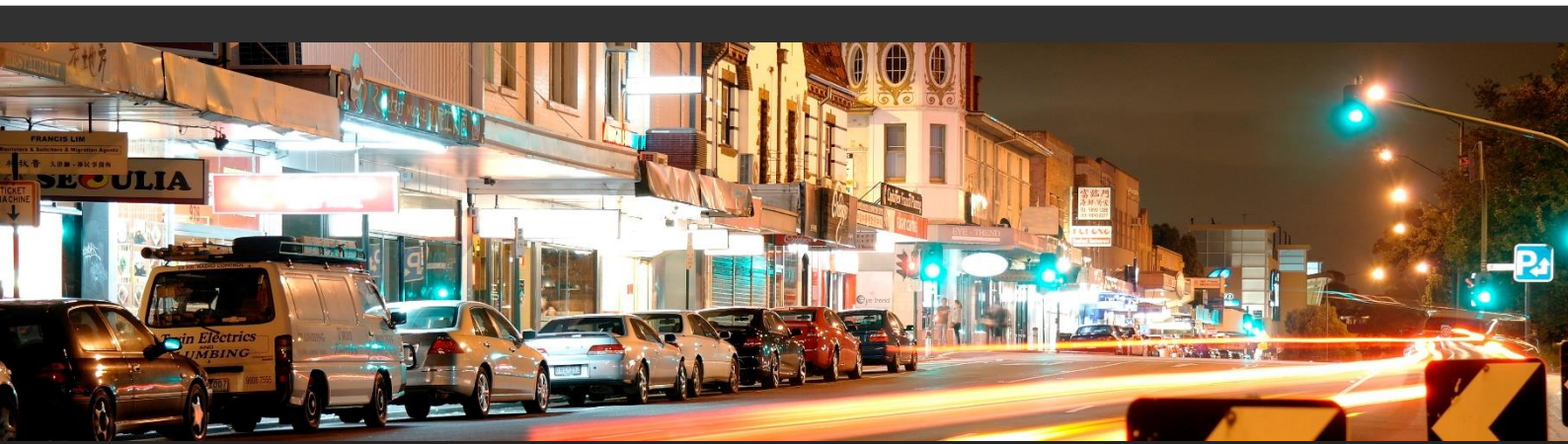


4 Cypress Lane, Torquay

Transport Impact Assessment



SURF COAST SHIRE COUNCIL
Planning Department

6/03/2024

21/0333 / D24/42567

210296TIA001G-F.docx

5 March 2024

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	Jedi Building Group	Report Date	5 March 2024
File Name	210296TIA001G-F.docx	Reviewed by	VPG
Prepared by	JM		

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.

SURF COAST SHIRE COUNCIL
Planning Department

6/03/2024
4 Cypress Lane, Torquay Transport Impact Assessment
210296TIA001G-F.docx 5 March 2024
21/0333 / D24/42567

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	Cypress Lane	8
2.3.2	Coombes Road	8
2.3.3	Surf Coast Highway	8
2.4	Existing Traffic Volumes.....	9
3	TORQUAY JAN JUC DEVELOPMENT CONTRIBUTIONS PLAN.....	10
4	DEVELOPMENT PROPOSAL.....	11
4.1	General	11
4.2	Vehicular Access and Car Parking	11
4.3	Pedestrian Access	13
5	DESIGN ASSESSMENT	14
5.1	Surf Coast Planning Scheme – Clause 52.06	14
5.1.1	Design Standard 1 – Accessways	14
5.1.2	Design Standard 2 – Car Parking Spaces	15
5.1.3	Design Standard 3 – Gradients	15
5.2	Bicycle Parking	16
5.3	Waste Collection.....	16
6	LOADING	16
7	BICYCLE PARKING	16
8	CAR PARKING	17
8.1	Statutory Car Parking Requirements.....	17
8.2	Accessible Car Parking.....	17
9	TRAFFIC.....	18
9.1	Traffic Generation	18
9.2	Traffic Distribution	18
9.3	Traffic Volume Growth.....	19
9.4	Turn Lane Warrant Assessment.....	19
9.5	Traffic Impact	20
10	CONCLUSIONS.....	21

TABLES

Table 1	Traffic Volume and Speed Surveys	9
Table 2	Proposed Development	11
Table 3	Clause 52.06-9 Design Assessment – Design Standard 1	14
Table 4	Clause 52.06-9 Design Assessment – Design Standard 3	15
Table 5	Clause 52.06 – Car Parking Requirements	17
Table 6	Surveyed Traffic Generation Rate – Existing Ingenia Site	18
Table 7	Anticipated traffic generation	18
Table 8	Traffic Volume and Speed Surveys	19

FIGURES

Figure 1	Site Location	5
Figure 2	Site Context (6 July 2023)	6
Figure 3	Planning Scheme Zones	7
Figure 4	Coombes Road / Surf Coast Highway Signalised Intersection Construction Plan	9
Figure 5	Torquay Jan Juc DCP	10
Figure 6	Internal Road Network	12
Figure 7	Pedestrian Footpath Network	13
Figure 8	Generated Traffic Volumes	18
Figure 9	Austrroads Turn Treatment Warrants	19
Figure 10	Proposed Turn Treatments	20

APPENDICES

APPENDIX A	SWEPT PATH DIAGRAMS	22
APPENDIX B	CONCEPT LAYOUT PLAN	23

1 INTRODUCTION

onemilegrid has been requested by Jedi Building Group to undertake a Transport Impact Assessment of the proposed retirement village at 4 Cypress Lane, Torquay.

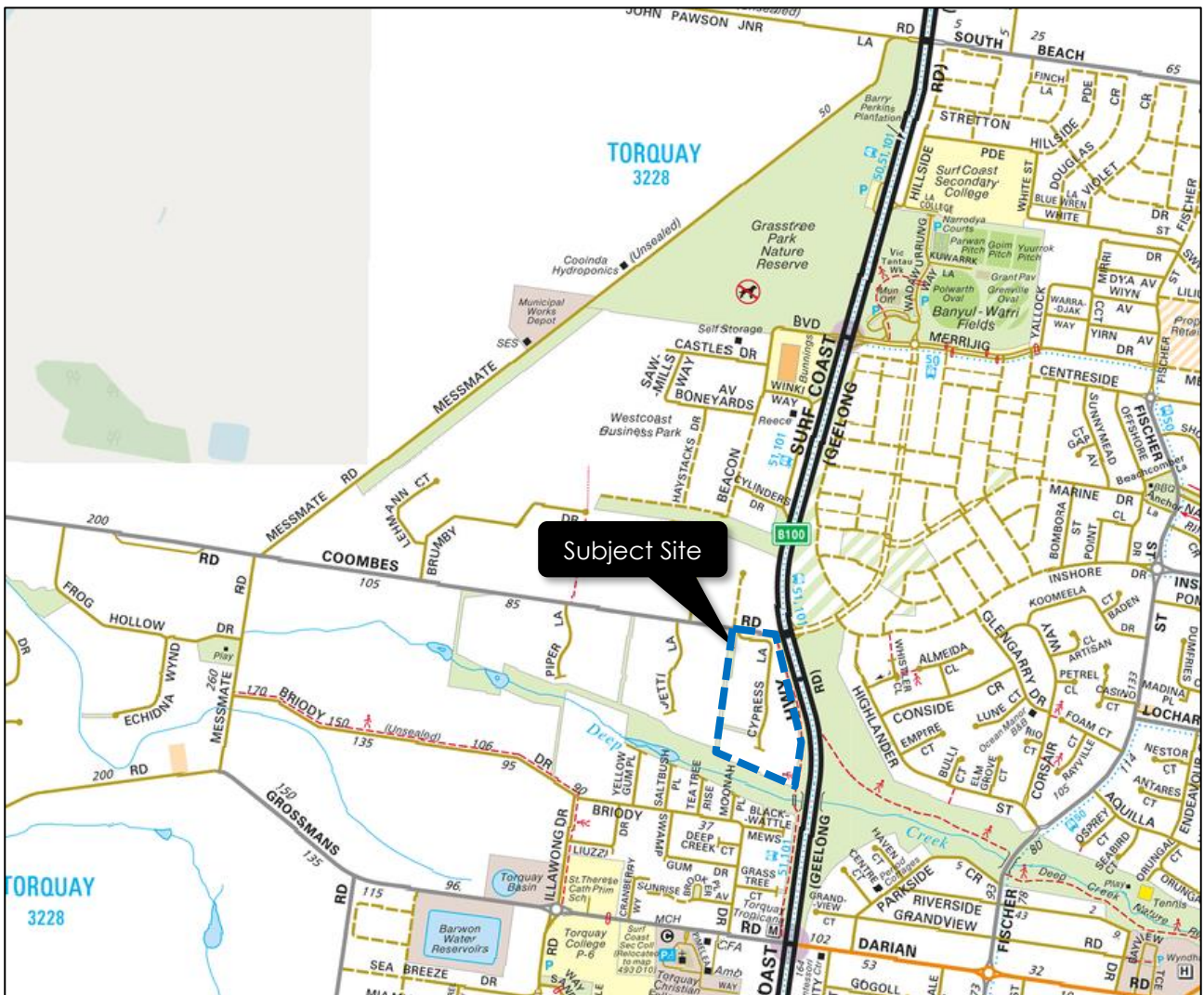
As part of this assessment the subject site has been inspected with due consideration of the development proposal, traffic has been sourced and relevant background reports have been reviewed.

2 EXISTING CONDITIONS

2.1 Site Location

The subject site is addressed as 4 Cypress Lane, Torquay, and is located on the south-western corner of the intersection between Coombes Road and Surf Coast Highway, as shown in Figure 1.

