

MPC Ref: 160548

8 July 2022

Newcastle Jockey Club
C/- Avid Project Management
PO Box 206
Carrington NSW 2294

Attn: David Read

(by email: david.read@avidpm.com.au)

RE: Newcastle Jockey Club - Chatham Street Stables Complex (SSD-12982045)

MPC has prepared responses to the relevant items listed in the correspondence from the City of Newcastle ('CoN') reference SDC2021/0014 dated 10 June 2022.

4. Stormwater Management

4.1 Management of Horse Waste

Capture and treatment of horse waste will be in accordance with the waste management plan for the development. MPC offers the following clarifications in this regard:

- a. Horse wash bays within the proposed new buildings will be bunded and drained to the proposed sewer system on the site.
- b. Horse wash bays within the proposed development footprint but outside of the proposed stables buildings will also be bunded and drained to the proposed sewer system on the site.
- c. Horse walkers within the proposed development footprint will be drained to the proposed sewer system on the site.
- d. Floor wastes/drains within the stables buildings will be drained to the proposed sewer system on the site. Drainage pits in breezeways will have drop-in filter baskets.
- e. Elevated concourses and ramps will have horse waste removed manually, stored and transported in suitable sealed containers, and taken off site to a licensed waste management facility, in accordance with the waste management plan for the development. Stormwater runoff from these areas will be directed to the site stormwater management facility which includes water quality treatment devices such as gross pollutant traps and bio-retention basins.

- f. The drop-off zone, marshalling area and lower-level passageways for horse movement will have horse waste removed manually, stored and transported in suitable sealed containers, and taken off site to a licensed waste management facility, in accordance with the waste management plan for the development. Stormwater runoff from these areas will be directed to adjacent landscaped areas for infiltration, with bypass flows directed to the site stormwater management facility which includes water quality treatment devices such as gross pollutant traps and bio-retention basins.

4.2 Stormwater Discharge Connections

Darling Street

The changes being requested by CoN could be undertaken in a manner depicted in Figure 1.

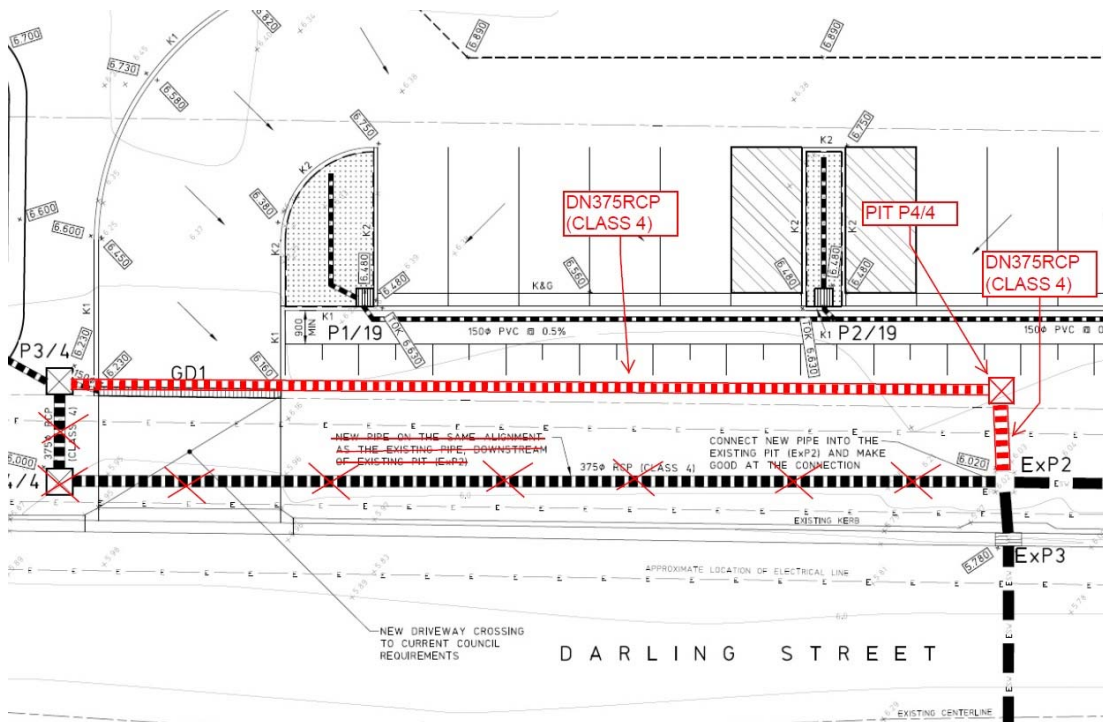


Figure 1: Change to Pit "P4/4" and connecting pipes

These changes will place the majority of the new pipe within the NJC property. Further detail can be resolved during the detailed 'CC' design process.

