

# **Construction Traffic and Pedestrian Management Plan**

Oran Park High School 390 South Circuit, Oran Park

Reference: 18.452r01v02 Date: September 2018 Suite 2.08 Holt Street Surry Hills NSW 2011 t: +61 2 8324 8700 w: www.traffix.com.au





### **Document Verification**

Job Number:	18.452					
Project:	390 South Circuit, Ora	390 South Circuit, Oran Park				
Client:	Hindmarsh Construction	Hindmarsh Construction Pty Ltd				
Revision	Date	Signature				
v01	14/09/2018	14/09/2018 Neil Caga				
v02	20/09/2018	Neil Caga	Vince Doan			

### Traffic Control Plan Certificates

Prepare a Work Zone Traffic Management Plan			
Name:	Vince Doan	Certificate No.	0031360631

Suite 2.08 Holt Street Surry Hills NSW 2011 t: +61 2 8324 8700 w: www.traffix.com.au





### Contents

1.	Introduction	2
2.	CTPMP Requirements	4
2.1 2.2	Traffic Control Plan Development Consent CTPMP Requirements	4 4
3.	Existing Conditions	6
3.1 3.2 3.3	Location and Site Road Network Public Transport	6 8 10
4.	Overview of Construction Program	12
4.1 4.2 4.3 4.4 4.5 4.6	Times of Operation Demolition Stage Bulk Excavation Stage Structure Stage Fit-out & Finishes Stage Work Zone Requirements	12 12 13 13 13 13 14
5.	Traffic Management Arrangements	15
5.1 5.2 5.3 5.4 5.5 5.6 5.7	Truck Routes (Site) Truck Routes (Works Zone) Vehicular Access Pedestrian Control Crane Requirements Traffic Control Plan Employee Vehicles	15 18 21 21 21 22 22
6.	Conclusions	23

### Appendices

- Appendix A: Photographic Record
- Appendix B: Site Establishment Plan
- Appendix C: Swept Path Analysis
- Appendix D: Traffic Control Plan



# 1. Introduction

TRAFFIX has been commissioned by Hindmarsh Construction Pty Ltd to prepare a Construction Traffic and Pedestrian Management Plan (CTPMP) report for the construction of Oran Park High School, and alterations and additions to Oran Park Primary School, located at 390 South Circuit, Oran Park. The development is approved under SSD 7968, which was granted by the NSW Government on 14 December 2017.

This CTPMP relates to the demolition, bulk excavation, structure, fit-out and finishes stages of construction.



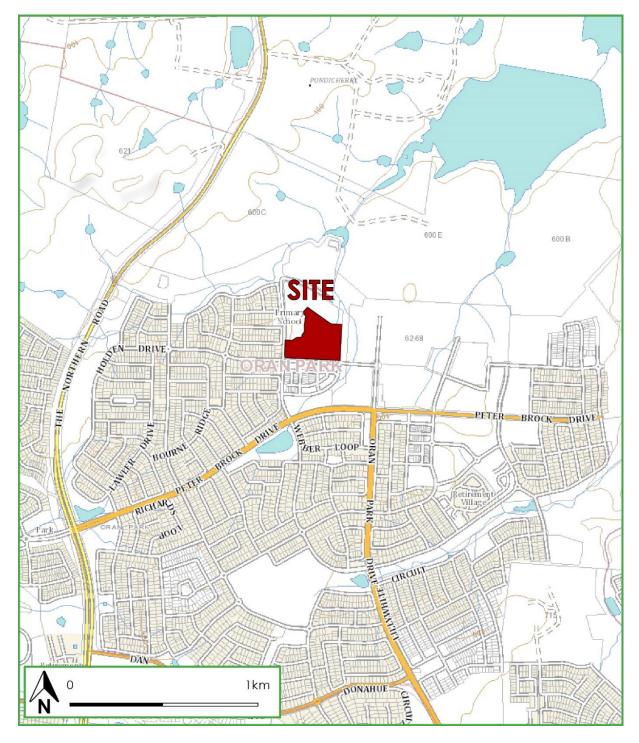


Figure 1: Location Plan



# 2. CTPMP Requirements

### 2.1 Traffic Control Plan

The Traffic Control Plans (TCPs) that are included in this report, should be implemented taking due account of on-site conditions as will occur over the construction period. Accordingly, construction crew are expected to respond in a pro-active manner to ensure that this plan is implemented to maximum effect and with no obvious safety issues being overlooked. In particular, the following matters are considered noteworthy:

- All signs are to be placed where clear visibility is available;
- Installations should be checked intermittently during the course of the day/s; and
- A Roads and Maritimes Services (RMS) certified Traffic Controllers shall be on-site during work hours to supervise vehicle and pedestrian movements.

It is noted that TRAFFIX is responsible for the preparation of these CTPMP only and not for its implementation, which is the responsibility of the project manager/builder.

### 2.2 Development Consent CTPMP Requirements

In addition to the above, it is noted that the Development Consent outlines a requirement for the preparation of a Construction Traffic and Pedestrian Management Plan. Specifically, Condition B22 states the following:

#### Construction Traffic and Pedestrian Management Plan

- a) Prior to the commencement of works on the Subject Site, a Construction Traffic and Pedestrian Management Plan (CTPMP) must be prepared for the development by a suitably qualified expert and in consultation with Council. The CTPMP must specify, but not be limited to, the following:
  - identification of construction traffic routes for all required vehicles during construction, inclusive of any crane delivery, including any known road closures and consideration of alternate routes and construction traffic volumes (including Heavy vehicle/spoil haulage) on these routes;
  - *ii)* details of construction vehicle movements including parking, dedicated vehicle turning areas, and ingress and egress points;



- iii) discussion of construction impacts that could result in disruption of traffic, public transport, pedestrian and cycle access, access to public land, property access, including details of oversize load movements, and the nature and duration of those impacts;
- *iv)* discussion of potential cumulative construction impacts on the surrounding road network as a result of the simultaneous construction of adjoining developments;
- v) details of management measures to minimise traffic impacts, including temporary road work traffic control measures and measures to minimise peak period congestion;
- vi) details of measures to maintain or provide alternative safe and accessible routes for pedestrians throughout the duration of construction;
- vii) details of measures to maintain connectivity for cyclists, with particular emphasis on providing adequate access between key existing cycle routes for commuter cyclists;
- viii) details of methods to be used to communicate proposed future traffic changes to affected road users, pedestrians and cyclists;
- *ix)* an adaptive response plan which sets out a process for response to any traffic, construction or other incident; and
- *x*) mechanisms for the monitoring, review and amendment of the CTPMP.
- b) The Applicant must submit a copy of the CTPMP to the Department and Council, prior to commencement of work.



# 3. Existing Conditions

### 3.1 Location and Site

The site in relation to the construction of the Oran Park High School is located on 390 South Circuit, Oran Park. It is situated approximately 10.3 kilometres northwest of Campbelltown CBD and is legally known as Lot 1000 in DP 1164435. More specifically, it is located on the northeast corner of the South Circuit and Holden Drive intersection.

The site is irregular in configuration with a total site area of approximately 48,965m<sup>2</sup>. It has a northern boundary to Oran Park Primary School of 450 metres and an eastern boundary to a vacant lot of 173 metres. The southern frontage to Holden Drive and western frontage to South Circuit measures 273 and 95 metres, respectively.

Vehicular access to the site is currently provided via a single driveway along the southern frontage of Holden Drive. The driveway is located on the southeast corner of the site.

A Location Plan is presented in **Figure 1**, with a Site Plan presented in **Figure 2** below. Reference should also be made to the Photographic Record presented in **Appendix A**.





Figure 2: Site Plan



### 3.2 Road Network

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

- The Northern Road: an RMS Main Road (MR 154) that generally traverses in a north-south direction between the M4 Western Motorway in the north and Camden Valley Way in the south. It is typically subject to 80km/hr speed zoning and accommodates one lane of traffic in each direction. It should be noted the RMS are upgrading approximately 35 kilometres of The Northern Road as part of the Western Sydney Infrastructure Plan. Upgrades between The Old Northern Road in Narellan and Jamison Road in South Penrith will provide three (3) to four (4) traffic lanes in either direction within a divided carriageway.
- Peter Brock Drive: a local collector road that traverses in an east-west direction between Perkins Drive in the east and The Northern Road in the west. It is subject to 60km/hr speed zoning and accommodates two (2) lanes of traffic in each direction. It should be noted that the eastern end of Peter Brock Drive continues onto a gravel road east of Perkins Drive.
- Oran Park Drive: a local road that traverses in a north-south direction between Holden Drive in the north and Camden Valley Way in the south. Within the vicinity of the site, it is subject to 60km/hr speed zoning and accommodates two (2) lanes of traffic in each direction.
- Holden Drive: a local road that traverses in an east-west direction between Oran Park Drive in the east and South Circuit in the west. Within the vicinity of the site, it is subject to 60km/hr speed zoning and accommodates a single lane of traffic in each direction. Holden Drive permits unrestricted kerbside parking.
- South Circuit: a local road that traverses throughout the Oran Park region from Oran Park Primary School in the north, Oran Park Drive in the south, and Civic Way in the west. Within the vicinity of the site, it is subject to 50km/hr speed zoning and accommodates a single lane of traffic in each direction. South Circuit permits unrestricted kerbside parking.



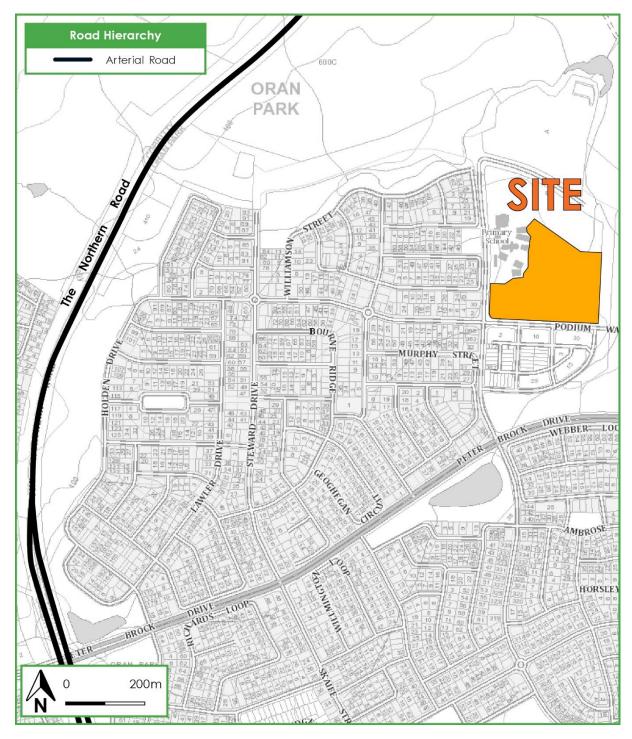


Figure 3: Road Hierarchy



### 3.3 Public Transport

The existing bus services that operate in the locality are shown in **Figure 4**. Standard transport planning guidelines state that a development is advantageously located to benefit bus services if it is within 400 metres (optimal walking distance) of a bus stop. These bus services and routes are summarised below:

- 850 Narellan Town Centre to Minto
- 858 Oran Park Town Centre to Leppington
- 2 896 Campbelltown to Oran Park via Gregory Hills



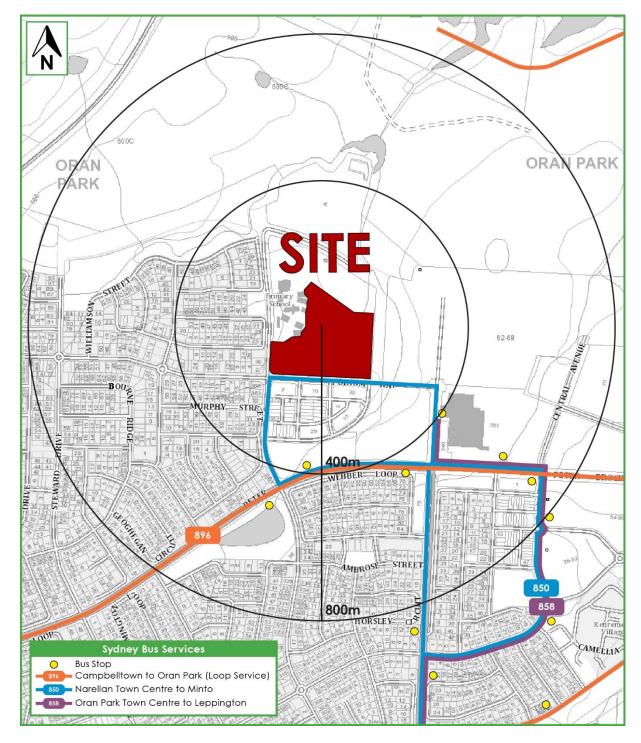


Figure 4: Public Transport



# 4. Overview of Construction Program

#### 4.1 Times of Operation

The total construction period is expected to occur for less than 14 months. The hours of operation will be in accordance with Condition C1 of the DA Conditions of Consent which is summarised below.