Figure 1 Site Location



Copyright Melway Publishing

The site is irregular in shape with a total area of approximately 65,000 m². The site has been subdivided into a number smaller lots (10 lots in total) with a Council road providing access to

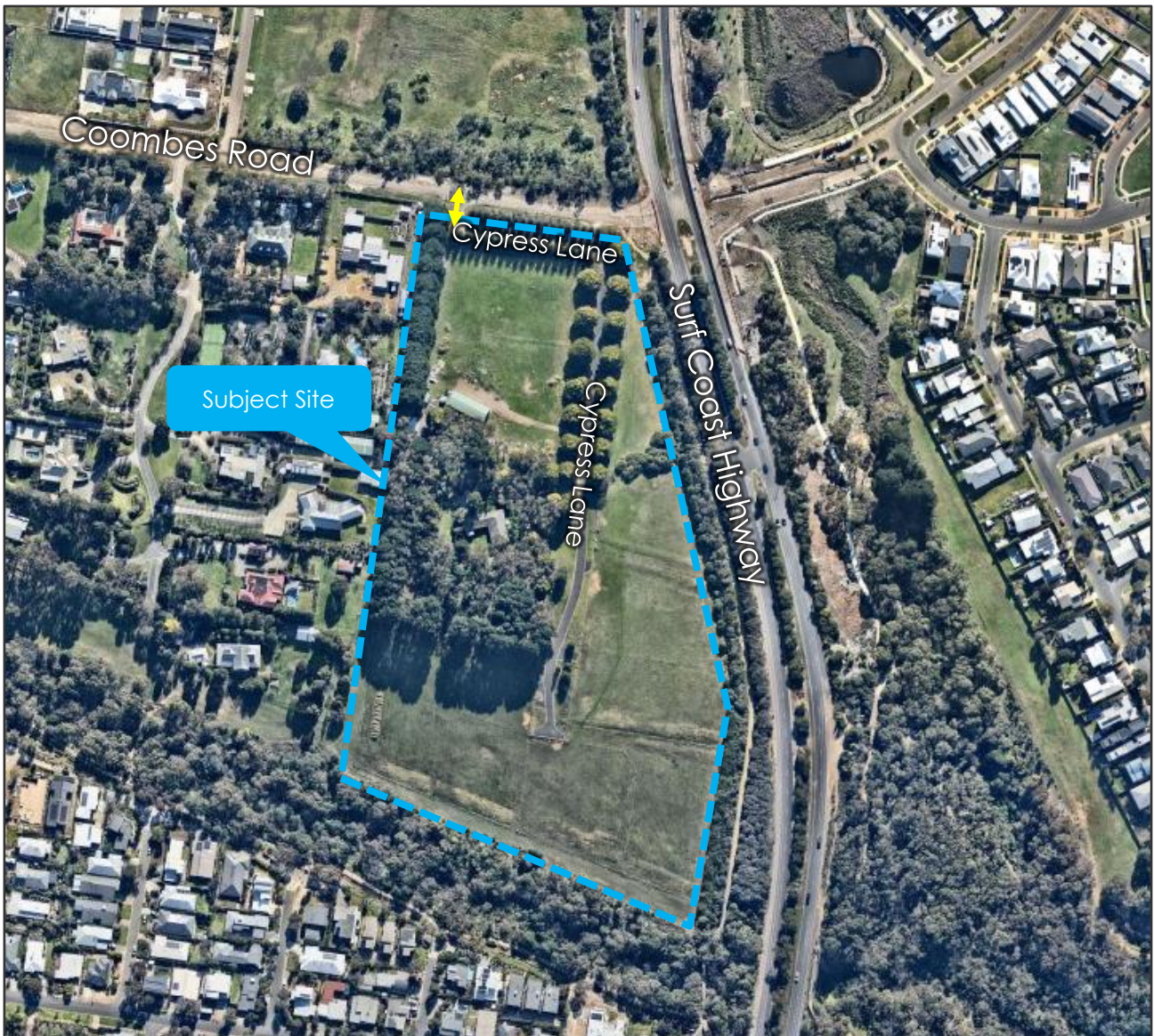
SURF COAST SHIRE COUNCIL
Planning Department
6/03/2024
4 Cypress Lane, Torquay
 210296TIA001C-F.docx 5 March 2024
 21/0333 / D24/42567

individual lots. Notwithstanding the subdivision, only a single dwelling occupies the site which is presumably the original dwelling on the site prior to subdivision. Access to the site is provided towards the north-western corner of the site, which connects Coombes Road to the internal Council Road identified as Cypress Lane.

Land use in the immediate vicinity of the site is largely residential in nature, with subdivision works well advanced to the east across Surf Coast Highway as part of the Quay 2 residential subdivision. To the north is a development commercial / industrial estate which includes Aldi Torquay and Bunnings Torquay amongst various other commercial stores.

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

Figure 2 Site Context (6 July 2023)



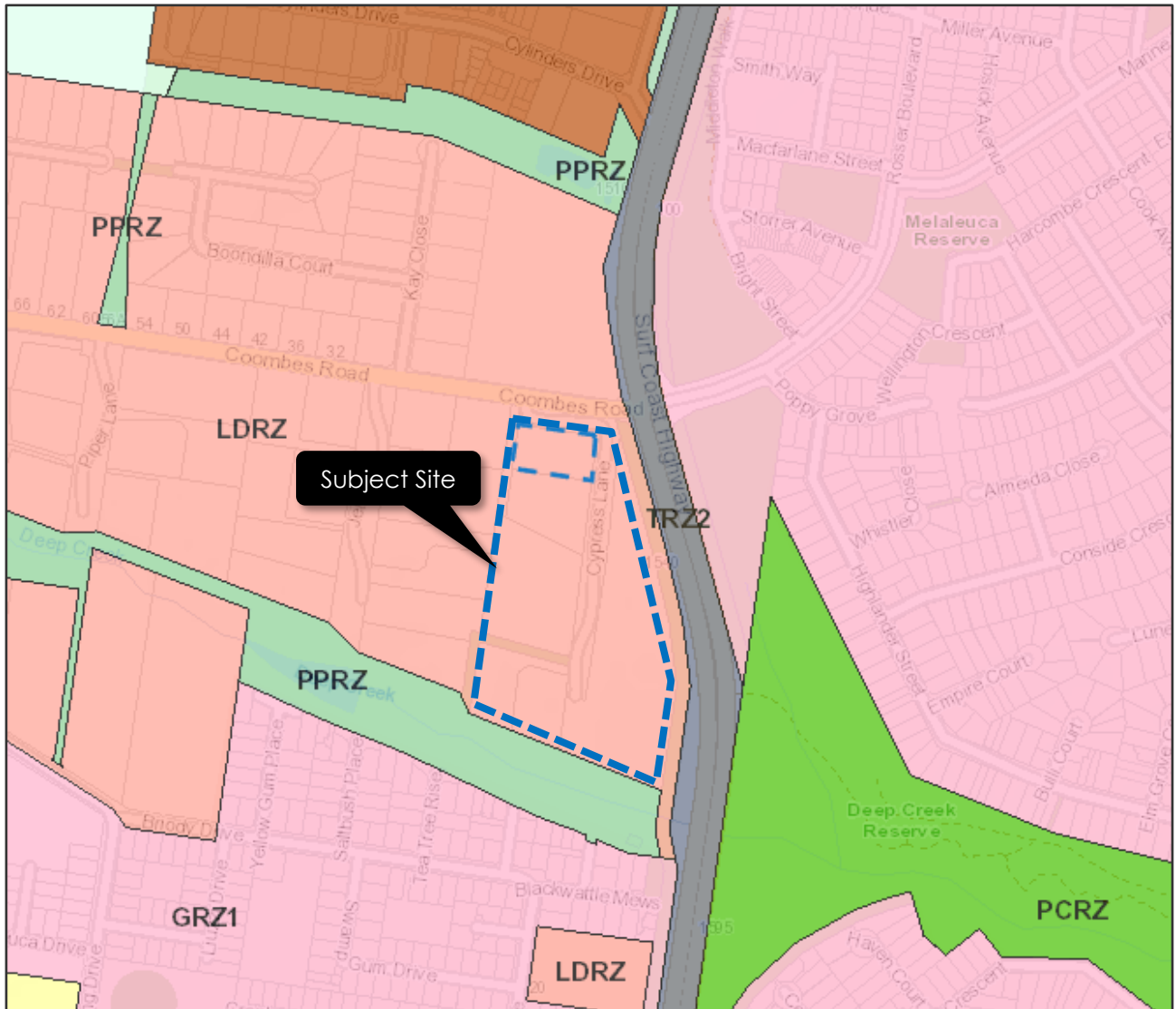
Copyright Nearmap

It is noted that the intersection between Surf Coast Highway and Coombes Road is in the process of being upgraded to a signalised intersection.

2.2 Planning Zones and Overlays

It is shown in Figure 3 that the site is located within a Low Density Residential Zone (LDRZ). Additionally, the site is subject to a Development Plan Overlay (DCPO2)

Figure 3 Planning Scheme Zones



Additionally, the site abuts Surf Coast Highway, which is within a Transport Zone (TRZ2), designating the Principal Road Network.

2.3 Road Network

2.3.1 Cypress Lane

Cypress Lane is a local road which runs north-south through the centre of the site. Cypress Lane connects to Coombes Road towards the north-western corner of the site and terminates towards the southern end of the site with a turnaround area provided (T-hammerhead).

Cypress Lane includes a pavement width of 5.5 metres and has a default speed limit of 50km/h.

2.3.2 Coombes Road

Coombes Road is a local road generally aligned east-west, running between Anglesea Road to the west and Surf Coast Highway to the east. Coombes Road provides a single traffic lane in each direction adjacent to the site with unsealed shoulders on either side.

A signed speed limit of 80km/h applies to Coombes Road in the vicinity of the site.

The intersection with Cypress Lane operates as a standard T-intersection, with a sealed shoulder provided for left turn movements from Coombes Road into Cypress Lane.

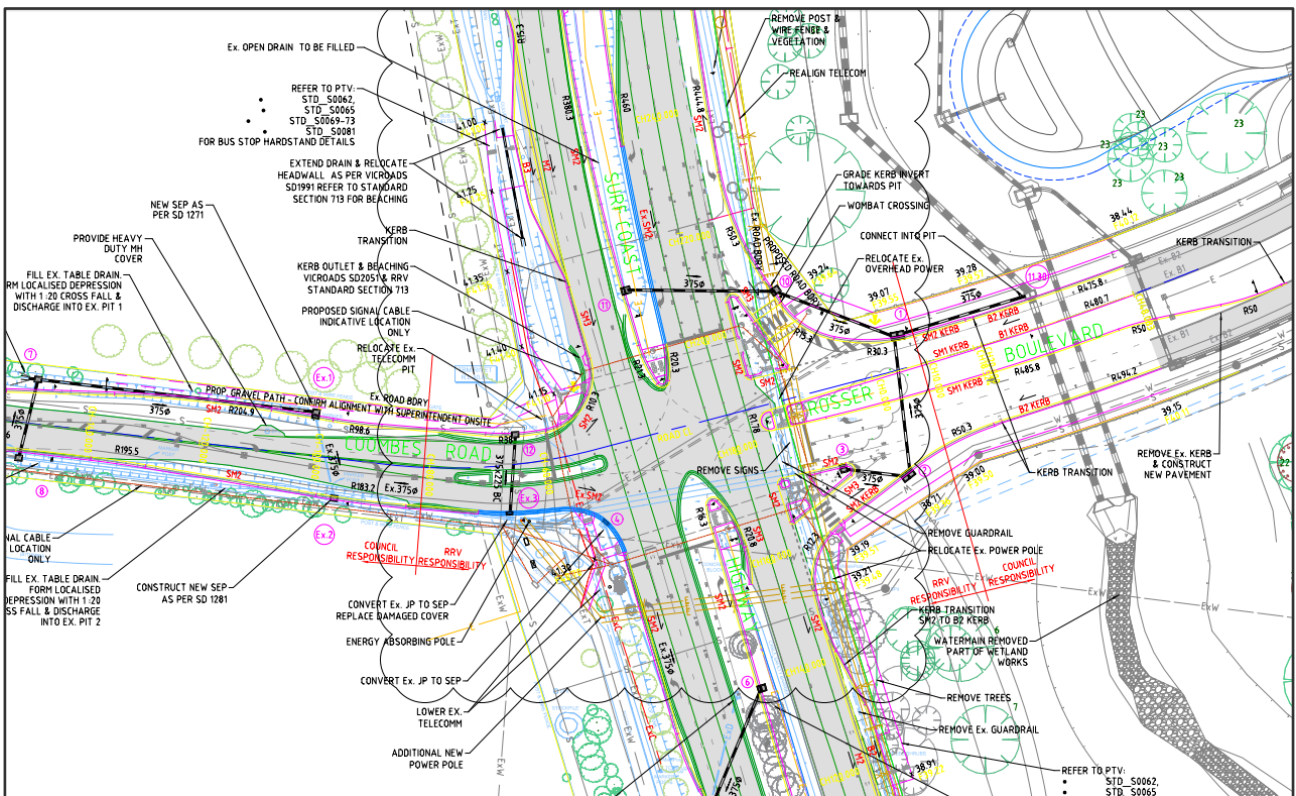
2.3.3 Surf Coast Highway

Surf Coast Highway is an arterial road generally aligned north-south, running between Princes Highway to the north and continuing as Great Ocean Road to the south. Surf Coast Highway provides two traffic lanes and a bike lane in each direction adjacent to the site, with the northbound and southbound carriageway separated by a landscaped central median.

