Traffic Impact Assessment

Proposed VISY Plastics Processing Facility
6 Herbert Place, Smithfield

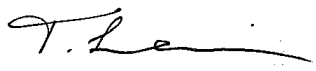
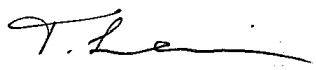
traffix
traffic & transport planners

po box 1061
potts point nsw 1335
t: +61 2 8324 8700
f: +61 2 9380 4481
w: www.traffix.com.au
abn: 66065132961

Reference: 11 376 Report v3

Document Verification

Job Number:	11 376
Project:	VISY Plastics Processing Facility, 6 Herbert Place, Smithfield
Client:	VISY Food Plastics

Revision		Initials	Date	Signature
Report v01	Prepared by:	TL	13 Jan 2012	
	Checked by:	GP	17 Jan 2012	
	Approved by:			
Report v02	Prepared by:	TL	25 Jan 2012	
	Checked by:			
	Approved by:	TL	25 Jan 2012	
Report v03	Prepared by:	TL	02 Feb 2012	
	Checked by:			
	Approved by:	TL	02 Feb 2012	

traffix
traffic & transport planners

po box 1061
potts point nsw 1335
t: +61 2 8324 8700
f: +61 2 9380 4481
w: www.traffix.com.au
abn: 66065132961

Contents

Appendices

1. Introduction

TRAFFIX has been commissioned by VISY Food Plastics to undertake a traffic impact assessment in support of a development application relating to a plastics processing facility located at 6 Herbert Place, Smithfield. The development is located within the Holroyd Council LGA and has been assessed under that Council's controls.

This report documents the findings of our investigations and should be read in the context of the Statement of Environmental Effects (SEE), prepared separately by Urban Perspectives. The development does not propose any significant changes to existing floor areas and is therefore considered a minor development under the provisions of SEPP (Infrastructure) 2007 and does not require formal referral to the Roads and Maritime Services (RMS).

The report is structured as follows:

- Section 2: Describes the site and its location
- Section 3: Documents existing traffic conditions
- Section 4: Describes the proposed development
- Section 5: Assesses the parking requirements
- Section 6: Assesses traffic impacts
- Section 7: Discusses access and internal design aspects
- Section 8: Presents the overall study conclusions.

2. Location and Site

The site is situated on the southern corner of the intersection of Herbert Place and the Cumberland Highway. It located within the Smithfield Industrial Area and approximately 30 kilometres west of the Sydney CBD. The "Smithfield Energy Facility" power station borders the site to the east.

The site has an irregular configuration and currently accommodates a "Visy TPC" (The Packaging Company) factory with a combined site area of approximately 10.151 ha. It has a northern frontage of approximately 213.5 metres to Herbert Place, a western frontage of approximately 271.7 metres to the Cumberland Highway, an irregular southern site boundary of approximately 364.4 metres to Prospect Creek and an eastern boundary of approximately 447.7 metres to neighbouring Visy properties.

There is currently a 17.9 metre wide driveway crossing providing access to a shared driveway which serves the subject lot, in addition to the "Smithfield Energy Facility" to the east of the site and the existing VISY facilities to the south-east of the subject site.

A Location Plan is presented in **Figure 1**, with a Site Plan presented in **Figure 2**. Reference should also be made to the Photographic Record presented in **Appendix A**, which provides an appreciation of the general character of roads and other key attributes in proximity to the site.

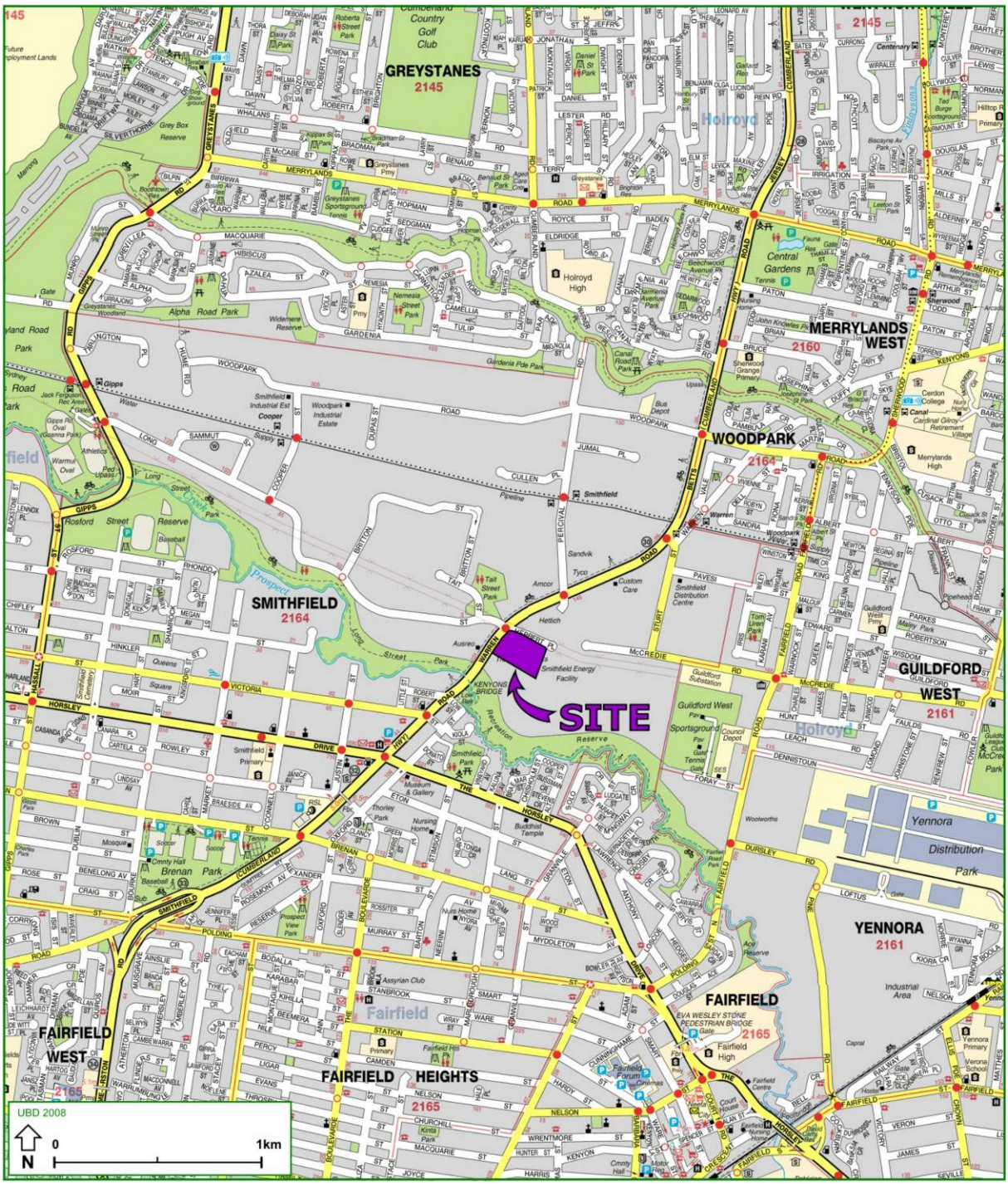


Figure 1: Location Plan

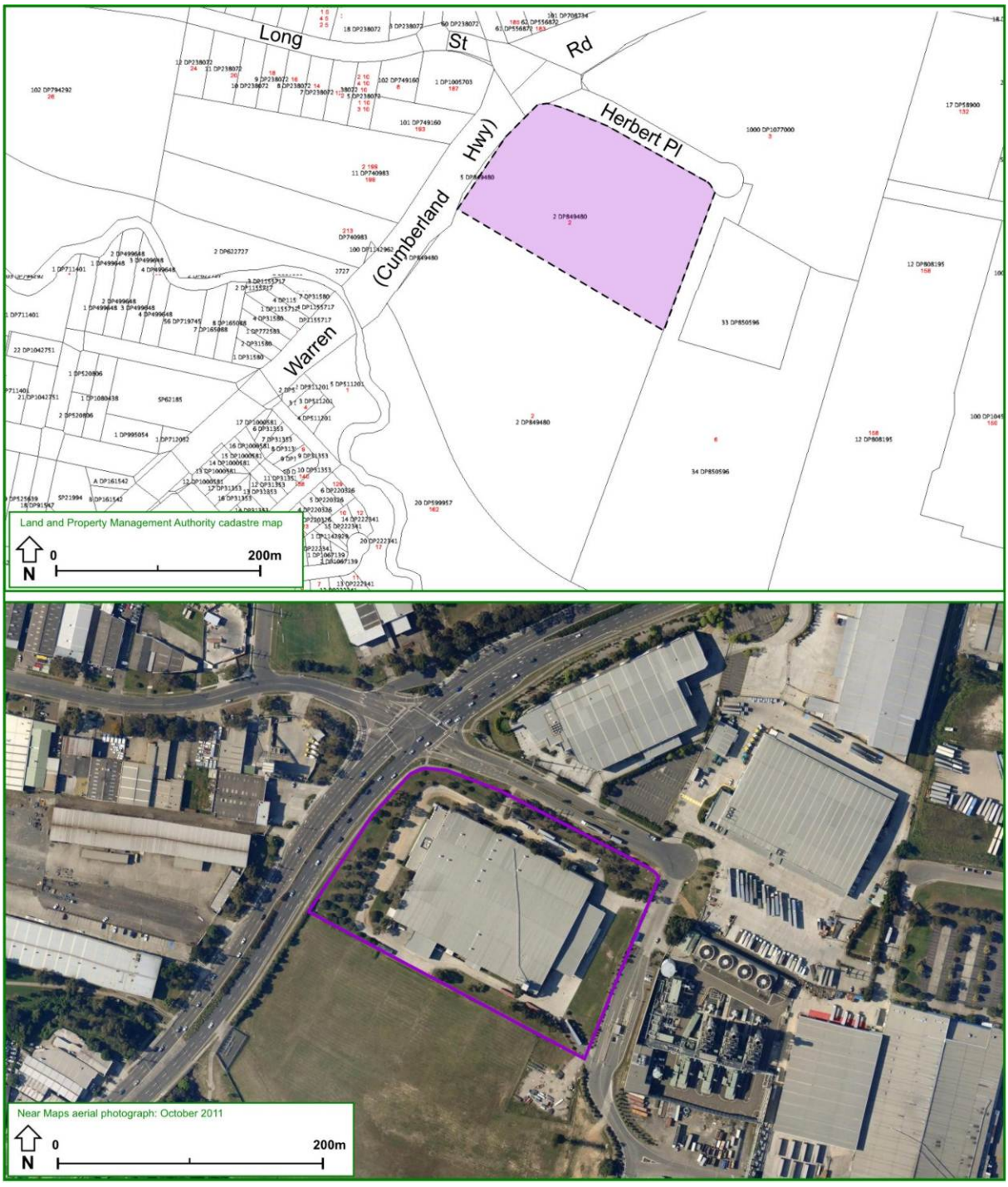


Figure 2: Site Plan

3. Existing Traffic Conditions

3.1 Road Network

The road hierarchy in the vicinity of the site is shown in **Figure 3** with the following roads of particular interest:

- Cumberland Highway: an RTA State Road (MR 13) that generally runs in a north-south direction and forms a link between the Hume Highway in the south and the F3 Sydney-Newcastle Freeway in the north. The Cumberland Highway carries 63,881 vehicles per day (vpd) in the vicinity of the site and provides direct access to Herbert Place. No Stopping restrictions apply along its length at all times. The Cumberland Highway is generally subject to a 70km/h speed zoning in the vicinity of the site and generally carries three lanes of traffic in either direction within a separated carriageway of width 28.0 metres.

- Herbert Place: a local road that runs in an east-west direction between the Cumberland Highway in the west and terminates in a cul-de-sac in the east, serving the industrial premises in the area. It carries approximately 1,650 vpd within a divided carriageway of width 17.0 metres and permits parallel parking along both kerbs. Access to the development is provided via an adjoining roadway accessed via Herbert Place.

It can be seen from **Figure 3** that the site is conveniently located with respect to the arterial and local road systems serving the region. It is therefore able to effectively distribute traffic onto the wider road network, minimising traffic impacts.