The hours of construction, including the delivery of materials to and from the subject site:

0	Monday to Friday	7:00am to 6:00pm;
0	Saturday	8:00am to 1:00pm; and
0	Sunday or Public Holiday	No building activities are to be carried out at any time.

The works that are permitted outside the above hours are limited to:

- O The delivery of materials is required outside these hours by the Police or other authorities; or
- It is required in an emergency to avoid the loss of life, damage to property and/or to prevent environmental harm; or
- 2 Variation is approved in advance in writing by the Secretary or her nominee.

#### 4.2 Demolition Stage

This stage will occur over a 5 week period commencing in October 2018, pending approval of this CTPMP report and will involve a maximum workforce of 20 people on-site at any one time with an average of 10 people. The maximum sized truck to be utilised during this stage will be 19.6m long truck and dogs. It is proposed that all demolition works will occur within the site, with access provided from Access Gate 1 on Holden Drive (southeast corner of the site).

This stage will have an average of five (5) truck arrivals per day (5 in, 5 out) and a maximum of four (4) truck arrivals during the peak hour movements (4 in, 4 out). This is considered a minor volume and hence, the impact on the performance of key intersections in the locality will be negligible.



#### 4.3 Bulk Excavation Stage

This stage will occur over a 13 week period commencing in October 2018, pending approval of this CTPMP report and will involve a maximum workforce of 20 people on-site at any one time with an average of 10 people. The maximum sized truck to be utilised during this stage will be 19.6m long truck and dogs. It is proposed that all bulk excavation works will occur within the site, with access provided from Access Gate 1 on Holden Drive (southeast corner of the site).

This stage will have an average of 15 truck arrivals per day (15 in, 15 out) and a maximum of four (4) truck arrivals during the peak hour movements (4 in, 4 out). This is considered a minor volume and hence, the impact on the performance of key intersections in the locality will be negligible.

#### 4.4 Structure Stage

This stage will occur over a 21 week period commencing in January 2019, pending approval of this CTPMP report and will involve a maximum workforce of 200 people on-site at any one time with an average of 80 people. It is proposed that all structure works will occur within the site and the proposed works zone.

The maximum sized truck to be utilised during this stage within the site will be 19.6m long truck and dogs. It is proposed that access to the site would be provided from Access Gate 1 and Access Gate 2.

The maximum sized truck to be utilising the works zone will be a 19.0m long articulated vehicle (AV). It is proposed that all loading and unloading works will occur inside the proposed work zone located along the southern frontage on Holden Drive, adjacent to Access Gate 1.

This stage will have an average of 15 truck arrivals per day (15 in, 15 out) and a maximum of four (4) truck arrivals during the peak hour movements (4 in, 4 out). This is considered a minor volume and hence, the impact on the performance of key intersections in the locality will be negligible.

### 4.5 Fit-out & Finishes Stage

This stage will occur over a 26 week period commencing in June 2019, pending approval of this CTPMP report and will involve a maximum workforce of 150 people on-site at any one time with an average of 120 people. The maximum sized truck to be utilised during these stages will be 19.6m long truck and dogs. It is proposed that all fit-out and finishes works will occur within the site, with access provided from Access Gate 1 and Access Gate 2 on Holden Drive.



This stage will have an average of 15 truck arrivals per day (15 in, 15 out) and a maximum of four (4) truck arrivals during the peak hour movements (4 in, 4 out). This is considered a minor volume and hence, the impact on the performance of key intersections in the locality will be negligible.

### 4.6 Work Zone Requirements

A single work zone is proposed during the Structure Stage (inclusive) on Holden Drive, located at the southeast corner of the site. This work zone will be 60.0 metres long and will be situated west of Access Gate 1. The 19.0m long AV will be required to approach from South Circuit and traval along Holden Drive (eastbound), in order to access the work zone. All loading and unloading works will then occur from within the work zone via a mobile crane and / or manitous. The 19.0m long AV will then be required to leave the work zone in a forward direction onto Holden Drive, eastbound. The proposed work zone is presented in **Figure 5** below.

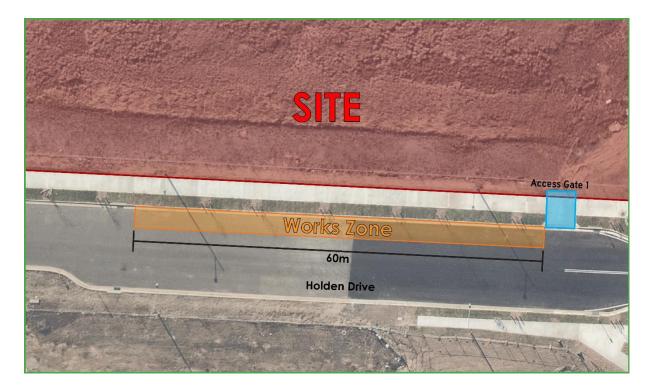


Figure 5: Proposed Work Zone during Structure Stage



# 5. Traffic Management Arrangements

### 5.1 Truck Routes (Site)

The proposed truck routes satisfy the requirements of the DA Conditions of Consent. These truck routes to and from Access Gate 1 and Access Gate 2 can be summarised as follows:

0	Routes to the subject site:	1.	Trucks will arrive on the Northern Road.
		2.	Turn onto Peter Brock Drive, eastbound.
		3.	Turn left onto Oran Park Drive, northbound.
		4.	Turn left onto Holden Drive, westbound.
		5.	Turn right onto the site.
0	Routes from the subject site:	1.	Trucks will exit right onto Holden Drive, westbound.
		2.	Turn left onto South Circuit, southbound.
		3.	Turn right onto Peter Brock Drive, westbound.

4. Turn onto the Northern Road.

The proposed truck routes for all stages of construction are shown in **Figure 6** and **Figure 7**. A copy of these routes shall be provided to all drivers prior to attending the site. The above routes make use of the arterial road network as much as possible with the use of local streets only where required.

15



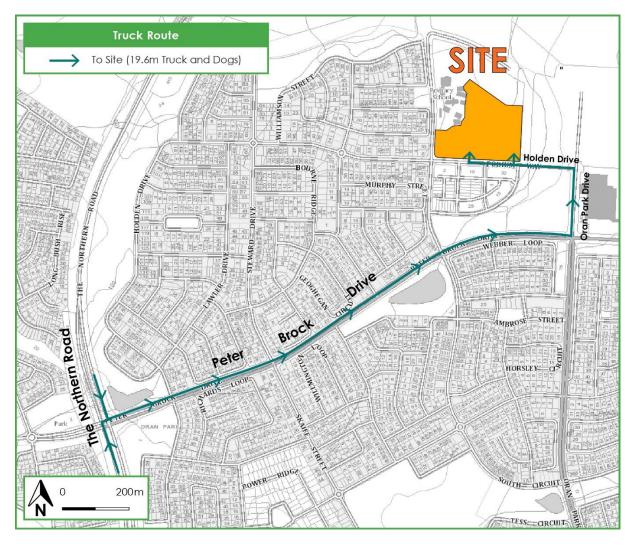


Figure 6: Proposed Truck Routes (Access the Site)



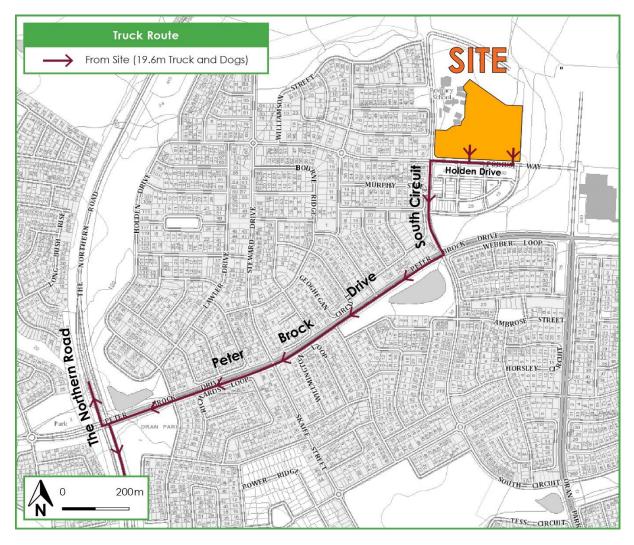


Figure 7: Proposed Truck Routes (Egress the Site)



### 5.2 Truck Routes (Works Zone)

The proposed truck routes satisfy the requirements of the DA Conditions of Consent. The truck routes to and from the proposed works zone during the structure stage (inclusive) are summarised as follows:

- O Routes to the work zone:
- 1. Trucks will arrive on the Northern Road.
- 2. Turn onto Peter Brock Drive, eastbound.
- 3. Turn left onto South Circuit, northbound.
- 4. Turn right onto Holden Drive, westbound.
- 5. Arrive into the work zone on Holden Drive.
- O Routes from the work zone:
- 1. Trucks will exit the work zone onto Holden Drive.
- 2. Turn right onto Oran Park Drive, southbound.
- 3. Turn right onto Peter Brock Drive, westbound.
- 4. Turn onto the Northern Road.

The proposed truck routes for the structure stage of construction are shown in **Figure 8** and **Figure 9**. A copy of these routes shall be provided to all drivers prior to attending the site. The above routes make use of the arterial road network as much as possible with the use of local streets only where required.