A signed speed limit of 80km/h applies to Surf Coast Highway in the vicinity of the site.

At the intersection with Coombes Road, the intersection is in the process of being upgraded to a signalised intersection. The intersection layout is provided in the construction plan in Figure 4.

Figure 4 Coombes Road / Surf Coast Highway Signalised Intersection Construction Plan



2.4 Existing Traffic Volumes

Traffic volume, speed and classification surveys were undertaken by Matrix Traffic and Transport Data on behalf of **onemilegrid** on Coombes Road adjacent to 350 Coombes Road, for a one-week period from Tuesday 20th November 2018 to Monday 26th November 2018 inclusive.

The results of the surveys are summarised in Table 1.

Table 1 Traffic Volume and Speed Surveys

Time Period	Direction	Traffic Volume (vpd)	AM Peak (8:00AM)	PM Peak (5:00PM)
Weekday Average	Eastbound	1628	136	187
	Westbound	1435	187	125
	Both Directions	3063	323	313
7 Day Average	Eastbound	1534	110	164
	Westbound	1366	152	113
	Both Directions	2900	263	277

3 TORQUAY JAN JUC DEVELOPMENT CONTRIBUTIONS PLAN

The subject site is located within the area covered by the Torquay Jan Juc Development Contributions Plan which was prepared by SGS Economics and Planning in partnership with the Shire of Surf Coast. The DCP has been prepared to outline the projects, framework and financial contribution required to deliver the infrastructure projects necessary for future residents. It includes the land and cost to fund road network upgrades, intersection construction and community facilities.

The DCP area is shown below in Figure 5.

Figure 5 Torquay Jan Juc DCP



DCP item RD03 identifies that the intersection connecting Surf Coast Highway to Coombes Road is to be upgraded to a signalised intersection when Coombes Road (east or west) traffic exceeds 3,000 vehicles per day.

It is noted that the historically estimated date that Coombes Road would reach 3,000 vehicles / day was in 2017, as modelled by the Transport Infrastructure Assessment Stage 2 prepared by Traffix Group in 2007. Furthermore, traffic volumes from 2020 provided by Council along Coombes Road identify an average daily traffic volume of 3,506 vehicles per day. It is also noted that development on the east side of Surf Coast Highway which would intersect with the existing intersection are effectively complete and would see the completion of an internal road network.

4 DEVELOPMENT PROPOSAL

4.1 General

It is proposed to demolish the existing dwelling and develop the site for the purposes of a residential village.

The retirement village will provide a total of 117 x 2-bedroom independent living units and 3 apartment buildings comprising a total of 16 x 1-bedroom apartments and 58 x 2-bedroom apartments. A breakdown of the proposed development yield is summarised in Table 2.

Table 2 Proposed Development

Use	Component	No.
Independent Living Units	2-Bedroom Dwelling	117
	1-Bedroom Dwelling	4
Apartments (Lot A)	2-Bedroom Dwelling	38
	1-Bedroom Dwelling	12
Apartments (Lot D2)	2-Bedroom Dwelling	20

The development is also proposed to include an ancillary Village Centre at the ground-floor of the apartment building (Lot A) with a library, gym, pool, salon and lawn bowls. The facilities on-site will be available for guests only.

4.2 Vehicular Access and Car Parking

As part of the development, it is proposed to absorb Cypress lane and deliver a privately owned internal road network for the residential village.

Specifically, the site is provided with one main point of entry and egress, via a two-way internal access road which intersects with Coombes Road towards the north-west corner of the site. The internal access road curves east and runs through the centre of the site, directly connecting to the Village Centre.

It is proposed to provide a short channelised right turn treatment (CHR(S)) and an auxiliary left turn treatment (AUL(S)) on Coombes Road to facilitate access to the site, which will be delivered as part of the Stage 2 works.

The internal access road has a carriageway width of 6 m from the connection to Coombes Road to the Village Centre. Beyond the Village Centre, the internal access road has a carriageway width of 5.5 m. The remaining roads through the site are generally provided with a 5.6 m carriageway, accommodating two-way traffic flow.

A porte-cochere adjacent to the village centre will allow pick-up/drop-off movements, close to the building entrance. The porte-cochere has been designed to accommodate vehicles up to a 6.1m Ambulance Victoria vehicle as demonstrated in Appendix A.

T-turning bays are provided at each no-through internal road, allowing for turnaround manoeuvres for waste and emergency vehicles up to an 8.8m medium rigid vehicle (MRV) as demonstrated in Appendix A.

The internal four-way intersection to the south of the porte-cochere will be provided with appropriate local area traffic management measures.

Single and double garages are provided for each of the independent living units, with the double garages provided in a tandem arrangement. Some single-garage units also include sufficient driveway length to accommodate a second vehicle, totalling 209 spaces for residents of the living units.

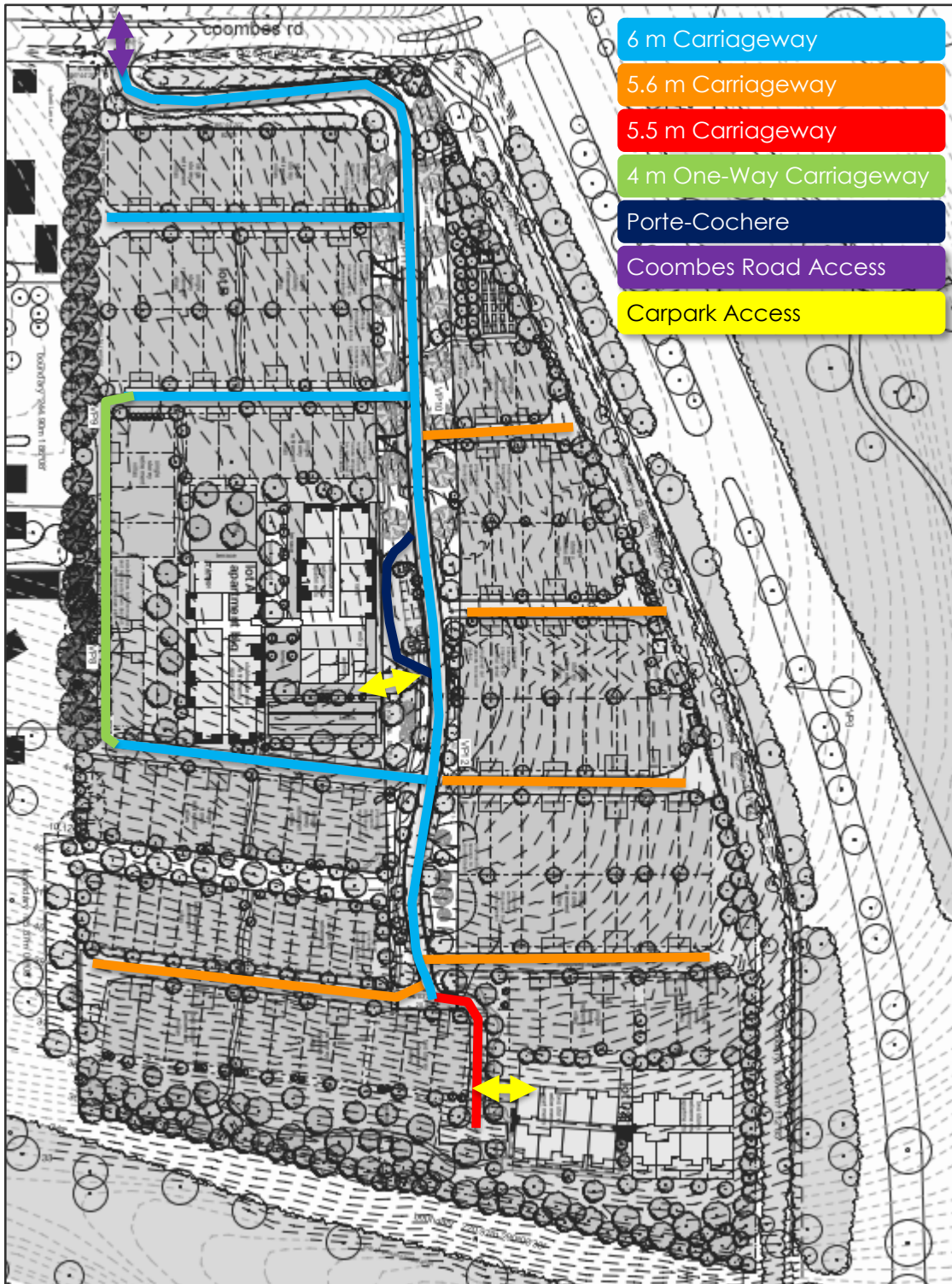
The 'Lot A' apartment building is provided with parking via a basement carpark, accessed via a ramp connected to the porte-cochere and accommodating a total of 57 parking spaces including 51 spaces for residents/visitors and 6 spaces for staff.

The 'Lot D2' apartment building comprises 36 spaces for residents/visitors.

An additional 33 car parking spaces are provided across the site for visitors and staff.

The internal road network and access are shown below in Figure 6.

Figure 6 Internal Road Network



4.3 Pedestrian Access

Pedestrian paths have been provided through the centre of the development to conveniently connect the independent living units to the Village Centre. In addition, a connection to the external pedestrian network on Surf Coast Highway is also proposed towards the northeast corner of the site.

The pedestrian paths have been shown below in Figure 7.

Figure 7 Pedestrian Footpath Network



**SURF COAST SHIRE COUNCIL
Planning Department**

6/03/2024

21/0333 / D24/42567

5 DESIGN ASSESSMENT

5.1 Surf Coast 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 section.

5.1.1 Design Standard 1 – Accessways

A summary of the assessment for Design Standard 1 is provided in Table 3.

Table 3 Clause 52.06-9 Design Assessment – Design Standard 1

Requirement	Comments
Be at least 3 metres wide.	Satisfied
Have an internal radius of at least 4 metres at changes of direction or intersection or be at least 4.2 metres wide.	Satisfied
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
Provide at least 2.1 metres headroom beneath overhead obstructions, calculated for a vehicle with a wheel base of 2.8 metres.	Satisfied
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
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 – internal access road is 6.1 m wide at the connection to Coombes Road, narrowing to 6 m after approximately 15 m
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
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 – Coombes Road is not a Transport Zone

5.1.2 Design Standard 2 – Car Parking Spaces

Car spaces on-site are proposed with a minimum width of 2.6 metres, length of 4.9 metres and are accessed from aisles of no less than 6.4 metres.

