



Traffic & Transportation Direction

RFBI Maitland Retirement Village and Aged Care Facility Expansion

30 Regent Street, Maitland

Traffic Impact Assessment

June 2024

Reference: 933 rep 240611 final

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Prepared for: Royal Freemasons' Benevolent Institution

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1. Introduction

Amber Organisation has been engaged to advise on the traffic and parking matters of the proposed retirement village and aged care facility expansion at 30 Regent Street, Maitland.

A Development Application (DA) has been prepared on behalf of the Royal Freemasons Benevolent Institution (RFBI) in support of the partial redevelopment of the Maitland Royal Freemasons Benevolent Institution, which is an aged care institution consisting of single rooms with private ensuites, a library, wellness and activities rooms, as well as services including registered nurses and permanent care staff on-site. This Traffic Impact Assessment report is an attachment to the Statement of Environment Effects.

The works associated with the proposal will result in a net loss of two aged care units on the site due to the internal reconfiguration of the existing buildings, with a total of 143 aged care units provided post-development.

The proposal includes four new one-bedroom independent living units (ILUs) for use as staff accommodation, as well as ancillary facilities including a café, gym, and salon. The ancillary facilities are for use by staff and residents only. There are no changes proposed to the approved resident and staffing numbers.

The proposal requires a redesign of the southern car park accessed from Bonar Street. The car park will continue to provide seven car spaces and one space for a minibus. There are no changes proposed to the other car parking areas across the site, and all vehicle accesses are to remain as per existing conditions.

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

2. Existing Conditions

2.1 Site Description

The site is located at 30 Regent Street, Maitland legally referred to as Lot 30 in DP 1224638 and has a total site area of approximately 1.4ha. The site has road frontages to Regent Street and Bonar Street and is located in the eastern portion of Maitland. The site is zoned R1 General Residential under the Maitland Local Environmental Plan 2011 (MLEP).

The site is located within the Regent Street Heritage Conservation Area and has multiple heritage buildings on site including 'House', 'Benhome', and 'Cintra' and stables. This application does not propose any alterations or additions to the heritage items on site.

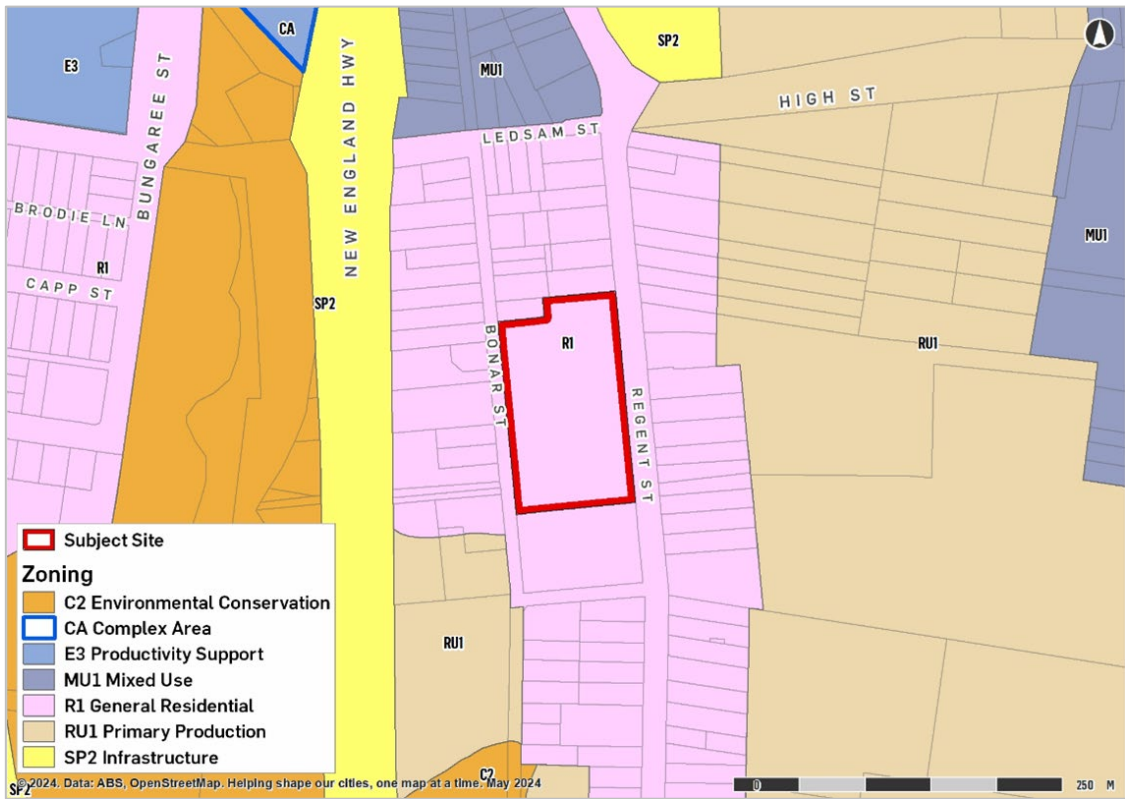
Images relevant to the site and its context have been reproduced below.

Figure 1: Aerial Image of the Site



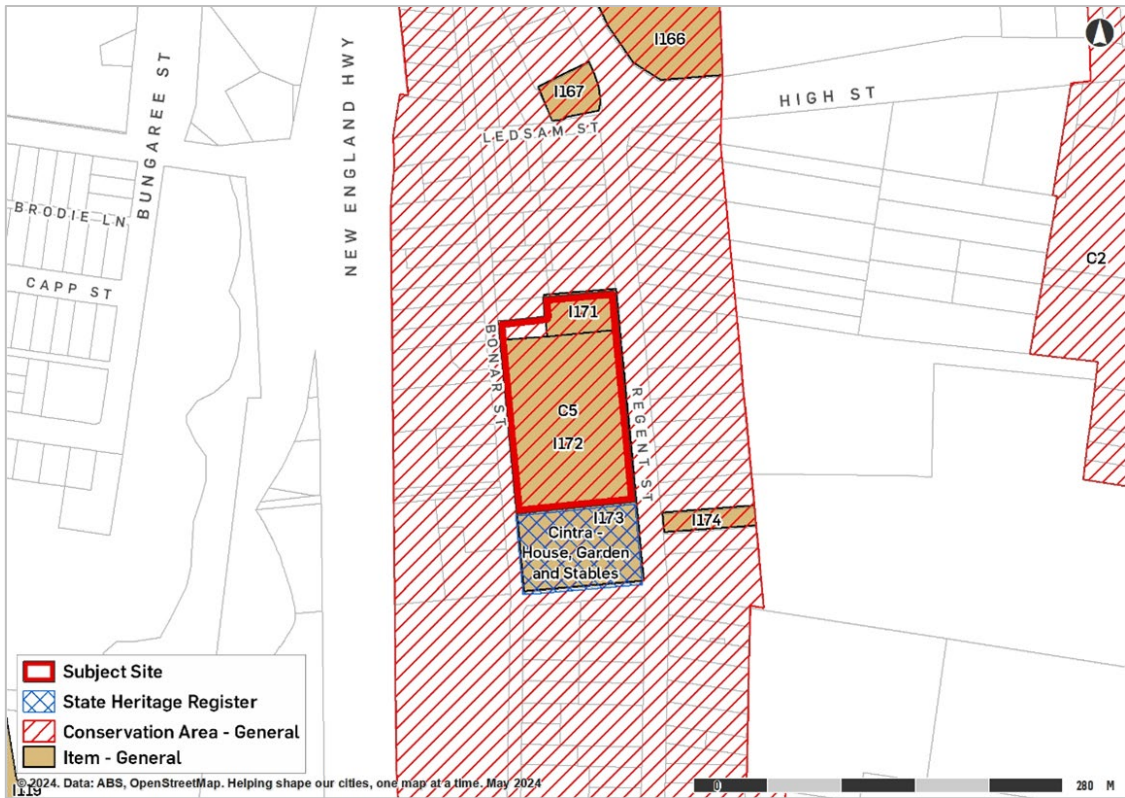
Source: Urbis, 2024

Figure 2: Land Zoning Map



Source: Urbis, 2024

Figure 3: Heritage Map



Source: Urbis, 2024

2.2 Site Location

The subject site is located between Regent Street and Bonar Street in Maitland. Figure 4 shows the location of the site in relation to the surrounding transport network. The site can be accessed via High Street to the north, which provides a connection to the state road network via New England Highway.

Figure 4: Site Location



Source: OpenStreetMap

Key features of the surrounding area include:

- Telarah Train Station, located 1.1 kilometres northwest of the site; and
- Maitland Commercial Precinct, located 1.3 kilometres east of the site.

The site is currently occupied by the RFBI Benhome Masonic Retirement Village, which provides residential aged-care facilities. The current licence allows for 145 aged care beds within the existing facility.

There are three car parking areas on the site accessed via Regent Street and Bonar Street as follows:

- Regent Street car park – 10 car spaces;
- Bonar Street north car park – 23 car spaces; and
- Bonar Street south car park – 7 car spaces and 1 minibus space.

