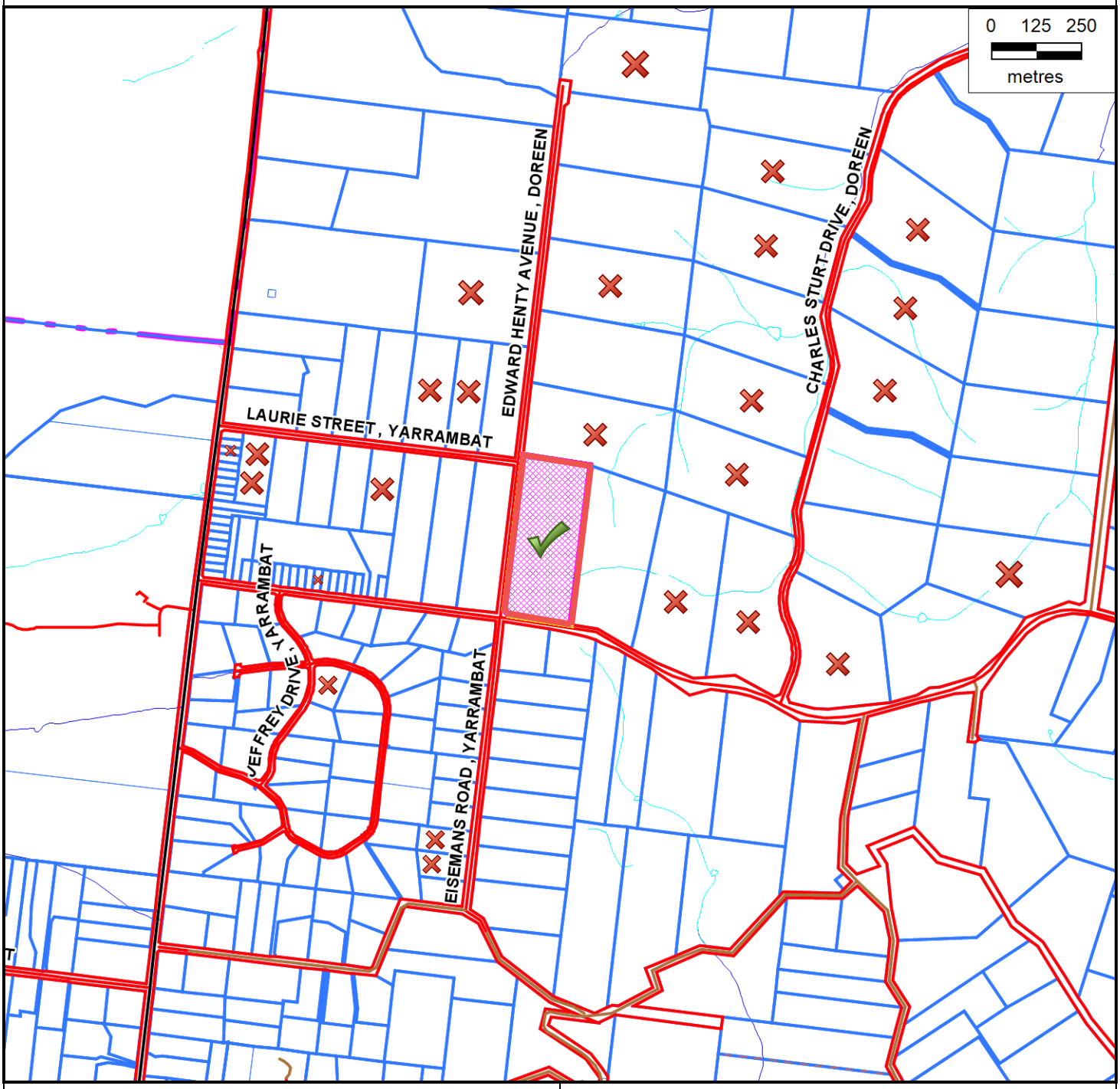
Subject Site and Surrounds

Subject Site: 103 Bannons Lane, Yarrambat	File Reference: B016/00/103P
Application Number:530/2019/02P	Melway's Reference: 184J4



Subject Site

Objectors

Nearby Objectors: 26

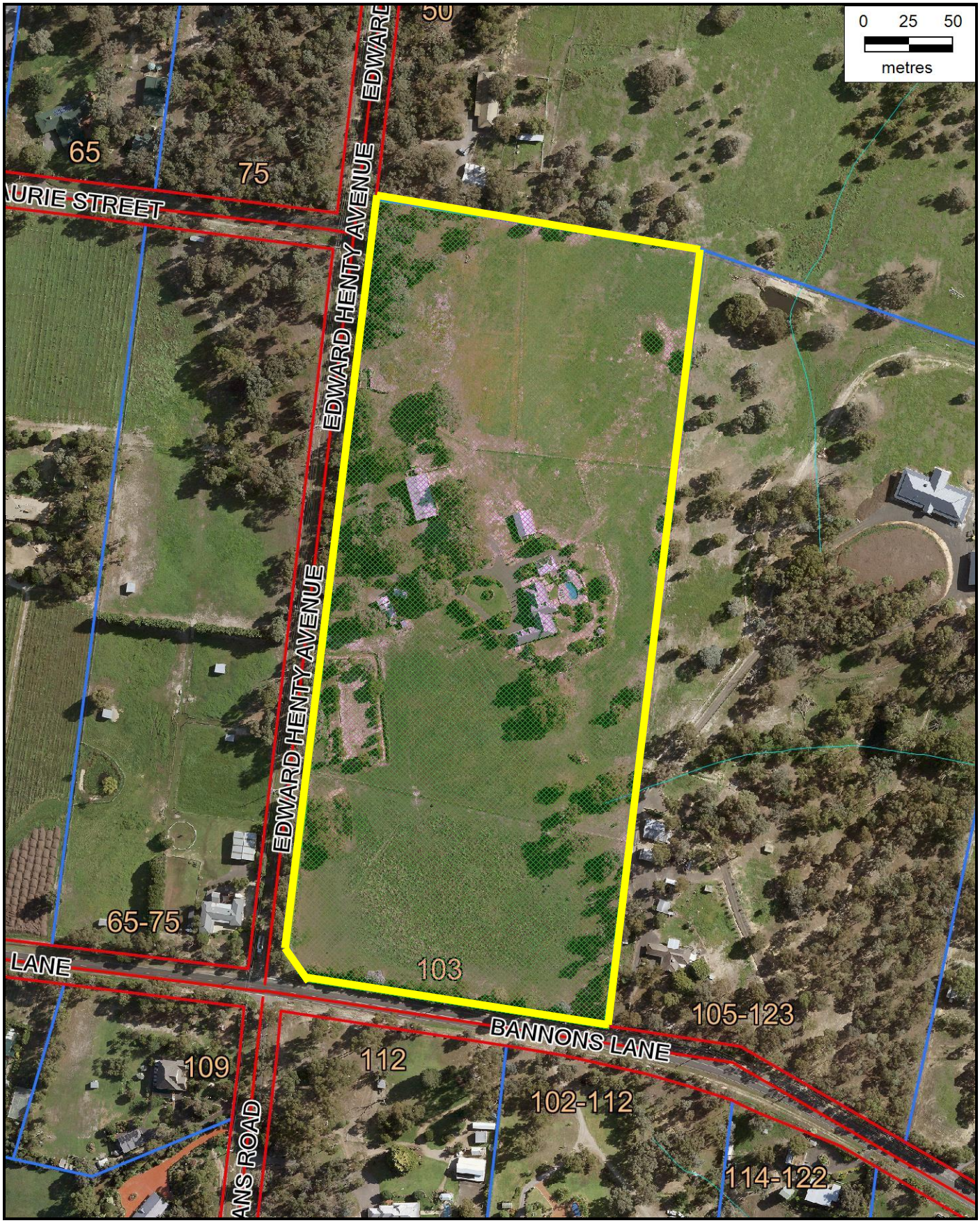
Total: 29

© Nillumbik Shire Council 2018	
Map Width:	3043 m
Produced By:	Planning and Building Services
Responsible Officer:	Tyson McAdie
Date:	Monday, 20 July 2020

N

Nillumbik Shire Council

103 Bannons Lane, Yarrambat



Map Width: 547.3 m

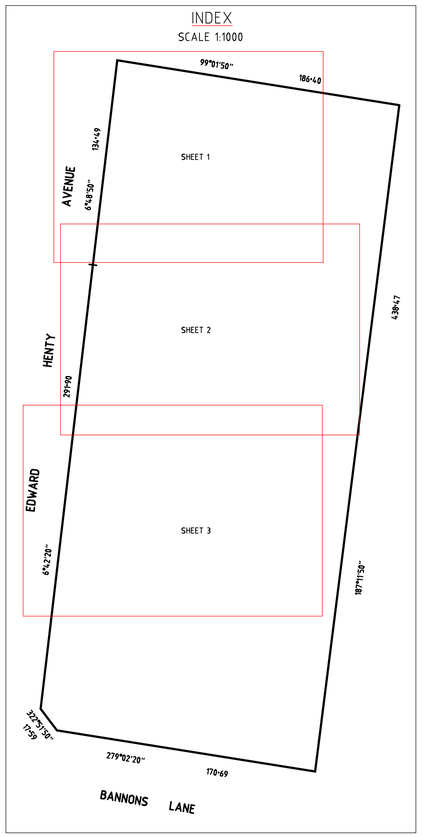
Date: Monday, 20 July 2020

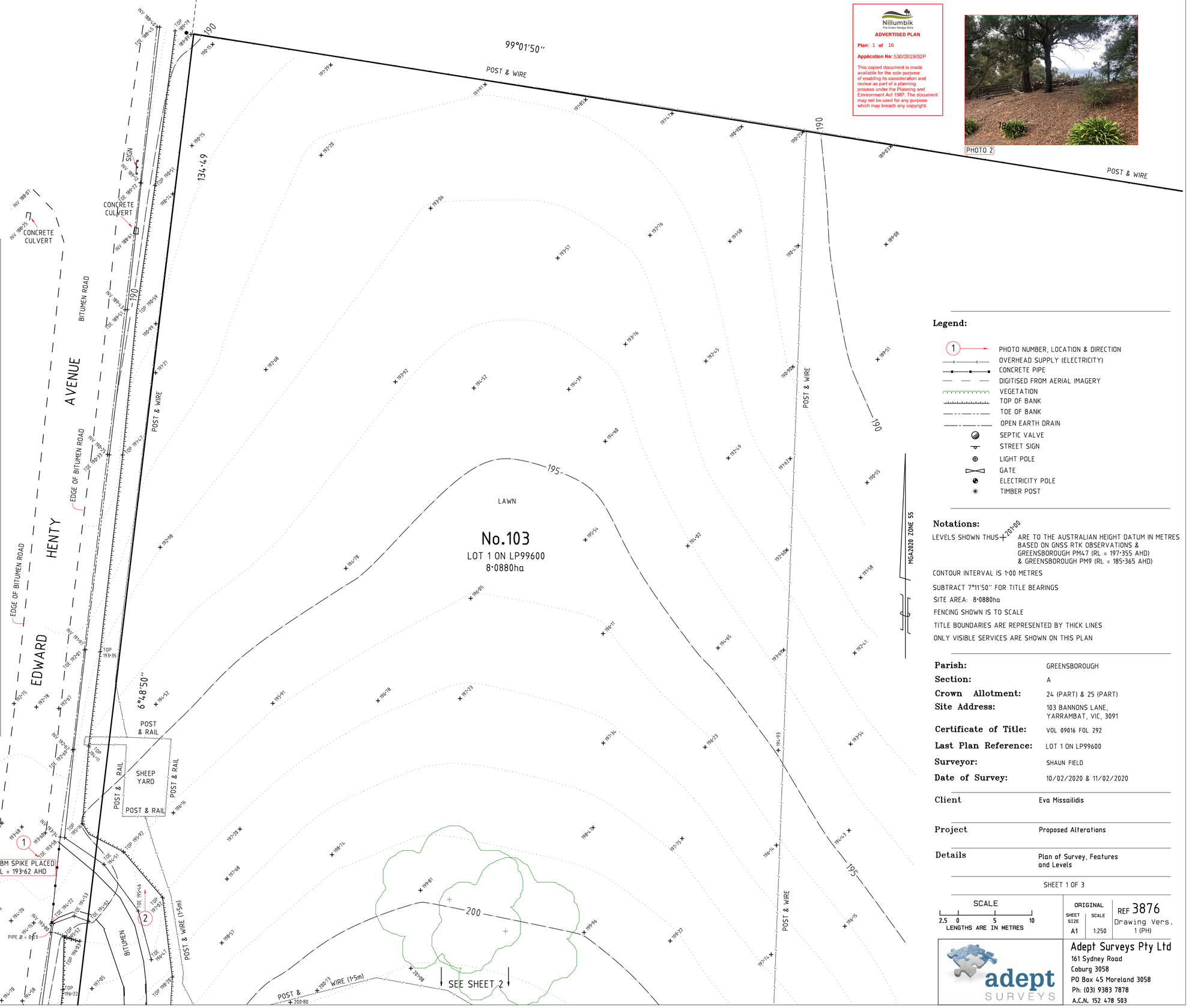
N

PHOTO 1

PHOTO 2

INDEX
SCALE 1:1000





Legend:

- 1 — PHOTO NUMBER, LOCATION & DIRECTION
- OVERHEAD SUPPLY (ELECTRICITY)
- CONCRETE PIPE
- DIGITISED FROM AERIAL IMAGERY
- VEGETATION
- TOP OF BANK
- TOE OF BANK
- OPEN EARTH DRAIN
- SEPTIC VALVE
- STREET SIGN
- LIGHT POLE
- GATE
- ELECTRICITY POLE
- TIMBER POST

Notations:

LEVELS SHOWN THUS +20·100 ARE TO THE AUSTRALIAN HEIGHT DATUM IN METRES BASED ON GNSS RTK OBSERVATIONS & GREENSBOROUGH PM47 (RL = 197·355 AHD) & GREENSBOROUGH PM9 (RL = 185·365 AHD)

CONTOUR INTERVAL IS 1·00 METRES

SUBTRACT 7°11'50" FOR TITLE BEARINGS

SITE AREA: 8·0880ha

FENCING SHOWN IS TO SCALE

TITLE BOUNDARIES ARE REPRESENTED BY THICK LINES

ONLY VISIBLE SERVICES ARE SHOWN ON THIS PLAN

Parish:	GREENSBOROUGH
Section:	A
Crown Allotment:	24 (PART) & 25 (PART)
Site Address:	103 BANNONS LANE, YARRAMBAT, VIC, 3091
Certificate of Title:	VOL 09016 FOL 292
Last Plan Reference:	LOT 1 ON LP99600
Surveyor:	SHAUN FIELD
Date of Survey:	10/02/2020 & 11/02/2020
Client	Eva Missailidis
Project	Proposed Alterations
Details	Plan of Survey, Features and Levels

SHEET 1 OF 3

SCALE
2.5 0 5 10
LENGTHS ARE IN METRES

ORIGINAL
SHEET SIZE A1 | SCALE 1:250

REF 3876
Drawing Vers. 1 (PH)

adept SURVEYS
Adept Surveys Pty Ltd
161 Sydney Road
Coburg 3058
PO Box 45 Moreland 3058
Ph: (03) 9383 7878
A.C.N. 152 478 503


PHOTO 1


PHOTO 2


PHOTO 3


PHOTO 4


PHOTO 5


PHOTO 6


PHOTO 7


PHOTO 8


PHOTO 9


PHOTO 10

SEE SHEET 1

SEE SHEET 3

TBM SPIKE PLACED
RL = 193·62 AHD

TBM NAIL PLACED
RL = 198·44

TBM NAIL PLACED
RL = 200·02

TBM NAIL PLACED
RL = 204·28

HENTY AVENUE

EDWARD BITUMEN ROAD

EDGE OF BITUMEN ROAD

CONCRETE CULVERT

BLUESTONE PILLAR

POST & WIRE

POST & WIRE (1·5m)

POST & RAIL (1·6m)

BITUMEN

DRIVEWAY

GRATED PIT CVR LVL 198·74

PIPE CVR LVL 199·21

GRATED PIT CVR LVL 200·36

GRATED PIT CVR LVL 201·33

MESH WIRE (2m)

CATTLE YARD

GALV IRON SHED

WATER TANK

GUTTER 209·73

CONCRETE DRIVEWAY

SHELTER

GALVANISED IRON SHED

ROLLER DOOR CONCRETE DRIVEWAY

LAWN

GRAVEL

HORSE ARENA

GARDEN

SEPTIC TANK

SINGLE STOREY WEATHERBOARD DWELLING

VERANDAH

TIMBER SHELTER

TIMBER DECK

BRICK WALL (2m)

BRICK STUDIO

outline of eave

STEPS

VERANDAH FLOOR LVL 205·31

DECK FLOOR LVL 204·91

upper level

BALCONY OVER DECK

GAZEBO

DORMER

GARAGE

No.103
LOT 1 ON
LP99600
8·0880ha

DOUBLE STOREY WEATHERBOARD DWELLING

MGA2020 ZONE 55

Legend:

- PHOTO NUMBER, LOCATION & DIRECTION
- OVERHEAD SUPPLY (ELECTRICITY)
- CONCRETE PIPE
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- VEGETATION
- TOP OF BANK
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- SEPTIC VALVE
- STREET SIGN
- LIGHT POLE
- GATE
- ELECTRICITY POLE
- TIMBER POST

Notations:

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Date of Survey:	10/02/2020 & 11/02/2020
Client	Eva Missailidis
Project	Proposed Alterations
Details	Plan of Survey, Features and Levels

SHEET 2 OF 3

SCALE
2.5 0 5 10
LENGTHS ARE IN METRES

ORIGINAL
SHEET SIZE A1 | SCALE 1:250

REF 3876
Drawing Vers. 3 (PH)

adept SURVEYS
Adept Surveys Pty Ltd
161 Sydney Road
Coburg 3058
PO Box 45 Moreland 3058
Ph: (03) 9383 7878
A.C.N. 152 478 503

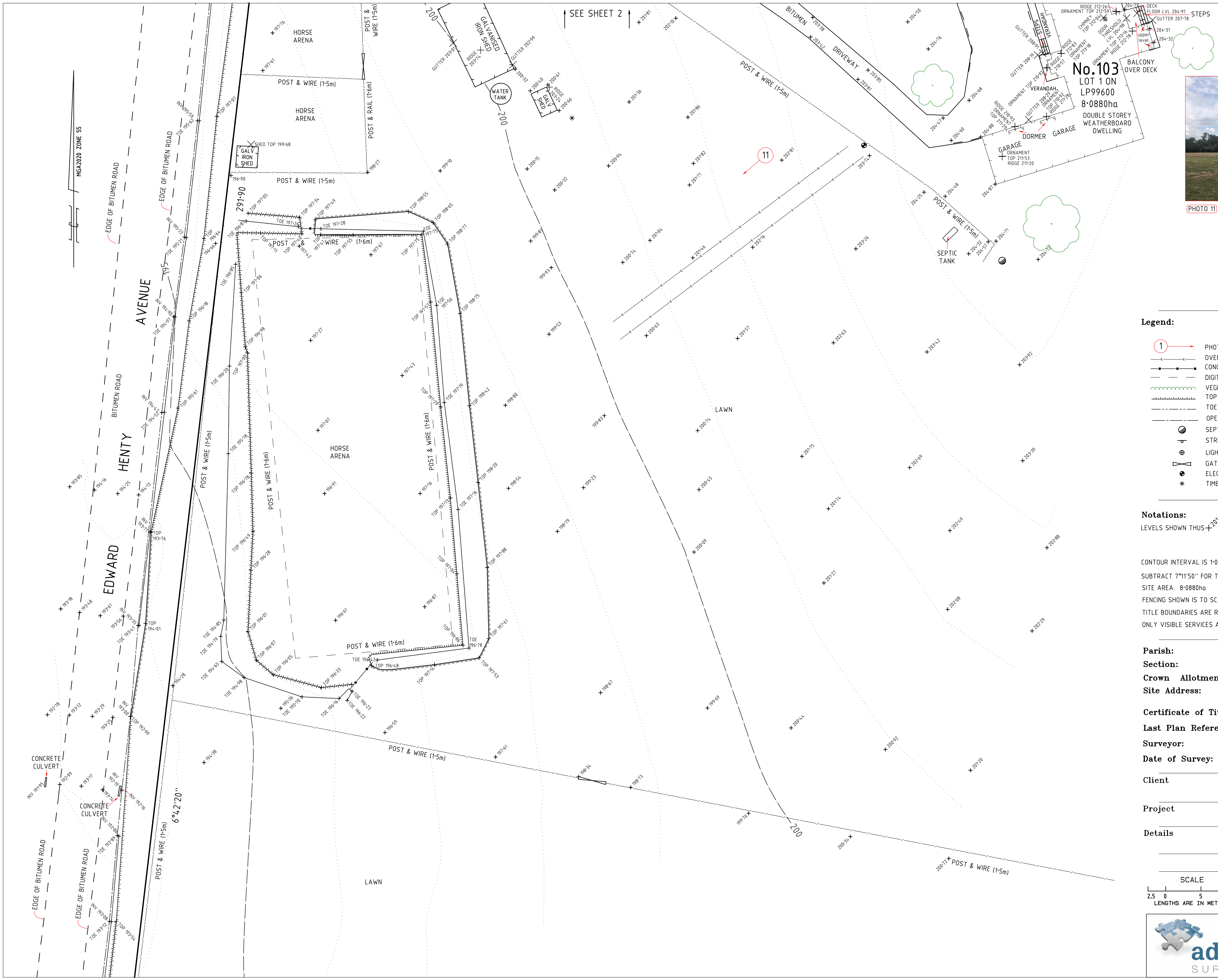

PHOTO 11

Legend:

(1) →	PHOTO NUMBER, LOCATION & DIRECTION
—E—E—	OVERHEAD SUPPLY (ELECTRICITY)
—■—■—	CONCRETE PIPE
— — —	DIGITISED FROM AERIAL IMAGERY
⌒⌒⌒	VEGETATION
	TOP OF BANK
	TOE OF BANK
	OPEN EARTH DRAIN
	SEPTIC VALVE
	STREET SIGN
⊕	LIGHT POLE
	GATE
	ELECTRICITY POLE
✳	TIMBER POST

Notations:

LEVELS SHOWN THUS +201·00 ARE TO THE AUSTRALIAN HEIGHT DATUM IN METRES BASED ON GNSS RTK OBSERVATIONS & GREENSBOROUGH PM47 (RL = 197·355 AHD) & GREENSBOROUGH PM9 (RL = 185·365 AHD)

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Client	Eva Missailidis
Project	Proposed Alterations
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SHEET 3 OF 3

SCALE
2.5 0 5 10
LENGTHS ARE IN METRES

ORIGINAL SHEET SIZE	ORIGINAL SCALE
A1	1:250

REF 3876
Drawing Vers. 1 (PH)

adept SURVEYS
Adept Surveys Pty Ltd
161 Sydney Road
Coburg 3058
PO Box 45 Moreland 3058
Ph: (03) 9383 7878
A.C.N. 152 478 503

LEGEND:

- TREES / FOLIAGE
- EXISTING BUILDINGS / SHEDS / TANKS
- PROPOSED BUILDING EXTENSIONS
- FENCES
- WATER BODY

Nillumbik
The Green Wedge Shire

ADVERTISED PLAN

Plan: 4 **of** 16

Application No: 530/2019/02P

N

EXISTING WATER DAM

WATER DAM

EXISTING CATTLE YARDS TO BE REMOVED

EXISTING DWELLINGS

438.47

187°11'53"

186.40

99°01'50"

170.69

279°02'23"

BANNONS LANE

134.49

6°48'50"

291.90

6°42'20"

322°51'53"
17.59

GAZEBO

BRICK STUDIO

NO. 103
LOT 1 ON
LP99600
8.0880HA
DOUBLE STOREY
WEATHERBOARD
DWELLING

SINGLE STOREY
WEATHERBOARD
DWELLING

TANK

DRIVEWAY

TANK

CUT BACK EXISTING POST AND WIRE FENCE AS REQUIRED TO ALLOW FOR NEW DRIVE

NO. 103
LOT 1 ON
LP99600
8.0880HA

CATTLE YARD

CATTLE YARD

GALVANISED IRON SHED

SHED

TANK

SHED

SHED

TANK

GALVANISED IRON SHED

LIVESTOCK PEN

LIVESTOCK PEN

LIVESTOCK PEN

LIVESTOCK PEN

SHED

LAWN

EXISTING SIGN

EXISTING FENCE/GATE

EXISTING WATER TANK

EXISTING FARM SHED

EXISTING FENCE/GATE TO BE REMOVED

EXISTING FARM SHEDS

EDWARD HENTY AVENUE

EXISTING SITE PLAN

SCALE 1:600

CORSO INTERIOR ARCHITECTURE
abn 80 480 927 089 telephone 0412 578 093
joey@corsodesign.com.au

NO.

DATE

TOWN PLANNING

PROJECT - CLIENT
103 BANNONS LANE
YARRAMBAT 3091

EXISTING SITE PLAN

SCALE	DATE
1:600 @ A1	28.02.2020
JOB NO.	
2005	
DRAWN BY	DWG NO.
JC	101


LEGEND:
TREES / FOLIAGE
EXISTING BUILDINGS / SHEDS / TANKS
PROPOSED BUILDING EXTENSIONS
FENCES
WATER BODY
PROPOSED SIGNAGE
LAND USE ZONES
Nillumbik
ADVERTISED PLAN
Plan: 5 of 16
Application No: 530/2019/02P
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N
EXISTING WATER DAM
PROPOSED AGRICULTURE LAND FOR OLIVE TREES
PROPOSED AGRICULTURE LAND FOR OLIVE TREES
PROPOSED AGRICULTURE LAND FOR LEMON TREES
EXISTING DWELLING
438.47
187°11'53"
WATER DAM
PROPOSED OLIVE TREES
PROPOSED OLIVE TREES
agricultural zone
4 acres
STAGE 2
PADDOCK 3
STAGE 1
agricultural zone
4 acres
186.40
domestic zone
GAZEBO
agricultural zone
2 acres
BRICK STUDIO
NO. 103
LOT 1 ON
LP99600
8.0880HA
DOUBLE STOREY
WEATHERBOARD
DWELLING
PROPOSED EXTENSION TO FENCE TO SECTION OFF PADDOCKS
PROPOSED LEMON TREES
SINGLE STOREY WEATHERBOARD DWELLING
TANK
DRIVEWAY
TANK
170.69
EXISTING DRIVE SHOWN DASHED - REFER DIMENSION FOR EXTENDED DRIVE PATH
STAGE 1
GATE - TO SEPARATE DWELLING FROM RESTAURANT
NO. 103
LOT 1 ON
LP99600
8.0880HA
PADDOCK 1
PADDOCK 5
LANE
99°01'50"
PADDOCK 2
HERB GARDEN
OUTDOOR DINING
SHIPPING CONTAINERS
PROPOSED RESTAURANT
TANK
SHED
CRUSHED ROCK DRIVE
CRUSHED ROCK DRIVE
CRUSHED ROCK DRIVE
PADDOCK 4
4400 EXTENSION
12300
SHED
SHED
TANK
GALVANISED IRON SHED
NEW CAR PARKING ARRANGEMENT AND DRIVE REFER TO ATTACHED TRAFFIC ENGINEERS REPORT FOR MORE DETAILS
BANNONS
279°02'23"
134.49
6°48'50"
LIVESTOCK PEN
LIVESTOCK PEN
LIVESTOCK PEN
LIVESTOCK PEN
291.90
6°42'20"
SHED
291.90
6°42'20"
AVENUE
HENTY
EDWARD
5900 EXTENSION
24490
6000 EXTENSION
322°51'53"
17.59
PROPOSED ENTRANCE SIGNAGE (ILLUMINATED)
PROPOSED FENCE EXTENSION TO SECTION OFF PADDOCKS
EXISTING DRIVE SHOWN DASHED - REFER DIMENSION FOR EXTENDED DRIVE PATH
PROPOSED EXTENSION TO FARM SHED FOR RESTAURANT FOOD STORAGE
EXISTING WATER TANK
PROPOSED EXTENSION FOR RECEPTION ENTRY AREA
PROPOSED 20FT SHIPPING CONTAINERS FOR RESTAURANT STORAGE
364 Eclipse Drive
PROPOSED BUILDING SIGNAGE (ILLUMINATED)
KALIMNA
PROPOSED SIGNAGE TO CORNER AT ROAD JUNCTION (ILLUMINATED)
PROPOSED SITE PLAN
SCALE 1:600

CORSO INTERIOR ARCHITECTURE

abn 80 480 927 089 telephone 0412 578 093 joey@corsodesign.com.au

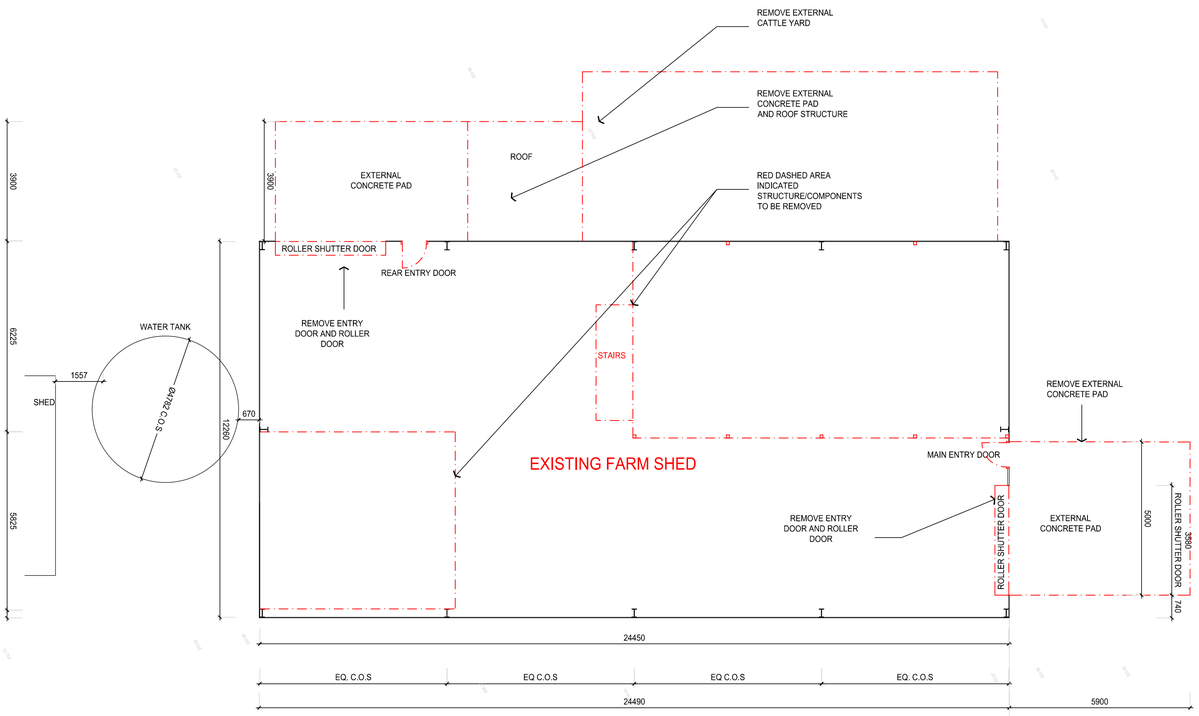
NO. | DATE

TOWN PLANNING

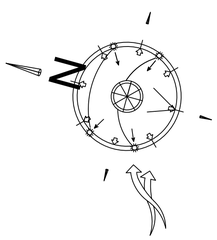
PROJECT - CLIENT
103 BANNONS LANE
YARRAMBAT 3091

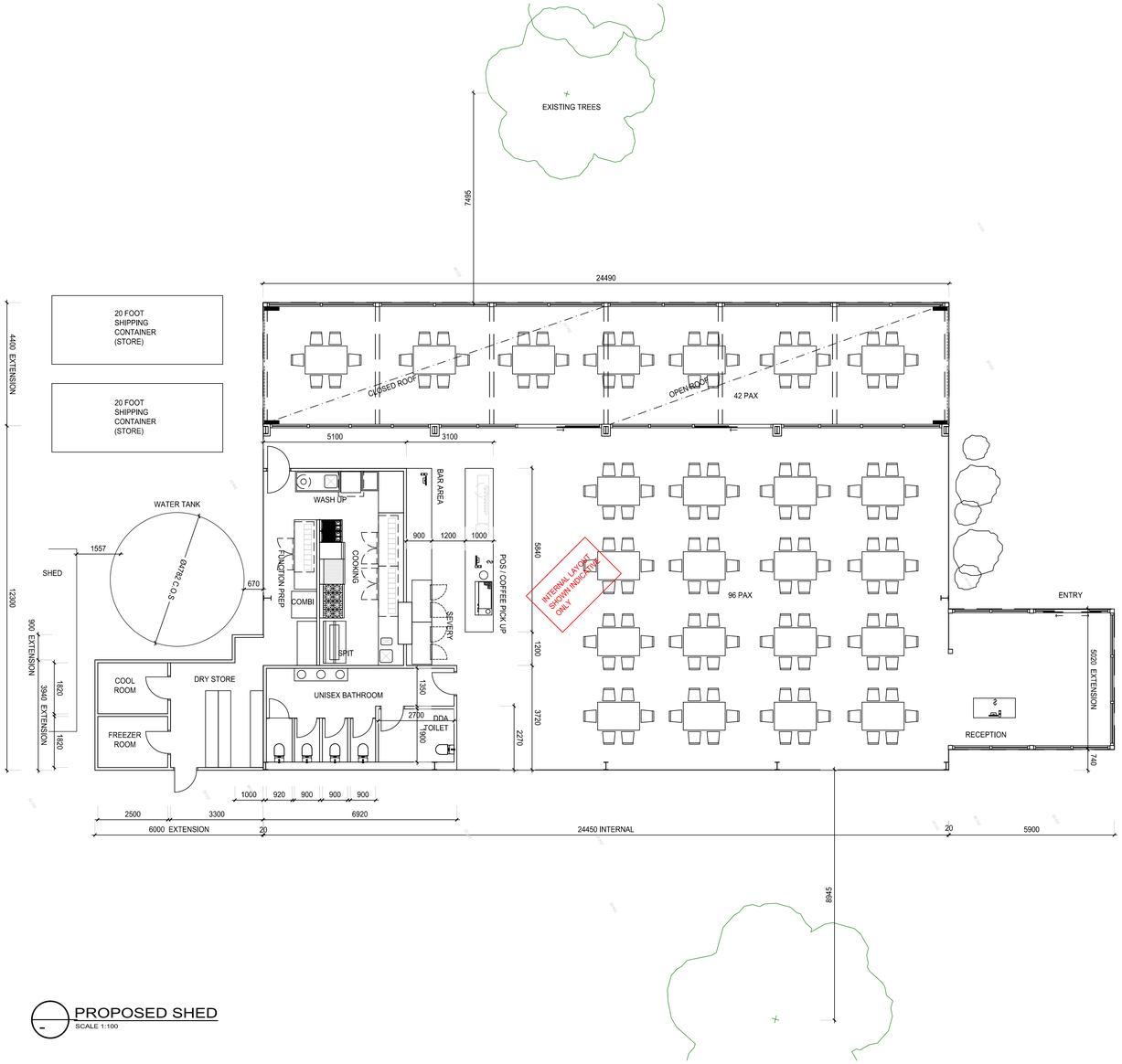
PROPOSED SITE PLAN

SCALE	DATE
1:600 @ A1	28.02.2020
JOB NO. 2005	
DRAWN BY JC	DWG NO. 102



EXISTING SHED
SCALE 1:100





PROPOSED SHED
SCALE 1:100

CORSO INTERIOR ARCHITECTURE
abn 80 480 927 089 telephone 0412 578 093
joey@corsodesign.com.au

NO.

