

Duncan Craighead
Project Manager – Asset Development
Evans Long Pty Ltd

6th February 2020

Dear Duncan,

Proposed Mixed Use Development
Gates Road, Flagstone
Vehicle Access & On-Site Manoeuvring

PLANS AND DOCUMENTS
referred to in the PDA
DEVELOPMENT APPROVAL

Approval no: DEV2020/1109

Date: 10 June 2020



I refer to your request for our review of the above proposed development (see attached development plan) with respect to the ability for vehicle to move in, out, through and within the development.

As you are aware, we have advised your development architect during the conduct of our review. This has resulted in a number of driveway and other amendments to the development plan which were necessary in order to ensure that vehicles could be comfortably manoeuvred to, from and within the site. The attached development plan reflects our advice.

1. Car Manoeuvres

Fig 1 shows 85th percentile cars (per AS/NZ2890.1) moving through the service station pump mat.

The swept paths shown in Fig 1 demonstrate that car will comfortably be manoeuvred in, out and within the development. Further, we confirm that the design of parking spaces across the frontage of the service station sales building and within the light industrial component of the development is consistent with service station and industrial design standards and consistent with the requirements of AS/NZ2890.1.

2. Medium Rigid Vehicle (MRV) Manoeuvres

An MRV (per AS/NZ2890.2) is likely to be the largest type of truck likely to enter regularly into the development.

Figs 2 and 3 show medium rigid vehicle manoeuvres in and out of the light industrial sector of the development and through the service station pump mat, assuming that the northern two pumps are allocated to low flow diesel sales.

The swept paths shown in Figs 2 and 3 demonstrate that MRVs will be able to comfortably manoeuvred in, out and within the development.

3. Heavy Rigid Vehicle (HRV) Manoeuvres

An HRV (per AS/NZ2890.2) is likely to be the largest type of truck to occasionally enter into the development other than a 19m Articulated Vehicle (AV) fuel delivery vehicle attending the service station.

Figs 4 and 5 show heavy rigid vehicles manoeuvring in and out of the service station and light industrial loading/refuse areas. An HRV is the largest vehicle likely to be driven into those facilities.

Notwithstanding that entry by HRVs into the development is unlikely to be regular, the swept paths shown in Figs 4 and 5 demonstrate that HRV will be able to be comfortably manoeuvred in, out and within the development.

4. Refuse Collection

Fig 6 shows the swept path of a 10.3m long ACCO 2350 refuse truck attending the light industrial refuse collection area.

The swept path clearly indicates that typical refuse vehicles will be capable of being driven comfortably through the development site, including in and out of refuse storage areas.

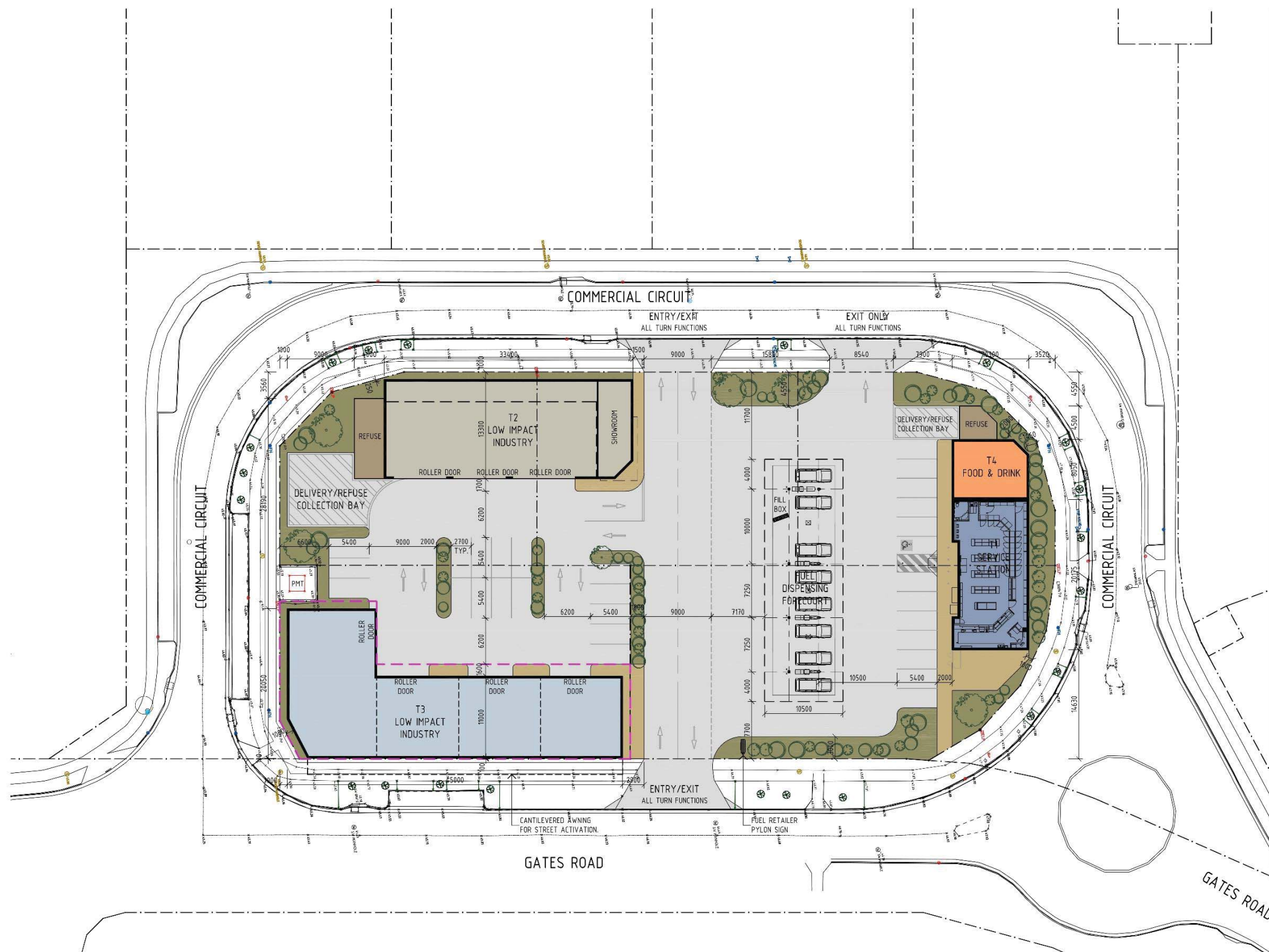
5. 19m Articulated Vehicle (AV) Manoeuvres