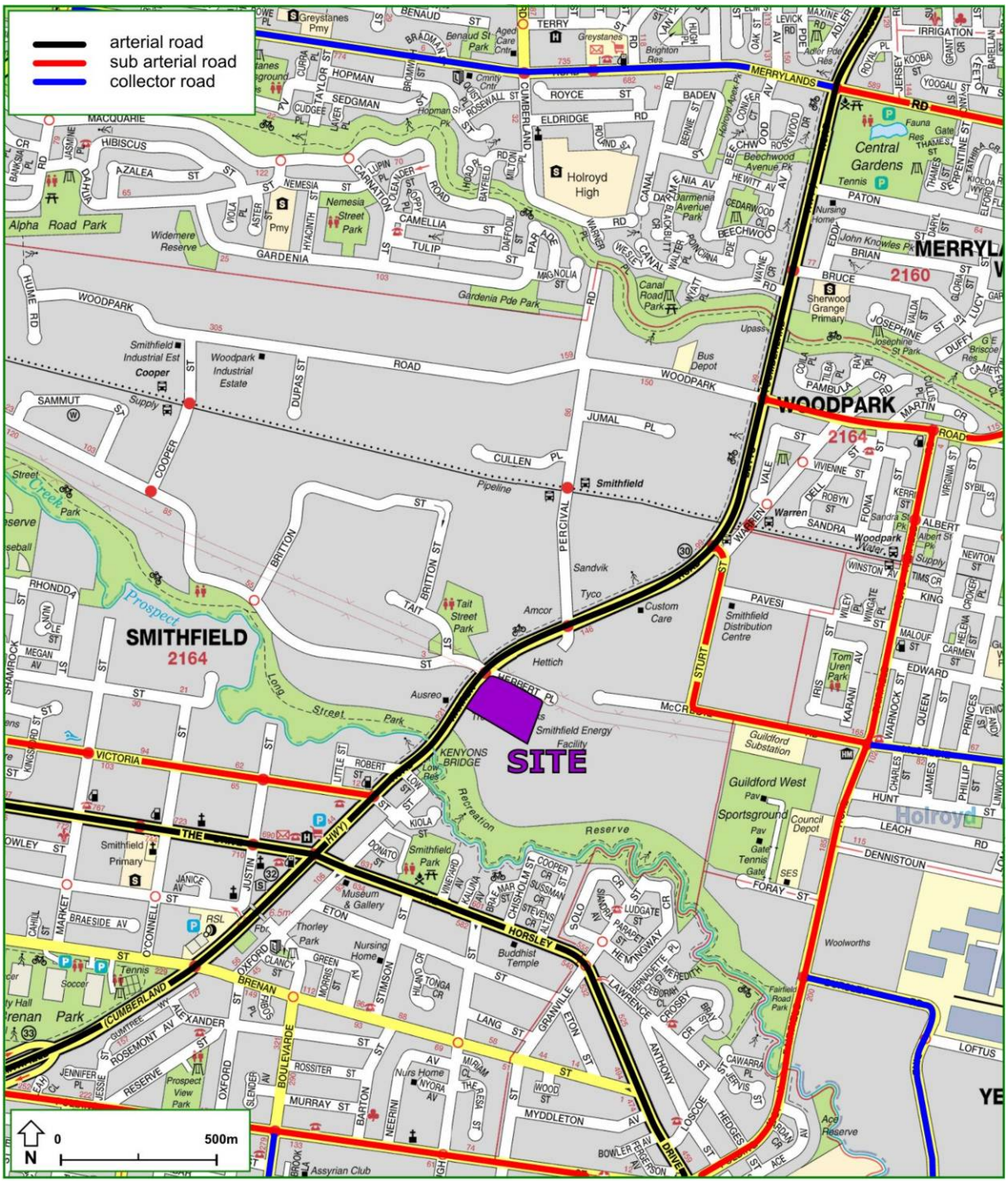


Figure 3: Road Hierarchy

3.2 Key Intersections

Cumberland Highway forms a four-way signalised intersection with Herbert Place and Long Street, at the northwest corner of the site. Northbound vehicles enter Herbert Place from the Cumberland Highway via a right-turn lane of length 140 metres, under signal control. Similarly, southbound vehicles enter Herbert Place via a left-in movement from the Cumberland Highway via a 60 metre left turn slip lane. At its intersection with Cumberland Highway, Herbert Place expands to three lanes of traffic for westbound vehicles. This includes a left turn slip lane, a 40 metre right turn storage lane in addition to a single lane for through traffic. Footpaths are available on these roads and pedestrian crossings are provided on the northern, eastern and western approaches to the intersection.

3.3 Public Transport

The existing bus services that operate in the locality are shown in **Figure 5**. It is evident that the site is 550 metres south west of bus route 821 (Guildford Railway Station to Smithfield) with the T80 (Rouse Hill to Liverpool) T-way bus service also operating approximately 1 kilometre walking distance to the north of the site.

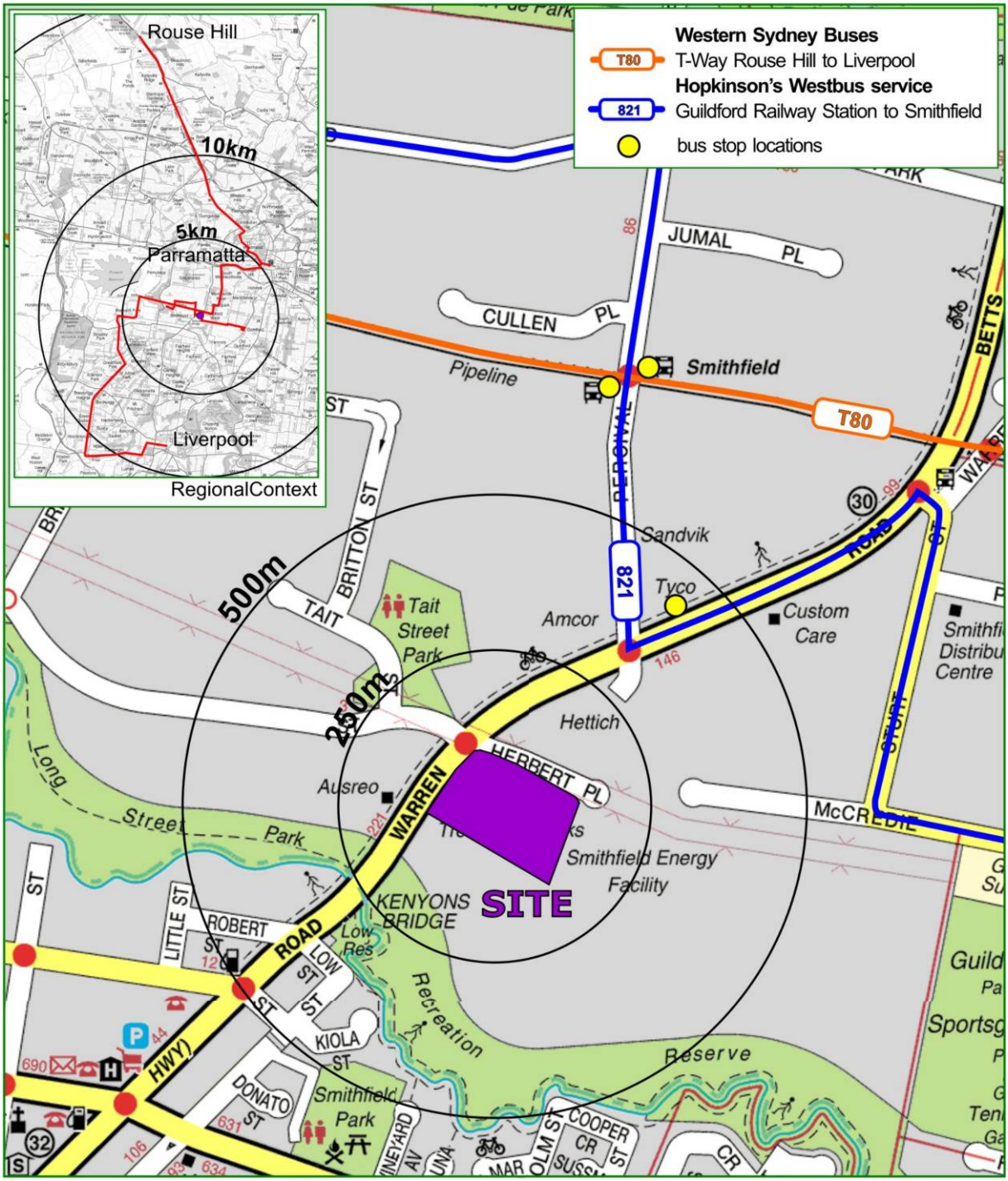


Figure 5: Public Transport

3.4 Existing Site Generation

The existing warehouse has a total floor area of 13,005m^2 and would be expected to generate up to 130 vehicle trips per hour during the peak periods, based on the RTA's Guide to Traffic Generating Developments (RTA Guide) rate for factory uses. This equates to a total 650 daily vehicle trips.

However, the site is not currently fully utilised and therefore the existing traffic volumes are substantially lower than were the development to operate as permitted by current approvals.

The Statement of Environmental Effects for construction of a box factory on the site was reported to generate the following traffic volumes:

- Cars 100 vehicles per day
- Small Trucks (<5t) 20 vehicles per day
- Semi-trailers 8 vehicles per day

The above traffic volume of 128 vehicles per day is significantly less than that of the RTA Guide rates and represents a specific use.

3.5 Existing Intersection Performance

To assess the operation of key intersections in the vicinity of the site, traffic surveys were undertaken at the intersection of Cumberland Highway with Long Street and Herbert Place on Tuesday 22nd November 2011 during the on-street peak periods (7.00-9.00am and 4.00-6.00pm).

The results of these surveys, included in **Appendix B** were then analysed using the SIDRA computer program to determine their performance characteristics under existing traffic conditions. This modelling assumes a peak hour cycle time of 140 seconds indicated by data provided by the RMS.

The SIDRA model produces a range of outputs, the most useful of which are the Degree of Saturation (DOS) and Average Vehicle Delay per vehicle (AVD). The AVD is in turn related to a level of service (LOS) criteria. These performance measures can be interpreted using the following explanations:

DOS - the DOS is a measure of the operational performance of individual intersections. As both queue length and delay increase rapidly as DOS approaches 1, it is usual to attempt to keep DOS to less than 0.9. When DOS exceeds 0.9 residual queues can be anticipated, as occurs at many major intersections throughout the metropolitan area during peak periods. In this regard, a practical limit of 1.1 can be assumed. For intersections controlled by roundabout or give way/stop control, satisfactory intersection operation is generally indicated by a DOS of 0.8 or less.

AVD - the AVD for individual intersections provides a measure of the operational performance of an intersection. In general, levels of acceptability of AVD for individual intersections depend on the time of day (motorists generally accept higher delays during peak commuter periods) and the road system being modelled (motorists are more likely to accept longer delays on side streets than on the main road system).

LOS - this is a comparative measure which provides an indication of the operating performance of an intersection as shown below:

Level of Service	Average Delay per Vehicle (sec/veh)	Traffic Signals, Roundabout	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
F	More than 70	Unsatisfactory and requires additional capacity.	Unsatisfactory and requires other control mode or major treatment.

A summary of the modelled results are provided below. Reference should also be made to the SIDRA outputs provided in **Appendix C** which provide detailed results for individual lanes and approaches.

Table 1: Existing Intersection Performance: AM and PM Peak Periods

Intersection Description	Control Type	Period	Degree of Saturation	Intersection Delay	Level of Service
Cumberland Hwy / Herbert Pl	Signals	AM	0.946	39.0	C
		PM	1.000	46.4	D

It can be seen from above that the intersection is operating at or close to capacity during both peak periods. Nevertheless, it is stressed that the most relevant use of this analysis is to compare the relative change in the performance parameters as a result of the proposed development. This is discussed further in Section 6.

4. Description of Proposed Development

A detailed description of the proposed development is provided in the Statement of Environmental Effects prepared separately. In summary, the development for which approval is now sought comprises the following components:

- Retention of the existing building structure;
- Refurbishment of the existing building structure whilst maintaining the overall floor area.
  - 11,978m^2 factory area;
  - 478.9m^2 mezzanine area; and
  - 548.1m^2 office area.
- Provision of new loading/unloading facilities including 6 silos and conveyor systems.
- The provision of at-grade staff car parking with a total of 85 spaces for the development, including 2 accessible spaces and a single courier parking space.
- Employment of a total of 86 staff, as follows:
  - 34 VISY Recycling HQ and office staff
  - 52 Plastic Processing (factory) staff, including 4 office/management staff on day shift plus 48 shift operators (12 per shift)

The parking and traffic impacts arising from the development are discussed in Sections 5 and 6, respectively. Reference should be made to the plans submitted separately to Council which are presented at reduced scale in **Appendix D**.

A 'standalone' option has also been developed to demonstrate to Council that the subject site can operate independently of the adjoining VISY facilities. This secondary option has potential to provide a total of 193 spaces, including 4 disabled spaces and a single courier space.

5. Parking Requirements

5.1 Council Controls

The Holroyd Council DCP 2008 Part A, requires parking for industrial developments to be determined at the rates shown in **Table 1**:

Table 2: Council Parking Rates and Provision

Type	Area	Council Parking Rates	Spaces Required
Factory[1]	12,456.9m^2	1/70m^2 GFA	178
Office	548.1m^2	1/40m^2 GFA	14
		Totals	185

Note: 1) Includes mezzanine area of 478.9m^2.

The number of spaces required under Council's DCP relies on generic rates for industrial development and does not represent the future staff numbers associated with the subject development which has a total of 86 staff. This consists of 38 office staff on day shift plus a further 12 factory staff on shift. As such, there is a maximum of only 50 staff on-site during day shift, with a maximum of up to only 62 staff during factory shift changeovers.