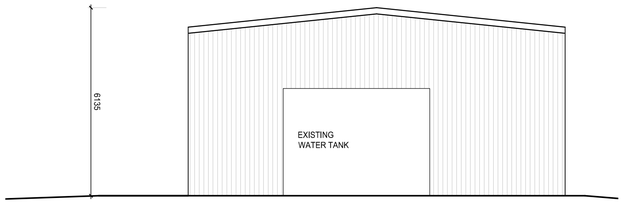
DATE

TOWN PLANNING

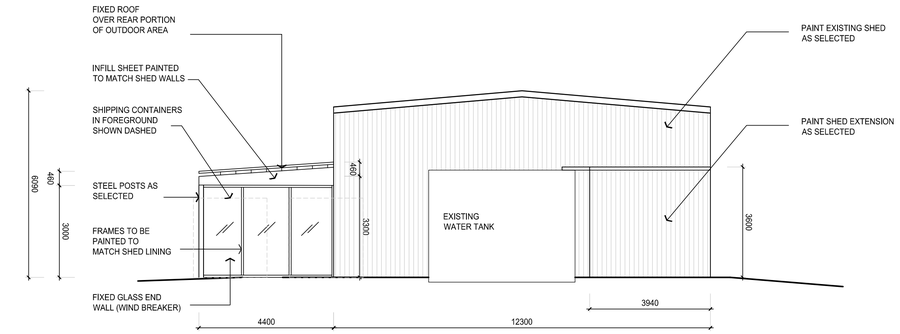
PROJECT - CLIENT
103 BANNONS LANE
YARRAMBAT 3091

SHED PLANS

SCALE	DATE
1:100 @ A1	28.02.2020
JOB NO. 2005	
DRAWN BY JC	DWG NO. 103



EXISTING NORTH ELEVATION
SCALE 1:100



PROPOSED NORTH ELEVATION
SCALE 1:100

EXISTING METAL PAINT SCHEDULE

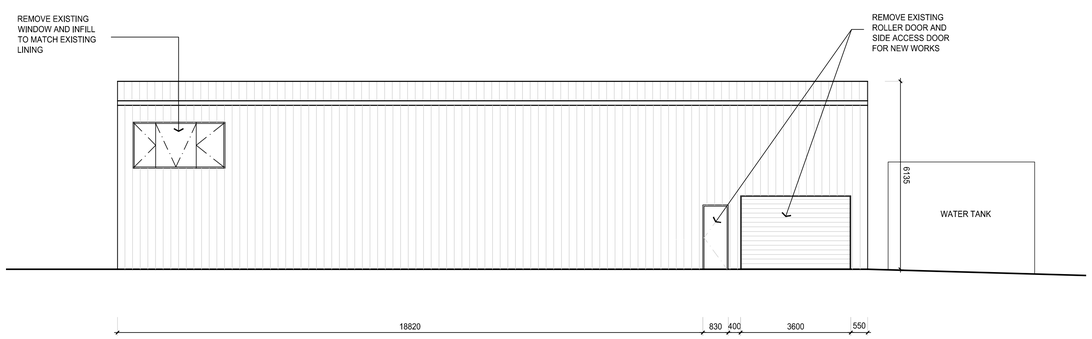
EXISTING WALL/ROOF METAL SHEETING TO BE PAINTED 'DULUX' GREY PEBBLE QUARTER - P14B1Q

NEW PERGOLA PAINT SCHEDULE

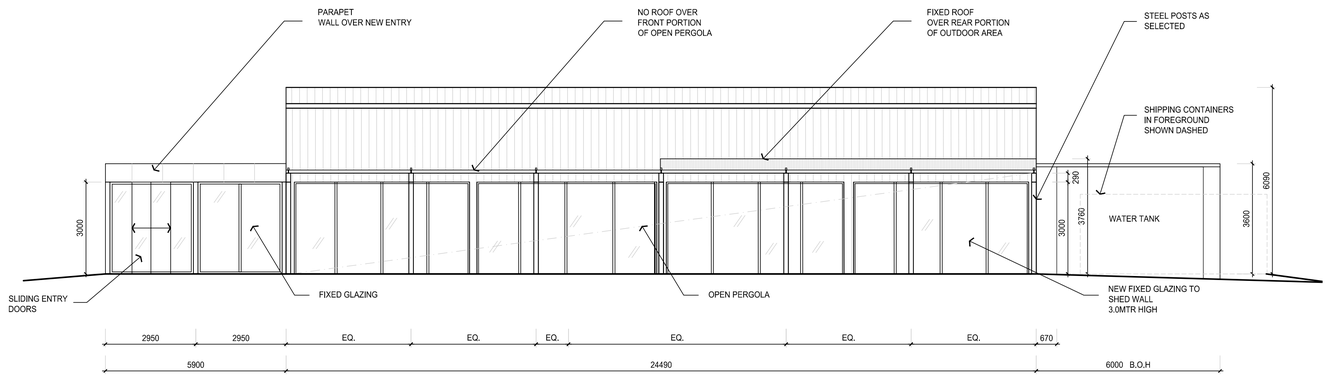
STEEL POSTS	'DULUX' GREY PEBBLE QUARTER - P14B1Q
BEARERS/ROOF BATTENS	TIMBER AS SPECIFIED BY ENGINEER
ROOF SHEETING	KLIP-LOK CLASSIC 700 PAINTED OUT TO MATCH EXISTING SHED WALLS

ENTRY STRUCTURE MATERIAL/ PAINT SCHEDULE

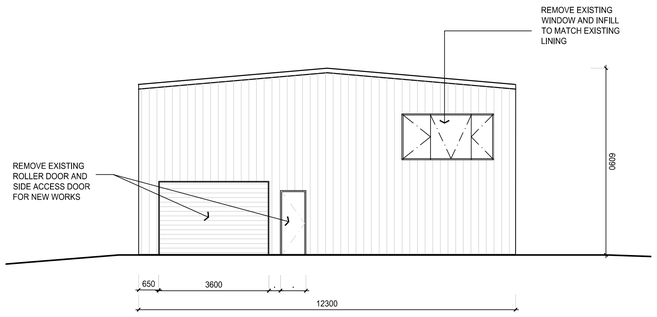
STEEL POSTS	'DULUX' GREY PEBBLE QUARTER - P14B1Q
BEARERS/ROOF BATTENS	ALUMINIUM
ROOF SHEETING	KLIP-LOK CLASSIC 700 PAINTED OUT TO MATCH EXISTING SHED WALLS
PARAPET WALL	CEMEMT SHEET/METAL LINING FINISHED IN CORTEN PAINT/METAL



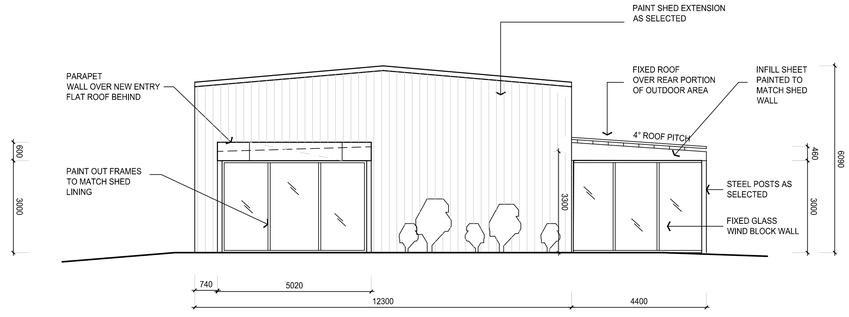
EXISTING EAST ELEVATION
SCALE 1:100



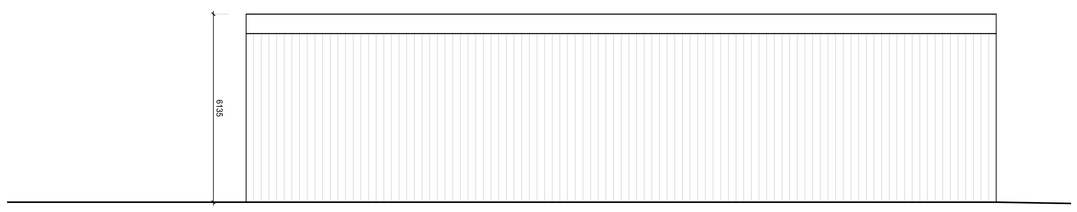
PROPOSED EAST ELEVATION
SCALE 1:100



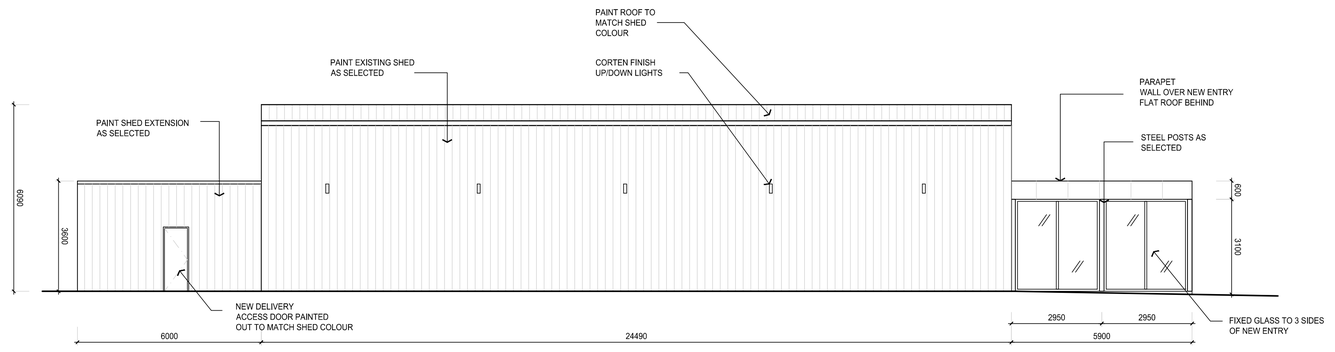
EXISTING SOUTH ELEVATION
SCALE 1:100



PROPOSED SOUTH ELEVATION
SCALE 1:100



EXISTING WEST ELEVATION
SCALE 1:100



PROPOSED WEST ELEVATION
SCALE 1:100

CORSO INTERIOR ARCHITECTURE
abn 80 480 927 089 telephone 0412 578 093
joey@corsodesign.com.au

NO.

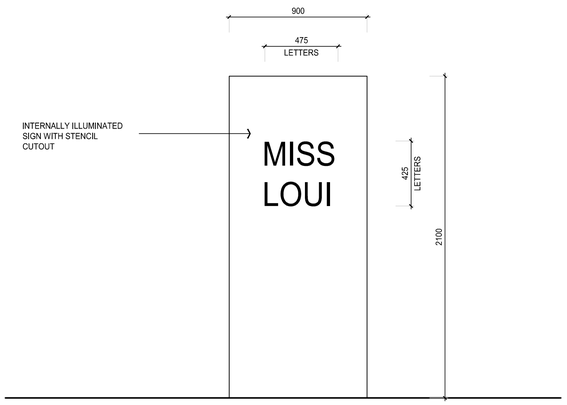
DATE

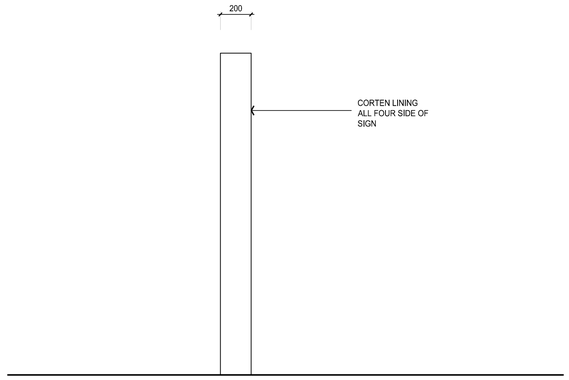
TOWN PLANNING

PROJECT - CLIENT
103 BANNONS LANE
YARRAMBAT 3091

SHED ELEVATIONS

SCALE	DATE
1:100 @ A1	28.02.2020
JOB NO. 2005	
DRAWN BY JC	DWG NO. 104

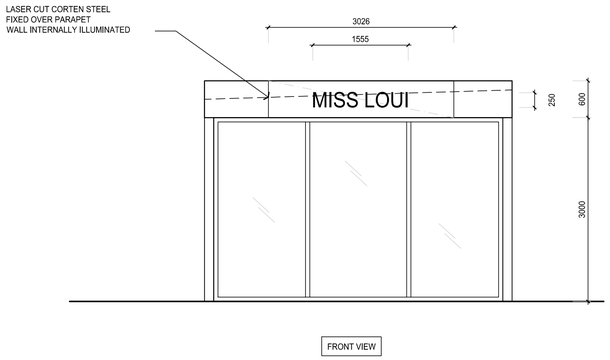


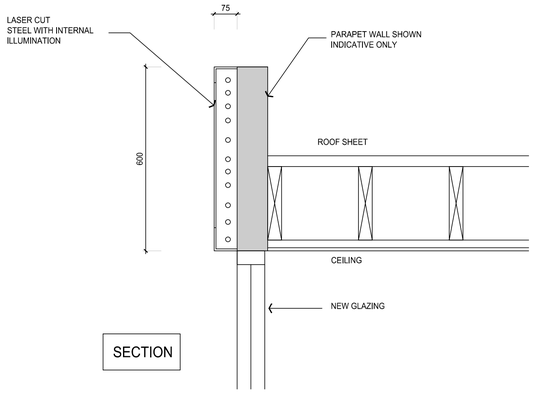


1

EXAMPLE SIGNAGE

ENTRY SIGNAGE - TYPE 1
SCALE 1:20

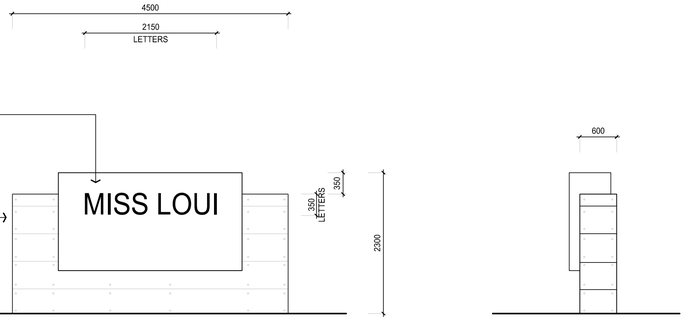




2

EXAMPLE SIGNAGE

SHED FACIA SIGNAGE - TYPE 2
SCALE 1:50



3

EXAMPLE SIGNAGE
(NOTE SIGN IS ILLUMINATED)
EXAMPLE ABOVE IS NOT ILLUMINATED

ROAD SIGNAGE - TYPE 3
SCALE 1:50

CRN OF BANNONS LANE AND EDWARD
HENTY AVENUE

SIGNAGE SCHEDULE

REFER TO PROPOSED SITE PLAN FOR
LOCATION OF EACH SIGN

ILLUMINATED SIGNS

SIGN 1	SIZE - 475 X 425 TOTAL AREA	0.2 m2
SIGN 2	SIZE - 1550 X 250 TOTAL AREA	.388 m2
SIGN 3	SIZE - 2150 X 350 TOTAL AREA	0.75 m2

TOTAL AREA ILLUMINATED SIGNS 1.34 m2

CORSO INTERIOR ARCHITECTURE
abn 80 480 927 089 telephone 0412 578 093
joey@corsodesign.com.au

NO.

DATE

TOWN PLANNING

PROJECT - CLIENT
103 BANNONS LANE
YARRAMBAT 3091

SIGNS SCHEDULE

SCALE	DATE
VARIES @ A1	28.02.2020
JOB NO. 2005	
DRAWN BY JC	DWG NO. 105

NOTES:
- LOCATION OF ALL TREES AND EXISTING BUILDINGS/FENCES ETC IS APPROXIMATE ONLY AND SUBJECT TO CONFIRMATION BY FEATURE SURVEY AND ON-SITE INSPECTION
- ALL LEVELS AND GRADES ON-SITE TO BE DETERMINED AND DESIGNED FOR APPROPRIATE CAR PARKING AND DDA ACCESS AS REQUIRED.

EXISTING DRIVEWAY AND ACCESS TO BE WIDENED TO FACILITATE TWO-WAY PASSING

EXISTING GATE TO BE WIDENED TO FACILITATE TWO-WAY PASSING

EXISTING SINGLE LANE DRIVEWAY TO BE WIDENED FOR PASSING

EXISTING SHED TO BE CONVERTED TO RESTAURANT

NEW GRAVEL AREA FOR LOADING/WASTE COLLECTION ETC

WIDENED DRIVEWAY FOR TWO-WAY PASSING

RETAIN EXISTING TREE

NEW 8 BICYCLE SPACES

RESTAURANT ENTRY

NEW GRAVEL CAR PARKING

34 SPACES

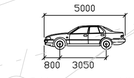
RETAIN EXISTING TREE

RETAIN EXISTING TREE

RETAIN EXISTING TREE

PROPOSED FENCE

EXISTING FENCE



99th percentile (ASNZS 2890.1-2004)

	mm
Width	: 1940
Track	: 1840
Lock to Lock Time	6.0
Steering Angle	: 33.9

TRAFFIC DETAIL PLAN
SCALE 1:200

CORSO INTERIOR ARCHITECTURE
abn 80 480 927 089 telephone 0412 578 093
joey@corsodesign.com.au

NO.

DATE

TOWN PLANNING

PROJECT - CLIENT
103 BANNONS LANE
YARRAMBAT 3091
TRAFFIC
DETAIL PLAN

SCALE	DATE
1:200 @ A1	28.02.2020
JOB NO. 2005	
DRAWN BY JC	DWG NO. 106

WIDENED DRIVEWAY FOR TWO-WAY PASSING

RETAIN EXISTING TREE

RESTAURANT ENTRY

NEW 8 BICYCLE SPACES

RETAIN EXISTING TREE

NEW GRAVEL CAR PARKING

34 SPACES

RETAIN EXISTING TREE

RETAIN EXISTING TREE

PROPOSED FENCE

99th percentile (ASNZS 2890.1-2004)

	mm
Width	1940
Track	1840
Lock to Lock Time	6.0
Steering Angle	33.9

EXISTING FENCE

NEW GATE TO RESIDENCE

NEW GATE TO OVERFLOW PARKING

PROPOSED GRAVEL OVERFLOW CAR PARK (SOME LEVELING REQUIRED TO ACHIEVE MAX 1 IN 16 OR 1 IN 20 GRADES)

EXISTING SHEDS/STRUCTURE TO BE RETAINED

EXISTING SHEDS TO BE DEMOLISHED

26 SPACES

PROPOSED GRAVEL OVERFLOW CAR PARK (SOME LEVELING REQUIRED TO ACHIEVE MAX 1 IN 16 OR 1 IN 20 GRADES)

N

TRAFFIC DETAIL PLAN - CONTINUED
SCALE 1:200

CORSO INTERIOR ARCHITECTURE
abn 80 480 927 089 telephone 0412 578 093
joey@corsodesign.com.au

NO.

DATE

TOWN PLANNING

PROJECT - CLIENT
103 BANNONS LANE
YARRAMBAT 3091
TRAFFIC
DETAIL PLAN - CONT

SCALE 1:200 @ A1
DATE 28.02.2020
JOB NO. 2005
DRAWN BY JC
DWG NO. 107

FARM MANAGEMENT/BUSINESS PLAN – MISSAILIDIS FARM
Rural Land:
LP099600 refers
103 Bannons Lane,
Yarrambat, Vic. 3091

Applicant: Dimitrius Missailidis

Municipality: Nillumbik Council

Date: Version 1

November, 2019

INTRODUCTION

This document has been prepared to outline the correlation between the proposed building & works on this rural land for a proposed on-site restaurant situated at 103 Bannons Lane, Yarrambat & the intensification of proposed agriculture use on this land as required by the provisions of the **Rural Conservation Zone.** It forms part of this particular planning permit application to Nillumbik council (statutory planning) which seeks approval for building & works for the development & use of a restaurant, in association with sustained agriculture use.

This **Farm Management/Business Plan** has been prepared in consultation with this applicant: Dimitrius (Jim) Missailidis to outline the justifiable reasons for the requirement for the development and use of a restaurant in association with sustained agriculture use on this rural parcel of land.

The actual use as highlighted in a separate very detailed written submission to council (statutory planning) is absolutely necessary in order to successfully run all agricultural activities & proposed business opportunities efficiently & effectively as outlined in this farm management/business plans.

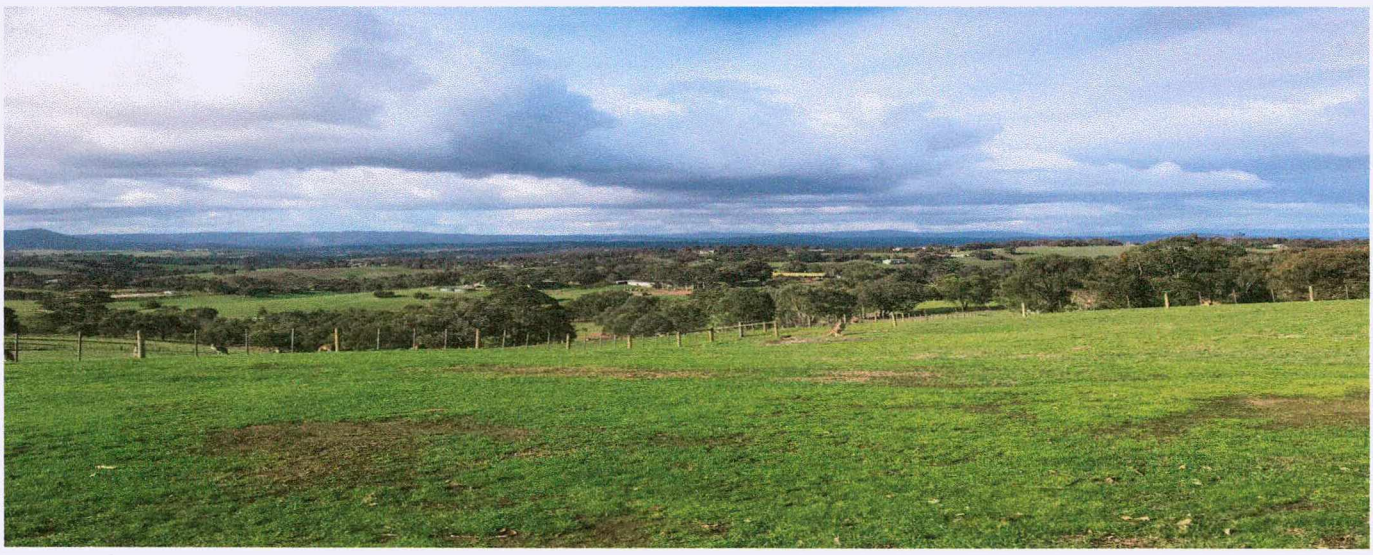
The farm is currently well run and will be a productive business, when both the restaurant & increased agricultural use commences. In order to intensify the farming capacity of the overall site & ensure that this business remains viable into the future, the applicant proposes to build the restaurant within an existing farm shed on this property, which will allow for the full-time farming requirements on this rural land, with the inclusion of increased agriculture use.

PROPERTY AND SURROUNDS

This land parcel situated at 103 Bannons Lane, Yarrambat, is on 8.09371 hectares or some 20 acres in land size. The land, in its original state, has been used & operated primarily for farming purposes (sustained agriculture use) over many years within this area of Yarrambat. Farming in the past, consistent of cattle grazing, some plant growth & horse adgistment.

The farming use and residential accommodation on site is consistent with surrounding land uses, which include a number of wineries, horticultural use, cattle breeding, grazing & some horse agistment. Surrounding land lots in the area also contain dwellings.

SURROUNDING LAND USE



LAND DESCRIPTION

The site, on vacant (clear-titled) rural farming land, (8.09371 hectares or 20 acres) currently used for cattle grazing & horse agistment sits within the Yarrambat area and located to the North from Bannons Lane. The land is rectangular in shape set on sloping terrain. The area itself is rural in nature.

REFER ATTACHED SITE PLANS & SPECIFIC FARMING ZONES –

APPENDIX 1

USE OF LAND

The predominant activity on the land will be directly associated with work requirements (agriculture use) to plant and grow a variety of plants & other produce on this property. Also, the operation of a proposed licensed restaurant. The proposal is consistent with other farming operations undertaken by other landowners in this area. In particular, a number of wineries & some restaurant/cafes.

This area is known for this type of farming activity, including a number of wineries & plant production. Apart from growing a variety of plants on this land, the logistics process will be conducted on site. It is a land use that is **consistent** with the direction given by policy and the purpose of the zone

OBJECTIVE

History of farming & credentials of owners

The land and re-established new dwelling is in ownership of the applicant, Dimitrius (Jim) Missailidis & his wife Eve. Their credentials, both in the hospitality arena and farming experience of this nature will allow this family to successfully operate a full - time viable farming & restaurant enterprise within this area of Yarrambat. The family has a wealth of knowledge and experience in both retail & farming & is well positioned to ensure that the property is used for productive & sustained agriculture use into the future.

In support of this comment, also attached is supporting documentation outlining the time frame, confirming proposed farming operations (agriculture use) & some (prediction only) average volumes of plant and other produce that will be grown & produced by this particular family on this land. **This is of course totally reliant on successful plant growth, favorable weather conditions & quality of produce.**

Table 1 refers

As stated, the applicant and members of his family share a wealth of experience in the hospitality & rural agricultural arena and all possess the appropriate skills, aptitude, desire and incentive to establish and operate this proposed & ongoing business venture. The Missailidis family has resided in this area for some sixteen (16) years in direct association with farming (agriculture use) & some horticultural activities.

Farm Shed (Proposed restaurant) - integral to the primary agricultural use.

There is an absolute necessity for a restaurant to be developed & used successfully on this rural land in direction association with proven sustained agricultural use.

Current agriculture & retail industry expectations from farming operators to the wholesalers, suppliers & the general public, demands for high quality produce at all times. To sustain quality produce at its highest production level, packing of produce is required to take place on site. Ongoing adverse weather conditions (extreme hot weather) requires complex monitoring & controlling irrigation systems on a 24/7 time frame process on site.

The proposed business will be a productive & economically viable farming enterprise & certainly **NOT** a "lifestyle block, or hobby scale farm, as recognized by council (statutory planning) during the course of a site inspection held on this property on 5 September, 2019.

The region, as you are well aware, is rapidly becoming a wide tourist attraction, with a number of people from around the world visiting farming properties of this & other description on a daily basis. The farming opportunities have been reviewed as a matter of practice & agriculture use options available will be **"increased"** to further incorporate additional plant & herb growth, in line with the actual scale of this land. This allows for maximum farming capabilities on this parcel of land without any further impacts of any nature.

The proposed additional farming activities & proposed restaurant will clearly demonstrate an economically viable and commercial business opportunity – not hobby farm scale, that has & will be operating as a farm on this parcel of rural land in this area for many years by this family group & others to be employed.

The proposed restaurant & increased agriculture use on this land, for the reasons outlined, forms a very crucial part to achieving a successful & meaningful business operation of this nature. Farming activities clearly demonstrates the need for an established dwelling (in existence) on this site for a number of justifiable reasons outlined.

As highlighted, with the inclusion of a restaurant (within an existing farm shed) & increased agriculture use that is required in these proven circumstances, does **NOT** in any way result in any loss of any productive agricultural land and is in keeping with local agricultural sustainability, nor any environmental, vegetation or landscape on/off site impacts.

The proposed restaurant is compatible & in association with the maintenance of rural & agriculture uses. It will allow for protection and preservation of landscape values, water resources, any indigenous flora & fauna (and their habitat) & for the provision of acceptable standards of residential, health, safety & amenity. In accordance with local & State planning schedules, the proposed development on this land aims to avoid, minimize & offset any vegetation removal (not applicable) or disturbance.

The proposed development & associated infrastructure has been very sensitively & carefully designed & carefully positioned to avoid any removal of any vegetation & to minimize any environmental & aesthetic impact & have a high regard for the natural physical features of this land & any cultural heritage elements (not applicable) such as the remnant vegetation, any wetland features & the view lines.

It is felt that the proposed onsite re-vegetation & restoration will just enhance the environmental qualities such as biodiversity, primarily through weed & pest management, erosion control & re-vegetation works as well as increase habitat provision onsite & coupled with this development proposal, provide coherence with the unique & distinctive character of this particular area.

The development proposed by these landowners residing onsite together with the continued use of the land as a farm & proposed restaurant is an **excellent outcome** for this parcel of rural land.

With the provision of proven existing careful land management, it will provide a wonderful habitat corridor & floral connectivity into the future in this particular area. Land management offers a balance between a development/domestic zone & farming zone, which will create habitat for some local flora & fauna.

Hard work & effort has been achieved by these landowners with the creation of proper land management of this nature. It achieves both restoration of floral biodiversity & re-vegetation of this particular land parcel, while also creating a new dwelling at significant cost & related on-site infrastructure for sustainable agricultural use in which the owner(s) can enjoy living & successfully operating a farming & restaurant business from.

24 HOUR (ON-SITE) FARM MANAGER – DAILY RESPONSIBILITIES!

The site, as highlighted, in the future, will definitely require the need to have a **24 hour farm business manager** on this property at all times. The daily tasks needed to run and maintain the farm can easily take more than twelve (12) hours per day, seven days a week. During plant (picking) session, the workload is considerably greater with constant supervision & monitoring of all processes required. For the reasons outlined, it is imperative that the applicant and his family are close on hand, twenty-four (24) hours a day during this time, in the event of any problem identified.

The following is provided:

- I reiterate that it should be noted that prior farming activities (agricultural use) on this land did in fact exist & was supported with the existence of a permanent dwelling at the same location on this rural land - since demolished & tastefully re-built at significant expense by this applicant.

- The applicant's contingency plan was to re-build a dwelling to compliment & again facilitate this proposed full-time (not part-time) farming & restaurant operation on this particular property.

- A full-time "hands-on" approach, with the development & use of a restaurant will again allow for on-site (24 hour) farm manager & employed staff to manage and care for both the restaurant & plants that will no doubt be in need of some form of attention necessary at all time of the day & night

- The proposed restaurant use **WILL** support & promote this proven agricultural activity proposed

- The restaurant & farming operation will be intense and **WILL** require a permanent "on-site" farm manager for the daily requirement for all management practices with a number of plants to be grown and/or what ever the reason deemed necessary at any given time of the day or night as is the case of a farming property of this nature

- On-site manager and/or employed staff will allow for daily inspections & ongoing maintenance of all plants growth for maturity & ripeness for eventual picking

- This is a critical component for any successful farming operation of this nature
- Availability for on-site manager/staff at all times will allow for the rapid identification & immediate response with any treatment of all plants & other produce on this land.
- Maintenance, hygiene & cleanliness across this site to reduce the risk of parasitism & disease to a very large number of plants on site
- Ongoing management of this land minimizing any possible contamination
- Legal daily eradication of foxes, rabbits, rats/mice & in some cases, deer & kangaroos currently destroying crops at an alarming rate in this area and beyond
- Protection against ongoing farm burglaries & thefts from the property - ongoing
- Control of other pests that can damage the water system on this parcel of land - ongoing
- Daily pruning & watering maintenance – again another critical component of this proposed farming operation at this location – ongoing requirement
- Removal & spraying of weeds, slashing grass & enhancement of site vegetation
- Fence assembling, replacing & general repairs
- General site security = ongoing requirement.
- Surveillance to prevent theft of machinery & produce
- Invoices, marketing etc.
- The overall benefit of having the owners/manager living on this site & maintaining it for weeds will be of significant value, not only to this site, but all neighboring properties & surrounding bush land areas.

Proposed Restaurant – Farm shed

The proposed location selected for restaurant use (within existing farm shed) compliments & will join an existing driveway access point on this land. For this reason, it just makes common sense for design & actual location purposes, is ideal & the most suitable location for this restaurant proposal.

The selected location for the restaurant will eliminate disturbance to the occupants of the dwelling on site & will reduce any potential noise levels emanating from this particular shed area.

It also should be noted that the proposed location for the restaurant on this parcel of land does **NOT** fragment or reduce land for farming (agriculture use) opportunities in any way. As stated, the restaurant use will just complement agricultural use proposed.

FARM MANAGEMENT –

Core business activities (farm management/business plan) relative to plant farming as follows:

KEY OBJECTIVES & BENEFITS:

- One of the key business objectives is to produce & maintain quality produce.
- To make allowance for any site improvement – This is certainly the case!
- To make efficient use of quality agricultural land
- To maintain the quality & manage the land sustainably
- To produce ongoing high quality produce at all times to maximize financial returns
- To increase awareness of staff & contractors with all farming requirements
- To be recognized & known in the restaurant/farming industry for producing quality produce
- Better produce = greater financial gain!
- The intention being to expand the family business & ensure that it is viable into the future

LAND MANAGEMENT PRACTICES

The applicant will manage nutrients, dust, odour, water resources & the actual land site. Activity on the site will **NOT** diminish the aesthetic value of the land, or have a negative effect that would make it difficult for neighboring landowners to carry out their own legal & permitted uses of their land.

As stated, there is **NO** impact on any vegetation, landscape, any waterway (not applicable) or the environment with this proposal. In particular, given the clear separation & considerable distance away in all directions from any neighboring properties, there is **NO** cumulative impact of any nature on the surrounding area.

SOIL IMPROVEMENT

Soil improvement will in fact take place, given the nature of green crops proposed with organic matter placed back into the ground, which will re-generate vegetation. Minimal chemicals & pesticides will be used for this type of farming & will have **NO** adverse impact on the land, soil, water, air, vegetation on this property or the environment.

LAND MANAGEMENT TECHNIQUES

There is a number of land management techniques required to ensure the ongoing management of a viable plant farm. These management techniques include the following:

ANIMAL MANAGEMENT

Maintaining fences will achieve the exclusion of wombats, kangaroos, deer & other pest species, all year round.

PEST MANAGEMENT

Pest animals such as grasshoppers, birds, weavels, moths & snails, dependent on any existence, will be sprayed at a suitable time of the year and climate conditions.

PLANT MANAGEMENT

Various chemical sprays will be used to combat fungus, pests & weeds, depending on the time of the year and climate conditions. Also, predators can be strategically placed on plants to counter-act other insect infestation on plants.

BUSINESS PLAN

A detailed business (contingency) long-term plan for the increased farming opportunity on this land for plant (horticulture) farming will be set in place for the additional proposal (restaurant & increased sustained agriculture use) on this land.

GENERAL STATEMENT OF BUSINESS PROJECTION

ONE TO FIVE (1-5) YEAR PLAN

Year 1-2

Building of all infrastructure requirements for the proposed restaurant, fencing & ongoing use of other farm sheds (outbuildings).

Year 2-4

General improvement of pasture, through cultivating & planting of various trees to commence some business operations, directly associated with horticulture farming.

Year 5

A staging process, depending on the success rate with plants over the first five (5) year period will commence with the gradual expansion of plant growth opportunity within an increased area of the designated agriculture zone. In addition to the proposed restaurant operations on this site, it is also anticipated that this farm, in the future, will be producing quality produce.

SITE PLANS DEPICTING ZONES

Attached site plans depict these particular **agriculture zones**, which comprises of the following:

- Stage 1: Herb Garden = Paddock 1
- Stage 1: Olive trees = Paddock 3
- Stage 2: Lemon trees = Paddock 4

Appendix 1

FIVE TO TEN (5-10) YEAR PLAN - GOAL

With ongoing land management, weed control, property enhancement, improvement of produce grown, the goal is to continue & sustain a successful farming enterprise, for the sale of plant produce to a selected customer base. Also, at the same time, providing the owners of this property with a reasonable income to support their family and a self-sustainable lifestyle.

SOURCING OF PLANTS

Plants (olive & other trees proposed) will be sourced from Modern Olives Pty Ltd., Lara Victoria

STAGING PERIOD

The actual expansion in terms of a staging period, as stated & dependent on success rate with trees Is over an estimated five (5) year period upon commencement of planting during 2020 period.

GROWING OLIVES

Olive trees are one of the world's oldest cultivated trees, dating back to ancient Greece. They are tough, drought hardy & famous for their delicious, plump fruit, which can be picked, pickled & enjoyed & are still very popular today.

Olive trees (Olea Europaea) are also evergreen, have stunning silver foliage & clip well, making them ideal for topiary, hedges or espalier.

Climate

Olive trees are native to the Mediterranean, so they thrive in a climate where the summer is long, hot & dry & the winter is cool (they are quite frost tolerant). Not suited to the tropics & they will grow well in temperate climates & even along coastal areas.

Soil Analysis

Soil analysis at three depths – 30,60 & 90cm will be performed on the areas selected on this property to be planted. These trees can survive on poor, low-nutrient soils, providing they are well drained. However, they will produce better fruit of planted in well-drained, fertile soil, which is the case on this property. Soil preparation and/or type & quantity of soil amendments will be determined according to the soil studies.

The ongoing management of the ground of an olive orchard requires minimum intervention in order to minimize erosion & to maximize machinery movement throughout the year. Typically, this would imply 2-4 herbicide treatments alongside the drip irrigation/tree row & mowing the natural grass in between rows.

Moisture levels

Olive trees typically require less water than most other perennial crops. The water requirement is covered by natural rainfall supplemented by irrigation through a highly efficient drip irrigation system. The same system will be used to deliver any required fertilizer to cover the trees' nutritional requirements. Moisture levels would be continuously monitored by hand feeling method and/or with the support of soil moisture measurement devices such as gypsum blocks.

Ground preparation – ongoing throughout the calendar year

Planting

Planting should be in full sun where the tree will receive at least six hours of direct sunlight. It is preferable to give trees a position that are out of strong winds or stake very well.

