



Traffic & Transportation Direction

## Bar, Dining & Function Centre

29, 33 and 35 Grey Street,  
Clarence Town

### Traffic Impact Assessment

August 2024

Reference: 739 rep 240816 final

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29, 33 and 35 Grey Street, Clarence Town

### Traffic Impact Assessment

Prepared for: Williams River Steel

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### Appendix A

#### *Swept Path Assessment*

# 1. Introduction

Amber Organisation Pty Ltd has been engaged by Williams River Steel to advise on the traffic and parking matters of the proposed bar, dining and function centre development at 29, 33 and 35 Grey Street, Clarence Town.

The proposal involves the construction of a single-storey bar, dining and function centre with courtyard. A total of 43 car parking spaces, including two accessible spaces, are proposed on-site. Entry to the site is provided via a one-way crossover from Grey Street to the car parking and loading zone with a new crossover exit on Queen Street. As part of the proposal, existing on-street parking will be formalised to provide 14 angled car parking spaces.

There is an existing small commercial building fronting Grey Street with unsealed off-street parking spaces. As part of the proposal, the existing single-width crossover from Queen Street will be sealed to provide access to 7 car parking spaces. Vehicles will exit utilising the same crossover to Queen Street that is proposed for the function centre. The existing building will undergo external improvements however no internal works or land use changes are proposed.

This report has been prepared to address the traffic and parking impacts of the proposed development. It is based on surveys and observations at the site and our experience of similar developments elsewhere.



## 2. Transport Environment

### 2.1 Site Location

The site is located on the northwestern corner of the intersection of Grey Street and Queen Street in Clarence Town, NSW. Figure 1 shows the location of the site in relation to the surrounding transport network.

Figure 1: Site Location



Source: OpenStreetMap

The site and immediate surrounding area are zoned Business Zone – Local Centre (E1) with land uses in adjacent areas predominantly being Residential – General Residential (R1) and Environmental Management (C3). A mix of commercial and retail uses area located along Grey Street (such as the IGA supermarket, Erringhi hotel, newsagency, and medical centre) with a church located opposite the site.

Figure 2 shows an aerial photograph view of the site, including the existing building, and the surrounding area. It shows the nature of the surrounding land uses as well as the generally wide road reserves of Clarence Town, and the associated opportunities for on-street parking. The figure also shows the off-street parking area adjacent to the Reg Ford Oval to the east of the site, on Queen Street.

Figure 2: Aerial Photograph



Source: Nearmap

The site is currently occupied with an existing building at the southeast corner which is currently being used as a hairdresser. An unsealed parking area is provided on-site adjacent to the building with access from Queen Street and Grey Street.

## 2.2 Road Network

**Grey Street** is a local road under the care and management of Dungog Shire Council. It runs in a north-south alignment between Glen William Road and its termination approximately 275 metres south of the site. In the vicinity of the site, it has an undivided sealed carriageway with a width of approximately 20 metres, accommodating two-way traffic and unrestricted parking on both sides.

**Queen Street** is a local road under the management of Dungog Shire Council. It runs in an east-west alignment between Rifle Street to the west and its termination approximately 140 metres east of the site. Along the site frontage it has an undivided sealed carriageway with a width of 9 metres, accommodating two-way traffic. Immediately west of the site the road narrows to 6.5 metres width and widens to 15.5 metres east of the intersection with Grey Street. There is unrestricted parallel on-street parking arrangements at the site frontage and more informal on-street parking east of Grey Street.

The intersection of Grey Street and Queen Street is priority controlled with vehicles on Queen Street giving way to those on Grey Street.

## 2.3 Parking Conditions

There is a range of on and off-street parking opportunities near the site. Informal on-street parking is provided on Grey Street and Queen Street.



At the site frontage on Queen Street, there are five unrestricted parallel on-street parking spaces. To the west of the site the on-street parking capacity is reduced due to Queens Road being significantly narrower. Off-street parking is also provided from Queen Street for the existing building.

To better understand the current parking demands near the site, a parking occupancy survey was undertaken using aerial photography. On-street parking areas within 150 metres from the site were surveyed as shown in Figure 3.

Figure 3: Aerial Parking Survey Areas



Source: Nearmap

There is capacity for approximately 173 spaces within the parking survey area. The results of parking survey are presented within Table 1.

**Table 1: Aerial Image Parking Survey Results**

Date (Time)	Parking Demand	Approx. Available Parking
Thursday 8 August 2024 (10:57am)	37	136
Friday 29 September 2023 (2:30pm)	44	129
Wednesday 28 December 2022 (12:23pm)	29	144
Tuesday 13 December 2022 (5:49pm)	21	152
Wednesday 23 November 2022 (3:34pm)	29	144
Sunday 3 April 2022 (1:05pm)	51	122
Thursday 8 July 2021 (11:58am)	40	133
<b>Average</b>	<b>36</b>	<b>138</b>

The survey results show that on-street parking demands are generally low and there is capacity in public on-street parking areas within convenient walking distance to the site.

## 2.4 Traffic Conditions

Given the nature of the existing land uses in Clarence Town and the surrounding area, traffic volumes on local roads around the site are expected to be within their capacity without significant levels of congestion.

More broadly, the road network in Clarence Town is generally in a grid pattern which presents options for motorists travelling through the area.

## 2.5 Sustainable Transport

Clarence Town is not serviced by Transport for NSW (TfNSW) trains or buses. There are several bus stops around the town for school bus services to neighbouring towns with the closest stop located approximately 150 metres north of the subject site on Grey Street. The services offered here are:

- 1271 - Clarence Town to Grahamstown PS: operating every school day departing at 7:45am
- 2245 - All Saints College St Peters Campus to Johnsons Farm Gate: operating every school day departing at 4:46pm
- 2361 - Clarence Town to All Saints Maitland: operating every school day departing at 7:15am
- S441 - Dungog Schools to Seaham via Clarence Town: operating every school day departing at 4:30pm to each direction.

There are small lengths of pedestrian / bike paths throughout Clarence Town. These sections are generally alongside recently reconstructed roads or over the creek crossing. It would therefore be assumed that people would walk or cycle on the road to their destination, with the low volume and traffic speeds facilitating this mode of travel for local trips within the town.

## 2.6 Crash History

To gain an understanding of any existing road safety issues, a review was conducted of the TfNSW Centre for Road Safety Crash and Casualty Statistics database. The crash database provides the location and severity of all injury and fatal crashes for the five-year period from 2018 to 2022.

The review was undertaken in an area within 150 metres of the intersection of Grey Street and Queen Street on all approaches. The crash search revealed no crashes. As such, it is concluded that the road network is currently operating in a relatively safe manner.



### 3. The Proposal

The proposal involves the construction of a single-story bar, dining and function centre development alongside an existing commercial building over three lots located at 29, 33 and 35 Grey Street, Clarence Town. In summary, the development will comprise:

- 1180 sqm gross floor area with a 176 sqm outdoor terrace and beer garden.
- A total of 43 on-site car parking spaces, including two accessible spaces, located in areas behind the bar, dining and function centre and adjacent to the existing building.
- On-site courtesy bus parking and loading zone for deliveries and waste removal.
- New one-way access via the existing single-width crossover from Grey Street and new one-way double-width exit crossover to Queen Street.
- Seal of existing one-way single-width crossover from Queen Street for car parking spaces adjacent to the existing building.
- Linemarking of 14 on-street car parking spaces at the site frontage on Grey Street.
- New pedestrian access paths to the new buildings to link to Grey Street and the parking area around the existing building.
- External improvements to the existing building on the site, including a new awning and paths.

No internal works or land use changes are proposed to the existing building as part of the proposal.

## 4. Parking Requirement

Part C, Section 20, Schedule 1 of the *Dungog Shire Development Control Plan (DCP)* outlines the off-street parking requirements for various common land uses. The closest listed land use term is 'Restaurant & Reception Establishments', with the relevant requirements outlined in Table 2.

**Table 2: DCP Car Parking Requirement**

Use	Gross Floor Area / Number of seats	Parking Rate	Parking Requirement
Restaurant & Reception establishments	1180 sqm / 253 seats	1 space per 7sqm of gross floor area, OR 1 space per 3 seats (whichever is greater)	168 spaces OR 84 spaces
<b>Total</b>			<b>168 spaces</b>

As shown, the proposal has a requirement to provide 168 car parking spaces. It is proposed to provide 43 on-site car parking spaces. Accordingly, the proposal seeks a reduction of 125 car parking spaces against the applicable rate for 'Restaurant & Reception Establishments'.

It is noted that the proposed use is mixed in nature and could be considered under other listed land use terms in the DCP, including, 'License Club', 'Hotel – Licenced premises' or 'Restaurant'. Schedule 1 includes the following provision for instances where proposed land use/s are not included in the applicable table:

*This Schedule defines parking numbers and standards for a number of land uses, which are the most frequently encountered. Council reserves the right to define a requirement for uses not referred to in the Schedule to the plan according to the merits of the specific case.*

In order to understand the implications of parking demands generated by the proposal, the likely future operational characteristics have been estimated as presented below.

### 4.1 Proposed Operation

Based on our experience of similar bar, dining and function centre developments, and the size of the proposal, the expected number of staff and patrons for various times of the week are provided below. The expected patronage volumes have been split into two operating weeks. Table 3 shows a typical operating week when there are no functions, and Table 4 shows the patronage numbers on a Friday and Saturday when there are functions held as well as normal bar and dining patrons, representing peak operating conditions.

**Table 3: Typical Operating Characteristics**

Time Period	Time	Number of Staff			Number of Patrons
		Kitchen	Bar	Total	
Weekday Business Hours	11am to 5pm	1	1	2	5-15
Weekday Evenings (Monday – Thursday)	5pm to late	1	1	2	10-30
Friday Evenings (After Work Drinks)	5pm to 7pm	2	2	4	20-40
Friday Evenings (Meal and Night Out)	7pm to late	3	3	6	20-60
Saturday Day (Lunch and Afternoon Drinks)	11am to 6pm	2	2	4	10-30
Saturday Evening (Meal and Night Out)	6pm to late	3	3	6	15-60
Sunday Day	11am to 5pm	2	1	3	10-40
Sunday Evenings	5pm to late	1	1	2	5-25

**Table 4: Peak Operating Characteristics – Friday and Saturday Evenings with Functions**

Time Period	Time	Number of Staff			Number of Patrons
		Kitchen	Bar	Total	
Friday Evenings (After Work Drinks)	5pm to 7pm	2	2	4	20-40
Friday Evenings (Meal and Night Out)	7pm to late	3	3	6	20-60
Friday Evening Function (up to 100 patrons)	6pm to late	5	4	9	80-120
Friday Evening Maximum	5pm to late	5	4	9	180
Saturday Evening (Meal and Night Out)	6pm to late	3	3	6	15-60
Saturday Evening Function (up to 130 patrons)	5pm to late	5	4	9	80-140
Saturday Evening Maximum	5pm to late	5	4	9	200

The tables show that the busiest periods will be during function service, either on a Friday or Saturday evening, with up to 200 people and 9 staff on-site.

