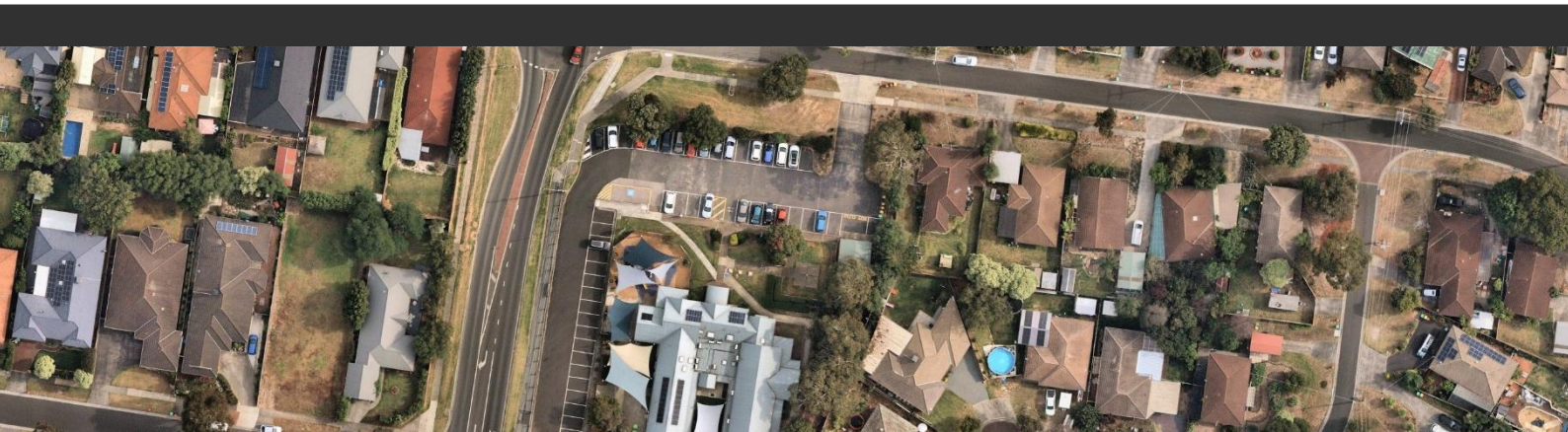


Langwarrin Community Centre

Transport Impact Assessment



230407TIA001D-F.docx

28 September 2023

onemilegrid

ABN: 79 168 115 679

(03) 9939 8250
Wurundjeri Woieworung Country
56 Down Street
COLLINGWOOD, VIC 3066
www.onemilegrid.com.au

DOCUMENT INFORMATION

Prepared for	Cohen Leigh Architects		
File Name	230407TIA001D-F.docx	Report Date	28 September 2023
Prepared by	NT	Reviewed by	JD

onemilegrid operates from Wurundjeri Woieworung Country of the Kulin nation. We acknowledge and extend our appreciation to the Wurundjeri People, the Traditional Owners of the land. We pay our respects to leaders and Elders past, present and emerging for they hold the memories, the traditions, the culture, and the hopes of all Wurundjeri Peoples.

© One Mile Grid Pty Ltd. This document has been prepared by **onemilegrid** for the client as per the terms of engagement. It may not be modified or altered, copied, reproduced, sold or transferred in whole or in part in any format to any person other than by agreement. **onemilegrid** does not assume responsibility or liability to any third party arising out of misuse of this document.

CONTENTS

1	INTRODUCTION.....	5
2	EXISTING CONDITIONS	5
2.1	Site Location	5
2.2	Planning Zones and Overlays.....	7
2.3	Road Network.....	8
2.3.1	Lang Road.....	8
2.3.2	Warrandyte Road	8
2.4	Existing Traffic Volumes	8
2.5	Sustainable Transport	9
3	DEVELOPMENT PROPOSAL.....	10
4	DESIGN ASSESSMENT	12
4.1	Frankston Planning Scheme – Clause 52.06	12
4.1.1	Design Standard 1: Accessways	12
4.1.2	Design Standard 2: Car Parking Spaces	13
4.2	Waste Collection.....	13
4.3	Bicycle Parking	13
5	LOADING	14
6	BICYCLE PARKING	14
7	CAR PARKING	15
7.1	Statutory Car Parking Requirements.....	15
7.2	Proposed Car Parking Provision	15
7.3	Car Parking Demand Assessment	16
7.4	Review of Car Parking Provision.....	16
7.5	Accessible Car Parking.....	17
8	TRAFFIC.....	18
8.1	Traffic Generation	18
8.1.1	Child Care Centre / Kindergarten and Occasional Care	18
8.1.2	Maternal Health Clinic	18
8.1.3	Community Centre.....	18
8.1.4	Total Traffic Generation	18
8.2	Traffic Impact	19
9	CONCLUSIONS.....	19

TABLES

Table 1	Traffic Volume and Speed Surveys	8
Table 2	Public Transport Provision	9
Table 3	Proposed Development	10
Table 4	Clause 52.06-9 Design Assessment – Design Standard 1	12
Table 5	Clause 52.34 – Bicycle Parking Requirements	14
Table 6	Clause 52.06 – Car Parking Requirements	15
Table 7	Child Care Case Study – Traffic Generation (Movements/Child)	18
Table 8	Traffic Generation	18

FIGURES

Figure 1	Site Location	5
Figure 2	Site Context (15 February 2023)	6
Figure 3	Planning Scheme Zones	7
Figure 4	Public Transport Provision	9
Figure 5	Site Plan	11
Figure 6	Car Parking Occupancy Survey Results – 8 th June 2023	16

APPENDIX A SWEPT PATH DIAGRAMS

1 INTRODUCTION

onemilegrid has been requested by Cohen Leigh Architects to undertake a Transport Impact Assessment of the proposed redevelopment of the Langwarrin Community Centre.