Olive trees are planted by hand with a shovel at typical spacing of 6 x 3m distances between tree rows & trees along the row respectively. Ideal planting times are spring (September – October) & autumn (March).

Plant Establishment

During the first years of plant establishment, management will focus on proper tree training to form a clean straight trunk of 70-90cm & good scaffold branches above that point. Additionally, weeds will be controlled & soil moisture levels kept at optimum levels to maximize tree growth & minimize the period until onset of bearing.

Plants bearing olives

Once olives start bearing fruit, management will mostly focus on good production pruning aiming at maintaining optimal canopy volume & shape, irrigation & fertilization aiming at maintaining sustainable levels of growth & yields & pest & disease control.

Harvesting

Well-managed groves will have their first commercial harvest at the end of the thirds annual growing cycle reaching full maturity between the sixth & eight year. Once the tree is four or five years old, it will start to bear fruit. Harvesting generally takes place from mid-autumn to early winter. For green olives, pick your fruit when it turns from dark green to light green, or you can wait for them to turn black, but still firm, for black olives.

Fertilizer

Feeding of plants should be in early spring & late summer with a well-balanced fertilizer, such as Yates Dynamic Lifter Advanced for fruit & Citrus or Osmocote Plus Organics Fruit & Citrus, which feeds the plant & enriches the soil too.

Watering

Watering of new trees is regular until they are well established. Mature trees are very drought tolerant, but will produce better fruit if watered well.

Pruning

To encourage growth, the pruning out suckers & low branches should be during winter & remove the tips of stems that have grown too long.

Pest & Diseases

Monitor for olive lace bugs. There are native Australian critters that suck sap from the underside of the leaves. They can completely defoliate the tree & eventually kill it. If seen, thoroughly spray the underside of the leaves with a product such as Eco-oil or pyrethrum. Peacock spot, a widespread fungal disease, can also affect the leaves & strip the tree of its foliage.

Fortunately, olives have only a limited amount of pests & diseases of commercial significance in Australia. Black scale & olive lace bug are the most important pests while anthracnose & peacock spot are the most relevant diseases affecting fruits & leaves respectively.

It causes sooty blotches to form on the leaves in winter, which develop into greenish-black circular spots. To control the disease, infected trees should be thoroughly sprayed in late autumn with a copper fungicide, such as Yates Fungus Fighter Copper Fungicide. If the problem is severe, spray again in early during winter.

Picking

Olives of the scale provided can be picked by hand (approximately 200kg olives/person/day or, for the more serious pickers, spread a sheet or tarpaulin on the ground underneath the tree, then shake the tree vigorously to free the fruit. Hand assisted mechanization such a pneumatic rakes = approximately 1000kg/person/day. Also, with the use of a small trunk shaker = approximately 50 trees/hour supported by 4 laborers moving nets.

Once picked, olives will be placed in plastic bins (20-500kg) & transported for process within a recommended period of 6-12 hours from picking. Oil will then be stored in a stainless steel container until bottled.

Top 5 Olive Trees

Kalamata

Produces juicy, sweet olives that are harvested once they turn black. Ideal for cooking or eating on their own. This variety is self-fertile, but fruiting may improve if cross-pollinated with Frantoio. Height: 8m.

Picual

A medium-sized olive tree that originates from Spain. It bears fruit early in the season, that is best picked when ripe. This variety is self-fertile, but may benefit from cross-pollination with Arbequina. Height: 6m.

Frantoio

Well known for its olives, which are used to make fruity, aromatic oil. When pickled, these olives have a pleasant nutty flavor. Frantoio is a self-fertile variety that consistently produces heavy yields. Height: 8m

Manzanillo

One of Spain's finest varieties. It is considered the world's best dual-purpose cultivar as its olives can be pickled when they are green or black & are also used to produce oil that is exported internationally. This variety is self-fertile, but may benefit from cross-pollination with Frantoio & Arbequina. Height: 5m.

Arbequina

This tree bears olives that are traditionally used for oil production, but they can also be pickled green or black. This variety is self-fertile & fruits early in the season. Height: 4-5m.

Appendix 2

GROWING LEMONS – CITRUS TREES

The applicant will follow all processes listed relating to the growth of Citrus (lemons) in Melbourne, in accordance to the information provided in Parts 1 – 5 that specifically relate to:

- **Citrus varieties for Melbourne**
- **Where & how to plant your citrus tree**
- **Ongoing care & management of citrus trees**
- **Pruning & shaping citrus trees**
- **Citrus pests, diseases & problems in Melbourne.**

Appendix 3

GROWING HERBS

The applicant will follow all processes listed in the attached information guide provided, specifically relating to planting, growing & cooking herbs.

Appendix 4

TARGET MARKET & MARKETING PLAN

There is no current requirement for any proposed marketing plan. The actual business logistics process is simplified. The applicant will engage the services of a specific site manager, who will be responsible for the management & care of all produce grown, harvested, picked, packed & sold on/off this site.

KEY MARKET

The key markets for the sale of this & other type of produce = restaurant on site, some local & other established retail stores & markets.

SITE (SWAT) ANALYSIS

STRENGTHS

- Persons living on the site for the care and management of produce grown at all times, including land inspections & protection of produce and stock from pests & other animals
- Caring for restaurant & other produce on this land
- Providing an opportunity to provide good quality land for successful growth of produce
- On hand maintenance of the site
- Quality of water & stock improvement
- Good Market
- An opportunity to manage the restaurant & site "on-hands" availability
- Proper horticultural farming management
- 24/7 security of property
- Good rural land space for all existing and potential farming requirements & future opportunities
- Greater financial gain from producing high quality plant produce

WEAKNESSES

- Living off the site
- Loss and damage of produce through disease & pest infestation
- Poor weather conditions & potential frost damage
- Loss of site security
- Opportunity for theft of produce & site assets from the restaurant & property
- Time management with all restaurant & farming activities
- Greater financial burden in the absence of a dwelling on this site

OPPORTUNITIES

- Living on the site to enable ongoing improvement of this rural land
- Control of weeds and management
- Property & restaurant management
- Improve produce & stock on hand
- Limit potential problems
- Proving a more saleable product through best restaurant & farming practices
- Improving the quality of the land.
- A successful & profitable business outcome being achieved

THREATS

- Living off the site
- Being absent from the property to manage and control restaurant & proposed farming requirements
- Disease & pest infestation
- Weed infestation
- Adverse weather conditions affecting plant produce & potential frost damage
- No security
- Theft of produce and site assets from the property
- Loss of Time Management
- Greater financial burden to maintain an additional property as a result of living off site.

FARMING IN THE YARRAMBAT AREA

Farming (agriculture use) throughout this area of Victoria & beyond has significantly grown over many years, simply based on its popularity and variety of use. There is no doubt that this area is rapidly becoming & recognized as a future thriving farming industry.

To sustain this business viability, the applicant Dimitrius Missailidis has now researched & established some professional associations with a renowned olive tree specialist – Leandro Revetti & other growers across the State of Victoria.

These organizations do provide some assistance & advice over a period of time to growers seeking general information with a view to producing successful produce.

Local produce grown throughout the region is transported to markets and sold in numerous retail outlets across the country. Apart from normal consumption, such produce will also be used & utilized throughout the proposed licensed restaurant to complement a variety of food items to be made available for choice selection & consumption.

The strong demand is based on medical advice, that plants of this nature are in fact a "healthy product" for proper consumption. Produce is totally dependent on good weather conditions, water availability, with no pest infestation or disease & is generally available from mid **autumn to the early winter period.** The actual logistic distribution time frames remain same time of each year.

This type of farming is "hands-on" with plants, pruned & harvested by hand, normally by experienced pickers engaged by farmers to undertake these tasks, - picking, sorting & packing process.
As such, it is generating excellent economy into this area, with some local & overseas employment opportunities for many.

The market is particularly strong, arguably at its best over the last five (5) year period. Based on the demand, with much international interest by overseas markets & growers now being shown, particularly, produce of this nature coming into the country.

The market forecasts clearly show a continued growth of this industry in the years to come.

AMENITY IMPACT

The use and proposed development will be managed that the amenity of the area is **NOT** detrimentally affected through:

- Clear separation distance from any neighboring properties, that are some considerable distance from the proposed restaurant area to be used on this site
- Traffic volume – minimum in our submission
- No on-street parking requirement for restaurant patrons or persons visiting this property
- Ample car parking availability on site as depicted in site plans attached
- Transportation of materials, goods or commodities to or from the land
- Appearance of any building, works or materials
- Emission of noise, artificial light, vibration, smell, fumes, smoke, vapor, steam, soot ash, dust, waste water, waster products, grit or oil
- Presence of vermin

BEST MANAGEMENT PRACTICES

The family business will adopt all "best management" practices with an integrated pest management system in line with sustainable farming requirements.

BUSINESS PLAN

A detailed business (contingency) long-term plan for the increased farming opportunity on this land will be set in place upon the commencement of the additional proposal (sustained agriculture use) on this land. This, as you are well aware, is totally dependent on the success rate with plant growth & volumes to be produced.

CORE BUSINESS ACTIVITIES - (farm management plan) relative to horticultural farming will include the following:

OLIVES

- Soil analysis = 2020
- Ground preparation – ongoing through the calendar year = 2020/21
- Planting - commencement period = 2020/21
- Growing period = 3 x year period to come into maturity = 2020 – 2023
- Staking - Year 1 = 2020/21
- Allowance for proper moisture levels
- Drip irrigation = watering daily during Summer months for the 1st year
- Plant establishment
- Pruning = 1st 4 year to shape properly at Winter's end
- Flowering = Spring or early Summer once tree begins to open its flower buds
- Plants bearing olives
- Picking = 2023/24
- Packing & transportation process to follow

LEMONS

- Planting - 2020/21
- Plant growth – 2020/21
- Nurturing & pruning - 2021
- Picking process – 2022

HERBS

- Planting – 2020/21
- Herb growth – 2020/21
- Nurturing 2020/21
- Picking 2021 & beyond

The farm management/business plan also sets out the following:

An indicative daily farm maintenance plan

On a daily basis, the farm will be required to be monitored & maintained for the following justifiable reasons:

- Maintenance & pruning of crops
- Gathering of produce when at correct ripeness
- Daily watering
- Weed maintenance
- Spraying for pest infiltration
- Grass cutting
- Security – protection of property, equipment, machinery & actual stock levels
- Control of pest damaging watering system
- Temperate control of food items
- Inspection of all food items stored on site

Projected yearly income

A projection only can be provided for proposed restaurant & increased agriculture use **= estimate only** = $60-70.000. This is entirely dependent on many circumstances. In particular the actual success with the proposed restaurant & plant growth, poor weather conditions & other factors that can & will affect a variety of plants etc.

Projected yearly farm carrying costs

= $150.000 – 200.000 for proposed restaurant
= 80-100.000 – set up for land agriculture use at Stage 1 period.

Projection only – olive plant growth per year for the next 10 years – dependent on successful growth & high quality produce for sale and consumption.

As stated, there may be some diversification with crops to include other produce in additional to that of initial plant growth proposed on this land. This will be considered in due course, again totally dependent on the success rate

Olives

- Year 1 = 2020 - 0kg/tree
- Year 2 = 2021 – 0kg/tree
- Year 3 = 2023 – 8 kg/tree
- Year 4 = 2024 – 15kg/tree
- Year 5 = 2025 - 20kg/tree
- Year 6 = 2026 – 24kg/tree
- Year 7 = 2027 – 28kg/tree
- Year 8 = 2028 – 28kg/tree
- Year 9 = 2029 – 28kg/tree
- Year 10 = 2030 – 28kg/tree

Proposed carrying capacity of the land – i.e. propagation etc.

Average yearly prediction - estimate only at this stage = **$200.000**

Propagation management/routine

Harvest, pack spray, irrigation & administration work requirements = throughout each year. Management includes the following processes required for this type of agriculture use:

- Ground & soil preparation
- Planting & establishment
- Staking
- Irrigation
- Pruning,
- Weeding,
- Spraying,
- General farming maintenance, including tractor, farm bikes, machinery & equipment,
- Grass cutting,
- Fertilization process,
- Site preparation for any external Audit & administration requirements.

- Picking of produce grown
- Packing produce for restaurant & sales to external customers

Total propagation area

Applies to Paddocks 1, 2 & 3

See attached site plans – Appendix 1.

Water Use & extraction points

On site use of rainwater tanks & Mains Water, only if required. Also, including extraction from large site same to irrigate. Water extraction quantity is totally dependent on dry &/or hot weather conditions.

Protection of Waterway –

Not applicable in these circumstances – No impacts of any nature apply!

Proposed water tank associated with proposed restaurant (outbuilding) & agriculture

= 22.500 litre capacity in compliance for any fire fighting requirements.

OTHER CONSIDERATIONS

No vegetation proposed to be removed in order to prepare for restaurant & agriculture use on the land. Any future re-vegetation/planting will take place as part of the overall management of the farming enterprise.

CONCLUSION

The land is clearly suited for this type of restaurant & proposed agriculture use, as outlined & demonstrated through the current & long established historic activity on this site & is suitable for further intensive use.

In order to operate the farm & proposed restaurant business efficiently & effectively & expand the business, it is essential that the applicant & his family reside on the property. The hours, as explained needed to operate the farm & restaurant together are quite lengthy, as discussed with council on 5 September, 2019 & highlighted in the content of this farm management plan.

This document, as stated, outlines a direct correlation between the development & use of a restaurant on this land, in association with agriculture use, as required by the Rural Conservation Zone.

Professional Consulting Services
Melbourne

Table 1

	YEARS	Weight Kg/tree Estimate Only		DATES
OLIVES	**1**	**0**		**2020**
	2	**0**		**2021**
	3	**8**		**2022**
	4	**15**		**2023**
	5	**20**		**2024**
	6	**24**		**2025**
	7 onwards	**28**		**2026**
LEMONS	**1**			**2020**
	2			**2021**
	3			**2022**
HERBS	**1**			**2020**
	2			**2021**
	3			**2022**
	4			**2023**

LEGEND

- DOMESTIC ZONE
- SITE BOUNDARY LINES/FENCE LINE
- PROPOSED AGRICULTURE USE
- MAIN ACCESS POINT
- ACCESS POINT EXISITNG DWELLIN
- EXISTING DWELLING
- PROPOSED RESTAURANT LOCATION
- WATER MAIN
- WATER DAM
- SITE LOCATION

Address of site = Lot 1 on Plan of subdivision LP0996(
SPI (standard parcel identifier - 1\LP99600
Local Government - Nillumbik Council
Council property No. 184927
Melway: 184 J4
Planning Zone = Rural Conservation Zone (RCZ)
Rural Conservation zone - Schedule 3 (RCZ3)
Planning Overlays = Bushfire Management Overlay (BM
Environmental Significance Overlay (ESO)
Environmental Significance Overlay - Schedule 1 (ESO

SHOP DRAWING / SUBMITTAL REVIEW

☐ APPROVED ☐ APPROVE WITH CHANGES NOTED
☐ REVISE AND RESUBMIT ☐ REJECTED_____

SUBMITTAL WAS REVIEWED FOR DESIGN CONFORMITY AND GENERAL CONFORMANCE TO CONTRACT DOCUMENTS ONLY. THE SUBCONTRACTOR IS RESPONSIBLE FOR CONFIRMING AND CORRELATING DIMENSIONS AT JOBSITE FOR TOLERANCE, CLEARANCE, QUANTITIES, FABRICATION PROCESSES AND TECHNIQUES OF CONSTRUCTION, COORDINATION OF HIS WORK WITH OTHER TRADES AND FULL COMPLIANCE WITH CONTRACT DOCUMENTS

By:_____ Date:_____

S01 **LOCATION - SITE OVERVIEW**
SCALE 1:1000 @ A3 NTS

NOTES:

	ISSUE:	REV:	DATE:
	CONCEPTUAL DESIGN	REV 1	26/08/2019
	CONCEPTUAL DESIGN	REV 2	03/09/2019
	CONCEPTUAL DESIGN	REV 3	17/09/2019
	CONCEPTUAL DESIGN	REV 4	19/09/2019
	CONCEPTUAL DESIGN	REV 5	05/11/2019
	CONCEPTUAL DESIGN	REV 6	08/11/2019

Drawings are approximate.
These drawings are not for construction, builders must verify all measurements.

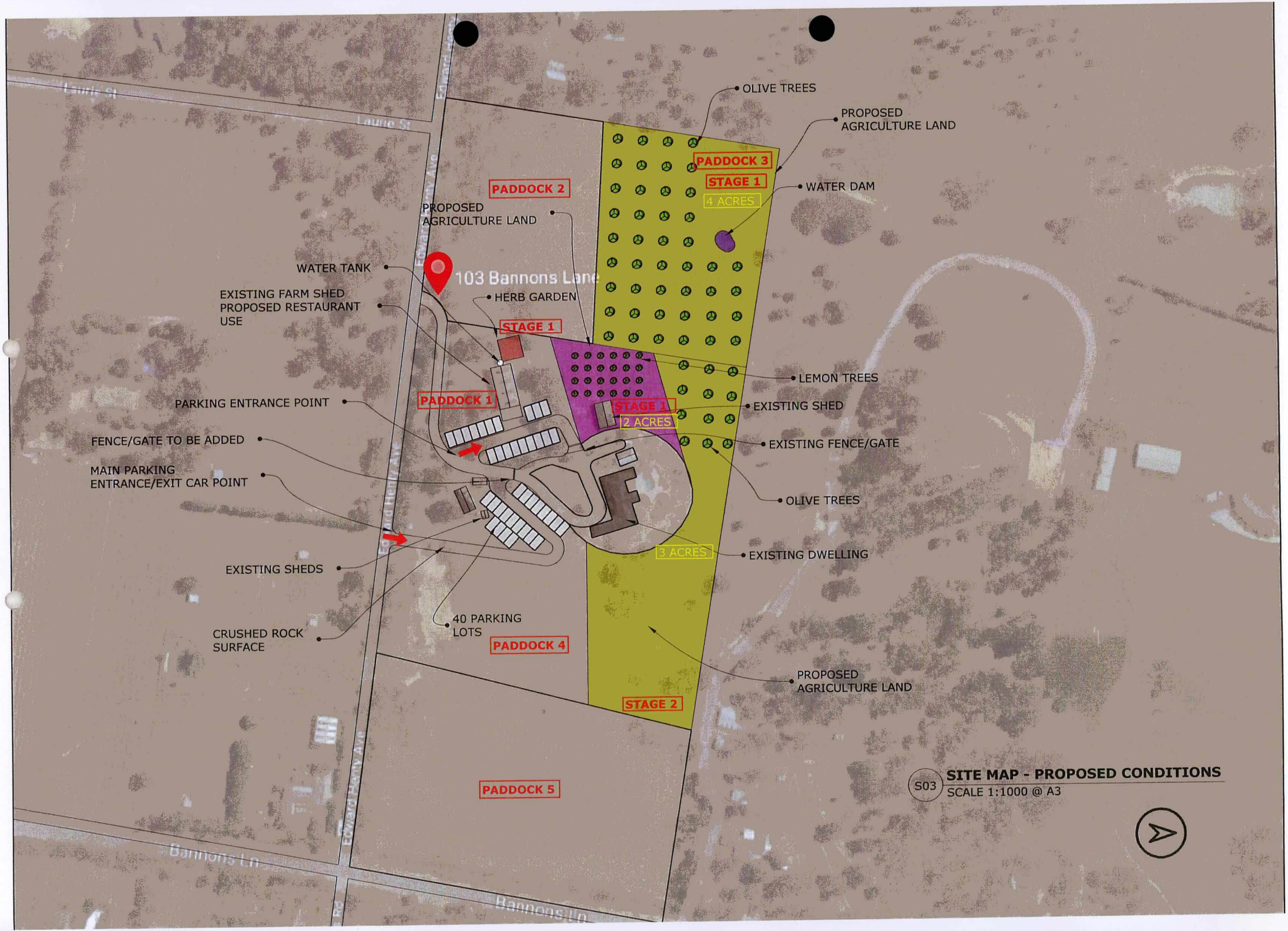
*Do not scale - written dimensions take precedence over scale.

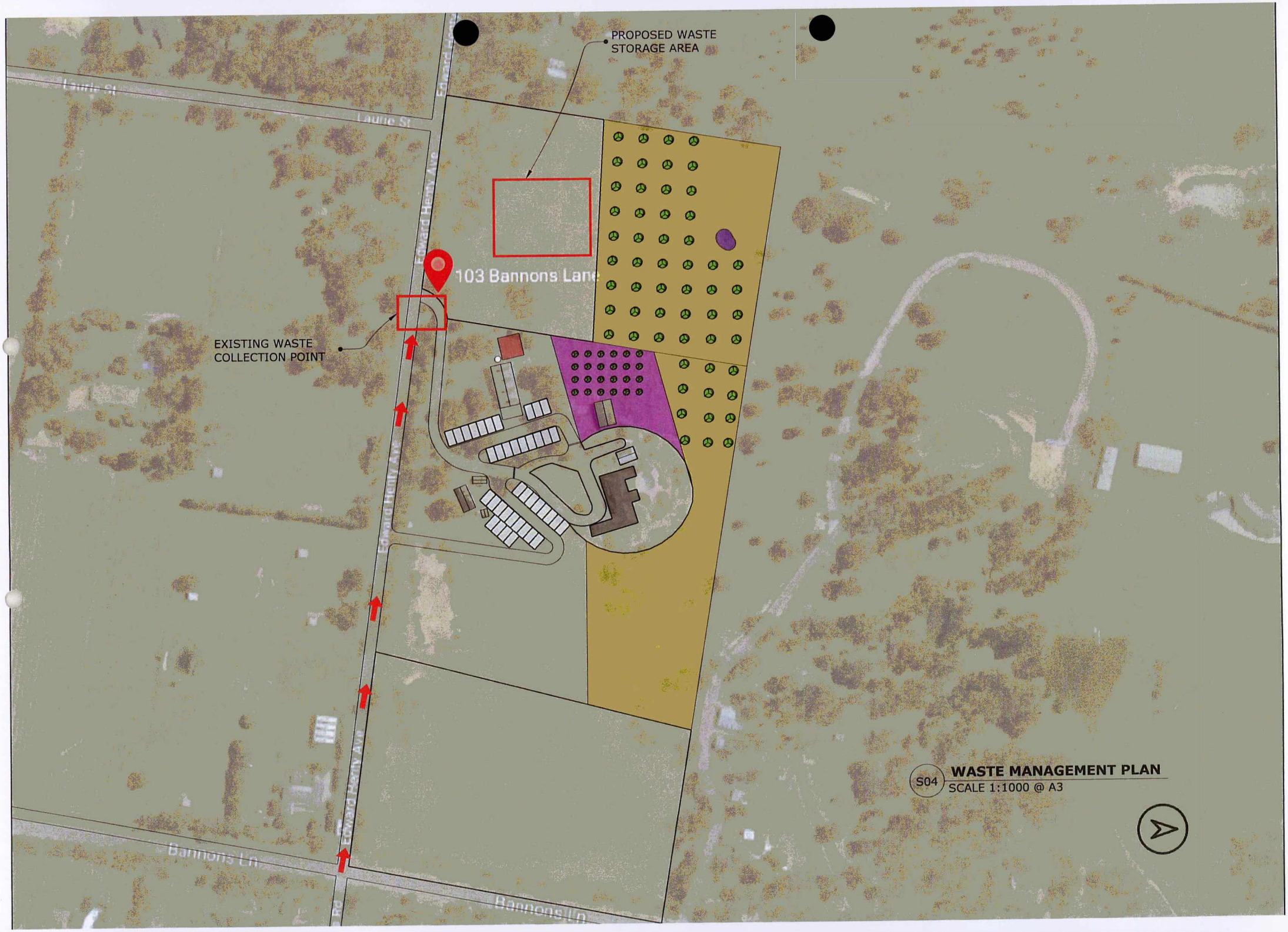
PRELIMINARY NOT FOR CONSTRUCTION

PROJECT:	103 BANNONS LANE YARRAMBAT
TITLE:	LOCATION OVERVIEW
DRAWN BY:	ALEX PANOPOULOS
CONTACT:	0410 248 773
INT DATE:	26/08/2019
SCALE:	1:1000 @ A3 NTS
PAGE:	1 OF 10

Inoventive HOSPITALITY SOLUTIONS
127 Boundary Road, North Melbourn
VIC 3051, Australia
Phone:03 9348 9087
Email:info@inoventive.com.au
Web:www.inoventive.com.au

S02 **SITE MAP - EXISTING CONDITIONS**
SCALE 1:1000 @ A3


OLIVE TREES
PROPOSED AGRICULTURE LAND
PADDOCK 3
STAGE 1
4 ACRES
WATER DAM
PADDOCK 2
PROPOSED AGRICULTURE LAND
WATER TANK
103 Bannons Lane
EXISTING FARM SHED PROPOSED RESTAURANT USE
HERB GARDEN
STAGE 1
LEMON TREES
PADDOCK 1
STAGE 1
2 ACRES
EXISTING SHED
PARKING ENTRANCE POINT
FENCE/GATE TO BE ADDED
EXISTING FENCE/GATE
MAIN PARKING ENTRANCE/EXIT CAR POINT
OLIVE TREES
3 ACRES
EXISTING DWELLING
EXISTING SHEDS
40 PARKING LOTS
CRUSHED ROCK SURFACE
PADDOCK 4
PROPOSED AGRICULTURE LAND
STAGE 2
PADDOCK 5
Laurie St
Edward Henry Ave
Bannons Ln
S03
SITE MAP - PROPOSED CONDITIONS
SCALE 1:1000 @ A3

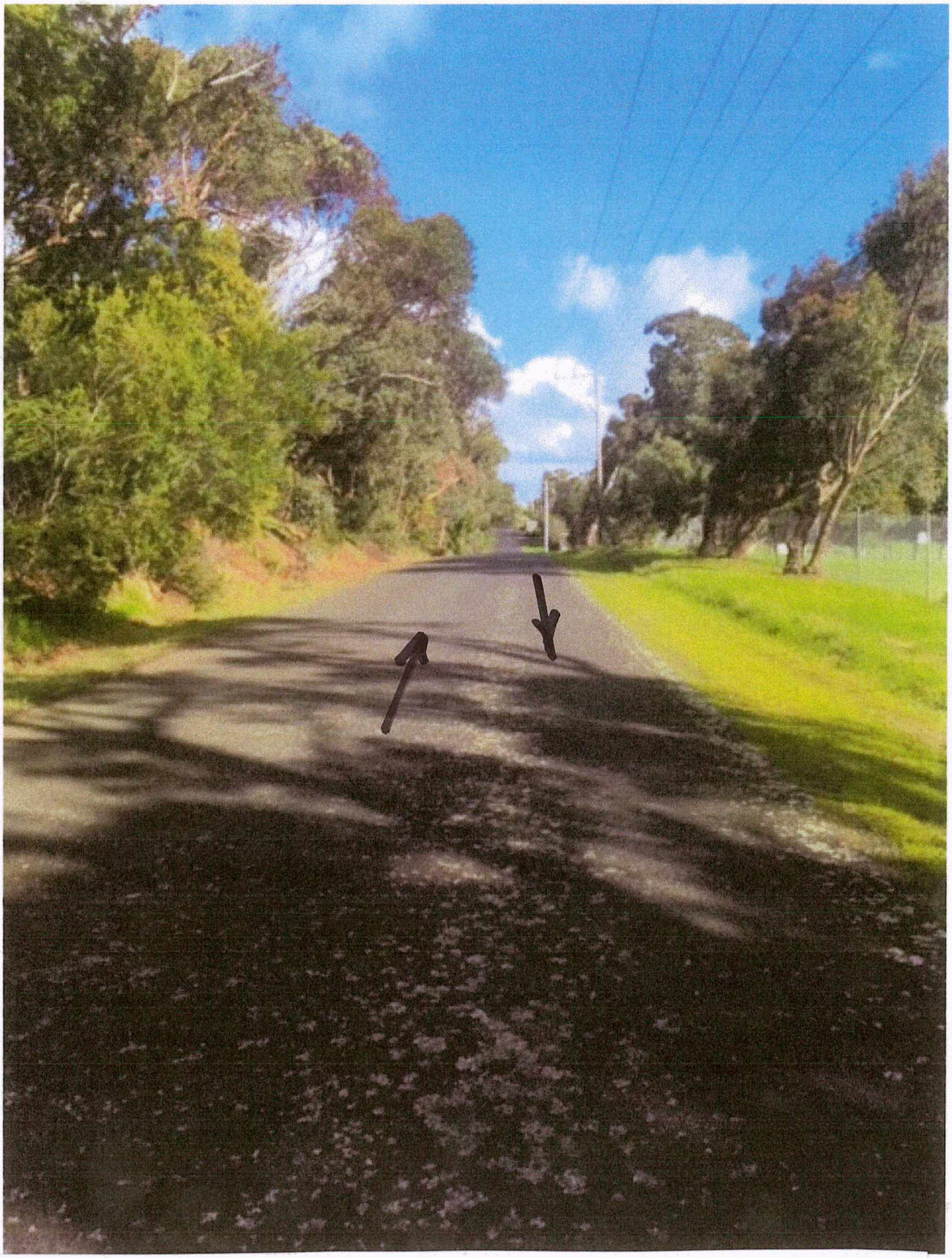


S04 **WASTE MANAGEMENT PLAN**
SCALE 1:1000 @ A3

Depicts subject property at 103 Bannons Lane, Yarrambat North view!
Subject site borders Bannons Lane to the South & Edward Henty Avenue to West .

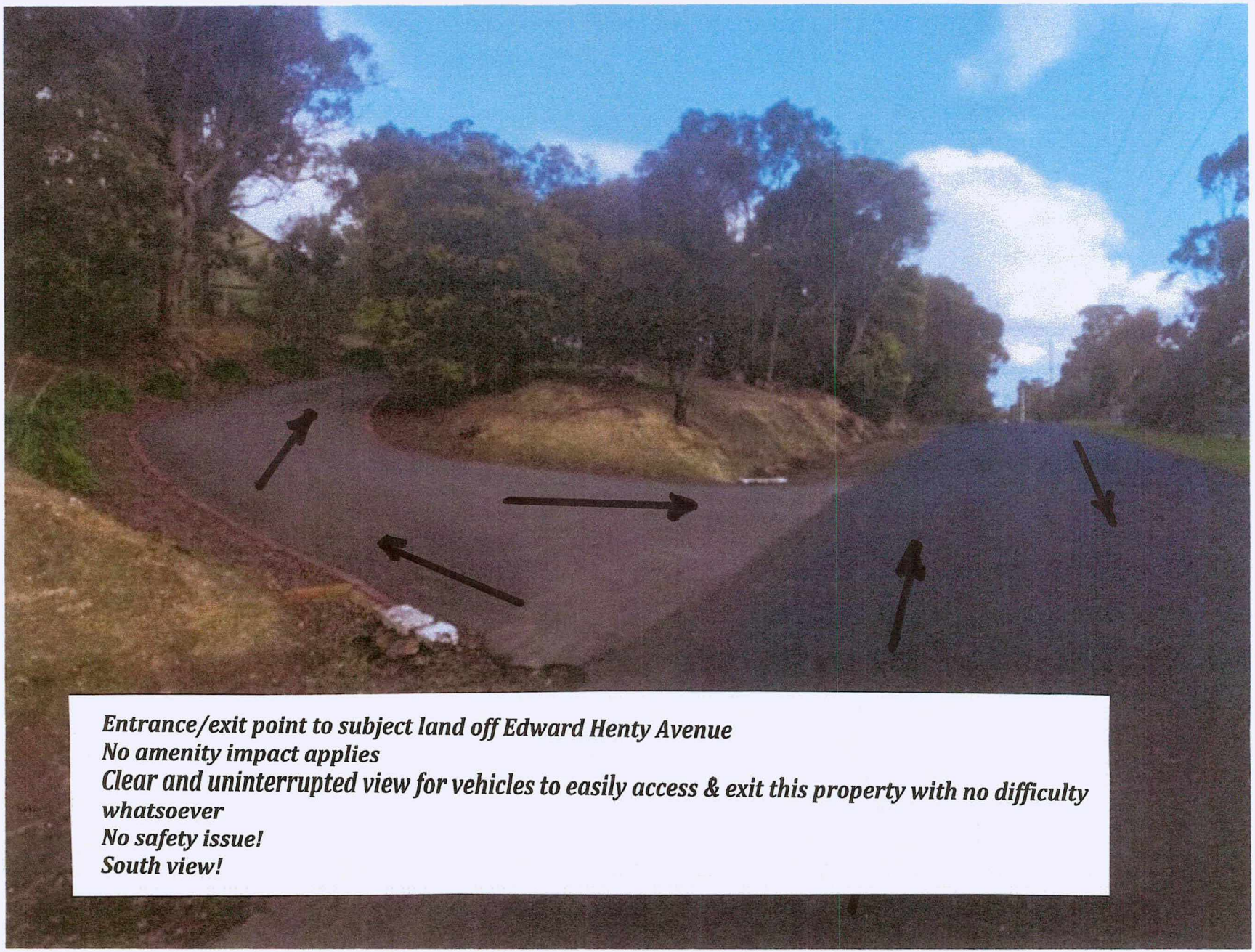

N
03
VBS

Depicts the intersection of Bannons Lane & Edward Henty Avenue, Yarrambat
South view on Edward Henty Avenue.
Access to this site can be achieved from both roads

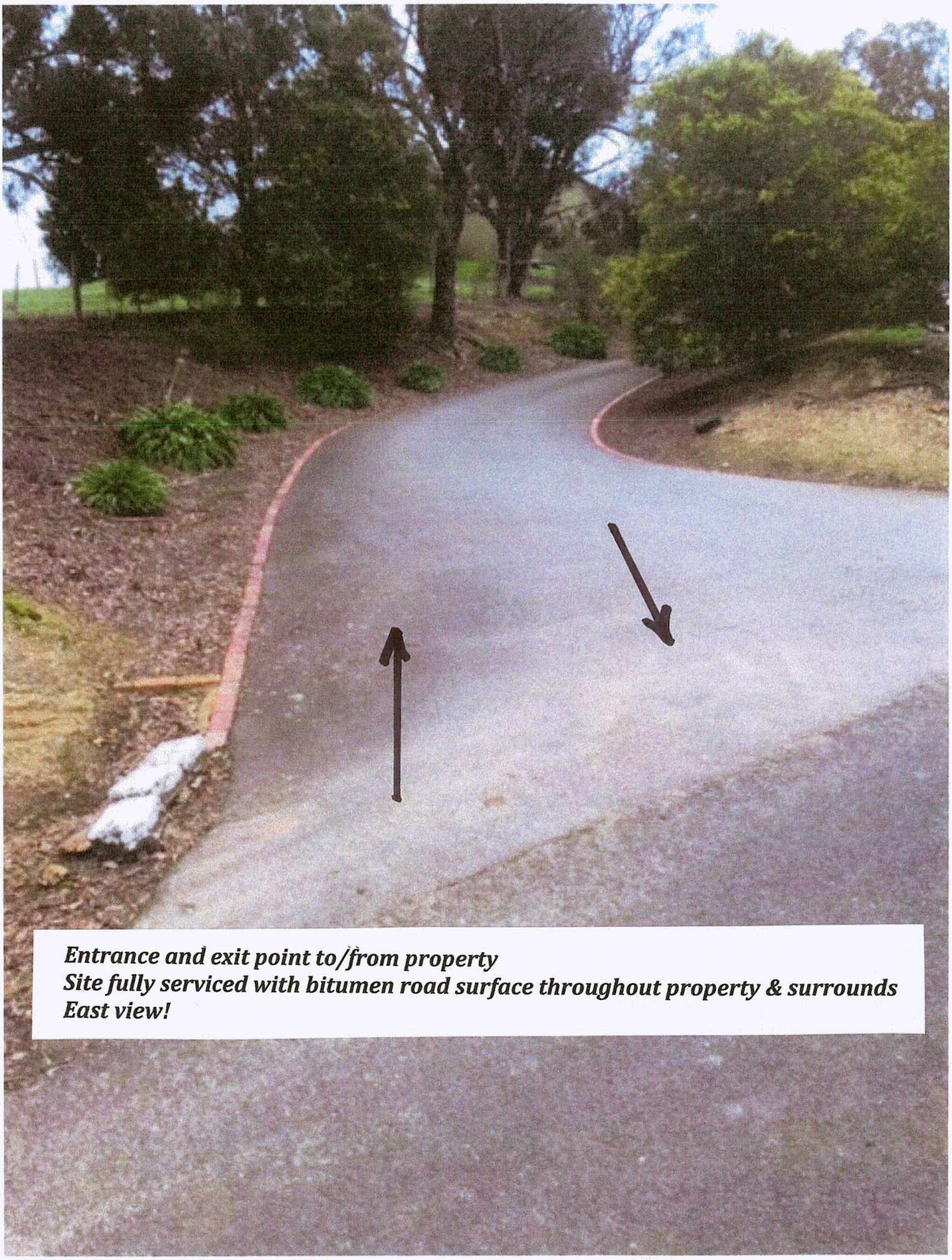


Depicts Edward Henty Ave., Yarrambat – South view!
Subject site borders this particular road to the North & to the West off Bannons Lane.