There are four vehicle crossovers to the site under existing conditions, including three crossovers to Bonar Street and one crossover to Regent Street.

2.3 Road Network

Regent Street is a local road that runs in a north-south alignment between High Street in the north to its continuation as Steam Street in the south. The carriageway width is approximately 12.2 metres which accommodates one lane of vehicle traffic in each direction and kerbside parallel parking on both sides of the road. There are footpaths on both sides of the road, and the default speed limit of 50km/h applies.

Bonar Street is a local road that extends south from High Street for approximately 650 metres to its termination. The carriageway width is approximately 6.2 metres which accommodates two-way vehicle movement and kerbside parallel parking on the east side of the road only. Footpaths are provided partially for various sections of the road, and the default speed limit of 50km/h applies.

Ledsam Street is a local road that extends west from Regent Street for approximately 140 metres to a dead end. The carriageway width is approximately 7.0 metres which accommodates two-way vehicle movement and kerbside parallel parking on the south side of the road only. A footpath is provided on the south side of the road between Regent Street and Bonar Street and partially on the north side. The default speed limit of 50km/h applies.

The intersections of Bonar Street/Ledsam Street, Regent Street/Ledsam Street, and Regent Street/High Street are all priority-controlled using Giveaway signage and linemarking. Footpaths are provided on both sides of the road, and the default speed limit of 50km/h applies.

2.4 Parking Conditions

Aerial photographs have been utilised to determine typical parking demands on-site and in the surrounding area. The survey area includes the three on-site car parking areas and on-street parking along Bonar Street and Regent Street within approximately 150 metres of the site. A total of 40 car spaces are available within the on-site car parks and 183 on-street spaces, as shown in Figure 5.

Figure 5: Parking Survey Map



Source: Nearmap

It is noted that not all parking spaces were completely visible on every aerial photograph due to tree canopies or structures, and some parking spaces were occasionally occupied by other objects. To provide a conservative assessment, if a parking space was not visible it has been assumed to be occupied. The results of the aerial surveys are summarised in Table 1.

Table 1: Parking Demand Based on Aerial Photographs

Street / Area	Capacity	Occupied Spaces					Average Demand	Average Occupancy
		Sat 9/10/21	Sun 12/6/22	Sat 11/2/23	Sun 15/10/23	Mon 1/4/24		
Regent Street	117	44	57	39	38	43	44	38%
Bonar Street	66	14	19	21	8	19	16	25%
Car Park 1	10	2	8	5	9	9	7	66%
Car Park 2	23	4	5	5	6	7	5	23%
Car Park 3	7	6	3	2	2	5	4	51%

The aerial photograph survey indicates that the on-site car parking areas experience an average demand of 16 spaces, which equates to 40% occupancy. The maximum demand was 21 occupied spaces, representing 53% occupancy.

The on-street parking along Regent Street and Bonar Street experienced an average demand of 60 spaces, which equates to 33% occupancy. The peak demand was 76 occupied spaces, representing 42% occupancy.

Accordingly, there is ample capacity available within the on-site parking areas to accommodate an increase in parking demand. Furthermore, there are low demands for on-street parking in the nearby area, should overflow parking demands occur.

2.5 Sustainable Transport

The site has access to public transport services via bus and train services. Telarah Train Station is located approximately 1.1 kilometres northwest of the site and is serviced by the Hunter Line. The nearest bus stops are located on High Street approximately 300 metres north of the site. The bus services operating in the nearby area are detailed as follows:

- Bus Route 179 – North Rothbury to Green Hills Shopping Centre via Maitland;
- Bus Route 180 – Singleton Heights to Green Hills Shopping Centre via Maitland;
- Bus Route 181 – Rutherford to Woodberry via Maitland, Green Hills Shopping Centre & Beresfield;
- Bus Route 182 – Rutherford to Thornton via Maitland, Green Hills Shopping Centre & Ashtonfield; and
- Bus Route 183 – Rutherford to Tenambit via Maitland & Green Hills Shopping Centre.

These services link the site with commercial and community uses within the wider Maitland area and can be accessed via footpaths. A shared path is provided north of the site along High Street which crosses Telarah Lagoon to the west. The shared path continues as an on-road cycling path along Telarah Street.

2.6 Crash History

Amber has conducted a review of the TfNSW Centre for Road Safety Crash and Casualty Statistics database for all crashes within close proximity of the site. The crash database provides the location and severity of all injury and fatal crashes for the five-year period from 2018 to 2022. The study area includes the following road sections:

- Regent Street;
- Bonar Street;
- Ledsam Street; and
- All associated intersections.

The crash search revealed one serious injury crash within the review area on Regent Street at the intersection with High Street. The crash was classified as an 'off road to the left on right bend, hitting object' type, and occurred in July 2019 during dark conditions. Based on the review, it is concluded that the road network is currently operating in a relatively safe manner.

3. Development Proposal

The proposed works will redevelop portions of the site, currently identified as the RFBI, as specified below. The proposal will include:

- Renovate Rose Cottage and convert the space into the following:
 - 4 x 1-bedroom staff accommodation units with separate kitchen, living/dining, and bathroom facilities;
 - 4 x Additional rooms to be converted from their existing use to Assisted Living Unit (dirty utility room, Lounge room);
 - A café with seating for approximately 30 people;
 - A salon with facilities to support hair and nail procedures;
 - A gym; and
 - A multi-purpose room with storage.
- Construct a Level 1 floor consisting of 9 x rooms over the top of the existing car park located off Bonar Street.
- Minor landscaping to the existing 'Courtyard 3', Rose Cottage and Bonar Street Car park.

The above works will result in a net loss of two aged care units on the site due to the internal reconfiguration of the existing buildings, with a total of 143 aged care units provided post-development.

The four additional one-bedroom assisted living units are classified as independent living units (ILUs) and are for use as staff accommodation. The café, gym, salon, and multi-purpose room are ancillary facilities for use by staff and residents only.

There are no changes proposed to the approved resident and staffing numbers, with a maximum of 40 staff on-site at any one time.

The amendments to the southern car park accessed from Bonar Street does not result in a loss of car parking, with the car park to continue to provide seven car spaces and one minibus space post-development. There are no changes proposed to the other car parking areas across the site, and all vehicle accesses are to remain as per existing conditions.

Waste collection is proposed to be undertaken on-street from Bonar Street via private contractor.

4. Car Parking Assessment

The car parking requirement of the proposal has been assessed against the State Environmental Planning Policy (Housing) 2021 (SEPP), which sets out car parking rates for various types of housing, including for seniors.

The aged care component has been classified as a ‘residential care facility’ and the staff accommodation has been classified as ‘independent living units’ (ILUs) under the SEPP. The ancillary facilities (café, gym, and salon) have been excluded from the car parking assessment as these facilities are available for use by staff and residents only and will not generate an additional car parking demand.

The relevant rates for car parking are listed under Clause 107 and 108 of the SEPP. For this assessment, the car parking requirement has been calculated based on the ultimate number of beds and units across the site post-development. A summary of the car parking requirements is provided at Table 2.

Table 2: Car Parking Requirement

Use	No. / Size	Parking Rate (SEPP Housing)	Parking Requirement
Residential care facility	143 beds (reduction of 2 beds) 40 staff on-site at one time (no change)	1 space for every 15 beds 1 space for every 2 staff on duty at the same time 1 ambulance space	10 aged care spaces 20 staff spaces 1 ambulance space
Independent living units	4 one-bedroom units (staff accommodation)	0.5 spaces to each bedroom	2 spaces
Ancillary facilities (café, gym, salon)	Approx. 220 sqm	No requirement as considered ancillary	No requirement

The car parking requirement for the facility post-development is 32 car spaces and one ambulance space. There will continue to be 40 car spaces and one minibus space available on-site post-development, with ambulance parking to occur adjacent to the building entry in the Regent Street car park. Accordingly, the car parking requirements of the SEPP are considered to be met.

The car parking demands of proposal will be generally consistent with existing conditions with exception to the addition of the four ILUs. This is as the number of staff and aged care beds is not increasing as part of the proposal. The car parking requirement of the four ILUs is outlined in Table 2 above, which is two car spaces under the SEPP.

The car parking surveys completed at Section 2.4 demonstrate that the on-site car parks are currently underutilised and there is sufficient capacity to accommodate the demand of two car spaces associated with the ILUs. Furthermore, on-street parking along the site frontage is in low demand and there is capacity to accommodate an increase in parking demands on-street in the unlikely event this occurs.

Based on the above, it is concluded that the car parking requirements of the SEPP are met on-site, and that the parking demands of the proposal post-development can be accommodated within the on-site car parking areas.

5. Car Park Layout

The proposal requires a redesign of the southern car park accessed from Bonar Street. The car park layout review focuses on this car park only as the other car parking areas are to remain as per existing conditions.