Parallel parking spaces are provided with a length of at least 6.7 metres and a width of at least 2.3 metres, in accordance with Design Standard 2 of the Planning Scheme.

Garage dimensions are in accordance with the requirements of the Planning Scheme, with garages a minimum of 6.0m long and 3.5m wide.

The tandem garages are provided with a minimum internal width of 3.5m, in accordance with the requirements of Design Standard 2 of Clause 52.06 the Planning Scheme. The proposed garage widths are therefore considered to be appropriate.

In relation to the length, a minimum internal length of 12.3 m is provided. The Planning Scheme does not specifically identify the required length for tandem garages, but Design Standard 2 of Clause 52.06 provides guidance on the design of tandem spaces and garages individually, as below:

- 90-degree parking spaces should be a minimum of 4.9m long;
- Car spaces in garages or carports must be at least 6 metres long; and
- Where parking spaces are provided in tandem (one space behind the other) an additional 500mm in length must be provided between each space.

From the above, the minimum length required by the Planning Scheme to accommodate two vehicles in tandem is determined to be 10.3 m (4.9 m + 0.5 m + 4.9 m = 10.3m). It is noted that the tandem spaces are provided with a length of 12.3 m, which is in excess of the requirements for tandem parking above. The tandem car spaces themselves are therefore considered to be appropriate to accommodate two vehicles.

5.1.3 Design Standard 3 – Gradients

A summary of the assessment for Design standard 3 is provided in Table 4 for the ramp connection through to the apartment buildings carpark.

Table 4 Clause 52.06-9 Design Assessment – Design Standard 3

Requirement	Comments
Accessway grades must not be steeper than 1:10 (10 per cent) within 5 metres of the frontage to ensure safety for pedestrians and vehicles. The design must have regard to the wheelbase of the vehicle being designed for; pedestrian and vehicular traffic volumes; the nature of the car park; and the slope and configuration of the vehicle crossover at the site frontage. This does not apply to accessways serving three dwellings or less.	N/a – the ramp connects through to the internal private road, which is not within 5 metres of the site frontage.
Ramps (except within 5 metres of the frontage) must have the maximum grades as outlined in Table 3 (of Design standard 3) and be designed for vehicles travelling in a forward direction.	Satisfied – a maximum grade of 1:4 is proposed
Where the difference in grade between two sections of ramp or floor is greater than 1:8 (12.5 per cent) for a summit grade change, or greater than 1:6.7 (15 per cent) for a sag grade change, the ramp must include a transition section of at least 2 metres to prevent vehicles scraping or bottoming.	Satisfied – a maximum change in grade of 12.5 % is proposed

5.2 Bicycle Parking

It is proposed to provide 55 bicycle spaces on-site, including 35 spaces within the basement carpark of the 'Lot A' apartment building, and 10 spaces in each of the 'Lot D1' and 'Lot D2' building.

The bicycle spaces have been designed as vertically mounted and staggered wall racks and are in accordance with the Australian Standards; specifically, they are provided at a minimum separation of 500 mm, with an envelope of 1.2 metres provided for bicycles and generally a 1.5 metre access aisle.

5.3 Waste Collection

The independent units will have bins stored within their individual lots and collected from the kerbside of the internal road network using Council municipal waste collection services.

Rubbish generated from the apartment buildings will be transferred via the lifts to the appropriate bins located in the bin storage area and collected through a private contractor.

Refer to the Waste Management Plan for further information.

6 LOADING

Clause 65 (Decision Guidelines) of the Surf Coast 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."*

In relation to the proposed residential uses, loading facilities will only be required for occasional removalist vehicles, which may utilise the existing on-street parking or prop on-street.

Given the nature of the Village Centre uses, it is not considered 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 porte-cochere.

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

7 BICYCLE PARKING

The bicycle parking requirements for the subject site are identified in Clause 52.34 of the Surf Coast Planning Scheme. The Planning Scheme does not specifically refer to parking requirements for retirement village uses, therefore, no bicycle parking is required. As the Village Centre is ancillary to the retirement village, it does not produce a separate bicycle parking requirement.

Regardless, 55 bicycle parking spaces have been provided within the basement car park of the Village Centre for staff and residents.

Considering the above, the proposed provision of bicycle parking is considered appropriate for the proposed development.

8 CAR PARKING

8.1 Statutory Car Parking Requirements

The car parking requirements for the subject site are identified in Clause 52.06 of the Surf Coast Planning Scheme, which specifies the following requirements for the proposed development (ILUs and ILAs combined).

Table 5 Clause 52.06 – Car Parking Requirements

<i>Use</i>	<i>No.</i>	<i>Rate</i>	<i>Car Parking Measure</i>	<i>Total</i>
Retirement village	191	1	to each one or two bedroom dwelling, plus	191
	191	1	for visitors to every five dwellings for developments of five or more dwellings	38
Total				229

Based on the above calculations, a total of 229 parking spaces are required for the proposed development.

A total of 335 spaces are provided across the site, 106 spaces in excess of the Planning Scheme requirement.

Each independent unit is provided with a double or single space garage, equating to a total of 209 spaces for the 117 units. A further 33 formal spaces have been provided through the internal road network. It is noted that the 5.6 m carriageway width allows for kerbside parking on one side of the road, increasing the visitor parking provision above and beyond the 33 formal spaces.

Residents of the 42 apartments within 'Lot A' are provided with at least one parking space each, with 6 spaces in the basement carpark allocated to staff.

Residents of the 32 apartments within 'Lot D2' are each provided with one parking space, with the remaining 4 spaces allocated to visitors.

The total provision of car parking is well in excess of the Planning Scheme requirements and is considered to be appropriate to satisfy the parking demands generated by the development.

8.2 Accessible Car Parking

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

The NCC does not provide a requirement for a retirement village use and therefore no accessible spaces are required.

Notwithstanding, is proposed to provide 2 accessible parking spaces on-site within the porte-cochere for the Village Centre.

9 TRAFFIC

9.1 Traffic Generation

Reference is made to traffic volume surveys undertaken by Cardno at the existing Ingenia Lifestyle village at 40 Watt Street, Lara. The traffic surveys were undertaken between 15th October and 21st October 2018, at the access point to the site, which contained 181 completed dwellings (it has been confirmed by the operator that all 181 dwellings were occupied at the time of the surveys). The results of the traffic study of the existing centre at Lara are summarised in Table 6.

Table 6 Surveyed Traffic Generation Rate – Existing Ingenia Site

Period	Inbound	Outbound	Total
AM Peak Hour	0.15	0.14	0.29
PM Peak Hour	0.17	0.11	0.28

Adopting the rates above to the proposed 191 dwellings generates the following anticipated traffic generation during the morning and afternoon peak hour periods.

Table 7 Anticipated traffic generation

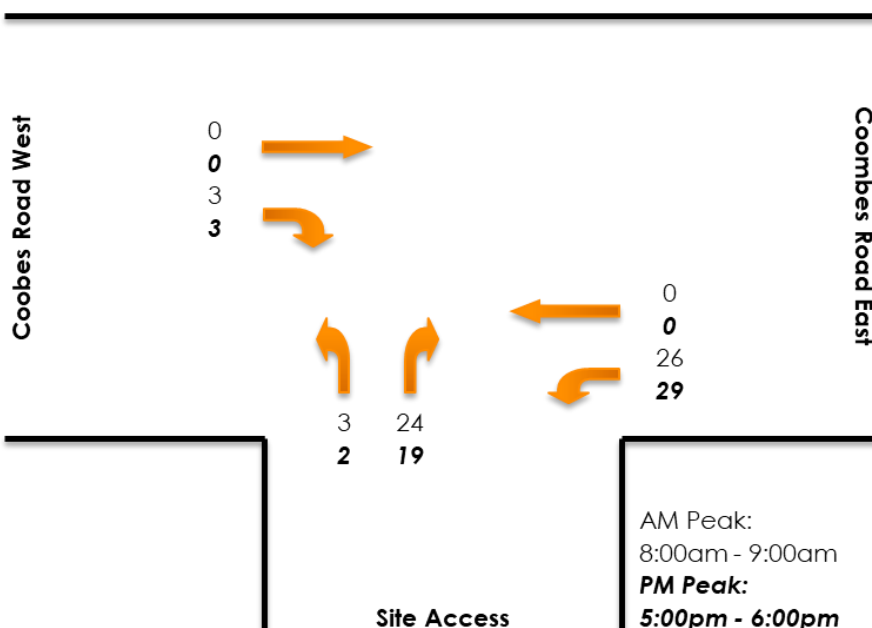
Period	Inbound	Outbound	Total
AM Peak Hour	29	27	56
PM Peak Hour	32	21	53

9.2 Traffic Distribution

Considering the location of the site in relation to the arterial road network, recreation and retail and employment precincts, it is assumed that 90% traffic will arrive from/depart to the east.

Based on the above, the following traffic volumes are expected to be generated by the proposed development.

Figure 8 Generated Traffic Volumes



SURF COAST SHIRE COUNCIL
Planning Department

6/03/2024

21/0333 / D24/42567

9.3 Traffic Volume Growth

To ensure that the operation of surrounding intersection will operate appropriately into the future, it is considered appropriate to include future traffic volume growth.

For the purposes of a conservative analysis, growth rates of 5% per year (compound) have been applied to the existing traffic volumes over a 10-year period, equivalent to a 55% increase in traffic volumes.

Table 8 Traffic Volume and Speed Surveys

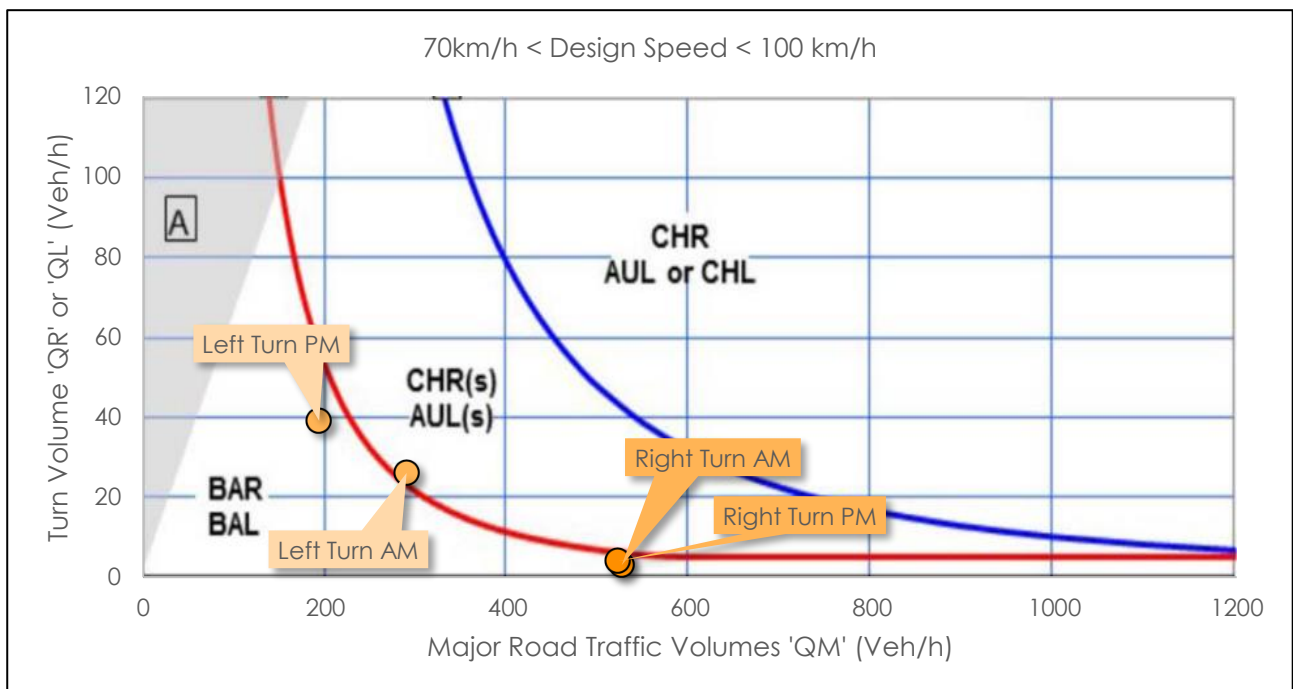
Direction	Traffic Volume (vpd)	AM Peak (8:00AM)	PM Peak (5:00PM)
Eastbound	2523	210	289
Westbound	2224	289	193
Both Directions	4749	499	482

9.4 Turn Lane Warrant Assessment

In determining an appropriate intersection configuration, the anticipated post-development peak hour volumes were assessed against the turn lane treatment warrants specified in the *Austrroads Guide to Traffic Management Part 6: Intersections, Interchanges and Crossings*.