Table 3 indicates that the during typical operating periods, the proposal is anticipated to accommodate a more modest number, with a maximum of 60 guests and 6 staff at any one time expected.

## 4.2 Car Parking Characteristics

The car parking demand for the venue would vary throughout the week based on the expected number of patrons and the type of patron that would be attracted to the venue. An assessment of the parking characteristics for the relevant time periods is discussed below.

### 4.2.1 Weekdays Business Hours

During weekday business hours the site is expected to generate a lower parking demand as compared to evenings and weekends. Business hours patrons would be expected to be working in the local area or are existing visitors who would already be parked nearby and could walk to the venue.

### 4.2.2 Weekday Evenings

During weekday evenings (including Fridays) there is expected to be two main groups of patrons which includes:

- Patrons visiting the venue for after work drinks which typically occurs from 5pm to 7pm; and
- Patrons visiting the venue for a meal and potentially a night out (more applicable to Friday evenings) which typically occurs from 7pm to 12am.

A proportion of patrons that attend the venue for after work drinks are expected to already be located within the town as workers or visitors to the area. Patrons that attend the venue later in the evening are expected to be standalone visitors to the venue and would be accessing the site as a single purpose trip.

### 4.2.3 Weekends

Patrons that attend the venue during weekends are assumed to be standalone visitors. Whilst there is likely to be some customers already in the local area during the day, it has been assumed that patrons represent a single purpose trip associated with the proposal for the purpose of the analysis.

### 4.2.4 Friday and Saturday Night Functions

Patrons that attend the venue for a function would comprise of standalone visitors and people already staying within the town. Due to the nature of functions, car pooling rates would be higher as well as more people opting to arrive to the venue by a means other than driving themselves.

The venue has also proposed a courtesy bus parking bay on site which would encourage larger groups of patrons to arrive together in one vehicle. This has not been factored into the following car parking rates however should be noted the capacity to reduce car parking demand.

Furthermore, it is noted that these periods would not coincide with the existing building's business hours and therefore all parking adjacent to the building is expected to be available.

## 4.3 Car Parking Rates

### 4.3.1 Staff

In order to provide a worst-case scenario, it has been assumed that all staff drive to the site. It is noted that survey data collected by Amber for other similar uses indicates a typical staff parking demand of 0.5 spaces per staff member.

### 4.3.2 Patrons

*The Guide to Traffic Engineering Developments* essentially states that research indicates the demand for parking varies substantially for uses similar to pubs and cannot readily be related to building floor areas. The determination of the number of parking spaces required is therefore based on the characteristics of the proposed development.

The vehicle occupancy for patrons attending a function has been set at 3 people per vehicle based on survey data collected by Amber at similar sites. This occupancy rate is considered to be conservative considering the characteristics of people attending functions and their avoidance of driving. Therefore, the parking rate used will be 0.33 spaces per patron.

The parking demand for patrons during weekday business hours is considered lower given the venue would be visited by staff and visitors who are already in the local area with fewer driving to the site as a standalone trip. Outside of these times the parking rate for patrons has been based on an empirical assessment of other similar uses.

Available survey data indicates that a standalone pub typically generates a parking demand of 0.3 spaces per patron. For the purposes of this assessment, the patron parking demand during the peak Friday evening and Saturday periods has been assumed to be 0.3 spaces per patron.

During the after-work drinks period the parking rate has been adopted as 0.15 spaces per patron (a 50% reduction from other periods) to allow for patrons that are already within the local area.

## 4.4 Parking Demand

The expected car parking rates have been applied to the number of staff and patrons expected to be on-site and are shown within Table 5. The total off-site car parking demand has been calculated based on the 43 on-site parking spaces being shared between staff and patrons.

The results show that during standard bar and dining operation periods the site is expected to generate no off-site parking demand given the low staff and patronage parking demand is accommodated on-site. The period with the highest parking demand during standard bar and dining operation is on Saturday evenings when 26 car parking spaces would be required. This demand can be accommodated with the proposed onsite parking.

The parking demand associated with an evening when a function is on increases to more than the proposed on-site parking provisions. A 140-person function on a busy Saturday evening for bar and dining would require 76 car parking spaces. The off-site parking demand with this scenario would be 33 spaces. With utilisation of the 18 on-street parking spaces at the site frontages, the remaining parking demand could be accommodated locally without significant impact on the wider town.



**Table 5: Expected Car Parking Demands**

Time Period	Time	Type	Number (Maximum)	Rate	Parking Demand	Total Off-Site Parking Demand
Weekday Business Hours	11am to 5pm	Staff	2	1 space per staff	2 spaces	0 spaces
		Patrons	15	0.1 spaces per patron	2 spaces	
Weekday Evenings (Monday – Thursday)	5pm to late	Staff	2	1 space per staff	2 spaces	0 spaces
		Patrons	30	0.3 spaces per patron	9 spaces	
Friday Evenings (After Work Drinks)	5pm to 7pm	Staff	4	1 space per staff	4 spaces	0 spaces
		Patrons	40	0.15 spaces per patron	6 spaces	
Friday Evenings (Meal and Night Out)	7pm to late	Staff	6	1 space per staff	6 spaces	0 spaces
		Patrons	60	0.3 spaces per patron	18 spaces	
Saturday Day (Lunch and Afternoon Drinks)	11am to 6pm	Staff	4	1 space per staff	4 spaces	0 spaces
		Patrons	30	0.3 spaces per patron	9 spaces	
Saturday Evening (Meal and Night Out)	6pm to late	Staff	6	1 space per staff	8 spaces	0 spaces
		Patrons	60	0.3 spaces per patron	18 spaces	
Sunday Day	11am to 5pm	Staff	3	1 space per staff	3 spaces	0 spaces
		Patrons	40	0.3 spaces per patron	12 spaces	
Sunday Evenings	5pm to late	Staff	2	1 space per staff	2 spaces	0 spaces
		Patrons	25	0.3 spaces per patron	8 spaces	
Friday Evening including Function	5pm to late	Staff	9	1 space per staff	9 spaces	26 spaces
		Patrons	180	0.33 spaces per patron	60 spaces	
Saturday Evening including Function	5pm to late	Staff	9	1 space per staff	9 spaces	33 spaces
		Patrons	200	0.33 spaces per patron	67 spaces	



## 4.5 On-Street Parking

Parking survey data has been provided within Section 2.3 which shows that there was a minimum of 122 parking spaces available on-street within 150 metres of the site and confirm there is capacity in on-street parking areas within convenient walking distance to the site.

In addition, the supply of on-street parking will increase with the formalisation of on-street parking along the Grey Street frontage.

During weekday evenings the parking demand is expected to gradually increase as workers in the area finish after work drinks and patrons arrive for a meal/night out. During this time the parking demand in the area is gradually decreasing as workers leave the area, resulting in parking becoming available for use by staff and patrons of the venue.

## 4.6 Summary

In summary, the assessment outlined above indicates that:

- During typical operations throughout the week the proposed use would not be expected to generate an off-site parking demand.
- During functions the parking demand is above the on-site provision however the surrounding low parking demands, results in there being ample on-street parking available for use by staff and patrons if required.
- During Friday nights, weekends and during events, a courtesy bus will be used to accommodate larger groups arriving and leaving the venue within one vehicle.

Accordingly, the proposed reduction of 125 car parking spaces against the relevant DCP requirements is considered appropriate.

## 5. Car Park Layout

On-site car parking is being proposed in two separate areas of the development. The majority of the car parking is behind function centre which includes 36 car parking spaces, inclusive of two accessible spaces as well as a delivery unloading and courtesy bus zone. An additional car park is provided at the existing building comprising of 7 parking spaces. A pedestrian path is proposed to connect the small car park to the entrance of the function centre, so pedestrians avoid using vehicle accessways.

### 5.1 Access Arrangements

The site is proposed to have two accesses and one egress crossover. The main car park access currently exists on Grey Street and is designed to accommodate vehicles up to an 8.8 metre Medium Rigid Vehicle (MRV) size. A secondary access is proposed from Queen Street to the existing building's car park and has been designed to accommodate a B99 (99th percentile vehicle). Egress is proposed to be shared by both car parks onto Queen Street and has been designed to accommodate an MRV.

Access to the main car parking area is proposed to be configured in a one-way arrangement with motorists entering via Grey Street and departing to Queen Street. This is an appropriate arrangement which will enable safe and convenient access to the on-site parking and loading areas.

An assessment of the site access arrangements against the requirements of AS/NZS 2890.1:2004 and the aims, objectives and controls of the DCP, is provided below:

- All vehicles are able to enter and exit the site in a forward direction.
- Areas to accommodate pedestrian sight splays adjacent to the accessways are provided.
- The proposed crossovers have been positioned clear of the intersection of Grey Street and Queen Street in line with the requirements outlined in the DCP (ref p14 of Part C of the DCP).

The assessment indicates that the access has been designed in accordance with the dimensional requirements and intent of AS/NZS 2890.1:2004 and the DCP.

### 5.2 On-Site Parking

An assessment of the car park layout against the requirements of AS/NZS 2890.1:2004 and the DCP is provided below:

- The parking spaces have all been designed with a width of 2.6 metres and a length of 5.4 metres, accessed via a minimum aisle width of 5.8 metres, meeting the dimensional requirements for 'Class 3' users.
- The accessible parking spaces has been provided with a width of 2.4 metres and a length of 5.4 metres, with an associated shared area and bollard, in accordance with AS/NZS 2890.6:2022. It is also noted that the provision for accessible parking spaces meets the requirements of Section 16.4.3 of the DCP.

The assessment indicates that the car park layout has been designed appropriately and in accordance with the dimensional requirements of AS/NZS 2890.1:2004, AS/NZS 2890.6:2022 and the DCP.

## 5.3 On-Street Parking

An assessment of the car park layout against the requirements of AS/NZS 2890.5:2020 is provided below:

- The parallel parking spaces at the Queen Street frontage have been designed in accordance with the Australian Standard requirements with a width of 2.6 metres and a length of 5.4 metres on the end space and 6.4 metres for middle spaces.
- The angled parking spaces at the Grey Street frontage have been designed in accordance with the Australian Standard requirements for 'Medium Class' usage with a width of 3.6 metres and an approximate distance of 10 metres to the road centre line. The layout is also consistent with the configuration of the on-street parking spaces along the frontage of the IGA to the north of the site.

The assessment indicates that the on-street car parking has been designed appropriately and in accordance with the dimensional requirements of AS/NZS 2890.5:2020.