5.1 Bonar Street Car Park

The southern Bonar Street car park has been assessed against the design requirements of the Housing SEPP, Maitland DCP, and AS/NZS 2890.1:2004. The key design aspects are:

- The design standards for ILUs set out at Schedule 4 of the SEPP apply to car spaces for use by occupants only. As the ILUs are for use by staff, these car spaces have been designed in accordance with the DCP.
- The DCP outlines guidelines for the design and layout of parking areas and notes that parking spaces shall generally be as set out in accordance with AS/NZS 2890.1:2004. The car spaces have been designed in accordance with AS/NZS 2890.1:2004, specifically:
 - All car spaces are for use by staff only, which falls under User Class 1A.
 - 2.5 metres wide by 5.4 metres long, accessed by a 5.8 metre wide aisle.
 - Columns are located in accordance with Figure 5.2 to allow for car door opening.
 - 300mm clearance is provided to car spaces adjacent to walls.
 - A 1.25 metre blind aisle extension is provided to the end car space.
 - A minimum headroom clearance of 2.2 metres is provided within the circulation areas and to car spaces.
- There are no specific design standards for a minibus space. The minibus space is provided with dimensions of 2.9 metres wide by 7.5 metres long with a headroom clearance of 3.7 metres, which is sufficient to accommodate a range of minibuses.

5.2 Swept Path Assessment

A swept path assessment has been prepared using a B85 vehicle (85th percentile vehicle) to ensure vehicles are able to access all car spaces, which is provided at Appendix A. The assessment found that each space could be accessed (ingress and egress) in a satisfactory manner, noting that corrective manoeuvres may be required, or some spaces may be better accessed with reverse in and forward out movements. This is considered an appropriate arrangement noting that the parking spaces meet the design requirements of AS/NZS 2890.1:2004, will be allocated for use by staff only, and maximises the supply of parking on-site with an efficient layout.

5.3 Summary

Overall, the assessment shows that the car parking areas have been designed in a suitable manner and generally in accordance with the requirements of the SEPP, DCP, and AS/NZS 2890.1:2004.

6. Bicycle Parking Assessment

The DCP states that bicycle parking is to be in accordance with the Austroads Guide, which specifies the following rates for a 'Nursing Home' use:

- 1 space per 60 beds for short-stay demands (visitors); and
- 1 space per 30 beds for long-stay demands (staff).

The number of aged care beds is reducing by two, however, there is an increase of four staff ILUs. For the purpose of this assessment the ILUs have been assessed under the Nursing Home rates listed above.

Given there is only a minor increase in ILUs on the site, there is no requirement under the DCP to provide additional bicycle parking. Accordingly, it is appropriate for bicycles to be stored within any existing bicycle parking available on-site, or informally within storage/back of house areas on an as-needs basis.

7. Loading and Waste Collection

7.1 Loading

The loading demands of the site will be largely consistent with existing conditions and operations. We understand that deliveries currently occur via the Bonar Street drive through using smaller delivery trucks (i.e. vehicles similar to a 6.4 metre SRV under AS/NZS 2890.2:2018).

The headroom clearance along the Bonar Street drive through is increasing to 3.7 metres as part of the proposed works, which exceeds the headroom requirements for a 6.4 metre SRV under AS/NZS 2890.2:2018. Accordingly, the loading demands of the proposal have been appropriately accommodated on-site.

7.2 Waste Collection

Waste collection currently occurs within the Bonar Street car park via private contractor. After the building extension is complete, waste collection will take place via a collect and return strategy from the sites Bonar Street frontage.

The private waste vehicle/contractor will park kerbside instead of driving into the car park due to the headroom restrictions associated with the extension. This process is detailed within the Waste Management Plan prepared for the DA (ref: 5871, dated 24/05/2024), and is considered appropriate.

8. Traffic Assessment

Post-development there will be a minor reduction in the number of aged care units and increase of four ILUs on the site, with no changes to the number of on-site car spaces, residents, or staff. Accordingly, the traffic impacts of the proposal will be generally consistent with existing conditions and are expected to have a negligible impact on the surrounding road network and intersections.

9. Conclusions

Amber has reviewed the traffic and parking matters associated with a proposed retirement village expansion located at 30 Regent Street, Maitland. The works will result in a net loss of two aged care units on the site due to the internal reconfiguration of the existing buildings. The proposal includes four new one-bedroom independent living units (ILUs) for use as staff accommodation, as well as ancillary facilities including a café, gym, and salon. There are no changes to the car parking provision or vehicle access arrangements.

Based on the above assessment, it is concluded that:

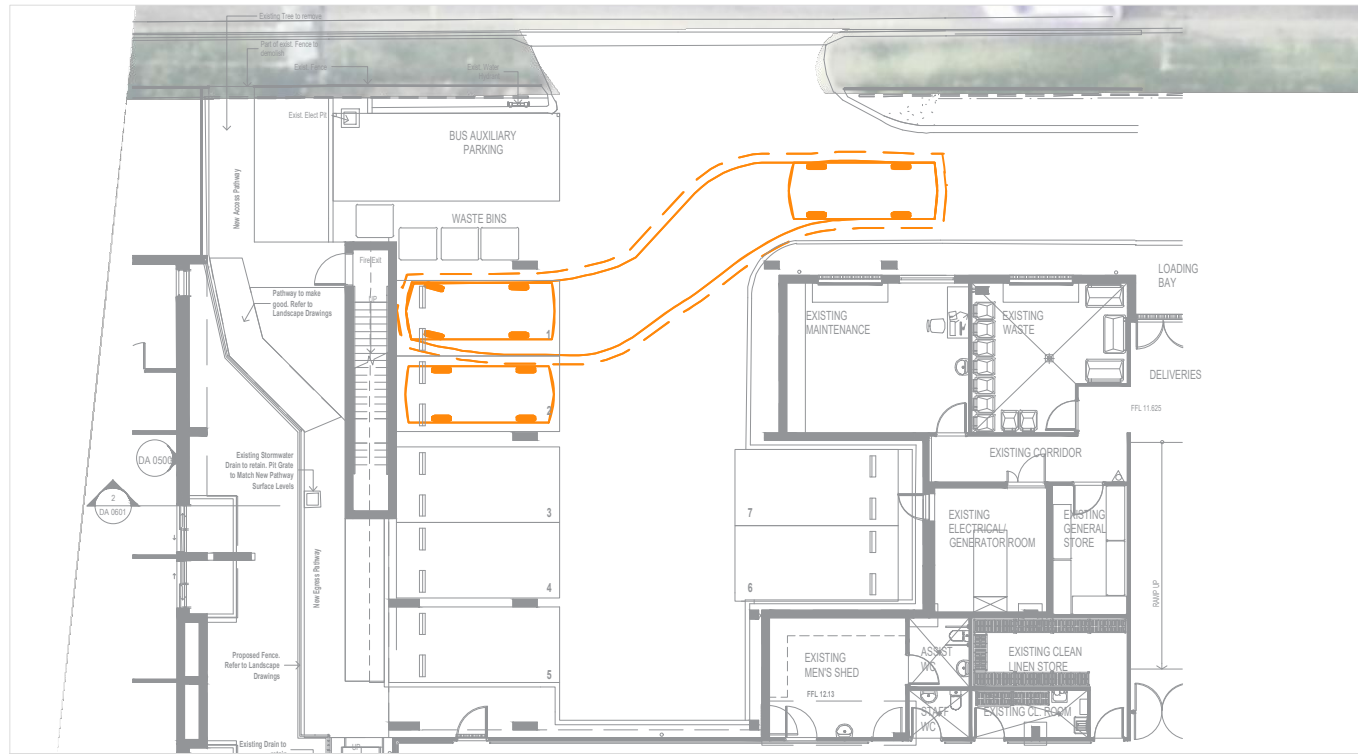
- The car parking requirement for the facility post-development is 32 car spaces and one ambulance space. There will continue to be 40 car spaces and one minibus space available on-site post-development, with ambulance parking to occur adjacent to the building entry in the Regent Street car park. Accordingly, the car parking requirements of the SEPP are considered to be met.
- The car parking demands of proposal will be generally consistent with existing conditions with exception to the addition of the four ILUs. The car parking requirement of the four ILUs is two car spaces under the SEPP.
- The car parking surveys completed at Section 2.4 demonstrate that the on-site car parks are currently underutilised and there is sufficient capacity to accommodate the demand of two car spaces associated with the ILUs.
- The southern Bonar Street car park has been designed in a suitable manner and generally in accordance with the requirements of the SEPP, DCP, and AS/NZS 2890.1:2004.
- Given there is only a minor increase in ILUs on the site, there is no requirement under the DCP to provide additional bicycle parking.
- The loading arrangements of the site will be generally consistent with existing conditions and can be undertaken within the Bonar Street drive through by vehicles up to a 6.4 metre SRV.
- Waste collection is proposed to be undertaken on-street from Bonar Street via private contractor.
- The traffic impacts of the proposal will be generally consistent with existing conditions and are expected to have a negligible impact on the surrounding road network and intersections.

Therefore, it is concluded that the traffic and parking aspects of the proposed development are satisfactory, and the development will have a negligible impact on the surrounding environment.