Based on the anticipated post-development traffic volumes, the turn lane requirements are demonstrated in Figure 9.

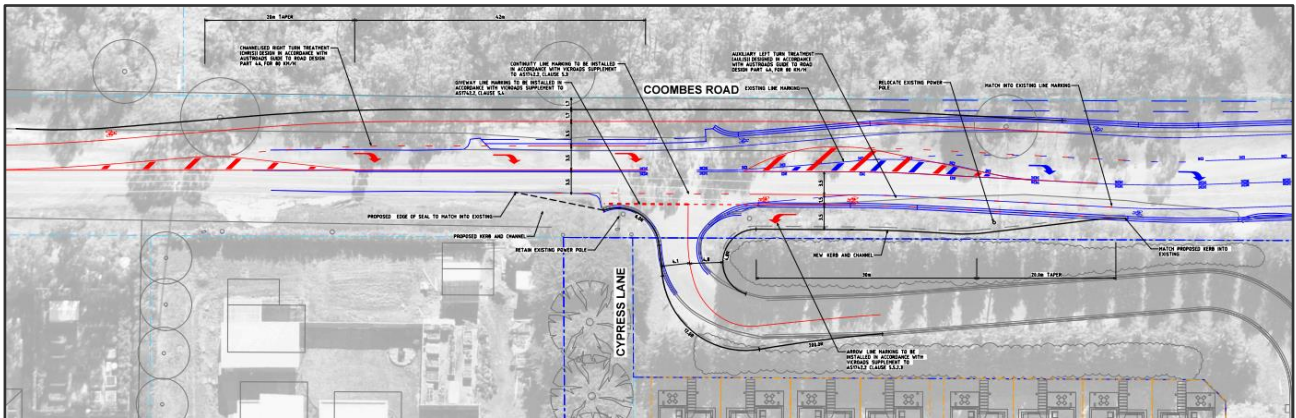
Figure 9 Austrroads Turn Treatment Warrants



As identified in the figure above, the anticipated turning movements at the site access indicate that an auxiliary left turn treatment (AUL) and a basic right turn treatment (BAR) would be required.

As part of the Stage 2 works, it is proposed to provide a short channelised right turn treatment (CHR(S)) and an auxiliary left turn treatment (AUL(S)) on Coombes Road to facilitate access to the site. A concept layout plan has been prepared demonstrating the proposed turn treatments, and is shown below in Figure 10 and enclosed as Appendix B.

Figure 10 Proposed Turn Treatments



9.5 Traffic Impact

Reviewing the volumes above, it is noted that a maximum of 56 vehicle movements per hour are expected during the morning peak period, equivalent to less than one vehicle trip every minute. Even when focussed into one access point, the traffic volumes generated by the proposed development are very low, and are expected to be easily absorbed into the surrounding road network.

Furthermore, it is noted that the intersection between Coombes Road and Surf Coast Highway is currently in the process of being upgraded to signals.

Additionally, the traffic generated by the site and the surrounding parcels has been factored into the overall traffic assessment for the area as part of the Torquay/Jan Juc Strategy Review Transport Infrastructure Assessment undertaken by Traffix Group, which includes the design of the Coombes Road / Surf Coast Highway signalised intersection. As such, the traffic generated by the site is expected to be readily accommodated by the surrounding road network and the signalised intersection.

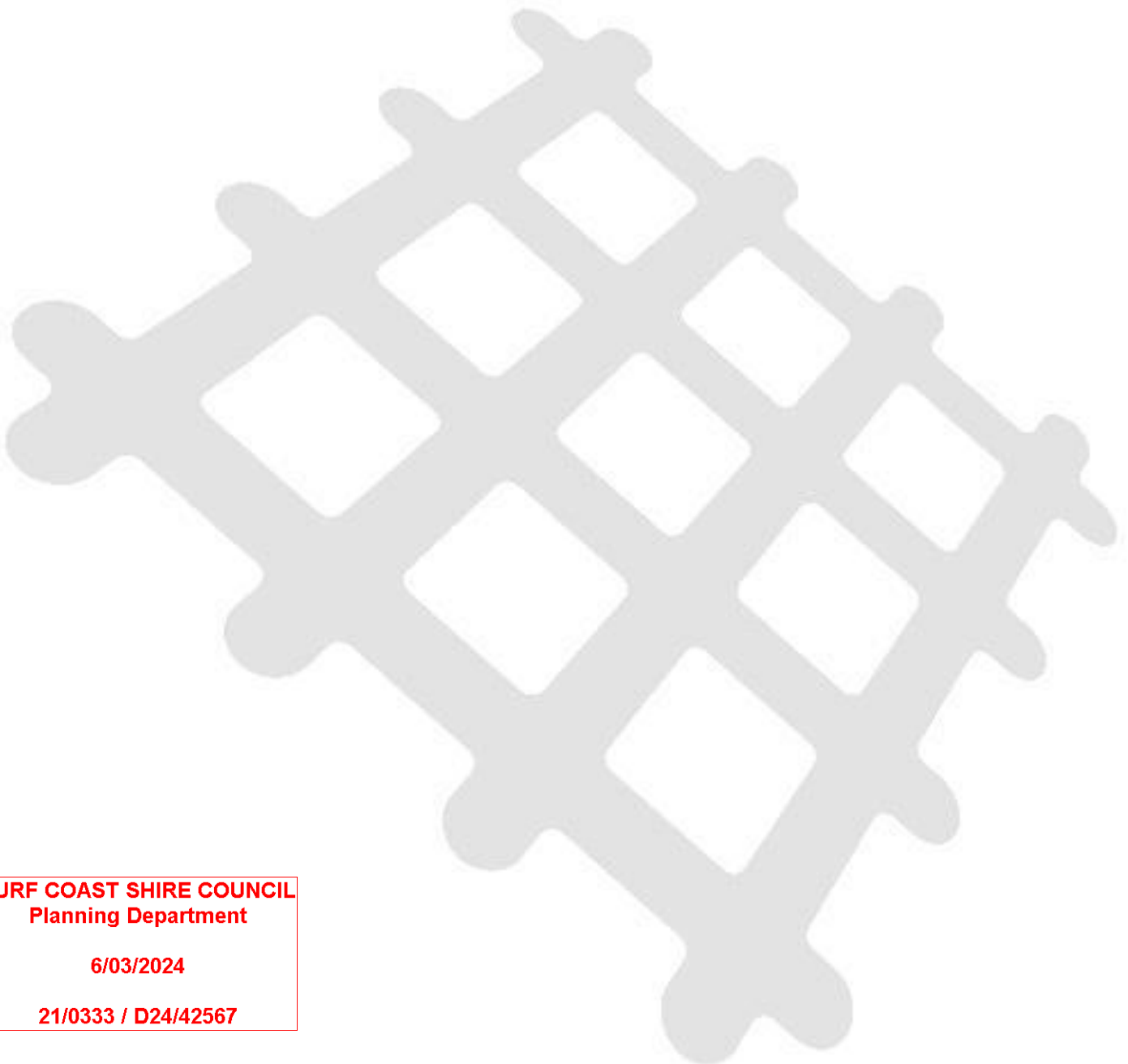
10 CONCLUSIONS

It is proposed to demolish the existing dwelling and develop the site for the purposes of a retirement village comprising 117 independent living units and 74 apartments.

Considering the analysis presented above, it is concluded that:

- The car parking layouts and accesses have been designed in accordance with the requirements of the Planning Scheme and are considered appropriate;
- The provision for loading is considered appropriate for the proposed use;
- The provision of bicycle parking is in excess of the Planning Scheme requirements;
- The provision of car parking is well in excess of the Planning Scheme requirements and is considered to be appropriate to satisfy the parking demands generated by the development;
- The NCC does not provide a requirement for a retirement village use and therefore no accessible spaces are required; and
- The traffic generated by the site is expected to be readily accommodated by the surrounding road network and the Surf Coast Highway / Coombes Road signalised intersection.

Appendix A Swept Path Diagrams



CAD File: N:\Projects\2021\210296\Drawings\210296SPA100.dgn

Date Plotted: 05-03-2024 16:56

SURF COAST SHIRE COUNCIL
Planning Department
6/03/2024
21/0333 / D24/42567

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.