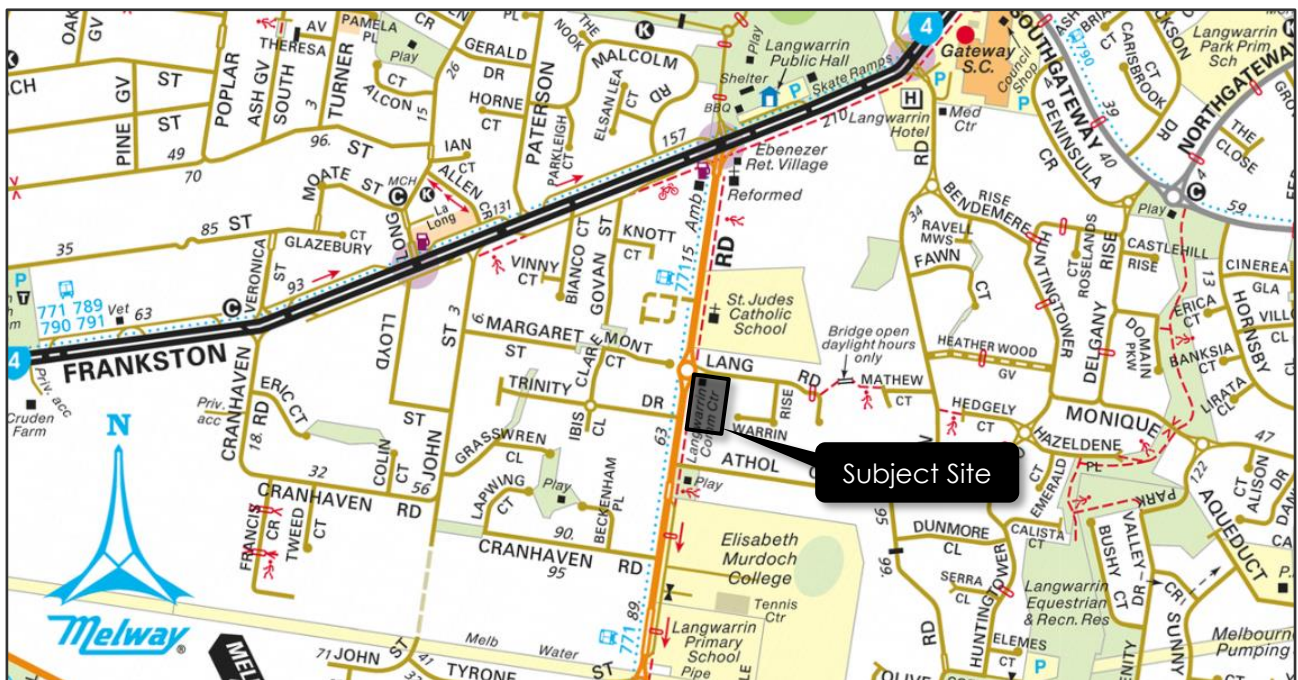
As part of this assessment the subject site has been inspected with due consideration of the development proposal, traffic and parking data has been sourced and relevant background reports have been reviewed.

2 EXISTING CONDITIONS

2.1 Site Location

The [subject site](#) is located in the southeast corner of the Warrandyte Road / Lang Road intersection, and is addressed at 2 Lang Road, Langwarrin as shown in Figure 1.

Figure 1 Site Location



Copyright Melway Publishing

The site is currently occupied by the Langwarrin Community Centre, which offers a range of community activities in addition to occasional care services. Among others, the community activities include Kung Fu and Kickboxing classes, pilates, and cooking classes.

The composition of the existing centre is as follows:

- 4x community rooms (296 m² total);
- 1x 29 child care / kindergarten room (104 m²); and
- 1x 22 occasional care room (76 m²).

Access to the site is provided in the northeast corner of the site via a double-width crossover on Lang Road, leading to a car park providing 49 parking spaces. A second vehicle access is provided from Warrandyte Road which leads to a small hardstand area separate from the car park.

Land use in the immediate vicinity of the site is largely residential in nature, and also includes St Jude's primary school less than 100 metres away to the north, and Langwarrin Primary School and Elizabeth Murdoch College approximately 500 metres to the south.

An aerial view of the subject site is provided in Figure 2.

Figure 2 Site Context (15 February 2023)

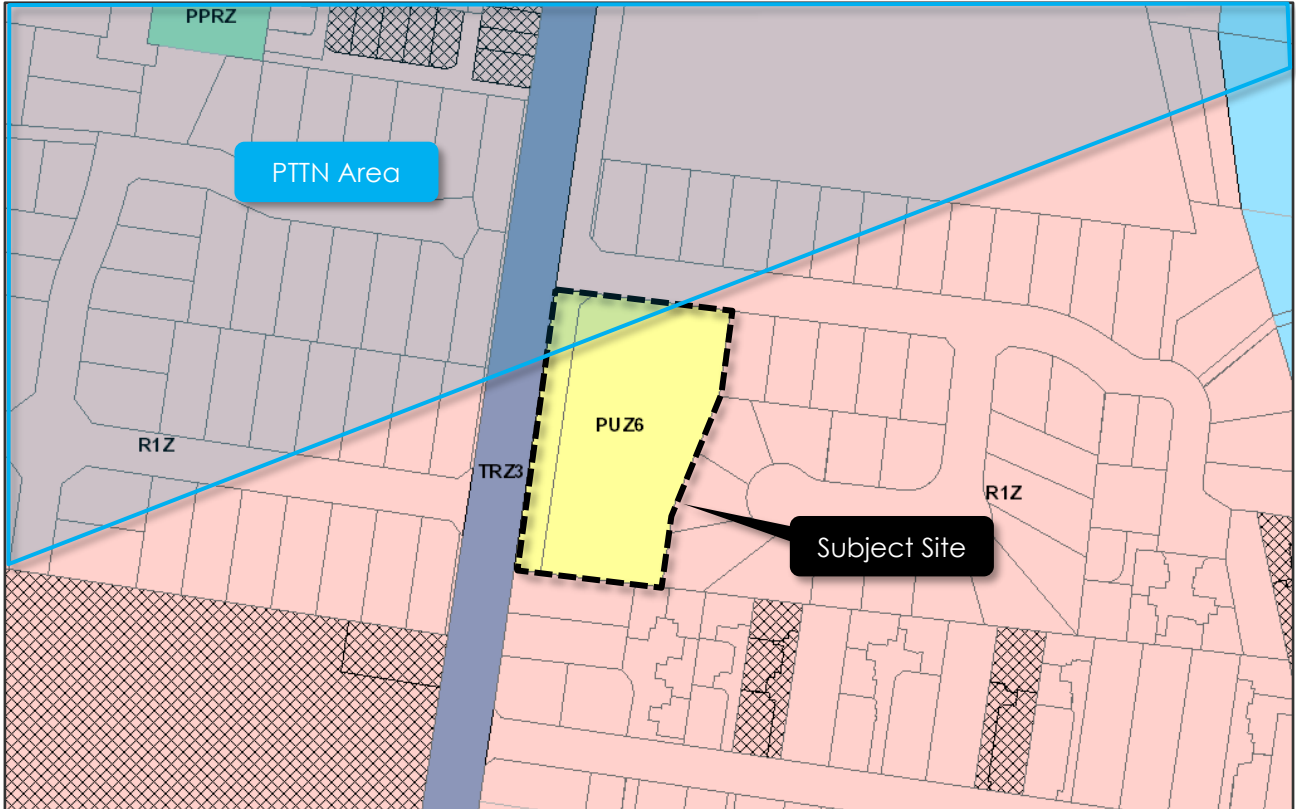


Copyright Nearmap

2.2 Planning Zones and Overlays

It is shown in Figure 3 that the site is located within a Public Use Zone (PUZ). Additionally, a small portion of the site falls within the Principle Public Transport Network (PPTN) area.

