MACEDON RANGES PLANNING SCHEME
DEVELOPMENT PLAN DP/...../.....
This Development Plan is satisfactory and meets the requirements of the Development Plan Overlay –
Clause 43.04 Schedule 4
of the Macedon Ranges Planning Scheme.
4/12/2020 Leanne.
Date Authorised Officer

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8611

25 March 2020

Leanne Khan
Coordinator Strategic Planning
Macedon Ranges Shire Council
P.O. Box 151
GISBORNE VIC 3437

Email: lkhan@mrsc.vic.gov.au

Dear Leanne,

Re: Amendment to the Fersfield Development Plan
110 – 112 Willowbank Road, Gisborne

Introduction

We act on behalf of the owner of the land in requesting an amendment to the Fersfield Road Development Plan to facilitate the development of 110 – 112 Willowbank Road, Gisborne (**subject site**) for the purpose of a Residential Aged Care Facility.

The Fersfield Development Plan seeks to facilitate the coordinated and sustainable development of the Fersfield Road area bounded by Fersfield Road to the north, Willowbank Road to the south, Aitken Street to the east and Old Bloomfield Road to the west.

The subject site, centrally located within the development plan area is 2,531m2 in area, contained within 2 allotments known as Lots 1 and 2 on Plan of Subdivision 130819 and is rectangular in shape. The subject site is located on the northern side of Willowbank Road opposite Brady Road.

The subject site is essentially vacant and developed by a single storey dwelling with associated outbuildings cited to Willowbank Road. The site is generally flat and whilst largely devoid of vegetation, the site does contain a grouping of mature trees located around the existing dwelling and outbuildings. Many of the trees are in very poor or hazardous condition, none are in good condition.

Peri-urban character of the Development Plan area has evolved through the development of greenfield sites. The area contains newly established residential subdivisions generally comprising single storey dwellings on medium to large size allotments. Approved subdivisions on adjoining land, has in part determined the layout of buildings and roads on the subject site.

The subject site is opposite a Neighbourhood Centre which is located to the south on the corners of Brady and Willowbank Road. The Neighbourhood Centre comprises a medical centre, shops and child care centre with additional retail and commercial uses proposed to the south west corner of Brady and Willowbank Road.

A locality, cadastral plan and aerial photograph are provided below on Figures 1 to 3.

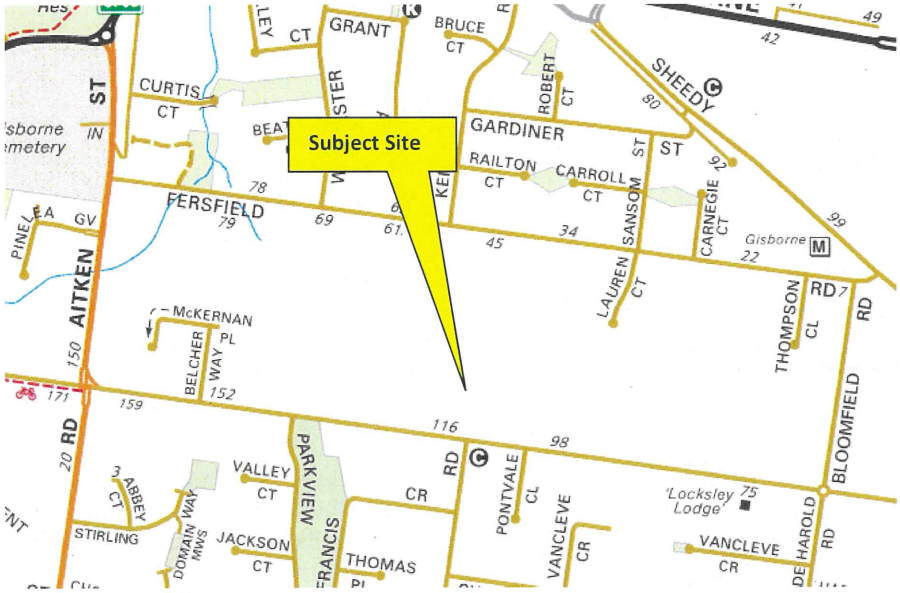


Figure 1: Location Plan

Figure 2: Cadastral Plan

Figure 3: Aerial Map – Macro – Near Map

Proposal

Amend the Fersfield Development Plan to facilitate the future development of the subject site for the purpose of a residential aged care facility.

The proposal is illustrated in the DPO concept plans prepared by Nock Architecture P/L and details the following:

- Two storey traditional residential aged care building and single level community centre to Willowbank Road.
- Single level residential care units to the rear.
- Centrally located landscaped corridor, pedestrian spine and park.
- Integration with recently approved subdivisions adjoining by providing vehicle access points to the north and east with pedestrian access only to the west.
- Carparking and loading areas provided to Willowbank Road with two crossover points proposed.

Zones and Overlays

The subject site is located within a General Residential Zone in which residential aged care is a Section 1, as-of-right use. A permit is required to construct a building or construct or carry out works. A residential aged care development must meet the requirements of Clause 53.17, Residential Aged Care.

The subject site is included within the following overlays:

- Development Contributions Overlay – Schedule 2 (**DCPO2**) Area 11; and
- Development Plan Overlay – Schedule 4 **(DPO4**) with the Fersfield Development Plan dated June 2012 being the most relevant document.

Submission

The proposal to develop the subject site for residential aged care purposes is not expected to undermine the strategic framework established by the Fersfield Road Development Plan.

Residential aged care is a residential use and best located within a residential area.

The subject site is located opposite an established and expanding Neighbourhood Centre and has access to a full range of services offered by the Gisborne township.

The provision of residential aged care beds on the subject site responds to the expected ageing of Gisborne population and the obvious need for such facilities in the future.

The size of the subject site will allow any future residential aged care development to fully comply with the requirements of Clause 53.17.

A Traffic Impact Assessment has been prepared by One Mile Grid Pty Ltd and accompanies the request to amend the Fersfield Development Plan. The report has responded to Council's internal Traffic Department comments and includes analysis indicating that a roundabout to the intersection of Brady / Willowbank Road is not needed given expected future traffic numbers. The report further concludes:

- *The site is located within the Development Plan Overlay (Schedule 4 – DPO4) which requires a Transport Impact Assessment to be prepared for the site;*
- *The Fersfield Road Development Plan has been prepared for the surrounding area which is proposed to yield approximately 327 residential lots and includes an internal road network;*
- *The subject site was anticipated to yield approximately 22 low-density residential lots;*
- *The proposed access and internal road network for the integrated residential care facility is in accordance with the Macedon Ranges Planning Scheme;*
- *The anticipated traffic volumes generated by the development is not expected to have an impact on the operation of the surrounding road network; and*

- *There are no traffic engineering reasons which would preclude the Development Plan Overlay to be amended.*

A due diligence review has been undertaken by Alpha Archaelogy P/L to determine if the proposed development of the subject site requires a Cultural Heritage Management Plan (CHMP) under the Aboriginal Heritage Regulations 2018 and accompanies the request to amend the Fersfield Development Plan. The due diligence review identifies that the subject site is not in an area of cultural sensitivity and therefore a mandatory CHMP is not required.

A preliminary Tree Assessment report has been undertaken by Open Space Management and accompanies the application to amend the Fersfield Development Plan. The report investigated 30 trees, concluding that most trees are either in very poor or hazardous conditions. Importantly, the report recommends the removal of all trees on.

In summary:

- The proposed amendment to the existing Fersfield Development Plan to allow a residential aged care development of the subject site is considered consistent with the strategic objectives of the development plan and will provide important housing diversity within the precinct.
- The proposed residential aged care use is a as-of-right use within the General Residential Zone.
- The proposed residential aged care development will provide a positive addition to the area and will enjoy a high level of access to the full range of urban services.
- The proposal adopts a scale, height and layout that respects the existing, preferred and approved development within the area.
- The proposal will not give rise to adverse traffic impacts and will not result in the removal of any significant vegetation.

Overall, amending the Fersfield Development Plan to facilitate the use of the subject site for a low scale residential aged care development will make a positive contribution to the Gisborne Township and the Fersfield residential neighbourhood.

Should you wish to discuss the above further, please do not hesitate to contact me.

Yours faithfully
for FASTNET CONSULTING

Stephen Bitmead

Enc:

Attachment 1 – Credit Card Payment Form

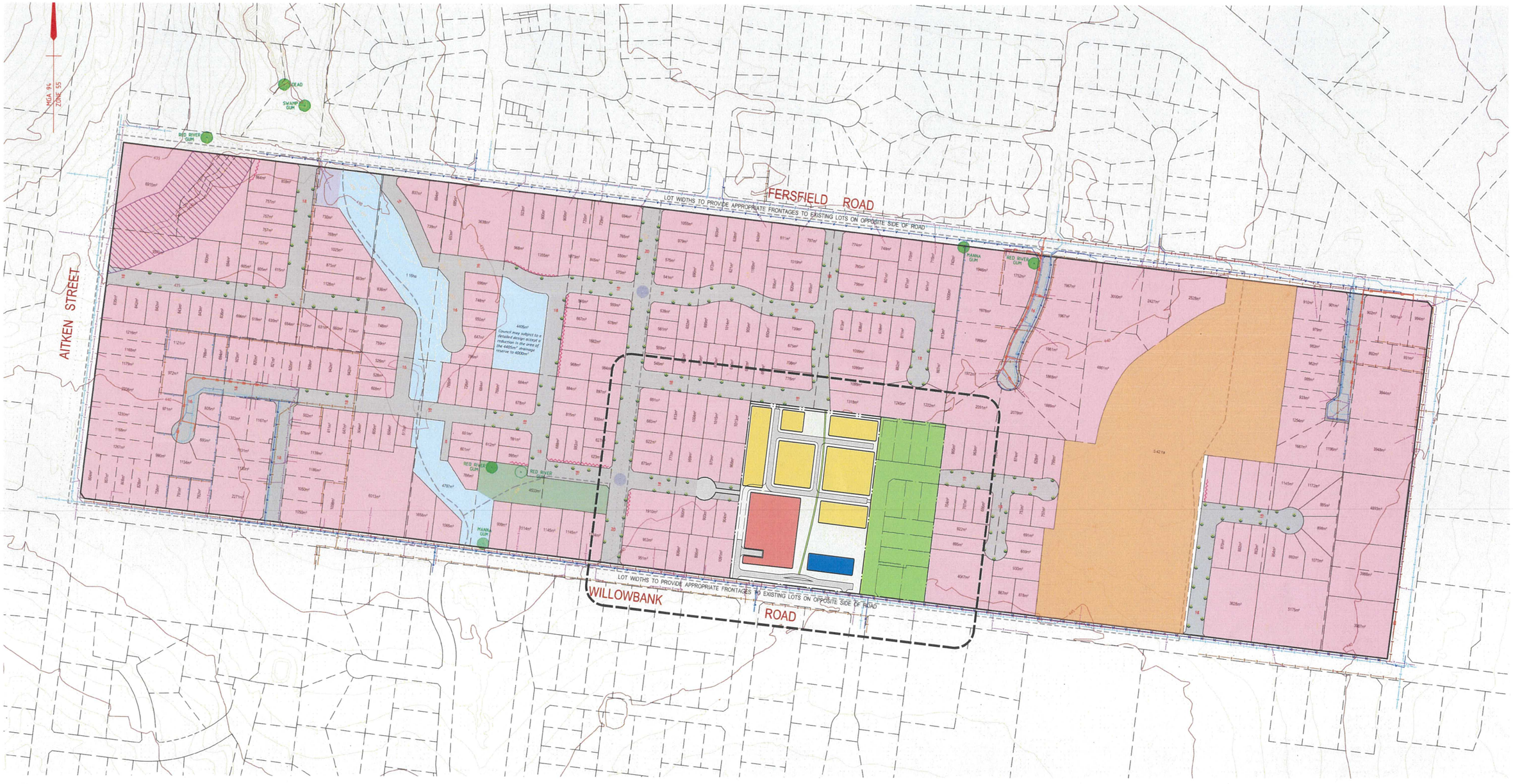
Attachment 2 – Plans PD01 Rev B and PD02 Rev A

Attachment 3 – Transport Impact Assessment

Attachment 4 – Alpha Archaeology Heritage Advice

Attachment 5 – Tree Assessment

Attachment 6 – Tree Photos



FERSFIELD ROAD DEVELOPMENT PLAN
SCALE 1:2000

MACEDON RANGES PLANNING SCHEME
DEVELOPMENT PLAN DP/...../.....
This Development Plan is satisfactory and meets the requirements of the Development Plan Overlay –
Clause 43.04 Schedule 4
of the Macedon Ranges Planning Scheme.
4/12/2020 Keenan
Date Authorised Officer

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SUBJECT SITE
ADJOINING SITE SHOWING UPDATED SUBDIVISION
REFER TO PD 02 FOR PROPOSED DPO CHANGES AND UPDATED ADJACENT SITE LAYOUTS
RESIDENTIAL AGED CARE FACILITY 2 X LEVELS
COMMUNITY CENTRE SINGLE LEVEL
RESIDENTIAL CARE UNITS SINGLE LEVEL

NOCK

NOCK ARCHITECTURE PTY LTD
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+61 (0)422 022 106
studio@nockarchitecture.com.au
www.nockarchitecture.com.au

DRAWING TITLE: AMENDMENT TO THE DPO - EXISTING PRECINCT PLAN						
PROJECT NAME: MAYFLOWER GISBORNE			CLIENT: MAYFLOWER GROUP			
PROJECT NUMBER: 2019 05	SCALE: 1:2000 @ A1	DRAWING NO.: PD 01	DATE: 13 / 03 / 2020	ISSUE: P	REV. NUM.: B	

NOTES:
A) PRIOR TO ANY DEVELOPMENT, EASEMENTS MUST BE PROVIDED IN FAVOUR OF WESTERN WATER OVER ALL PROPOSED SEWER MAINS LOCATED WITHIN PRIVATE PROPERTY. EASEMENT WIDTHS AND SEWER OFFSETS MUST COMPLY WITH THE CURRENT VERSION OF THE GRAVITY SEWERAGE CODE OF AUSTRALIA - MELBOURNE RETAIL WATER AGENCIES.

B) PRIOR TO ANY DEVELOPMENT, THE DEVELOPER MUST PREPARE TO THE SATISFACTION OF COUNCIL AND WESTERN WATER AN INTEGRATED WATER MANAGEMENT PLAN (IWMP) THAT INCORPORATES WATER EFFICIENCY MEASURES AND WATER-SENSITIVE URBAN DESIGN TECHNIQUES THAT REDUCE RELIANCE ON POTABLE WATER BY INCREASING UTILISATION OF FIT- FOR-PURPOSE ALTERNATIVE WATER SUPPLIES.

C) PRIOR TO ANY DEVELOPMENT, A RIGHT OF WAY EASEMENT MUST BE PROVIDED ALONG THE 'PEDESTRIAN SPINE' TO PROVIDE FOR PUBLIC ACCESS.

MORRISON ROAD
PROPOSED SUBDIVISION

FUTURE X-OVER ENTRY & EXIT

RESIDENTIAL CARE UNITS SINGLE LEVEL

NEW 2 WAY ACCESS ROAD

RESIDENTIAL CARE UNITS SINGLE LEVEL

PARK

PEDESTRIAN SPINE

RESIDENTIAL CARE UNITS SINGLE LEVEL

NEW 2 WAY ACCESS ROAD

NEW 2 WAY ACCESS ROAD

RESIDENTIAL CARE UNITS SINGLE LEVEL

PEDESTRIAN SPINE

RESIDENTIAL CARE UNITS SINGLE LEVEL

NEW 2 WAY ACCESS ROAD

NEW 2 WAY ACCESS ROAD

FUTURE X-OVER ENTRY & EXIT

PROPOSED COURT BOWL & PEDESTRIAN LINK SHOWING APPROXIMATE DIMENSIONS

R12000

25000

4500

FUTURE PEDESTRIAN ACCESS

116 WILLOWBANK ROAD
PROPOSED SUBDIVISION

TEMPORARY 2 WAY ACCESS ROAD

RESIDENTIAL AGED CARE FACILITY
2 X LEVELS

RESIDENTIAL CARE UNITS SINGLE LEVEL

PEDESTRIAN SPINE

PARK

FUTURE PEDESTRIAN ACCESS

96 - 98 WILLOWBANK ROAD
PROPOSED SUBDIVISION

LOADING

COMMUNITY CENTRE
SINGLE LEVEL

NEW 2 WAY ACCESS ROAD

PARKING

DROP OFF

PARKING

NEW X-OVER ENTRY & EXIT

NEW X-OVER EXIT ONLY

W I L L O W B A N K R O A D

101 -105 WILLOWBANK ROAD

97 WILLOWBANK ROAD

2 PONTVALE CLOSE

1 PONTVALE CLOSE

MACEDON RANGES PLANNING SCHEME
DEVELOPMENT PLAN DP/...../.....
This Development Plan is satisfactory and meets the requirements of the Development Plan Overlay –
Clause 43.04 Schedule 4
of the Macedon Ranges Planning Scheme.
4/12/2020 .....
Date Authorised Officer

page 8 of 88

NOCK

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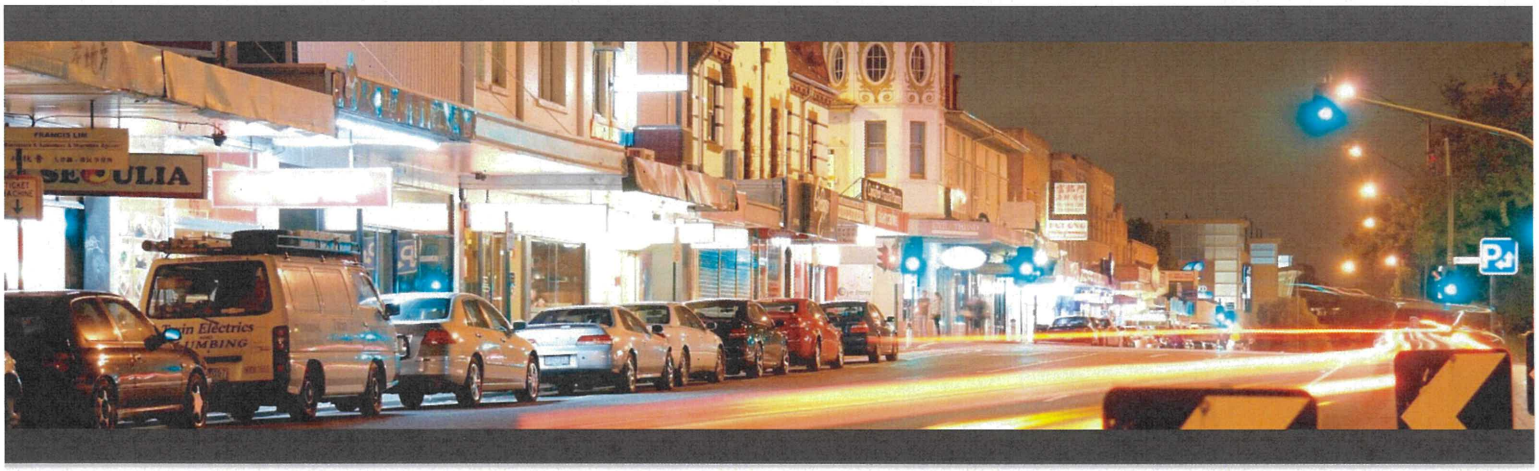
DRAWING TITLE: AMENDMENT TO THE DPO - SITE PLAN					
PROJECT NAME: MAYFLOWER GISBORNE			CLIENT: MAYFLOWER GROUP		
PROJECT NUMBER: 2019 05	SCALE: 1:500 @ A1	DRAWING NO.: PD 02	DATE: 28 / 10 / 2020	ISSUE: P	REVISION: B

onemilegrid
TRAFFIC ENGINEERING

110-112 Willowbank Road, Gisborne

Transport Impact Assessment – DPO Amendment



MACEDON RANGES PLANNING SCHEME
DEVELOPMENT PLAN DP/...../.....
This Development Plan is satisfactory and meets the requirements of the Development Plan Overlay –
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4/12/2020 .....
Date Authorised Officer

page 9 of 88

190536TIA001D-F

18 March 2020

onemilegrid

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56 Down Street

COLLINGWOOD, VIC 3066
www.onemilegrid.com.au

DOCUMENT INFORMATION

Prepared for	Connect		
File Name	190536TIA001D-F	**Report Date**	18 March 2020
Prepared by	Martin Kropiewnicki	**Reviewed by**	Valentine Gnanakone
Signature	M. Kropiewnicki	**Signature**	Valentine GR

CONTENTS

TABLES

FIGURES

APPENDICES

1 INTRODUCTION

onemile**grid** has been requested by Connect to undertake a Transport Impact Assessment of the proposed Development Plan Overlay amendment at 110-112 Willowbank Road, Gisborne.

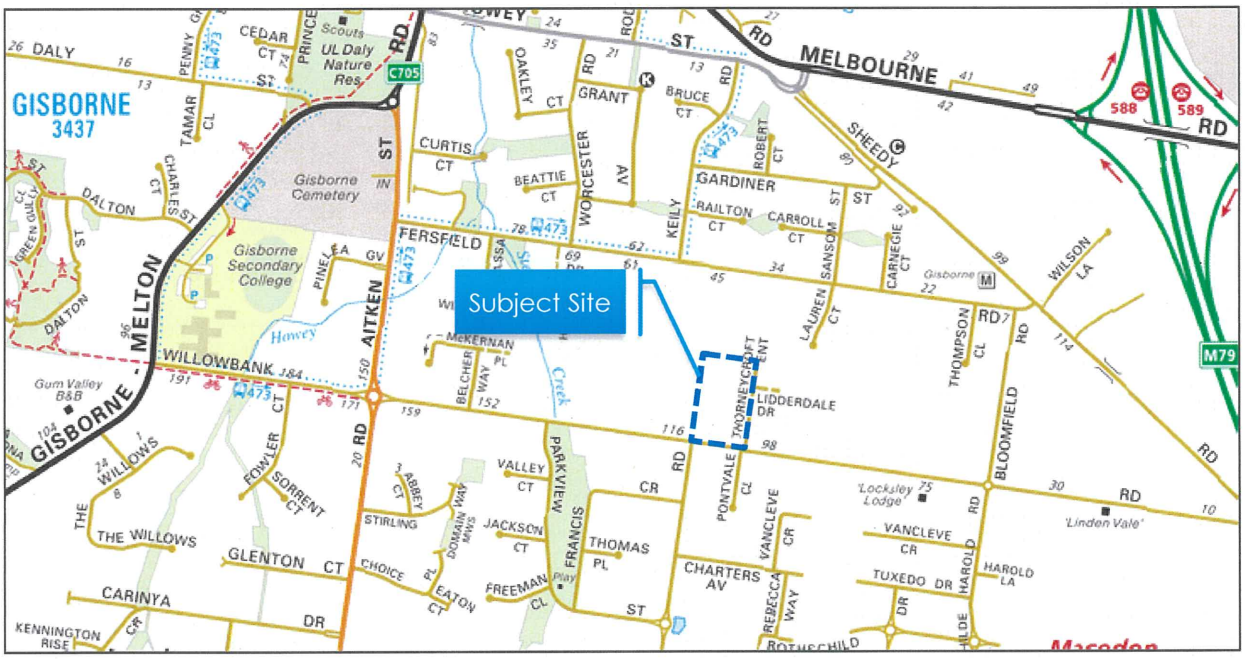
As part of this assessment the subject site has been inspected with due consideration of the development proposal, traffic data has been sourced and relevant background reports have been reviewed.

2 EXISTING CONDITIONS

2.1 Site Location

The subject site is located on the northern side of Willowbank Road, approximately midway between Aitken Street to the west and Bloomfield Road to the east, as shown in Figure 1.

Figure 1 Site Location



Copyright Melway Publishing

The site is rectangular in shape and abuts Willowbank Road for approximately 140 metres along the site's southern boundary.

The site is largely made up of vacant land, with a single residential building located towards the southern boundary site.

The site is located within the Gisborne Outline Development Plan (Amendment C676 Part 1 – September 2012).

Land use in the immediate vicinity is mixed in nature, including an established residential area and township on the southern side of Willowbank Road and rural residential properties to the east and west, earmarked for residential development.

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

Figure 2 Site Context (13 October 2019)

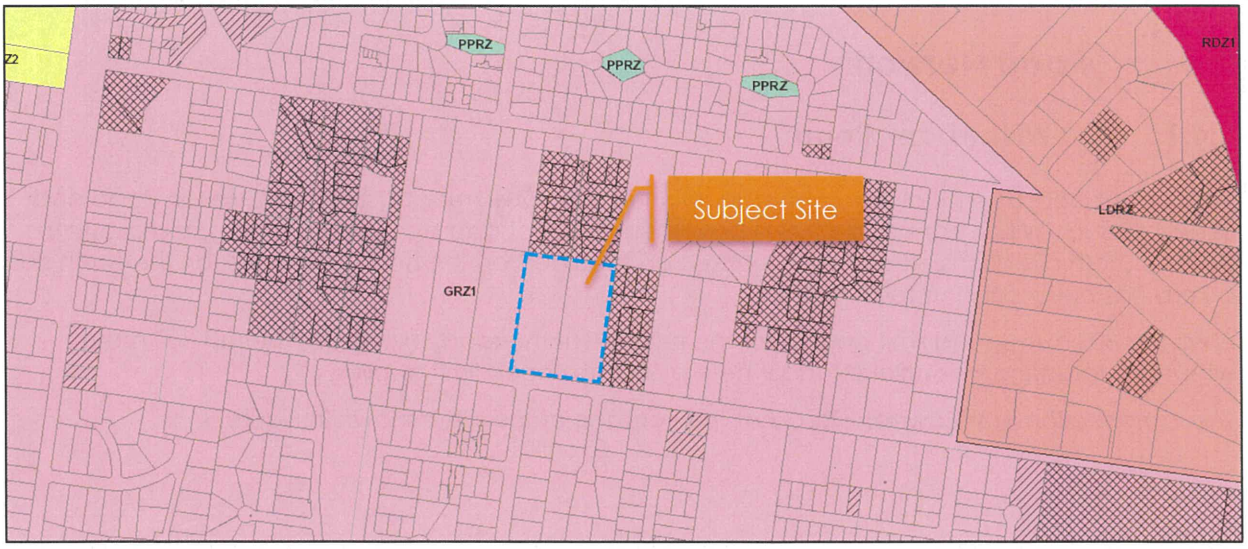
Copyright Nearmap

2.2 Planning Zones and Overlays

It is shown in Figure 3 that the site is located within a General Residential Zone (GRZ), for which permitted uses are listed in Clause 32.08 of the Macedon Ranges Planning Scheme. Furthermore, the site is subject to the following planning overlays:

- Development Contributions Plan Overlay – Schedule 2 (DCPO2)
- Development Plan Overlay – Schedule 4 (DPO4)

Figure 3 Planning Scheme Zones



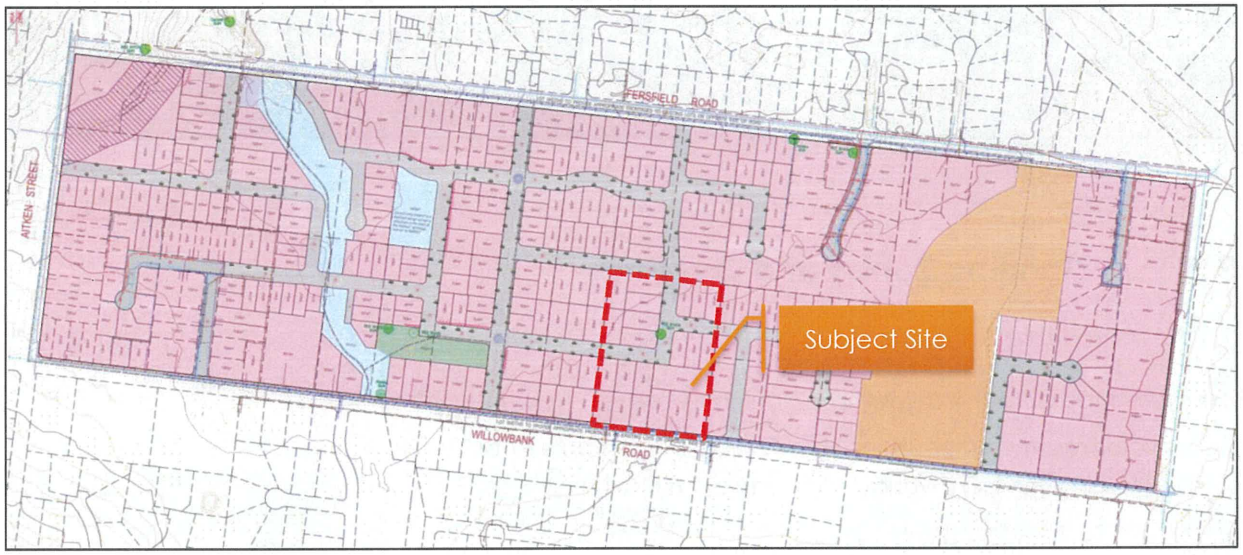
It is noted that DPO4 which applies to the subject site is required to provide the following for any proposed Development Plan's:

"A detailed traffic assessment and management plan addressing the impact of the development on the arterial and local road network, including mitigation works required on the road network in addition to funding responsibilities. The plan must show typical road cross sections and integration with the existing and proposed road, bicycle and pedestrian networks and public transport."

2.3 Fersfield Road Development Plan

As noted above, the subject site is subject to a Development Plan Overlay. As a result, a Development Plan has been prepared for the site, which is bound by Aitken Street to the west, Fersfield Road to the north, Willowbank Road to the south and Bloomfield Road to the east. The development plan has been prepared to allow for a connected internal road network to allow for future residential development which is proposed to yield approximately 327 residential lots. In regard to the subject site, access is proposed directly from Willowbank Road to all lots fronting Willowbank Road. Whilst all other residential lots are proposed with access from an internal road network running from the northern, eastern and western boundaries.