Chatham Street Northern Access Location

CoN has suggested constructing a new stormwater pipe along Chatham Street, in lieu of the Junction Pit “Exp6” proposed in MPC’s design. Construction of a new pipe across Chatham Street would cause a great deal more public disturbance than the currently proposed junction pit. The proposed Junction Pit can be designed to facilitate appropriate maintenance access, as depicted in Figure 2 below, and can be designed structurally to support loads from heavy vehicles and comply with all current relevant Australian Standards.

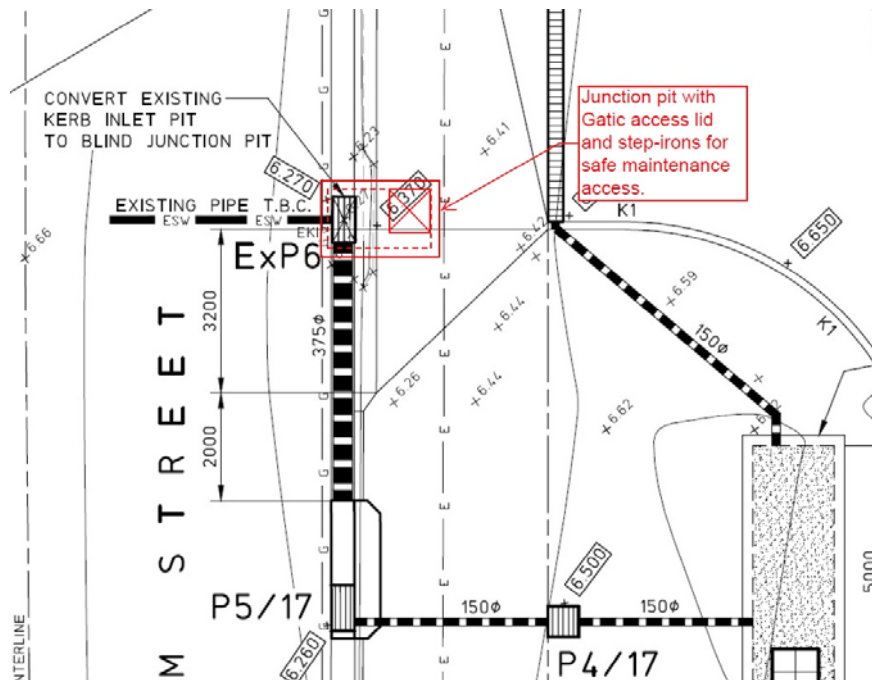


Figure 2: Junction Pit in the North-Western Access Driveway

Further detail can be resolved during the detailed ‘CC’ design process, and once draft DA Conditions of Consent are made available.

5. Traffic Management

Road Widening and Future Roundabout

MPC have undertaken additional turning path checks using a 19m semi-trailer and the proposed roundabout geometry supplied by CoN. The roundabout appears to work for the 19m semi-trailer movements provided that the outer “apron” in the middle of the roundabout is mountable (i.e. only 50mm higher than the asphalt surface). The proposed roundabout does not appear to interfere with the truck paths entering or leaving the NJC site.

The roundabout works will likely involve improvements to Council’s road stormwater drainage assets in that area, so MPC would need CoN’s next iteration of concept design for the roundabout consider those proposed stormwater asset changes.

8. Vehicular Access, Driveway Design and Crossing Locations

Chatham Road Maintenance Drop-off Driveway

MPC has offered a response to this issue (discussed earlier in this report and depicted in Figure 2) that does not require the driveway to be relocated or new stormwater pipes to cross Chatham Street.