Figure 3 Planning Scheme Zones



2.3 Road Network

2.3.1 Lang Road

Lang Road is a local road generally aligned east-west, running between Warrandyte Road in the west and terminating in the east past the subject site. The intersection of Warrandyte Road and Lang Road is controlled by a roundabout.

Lang Road provides for two-way traffic and unrestricted kerbside parking. A pedestrian footpath is located on the south side of the road, along the site frontage.

The default 50km/h speed limit applies to Lang Road in the vicinity of the site.

2.3.2 Warrandyte Road

Warrandyte Road is a local road generally aligned north-south, running between Cranbourne-Frankston Road in the north, and continuing south towards Baxter. Warrandyte Road provides a single traffic lane in each direction, separated by a painted median and right turn lane into Trinity Drive to the west adjacent to the site.

Kerbside parking is restricted along Warrandyte Road in the vicinity of the site.

A 60km/h speed limit applies to Warrandyte Road in proximity to the site, which is reduced to 40 km/h during school drop-off and pick-up periods.

2.4 Existing Traffic Volumes

Traffic volume, speed and classification surveys were undertaken by Trans Traffic Survey on behalf of Frankston Council on Warrandyte Road at the Elizabeth Murdoch College frontage, approximately 320 metres south of the subject site, for a one-week period from Friday 7th March 2023 to Thursday 24th March 2023 inclusive. The results of the surveys are summarised in Table 1.

Table 1 Traffic Volume and Speed Surveys

<i>Time Period</i>	<i>Direction</i>	<i>Daily Traffic Volumes (vpd)</i>	<i>AM Peak Hour Volumes</i>	<i>PM Peak Hour Volumes</i>	<i>85th Percentile Speed (km/h)</i>
Weekday Average	Northbound	3,803	552	419	59.1
	Southbound	2,961	246	287	58.9
	Both Directions	6,761	798	693	59.0
7 Day Average	Northbound	3,525	438	356	59.7
	Southbound	2,862	199	256	59.3
	Both Directions	6,385	636	612	59.5

As shown above, Warrandyte Road currently experiences an average of 6,761 vehicle movements on a weekday, with a general bias towards northbound movements.

On weekdays, the peak periods occurred at 8:00am and 3:00pm coinciding with school drop-off and pick-up, when an average of 798 and 693 vehicle movements were recorded respectively. On weekends, a single peak occurs at midday.

2.5 Sustainable Transport

The public transport provision in the vicinity of the site is shown in Figure 4 and detailed in Table 2.

Figure 4 Public Transport Provision

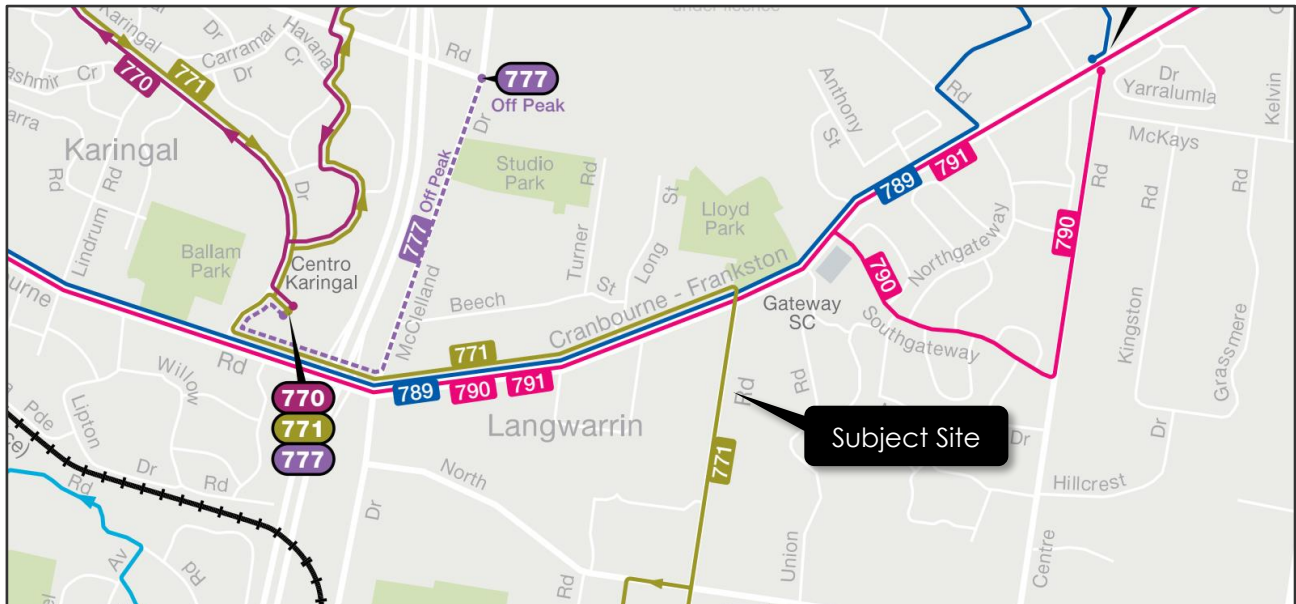


Table 2 Public Transport Provision

Mode	Route No.	Route Description	Nearest Stop/Station
Bus	771	Frankston - Langwarrin via Karingal	Athol Ct / Warrandyte Rd
	790	Frankston Station - Langwarrin via Langwarrin South	Warrandyte Rd /
	791	Frankston Station - Cranbourne Station	Cranbourne- Frankston Rd
	789	Frankston Station - Langwarrin via Langwarrin North	

It is shown that public transport in the area is limited to bus services, with several bus routes operating in the vicinity with connections to Frankston and Cranbourne train stations, and Langwarrin in general.

3 DEVELOPMENT PROPOSAL

It is proposed to redevelop and expand the subject site to provide improved community centre and occasional care facilities, in addition to new child care / kindergarten rooms and maternal health care services, and provision for an additional occasional care program within the Community Hall. A summary of the proposed development is provided in Table 3 below.