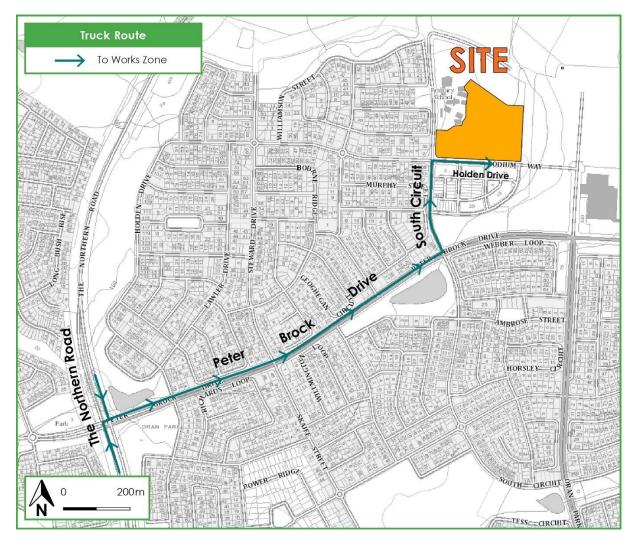


Figure 8: Proposed Truck Routes (Access the Work Zone)



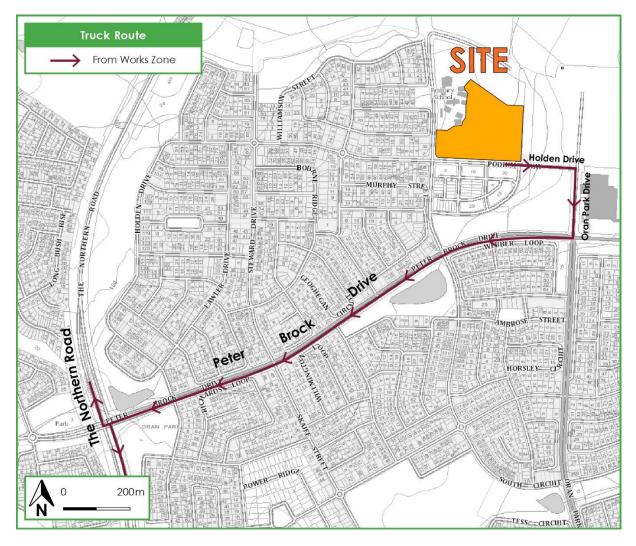


Figure 9: Proposed Truck Routes (Egress the Work Zone)



#### 5.3 Vehicular Access

It is proposed that vehicular access to the site will be provided via two (2) driveways along the southern frontage of Holden Drive. The Access Gate 1 driveway is located on the southeast corner of the site, while Access Gate 2 driveway is located midway through the southern frontage. Construction vehicles will be contained and utilised within the site. The dedicated construction site access shall have an RMS certified Traffic Controller during school days from 8:00am to 9:30am, and 2:30pm to 4:00pm to safely manage pedestrian and construction related vehicles.

It is noted that there will also be two (2) egress gates utilised for emergencies, inclusively. The first emergency egress gate is located on the northwest corner of the site, off South Circuit adjacent to Oran Park Primary School. The secondary emergency egress gate will be located midway along the northern boundary.

Reference should be made to the Site Establishment Plan, prepared by Hindmarsh Construction, which is included in **Appendix B** which provides a more detailed overview of the proposed site layout.

A swept path analysis of the proposed site access and critical intersections are provided in **Appendix C** demonstrating the largest vehicle (19.6m truck and dog) accessing and egressing the site during the construction process.

### 5.4 Pedestrian Control

An RMS certified Traffic Controller will be on-site during school days from 8:00am to 9:30am, and 2:30pm to 4:00pm for all stages to supervise pedestrian movements around the site access in accordance with the TCP. It is noted that painted ply hoarding will be utilised along the property boundary shared with Oran Park Primary School, while the perimeter fencing with shade cloth will be installed for the remaining boundaries of the subject site.

### 5.5 Crane Requirements

A mobile crane will be utilised during all stages of construction. This mobile crane will facilitate all loading / unloading of material, machinery plant, etc. from within the site. The movements and utilisation of this mobile crane will be contained within the subject site.



### 5.6 Traffic Control Plan

The Traffic Control Plans (TCPs) included in **Appendix D** demonstrate the proposed signage / traffic management measures to be adopted for the following works:

- O TCP No. 1 Demolition & Excavation
- TCP No. 2 Structure
- TCP No. 3 Fit-out

The proposed TCPs will ensure that all vehicular and pedestrian traffic is managed safely and efficiently. Theses TCPs have been designed in accordance with the requirements of the RMS *Traffic Control at Work Sites Manual* and is recommended for adoption. In addition, it is noted that copies of the TCPs are to be kept on-site at all times.

### 5.7 Employee Vehicles

As previously mentioned, the site benefits from access to public transport services, being within 400 metres from various bus stops. These bus stops provide regular services to centres north and south of the site, such as Campbelltown, Narellan and Leppington Railway Station, which in turn provide connections to the wider bus and train network. This is expected to result in substantial levels of public transport usage by workers, thereby ensuring that the construction activities will generate minimal parking demands.

There will be a maximum of 120 workers on-site at any one time, from which the majority will utilise public transport and car sharing. In addition, when parking is available on-site during the later stages of construction (after construction of the car park), workers would be able to park within the available car parking areas.



# 6. Conclusions

This report should be read in conjunction with other documentation prepared by Hindmarsh Construction relating to the internal construction activities. The plan outlined above is considered satisfactory and will minimise any disruptions to residents / tenants of neighbouring developments, as well as pedestrians in the area. This plan meets all requirements of the RMS *Traffic Control at Work Sites Manual* and is recommended for adoption.



# Appendix A

Photographic Record



View looking east from South Circuit towards the subject site.





View looking northwest from Holden Drive towards the proposed Work Zone.





View looking south towards the Holden Drive and Oran Park Drive Intersection.





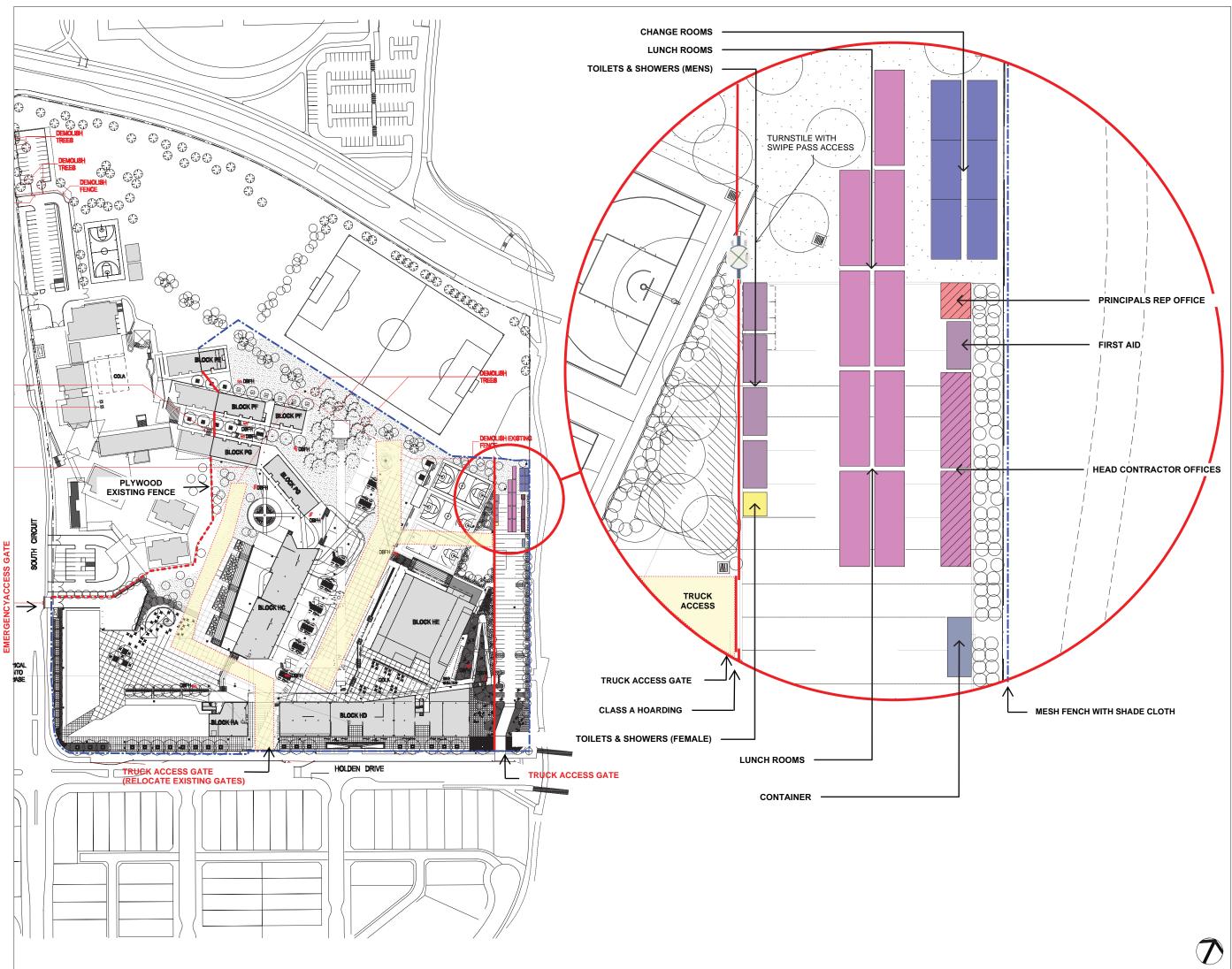
View looking southwest towards the South Circuit and Holden Drive Intersection.





# Appendix B

Site Establishment Plan





TENDER PLANNING INFORMATION 25/06/2018

Amendments Issue Description

А

Date



Head Contractor

3600

2400

Client



#### Hindmarsh Construction Pty Ltd Level 27, 100 Miller Street T +612 9274 1100 North Sydney NSW 2000 F +612 6274 8898

- www.hindmarsh.com.au

Project Title

**Oran Park Public School** Holden Drive, Oran Park NSW

Drawing Title

#### Site Amenity Plan

Scale NTS @ A3		
Drawing Created (da	June 2018	
Drawing Created (by	<u>()</u>	SS
Plotted and checked	by	SS
Verified	SS/ZE	
Approved	GA	
Project No	Drawing No	Issue
NSW-70##	TP-0002	А

This drawing is the copyright of Hindmarsh Pty Ltd and ma

HOLDEN DRIVE, ORAN PARK

#### SITE ESTABLISHMENT

- SITE ACCESS ESTABLISHED AT CARPARK ENTRANCE OFF HOLDEN DRIVE
- PAINTED PLY HOARDING ALONG WORKS BOUNDARY WITH ORAN PARK PUBLIC SCHOOL
- CHAIN MESH FENCING WITH FULL HEIGHT SHADE CLOTH WRAPPING TO **REMAINING SITE PERIMETER**
- SITE ACCOMMODATION SETUP AT THE NORTHERN END OF THE CARPARK OFF HOLDEN DRIVE. ACCOMMODATION TO INCLUDE:
  - SITE OFFICE
  - FIRST AID ROOM
  - MEETING ROOM
  - LUNCH SHEDS
  - ABLUTION BLOCKS
- TURNSTILE GATE WITH CARD READER INSTALLED AT SITE PERSONNEL ACCESS POINT OFF HOLDEN DRIVE
- SITE SIGNAGE INSTALLED AT SITE GATE & AT POINTS OFF PAINTED PLY HOARDING ALONG BORDER WITH ORAN PARK PUBLIC SCHOOL
  - PAINTED PLY HOARDING
  - SITE PERIMETER FENCING .....
    - TRAFFIC CONTROL
  - $\triangleright \lhd$ MAIN SITE ACCESS GATE
  - EMERGENCY EGRESS  $\succ$
  - SITE COMPOUND