Turning Path and Internal Manoeuvring

CoN Comment:

Turning Path Plan Sheet 4 (Dwg No. T04) indicates a B85+Horse Float will enter the site from the Equine/Goods Drop-off Entry driveway (south of Chatham Street) to the Ramp 01 via a gated control and exit at Ramp 02. A Loading Zone is proposed at the entry to Ramp 01 for the Equine/Goods Drop-off which will restrict entry to the Ramp 01. Concern is raised that the impact of this proposed entry to the Ramp 01 may adversely impact on the operation of the driveway and road traffic.

MPC Response:

The ramps were checked for vehicle access to ensure there is emergency access for a vehicle and float to pick up an injured horse from a stable. The frequency of such access would be very rare and not part of the regular day-to-day operation of the facility. Traffic controls would be implemented by NJC personnel in the rare event that float access to the stables was needed to retrieve an injured horse. We therefore do not foresee a problem with the ramp position or geometry as currently proposed in the design.

CoN Comment:

Furthermore, the turning path drawings indicate that the entry is very tight for manoeuvring. Use of larger B99 type vehicles is likely expected for such movements. Proposed gate and landscaping may have to be amended to allow for access for a B99+Horse Float to ensure the flexibility for manoeuvring.

MPC Response:

Vehicle turning paths for emergency horse float access (on MPC Drawings T03, T04 and T05, Revision 4, dated 8 July 2022) have been updated to show a B99 vehicle with the horse float.

CoN Comment:

Turning Path Plan Sheet 4 (Dwg No. T04) indicates a B85+Horse Float will drive via the Lower Passage and use the Equine/Goods Drop-off Entry driveway (South of Chatham St) to exit onto the road. Safety concern is raised regarding the above turning pattern as it could result in a head on collision.

MPC Response:

The ramps were checked for vehicle access to ensure there is emergency access for a vehicle and float to pick up an injured horse from a stable. The frequency of such access would be very rare and not part of the regular day-to-day operation of the facility. Traffic controls would be implemented by NJC personnel in the rare event that float access to the stables was needed to retrieve an injured horse. The very low risk of collisions can therefore be safely managed by the above-mentioned traffic controls in the rare emergency event that access by the float was required.

CoN Comment:

Turning Path Plan Sheet 5 (Dwg No. T05) indicates a B85+Horse Float exiting the site via Ramp 01. Turning Path Plan Sheet 4 (Dwg No. T04) shows the same ramp to be used as an entry. Safety concerns are raised at this interface and on the ramp. Turning movements at Horse Walker G2 are also in question.

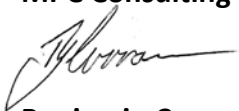
MPC Response:

As per the response to the previous comment, the very low risk of collisions can be safely managed by the above-mentioned traffic controls in the rare emergency event that access by the float was required.

Should you require additional information please contact the undersigned on 0417049818 or benjamin@mpceng.com.au.