Figs 6 to 11 demonstrate the swept paths of a 19m AV (per AS/NZ2890.2) moving to and from the development site and moving within the development site for the purposes of making fuel deliveries. In the latter respect, we have shown several positions (and associated swept paths) which the AV could potentially occupy whilst fuel is dispensed to underground storage tanks.

The swept paths of AV fuel delivery vehicles demonstrate that the site and adjacent roundabout can facilitate this type of vehicle when delivering fuel to service station component of the development.



Glen Holdsworth (RPEQ)
B.Eng.(Civil), M.Eng.Sc.(Highway Eng)
MIE Aust, CPEng, MITE, MPA



PRELIMINARY

PROPERTY DESCRIPTION
LOTS 25012, 25013, 25014,
25015 & 25016 on SP303119



COUNCIL: LOGAN CITY COUNCIL

DEVELOPMENT ASSESSMENT

TOTAL SITE AREA - 5,104m²

STAGE 1

SITE AREA - 4,404m²

LANDSCAPED AREA - 620m²
(INCLUDES STAGE 2 LANDSCAPING - 35m²)

BUILDING SITE COVER - 27.9%
(INCLUDES ALL ROOFED AREAS, FOR ALL BUILDINGS)

IMPERVIOUS AREAS

- PRE SITE DEVELOPMENT (INCLUDES BUILDING ROOFED AREAS) - 0m²
- POST SITE DEVELOPMENT (INCLUDES BUILDING ROOFED AREAS) - 3,784m²

STAGE 2

SITE AREA - 700m²

LANDSCAPED AREA - 35m²

BUILDING SITE COVER - 85.7%
(INCLUDES ALL ROOFED AREAS, FOR ALL BUILDINGS)

IMPERVIOUS AREAS

- PRE SITE DEVELOPMENT (INCLUDES BUILDING ROOFED AREAS) - 0m²
- POST SITE DEVELOPMENT (INCLUDES BUILDING ROOFED AREAS) - 650m²

STAGE 1

BUILDING AREAS - GFA

- T1 - FUEL SALES/SHOP (EXCLUDES REFUSE/SERVICES) - 200m²
- T2 - LOW IMPACT INDUSTRY (EXCLUDES REFUSE/SERVICES) - 440m²
- T4 - FOOD & DRINK - 80m²

TOTAL BUILDING GFA - 720m²

EXTERNAL/OTHER AREAS

- FUEL DISPENSING FORECOURT - 340m²
- T1 REFUSE/SERVICES - 20m²
- T2 REFUSE/SERVICES - 43m²

TOTAL AREAS - 403m²

STAGE 2

BUILDING AREAS - GFA

- T3 - LOW IMPACT INDUSTRY - 600m²

Consulting Engineer



- commercial / industrial / retail
- fast food restaurant design
- travel centre / service stations
- project concept to completion

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Revision and approval				Date
Date	By	Rev	Description	
PS	05.07.2018	01	PRELIMINARY ISSUE	

