

1 November 2018

Scott Richardson
FDC Construction (NSW) Pty Ltd
22-24 Junction Street
Forest Lodge NSW 2037

Dear Scott,

Logos Building 6 Hollinsworth Road, Marsden Park

This letter has been prepared by **ptc.** Consultants to accompany a Section 4.55 application in relation to the proposed Logos Building 6 development located at Lot 23 & 24 DP 262886 in Marsden Park, NSW.

In November 2017, GTA Consultants submitted a Traffic Impact Assessment report to accompany an SSD Application for the proposed masterplan with reference number SSD 8606.

To address site constraints and feasibility of the facility in terms of heavy vehicle and oversized vehicle movements, and loading arrangements, amendments to the approved masterplan were undertaken. The amendments are summarised below:

1. Reduction of the office GLFA from 1000m² to 500m²;
2. Reduction and reconfiguration of car parking spaces to accommodate the heavy vehicle turning paths; and
3. Widening of internal carriageway and reconfiguration of kerbs to accommodate turning paths.

This letter has been prepared to address the traffic-related items with regards to the revised development layout and car park arrangements. We have undertaken an assessment of the proposed amendments with reference to the drawings prepared by Watch This Space Design Pty Ltd ref. 1706 LG MAR DA60 and site plan prepared by Nettleton Tribe Partnership Pty Ltd ref. 11001_SK004.

1. Parking Requirement Review

With reference to Table 4.2 of the Traffic Impact Assessment report prepared by GTA Consultants (ref. N105790 dated 15 Nov 2018), the parking requirements for the development were calculated in accordance with the RMS Guide to Traffic Generating Developments. The RMS Guide's parking requirements for this type of development are as follows:

- 1 space for every 300m² GFA of Warehouse floor plate; and
- 1 space for every 40m² GFA of Office floor plate.

The car parking requirements and provision are illustrated in Figure 1, highlighting the parking calculations for *Building 6*.

Table 4.2: Guide to Traffic Generating Developments car parking requirements

Building	Land use	Size (m ²)	Roads and Maritime parking requirements	Total parking requirements	Parking provision
Building 1a	Warehouse	6,225	21 spaces	33 spaces	34 spaces
	Office	500	13 spaces		
Building 1b	Warehouse	6,245	21 spaces	33 spaces	50 spaces
	Office	500	13 spaces		
Building 2a	Warehouse	9,440	31 spaces	47 spaces	92 spaces
	Office	625	16 spaces		
Building 2b	Warehouse	9,440	31 spaces	47 spaces	72 spaces
	Office	625	16 spaces		
Building 3	Warehouse	37,110	124 spaces	182 spaces	165 spaces
	Office	2,333	58 spaces		
Building 4	Warehouse	3,263	11 spaces	18 spaces	28 spaces
	Office	300	8 spaces		
Building 5	Warehouse	5,924	20 spaces	27 spaces	66 spaces
	Office	300	8 spaces		
Building 6	Warehouse	11,140	37 spaces	62 spaces	59 spaces
	Office	1,000	25 spaces		
Building 7	Warehouse	12,352	41 spaces	52 spaces	97 spaces
	Office	450	11 spaces		
Total				503 spaces	663 spaces

Figure 1 – Table 4.2 of GTA TIA Report: *Guide to Traffic Generating Developments car parking requirements* (source: GTA TIA ref. N105790)

The revised layout of Building 6 reduces the office GFA from 1000m² to 500m². In this regard, the car parking requirement reduces accordingly. The revised calculation of the parking requirement is summarised in Table 1.

Table 1 – Car Parking Requirements

Building	Land Use	Size (m ²)	RMS Parking Requirements	Total Parking Requirements	Parking Provision
Building 1a	Warehouse	6,225	21	33	34
	Office	500	13		
Building 1b	Warehouse	6,245	21	33	50
	Office	500	13		
Building 2a	Warehouse	9,440	31	47	92
	Office	625	16		
Building 2b	Warehouse	9,440	31	47	72
	Office	625	16		
Building 3	Warehouse	37,110	124	182	165
	Office	2,333	58		
Building 4	Warehouse	3,263	11	18	28
	Office	300	8		