Figure 4 Fersfield Road Development Plan Layout



2.4 Road Network

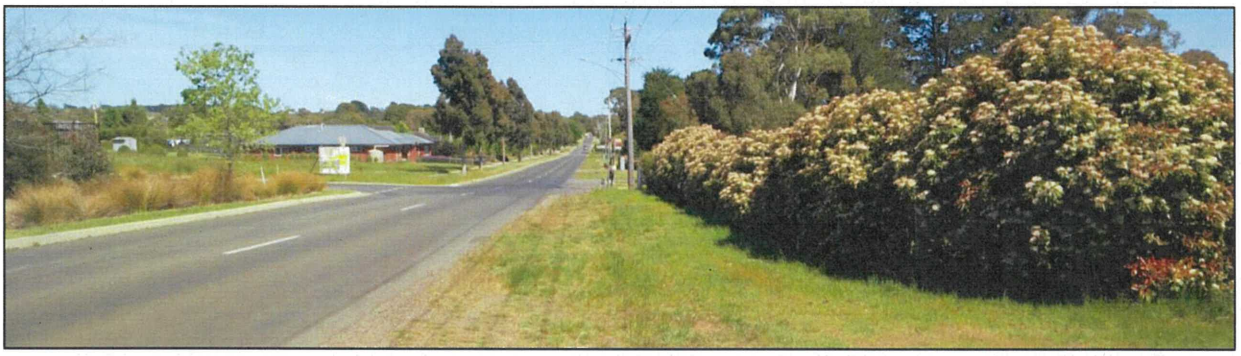
2.4.1 Willowbank Road

Willowbank Road is a local road generally aligned east-west, running between Melton Road and Sheedy Road. Willowbank Road has a pavement width of approximately 6 metres and allows for traffic in both directions. The road has unsealed shoulders on the north side, whilst on the south side a kerb has been constructed.

A signed 80 km/h speed limit applies for the majority of the road, except for the last 300 metres when approaching Bloomfield Road where a 60km/h speed limit applies.

The cross-section of Willowbank Road at the frontage of the site is shown in Figure 5.

Figure 5 Willowbank Road, looking west from the subject site



2.5 Traffic Volumes

Traffic volume surveys were undertaken by Trans Traffic Survey on behalf of **one**mile**grid** at the following intersection and times:

- Bloomfield Road / Willowbank Road - Wednesday 20th June 2018, between 6:00am and 10:00am, and between 3:00pm and 7:00pm;
- Melton-Gisborne Road / Aitken Street - Wednesday 5th December 2018, between 6:00am and 10:00am, and between 3:00pm and 7:00pm;
- Melton-Gisborne Road / Willowbank Road - Wednesday 5th December 2018, between 6:00am and 10:00am, and between 3:00pm and 7:00pm;
- Willowbank Road / Brady Road – Wednesday 4th March 2019, between 7:00am and 10:00am, and between 3:30pm and 7:00pm.

The peak hour results of the survey are shown below.

Figure 6 2018 Existing Traffic Volumes – Bloomfield Road/Willowbank Road

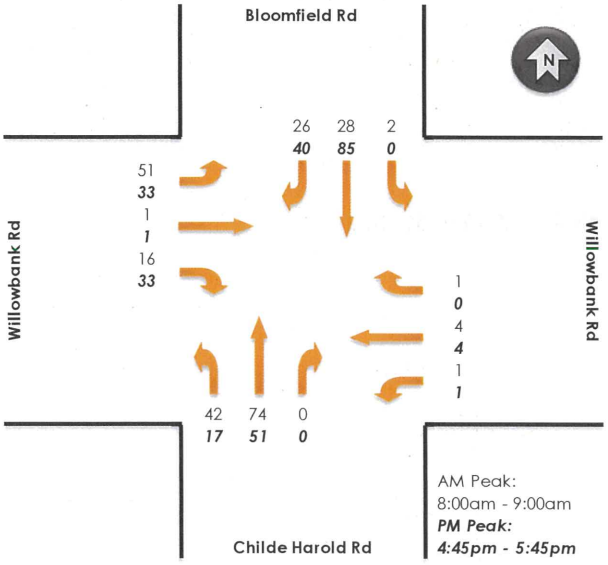


Figure 7 2018 Existing Traffic Volumes – Melton-Gisborne Road/Willowbank Road

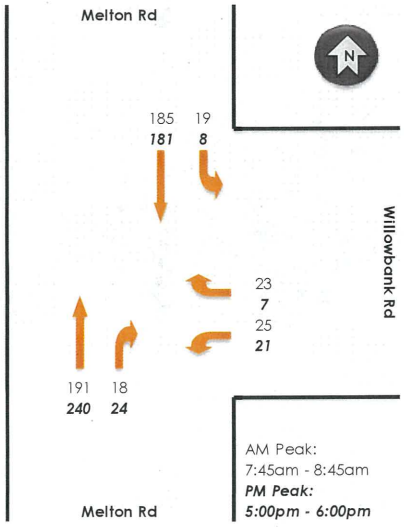


Figure 8 2018 Existing Traffic Volumes – Melton-Gisborne Road / Aitken Street

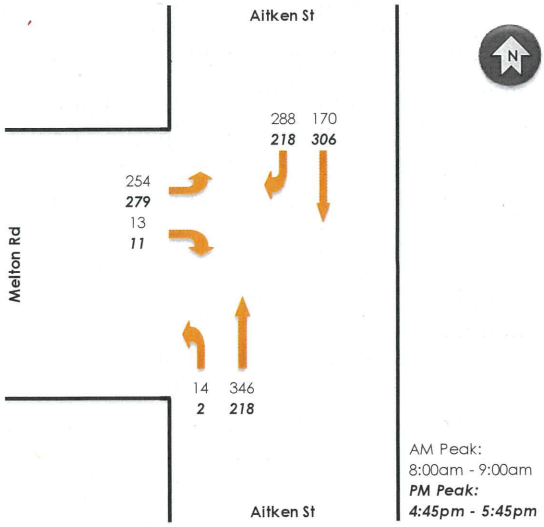
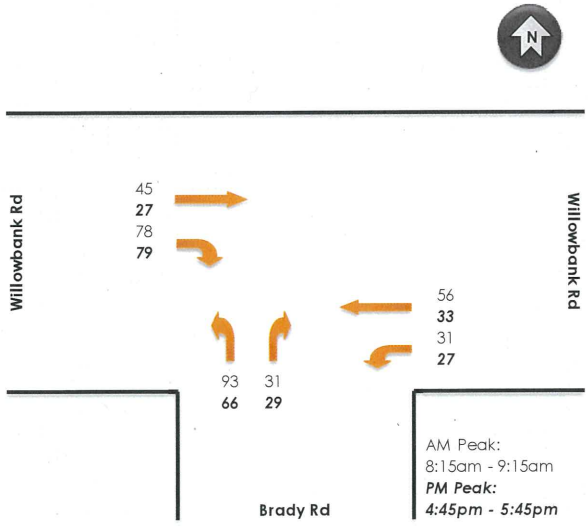


Figure 9 2020 Existing Traffic Volumes – Willowbank Road / Brady Road



2.6 Intersection Capacity Assessment

To assess the operation of the intersection the traffic volumes have been input into SIDRA Intersection, a traffic modelling software package.

The SIDRA Intersection software package has been developed to provide information on the capacity of an intersection with regard to a number of parameters. Those parameters considered relevant are, Degree of Saturation (DoS), 95th Percentile Queue, and Average Delay as described below.

Table 1 SIDRA Intersection Parameters

<table>
<tr><th>Parameter</th><th>Description</th></tr>
<tr><td>Degree of Saturation (DoS)</td><td>The DoS represents the ratio of the traffic volume making a particular movement compared to the maximum capacity for that particular movement. The value of the DoS has a corresponding rating depending on the ratio as shown below.
<table>
<tr><th>Degree of Saturation</th><th>Rating</th></tr>
<tr><td>Up to 0.60</td><td>Excellent</td></tr>
<tr><td>0.61 – 0.70</td><td>Very Good</td></tr>
<tr><td>0.71 – 0.80</td><td>Good</td></tr>
<tr><td>0.81 – 0.90</td><td>Fair</td></tr>
<tr><td>0.91 – 1.00</td><td>Poor</td></tr>
<tr><td>Above 1.00</td><td>Very Poor</td></tr>
</table>
It is noted that whilst the range of 0.91 – 1.00 is rated as 'poor', it is acceptable for critical movements at an intersection to be operating within this range during high peak periods, reflecting actual conditions in a significant number of suburban signalised intersections.</td></tr>
<tr><td>Average Delay (seconds)</td><td>Average delay is the time delay that can be expected for all vehicles undertaking a particular movement in seconds.</td></tr>
<tr><td>95th Percentile (95%ile) Queue</td><td>95%ile queue represents the maximum queue length in metres that can be expected in 95% of observed queue lengths in the peak hour</td></tr>
</table>

The results of the analysis are provided in tables below.

Table 2 Willowbank Road / Bloomfield Road – AM Peak Hour - Existing

Approach	Movement	D.o.S.	Avg Delay (sec)	Queue (m)
Childe Harold Road - South	Left	0.097	4.7	3.4
	Through	0.097	5	3.4
	Right	0.097	8.6	3.4
Willowbank Road - East	Left	0.036	4.7	1.2
	Through	0.036	4.9	1.2
	Right	0.036	8.6	1.2
Bloomfield Road - North	Left	0.043	4.4	1.5
	Through	0.043	4.7	1.5
	Right	0.043	8.4	1.5
Willowbank Road - West	Left	0.058	4.7	2
	Through	0.058	5	2
	Right	0.058	8.7	2

Table 3 Willowbank Road / Bloomfield Road – PM Peak Hour - Existing

Approach	Movement	D.o.S.	Avg Delay (sec)	Queue (m)
Childe Harold Road - South	Left	0.056	4.6	1.9
	Through	0.056	4.8	1.9
	Right	0.056	8.5	1.9
Willowbank Road - East	Left	0.006	5.1	0.2
	Through	0.006	5.3	0.2
	Right	0.006	9.0	0.2
Bloomfield Road - North	Left	0.097	4.5	3.5
	Through	0.097	4.8	3.5
	Right	0.097	8.5	3.5
Willowbank Road - West	Left	0.056	4.6	1.9
	Through	0.056	4.9	1.9
	Right	0.056	8.6	1.9

Table 4 Willowbank Road / Melton Road – AM Peak Hour - Existing

Approach	Movement	D.o.S.	Avg Delay (sec)	Queue (m)
Melton Road - South	Through	0.118	0.1	1
	Right	0.118	6.2	1
Willowbank Road - East	Left	0.048	6.2	1.2
	Right	0.048	7.2	1.2
Melton Road - North	Left	0.112	5.6	0
	Through	0.112	0	0

Table 5 Willowbank Road / Melton Road – PM Peak Hour - Existing

Approach	Movement	D.o.S.	Avg Delay (sec)	Queue (m)
Melton Road - South	Through	0.149	0.1	1.4
	Right	0.149	6.2	1.4
Willowbank Road - East	Left	0.025	6.1	0.7
	Right	0.025	7.5	0.7
Melton Road - North	Left	0.104	5.6	0
	Through	0.104	0	0

Table 6 Aitken Street / Melton Road – AM Peak Hour - Existing

Approach	Movement	D.o.S.	Avg Delay (sec)	Queue (m)
Aitken Street - South	Left	0.348	5.8	15.3
	Through	0.348	6	15.3
Aitken Street - North	Through	0.297	4.2	15.5
	Right	0.297	8.8	15.5
Melton Road - West	Left	0.281	6	12.7
	Right	0.281	10.9	12.7

Table 7 Aitken Street / Melton Road – PM Peak Hour - Existing

Approach	Movement	D.o.S.	Avg Delay (sec)	Queue (m)
Aitken Street - South	Left	0.202	5.1	7.8
	Through	0.202	5.4	7.8
Aitken Street - North	Through	0.335	4.2	17.5
	Right	0.335	8.8	17.5
Melton Road - West	Left	0.268	5.2	11.8
	Right	0.268	10.	11.8

Table 8 Willowbank Road / Brady Road – AM Peak Hour - Existing

Approach	Movement	D.o.S.	Avg Delay (sec)	Queue (m)
Brady Road - South	Left	0.094	5.7	2.6
	Right	0.094	6.3	2.6
Willowbank Road - East	Left	0.048	5.6	0
	Through	0.048	0	0
Willowbank Road - West	Through	0.075	0.2	2.5
	Right	0.075	5.8	2.5

Table 9 Willowbank Road / Brady Road – PM Peak Hour - Existing

Approach	Movement	D.o.S.	Avg Delay (sec)	Queue (m)
Brady Road - South	Left	0.072	5.7	2
	Right	0.072	6.1	2
Willowbank Road - East	Left	0.034	5.6	0
	Through	0.034	0	0
Willowbank Road - West	Through	0.065	0.2	2.2
	Right	0.065	5.7	2.2

As shown above, all intersections that were analysed are operating with a rating of 'excellent' during both the AM and PM peak periods, with negligible queues and delays on each approach.

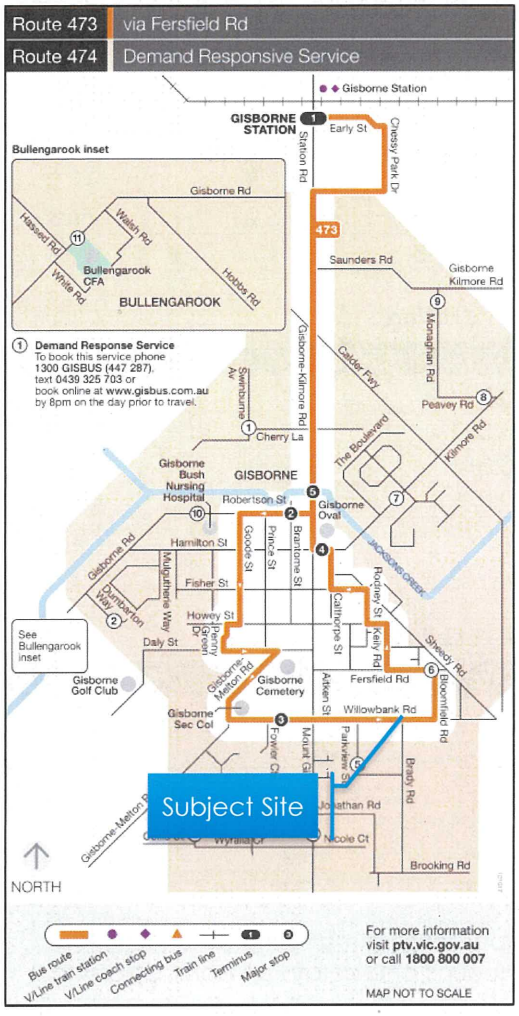
2.7 Sustainable Transport

Public transport in the immediate vicinity of the subject site is limited to bus services. The 473 Gisborne – Gisborne Station bus service provides access to Gisborne Train Station from Willowbank Road at the south-western corner of the subject site. Gisborne Train Station is located in 'New Gisborne', approximately 6km north of the subject site, and provides access to the Melbourne CBD, as well as other regional areas by train.

In addition, areas outside of the 473 bus route benefit from a Demand Responsive Service that operates in the shaded areas in Figure 10. To use this service, it is required to book by phone or online the day before travel.

The Gisborne bus network map has been provided in Figure 10.

Figure 10 Gisborne Bus Network



3 GISBORNE OUTLINE DEVELOPMENT PLAN (AMENDMENT C67 PART 1 – SEPTEMBER 2012)

3.1 Overview

The site is located within the Gisborne Outline Development Plan (Amendment C67 Part 1 – September 2012) for which an extract is shown in Figure 11.

The outline development plan provides a framework for future growth and development of Gisborne, including future land uses, transport networks, open space and environmental features. As shown in the below figure, the site is located towards the southern end of the development plan area.

The site is nominated in the structure plan largely as residential land, with a notation that the area towards the south-western corner of the site provide for a neighbourhood convenience store and community facility (i.e. community centre/kindergarten) to service local needs.

The Gisborne Outline Development Plan provided the guidelines for the preparation of the Fersfield Road Development Plan as previously discussed in Section 2.3.

The structure plan has also proposed for Willowbank Road to be upgraded, as well as the intersection of Willowbank Road and Brady Road, as shown in Figure 12.

Figure 11 Gisborne / New Gisborne Structure Plan

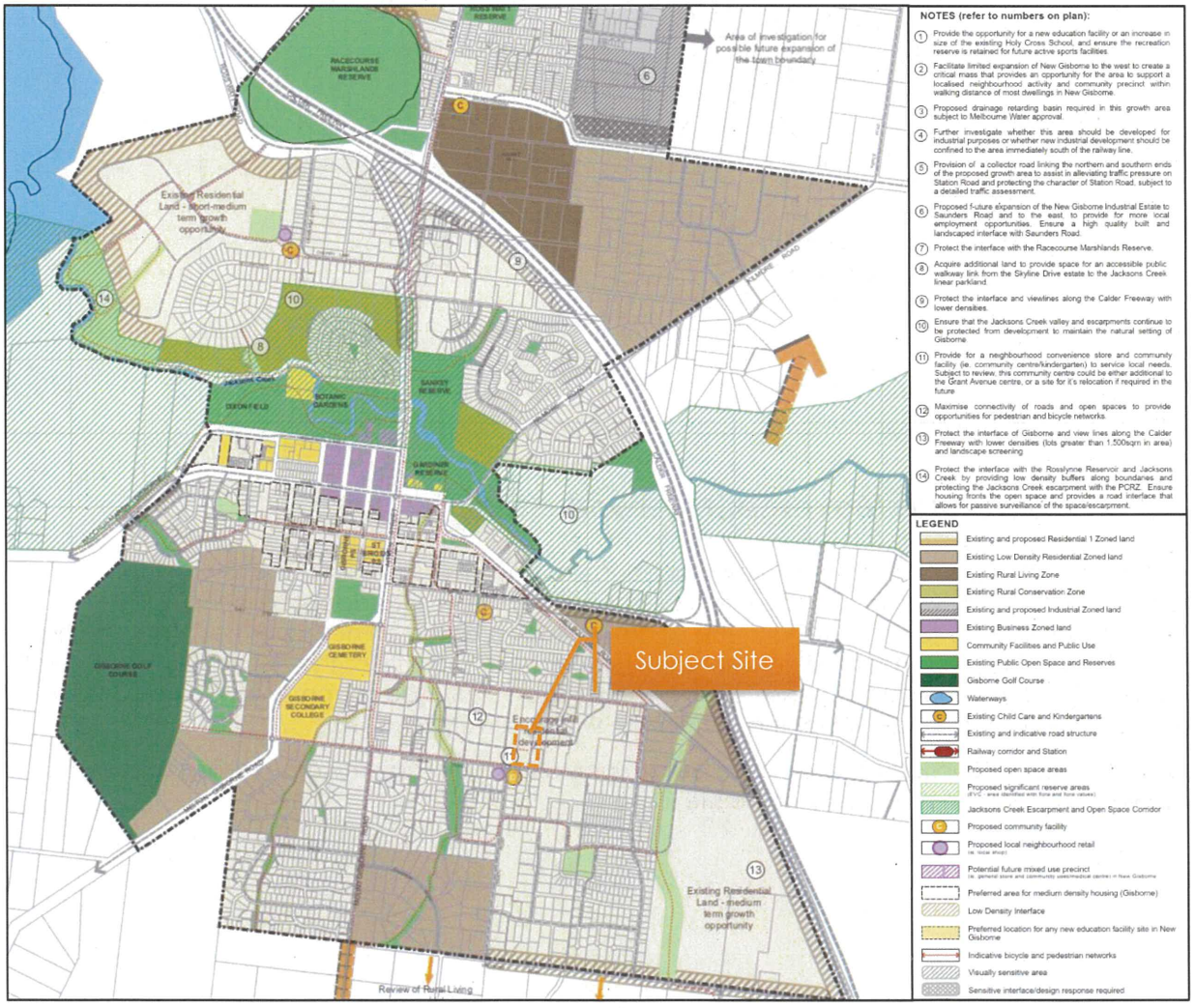
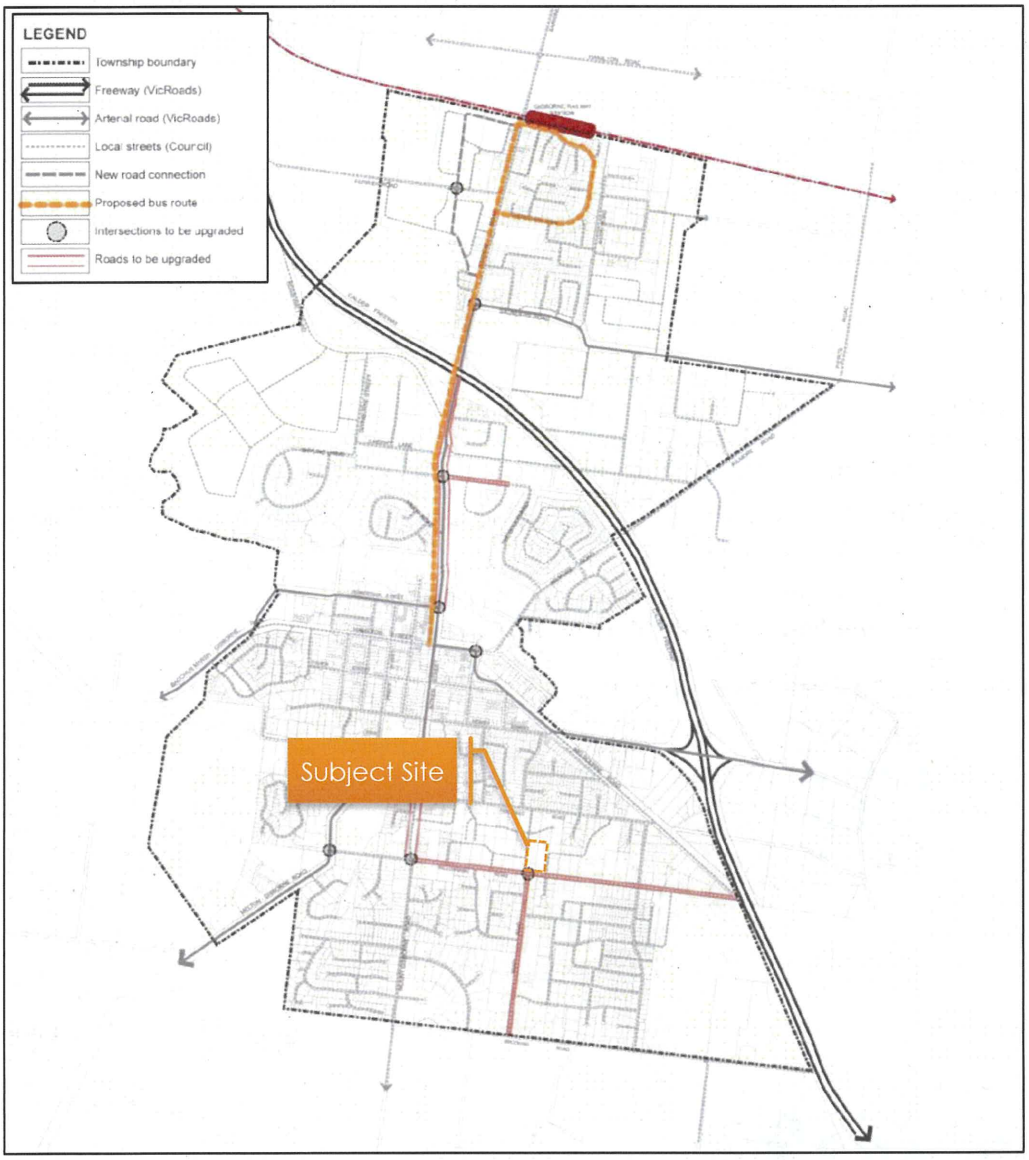


Figure 12 Structure Plan Road Network

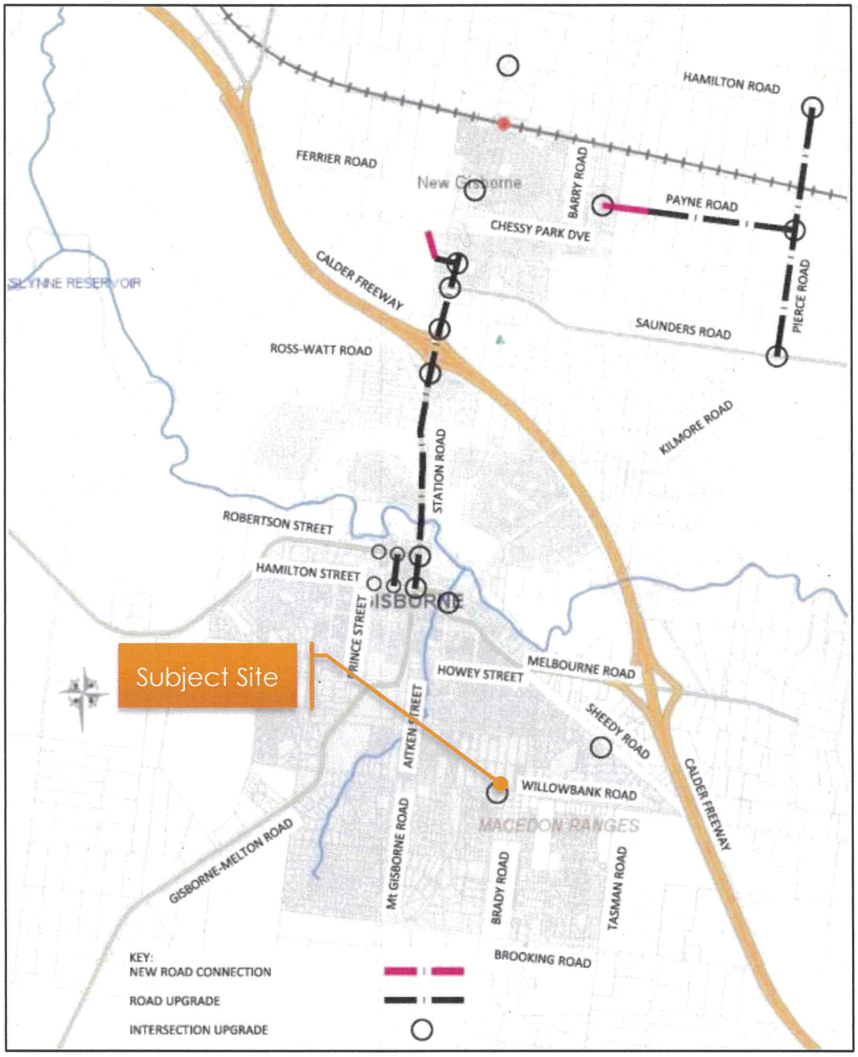


3.2 Gisborne Movement Network Study

In 2016 a traffic study was prepared for Macedon Ranges Shire Council for the township of Gisborne. This study was to replace the 2009 traffic study which was adopted in the above Gisborne Outline Development Plan. The updated study is based on new information regarding yields for new developments within Gisborne. Although the majority of the network study generally remains the same, the study takes into account the subject sites development, whereas in 2009 future development potential for the subject site was relatively unknown.

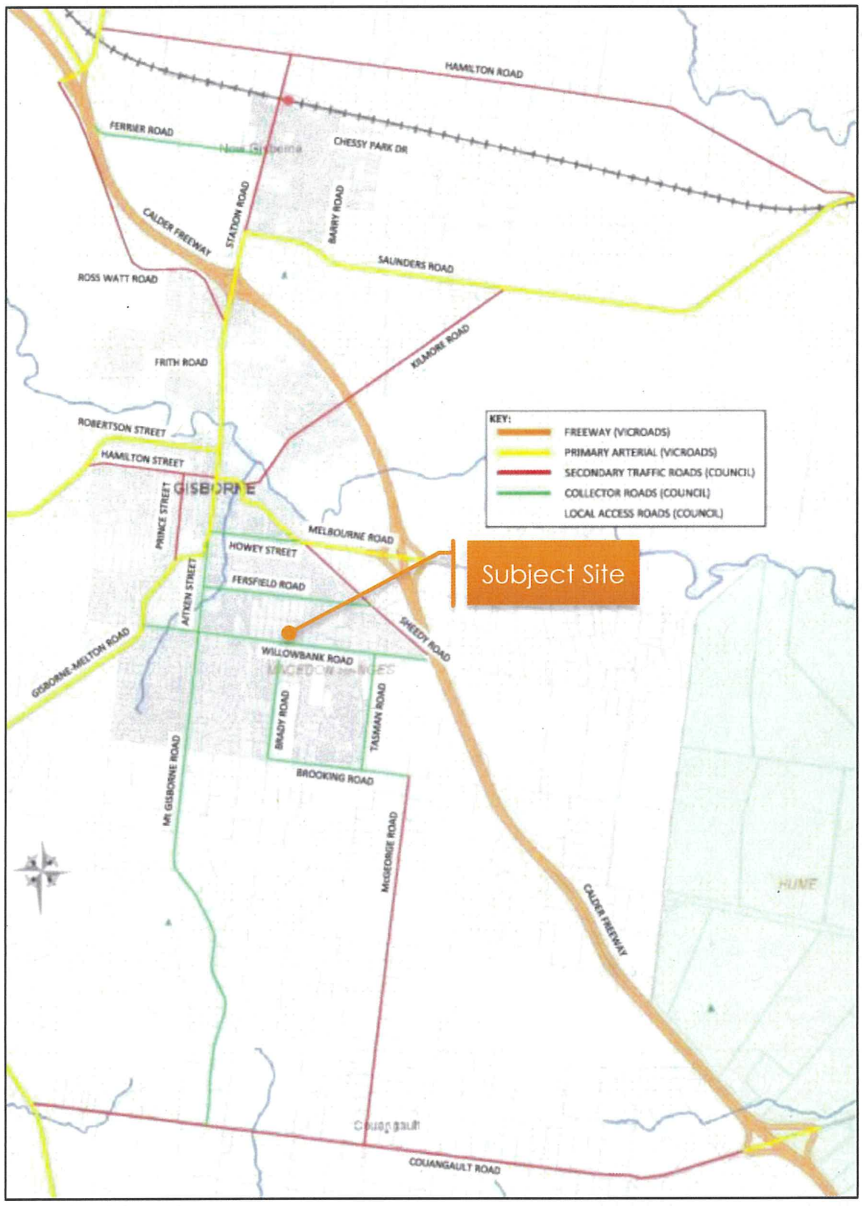
Extracts of the network study are shown below, indicating the road network, walking and cycling network proposed in the vicinity of the site.

