

26 May 2022



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Attention: Travis Lythall

RE: 780 Wallgrove Road, Horsley Park SSD-9601 Modification – Response to Submission - Transport Statement

Dear Travis,

Reference has been made to the Fairfield City Council's (Council) response sent on 02 May 2022 in relation to Modification (MOD 1) for SSD-9601 at 780 Wallgrove Road, Horsley Park (the Site). In this regard, Brickworks Land & Development (Brickworks) have commissioned Ason Group to prepare a response to the Council comments. Details of our assessment are as follows.

Modification to SSD-9601

It is noted that the submitted MOD 1 proposal sought approval of the following key works:

- Provision of 33 car spaces at the car park outside the office of the new production building.
- Construction of a new hardstand area for loading/unloading and storage.
- Removal of an existing internal ramp at the northern end of the Site.
- Construction of a new driveway for heavy vehicles to/from the Internal Access Road including the gate and weighbridges within the Site.
- Demolition of office buildings at the north-eastern section of the Site and convert into a yard for storage and overflow parking.
- Additional 10-12 staff working the night shift.
- Retained maximum of 35 staff on site at any given time.

Response to Council's Comments

The relevant comments raised by Council in relation to MOD 1 are included in the sections below.

Item 1

“Prior to incorporating the submission of loading management plan to Council as a condition of the development consent, the applicant shall provide a breakdown of the types and the frequency of vehicles servicing the site on a daily basis throughout the day;”

Appendix A provides Brickworks’ anticipated breakdown of vehicle types and frequencies servicing the site on a daily basis.

Item 2

“The operations of fire trucks in the site shall be incorporated into the Operational Traffic Management Plan or loading management plan – Can be conditioned;”

Details of fire truck operations shall be provided within a future Operational Traffic Management Plan (OTMP) or Loading Management Plan (LMP).

Item 3

“Australian Standards (AS 2890.2:2018) does not specify a requirement for the maximum permissible allowable ramp grade for 26m B-Double vehicle. The applicant shall carry out investigation and submit additional information to Council for assessment regarding this matter;”

AS2890.2:2018, Table 3.2 stipulates the following regarding maximum grade of 26.0m B-Double vehicles.

Table 3.2 — Maximum roadway and ramp grades

Design vehicle	Roadway/ramp grade ^a (max)
SRV	1:6.5 (15.4 %)
MRV, HRV	1:6.5 (15.4 %)
AV	1:6.5 (15.4 %)
BD	1:8.3 (12 %)
A-double	1:10 (10 %)
A-triple	1:20 (5 %)
^a The grade on a curve is measured along the inside of the curve. If reverse manoeuvres are permitted on a ramp, the maximum grade shall be 1:8 (12.5 %).	

Table 3.3 stipulates the maximum rates of change of grades for roadways and ramps.

Table 3.3 — Maximum rates of change of grades for roadways and ramps

Design vehicle	Rate of change of grade (max)
SRV	1:12 (8.3 %) in 4.0 m of travel
MRV, HRV	1:16 (6.25 %) in 7.0 m of travel
AV	1:16 (6.25 %) in 10 m of travel
BD	1:16 (6.25 %) in 10 m of travel
A-double	1:16 (6.25 %) in 10 m of travel
A-triple	1:16 (6.25 %) in 10 m of travel

As seen above, the maximum allowable ramp grade for a B-double vehicle is 1:8.3 (12%) and the maximum rate of change is 1:15 (6.25%) in 10m of travel. The proposed driveway has been designed in accordance with the above.

Item 4

“The applicant shall provide swept path diagram(s) to demonstrate the intersection areas within the site have sufficient capacity to cater for two-way traffic movements;”

Ason Group prepared the Traffic Report for the SSD-9601 which stipulated a traffic generation of fewer than 10 vehicles per hour (vph) in the peak hours.

The traffic generation of the MOD 1 SSDA would result in an additional 20 heavy vehicles throughout the day, resulting in approximately 1-2vph in the peak hour.