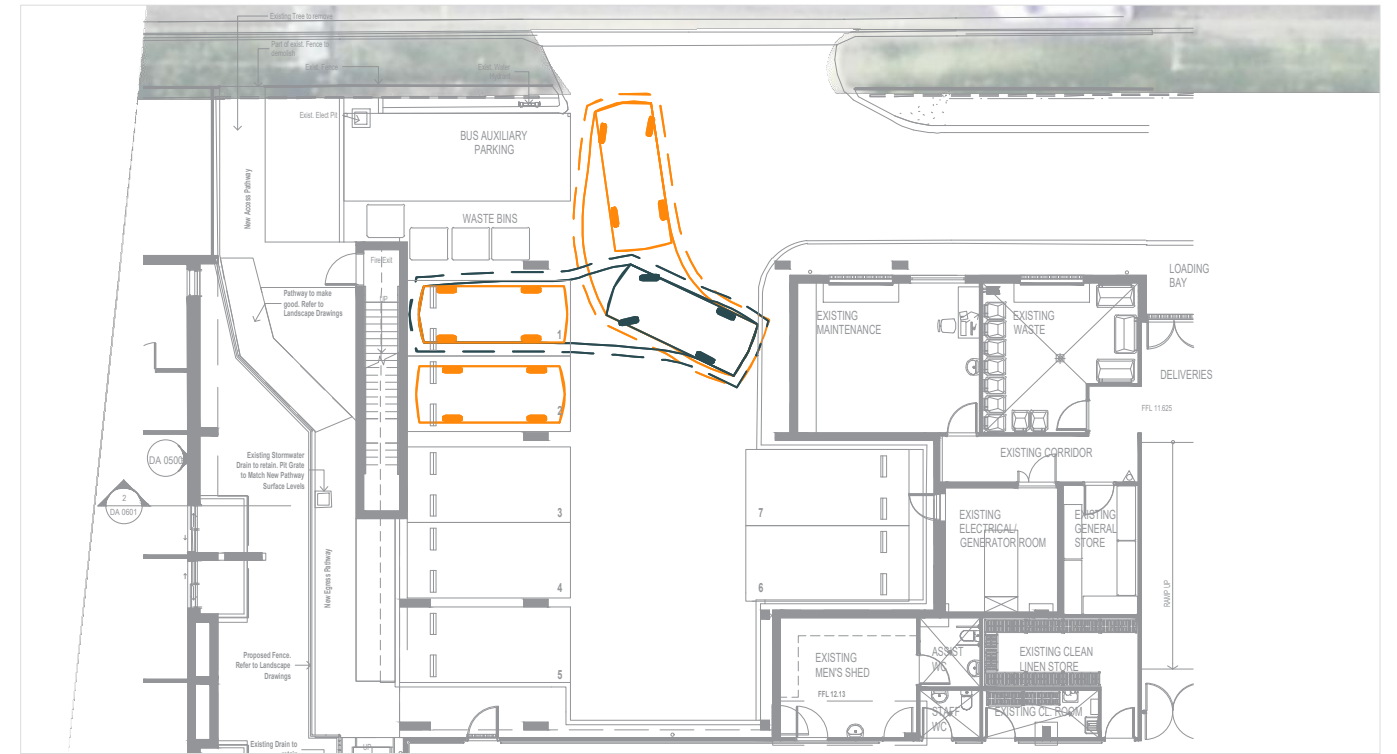
Appendix A

Swept Path Assessment

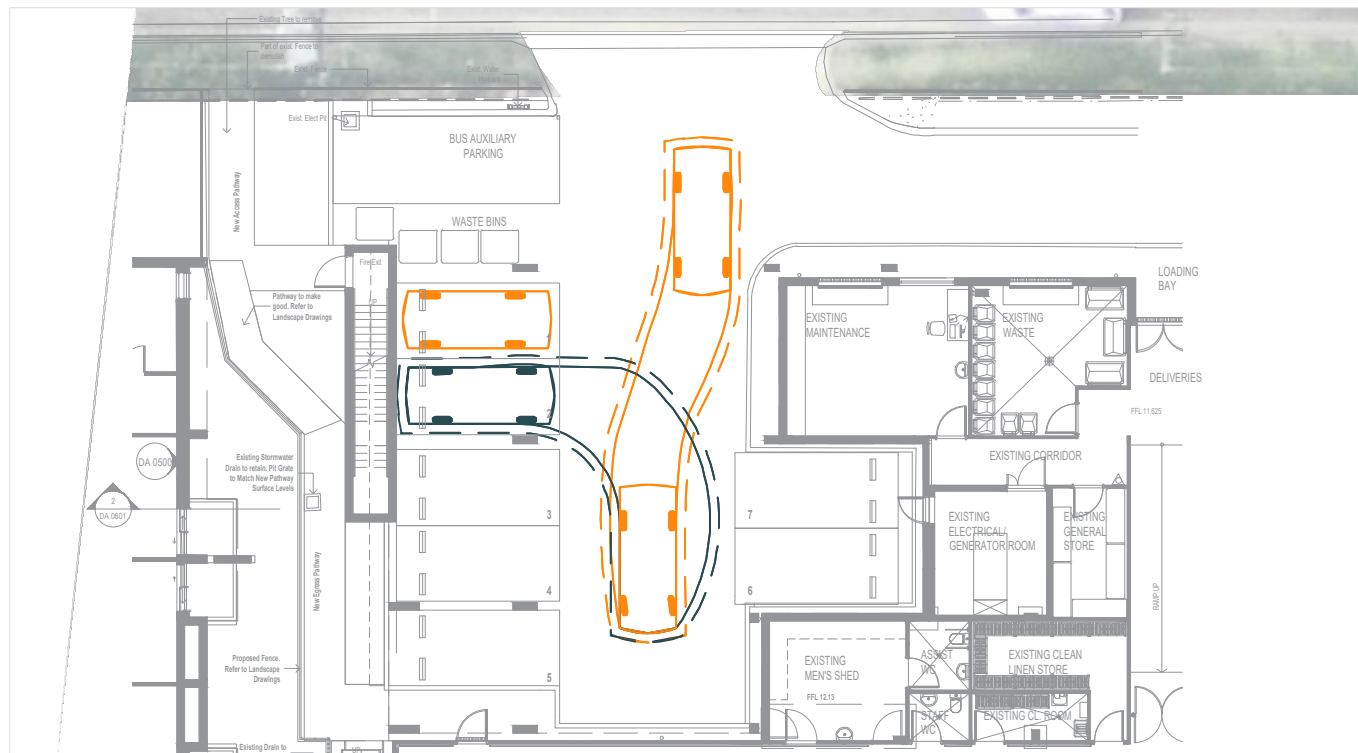




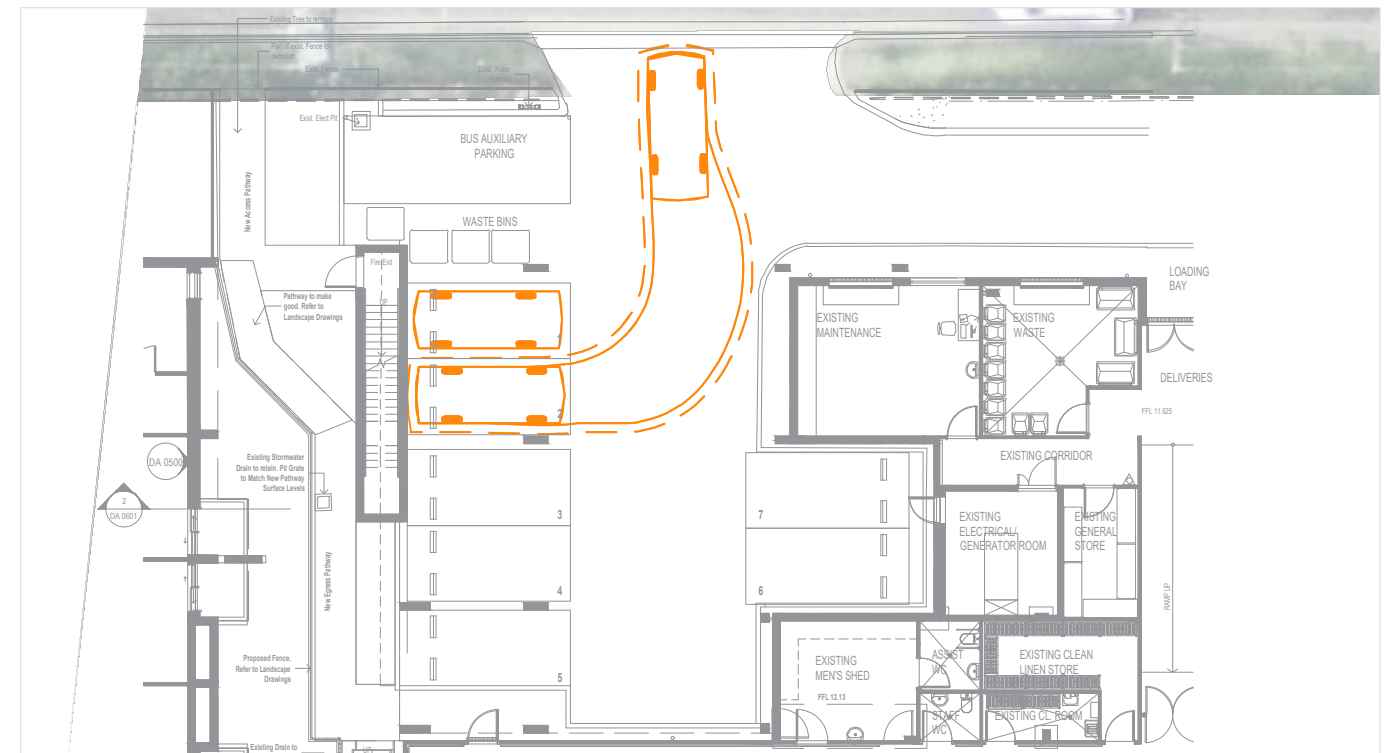
Entry Manoeuvre



Exit Manoeuvre



Entry Manoeuvre



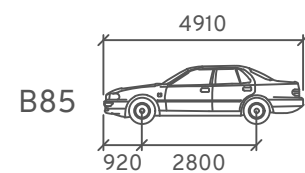
Exit Manoeuvre

Vehicle Envelope

300mm Clearance

Reverse Manoeuvre