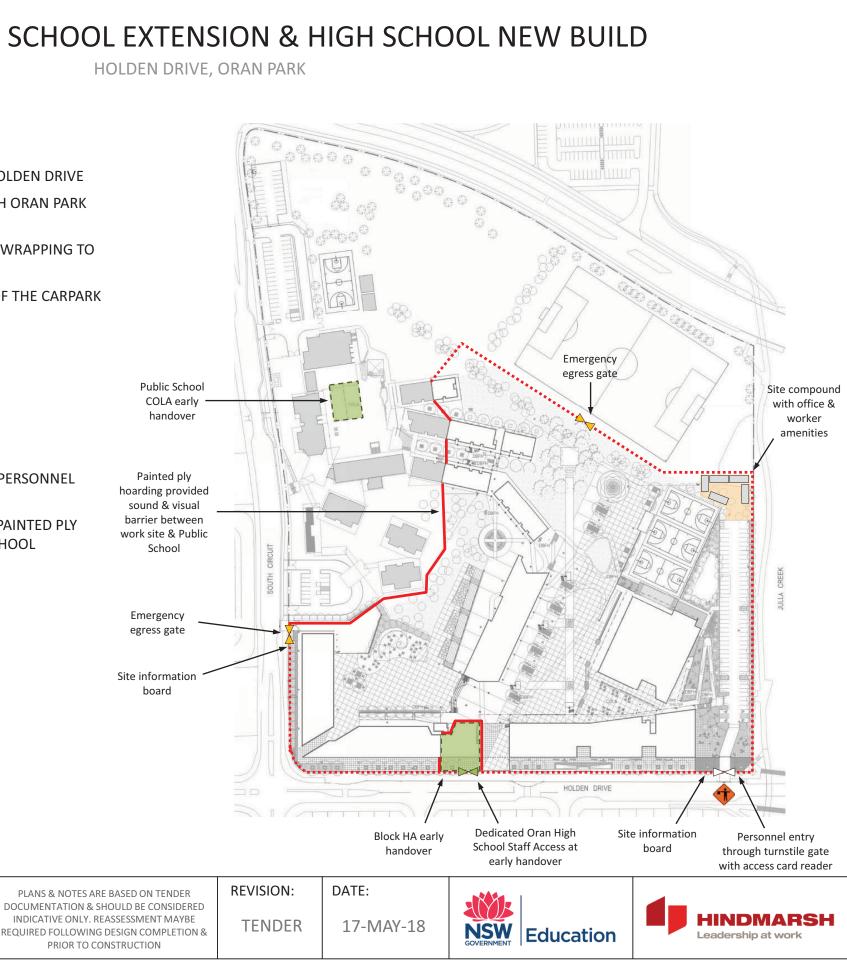
**ORAN PARK PUBLIC & HIGH SCHOOL** 

SITE ESTABLISHMENT

PROJECT:

TITLE:

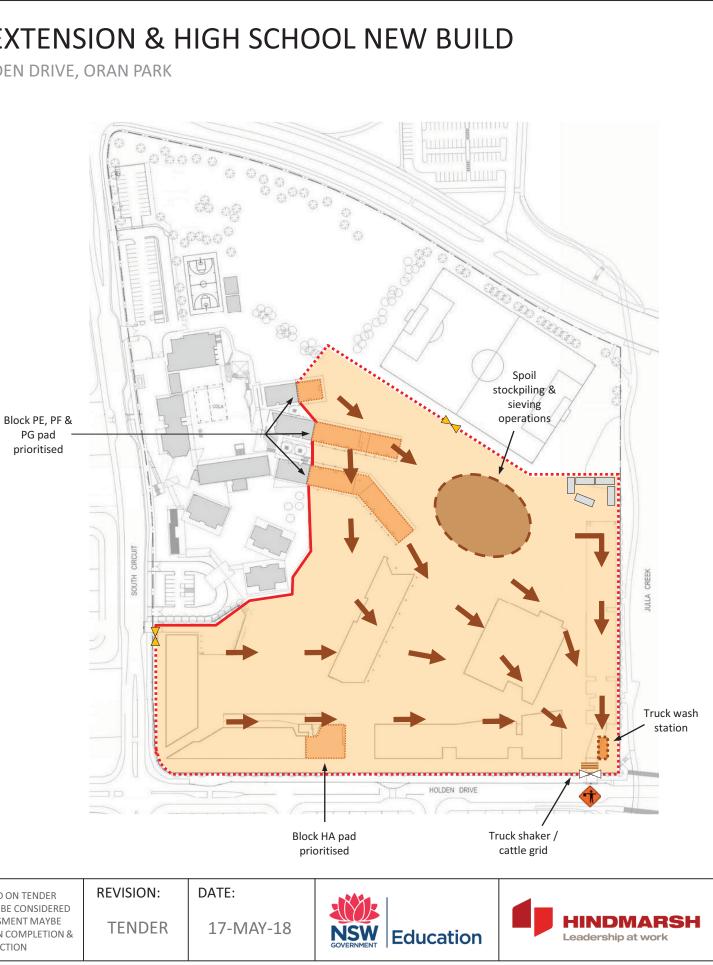
**MILESTONE 1 HANDOVER AREA** 



HOLDEN DRIVE, ORAN PARK

#### **BULK EXCAVATION & FILL WORKS**

- SILT FENCES & SEDIMENT TRAPS INSTALLED AROUND SITE AS INDICATED BY CIVIL CONSULTANT
- TRUCK WASH STATION & TRUCK SHAKER / CATTLE GRID INSTALLED AT HOLDEN DRIVE ACCESS / EGRESS GATE
- VEGETATION STRIPPING & TOPSOIL REMOVED PRIOR TO BULK **EARTHWORK & FILL OPERATIONS**
- WORKS TO BEGIN IN NORTH WEST & SOUTH WEST CORNERS CONCURRENTLY PROGRESSING TOWARDS SITE GATE IN SOUTH EAST CORNER
- SPOIL STOCKPILING & SIEVING OPERATIONS CONDUCTED ON LOCATION OF FUTURE PLAYING COURTS. RECYCLED MATERIAL REUSED AS FILL WHERE REQUIRE. ALL OTHER MATERIAL REMOVED FROM SITE & DISPOSED OF ACCORDINGLY
- ROLLING & COMPACTION OF FILL TO BE CONDUCTED IN ACCORDANCE WITH CIVIL SPECIFICATION
- PRIORITISED COMPLETION OF BLOCK HA, PE, PF & PG PADS
  - PAINTED PLY HOARDING
  - SITE PERIMETER FENCING .....
  - TRAFFIC CONTROL
  - $\triangleright$ MAIN SITE ACCESS GATE
  - EMERGENCY EGRESS
  - SITE COMPOUND
    - SPOIL STOCKPILING & SIEVING





PROJECT:	ORAN PARK PUBLIC & HIGH SCHOOL	PLANS & NOTES ARE BASED ON TENDER DOCUMENTATION & SHOULD BE CONSIDERED	REVISION:	DATE:	
TITLE:	BULK EXCAVATION & FILL WORKS	INDICATIVE ONLY. REASSESSMENT MAYBE REQUIRED FOLLOWING DESIGN COMPLETION & PRIOR TO CONSTRUCTION	TENDER	17-MAY-18	GOVERNMENT Education

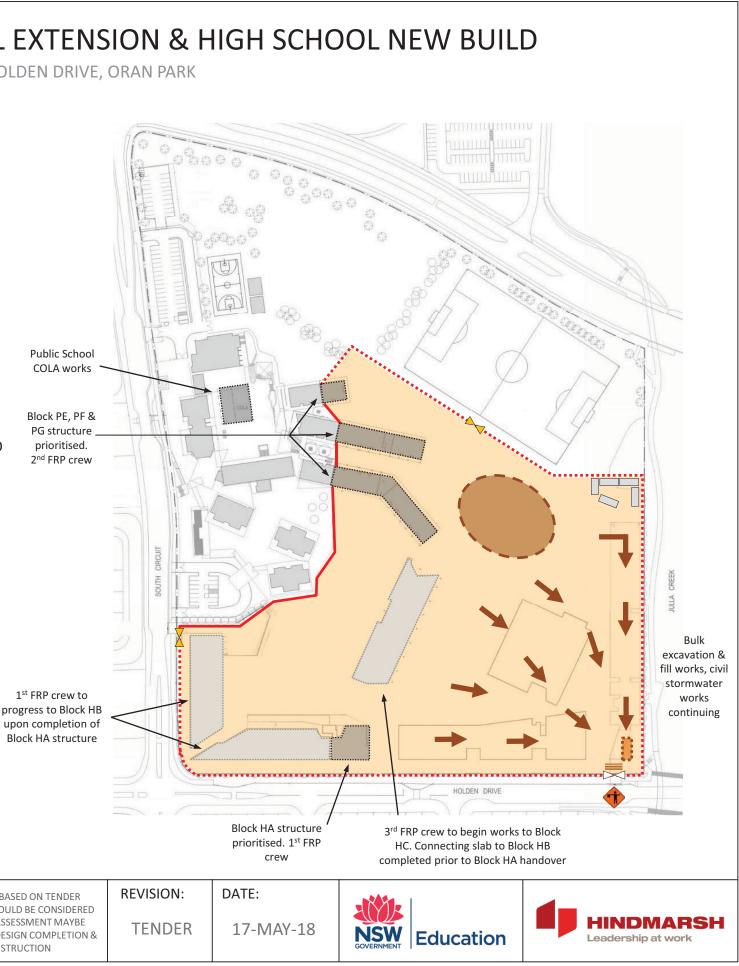
HOLDEN DRIVE, ORAN PARK

#### PUBLIC SCHOOL SERVICES RETICULATION

 SERVICES RETICULATION, PIT CLEANING, LID REPLACEMENT & DISTRIBUTION BOARD & SWITCHBOARD MODIFICATIONS WITHIN PUBLIC SCHOOL GROUNDS PROGRAMMED OVER SCHOOL CHRISTMAS HOLIDAYS

#### **STRUCTURE WORKS**

- PUBLIC SCHOOL COLA COMPLETED DURING SCHOOL CHRISTMAS HOLIDAYS
- THREE FRP CREWS COMMENCE ONSITE WORKING CONCURRENTLY
  - 1st FRP CREW COMMENCE ON BLOCK HA & PROGRESS TO **BLOCK HB**
  - 2<sup>nd</sup> FRP CREW COMMENCE ON BLOCKS PE, PF & PG
  - 3<sup>rd</sup> FRP CREW COMMENCE ON BLOCK HC TO EXPEDITE COMPLETION OF CONNECTING SLAB INTO BLOCK HB PRIOR TO **BLOCK HA HANDOVER**
- BLOCK HA STRUCTURE WORKS PRIORITSED FOR EARLY COMPLETION AT END OF SCHOOL CHRISTMAS HOLIDAYS
- ROOF INTERFACE WITH EXISTING BLOCKS PE, PF & PG UNDERTAKEN OVER SCHOOL CHRISTMAS HOLIDAYS
- BULK EXCAVATION & FILL WORKS, AND CIVIL STORMWATER WORKS CONTINUING TOWARD SOUTH WEST CORNER OF SITE
- MAIN SITE ACCESS GATE PAINTED PLY HOARDING  $\triangleright \lhd$ SITE PERIMETER FENCING EMERGENCY EGRESS .... TRAFFIC CONTROL SITE COMPOUND



PROJECT:	ORAN PARK PUBLIC & HIGH SCHOOL	PLANS & NOTES ARE BASED ON TENDER DOCUMENTATION & SHOULD BE CONSIDERED	REVISION:	DATE:	
TITLE:	STRUCTURE & PUBLIC SCHOOL SERVICES	INDICATIVE ONLY. REASSESSMENT MAYBE REQUIRED FOLLOWING DESIGN COMPLETION & PRIOR TO CONSTRUCTION	TENDER	17-MAY-18	SOVERNMENT Education