The projected heavy vehicle traffic generation is sufficiently low such that continuous two-way flow at the internal intersections is not warranted. The design generally provides for one-way circulation in accordance with best practise from a safety and efficiency standpoint. The proposed one-way circulation would result in fewer conflict points within the proposed hardstand area, facilitating safer use of the proposed hardstand area.

It would be expected that a Signage and Line Marking plan to be issued will provide the appropriate signage to facilitate safe traffic movements.

Appendix B provides swept path analysis demonstrating the one-way flow.

Item 5

“With regard to heavy vehicles manoeuvring within the site, the applicant’s swept path diagrams shall demonstrate how heavy vehicles can satisfactorily manoeuvre into and out of the proposed new hardstand areas. This is to ensure that the design of the hardstand areas will be sufficient to accommodate the intended design vehicles. The plan shall be updated to show where one-way traffic flow is proposed within the site. Where two-way movements are permitted at the intersection areas, swept path analysis demonstrating that two-way simultaneous movements for the possible scenarios shall be shown.”

Please refer to Item 4 regarding two-way movements within the proposed hardstand area. Please refer to Appendix B for truck manoeuvres within the proposed hardstand.

Item 6

“The applicant shall provide more information on how vehicles at the waiting bay queuing to enter the site will be managed during the peak hour of the day. Additional information shall be provided in relation to the dimensions of the queuing bay and how motorists not complying with the queuing bay can be managed and enforced on a private road. Otherwise, the applicant shall come up with a strategy/risk assessment to ensure that the light and commercial vehicles manoeuvring into and within the site will be managed in a way that vehicles queuing would not occur on the external road network.”

Dimensions of the proposed waiting bay are provided within **Appendix C**.

The waiting bay shall be managed by means of the following procedures.

The correct operation and rules of the proposed waiting bay shall be included within Brickworks’ existing site induction procedures and training that all parties visiting the site must undergo before allowed on the site. This will include all drivers using the bay being required to call site security to notify them of their arrival and use of the waiting bay.

Brickworks shall also install a security camera within their site which can monitor the waiting bay area, to be monitored by security staff on-site. In any instance where a driver does not adhere to the procedures mentioned in the induction above, security shall contact the driver and subsequently their supervisor to inform of wrongdoings.

Signage and line marking shall be installed to correctly indicate the appropriate use of the proposed waiting bay, including directions for drivers to notify site security of their arrival. This shall be provided as part of a future OTMP or LMP.

We trust the above is of assistance and if you have any questions, please do not hesitate to contact the undersigned.

Yours sincerely,

A handwritten signature in black ink, appearing to be 'Alan Tan', with a stylized flourish at the end.