Min. Design Speed 5km/h



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



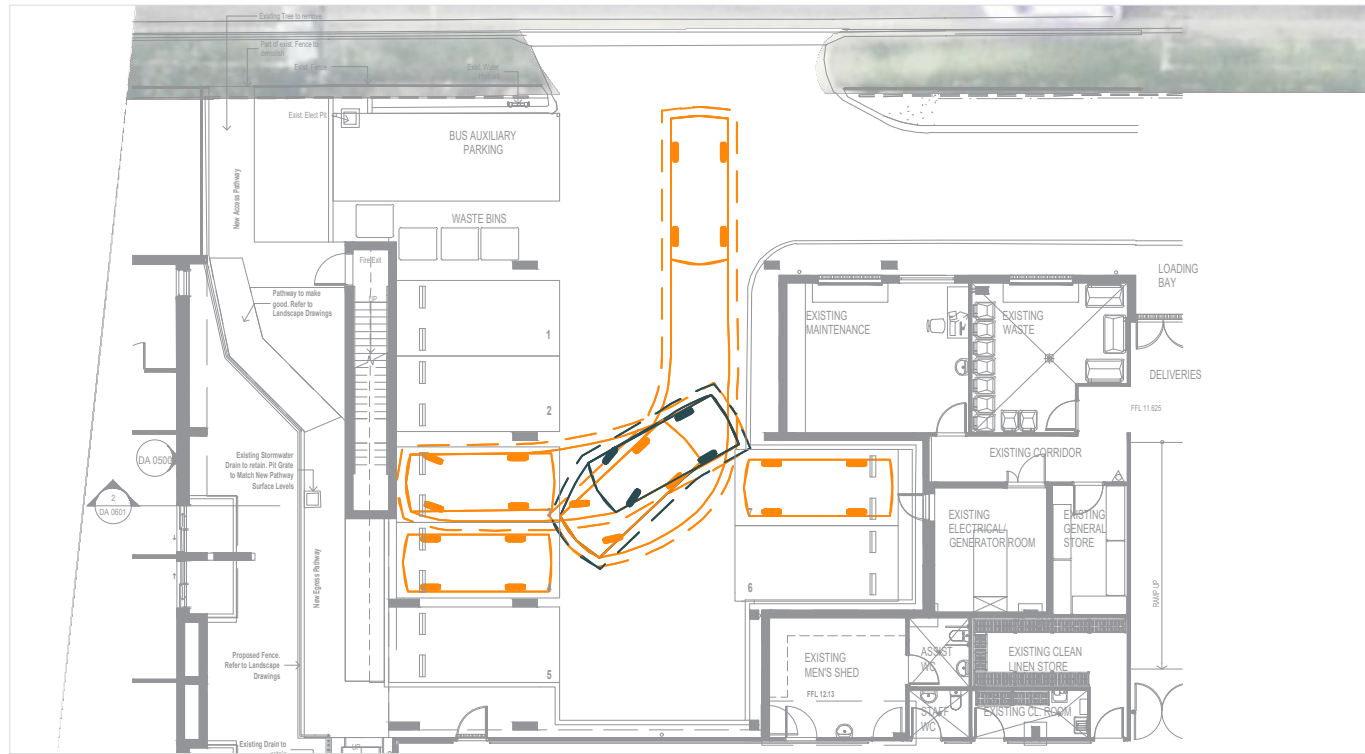
30 Regent Street, Maitland

Aged Care Facility

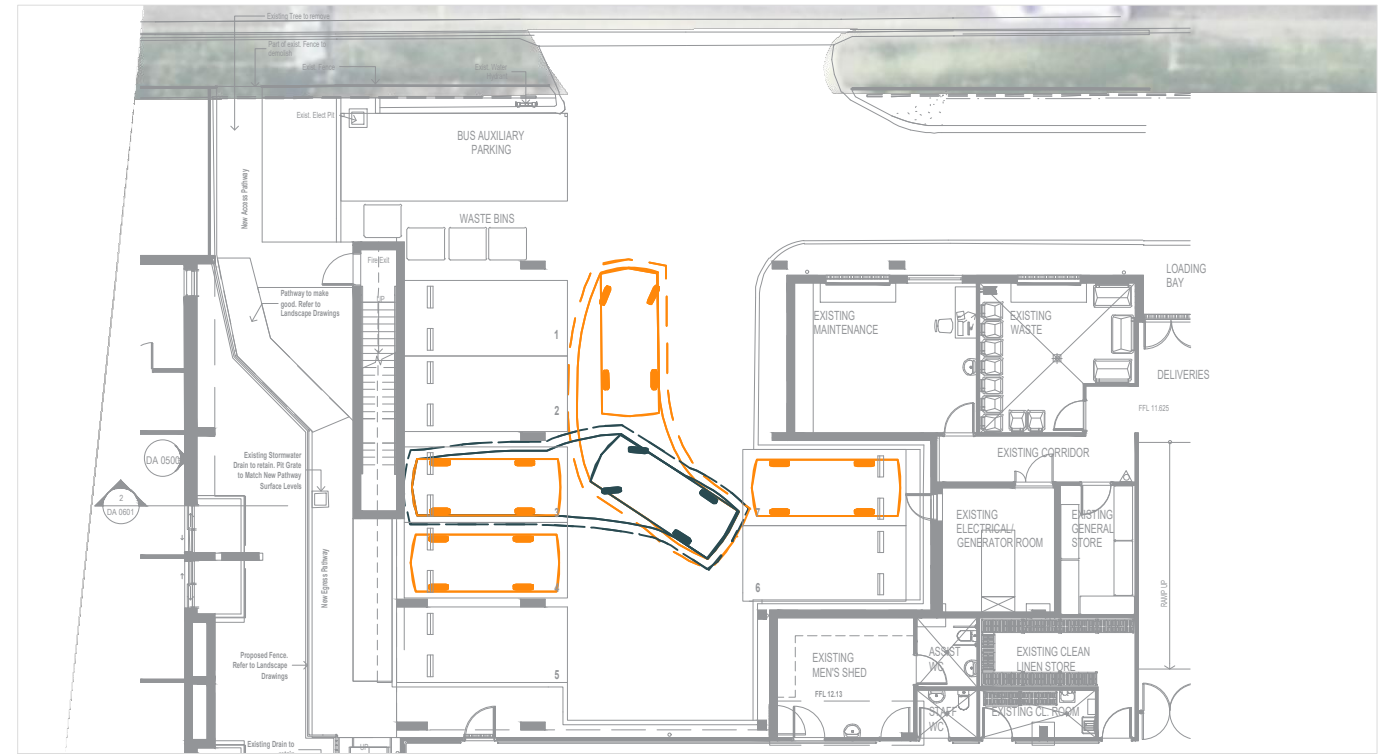
Swept Path Assessment

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 DATE: 03/06/2024
 DWG NO: 933 - S01C
 SCALE at A3: 1:250