Yours faithfully,

MPC Consulting Engineers

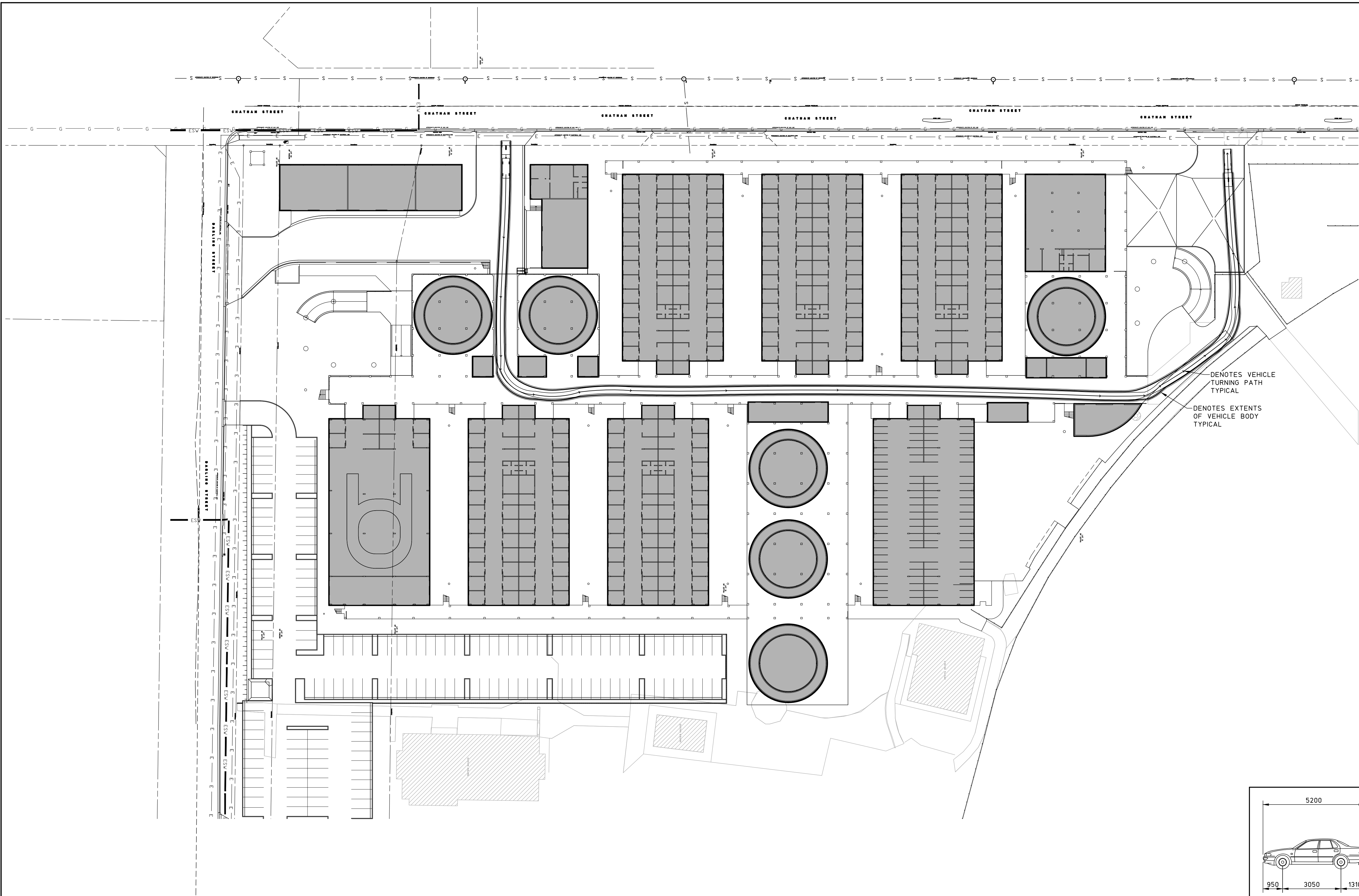


Benjamin Curran

B.E (Civil)(Hons) MIEAust, CPEng, NER, APEC Engineer IntPE(Aust) RPEQ
Director, Senior Civil/Structural Engineer

Enclosed:

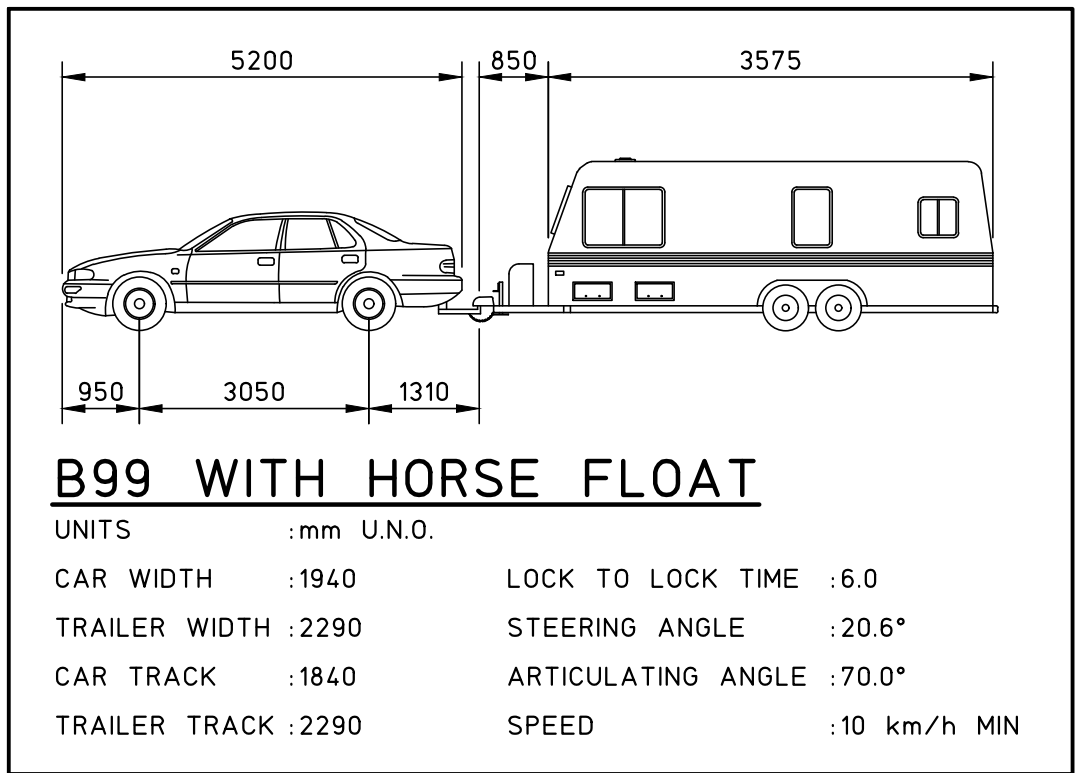
Emergency horse float turning paths – Drawings 160548-T03, T04 and T05 (Rev 4, 8.7.2022)