Project Description	
PROPOSED MIXED USE DEVELOPMENT GATES ROAD, FLAGSTONE	
Scale 1:250 @ A1 / 1:500 @ A3	Author
Drawn GN	Issue

Drawing Title	
PROPOSED SITE PLAN STAGE 1 & STAGE 2	
Drawing Number 19042-DA01	Revision P5

The Proposed Mixed Use Development

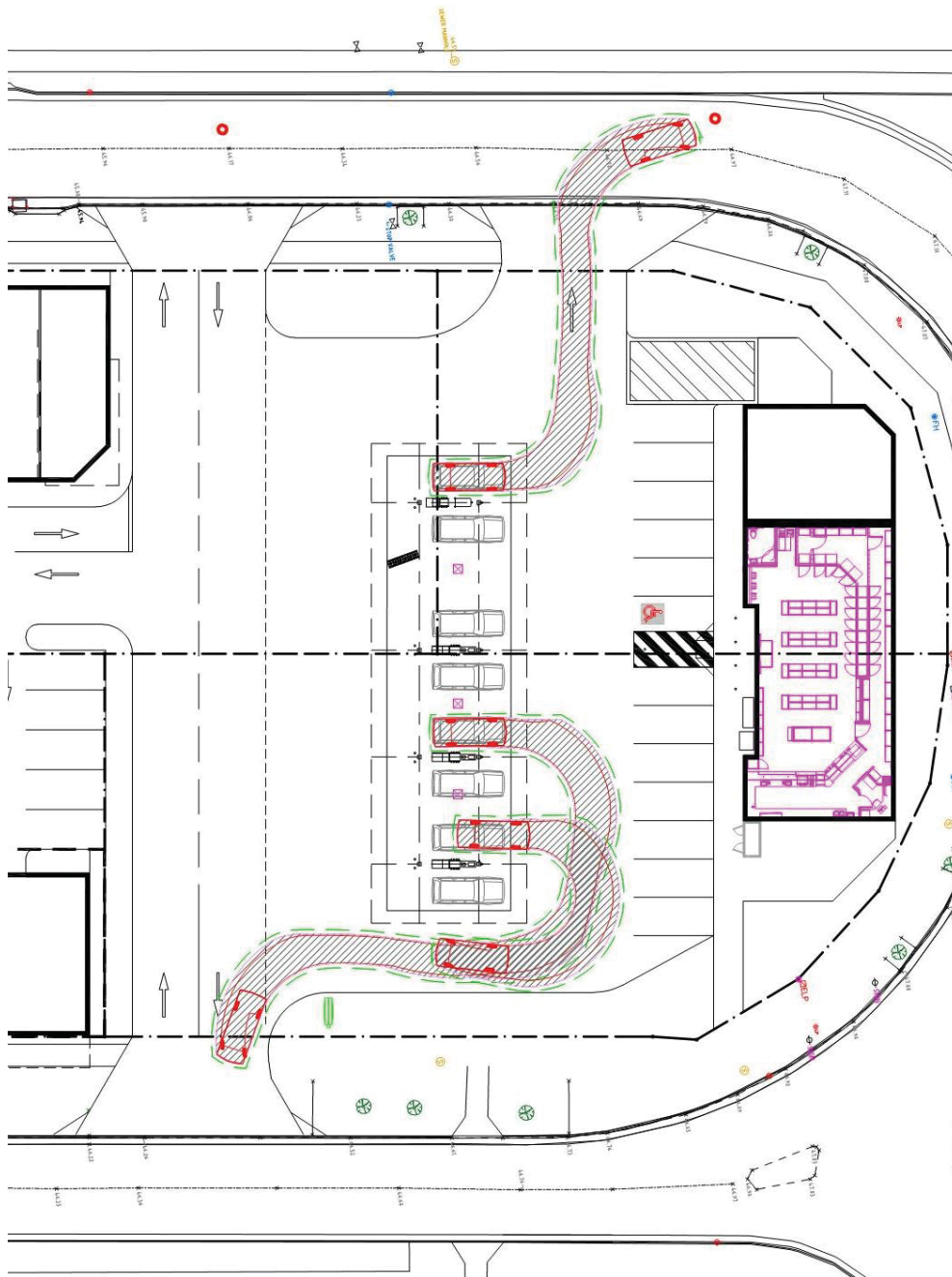


Fig 1 B85 Cars Turning from Pump Mat

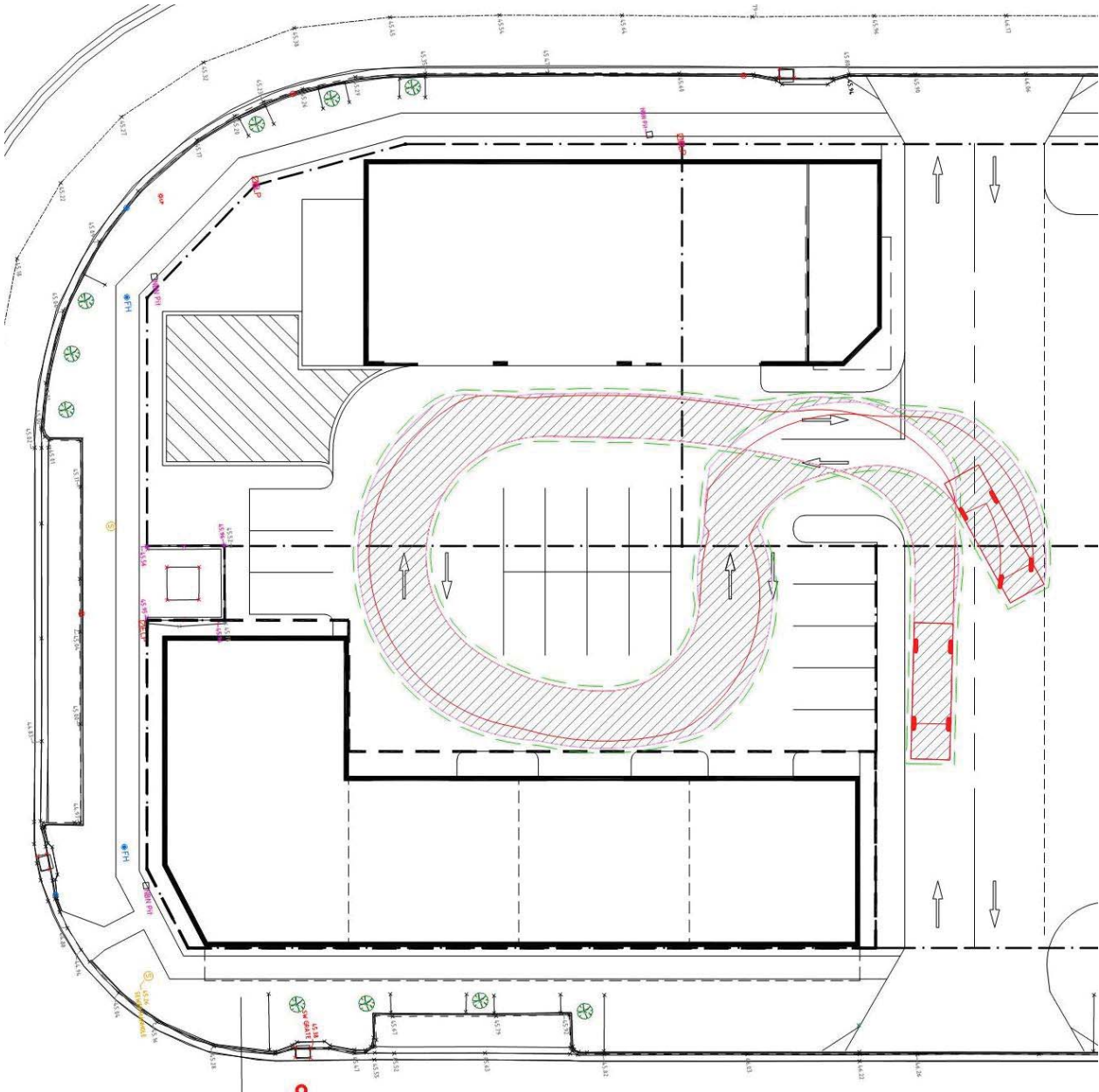


Fig 2 MRV (AS2890.2) Turning In & Out of Industrial Development