Building	Land Use	Size (m ²)	RMS Parking Requirements	Total Parking Requirements	Parking Provision
Building 5	Warehouse	5,924	20	27	66
	Office	300	8		
Building 6	Warehouse	11,140	37	50	52
	Office	500	13		
Building 7	Warehouse	12,352	41	52	97
	Office	450	11		
Total				489	656

The amended proposal comprises of 656 car spaces as opposed to the approved 663 car spaces, equating to a total loss of 7 parking spaces. Building 6 accommodates 52 parking spaces, exceeding the required number of spaces of 50. As illustrated, despite the reduction, the revised proposal still meets the requirement of parking spaces stipulated within the RMS Guide to Traffic Generating Developments, which was the basis for the SSD approval.

2. Loading Facility Layout and Arrangements

The revised layout of Building 6 has been assessed with reference to the typical vehicles anticipated to be using the facility.

The facility shall be accessed by vehicles up to B-Doubles (25.0m in length) via a driveway located at the end of the future Access Road 3. Heavy vehicles then proceed to the B-Double loading bay located at the south-eastern corner of the site via an internal roadway. The internal roadways were modified to accommodate a two-way flow for B-Doubles (refer to SK-005).

The remaining loading bays are able to accommodate either a 19.0m Articulated Vehicles (AV's) or a 12.5m Heavy Rigid Vehicles (HRV's). AV's shall use the internal roadway and reverse into the loading bays (refer to SK-006). The vehicle movements are illustrated within a swept path assessment included in this letter as Attachment 1.

3. Conclusion

In conclusion, based on our assessment we confirm that the revised facility layout has no significant variation from the previously approved layout and arrangements.