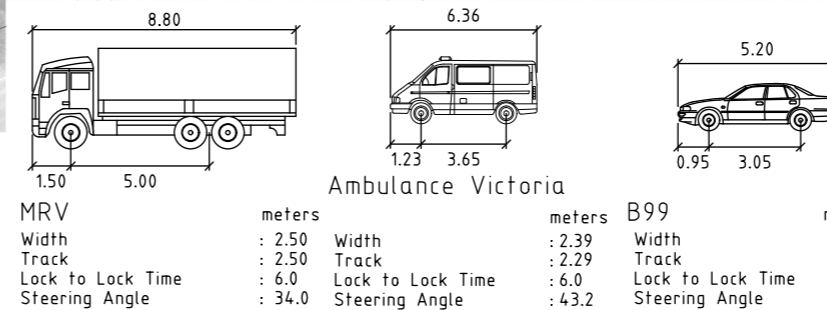
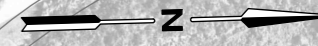
onemilegrid operates from Wurundjeri Woiwurrung Country of the Kulin nation.
We acknowledge and extend our appreciation to the Wurundjeri People, the Traditional Owners of the land.
We pay our respects to leaders and Elders past, present and emerging for they hold the memories,
the traditions, the culture,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

Aerial Photography
Aerial photography provided by Nearmap

MRV ANTI-CLOCKWISE CIRCULATION VIA ONE-WAY ROAD

COOMBES ROAD

SURF COAST HIGHWAY



SWEPT PATH LEGEND

- DESIGN VEHICLE SWEPT PATHS SHOWN DASHED
- 300mm CLEARANCE ENVELOPE SHOWN DOTTED



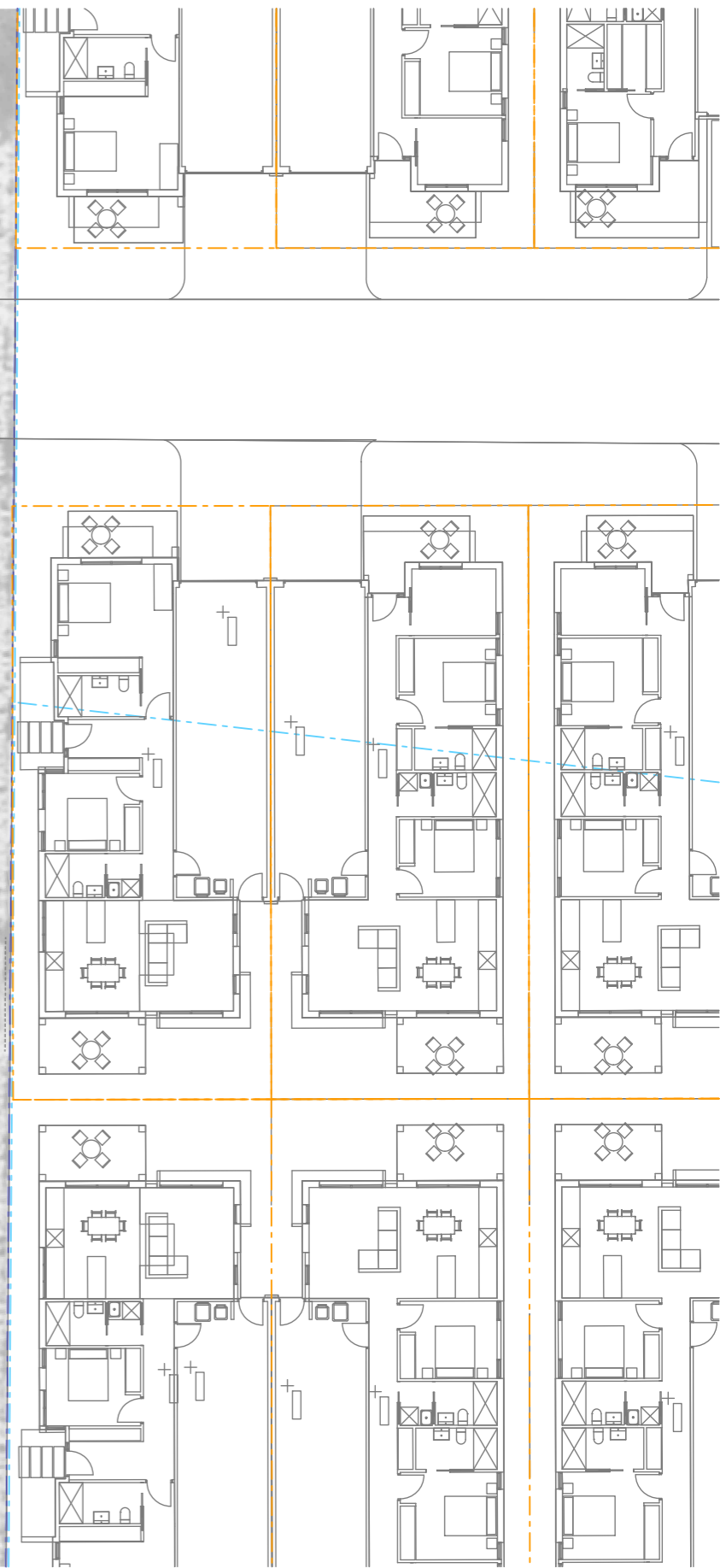
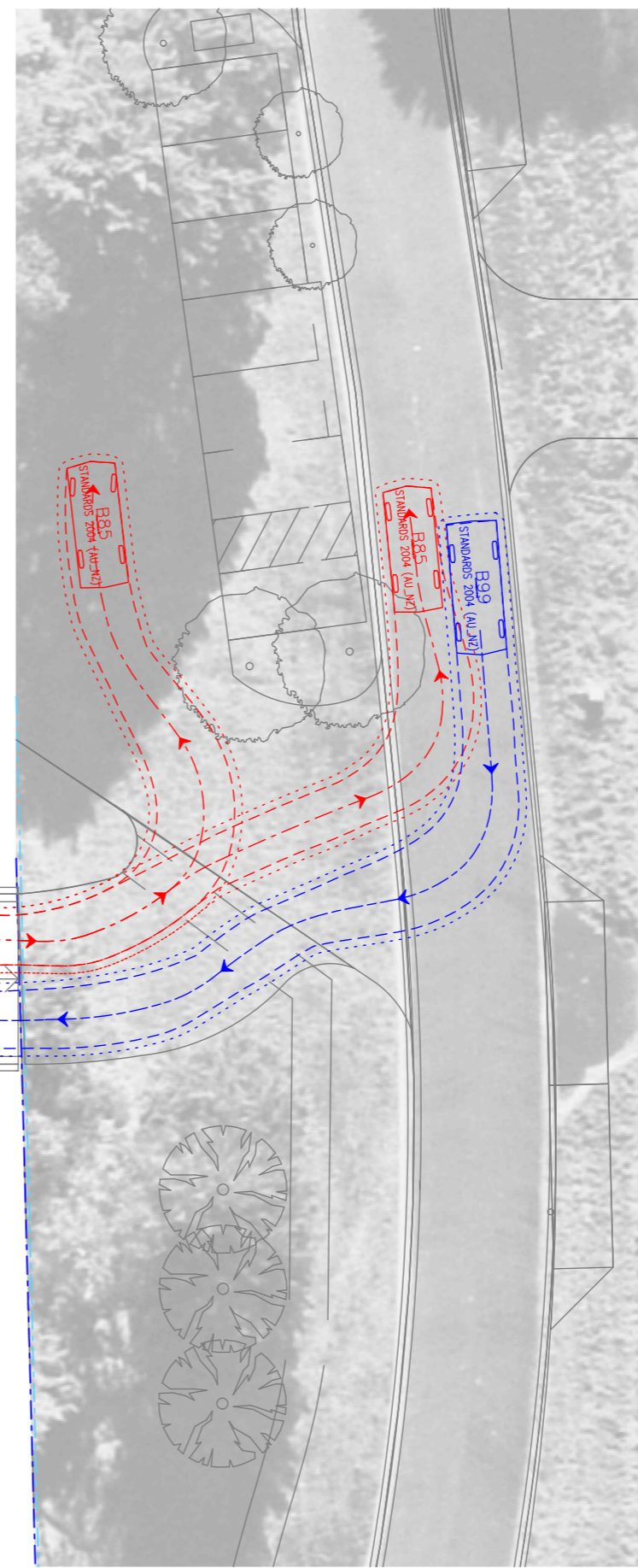
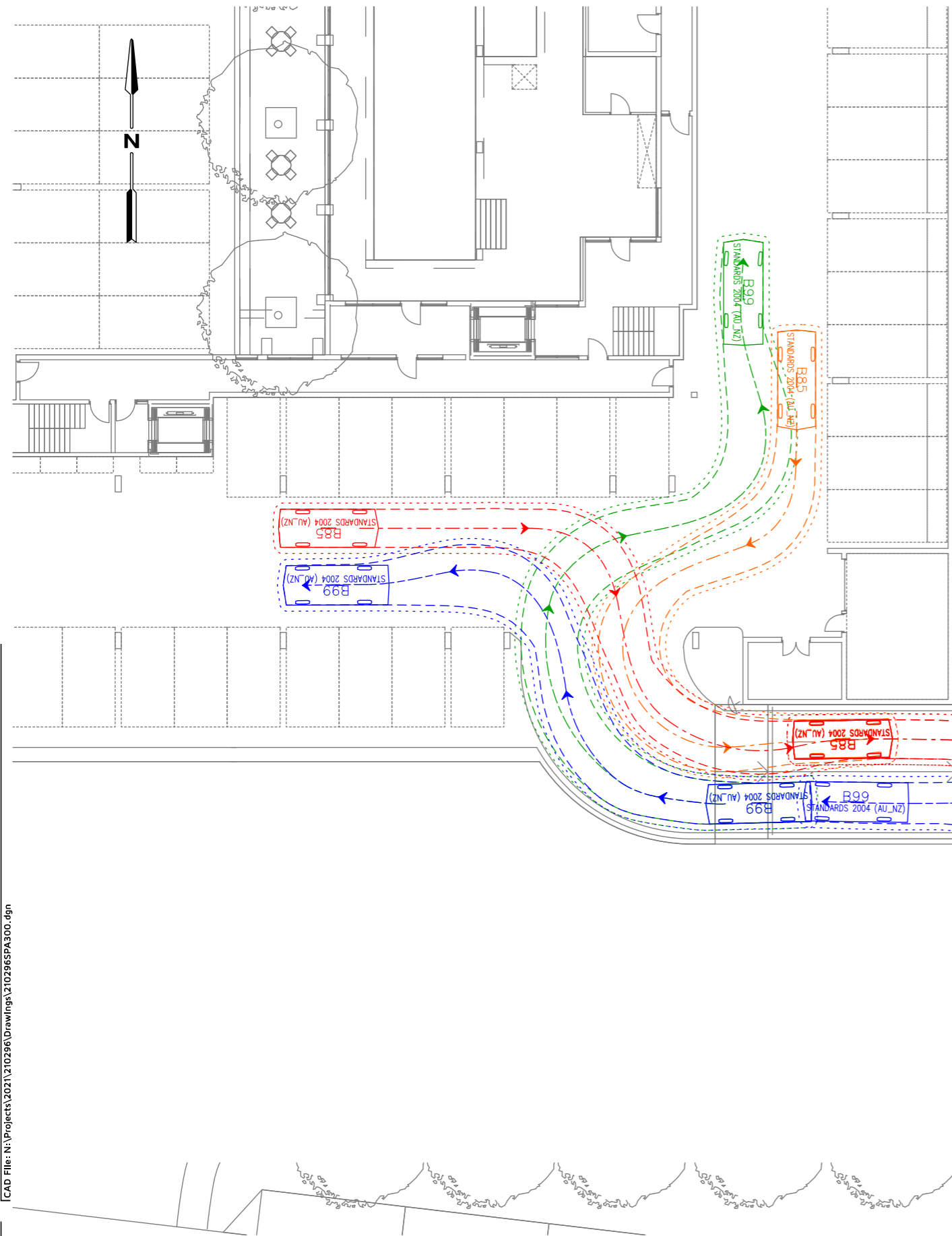
Wurundjeri Woiwurrung Country
56 Down Street, Collingwood, VIC 3066
Email: info@onemilegrid.com.au Web: www.onemilegrid.com.au
Phone: (03) 9939 8250

Scale: 1:1000 @ A3
0 5 10 20

Drawing Title
4 CYPRESS LANE TORQUAY
SITE VEHICLE ACCESS - G
SWEPT PATH ANALYSIS

Designed CM	Approved VG	Metway Ref 505 K1
----------------	----------------	----------------------