Application of Council's staff parking rate of 1 space per 2 staff to the above figure would result in a requirement for only 31 spaces.

Having regard for the above, it is proposed to provide a total of 85 spaces at commencement of the development. Nevertheless, provision is made for a potential further 108 spaces to be provided in the future in the unlikely event that additional parking was to be required. This provision exceeds (is superior to) that nominated by Council officers during pre-DA discussions which required a minimum of 80 spaces to be constructed with an allowance for up to 192 spaces to be provided in the future.

In summary, the proposed car parking is more than sufficient to accommodate the parking demands associated with the subject development, based on experience. Additional car parking can be readily accommodated on-site in the unlikely event that Council's DCP parking requirement was to be realized on the site at some time in the future.

5.2 Courier Parking

A single courier parking space is provided adjacent to the main office entry, in accordance with Council's DCP.

5.3 Disabled Parking

Council's Draft DCP 2010 requires the provision of 2 disabled spaces per 100 visitor spaces up to 400 spaces. In this regard, the 2 and 4 spaces proposes by both options respectively satisfy this requirement. These spaces are to be located adjacent to building entries with a minimum width of 2.4 metres with a 2.4 metre wide shared area in order to satisfy the requirements of AS 2890.6 (2009).

5.4 Servicing

Servicing of the site will be undertaken by a number of trucks ranging in size from forklifts up to B-Doubles. The average number of trucks per day is as shown in Table 3, below. These trucks will be accommodated by loading facilities provided under the southern and eastern awnings in addition to silos located at the southeast corner of the building.

Table 3: Truck Deliveries

Origin	Destination	Number of Trucks		Vehicle Size
		IN	OUT	
Smithfield MRF	East Canopy	*3.80*		Semi/B-double
External	East Canopy	7.60		Semi/B-double
Silos	External		4.30	External
East Canopy	External		2.90	Semi/B-double
East Canopy	Smithfield MRF		*6.22*	Skip Loader
East Canopy	Smithfield MRF		*3.20*	Compactor Bin Carrier
South Canopy	External		1.50	Semi
South Canopy	External (China)		0.20	Container (Semi)
Total		11.40	18.32	

It can be seen from Table 3 that there will be an average of 29.72 trucks per day. Of these, only 16.5 trucks are external movements, with the remaining 13.22 trucks associated with movements to/from the MRF facility within the overall VISY site. External deliveries will generally be undertaken by semi-trailers and or B-double trucks.

6. Traffic Impacts

6.1 Trip Generation

RTA Guideline Rates:

The RTA Guide recommends the following traffic generation for factory uses:

- Peak hour 1 trips per 100m^2
- Daily 5 trips per 100m^2

It should be noted that the above rate includes ancillary office areas, provided that the office component does not exceed 20 percent of the total floor area.

Application of the above rates to the subject development results in a total site generation of 131 trips per hour during peak periods and a total daily traffic volume of 650 trips per day.

Known Operational Requirements:

The above are based on generic rates and are not considered to accurately reflect the subject development. As stated in the Section 5, the development will employ a total of 86 staff and results in an average of only 16.5 trucks per day. It is expected that on any one given weekday there would be 12 factory shift workers rostered off so that the total number of staff would be only 74 staff.

Conservatively assuming that a minimum of 10 percent of staff walk, ride share or use public transport as worst case scenario would result in a total daily traffic volume of a total 167 trips per day, as follows:

- Staff 134 trips per day (67 in, 67 out)
- Trucks 33 trips per day (16.5in, 16.5out)

Office staff are generally expected to arrive and depart during the AM and PM peak periods. However, factory shift rosters would likely to result in staff arriving and departing outside of these typical on-street peak periods. Nevertheless, for assessment purposes, it has been assumed that shift changeovers will also occur during these peaks as a worst case scenario. Furthermore, approval is sought for 24 hour operations, however it has been assumed that daily truck movements occur within a 10 hour period. Table 4 provides a summary of traffic movements during peak periods.

Table 4: Total Peak Hour Traffic Movements

User	AM Peak		PM Peak	
	IN	OUT	IN	OUT
Office (38 staff)	34	0	0	34
Factory (12 per shift)	12	12	12	12
External Trucks	2	2	2	2
Total	48	14	14	48
	62		62	

It should be noted that the VISY Recycling HQ and office staff (34 persons) are already on-site such that the additional office staff traffic volumes compared to the traffic surveys undertaken would be only 32 vehicles per hour during both peak periods, as follows:

Table 5: Increased Peak Hour Traffic Movements

User	AM Peak		PM Peak	
	IN	OUT	IN	OUT
Office (4 staff)	4	0	0	4
Factory (12 per shift)	12	12	12	12
External Trucks	2	2	2	2
Total	18	14	14	18
	32		32	

The impact of these additional vehicle trips is discussed further in Section 6.2.

6.2 Peak Period Intersection Performances

The traffic demands associated with the known operational requirements are significantly less than that associated with the RTA Guide rates associated with the currently approved development. In this regard, the site could potentially operate with higher traffic demands under current approvals were the site to be more intensively utilised than now proposed.

Table 6 provides a summary of the performance of surrounding intersections under an 'existing plus development' scenario.

Table 6: Existing Intersection Performance: AM and PM Peak Periods

Intersection Description	Control Type	Period	Degree of Saturation	Intersection Delay	Level of Service
Cumberland Hwy / Herbert Pl	Signals	AM	0.946	39.1	C
		PM	1.000	46.4	D

It can be seen from above that the critical intersection of Cumberland Highway and Herbert Place will continue to operate satisfactorily post development, with minimal change to existing delays or Level of Service.

In summary, the traffic impacts associated with the development are readily accommodated by the surrounding road network and are considered acceptable.

7. Access & Internal Design Aspects

7.1 Access

The proposed development proposes truck access from a shared driveway of width 17.9 metres which also services the adjoining VISY facilities to the southeast of the subject site. It is proposed to rely on this access in order to use the existing weighbridge. This will require large trucks, including semi-trailers and B-doubles to circulate within the VISY MRF site in order to access the subject site without impacting on the current weighbridge location. In effect, both entering and exiting trucks will be required to undertake a U-turn at the proposed roundabout at the northwest corner of the VISY MRF facility. Truck movements are therefore effectively separated from cars which is beneficial from a safety perspective. Furthermore, these movements will be subject to an internal Plan of Management (prepared separately for the overall VISY facilities) and signposted accordingly to ensure that on-site circulation will occur as safely and efficiently as practicable.

If the existing truck access to the site is prevented in the future due to land or occupancy changes, Option 2 indicates that adequate access and circulation within the site can be provided, although this is not the proposal put forward in this development application.

A separate 6 metre access is proposed to Herbert Place for access to the car parking area. In this regard, the proposed design effectively separates both truck and light vehicles movements which is a beneficial outcome for the site. Cars will be required to use the turning head to undertake a U-turn movement to access the site which is considered acceptable having regard for the relatively moderate traffic volumes currently using Herbert Place which were surveyed as being 71 veh/hr and 93 veh/hr during the AM and PM peak periods, respectively.

7.2 Internal Design

The internal at-grade surface car park and truck circulation areas generally comply with the requirements of AS 2890.1 (2004) and AS 2890.2 (2002) and are considered acceptable. Reference

should be made to the swept path assessment included in **Appendix E** which demonstrates satisfactory manoeuvrability throughout the site.

All trucks will enter and exit the site via the driveway to the southwest of the existing weighbridge. Trucks accessing the silos and/or south canopy will travel along the southern roadway and turn under the southern canopy to exit the site, thus avoiding the use of the car park area. Similarly, trucks accessing the eastern canopy will undertake a U-turn to the north of the canopy before returning south to the exit to the east of the canopy.

Parking spaces are generally 2.5 metres in width and 5.5 metres in length in accordance with Council's DCP. As discussed in Section 5.4, two accessible spaces are also provided and are designed in accordance with AS2890.6 (2009).

In summary, the proposed internal design is acceptable and will provide a satisfactory standard of safety and efficiency.

8. Conclusions

In summary:

- The site has historically been used as a factory and the current proposal is primarily alterations and additions to facilitate a plastics processing facility with known operational requirements. In this regard, the specific demands associated with the proposed facility are significantly less than a typical factory use, resulting in both reduced car parking demands and traffic volumes.
- All car parking demands associated with the proposed facility can be readily accommodated by the proposed car parking of 85 spaces.
- Furthermore, there is additional space available within the site to provide additional car parking, as nominally required under Council's DCP, in the unlikely event that higher demands were to occur in the future. Option 2 identifies that an additional 108 spaces can readily be provided, as necessary, to accommodate higher demands which would result in a total provision of 193 spaces which is superior to Council's nominal requirements.
- The proposed development will generate in the order of 167 vehicle trips per day which is comparable to the currently approved use of the site which was previously reported to generate in the order of 128 vehicle trips per day.
- A peak hour traffic generation of 62 vehicles per hour has been adopted for the purposes of this assessment and represents an increase in the order of 34 trips per hour above that of the existing office component currently active on the site. These additional trips will have minimal impact on the surrounding road network, with minimal change to existing delays and no change in Level of Service.
- The proposed access and internal design are considered acceptable and the development will operate safely and efficiently, subject to implementation of the Plan of Management for the overall VISY facilities. In the event that access were to no longer be available from the adjoining allotments, then a new truck access driveway can be provided to Herbert Place without significant changes to the internal layout of the site.

It is therefore concluded that the proposed development is supportable on traffic planning grounds and will operate satisfactorily.

Appendix A

Photographic Record

View looking southeast at the site from the intersection of Cumberland Highway and Herbert Place.

View looking south at the existing car park driveway exit to Herbert Place.

View looking south from the western end of Herbert Place at the shared access to VISY facilities.

View looking west along Herbert Place on approach to its intersection with the Cumberland Highway.

View looking south along the Cumberland Highway on approach to Herbert Place.

View looking at the cul-de-sac at the eastern end of Herbert Place, adjacent to the VISY site access.

Appendix B

Survey Results

R.O.A.R. DATA

Reliable, Original & Authentic Results

Ph.88196847, Fax 88196849, Mob. 0418 239019

Client : Traffix
Job No/Name : 3876 SMITHFIELD Long St Counts
Day/Date : Tuesday 22nd November 2011

Lights

	NORTH			WEST			SOUTH			EAST			
	C-Land Hwy			*Long St*			*C-Land Hwy*			*Herbert Pl*			
Time Per	**L**	**T**	**R**	**L**	**T**	**R**	**L**	**T**	**R**	**L**	**T**	**R**	**TOT**
0700 - 0715	9	333	41	14	5	53	67	714	5	7	3	8	**1259**
0715 - 0730	7	372	26	12	4	24	68	706	7	4	2	5	**1237**
0730 - 0745	7	369	38	15	1	28	56	671	9	5	1	4	**1204**
0745 - 0800	6	455	30	21	3	46	75	606	7	4	0	3	**1256**
0800 - 0815	8	438	26	20	3	42	74	631	7	1	5	5	**1260**
0815 - 0830	6	424	25	16	3	36	75	507	12	3	2	2	**1111**
0830 - 0845	12	412	29	14	2	39	55	481	5	1	0	5	**1055**
0845 - 0900	3	364	29	26	1	35	76	515	5	3	1	5	**1063**
Period End	**58**	**3167**	**244**	**138**	**22**	**303**	**546**	**4831**	**57**	**28**	**14**	**37**	**9445**

Heavies

	NORTH			WEST			SOUTH			EAST			
	C-Land Hwy			*Long St*			*C-Land Hwy*			*Herbert Pl*			
Time Per	**L**	**T**	**R**	**L**	**T**	**R**	**L**	**T**	**R**	**L**	**T**	**R**	**TOT**
0700 - 0715	3	16	7	4	0	7	1	23	2	5	0	2	**70**
0715 - 0730	7	17	5	12	0	4	2	17	5	1	1	1	**72**
0730 - 0745	3	13	8	7	0	2	1	21	3	4	0	1	**63**
0745 - 0800	4	15	4	7	3	7	3	12	2	4	0	6	**67**
0800 - 0815	3	19	3	4	1	2	1	23	4	1	0	5	**66**
0815 - 0830	3	16	4	9	0	4	3	19	4	7	1	5	**75**
0830 - 0845	3	21	1	6	0	4	3	18	1	2	0	2	**61**
0845 - 0900	5	29	4	8	1	2	2	22	2	1	1	5	**82**
Period End	**31**	**146**	**36**	**57**	**5**	**32**	**16**	**155**	**23**	**25**	**3**	**27**	**556**