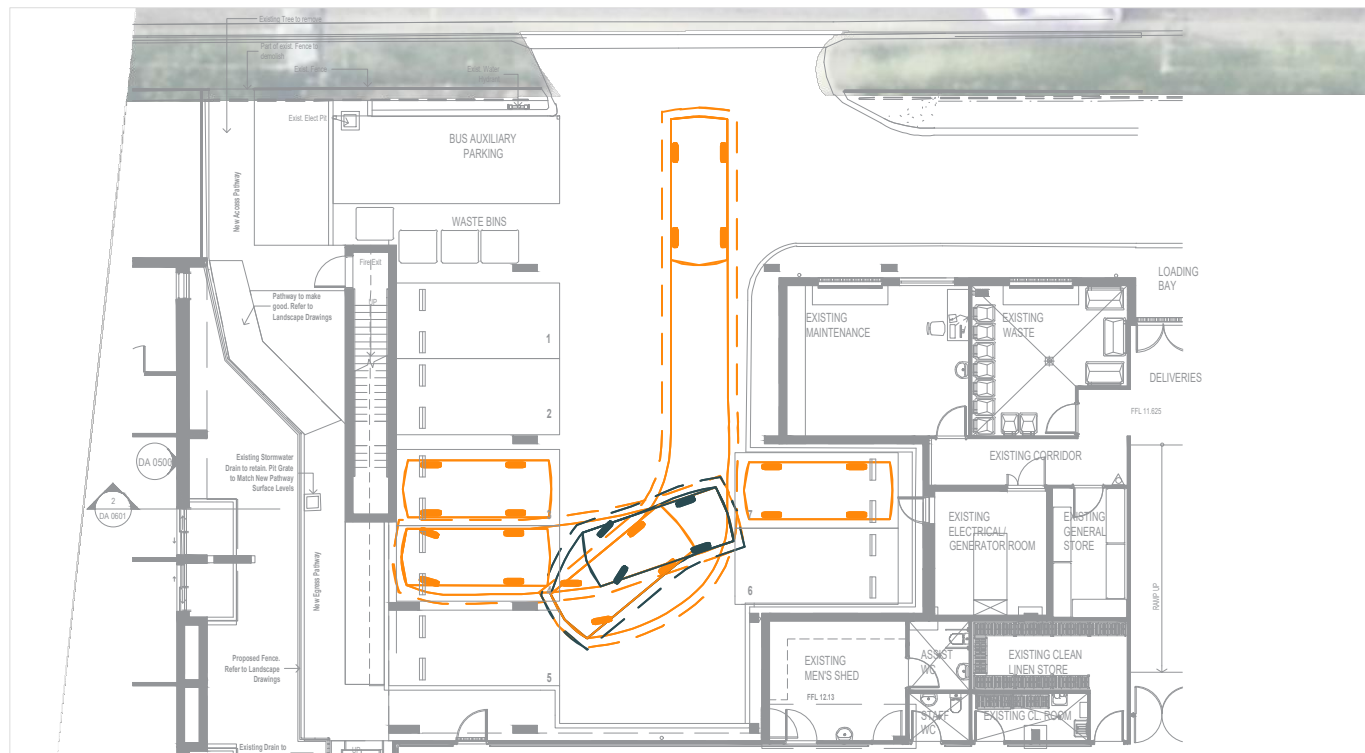




Entry Manoeuvre



Exit Manoeuvre



Entry Manoeuvre



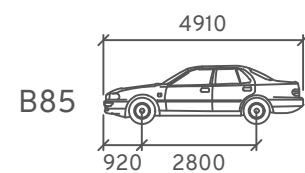
Exit Manoeuvre

Vehicle Envelope

300mm Clearance

Reverse Manoeuvre

Min. Design Speed 5km/h



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

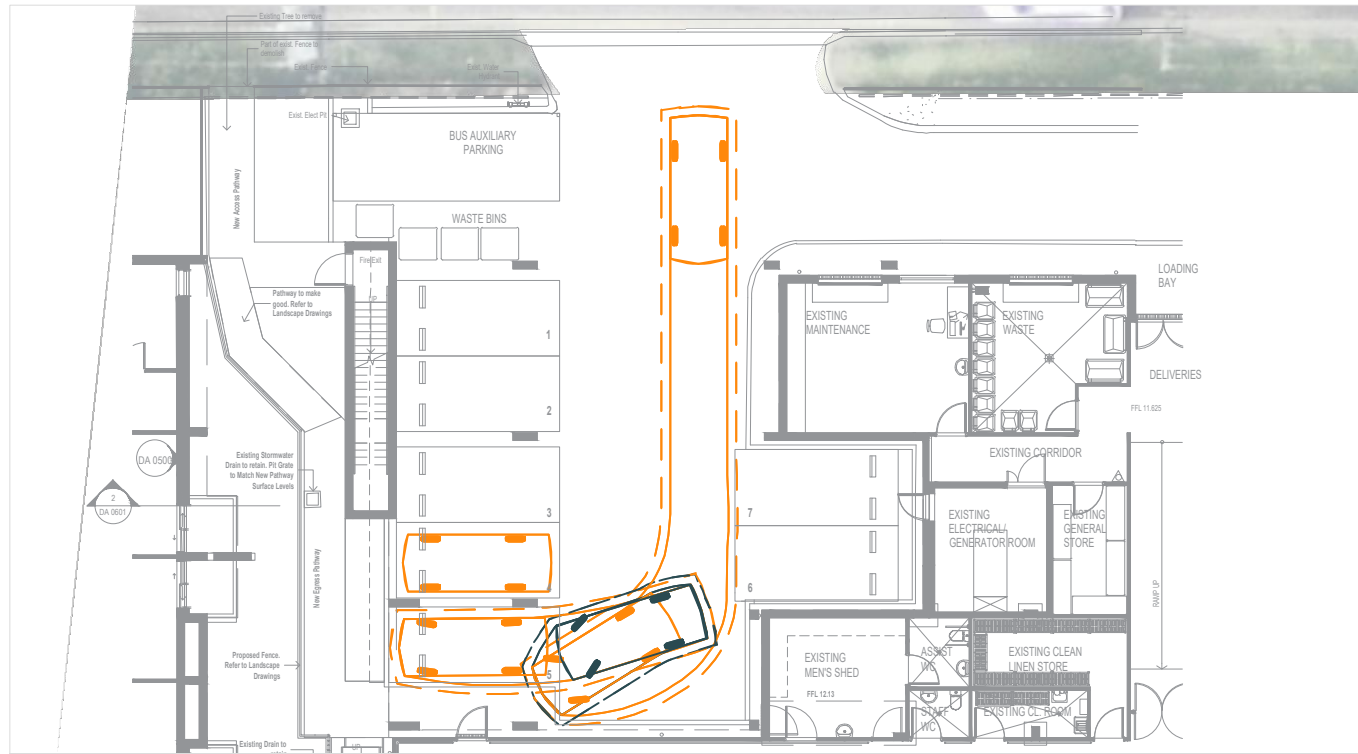
30 Regent Street, Maitland

Aged Care Facility

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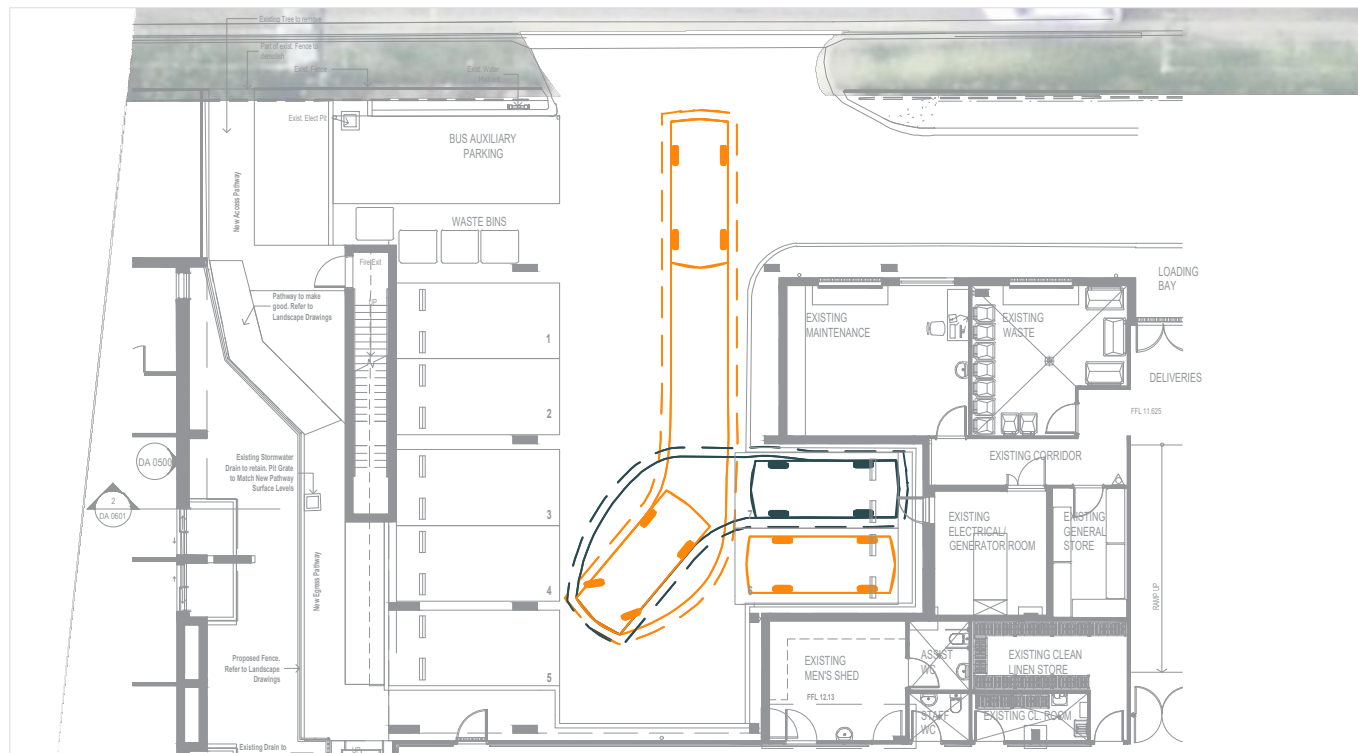