## 5.4 Swept Path Assessment

In order to confirm the appropriateness of access arrangements and parking layout, a swept path assessment has been prepared using the following vehicles:

- B85 vehicle (85th percentile vehicle);
- MRV (Medium Rigid Vehicle); and
- SRV (Small Rigid Vehicle).

The assessment is provided in Appendix A, and found that the site and each space could be accessed (ingress and egress) in a satisfactory manner.

Accordingly, the car park layout and access arrangements are suitably designed.

## 6. Waste Collection and Loading

Part C of the Dungog DCP requires the following in relation to loading:

*All developments involving the erection of new buildings involving significant change of use and/or generating significant extra heavy vehicle movements are required to provide on-site loading and unloading facilities, except:*

- i dwelling houses*
- ii residential flats with access other than from a main or country road.*

An area for waste storage and loading is proposed within the building's delivery area. Waste and loading activities are proposed to occur in off-peak periods when the on-site parking area is clear using small to medium sized trucks.

In order to confirm the appropriateness of access to the waste and loading area a swept path assessment has been prepared using the 6.4 metre long Small Rigid Vehicle (SRV as defined by AS/NZS 2890.2:2018) to ensure small trucks are able to access the dedicated waste storage and loading area.

In addition, to test accessibility for larger loading vehicles, a swept path assessment of an 8.8 metre long Medium Rigid Vehicle (MRV as defined by AS/NZS 2890.2:2018) was undertaken. This was undertaken using the accessway from Grey Street to Queen Street and undertaking loading / unloading activities within the accessway adjacent to the loading area.

The assessment is provided in Appendix A, and found that the waste storage / loading area, and site more broadly, could be accessed (ingress and egress) in a satisfactory manner by a mix of suitable loading vehicles.

Accordingly, the waste collection and loading arrangements for the proposal are concluded to be appropriate.



## 7. Traffic Assessment

The *RTA Guide to Traffic Engineering Developments* provides guidance on the expected traffic generating rates for a range of land uses. The rate closest to the proposed land use is the 'restaurants' land use. Based on the size and location of the proposal, and our experience with similar developments, trip generation rates for a peak hour would be expected to be as follows:

- *Restaurants*                      *5 vehicle trips per 100sqm of Gross Floor Area*

Application of the rate above results in a total of up to 59 vehicle trips in a peak hour, which would be split between trips to and from the site.

A total of 59 trips in a peak hour is a modest level of traffic and represents approximately one vehicle movement every minute, on average. The surrounding road network is able to accommodate the increase in vehicle movements without any adverse impact to traffic operations or safety.

## 8. Conclusion

Amber Organisation has reviewed the traffic and parking matters of the proposed mixed-use development at 29 Grey Street, Clarence Town. The proposal involves the construction of a single-storey bar, dining and function centre with courtyard alongside an existing commercial building which will remain functionally unchanged. A total of 43 car parking spaces, including two accessible spaces, are proposed on-site. Access to the site is provided via crossovers from Grey Street and Queen Street. On-street parking will be formalised on Grey Street adding 14 car parking spaces on the site frontage.

Based on the above assessment, the following conclusions are provided:

- The site generates a parking requirement of 168 spaces based on relevant DCP requirements. The proposed provision of 43 on-site spaces is considered appropriate given that there is ample capacity in nearby on-street parking, including approximately 173 spaces within 150 metres of site, which would be suitable for staff and patrons.
- The site access involves new access to Grey Street and Queen Street and is suitably designed to safely and effectively accommodate the expected vehicle movements.
- The car park layout and on-street parking has been designed in accordance with relevant requirements of the Australian Standards and the Dungog DCP, and suitable access is provided to the individual parking spaces.
- Waste collection and loading arrangements are considered appropriate with the internal accessways able to be used by small and medium sized trucks.
- The site is expected to generate up to 59 vehicle trips in a peak hour which can be readily accommodated on the surrounding road network.

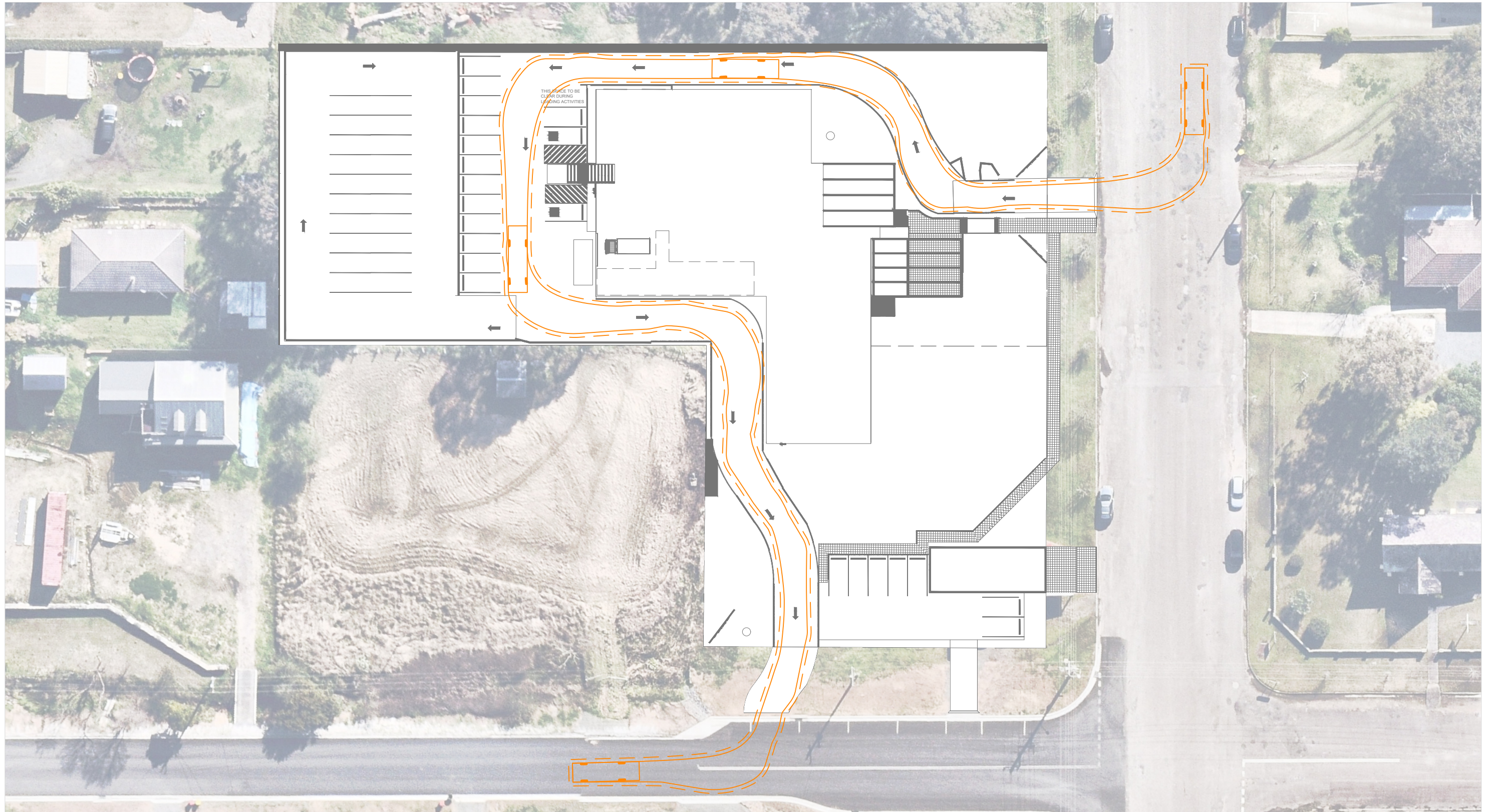
Therefore, it is concluded that the traffic and parking aspects of the proposed development are satisfactory, and the development would not be expected to have a significant impact on the safety or operation of the surrounding traffic and transport network.