Figure 13 Recommended Road Infrastructure Upgrades



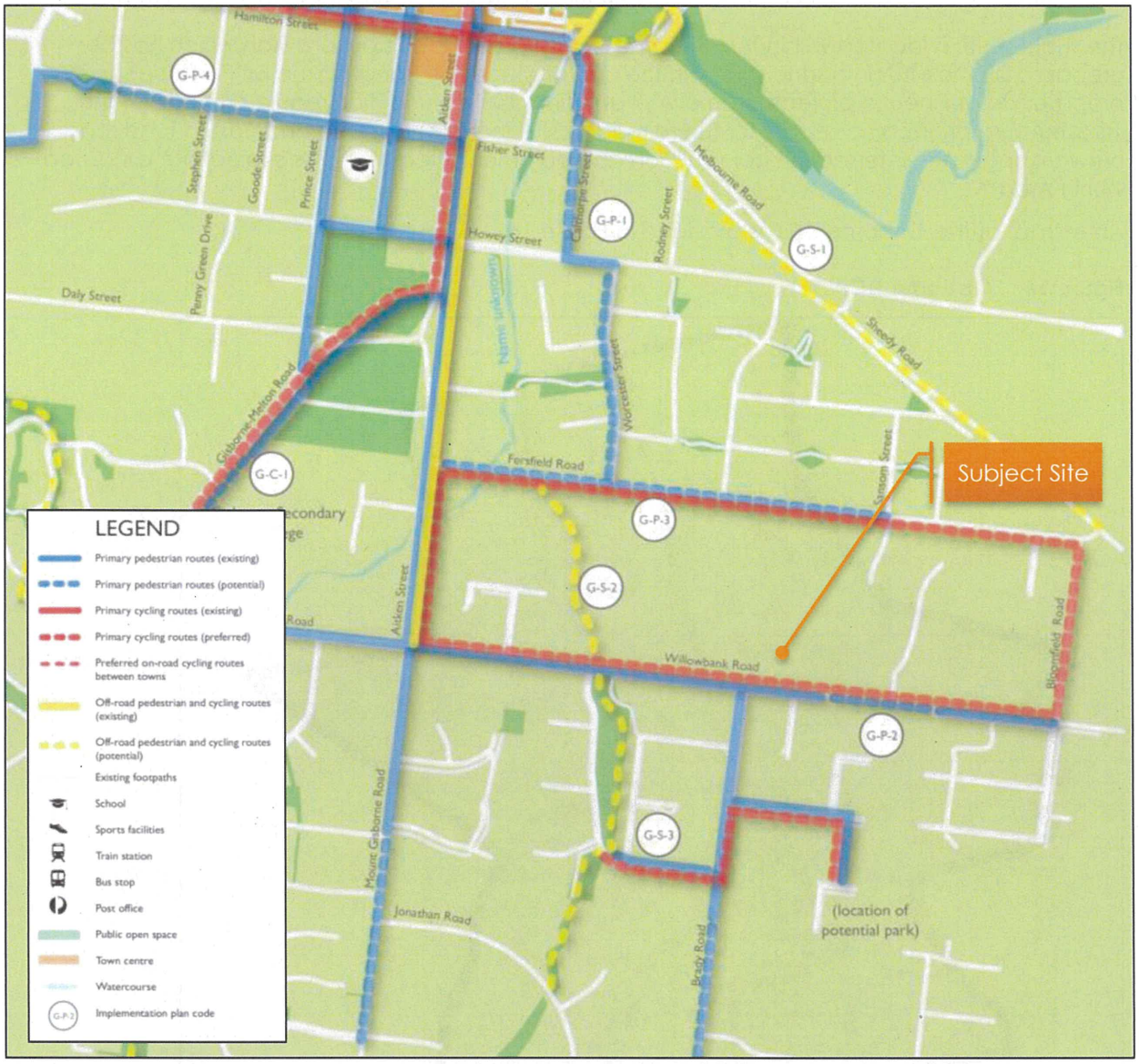
As shown above, the intersection of Willowbank Road and Brady Road has been identified as a recommended intersection upgrade.

Figure 14 Recommended Future Road Hierarchy



The recommended future road hierarchy above identifies Willowbank Road in the vicinity of the site as a 'Council Collector Road'.

Figure 15 Proposed Pedestrian and Cycling Network



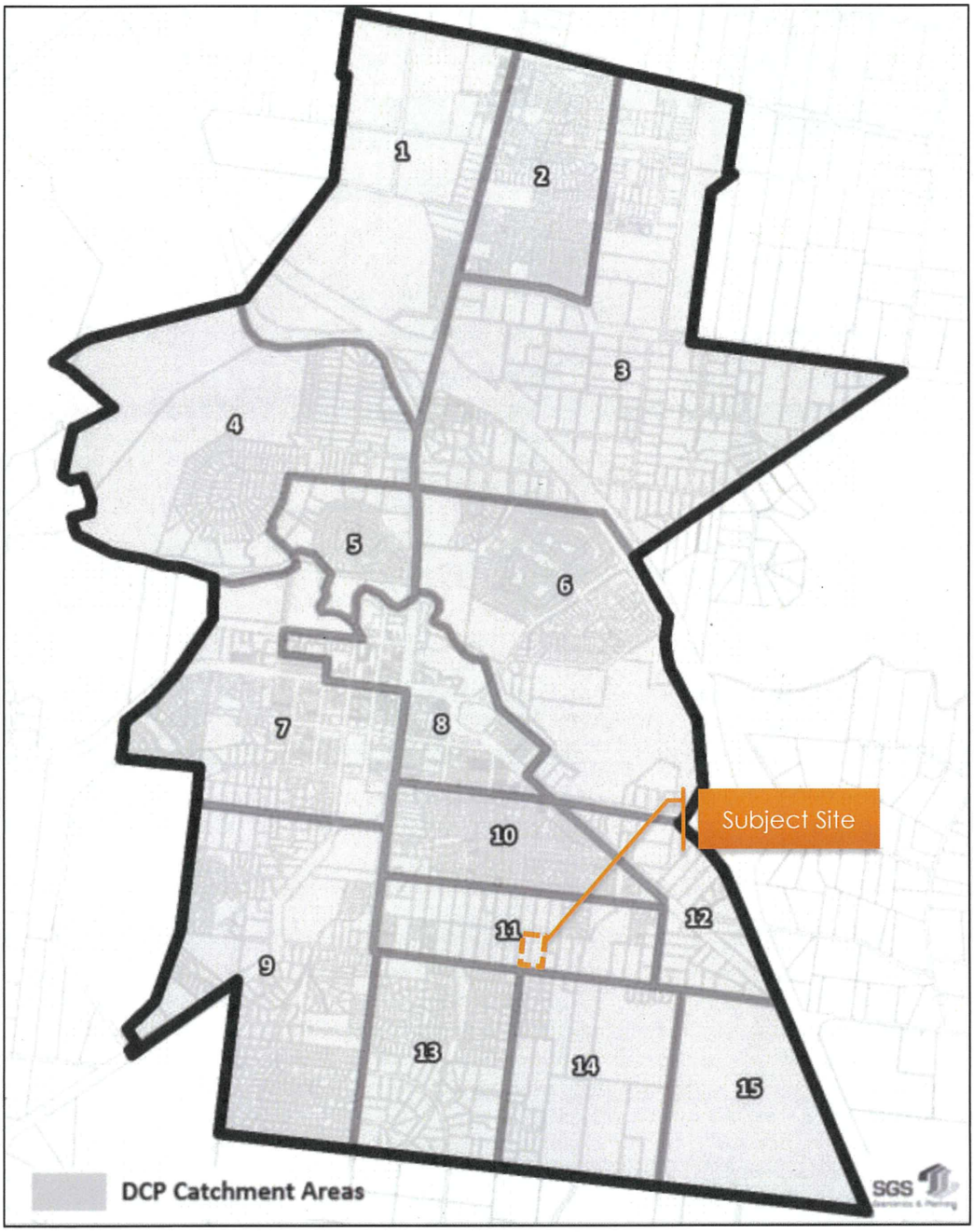
As shown above, the pedestrian and cycling network plan identifies the southern side of Willowbank Road as an existing 'Primary Pedestrian Route', whilst the northern side is shown to be a 'Primary Cycling Route (preferred)'.

3.3 Gisborne Development Contributions Plan (DCP)

The subject site is located within the Gisborne Development Contributions Plan which has been prepared by the MPA in partnership with the City of Macedon Ranges. 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 subject site is located within Area 11.

An extract of the Gisborne DCP is provided in Figure 16.

Figure 16 Gisborne DCP



4 DEVELOPMENT PROPOSAL

4.1 General

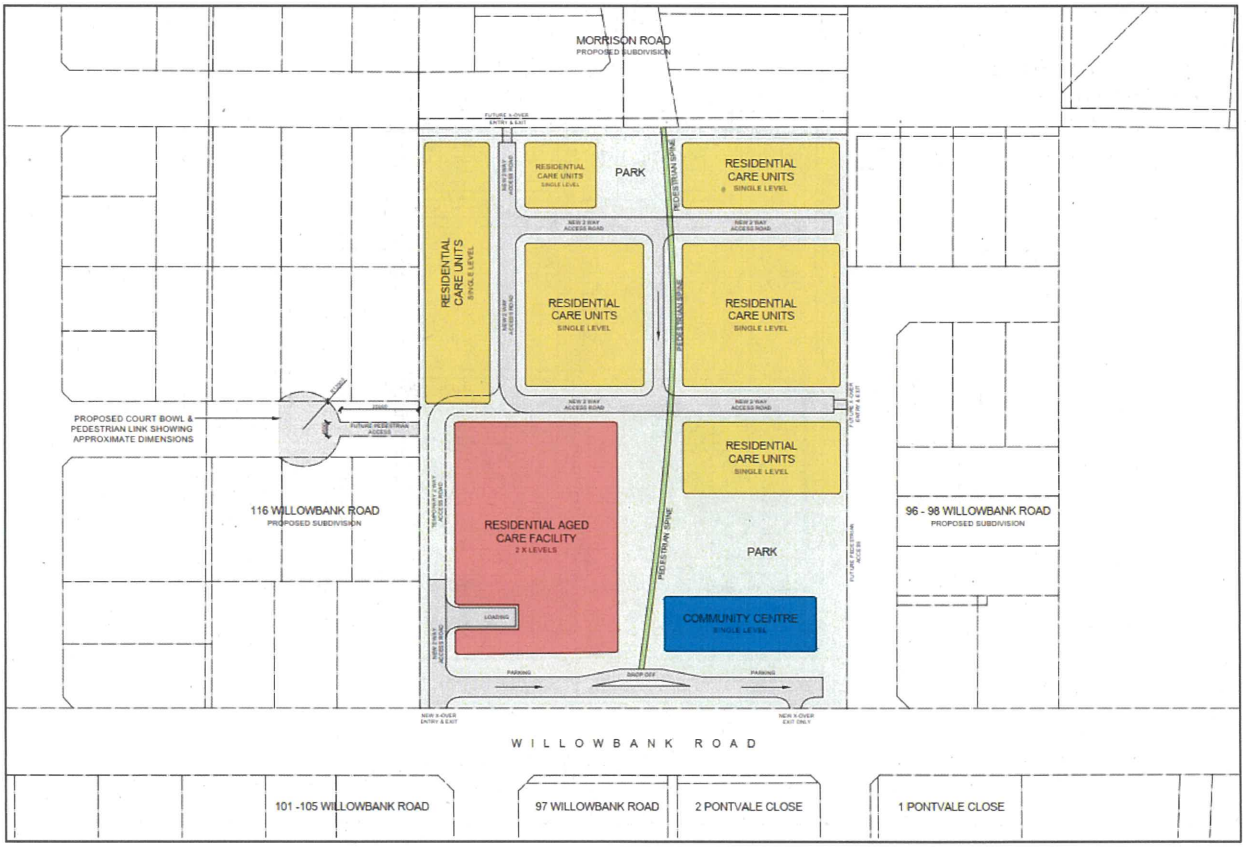
It is proposed to amend the existing Development Play Overlay that applies to the subject site and allow for an integrated residential care facility to operate on site.

The integrated residential care facility is to include a range of aged care living options dependant on the requirements of the residents.

It is expected that the proposed development will provide at least 107 units offering a variety of aged care living options, as well as a community centre.

The proposed Development Plan Overlay amendment is shown below in Figure 17.

Figure 17 Proposed Development Plan



4.2 Vehicle Access & Road Network Plan

Vehicle access to the external road network will ultimately be provided via four access points, as detailed below and shown in Figure 18.

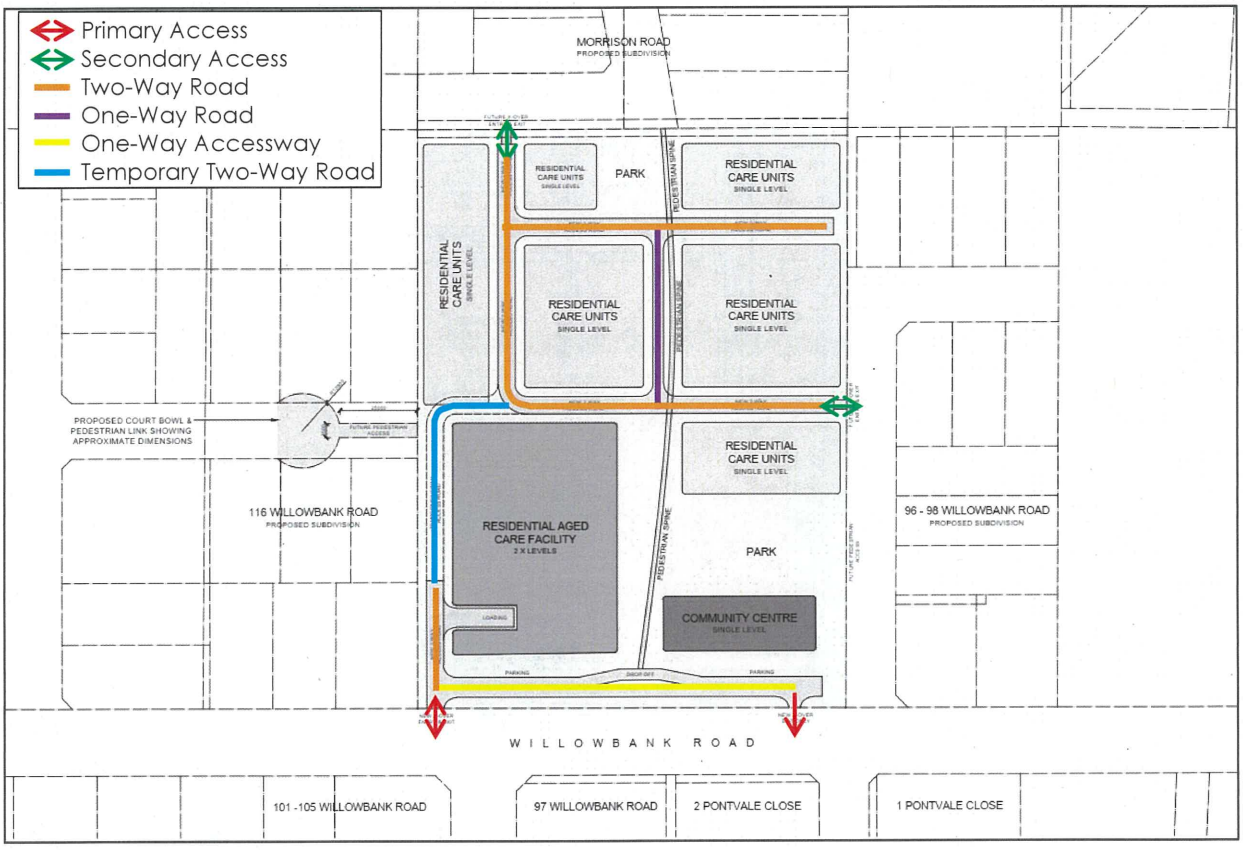
- Fully directional access to Willowbank Road at the south-western corner of the site;
- Exit only access to Willowbank Road at the south-eastern corner of the site;
- Fully directional access to the proposed Morrison Road at the north-western corner of the site; and
- Fully directional access to the proposed north-south aligned road located midpoint along the eastern boundary of the site.

Primary access is to be provided from fully directional access proposed along Willowbank Road, with secondary access to the site provided when the sites to the north and east develop as part of the Fersfield Road Development Plan.

The development is proposed to generally be serviced by roads with a 11.5-metre cross section which allow for a road width of 5.5 metres for two-way traffic and footpaths where required. In addition, a one-way road with a road width of 3.6 metres is proposed between in the northern portion of the site to allow for vehicle circulation.

It is noted that the two-way road to the north-west of the two-level residential aged care facility will be provided as a temporary access road which will be removed once access to the site is provided from Morrison Road and the north-south aligned road to the east of the site. Furthermore, construction of the southern portion of the residential care units located along the site's western boundary will not commence until the temporary access road is removed.

Figure 18 Proposed Vehicle Access and Internal Road Network



The proposed road cross-sections are shown in Figure 19 and Figure 20 below.

Figure 19 Proposed 11.5m Cross-Section

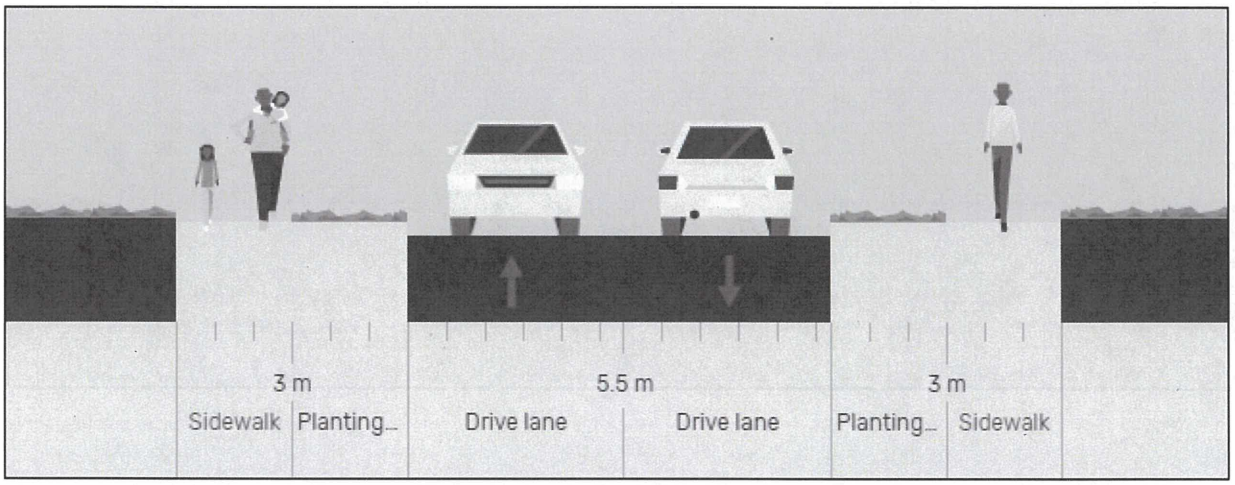
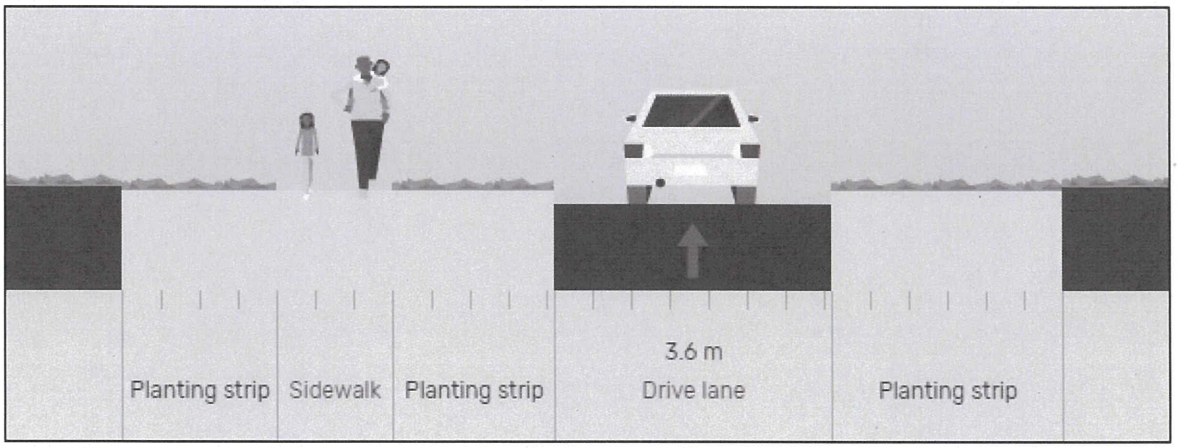


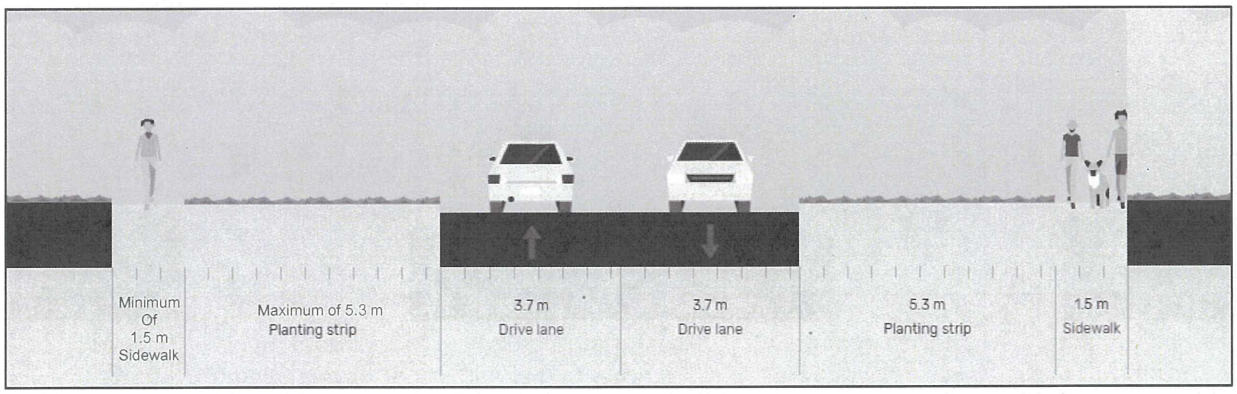
Figure 20 Proposed One-Way Road Cross-Section



4.3 External Road Upgrades

It is proposed to partially upgrade Willowbank Road which fronts the subject site. The upgrade will involve increasing the northern half of the Willowbank Road carriageway to have a sealed width of 3.7m with kerb and channel, and provide a 1.5m with footpath on the northern side of the road. These upgrades are in line with the recommendations of the development plan. The proposed cross-section of Willowbank Road at the frontage of the site is shown overleaf in Figure 21.

Figure 21 Proposed Willowbank Road Cross-section (21 metres)



4.4 Pedestrian Network Plan

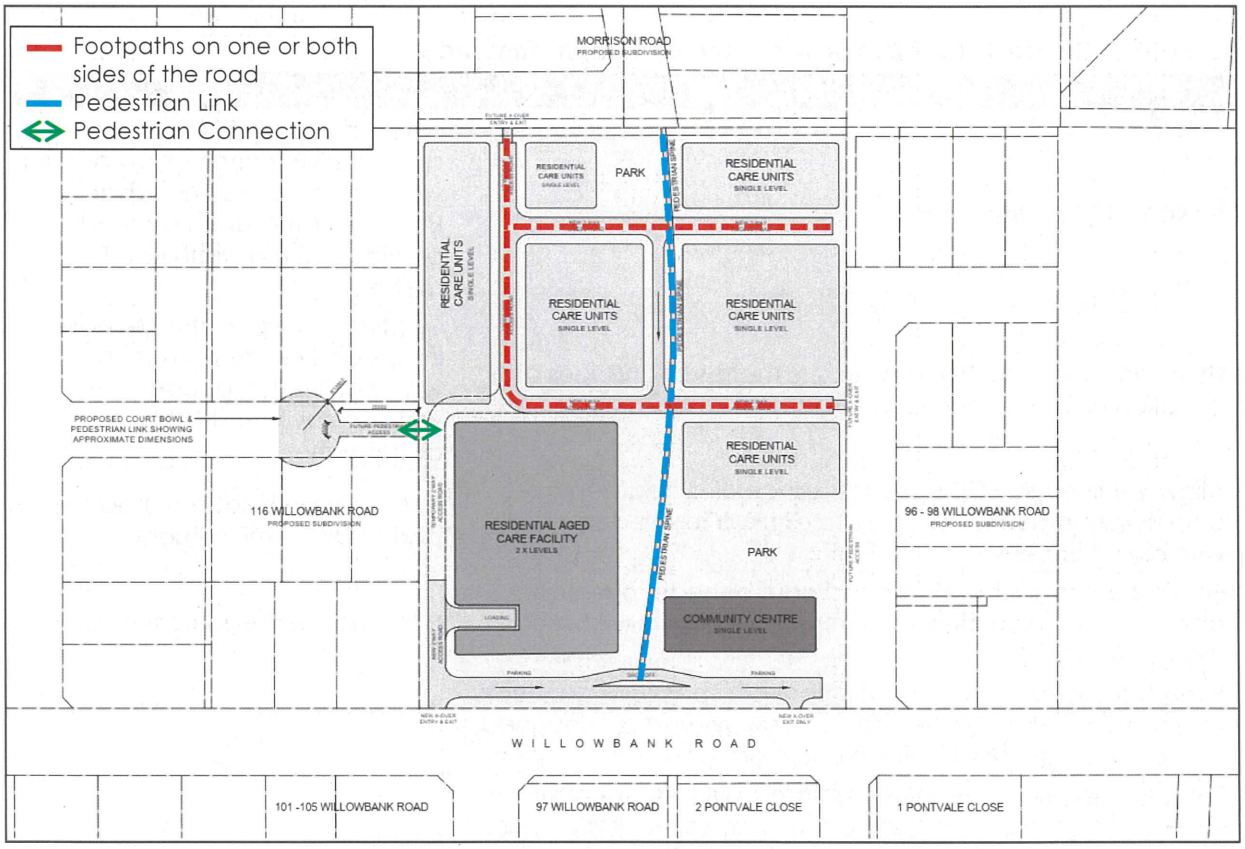
The proposed internal road network includes footpaths on one or both sides of all roads adjacent to the single-storey residential care units.

Furthermore, a north-south pedestrian link bisects the site to allow for pedestrian movements throughout the site.

In addition, a pedestrian connection is proposed to the west of the subject site once the neighbouring property undergoes residential development. It is noted that the length and design of this pedestrian connection is subject to the approval of the neighbouring property.

The proposed pedestrian network plan is shown in Figure 22 below.

Figure 22 Proposed Path Network



4.5 Bus Stop Relocation

It is proposed to relocate the existing bus stop located in the south-western corner of the site to allow for the proposed crossover. The bus stop is to be relocated within the site's property boundaries.

5 DESIGN ASSESSMENT

5.1 Macedon Ranges Planning Scheme – Clause 52.06

onemile**grid** has undertaken an assessment of the site layout and access for the proposed Development Planning Overlay amendment 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 10.

Table 10 Clause 52.06-9 Design Assessment – Design Standard 1

Requirement	*Comments*
Be at least 3 metres wide	Satisfied – minimum width of access is 3.6 metres is provided for western access to Willowbank Road. Whilst eastern access is provided with a width of 6.1 metres.
Have an internal radius of at least 4 metres at changes of direction or intersection or be at least 4.2 metres wide	Satisfied – swept paths provided in Appendix A demonstrating waste collection and service vehicle movement along accessway
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	N/A – car park not assessed as part of DPO amendment
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 Road Zone, 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 Road Zone	Satisfied
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 Road Zone, the access to the car spaces must be at least 6 metres from the road carriageway.	Satisfied

5.2 Waste Collection

The internal road network has been designed to accommodate up to a 9.8 metre waste collection vehicle, as per the swept paths shown in Appendix A. The internal road network is therefore considered appropriate to accommodate the required waste collection.

Refer to the Waste Management Plan for further information.

5.3 Emergency Vehicles

The internal road network has been designed to allow for circulation of a CFA emergency vehicle (8.2 metres). Swept path diagrams have been provided in Appendix A showing a CFA vehicle circulating the internal road network without obstructing the CFA 300mm clearance envelope on circulation.

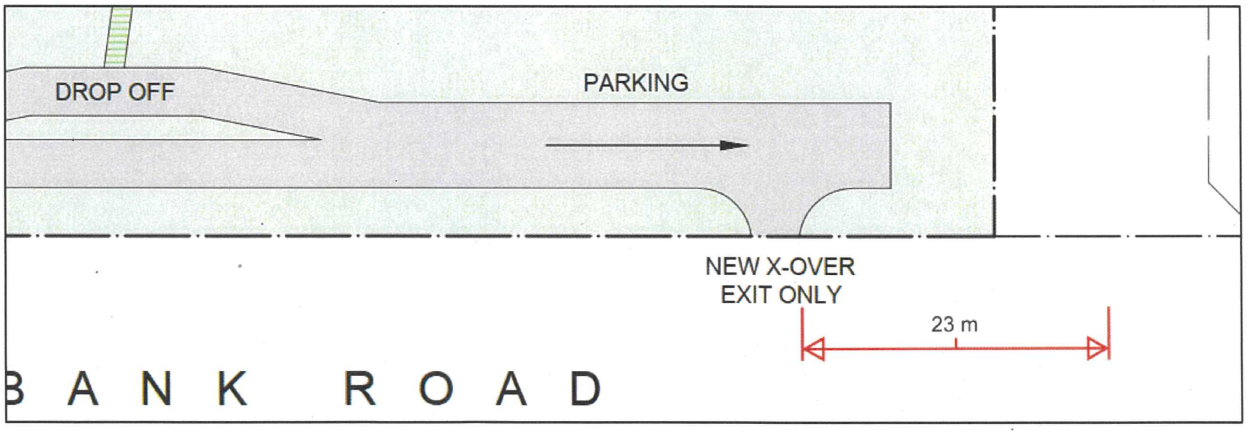
5.4 Vehicle Access Location

The proposed crossover locations along Willowbank Road have been offset 15 metres from Brady Road and Pontvale Close, measured from the centreline of the access and existing roads.

The proposed left-right staggers of 15 metres (measured from centreline and centreline) are in accordance with Austroads Guide to Traffic Management Part 6, Commentary 5 which specifies that 15 metres should be provided for roads which carry less than 2000 veh/day and with no significant curvature. Furthermore, the proposed 15 metres offset is in accordance with Austroads Guide to Road Design Part 4A, Section 7.2 which specifies a 15-metre offset for a staggered T-intersection on two-lane rural roads.

Furthermore, the western crossover to Willowbank Road is located approximately 28 metres from the drivers exit site of the future Thorneycroft Entrance (96-98 Willowbank Road) as shown below in Figure 23. Whilst it is acknowledged that the Minimum Gap Sight Distance (MGSD) of 28 metres is not in accordance with Austroads Guide to Road Design Part 4A, Table 3.6 which specifies a MGSD of 83 metres for a 60km/h road, it is not expected that vehicles exiting the subject site will be travelling over 10km/h when exiting the subject site. Therefore, the proposed distance of 23 metres between the western crossover and 96-98 Willowbank Road is in excess of 14 metres for 10km/hr as stipulated in Austroads Guide to Road Design Part 4A and is therefore appropriate.

Figure 23 Minimum Gap Sight Distance to 96-98 Willowbank Road



5.5 External Road Modifications

The neighbouring site (116 Willowbank Road) which shares the western boundary currently contemplates having a through road which continues through the subject site. The proposed DPO amendment will require the road to terminate before the subject site's western boundary and a court bowl (or similar treatment) will need to be constructed to allow for vehicles to turn around.