Lights

	NORTH			WEST			SOUTH			EAST			
	C-Land Hwy			*Long St*			*C-Land Hwy*			*Herbert Pl*			
Peak Time	**L**	**T**	**R**	**L**	**T**	**R**	**L**	**T**	**R**	**L**	**T**	**R**	**TOT**
0700 - 0800	29	1529	135	62	13	151	266	2697	28	20	6	20	**4956**
0715 - 0815	28	1634	120	68	11	140	273	2614	30	14	8	17	**4957**
0730 - 0830	27	1686	119	72	10	152	280	2415	35	13	8	14	**4831**
0745 - 0845	32	1729	110	71	11	163	279	2225	31	9	7	15	**4682**
0800 - 0900	29	1638	109	76	9	152	280	2134	29	8	8	17	**4489**
PEAK HOUR	**29**	**1529**	**135**	**62**	**13**	**151**	**266**	**2697**	**28**	**20**	**6**	**20**	**4956**

Heavies

	NORTH			WEST			SOUTH			EAST			
	C-Land Hwy			*Long St*			*C-Land Hwy*			*Herbert Pl*			
Peak Time	**L**	**T**	**R**	**L**	**T**	**R**	**L**	**T**	**R**	**L**	**T**	**R**	**TOT**
0700 - 0800	17	61	24	30	3	20	7	73	12	14	1	10	**272**
0715 - 0815	17	64	20	30	4	15	7	73	14	10	1	13	**268**
0730 - 0830	13	63	19	27	4	15	8	75	13	16	1	17	**271**
0745 - 0845	13	71	12	26	4	17	10	72	11	14	1	18	**269**
0800 - 0900	14	85	12	27	2	12	9	82	11	11	2	17	**284**
PEAK HOUR	**17**	**61**	**24**	**30**	**3**	**20**	**7**	**73**	**12**	**14**	**1**	**10**	**272**

Combined

	NORTH			WEST			SOUTH			EAST			
	C-Land Hwy			*Long St*			*C-Land Hwy*			*Herbert Pl*			
Time Per	**L**	**T**	**R**	**L**	**T**	**R**	**L**	**T**	**R**	**L**	**T**	**R**	**TOT**
0700 - 0715	12	349	48	18	5	60	68	737	7	12	3	10	**1329**
0715 - 0730	14	389	31	24	4	28	70	723	12	5	3	6	**1309**
0730 - 0745	10	382	46	22	1	30	57	692	12	9	1	5	**1267**
0745 - 0800	10	470	34	28	6	53	78	618	9	8	0	9	**1323**
0800 - 0815	11	457	29	24	4	44	75	654	11	2	5	10	**1326**
0815 - 0830	9	440	29	25	3	40	78	526	16	10	3	7	**1186**
0830 - 0845	15	433	30	20	2	43	58	499	6	3	0	7	**1116**
0845 - 0900	8	393	33	34	2	37	78	537	7	4	2	10	**1145**
Period End	**89**	**3313**	**280**	**195**	**27**	**335**	**562**	**4986**	**80**	**53**	**17**	**64**	**10001**

Peds

	NORTH	WEST	SOUTH	EAST	
	C-Land Hwy	*Long St*	*C-Land Hwy*	*Herbert Pl*	
Time Per	**UNCLASSIFIED**	**UNCLASSIFIED**	**UNCLASSIFIED**	**UNCLASSIFIED**	**TOT**
0700 - 0715					**0**
0715 - 0730					**0**
0730 - 0745	***Not***	***Not***	***Not***	***Not***	**0**
0745 - 0800	***Required***	***Required***	***Required***	***Required***	**0**
0800 - 0815					**0**
0815 - 0830					**0**
0830 - 0845					**0**
0845 - 0900					**0**
Period End	**0**	**0**	**0**	**0**	**0**

Combined

	NORTH			WEST			SOUTH			EAST			
	C-Land Hwy			*Long St*			*C-Land Hwy*			*Herbert Pl*			
Peak Time	**L**	**T**	**R**	**L**	**T**	**R**	**L**	**T**	**R**	**L**	**T**	**R**	**TOT**
0700 - 0800	46	1590	159	92	16	171	273	2770	40	34	7	30	**5228**
0715 - 0815	45	1698	140	98	15	155	280	2687	44	24	9	30	**5225**
0730 - 0830	40	1749	138	99	14	167	288	2490	48	29	9	31	**5102**
0745 - 0845	45	1800	122	97	15	180	289	2297	42	23	8	33	**4951**
0800 - 0900	43	1723	121	103	11	164	289	2216	40	19	10	34	**4773**
PEAK HOUR	**46**	**1590**	**159**	**92**	**16**	**171**	**273**	**2770**	**40**	**34**	**7**	**30**	**5228**

Peds

	NORTH	WEST	SOUTH	EAST	
	C-Land Hwy	*Long St*	*C-Land Hwy*	*Herbert Pl*	
Peak Per	**UNCLASSIFIED**	**UNCLASSIFIED**	**UNCLASSIFIED**	**UNCLASSIFIED**	**TOT**
0700 - 0800	0	0	0	0	**0**
0715 - 0815	0	0	0	0	**0**
0730 - 0830	0	0	0	0	**0**
0745 - 0845	0	0	0	0	**0**
0800 - 0900	0	0	0	0	**0**
PEAK HR	**0**	**0**	**0**	**0**	**0**

R.O.A.R. DATA

Reliable, Original & Authentic Results

Ph.88196847, Fax 88196849, Mob. 0418 239019

Client : Traffix
Job No/Name : 3876 SMITHFIELD Long St Counts
Day/Date : Tuesday 22nd November 2011

Lights

	NORTH			WEST			SOUTH			EAST			
	C-Land Hwy			*Long St*			*C-Land Hwy*			*Herbert Pl*			
Time Per	**L**	**T**	**R**	**L**	**T**	**R**	**L**	**T**	**R**	**L**	**T**	**R**	**TOT**
1600 - 1615	1	560	14	37	2	94	35	461	2	27	3	13	**1249**
1615 - 1630	1	585	8	28	2	61	39	380	1	3	0	3	**1111**
1630 - 1645	1	560	12	48	2	99	41	427	2	14	1	5	**1212**
1645 - 1700	0	697	13	20	1	63	26	404	2	9	0	12	**1247**
1700 - 1715	0	570	9	44	2	123	31	492	4	10	2	10	**1297**
1715 - 1730	1	646	8	28	0	51	26	397	2	8	3	10	**1180**
1730 - 1745	4	637	8	25	0	73	31	450	2	9	3	3	**1245**
1745 - 1800	2	565	5	11	0	39	22	400	2	3	1	5	**1055**
Period End	**10**	**4820**	**77**	**241**	**9**	**603**	**251**	**3411**	**17**	**83**	**13**	**61**	**9596**

Heavies

	NORTH			WEST			SOUTH			EAST			
	C-Land Hwy			*Long St*			*C-Land Hwy*			*Herbert Pl*			
Time Per	**L**	**T**	**R**	**L**	**T**	**R**	**L**	**T**	**R**	**L**	**T**	**R**	**TOT**
1600 - 1615	7	10	5	4	0	1	4	15	0	5	0	3	**54**
1615 - 1630	4	14	2	5	2	2	2	10	4	3	0	2	**50**
1630 - 1645	2	10	2	3	2	1	1	9	1	3	0	1	**35**
1645 - 1700	5	14	6	6	0	0	1	4	4	2	1	2	**45**
1700 - 1715	3	15	3	1	1	3	2	5	2	3	0	1	**39**
1715 - 1730	7	14	3	0	1	1	1	10	4	1	0	1	**43**
1730 - 1745	5	8	2	2	0	0	2	7	9	1	0	2	**38**
1745 - 1800	7	16	4	2	0	1	0	7	1	1	0	1	**40**
Period End	**40**	**101**	**27**	**23**	**6**	**9**	**13**	**67**	**25**	**19**	**1**	**13**	**344**

Lights

	NORTH			WEST			SOUTH			EAST			
	C-Land Hwy			*Long St*			*C-Land Hwy*			*Herbert Pl*			
Peak Time	**L**	**T**	**R**	**L**	**T**	**R**	**L**	**T**	**R**	**L**	**T**	**R**	**TOT**
1600 - 1700	3	2402	47	133	7	317	141	1672	7	53	4	33	**4819**
1615 - 1715	2	2412	42	140	7	346	137	1703	9	36	3	30	**4867**
1630 - 1730	2	2473	42	140	5	336	124	1720	10	41	6	37	**4936**
1645 - 1745	5	2550	38	117	3	310	114	1743	10	36	8	35	**4969**
1700 - 1800	7	2418	30	108	2	286	110	1739	10	30	9	28	**4777**
PEAK HOUR	**5**	**2550**	**38**	**117**	**3**	**310**	**114**	**1743**	**10**	**36**	**8**	**35**	**4969**

Heavies

	NORTH			WEST			SOUTH			EAST			
	C-Land Hwy			*Long St*			*C-Land Hwy*			*Herbert Pl*			
Peak Time	**L**	**T**	**R**	**L**	**T**	**R**	**L**	**T**	**R**	**L**	**T**	**R**	**TOT**
1600 - 1700	18	48	15	18	4	4	8	38	9	13	1	8	**184**
1615 - 1715	14	53	13	15	5	6	6	28	11	11	1	6	**169**
1630 - 1730	17	53	14	10	4	5	5	28	11	9	1	5	**162**
1645 - 1745	20	51	14	9	2	4	6	26	19	7	1	6	**165**
1700 - 1800	22	53	12	5	2	5	5	29	16	6	0	5	**160**
PEAK HOUR	**20**	**51**	**14**	**9**	**2**	**4**	**6**	**26**	**19**	**7**	**1**	**6**	**165**

Combined

	NORTH			WEST			SOUTH			EAST			
	C-Land Hwy			*Long St*			*C-Land Hwy*			*Herbert Pl*			
Time Per	**L**	**T**	**R**	**L**	**T**	**R**	**L**	**T**	**R**	**L**	**T**	**R**	**TOT**
1600 - 1615	8	570	19	41	2	95	39	476	2	32	3	16	**1303**
1615 - 1630	5	599	10	33	4	63	41	390	5	6	0	5	**1161**
1630 - 1645	3	570	14	51	4	100	42	436	3	17	1	6	**1247**
1645 - 1700	5	711	19	26	1	63	27	408	6	11	1	14	**1292**
1700 - 1715	3	585	12	45	3	126	33	497	6	13	2	11	**1336**
1715 - 1730	8	660	11	28	1	52	27	407	6	9	3	11	**1223**
1730 - 1745	9	645	10	27	0	73	33	457	11	10	3	5	**1283**
1745 - 1800	9	581	9	13	0	40	22	407	3	4	1	6	**1095**
Period End	**50**	**4921**	**104**	**264**	**15**	**612**	**264**	**3478**	**42**	**102**	**14**	**74**	**9940**

Peds

	NORTH	WEST	SOUTH	EAST	
	C-Land Hwy	*Long St*	*C-Land Hwy*	*Herbert Pl*	
Time Per	**UNCLASSIFIED**	**UNCLASSIFIED**	**UNCLASSIFIED**	**UNCLASSIFIED**	**TOT**
1600 - 1615					**0**
1615 - 1630					**0**
1630 - 1645	***Not***	***Not***	***Not***	***Not***	**0**
1645 - 1700	***Required***	***Required***	***Required***	***Required***	**0**
1700 - 1715					**0**
1715 - 1730					**0**
1730 - 1745					**0**
1745 - 1800					**0**
Period End	**0**	**0**	**0**	**0**	**0**

Combined

	NORTH			WEST			SOUTH			EAST			
	C-Land Hwy			*Long St*			*C-Land Hwy*			*Herbert Pl*			
Peak Time	**L**	**T**	**R**	**L**	**T**	**R**	**L**	**T**	**R**	**L**	**T**	**R**	**TOT**
1600 - 1700	21	2450	62	151	11	321	149	1710	16	66	5	41	**5003**
1615 - 1715	16	2465	55	155	12	352	143	1731	20	47	4	36	**5036**
1630 - 1730	19	2526	56	150	9	341	129	1748	21	50	7	42	**5098**
1645 - 1745	25	2601	52	126	5	314	120	1769	29	43	9	41	**5134**
1700 - 1800	29	2471	42	113	4	291	115	1768	26	36	9	33	**4937**
PEAK HOUR	**25**	**2601**	**52**	**126**	**5**	**314**	**120**	**1769**	**29**	**43**	**9**	**41**	**5134**

Peds

	NORTH	WEST	SOUTH	EAST	
	C-Land Hwy	*Long St*	*C-Land Hwy*	*Herbert Pl*	
Peak Per	**UNCLASSIFIED**	**UNCLASSIFIED**	**UNCLASSIFIED**	**UNCLASSIFIED**	**TOT**
1600 - 1700	0	0	0	0	**0**
1615 - 1715	0	0	0	0	**0**
1630 - 1730	0	0	0	0	**0**
1645 - 1745	0	0	0	0	**0**
1700 - 1800	0	0	0	0	**0**
PEAK HR	**0**	**0**	**0**	**0**	**0**