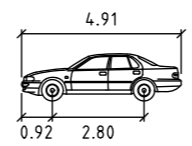
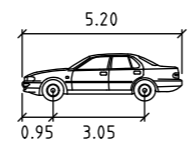
Project Number 210296	Drawing Number SPA100	Revision K
--------------------------	--------------------------	---------------



CAD File: N:\Projects\2021\210296\Drawings\210296SPA300.dgn

TORF COAST SHIRE COUNCIL
Planning Department
 6/03/2024
 21/0333 / D24/42567

Date Plotted: 05-03-2024 12:17:16



Model	Width (meters)	Track (meters)	Lock to Lock Time (meters)	Steering Angle (degrees)
B99	5.20	1.94	6.0	33.9
B85	4.91	1.87	6.0	34.1

SWEPT PATH LEGEND

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

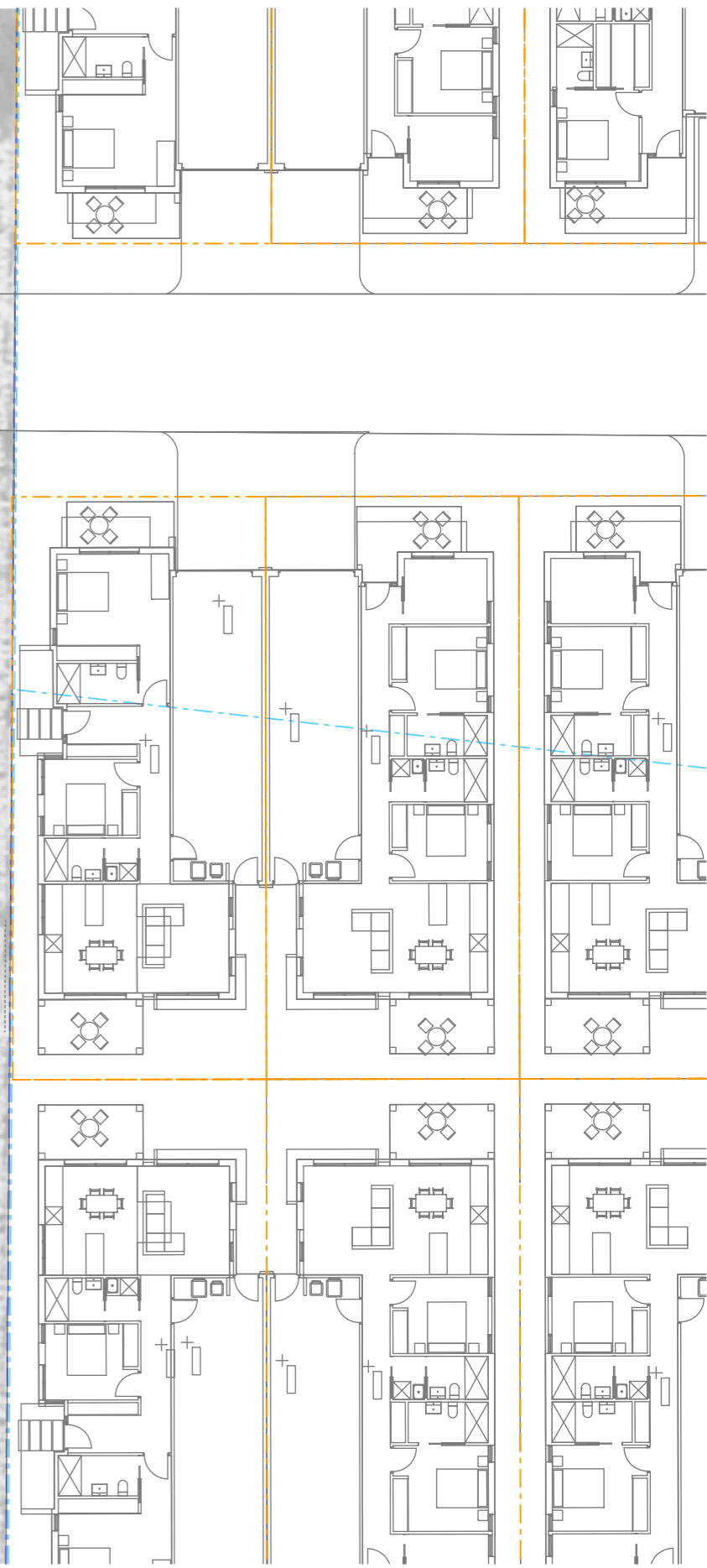
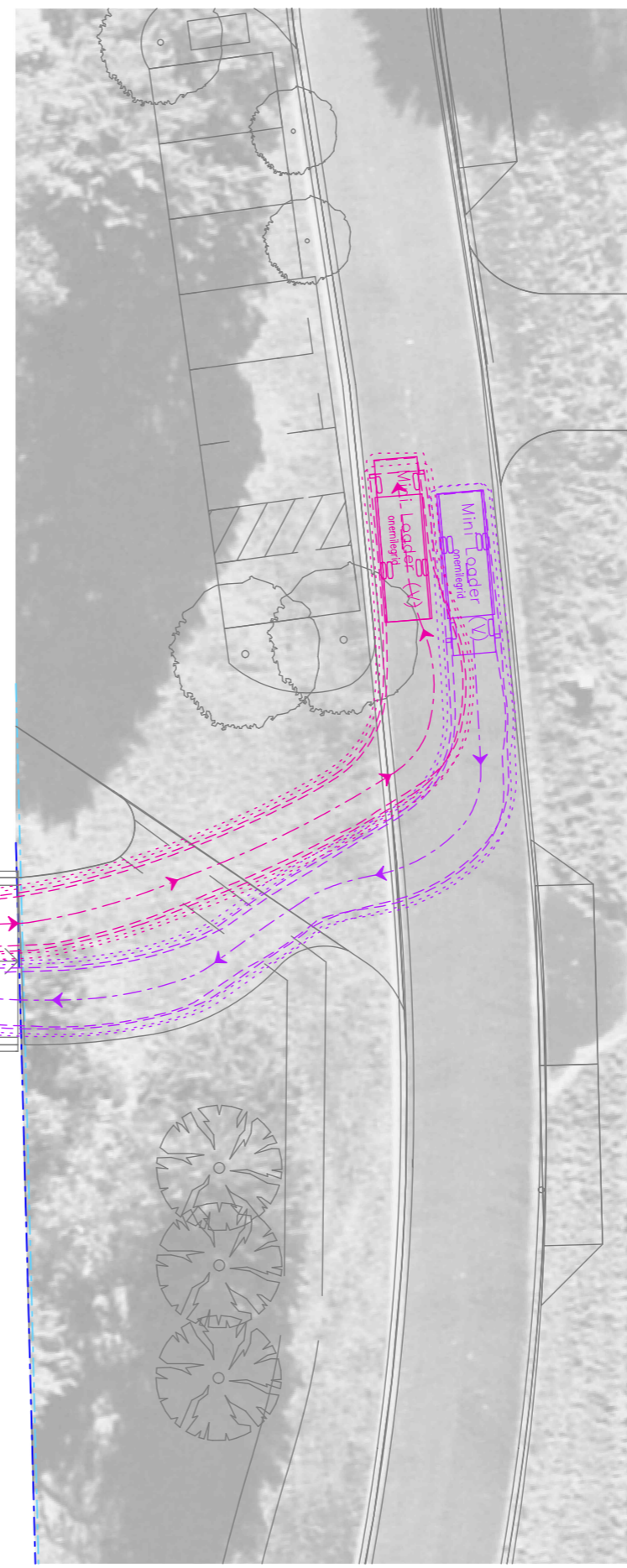
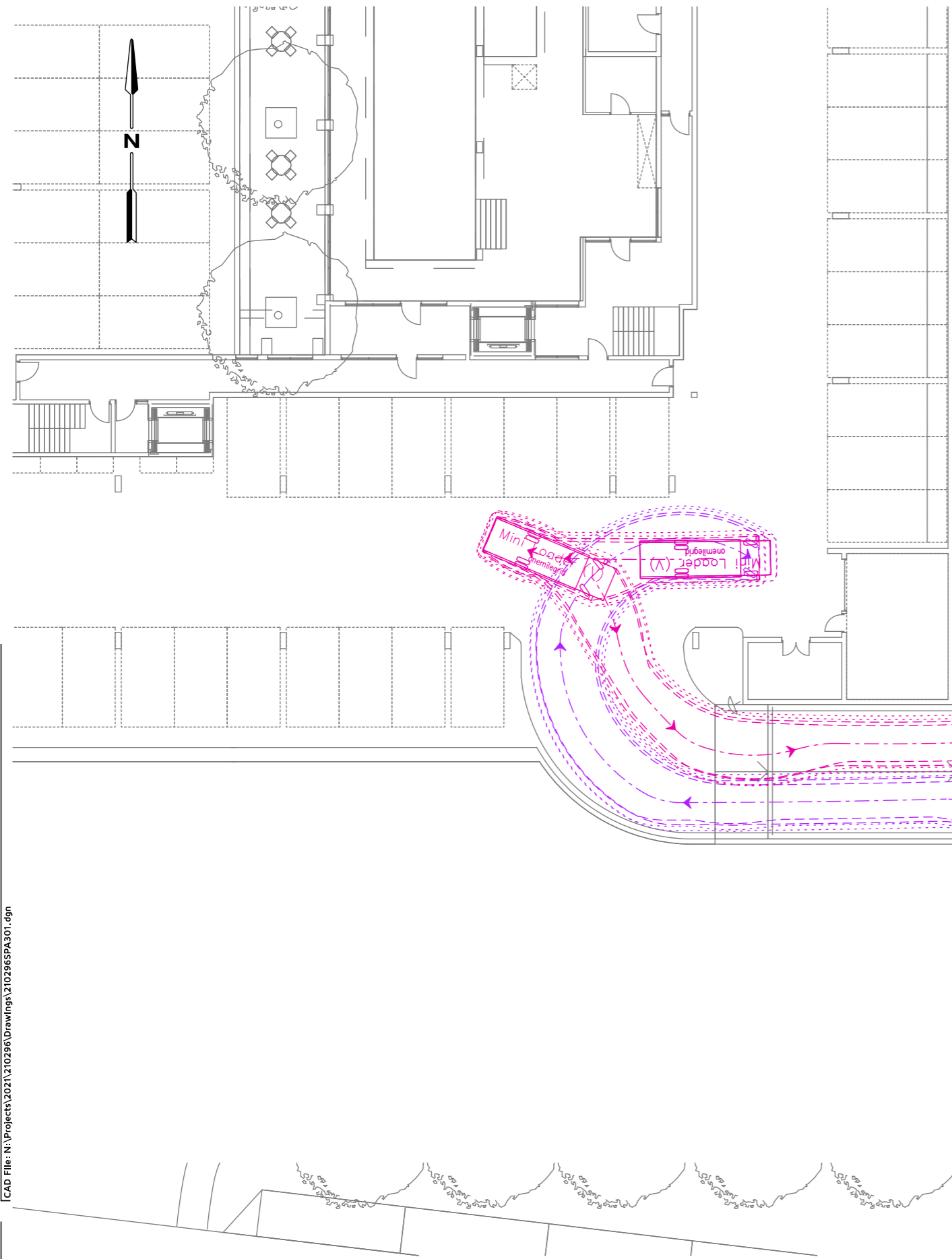


Wurundjeri Woiwurrung Country
 56 Down Street, Collingwood, VIC 3066
 Email: info@onemilegrid.com.au Web: www.onemilegrid.com.au
 Phone: (03) 9939 8250

Scale: 1:200 @ A3

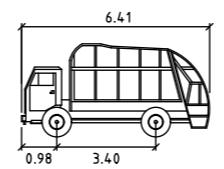
Drawing Title 4 CYPRESS LANE TORQUAY SITE VEHICLE ACCESS - B1 SWEEP PATH ANALYSIS		
Designed CM	Approved VG	Metway Ref 505 K1
Project Number 210296	Drawing Number SPA300	Revision E

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.