## Appendix A

### Swept Path Assessment





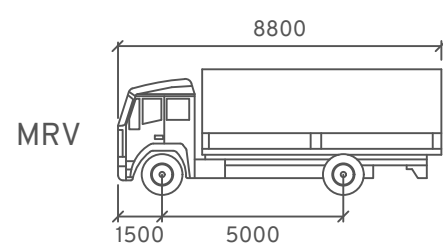


Vehicle Envelope

500mm Clearance

Reverse Manoeuvre

Min. Design Speed 5km/h



Width : 2500 mm  
Track : 2500  
Lock to Lock : 6.0s  
Steering Angle : 34.0

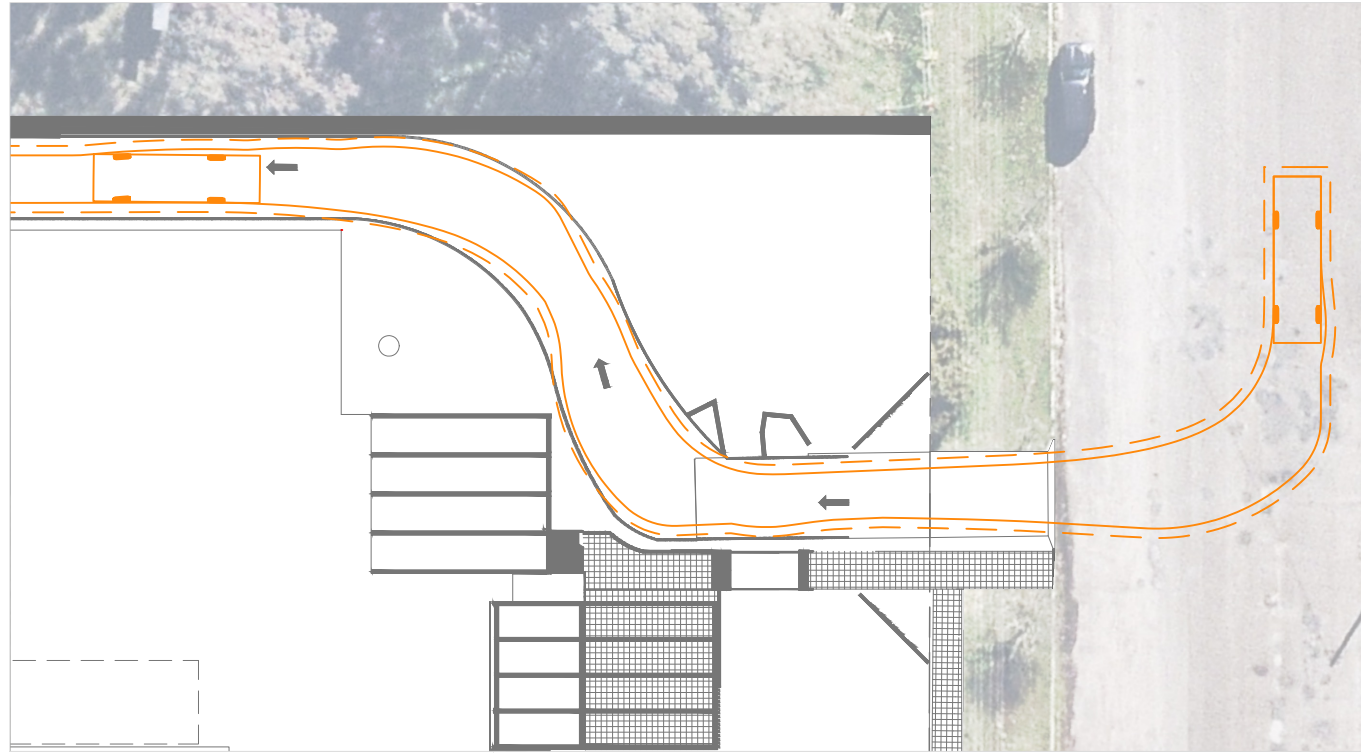


29 Grey St, Clarence Town  
Bar, Dining & Function Centre  
Medium Rigid Vehicle Delivery Route

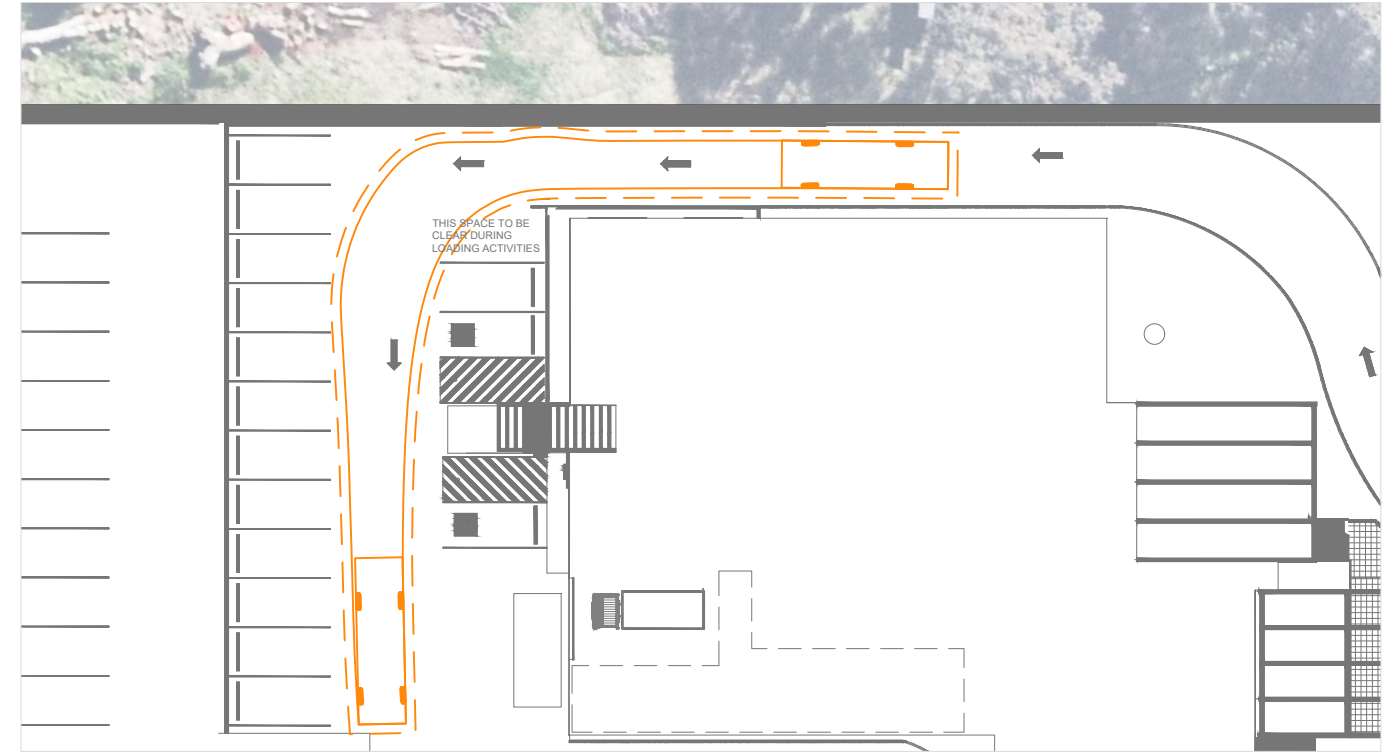
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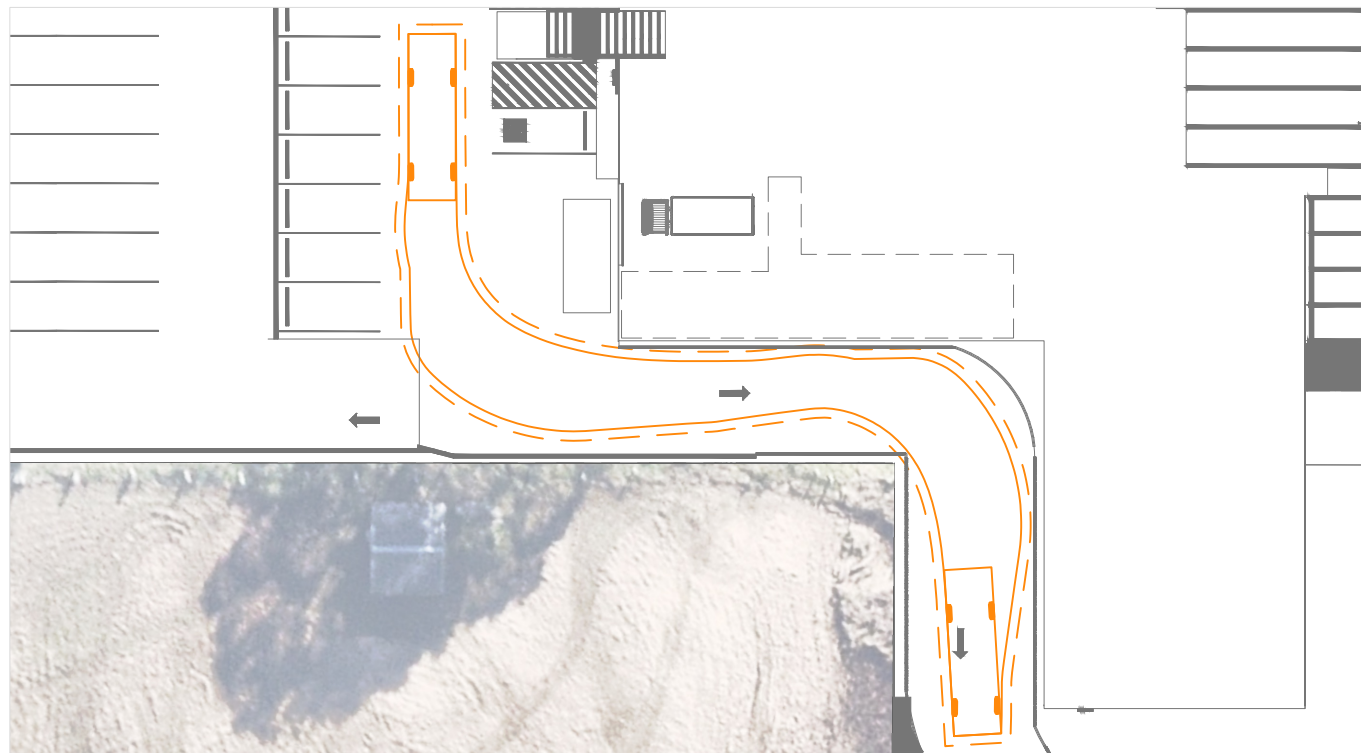