An indicative design and location of the court bowl is shown on the DPO plans, and a lot yield comparison for 116 Willowbank Road is attached Appendix B. The comparison shows that 116 Willowbank Road will have an increase in developable area due to the provision of a court bowl in lieu of a through road.

5.6 Pedestrian Access

Multiple pedestrian access points are located within the site, designed to cater for and encourage pedestrian trips throughout the surrounding area.

The northern pedestrian access point provides access from Morrison Road to a pedestrian spine which bisects the site in a north-south alignment.

The proposed development includes footpaths on one or both sides of all two-way roads which will provide access to the neighbouring properties when development occurs.

6 CAR PARKING

6.1 Statutory Car Parking Requirements

6.1.1 Car Parking Requirements – Clause 52.06

It is expected that the proposed integrated residential care facility is nestled within the residential aged care facility land use. Therefore, the car parking requirements for the subject site are identified in Clause 52.06 of the Macedon Ranges Planning Scheme, which specifies the following requirements for the proposed development.

Table 11 Clause 52.06 – Car Parking Requirements

Use	No	Rate	Car Parking Measure	Total
Residential aged care facility	107	0.3	to each lodging room	32
Total				**32**

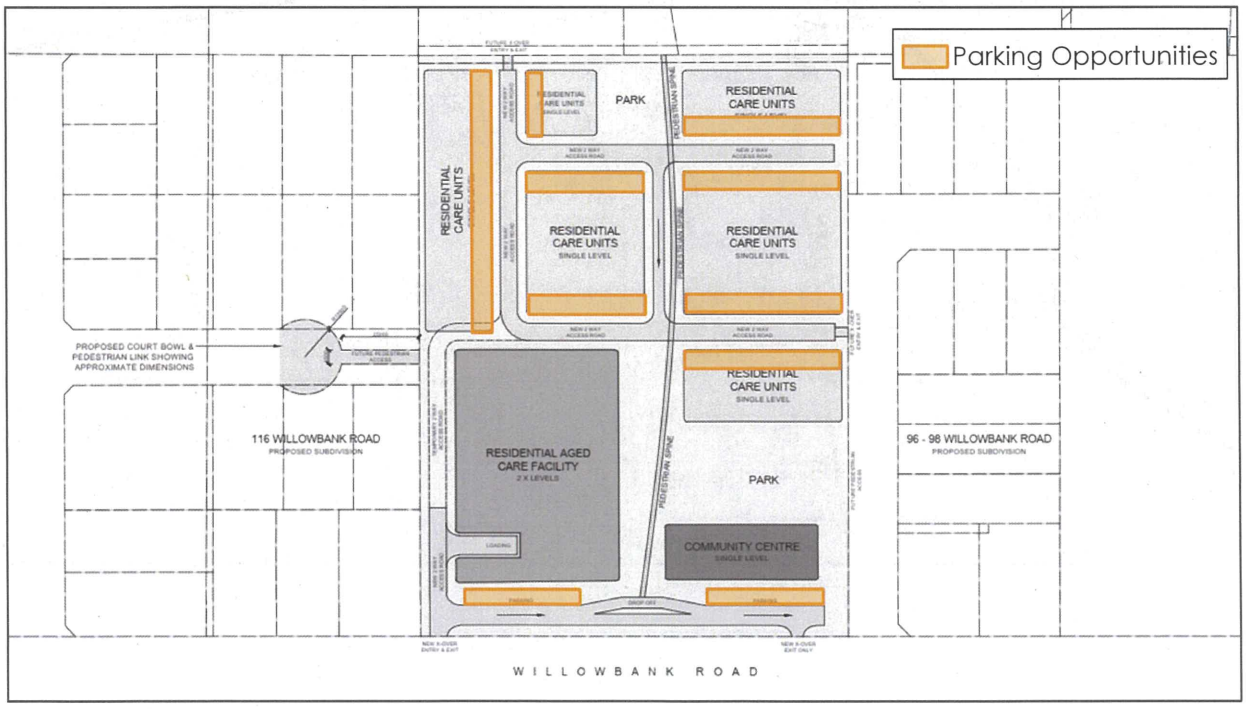
Based on the above calculations, a total of 32 parking spaces are required for the proposed development.

6.1.2 Proposed Car Parking Provision

It is proposed to provide at least 32 car parking spaces within development. The applicant is willing to include this requirement as a Clause in the Development Planning Overlay amendment.

Figure 24 below shows where parking will be provided on-site. It is noted that there will be a setback provided to garages of the single level residential care units which will allow for visitor parking if required.

Figure 24 On-Site Parking Opportunities



7 TRAFFIC

7.1 Traffic Growth

7.1.1 10 year Base Conditions

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

For the purposes of a conservative analysis, growth rates of 1% per year (compound) have been applied to the existing traffic volumes for all local roads for a 10-year period, equivalent to a 10.5% increase in traffic volumes.

7.1.2 Approved Development at 39 Willowbank Road

A 615 lot residential subdivision has been approved to the east of the subject site at 39 Willowbank Road. The residential subdivision is expected to increase through volumes along Willowbank Road and as such should be included in the traffic analysis of the surrounding intersections.

7.1.3 Future Traffic Volumes

Based on the above, the expected traffic volumes as a result from future growth is shown in Figure 25 and Figure 26.

Figure 25 Future Traffic Conditions – Traffic Growth - AM Peak

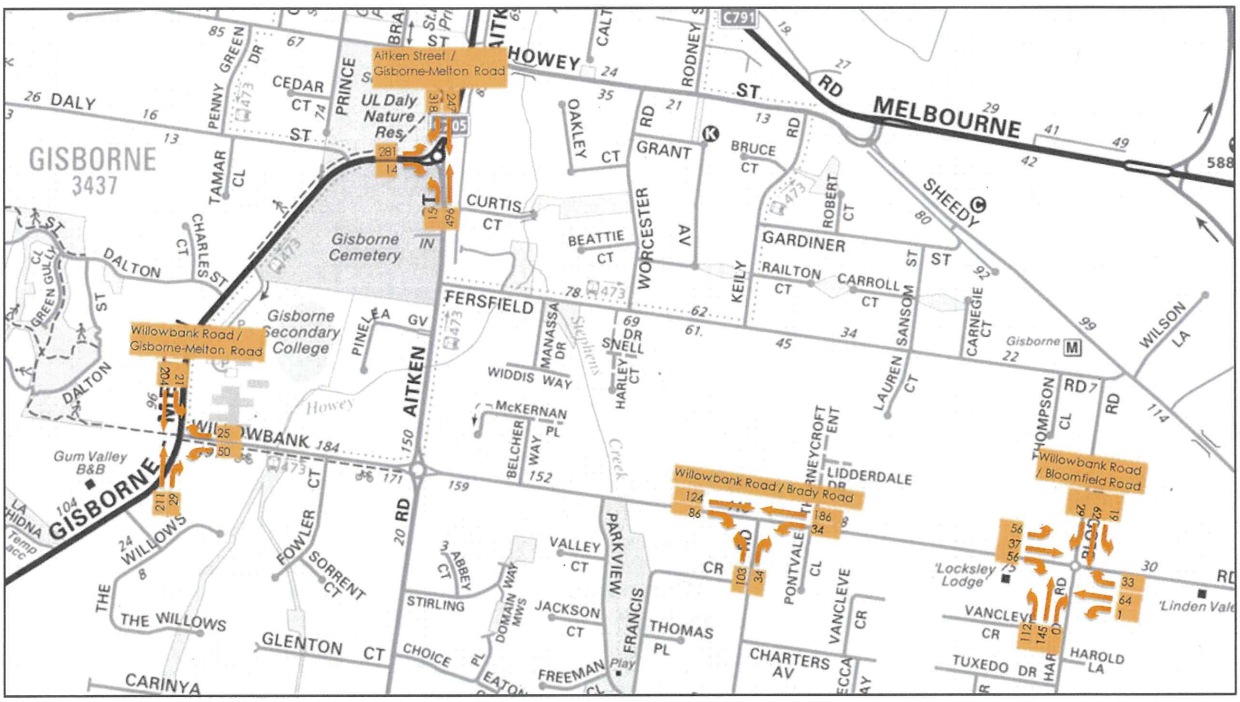
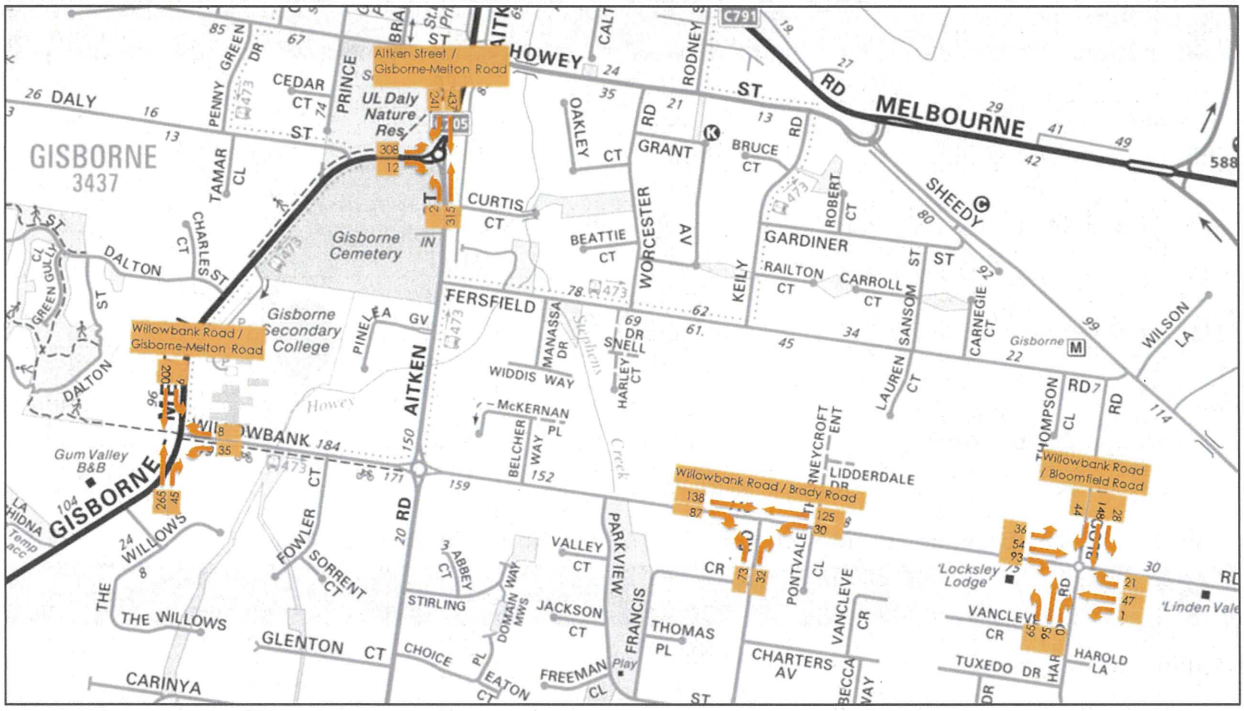


Figure 26 Future Traffic Conditions – Traffic Growth - PM Peak



7.1.3.1 Intersection Capacity Assessment

To assess the operation of the intersections surrounding the site the traffic volumes have been input into SIDRA Intersection. The results from the analysis are presented in the tables below.

Table 12 Willowbank Road / Bloomfield Road – AM Peak Hour - Traffic Growth

Approach	Movement	D.o.S.	Avg Delay (sec)	Queue (m)
Childe Harold Road - South	Left	0.223	5.1	9.1
	Through	0.223	5.4	9.1
	Right	0.223	9	9.1
Willowbank Road - East	Left	0.089	5.1	3.2
	Through	0.089	5.4	3.2
	Right	0.089	9.1	3.2
Bloomfield Road - North	Left	0.095	4.8	3.6
	Through	0.095	5.1	3.6
	Right	0.095	8.8	3.6
Willowbank Road - West	Left	0.14	5.3	5.3
	Through	0.14	5.6	5.3
	Right	0.14	9.3	5.3

Table 13 Willowbank Road / Bloomfield Road – PM Peak Hour - Traffic Growth

Approach	Movement	D.o.S.	Avg Delay (LOS)	Queue (m)
Childe Harold Road - South	Left	0.14	5	5.3
	Through	0.14	5.2	5.3
	Right	0.14	8.9	5.3
Willowbank Road - East	Left	0.071	5.8	2.6
	Through	0.071	6.1	2.6
	Right	0.071	9.8	2.6
Bloomfield Road - North	Left	0.198	5.2	8
	Through	0.198	5.5	8
	Right	0.198	9.2	8
Willowbank Road - West	Left	0.16	5	6.1
	Through	0.16	5.3	6.1
	Right	0.16	9	6.1

Table 14 Willowbank Road / Melton Road – AM Peak Hour - Traffic Growth

Approach	Movement	D.o.S.	Avg Delay (sec)	Queue (m)
Melton Road - South	Through	0.137	0.2	1.7
	Right	0.137	6.4	1.7
Willowbank Road - East	Left	0.072	6.3	1.9
	Right	0.072	7.6	1.9
Melton Road - North	Left	0.124	5.6	0
	Through	0.124	0	0

Table 15 Willowbank Road / Melton Road – PM Peak Hour - Traffic Growth

Approach	Movement	D.o.S.	Avg Delay (sec)	Queue (m)
Melton Road - South	Through	0.179	0.2	2.7
	Right	0.179	6.3	2.7
Willowbank Road - East	Left	0.039	6.2	1
	Right	0.039	7.9	1
Melton Road - North	Left	0.115	5.6	0
	Through	0.115	0	0

Table 16 Aitken Street / Melton Road – AM Peak Hour - Traffic Growth

Approach	Movement	D.o.S.	Avg Delay (sec)	Queue (m)
Aitken Street - South	Left	0.501	6.4	25.4
	Through	0.501	6.6	25.4
Aitken Street - North	Through	0.365	4.2	21.7
	Right	0.365	8.8	21.7
Melton Road - West	Left	0.363	7.3	18
	Right	0.363	12.1	18

Table 17 Aitken Street / Melton Road – PM Peak Hour - Traffic Growth

Approach	Movement	D.o.S.	Avg Delay (sec)	Queue (m)
Aitken Street - South	Left	0.295	5.4	12.4
	Through	0.295	5.6	12.4
Aitken Street - North	Through	0.431	4.2	26.7
	Right	0.431	8.8	26.7
Melton Road - West	Left	0.326	5.9	15.1
	Right	0.326	10.8	15.1

Table 18 Willowbank Road / Brady Road – AM Peak Hour - Traffic Growth

Approach	Movement	D.o.S.	Avg Delay (sec)	Queue (m)
Brady Road - South	Left	0.122	6.2	3.4
	Right	0.122	7.5	3.4
Willowbank Road - East	Left	0.123	5.6	0
	Through	0.123	0	0
Willowbank Road - West	Through	0.132	0.6	4.1
	Right	0.132	6.3	4.1

Table 19 Willowbank Road / Brady Road – PM Peak Hour - Traffic Growth

Approach	Movement	D.o.S.	Avg Delay (sec)	Queue (m)
Brady Road - South	Left	0.091	6	2.5
	Right	0.091	7.2	2.5
Willowbank Road - East	Left	0.086	5.6	0
	Through	0.086	0	0
Willowbank Road - West	Through	0.138	0.3	4
	Right	0.138	6	4

As shown above, all intersections are expected to operate under excellent conditions during both the morning and afternoon peak hours with minimal queues and delays experienced by motorists.

7.2 Existing Development Plan

The subject site is located within the Fersfield Road Development Plan which contemplated having 22 low-density residential lots located within the subject site.

Furthermore, it is generally accepted that single dwellings on a lot in outer suburban areas may generate traffic at up to 10 vehicle trips per day, whilst in areas with good public transport, and for higher density dwellings, lower traffic generation rates are often recorded.

For the purpose of a conservative assessment, a traffic generation rate of 10 vehicle movements per day per dwelling will be adopted.

Application of the above traffic generation rates to the 22 low-density lots is expected to generate up to 220 vehicle trips per day, with approximately 22 vehicle movements occurring during the AM and PM peak periods.

7.3 Traffic Generation

onemile**grid** and various other traffic consultants have undertaken a number of traffic generation surveys of aged care developments, summarised in Table 20.

Table 20 Aged Care Traffic Generation

Location	Level of Care	No. Beds	Traffic Generation (trips/bed)		
			Site Peak	Commuter Peak	Daily
Arcare, Caulfield North	High Care, Low Care	110	0.37	0.18	2.15
Broughtonlea, Surrey Hills	High Care, Low Care, Supported Residential	109	0.34	0.15 (avg.)	2.14
Regis Lake Park, Blackburn	High Care, Low Care, Respite Care, Dementia Care	202	0.39		2.32
Canterbury Nursing Home, Canterbury			0.39	0.21	
Lorikeet Lodge, Frankston		106	0.40	0.14	
Newmans on the Park, Templestowe	High Care, Low Care	109	0.47	0.09	3.2
47-49 Belgrave Road, Belgrave	High Care, Low Care	60	0.52	0.22	
Average			**0.41**	**0.17**	**2.45**

It is noted that typically, the peak traffic generation of an aged care facility coincides with the staff changeover period, which typically occurs between approximately 2:00pm and 3:00pm. During the typical commuter peak period, traffic generation is typically considerably lower, as demonstrated above.

In order to provide a conservative assessment, traffic generation rates of 2.5 and 0.20 movements per dwelling will be adopted for daily and commuter peak hour periods respectively.

An inbound/outbound split of 60%/40% will be adopted for the AM peak, and 50%/50% for the PM peak.

Application of the above rates applied to the expected yield of 107 units results in the following additional traffic movements.

Table 21 Traffic Generation

AM Peak			PM Peak			Daily		
In	Out	Total	In	Out	Total	In	Out	Total
13	9	22	11	11	22	134	134	268

As noted previously, the Fersfield Development Plan had contemplated low-density residential development for the site which would have generated a similar number of traffic movements during the AM peak and PM peak. Notwithstanding, an analysis of the traffic generated by the development is provided below.

7.4 Traffic Distribution

It is noted that a number of alternative access points will be provided as the area develops including multiple access points to the neighbouring developments located to the north and west of the site. Nevertheless, to provide a conservative assessment and considering the location of the site in relation to the arterial road network, recreational and retail precincts, the directional distribution is shown below in Table 22.

Table 22 Adopted Directional Traffic Distribution

Origin/Destination	*Percentage*
Willowbank Road - West	50%
Willowbank Road - East	50%

Furthermore, it is expected that 50% of vehicles will use the eastern site access and 50% of vehicles will use the western site entrance for exit movements. Applying this distribution percentage to the projected traffic movements to be generated by the proposed development produces the following traffic movements as shown below in Figure 27.

Figure 27 Anticipated Traffic Generation

7.5 Resultant Traffic Volumes

Based on the above, the future intersection volumes at the intersections in the vicinity of the site can be calculated by combining the anticipated future volumes with the traffic expected to be generated by the proposed development.

The resultant peak hour traffic volumes are shown in Figure 28 and Figure 29.

Figure 28 Resultant Traffic Volumes – AM Peak

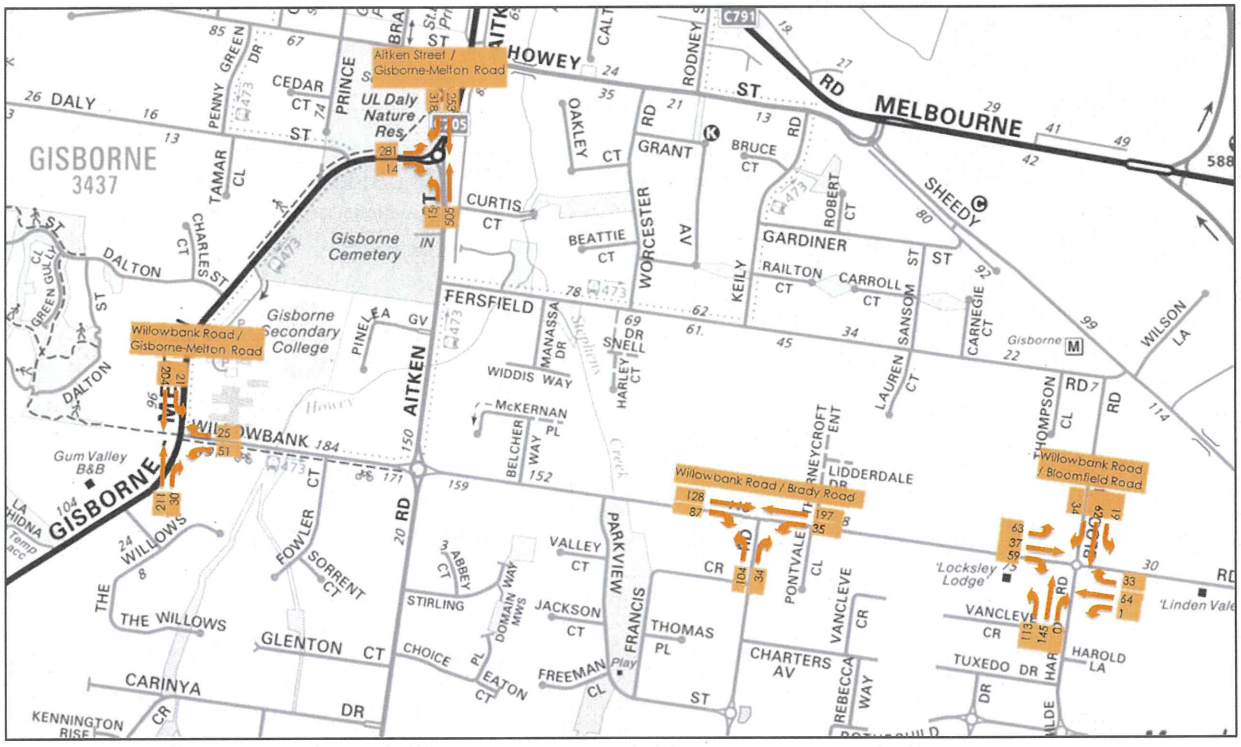
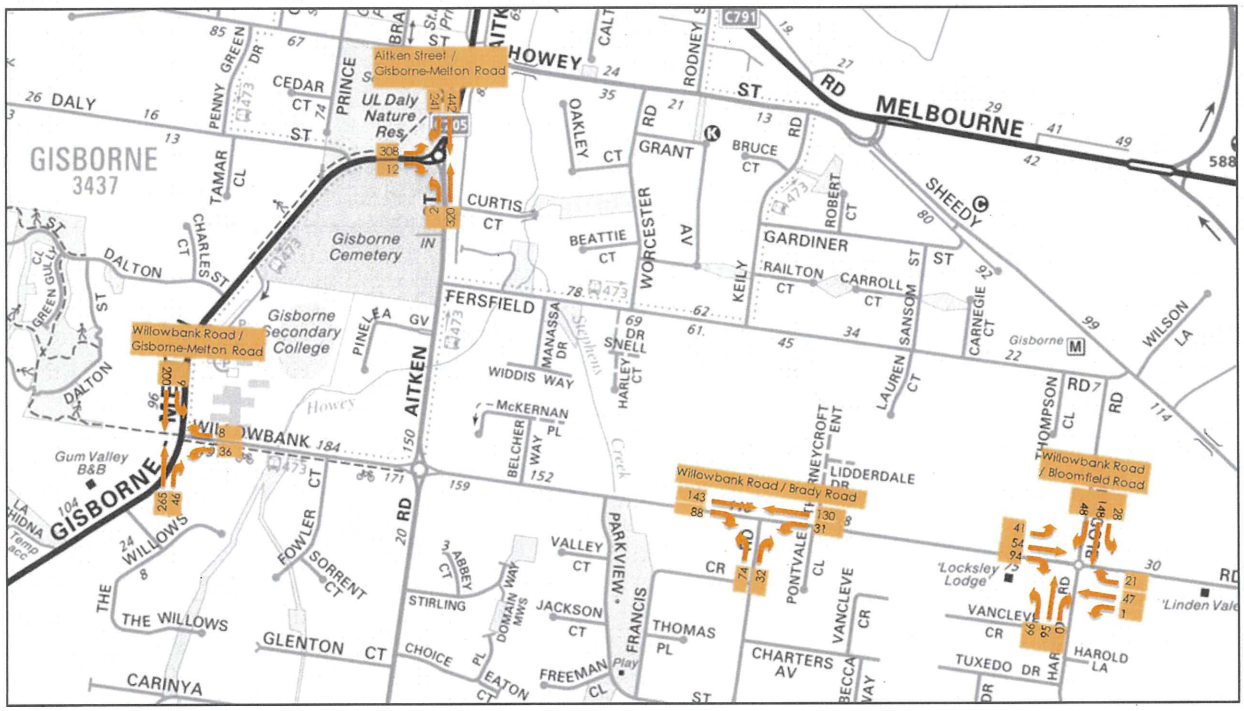


Figure 29 Resultant Traffic Volumes – PM Peak



7.6 Traffic Impact

Reviewing the volumes above, it is noted that a maximum of 7 vehicle movements per hour are expected for any one movement, equivalent to approximately one vehicle trip every 9 minutes. This amount of traffic is considered to be very low, and is expected to be easily absorbed into the surrounding road network.

Nevertheless, an analysis follows to understand the impact of the proposed development on intersections in the vicinity of the site to ensure they are to operate satisfactorily.

7.6.1 Intersection Capacity Assessment

To assess the operation of the intersection post-development the traffic volumes have been input into SIDRA Intersection. The results from the analysis are presented in the tables below.

Table 23 Willowbank Road / Bloomfield Road – AM Peak Hour - Future

Approach	Movement	D.o.S.	Avg Delay (sec)	Queue (m)
Childe Harold Road - South	Left	0.225	5.1	9.2
	Through	0.225	5.4	9.2
	Right	0.225	9.1	9.2
Willowbank Road - East	Left	0.09	5.2	3.2
	Through	0.09	5.4	3.2
	Right	0.09	9.1	3.2
Bloomfield Road - North	Left	0.1	4.9	3.8
	Through	0.1	5.1	3.8
	Right	0.1	8.8	3.8
Willowbank Road - West	Left	0.149	5.4	5.7
	Through	0.149	5.6	5.7
	Right	0.149	9.3	5.7

Table 24 Willowbank Road / Bloomfield Road – PM Peak Hour - Future

Approach	Movement	D.o.S.	Avg Delay (sec)	Queue (m)
Childe Harold Road - South	Left	0.142	5	5.4
	Through	0.142	5.3	5.4
	Right	0.142	8.9	5.4
Willowbank Road - East	Left	0.071	5.9	2.6
	Through	0.071	6.2	2.6
	Right	0.071	9.8	2.6
Bloomfield Road - North	Left	0.202	5.2	8.2
	Through	0.202	5.5	8.2
	Right	0.202	9.2	8.2
Willowbank Road - West	Left	0.164	5	6.4
	Through	0.164	5.3	6.4
	Right	0.164	9	6.4

Table 25 Willowbank Road / Melton Road – AM Peak Hour - Future

Approach	Movement	D.o.S.	Avg Delay (sec)	Queue (m)
Melton Road - South	Through	0.138	0.2	1.8
	Right	0.138	6.4	1.8
Willowbank Road - East	Left	0.073	6.3	1.9
	Right	0.073	7.6	1.9
Melton Road - North	Left	0.124	5.6	0
	Through	0.124	0	0

Table 26 Willowbank Road / Melton Road – PM Peak Hour - Future

Approach	Movement	D.o.S.	Avg Delay (sec)	Queue (m)
Melton Road - South	Through	0.179	0.2	2.7
	Right	0.179	6.3	2.7
Willowbank Road - East	Left	0.039	6.2	1
	Right	0.039	7.9	1
Melton Road - North	Left	0.115	5.6	0
	Through	0.115	0	0

Table 27 Aitken Street / Melton Road – AM Peak Hour - Future

Approach	Movement	D.o.S.	Avg Delay (sec)	Queue (m)
Aitken Street - South	Left	0.509	6.4	26
	Through	0.509	6.6	26
Aitken Street - North	Through	0.368	4.2	22.1
	Right	0.368	8.8	22.1
Melton Road - West	Left	0.366	7.4	18.2
	Right	0.366	12.2	18.2

Table 28 Aitken Street / Melton Road – PM Peak Hour - Future

Approach	Movement	D.o.S.	Avg Delay (sec)	Queue (m)
Aitken Street - South	Left	0.3	5.4	12.7
	Through	0.3	5.6	12.7
Aitken Street - North	Through	0.434	4.2	27.1
	Right	0.434	8.8	27.1
Melton Road - West	Left	0.328	6	15.2
	Right	0.328	10.8	15.2

Table 29 Willowbank Road / Brady Road – AM Peak Hour - Future

Approach	Movement	D.o.S.	Avg Delay (sec)	Queue (m)
Brady Road - South	Left	0.124	6.3	3.4
	Right	0.124	7.6	3.4
Willowbank Road - East	Left	0.128	5.6	0
	Through	0.128	0	0
Willowbank Road - West	Through	0.136	0.6	4.2
	Right	0.136	6.4	4.2

Table 30 Willowbank Road / Brady Road – PM Peak Hour - Future

Approach	Movement	D.o.S.	Avg Delay (sec)	Queue (m)
Brady Road - South	Left	0.092	6	2.5
	Right	0.092	7.2	2.5
Willowbank Road - East	Left	0.089	5.6	0
	Through	0.089	0	0
Willowbank Road - West	Through	0.140	0.4	4.1
	Right	0.140	6.1	4.1

As shown above, all intersections are expected to operate under excellent conditions during both the morning and afternoon peak hours. All intersections that were analysed in the vicinity of the subject site are expected to have negligible increases to average delays and queues in comparison to the base case due to the minimal amount of traffic generated by the proposed development.

In regard to the intersection of Brady Road / Willowbank Road, it is understood that Macedon Ranges Shire Council has a preference for the intersection to be upgraded to a roundabout. The SIDRA analysis shows that the existing intersection will operate well within its capacity with the critical period being the AM peak. The AM peak is expected to have an average delay of 7.6 seconds and queue of 3.4 metres on the southern approach, and an average delay of 6.4 metres and queue of 4.2 metres on the western approach. These delays and queues are unlikely to be an inconvenience to motorists during the day-to-day operation of the intersection. Furthermore, it is expected that a significant portion of the turning movements at the intersection of Brady Road / Willowbank Road is due to the existing childcare centre at the south-eastern corner of the intersection. Therefore, it is expected that turning movements at this intersection will not increase significantly in the future.

Based on the above, it is expected that the intersections in the vicinity of the site are appropriate to accommodate the expected traffic growth within the area and the proposed development.