Depicts entrance/exit point to 103 Bannons Lane, Yarrambat
To/from Edward Henty Avenue
North/East view!

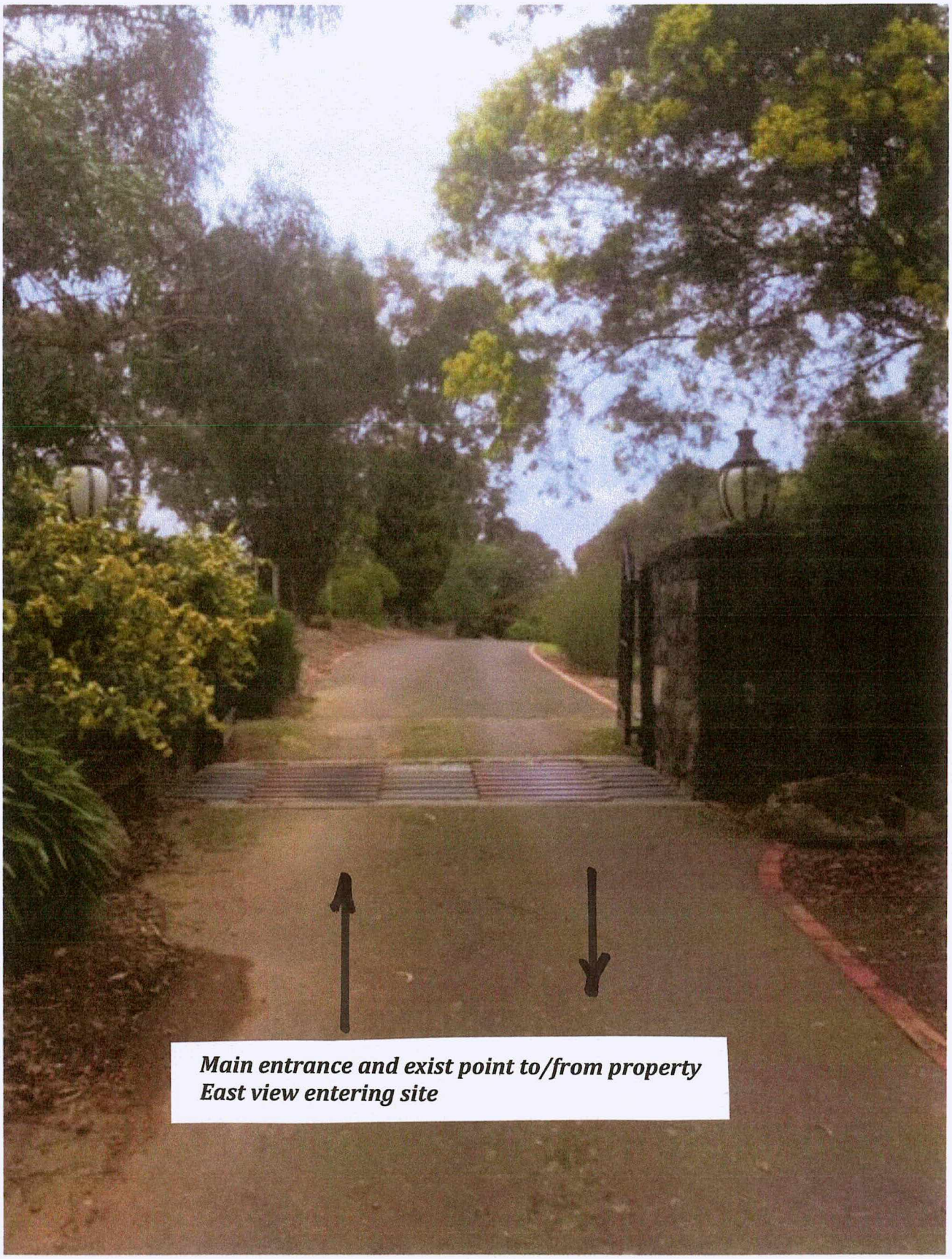


Entrance/exit point to subject land off Edward Henty Avenue
No amenity impact applies
Clear and uninterrupted view for vehicles to easily access & exit this property with no difficulty whatsoever
No safety issue!
South view!



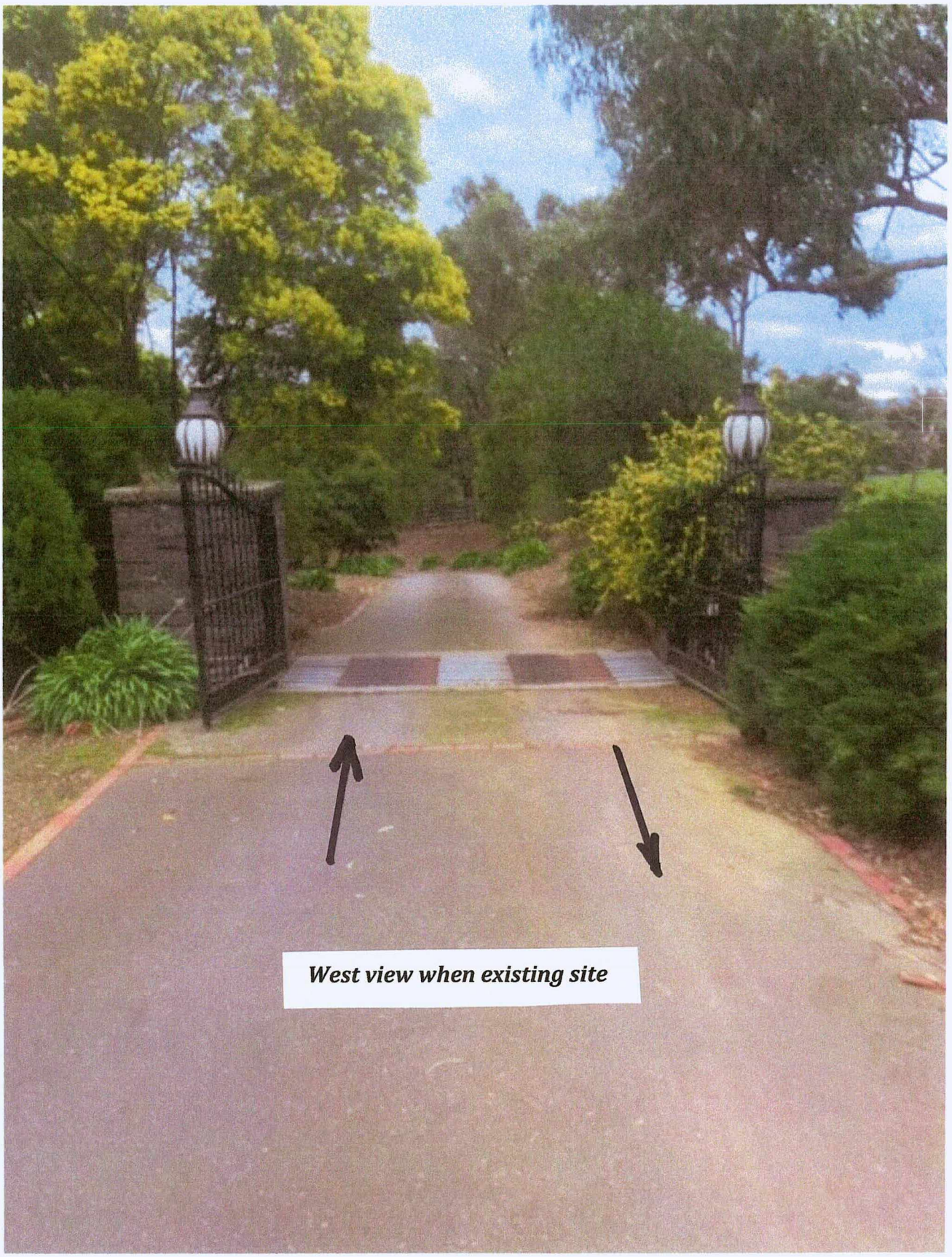
Entrance and exit point to/from property
Site fully serviced with bitumen road surface throughout property & surrounds
East view!


No difficulty whatsoever for vehicles to access or egress to/from this site



Main entrance and exist point to/from property
East view entering site


West view when existing site



West view when existing site

West view when existing site onto Edward Henty Avenue, Yarrambat

Depicts existing dwelling on site occupied by the applicant & his family
East view!

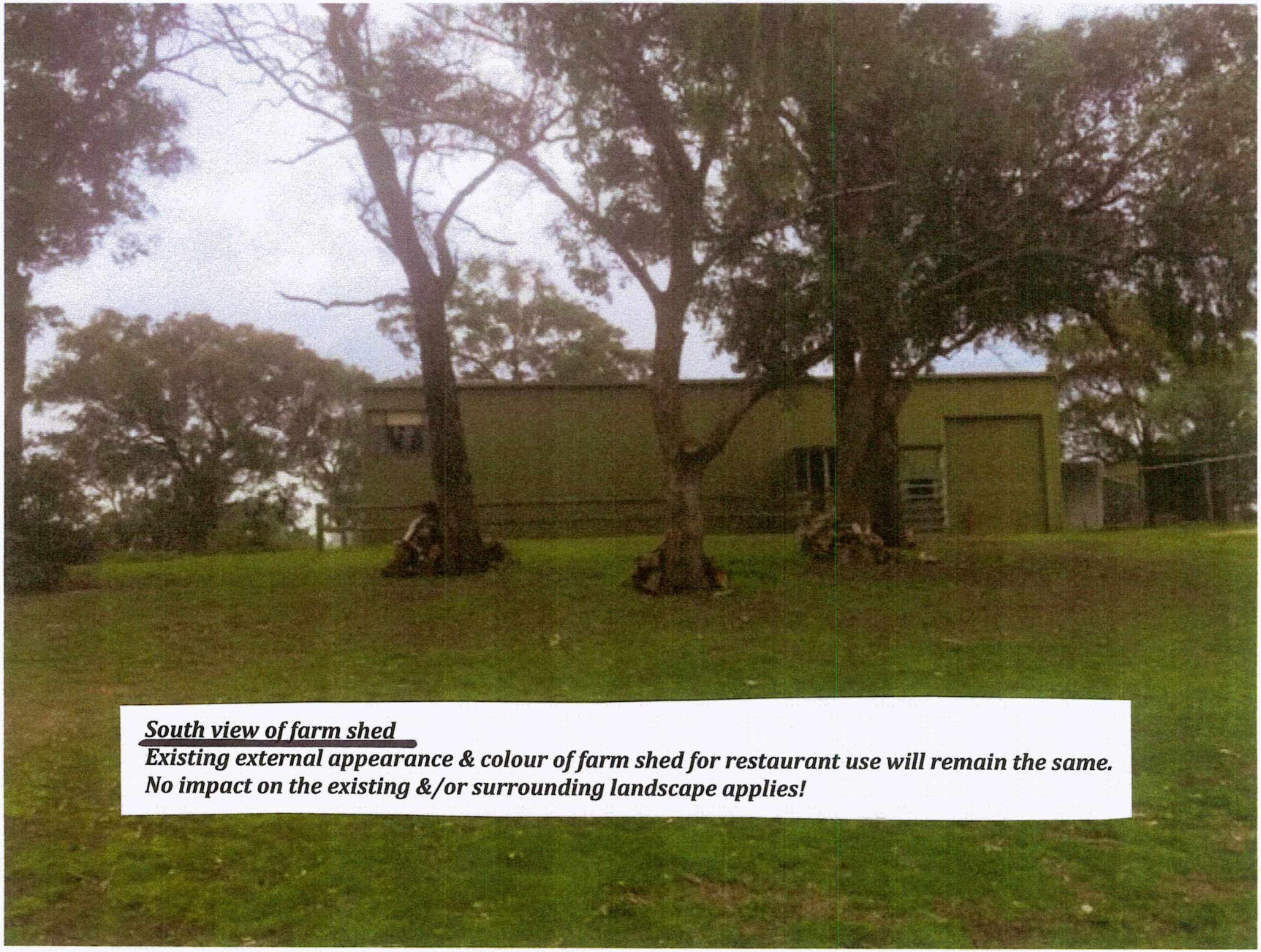

East view of property


Depicts existing entrance/exit points to/from dwelling & farm shed areas
South/West view!

Access points leading to residential dwelling & farm sheds on this site East view!


Depicts existing farm shed
No impacts of any nature applies with this land use proposal
West view!

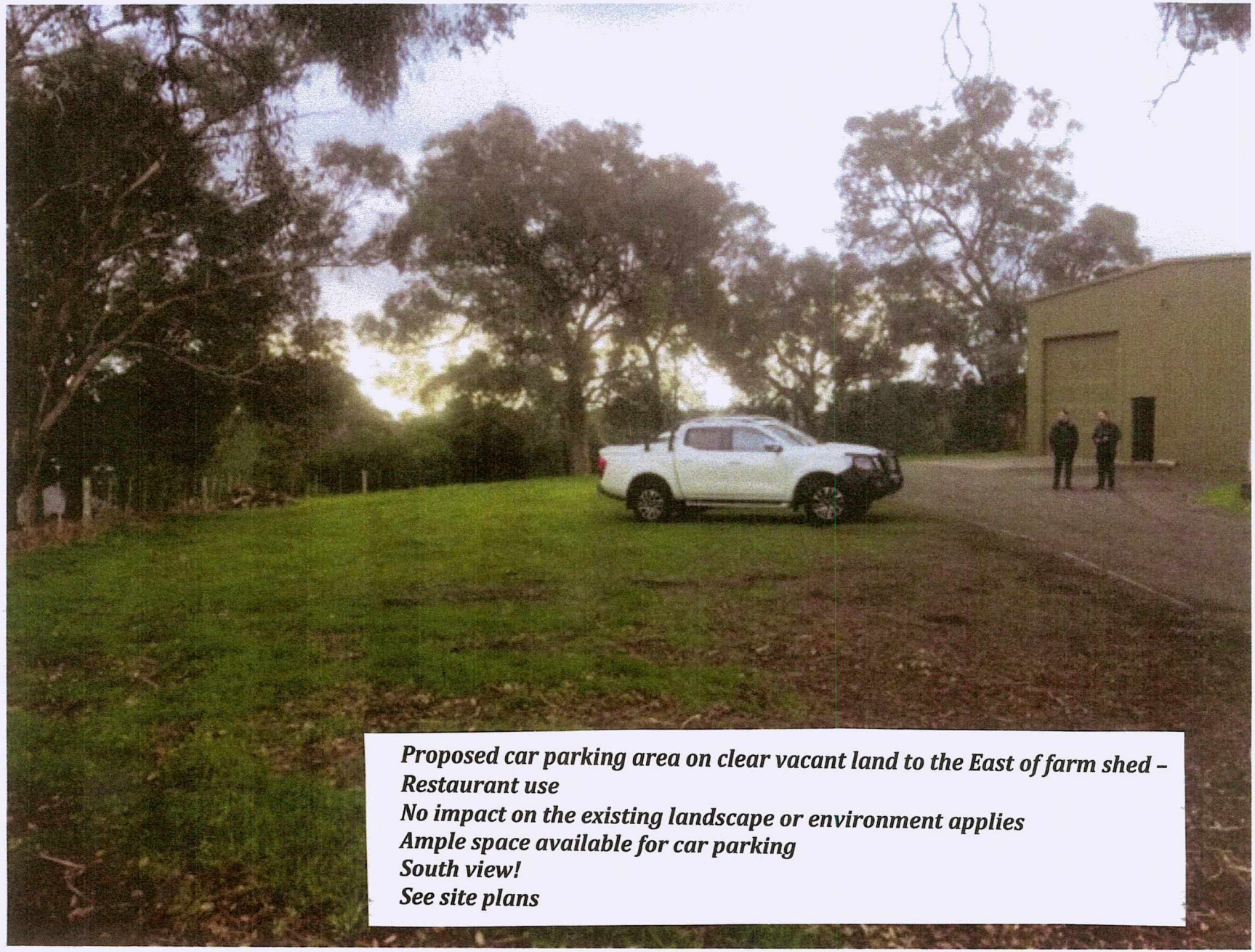
Existing farm shed - colour & appearance nestles very comfortably into the landscape of this particular area of Yarrambat - West view!



South view of farm shed

Existing external appearance & colour of farm shed for restaurant use will remain the same. No impact on the existing &/or surrounding landscape applies!


Existing access/egress point to farm shed area
West view!



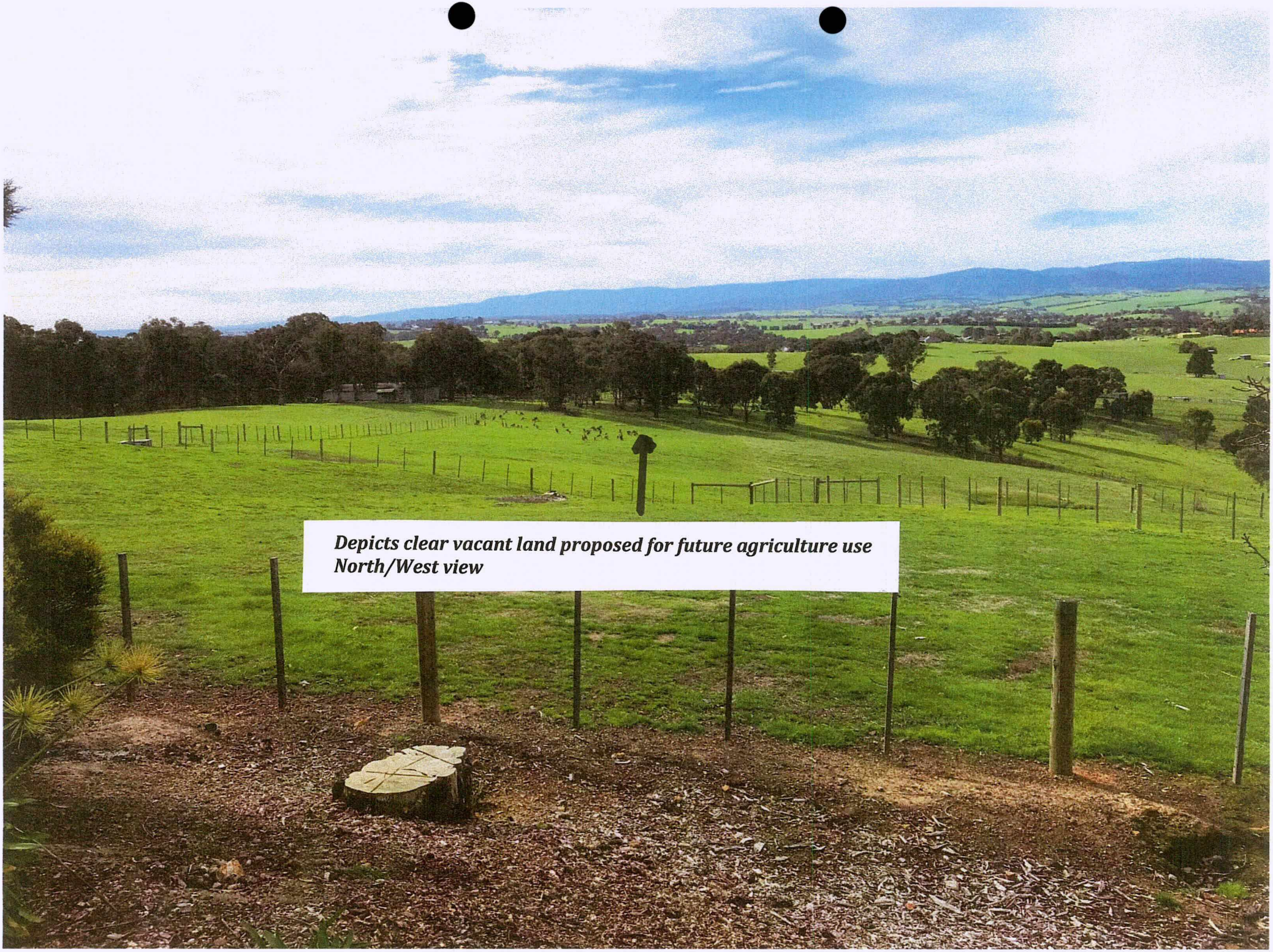
Proposed car parking area on clear vacant land to the East of farm shed – Restaurant use
No impact on the existing landscape or environment applies
Ample space available for car parking
South view!
See site plans

N.

Proposed main car parking area to be utilized on this section of vacant land
East of farm shed – restaurant use!
Ample car parking space is currently available on this site, with no restrictions at all for vehicles turning, to either enter or leave this particular site area.
Also, no traffic congestion
This area can comfortably accommodate some 20 ***motor vehicles***
North view
See site plans

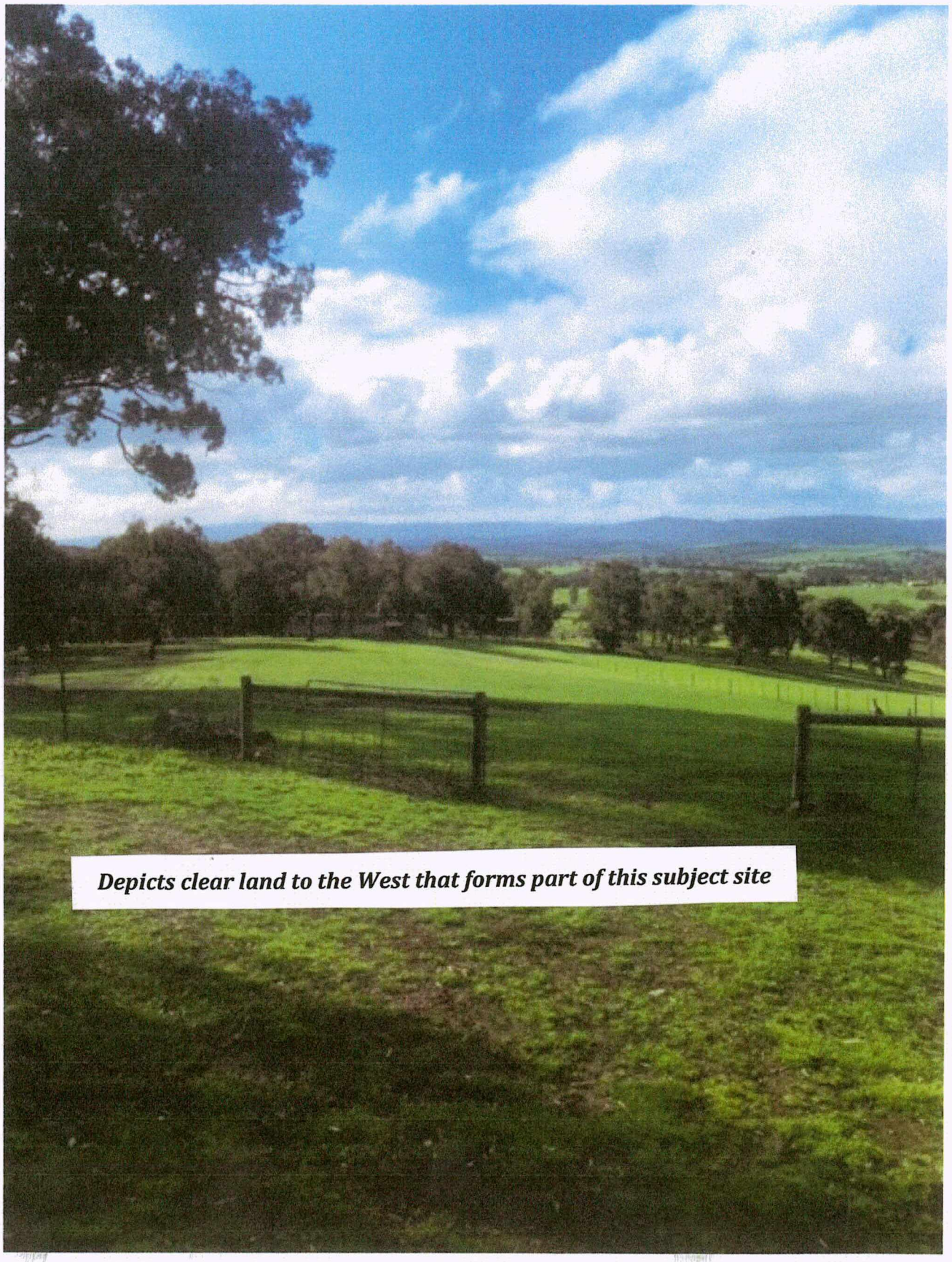
Secondary vacant land area to be utilized for additional patron car parking
Ample car parking space is currently available on this site, with no restrictions at all for vehicles turning, to either enter or leave this particular site area.
Also, no traffic congestion
This area can comfortably accommodate some thirty + motor vehicles
No impact on the existing landscape or environment applies
South view SEE SITE PLANS


Depicts paddock No: 3 proposed for future agriculture use
Stage 1 of farming proposal!
North/West view!
No impacts of any nature apply with this farming proposal & restaurant use

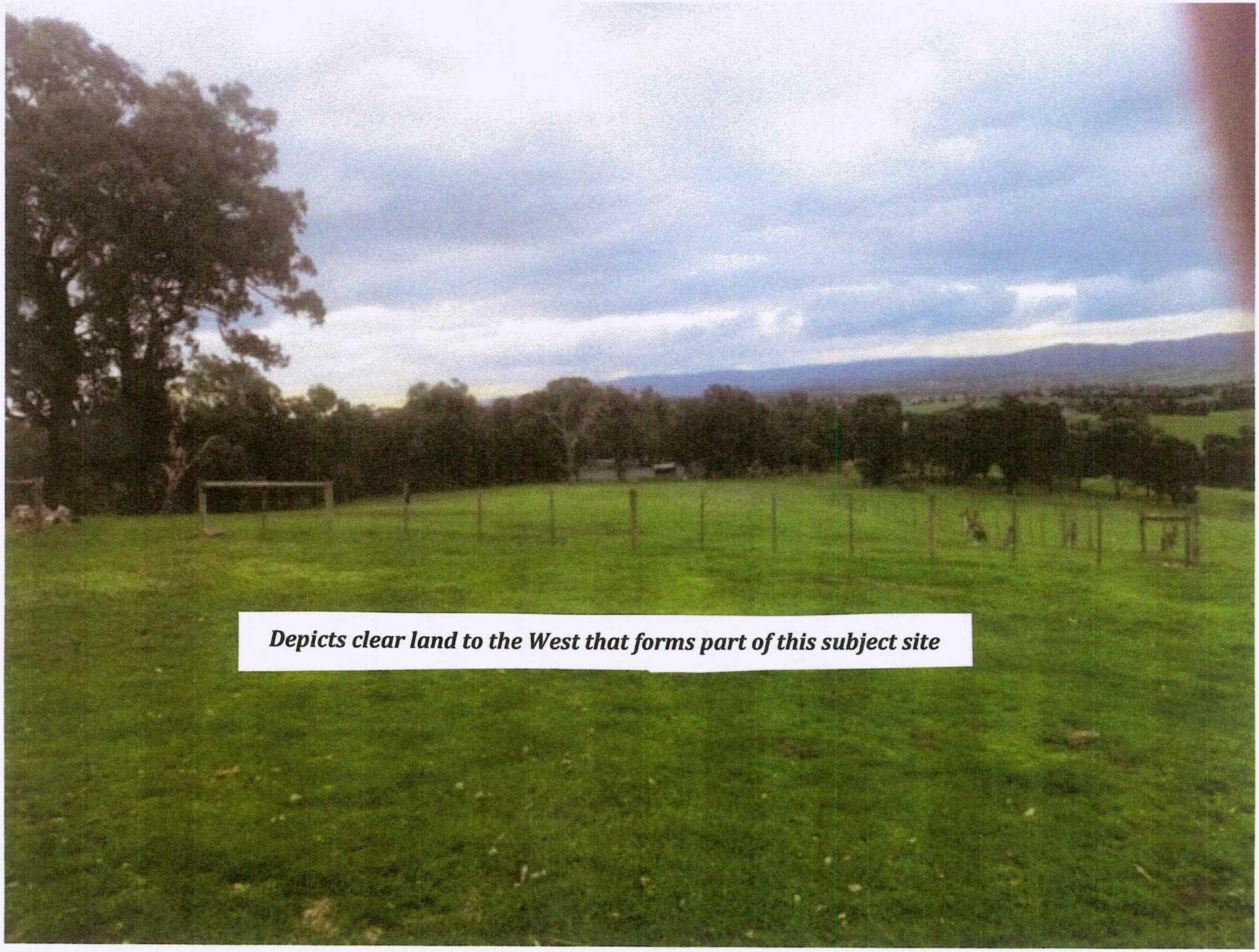

Depicts clear vacant land proposed for future agriculture use
North/West view


Depicts clear vacant land
South view!

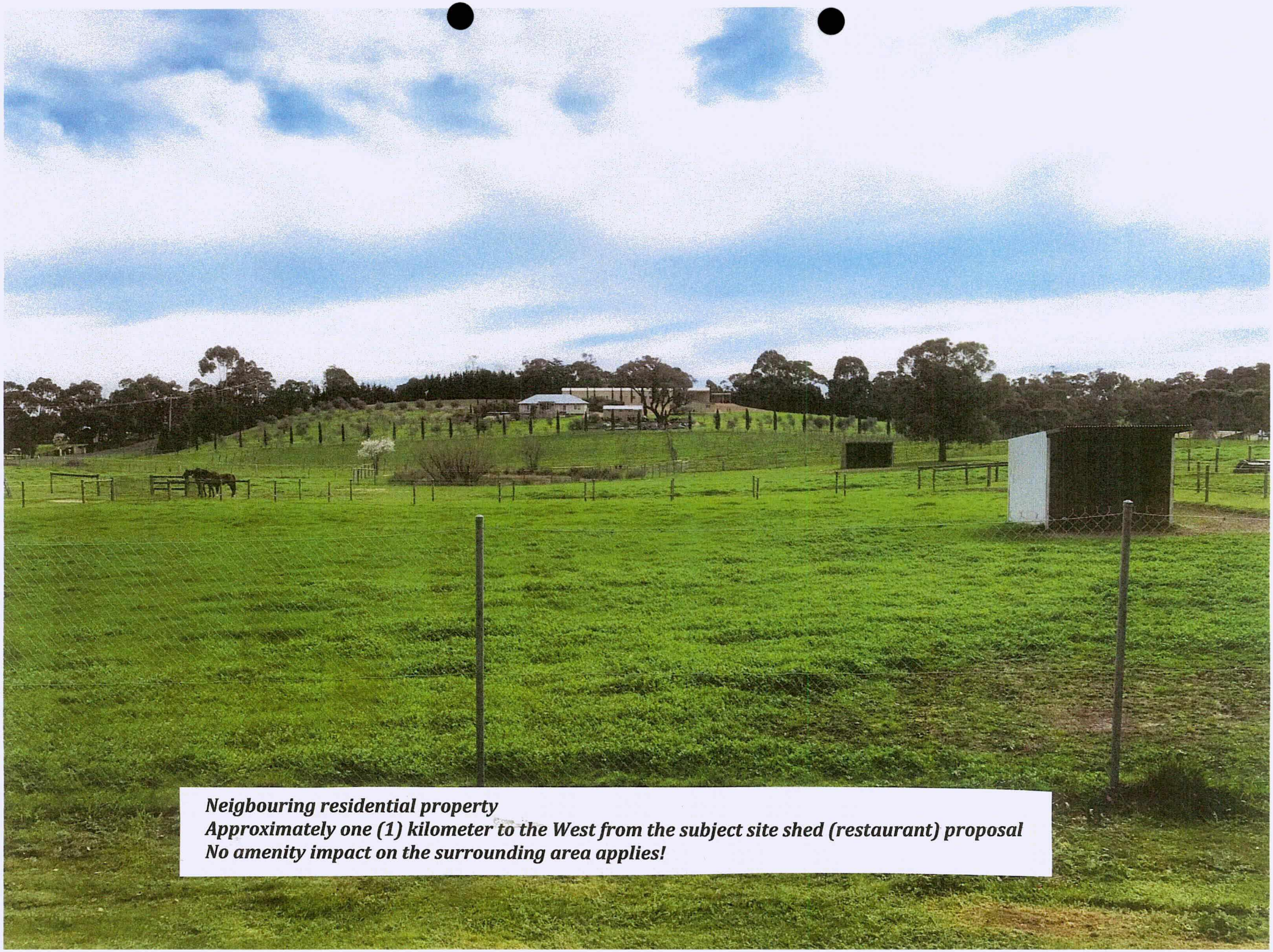
East view off Edward Henty Avenue



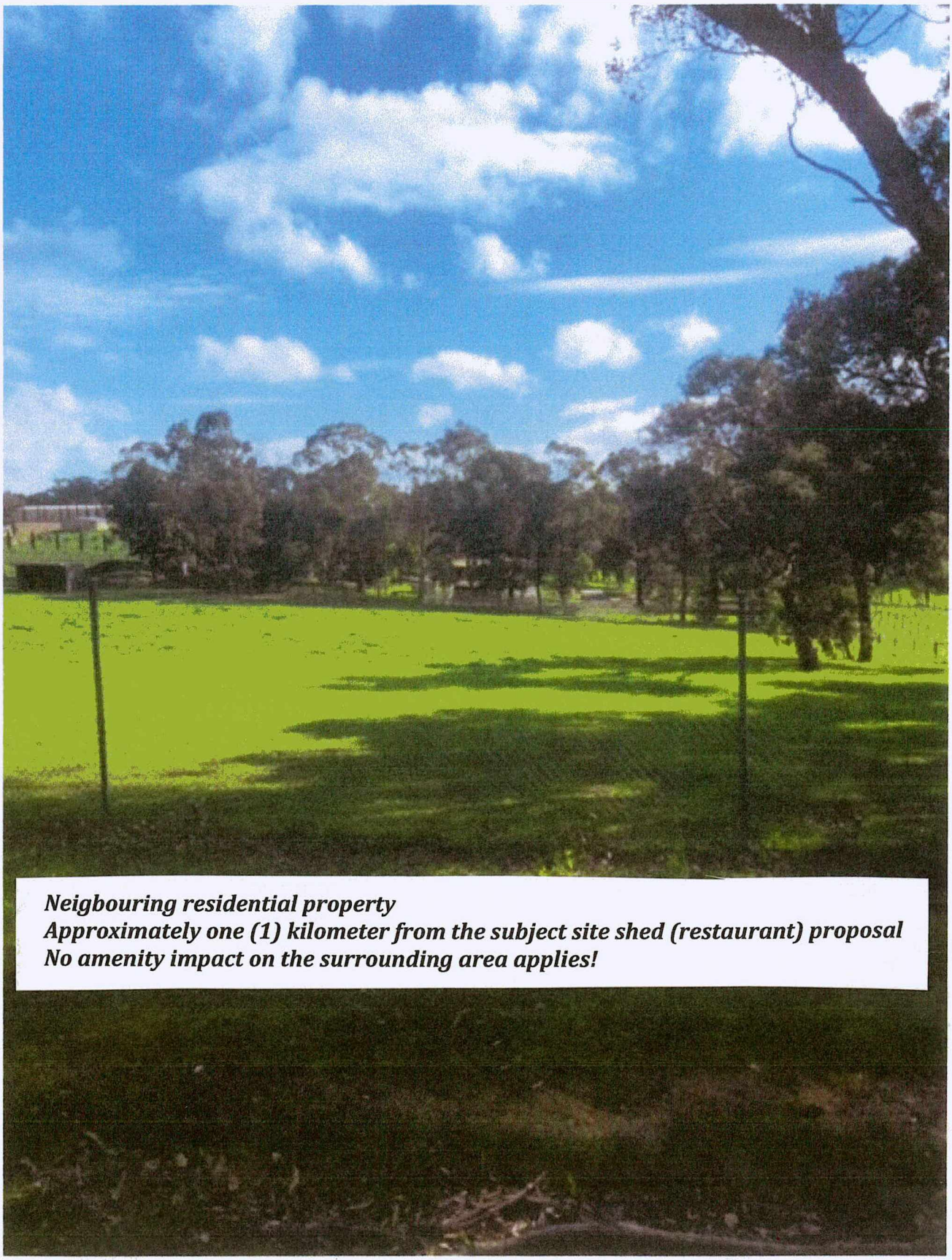
Depicts clear land to the West that forms part of this subject site



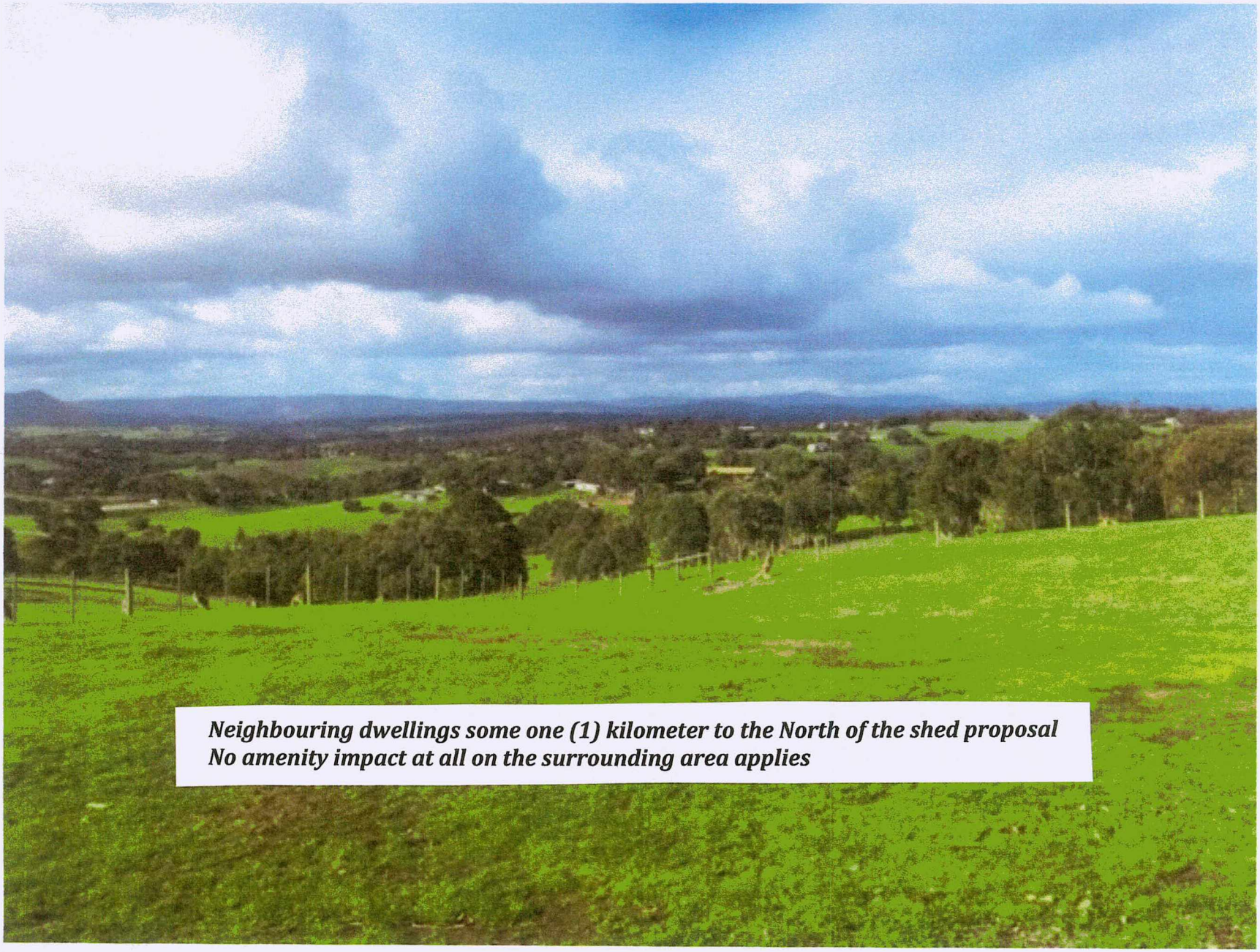
Depicts clear land to the West that forms part of this subject site



Neigbouring residential property
Approximately one (1) kilometer to the West from the subject site shed (restaurant) proposal
No amenity impact on the surrounding area applies!