HOLDEN DRIVE, ORAN PARK

#### **BLOCK HA COMMISSIONING & HANDOVER / PS COLA** COMPLETION

- BLOCK HB COMMISSIONING PERFORMED ON TEMPORARY POWER
- SITE RETICULATION FROM EXISTING 500kVA SUBSTATION TO SUPPLY BLOCK HA UNTIL CHANGEOVER TO NEW 1000kVA SUBSTATION IS PERFORMED
- BLOCK HB STRUCTURE, ROOF & ENVELOPE COMPLETED. SCAFFOLD **REMOVED PRIOR TO BLOCK HA HANDOVER**
- DEDICATED STAFF ACCESS ESTABLISHED. PAINTED PLY HOARDING TO PROVIDE SEGREGATION FROM SITE WORKS
- PUBLIC SCHOOL COLA COMPLETED DURING SCHOOL CHRISTMAS HOLIDAYS & HANDOVER PERFORMED
- CONNECTING SLAB FROM BLOCK HC TO BLOCK HB COMPLETED PRIOR TO **BLOCK HA HANDOVER**

#### **STRUCTURE WORKS**

PROJECT:

TITLE:

 BLOCK HD & HE STRUCTURE WORKS COMMENCE. 1<sup>st</sup> FRP OPERATING ON BLOCK HD. 3rd FRP OPERATING ON BLOCK HE GROUND SLABS

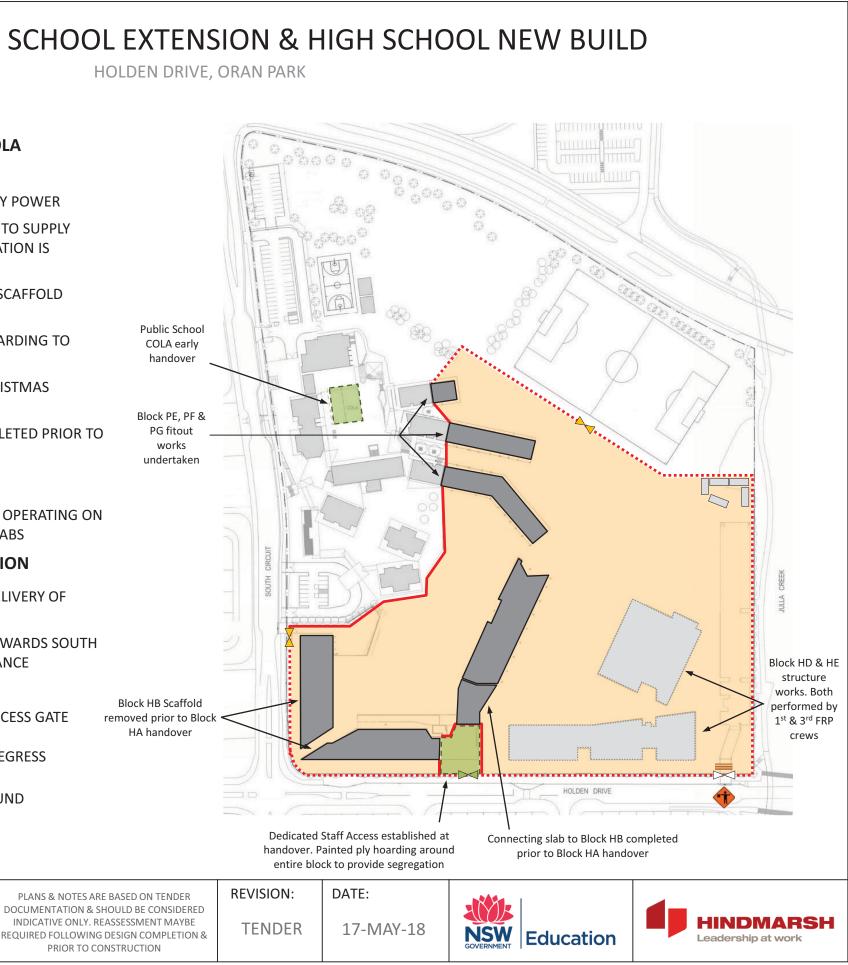
#### **HIGH SCHOOL SUBSTATION & SERVICES RETICULATION**

**ORAN PARK PUBLIC & HIGH SCHOOL** 

**BLOCK HA & COLA HANDOVER / STRUCTURE** 

- SUBSTATION INSTALLATION & COMMISSIONING UPON DELIVERY OF 1000kVA KIOSK
- HIGH SCHOOL SERVICES RETICULATION PROGRESSING TOWARDS SOUTH EAST CORNER OF SITE AT HOLDEN DRIVE CARPARK ENTRANCE





HOLDEN DRIVE, ORAN PARK

#### **SERVICES & FINISHES FITOUT**

- UPON COMPLETION OF BLOCK HA, SERVICES & FINISHES FITOUT TRADES TO PROGRESS ACROSS SITE
- CHRONOLOGY TO FOLLOW BLOCKS PF, PG, PE, HB, HC, HE & HD
- TRADES TO PROTECT THEIR OWN WORKS UPON COMPLETION
- CLEANING & DEFECTS CLOSED OUT FOR EACH BLOCK PROGRESSIVELY THROUGHOUT SITE

#### **EXTERNAL WORKS**

- FOOTPATHS, EXTERNAL LIGHTING & SECURITY INSTALLATIONS, LANDSCAPING, BIO-BASINS & PLAYING COURTS TO OCCUR CONCURRENTLY WITH SERVICES & FINISHES FITOUT WORKS TO BLOCKS HB, HE & HD
- SOUTH CIRCUIT CARPARK EXTENSION & HOLDEN DRIVE CARPARK WORKS TO PROCEED CONCURRENTLY WITH EXTERNAL WORKS

#### **PUBLIC SCHOOL EXTENSION / HIGH SCHOOL COMMISSIONING &** HANDOVER

- BLOCK FITOUT WORKS PROGRAMMED TO ALLOW EFFICIENT MANAGEMENT OF COMPLETION & COMMISSIONING ACTIVITIES
- MASTER KEY SCHEDULE, WARRANTIES & O&M MANUALS COMPILED
- CERTIFIER INSPECTIONS & OCCUPANCY CERTIFICATE RECEIVED

#### HINDMARSH DEMOBILISATION

- TEMPORARY SERVICES ISOLATED & SITE ACCOMMODATION REMOVED
- SITE PERIMETER FENCE DISMANTLED & SEPARATION HOARDING REMOVED



PROJECT:	ORAN PARK PUBLIC & HIGH SCHOOL	PLANS & NOTES ARE BASED ON TENDER DOCUMENTATION & SHOULD BE CONSIDERED	REVISION:	DATE:	
TITLE:	FITOUT / EXTERNAL WORKS / HANDOVER	INDICATIVE ONLY. REASSESSMENT MAYBE REQUIRED FOLLOWING DESIGN COMPLETION & PRIOR TO CONSTRUCTION	TENDER	17-MAY-18	<b>Education</b>



# Appendix C

Swept Path Analysis



## lotes This drawing is prepared for information purposes only. It is not to be used for construction. TRAFFIX is responsible for vehicle swept path diagrams and/or drawing mark-ups only. Base drawing prepared by others. Vehicle swept path diagrams prepared using computer generated turning path software and associated CAD drawing platforms. Vehicle data based upon relevant Australian Standards (AS/NZS 2890.1-2004 Parking facilities - Off-street commercial vehicle facilities). These standards embody a degree of tolerance, however the vehicle characteristics in these standards represent a suitable design vehicle and do not account for all variations in vehicle dimensions / specifications and/or driver ability or behaviour. no. revision note by. date P- FEE Swept Path Legend: Wheel Path Vehicle Body Envelope Clearance Envelope (300mm) architect 27. 1. 3 client Hindmarsh Construction Australia Pty Ltd Level 22, 25 Bligh Street Sydney NSW 2000 scale 1:400 @ A3 project 390 South Circuit Oran Park NSW 2570 drawing prepared by TRAFFIX affic and Suite 2.08, 50 Holt Street Surry Hills NSW 2010 PO Box 1124 Strawberry Hills NSW 2012 t: +61 2 8324 8700 f: +61 2 9380 4481 e: info@traffix.com.a traffix traffic & transport planners drawing title All Stages of Construction - Truck Routes Oran Park Drive / Holden Drive / South Circuit 19.6m Truck & Dog Movements at Intersections drawn: NC checked: VD date: 20-09-2018 3.452d00v01 TRAFFIX Key Intersection Truck Routes.dwg

- | TX.01|

drawing phase. drawing no.