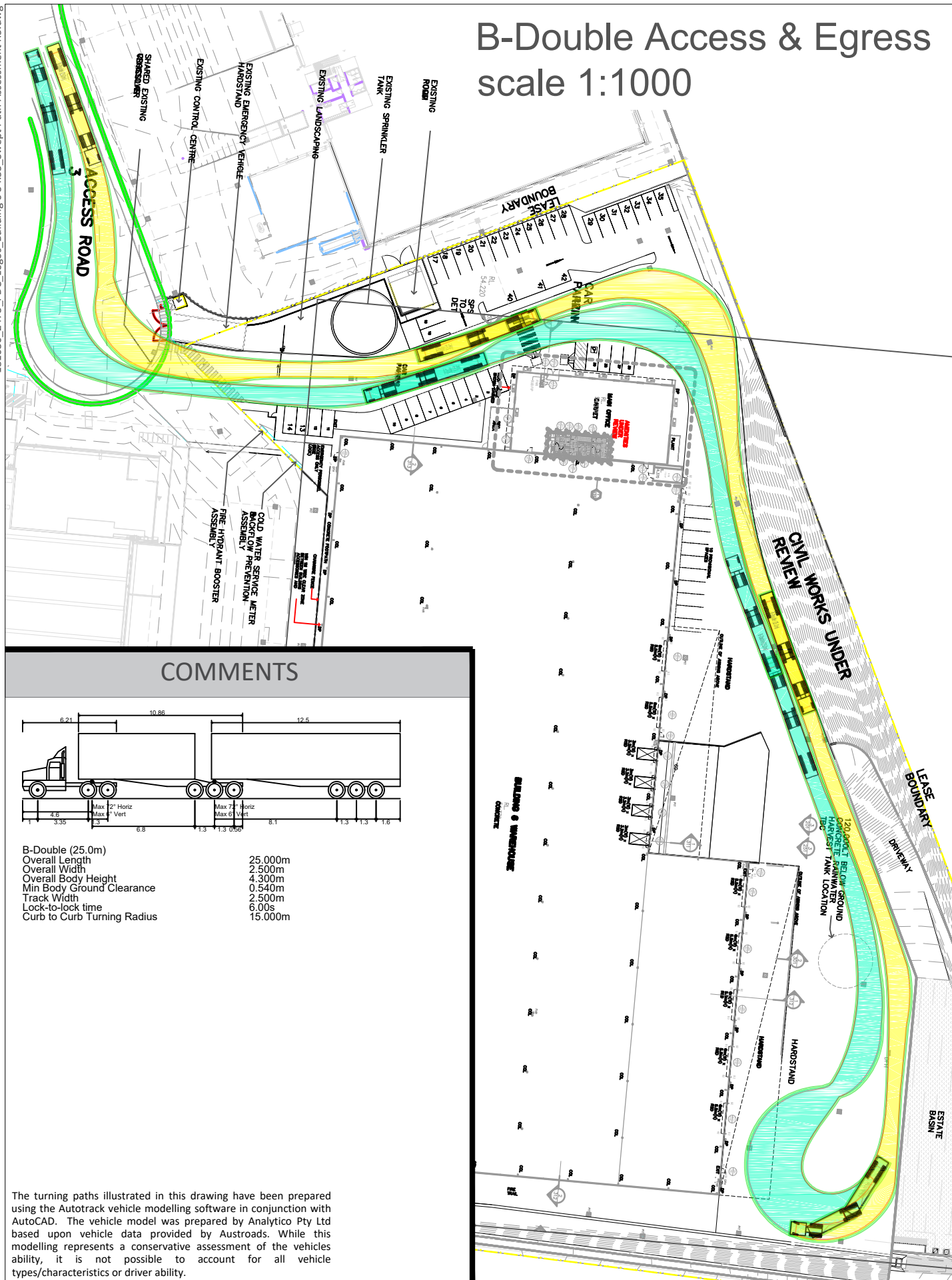
Regards



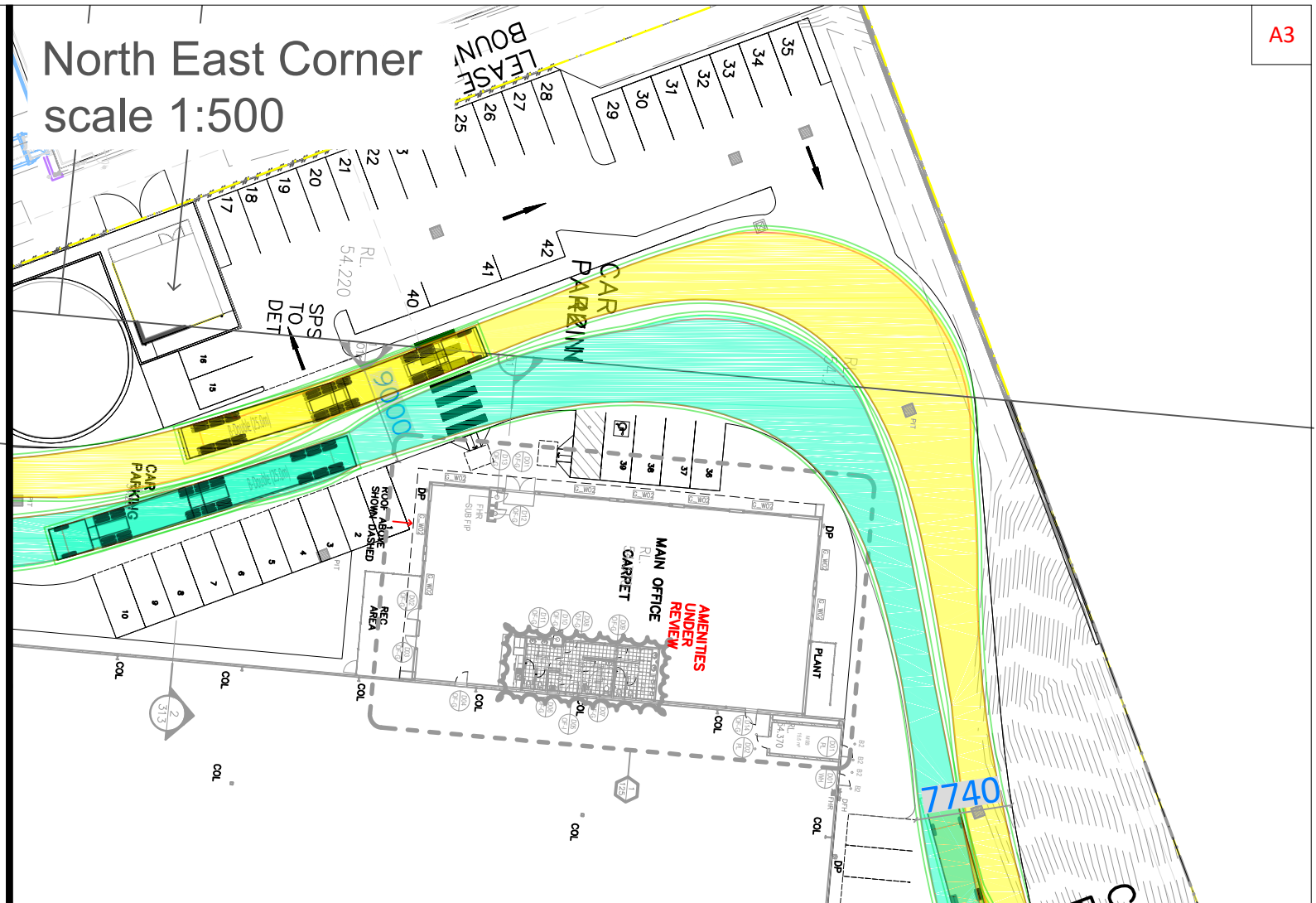
Steve Wellman
Senior Traffic Engineer

Attachment 1 Heavy Vehicle Swept Path Assessment

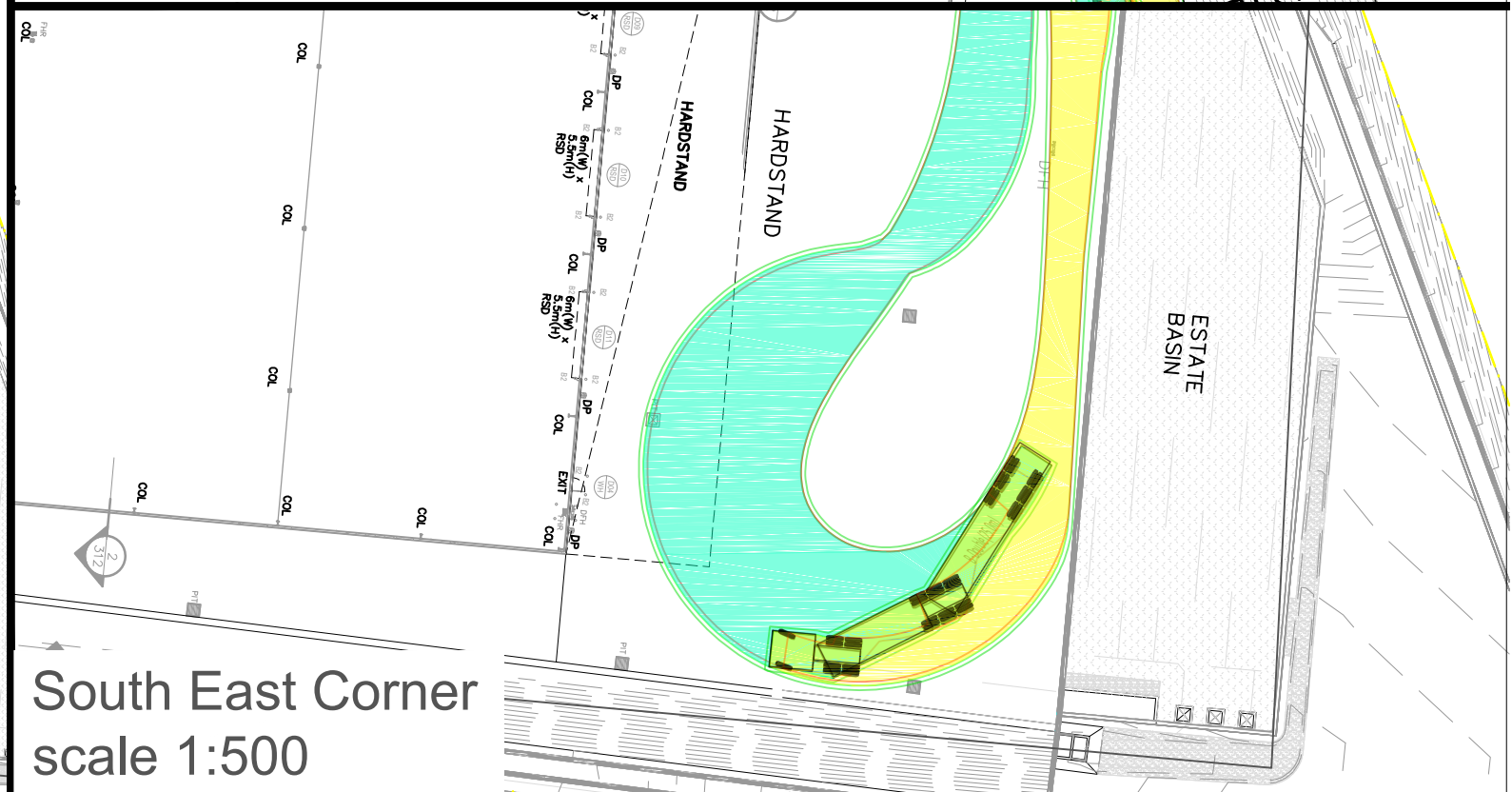
B-Double Access & Egress scale 1:1000



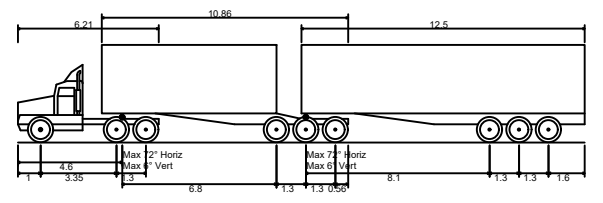
North East Corner scale 1:500



South East Corner scale 1:500



COMMENTS



B-Double (25.0m)	25.000m
Overall Length	2.500m
Overall Width	4.300m
Overall Body Height	0.540m
Min Body Ground Clearance	2.500m
Track Width	6.00s