Neigbouring residential property
Approximately one (1) kilometer from the subject site shed (restaurant) proposal
No amenity impact on the surrounding area applies!



Neighbouring dwellings some one (1) kilometer to the North of the shed proposal
No amenity impact at all on the surrounding area applies

This document has 35 pages

JIM MISSAILIDIS

LAND CAPABILITY ASSESSMENT
FOR
ON-SITE WASTEWATER MANAGEMENT
AT
103 BANNONS LANE, YARRAMBAT

REPORT No. A200303 MARCH 2020

By

Paul Williams, B.App.Sc.
Paul Williams & Associates Pty Ltd
CONSULTANTS IN THE EARTH SCIENCES

IMPORTANT NOTE

The land capability assessment report consists of this cover sheet, two written sections, three drawings and four appendices.
The report elements are not to be read or interpreted in isolation.

TABLE OF CONTENTS

SECTION 2 RECOMMENDATIONS

ASSESSOR'S ACADEMIC & PROFESSIONAL QUALIFICATIONS

Paul Williams is the Director and principal earth scientist at Paul Williams & Associates Pty Ltd. He has a Bachelors Degree in Applied Science (Geology and Land Use) (awarded in 1978) and has since specialised in vadose zone hydrology, soil science and engineering geology.

He is a member of the Foundation and Footings Society (Vic) Inc. and is a Registered Building Practitioner (EC1486)

All fieldwork and analyses are undertaken by, or directly supervised by Paul Williams.

ASSESSOR'S PROFESSIONAL INDEMNITY INSURANCE

Policy Number:	NPP-13384
Period of Cover:	14/2/2020 – 14/2/2021
Geographical Coverage:	Worldwide (excluding U.S.A.)
Retro-active Date:	Unlimited
Limit of Indemnity:	$4,000,000
Underwriting Company:	Certain Underwriters at Lloyd's

EXECUTIVE SUMMARY

The proposed development at 103 Bannons Lane, Yarrambat, is suitable for sustainable on-site effluent disposal.

The allotment of 8.088 hectares is in the Rural Conservation zone and is not located in a Special Water Supply Catchment.

It is proposed to operate a 150-seat restaurant, as shown in Drawing 2

The site is not sewered. For design purposes, mains water (equivalent) is assumed.

Table 1
Description of Development

Parameter	Site specific element
SPI Number	1\LP99600
Property Address	103 Bannons Lane, Yarrambat
Owner/lessee	Jim Missailidis
Contact	Matt Dillon 0448 292 164 matt-dillon@live.com.au
Locality	Yarrambat
Zoning and Overlays	Rural Conservation
Area	8.088 hectares.
Usable Lot Area	At least double LAA requirement.
Soil Texture	Type 4 (loam) over Type 6 (dispersive light clay).
Soil Depth	0.7 to 1.15m.
Soil Structure	Poorly structured.
Soil Constraints	Dispersive (requires amelioration).
Permeability	0.03+m/day after renovation.
Slope	Less than 10%
Distance to Surface Waters	100m (minimum) to watercourse.
Distance to water bore	280m (minimum) to bore.
Water Supply	Mains equivalent (assumed for design purposes).
Wastewater Load	Up to 3,200 litres (load balanced) plus 750 litres (residence on separate system). Total site hydraulic load is 3,950 litres.
Availability of Sewer	Not available

Our field testing which included soil profile logging and sampling, a differential level survey (by others), laboratory testing and subsequent reporting including water and nutrient balance modelling and risk assessment has revealed that on-site effluent disposal is rational and sustainable.

The assessment has been made in the context of prioritising public and environmental health with a design compromise between rational wastewater reuse and sustainable wastewater disposal.

Effluent shall be treated to at least the 20/30 standard and distributed by subsurface irrigation utilising the processes of evapotranspiration and deep seepage.

The irrigation area has been determined for the mean wet year and satisfies the requirements of *SEPPs (Waters of Victoria)* in that the effluent irrigation system cannot have any detrimental impact on the beneficial use of surface waters or groundwater.

With regard to density of development and cumulative risk the assessment has considered risk associated with subsurface flows and surface flows.

In regard to subsurface flows, it is clear that provided the on-site system is adequately designed, constructed, operated and maintained the risk to surface and ground waters is negligible. Once the effluent is placed underground, the extraordinary long travel times via ground water to surface waters ensures adequate nutrient attenuation.

In regard to surface flows, it is clear that provided the on-site system is adequately designed, constructed, operated and maintained, the risk to surface and ground waters is no greater than for a sewered development.

The results of the land capability assessment and risk analysis indicate that primary effluent and trench systems are not appropriate for this site.

Where risk is defined as the product of consequences and frequency, the risk can be reduced to negligible levels if effluent is treated to a secondary level and disposed via pressure compensated subsurface irrigation, as described in Section 2 of the land capability assessment.

Onsite disposal/recycling requires AWTS with pressure compensated subsurface irrigation and load balancing facility.

The LCA recommends a conservative, scientifically based, well founded wastewater management system with inherent multiple barriers of safety.

Cumulative risk from the development is extremely low. The risk of serious or irreversible damage is extremely low.

All requirements of *SEPP (Waters of Victoria)* can be met.

Paul Williams & Associates Pty. Ltd.
ABN 80 006 412 862
CONSULTANTS IN THE EARTH SCIENCES

P. O. Box 277, Sunbury, Victoria, 3429
2 Argyle Place, Sunbury, Victoria, 3429
Telephone: 03 9744 6426
Mobile: 0418 171 796
Email: paul@rockdr.com.au

A200303 – MARCH 2020

LAND CAPABILITY ASSESSMENT
FOR
ON-SITE WASTEWATER MANAGEMENT
AT
103 BANNONS LANE, YARRAMBAT

SECTION 1. SITE INVESTIGATION

1.1 INTRODUCTION

1.1.1 General. On instruction from the land owner, an investigation was undertaken to assess land capability for on-site effluent disposal at 103 Bannons Lane, Yarrambat.

The allotment of 8.088 hectares is in the Rural Conservation zone and is not located in a Special Water Supply Catchment.

It is proposed to operate a 150-seat restaurant, as shown in Drawing 2.

The site is not sewered. For design purposes, mains water (equivalent) is assumed.

1.1.2 Existing Onsite Systems. The existing 4-bedroom (equivalent) residence is serviced by a septic tank and absorption trench disposal system. The trenches are located to the south-west of the residence. We are advised that the existing system is functioning without any surface surcharge and there is no surficial evidence to contradict this advice.

The location of this onsite system cannot impact on the proposed restaurant onsite system.

The assessment has been made in the context of prioritising public and environmental health with a design compromise between rational wastewater reuse and sustainable wastewater disposal.

1.2 INVESTIGATION METHOD

The site investigation was carried out in accordance with *SEPPs (Waters of Victoria) and related documents. This report is in accordance with* current *SEPPs (Waters of Victoria), Code of Practice - Onsite Wastewater Management, E.P.A.* Publication 891.4, July 2016 and *Approaches for Risk Analysis of Development with On-site Wastewater Disposal in Open, Potable Water Catchments,* Dr Robert Edis, April 2014 (as adapted for non-potable catchments). Guidance has been sought from *AS/NZS 1547:2012*, *Guidelines for Wastewater Irrigation*, E.P.A. Publication 168, April 1991, *Wastewater Subsurface Drip Distribution*, Tennessee Valley Authority, March, 2004, *AS 2223, AS 1726, AS 1289, AS 2870* and *Australian Laboratory Handbook of Soil and Water Chemical Methods*.

Our capability assessment involved the mapping of unique land-soil unit(s) which were defined in terms of significant attributes including; climate, slope, aspect, vegetation, soil profile characteristics (including colloid stability, soil reaction trend and electrical conductivity), depth to rock, proximity to surface waters and escarpments, transient soil moisture characteristics and hydraulic conductivity.

Exploratory boreholes were push-tube sampled and hand augered. The soil profile was logged and representative soil samples were taken for laboratory testing.

Water and nutrient balance analyses were based on the mean wet year rainfall for Eltham and mean evaporation data for Yan Yean Reservoir and were undertaken in accordance with *Guidelines for Wastewater Irrigation, E.P.A.* Publication 168, April 1991 (Part), *AS/NZS 1547:2012* and in-house methods.

The results of the water and nutrient balance analyses are given in Appendix B, to this report.

The results of the investigation and *in situ* and laboratory testing are given in Section 1.3, below, and in Appendix A, to this report.

1.3 CAPABILITY ASSESSMENT

We have used the attributes determined by the investigation to define one (1) land-soil unit, as follows:-

1.3.1 Land-Soil Unit A. This land-soil unit consists of gently sloping terrain, as shown in Drawing 2 and Figure 1.

1.3.1.1 Climate. The general area receives a mean annual rainfall of 742mm and a mean annual evaporation of 1180mm. Mean evaporation matches or exceeds the mean rainfall in September through April.

Rainfall and evaporation data are presented in Appendix B, to this report.

1.3.1.2 Slope and Aspect. The ground surface (proposed land application area) straddles a gentle ridge line and slopes to the north-east, north and north-west at less than 10%, as shown in Drawing 2.

The unit is exposed to the prevailing winds and is subject to partial shade from nearby trees.

1.3.1.3 Vegetation and Land Use. The unit is vegetated with sparse to dense pasture grasses, as shown in Figure 1.

1.3.1.4. Slope Stability. For the encountered subsurface conditions, slope degree and geometry and for the proposed range of hydraulic loadings, the stability of the ground slopes within the disposal areas are unlikely to be compromised.

1.3.1.5 Subsurface Profile. The following interpretation of the general subsurface profile assumes conditions similar to those encountered in the boreholes are typical of the investigation area.

Note: If subsurface conditions substantially different from those encountered in the investigation are encountered during soil renovation works, all work should cease, and this office notified immediately.

The unit is underlain by residual materials overlying fractured metasedimentary rocks of Silurian Age.

The general subsurface profile consists of:-

- A topsoil (A_1-horizon) layer of light grey-brown, moist, medium dense silt (silty loam), with a soil reaction trend of 5.6 to 5.8 pH and electrical conductivity of 0.36 to 0.40 dS/m, to a depth of 0.1m, overlying,
- A slopewash (A_2-horizon) layer of light brown, moist medium dense clayey silt (silty loam), with a soil reaction trend of 6.1 pH and electrical conductivity of 0.20 to 0.26 dS/m and clay content increasing with depth, to depths of 0.2 to 0.25m, overlying,
- A residual soil (B-horizon) layer of orange-brown, moist, poorly structured and very stiff silty clay of low plasticity (light clay), with a soil reaction trend of 6.0 to 6.3 pH, electrical conductivity of 0.10 to 0.20 dS/m and free swell[a] of 10% to 30%, to depths of 0.6 to 1.15m, overlying,
- An extremely weathered (B-horizon) layer of orange-brown, moist, poorly structured and very stiff silty clay of low plasticity (light clay), with a soil reaction trend of 6.4 pH, electrical conductivity of 0.26 dS/m and free swell of 10%, to depths of 0.75 to 1.15, overlying,

[a] After Holtz (measures swell potential of fraction passing 450-micron sieve)

- Highly and less weathered, highly fractured sandstone and siltstone rock.

The metasedimentary rocks in this area consist of steeply dipping, alternating hard and soft layers. Variable composition and rock mass defect character coupled with the vagaries of time and weathering often result in highly variable vertical and areal thickness of residual materials.

1.3.1.6 Soil Permeability. The *in-situ* permeability tests were attempted on 31st March 2020.

The field testing was abandoned due to spontaneous dispersion of the soil clay fraction.

Where the soils are dispersive *insitu* permeability testing realises inaccurate, low or nil results.

The hydraulic conductivity can be estimated by using test waters containing calcium chloride and/or by laboratory assessment of colloid stability and determination of ameliorant quantities (e.g. gypsum/lime requirement) and swell potential.

A conservative estimate of permeability has been deduced as follows (see Code 3.6.1):-

Profile analysis in accordance with AS/NZS 1547:2012 and our laboratory determined dispersion and swell potential shows the residual clay soils (and clay fractions) to be dispersive. They are therefore by definition Category 6 soils with saturated hydraulic conductivity less than 0.06m/day.

Similar dispersive soils have responded positively (with sufficiently improved hydraulic capability) following applications of gypsum.

For the limiting poorly-moderately structured clay and assuming renovation by gypsum application we have adopted an estimated and conservative design saturated hydraulic conductivity of 0.030m/day.

Peak deep seepage is conservatively estimated at 3mm/day (<10% k_{sat}). Average daily deep seepage is 1.6mm.

1.3.1.7 Basement Rock Permeability. From the literature and from examination of rock profiles and rock mass defect character in the vicinity, the hydraulic conductivity of the basement rocks would be in excess of 0.06m/day (adopt 1m/day for buffer design).

1.3.1.8 Colloid Stability. The results of the Emerson Crumb Tests, Dispersion Index tests and observations of any discolouration of water in the boreholes indicate that all subsoil materials are dispersive.

The Emerson Class was 5 (A_1-horizon) and Class 1 and 2 (subsoil) while the Dispersion Index was zero (A_1-horizon) and 12 to 14 (subsoil).

The electrical conductivity was determined for all horizons using a 1:5 soil/water extract and converted to EC (saturation extract).

The determined electrical conductivity (EC_{se}) ranged from 0.10 dS/m to 0.40 dS/m.

Soil reaction trend ranged from 5.6 pH to 6.3 pH which is within a tolerable range.

Cation balance and soil amelioration additives and application techniques will be provided on release of laboratory test results.

It is expected that gypsum will need to be applied to achieve a suitable cation balance and structural stability.

Assuming design, construction, operation and maintenance of the on-site effluent systems are in accordance with the recommendations contained in this report, we can conclude that there is a low salting potential.

1.3.1.9 AS1547:2012 Soil Classification. In accordance with *AS/NZS1547:2012* the residual clay materials can be classified as Type 6 soils.

After allocating proportional vertical and lateral flows and allowing for the potential for perched water mounding and after the application of gypsum, we have adopted a daily peak water balance seepage rate[b] of 3mm for 20/30 standard effluent.

1.3.1.10 Surface Drainage. Site surface drainage is to the north-east, north and north-west, as shown in Drawings 1 and 2. The nearest watercourse is at least 100m distant.

The effluent areas cannot impact on any surface waters (see Section 2.5, below).

1.3.1.11 Groundwater. No ground water was encountered in the boreholes.

Subsurface flow direction will generally reflect natural surface flow direction (i.e. a northerly direction), as shown in Drawing 2.

The nearest groundwater bore is located at least 280m to the west of the land application area.

The Victorian groundwater data base indicates groundwater is between 20 and 50 metres of the surface.

Regionally the groundwater is contained in fractured metasediments and is of low yield and low quality (1,000 to 3,500mg/litre TDS) with beneficial use including most stock.

1.3.1.12 Nutrient Attenuation. Clay soils (as found on this site) can fix large amounts of phosphorous. Phosphate-rich effluent seeping through these soils will lose most of the phosphorous within a few metres.

The limiting nutrient for this site is nitrogen. No phosphorous balance is required.

Nitrogen, contained in organic compounds and ammonia, forms nitrate-N and small amounts of nitrite-N when processed in an aerated treatment plant. Several processes affect nitrogen levels within soil after irrigation. Alternate periods of wetting and drying with the presence of organic matter promote reduction to nitrogen gas (denitrification). Plant roots absorb nitrates at varying rates depending on the plant species (see Appendix B), however nitrate is highly mobile, readily leached, and can enter groundwater via deep seepage and surface waters via overland flow and near-surface lateral flow.

Based on the water and nutrient balance (see Appendix B), and assuming 30mg/litre N in the effluent (general case) and 20mg/litre P, a denitrification rate of 20%, with N uptake of 220 kg/ha/year for the an appropriate grass cover equivalent to a rye/clover mix) and sequential zoned dosing of the irrigation area, a conservative estimate can be made of the nitrogen content in the deep seepage and lateral flow.

For the general case, and without considering further expected denitrification below the root zone and in the groundwater (reported to be in the vicinity of 80%), denitrification in the lateral flow (external to the irrigation areas but within the curtilage of the allotment) and plant uptake in the lateral flow, the irrigation area would need to be 1,280m^2 for 3,200 litres/day of effluent for complete attenuation.

The hydraulic component of the water and nutrient balance have shown that an irrigation area of 1,700m^2 would be required to limit surface rainwater flows to episodic rain events.

For the development and to satisfactorily attenuate nitrogen on-site and to accommodate the design hydraulic loading, the application rate should not exceed **1.9mm/day**.

1.4 RISK MANAGEMENT & MITIGATION

SEPP (Waters of Victoria) requires that the proposal be assessed on a risk-weighted basis and cumulative effects[c] be considered.

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[b] The peak water balance seepage loss rate is based on being <10% of the measured/estimated hydraulic conductivity (of the limiting horizon) plus a lateral flow component, effluent type and the effects of soil characteristics including profile thickness (flow paths and storage), shrink-swell, dispersivity, soil reaction trend and assumes renovation.

[c] We would contend that there can be no significant cumulative effect if the provisions of *SEPP (Waters of Victoria)* are met (i.e. all wastes contained onsite).

A multiple risk-reduction approach is used in assessing this development, with components listed below:

1.4.1 Water Usage. With respect to daily effluent production, the system is overdesigned. Current best practice allows for a (maximum) daily effluent flow of 3,200 litres (5-day trading and load-balanced). Design usage estimates are as per *Code of Practice - Onsite Wastewater Management, E.P.A.* Publication 891.4, July 2016.

1.4.2 Secondary Treatment. The LCA recommends AWTS. These systems generate a much higher quality of effluent than septic systems.

1.4.3 Block Size. Many under-performing effluent fields are placed on blocks where area is limited. Limited area can lead to inadequately sized or inappropriately placed effluent fields and a lack of options should the daily effluent volumes increase. In the subject site, size is not a constraining factor.

1.4.4 Management Plan. Historically, inadequate maintenance has played a major part in the failure of onsite effluent disposal systems. There is a management plan within the LCA (see Appendix C). This plan gives guidance on the implementation of mandatory operation, maintenance and inspection procedures.

1.4.5 Sizing of Treatment Systems. No specific proprietary treatment plant is recommended, however treatment plants must have current JAS/ANZ accreditation, which match effluent volumes with plant capacity.

1.4.6 Load Balancing. Surge flows are likely and the systems may become overwhelmed for a period. This potential problem can be eliminated by installing a plant with a load balancing facility (or equivalent function) which enables short-term storage and sustainable flows to the distribution area over extended time. The load balancing facility also provides temporary storage should the plant fail or if there is a power outage.

1.4.7 Zoned Dosing. The LCA stipulates that the effluent area is (automatically) irrigated sequentially by zones to promote the creation of transient aerobic and anaerobic soil conditions.

The effluent field is sized conservatively for nitrogen attenuation, using pasture grass (rye/clover eq mix), which has a nitrogen uptake of 220 kg/ha/year. Zoned dosing will increase the efficiency of the field for removing nitrogen from the soil.

Undersized effluent fields are at risk of becoming anaerobic for long periods, with the risk of microbial build-up. This leads to secretion of microbial polysaccharides, which coat soil particles and restrict the ability of the soil to adsorb nutrients and attenuate pathogens. Polysaccharides can also coat the interior of pipes and block drainage holes if drainage is slow due to the field being overloaded with effluent. This can lead to effluent surcharge from the ends of the drainage pipes, forming preferential flow paths through overlying soil and draining overland to nearby surface waters.

The alternating aerobic and anaerobic conditions created by zoned dosing prevent the build-up of microbial polysaccharides, and ensures efficient renovation of effluent.

1.4.8 Pressure Compensated Subsurface Disposal. Conservatively sized irrigation areas with pressure compensated subsurface disposal and zoned dosing deliver effluent directly into the soil. Under saturated conditions, water flow is downwards in the direction of maximum hydraulic gradient. For a surface flow containing effluent to occur, the effluent would have to rise, *against gravity*, through at least 150mm of soil. Under unsaturated conditions, water flow is multi-directional due to capillary forces and matrix suction. The atmosphere provides a capillary break with capillary forces and matrix suction reducing to zero at the air/soil interface. Gravitational forces outweigh the capillary forces and matrix suction long before the surface is reached. Hence, any surface flow from the effluent area cannot contain any effluent, regardless of the intensity and duration of rain events. Surface flow can only ever consist of **rainfall** in excess of soil storage capacity and hydraulic conductivity.

Except for the instance of a broken/damaged drip line or distribution line, surface flow cannot contain any effluent.

Note: For a pressure compensated distribution network to function properly, lines must be placed parallel to contours and/or horizontal for even effluent distribution.

1.4.9 Effluent Areas. Design effluent areas are oversized. They have been designed for a deep seepage less than 10% of hydraulic conductivity.

1.4.10 Reserve Areas. Although reserve areas are not required for subsurface irrigation (*Code of Practice*, 2016), there is sufficient area available for extension of the irrigation area. The reserve area is a spare effluent field, which is left undeveloped, but can be commissioned in the case of increase in daily effluent production due to contingencies through the chain of ownership.

1.4.11 Buffer Distances. Buffer distances are set out in the *Code of Practice* to allow for attenuation of pathogens and nutrients, should an overland effluent surcharge occur.

The time taken for groundwater to reach the nearest potable surface waters can be estimated by using the Darcy equation (which states that velocity is the product of the hydraulic conductivity and the hydraulic gradient). From the literature, the regional gradient is about 0.005.

Flow times can be estimated for groundwater to flow the 100m (minimum) to the nearest surface waters at this site.

For a conservative basement hydraulic conductivity of 1m/day[d] with a hydraulic gradient of 0.005, the time taken for groundwater to flow a distance of 100m is over 50 years.

For a (rare) surface effluent discharge on a 10% slope and for the prevailing soil hydraulic characteristics, the estimated maximum travel distance of the surface effluent discharge before reabsorption is less than 5m[e].

The design buffer distances comply the requirements of the Code of Practice.

1.4.12 System Failure. A properly designed and constructed onsite effluent system consisting of the treatment plant and the irrigation area can suffer degrees of failure.

Failure can take the form of mechanical (plant), accidental (toilet blockages, damaged irrigation lines, high BOD influent), operational (power outage, overloading) and maintenance (failure to check filters, failure to participate in maintenance programme).

1.4.12.1 Mechanical Breakdown. Mechanical plant breakdown typically involves compressor and pump malfunction causing no aeration and high-water levels, respectively. Both of these situations are alarmed (both audible and visual). The proposed plants will benefit from a service contract providing 24-hour repair cycles. If the alarms were ignored (or malfunctioned) and the establishment continued to produce waste until the load balancing tank and plant capacities were exceeded (at least 3 days), a mixture of septic and raw effluent would back up to the interior of the toilet area and/or surcharge through the plant hatches. It is difficult to imagine how this outcome could be allowed to manifest.

1.4.12.2 Accidents. Toilet blockages and accidentally damaged irrigation lines could allow localised surface surcharge of treated effluent. This is why minimum buffers to surface waters have been maintained. High BOD influent (e.g. dairy or orange juice) can realise a lesser quality than 20/30 standard for some weeks. Provided the high BOD influent is not continuous, the soils will continue to satisfactorily renovate the effluent.

1.4.12.3 Operational Breakdown. Operational failures including power outages and transient hydraulic overloading are accommodated by the load balancing facility, as described in Section 1.4.6, above.

1.4.12.4 Maintenance Breakdown. Maintenance breakdowns such as failure to clean line filters can lead to expensive pump repairs and in extreme cases leakage (of 20/30 standard effluent) from the outlet pipe. This leakage would occur in proximity to the facility and would be noticed and acted on.

Refusal to participate in the management programme would be acted on by the responsible authority within one maintenance cycle.

AWTS and pumped systems have mechanical components which can malfunction and will age. The management plan including the maintenance and monitoring programmes are essential to ensure safe onsite effluent disposal.

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[d] This is a conservatively high figure to demonstrate maximum possible flow rates. A conservatively low figure was used for calculation of effluent application rates (see recommendations) to demonstrate irrigation sustainability.

[e] Source: *Approaches for Risk Analysis of Development with On-site Wastewater Disposal in Open, Potable Water Catchments* (Dr Robert Edis April 2014).

1.4.13 Risk Summary. With regard to density of development and cumulative risk the assessment has considered risk associated with subsurface flows and surface flows.

In regard to subsurface flows, it is clear that provided the on-site system is adequately designed, constructed, operated and maintained (see items 1.4.1 through 1.4.12.4), the risk to surface and ground waters is negligible. Once the effluent is placed underground, the extraordinary long travel times via ground water to surface waters ensures adequate nutrient attenuation.

In regard to surface flows, it is clear that provided the on-site system is adequately designed, constructed, operated and maintained (see items 1.4.1 through 1.4.12.4), the risk to surface and ground waters is no greater than for a sewered development. Indeed, it could be considered that the risk is less than for a sewered development because there can be no mains failure (because there is no mains).

The LCA recommends a conservative, scientifically based, well founded wastewater management system with inherent multiple barriers of safety. Cumulative risk from the development is also extremely low. The risk of serious or irreversible damage is extremely low.

All requirements of *SEPP (Waters of Victoria)* have been met.

Figure 1: Land-soil unit A (proposed land application area) viewed from north to south.

SECTION 2. RECOMMENDATIONS

2.1 APPLICATION

The following recommendations are based on the results of our assessment, and are made in accordance with *SEPPs (Waters of Victoria),* the *Code of Practice - Onsite Wastewater Management,* E.P.A. Publication 891.4, July 2016, *AS 1726*, and *AS/NZS 1547:2012*.

They are based on the mean saturated hydraulic conductivity of the limiting clay materials and are designed to demonstrate the viability of on-site effluent disposal for a restaurant and a daily effluent production of up to 3,200 litres (load-balanced) and are considered to be conservative.

Note: The total site hydraulic load will consist of 3,200 litres (restaurant) plus 750 litres (residence) i.e. 3,950 litres.

2.2 SUBSURFACE IRRIGATION

2.2.1 General. Based on the results of the water balance analysis and considering the prevailing surficial and subsurface conditions including soil profile thickness[f] and slope and on condition that adequate site drainage is provided (as described in Section 2.4, below), on-site irrigation systems are appropriate for effluent disposal for land-soil unit A.

2.2.2 Effluent. Effluent will be generated from a restaurant and will include black and grey water (all wastes).

2.2.2.1 Effluent Quality. Effluent shall be treated by AWTS to a standard that meets or exceeds the water quality requirements of the 20/30 standard for BOD/SS.

2.2.2.2 Effluent Quantity. The daily effluent volume is a function of patronage, trading days and type of business. It is proposed to have a 150-seat restaurant, trading five days/week. As there is no water usage or patronage data, we are required to estimate conservative values from the Code.

For a restaurant with more than 50 seats, a wastewater allowance of 30 litres/seat is required. It is anticipated that peak trading (with multiple covers) would occur on Friday, Saturday and Sunday, significantly reduced covers would occur on Wednesday and Thursday. There would be no trading on Monday and Tuesday. On balance, trading days would realise 150 covers/day averaged over all five trading days.

For a 5-day trading week, the design load-balanced volume is 3,200 litres.

All effluent volumes have been calculated from *Code of Practice - Onsite Wastewater Management,* E.P.A. Publication 891.4, July 2016, Table 4 and assumes mains water (equivalent), out-sourced laundry and WELS-rated water-reduction fixtures and fittings – minimum 4 Stars for dual-flush toilets, aerator taps, flow/pressure control valves and minimum 3 Stars for all appliances.

For estimating grease trap and load-balance tank volumes we have adopted a peak daily flow of 9,000 litres (two covers).

2.2.2.3 Load Balancing. Transient hydraulic loads in excess of the expected daily peak load will occur (e.g. transient increases in patronage). In addition, and in the case of power outages and/or mechanical breakdown, the load balancing tank can act as a temporary storage.

The effluent treatment system must be fitted with a load balancing facility to allow transient high hydraulic loads to be retained and distributed to the land application area during periods of low load.

The load-balancing tank size is a function of 2 times (approximately) maximum daily peak flow plus ballast if required[g].

Hence, we recommend that the load-balancing tank be at least 25,000 litres with ballast.

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[f] Minimum 1400mm required for evapotranspiration-absorption trenches.

[g] Ballast would nominally be 1/4 required capacity (i.e. 5,000 litres).

2.2.2.4 BOD Reduction. The effluent treatment system will be required to process up to 4,285 grams BOD/day (load-balanced) (150x40x5/7). The effluent stream will pass through kitchen degreasing practices, triple stage grease trap, load-balancing tank and AWTS.

Typically, BOD reduction would be a minimum of 20% as kitchen practise, 60% through the grease trap and 30% in the balance tank (assuming 5,000 litre ballast) prior to the AWTS. Hence, the AWTS will typically need to treat about 960 grams BOD.

To satisfactorily reduce BOD, we recommend that the effluent stream pass through a triple interceptor grease trap and a 25,000 litre (including ballast) load-balance tank, prior to treatment in the plant.

2.2.2.5 Triple Stage Grease Trap. The triple stage grease trap needs to be sized in proportion to peak hourly waste flow. Hence, for a peak daily waste flow of 9,000 litres and a wash cycle of 3 to 4 hours the grease trap would need to be at least 2,250 to 3,000 litres capacity, allow 3,000 litres.

2.2.3 Application Rates and Irrigation Areas. An irrigation area and application rate has been determined from the results of the water and nutrient balance analyses and *AS/NZS 1547:2012, Appendix M*.

2.2.3.1 Hydraulic Loading. To satisfy the requirement for no surface discharge in the mean wet year, effluent shall be applied at an application rate not exceeding 1.9mm/day.

2.2.3.2 Nutrient Loading. The requirements of *SEPPs (Waters of Victoria)* would be satisfied with effluent applied at an application rate not exceeding 2.5mm/day.

2.2.3.3 Design Loading. To satisfy the requirement for no surface discharge in the mean wet year and on-site attenuation of nutrients, the effluent shall be applied at a rate not exceeding **1.9mm/day**.

2.2.4 General Requirements. For subsurface irrigation, it is assumed that the design, construction, operation and maintenance are carried out in accordance with *AS/NZS1547:2012* and a "system specific" JAS/ANZ accreditation, as appropriate.

The irrigation area is to be a dedicated area. To prevent stock and vehicular movements over the area, the effluent area shall be "fenced".

Note: The irrigation area will be confined in an existing fenced paddock.

2.2.5 Subsurface Distribution System. A distribution network design similar to that shown in *AS/NZS1547:2012, Figure M1* is appropriate.

2.2.5.1 Ground Preparation and Excavations. Preparation of the ground is to include the redistribution of topsoil to form a free draining, smooth surface. Pipe excavations shall only be undertaken in drier periods when soil moisture contents are relatively low and when heavy rainfall and storms are not normally expected (see also, Section 2.2.8, below).

2.2.5.2 Pump System and Pipe works. Uniform delivery pressure of the effluent throughout the distribution system is essential. Percolation or drip rates shall not vary by more than 10% from the design rate over the whole of the system (i.e. pressure compensated).

The distribution pipes shall be placed coincident with slope contours. The dripper system is to provide an effective even distribution of effluent over the whole of the design area. Line spacing shall be no closer than 1000mm.

2.2.6 Sequential Zoned Irrigation. The efficiency of irrigation effluent disposal systems can be highly variable. We recommend that as part of the daily irrigation process, the effluent area be irrigated sequentially by zones to promote the creation of transient aerobic and anaerobic soil conditions.

The inspection regime described in Section 2.2.7, below, is to be strictly adhered to.

2.2.7 Inspections and Monitoring. We recommend that the mandatory testing and reporting as described in the *Code of Practice - Onsite Wastewater Management,* E.P.A. Publication 891.4, July 2016, include an annual (post spring)

report on the functioning and integrity of the distribution system and on the functioning and integrity of the cut-off drains and outfall areas.

It is expected that the frequency of inspections and monitoring will intensify as systems age.

We recommend that the daily waste flow is metered and recorded against patronage.

2.2.8 Soil Renovation. To improve the subsoil permeability and to maintain stable soil peds, the exchangeable Calcium needs to be increased.

Application rates are related to water (irrigation and mean rainfall) available to dissolve the gypsum. The water required to dissolve 1 kilogram of gypsum is about 400 litres.

In this instance, where irrigation water is expected to be continuous, available water is sourced from mean rainfall plus irrigation water.

A suitable amelioration technique is to initially regrade the surface of the land application area by redistribution of topsoil to create a smooth and free draining surface.

Gypsum should be broadcast over the land application area at the rate to be determined from laboratory tests, followed by smoothing of the surface.

After one-month (April through October) or two months (November through March) gypsum should be broadcast over the land application area at the rate of 0.25kg/m^2 for a total of 3 cycles (determined from laboratory tests).

We recommend that the subsoil of the land application area be assayed every five years to determine further application rates.

Gypsum is to be fine ground “Grade 1” agricultural quality.