18.452

project no

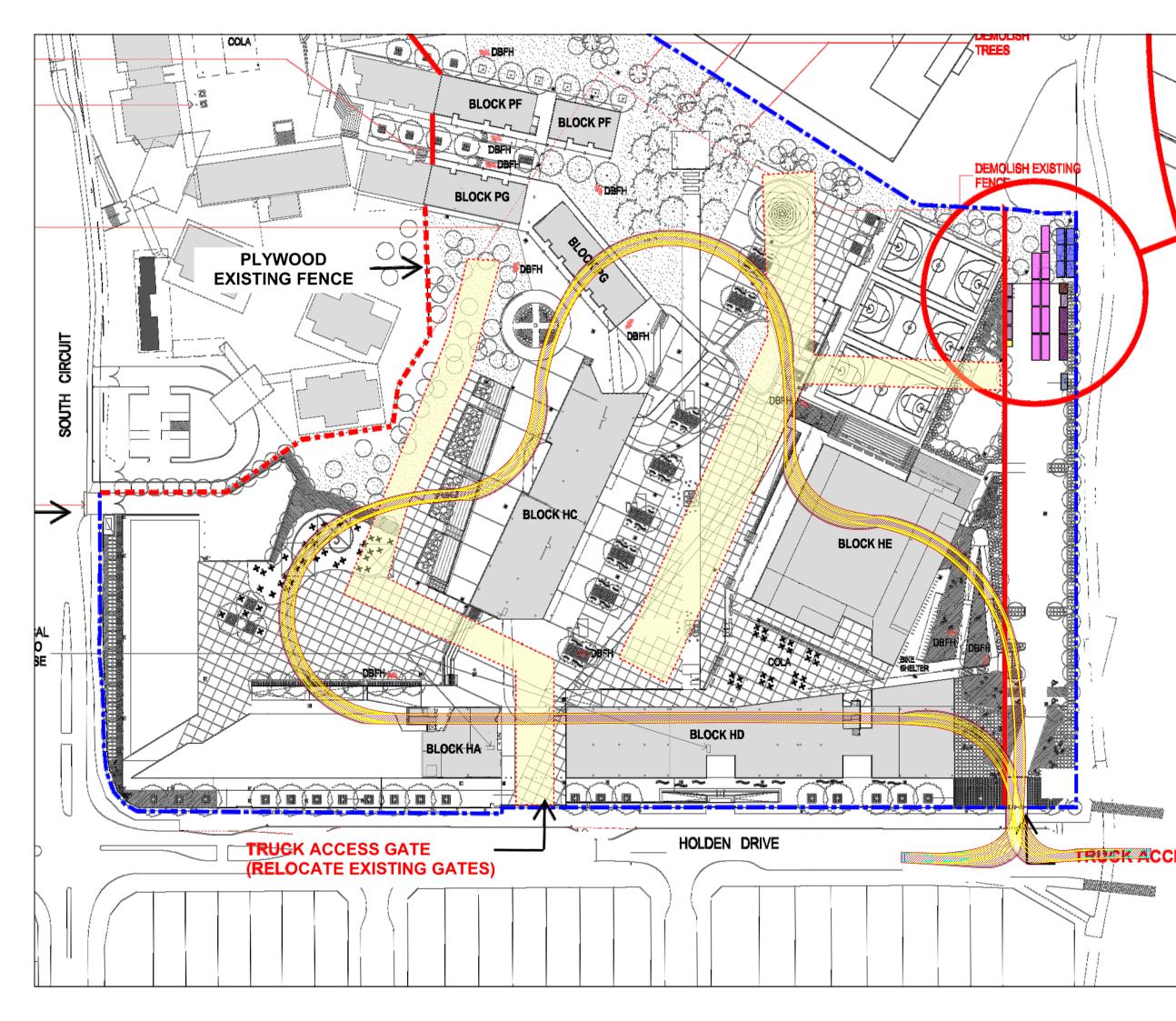


## lotes This drawing is prepared for information purposes only. It is not to be used for construction. TRAFFIX is responsible for vehicle swept path diagrams and/or drawing mark-ups only. Base drawing prepared by others. Vehicle swept path diagrams prepared using computer generated turning path software and associated CAD drawing platforms. Vehicle data based upon relevant Australian Standards (AS/NZS 2890.1-2004 Parking facilities - Off-street commercial vehicle facilities). These standards embody a degree of tolerance, however the vehicle characteristics in these standards represent a suitable design vehicle and do not account for all variations in vehicle dimensions / specifications and/or driver ability or behaviour. no. revision note by. date -Swept Path Legend: Wheel Path Vehicle Body Envelope Clearance Envelope (300mm) architect at the client Hindmarsh Construction Australia Pty Ltd Level 22, 25 Bligh Street Sydney NSW 2000 scale 1:400 @ A3 project 390 South Circuit Oran Park NSW 2570 drawing prepared by TRAFFIX affic and Suite 2.08, 50 Holt Street Surry Hills NSW 2010 PO Box 1124 Strawberry Hills NSW 2012 t: +61 2 8324 8700 f: +61 2 9380 4481 e: info@traffix.com. traffix traffic & transport planners drawing title Structure Stage - Truck Routes South Circuit / Holden Drive / Oran Park Drive 19.0m AV Movements at Intersections drawn: NC checked: VD date: 20-09-2018 3.452d00v01 TRAFFIX Key Intersection Truck Routes.dwg

18.452

- |TX.02|

drawing phase. drawing no.



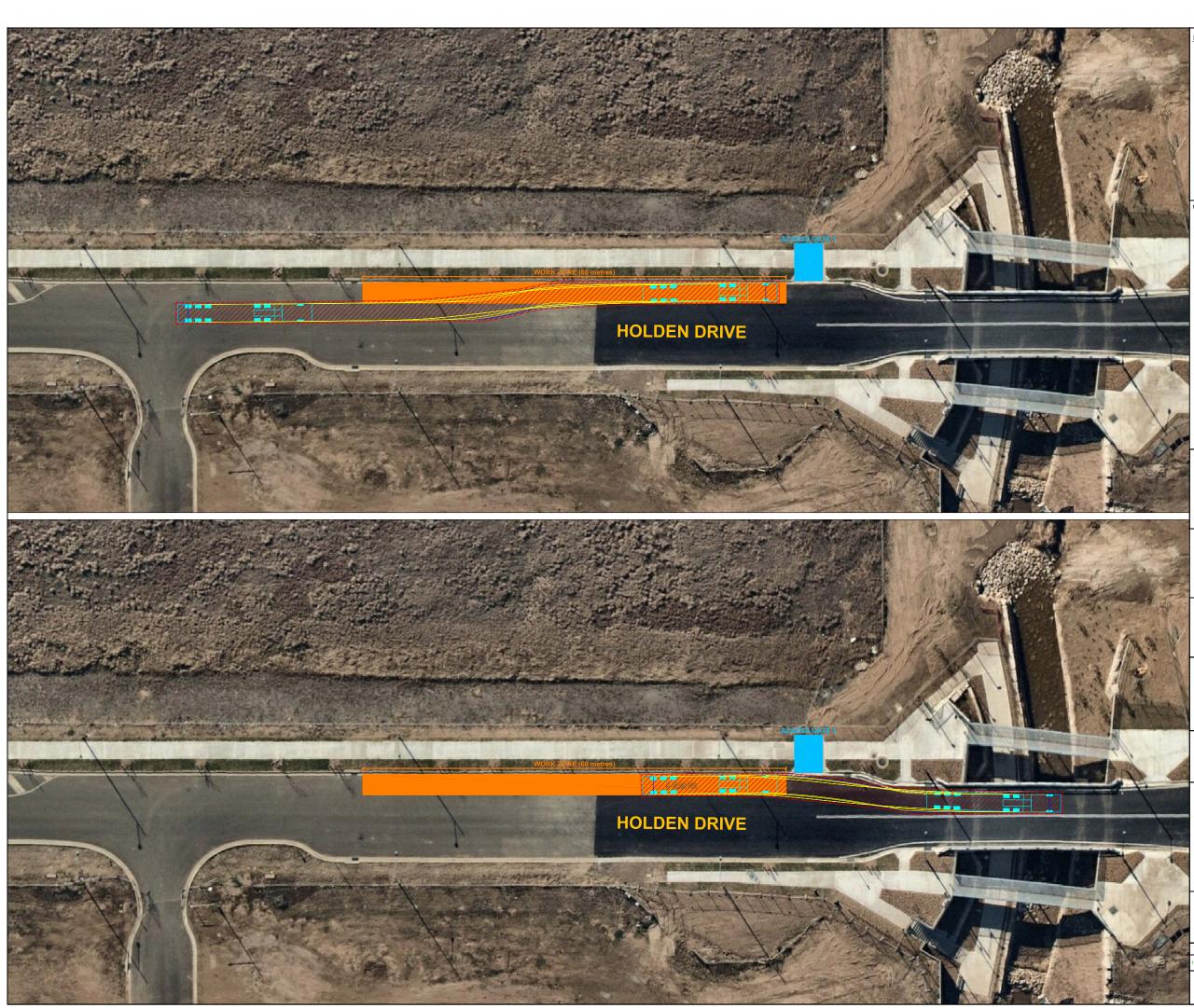
#### Notes

This drawing is prepared for information purposes only. It is not to be used for construction.

TRAFFIX is responsible for vehicle swept path diagrams and/or drawing mark-ups only. Base drawing prepared by others.

Vehicle swept path diagrams prepared using computer generated turning path software and associated CAD drawing platforms. Vehicle data based upon relevant Australian Standards (AS/NZS 2890.1-2004 Parking facilities - Off-street commercial vehicle facilities). These standards embody a degree of tolerance, however the vehicle characteristics in these standards represent a suitable design vehicle and do not account for all variations in vehicle dimensions / specifications and/or driver ability or behaviour.

no. revision note		by. da	te
1			
1			
Swept Path Legend:			
Wheel Path	1		
Vehicle Bo	dy Envelope		
Venicle Bo	., <u></u> oopo		
Clearance	Enve <b>l</b> ope (300mm)		
architect			
client			
Hindmarsh Construction Level 22, 25 Bligh Stree Sydney NSW 2000	i Australia Pty Ltd t		
Sydney NSW 2000			
scale			
1 1000 0 10		(	
1:1000 @ A3 0m 10 ::	20 30	40	• )
Î Î	20 30 I I		$\checkmark$
project			
390 South Circuit			
Oran Park NSW			
drawing prepared by			
TRAFFIX		$\frown$	
traffic and transport plan	nners		
Suite 2.08, 50 Holt Street Surry Hills NSW 2010	1		
PO Box 1124	1		
Strawberry Hills NSW 20	012		
t: +61 2 8324 8700 f: +61 2 9380 4481		traffix	
e: info@traffix.com.au	traffic	& transport plann	ners
drawing 64 -			
drawing title	anth Manha C		
Demolition and E		ages	
Overall Site Plan			ta
19.6m Truck and	Dog Circulatio	un wovemen	ເຮ
drawn: NC	checked: VD	date: 20-	09-2018
18.452d02v01 TRAFFIX [18-09-18]	- Swept Path Analysis.dwg		
18.452	- 1	TX.03	_
project no.	drawing phase.	drawing no.	rev



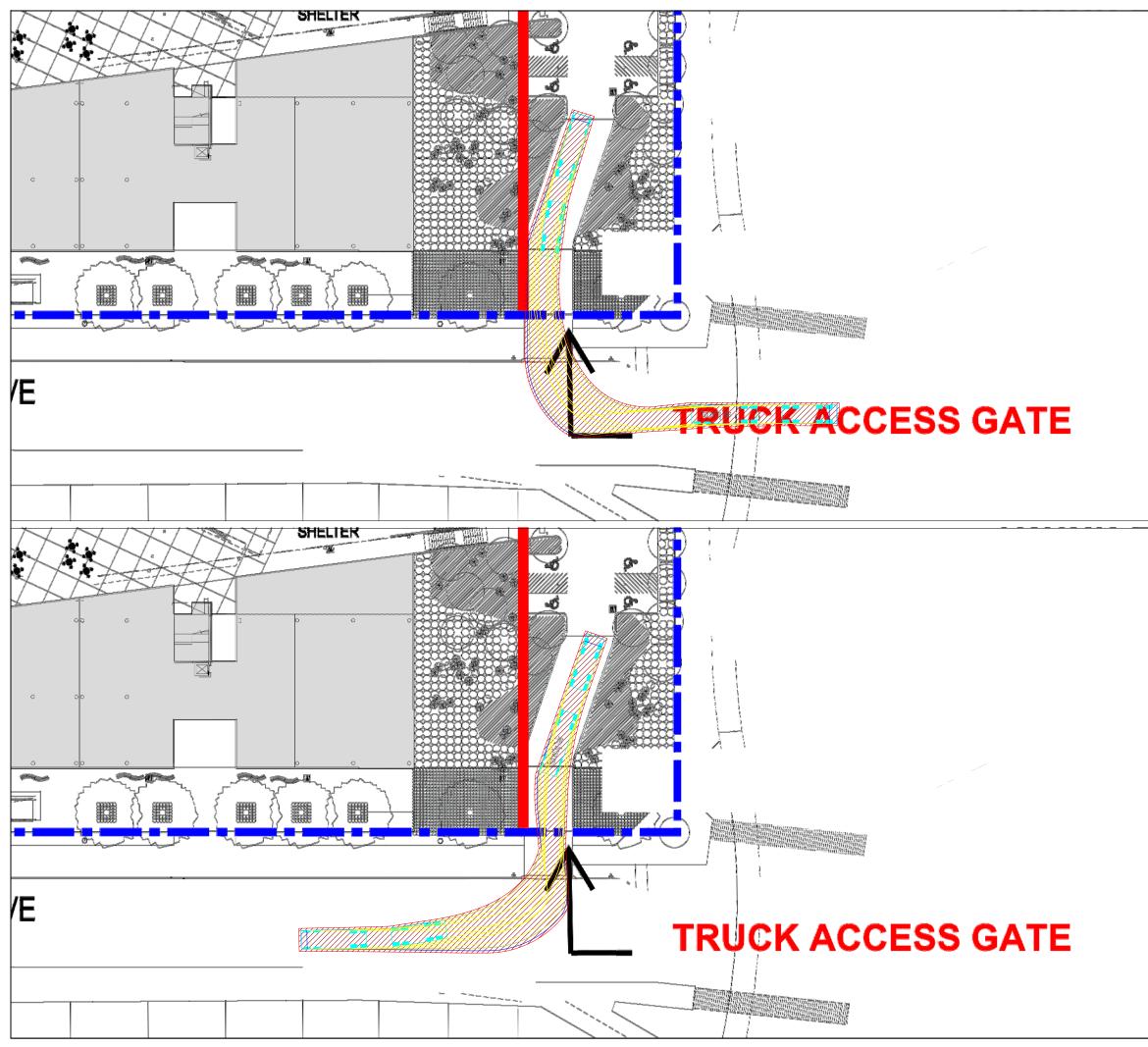
lotes

This drawing is prepared for information purposes only. It is not to be used for construction.