Appendix C

Sidra Intersection Analysis

Appendix C-1

Existing Scenario

MOVEMENT SUMMARY

Site: Cumberland Hwy / Herbert Pl_EX_AM

Cumberland Hwy / Herbert Pl / Long St
Period: AM
Scenario 01: Existing
Signals - Fixed Time Cycle Time = 140 seconds (User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Cumberland Hwy (south)											
1	L	287	2.6	0.228	9.7	LOS A	2.4	17.3	0.18	0.67	52.5
2	T	2916	2.6	0.934	48.7	LOS D	73.2	524.0	1.00	1.04	27.0
3	R	42	30.0	0.275	74.7	LOS F	2.8	24.3	0.96	0.75	20.8
Approach		3245	3.0	0.934	45.6	LOS D	73.2	524.0	0.93	1.01	28.1
East: Herbert Pl (east)											
4	L	36	41.2	0.129	13.9	LOS A	0.6	5.9	0.30	0.68	38.3
5	T	7	14.3	0.032	57.5	LOS E	0.4	3.5	0.90	0.61	13.6
6	R	32	33.3	0.368	82.7	LOS F	2.2	20.0	1.00	0.73	12.0
Approach		75	35.2	0.368	47.3	LOS D	2.2	20.0	0.65	0.69	18.3
North: Cumberland Hwy (north)											
7	L	48	37.0	0.061	10.2	LOS A	0.2	2.3	0.12	0.64	47.5
8	T	1674	3.8	0.540	15.2	LOS B	17.0	122.6	0.49	0.44	39.8
9	R	167	15.1	0.653	76.7	LOS F	7.6	59.7	0.99	0.80	15.0
Approach		1889	5.7	0.653	20.5	LOS B	17.0	122.6	0.52	0.48	35.1
West: Long St (west)											
10	L	97	32.6	0.946	63.5	LOS E	5.5	49.0	0.92	0.81	23.3
11	T	17	18.8	0.110	58.3	LOS E	1.0	8.3	0.91	0.64	22.3
12	R	180	11.7	0.919	96.7	LOS F	7.2	55.4	1.00	1.00	17.4
Approach		294	19.0	0.946	83.6	LOS F	7.2	55.4	0.97	0.92	19.2
All Vehicles		5503	5.2	0.946	39.0	LOS C	73.2	524.0	0.79	0.82	28.7

Level of Service (LOS) Method: Delay (RTA NSW).
Vehicle movement LOS values are based on average delay per movement
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model used.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Average Back of Queue Distance m	Prop. Queued	Effective Stop Rate per ped
P3	Across E approach	32	18.5	LOS B	0.1	0.1	0.51	0.51
P5	Across N approach	32	64.1	LOS F	0.1	0.1	0.96	0.96
P6	Across N approach	32	59.4	LOS E	0.1	0.1	0.92	0.92
P7	Across W approach	32	21.7	LOS C	0.1	0.1	0.56	0.56
All Pedestrians		128	41.0	LOS E			0.74	0.74

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

Copyright © 2000-2011 Akcelik and Associates Pty Ltd
www.sidrasolutions.com

MOVEMENT SUMMARY

Site: Cumberland Hwy / Herbert Pl_EX_PM

Cumberland Hwy / Herbert Pl / Long St
Period: PM
Scenario 01: Existing
Signals - Fixed Time Cycle Time = 140 seconds (User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Cumberland Hwy (south)											
1	L	126	5.0	0.100	9.1	LOS A	0.5	3.9	0.11	0.65	53.3
2	T	1862	1.5	0.652	28.1	LOS B	31.2	220.9	0.81	0.73	36.0
3	R	31	65.5	0.211	73.8	LOS F	2.0	21.5	0.94	0.74	21.2
Approach		2019	2.7	0.652	27.6	LOS B	31.2	220.9	0.77	0.72	36.3
East: Herbert Pl (east)											
4	L	45	16.3	0.135	34.1	LOS C	1.9	14.8	0.65	0.72	23.0
5	T	9	11.1	0.041	57.6	LOS E	0.6	4.4	0.90	0.62	13.6
6	R	43	14.6	0.359	74.8	LOS F	2.8	22.4	0.97	0.74	13.0
Approach		98	15.1	0.359	54.3	LOS D	2.8	22.4	0.81	0.72	16.4
North: Cumberland Hwy (north)											
7	L	26	80.0	0.042	11.4	LOS A	0.1	1.4	0.11	0.63	47.6
8	T	2738	2.0	0.962	52.0	LOS D	72.1	513.2	1.00	1.08	20.1
9	R	55	26.9	0.201	71.3	LOS F	2.3	19.6	0.94	0.73	15.9
Approach		2819	3.2	0.962	52.0	LOS D	72.1	513.2	0.99	1.07	20.1
West: Long St (west)											
10	L	126	7.1	1.000[3]	58.7	LOS E	6.6	49.0	0.99	0.79	24.2
11	T	12	40.0	0.078	58.1	LOS E	0.7	5.9	0.91	0.63	22.0
12	R	331	1.3	0.967	106.0	LOS F	14.2	100.5	1.00	1.10	16.2
Approach		468	3.4	1.000	92.0	LOS F	14.2	100.5	0.99	1.00	17.9
All Vehicles		5404	3.2	1.000	46.4	LOS D	72.1	513.2	0.90	0.93	24.7

Level of Service (LOS) Method: Delay (RTA NSW).
Vehicle movement LOS values are based on average delay per movement
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model used.

3 x = 1.00 due to short lane. Refer to the Lane Summary report for information about excess flow and related conditions.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Average Back of Queue Distance m	Prop. Queued	Effective Stop Rate per ped
P3	Across E approach	32	22.3	LOS C	0.1	0.1	0.56	0.56
P5	Across N approach	32	64.1	LOS F	0.1	0.1	0.96	0.96
P6	Across N approach	32	59.4	LOS E	0.1	0.1	0.92	0.92
P7	Across W approach	32	25.8	LOS C	0.1	0.1	0.61	0.61
All Pedestrians		128	42.9	LOS E			0.76	0.76

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

Copyright © 2000-2011 Akcelik and Associates Pty Ltd
www.sidrasolutions.com

Appendix C-2

Existing plus Development Scenario

MOVEMENT SUMMARY

Site: Cumberland Hwy / Herbert Pl_EXplusDEV_AM

Cumberland Hwy / Herbert Pl / Long St
Period: AM
Scenario 02: Existing plus Development
Signals - Fixed Time Cycle Time = 140 seconds (User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Cumberland Hwy (south)											
1	L	287	2.6	0.228	9.7	LOS A	2.4	17.3	0.18	0.67	52.5
2	T	2916	2.6	0.934	48.7	LOS D	73.2	524.0	1.00	1.04	27.0
3	R	52	26.5	0.330	75.0	LOS F	3.4	29.2	0.97	0.76	20.7
Approach		3255	3.0	0.934	45.7	LOS D	73.2	524.0	0.93	1.01	28.0
East: Herbert Pl (east)											
4	L	44	35.7	0.154	13.8	LOS A	0.8	7.2	0.30	0.68	38.1
5	T	7	14.3	0.032	57.5	LOS E	0.4	3.5	0.90	0.61	13.6
6	R	40	28.9	0.455	83.0	LOS F	2.8	24.7	1.00	0.74	12.0
Approach		92	31.0	0.455	47.6	LOS D	2.8	24.7	0.66	0.70	18.2
North: Cumberland Hwy (north)											
7	L	58	32.7	0.073	10.2	LOS A	0.3	2.9	0.13	0.64	47.4
8	T	1674	3.8	0.540	15.2	LOS B	17.0	122.6	0.49	0.44	39.8
9	R	167	15.1	0.653	76.7	LOS F	7.6	59.7	0.99	0.80	15.0
Approach		1899	5.7	0.653	20.5	LOS B	17.0	122.6	0.52	0.48	35.2
West: Long St (west)											
10	L	97	32.6	0.946	63.5	LOS E	5.5	49.0	0.92	0.81	23.3
11	T	17	18.8	0.110	58.3	LOS E	1.0	8.3	0.91	0.64	22.3
12	R	180	11.7	0.919	96.7	LOS F	7.2	55.4	1.00	1.00	17.4
Approach		294	19.0	0.946	83.6	LOS F	7.2	55.4	0.97	0.92	19.2
All Vehicles		5539	5.2	0.946	39.1	LOS C	73.2	524.0	0.79	0.81	28.6

Level of Service (LOS) Method: Delay (RTA NSW).
Vehicle movement LOS values are based on average delay per movement
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model used.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Average Back of Queue Distance m	Prop. Queued	Effective Stop Rate per ped
P3	Across E approach	32	18.5	LOS B	0.1	0.1	0.51	0.51
P5	Across N approach	32	64.1	LOS F	0.1	0.1	0.96	0.96
P6	Across N approach	32	59.4	LOS E	0.1	0.1	0.92	0.92
P7	Across W approach	32	21.7	LOS C	0.1	0.1	0.56	0.56
All Pedestrians		128	41.0	LOS E			0.74	0.74

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

Copyright © 2000-2011 Akcelik and Associates Pty Ltd
www.sidrasolutions.com

MOVEMENT SUMMARY

Site: Cumberland Hwy / Herbert Pl_EXplusDEV_PM

Cumberland Hwy / Herbert Pl / Long St
Period: PM
Scenario 02: Existing plus Development
Signals - Fixed Time Cycle Time = 140 seconds (User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Cumberland Hwy (south)											
1	L	126	5.0	0.100	9.1	LOS A	0.5	3.9	0.11	0.65	53.3
2	T	1862	1.5	0.652	28.1	LOS B	31.2	220.9	0.81	0.73	36.0
3	R	39	54.1	0.254	73.6	LOS F	2.5	25.8	0.95	0.75	21.2
Approach		2027	2.7	0.652	27.8	LOS B	31.2	220.9	0.77	0.72	36.2
East: Herbert Pl (east)											
4	L	55	15.4	0.162	34.3	LOS C	2.3	18.0	0.65	0.72	22.9
5	T	9	11.1	0.041	57.6	LOS E	0.6	4.4	0.90	0.62	13.6
6	R	53	14.0	0.437	75.3	LOS F	3.5	27.3	0.98	0.75	12.9
Approach		117	14.4	0.437	54.6	LOS D	3.5	27.3	0.82	0.73	16.3
North: Cumberland Hwy (north)											
7	L	35	63.6	0.051	10.9	LOS A	0.2	1.7	0.12	0.63	47.6
8	T	2738	2.0	0.962	52.0	LOS D	72.1	513.2	1.00	1.08	20.1
9	R	55	26.9	0.201	71.3	LOS F	2.3	19.6	0.94	0.73	15.9
Approach		2827	3.2	0.962	51.9	LOS D	72.1	513.2	0.99	1.07	20.2
West: Long St (west)											
10	L	126	7.1	1.000[3]	58.7	LOS E	6.6	49.0	0.99	0.79	24.2
11	T	12	40.0	0.078	58.1	LOS E	0.7	5.9	0.91	0.63	22.0
12	R	331	1.3	0.967	106.0	LOS F	14.2	100.5	1.00	1.10	16.2
Approach		468	3.4	1.000	92.0	LOS F	14.2	100.5	0.99	1.00	17.9
All Vehicles		5440	3.3	1.000	46.4	LOS D	72.1	513.2	0.90	0.93	24.7

Level of Service (LOS) Method: Delay (RTA NSW).
Vehicle movement LOS values are based on average delay per movement
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model used.

3 x = 1.00 due to short lane. Refer to the Lane Summary report for information about excess flow and related conditions.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Average Back of Queue Distance m	Prop. Queued	Effective Stop Rate per ped
P3	Across E approach	32	22.3	LOS C	0.1	0.1	0.56	0.56
P5	Across N approach	32	64.1	LOS F	0.1	0.1	0.96	0.96
P6	Across N approach	32	59.4	LOS E	0.1	0.1	0.92	0.92
P7	Across W approach	32	25.8	LOS C	0.1	0.1	0.61	0.61
All Pedestrians		128	42.9	LOS E			0.76	0.76

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

Copyright © 2000-2011 Akcelik and Associates Pty Ltd
www.sidrasolutions.com

Appendix D

Reduced Plans

CAR PARKING SCHEDULE

EXISTING CONDITIONS TO REMAIN, EXCEPT AS NOTED BELOW:

1. COMBINE EXISTING 3 x ADJOINING CAR SPACE AS SHOWN TO PROVIDE 2 x DISABLED CAR SPACES WITH SHARED SPACE BETWEEN TO AS 2890.6 (2009) REQUIREMENTS.
2. ALLOCATE 1 EXISTING CAR SPACE FOR COURIER USE AS SHOWN.
3. TOTAL CAR PARKING PROPOSED : 85 SPACES

NOTE: REFER ALSO TO TRAFFIC IMPACT ASSESSMENT REPORT PREPARED BY 'TRAFFIX', TRAFFIC PLANNERS AND DRAWING ST–AL 01 FOR DETAILS OF ADDITIONAL CAR PARKING FOR PROVISONAL 108 CAR SPACES, AND PROPOSED LAYOUT FOR DIRECT ACCESS OPTION FROM HERBERT PLACE FOR HEAVY VEHICLES IF REQUIRED FOR FUTURE USE OF THE SITE.