Table 3 Proposed Development

<i>Component</i>	<i>Existing</i>	<i>Proposed Additional</i>	<i>Total</i>
Community Centre	4x community rooms (296 m ² total)	-	4x community rooms (252 m ² total)
Child Care / Kindergarten	1x 29 child room	2x 33 child rooms + increased capacity to the existing room	3x 33 child rooms (99 children total)
Occasional Care	1x 22 child occasional care room (76 m ² total)	1x 40 child occasional care	62 child occasional care (218 m ² total)
Maternal Health Clinic	-	2 maternal health clinic rooms	2 maternal health clinic rooms (66 m ² total)

As part of the redevelopment, it is proposed to modify the car park to provide 54 parking spaces (inclusive of 2 accessible spaces) with revised line marking to improve circulation. Furthermore, 6 of the spaces are proposed in tandem (3 pairs) which will all be allocated to staff.

The existing vehicle access to Lang Road will remain as the sole vehicle access to the car park. The vehicle crossover from Warrandyte Road will be removed and reinstated with kerb and channel.

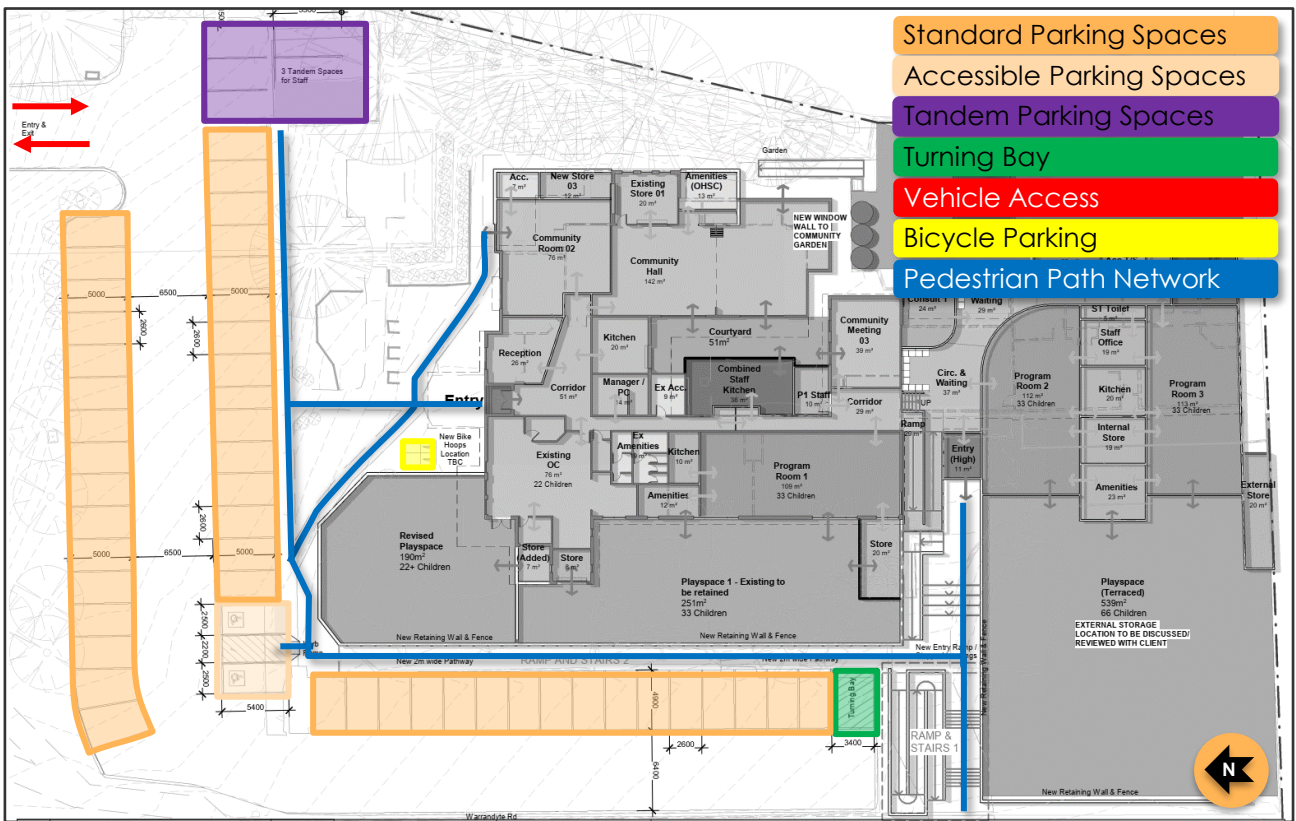
Bicycle parking is proposed adjacent the existing building entrance, providing a total of 4 bicycle spaces.

Additionally, a new pedestrian entrance from Warrandyte Road is proposed south of the car park, which will be provided with connectivity to the existing path network via a pedestrian connection along the west side of the building.

No formal loading area is proposed as majority of loading activities will occur using smaller vehicles which can use the standard parking spaces, consistent with existing conditions.

The site plan is provided in Figure 5 below.

Figure 5 Site Plan



4 DESIGN ASSESSMENT

4.1 Frankston Planning Scheme – Clause 52.06

onemilegrid has undertaken an assessment of the car parking layout and access for the proposed development with due consideration of the Design Standards detailed within Clause 52.06-9 of the Planning Scheme. A review of those relevant Design Standards is provided in the following sections.

4.1.1 Design Standard 1: Accessways

A summary of the assessment for Design Standard 1 is provided in Table 4.

Table 4 Clause 52.06-9 Design Assessment – Design Standard 1

<i>Requirement</i>	<i>Comments</i>
Be at least 3 metres wide.	Satisfied – all internal accessways allow for concurrent two-way movements
Have an internal radius of at least 4 metres at changes of direction or intersection or be at least 4.2 metres wide.	Satisfied – accessways are in excess of 4.2 metres wide
Allow vehicles parked in the last space of a dead-end accessway in public car parks to exit in a forward direction with one manoeuvre.	Satisfied – a turnaround bay is provided at the end of the parking aisle.
Provide at least 2.1 metres headroom beneath overhead obstructions, calculated for a vehicle with a wheel base of 2.8 metres.	N/A – No overhead obstructions
If the accessway serves four or more car spaces or connects to a road in a Transport Zone 2 or Transport Zone 3, the accessway must be designed so that cars can exit the site in a forward direction.	Satisfied – all drivers may exit forwards
Provide a passing area at the entrance at least 6.1 metres wide and 7 metres long if the accessway serves ten or more car parking spaces and is either more than 50 metres long or connects to a road in a Transport Zone 2 or Transport Zone 3.	Satisfied – all aisles are at least 6.4 metres wide
Have a corner splay or area at least 50 per cent clear of visual obstructions extending at least 2 metres along the frontage road from the edge of an exit lane and 2.5 metres along the exit lane from the frontage, to provide a clear view of pedestrians on the footpath of the frontage road. The area clear of visual obstructions may include an adjacent entry or exit lane where more than one lane is provided, or adjacent landscaped areas, provided the landscaping in those areas is less than 900mm in height.	Satisfied – exit side of accessway is devoid of any sight obstructions
If an accessway to four or more car parking spaces is from land in a Transport Zone 2 or Transport Zone 3, the access to the car spaces must be at least 6 metres from the road carriageway.	N/A – no access to a Transport Zone