CAD File: N:\Projects\2021\210296\Drawings\210296SPA301.dgn

TORF COAST SHIRE COUNCIL
Planning Department
 6/03/2024
 21/0333 / D24/42567



WASTE MINI LOADER meters
 Width : 1.85
 Track : 1.85
 Lock to Lock Time : 4.0
 Steering Angle : 33.6

SWEPT PATH LEGEND

--- 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: 1:200 @ A3

Drawing Title
4 CYPRESS LANE TORQUAY
SITE VEHICLE ACCESS - B1
SWEPT PATH ANALYSIS

Designed CM	Approved VG	Metway Ref 505 K1
Project Number 210296	Drawing Number SPA301	Revision E

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.



COOMBES ROAD

RELOCATE EXISTING POWER POLE

SERVICE VEHICLE AUSTRROADS 2013 (AU)

SERVICE VEHICLE AUSTRROADS 2013 (AU)

SERVICE VEHICLE AUSTRROADS 2013 (AU)

SERVICE VEHICLE AUSTRROADS 2013 (AU)

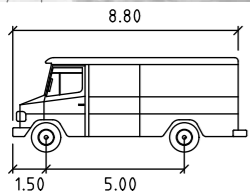
SERVICE VEHICLE AUSTRROADS 2013 (AU)

EXISTING POWER POLE

CYPRESS LANE

CAD File: N:\Projects\2021\210296\Drawings\210296SPA400.dgn

Date Plotted: 07-03-2024 13:54:13



SERVICE VEHICLE meters
Width : 2.50
Track : 2.50
Lock to Lock Time : 6.0
Steering Angle : 38.7

SURF COAST SHIRE COUNCIL
Planning Department

6/03/2024

21/0333 / D24/42567

SWEPT PATH LEGEND

- DESIGN VEHICLE SWEEP PATHS SHOWN DASHED
- 500mm 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 1:400 @ A3
0 2 4 8

Drawing Title
4 CYPRESS LANE, TORQUAY
VEHICLE SITE ACCESS
SWEPT PATH ANALYSIS

Designed CM	Approved VG	Metway Ref 505 K1
-------------	-------------	-------------------

Project Number 210296	Drawing Number SPA400	Revision E
-----------------------	-----------------------	------------



COOMBES ROAD

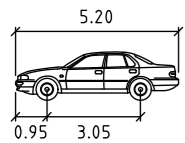
RELOCATE EXISTING POWER POLE

EXISTING POWER POLE

CYPRESS LANE

CAD File: N:\Projects\2021\210296\Drawings\210296SPA401.dgn

Date Plotted: 07-02-2024 13:54:33



B99 meters
Width : 1.94
Track : 1.84
Lock to Lock Time : 6.0
Steering Angle : 33.9

SURF COAST SHIRE COUNCIL
Planning Department

6/03/2024

21/0333 / D24/42567

SWEPT PATH LEGEND

- DESIGN VEHICLE SWEEP PATHS SHOWN DASHED
- 500mm CLEARANCE ENVELOPE SHOWN DOTTED



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

Scale 1:400 @ A3
0 2 4 8

Drawing Title
4 CYPRESS LANE, TORQUAY
VEHICLE SITE ACCESS
SWEPT PATH ANALYSIS

Designed CM	Approved VG	Metway Ref 505 K1
----------------	----------------	----------------------

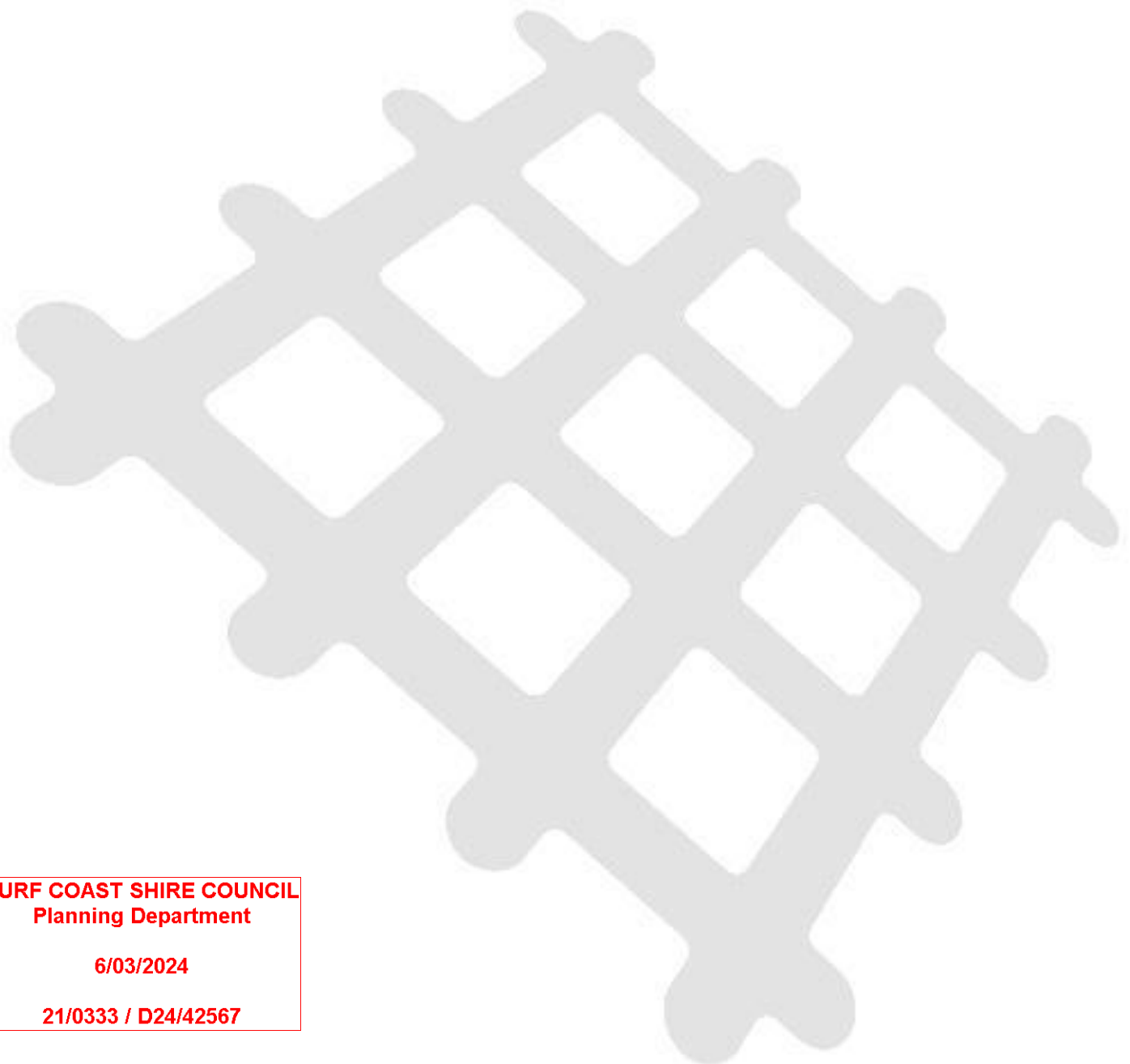
Project Number 210296	Drawing Number SPA401	Revision E
--------------------------	--------------------------	---------------

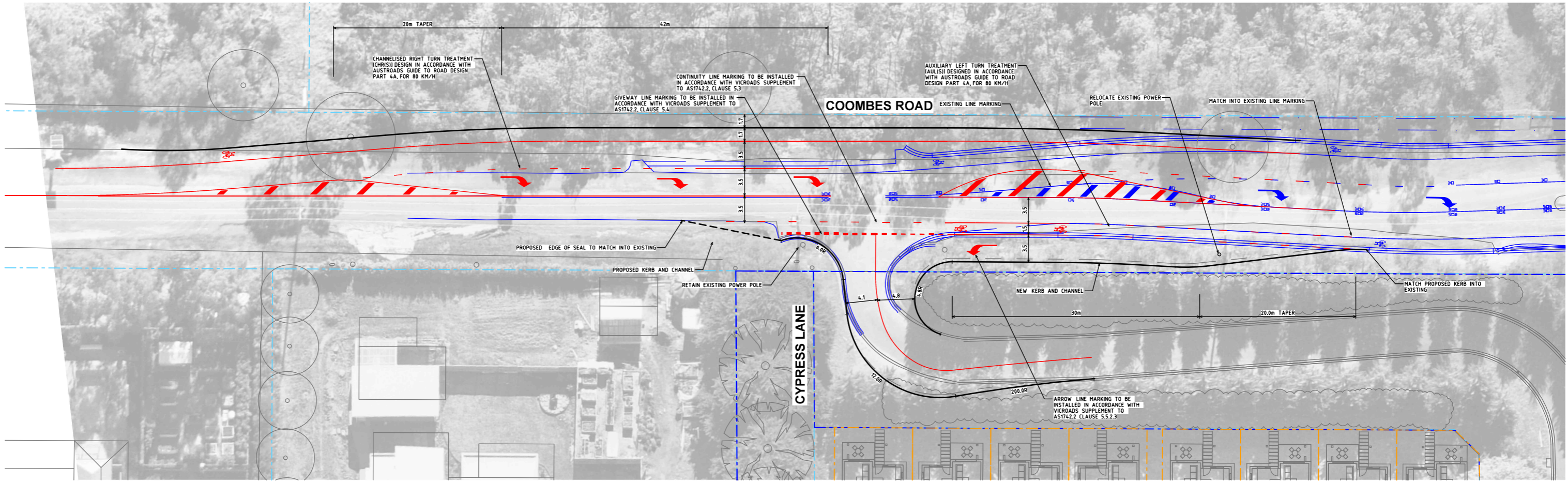
Copyright
This document may only be used for its commissioned purpose. No part of this document may be reproduced, modified or transmitted without the written authority of onemilegrid. Unauthorised use of this document in any form is prohibited.

onemilegrid operates from Wurundjeri Woiworing 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

Appendix B Concept Layout Plan





CAD File: N:\Projects\2021\210296\Drawings\210296CLP400.dgn

SURF COAST SHIRE COUNCIL
Planning Department
 6/03/2024
 21/0333 / D24/42567

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

Scale: 1:500 @ A3


Drawing Title 4 CYPRESS LANE, TORQUAY VEHICLE SITE ACCESS CONCEPT LAYOUT PLAN		
Designed CM	Approved VG	Melway Ref 505 K1
Project Number 210296	Drawing Number CLP400	Revision G

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 Woiworing 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