2.2.9 AWTS. It is assumed that the design, construction, operation and maintenance of all treatment elements are carried out in accordance with *AS/NZS1547:2012* and a current JAS-ANZ accreditation.

The AWTS is to be sized to successfully treat a daily hydraulic load of 3,200 litres and a nutrient load of 960.grams BOD for ballasted load balance tanks.

2.3 RESERVE AREA

The expected design life of fifteen years may vary due to construction and maintenance vagaries and possible effluent volume increases through the chain of ownership.

There is sufficient available area on the allotment for duplication of the effluent area.

2.4 SITE DRAINAGE.

Our recommendations for on-site effluent disposal have allowed for incident rainfall only and are conditional on the installation of a shallow cut-off drain, which shall be placed upslope of the disposal area.

Care shall be taken to ensure that the intercepted and diverted surface waters are discharged well away and down slope of the disposal field.

Locations of the cut-off drains and a drain detail are shown in Drawings 2 and 3.

The owner shall also ensure that any upslope site works do not divert and/or concentrate surface water flows onto the disposal area.

2.5 BUFFER DISTANCES

The water balance analysis has shown that potential surface (rain water) flows from the effluent area would be restricted to episodic events.

The estimated hydraulic properties of the upper soil materials and hydraulic gradient have been used to evaluate (via Darcy's Law) the buffer distances with respect to subsurface flows.

Our analysis and evaluation have shown that the default setback distances given in *Code of Practice - Onsite Wastewater Management,* E.P.A. Publication 891.4, July 2016, Table 5 and *Approaches for Risk Analysis of Development with On-site Wastewater Disposal in Open, Potable Water Catchments,* Dr Robert Edis, April 2014 are conservative and can be applied without amendment.

For a building located downslope of an effluent field, your engineer shall evaluate the integrity of building foundations with respect to the assigned buffer distance.

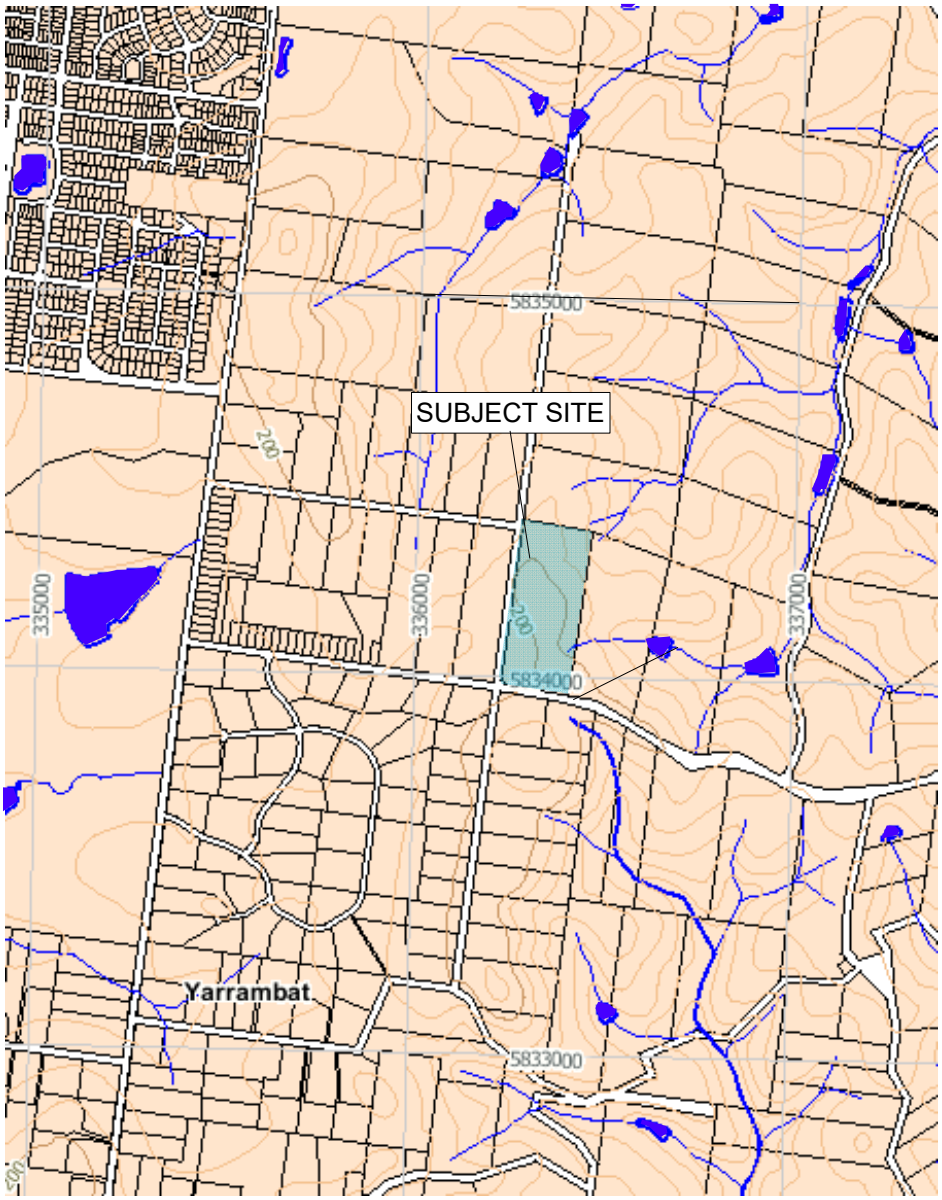
2.6 SUMMARY OF RECOMMENDATIONS

Our capability assessment has shown that at least one rational and sustainable on-site effluent disposal method (20/30 standard subsurface irrigation) is appropriate for the proposed development, subject to specific design criteria, described above.

A management plan is presented in Appendix D, to this report.

Paul R. WILLIAMS B.App.Sc.
PRINCIPAL HYDROGEOLOGIST
Building Practitioner No. EC-1486

Paul Williams & Associates Pty Ltd



LOCATION OF SUBJECT SITE		
103 BANNONS LANE, YARRAMBAT		
JIM MISSAILIDIS		
Scale: 1:20,000	Drawn: P.R.W.	Report Number: A200303
Contour Interval: 10m	Date: March 2020	Drawing Number: 1

SUFFICIENT AREA EXISTS FOR DUPLICATION OF EFFLUENT IRRIGATION AREA DUE TO CONTINGENCIES THROUGH THE CHAIN OF OWNERSHIP

Paul Williams & Associates Pty Ltd

1,700m² PRIMARY IRRIGATION AREA

AWTS & BALANCE-TANK

PROPOSED RESTAURANT

CUT-OFF DRAIN SEE DRAWING 3

EXISTING COTTAGE (EFFLUENT SYSTEM DECOMMISSIONED)

EXISTING RESIDENCE (SEPARATE, FUNCTIONAL EFFLUENT SYSTEM)

5m

SLOPE < 10%

SLOPE > 10%

SLOPE > 10%

BH1

BH2

BH3

BH4

BH5

BH6

No.103
LOT 1 ON LP99800
0.0800ha

No.103
LOT 1 ON LP99800
8.0680ha
DOUBLE STOREY WEATHERBOARD DWELLING

HENTY AVENUE

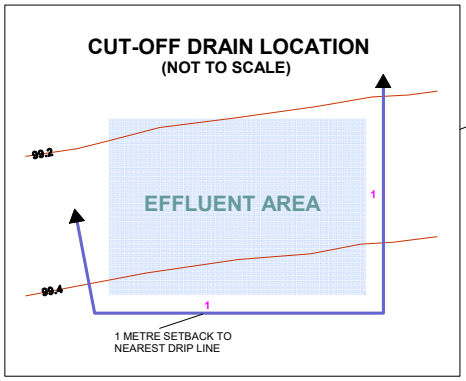
EDWARD AVENUE

EDGE OF BITUMEN ROAD

0 20 40 60 80 100
SCALE OF METRES

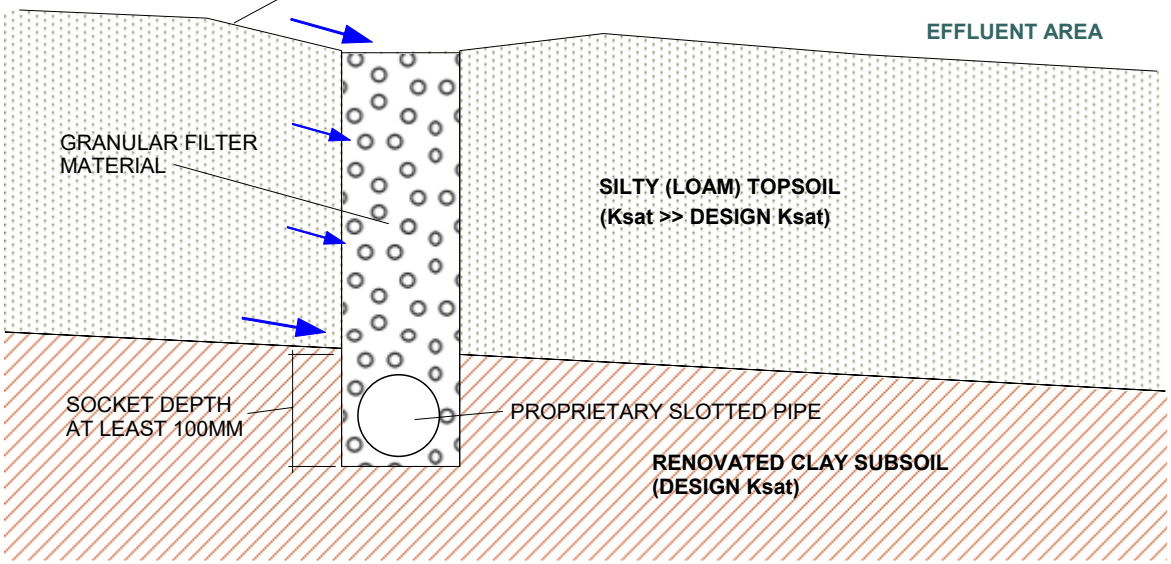
FEATURE SURVEY SUPPLIED BY ADEPT SURVEYS PTY LTD

LOCATION OF PROPOSED DEVELOPMENT SHOWING CONTOURS		
103 BANNONS LANE, YARRAMBAT		
JIM MISSAILIDIS		
Scale: 1:1,000	Drawn: P.R.W.	Report Number: A200303
Contour Interval: 1m	Date: March 2020	Drawing Number: 2



NOTE: CUT-OFF DRAIN LOCATION IS SCHEMATIC ONLY. FINAL LOCATION TO BE DETERMINED BY DESIGN ENGINEER AS PART OF SITE DRAINAGE DESIGN.

SURFACE REGRADED BY CUTTING TO FACILITATE COLLECTION OF SURFACE FLOWS - DEGREE OF CUT SLOPE LIMITED BY REQUIREMENTS FOR SAFE & EFFICIENT MOWING/MAINTENANCE



NOTES:
1. DRAIN TO BE DESIGNED, CONSTRUCTED & MAINTAINED TO ENSURE THAT NO SURFACE & PERCHED GROUNDWATER FLOWS ENTER THE IRRIGATION AREA.
2. DRAIN TO BE LOCATED ON ALL UPSLOPE SIDES OF IRRIGATION AREA (NO CLOSER THAN 1m FROM NEAREST SUBSURFACE DISTRIBUTION LINE).
3. DRAIN TO HAVE UNSPECIFIED FALL.
4. MINIMUM SOCKET DEPTH OF 100mm INTO CLAY SUBSOIL (WHERE ENCOUNTERED) OR AT LEAST 300mm DEEP.
5. DRAIN CROSS SECTIONAL AREA RELATED TO DESIGN FLOWS AS DETERMINED BY A SUITABLY QUALIFIED AND EXPERIENCED ENGINEER.
6. OFF-SITE DRAIN OUTFALL TO LEGAL POINT OF DISCHARGE SUBJECT TO LOCAL AUTHORITY REQUIREMENTS.
7. ON-SITE DRAIN OUTFALL TO INCLUDE APPROPRIATE ENERGY DISSIPATION TO AVOID EROSION.
8. ALL DRAINS AND OUTFALL AREAS SUBJECT TO POST-SPRING INSPECTION.

NOTE: DRAWING NOT TO BE USED FOR SET-OUT PURPOSES

CUT-OFF DRAIN DETAIL FOR 20/30 STANDARD EFFLUENT IRRIGATION FIELDS

DUPLEX/GRADATIONAL SOIL PROFILES

JIM MISSAILIDIS

Scale: 1:10 (Approximately)	Drawn: P.R.W.	Report Number: SPEC 014
Contour Interval: N/A	Date: March 2020	Drawing Number: 3

APPENDICES

APPENDIX A1
SOIL PERMEABILITY

The *in-situ* permeability tests were attempted on 31st March 2020.

The field testing was abandoned due to spontaneous dispersion of the soil clay fraction.

Where the soils are dispersive *insitu* permeability testing realises inaccurate, low or nil results.

The hydraulic conductivity can be estimated by using test waters containing calcium chloride and/or by laboratory assessment of colloid stability and determination of ameliorant quantities (e.g. gypsum/lime requirement) and swell potential.

A conservative estimate of permeability has been deduced as follows (see Code 3.6.1):-

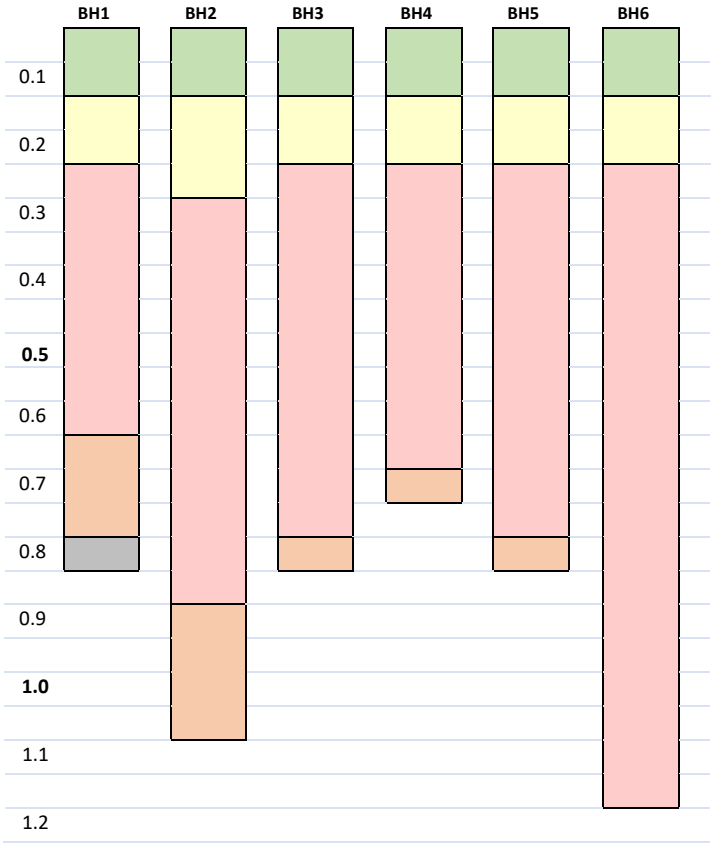
Profile analysis in accordance with AS/NZS 1547:2012 and our laboratory determined dispersion and swell potential shows the residual clay soils (and clay fractions) to be dispersive. They are therefore by definition Category 6 soils with saturated hydraulic conductivity less than 0.06m/day.

Similar dispersive soils have responded positively (with sufficiently improved hydraulic capability) following applications of gypsum.

For the limiting poorly-moderately structured clay and assuming renovation by gypsum application we have adopted an estimated and conservative design saturated hydraulic conductivity of 0.030m/day.

Peak deep seepage is conservatively estimated at 3mm/day (<10% k_{sat}). Average daily deep seepage is 1.6mm.

APPENDIX A2
LOGS OF BOREHOLES



SILT; light grey-brown, some fine sand, (**loam**) **TOPSOIL**

Clayey SILT; light brown, trace fine to coarse sand, dispersive clay fraction, (**loam**) **SLOPEWASH**

Silty CLAY; t orange-brown, low plasticity, dispersive (**light clay**) **RESIDUAL SOIL**.

Silty CLAY; orange-brown, low plasticity, dispersive (**light clay**) **EW SILTSTONE**.

Extremely weathered siltstone (silty clay) with fragments of highly weathered siltstone.

For locations of boreholes refer Drawing 2.
All boreholes terminated at refusal.

APPENDIX A3
SOIL PROFILE PHOTOGRAPHS

BOREHOLE BH1.

BOREHOLE BH 2.

BOREHOLE BH 3.

BOREHOLE BH5

BOREHOLE BH 6.

APPENDIX A4
SUMMARY OF LABORATORY TEST RESULTS

COMPOSITE RESIDUAL CLAY PROFILE

Property	LAND-SOIL UNIT A			
Depth (average)	0-10cm	10-20cm	20+cm	Desirable
Horizon	A_1	A_2	B	-
pH	5.6-5.8	6.1	6.0-6.3	-
EC (dS/m)	0.36-0.40	0.20-0.26	0.10-0.20	-
Exchangeable Sodium %	-	-	TBA	0.5%–5%
Exchangeable Magnesium %	-	-	TBA	12%-15%
Exchangeable Calcium %	-	-	TBA	65%-70%
CEC ($cmol^+/kg$)	-	-	TBA	15+
Calcium/Magnesium Ratio	-	-	TBA	2-4
Gypsum Req (t/ha)	-	-	TBA	-
Lime Req (t/ha)	-	-	TBA	-
Dolomite Req (t/ha)		-	TBA	
Emerson	5	2	1, 2	-
Dispersion Index	0	12	12-14	-
Free Swell (%)	0	0-5	0-50	-
Ksat (m/day)[1]	<0.6	<0.06	<0.06	-
Soil Permeability Category[1]	4	4/6	6	-
AS/NZS 1547 Classification	loam	loam	light clay	-

1. After renovation including gypsum application. Estimated by visual tactile methods, AS/NZS1547, AS1289 and database or by insitu measurement as shown.

All test results in green highlight from SWEP Analytical Laboratories.
All test results in blue highlight from in-house laboratory.

APPENDIX B

Paul Williams & Associates Pty Ltd A200303

WATER/NITROGEN BALANCE (20/30 irrigation): With no wet month storage.

Rainfall Station: Eltham/ **Evaporation Station:** Yan Yean Reservoir

Location: Yarrambat
Date: March, 2020
Client: Jim Missailidis

ITEM	UNIT	#	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR
Days in month:		D	31	28	31	30	31	30	31	31	30	31	30	31	365
Evaporation (Mean)	mm	A	182	154	119	78	45	31	37	52	71	109	130	161	1180
Rainfall (Mean)	mm	B1	48	51	53	62	66	60	58	62	67	71	71	65	742
Effective rainfall	mm	B2	38	41	42	50	52	48	46	50	54	57	57	52	587
Peak seepage Loss[1]	mm	B3	93	84	93	90	93	90	93	93	90	93	90	93	1095
Evapotranspiration(IXA)	mm	C1	82	69	54	35	20	14	17	23	32	49	59	72	526
Waste Loading(C1+B3-B2)	mm	C2	137	112	104	75	61	56	63	67	68	85	92	113	1034
Net evaporation from lagoons (10(0.8A-B1xlagoon area(ha)))	L	NL	0	0	0	0	0	0	0	0	0	0	0	0	0
Volume of Wastewater	L	E	99200	89600	99200	96000	99200	96000	99200	99200	96000	99200	96000	99200	1168000
Total Irrigation Water(E-NL)/G	mm	F	58	53	58	56	58	56	58	58	56	58	56	58	687
Irrigation Area(E/C2)annual.	m^2	G													**1700**
Surcharge	mm	H	-79	-60	-46	-19	-2	0	-5	-8	-12	-27	-35	-55	0
Actual seepage loss	mm	J	14	24	47	71	91	90	88	85	78	66	55	38	748
Direct Crop Coefficient:		I	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	Shade:

Rainfall Retained:	80 %	K	1. Seepage loss (peak) equals deep seepage plus lateral flow: 3mm (after renovation)												
Lagoon Area:	0 ha	L	CROP FACTOR												
Wastewater(Irrigation):	3200 L	M	0.7	0.7	0.7	0.6	0.5	0.45	0.4	0.45	0.55	0.65	0.7	0.7	Pasture:
Seepage Loss (Peak):	3 mm	N	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	Shade:
Irrig'n Area(No storage):	**1700** m^2	P2	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	Buffalo:
Application Rate:	**1.9** mm	Q	1	1	1	1	1	1	1	1	1	1	1	1	Woodlot
Nitrogen in Effluent:	30 mg/L	R	NITROGEN UPTAKE:												
Denitrification Rate:	20 %	S													
Plant Uptake:	220 kg/ha/y	T													
Average daily seepage:	2.0 mm	U													
Annual N load:	28.03 kg/yr	V													
Area for N uptake:	**1274** m^2	W													
Application Rate:	2.5 mm	X													

Species:	Kg/ha.yr	pH	Species:	Kg/ha.yr	pH	Species:	Kg/ha.yr	pH
Ryegrass	200	5.6-8.5	Bent grass	170	5.6-6.9	Grapes	200	6.1-7.9
Eucalyptus	90	5.6-6.9	Couch grass	280	6.1-6.9	Lemons	90	6.1-6.9
Lucerne	220	6.1-7.9	Clover	180	6.1-6.9	C cunn'a	220	6.1-7.9
Tall fescue	150-320	6.1-6.9	Buffalo (soft)	150-320	5.5-7.5	P radiata	150	5.6-6.9
Rye/clover	220		Sorghum	90	5.6-6.9	Poplars	115	5.6-8.5

PART 2

RAINFALL DATA

Station: Eltham **Number:** 86035 **Opened:** 1906 **Now:** Open
Lat: 37.70° S **Lon:** 145.15° E **Elevation:** 35 m

Statistic	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Mean	47.5	51.2	53.1	62.2	65.6	59.6	57.7	62.3	67.0	71.0	71.0	65.0	742.1
Lowest	0.0	0.0	5.4	0.0	3.5	14.8	17.0	14.5	12.7	4.6	14.5	5.1	414.0
5th %ile	5.3	2.7	6.3	15.9	19.1	25.2	22.8	22.5	21.0	22.5	21.7	17.7	513.6
10th %ile	12.3	7.2	13.7	20.3	23.4	32.6	31.9	25.0	36.0	27.9	25.7	20.0	530.9
Median	43.5	39.1	44.4	53.7	62.0	53.5	52.2	57.6	59.2	64.4	67.1	57.0	738.3
90th %ile	83.7	117.4	111.4	115.8	107.4	98.1	91.1	96.5	107.9	115.2	124.3	123.8	951.4
95th %ile	93.9	157.4	127.2	125.6	136.4	112.1	107.3	105.5	133.7	128.0	146.6	134.4	1005.4
Highest	229.8	208.6	188.1	214.7	175.9	177.0	137.0	135.9	190.3	201.2	195.7	209.6	1148.0

APPENDIX C

LAND CAPABILITY ASSESSMENT TABLE
(Non-potable catchments)

LAND FEATURE	LAND CAPABILITY RISK RATING				AMELIORATIVE MEASURE & RISK REDUCTION
	LOW	MEDIUM	HIGH	LIMITING	
Available land for LAA	Exceeds LAA and duplicate LAA requirements	Meets LAA and duplicate LAA requirements	Meets LAA and partial duplicate LAA requirements	Insufficient LAA area	Limiting for trenches & beds: Insufficient area available. Non-limiting for subsurface irrigation: Full reserve area available
Aspect	North, north-east and north-west	East, west, south-east, south-west	South	South, full shade	Northerly aspect.
Exposure	Full sun and/or high wind or minimal shading	Dappled light (partial shade)	Limited light, little wind to heavily shaded all day	Perpetual shade	Partial shade from nearby trees.
Slope Form	Convex or divergent side slopes	Straight sided slopes	Concave or convergent side slopes	Locally depressed	Regrade finished LAA surface by smoothing and redistribution of topsoil.
Slope gradient:					
Trenches and beds	<5%	5% to 10%	10% to 15%	>15%	5% to 10%: Non-limiting for trenches.
Subsurface irrigation	<10%	10% to 30%	30% to 40%	>40%	5% to 10%: Non-limiting for irrigation.
Site drainage: runoff/run-on	LAA backs onto crest or ridge	Moderate likelihood	High likelihood	Cut-off drain not possible	Cut-off drain required upslope.
Landslip[8]	Potential	Potential	Potential	Existing	Unremarkable
Erosion potential	Low	Moderate	High	No practical amelioration	If undisturbed. Well vegetated soils, stabilised with gypsum (all runoff to be dispersed without concentrating flows).
Flood/inundation	Never		<1%AEP	>5% AEP	Unremarkable
Distance to surface waters (m)	Buffer distance complies with Code requirements		Buffer distance does not comply with Code requirements	Reduced buffer distance not acceptable	LAA located at least 100m from watercourse (see Drawing 1).
Distance to groundwater bores (m)	No bores on site or within a significant distance	Buffer distances comply with Code	Buffer distances do not comply with Code	No suitable treatment method	Groundwater bores at 280m distant.
Vegetation	Plentiful/healthy vegetation	Moderate vegetation	Sparse or no vegetation	Propagation not possible	Recommend over-sowing with rye/clover.
Depth to water table (potentiometric) (m)	>2	2 to 1.5	<1.5	Surface	Water 20+m.
Depth to water table (seasonal perched) (m)	>1.5	<0.5	0.5 to 1.5	Surface	Perching probable. (Install cut-off drain and design LAA for limiting clay soils)
Rainfall[9] (9th decile) (mm)	<500	500-750	750-1000	>1000	Non-limiting for trench systems. Non-limiting for subsurface irrigation - Design by water balance.
Pan evaporation (mean) (mm)	1250 to 1500	1000 to 1250	750 to 1000	<750	Design by water balance.
SOIL PROFILE CHARACTERISTICS					
Structure	High or moderately structured	Weakly structured	Structureless, massive or hardpan		Improve and maintain structure by gypsum application.
Fill materials	Nil or mapped good quality topsoil	Mapped variable depth and quality materials	Variable quality and/or uncontrolled filling	Uncontrolled poor quality/unsuitable filling	No significant fill encountered.
Thickness: (m)					
Trenches and beds	>1.4		<1.4	<1.2	Limiting for trench systems.
Subsurface irrigation	1.5+	1.0 to 1.5	0.75 to 1.0	<0.75	Non-limiting for irrigation systems.
Permeability[10] (limiting horizon) (m/day)	0.15-0.3	0.03-0.15 0.3-0.6	0.01-0.03 0.6-3.0	>3.0 <0.03	After renovation; design by water balance
Permeability[11] (buffer evaluation) (m/day)	<0.3	0.3-3	3 to 5	>5.0	Evaluate flow times via Darcy's Law (assume 1m/day for metasediments)
Stoniness (%)	<10	10 to 20	>20		Unremarkable
Emerson number	4, 5, 6, 8	7	2, 3	1	Dispersive: Limiting for trenches, non-limiting for irrigation.
Dispersion Index	0	1-8	8-15	>15	Dispersive: Limiting for trenches, non-limiting for irrigation.
Reaction trend (pH)	5.5 to 8	4.5 to 5.5	<4.5>8		Suitable range.
E.C. (dS/m)	<0.8	0.8 to 2	2-4	>4.0	Non-limiting for trench systems. Non-limiting for irrigation.
Exchangeable Na (%)	<5	5 to 10	10-15	>15	TBA: Lower to less than 5%.
Exchangeable Mg (%)	12-15	15 to 25	25-35	35+	TBA: Lower to less than 15%
Exchangeable Ca (%)	65-70	40-65	20-40	<20	TBA: Raise to at least 40%.
Adjusted CEC	15+	10 to 15	5 to 10	<5	TBA
Free swell (%)	<30	30-80	80-120	>120	Low-swelling clay fraction.

There are limiting factors for primary effluent trench systems (rainfall and available area).

There are no limiting factors for secondary effluent subsurface irrigation.

[8] Landslip assessment based on proposed hydraulic loading, slope, profile characteristics and past and present land use.
[9] Mean monthly rainfalls used in water balance analyses.
[10] Saturated hydraulic conductivity from *insitu* testing and data base.
[11] Saturated hydraulic conductivity estimated from AS/NZS1547:2012 and data base.

APPENDIX D

MANAGEMENT PLAN

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A200303-MARCH 2020

MANAGEMENT PLAN FOR ON-SITE EFFLUENT DISPOSAL VIA SUBSURFACE IRRIGATION AT 103 BANNONS LANE, YARRAMBAT

1. INTRODUCTION

This document identifies the significant land-soil unit constraints (as identified in A200303) and their management and day-to-day operation and management of the on-site effluent system.

2. SIGNIFICANT LAND-SOIL UNIT CONSTRAINTS

2.1 Allotment Size. The day-to-day operation and management of on-site effluent systems, as described below, is not constrained by lot size or geometry.

Although all requirements of *SEPPs* have been met or exceeded through conservative design, prudence dictates that individual lot owners assiduously follow the management programme given in Section 4, below.

2.2 Nitrogen Attenuation. To reduce nitrates to insignificant levels, the effluent should not contain more than 30mg/litre total nitrogen.

Provided the irrigation areas are at least as large as those required to satisfy the nitrogen loading, as described in A200303 Sections 1.3.1.13, 1.3.2.13 and 2.2.3.2, and that the (specified) grass is cut and (periodically) harvested, nitrogen will be attenuated on-site.

2.3 Hydraulic Conductivity. The soils of this site are dispersive and low swelling clays with a low hydraulic conductivity. The hydraulic conductivity is significantly influenced by soil structure, soil colloid stability and swell characteristics. Breakdown or reduction of these soil parameters over time may manifest as reduced performance of the irrigation system. The monitoring and inspection regime detailed in Section 4.7.2, below, should be adhered to.

2.4 Site Drainage. Our recommendations for on-site effluent disposal have allowed for incident rainfall (not surface flow or lateral subsurface flow) and are conditional on the installation of a cut-off drain, which should be placed upslope of the disposal area. Care should be taken to ensure that the intercepted and diverted surface waters and any perched groundwater is discharged well away and down slope of the disposal field (see Drawing 3).

The owner should also ensure that any upslope works do not divert and/or concentrate surface water flows onto the disposal area.

2.5 Vegetation. The effluent disposal areas have been sized via water balance analyses utilising crop factors for pasture (rye/clover mix).

3. THE ONSITE EFFLUENT SYSTEM

The onsite effluent system consists of the influent (toilets, kitchen), a triple-stage grease interceptor, a load balancing tank, the treatment plant (a device to treat the effluent to at least the 20/30 standard), the irrigation area including effluent distribution system (delivery pipes and drippers), prescribed irrigation area vegetation, associated infrastructure (cut-off drains, outfall areas, fencing), a service and maintenance programme and on-going management.

4. MANAGEMENT

The owner is required to understand (and ensure that users understand) that sustainable operation of the onsite effluent system is not automatic. Sustainable operation requires on-going management, as outlined below.

4.1 Effluent. Effluent will be generated from a residence and will include black and grey water (all wastes).

4.1.2 Effluent Quality. Effluent should be treated to a standard that meets or exceeds the water quality requirements of the 20/30 standard.

4.1.3 Effluent Quantity. The daily effluent volume of 3,200 litres has been calculated from *Code of Practice - Onsite Wastewater Management,* E.P.A. Publication 891.4, July 2016, Table 4 and assumes mains water supply (equivalent) and WELS-rated water-reduction fixtures and fittings – minimum 4 Stars for dual-flush toilets, aerator taps, flow/pressure control valves and minimum 3 Stars for all appliances.

4.2 Treatment. It is assumed that the design, construction, operation and maintenance of all treatment elements are carried out in accordance with *AS/NZS1547:2012* and a current JAS-ANZ accreditation.

The AWTS is to be sized to successfully treat a daily hydraulic load of 3,200 litres and a nutrient load of up to 960grams BOD.

4.3 Irrigation Area. The irrigation area has been determined from the results of the water and nutrient balance analyses and AS/NZS 1547:*2012*, *Appendix M*.

4.3.1 Effluent Area Requirement. For a daily effluent flow of 3,200 litres and to satisfy the requirement for no surface rainwater flow in the mean wet year and on-site attenuation of nutrients, the effluent should be applied to an irrigation area of 1,700m^2.

Effluent distribution is as detailed in Section 4.3.2, below.

In case of an increase in effluent production through the chain of ownership, there is sufficient area available for duplicating the irrigation areas.

Any landscaping and/or planting proposals require endorsement from the Nillumbik Shire Council.

4.3.2 Distribution System. The distribution system must achieve controlled and uniform dosing over the irrigation area. A small volume of treated effluent should be dosed at predetermined time intervals throughout the day via a pressurised piping network that achieves uniform distribution over the entire irrigation area.

Uniform delivery pressure of the effluent throughout the distribution system is essential. Drip rates should not vary by more than 10% from the design rate over the whole of the system.

To minimise uneven post-dripper seepage, the distribution pipes must be placed parallel with slope contours.

Line spacing shall be not closer than 1000mm under any circumstances.

To facilitate the creation of transient aerobic and anaerobic soil conditions we recommend that as part of the daily irrigation process, the effluent area be irrigated sequentially by zones or time.

4.3.3 Soil Renovation. To improve the subsoil permeability and to maintain stable soil peds, the exchangeable Calcium needs to be increased.

Application rates are related to water (irrigation and mean rainfall) available to dissolve the gypsum. The water required to dissolve 1 kilogram of gypsum is about 400 litres.

In this instance, where irrigation water is expected to be continuous, available water is sourced from mean rainfall plus irrigation water.

A suitable amelioration technique is to initially regrade the surface of the land application area by redistribution of topsoil to create a smooth and free draining surface.

Gypsum should be broadcast over the land application area at the rate to be determined from laboratory tests, followed by smoothing of the surface.

After one-month (April through October) or two months (November through March) gypsum should be broadcast over the land application area at the rate of 0.25kg/m^2 for a total of 3 cycles (determined from laboratory tests).

We recommend that the subsoil of the land application area be assayed every five years to determine further application rates.

Gypsum is to be fine ground “Grade 1” agricultural quality.

4.3.4 Buffer Distances. The water balance analysis has shown that potential surface rainwater flows from the effluent area would be restricted to episodic events.

The estimated hydraulic properties of the upper soil materials and hydraulic gradient (equivalent to the ground slope and regional gradients) have been used to evaluate (via Darcy’s Law) the buffer distances with respect to subsurface flows.

Our analysis and evaluation have shown that the default setback distances given in *Code of Practice - Onsite Wastewater Management,* E.P.A. Publication 891.4, July 2016, Table 5 are conservative and can be applied without amendment.

For a building located downslope of an effluent field, your engineer should evaluate the integrity of building foundations with respect to the assigned buffer distance.

Buffer distances are to be applied exclusive of the irrigation area.

4.3.5 Buffer Planting. All downslope (Title inclusive) buffers may be required to filter and renovate abnormal surface discharges. Hence, they are to be maintained with existing or equivalent groundcover vegetation.

4.3.6 Buffer Trafficking. On all allotments, buffer trafficking should be minimised to avoid damage to vegetation and/or rutting of the surface soils.

Traffic should be restricted to ‘turf’ wheeled mowing equipment and to maintenance, monitoring and inspections by pedestrians, where possible.

4.4 Vegetation. The system design for on-site disposal includes the planting and maintenance of suitable vegetation, as specified in A200303 and/or similar documents.

Specifically, this irrigation area has been sized (in part) utilising crop factors and annual nitrogen uptake for a rye/clover eq mix.

The grass needs to be harvested (mown and periodically removed from the irrigation area).

Where a variation to recommended grass species is proposed, it must be demonstrated that the nitrogen uptake and crop factors (as specified in A200303 Appendix B – water balance) are met or exceeded.

4.5 Verification. The Council is to be satisfied that the effluent system has been constructed as designed.

4.6 Associated Infrastructure. The following items are an integral part of the onsite effluent system.

4.6.1 Cut-off drains. Cut-off drains are designed to prevent surface and near-surface water flows from entering the effluent area. They should be constructed and placed around the effluent area, as detailed in Drawings 2 and 3.

4.6.2 Outfall areas. All pipe outfalls should be at grade and designed to eliminate scour and erosion.

A grassed outfall would normally be adequate. However, should monitoring and inspections reveal rill or scour formation, the outfall will need to be constructed so that energy is satisfactorily dissipated.

Should this situation occur, professional advice is to be sought.

4.6.3 Fencing. The disposal area is to be a dedicated area. Adequate fencing must be provided to prevent stock, excessive pedestrian and vehicular movements over the area.

4.7 Service and Maintenance Programme. The minimum requirements for servicing and maintenance are set out in the relevant the JAS-ANZ accreditation and the manufacturer's recommendations.