Alan Tan

Traffic Engineer – Ason Group

Email: alan.tan@asongroup.com.au

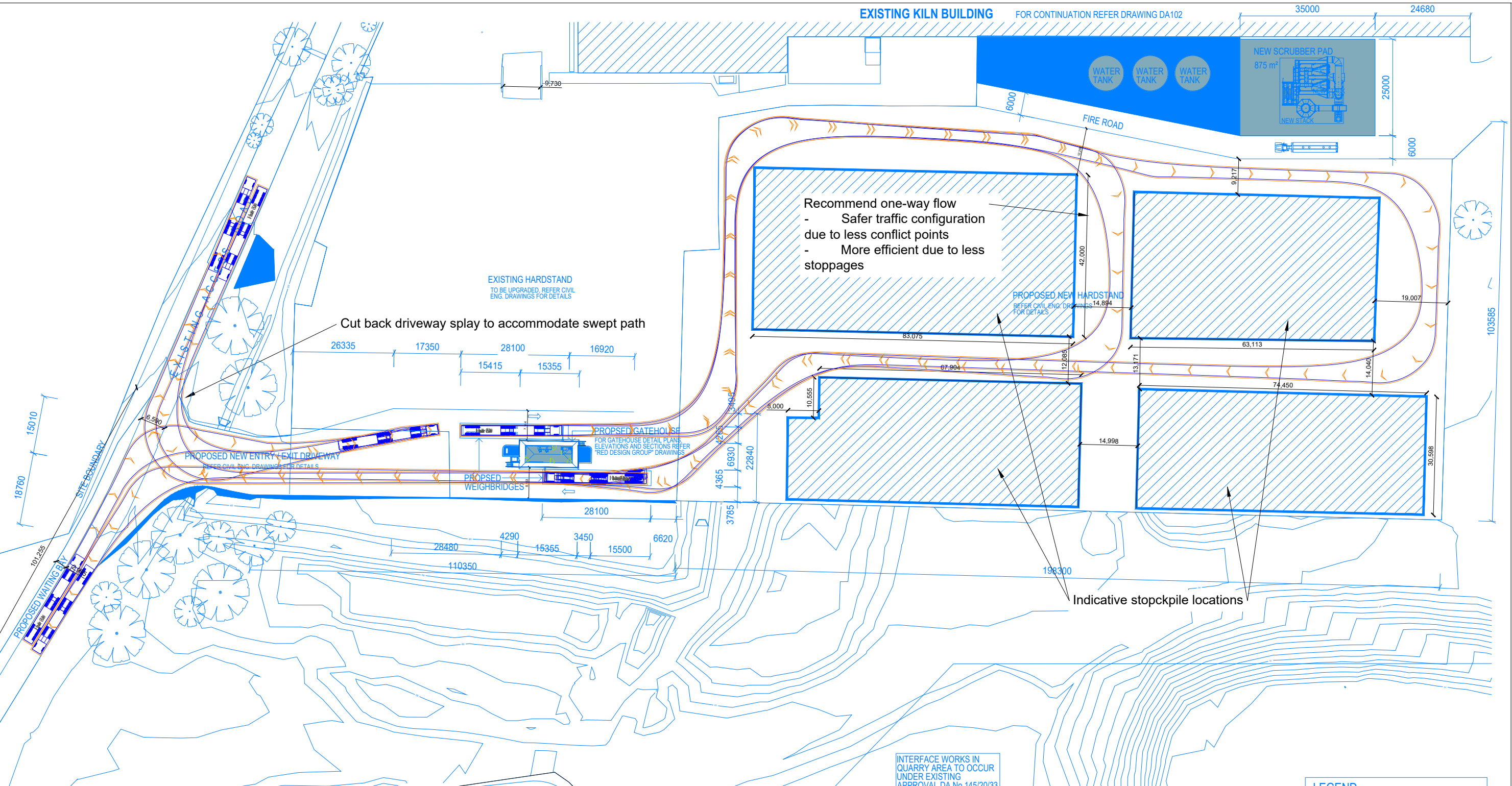
Appendix A
Daily Traffic Vehicle Breakdown

HARDSTAND AREA																
Land Use	Vehicle Type	In/Out	5am-6am	6am-7am	7am-8am	8am-9am	9am-10am	10am-11am	11am-12pm	12pm-1pm	1pm-2pm	2pm-3pm	3pm-4pm	4pm-5pm	9pm-10pm	Daily Total
Existing Plant 1 and Plant 2	Light Vehicles	In	20									15				35
		Out										15		10	10	35
	Light Vehicles		20	0	0	0	0	0	0	0	0	30	0	10	10	70
	B-Doubles	In				1	2					1	1	1		6
		Out	1	2				1	1	1						6
	19.0m Semi-Trailers	In				3	5					2	2	3		15
		Out	3	3				2	2	2	2					14
	Heavy Rigid Vehicles	In				4	5					2	3	5		19
		Out	4	6				2	3	2	3					20
	Truck and Dog	In				2	3					1	2	2		10
		Out	2	3				1	1	2	1					10
Sub-Total	Heavy vehicles		10	14	0	10	15	6	7	7	6	6	8	11	0	100
Plant 2 Proposed Hardstand	Light Vehicles	In													12	12
		Out		12												12
	Light Vehicles		0	12	0	0	0	0	0	0	0	0	0	0	12	24
	B-Doubles	In								1			1			2
		Out		1						1						2
	19.0m Semi-Trailers	In						1					1			2
		Out		2												2
	Heavy Rigid Vehicles	In				1			1	1			1			4
		Out	1	1		1				1						4
	Truck and Dog	In								1			1			2
		Out		1						1						2
Sub-Total	Heavy Vehicles		1	5	0	2	0	1	1	6	0	0	4	0	0	20
Total	Heavy Vehicles		11	19	0	12	15	7	8	13	6	6	12	11	0	120