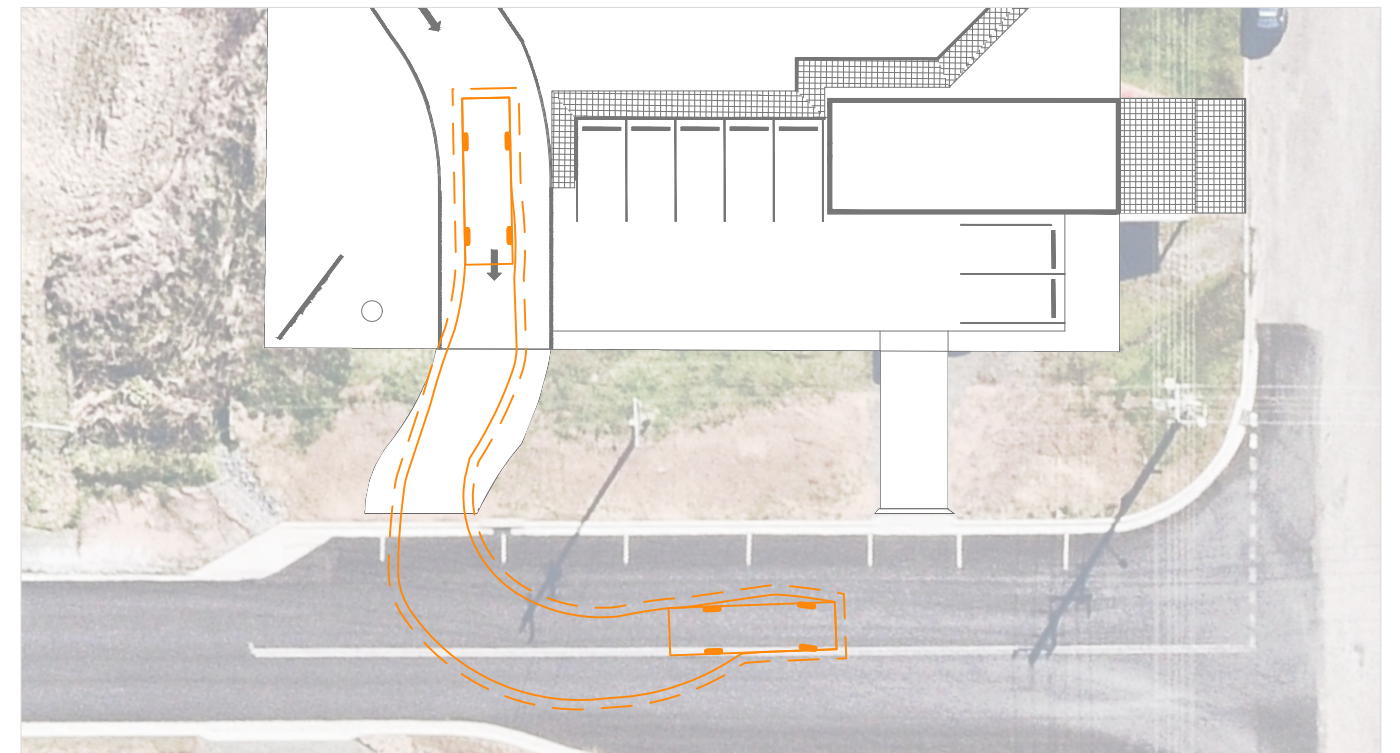
Entry Manoeuvre



Entry Manoeuvre



Exit Manoeuvre



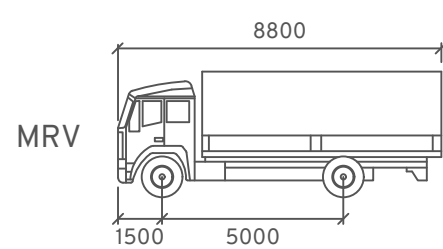
Exit Manoeuvre

Vehicle Envelope

500mm Clearance

Reverse Manoeuvre

Min. Design Speed 5km/h



Width : 2500  
Track : 2500  
Lock to Lock : 6.0s  
Steering Angle : 34.0

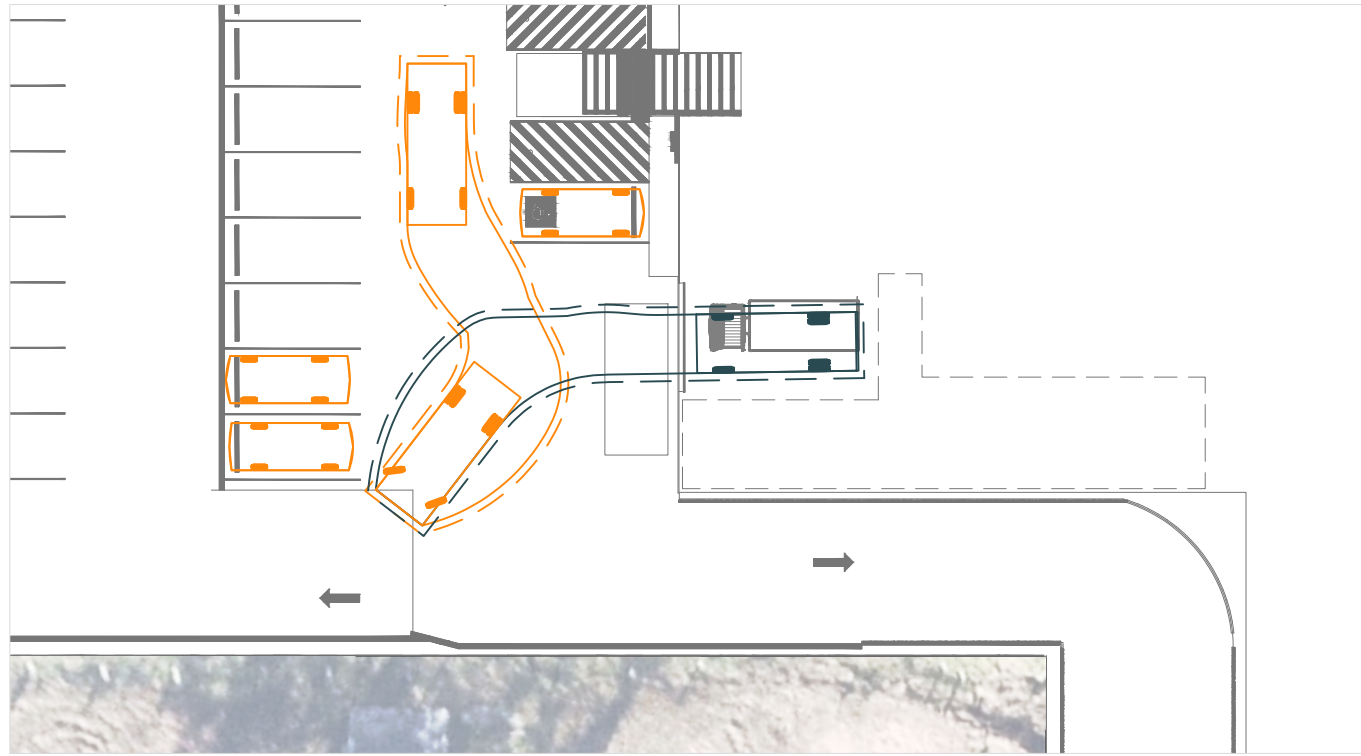


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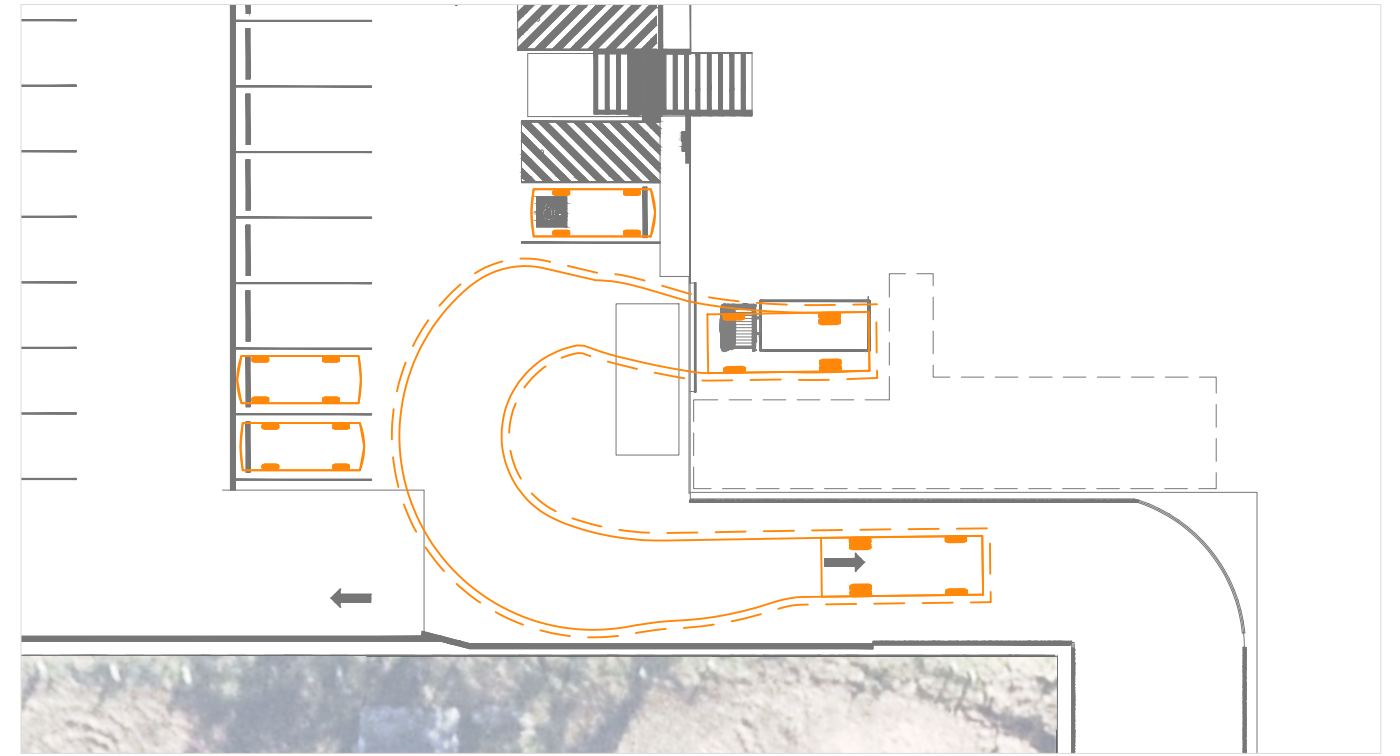
DRAWN: SE  
DATE: 15/08/2024  
DWG NO: 739 S02B  
SCALE at A3: 1:400