4.1.2 Design Standard 2: Car Parking Spaces

All car spaces on-site are proposed to be modified to provide a minimum width of 2.6 metres, length of 4.9 metres and accessed from aisles of no less than 6.4 metres, in accordance with Design Standard 2 of the Planning Scheme.

The tandem spaces are provided with a width of 2.6 metres and length of 5.4 metres in accordance with the requirements for tandem spaces.

The accessible bays are provided with a length of 5.4 metres and a width of 2.4 metres, and an adjacent shared area of the same dimensions, in accordance with the Australian Standard for Parking facilities, Part 6: Off-street parking for people with disabilities (AS 2890.6:2022).

The dead-end access aisle has been provided with a dedicated turn around bay in accordance with the Australian Standard for Off-street Parking. The turnaround bay is proposed with a larger width of 3.4 metres which accounts for the lack of aisle extension.

Swept path diagrams have been provided within Appendix A demonstrating circulation within the car park and suitable access to critical parking spaces.

4.2 Waste Collection

A bin storage area is located adjacent the car park. Bins will be transferred to Lang Road for collection by Council on collection days.

This arrangement is consistent with that of the existing use.

4.3 Bicycle Parking

Bicycle parking is proposed in the form of on-ground bicycle hoops.

The bicycle hoops have been designed in accordance with the Australian Standards; specifically, they are provided at one metre centres, with an envelope of 1.8 metres provided for bicycles and a 1.5 metre access aisle.

5 LOADING

Clause 65 (Decision Guidelines) of the Frankston Planning Scheme identifies that “Before deciding on an application or approval of a plan, the responsible authority must consider, as appropriate: The adequacy of loading and unloading facilities and any associated amenity, traffic flow and road safety impacts.”

Given the nature of the development, it is not considered practical or necessary to provide an on-site loading bay. It is expected that the majority of deliveries will occur via small vans and utility vehicles, which can utilise the existing on-site parking. Alternatively, larger vehicles may access the site outside of typical operating hours if use of the car spaces is required for manoeuvring.

The provision for loading is therefore considered appropriate for the proposed use.

6 BICYCLE PARKING

The bicycle parking requirements for the subject site are identified in Clause 52.34 of the Frankston Planning Scheme, which specifies the requirements for the different components of the proposed development. For completeness, the requirements for the entire development (existing and proposed) are provided below.

For assessment purposes, the community centre most closely falls under the ‘place of assembly’ land use, and the maternal health clinic most closely falls under the ‘medical centre’ land use. There is no bicycle parking requirements for a child care centre / kindergarten or occasional care land uses.

Table 5 Clause 52.34 – Bicycle Parking Requirements

Component	No/Area	Requirement	Total
Maternal Health Clinic (medical centre)	2 practitioners	1 space per 8 practitioners for employees	0
		1 space per 4 practitioners for visitors	1
Community Centre (place of assembly)	252 m ²	1 space per 1,500m ² for employees	0
		2 + 1 space per 1,500m ² for visitors	2
Total		Employees	0
		Visitors	3

It is proposed to provide a total of 4 bicycle parking spaces available for visitor use.

Considering the above, the proposed provision of bicycle parking exceeds the requirements of the Planning Scheme for both the existing and proposed uses, and is therefore considered appropriate.

7 CAR PARKING

7.1 Statutory Car Parking Requirements

The car parking requirements for the subject site are identified in Clause 52.06 of the Frankston Planning Scheme, which specifies the requirements for the different components of the proposed development.

In the case of existing uses being expanded with new or additional facilities, the parking requirements apply only to the proposed increase from existing conditions. This includes the additional child care / kindergarten places, maternal health clinic, and increase in occasional care places, as summarised in Table 6 below.

Furthermore, as the site is located within the Principal Public Transport Network Area, the Column B car parking rates apply to the proposed development.

Table 6 Clause 52.06 – Car Parking Requirements

<i>Use</i>	<i>No/Area</i>	<i>Rate</i>	<i>Car Parking Measure</i>	<i>Total</i>
Child Care Centre / Kindergarten	70 children	0.22	to each child	15
Occasional Care	40 children	0.22	to each child	8
Maternal Health Clinic (medical centre)	2 staff 66 m ²	3.5	to each 100 m ² of leasable floor area	2
Total				25

Based on the above calculations, a total of 25 additional parking spaces are required for the proposed development.

7.2 Proposed Car Parking Provision

It is proposed to provide an additional 5 parking spaces (for a total supply of 54 spaces), which equates to a shortfall of 20 spaces when compared to the Planning Scheme requirements.

In this regard, Clause 52.06-7 of the Frankston Planning Scheme indicates that an application to reduce the requirement for car spaces must be accompanied by a Car Parking Demand Assessment. The Assessment must assess the car parking demand likely to be generated by the proposed development, having consideration to a number of contextual factors including the variation of car parking demand likely to be generated by the proposed use over time, and any empirical assessment or case study.

An assessment of the likely parking demands generated by the proposed use is set out below, which has been restricted to an assessment of the additional components only.

7.3 Car Parking Demand Assessment

For assessment purposes, the Planning Scheme statutory rate for the child care centre / kindergarten and occasional care of 0.22 spaces per child will be adopted for the additional 70 and 40 children for the child care and occasional care respectively. This equates to a demand for 15 spaces for the child care and 8 spaces for the occasional care. It is of noted that this rate is inclusive of staff and parent pick-up/drop-off demands.

For the maternal health clinic, the statutory car parking rate of 3.5 spaces per 100 m² floor area will be adopted for assessment purposes, amounting to 2 parking spaces.

Based on the above, the proposed additions may generate parking demands of up to 25 spaces, which results in a shortfall of 20 spaces.