EXISTING VEHICLES ELSEWHERE ON THE SITE NOT USING THE HARDSTAND AREA																
Land Use	Vehicle Type	In/Out	5am-6am	6am-7am	7am-8am	8am-9am	9am - 10am	10am - 11am	11am-12pm	12pm-1pm	1pm-2pm	2pm-3pm	3pm-4pm	4pm-5pm	9pm-10pm	Daily Total
Quarry	Truck and Dog	In			5, or if major campaign 15	5, or if major campaign 15	5, or if major campaign 15	5, or if major campaign 15	5, or if major campaign 15	5, or if major campaign 15	5, or if major campaign 15	5, or if major campaign 15	5, or if major campaign 15			Baseline 36 or max 100 with major campaign (a few months a year)
		Out				3-5, or if major campaign 15	3-5, or if major campaign 15	3-5, or if major campaign 15	3-5, or if major campaign 15	3-5, or if major campaign 15	3-5, or if major campaign 15	3-5, or if major campaign 15	3-5, or if major campaign 15	3-5, or if major campaign 15		Baseline 36 or max 100 with major campaign (a few months a year)
	36t net	In			1	1	1	1	1	1	1	1	1			9
		Out				1	1	1	1	1	1	1	1	1		9
	Waste trucks	In	3	3	3	3	3	3	3	3	3	3	3			33
Veolia		Out		3	3	3	3	3	3	3	3	3	3	3		33
Customers to Design Centre	Light Vehicles	In														60
		Out			7	8	8	7	8	7	8	7				60
Horsley Park Administration	Light Vehicles	In														60
		Out	10	20	20	10						10	30	20		60