**Amber** 01

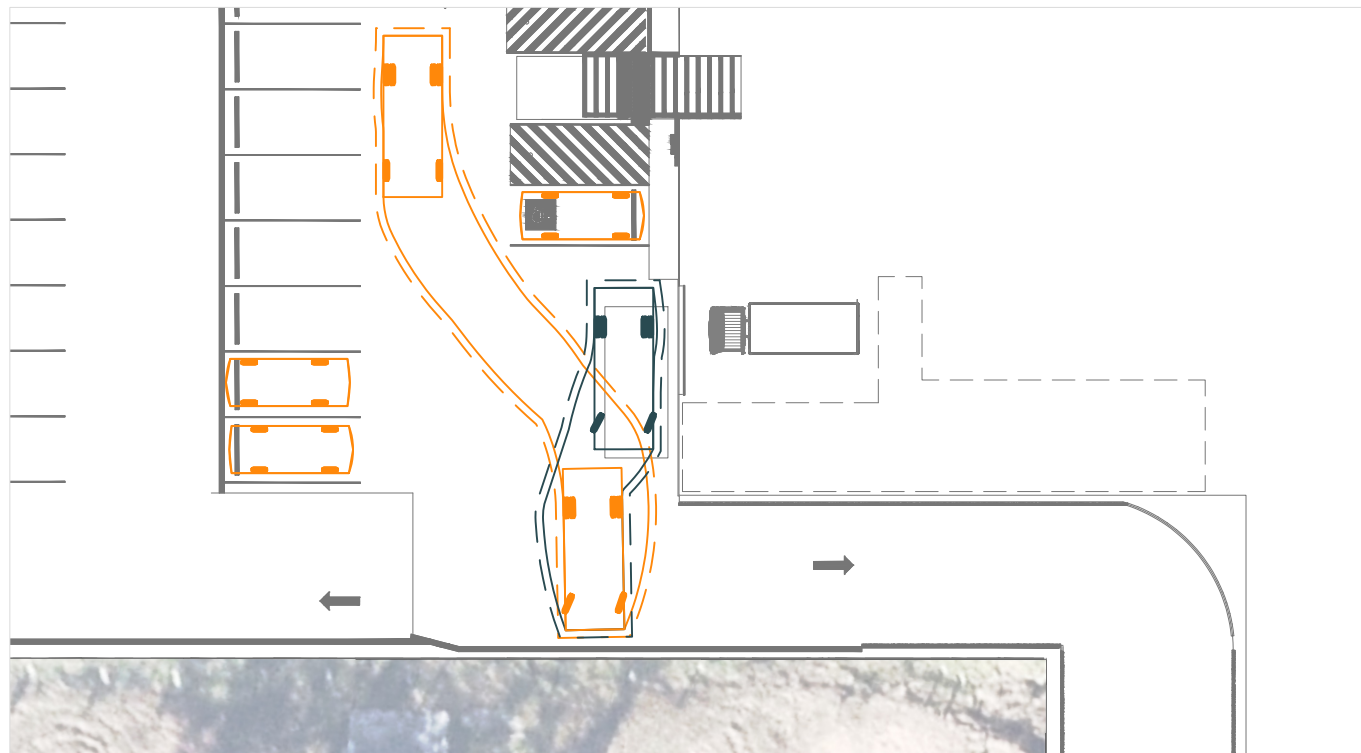




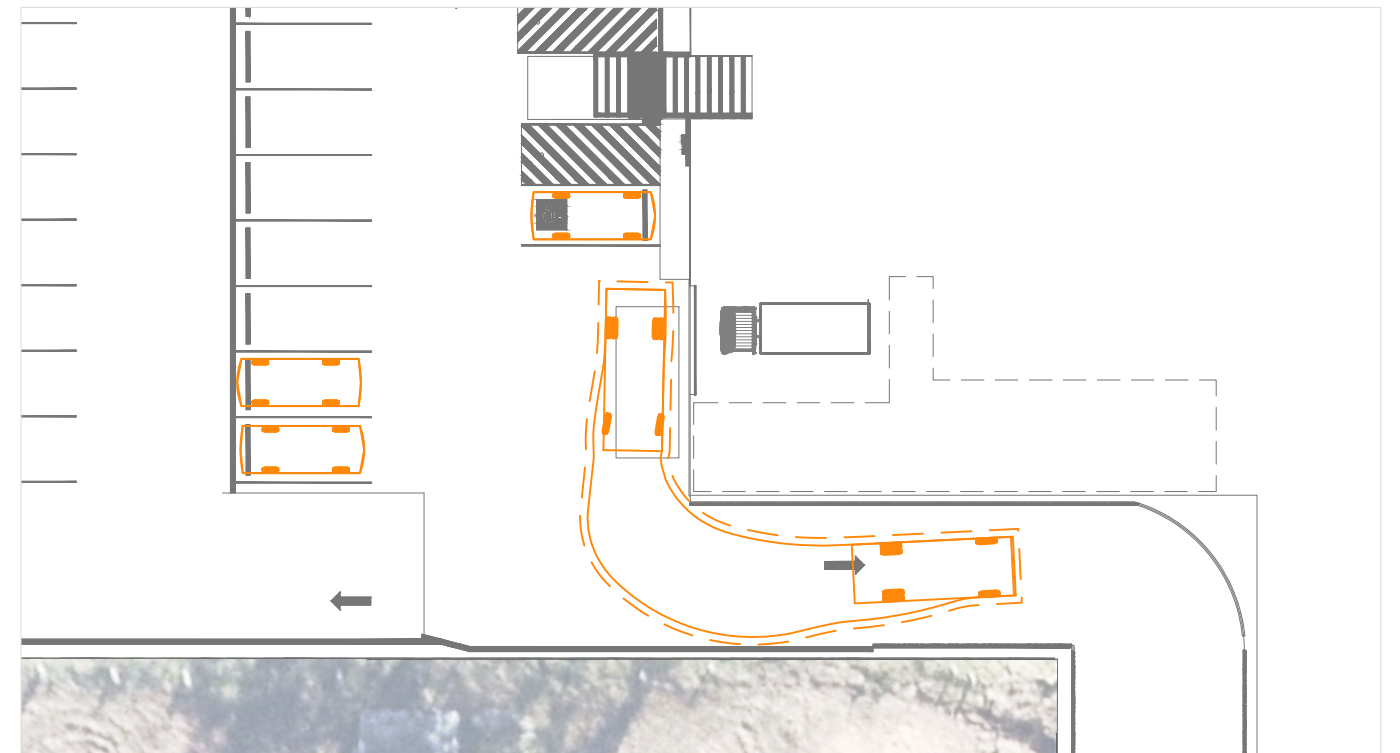
Entry Manoeuvre



Exit Manoeuvre

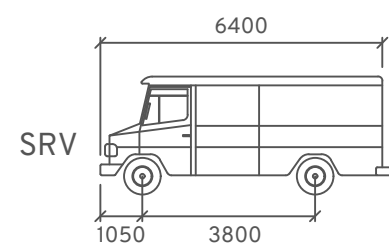


Entry Manoeuvre



Exit Manoeuvre

Vehicle Envelope  
 300mm Clearance  
 Reverse Manoeuvre  
 Min. Design Speed 5km/h

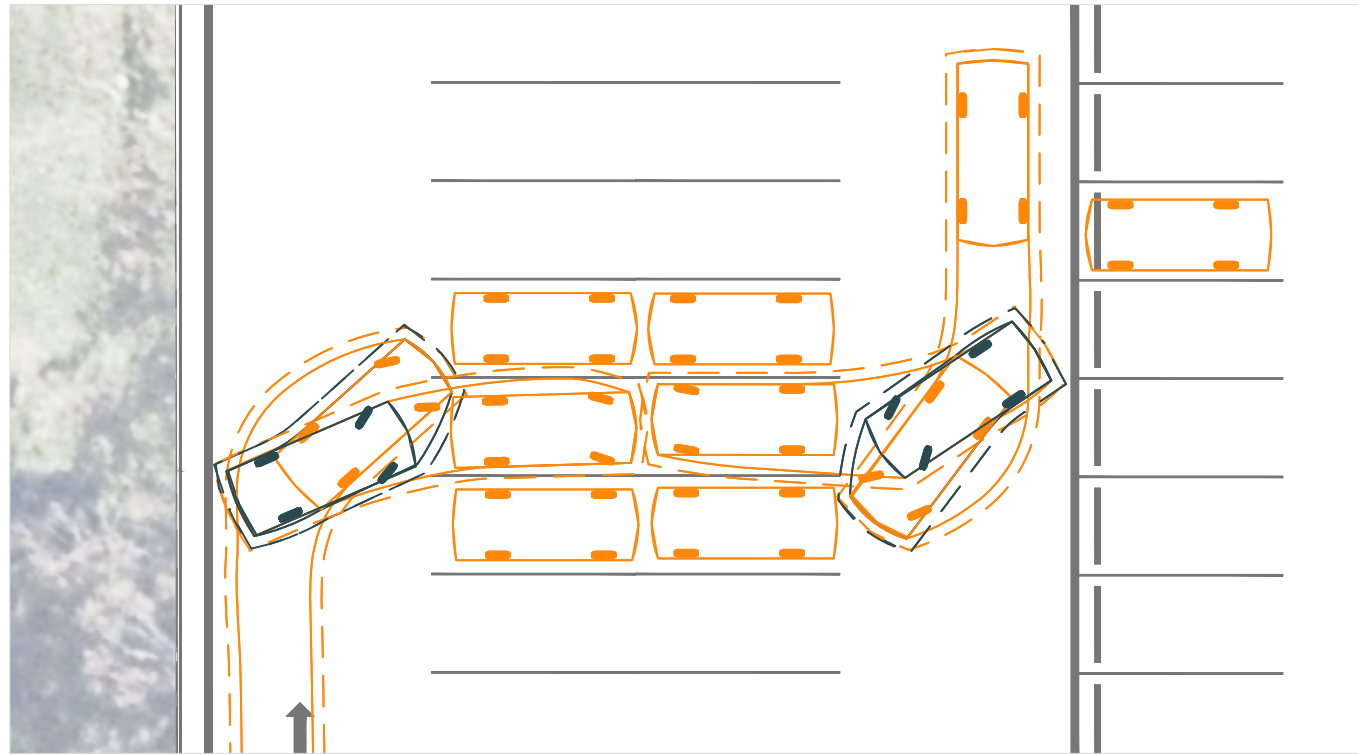


Width : 2300 mm  
 Track : 2300 mm  
 Lock to Lock : 6.0s  
 Steering Angle : 38.0