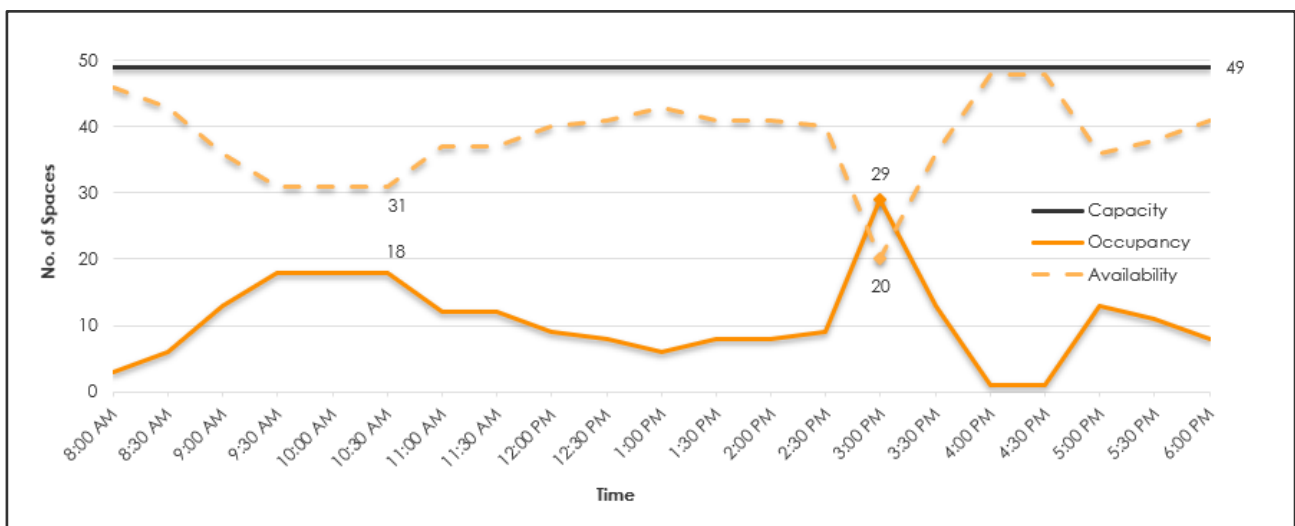
In this regard, Clause 52.06-7 of the Frankston Planning Scheme further indicates that a permit may be granted to reduce the number of parking spaces with consideration of a number of strategic factors, including the availability of car parking associated with the existing use of the land, assessed below.

7.4 Review of Car Parking Provision

In order to understand the existing parking demands and availability on site, car parking occupancy surveys were undertaken by Trans Traffic Survey on behalf of **onemilegrid** on Thursday 8th June 2023 between 8:00am and 6:00pm. Information provided by the operator suggests Thursdays are one of the busiest days for the site, with on-site activities including occasional care, elderly fitness groups, computer courses, and kung-fu and ukelele lessons.

The survey results are summarised in Figure 6 below.

Figure 6 Car Parking Occupancy Survey Results – 8th June 2023



The surveys identified peak occupancy at 3:00pm, when 29 of the total 49 spaces were occupied (59%), leaving a minimum of 20 spaces available at all times. This peak occurs as a 'spike' between 2:30pm when 9 spaces were occupied, and 3:30pm when 13 spaces were occupied.

This period also coincides with the pick-up period for the nearby schools, hence a portion of the parking occupancy may be due to parents parking on-site (as opposed to parking at the school) to pick up their children. Nonetheless, the maximum occupancy of 29 spaces will be adopted as the existing on-site demand.

It is of note that other than the peak at 3:00pm, the highest occupancy was recorded between 9:30am – 10:30am when 18 spaces were occupied (37%), leaving no less than 31 spaces available for use outside of peak periods.

Based on the preceding assessment, a future parking demand of 54 spaces is expected, comprising 29 spaces for the existing operation and 25 spaces for the proposed additions. It is reiterated that this maximum demand will only occur during a small period coinciding with school pick-up.

Therefore, the provision of 54 parking spaces is considered appropriate in accommodating the expected demands.

It is of note that children enrolled in the occasional care programs likely attend St. Jude's or Langwarrin Primary School, both of which are located on Warrandyte Road within walking distance of the site. These children would walk to the site after school and consequently will not generate any parking demands during the critical after school pick-up period. Therefore, the actual parking demands will be lower than what is identified above.

7.5 Accessible Car Parking

The National Construction Code specifies the minimum requirements for provision of accessible car parking.

The proposed child care / kindergarten development and place of assembly (community centre) uses are classified as a Class 9B building, and require provision of one accessible car space for every 50 car parking spaces or part thereof for the first 1,000 spaces, and then 1 space per 100 car parking spaces or part thereof in excess of 1,000 spaces.

Noting the proposed provision of 54 car spaces on-site, the National Construction Code (NCC) requires at least two accessible car space on-site.

The proposed provision of two spaces thus satisfies the NCC requirements.

8 TRAFFIC

8.1 Traffic Generation

8.1.1 Child Care Centre / Kindergarten and Occasional Care

In order to establish traffic generation rates for similar uses, **onemilegrid** undertook turning movement surveys of existing child care centres at 418 Mt Dandenong Rd, Croydon (Goodstart Early Learning Croydon) and 18 Grange Road, Alphington (Smart Start Early Learning and Development Centre).

A summary of the case-study results is provided below, representing the peak traffic generation in relation to the maximum number of child care places.

Table 7 Child Care Case Study – Traffic Generation (Movements/Child)

Site	No. Places	AM Peak				PM Peak			
		Time	In	Out	Total	Time	In	Out	Total
Alphington	120	7:45am-8:45am	0.28	0.25	0.53	4:15pm-5:15pm	0.28	0.32	0.59
Croydon	90	7:45am-8:45am	0.33	0.28	0.61	4:30pm-5:30pm	0.32	0.36	0.68
Average			0.31	0.27	0.57		0.30	0.34	0.64

Applying the average rates above (0.57 during the AM peak and 0.64 during the PM peak) to the increase of 70 children for the child care equates to an expected generation of 63 movements during the AM peak and 70 movements during the PM peak.

8.1.2 Maternal Health Clinic

It is expected that the maternal health clinic will generate four vehicle movements during the peak hours, comprising two staff movements and two visitor movements.

8.1.3 Community Centre

As part of the redevelopment, the number of community centre rooms will remain the same, with an overall slight reduction in floor area. Therefore, there is not expected to be any additional traffic generated relating to the community centre use.

8.1.4 Total Traffic Generation

The total traffic generated by the proposed additions is summarised in Table 8 below.