N

0 10 20 30 40 50M
SCALE

Herbert Place

Highway

Cumberland

No. 6
VISY - TPC
"VISY SPECIALTIES"
METAL CLAD BUILDING

No Entry signs facing car park

No Truck Access Past This Point

No Entry sign posting

truck loading to conveyor

NOTE: REFER TO TRAFFIX DRAWINGS FOR DETAILS OF SWEPT PATHS AND PROPOSED TRAFFIC DIRECTION.

LOT 2
DP 849480

VISY
Out side Storage

POWER STATION
"Smithfield Energy Facility"
LOT 33
DP 850596
AREA = 1.382 ha

VISY
Out side Storage

16°56'41" 139.880 m

282°59'56" 112.605 m

16°56'41" 47.680 m

97°53'46" 10.720 m

SITE PLAN
SCALE 1:500

GENERAL REVISIONS

A	SILOS & CONTAINERS RELOCATED, DIMENSIONS ADDED.	28 NOV 2011
B	GENERAL REVISIONS, ADD SMALL TOPHATS TO ROOF RELOCATE PIPEBRIDGE, WIDEN EXTG CAR ENTRY / EXIT.	10 JAN 2012
C	ADDED EXISTING CARPARK LAYOUT.	11 JAN 2012
D	ADDED MAJOR CONTOURS, CAR PARKING SCHEDULE, ADDITIONAL SWEPT PATHS, REVISE PRE-WWT FOOTPRINT.	23 JAN 2012
E	REVISED DISABLED PARKING, NOTES TO EXTEND ROADWAY REVISED SETOUT FOR SILOS DUE TO S/W PIT.	30 JAN 2012

PRELIMINARY – NOT FOR CONSTRUCTION

CLIENT	PROJECT TITLE	DRAWING TITLE	ARCHITECT	DATE / CHECKED
VISY PLASTICS	ALTERATIONS TO EXISTING FACTORY PREMISES 6 HERBERT PLACE SMITHFIELD NSW	SITE PLAN	**DAVID SABA ARCHITECT** NSW REGISTRATION No. 4551 10/3–5 WATERS ROAD NEUTRAL BAY 2089 Phone: 9953 2477 Mobile: 0411 152 477 Email: davidsaba@optusnet.com.au	30 JAN 2012
				SCALE 1:500 (B1) — PROJECT No. 201105
				DRAWN
				SHEET No. A 01 OF – REVISION E

C:\Data\C12\VISY\SITE PLAN 30 JAN 2012.dwg

CAR PARKING SCHEDULE

CAR PARKING PROPOSED AS SHOWN ON SITE PLAN Dwg. No. 201105 / A–01: 85 SPACES

PROVISIONAL CAR PARKING IF REQUIRED FOR FUTURE USE OF THE SITE: 108 SPACES

TOTAL : 193 SPACES

N

0 10 20 30 40 50M

SCALE

Herbert Place

Highway

Cumberland

No. 6

VISY - TPC

"VISY SPECIALTIES"

METAL CLAD BUILDING

NOTE: REFER TO TRAFFIX DRAWINGS FOR DETAILS OF SWEPT PATHS AND PROPOSED TRAFFIC DIRECTION.

LOT 2
DP 849480

POWER STATION

"Smithfield Energy Facility"

LOT 33
DP 850596
AREA = 1.382 ha

VISY
Out side Storage

VISY
Out side Storage

Road Access (Bitumen)

16°56'41" 139.880 m

282°59'36" 112.605 m

97°53'46" 10.720 m

BM(SSM 87491) RL=18.650(AHD)

11550

57700

9700

125000

57600

17700

SITE PLAN

SCALE 1:500

GENERAL REVISIONS

–	OPTION "B" FOR STAND ALONE USAGE OF SITE SHOWING FUTURE TRUCK ACCESS FROM HERBERT PLACE.	09 DEC 2011
A	PROPOSAL FOR FUTURE ADDITIONAL CARPARK, RELOCATE WATER PRE TREATMENT PLANT AND WATER TANK	20 DEC 2011
B	SMALL TOPHATS TO ROOF, RELOCATE PIPEBRIDGE. WIDEN CAR ENTRY / EXIT DRIVEWAY.	04 JAN 2012
C	REVISE PIPEBRIDGE, ADD ROOF FANS, EXISTING CARPARK.	11 JAN 2012
D	REVISE PROVISIONAL CAR PARK, ADD SWEPT PATHS, REVISE PRE–WWT FOOTPRINT.	23 JAN 2012
E	REVISED DISABLED PARKING, NOTES TO EXTEND ROADWAY REVISED SETOUT FOR SILOS DUE TO S/W PIT.	30 JAN 2012

OPTION "B": PROPOSAL FOR STAND ALONE USE OF SITE.
PRELIMINARY – NOT FOR CONSTRUCTION

CLIENT	PROJECT TITLE	DRAWING TITLE	ARCHITECT	DATE / CHECKED
VISY PLASTICS	ALTERATIONS TO EXISTING FACTORY PREMISES 6 HERBERT PLACE SMITHFIELD NSW	SITE PLAN – OPTION "B" FOR STAND ALONE USAGE	**DAVID SABA ARCHITECT** NSW REGISTRATION No. 4551 10/3–5 WATERS ROAD NEUTRAL BAY 2089 Phone: 9953 2477 Mobile: 0411 152 477 Email: davidsaba@optusnet.com.au	30 JANUARY 2011 / CHECKED
				SCALE 1:500 (B1) / PROJECT No. 201105
				DRAWN / SHEET No. ST–AL 01 OF – / REVISION E

C:\Data\DC12\VISY\STAND ALONE OPTION 30 JAN 2012.aec

Appendix E

Swept Paths

Appendix E-1

Option 1

G CAR SPACE FOR COURIER USE

PROPOSED : 85 SPACES

TRAFFIC IMPACT ASSESSMENT
'TRAFFIX', TRAFFIC PLANNERS
1 FOR DETAILS OF ADDITIONAL
VISONAL 108 CAR SPACES, AND
DIRECT ACCESS OPTION FROM
EAVY VEHICLES IF REQUIRED FOR
ITE.

Herbert Place

Highway

No. 6
VISY - TPC
"VISY SPECIALTIES"
METAL CLAD BUILDING

01

02

03

04

05

No Entry sign facing car park

No Truck Access Past This Point

No Entry sign / posting

potentially close off to light vehicle traffic

NOTE: REFER TO TRAFFIX DRAWINGS FOR DETAILS OF SWEPT PATHS AND PROPOSED TRAFFIC DIRECTION.

truck loading to truck loading to conveyor

conveyor

LOT 2
DP 849480

VISY
Out side Storage

VISY
Out side Storage

POWER STATION
"Smithfield Energy Facility"
LOT 33
DP 850596
AREA = 1.382 ha

SITE PLAN
SCALE 1:500

TED, DIMENSIONS ADDED 25 NOV 2011
LL TOPHATS TO ROOF 11 JAN 2012
EXTG CAR ENTRY / EXIT.
OUT. 11 JAN 2012
R PARKING SCHEDULE 11 JAN 2012
ISE PRE-WWI FOOTPRINT.
NOTES TO EXTEND ROADWAY 2012
DUE TO S/W PIT.

PRELIMINARY – NOT FOR CONSTRUCTION

PROJECT TITLE	DRAWING TITLE	ARCHITECT	DATE	CHECKED
ALTERATIONS TO EXISTING FACTORY PREMISES 6 HERBERT PLACE SMITHFIELD NSW	SITE PLAN	DAVID SABA ARCHITECT NSW REGISTRATION No. 4551 10/3–5 WATERS ROAD NEUTRAL BAY 2089 Phone: 9953 2477 Mobile: 0411 152 47 Email: davidsaba@optusnet.com.au	30 JAN 2012	
			SCALE 1:500 (B1)	PROJECT No. 201105
			DRAWN	
			SHEET No. A 01	OF –
				REVISION E

no. revision note by. date

architect
David Saba Architect
a: 10/3-5 Waters Road, Neutral Bay, NSW 2089
t: +61 2 9953 2477

client
VISY PLASTICS

scale

project
VISY - TPC
6 Herbert Place
SMITHFIELD

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
Cover Sheet
(Option 1)

drawn:	checked:	date:
TL	-	02 Feb 2012

project no.	drawing phase.	drawing no.	rev
11.376	DA	TX.00	-

sting Kerb & Gutter

g Kerb & Gutter

Existing Kerb & Gutter

Island

19.027

19.214

19.211

19.093

18.891

18.870

18.853

18.760

18.737

18.665

18.651

Existing Kerb & Gutter

Head)

PIT

& Gutter

19.200

Existing Mesh Fence

BM(SSM 87491)
RL=18.650(AHD)

18.556

19.008

19.322

19.340

18.516

PP

18.457

18.382

EXTEND EXTG ROADWAY, PROVIDE
NEW KERB & GUTTER, REVISE S/W PIT
ALL TO ENGINEER'S DETAIL

PIT

Existing Mesh Fence

PIT

RL=18.880

19.315

19.320

19.275

19.230

19.200

19.125

PIT

19.008

19.008

Drive Way

19.071

19.041

19.019

Existing Kerb & Gutter

18.916

18.822

18.822

ncrete Area

no.	revision note	by.	date

architect

David Saba Architect

a: 10/3-5 Waters Road, Neutral Bay, NSW 2089
t: +61 2 9953 2477

client

VISY PLASTICS

scale

1:250 @ A3

0m 2,5 5,0 7,5 10,0

project

VISY - TPC
6 Herbert Place
SMITHFIELD

drawing prepared by

TRAFFIX
traffic and transport planners

suite 3,08 46a macIaey 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
B-Double Access & Circulation
(Option 1)

drawn:	checked:	date:
TL	-	02 Feb 2012

project no.	drawing phase.	drawing no.	rev
11.376	DA	TX.01	-

posting

truck loading to conveyor

NOTE: REFER TO TRAFFIX DRAWINGS FOR DETAILS OF SWEPT PATHS AND PROPOSED TRAFFIC DIRECTION.

EXTEND EXTG ROADWAY, PROVIDE NEW KERB & GUTTER, REVISE S... ALL TO ENGINEER'S DETAIL

EXTEND EXTG ROA... NEW KERB & GU...

Easement 70m Wide

Driveway

Footpath

Conc. Area

AWNING

Existing Mesh Fence

Existing Kerb & Gutter

Eve & Gutter RL=27.360

RR=27.845

19.500

PIT Inv.RL=18.880

PIT

PIT

Concrete Area

CONTAINERS

PIT Inv.RL=17.445

PIT Inv.RL=18.770

PIT

EXISTING RIDGE RL 30.165

FFL=19.585

FFL=19.590

FFL=19.580

AWNING

CONTAINERS

Existing Kerb & Gutter

Existing

no.	revision note	by.	date

architect
David Saba Architect
a: 10/3-5 Waters Road, Neutral Bay, NSW 2089
t: +61 2 9953 2477