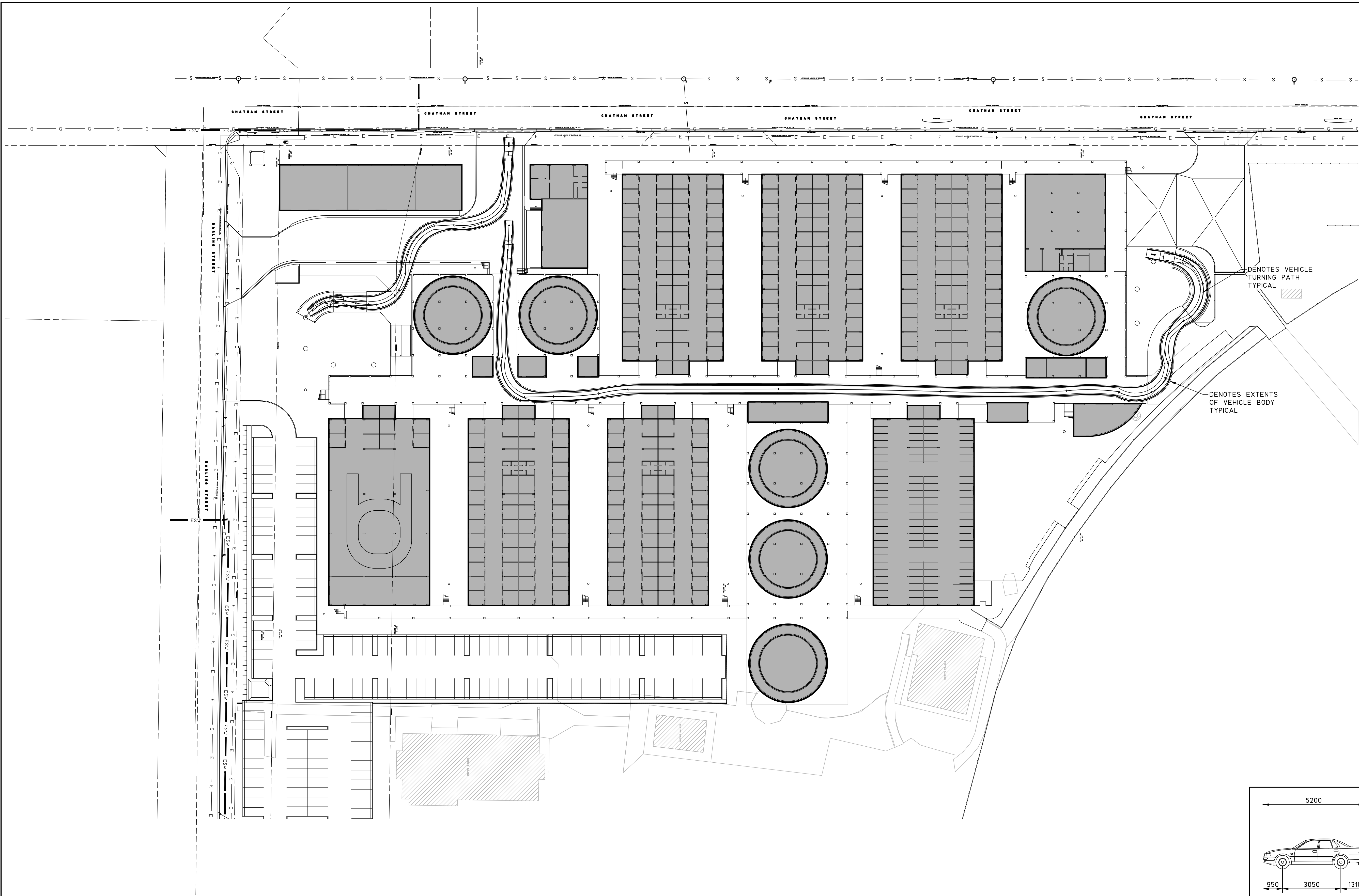
TURNING PATH ENTRY PLAN SHEET 3 - EMERGENCY HORSE FLOAT ACCESS

SCALE 1:500

NOT FOR CONSTRUCTION



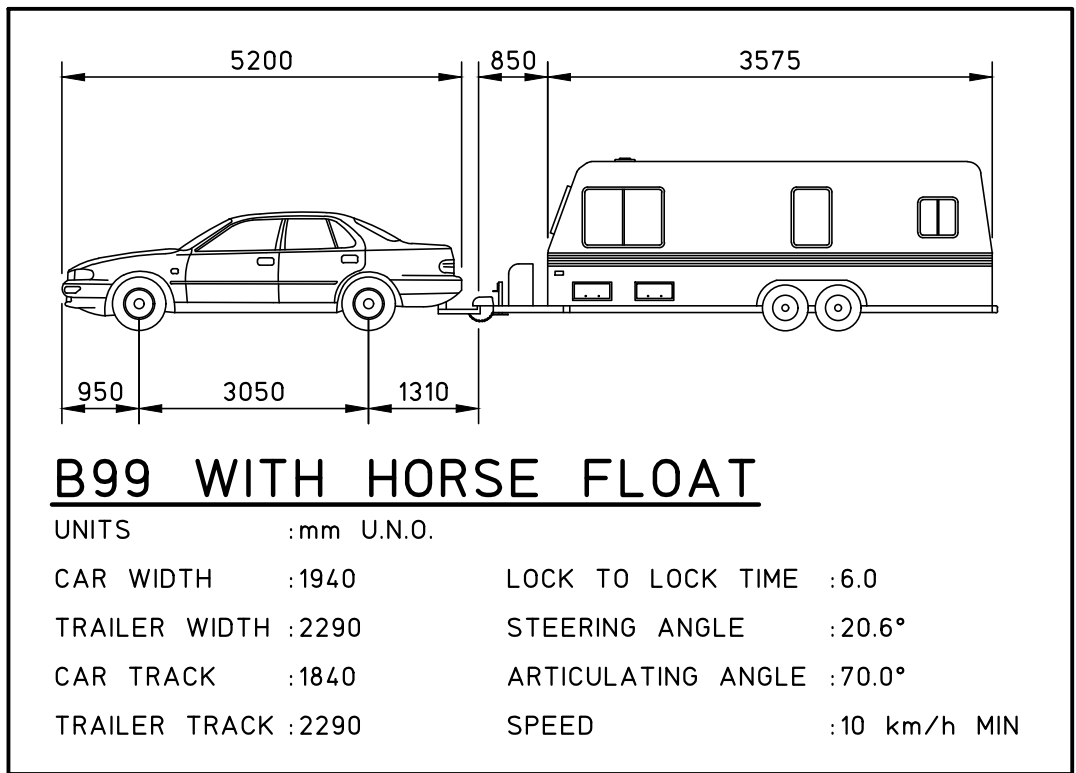
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4	B99 VEHICLE ADDED	8.7.22							Level 1, 16 Telford Street, NEWCASTLE EAST, NSW 2300			TITLE			DRAWN C.H.				
3	REVISED DEVELOPMENT APPLICATION	26.4.22							PO BOX 559 THE JUNCTION, NSW 2291			TURNING PATH PLAN			ENGINEER B.C.				
2	DEVELOPMENT APPLICATION	12.8.21							Tel: (02) 4927 5566			SHEET 3			No in SET 5				
1	CLIENT REVIEW	12.7.21							Fax: (02) 4927 5577						JOB No 16-548.CH				
0	CLIENT REVIEW	9.11.20							Email: admin@mpceng.com.au						DRAWING No T03				
ISSUE		REASON FOR ISSUE	DATE	DATE OF RELEASE	RESPONSIBLE PRINCIPAL SIGNATURE	ISSUE				Web: www.mpceng.com.au						ISSUE 4			
										A.C.N. 098 542 575									