8 CONCLUSIONS

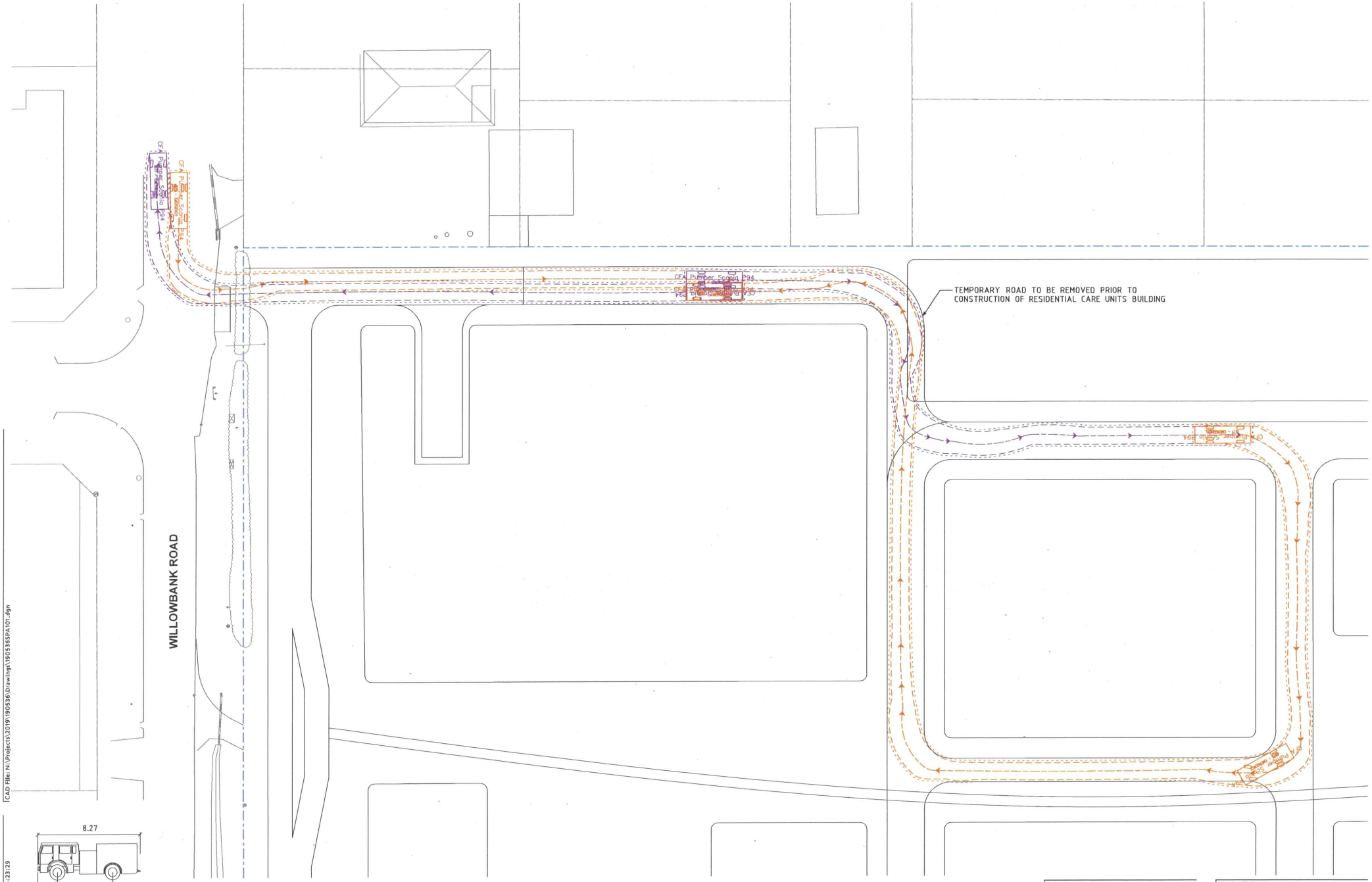
It is proposed to amend the existing Development Plan Overlay that applies to the subject site and allow for an integrated residential care facility to operate on site. For the purposes of this analysis, a yield of 107 aged care living options has been adopted.

Considering the analysis presented above, it is concluded that:

- The site is located within the Development Plan Overlay (Schedule 4 – DPO4) which requires a Transport Impact Assessment to be prepared for the site;
- The Fersfield Road Development Plan has been prepared for the surrounding area which is proposed to yield approximately 327 residential lots and includes an internal road network;
- The subject site was anticipated to yield approximately 22 low-density residential lots;
- The proposed access and internal road network for the integrated residential care facility is in accordance with the Macedon Ranges Planning Scheme;
- The anticipated traffic volumes generated by the development is not expected to have an impact on the operation of the surrounding road network; and
- There are no traffic engineering reasons which would preclude the Development Plan Overlay to be amended.

onemilegrid

Appendix A Swept Paths



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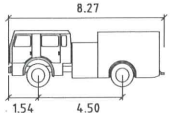

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Track	: 2.47
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Steering Angle	: 40.2

LEGEND

– – – – – DESIGN VEHICLE SWEPT PATHS SHOWN DASHED

– – – – – – 300mm CLEARANCE ENVELOPE SHOWN DOTTED

Aerial Photography
Aerial photography provided by Nearmap

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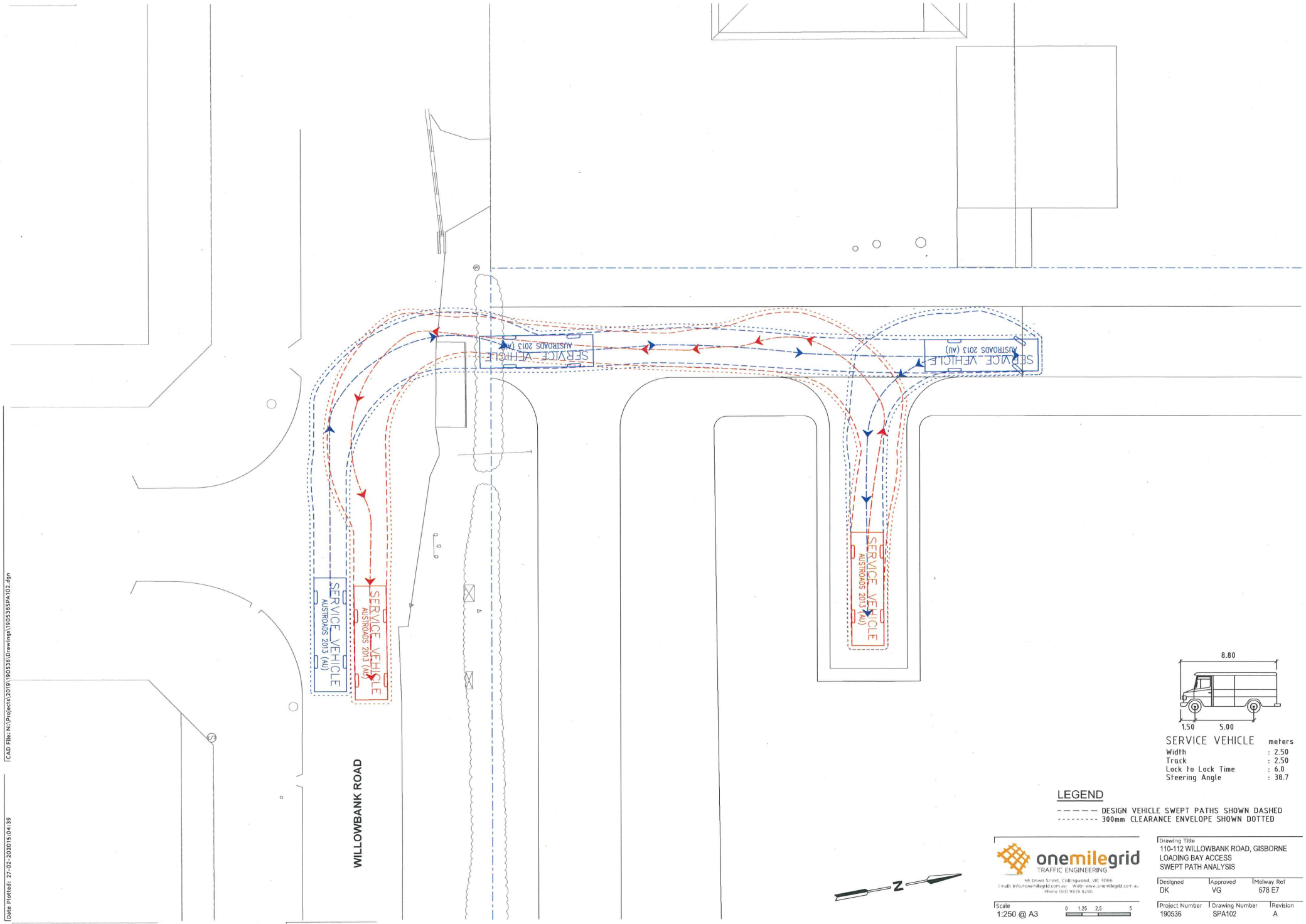
Scale
1:500 @ A3
0 2.5 5 10

Drawing Title
110-112 WILLOWBANK ROAD, GISBORNE
CFA TRUCK ACCESS
SWEPT PATH ANALYSIS

Designed	Approved	Melway Ref
DK	VG	678 E7

Project Number	Drawing Number	Revision
190536	SPA101	A



8.80

1.50 5.00

SERVICE VEHICLE meters

Width	: 2.50
Track	: 2.50
Lock to Lock Time	: 6.0
Steering Angle	: 38.7

LEGEND

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

N

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Scale
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Drawing Title
110-112 WILLOWBANK ROAD, GISBORNE
LOADING BAY ACCESS
SWEPT PATH ANALYSIS

Designed	Approved	Melway Ref
DK	VG	678 E7

Project Number	Drawing Number	Revision
190536	SPA102	A

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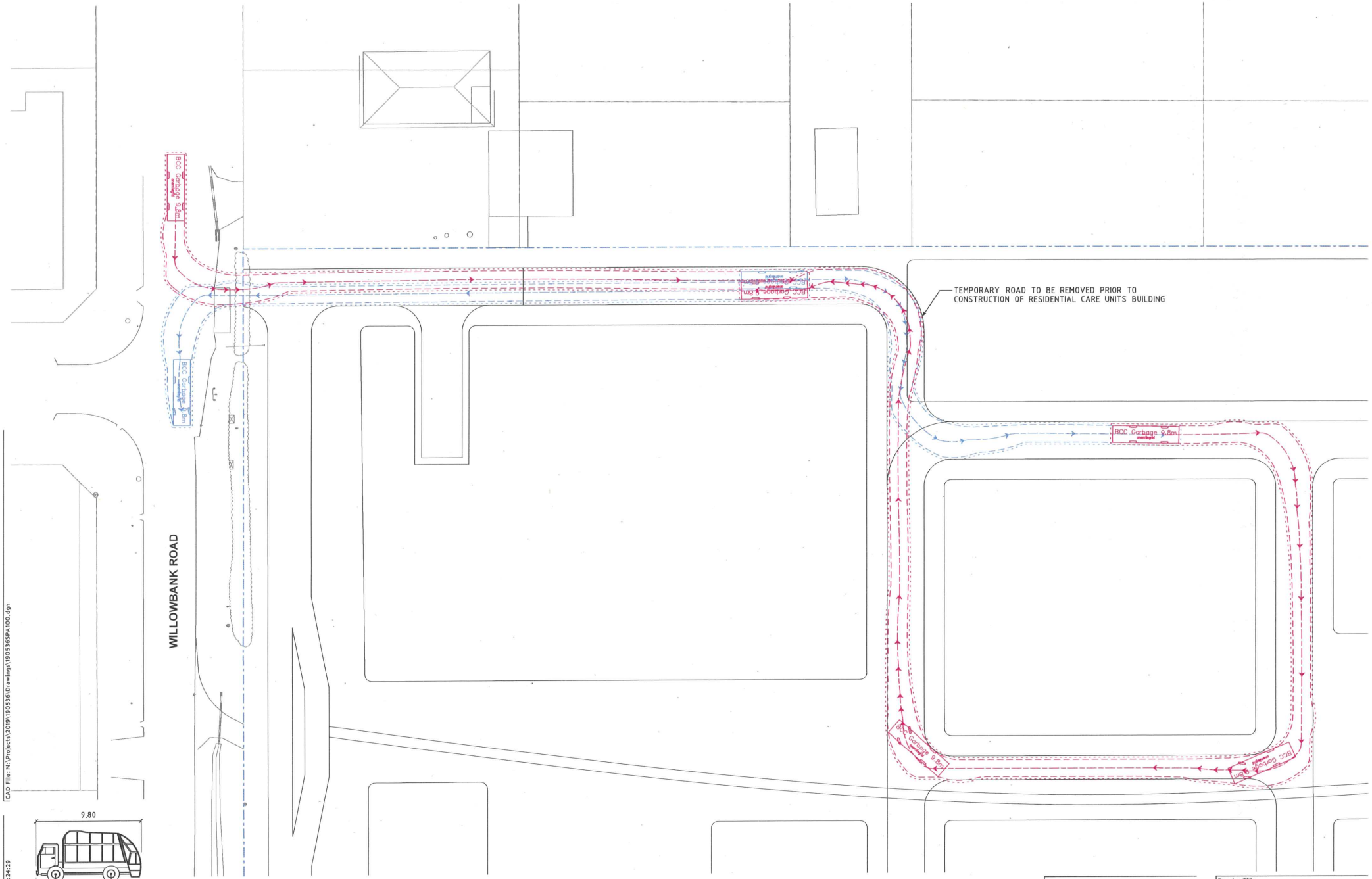
Aerial Photography
Aerial photography provided by Nearmap



BCC GARBAGE 9.8m meters

Width	: 2.50
Track	: 2.50
Lock to Lock Time	: 4.0
Steering Angle	: 35.8

LEGEND

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

CAD File: N:\Projects\2019\190536\Drawings\190536SPA100.dgn

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Aerial Photography
Aerial photography provided by Nearmap

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Scale
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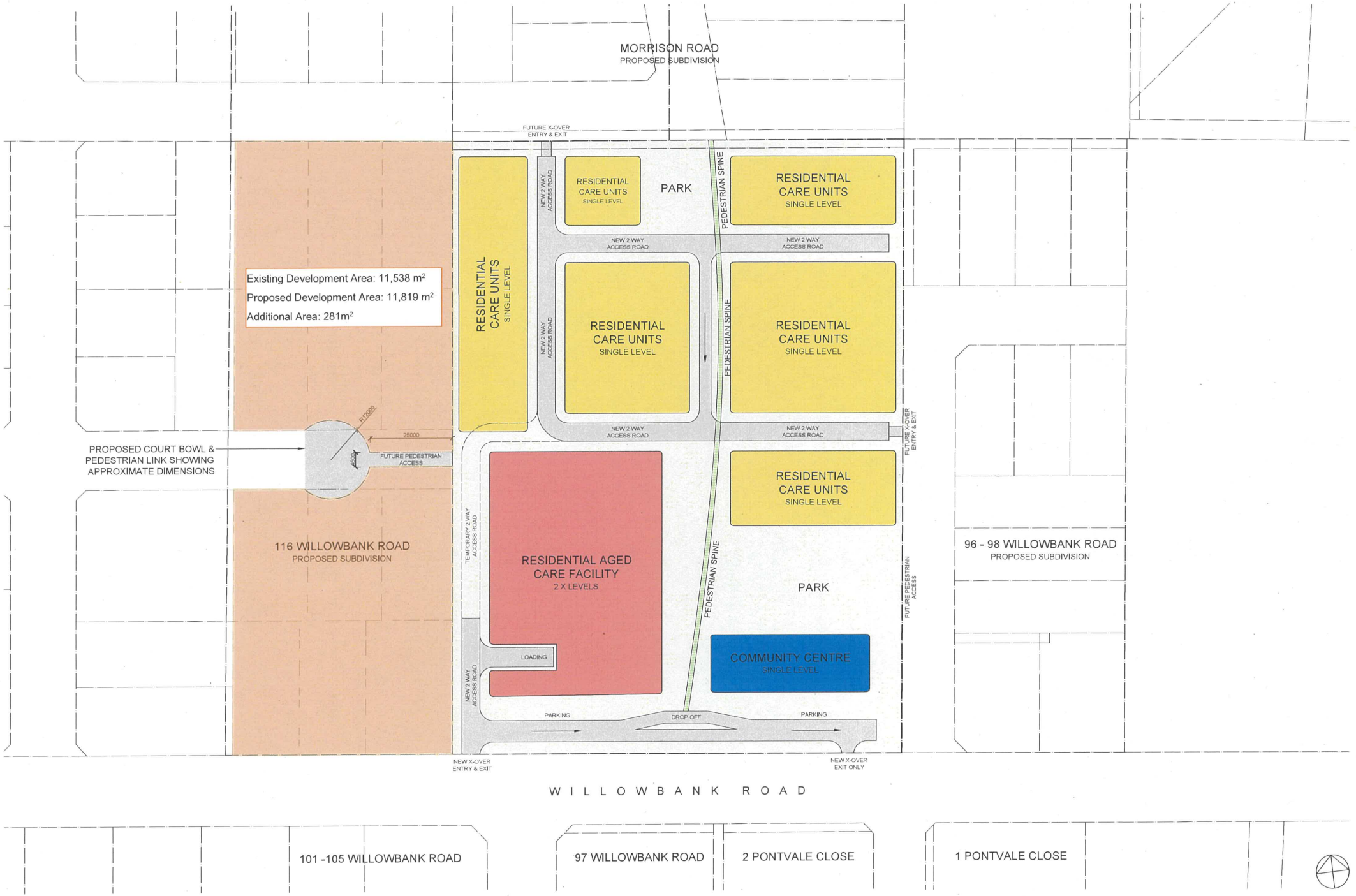
Drawing Title
110-112 WILLOWBANK ROAD, GISBORNE
WASTE TRUCK ACCESS
SWEPT PATH ANALYSIS

Designed	Approved	Melway Ref
DK	VG	678 E7

Project Number	Drawing Number	Revision
190536	SPA100	A

Appendix B 116 Willowbank Road Yield Comparison



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DRAWING TITLE: AMENDMENT TO THE DPO - SITE PLAN					
PROJECT NAME: MAYFLOWER GISBORNE			CLIENT: MAYFLOWER GROUP		
PROJECT NUMBER: 2019 05	SCALE: 1:500 @ A1	DRAWING NO: PD 02	DATE: 13 / 03 / 2020	ISSUE: P	REVISION: A

OPEN SPACE MANAGEMENT - OPEN SPACE MANAGEMENT

Arboricultural Assessment & Report

Preliminary Tree Assessment

(This Report must be read with: Tree Data Tables. Tree Photos Book & Site Plan Attachments)

As per AS 4970- 2009: Australian Standard for Protection of Trees on Development Sites.

MAYFLOWER Retirement Village - Gisborne

110-112 Willowbank Rd. Gisborne

MACEDON RANGES Shire Council

All Relevant Trees with Trunk Diameters 100mm>
And other trees within the site-landscape as shown.

T1–T30: Including Linear Groups and many others small.

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Consulting Arborist. Mob: 0402 084 502
Email: patrickaj@bigpond.com

www.openspacemanagement.com.au

3 /12/ 2019

MACEDON RANGES PLANNING SCHEME
DEVELOPMENT PLAN DP/...../.....
This Development Plan is satisfactory and meets the requirements of the Development Plan Overlay –
Clause 43.04 Schedule 4
of the Macedon Ranges Planning Scheme
4/12/2020 .....
Date Authorised Officer

INSTRUCTIONS:

Assess x30 relevant trees, linear groups & many others small within the site and adjoining properties including specifically the Willowbank Rd frontage, as required by Macedon Ranges Shire Council for a proposed site redevelopment. Council requires pertinent comments regarding trees; this includes Tree Condition & Specifications, SULE, Retention Value and likely impact upon viable vegetation relative to The Australian Standard for Protection of Trees on Development Sites: AS 4970-2009. Reference the Macedon Ranges Planning Scheme and the relevant Council site-overlays GRZ/1 & Overlays DCPO/2. DCPO/4. There is approximately x45> mapped trees & shrubs relative to this site as shown on plans; many are small or weedy or dead.
Only x30 Trees are fully relevant here. Refer: Land Dimensions: Feature & level Survey. Ref 19429FL Ver A – 19/11/2019

FACTS, MATTERS & ASSUMPTIONS:

The following methodology was adopted in making this report:

- This is a 'Preliminary Tree Assessment Report'; there are no instructions from Council at this stage.
- Provide an assessment of the overall health and structure of the x30 nominated trees as observed on the day.
- Attended the farm-paddock site on Friday 22nd November 2019 PM to collect all the relevant data.
- Visual observations were taken of subject tree/s from ground level. Identify Genus and Species of subject tree; some species may need further identification. Trees also exist on properties adjoining to North, East & West as shown.
- Tree numbering T1-T30 and linear groups relate to x30> relevant trees & groups or pairings in the survey
- Many other trees are shown but are not relevant because they are dead, designated weed-trees or <100mm in trunk diameter at 1400mm above grade as per Victorian Planning Scheme Clauses: Weeds exempt of permit & status.
- All relevant data was recorded for x30> Trees – including: Estimated Size, Height, Canopy Spread and General Condition. Trunk Diameter (DBH) was accurately measured with all trees circumferentially measured at 1400mm.
- Tagged and located x30 trees & groups for reference and bearing on supplied plan by Land Dimensions Surveyors.
- X45> nominated & relevant trees are within the site and adjacent the site that have been specifically identified.
- Trees on adjoining properties are also fence-tagged their dimensions are only estimated; refer tables & photos.
- Note: Some trees within adjoining properties are not affected by works due to the set-back of 3Mtrs or more.
- Detailed objective recommendations for the management of the subject trees is offered including their respective safe viability and where relevant and their indicative TPZs within a Development-site for a period of 5-8 years or more. The site is fully mature and shows, exotic, native and weed- trees. T7 & T8 are likely native remnant indigenous specimens but they are both structurally hazardous and / or dead as shown; growing on boundaries.
- Generally speaking all trees on-site are contrived mature or decrepit & planted specimens many past their SULE.
- Information in this report reflects the condition of those items that were examined at the time of the inspection and must be read in conjunction with the attached Map/Plans, Report. Tree Data Tables & The Tree Photos Book.
- Topography vagaries & existing infrastructure strongly influence the condition & viability of most trees in survey.
- A comprehensive Tree Photos Book attachment separately describes the site & trees; as it is currently – Nov` 2019.
- **Note:** Further information regarding typical development perspectives can be gleaned or extrapolated from the Tree Data Table Specifications and Photos; this will eventually include relative perspectives on the implications of Tree Protection Zones (TPZ) as the need arises relative to the Australian Standard for the Protection of Trees on Development Sites – AS 4970 2009 and the implication of a separate Tree Management Plan (TMP) pending Councils endorsement of the proposal as it comes to light. There are sewer & drainage easements that affect the site.
- A Design-response & Layout has not been finalised at this stage relative to the tree survey & other matters.

OBSERVATIONS:

Note: Refer to attached Map/Plans, Tree Data Tables and separate Detailed Tree Photos Book.

- All nominated trees T1-T30 were assessed on the basis of their safe viable retention within a development for a period of 5-8 years or more; some liberty has been taken for recommendations to remove trees that are not in context with the site based upon their current SULE status or safety, their merits are easily determined by description & photos; the site is cleared paddocks with an older brick residence, flat topography but with a dam and swale easements. Old infrastructure foot-prints evident.
- Generally speaking the topography is flat but falls towards the North rear of the site, has access driveways and is bounded in the North. East & West by other similar property acreage and sheds.
- A number of hazardous dead trees T7 & T8 are apparent and others are degraded or not affected.
- The tree species found on and adjoining the site are a combination of contrived and vagrant, native & exotic plantings and designated weed species such as Acacia. Cotoneaster. Fraxinus, Photinia, Prunus. Privet & others. This includes Sweet Pittosporum and other designated weed-trees; some contrived plantings of Eucalypts / Natives & Exotics are evident from the farm plantings previously available.
- Many trees on and adjoining the site are Mature, Decrepit or Senescent; some are in-fact Hazardous.
- All the x30 trees have been designated consecutive varying numbers from T1-T30 & some are shown but no surveyed, the tree numbering correlates directly to the Map/Plans and Tree Data Tables & tree photos.
- **All surveyed trees are tagged** and their positions within the landscape are easily determined; see plan.
- Tree positions have been inspected as marked by Land Dimensions Surveyors and are fully correct.
- All individual x30 Tree-data & Comments is to be found within the attached Tree Data Tables herein.
- The individual data for each tree has attending Comments that must be read to determine the full profile of that specimen. Many trees are in Very Poor or Hazardous Condition. None are Good. TPZ/SRZs are provided where there is an assumed potential for the tree to be retained as positioned outside the site.
- Previous agricultural endeavour and swale culverts obviously encroaches these indicative TPZs. Some trees on-site would become unstable once the site has been redeveloped due to very diminished set-backs from linear planting and asymmetry; there are no tree of good merit upon the site. Refer photo details.
- Willowbank Rd frontages are strongly influenced by HV & LV Electricity Mains and various trees have been pruned heavily to abide by statutory clearances and are ongoing maintenance problems; some of these trees have been irrevocably damaged and should be removed; the Pole CAMM Numbers of the relevant poles have been included to assist maintenance interpretation One Pole near Brady Rd has no apparent Pole CAMM Number. But Poe CAMM 741065 has an HV Pole Sub-station; near T29.

CONCLUSIONS:

As a matter of aesthetics & SULE including perspectives of any ongoing viability within a proposed development all numbered trees including shrubs, weeds or dead or hazardous trees T7 & T8 are also noted as being extremely poor in condition. No trees on-site are viable. I provide detailed photographic evidence of suitability for adjoining trees. Willow bank Rd frontages are strongly influenced by HV & LV Electricity Mains Supply & Poles.

I suggest retention & removals of all the following trees for the applicant because they are obvious - as follows:

REMOVALS x21: T3. T6ABC. T7B. T8. T9. T12. T13. T15. T22. T23. T24. T26. T27. T28. T29. T30 Group. T31. T36.

RETENTION x19: T1. T2. T4. T5. T7A. T10. T11. T14. T16. T17. T18. T19. T20. T21. T25 x2 & Others. T32. T33. T34. T35 including that group with multiple Spotted Gum Saplings.

There are some trees within survey that are viable to retain. These are obvious or mentioned because of their viability or high retention value. Others are decrepit and some are dubious in merit; refer tree-photos book & tree-data tables herein.

MAYFLOWER - Keilor	**Remove: x19** And others small & weedy-trees.	**Retain: x11** And groups as described on plans.
X30 trees & others small. T1-T30	T7. T8. T9 Group. T14. T15. T16. T17. T18. T19. T20. T21. T22. T23. T24. T25. T26. T27. T28. T29.	T1. T2. T3. T4. T5. T6. T10 & Others. T11. T12. T13. T30 x2.

NOTE: Many trees exist within the property, most are dead, dying & diseased or hazardous; others with Very Short SULE have no ongoing merit.
NOTE: Where trees are nominated for removal the following categories are fully pertinent as an industry rationale.
Note: Category Retention Ratings: Refer Barrell SULE: NAAA Workshop Sydney 2001. Bibliography excerpt of AS 4970-2009
Refer: BARRELL TREE AZ: AS/NZ 2007: Bibliography Excerpt of AS 4970-2009. All tree Removals are Rated Z / ZZ.

A few trees on adjoining land are degraded but not adversely affected; some of these are decrepit or possibly hazardous as described (T5+T6). Most trees on-site are not material constraints to any proposed development of the site as they are generally past their respective Safe Useful Life Expectancies (SULE) according to AS4970-2009. They are not viable within a proposed residential development, and are generally very restrictive upon the site and future site activities. The neighbourhood character & biodiversity are not degraded by their removal relative to the extensive potential for replanting & landscaping on the site in due course relative to the Macedon Shire Council Landscape Guidelines.

Note those trees on-site which are dead and others which are irrevocably damaged by heavy pruning for power-lines.

Note: Further tree removals could be considered in relation to an effective design layout but only trees in good viable condition for a period of 5-8Years or more have been recommended for retention and all of these are on adjoining properties, although some will have diminished Tree Protection Zones (TPZs) due to previous farm-use and existing open swale-culvert drains. Trees on the boundary North & West might compliment the development.
Final tree removal decisions pending as per Council response to this report and detailed photos.