Lock-to-lock time	15.000m
Curb to Curb Turning Radius	

The turning paths illustrated in this drawing have been prepared using the Autotrack vehicle modelling software in conjunction with AutoCAD. The vehicle model was prepared by Analytico Pty Ltd based upon vehicle data provided by Austroads. While this modelling represents a conservative assessment of the vehicles ability, it is not possible to account for all vehicle types/characteristics or driver ability.

REV	DATE	COMMENT	DRAWN	REVIEWED	REV	DATE	COMMENT	DRAWN	REVIEWED
5	30/10/18	Updated Site Plan	DS	SW					
4	24/10/18	Draft for discussion	DS	SW					
3	24/10/18	Updated Swept Path	DS	SW					
2	18/10/18	Updated Site Layout	DS	SW					
1	25/09/18	Swept Path Analysis	SW	DS					

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ptcconsultants.co

PROJECT:
Logos Development, Marsden
Park

DRAWING TITLE:
Building 6
Swept Path Analysis of B
Double Access & Egress

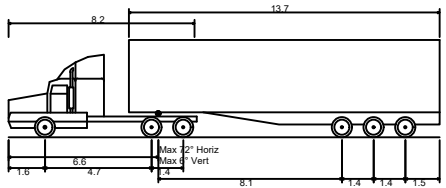
CLIENT: FDC Construction & Fitout
DRG. #: SK-005
PROJECT #: T2-2473
SCALE: as shown