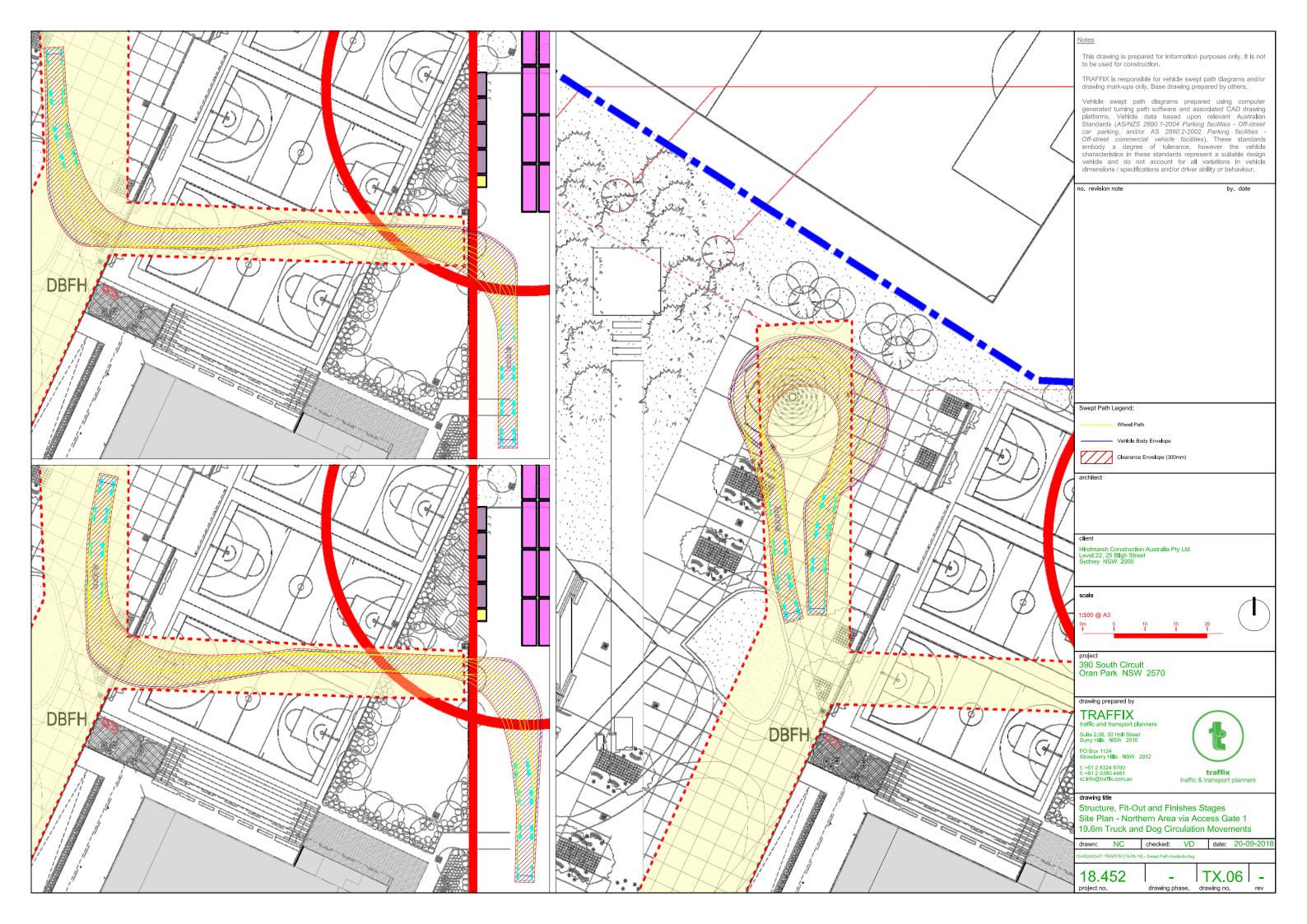
TRAFFIX is responsible for vehicle swept path diagrams and/or drawing mark-ups only. Base drawing prepared by others.

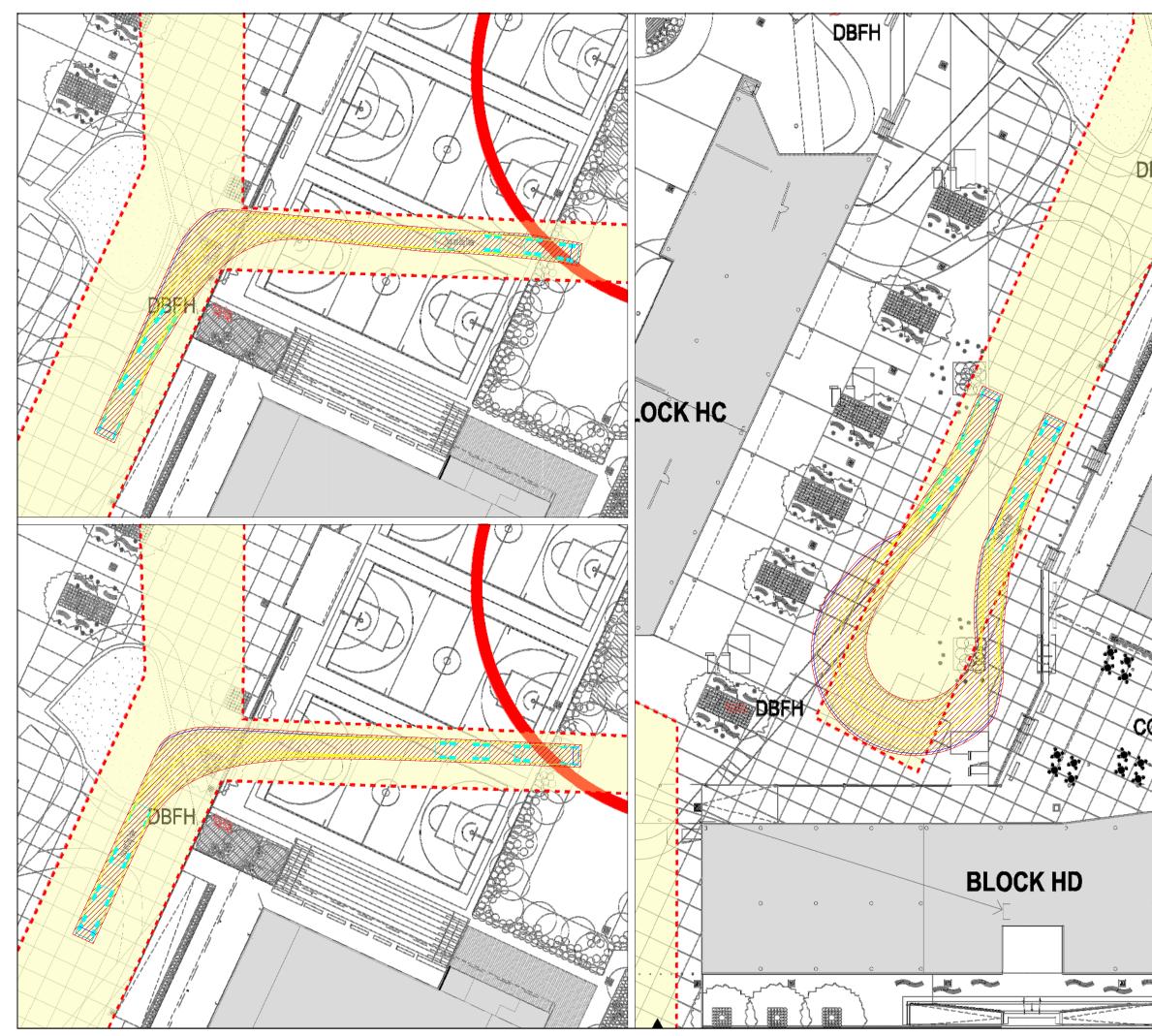
Vehicle swept path diagrams prepared using computer generated turning path software and associated CAD drawing platforms. Vehicle data based upon relevant Australian Standards (*AS/NZS 2890.1-2004 Parking facilities - Off-street car parking, and/or AS 2890.2-2002 Parking facilities - Off-street commercial vehicle facilities*). These standards embody a degree of tolerance, however the vehicle characteristics in these standards represent a suitable design vehicle and do not account for all variations in vehicle dimensions / specifications and/or driver ability or behaviour.

10.0								
Do the	no.	revision r	ote			ł	oy. date	e
-								
A MA								
***								
大山の	Sw	ept Path L	.egend:					
	_		Wheel Path	ı				
all	-	777		dy Envelope Envelope (30				
N.C.N.	arc	hitect	Gleanande		Johnny			
2								
And The	clie	ent						
10 - 1	Hir Le Sy	ndmarsh C vel 22, 25 dney NSV	onstructior Bligh Stree V 2000	i Australia t	Pty Ltd			
Real Providence								
100	SCA						(	
-OF	1:5 <sup>0m</sup> I	00 @ A3	5	10 I	15 	20 		
		iont						
	39		h Circuit k_NSW					
100		-						
	Т	iwing prep RAF	FIX			$\frown$		
	Su	ffic and tra ite 2.08, 50 rry Hills N	nsport plan Holt Street SW 2010	nners	(	4		
	Str		Is NSW 2	012	1			
-	t + f + e i	61 2 8324 61 2 9380 nfo@traffix	3700 4481 .com.au		traffic	traffix & transport		ers
		wing title	Store	(Inclust:	(0)			
The Party	Pr	oposed	Stage ( Work 2 ticulated	Zone - H	lolden			
あるの			NC	checked:		date:	20-0	9-2018
	18.45	2d02v01 TRA	FIX [18-09-18]	- Swept Path /	Analysis.dwg			
Alte		8.45	52	drawing	nhase	TX.		rev
-	μισ	goorno.		urawing	PIROC.	arawing no		107