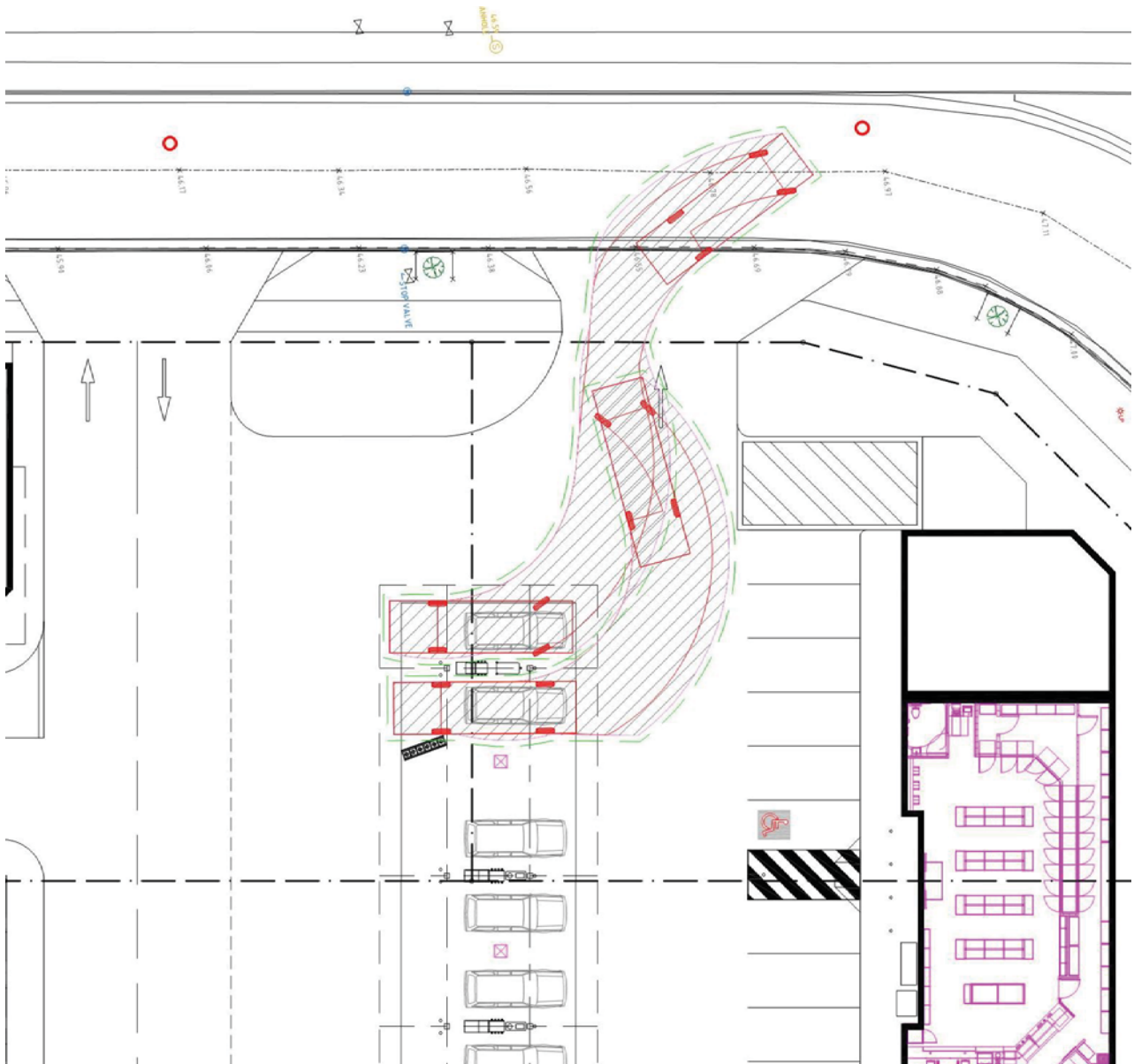


Fig 3 MRV (AS2890.2) Turning From Low Flow Diesel Pumps



Fig 4 HRV (AS2890.2) Turning in and Out of Industrial Development Area.
Occasional Access Only