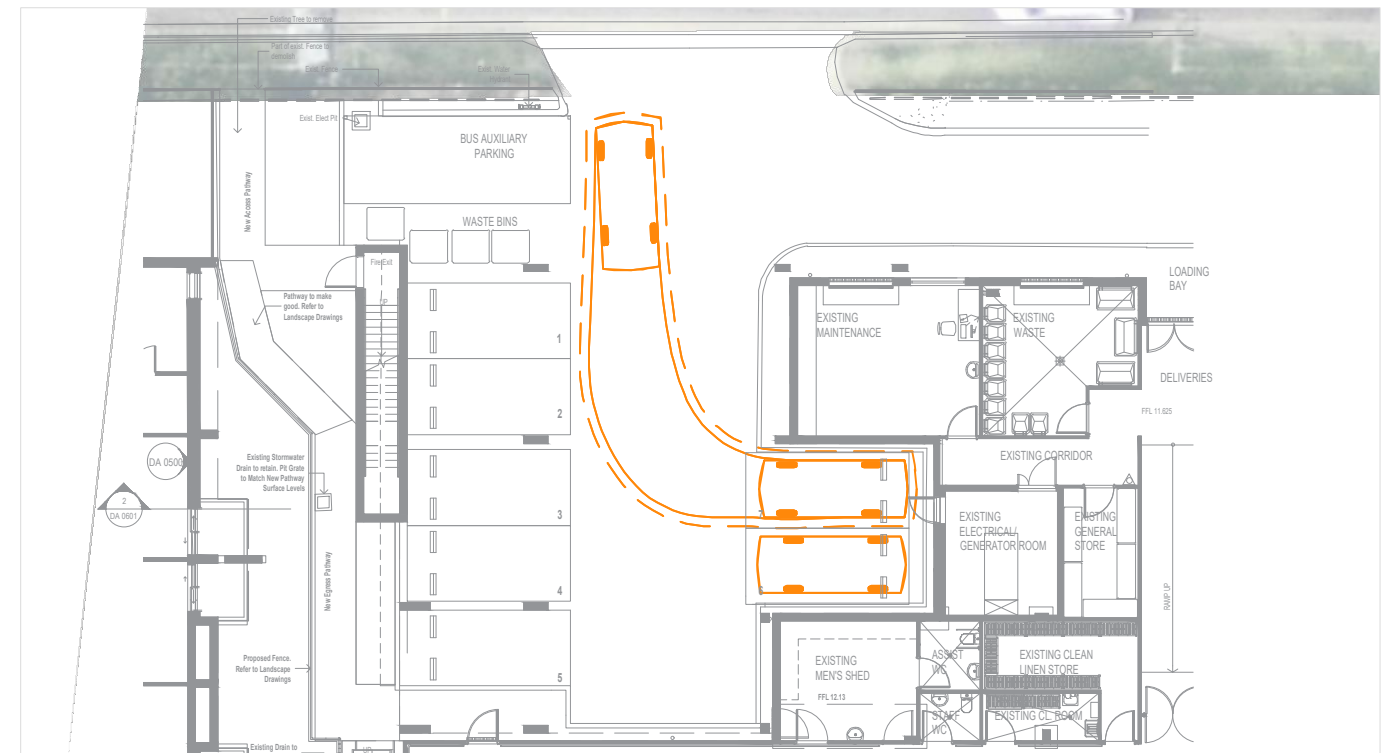
Entry Manoeuvre



Exit Manoeuvre



Entry Manoeuvre



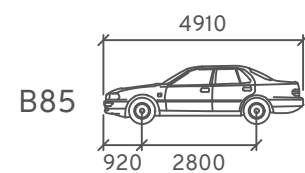
Exit Manoeuvre

Vehicle Envelope

300mm Clearance

Reverse Manoeuvre

Min. Design Speed 5km/h



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



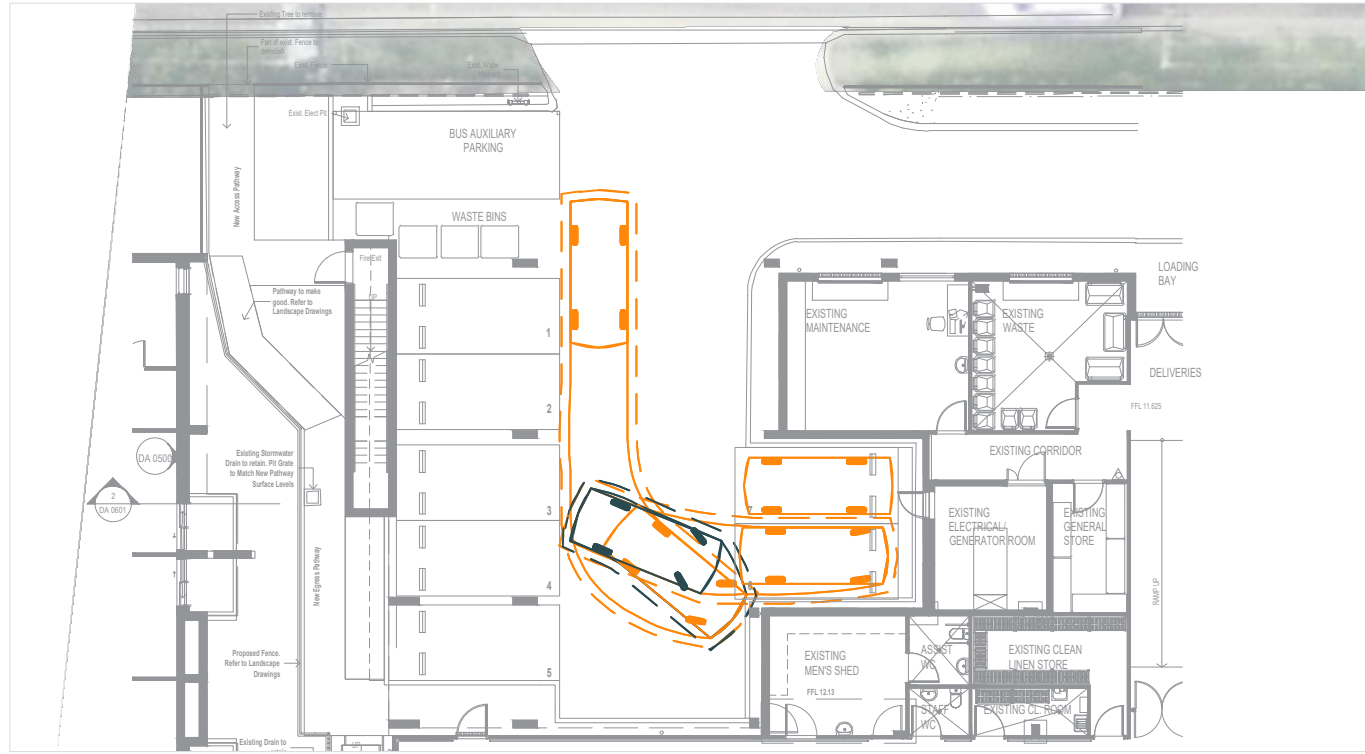
30 Regent Street, Maitland

Aged Care Facility

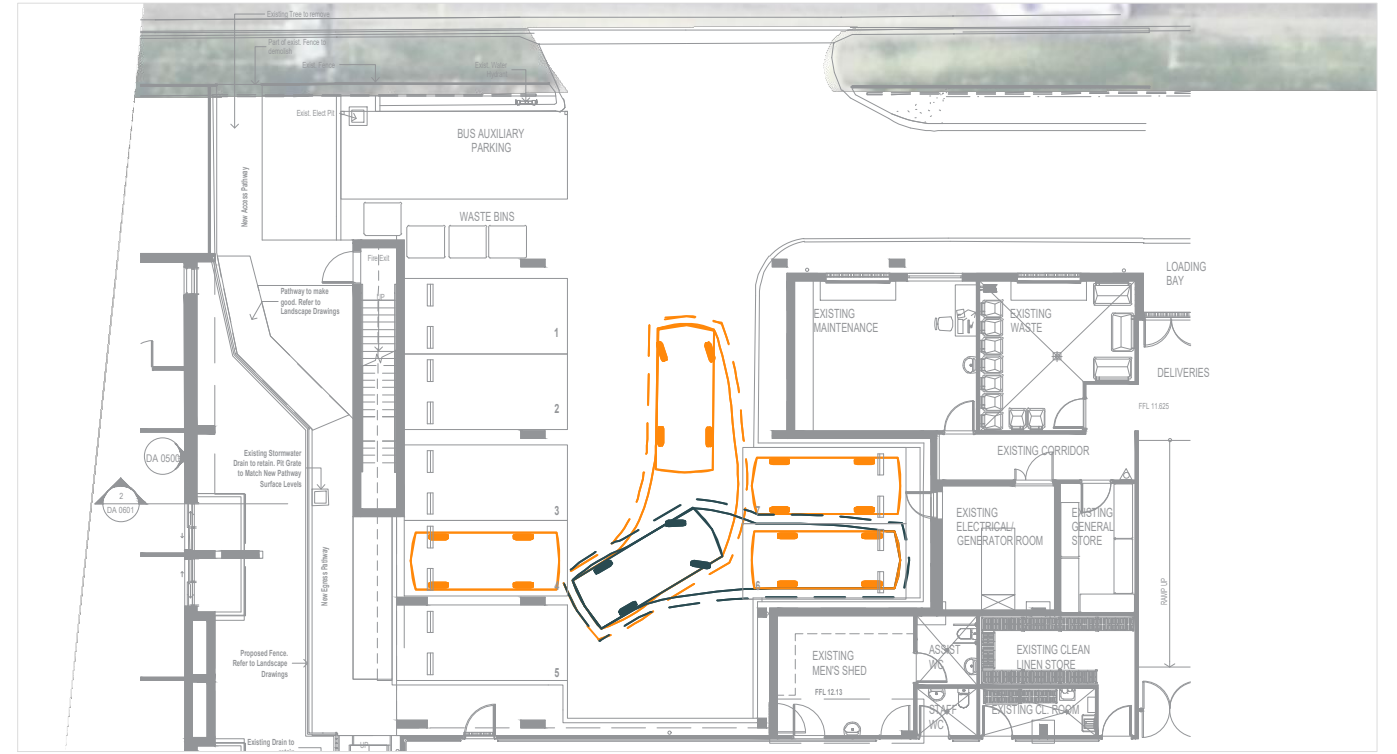
Swept Path Assessment