REV: 5

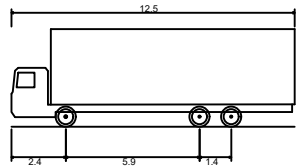
Access & Egress to AV Docks scale 1:500

BUILDING 6 WAREHOUSE
PL. CONCRETE

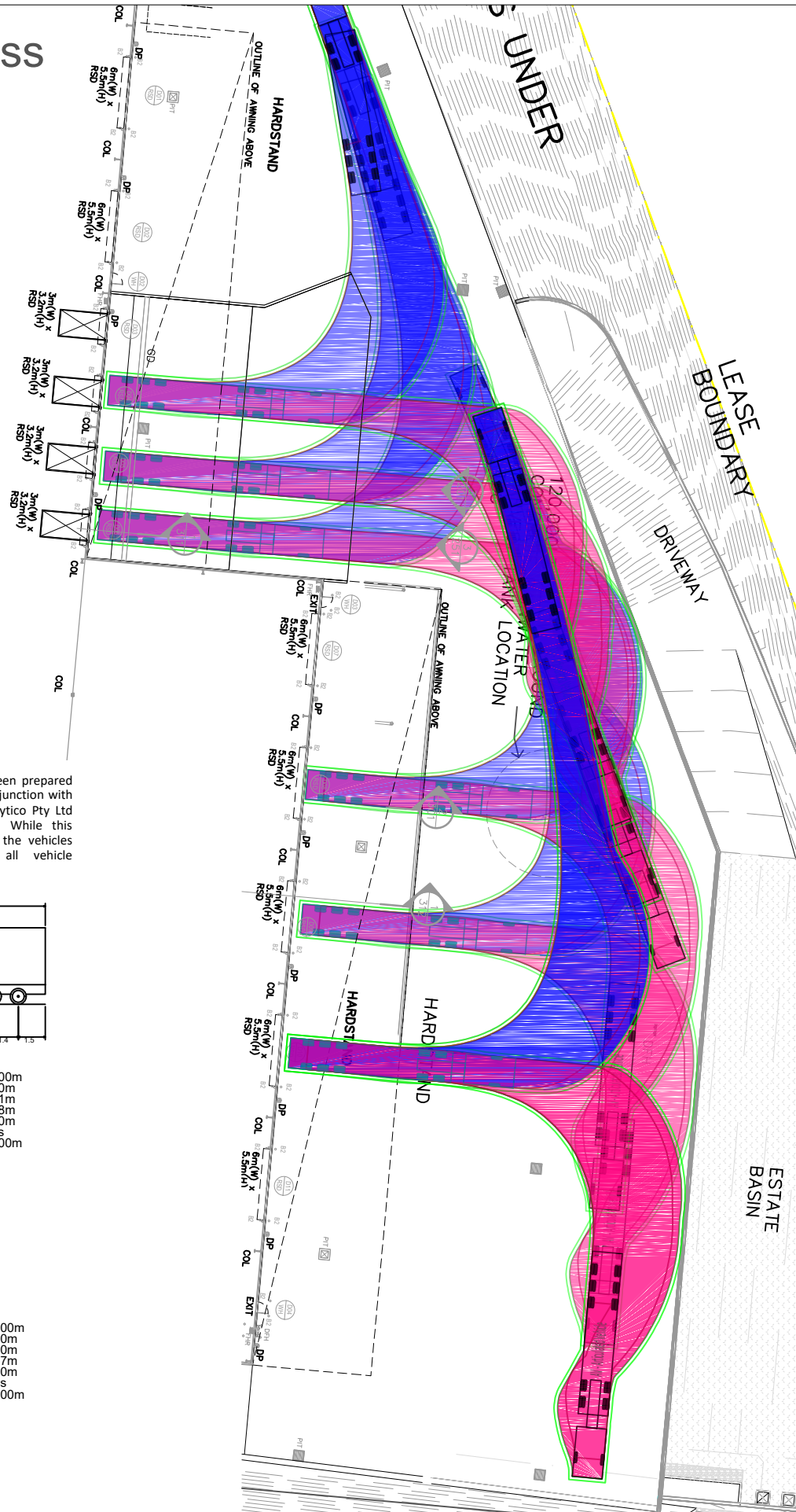
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AV - Articulated Vehicle
Overall Length 19.000m
Overall Width 2.500m
Overall Body Height 4.301m
Min Body Ground Clearance 0.418m
Track Width 2.500m
Lock-to-lock time 6.00s
Curb to Curb Turning Radius 12.500m