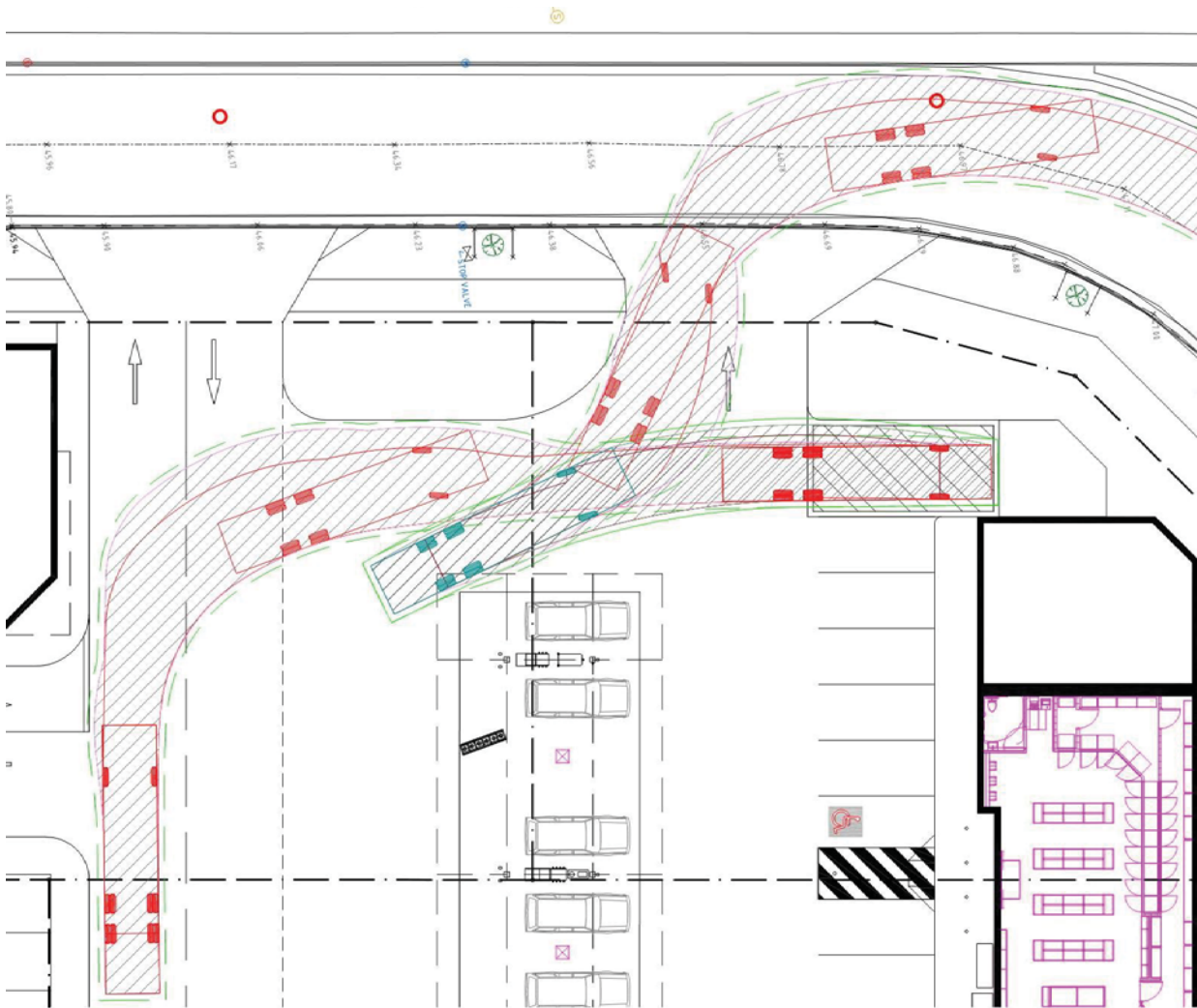


Fig 5 HRV (AS2890.2) Turning to and From Refuse Area
(Largest truck likely to do so)