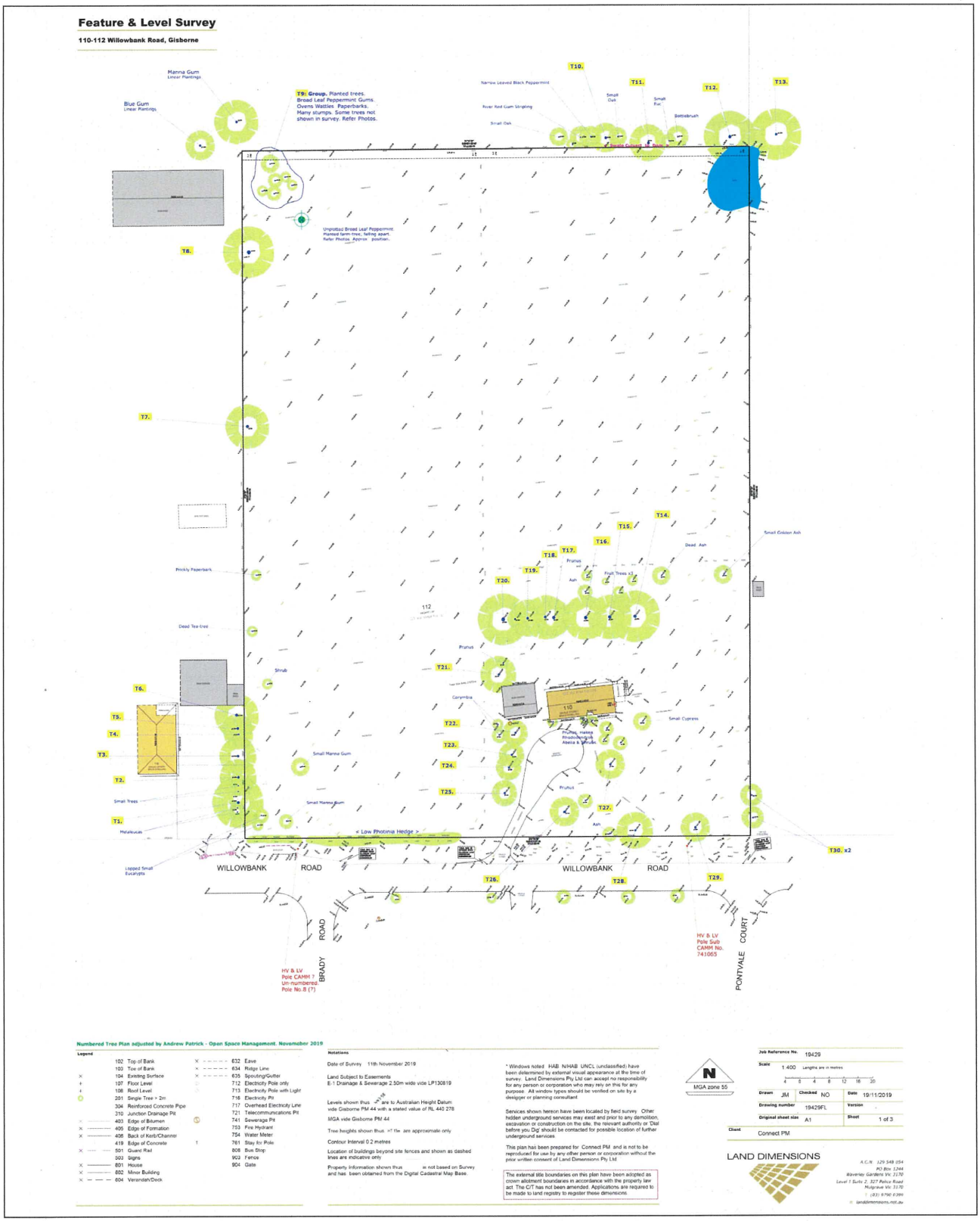
RECOMMENDATIONS:

- The proposed removal of x19 listed trees and all others small within and adjoining the site would allow the practical positioning of new buildings, roads & infrastructure; retention of x11 listed trees adjoining including those in linear rows, not tagged. Pending Council consideration of this report & its merits.
- Some trees are actually Hazardous T7 & T8 or Very Poor and require immediate consideration for safety; they are not viable and some require urgent attention in due course. They cannot possibly be retained.
- Any necessary Tree Protection Zones (TPZ) should be calculated using a combination of issues relating to Tree Species & Condition and the surveyed Canopy Spread. As a minimum, this would be no less than 80% of the Average Canopy Radius spread from the trunk on any given aspect. The Tree Canopy Drip-line is a proven and recognised Tree Protection Zone also appropriate in this instance. Various existing infrastructure, easements and construction set-backs including fences, will also influence actual TPZs.
- There are a number of minor grade & level cuts universally throughout the site dictating outcomes; note the Dam at the Nth, North East boundary and trees separated by a swale culvert & easement along there.
- Tree protection protocols would be aligned with standard instruction as per AS 4970 2009 if required.
- In this case the Council Arborist of Victoria (CAV) Algorithm has been used to calculate the indicative Tree Protection Zones (TPZs) as a starting point for inclusion of some trees only as per tree data tables; in this instance due to existing conditions the contiguous <10% allowable encroachment is not shown.
- A Tree Management Plan (TMP) is separate and additional to this report & may eventually be required.
- **Important note:** Whilst not every single tree is surveyed, most Arboricultural assumptions here are very clear.

REFERENCES:

- Trees and Development: A Technical Guide to Preservation of Trees During Land Development – Matheny & Clark. ISA 1998. Page 73
- CSIRO Publication Sheet BTF18 'Foundation Maintenance and Footing Performance – A Home Owners Guide'
- Arboriculture: Integrated Management of Landscape Trees, Shrubs & Vines. Harris. Matheny & Clark – 1999
- Department of Sustainability & Environment: Advisory List of Rare or Threatened Plants in Victoria – 2005
- Flora of Melbourne: A Guide to Indigenous Plants of the Greater Melbourne Area. Marilyn Bull – 2014
- City West Water: The Water Act 1989 – Section 149: Removal of Trees (26)s 149. Points 1-9.
- The Body Language of Trees – A Handbook for Failure Analysis. Matheck & Breloer. 1999
- The Victorian Native Vegetation Plan. A Framework for Action - The Three-Step Process.
- The Australian Standard for Protection of Trees on Development Sites - AS 4970 2009.
- Barrell SULE: NAAA Workshop Sydney 2001. Bibliography Excerpt of AS 4970-2009
- Refer: Land Dimensions: Feature & level Survey. Ref 19429FL Ver A – 19/11/2019
- Native Trees & Shrubs of South Eastern Australia - Costermans (5th Edition 1994)
- The Australian Standard for The Pruning of Amenity Trees - AS 4373 1996 /2007.
- Council Arborists of Victoria (CAV) - Tree Protection Calculator Algorithm
- Environmental Weeds – Field Guide SE Australia. Kate Blood. 2001
- Council Arborists of Victoria (CAV) - Tree Protection Calculator
- Australian Native Plants – Wrigley & Fagg. (4th Edition 1997)
- Trees for South Eastern Australia - Ken Simpfendorfer
- Building Code Australia 3.1.2-5. 1996 & Amendments
- Urban Landscape Management – Hitchmough 1994.
- AS 4687-2007 Temp` Fencing & Hoarding.

SITE SURVEY PLAN & Trees: Land Dimensions: Feature & level Survey. Ref 19429FL Ver A – 19/11/2019



MAYFLOWER Gisborne: 110-112 Willowbank Rd: Tree Data Tables: T1-T30.

No.	Species	Age	Height mtrs	Canopy Diam mtrs	DBH at 1400	Condition & SULE	Comments & TPZ/SRZ
1	Manna Gum: *Eucalyptus viminalis*	Semi Mature	14	12	900	Fair Long/Medium Cat 1a. 2a. Retain Tree	Part of Planted Linear Row with mixed species adjoining at 1.5Mtrs off fence. Indicative TPZ=10.8 Mtrs Radius. SRZ=3.2 Mtrs Radius. Actual TPZ is more likely to be Canopy Dripline here at 5-6Mtrs R
2	*Eucalyptus Sp*	Dead	11	8	240	Hazardous Zero. Cat 4 Retain Tree	Part of Planted Linear Row with mixed species adjoining at 1.5Mtrs off fence. Indicative TPZ NA
3	Monterey Pine: *Pinus radiata*	Mature Plus	14	7	480	V. Very Poor Short. Cat 3. Retain Tree	Part of Planted Linear Row with mixed species adjoining at 1.5Mtrs off fence. Indicative TPZ=5.8 Mtrs Radius. SRZ=2.4 Mtrs Radius. Actual TPZ is more likely to be Canopy Dripline here at 3.5Mtrs R
4	Monterey Pine: *Pinus radiata*	Mature	9	6	500	Fair Medium. Cat 2 Retain Tree	Part of Planted Linear Row with mixed species adjoining at 1.5Mtrs off fence. Indicative TPZ=6.0 Mtrs Radius. SRZ=2.5 Mtrs Radius. Actual TPZ is more likely to be Canopy Dripline here at 3.0 Mtrs
5	Swamp Gum: *Eucalyptus ovata*	Senescent	10	8	450 x2 CAV= 640mm	V. Very Poor Short. Cat 3. Retain Tree	Part of Planted Linear Row with mixed species adjoining at 1.5Mtrs off fence. Indicative TPZ=7.7 Mtrs Radius. SRZ=2.7 Mtrs Radius. Actual TPZ is more likely to be Canopy Dripline here at 4.0 Mtrs
6	Manna Gum: *Eucalyptus viminalis*	Semi Mature	12	11	900	Fair Medium. Cat 3 Retain Tree	Part of Planted Linear Row with mixed species adjoining at 1.5Mtrs off fence. Indicative TPZ=10.8 Mtrs Radius. SRZ=3.2 Mtrs Radius. Actual TPZ is more likely to be Canopy Dripline here at 5-6Mtrs R
7	Swamp Gum: *Eucalyptus ovata*	Senescent	8	10	1320	Hazardous Zero. Cat 4. Remove Tree	Stand Alone Tree on fence-line. Native Remnant Vegetation. Hollow Rotten. Gross major D`Wood. Full Canopy. Regrowth only. Structurally unsound.
8	Swamp Gum: *Eucalyptus ovata*	Dead	10	13	1390	Hazardous Zero. Cat 4. Remove Tree	Stand Alone Tree on fence-line. Native Remnant Vegetation. Hollow Rotten. Dead Canopy. Universal Parasitic Decay Fungi Brackets. Structurally unsound. Not Viable. Leaning acutely.
9	Group: Euc`s. Wattles. Paperbarks. Shrubs.	Semi Mature	<6	<3	<150	Fair Short. Cat 3 Remove Trees	Small Group of planted farm trees including a Broad Leaf Peppermint with multiple-stems. No Merit. Remove all.
10	River Red Gum: *Euc` camaldulensis*	Semi Mature	9	7	550	Fair Medium. Cat 2 Retain Trees	Part of Planted Linear Row with mixed species adjoining at 2.5Mtrs off fence North. Indicative TPZ=6.6 Mtrs Radius. SRZ=2.6 Mtrs Radius. Actual TPZ is more likely to be Canopy Dripline here at 3.0 Mtrs or fence-line due to culvert-swale. Retain.

MAYFLOWER Gisborne: 110-112 Willowbank Rd: Tree Data Tables: T1-T30.

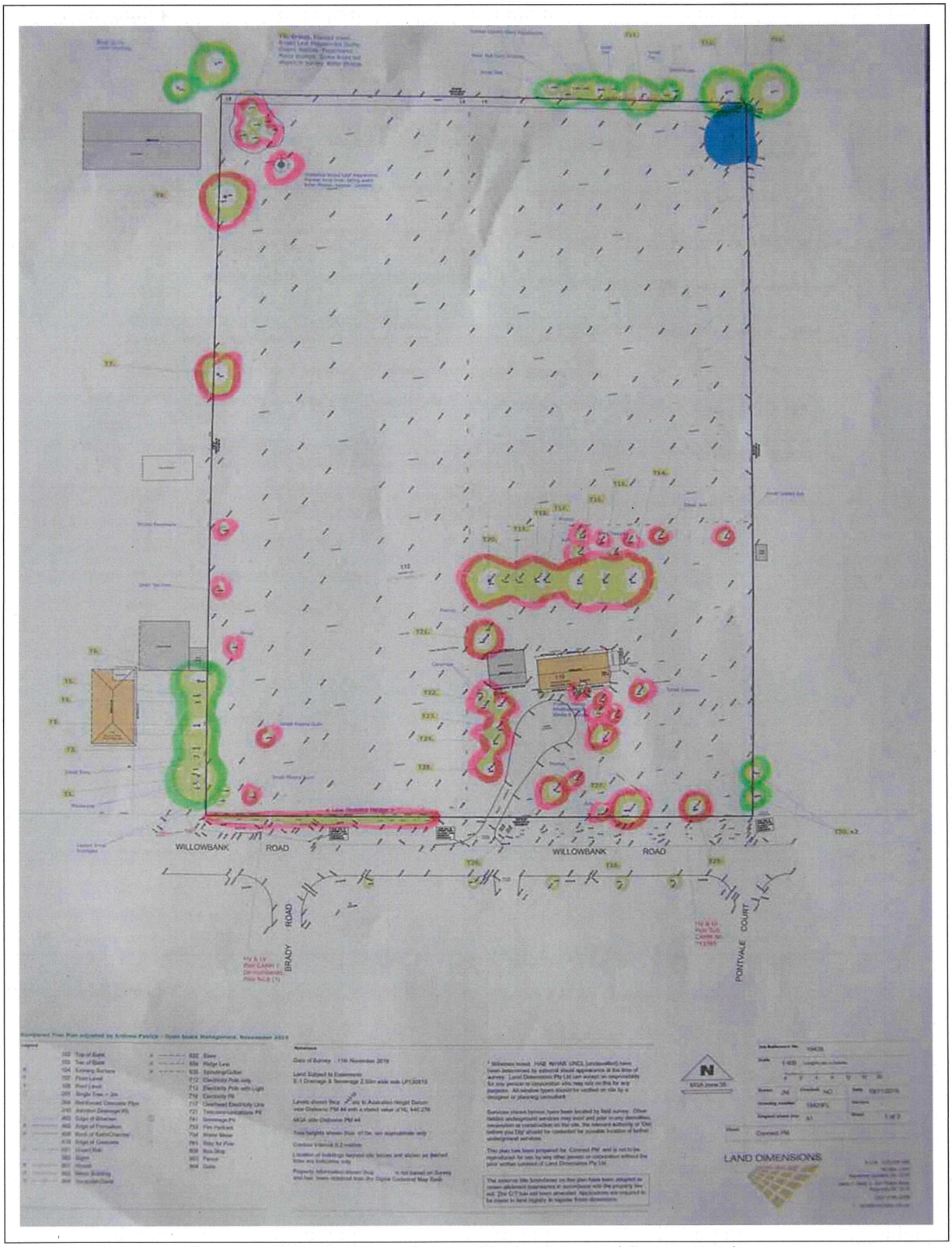
No.	Species	Age	Height mtrs	Canopy Diam mtrs	DBH at 1400	Condition & SULE	Comments & TPZ/SRZ
11	Narrow Leaved Black Peppermint: *Euc` nicholli*	Mature	8	7	620	Fair Medium. Cat 2 Retain Trees	Part of Planted Linear Row with mixed species adjoining at 2.5Mtrs off fence North. Indicative TPZ=7.4 Mtrs Radius. SRZ=2.7 Mtrs Radius. Actual TPZ is more likely to be Canopy Dripline here at 3.0 Mtrs or fence-line due to culvert-swale.
12	Leyland Cypress: *Cupressus leylandiii*	Mature	10	13	1500 Multi	Fair Medium. Cat 2 Retain Tree	Part of Planted Linear Row with mixed species adjoining at 4.5Mtrs off fence North. Indicative TPZ=15.0 Mtrs Radius. SRZ=3.9 Mtrs Radius. Actual TPZ is more likely to be Canopy Dripline here at 7.0 Mtrs or fence-line. Culvert & Dam.
13	Manna Gum: *Eucalyptus viminalis*	Mature	10	12	800	Fair Medium. Cat 2 Retain Trees	Other side of property fences & Dam. Large Trunk Split & Hollow. Indicative TPZ=9.6 Mtrs Radius. SRZ=3.0 Mtrs Radius. Actual TPZ is more likely to be Canopy Dripline. Not Affected.
14	Southern Mahoganey: *Eucalyptus botryoides*	Mature Plus	10	15	840. 900. CAV=1230	Poor V. Short. Cat 3 Remove Tree.	Part of Linear Row. Lopped at 6Mtrs. Twin leader with Bark Included Bifurcations. Poor Structure. Asymmetry. Indicative TPZ=15.0 Mtrs Radius. SRZ=3.9 Mtrs Radius. Not Viable. Remove All.
15	Southern Mahoganey: *Eucalyptus botryoides*	Mature	10	13	790	Poor-Fair Short. Cat 3 Remove Tree.	Part of Linear Row. Lopped at 6Mtrs. Poor Structure. Asymmetry. Indicative TPZ=9.5 Mtrs Radius. SRZ=3.0 Mtrs Radius. Not Viable. Remove One & All.
16	Southern Mahoganey: *Eucalyptus botryoides*	Mature Plus	10	9	820. 1200. CAV=1450	Poor V. Short. Cat 3 Remove Tree.	Part of Linear Row. Lopped at 6Mtrs. Twin leader with Bark Included Bifurcations. Poor Structure. Asymmetry. Indicative TPZ=15.0 Mtrs Radius. SRZ=3.9 Mtrs Radius. Not Viable. Remove All.
17	Southern Mahoganey: *Eucalyptus botryoides*	Mature Plus	10	10	1000	Poor-Fair Short. Cat 3 Remove Tree.	Part of Linear Row. Lopped at 6Mtrs. Poor branch unions. Poor Structure. Asymmetry. Indicative TPZ=12.0 Mtrs Radius. SRZ=3.3 Mtrs Radius. Not Viable. Remove One & All.
18	Southern Mahoganey: *Eucalyptus botryoides*	Mature Plus	7	10	300 x4 CAV=600	Poor V. Short. Cat 3 Remove Tree.	Part of Linear Row. Lopped at 6Mtrs. Multi-stemmed with Bark Included Bifurcations. Poor Structure. Asymmetry. Indicative TPZ=7.2Mtrs Radius. SRZ=2.7 Mtrs Radius. Not Viable. Remove One & All.
19	Southern Mahoganey: *Eucalyptus botryoides*	Mature Plus	10	8	750	Poor V. Short. Cat 3 Remove Tree.	Lopped at 6Mtrs. Poor branch unions. Poor Structure. Asymmetry. Indicative TPZ=9.0 Mtrs Radius. SRZ=2.9 Mtrs Radius. Not Viable. Remove One & All. Small tree in between T20.
20	Southern Mahoganey: *Eucalyptus botryoides*	Mature	11	14	1150	Poor-Fair V. Short. Cat 3 Remove Tree.	Lopped at 6Mtrs. Poor branch unions. Poor Structure. Asymmetry. Indicative TPZ=13.8Mtrs Radius. SRZ=3.5 Mtrs Radius. Not Viable. Major Dead-wood. Remove One & All as part of row.

MAYFLOWER Gisborne: 110-112 Willowbank Rd: Tree Data Tables: T1-T30.

No.	Species	Age	Height mtrs	Canopy Diam mtrs	DBH at 1400	Condition & SULE	Comments & TPZ/SRZ
21	Sugar Gum: *Euc` cladocalyx* 'Nana'	Mature Plus	7	8	400. 390.	Poor V. Short. Cat 3/4 Remove Tree.	Twin Leader. Growing with Prunus. History Major Limb Loss. Universal Trunk Necrosis. No Merit. TPZ - NA. Remove tree.
22	Arizona Cypress: *Cup` Arizonica* 'Glabra'	Mature	8	6	465. 230. 160.	Poor-Fair Short. Cat 3/4e Remove Tree.	Part of a linear-row. Heavily compacted gravel driveway. Multi-stemmed. Supressed. No Merit. Remove.
23	Arizona Cypress: *Cup` Arizonica* 'Glabra'	Mature	8	6	480	Poor-Fair Short. Cat 3/4e Remove Tree.	Part of a linear-row. Heavily compacted gravel driveway. Supressed. No Merit. Remove.
24	Arizona Cypress: *Cup` Arizonica* 'Glabra'	Mature	8	6	430. 400	Poor-Fair Short. Cat 3/4e Remove Tree.	Part of a linear-row. Heavily compacted gravel driveway. Twin Leader. Bark Included Bifurcation. Suppressed. No Merit. Remove.
25	Arizona Cypress: *Cup` Arizonica* 'Glabra'	Mature	6	6	450	Poor-Fair Short. Cat 3/4e Remove Tree.	Part of a linear-row. Heavily compacted gravel driveway. Supressed. No Merit. Remove.
26	Hill Red Gum: *Euc` blakelyi*	Semi Mature	7	8	465. 340. 200. 240. CAV=655	Fair Medium. Cat 2 Remove Tree	Planted Tree. Multi-stemmed. Reasonable Form. Some Bark Included Bifurcations at height. Poor Structure. Good Bole. No Merit within the project. Remove tree & Replace.
27	Flowering Gum: *Euc` leucoxylon* 'Rosea'	Senescent	7	7	370. 340.	V. Very Poor V.V Short. Cat 4. Remove Tree	Straggly open canopy specimen. Poor Form. Multi-stemmed. Major Dead-wood. Suckering. No Merit TPZ NA. Remove tree with others.
28	English Elm: *Ulmus procera*	Mature	6	9	490	Poor-Fair Short. Cat 3/4e Remove Tree.	Very Poor Form. Heavily Pruned for HV & LV Electricity Mains. Strong Canopy Bias & Asymmetry North. No Merit. Remove.
29	Golden Monterey Cypress: *Hesperocyparis macrocarpa* 'Aurea'	Senescent	5	7	Multi-stemmed	V. Very Poor V.V Short. Cat 4. Remove Tree	Decrepit Specimen. Seridium Canker affected. Adjacent o HV & LV Pole Sub-station. Pole CAMM 741065. Remove tree.
30	Leyland Cypress: *Cupressus leylandii*	Mature	7	5	400 both	Fair Medium. Cat 2 Retain Trees	Two trees on adjoining property close to fence. Indicative TPZ=4.8 Mtrs Radius. SRZ=2.3 Mtrs Radius. Retain trees behind ring-lock fence. Current vehicle egress. Compacted ground.
Others	Various shown on plan Small Trees & Shrubs. Mostly Exotic.	Mature	<6	<3	<150	V. Very Poor V.V Short. Cat 4. Remove Trees	Various other trees & shrubs as shown on adjusted site-plan. None special. Many weedy or exotic. Remove all as shown on plan.

Note: Category Retention Ratings: Refer Barrell SULE: NAAA Workshop Sydney 2001. Bibliography excerpt of AS 4970-2009
Refer: BARRELL TREE AZ: AS/NZ 2007: Bibliography Excerpt of AS 4970-2009. All Tree Removals Rated ZZ. Refer end-pages.

SITE SURVEY PLAN & Trees: **Proposed Tree Removals & Retention Concept recommendations; this might change.**



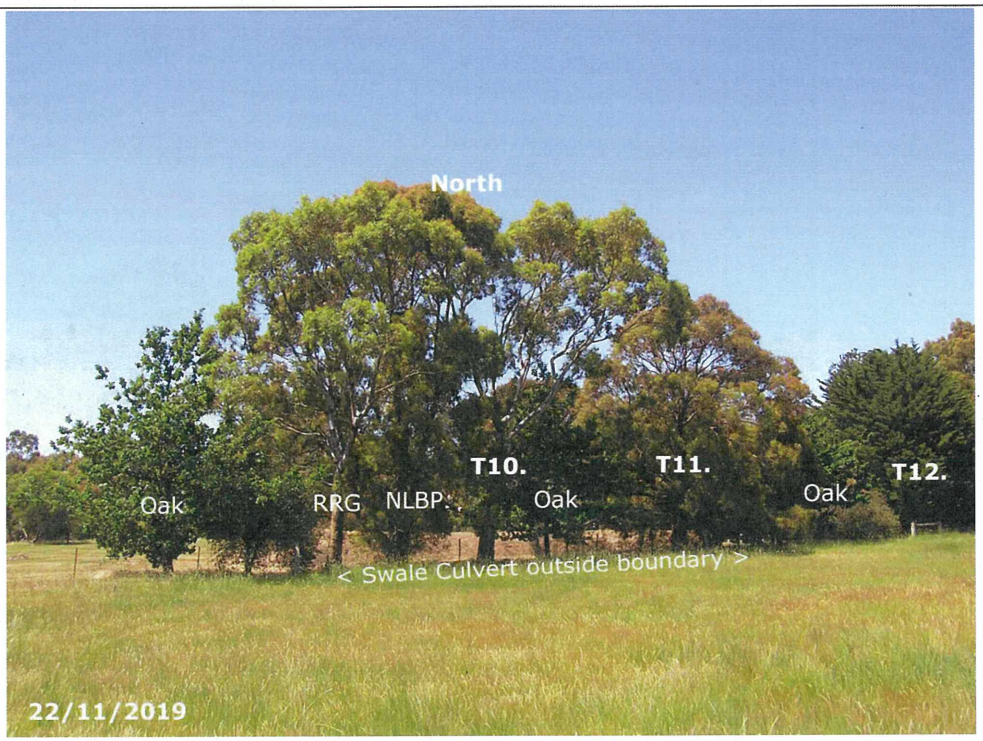
Retention Code Recommendations: *Red – Remove. *Green – Retain.

Photo Samples: Mayflower Gisborne – December 2019 (Refer Separate 'Tree Photos Book' - attachment)

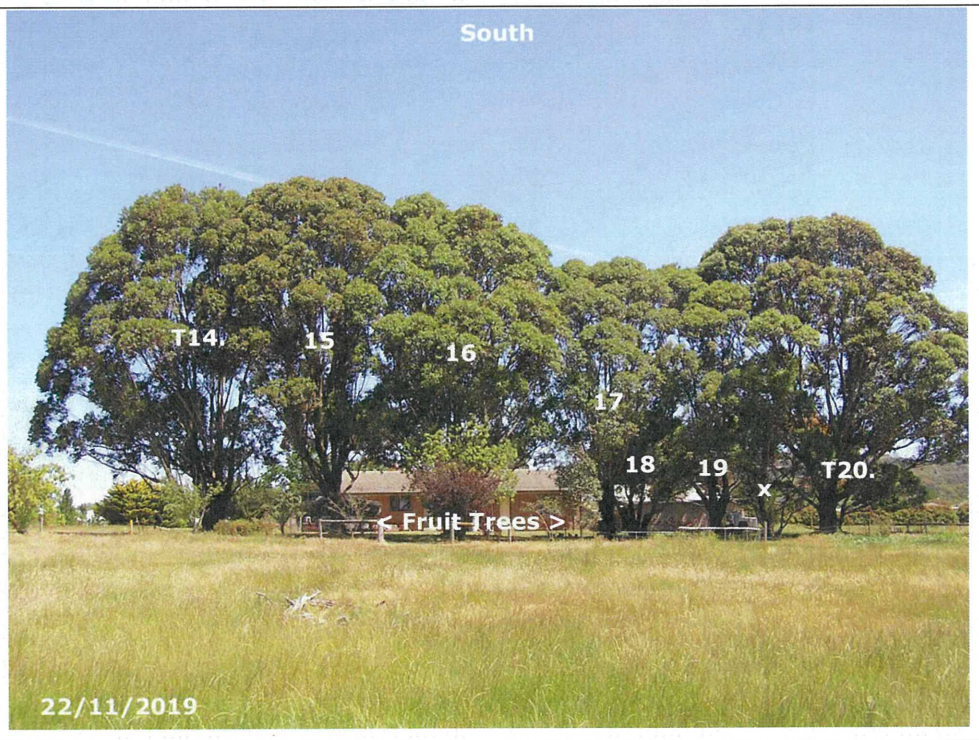
T1 – T6: Sample Photograph. Describing West Boundary.

T8 & Others: Sample Photograph. Describing some site features.

Photo Samples: Mayflower Gisborne – December 2019 (Refer Separate 'Tree Photos Book' - attachment)

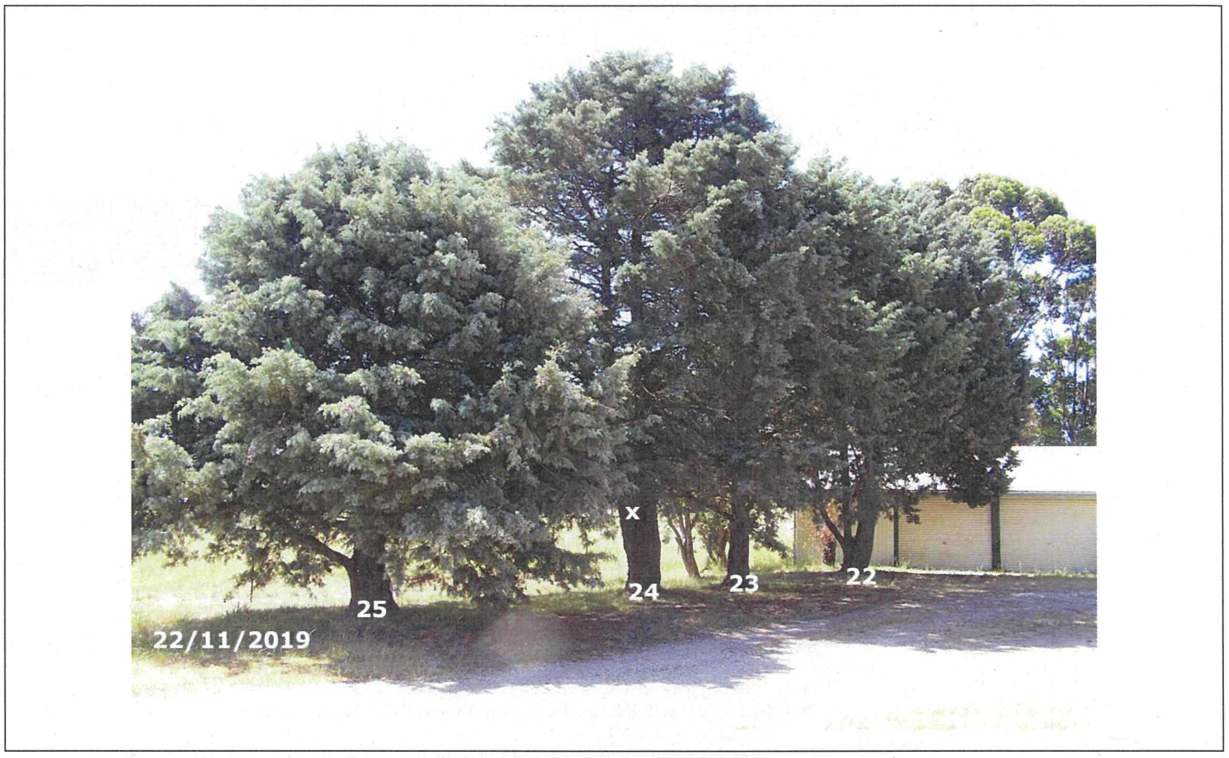


T10. T11. T12 & Others: Sample Photograph. Describing North Boundary Aspect.