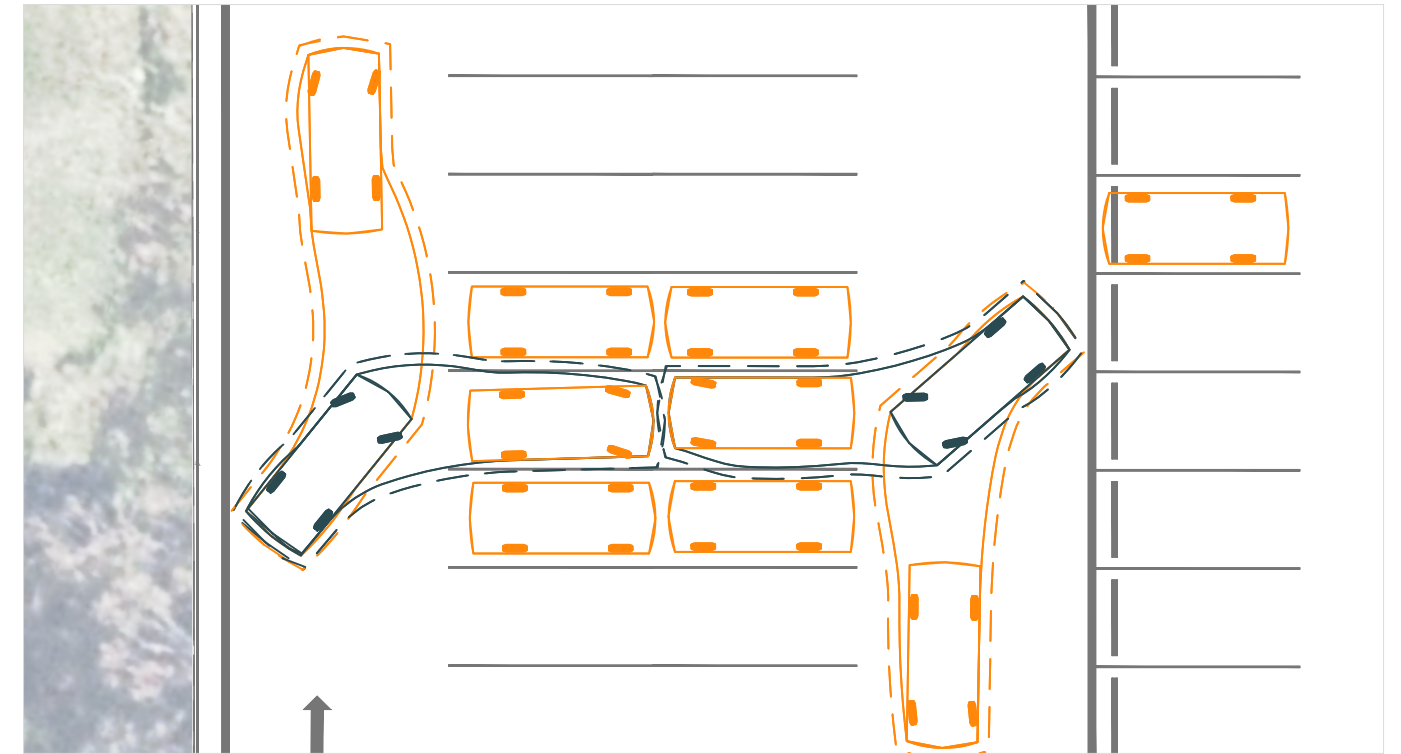


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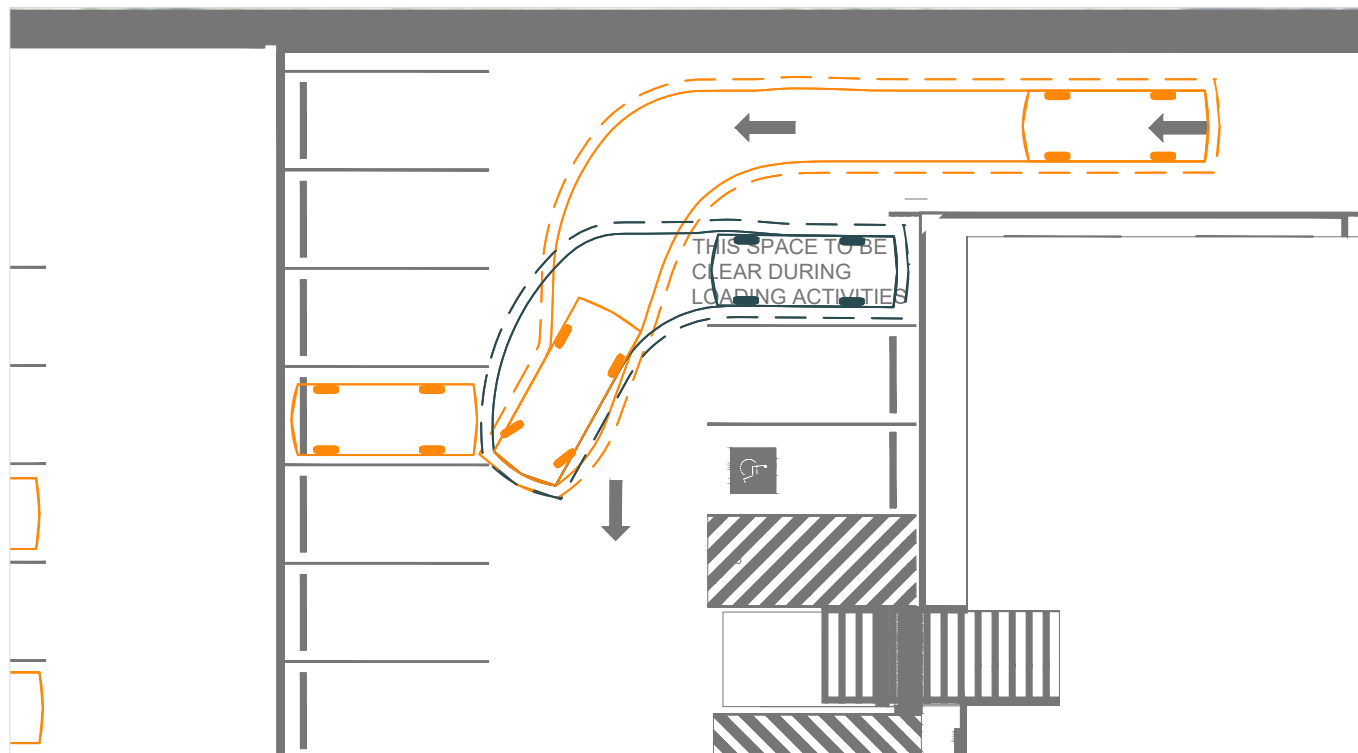
DRAWN: SE  
 DATE: 15/08/2024  
 DWG NO: 739 S02B  
 SCALE at A3: 1:300



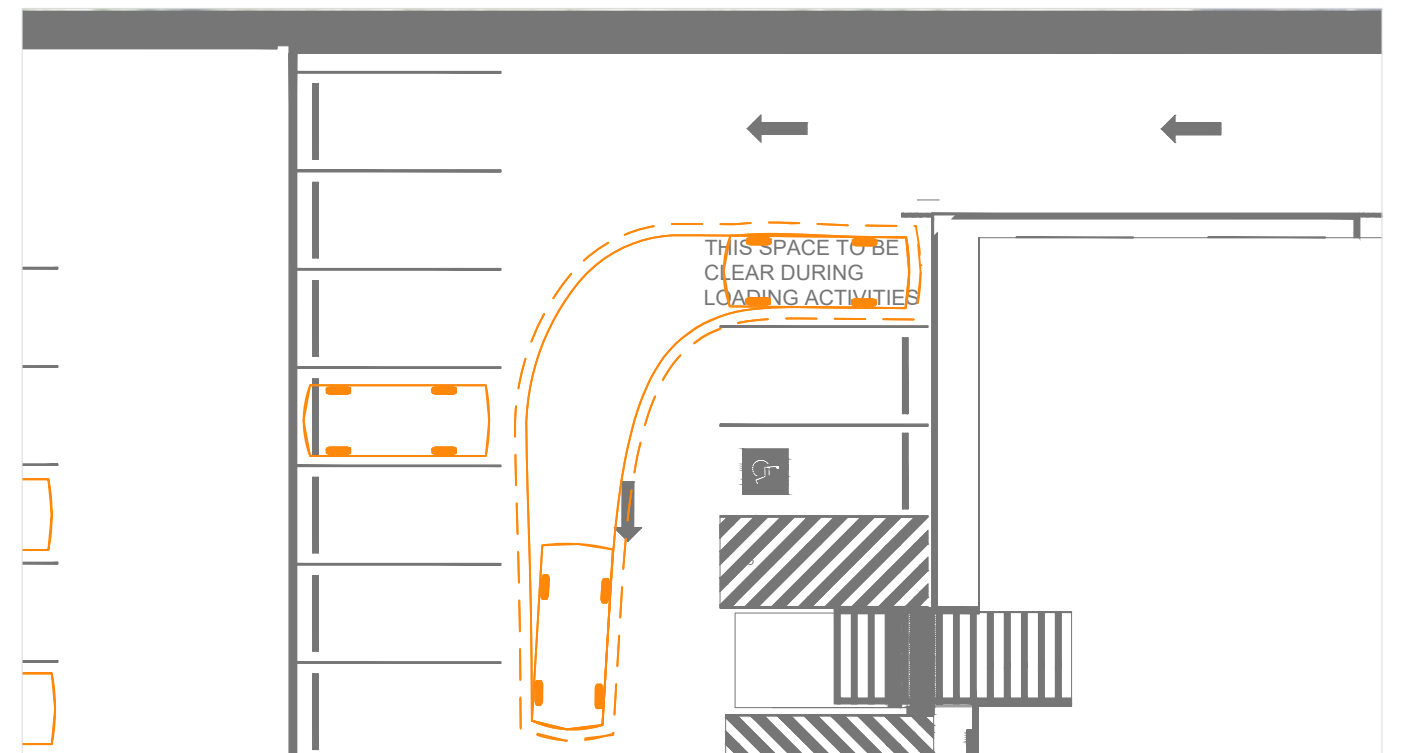
Entry Manoeuvre



Exit Manoeuvre



Entry Manoeuvre



Exit Manoeuvre

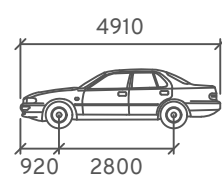
Vehicle Envelope

300mm Clearance

Reverse Manoeuvre

Min. Design Speed 5km/h

B85



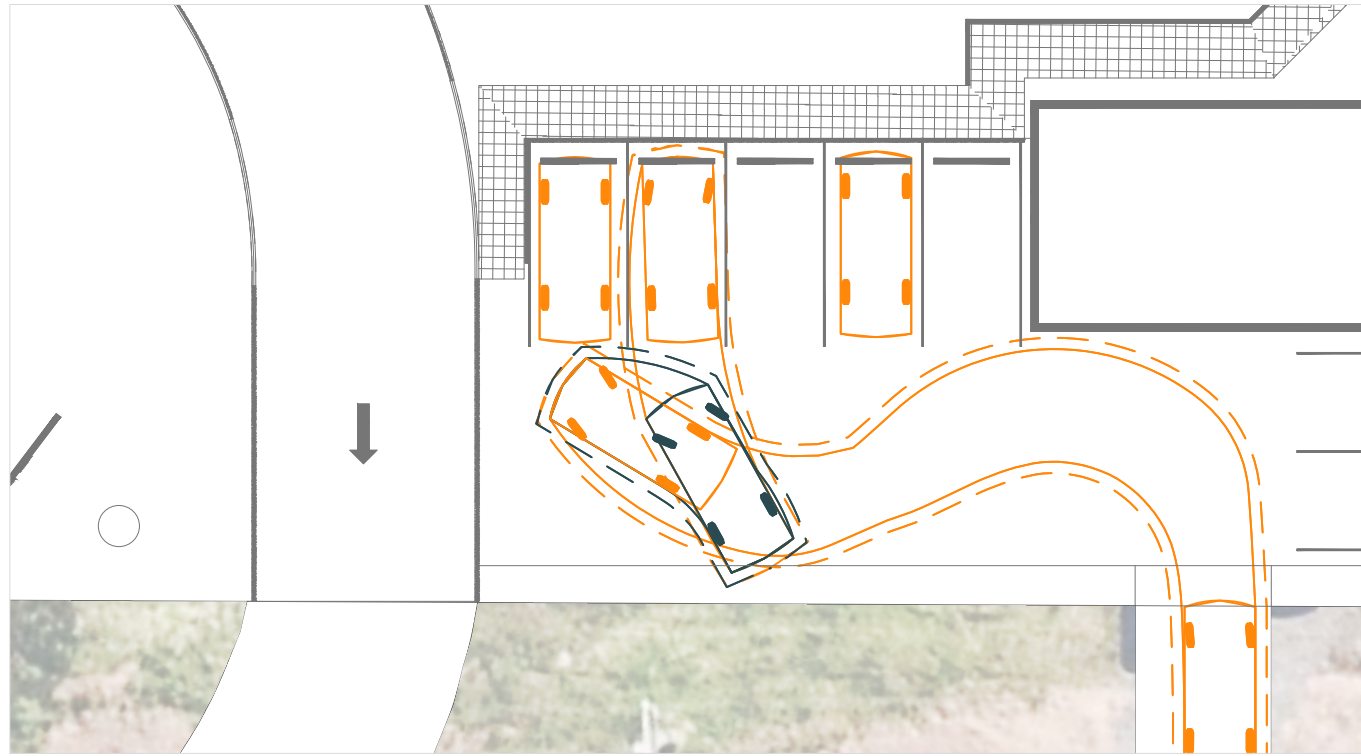
Width	: 1870	mm
Track	: 1770	
Lock to Lock	: 6.0s	
Steering Angle	: 34.1	
Height	: 2100	