Fig 6 Refuse Truck (ACCO 2350) Moving in and out of Industrial Refuse Store



Fig 7 19m AV (AS2890.2) Approaching Site

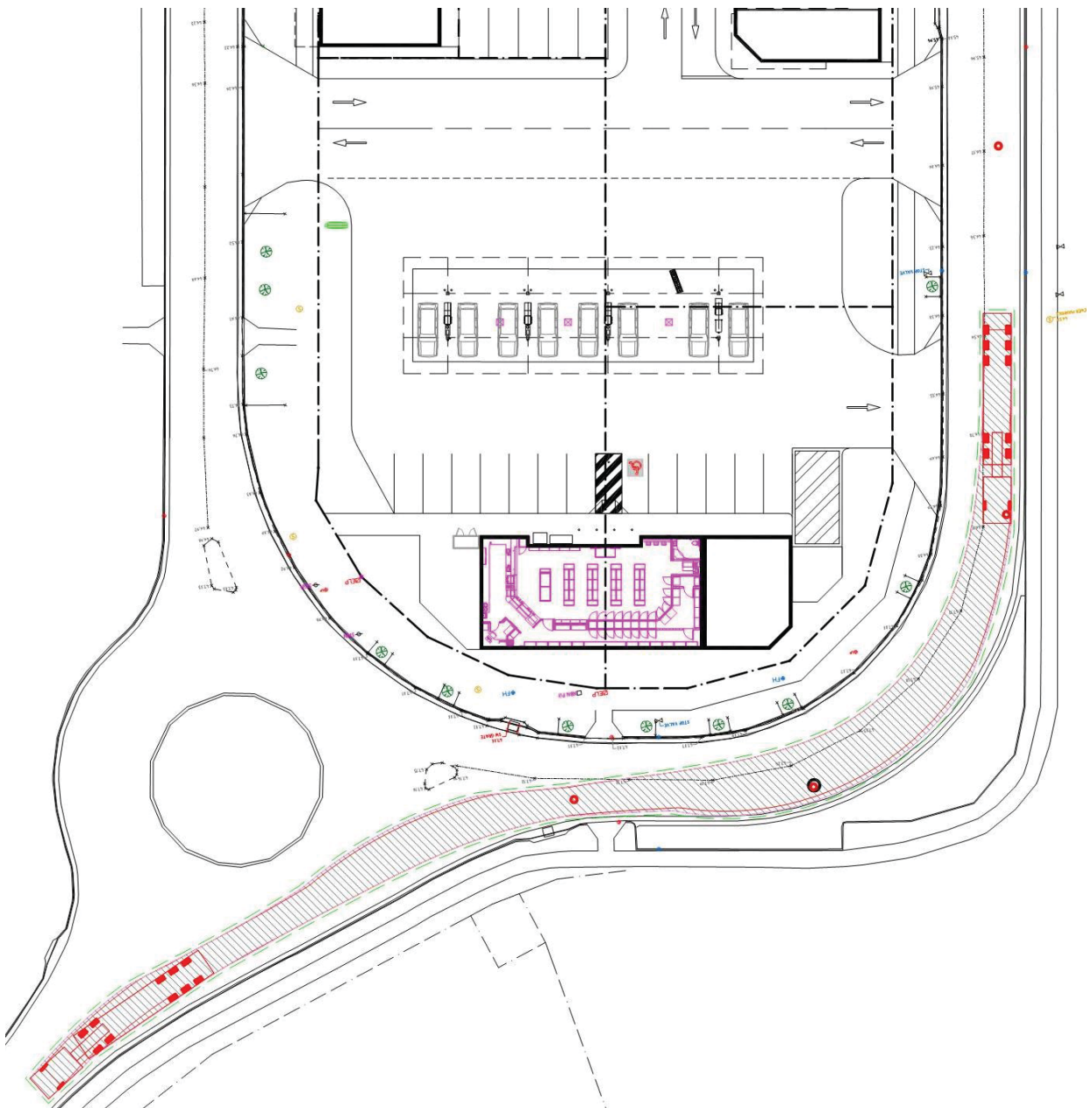


Fig 8 19m AV (AS2890.2) Leaving Site

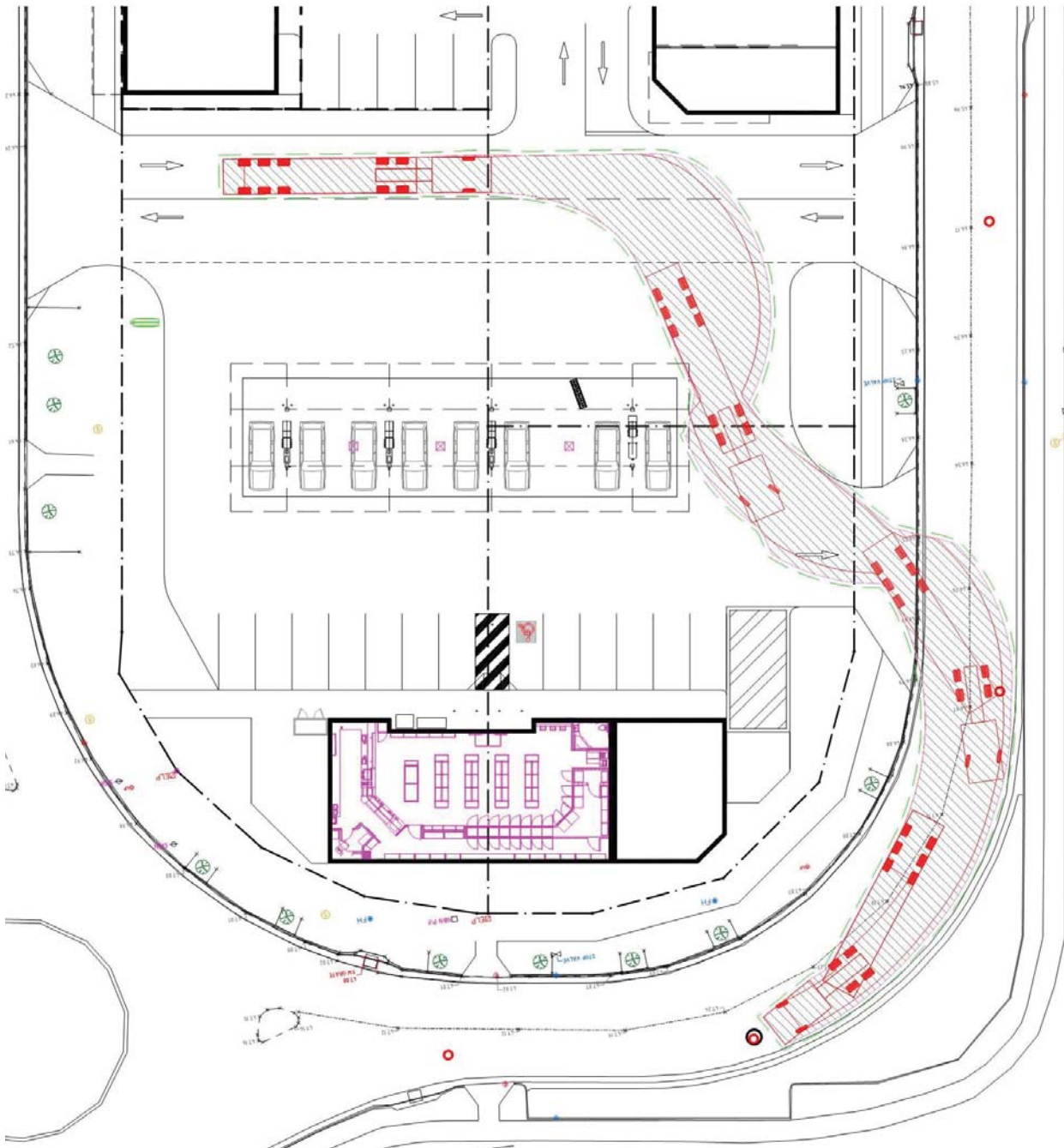