client
VISY PLASTICS

scale
1:250 @ A3
0m 2,5 5,0 7,5 10,0

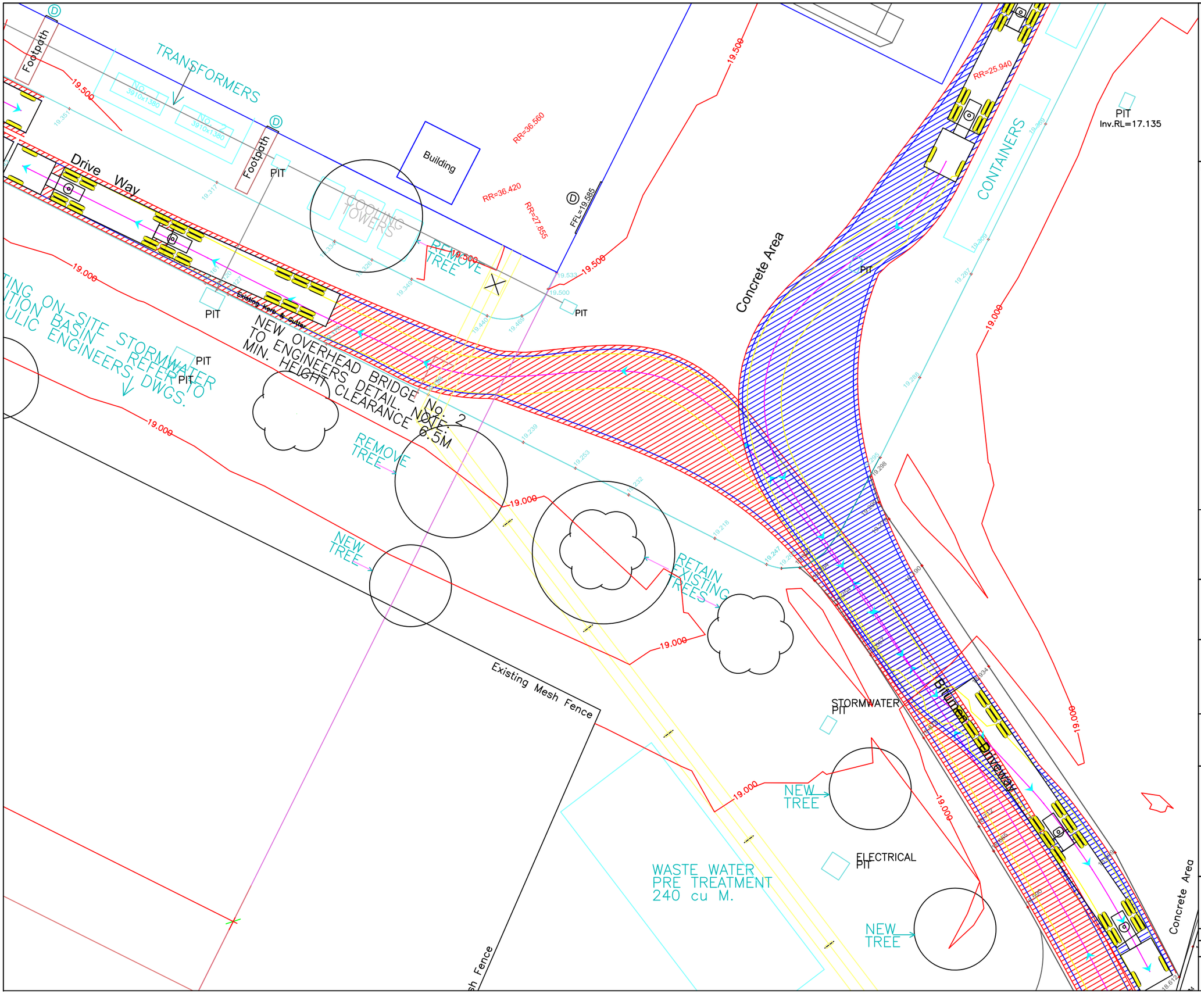
project
VISY - TPC
6 Herbert Place
SMITHFIELD

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
B-Double Access & Circulation
(Option 1)

drawn:	checked:	date:
TL	-	02 Feb 2012

project no.	drawing phase.	drawing no.	rev
11.376	DA	TX.02	-



no. revision note — by. date

architect

David Saba Architect

a: 10/3-5 Waters Road, Neutral Bay, NSW 2089
t: +61 2 9953 2477

client

VISY PLASTICS

scale

1:250 @ A3

0m 2,5 5,0 7,5 10,0

project

VISY - TPC
6 Herbert Place
SMITHFIELD

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

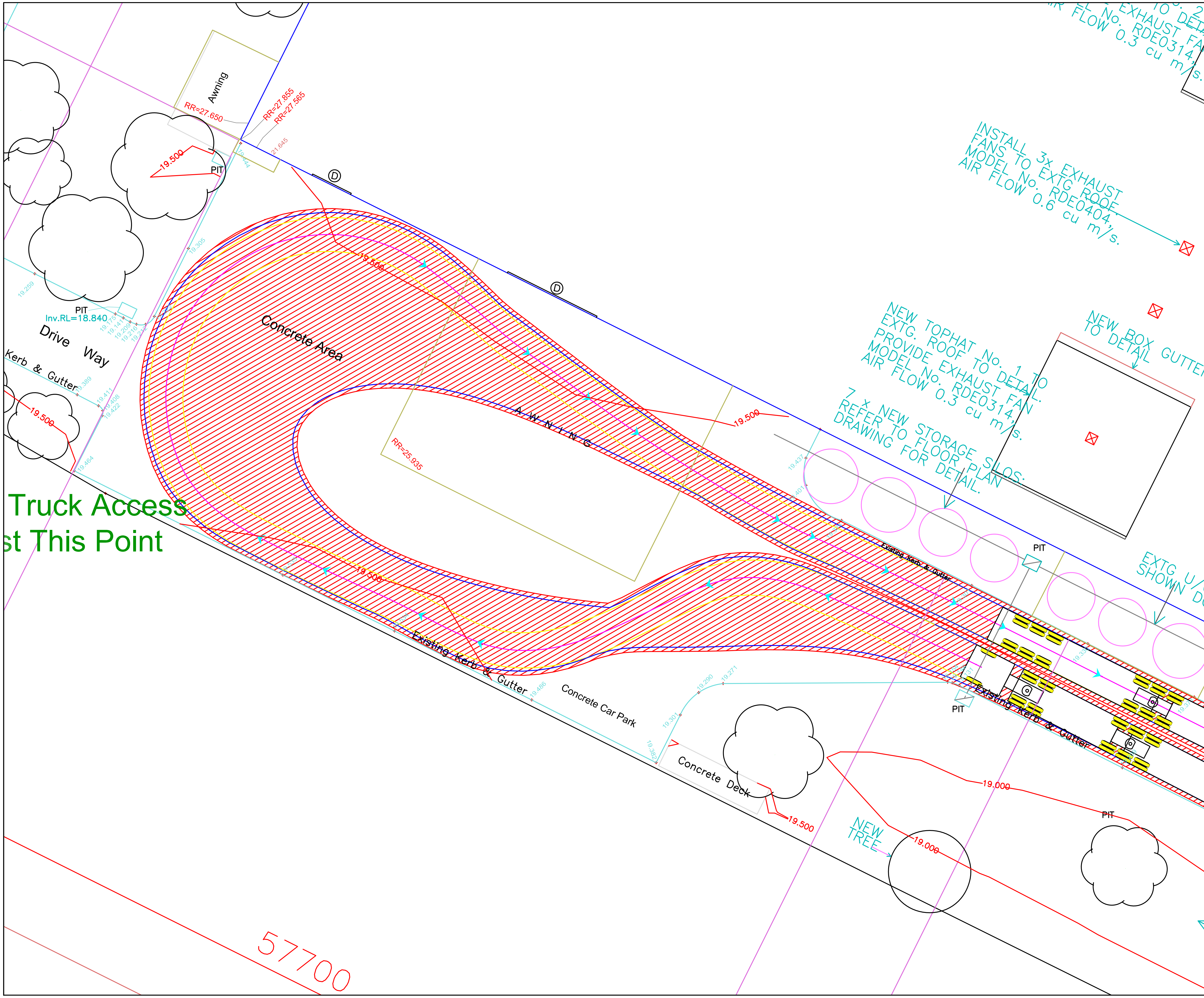
traffix
traffic & transport planners

drawing title

Swept Paths
B-Double Access & Circulation
(Option 1)

drawn:	checked:	date:
TL	-	02 Feb 2012

project no.	drawing phase.	drawing no.	rev
11.376	DA	TX.03	-



no. revision note by. date

architect
David Saba Architect
a: 10/3-5 Waters Road, Neutral Bay, NSW 2089
t: +61 2 9953 2477

client
VISY PLASTICS

scale
1:250 @ A3
0m 2.5 5.0 7.5 10.0

project
VISY - TPC
6 Herbert Place
SMITHFIELD

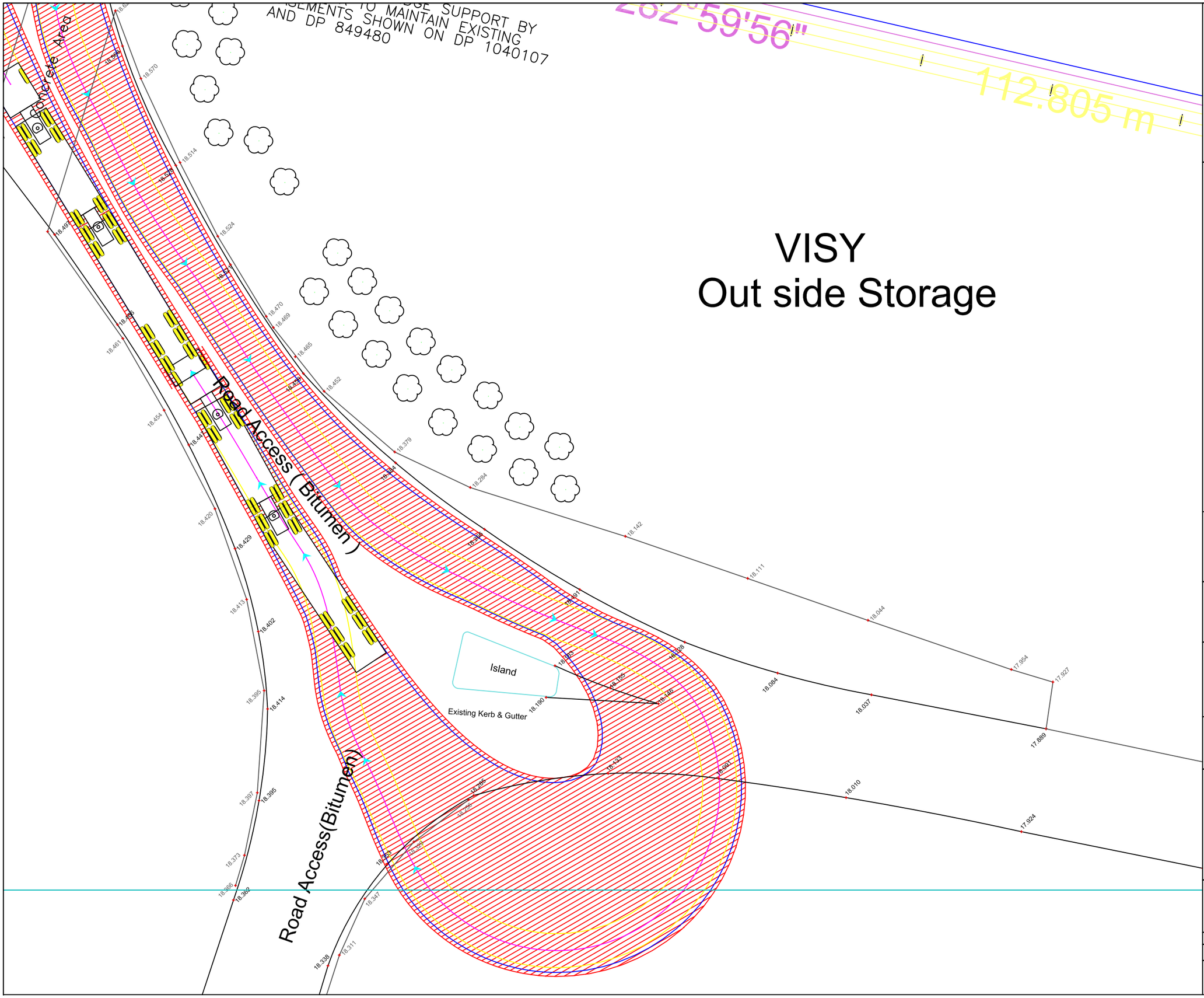
drawing prepared by
TRAFFIX
traffic and transport planners
suite 3.08 46a macleay street
potts point NSW 2011
PO Box 1061 potts point nsw 1035
t: +61 2 8324 8700
f: +61 2 9380 4481
e: info@traffix.com.au

traffix
traffic & transport planners

drawing title
Swept Paths
B-Double Access & Circulation
(Option 1)

drawn: TL	checked: -	date: 02 Feb 2012

project no.	drawing phase.	drawing no.	rev
11.376	DA	TX.04	-



VISY
Out side Storage

no.	revision note	by.	date

architect
David Saba Architect
a: 10/3-5 Waters Road, Neutral Bay, NSW 2089
t: +61 2 9953 2477

client
VISY PLASTICS

scale
1:250 @ A3
0m 2.5 5.0 7.5 10.0

project
VISY - TPC
6 Herbert Place
SMITHFIELD

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
B-Double Access & Circulation
(Option 1)

drawn:	checked:	date:
TL	-	02 Feb 2012

project no.	drawing phase.	drawing no.	rev
11.376	DA	TX.05	-

Appendix E-2

Option 2 (Standalone Development)

193 SPACES

line mark as shared area

line mark as accessible space'

Herbert Place

Highway

No. 6
VISY - TPC
"VISY SPECIALTIES" METAL CLAD BUILDING

B1

B2

B3

B4

potentially cut off to light vehicle traffic

truck loading to conveyor

No Truck Access Past This Point

linemark /signpost as 'standard spaces'