Table 8 Traffic Generation

Component	AM Peak	PM Peak
Child Care Centre / Kindergarten and Occasional Care	63	70
Maternal Health Clinic	4	4
Community Centre	0	0
Total	67	74

8.2 Traffic Impact

Based on the above, it is expected the subject site will generate a total of 67 additional movements during the AM peak hour, and 74 additional movements during the PM peak hour. This equates to less than two additional movements per minute, which will be split between inbound and outbound movements, and is considered low in traffic engineering terms.

As discussed in Section 2.4, Warrandyte Road currently experiences an average of 798 movements during the AM peak hour and 693 movements in the PM peak hour. The additional traffic generated from the subject site equates to an approximate increase of 9% of these volumes.

In light of the above, the additional traffic generated by the proposed development is not expected to have any significant impacts on the operation of Lang Road or Warrandyte Road and is expected to be easily absorbed into the surrounding road network.

9 CONCLUSIONS

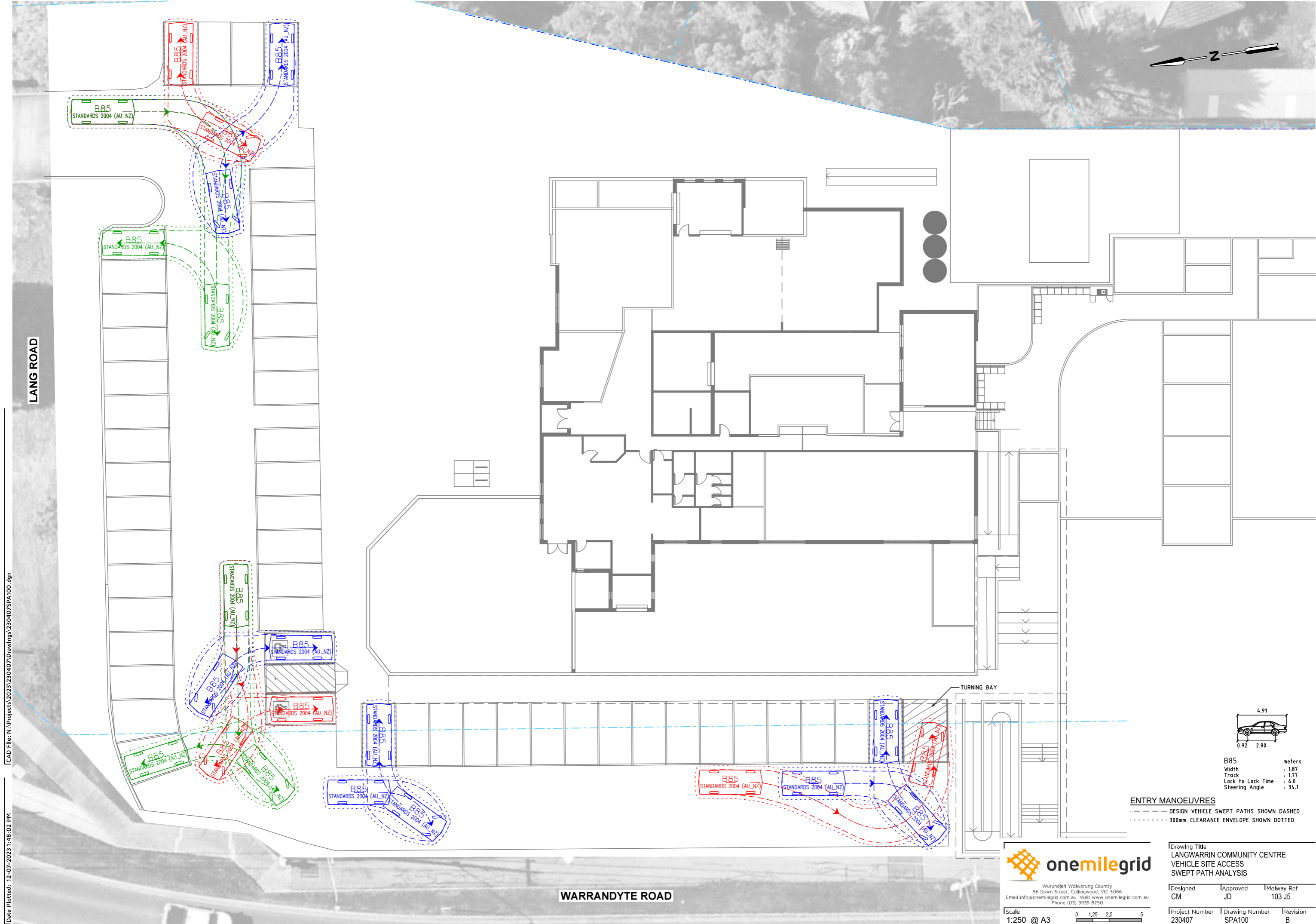
It is proposed to redevelop the subject site for the purposes of improved community and child care / kindergarten spaces, with minor modifications to the existing car park to provide an increased provision of 54 spaces.

Considering the analysis presented above, it is concluded that:

- The car parking layouts and accesses have been designed generally in accordance with the requirements of the Planning Scheme and are considered appropriate;
- The provision and design of bicycle parking is considered appropriate;
- The provision of loading is considered appropriate;
- Based on the car parking surveys, the proposed provision of car parking is considered sufficient to accommodate additional parking demands; and
- The additional traffic generated by the proposed development is not expected to have any significant impacts on the operation of Lang Road or Warrandyte Road and is expected to be easily absorbed into the surrounding road network.

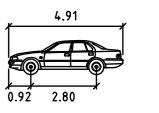
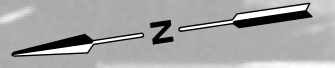
Appendix A Swept Path Diagrams





LANG ROAD

WARRANDYTE ROAD



B85 meters
 Width : 1.87
 Track : 1.77
 Lock to Lock Time : 6.0
 Steering Angle : 34.1

ENTRY MANOEUVRES
 - - - DESIGN VEHICLE SWEEP PATHS SHOWN DASHED
 ······ 300mm CLEARANCE ENVELOPE SHOWN DOTTED



Wurundjeri Woiwurrung Country
 56 Down Street, Collingwood, VIC 3066
 Email: info@onemilegrid.com.au Web: www.onemilegrid.com.au
 Phone: (03) 9939 8250

Scale 1:250 @ A3
 0 1.25 2.5 5 meters

Drawing Title
**LANGWARRIN COMMUNITY CENTRE
 VEHICLE SITE ACCESS
 SWEEP PATH ANALYSIS**

Designed CM	Approved JD	Melway Ref 103 J5
Project Number 230407	Drawing Number SPA100	Revision B