4.7.1 Treatment Plant. Aerated treatment plants and sand filters should be serviced at least one time per year (or as recommended in the JAS-ANZ accreditation and the effluent should be sampled and analysed as required by the JAS-ANZ accreditation. The local authority is to ensure compliance.

The manufacturer's recommendations are to be followed. Generally, low phosphorous and low sodium (liquid) detergents should be used. Plastics and other non-degradable items should not be placed into the tanks. Paints, hydrocarbons, poisons etc should not be disposed of in sinks or toilets. Advice from a plumber should be obtained prior to using drain cleaners, chemicals and conditioners. It is important to ensure that grease does not accumulate in the tanks or pipes. Grease and similar products should be disposed of by methods other than via the on-site effluent system.

4.7.2 Monitoring and Inspections. We recommend that the mandatory testing and reporting as described in the *Code of Practice - Onsite Wastewater Management,* E.P.A. Publication 891.4, July 2016, include an annual (post spring) and post periods of heavy and/or prolonged rainfall report on the functioning and integrity of the distribution system and on the functioning and integrity of the cut-off drains, outfall areas and soil media.

The effluent areas should be regularly inspected for excessively wet areas and vegetation integrity.

We recommend that the daily waste flow is metered and recorded against patronage.

The inspection regime described in A200303, Section 2.2.7, should be strictly adhered to.

4.7.3 Grease and Oil Reduction. Restaurant kitchen wastewater usually contains high levels of food waste, grease and oils. If grease and oils or food solids reach your treatment plant they will permanently damage the plant so that it no longer functions to dispose of wastewater. This leads to costly repairs and/or replacement. You can help protect your treatment plant by following simple kitchen procedures.

4.7.3.1 Plate and Cookware Pre-clean. Plates and cookware need to be thoroughly scraped to remove all food waste, especially cooking oils and creamy sauces and gravies which are high in grease, before rinsing dishes. Thorough scraping of dishes will prevent the majority of grease in your waste stream from entering your septic system.

Absorb room temperature liquid oils with bread waste and dispose as solid waste off site.

4.7.3.2 Water Conservation. Restaurant kitchens produce surge water flows during mealtime dishwashing periods. Surge water loads push wastewater through the grease trap too rapidly for grease to separate. Water conservation helps prevent surge loading.

4.7.3.3 Detergents. Select detergents that are formulated to release oil quickly so that it can rise to the water surface instead of remaining emulsified.

4.7.3.4 Solvents, Cleaners and Disinfectants. Solvents and cleaners can cause grease to become emulsified and be carried past the grease trap to the treatment plant. Excess use of disinfectants reduces bacterial action in the treatment system which in turn reduces treatment of wastewater.

4.7.4 Grease Trap. The recommended triple interceptor grease trap must be regularly inspected and cleaned. Only solids and surface oils should be removed. The water should be retained in the chambers.

Paul R. WILLIAMS B.App.Sc.
PRINCIPAL HYDROGEOLOGIST
Registered Building Practitioner EC1486

This document has 32 pages

12 November, 2019

Nillumbik Council
(Statutory Planning)
34 Civic Drive,
Greensborough, Vic. 3088

Subject: **Planning Permit Application**
Planning & Environment Act, 1987
Nillumbik council (statutory planning)
Rural Land: LP099600 (Lot No: 1) refers
103 Bannons Lane, Yarrambat, Vic. 3091
Applicant: Dimitrius Missailidis

Attention: Tyson McAdie:

SITUATION

Subject to discussions held, including a site inspection (pre-application meeting) No.1 undertaken on 5 September, 2019, with Tyson McArdie, Daniel Sadler Anita Zmak, this is an application seeking approval for a planning permit for building and works associated with the development & change of use of an out-building (farm shed to restaurant) in direct association with sustained agricultural use on rural land (8.09371 hectares or 20 acres) situated at 103 Bannons Lane, Yarrambat, Vic. 3091.

Appendix 1

PROPOSAL

This proposal also seeks permission for the sale and consumption of liquor in association with a restaurant use on this site, with proposed agriculture use, adjacent to Edward Henty Avenue, Yarrambat - **no impacts of any nature apply!**

Refer site plans & photographs attached
Appendices 2 & 6

This proposal is consistent with planning policy, with some building and works required to be undertaken on this rural land, located within a Rural Conservation Zone (RCZ). Also, the objectives set in place within the Nillumbik council Planning Scheme.

In particular, council's objective under the planning scheme to manage land use change and development in rural areas **"to promote agriculture and rural production".**

Clause 11.05 refers.

BACKGROUND

This land parcel was purchased by the applicant in 2004, and is rated by council as **"primary production".**

A residential dwelling has existed on the property for many years (since demolished & re-built) in direct association with ongoing farming activities undertaken in the past.

See attached photographs

Appendix 3

EXISTING CONDITIONS

As stated, this land parcel 8.09371 hectares or some 20 acres in land size. This parcel of rural land has remained in its original state and, as stated, has always been used & operated primarily for various farming purposes (sustained agriculture) use over many years within this particular region.

LAND DESCRIPTION

The site, on vacant (clear-titled) rural farming land, (8.09371 hectares or 20 acres) is currently used for horse agistment & cattle grazing & is located to the East off Edward Henty Avenue, Yarrambat. The land is rectangular in shape set on sloping terrain. The area itself is somewhat rural in nature.

USE OF LAND

The predominant activity on the land will be directly associated with work requirements (agriculture use) to plant and grow a variety of produce on this property, in association with restaurant operations. It is consistent land use with other farming operations undertaken on other land parcels in the Yarrambat & surrounding areas.

This area is known for this type of agriculture use. It is a land use that is **consistent** with the direction given by policy and the purpose of the zone.

The area of land to be utilised for vegetation growth & establishment has no effect or impact whatsoever on the local environment.

It does not create any nuisance or any exposure to any hazards. It simply adds character to the land and allows for some **sustainment of produce** grown on this property by the applicant & his family.

BUSINESS CONCEPT & PROPOSAL

The proposed restaurant, in association with agriculture use will be a business concept that will comprise of dining with the sale and consumption of liquor on these premises. The business will provide lunch & dinner from Wednesday – Sunday of each week.

Proposed trading hours

Sunday: Between 8am & 12 midnight
Good Friday & Anzac Day from 12noon to 12 midnight
On any other day: Between 12noon & 12 midnight.

RESTAURANT

The proposed licensed restaurant will allow for the service of various selected food items, with the opportunity for the sale and consumption of alcohol for seated patrons on the premises, including the sale & consumption of produce grown on this land.

There is no loss of productive agricultural land, nor any detriment to agricultural sustainability of the area with the proposed farm shed, one of the vital key components in direct association, to ensure this particular business activity can be effectively maintained on this parcel of land.

We say that this proposal accords with planning policy, the purpose of the zone (RCZ) and/or the Upper Yarra Valley & Dandenong Ranges Regional Strategy Plan (RSP). On balance, the proposal maintains consistency with the protection of this agricultural resource.

NEARBY DEVELOPMENT

Surrounding land parcels are used for a variety of rural farming purposes, such as horse agistment & cattle grazing, with some properties growing and harvesting a variety of produce. A number of wineries have also been established (licensed premises) that operate within the Yarrambat area.

LOCATION PLAN

This particular region accommodates a mixture of residential and farming properties.

Appendix 4

PLANNING PERMIT APPLICATION

Planning permit approval in accordance with plan(s) and other detailed documentation to be submitted to Council is sought for the following:

Building & works for the the development & use of a restaurant, in association with sustained agriculture use on rural land situated at 103 Bannons Lane, Yarrambat, Vic. 3091.

Appendix 1

TITLE PARTICULARS

A copy of a current and clear title applicable for this parcel of land is attached. Document Identification No. **LP099600 (Lot 1) refers.** This rural land is one (1) existing land parcel, to be dedicated for agriculture use, in associated with a proposed restaurant on site.

Appendix 5

DEVELOPMENT OVERVIEW – SITE PLANS

Scaled site, floor and elevation plans are attached. A number of directional photographs depicting the rural land & agriculture use on this site are also attached. The scaled site plan clearly details this proposal, depicting all dimensions and existing features on the land including the following:

- **Perimeter of land**
- **Access/egress points throughout property**
- **Shed entrance & exit points**
- **Shed is some 80 metres to the East off Edward Henty Avenue**
- **Proposed car parking plan depicting parking areas (2) within this property**
- **Proposed zoning areas & revegetation**
- **In particular, paddock Nos. 2,3,4 & all zoned areas**
- **Proposed restaurant area (farm shed) & red-line plan (licensed areas)**
- **Areas of the land, showing all setbacks**
- **Waste Management Plan**
- **Detailed plans & photographs attached highlight & depict all areas on the land and existing & proposed use within the confines of this property.**

Appendix 6

TREES ON LAND

This is to confirm that no trees will be affected or removed as a result of the continued use and development of this land. No trees are located within 15m of the proposed outbuilding (farm shed) near the North/East boundary point on this land.

The protection of trees is sustained, based on the fact that there is no change to the conditions on the site that would have any adverse effect on the property. Some very minor earthworks (no erosion) will be undertaken in preparation for a concrete floor base.

ARBORIST REPORT

Contrary co council's written response, proposed agricultural use has **NO** impact whatsoever on native vegetation. This will be explained further in detail at a scheduled pre-application meeting (No.2) with council (statutory planning) on 11 November, 2019.

In our submission, an arborist report from an independent environmental consultant is **NOT** deemed necessary or required in these circumstances.

No impact on any vegetation applies.

As stated, established trees, some considerable distance to the North & West from the proposed agriculture location = Paddock 3, will **NOT** have any affect on any existing vegetation in any way. As such, there is **NO** requirement for any vegetation (trees) to be cut or removed.

Appendix 2 & 6

PLANNING ZONE

PLANNING TRIGGERS

CLAUSE 35.06-1

RURAL CONSERVATION ZONE (RCZ)

Section 2 = Permit requirement – RESTAURANT!

Building & Works associated with a use in Section 2 of Clause 35.06-1

RURAL CONSERVATION ZONE – SCHEDULE 3 (RCZ3)

Appendix 7

CONSERVATION VALUES

To ensure land use changes do **NOT** have an adverse impact on the landscape or strategic environmental values of the land.

This application meets these conservation values. Proposed re-vegetation will simply enhance the landscape considerably in this area & has **NO** impact of any nature on the landscape or environment.

Appendix 6

The purpose under the RCZ at Clause 35.06 does support this proposal with the following provisions:

- To conserve the values specified in a schedule to this zone
- To protect and enhance the natural environment & natural processes for their historic, archaeological & scientific interest, landscape, faunal habitat & cultural values
- To protect & enhance natural resources & the biodiversity of the area
- To encourage development & use of land which is consistent with sustainable land management & land capability practices, & which takes into account the conservation values & environmental sensitivity of the locality
- To provide for agricultural use consistent with the conservation of environmental & landscape values of the area
- To conserve & enhance the cultural significance & character of open rural & scenic non urban landscapes

In our submission, we meet all of these requirements of the purpose of RCZ.

PLANNING OVERLAYS

CLAUSE 42.01-2

ENVIRONMENTAL SIGNIFICANCE OVERLAY (ESO)
Permit requirement to carry out works.
Exemptions under Schedule 1 to ESO do NOT apply for this proposal.

Appendix 9

Decision Guidelines: Clause 42.01-5

ENVIRONMENTAL SIGNIFICANCE OVERLAY – SCHEDULE 1 (ESO1)

Decision Guidelines

- No effect with building or works on the identified faunal & habitat values of this land
- Protection of any native vegetation is achieved
- Vegetation will NOT be removed, destroyed or lopped, including dead vegetation
- An integrated LMP will be provided to council
- The design & materials to be used for building works will **NOT** have any affect with the movement of fauna

CLAUSE 44.04

BUSHFIRE MANAGEMENT OVERLAY

Not applicable

Farm shed – (proposed restaurant) is some 35m outside the BMO envelope. Therefore, as advised by council (statutory planning) a planning permit is NOT required under this particular overlay.

Appendix 8

As stated, there is **NO** need to remove, destroy or lop vegetation to create a defendable space to reduce the risk of bushfire to life & property

VICTORIA PLANNING PROVISIONS

DEFINITIONS

USE OF LAND – Clause 51.02-2 – CONDITIONS

As highlighted by council:

"Core planning scheme provisions (RCZ) seek to encourage urban activities within urban areas & a restaurant is generally considered to be an urban or township appropriate activity. It is generally discouraged by the policies of the Nillumbik Planning Scheme, unless, in certain circumstances, this includes where there is a primary & valid agricultural use & the permit cannot be granted."

Comment

In these circumstances clearly outlined in this written submission, there is a primary & valid agricultural use proposed on this site. The proposed restaurant is associated & in conjunction with both agriculture & rural industry use provisions.

The proposed agriculture use is certainly viable (very capable of becoming actual) in our detailed written submission & council (statutory planning) should be satisfied that all of the requirements of the applicable planning scheme provisions have been met.

RESTAURANT

Must be used in conjunction with **AGRICULTURE** – we meet this condition.

No more than **150** patrons may be present at any time – we meet this condition = **150** proposed.

AGRICULTURE

Land used to:

Propagate, cultivate or harvest plants, including cereals, flowers, fruit, seeds, trees, turf & vegetables: The applicant will meet this particular definition with this proposal.

RURAL INDUSTRY

Land used to:

Handle, treat, process or pack agricultural produce – The applicant will meet this condition.

Appendix 10

COMMENT

It is important that council (statutory planning) recognises and accepts the fact that this particular rural farming land at this location & an original dwelling on site has been in operation and used for a number of various farming activities over some sixty (60) years prior to any planning controls of this nature being set in place in later years.

In our application, we submit the following:

- This particular development & use of this land is in direct association with sustained agriculture activity will **NOT** prejudice the primary purpose of the zone and local planning policies that apply to this land
- No incremental (soil) erosion will take place – natural water roof runoff captured into adjoining rainwater tanks (2)
- It is certainly **NOT** an inappropriate proposal
- Services such as constructed roads, reticulated water supply etc. in existence
- No additional costs will be incurred by council or servicing authorities
- Proposed very minor earthworks (if any) will have no impact on the environment or landscape of this area
- This site is of sufficient size to enable proper onsite treatment of all wastes and retention of effluent
- In terms of wildfire/bushfire hazard management, all appropriate works will be undertaken by this applicant will provide an acceptable level of protection
- SLO - no impact whatsoever, given the clear separation distance from landscape from where the outbuilding (restaurant) is to be located on the property
- No detriment to the ecology of any stream or watercourse on or near this site by virtue of this proposal
- Development NOT considered to be infill in any area of this land
- No removal whatsoever of any native vegetation – revegetation applies!

Significant Landscape overlay does NOT apply with this application:

However in response to Decision Guidelines – the following is provided:

- There is a clear buffer zone of more than **100 metres** from existing vegetation on the North/East section of this land where proposed building works for the construction of an outbuilding (farm shed) will take place.
- There is **NO** impact whatsoever on any landscape in this particular area on this parcel of land.
- Landscape character & values of this area are maintained.
- The proposal will still allow for the efficient use of this site, while recognising the amenity of the surrounding area
- The development is at a scale consistent with the neighbourhood character of this area, conserves the environmental & visual sensitivity of this area
- No other detrimental effects on the key characteristics of the identified landscapes
- Conservation of all flora & fauna has been achieved
- Minimal soil disturbance, excavation & no risk of any land erosion
- Ample land area has been retained around this building for any additional landscaping purposes, if deemed necessary
- Open space and existing vegetation is also retained & **NOT** jeopardised with this modest farm shed proposal
- The site cover maintains the ambience & sense of spaciousness
- Works will retain an inconspicuous profile & does **NOT** dominate the landscape
- Minimal excavation works apply – if any!
- Minimal soil disturbance
- No impact to the natural environment
- Retention of significant vegetation is achieved
- Vegetation characteristics remain the same
- Proposal retains & enhances the landscape
- Proposed colour of shed roof and vertical walls will nestle comfortably into the appearance of the surrounding landscape of this particular area
- colour-bond pale eucalypt applies!

In our submission, all landscape character objectives has been maintained. In particular, the protection and enhancement of the environmental, scenic, visual, cultural & scientific values of the significant landscapes which have been identified in the Shire.

CLAUSE 52.06

CAR PARKING

CLAUSE 52.06-7

CAR PARKING DEMAND ASSESSMENT

Advice received from an independent qualified traffic engineer was that any car parking demand assessment was **NOT** required, given the fact that this site can easily accommodate forty (40) car spaces.

CALUSE 52.06-8

CAR PARKING PLAN

Amended plans now sought by council (statutory planning) incorporating all car-parking arrangements on this site are now attached. In our submission, we meet compliance with all requirements under the provisions of Clause 52.06 of the Nillumbik Planning Scheme.

Appendix 6

CLAUSE 52.17-1

NATIVE VEGETATION

Permit requirement to remove, destroy or lop native vegetation, including dead native vegetation.

As stated, not applicable for reasons outlined & for further discussion & confirmation with council (statutory planning) on 11 November, 2019.

CLAUSE 52.27

LICENSED PREMISES

Permit requirement to use this land for the sale and consumption of liquor.

Proposed licensed premises (restaurant) will have **NO** amenity impact on the surrounding area for reasons articulated in the content of this written submission to council – statutory planning.

DECISION GUIDELINES

In addition to the decision guidelines in Clause 65, the responsible authority – council, must consider, as appropriate:

GENERAL ISSUES

In our submission, this proposal certainly meets the general issues that relate to:

- The municipal Planning Strategy & the Planning Policy Framework
- Any regional Catchment Strategy & associated plan applying to this land –not applicable
- This land is clearly capable to accommodate the proposed extended use & development, with both a restaurant & increased agriculture use.

RURAL ISSUES

- This site has the capacity to sustain the rural enterprise
- An integrated land/business management plan will be provided to council (statutory planning)
- No impact on the existing & proposed infrastructure
- The use or development will **NOT** have any adverse impact on surrounding land uses

ENVIRONMENT ISSUES

- Existing building (proposed restaurant) will have no impact on the natural physical features & resources of the area
- No impact on any waterway - not applicable
- No history of any flooding at all in this particular area
- Excellent drainage system in existence on site & surrounding areas.
- No impact will be caused by this proposal on soil & any water quality & by the emission of any noise, dust & odours
- No impact of the use or development on the flora, fauna & landscape features of this locality
- Vacant land applies with proposed increased vegetation on subject site
- Protection & enhancement of the natural environment, retention of vegetation & biodiversity of the area is maintained.
- The retention of re-vegetation & faunal habitat is achieved
- No requirement to revegetate land along property boundaries = in existence.
- The proposed location of on site effluent disposal area will NOT have any impact of nutrient loads on any waterway (not applicable) & native vegetation

DESIGN & SITING ISSUES

- No impact of the siting, design, height, bulk, colours & materials to be used
- No impact on the natural environment, or any waterway – not applicable in this area
- Measures to be undertaken will minimise any adverse impacts
- Adds to the character & appearance of the area with increased vegetation

- Maintains natural scenic beauty
- The vitality of the retail core within this municipality is maintained in its existing format within the farm shed – proposed restaurant
- Pedestrian comfort and safety is achieved
- Built scale is appropriate to this area and pedestrians
- The location & design of the building has **NO** impacts on any road, gas, water, drainage, telecommunications & any sewerage facilities
- Boundaries, dimensions layout, size & use of the site, including vehicle parking areas = No impacts of any nature
- The existing use of the land area remains the same
- No flood risk factors
- No effect whatsoever with the proposal with any floodwater, stormwater or drainage water
- No effect with the proposal with any reduction of flood storage & increased flood levels & flow velocities

BUSINESS TRADING HOURS

Trading hours for the proposed restaurant are quite conservative. As such, will have **NO** impact on the neighbourhood amenity.

There is some late night trading proposed for this business = 12 midnight closure.

Cumulative Impact!

There is **NO** negative cumulative impact that can arise from this building modification proposal & any associated impact on the surrounding area.

CUMULATIVE IMPACT ASSESSMENT

We submit the following:

- This building characteristic & location as it stands is certainly appropriate to what is being proposed
- It sits very comfortably within this established area of Yarrambat
- There is no change whatsoever proposed to the nature of this business activity during the course of the day
- **NO** night time trading.
- Closing time of this business is **12 midnight Monday to Sunday.**
- No amenity impact of any nature on the neighbourhood area!
- Adequate access to public transport and other services are available throughout this particular area at this time of day.

Cumulative Impact = Positive!

It is our view that that this proposal will provide a **"positive cumulative impact"** with the creation of an identified local business activity that will, not doubt, enhance the character & vitality of this area.

It will provide and will continue to provide some economic benefits, allowance for some local employment opportunities and an increase with consumer choice, with the availability of transport services in this area.

Building footprint

The footprint of the existing outbuilding (proposed restaurant) will **NOT** change, subject to this proposal. This proposed business, as stated, will make a positive contribution to the renewal and revitalisation of this particular area.

Role & function of retail business

Council, with the implementation of a number of strategies, also supports the role and function of a commercial business of this nature and the importance of retaining a retail core area within this municipality.

Also the availability for local residents to access produce & services provided to meet everyday requirements and other specialty needs.

A mixture of commercial and residential development exists in this area, with ongoing expanding educational facilities, employment opportunities and open space.

It provides a range of local services to the community and does encourage a lively and active community.

The business will provide & offer an array of food selection & other produce choices & creates an allowance for a socialisation facility (restaurant).

Yarrambat and beyond has been the subject of continual extensive land and business development. Complete with unparalleled amenities, technology and access to major transport arterials & provides the ideal platform for business success, now and into the future.
It provides a range of local services, retail, business to the community and employment opportunity.

Council - Vision & Values

In line with municipal council's vision & values, it does accept the challenges that a growth area brings and works towards sustainable outcomes with employment generation and enhancement of certain areas.

It also acknowledges the specific characteristics that contribute to and define the municipality as a unique housing, horticulture farming and employment location within this area.

We say that the design and internal upgrade to this existing building certainly meets Council's **strategies** with the development & creating a stronger local community & fostering local business, enhancing & promoting business proposals of this nature, more job opportunities and additional service delivery within this municipality.

Economic Development – Commercial Business Objective

It is also our submission that this business concept meets the objectives & strategies of the Economic Development: Commercial Business Objective:

"*To encourage development which meet the communities' needs for retail and other commercial services and provides net community benefit in relation to accessibility, efficient infrastructure use and the aggregation and sustainability of commercial facilities"*

Reference: Economic Development &
State Planning Policy Framework – Clause 17.01-1 refers

Council Objectives & Business Plan

The overall enhancement of this outbuilding over time, internal upgrade and proposed modifications at significant cost to the applicant, will continue to provide coherence to the unique and distinctive character of this area, in line with the objectives set in place within municipal strategies and council vision & aim statement relating to community facilities, economic vibrancy within these areas.

Also council's Plan - supporting thriving commercial and retail activity and working in partnership with businesses to market and promote retail and commercial offerings.

PROPOSAL

The proposal will support business operations at 103 Bannons Lane, Yarrambat.
The building upgrade (internal only) will enhance the character & visual appearance, which still sits & blends very comfortably into the street & surrounding landscape. In our view, this proposal is modest in our view and seeks planning permit approval with expected conditions to be set in place.

BUSINESS OPERATIONS

This is a business operation by the family that will involve continued land preparation for horticultural farming, irrigation with access & use of water extracted from both the existing farm dam & rainwater tanks on site.

In terms of this proposal, we submit the following:

- The proposal does meet council's guidelines, such as planning, environmental, land use, zoning, cultural heritage, infrastructure & community considerations & that this project to be undertaken by the applicant is not an inappropriate development, but an excellent outcome for this land with the proposed use.
- The area is well established in rural pursuits including various forms of agriculture and horticultural endeavours.
- The proposed development will comply with Nillumbik council (statutory planning) scheme.
- It favourably compliments existing approved neighbourhood activities.
- **The proposal does not result in the loss of any productive agricultural land and is in keeping with local agricultural sustainability.**
- No environmental impact on this land.
- No impact on vegetation

FARM/BUSINESS MANAGEMENT PLAN

A detailed farm/business management plan, given these circumstances will be provided to council – statutory planning **(also attached).**

As stated, there is **NO** impact whatsoever on any vegetation, landscape, waterway or the environment with this proposal. This Farm/business management plan incorporates all components that specifically relate to this type of proposed business activity & farming – agriculture use.

CLAUSE 52.27

LICENSED PREMISES POLICY:

Patron numbers **(150)** in our submission to council will still allow for the safe and amenable operating capacity of these premises and based on these patron numbers, proposed trading hours and the sale and consumption of liquor permitted by the liquor licence (on premises) will **NOT** have any cumulative impact at all on the amenity of the surrounding area.

Reference: Nillumbik Council Planning Scheme provisions:

- **Licensed premises Clause 52.27 - Page 2 refers**
- **Licensed premises: Assessing cumulative impact, Practice Note 61**
- **Department of Planning & Community Development, Pages 1 – 9**
- **(Revised June, 2015) CUMULATIVE IMPACT ASSESSMENT AREA**

There are a total eight (8) licensed premises currently operating within a five (5) kilometre radius from the subject site & beyond. **Appendix 11**

Breakdown of Licensed premises: Radius = 5 kilometres.
Location of existing licensed premises – (5 x kilometre) radius:

- **Rivers Café at 28-50 Kurrak Road – Smaller land lot!**
- **Yarrambat Park Golf Course at 649 Yan Yean Road**
- **Tanck's Corner at 461 Ironbark Road**
- **Yarrambat Junior Football Club at War Memorial Park, Ironbark Road**
- **Plenty Valley Cricket Club at War Memorial Park, Ironbark Road**
- **High Tea at High Gate at 68 Kurrak Road**
- **Yarrambat Estate at Lot 6 Laurie Street**
- **Yarrambat Natural Winery at 382 Yan Yean Road**

Total = 8

Impact assessment diagram prepared & current list extracted from VCGLR (licence premises) records (to be provided) is attached.

Appendix 12

COMMENT

There is **NO** negative cumulative impact that can arise from any clustering of outlets & any associated impact on the surrounding area & alcohol related harms.

As highlighted, there are **NO** licensed premises of any category in the near vicinity of the subject site & beyond. In our submission to VCGLR, there is **NO** clustering of such premises within this particular area, where this particular business will operate.

LICENSED PREMISES: ASSESSING CUMULATIVE IMPACT

CUMULATIVE IMPACT

Refers to both positive & negative impacts that can result from clustering a particular land use or type of land use.

Potential cumulative impact from a cluster of licensed premises will vary between locations, depending on the mix & number of venues & whether the area is a destination for activities associated with the supply of alcohol.

Cumulative impact is a product of the number & type of venues present, the way they are managed, & the capacity of the local area to accommodate those venues.

ASSESSMENT OF THE CUMULATIVE IMPACT FOR LICENSED PREMISES

In accordance to the provisions of the Liquor Control Reform Act, 1998 – Decision-Making Guidelines, in our submission the proposal for a licensed restaurant on this land will have a **Positive cumulative impact** within this area for the following reasons outlined:

- The creation of this local licensed business, specialising in specific food dishes, will allow for a socialisation facility & general benefit to the community
- This venue will incorporate good urban design & safe design principles which will allow for the successful management of any potential amenity impacts from venue patrons on these premises, improve perceptions of safety & provide a **"positive cumulative impact"**
- Provision of background music only!
- Management will comply with all amenity-protection conditions that apply to this particular liquor licence.
- It enhances the character, vibrancy & vitality of this area
- Proven economic benefits will follow to the community & council – rate revenue!
- Allows for local employment opportunities
- An increase in patron/consumer choice
- Provides the ability to manage any impact, for example location of this venue is around public transport networks & other services to aid the dispersal of patrons
- Late night transport is available throughout this particular area
- The proposed restaurant t & agriculture use adds balance & blends very comfortably into an existing **"Rural Conservation Zone**" to accommodate a retail service of this nature to the community
- The proposed use of this solid building contributes positively to the diversity of uses & activities in this area
- This business proposal does **NOT** generate any unreasonable amenity impacts or significantly increases the number of people at this location at any given time
- Patron numbers sought **(150)** is very conservative, given the fact that these premises, as highlighted can easily accommodate some **150+** patrons at the same time.
- Patron capacity numbers will be confirmed after a site inspection of this building has been undertaken by a registered building surveyor, in compliance with VCGLR guidelines.
- Rather then being viewed as a **Negative**, the proposal should be supported by Nillumbik council
- Good separation distance from any residential interface to the North, East & West of this site
- The proposal will **NOT** significantly increase the number of patrons near sensitive uses at any time.
- Given the location & planning policy context, this proposal will **NOT** generate amenity impacts beyond what is reasonable
- **= No amenity impact!**

- Existing uilding works have reflected many contemporary public safety principles, which include active frontage & excellent street lighting etc.
- Excellent pedestrian circulation
- All amenity protection outcomes will be achieved
- No clustering of licensed premises in the immediate area – not applicable
- Some existing wineries are within a five (5) kilometre radius from this site
- The subject land does **NOT** adjoin sensitive uses
- Adjoining land use = commercial business operations & residential interface surround the subject site, some considerable distance in all directions away from this land parcel.

ASSESSMENT

In our submission to council (statutory planning) this proposal is certainly consistent with the planning outcomes encouraged in the policy, zoning & other planning controls for this area.

NEGATIVE CUMULATIVE IMPACTS

In our submission, there are **NO Negative cumulative impacts** identified or anticipated for the reasons outlined. In particular, there is **NO clustering** of licensed premises within this particular area of Yarrambat.

This modest proposal, in our view, does not require any further detailed analysis, in support of this application, in addition to what has been stated in the content of this detailed submission to Nillumbik council - Statutory Planning & VCGLR.

The proposal will **NOT** generate amenity impacts beyond what is reasonable & accepted (including under both State & Local planning policy) for this Activity Centre.

Reasonable amenity expectations should be taken into account.

Given the actual distance between this site & the nearest residential properties, some considerable distance away, it is our view that it is highly unlikely that this proposal would significantly increase the number of patrons near sensitive uses in these residential areas at any time.

This proposal maintains the existing built form, scale and design of the building as a whole. As stated, it still remains sits & blends very comfortably in Yarrambat streetscape.

IMPACT MITIGATION MEASURES

The proposal will also provide a number of impact mitigation measures, some of which have been listed to reduce a potential negative cumulative impact.

In addition to the above, the following is also provided:

- This relatively small business use with a modest patron capacity being sought & very conservative trading times are by no means the highest or latest operating in the area of Yarrambat that has been researched.
- The location of this proposed venue is within a **"Rural Conservation Zone",** with or in good proximity to public transport, taxi services, local Police & other retail uses etc.
- The proposed venue is well separated from other residential properties some considerable away – **no amenity impact**
- The internal layout that is generally consistent with the "design guidelines for licensed venues"
- Layout & design of this building is in accordance with good urban design & safe design principles
- The service of food on these premises at all times will be made available for selection & consumption during licensed trading hours
- The function of this restaurant where the primary activity will be the preparation & consumption of food
- Operating in compliance with EPA "Noise Emission" requirements
- Operating under applicable liquor licence conditions to protect the amenity of any residents
- Operating under an appropriate daily management plan set in place
- Provision for patron transport and parking
- Very reasonable operating hours for this venue is proposed
- No external trading (outdoor seating) after 10pm

Liquor Trading hours sought by the applicant are very reasonable in the circumstances and very conservative in our view.

This written submission also includes the following:

PROPOSED TRADING HOURS:

- ***Sunday: 8am – 12 midnight***
- ***Good Friday & Anzac Day: between 12noon & 12 midnight***
- ***On any other day: between 8am – 12 midnight***

APPLICATION FOR LIQUOR LICENCE (RESTAURANT/CAFE CATEGORY)

To facilitate the actual time frame with this planning permit application to council (statutory planning) & without experiencing any further delay experienced, a separate application seeking approval for a liquor licence (restaurant category) will also submitted to VCGLR for acknowledgement, advertising period & processing of this separate application during the planning permit phase.

PUBLIC NOTICE DISPLAY

From the date to be specified, a Public Notice of the size and in the format required both by Council & VCGLR and containing all relevant details of the application will be displayed on the site to which the application relates.

This Public Notice will be continuously and conspicuously displayed during a required period in accordance with the guidelines for the Display of Planning Permit & Liquor Licensing Applications. Certifications and signature of Public Notice display periods (2) will be completed and forwarded to Council & VCGLR at the expiration of the required notice periods set in place.

UNDERAGE APPROVAL

Permanent underage approval is not sought with this application.

CONSULTATION WITH VICTORIA POLICE

Discussion relating to proposed security arrangements, noise levels, if any, management, staff, patron behaviour and other legal expectations will take place with the designated licensing Sergeant, Diamond Creek Police Station in due course, which forms part of the application process with VCGLR.

The applicant & family members will adopt an ongoing professional approach with the operations of this proposed business venture, to be operating within this municipality.

LICENSED PREMISES POLICY - continued

The following additional information is also provided in support of this application in line with the provisions of Clause 52.27 of Nillumbik council Planning Scheme for Licensed premises and Department of Planning & Community Development, Practice Note 61 relating to licensed premises: Assessing cumulative impact:

It is our view that the proposed business (restaurant) will provide a **"positive cumulative impact"** with the creation of an identified local business that will, no doubt, enhance the vitality of the area.

It will provide and continue to provide some economic benefits, an allowance for some local employment opportunities and an increased consumer choice with the availability of transport services in this area.

Nillumbik Council Planning Scheme, Clause 52.27
& Assessment of Cumulative Impact – licensed premises

Appendix 13

INTERNAL LIGHTING

Significant internal lighting throughout the building (farm shed) is proposed with excellent visibility.

EXTERNAL SECURITY LIGHTING

Existing external lighting throughout this property and beyond allows for excellent visibility. Lighting is positioned directly in front of & throughout this site.

In our submission, there is no issue whatsoever in relation to lighting and general visibility at this location and throughout this area and surrounds.

SECURITY

In view of the nature and size of this proposed business, no security personnel will be deployed.

CCTV SYSTEM

A security CCTV system, with a number of digital cameras (internally and externally) will be installed throughout the building. This system allows for twenty-four (24) hour recording and will depict any incident that may take place at the site or surrounds. Entertainment only provided consists of low volume background music generated through a sound system (internal area) only.

No other form of amplified music i.e. live bands; live music (DJ) is proposed. No external music of any description will be played. Music (low background) within the tenancy is to be played at ambient levels only, allowing patrons to converse without strain.

No amenity impact.

PATRON BEHAVIOUR

If any patron(s) appear noisy as they are leaving the restaurant, they will be asked to conduct themselves in a manner that does not cause any disturbance to the amenity of the neighbourhood and to respect local residents in the area. No noise will be created from opening or closing the premises.

Any noise emissions from the proposed licensed premises will comply with the standards specified in the **State Environmental Protection Policy.**

NOISE SOURCES

Noise levels and other emissions will be consistent with comparable restaurant/café & other uses that exist in this area. Within opening hours, the front entry door will primarily be in a closed position.

Here, we have a clear separation distance with the existence of the building design as it stands with some residential interface, some considerable distance away from the site. Any patron noise generated, if any, will have **NO amenity impact!**

Photographs in support of this comment are attached.

Appendix 2

An acoustic report in consultation and agreement with council (planning) is **NOT** considered necessary or warranted based on the low volume (noise level) to be created, the actual separation distance of properties highlighted and very conservative trading hours sought for the operations of this business.

AMENITY IMPACT

As advised, no amplified or live music will be played on premises. The nature of the proposed business will not in our submission create any excessive noise levels and reduces the likelihood of any amenity related issues. Internal air-conditioning and small exhaust fan systems will **NOT** generate any excessive noise at all.

No off-site amenity impact.

NOISE ATTENUATION MEASURES

Given the fact that the existing building itself is particularly well insulated by construction and proposed internal design, it is our belief that any noise levels will be minimal and not disruptive in any way to residents, some considerable distance away from this site.

As stated, other residential properties surround the site in all directions. These premises do not directly abut to any residential interface and residents in no way, in our submission will be affected in any way by any noise.

Preliminary research undertaken has indicated that this site will be regularly frequented by a number of residents and local traders who will dine, purchase produce and socialise at this proposed establishment - restaurant.

During conversation with some residents or fellow traders in this area relating to operations of this business, all have welcomed this additional proposal in the area.

PATRON DISPERSAL

Patron dispersal will be via the site front entrance/exit point only and does not create any new impacts.

Management will closely monitor and control patrons entering and leaving the restaurant & property surrounds.

QUEUING OF PATRONS

Not applicable, given the nature of this existing business and patron numbers anticipated for the premises. Security as mentioned (Page 18) is not considered necessary for this business not to operate safely and successfully.

STANDARD PROCEDURES FOR STAFF - COMPLAINTS

A number of internal procedures - to be set in place will be adhered to by all staff at all times.