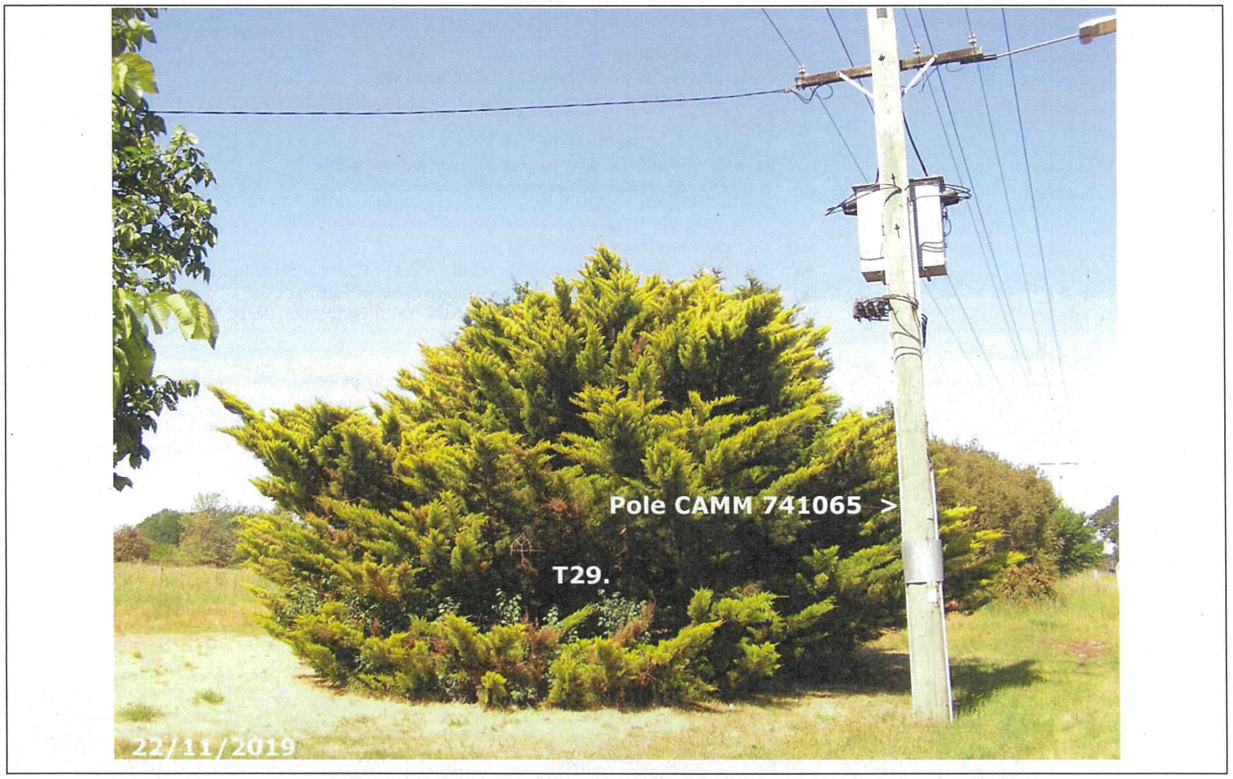


T14 – T20: Lopped Southern Mahoganies. Asymmetrical Grove. All with Poor Structure & Form.

Photo Samples: Mayflower Gisborne – December 2019 (Refer Separate 'Tree Photos Book' - attachment)



T22 – T25 Front.



T29: Dying. Near Pole CAMM 741065

Barrell SULE: NAAA Workshop Sydney 2001. Bibliography Excerpt of AS 4970-2009

TreeAZ

SULE: Its use and status into the new millennium

Appendix 3
Safe Useful Life Expectancy Categories (Updated 04/01)

This reference sheet should be included as supplementary information with all reports where a SULE assessment is an element. Additionally, it can be copied and covered with a laminated plastic protective sheet and used as a field sheet to help with data collection.

Safe Useful Life Expectancy Categories (Updated 01/04/01)

1: **Long SULE:** Trees that appeared to be retainable at the time of assessment for more than 40 years with an acceptable level of risk.
- (a) Structurally sound trees located in positions that can accommodate future growth.
- (b) Trees that could be made suitable for retention in the long term by remedial tree care.
- (c) Trees of special significance for historical, commemorative or rarity reasons that would warrant extraordinary efforts to secure their long term retention.

2: **Medium SULE:** Trees that appeared to be retainable at the time of assessment for 15–40 years with an acceptable level of risk.
- (a) Trees that may only live between 15 and 40 more years.
- (b) Trees that could live for more than 40 years but may be removed for safety or nuisance reasons.
- (c) Trees that could live for more than 40 years but may be removed to prevent interference with more suitable individuals or to provide space for new planting.
- (d) Trees that could be made suitable for retention in the medium term by remedial tree care.

3: **Short SULE:** Trees that appeared to be retainable at the time of assessment for 5–15 years with an acceptable level of risk.
- (a) Trees that may only live between 5 and 15 more years.
- (b) Trees that could live for more than 15 years but may be removed for safety or nuisance reasons.
- (c) Trees that could live for more than 15 years but may be removed to prevent interference with more suitable individuals or to provide space for new planting.
- (d) Trees that require substantial remedial tree care and are only suitable for retention in the short term.

4: **Remove:** Trees that should be removed within the next 5 years.
- (a) Dead, dying, suppressed or declining trees because of disease or inhospitable conditions.
- (b) Dangerous trees because of instability or recent loss of adjacent trees.
- (c) Dangerous trees because of structural defects including cavities, decay, included bark, wounds or poor form.
- (d) Damaged trees that are clearly not safe to retain.
- (e) Trees that could live for more than 5 years but may be removed to prevent interference with more suitable individuals or to provide space for new planting.
- (f) Trees that are damaging or may cause damage to existing structures within 5 years.
- (g) Trees that will become dangerous after removal of other trees for the reasons given in (a) to (f).
- (h) Trees in categories (a) to (g) that have a high wildlife habitat value and, with appropriate treatment, could be retained subject to regular review.

5: **Small, young or regularly pruned:** Trees that can be reliably moved or replaced.
- (a) Small trees less than 5m in height.
- (b) Young trees less than 15 years old but over 5m in height.
- (c) Formal hedges and trees intended for regular pruning to artificially control growth.

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www.barrelltreecare.co.uk

BARRELL TREE AZ: AS/NZ 2007: Bibliography Excerpt of AS 4970-2009

Figure 1: TREE - AZ Categories (Version 7.05ANZ)

CAUTION: TREE-AZ assessments must be carried out by a competent person qualified and experienced in arboriculture, the following category descriptions are designed to be a brief field reference and are not intended to be self-explanatory. They must be read in conjunction with the most current explanations published at www.treeaz.com.au.

Category Z: Unimportant trees not worthy of being a material constraint

	Local policy exemptions: Trees that are unsuitable for legal protection for local policy reasons including size, proximity and species
Z1	Young or insignificant small trees, i.e. below the local size threshold for legal protection, etc
Z2	Too close to a building, i.e. exempt from legal protection because of proximity, etc
Z3	Species that cannot be protected for other reasons, i.e. scheduled noxious weeds, out of character in a setting of acknowledged importance, etc
	High risk of death or failure: Trees that are likely to be removed within 10 years because of acute health issues or severe structural failure
Z4	Dead, dying, diseased or declining
Z5	Severe damage and/or structural defects where a high risk of failure cannot be satisfactorily reduced by reasonable remedial care, i.e. cavities, decay, included bark, wounds, excessive imbalance, overgrown and vulnerable to adverse weather conditions, etc
Z6	Instability, i.e. poor anchorage, increased exposure, etc
	Excessive nuisance: Trees that are likely to be removed within 10 years because of unacceptable impact on people
Z7	Excessive, severe and intolerable inconvenience to the extent that a court or tribunal would be likely to authorise tree removal, i.e. dominance, debris, interference, etc
Z8	Excessive, severe and intolerable damage to property to the extent that a court or tribunal would be likely to authorise tree removal, i.e. severe structural damage to surfacing and buildings, etc
	Good management: Trees that are likely to be removed within 10 years through responsible management of the tree population
Z9	Severe damage and/or structural defects where a high risk of failure can be temporarily reduced by reasonable remedial care, i.e. cavities, decay, included bark, wounds, excessive imbalance, vulnerable to adverse weather conditions, etc
Z10	Poor condition or location with a low potential for recovery or improvement, i.e. dominated by adjacent trees or buildings, poor architectural framework, etc
Z11	Removal would benefit better adjacent trees, i.e. relieve physical interference, shading, etc
Z12	Unacceptably expensive to retain, i.e. severe defects requiring high levels of maintenance, etc

NOTE: Z trees with a high risk of death/failure (Z4, Z5 & Z6) or causing severe inconvenience (Z7 & Z8) at the time of assessment and need an urgent risk assessment can be designated as ZZ. ZZ trees are likely to be unsuitable for retention and at the bottom of the categorisation hierarchy. In contrast, although Z trees are not worthy of influencing new designs, urgent removal is not essential and they could be retained in the short term, if appropriate.

	Category A: Important trees suitable for retention for more than 10 years and worthy of being a material constraint
A1	No significant defects and could be retained with minimal remedial care
A2	Minor defects that could be addressed by remedial care and/or work to adjacent trees
A3	Special significance for historical, cultural, commemorative or rarity reasons that would warrant extraordinary efforts to retain for more than 10 years
A4	Trees that may be worthy of legal protection for ecological reasons (Advisory requiring specialist assessment)

NOTE: Category A1 trees that are already large and exceptional, or have the potential to become so with minimal maintenance, can be designated as AA at the discretion of the assessor. Although all A and AA trees are sufficiently important to be material constraints, AA trees are at the top of the categorisation hierarchy and should be given the highest weight in any selection process.

TREE-AZ is designed by Barrell Tree Consultancy (www.barrelltreecare.co.uk) and is reproduced with their permission

TreeAZ Categories Field Sheet (Version 10.04-ANZ)

CAUTION: TreeAZ assessments must be carried out by a competent person qualified and experienced in arboriculture. The following category descriptions are designed to be a brief field reference and are not intended to be self-explanatory. They must be read in conjunction with the most current explanations published at www.TreeAZ.com.

Category Z: Unimportant trees not worthy of being a material constraint

Local policy exemptions: Trees that are unsuitable for legal protection for local policy reasons including size, proximity and species

Z1	Young or insignificant small trees, i.e. below the local size threshold for legal protection, etc
Z2	Too close to a building, i.e. exempt from legal protection because of proximity, etc
Z3	Species that cannot be protected for other reasons, i.e. scheduled noxious weeds, out of character in a setting of acknowledged importance, etc

High risk of death or failure: Trees that are likely to be removed within 10 years because of acute health issues or severe structural failure

Z4	Dead, dying, diseased or declining
Z5	Severe damage and/or structural defects where a high risk of failure cannot be satisfactorily reduced by reasonable remedial care, i.e. cavities, decay, included bark, wounds, excessive imbalance, overgrown and vulnerable to adverse weather conditions, etc
Z6	Instability, i.e. poor anchorage, increased exposure, etc

Excessive nuisance: Trees that are likely to be removed within 10 years because of unacceptable impact on people

Z7	Excessive, severe and intolerable inconvenience to the extent that a locally recognized court or tribunal would be likely to authorize removal, i.e. dominance, debris, interference, etc
Z8	Excessive, severe and intolerable damage to property to the extent that a locally recognized court or tribunal would be likely to authorize removal, i.e. severe structural damage to surfacing and buildings, etc

Good management: Trees that are likely to be removed within 10 years through responsible management of the tree population

Z9	Severe damage and/or structural defects where a high risk of failure can be temporarily reduced by reasonable remedial care, i.e. cavities, decay, included bark, wounds, excessive imbalance, vulnerable to adverse weather conditions, etc
Z10	Poor condition or location with a low potential for recovery or improvement, i.e. dominated by adjacent trees or buildings, poor architectural framework, etc
Z11	Removal would benefit better adjacent trees, i.e. relieve physical interference, suppression, etc
Z12	Unacceptably expensive to retain, i.e. severe defects requiring excessive levels of maintenance, etc

NOTE: Z trees with a high risk of death/failure (Z4, Z5 & Z6) or causing severe inconvenience (Z7 & Z8) at the time of assessment and need an urgent risk assessment can be designated as ZZ. ZZ trees are likely to be unsuitable for retention and at the bottom of the categorization hierarchy. In contrast, although Z trees are not worthy of influencing new designs, urgent removal is not essential and they could be retained in the short term, if appropriate.

Category A: Important trees suitable for retention for more than 10 years and worthy of being a material constraint

A1	No significant defects and could be retained with minimal remedial care
A2	Minor defects that could be addressed by remedial care and/or work to adjacent trees
A3	Special significance for historical, cultural, commemorative or rarity reasons that would warrant extraordinary efforts to retain for more than 10 years
A4	Trees that may be worthy of legal protection for ecological reasons (Advisory requiring specialist assessment)

NOTE: Category A1 trees that are already large and exceptional, or have the potential to become so with minimal maintenance, can be designated as AA at the discretion of the assessor. Although all A and AA trees are sufficiently important to be material constraints, AA trees are at the top of the categorization hierarchy and should be given the most weight in any selection process.

Further explanations to assist categorization

Z1	Any existing statutory definitions of trees that are too small to be legally protected should be applied and trees less than those heights or diameters will be Z1. If there are none, then if the tree has been planted for less than 5 years it is Z1. If it is less than 5m in height, it will be Z1 unless it is significant, i.e. clearly mature, but small trees are not Z1. If it is greater than 10m in height it is not Z1 unless it was planted in the last 5 years. Applying Z1 to trees between 5–10m is a matter of judgment; the most obvious test being that the tree could be easily and reliably moved or replaced. Ideally, the replacement tree should not be less than 20% of the replaced tree's trunk, height and spread dimensions.
Z2	Any existing statutory rules that prevent protection of trees within a fixed distance of a structure will allow a tree to be subcategorized as Z2.
Z3	Any existing statutory rules or guidance that prevent protection of trees for reasons other than size and proximity dictate Z3, i.e. invasive or alien species. If none exist, then Z3 cannot be applied.
Z4	This subcategory is for trees that are unlikely to recover from a serious health problem. The condition must be terminal with no obvious potential to recover, i.e. severe crown dieback related to excavation damage or root decay, to the extent that the structural branch framework is compromised. Trees that are likely to recover or improve should not be placed in this subcategory, i.e. trees suffering from a foliar problem that has little impact on the branch framework and varies from year to year.
Z5	Severe means so bad that there is no realistic chance of the tree achieving its full potential and there is a high of failure risk. In many cases, the risk of failure can be reduced by dramatic reduction in tree size, but this has severe health, maintenance cost and amenity implications, so is unlikely to be a sustainable management option. A common example is a severely unbalanced tree within a group that will be particularly vulnerable in adverse weather conditions and the adjacent trees mean there is no hope of remedial works resulting in an

Tree AZ Detailed Descriptors.

Z5 continued	improvement. Topped trees do not automatically fit into this subcategory, although there is an obvious temptation. Species prone to decay, such as willow and poplar, often have severe decay at the origin of vigorous re-growth, creating a high risk of failure in adverse weather conditions. Z5 is clearly appropriate for them. However, this needs to be a careful judgment because topping in itself does not necessarily condemn a tree to this subcategory. Some trees, such as plane, oak and lime, are particularly good at coping with this treatment and often are able to mature with a low risk of failure. If remedial works will allow the tree to be retained with no significant adverse impact on amenity, health or maintenance costs, then it does not fit here.
Z6	Trees can become poorly anchored because of soil erosion through climatic factors, i.e. water or wind, wear from traffic - pedestrian or vehicular, changing soil conditions - increasing wetness, sudden and severe physical stress from storms and root damage such as decay or severance reducing root strength. In some case, i.e. storm induced instability, there may be a realistic chance of recovery and a subcategorization of Z6 may be premature. However, if excessive remedial work is required, it is likely that Z6 is a defensible subcategory. Alterations to tree exposure to the wind occurs because of changes in the shelter provided by adjacent objects such as buildings or trees. This often applies to groups of trees where one large dominant individual will be lost because of poor health or a structural problem, which then dramatically exposes the remaining trees.
Z7	**Establishing thresholds of acceptable levels of inconvenience:** In its broadest sense, inconvenience is the interference with the authorized use of land. In relation to trees, it can be in the form of roots disrupting landscaping and hard surfacing, parts of trees physically preventing land use, tree debris such as leaves and fruit falling and tree crowns causing excessive shade. The principles for establishing what are acceptable levels of inconvenience are the same irrespective of the cause. In a community context, it is generally accepted that trees provide a significant benefit to society and it is reasonable for individuals to tolerate some level of inconvenience from their presence. However, the precise location or value of these thresholds is not always obvious and is often a subjective interpretation rather than a definitive point. There will always have to be a balancing of the benefit to the community weighed against the inconvenience suffered by the individual. What is an acceptable, tolerable or reasonable level of inconvenience is often a matter of judgment for each specific situation, tempered by experience and common sense. This, in turn, should be guided by court, tribunal and planning decisions that have made informed judgments on these issues. **Common examples:** Very large trees near existing occupied buildings can dominate to the extent that the disbenefit from the anxiety of the occupants outweighs the benefit of the tree. Regular and severe staining caused by fallen debris to a swimming pool surround may be unacceptable because the stark contrast in colours creates a dirty impression whereas the same staining on a path or drive surface may be more acceptable. In contrast, falling leaves blocking gutters causing them to be cleaned once a year is not that much of a local inconvenience in the context of the wider benefits that trees impart. **Making the decision:** Assessing inconvenience is almost entirely a subjective judgment, based on experience and understanding of what is perceived as being reasonable and unreasonable for a normal person. As with all these judgments, a simple test is to imagine a court hearing where a judge has to decide if the levels of inconvenience are intolerable. If they are, then the tree is Z7; if they are not that bad, then the tree belongs in another subcategory.
Z8	Where more serious damage occurs to property from root action, then court/tribunal judgments on liability help to focus on what level of damage is deemed tolerable by society. The most common example is direct damage from roots, trunks and branches to structures and surfacing. Repairs to walls may require such extensive excavation and cutting of roots that the tree cannot be retained. However, the use of innovative techniques may reduce root damage, but still produce a viable boundary, allowing the tree to be retained. Root damage to surfacing is often a sustainable reason for removal if rectifying the damage will significantly adversely affect the tree. In contrast, the potential for roots to deform surfacing would be a less reliable basis for allocation to this subcategory because it is so unpredictable. As a general rule, there would need to be good evidence for ongoing damage, with little scope for remedial works, before a tree could be reliably allocated to this subcategory.
Z9	This is a similar subcategory to Z5, but where the defect is not so severe that remedial works have to be extensive and immediate. Quite often, there are less severe defects that are so bad there is no realistic potential for the tree to improve, but it could be retained in the short term with some significant remedial works. This would only be seen as a temporary measure because to continue applying the same principle would not be cost-effective compared to replacement. A typical example would be a tree with a large and progressive cavity that will clearly prevent it ever improving its condition or contribution to amenity. However, substantial thinning and reduction would allow it to be retained in the short term to allow other replacement trees to develop to buffer its inevitable loss. The benefit of retaining it in the short term might outweigh the cost of doing the works as a one-off, but not on a regular basis.
Z10	It is common to find trees that are obviously not good enough for long term retention because they look unhealthy or are so unbalanced or so tall and thin or that they will never improve. However, the problems are not so severe that there is a high risk of death or failure, and they cannot be discounted for that reason. This subcategory is for those trees and relies on the principle of sustained amenity to justify the allocation. Trees with no potential to improve are taking up space where new trees could be growing, which would be enhancing the desirable objective of an uneven age class structure. The replacements would obviously be small trees and these would then fall into the Z1 subcategory. As set out in the Z1 explanations, the precise location on the site is not often that critical, so these trees would not generally be considered worthy of being a material constraint.
Z11	This applies to trees in groups where one individual is destructively interfering with another. The judgment of which is the better tree is obviously subjective and would be informed by which tree had the best potential for sustainable retention. An obvious example is one tree growing up through another and directly rubbing causing damage. Retaining both would probably result in the loss of each, whereas removing one may allow the other to achieve its full potential. Another example would be one tree shading and preventing the sustainable development of a neighbour to the extent that both trees would be prematurely removed if left alone. The removal of one tree may be justified if it allowed the remaining tree to reach its full potential. If both trees could be retained as a group and achieve their full potential, then they should not be included in this subcategory.
Z12	This is a matter of judgment and may vary widely. It primarily applies to existing trees that are not suited to their location, but there is resistance to their replacement. As a general principle, all trees will incur some management costs and these would normally not be a valid reason for removal. However, as those costs increase, their acceptability decreases to a point where it will be more cost-effective to plant a new tree more suited to the location rather than incur the burden of repeated and excessive costs indefinitely. Typical examples include topped trees with excessive decay, pollarded trees to reduce subsidence risk, trees beneath power lines and trees close to buildings, roads and paths. All these examples will require high levels of maintenance that may not be financially acceptable unless the benefits that arise from retaining the trees are particularly high.
A1	Trees that do not require any specific remedial works above those that would be required for normal maintenance.
A2	Trees with minor defects likely to recover from remedial works to be retainable in the long term, i.e. pollards with little decay.
A3	'Special' means unusual, rare or uncommon, i.e. a tree of some historical/cultural significance, etc.
A4	Trees can be valuable ecological habitat that may be protected by legislation, which may be a material constraint on the type and timing of changes that can occur on a site. If an ecological assessment has not been carried out by the time of the survey, and the arborist suspects there may be habitat issues, the tree should be identified as A4, and specialist assessment should be sought.

Tree AZ Detailed Descriptors.

City West Water: Victorian Water Act 1989 – Sect 149/26

Show the Annotations Toolbar

WATER ACT 1989 - SECT 149
Removal of trees [26] s. 149

(1) An Authority may, by notice in writing, require the owner of any property to remove any tree on that property if the Authority reasonably decides that the tree is obstructing or damaging the Authority's works or that it is likely to obstruct or damage them.

(2) If the tree required to be removed is not on land over which—
(a) an easement exists in favour of the Authority; or
(b) an easement exists for water supply, sewerage or drainage purposes—

the Authority must, subject to subsection (7), pay appropriate compensation to the owner of the property in accordance with Part 5 of the Land Acquisition and Compensation Act 1986 .

(3) The owner may, within 7 days after receiving a notice to remove a tree, object to the Authority.

(4) An Authority must take into account any objection made to it.
s. 149

(5) If the owner refuses or fails to comply with the notice—
(a) within the time specified in the notice; or
(b) if the owner has objected, within 7 days after he or she receives notice from the Authority that the objection is not upheld; or
(c) within any longer time allowed by the Authority—
the Authority may, after giving 21 days' notice of its intention to do so, remove the tree and recover from the owner the reasonable costs of the removal.

(6) The Authority may recover from the owner the cost of any repairs to the Authority's works that are necessary to repair the damage caused by a tree that is removed by the owner or the Authority after service of a notice under subsection (1).

(7) An Authority is not liable to pay compensation for the removal of a tree that is planted after the completion of the works of the Authority that are obstructed, damaged or at risk.
S. 149(8) substituted by No. 52/1998
s. 311(Sch. 1 item 105.19).

(8) An owner may apply to the Tribunal for review of a decision by an Authority not to uphold the owner's objection to a notice to remove a tree .

S. 149(9) inserted by No. 52/1998
s. 311(Sch. 1 item 105.19).

(9) An application for review must be made within 28 days after the later of—
(a) the day on which the decision is made;
(b) if, under the Victorian Civil and Administrative Tribunal Act 1998 , the owner requests a statement of reasons for the decision, the day on which the statement of reasons is given to the owner or the owner is informed under section 46(5) of that Act that a statement of reasons will not be given.

TREE DESCRIPTORS & TERMINOLOGY - OSM

AGE:
Young: Juvenile tree recently planted. Last 1- 5 yrs
Semi-mature: Tree still growing within the current environment
Mature: Specimen has reached expected size in current situation.
Senescent: Tree is over mature and in decline or past its respective SULE for the site.

FORM:
Good: Canopy full and symmetrical.
Fair: Minor asymmetry, or suppression. Considered typical for species in situation.
Poor: Canopy suppressed, major asymmetry. Stump re-growth.

HEALTH:
Good: Crown full, with good density. Foliage entire with good colour, minimal or no Pathogen damage. Good growth indicators, e.g. extension growth. No or minimal Canopy Die-back. Good wound-wood development and callusing.
Fair: Tree is exhibiting one or more of the following symptoms;
Tree has <30% dead wood, or can have minor canopy dieback, Foliage generally with good colour, some discolouration may be present, minor pathogen damage present. Typical growth indicators, e, g. extension growth, leaf size, canopy density for species in location may be slightly abnormal.
Poor: Tree has >30% dead wood. Canopy Die-back present. Discoloured or distorted leaves and or excessive Epicormic Regrowth. Pathogen is present and or stress symptoms that could lead to or are leading to decline.
Dead: Tree is dead.

STRUCTURE:
Good: Good branch attachment and or no minor structural defects. Trunk and scaffold branches sound or only minor damage. Good trunk and scaffold branch taper.
No branch over extension. No damage to structural roots and or good buttressing present.
No obvious root pests or diseases.
Fair: Some minor structural defects and or minor damage to trunk. Bark missing. Cavities could be present.
Minimal or no damage to structural roots. Typical structure for the species in the situation.
Poor: Major structural defects and or trunk damaged and or missing bark.
Large cavities and or girdling or damaged roots that are problematical.
Hazardous: Tree poses immediate hazard potential that should be rectified as soon as possible.

VIGOUR
Good, Fair or Poor. This describes the ability of a tree to promote extension growth and wound-callus effectively; this is directly related to the annual progress of tree growth, including root systems, which are dependent on in-situ and environmental conditions.

GENERAL CONDITION:
Describes a tree or group of trees in a broad term of convenient précis that considers all of these Tree Descriptors as mentioned in Documents, MS XL Spreadsheets or Tree Data Tables. Refer Photos.

SAFE USEFUL LIFE EXPECTANCY (SULE):
Safe Useful Life Expectancy (SULE) means that in a planning context the length of time a tree can be maintained as a useful amenity and not a liability is by far the most important long-term consideration. SULE is contingent on a number of obvious management assumptions and the fundamental principles of public safety and usefulness in the landscape. Trees are a renewable resource.

Disclaimer:

- ***Open Space Management*** does not assume responsibility for legal matters, and assumes that legal descriptions, titles and ownerships are correct and good.
- ***Open Space Management*** assumes that any property or project is not in violation of any applicable codes, ordinances, statutes or other government regulations.
- ***Open Space Management*** takes all reasonable care to ensure all referenced material is accurate and quoted in correct context but does not take responsibility for information quoted or supplied.
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- This report and any values expressed herein represent the opinion of ***OSM*** and ***OSM's*** fee is in no way contingent upon the reporting of a specified value, the occurrence of a subsequent event, nor upon any finding to be reported.
- Site plans, diagrams, graphs and photographs in this report, being intended as visual aids, are not necessarily to scale and should not be construed as engineering or architectural reports or surveys.
- Information in this report covers only those items that were examined in accordance with the Terms of Reference, and reflects the condition of those items that were examined at the time of the inspection.
- The inspection is limited to visual examination of accessible components unless otherwise stated.
- The trees were assessed using the Visual Tree Assessment (VTA) method. The inspection is limited to a visual examination from the ground without tree dissection or soil excavation. Consent will be sought with the client to carry out any tree dissection or soil excavation if required or as indicated within report body. All measurements are approximate only but validated to the best of the consultant`s ability using specialist tools where access to the tree is available, other-wise it is estimated.
- Any opinions or recommendations are the opinions of the assessing Arborist representing ***OSM.***
- There is no warranty or guarantee, expressed or implied, that the problems or deficiencies of the plants or property in question may not arise in the future.

Open Space Management - Open Space Management

Arboricultural Assessment & Report

Preliminary Tree Assessment

(This Report must be read with: Tree Data Tables. Tree Photos Book & Site Plan Attachment)

As per AS 4970- 2009: Australian Standard for Protection of Trees on Development Sites.

MAYFLOWER Retirement Village - Gisborne

110-112 Willowbank Rd. Gisborne.

MACEDON RANGES Shire Council

TREE PHOTOS BOOK

All Relevant Trees with Trunk Diameters 100mm>
And other trees within the site-landscape as shown.
Other Photos Archived.

T1–T30 and Others

Client: Mayflower Gisborne P/L

C/o CONNECT Project Management
Level 16/60 Albert Rd. Sth Melb. Vic 3205
Mr Konstantine Daviotis – Project Manager
Ph: 9686 4488
Mob: 0416 220 562
Email: KDaviotis@connectpm.com.au

MACEDON RANGES PLANNING SCHEME
DEVELOPMENT PLAN DP/...../.....
This Development Plan is satisfactory and meets the requirements of the Development Plan Overlay –
Clause 43.04 Schedule 4
of the Macedon Ranges Planning Scheme.
4/12/2020 .....
Date Authorised Officer

Andrew J Patrick
(Adv Cert Hort. Dipl Hort/Arb. WTA Cert 4)
Consulting Arborist. Mob: 0402 084 502
Email: patrickaj@bigpond.com

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3 /12/ 2019

TREE PHOTOS BOOK: Mayflower Gisborne – Existing Conditions.

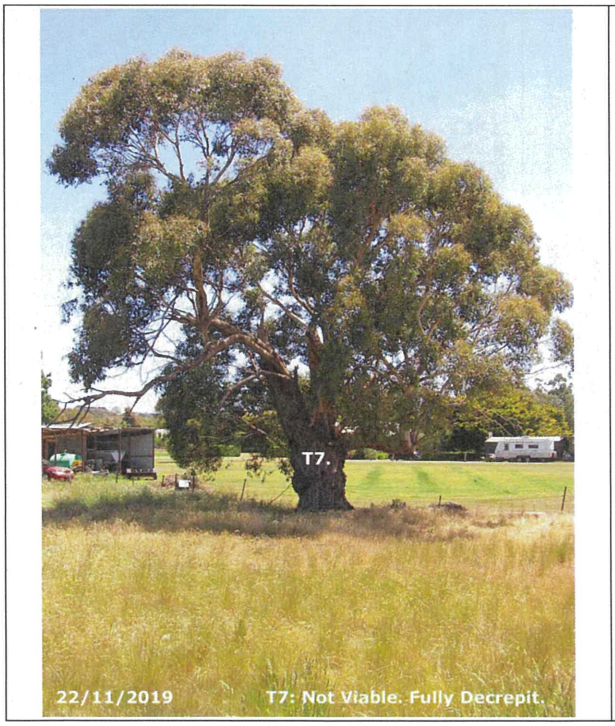
T1 -T6 & Others.

T1 & Others.

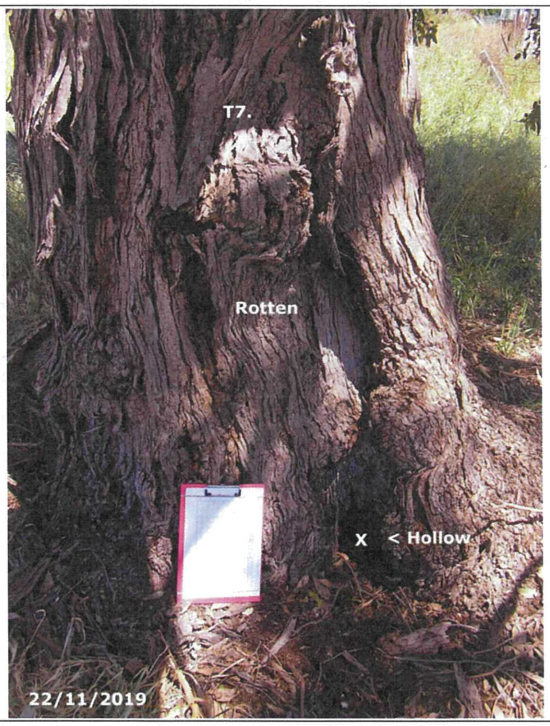
T1: Trunk & Others.

TREE PHOTOS BOOK: Mayflower Gisborne – Existing Conditions.

T6 & Others.



T7: Regrowth.