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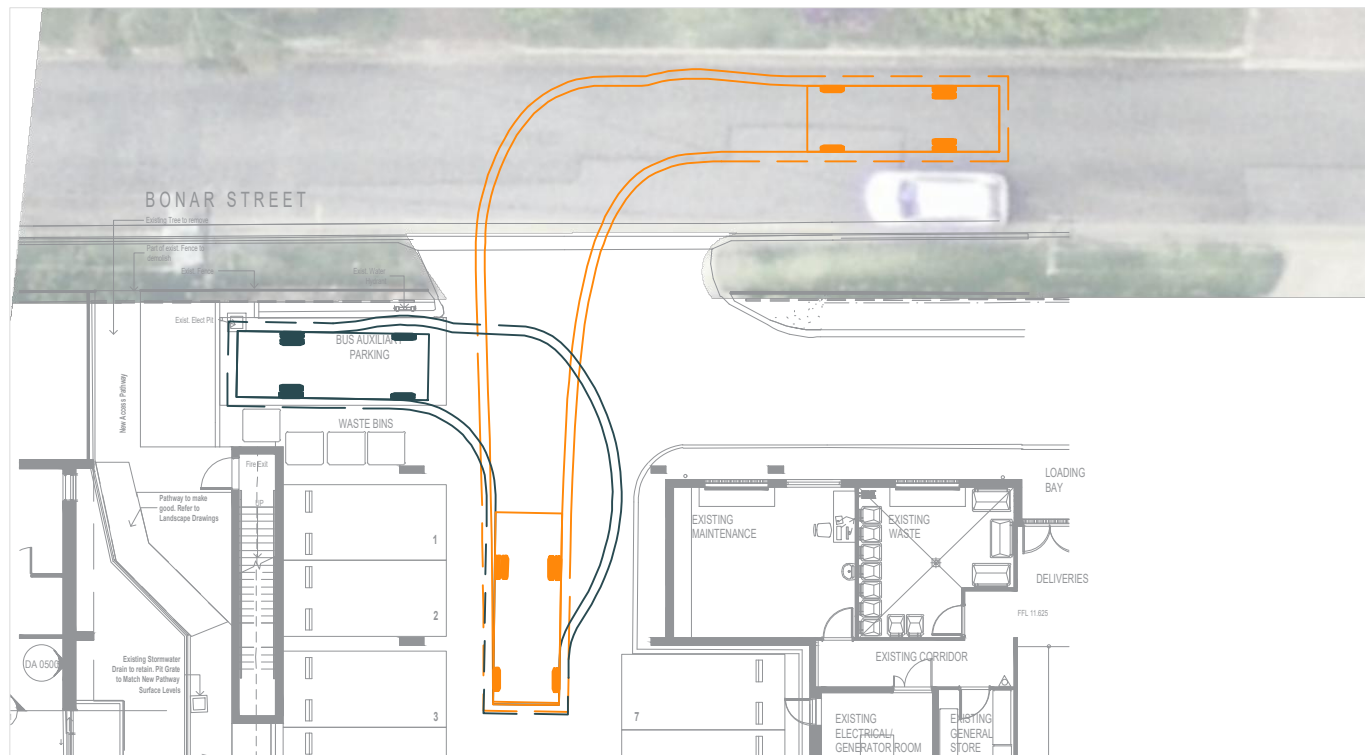




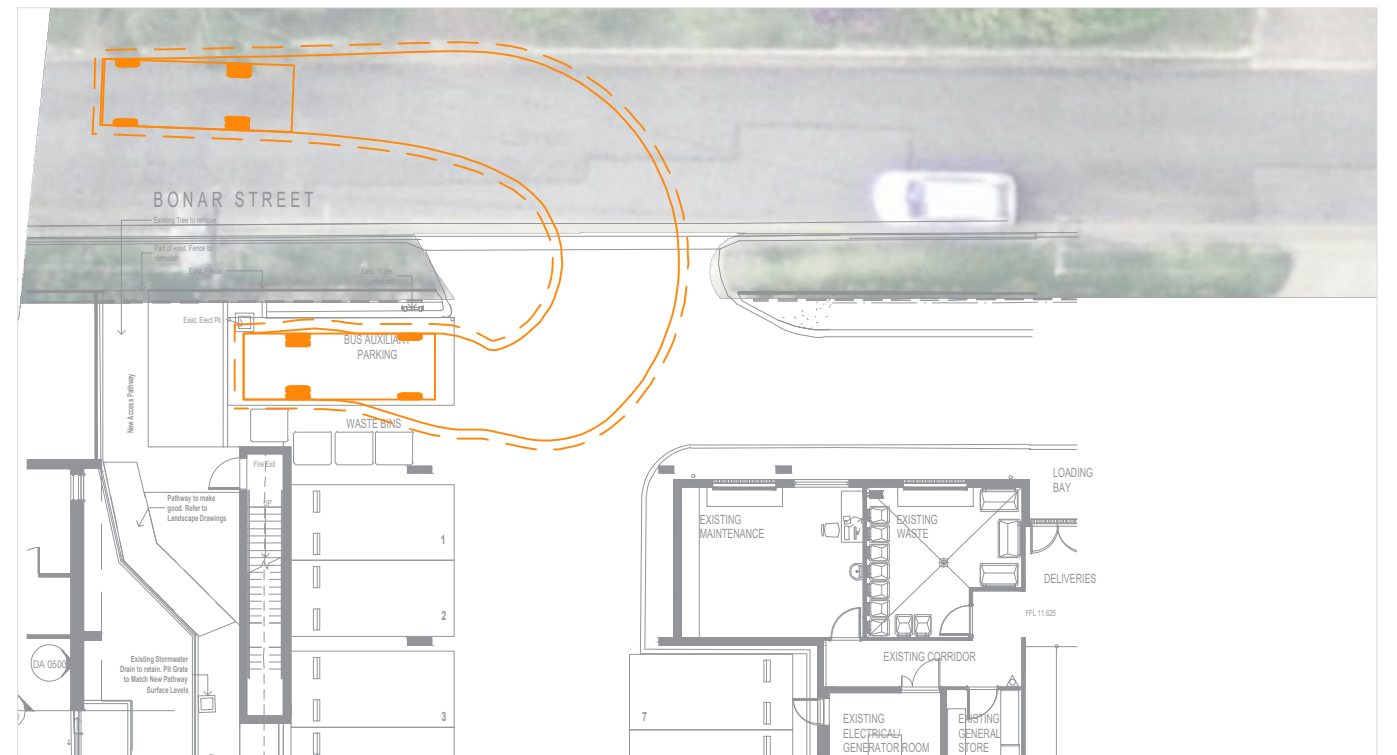
Entry Manoeuvre



Exit Manoeuvre



Minibus Space - Entry Manoeuvre



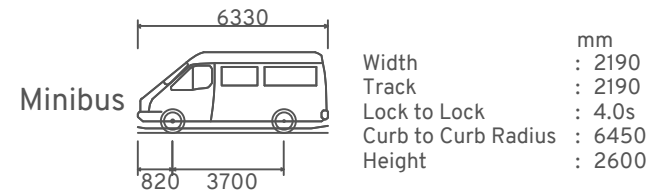
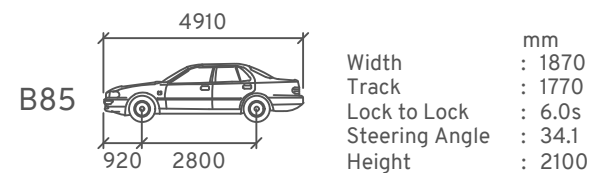
Minibus Space - Exit Manoeuvre

Vehicle Envelope

300mm Clearance

Reverse Manoeuvre

Min. Design Speed 5km/h



30 Regent Street, Maitland

Aged Care Facility

Swept Path Assessment

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