Fig 9 19m AV (AS2890.2) Fuel Delivery Vehicle Servicing Site

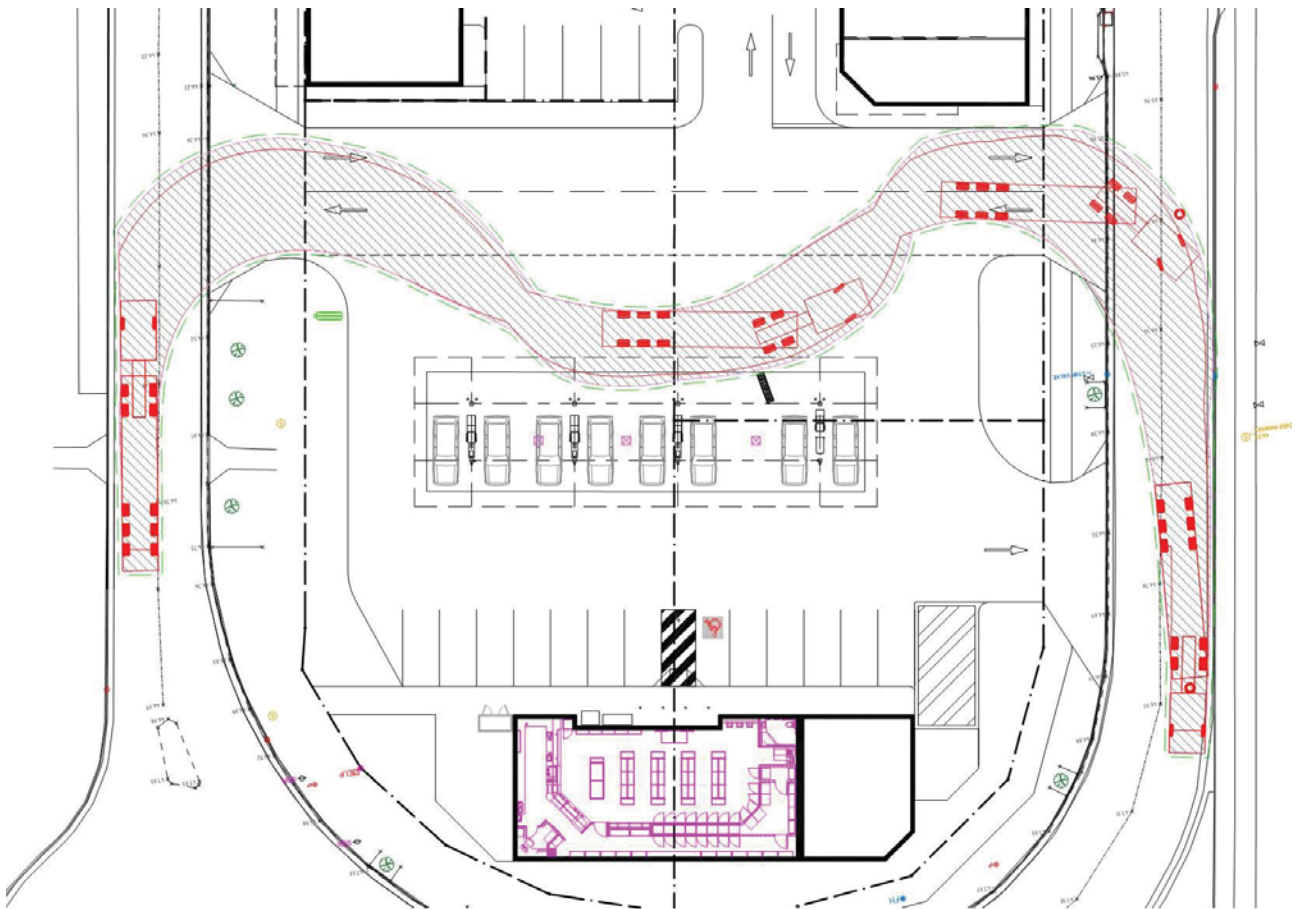


Fig 10 19m AV (AS2890.2) Fuel Delivery Vehicle Servicing Site

Fig 11 19m AV (AS2890.2) Fuel Delivery Vehicle Servicing Site