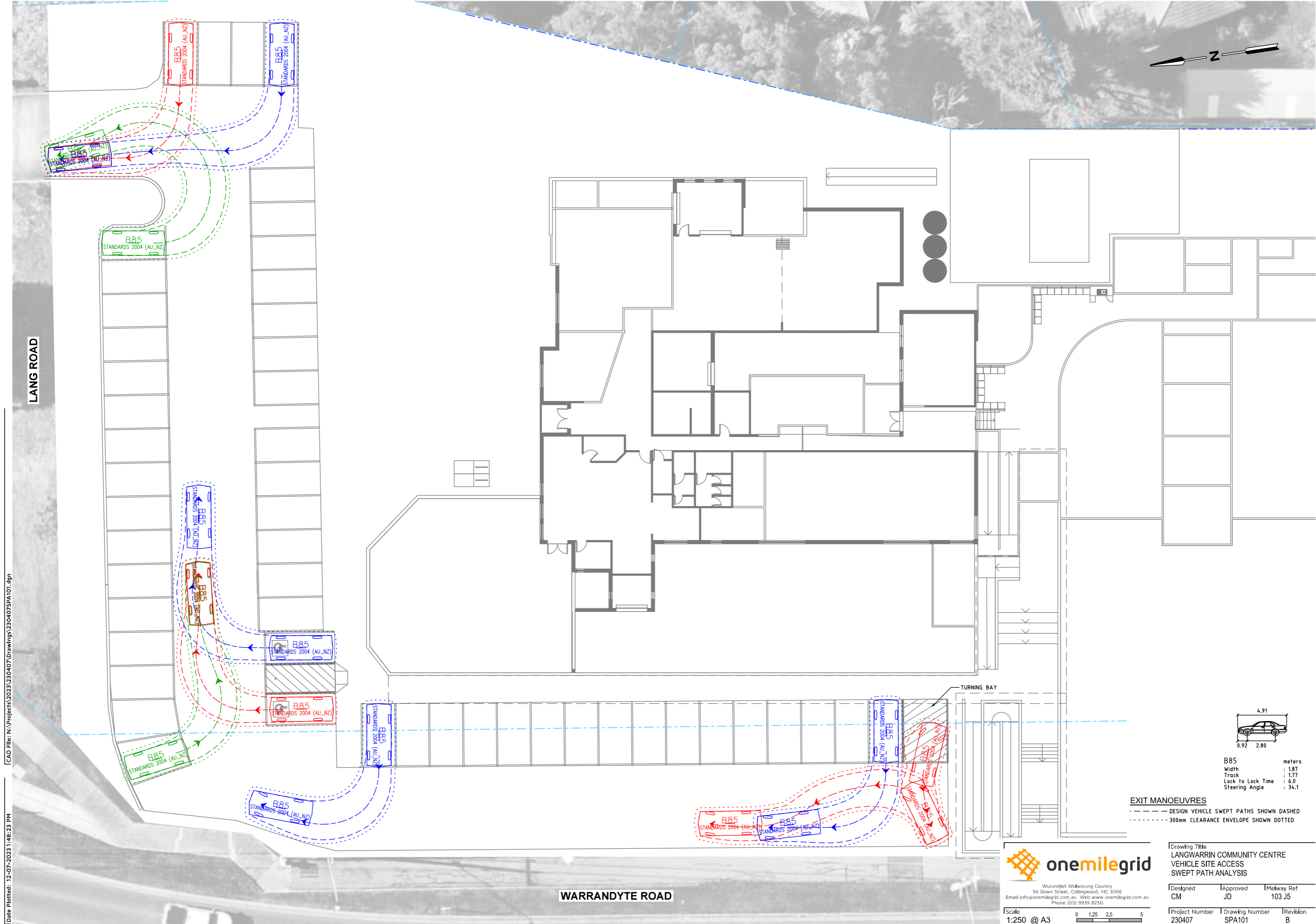
CAD File: N:\Project\2023\230407\Drawings\230407SPA100.dgn

Date Plotted: 12-07-2023 1:48:02 PM

Copyright
 This document may only be used for its commissioned purpose. No part of this document may be reproduced, modified or transmitted without the written authority of onemilegrid. Unauthorised use of this document in any form is prohibited.

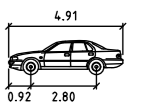
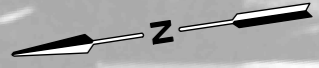
onemilegrid operates from Wurundjeri Woiwurrung Country of the Kulin nation. We acknowledge and extend our appreciation to the Wurundjeri People, the Traditional Owners of the land. We pay our respects to leaders and elders past, present and emerging for they hold the memories, the traditions, the culture, and the hopes of all Wurundjeri Peoples.

Aerial Photography
 Aerial photography provided by Nearmap



LANG ROAD

WARRANDYTE ROAD



B85 meters
 Width : 1.87
 Track : 1.77
 Lock to Lock Time : 6.0
 Steering Angle : 34.1

EXIT MANOEUVRES
 - - - - DESIGN VEHICLE SWEEP PATHS SHOWN DASHED
 ······ 300mm CLEARANCE ENVELOPE SHOWN DOTTED



Wurundjeri Woiwurrung Country
 56 Down Street, Collingwood, VIC 3066
 Email: info@onemilegrid.com.au Web: www.onemilegrid.com.au
 Phone (03) 9939 8250

Scale 1:250 @ A3
 0 1.25 2.5 5 meters

Drawing Title
**LANGWARRIN COMMUNITY CENTRE
 VEHICLE SITE ACCESS
 SWEEP PATH ANALYSIS**

Designed CM	Approved JD	Melway Ref 103 J5
----------------	----------------	----------------------

Project Number 230407	Drawing Number SPA101	Revision B
--------------------------	--------------------------	---------------

CAD File: N:\Project\2023\230407\Drawings\230407SPA101.dgn

Date Plotted: 12-07-2023 1:48:23 PM

Copyright
 This document may only be used for its commissioned purpose. No part of this document may be reproduced, modified or transmitted without the written authority of onemilegrid. Unauthorised use of this document in any form is prohibited.

onemilegrid operates from Wurundjeri Woiwurrung Country of the Kulin nation.
 We acknowledge and extend our appreciation to the Wurundjeri People, the Traditional Owners of the land.
 We pay our respects to leaders and Elders past, present and emerging for they hold the memories,
 the traditions, the culture, and the hopes of all Wurundjeri Peoples.

Aerial Photography
 Aerial photography provided by Nearmap