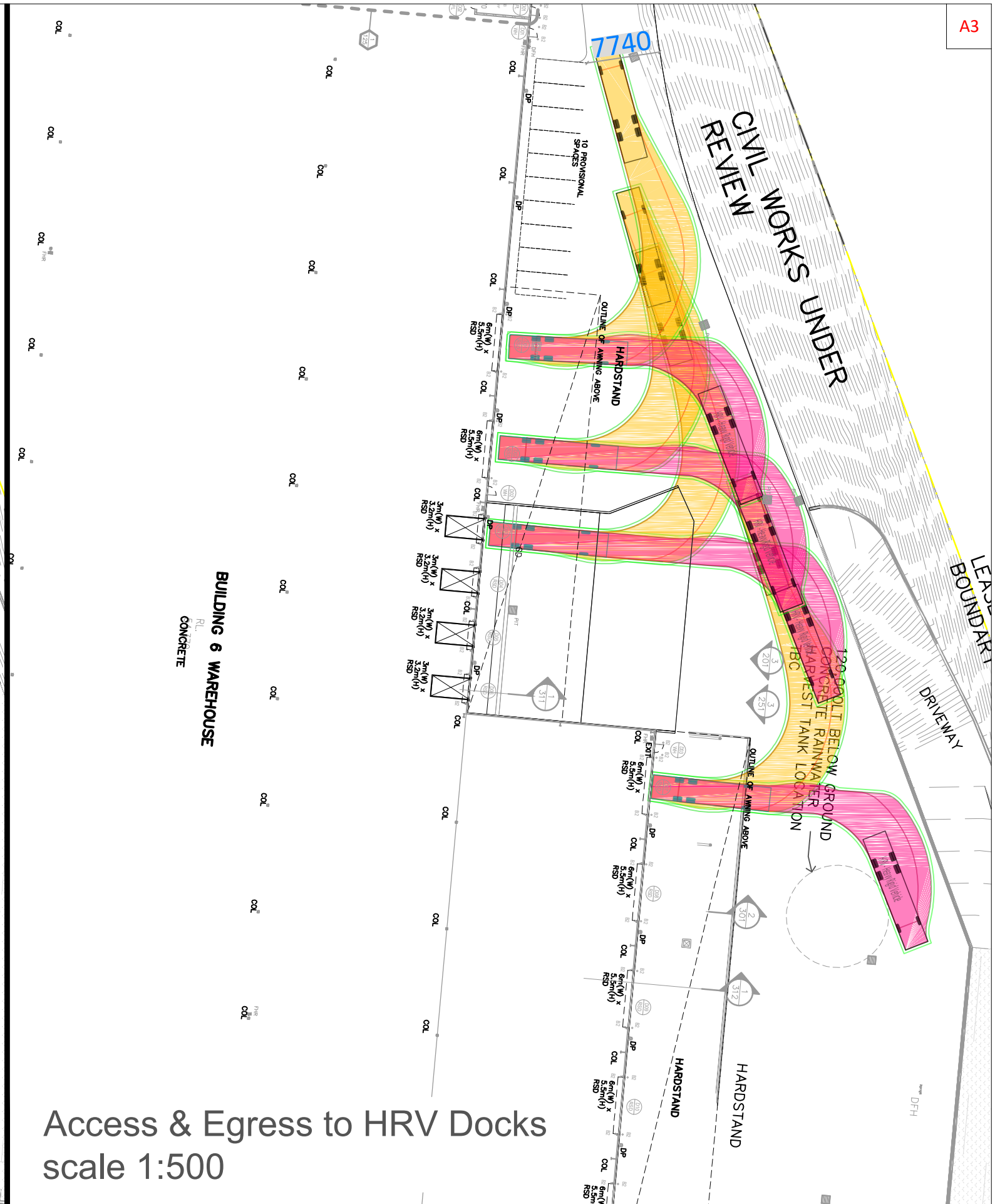


HRV - Heavy Rigid Vehicle
Overall Length 12.500m
Overall Width 2.500m
Overall Body Height 4.300m
Min Body Ground Clearance 0.417m
Track Width 2.500m
Lock-to-lock time 6.00s
Curb to Curb Turning Radius 12.500m



Access & Egress to HRV Docks scale 1:500

BUILDING 6 WAREHOUSE
PL. CONCRETE



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REV	DATE	COMMENT	DRAWN	REVIEWED	REV	DATE	COMMENT	DRAWN	REVIEWED
5	30/10/18	Updated Site Plan	DS	SW					
4									
3	24/10/18	Updated Swept Path	DS	SW					
2	18/10/18	Updated Site Layout	DS	SW					
1	25/09/18	Swept Path Analysis	SW	DS					

PROJECT:
Logos Development, Marsden
Park

DRAWING TITLE:
Building 6
Swept Path Analysis of
Loading Dock Access & Egress

CLIENT: FDC Construction & Fitout
DRG. #: SK-006
PROJECT #: T2-2473
SCALE: as shown

REV: 5