LOT 2
DP 849480

VISY
Out side Storage

VISY
Out side Storage

POWER STATION
"Smithfield Energy Facility"
LOT 33
DP 850596
AREA = 1.382 ha

SITE PLAN
SCALE 1:500

OPTION "B": PROPOSAL FOR STAND ALONE USE OF SITE.
PRELIMINARY – NOT FOR CONSTRUCTION

PROJECT TITLE: ALTERATIONS TO EXISTING FACTORY PREMISES 6 HERBERT PLACE SMITHFIELD NSW	DRAWING TITLE: SITE PLAN – OPTION "B" FOR STAND ALONE USAGE	ARCHITECT: DAVID SABA ARCHITECT NSW REGISTRATION No. 4551 10/3-5 WATERS ROAD NEUTRAL BAY 2089 Phone: 9953 2477 Mobile: 0411 152 477 Email: davidsaba@optusnet.com.au	DATE: 30 JANUARY 2012 / SCALE: 1:500 (B1) / DRAWN / SHEET No.: ST-AL 01 OF –	CHECKED / PROJECT No.: 201105 / REVISION: E

no. revision note — by. date

architect
David Saba Architect
a: 10/3-5 Waters Road, Neutral Bay, NSW 2089
t: +61 2 9953 2477

client
VISY PLASTICS

scale

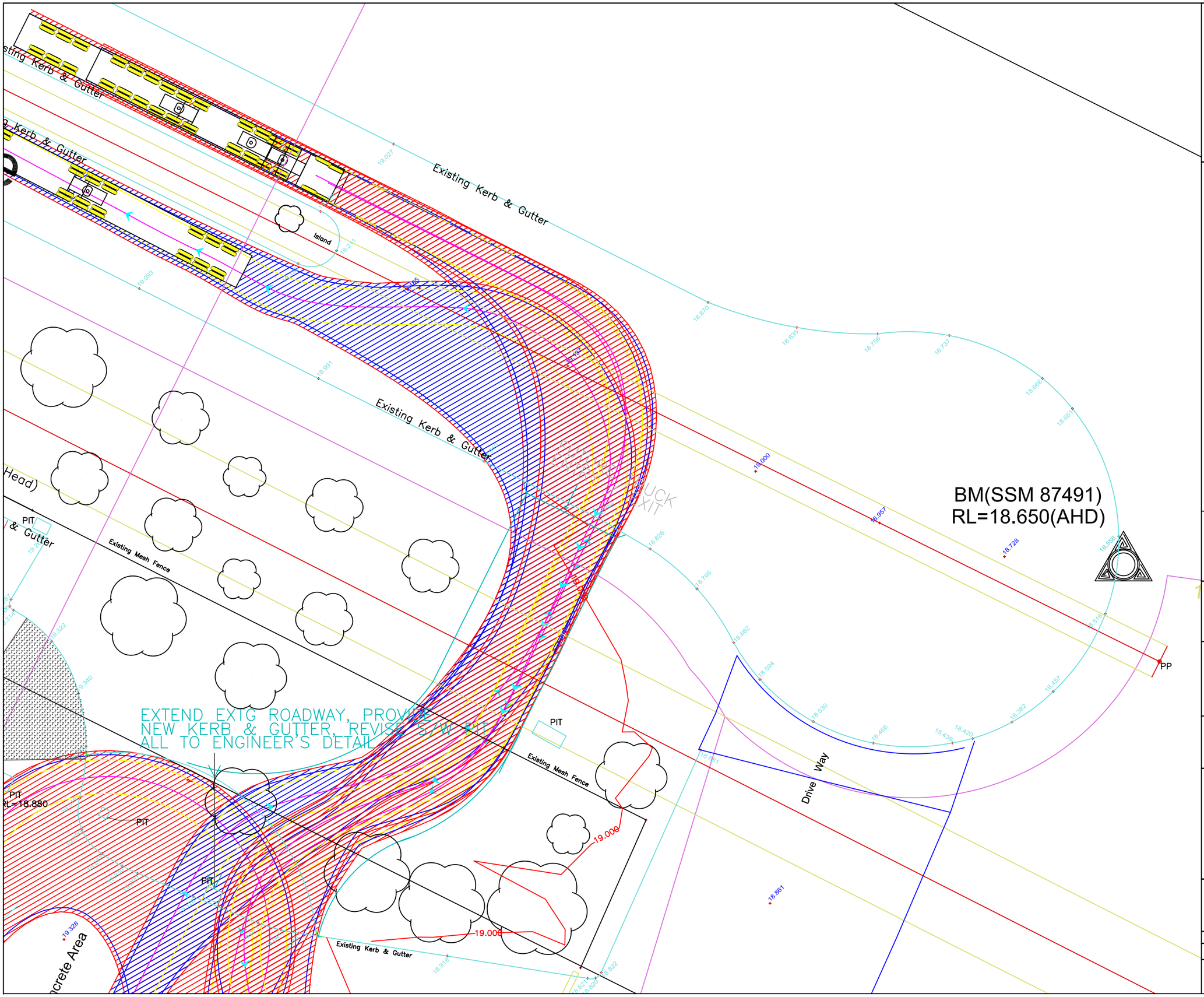
project
VISY - TPC
6 Herbert Place
SMITHFIELD

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
Cover Sheet
(Option 2)

drawn: TL | checked: - | date: 01 Feb 2012

11.376	DA	TX.B0	-
project no.	drawing phase.	drawing no.	rev



no.	revision note	by.	date

architect

David Saba Architect

a: 10/3-5 Waters Road, Neutral Bay, NSW 2089
t: +61 2 9953 2477

client

VISY PLASTICS

scale

1:250 @ A3

0m 2,5 5,0 7,5 10,0

project

VISY - TPC
6 Herbert Place
SMITHFIELD

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
B-Double Access & Circulation
(Option 2)

drawn:	checked:	date:
TL	-	01 Feb 2012

project no.	drawing phase.	drawing no.	rev
11.376	DA	TX.B1	-

NOTE: REFER TO TRAFFIX DRAWINGS FOR DETAILS OF SWEPT PATHS AND PROPOSED TRAFFIC DIRECTION.

Drive Way

Footpath

Conc. Area

AWNING

Existing Mesh Fence

Existing Kerb & Gutter

Eve & Gutter RL=27.360

RR=27.845

PIT
Inv.RL=18.880

PIT

PIT

Concrete Area

EXTEND EXTG ROADWAY, PROVID
NEW KERB & GUTTER, REVISE S
ALL TO ENGINEER'S DETAIL

PIT
Inv.RL=17.445

RR=25.950

EXTEND EXTG RO
NEW KERB & GU

CONTAINERS

CONTAINERS

CONTAINERS

CONTAINERS

NEW CONCRETE AREA
APPROX 900 SQ M.

EXISTING RIDGE RL 30.165

FFL=19.585

FFL=19.590

FFL=19.580

PIT

PIT
Inv.RL=18.720

Existing

no.	revision note	by.	date

architect
David Saba Architect
a: 10/3-5 Waters Road, Neutral Bay, NSW 2089
t: +61 2 9953 2477

client
VISY PLASTICS

scale
1:250 @ A3
0m 2.5 5.0 7.5 10.0

project
VISY - TPC
6 Herbert Place
SMITHFIELD

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
B-Double Access & Circulation
(Option 2)

drawn:	checked:	date:
TL	-	01 Feb 2012

project no.	drawing phase.	drawing no.	rev
11.376	DA	TX.B2	-

NOTE: REFER TO TRAFFIX DRAWINGS FOR DETAILS OF SWEPT PATHS AND PROPOSED TRAFFIC DIRECTION.

EXISTING RIDGE RL 30.165

FFL=19.585

FFL=19.590

FFL=19.580

PIT

PIT
Inv.RL=18.770

PIT
Inv.RL=17.135

PIT
Inv.RL=17.445

Concrete Area

Concrete Area

Drive Way

Existing Kerb & Gutter

Existing Kerb & Gutter

Existing Kerb & Gutter

Existing Metal Fence

Gate

Gate

RR=25.950

RR=35.080

EXTEND EXTG ROADWAY, PROVIDE NEW KERB & GUTTER AS REQ'D.

FORKLIFT CROSSING

CONTAINERS

CONTAINERS

CONTAINERS

CONTAINERS

NEW CONCRETE AREA APPROX 900 SQ.M.

CONVEYOR

A W N I N G

19.000

19.008

19.000

19.500

19.328

19.220

19.398

19.242

19.560

19.560

19.293

19.377

19.225

19.341

19.574

19.563

19.575

19.564

19.379

19.232

19.308

19.527

19.411

19.254

19.360

19.260

19.038

18.967

18.802

18.800

18.793

18.732

18.533

18.633

18.678

18.552

18.750

18.781

18.763

no.	revision note	by.	date

architect
David Saba Architect
a: 10/3-5 Waters Road, Neutral Bay, NSW 2089
t: +61 2 9953 2477

client
VISY PLASTICS

scale
1:250 @ A3
0m 2.5 5.0 7.5 10.0

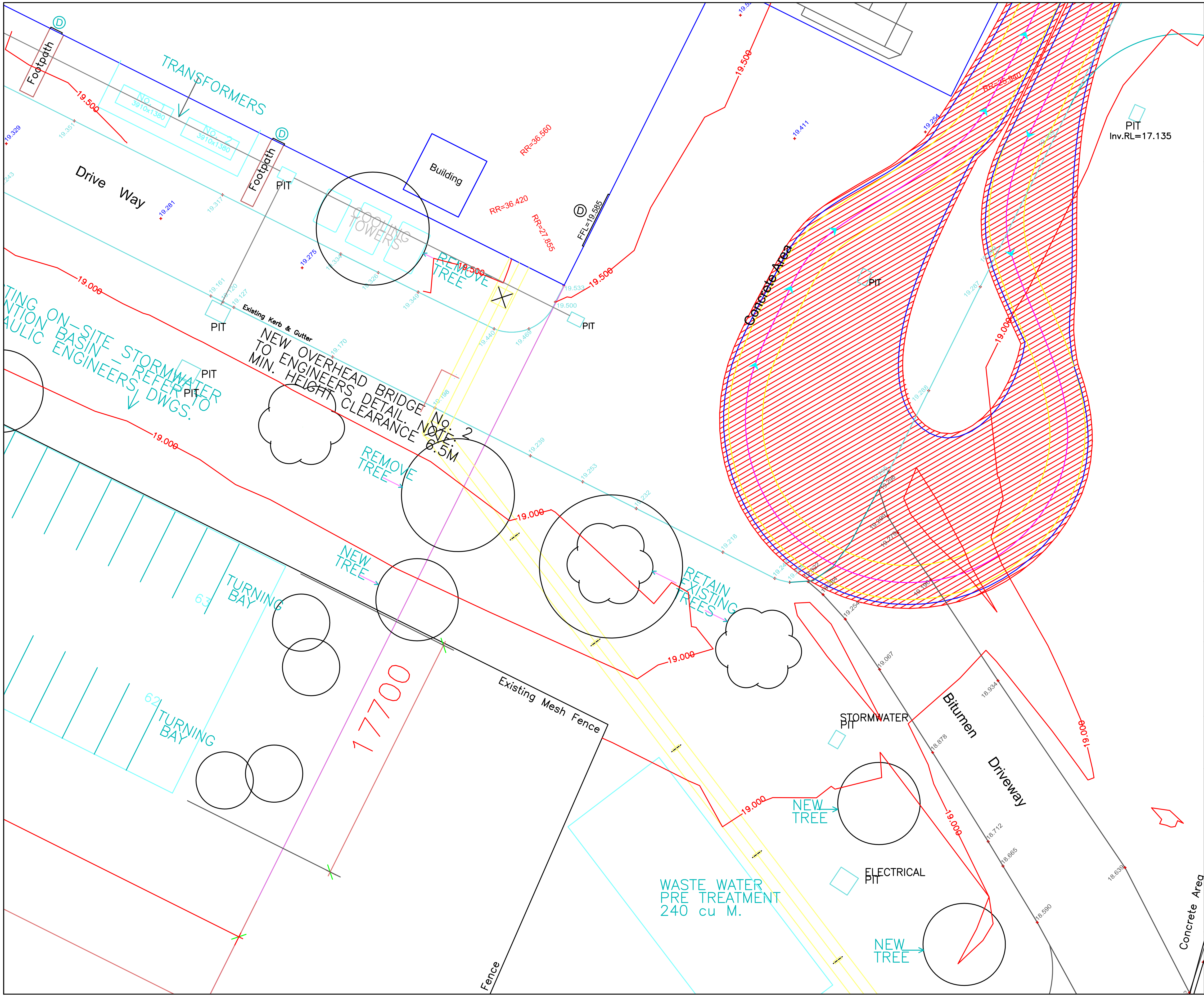
project
VISY - TPC
6 Herbert Place
SMITHFIELD

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
B-Double Access & Circulation
(Option 2)

drawn:	checked:	date:
TL	-	02 Feb 2012

project no.	drawing phase.	drawing no.	rev
11.376	DA	TX.B3	-



no. revision note | by. date

architect
David Saba Architect
a: 10/3-5 Waters Road, Neutral Bay, NSW 2089
t: +61 2 9953 2477

client
VISY PLASTICS

scale
1:250 @ A3
0m 2.5 5.0 7.5 10.0

project
VISY - TPC
6 Herbert Place
SMITHFIELD

drawing prepared by
TRAFFIX
traffic and transport planners
suite 3.08 46a maclaey 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
B-Double Access & Circulation
(Option 2)

drawn: TL	checked: -	date: 02 Feb 2012

11.376	DA	TX.B4	-
project no.	drawing phase.	drawing no.	rev