TURNING PATH ENTRY PLAN SHEET 4 - EMERGENCY HORSE FLOAT ACCESS

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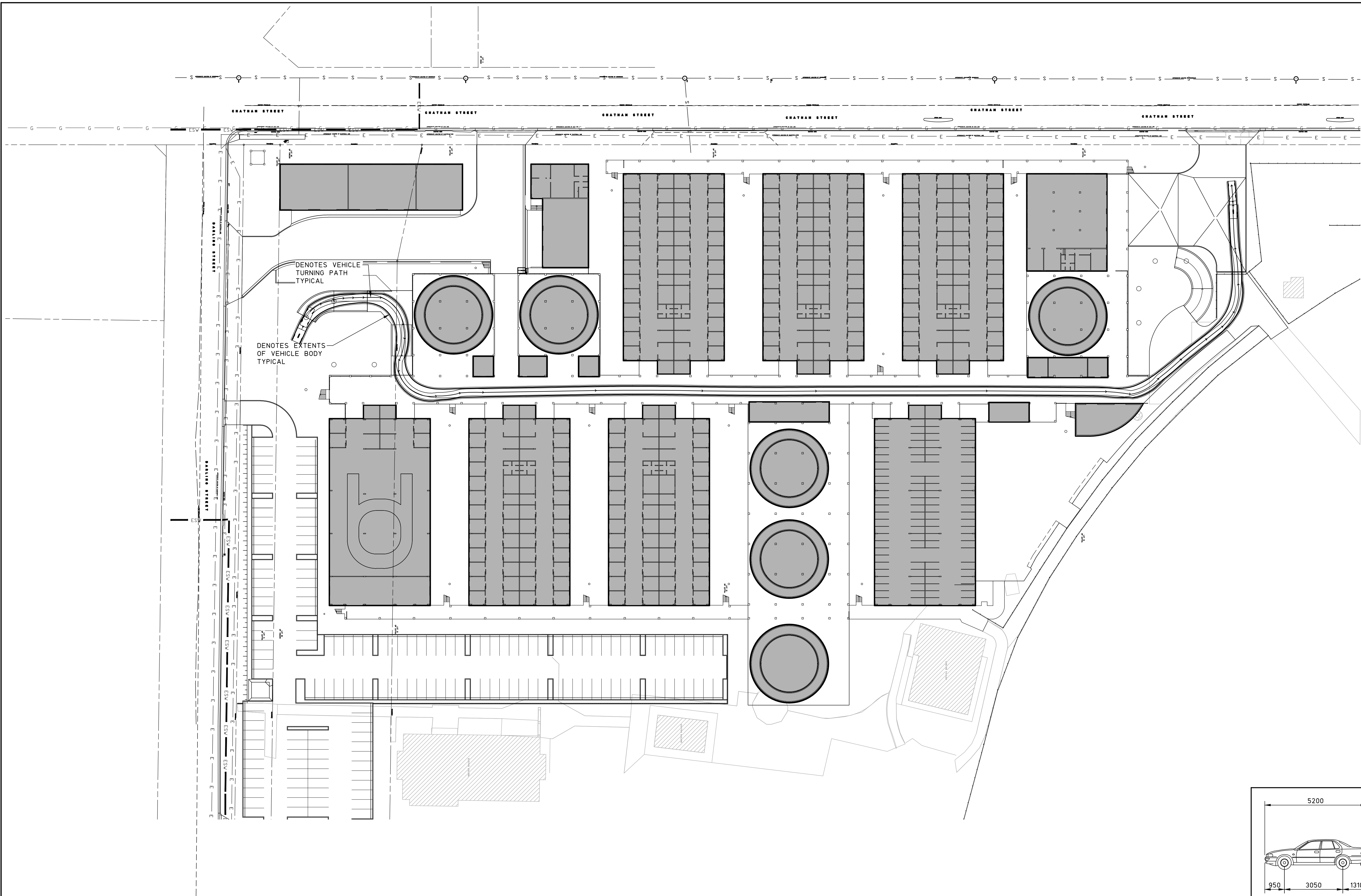