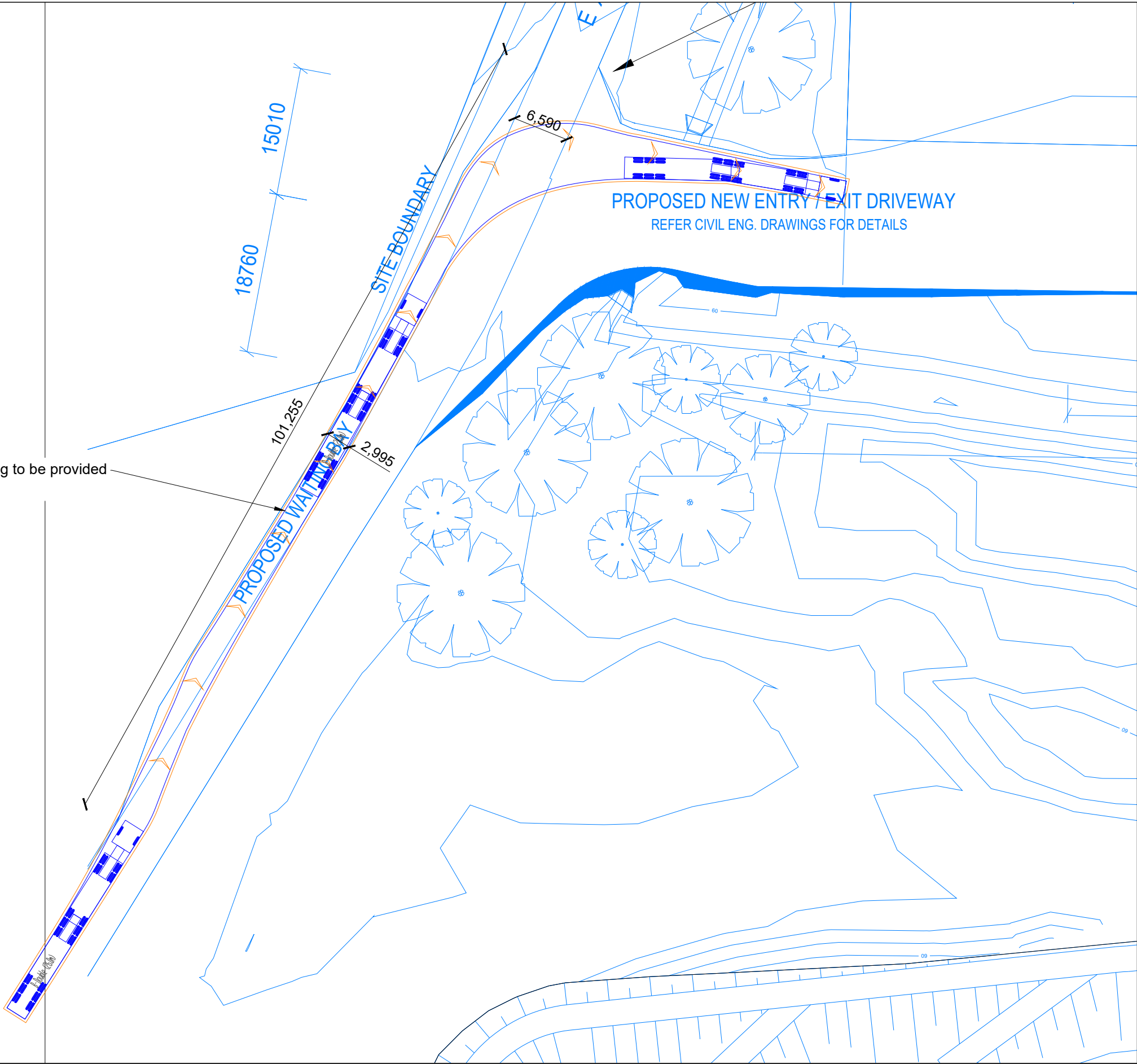
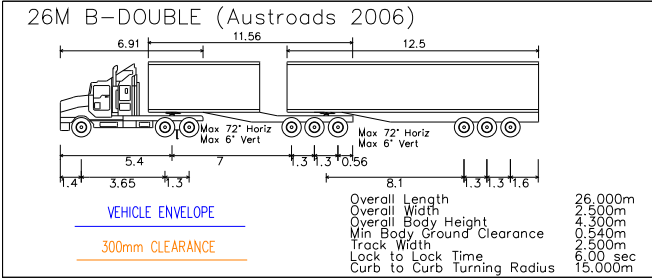
Appendix B

Swept path analysis of proposed hardstand area



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Appendix C
Swept path analysis of proposed waiting bay



GENERAL NOTES

This drawing is provided for information purposes only and should not be used for construction.

Base Plan prepared by AT&L, received 01.03.2022.

Swept path assessments completed at 10 km/h and 300mm clearance.

DESIGNED	PAPER SIZE	CLIENT	DOCUMENT INFORMATION	
Sadeepth	A3	BRICKWORKS	SWEPT PATH ASSESSMENT	
APPROVED BY	DATE	PROJECT	PROPOSED WAITING BAY	
D. CHOI	18.05.2022			
SCALE		0714	FILE NAME	SHEET
1:500		780 WALLGROVE ROAD, HORSLEY PARK	AG0714-08-v1.dwg	AG01

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