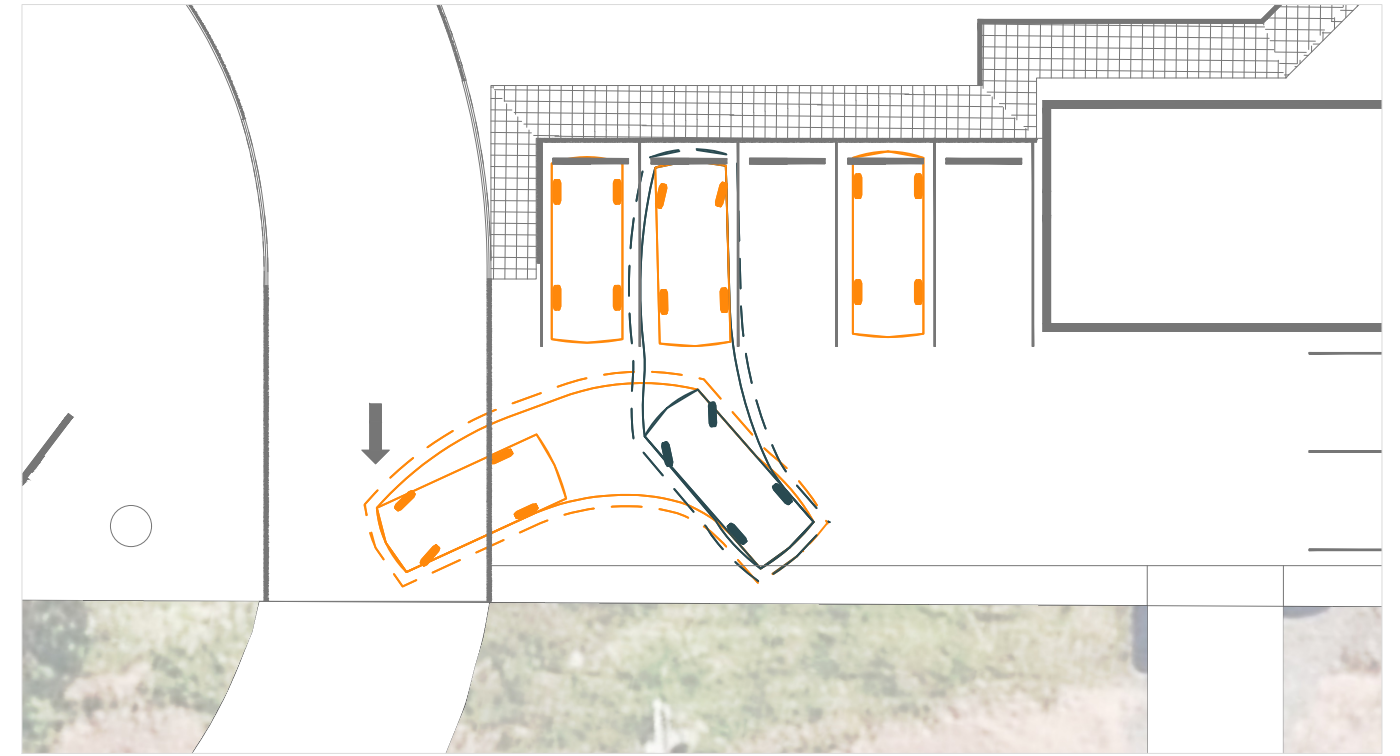
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DRAWN: SE  
DATE: 15/08/2024  
DWG NO: 739 S02B  
SCALE at A3: 1:200

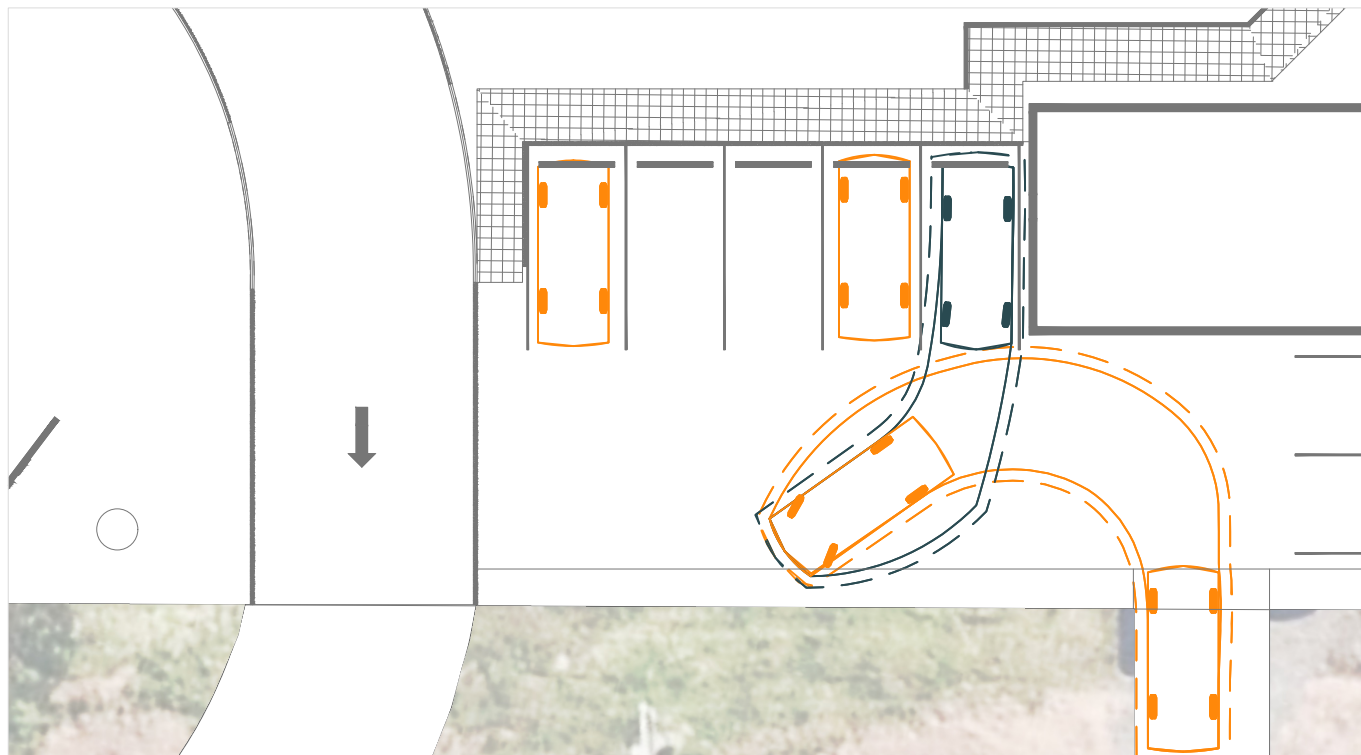
**Amber** 03



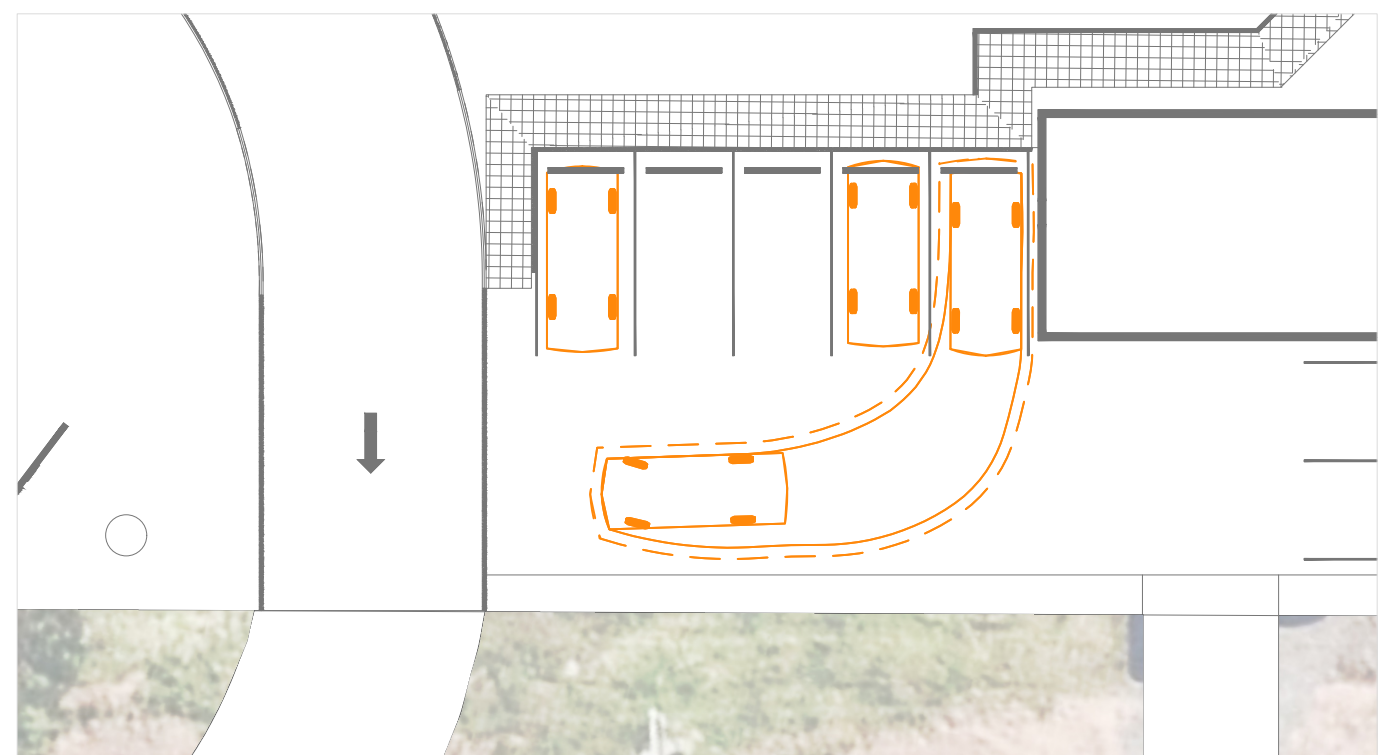
Entry Manoeuvre



Exit Manoeuvre



Entry Manoeuvre



Exit Manoeuvre

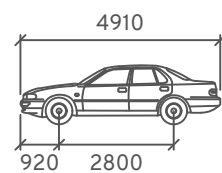
Vehicle Envelope

300mm Clearance

Reverse Manoeuvre

Min. Design Speed 5km/h

B85



Width	: 1870	mm
Track	: 1770	
Lock to Lock	: 6.0s	
Steering Angle	: 34.1	
Height	: 2100	



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DRAWN: SE  
DATE: 15/08/2024  
DWG NO: 739 S02B  
SCALE at A3: 1:200

**Amber** 04