B99 WITH HORSE FLOAT

UNITS		mm	U.N.O.
CAR WIDTH	:1940	LOCK TO LOCK TIME	:6.0
TRAILER WIDTH	:2290	STEERING ANGLE	:20.6°
CAR TRACK	:1840	ARTICULATING ANGLE	:70.0°
TRAILER TRACK	:2290	SPEED	:10 km/h MIN

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								TITLE TURNING PATH PLAN SHEET 4				SCALES 1:500		JOB No 16-548.CH		DRAWING No T04		ISSUE 4	
ISSUE		REASON FOR ISSUE		DATE		DATE OF RELEASE		RESPONSIBLE PRINCIPAL SIGNATURE		ISSUE									
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1		CLIENT REVIEW		12.7.21															
0		CLIENT REVIEW		9.11.20															

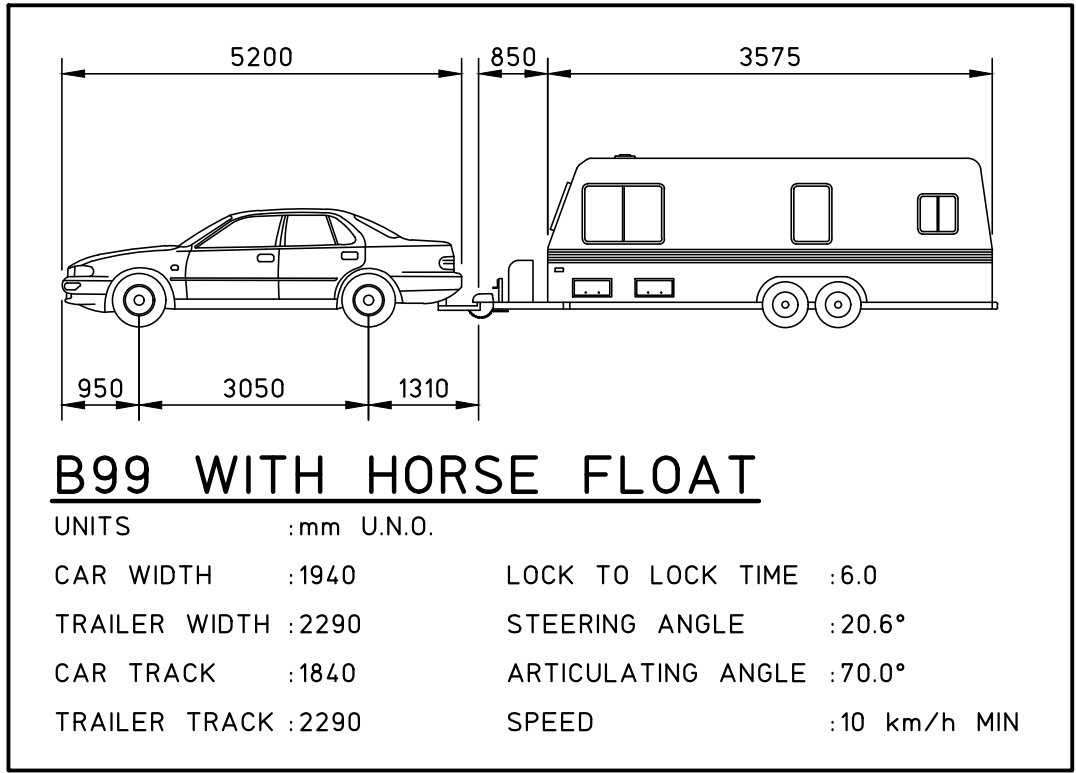
FULL SIZE ON ORIGINAL 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 cm



TURNING PATH ENTRY PLAN SHEET 5 - EMERGENCY HORSE FLOAT ACCESS

SCALE 1:500

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3 REVISED DEVELOPMENT APPLICATION			26.4.22						TURNING PATH PLAN			JOB No			DRAWING No		ISSUE	
2 DEVELOPMENT APPLICATION			12.8.21						SHEET 5			16-548.CH			T05		4	
1 CLIENT REVIEW			12.7.21						SHEET 5									
0 CLIENT REVIEW			9.11.20															
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FULL SIZE ON ORIGINAL 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 cm