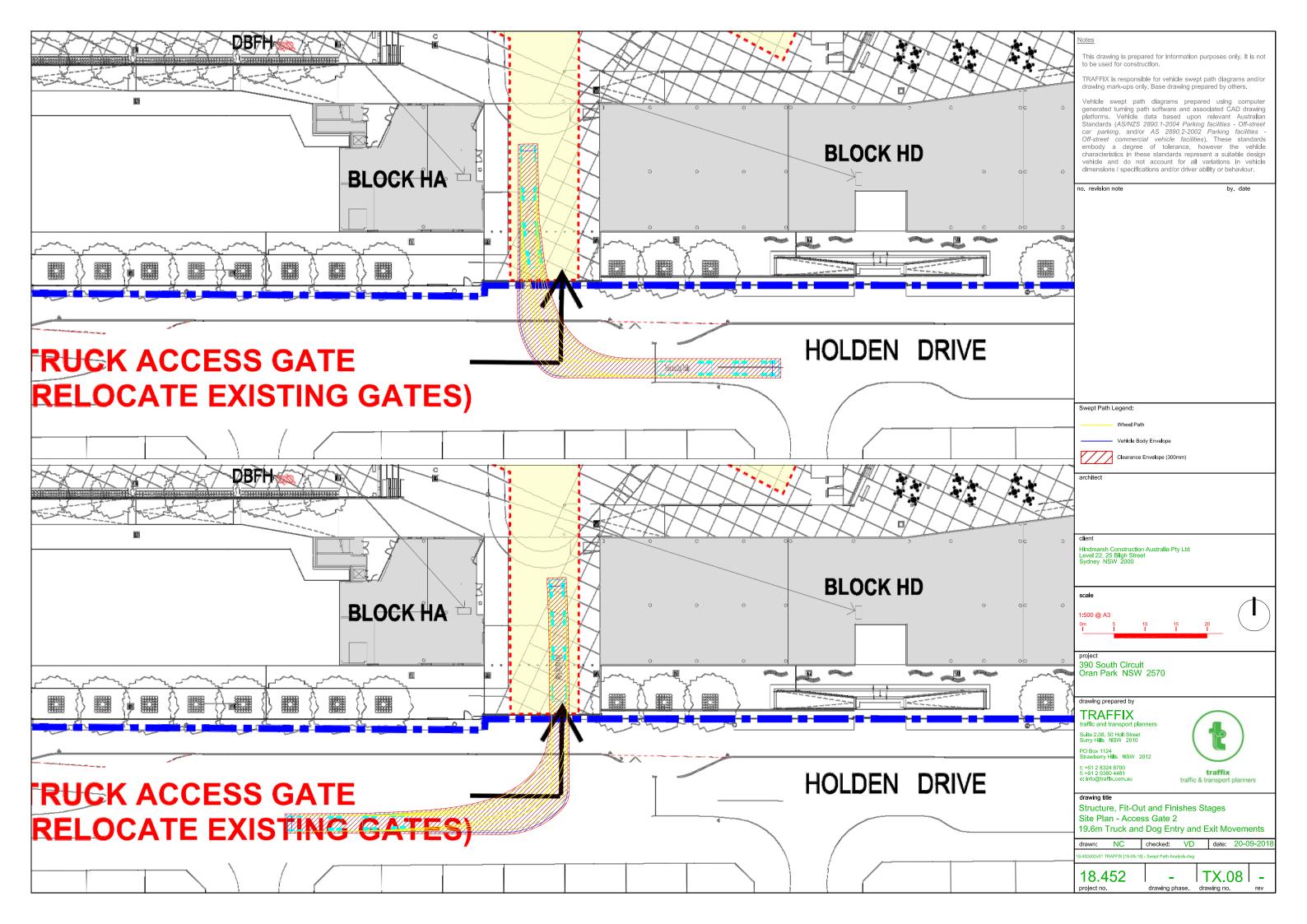


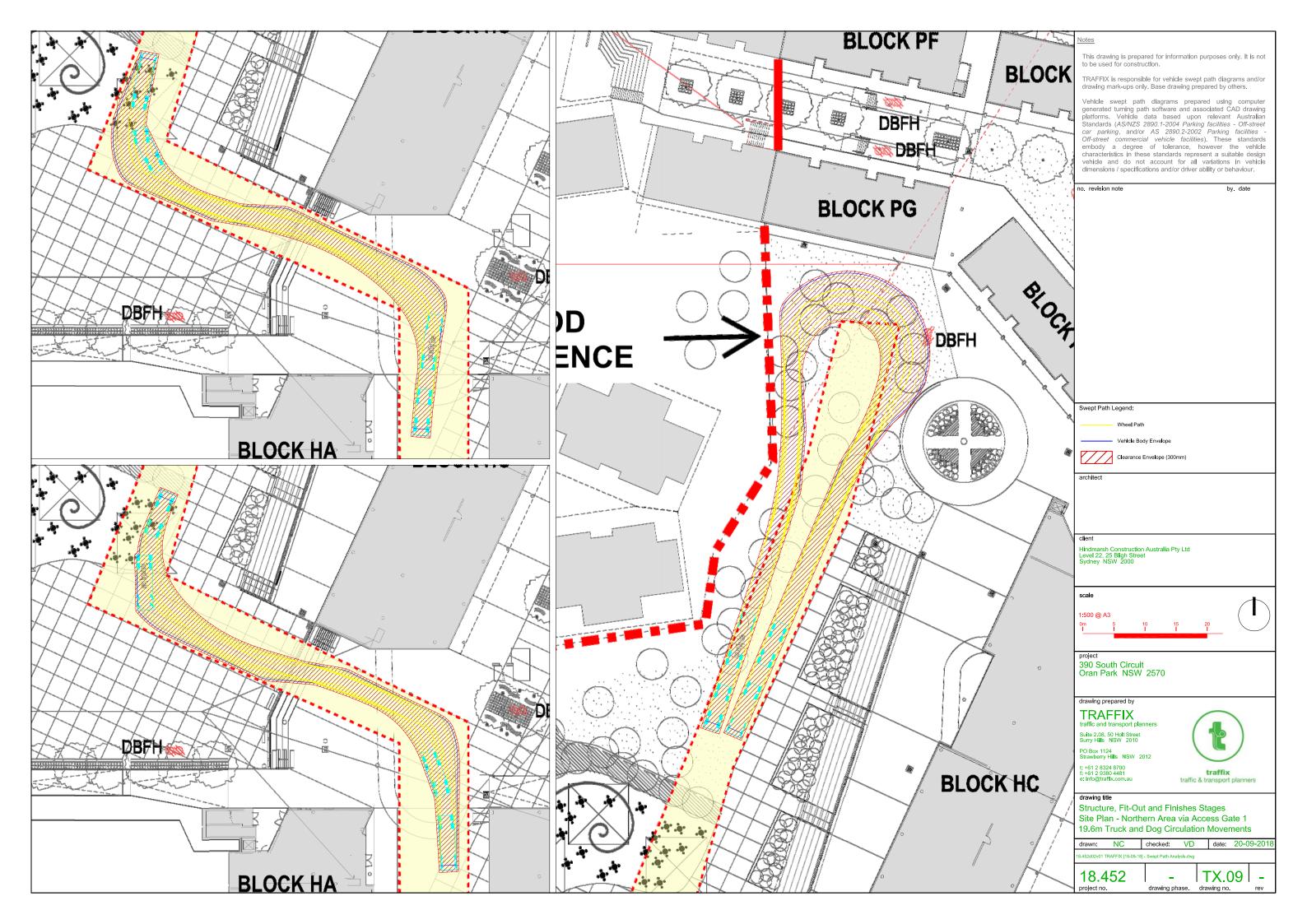
	Notes			
	This drawing is prepa to be used for constru		purposes only. It	is not
	TRAFFIX is responsite drawing mark-ups onl	ble for vehicle swe		
	Vehicle swept path generated turning pa platforms. Vehicle Standards (AS/NZS J car parking, and/or Off-street commercia embody a degree characteristics in the vehicle and do not dimensions / specifica	<ul> <li>dlagrams prep</li> <li>th software and a</li> <li>data based upc</li> <li>2890.1-2004 Parki</li> <li>AS 2890.2-200</li> <li>al vehicle faciliti</li> <li>of tolerance, se standards repr</li> <li>account for all</li> </ul>	ared using con sociated CAD di n relevant Aus ing facilities - Off- 2 Parking facili es). These star however the v esent a suitable of variations in v	nputer rawing tralian -street ities - ndards rehicle design rehicle
	no. revision note		by. dat	e
	Current Dette Langer de			
	Swept Path Legend:			
	Wheel Path			
	Vehicle Boo	iy Envelope Envelope (300mm)		
	architect			
	client			
_	Hindmarsh Construction Level 22, 25 Bligh Street			
	Sydney NSW 2000			
	scale		(	$\uparrow$
	1:500 @ A3 0m 5 1	0 15	20	• )
	project			
	390 South Circuit Oran Park NSW	2570		
	IRAFFIX traffic and transport plar	iners		
	Suite 2.08, 50 Holt Street Surry Hills NSW 2010	(	12)	
	PO Box 1124 Strawberry Hills NSW 20	012		
	t: +61 2 8324 8700 f: +61 2 9380 4481 e: info@traffix.com.au	traffic	traffix & transport plann	ers
		traffic	& transport plann	613
	drawing title All Stages of Cor			
	Site Plan - Acces 19.6m Truck and		d Exit Movem	ente
	drawn: NC	checked: VD		)9-2018
	18.452d02v01 TRAFFIX [18-09-18]			
	18.452	_	TX 05	
	project no	drawing phase.	drawing no.	rev





K V Xert	Notes
VAS MA	This drawing is prepared for information purposes only. It is not to be used for construction.
1) And	TRAFFIX is responsible for vehicle swept path diagrams and/or drawing mark-ups only. Base drawing prepared by others.
BFH	Vehicle swept path diagrams prepared using computer generated turning path software and associated CAD drawing platforms. Vehicle data based upon relevant Australian Standards (AS/NZ 2880.1-2004 Parking facilities - Off-street commercial vehicle facilities). These standards embody a degree of tolerance, however the vehicle characteristics in these standards represent a suitable design vehicle and do not account for all variations in vehicle dimensions / specifications and/or driver ability or behaviour.
	no. revision note by. date
	Swept Path Legend:
	Wheel Path
	Vehicle Body Envelope
	Clearance Envelope (300mm)
X	architect
/	
	client Hindmarsh Construction Australia Pty Ltd Level 22, 25 Blink Street
XX	Level 22, 25 Bligh Street Sydney NSW 2000
	scale
	scale
	1:500 @ A3 0m 5 10 15 20 I I I I I
	resignt
AA	<sup>project</sup> 390 South Circuit Oran Park NSW 2570
XAX	drawing prepared by
00	TRAFFIX traffic and transport planners
	Suite 2.08, 50 Holt Street Surry Hills NSW 2010
	PO Box 1124 Strawberry Hills NSW 2012 t: +61 2 8324 8700
0 00	t: +61 2 8324 8700 f: +61 2 930 4481 e: info@traffix.com.au traffic & transport planners
	drawing title Structure, Fit-Out and Finishes Stages
	Site Plan - Southern Area via Access Gate 1 19.6m Truck and Dog Circulation Movements
0 00	drawn: NC checked: VD date: 20-09-2018
~ ,~~	18.452d02v01 TRAFFIX [18-09-18] - Swept Path Analysis.dwg
1 / en	18.452 - TX.07 -







# Appendix D

**Traffic Control Plans** 



TCP 1: Demolition and Excavation		Date:	20.09.2018	<b>TRAFFIC &amp; TRANS</b>
Project:	390 South Circuit, Oran Park	Prepared By:	Neil Caga	Suite 2.08 50 Holt Street
Project Number:	18.452	Approved By:	Vince Doan (0031360631)	Surry Hills NSW 2010
Client:	Hindmarsh	Signature:		(02) 8324 8700 info@traffix.com.au

# **ISPORT PLANNERS**



JU



	TCP 2: Structure	Date:	20.09.2018	TRAFFIC & TRANSP
Project:	390 South Circuit, Oran Park	Prepared By:	Neil Caga	Suite 2.08 50 Holt Street
Project Number:	18.452	Approved By:	Vince Doan (0031360631)	Surry Hills NSW 2010
Client:	Hindmarsh	Signature:	A	(02) 8324 8700 info@traffix.com.au

# **ISPORT PLANNERS**





	TCP 3: Fitout	Date:	20.09.2018	TRAFFIC & TRANS
Project:	390 South Circuit, Oran Park	Prepared By:	Neil Caga	Suite 2.08 50 Holt Street
Project Number:	18.452	Approved By:	Vince Doan (0031360631)	Surry Hills NSW 2010
Client:	Hindmarsh	Signature:		(02) 8324 8700 info@traffix.com.au

# ISPORT PLANNERS

0



au