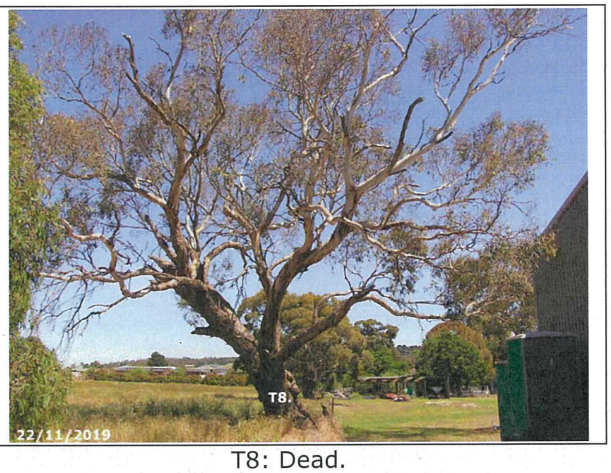


T7: Completely Rotten Bole

TREE PHOTOS BOOK: Mayflower Gisborne – Existing Conditions.

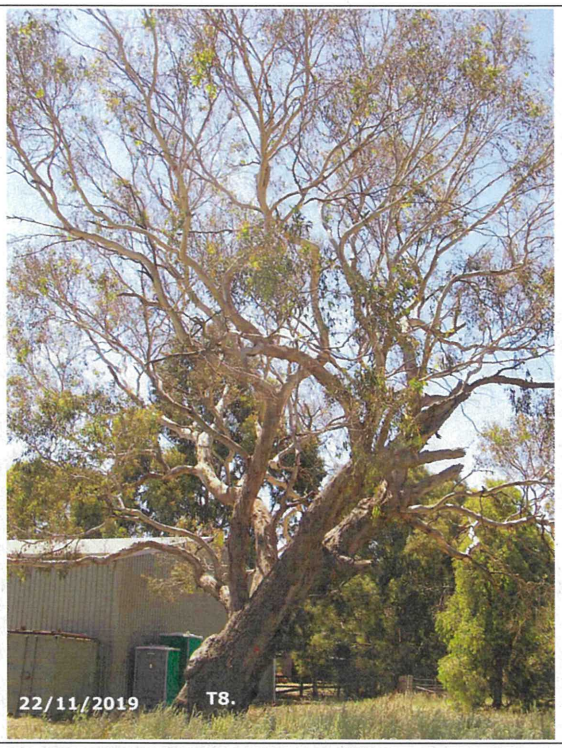
T7: Reasonable Form. Very Very Poor Structure. Hollow & Rotten. On Boundary.

Trees T7 & T8.



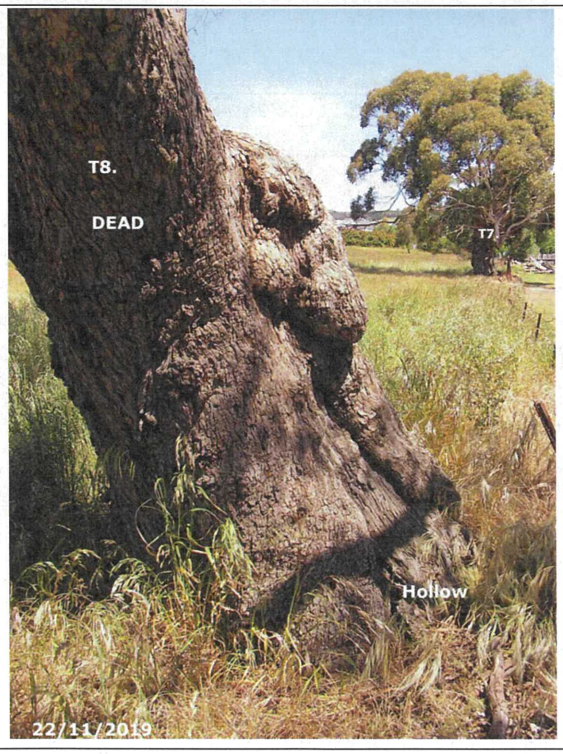
T8: Dead.

TREE PHOTOS BOOK: Mayflower Gisborne – Existing Conditions.

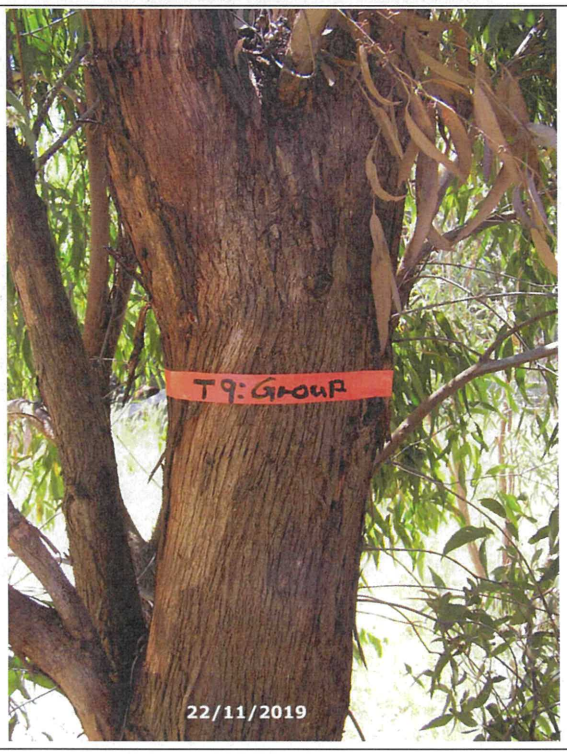


T8: Dead.

T8: Fungal Brackets.



T8: Hollow Leaning.

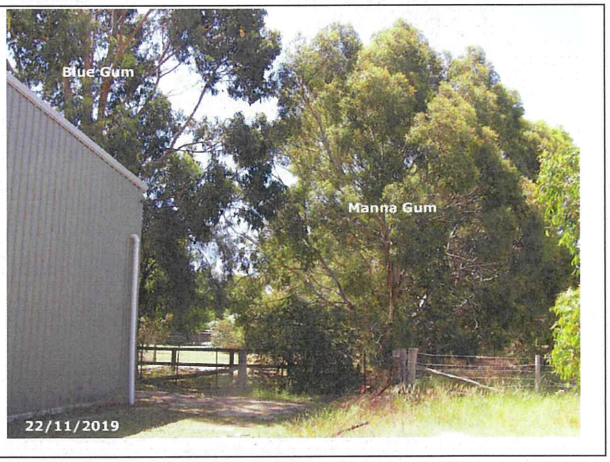


T9: Group Reference.

TREE PHOTOS BOOK: Mayflower Gisborne – Existing Conditions.

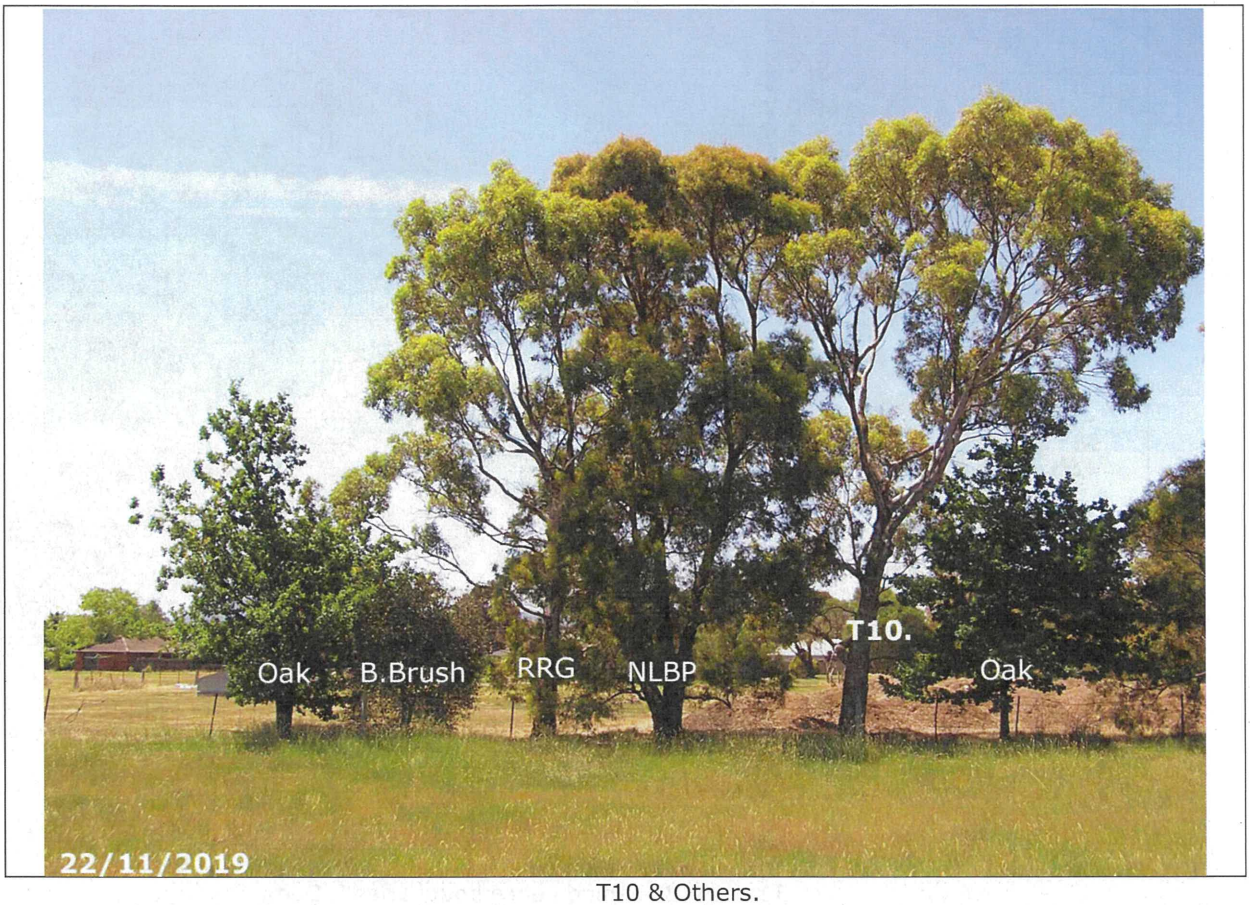
T8 and T9 Group & Others. Unsurveyed tree. Broad Leaf Peppermint.

T9 Group & Others.

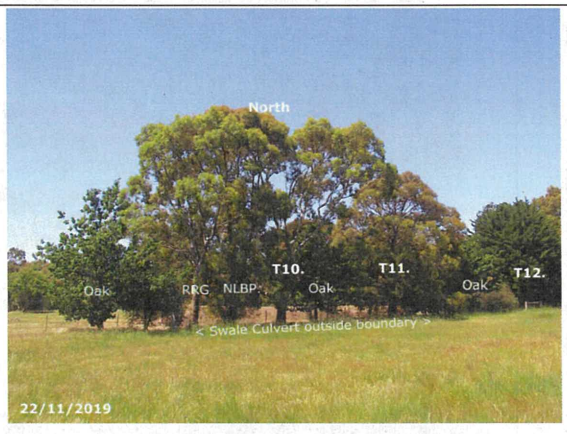


Manna & Blue Gums on Plan.

TREE PHOTOS BOOK: Mayflower Gisborne – Existing Conditions.



T10 & Others.

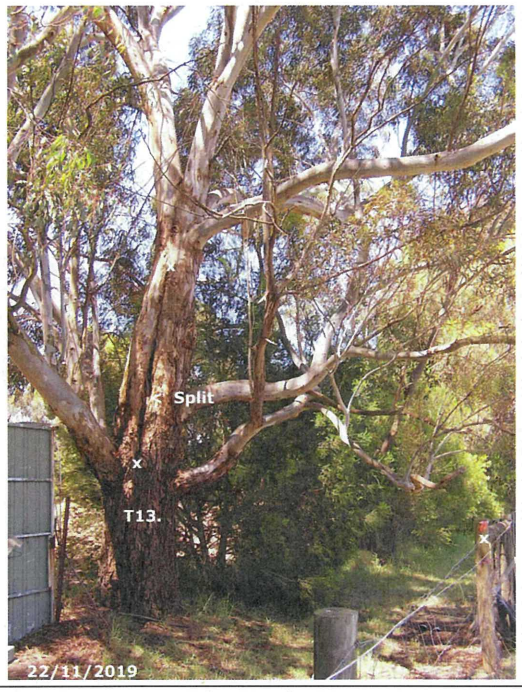


T10-T12 & Others.

T12 + T13.

TREE PHOTOS BOOK: Mayflower Gisborne – Existing Conditions.

T12 & T13: Behind Fence boundaries & Dam.



T13 Detail.

T13: Behind Fence.

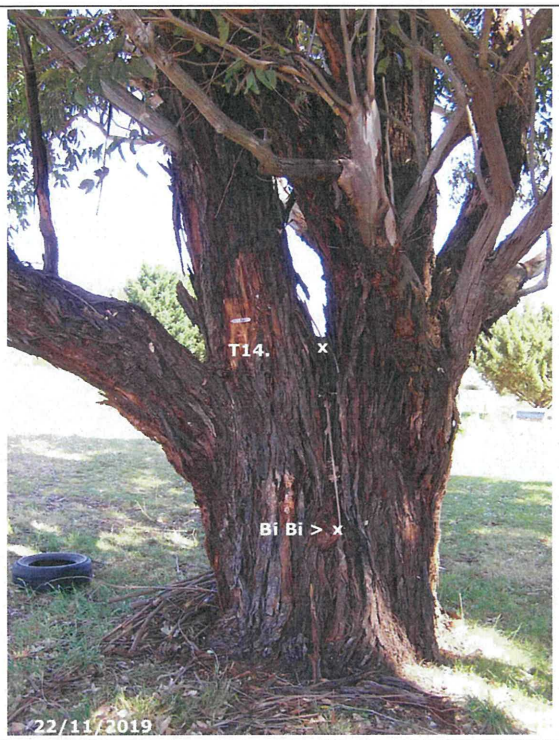
TREE PHOTOS BOOK: Mayflower Gisborne – Existing Conditions.

T14 – T20 & Others small.

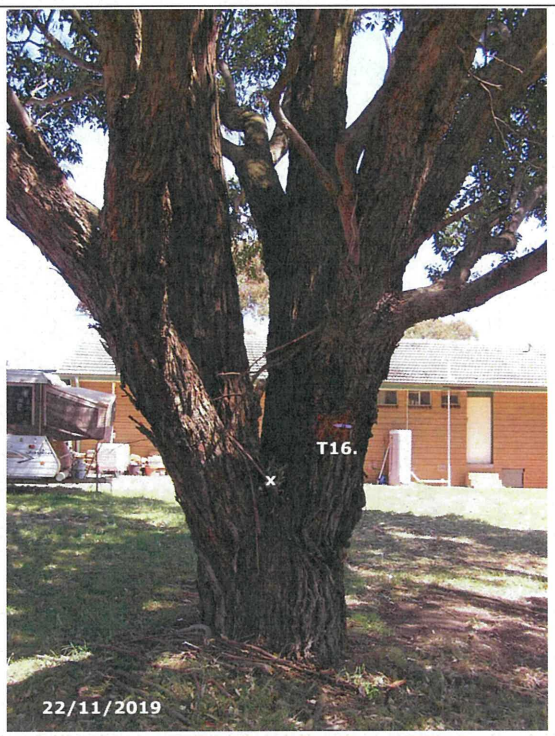
Ash trees on Plan.

T14 – T19 & Others Small.

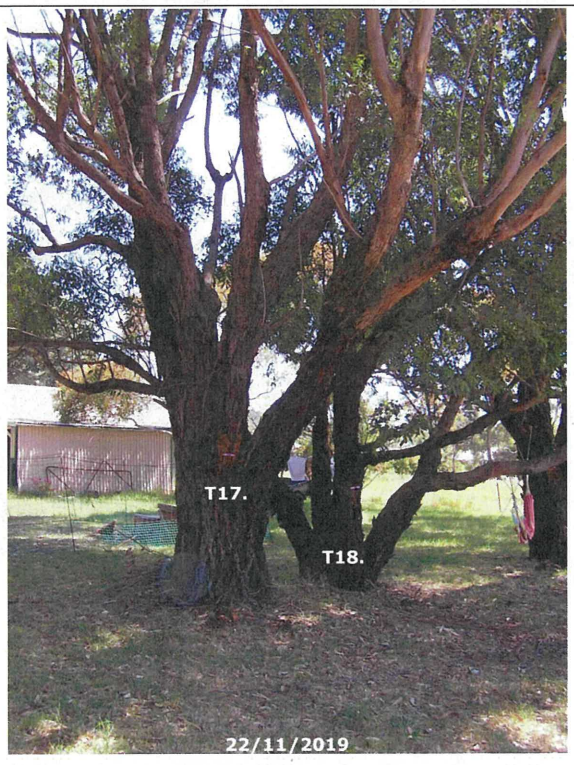
TREE PHOTOS BOOK: Mayflower Gisborne – Existing Conditions.



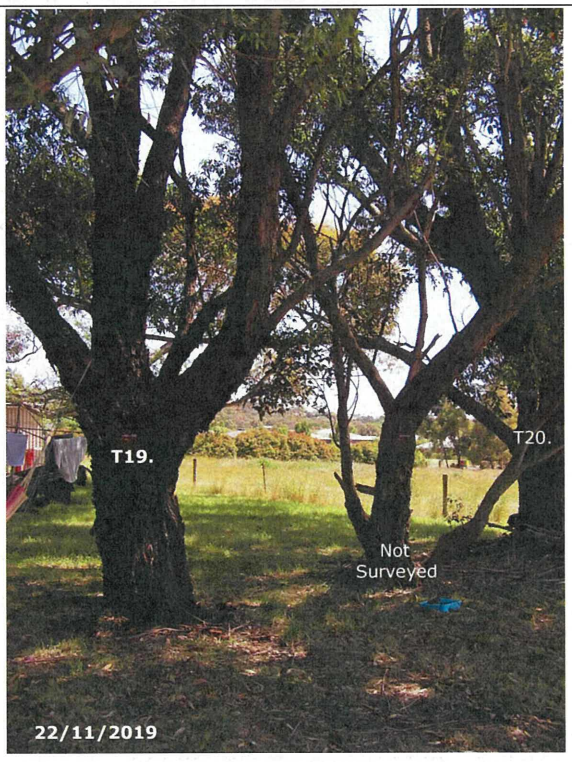
T14 Bole.



T16: Bole & Stems.

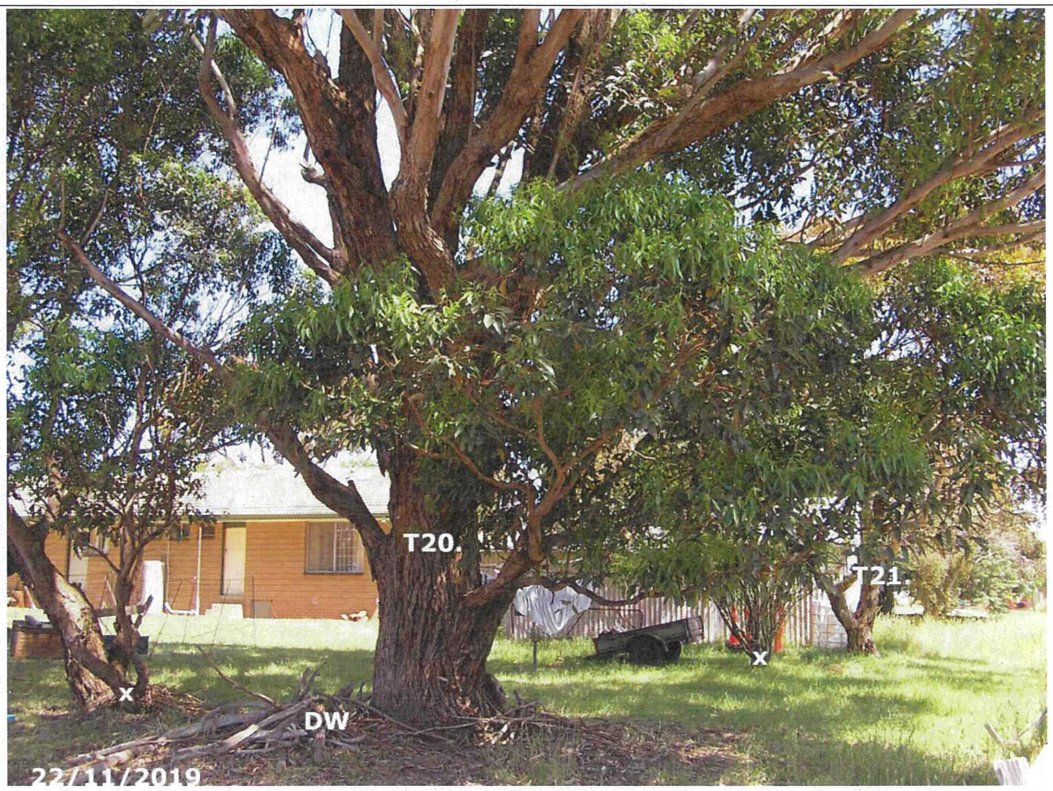


T17+18 Boles.

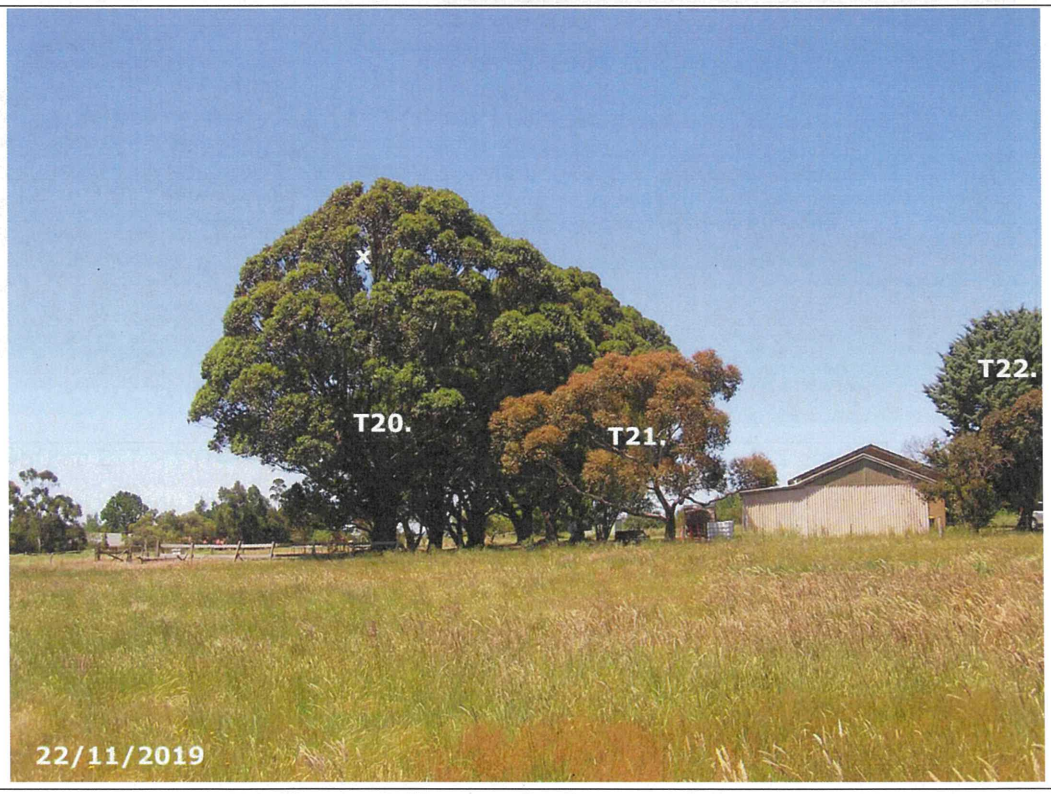


T19 Bole & Others.

TREE PHOTOS BOOK: Mayflower Gisborne – Existing Conditions.



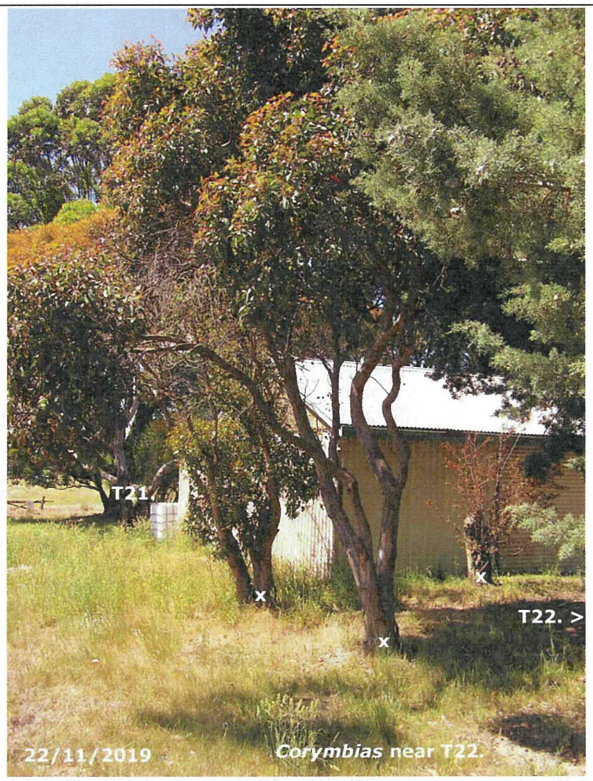
T20 & T21 Behind.



T20 (Canopy Falling apart). T21. T22. Elevation East.

TREE PHOTOS BOOK: Mayflower Gisborne – Existing Conditions.

T21.



Corymbias near T22.

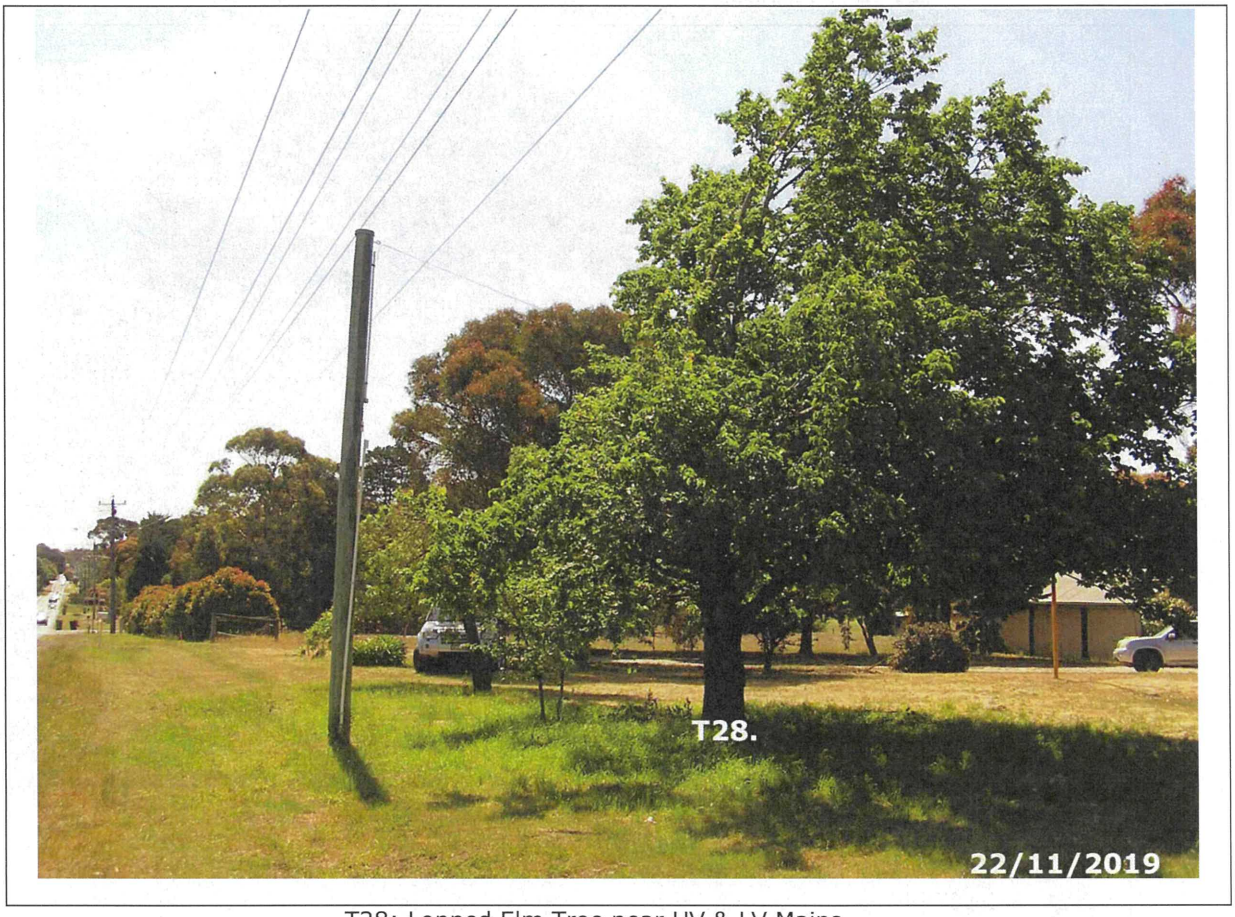
Trees T22 – T25.

T22 – T25 on Driveway.

TREE PHOTOS BOOK: Mayflower Gisborne – Existing Conditions.

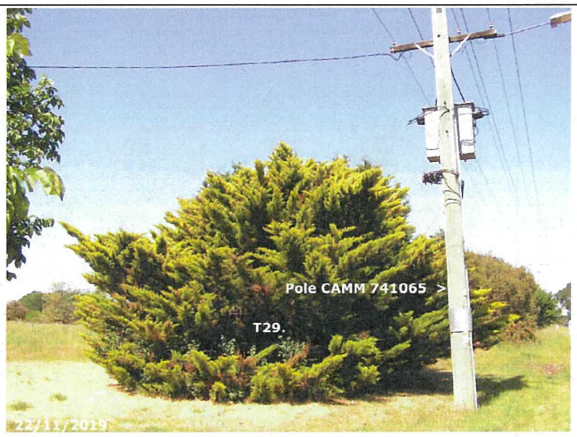
T26.

T27 & Others.



T28: Lopped Elm Tree near HV & LV Mains

TREE PHOTOS BOOK: Mayflower Gisborne – Existing Conditions.



T29 & HV Pole Sub.

T30 Reference.

T30: Two Trees Adjoining

MACEDON RANGES PLANNING SCHEME
DEVELOPMENT PLAN DP/...../.....
This Development Plan is satisfactory and meets the requirements of the Development Plan Overlay – Clause 43.04 Schedule 4 of the Macedon Ranges Planning Scheme.
4/12/2020 .....
Date Authorised Officer

END ALL PHOTOS – others archived.

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END.