In the event of any complaint(s) being received from any patron or member of the public or governing bodies, the issue will be formally recorded in a register and on-premises management will be notified immediately for any attention and/or action deemed necessary at the time.

A complaint of any nature will be dealt with immediately and accordingly to the satisfaction of all concerned parties.

Management, as highlighted is well experienced in this field of employment, having owned & operated other very successful licensed establishments in the metropolitan area.

STAFFING ARRANGEMENTS

The appropriate number of staff will be available during operating hours. As stated, an on-premises manager will also be on duty at all times of business operations to oversee, monitor and control all staff and other activities.

TRAINING (restaurant staff)

All staff will have certified training qualifications relating to the responsible service of alcohol (RSA). All certificates will be filed accordingly in a “compliance folder” on site for the information and any inspection deemed necessary by regulatory bodies.

NOISE & AMENITY – ACTION PLAN

Advice received from council (statutory planning) on 5 September, 2019, was that such a plan was not considered necessary to submit as part of this particular application process to council.

ALCOHOL SALES & CONSUMPTION ON PREMISES

Liquor will be sold and consumed on the premises only & in compliance with the liquor licensing requirements relating to a restaurant/cafe licence, which will allow for the sale & consumption of liquor on the premises.

WASTE MANAGEMENT PLAN

WASTE STORAGE & COLLECTION POINT

Waste and storage will be maintained and secured on the property and stored in contractor provided bins for collections at the appropriate time.

Council waste collections in this area, are at a time during the day that does not create an issue (noise/interference) with residents in this area.

Similarly, waste collections from appointed contractors will take place from an allocated storage area only during the day.

No amenity impact on the surrounding area

Appendix 6

DELIVERIES TO PREMISES

All deliveries will have no adverse effect on adjoining commercial & residential properties some considerable distance away from this site. Delivery times will only occur during acceptable times during the day (no early/late night deliveries) and be accommodated on site at the proposed restaurant area.

CAR PARKING SURVEY

Given the fact that there is no increase to the floor area within the farm shed (proposed restaurant), it was agreed with council (statutory planning) that any independent parking assessment by a qualified traffic engineer for car parking survey has not been considered necessary or warranted by council in these circumstances, given ample car parking spaces readily available within this site area.

PARKING & TRAFFIC IMPLICATIONS

Car parking & loading bay waiver justifications do not apply. In our submission, there is ample on-site car parking availability for multiple users on this property for the reasons outlined. As stated, a number of public transport networks and other alternative modes of travel also exist in this locality.

Given the patron numbers sought (100) for the restaurant proposal, equates to the parking requirement for some forty (40) car spaces on this site. It is our view, that any traffic generated by the proposed use will be minimal and will **NOT** cause any vehicle congestion or any road safety issue whatsoever. Additional access/egress point to/from this site to be created will allow for proper traffic management on this particular site.

PUBLIC TRANSPORT SERVICES & AVAILABILITY

The area is well serviced by public transport. Excellent bus commuter services exist and are available throughout the area. Taxi services will also accommodate a number of persons to and from this site. Extensive new road construction and expansion throughout Yarrambat & surrounding suburbs has made the way for increased public transport networks.

BUILDING & SITE ENHANCEMENT

It is our view that this building (restaurant use) & site upgrade (increased vegetation) will considerably enhance the appearance of this property and no doubt, will be welcomed by the local community and fellow traders, who have collectively welcomed.

It will support this proposed additional business opportunity to allow for the sale and consumption of liquor with the provision and service of food on the premises & other produce to be grown on this property.

RESPONSIBLE MANAGEMENT

The applicant & his family are highly regarded and well respected by the local community, due to their positive contribution and commitment to the hospitality/retail & agriculture industry. All are well aware of liquor licensing requirements and local laws, also all expectations of governing authorities.

The family maintains a strong work ethic, an admired reputation by their peers and are genuinely committed to high standards and excellent service to the community.
Their “track record” within the hospitality industry over many years to date is impeccable and well respected by all local authorities, Council, Police and fellow traders in the area.

The applicant, in my opinion and others is of excellent character with no blemishes whatsoever that would have any affect on all applications being sought and approved.

The proposed restaurant & increased agriculture use will be operated in a manner that provides for the safety of patrons, the general public, other owners of nearby commercial properties.

LIAISON WITH TRADERS & RESIDENTS

To his credit and commitment, the applicant continues to closely liaise with other traders and residents in the area, who, on advice received, have no objections whatsoever with this future proposal being sought.

In fact to date, total support has been received from fellow traders and residents in this area all collectively welcoming the additional proposal being sought for this proposed licensed establishment to operate successfully.

PROPOSAL

This proposal maintains the existing built form, scale and design of the building as a whole, with no external changes proposed at this stage. It still remains sitting very comfortably in the streetscape. It will **NOT** create any new impacts arising from the mix of uses in this area
It will make and maintain a positive contribution to the renewal and revitalisation of this area. New businesses, shopping, working, leisure and community facilities continue to emerge in this area.

Also, it adds to the range of services to the local community, employment and social opportunities well served by public transport and cycling networks, to meet the ongoing needs of the growing population associated with new medium and high density housing in the local area.

The creation of this excellent facility will continue to enhance the character, vibrancy and vitality of this area within Yarrambat.

It makes allowance for local & other forms of employment and provides some further economic benefit to the community.

It adds to the range of services available in this business & residential precinct and provides an excellent socialisation facility for the growing local population and general public.

In all, this proposal is strongly supported by the planning scheme, with elements not requiring a planning permit.

All internal building work elements to be undertaken and approved will be consistent with the preferred planning outcomes under the relevant assessment criteria.

As stated, parking is properly supported on this site & by the very good availability of alternative transport options.

Some considerable finance is to be expended, patience and hard work undertaken by the applicant to ensure all compliance is achieved and maintained with building, town planning, local laws, liquor licensing, food and other legal requirements.

PROPOSED NUMBER OF STAFF & PATRONS (ratio of seating to standing)

The actual patron numbers will obviously vary from time to time. It is envisaged staff numbers will be four (4) at any one time, with a maximum number of six (6). Patron numbers in our belief will peak on particular occasions to approximately **150.**

MAXIMUM PATRON CAPACITY

A MPC report calculating the maximum number of persons to be accommodated on these premises will be provided, in accordance to VCGLR guidelines.

In our submission this building can clearly accommodate in excess of 150 patrons being sought with this application.

Please note:

The external trading area adjacent to the North of the actual building perimeter will be licensed for the sale & consumption of alcohol on these premises.

Proposed red-line plan attached

Appendix 6

It is our view that more than adequate seating availability exists inside this proposed restaurant, given the number of patrons anticipated to visit the site. Proposed patron numbers, in our submission to VCGLR will still allow for the safe and amenable operating capacity of these premises.

Given the number of patrons being sought on the premises - **150** only, it is our view that more than adequate seating availability exists inside and outside this facility given the number of patrons anticipated to visit these premises.

Based on patron numbers, existing trading hours and the sale and consumption of liquor permitted by such a liquor licence, will **NOT** have any cumulative impact at all on the amenity of the surrounding area.

This is in accordance to the provisions of local planning policies within the Nillumbik Planning Scheme.

Nillumbik Council Planning Scheme
Licensed premises, Clause 52.27 refers &
Licensed premises: Assessing Cumulative Impact, Practice Note No. 61, March, 2011, Department of Planning & Community Development, Victoria.

MANAGEMENT

As stated, the applicant & family members are highly regarded and well respected over many years, due to their positive contribution and commitment to the hospitality & rural farming industry and local community. All are well aware of local laws and all expectations of governing authorities.

The applicant & his family adopt a very high standard with management practices, being a critical component to maximise this land's potential and minimise any negative impacts on resources.

- Farming activities & proposed restaurant use on this land is supported with the existence of a permanent dwelling on this rural land
- The priority for this land is to be retained and genuinely used for ongoing agricultural activities, in associated with proposed restaurant use
- **NO** loss or any impact on productive agricultural land.
- It is **NOT** an inappropriate development that should be recognised and supported by council.
- It is a bona fide ongoing agricultural activity requirement to be conducted on the land in association with proposed use
- The land use is consistent with the direction given by policy and the purpose of this zone.
- As stated, it will **NOT** result in any fragmentation of productive agricultural land.
- The proposal will **NOT** remove any significant land from agricultural production.
- Land use in this area is predominantly various farming activities, wineries, nurseries of all sizes, cattle grazing & horse activity
- **NO** demand will be enforced on other ratepayers and town services with this proposal.
- The business will be a full-time business operation, not a part-time exercise that can generate and sustain income for the family & of course, the local economy
- The proposal, in our submission supports this required agricultural activity.
- It will assist business operations in a meaningful and practical way
- It is an essential component that generates a need to support the operation of agricultural activity for the care and management of all plants in need of attention deemed necessary at any time
- Existing use of a number of surrounding properties on land throughout this area are of similar & other agricultural use
- Our submission is that this property is very capable of conducting continued agricultural activity & proposed restaurant use on this site

- There is **NO** potential off-site environmental impacts or effects of this rural land proposal (such as degradation of soil or water quality and land salinization.
- The use of the land is compatible with the environmental features of this area with no disturbance to any existing established vegetation or other environmental features.
- The planning scheme strategies: Clause 21.04 Objective 4 – Green Wedge residential provisions "provide for dwellings which are required to manage the land for sustainable agricultural use in the **Rural Conservation** & Green Wedge Zones".
- State Planning Policy Framework Strategy: Clause 11.04-7 – Green Wedges also "supports development in the green wedge that provides for environmental, economic and social benefits" which in this case certainly applies.

REGIONAL STRATEGY PLAN - RURAL POLICY AREAS

Proposed works to be undertaken, in our submission, meets the goals and objectives of the Regional Strategy Plan – Rural Policy areas. It will place no demand on the natural resources of the Rural Policy areas, nor any dramatic modification of the natural environment – **rural land**.

The business activity on this parcel of land is managed and controlled sensitively with no alienation of any productive agricultural land and any deterioration and/or loss of any environmental and landscape values.

This rural land is maintained for agricultural and rural activities, including the protection of the landscape for the benefit of present and future generations.

Regional Strategy Plan – Rural Policy Areas Clause 5.01 & 5.02 refers

STATE PLANNING POLICY

Schedule One of the State Planning Policy, Formerly Statement of Planning Policy No.3 – Upper Yarra Valley & Dandenong Ranges (as varied April, 1979), states that - **"Planning measures shall encourage farming & other rural pursuits** in appropriate areas, and provide for the maintenance of natural resources & rural landscape values"

AMENITY IMPACTS

- Minor earthworks to be undertaken with tree planting only.
- Any noise emissions from this site will comply with the standards specified in the State Environmental Protection Policy.
- Noise levels and other emissions will be consistent with comparable uses that exist in this area.
- Traffic use (excavation equipment) if applicable, will be minimal.
- Multiple use of any large commercial vehicles to/from this site will **NOT** take place – minor building works for the proposed restaurant will apply only!

- No after hour work activities associated with the farm shed (restaurant) will take place
- Any vehicle/pedestrian traffic is consistent to other farming activities taking place on adjoining farming properties throughout this particular area.
- No interference at all to any traffic or pedestrian activity in this area.

AMENITY IMPACTS - CONTINUED

LAND CAPABILITY ASSESSMENT

Consultation with Soiltech Investigations Pty Ltd. is to be undertaken by the applicant in relation to a Land Capability Assessment (LCA) for an on-site wastewater management (treatment system) requirement. This is also work in progress!

FARM/BUSINESS MANAGEMENT PLAN

A farm/business management plan for this type of farming operation (agricultural use) on this land has been provided in support of this particular application to council (statutory planning)

CONCLUSION

The location, appearance, design, and specifications with this proposal (restaurant), landscaping and sustained agriculture use of this parcel of land, as a whole still remains sitting very comfortably in the landscape.

It makes and maintains a positive contribution to this area. New businesses activities of this nature continue to emerge in this region.

Also, it adds to the range of services to the local community, employment and social opportunities in an existing and popular area to meet the ongoing needs of the growing population in this region.

This proposal will maintain the character, vibrancy and vitality of this area and **NOT** have any adverse impact on the landscape as a whole or environment.

In all, this proposal is supported by the planning scheme, with elements not requiring a planning permit.

Again, this is a consistent local business activity in this region and a commercial business opportunity for land owner(s) to source some income to support their business and family interests.

It is their livelihood to survive in a very difficult business arena. As you are aware, proprietors of semi-rural properties in this area work particularly hard, under very difficult circumstances with many over-heads and low margin return, if any at times for their ongoing dedicated work ethic & commitments.

This particular agriculture area represents one the few remaining farmed agricultural areas relatively close to metropolitan Melbourne.

It continues to be an important economic resource for the area. The maintenance of farming activities & other business opportunities is <u>ESSENTIAL</u> and does retain the established landscape character of the area.

In our submission, we certainly meet these objectives set in place. The proposed restaurant will simply allow for ongoing maintenance, with sustained farming (agriculture use) on this land parcel.

We have clearly demonstrated with what is to be **genuinely undertaken** on this property and have provided sound & authentic evidence of the justification with this proposal – restaurant, which is warranted in these circumstances & directly associated & one of the key pivotal links in conjunction with agriculture use (farming) on this land.

This application also meets all of the provisions contained within the Nillumbik Planning Scheme. In particular the following that apply to this planning permit application:

- **Rural Conservation Zone (RCZ) Clause 35.06**
- **Schedule 3 to Rural Conservation Zone (RCZ3)**
- **Bushfire Management Overlay (BMO) Clause 44.06 – not applicable**
- **Environmental Significance Overlay (ESO) Clause 42.01**
- **Schedule 1 to the Environmental Significance Overlay Clause 3.0 & 4.0**
- **Licensed Premises Policy Clause 52.27**
- **Cumulative Impact of licensed premises, Department of Planning & Community Development, Practice Note 61 (March 2011)**
- **Cumulative Impact Assessment provisions & general expectations**
- **Other applicable provisions contained with the Nillumbik Council planning scheme**

We look forward to your written response in due course in relation to this planning permit application being sought.

To facilitate the assessment time frame to process this particular application, please do not hesitate to contact me directly should you have any further queries or concerns, with a view to avoid any written RFI response requirement(s) in relation to this application (details and business mobile telephone number provided).

> Please forward all future correspondence to business address provided

Yours Sincerely,

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Director
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Authorised on behalf of applicant
Dimitrius Missailidis

Traffix Group

Traffic Engineering Assessment

Proposed Restaurant

103 Bannons Lane, Yarrambat

Prepared for
Professional Consulting Services

March 2020

G27894R-01B

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Issue No.	Type	Date	Prepared By	Approved By
B	Final	12/03/20	S.Goh	C.Morello

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1. Introduction

Traffix Group has been engaged by Professional Consulting Services to undertake a Traffic Engineering Assessment for the Proposed Restaurant associated with the proposed agricultural use at 103 Bannons Lane, Yarrambat

During the course of preparing this assessment, we undertook relevant site inspections and traffic surveys, reviewed plans and provided advice to the Applicant.

Our assessment is as follows.

2. Existing Conditions

2.1. Subject Site

The subject land, addressed as 103 Bannons Lane, Yarrambat, is located at the north-eastern corner of the intersection of Bannons Lane with Edward Henty Avenue in Yarrambat.

The site is a rectangular parcel of land and has a total area of approximately 78,450 square metres. It has abuttals to Bannons Lane of approximately 170 metres and Edward Henty Avenue of approximately 430 metres.

The site is currently improved with a residential dwelling and associated farm and animal sheds.

Site access is provided via a two-way crossover to Edward Henty Avenue near the north-western corner of the site. Internally, the site is provided with access via a number of internal accessways/driveways.

A locality plan and an aerial image of the subject site are provided at Figure 1 and Figure 2, respectively.

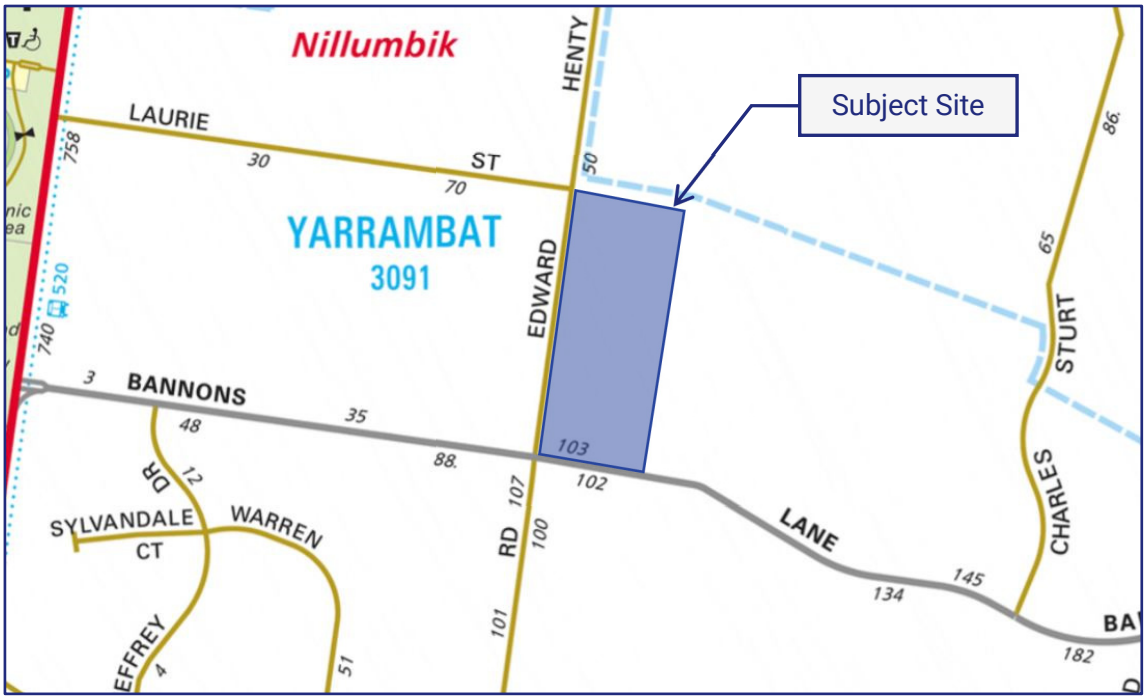


Figure 1: Locality Map

Figure 2: Aerial View

2.2. Planning Scheme Zones & Surrounding Uses

The subject site is situated within Rural Conservation Zone – Schedule 3 (RCZ3) under the Nillumbik Planning Scheme. A planning zone map is provided at Figure 3.

Land uses in the vicinity of the subject site are generally Rural Conservation Zone in nature with low density residential zoning to the south-west.

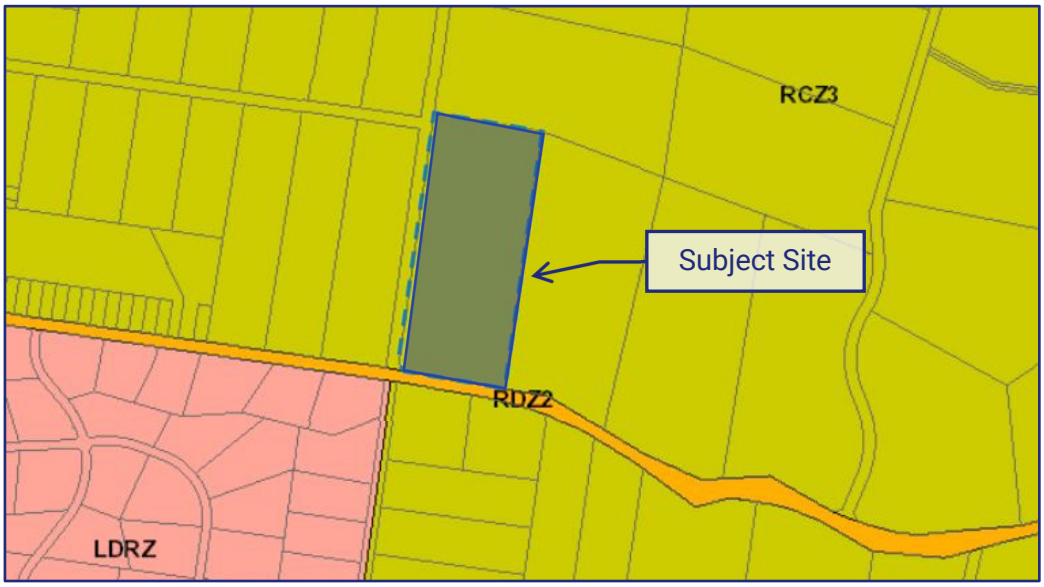


Figure 3: Planning Scheme Zoning Map – Yan Yean

2.3. Road Network

Bannons Lane is a local Council road located within a Road Zone Category 2 (RDZ2). It extends east from Yan Yean Road, culminating at the intersection with Broad Gully Road, Bannons Lane North and Haleys Gully Road.

Along the site frontage, Bannons Lane provides for a single carriageway accommodating a single lane of traffic in each direction with gravel shoulders.

Bannons Lane forms a cross intersection with Edward Henty Avenue at the southwest corner of the site which is sign controlled.

Along the site frontage, a speed limit of 80km/h applies to Bannons Lane.

Edward Henty Avenue is a Council road aligned in a north-south direction. Edward Henty Avenue extends north from Bannons Lane and continues for approximately 1.35 kilometres before terminating near farmland. Council's Road Register identifies the road as a 'rural' road which has an unposted default speed limit of 100 km/h.

Along the site frontage, Edward Henty Avenue provides a single carriageway for two-way traffic with a pavement width of approximately 7.0 metres and vegetated verges on either side..

Photographs of the surrounding road network are provided at Figure 4 to Figure 7.

Figure 4: Bannons Lane – View West

Figure 5: Bannons Lane – View East

Figure 6: Edward Henty Avenue – View North

Figure 7: Edward Henty Avenue – View South

3. Proposal

The application proposes to convert an existing shed on the site for the purposes of a restaurant to cater for up to 150 patrons which is to be associated with a future agricultural use on the land.

Works are proposed to widen the existing driveway and provide new gravel at-grade parking within the existing property to support the proposed restaurant.

The plans include a provision of a total of 60 car parking spaces on-site inclusive of a single DDA space for the restaurant in two parking areas as follows:

- 34 spaces will be located immediately adjacent the restaurant to cater for the majority of operating periods
- A further 26 spaces will be provided within an overflow parking area to accommodate peak patronage periods.

Site access is proposed via the existing crossover to Edward Henty Avenue which connects with the existing driveway and provides access to internal areas of the site. Both the crossover and the driveway will be widened to facilitate two-way simultaneous traffic.

A total of eight (8) bicycle spaces are proposed on-site located near the entry to the restaurant.

4. Car Parking Considerations

4.1. Statutory Requirements – Clause 52.06

The car parking requirements for the proposed development are outlined under Clause 52.06 of the Planning Scheme. The purpose of Clause 52.06 is:

- *To ensure that car parking is provided in accordance with the Municipal Planning Strategy and the Planning Policy Framework.*
- *To ensure the provision of an appropriate number of car parking spaces having regard to the demand likely to be generated, the activities on the land and the nature of the locality.*
- *To support sustainable transport alternatives to the motor car.*
- *To promote the efficient use of car parking spaces through the consolidation of car parking facilities.*
- *To ensure that car parking does not adversely affect the amenity of the locality.*
- *To ensure that the design and location of car parking is of a high standard, creates a safe environment for users and enables easy and efficient use.*

Based on Clause 52.06, the restaurant is statutorily required to provide car parking at a rate of 0.4 spaces to each patron permitted within the premise.

Applying this rate to the proposed capacity of the restaurant of up to 150 patrons equates to a requirement for 60 car parking spaces.

The proposed parking provision of 60 spaces on-site for the restaurant use meets the minimum requirements of Clause 52.06 and therefore no permit is sought under Clause 52.06.

4.2. Car Parking Layout & Access Arrangements

The car park layout and access arrangements have been developed with design advice provided to the project architect (Corso Design) and are considered to principally meet the relevant requirements of the Planning Scheme and where applicable, the Australian Standard for Off-Street Parking (AS2890.1:2004).

The following is noted:

- The proposal intends to take access via Edward Henty Avenue via a widened existing crossover and driveway with a minimum width of 6.0 metres within all areas accessed by the restaurant, allowing two-way passing throughout the site.
- All vehicles are able to exit the site in a forward direction in accordance with the requirements of the Planning Scheme.
- Car spaces are proposed with minimum dimensions of 2.6 metres width and 4.9 metres length, accessible from 6.4 metre wide aisles, meeting the Planning Scheme requirements.

- A dead end aisle is proposed within the main car parking area, however this is overcome by a widening of the aisle to permit a three point turn for the B99 vehicle.
- DDA parking bays have been provided in accordance with the requirements of AS2890.6:2009. A dedicated bay and shared area have been dimensioned at a minimum width of 2.4 metres, minimum length of 5.4 metres.
- As the car park is intended to be gravel, parking will be designated through the use of spike-down pavement markers and/or wheel stops.
- Internal wayfinding signage will be utilised to direct patrons to each of the parking areas as required.
- Parking and accessways are proposed in locations that limit the impact to the existing vegetation and utilise the existing slopes of the land as much as possible.
- Some regrading of areas may be required, however the widened driveway will match to the existing grades which are considered acceptable for the access requirements for the proposal.
- Parking on a grade should ultimately comply with AS2890.1:2004 and AS2890.6:2009, which requires a maximum grade of 1 in 16 where parking is perpendicular to the grade, 1 in 20 where it is parallel with the grade and 1 in 33 where DDA parking is provided (parking is intended to be gravel parking). It is expected this can be addressed through the detailed design of the site layout.
- Manoeuvrability within the internal driveway and parking aisle has been check the B99 design vehicle passing as demonstrated with swept paths in Appendix A.

Based on the foregoing, we are satisfied that the proposed car parking layout, access arrangements and internal layout are satisfactory, meeting the relevant requirements of the Planning Scheme and the relevant Australian Standards and will provide for safe and efficient movements to/from and within the site.

5. Traffic Considerations

5.1. Traffic Surveys

Traffix Group has commissioned Trans Traffic Surveys to conduct a tube count survey at Edward Henty Avenue adjacent to the existing site access as shown in Figure 8.

Figure 8: Tube Count Location

The counts were undertaken across seven (7) days starting on Saturday the 1st February 2020. A summary of the results is shown in Table 1.

Table 1: Trans Traffic Survey Tube Count Results

Period	Peak Hour	Combined	Northbound	Southbound
AM Peak	8am-9am	116	7	109
PM Peak	3pm-4pm	21	11	10
Average Weekday Daily Two-Way		334	83	251
Speeds (km/h)	85th Percentile	65.1	65.3	65.0
	Average	57.1	57.8	56.5

The counts recorded an average daily weekday two-way volume of some 334 vehicles, inclusive of 116 vehicles in the morning peak (8-9am) and 21 vehicles in the afternoon peak (3-4pm).

The surveys also included recording vehicle speeds, which identified that this section of Edward Henty Avenue has an average speed of around 60 km/h and an 85th percentile speed of around 65 km/h.

5.2. Traffic Generation & Impacts

The proposed restaurant is likely to generate its peak demands around lunch time (noon to 2pm) and evenings (6-8pm), most probably on weekends and to a lesser extent on Fridays.

Based on surveys of a winery/restaurant at T'Gallant Winery in Main Ridge, and our experience of similar developments, we will adopt the following peak traffic generation rates for the proposal:

- A morning commuter peak hour traffic generation of 1 inbound movement per 15 patrons associated with staff arrivals,
- A weekend lunchtime/dinner peak rate of 0.38 vehicle movements per patron, with a bias of 84% inbound and 16% outbound, and
- An afternoon commuter peak hour traffic generation of 25% of the peak, all being arrivals.

Application of these rates to the proposed 150 patron restaurant equates to a total of:

- 10 vehicle movements in the morning peak hour (all arrivals),
- 57 vehicle movements at the lunchtime peak on a weekend, split as 48 arrivals and 9 departures, and
- 14 vehicle movements in the afternoon peak hour (all arrivals).

In the morning and afternoon peak hours, the level of traffic generation by the proposal is considered to be low in traffic engineering terms, equal to on average, not more than 1 additional vehicle movement generated every 4-6 minutes.

This level of traffic will have no material impact on the operation of Edward Henty Avenue or the intersection of Edward Henty Avenue and Bannons Lane.

Whilst traffic volumes of a weekend at lunch and of an evening dinner period are expected to be higher, a total peak hour volume of not more than 60 vehicle movements is expected. This is equivalent to an average of less than one vehicle movement every minute generate to the network across the hour.

The majority of these movements will be arrivals turning into Edward Henty Avenue from Bannons Lane.

Based on our observations, and the surveyed traffic volumes, we are comfortable that the traffic generated by the proposal can be accommodated by the existing road network and will not have a significant impact on the operation of the nearby intersections.

5.3. Suitability of Access Arrangements

The existing access to Edward Henty Road is to be utilised by the proposal, with internal widening to facilitate passing and two-way movements within the site.

As noted previously, Edward Henty Avenue is classified as a 'rural' road with a default speed limit of 100km/h. However, it is clear from observations and the traffic surveys that the speed environment at the frontage of the subject site and proximity to the site access is much lower.

In relation to the proposed access arrangements, it is noted that there are a number of crests and dips along Edward Henty Avenue which somewhat constrain the available sight distance at the access point in both directions. Our observations identify that the existing access achieves a sight distance of approximately 115 metres in both directions.

Figure 3.2 "Sight Distance Requirements At Access Driveways" of AS2890.1:2004 suggests that whilst this sight distance would not meet the minimum requirements for a 100km/h road, it would satisfy both the minimum and desirable requirements for an 80km/h speed limit of 111 metres and 105 metres respectively.

Given that the 85th percentile speed on Edward Henty Avenue, in the section between Bannons Lane and Laurie Street, was recorded at 65 km/h, we are of the view that access at this location is appropriate.

To further support these access arrangements, formal speed limit signs, commensurate to the existing travel speeds, could be provided along this part of Edward Henty Avenue.

Based on the preceding, the location of the proposed site access is considered acceptable.

6. Bicycle Considerations

Clause 52.34 of the Planning Scheme specifies the bicycle parking requirement for new developments.

For restaurant, bicycle parking requirements are set at a rate of:

- 1 space to each 100 square metres of floor area available to the public for staff; and
- 2 plus 1 space to each 200 square metres of floor area available to the public if the floor area exceeds 400 square metres.

Measurements from the plans suggest that there is in the order of 425 square metres of space available to the public.

This generates a requirement for 4 staff spaces and 4 visitor spaces.

The application plans illustrate the provision of 8 bicycle spaces meeting the minimum requirements under Clause 52.34 of the Scheme.

Bicycle parking has been provided in accordance with AS2890.3-2015 as horizontal rails with dimensions of 1.8 metre length and spaced at 1.0 metre centres, accessible from a 1.5 metre aisle.

Accordingly, the provision of bicycle parking is considered appropriate and a permit is not required under Clause 52.34.

7. Loading & Waste Considerations

Clause 65.01 of the Planning Scheme states that the responsible authority must consider a number of matters as appropriate including:

- *The adequacy of loading and unloading facilities and any associated amenity, traffic flow and road safety impacts.*

A loading area is proposed adjacent the restaurant building which will service as a location for loading vehicles, deliveries and waste collection for the proposed use. Loading for the proposed restaurant will typically take place outside of peak hours of operation for the restaurant.

Swept paths have been prepared for an 8.8 metre Medium Rigid Vehicle (MRV) to demonstrate access is appropriate for this size vehicle.

Accordingly, we are satisfied that appropriate loading and waste provisions can be accommodated in accordance with the objectives of the Planning Scheme.

8. Conclusions

Having undertaken a detailed traffic engineering assessment of the proposed restaurant at 103 Bannons Lane, Yarrambat, we are of the opinion that:

a. the proposed development has a statutory car parking requirement of 150 car spaces under Clause 52.06-5 of the Planning Scheme and the proposal meets this requirement and therefore doesn't seek a permit under Cause 52.06,

b. the proposed parking layout and access arrangements are appropriate and accord with the requirements of the Planning Scheme, AS2890.1:2004 (where relevant) and current practice,

c. the level of traffic generated as a result of this proposal is acceptable and in the most part will occur outside of peak commuter periods,

d. the provision of eight bicycle parking spaces meets the requirement under Clause 52.34 and a permit is not required,

e. the on-site loading area has been designed to meet the objectives of Clause 65.01 of the Planning Scheme, and

f. there are no traffic engineering reasons why a planning permit for the proposed restaurant at 103 Bannons Lane, Yarrambat, should be refused, subject to appropriate conditions.

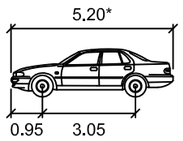
Appendix A

Swept Paths

B99 SITE ACCESS PASSING

B99 INTERNAL DRIVEWAY PASSING

VEHICLE USED IN SIMULATION



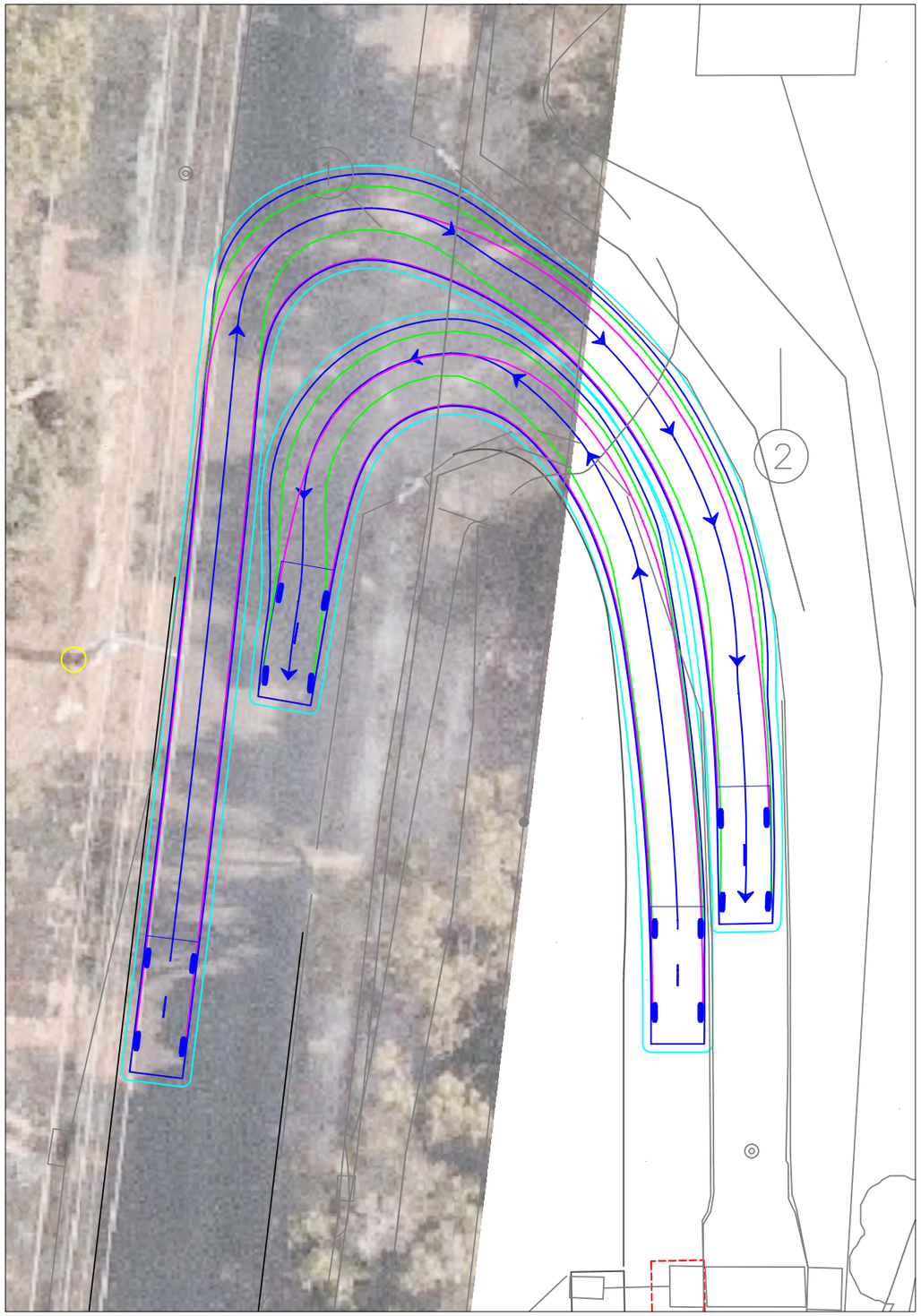
99th percentile
(AS/NZS 2890.1:2004)

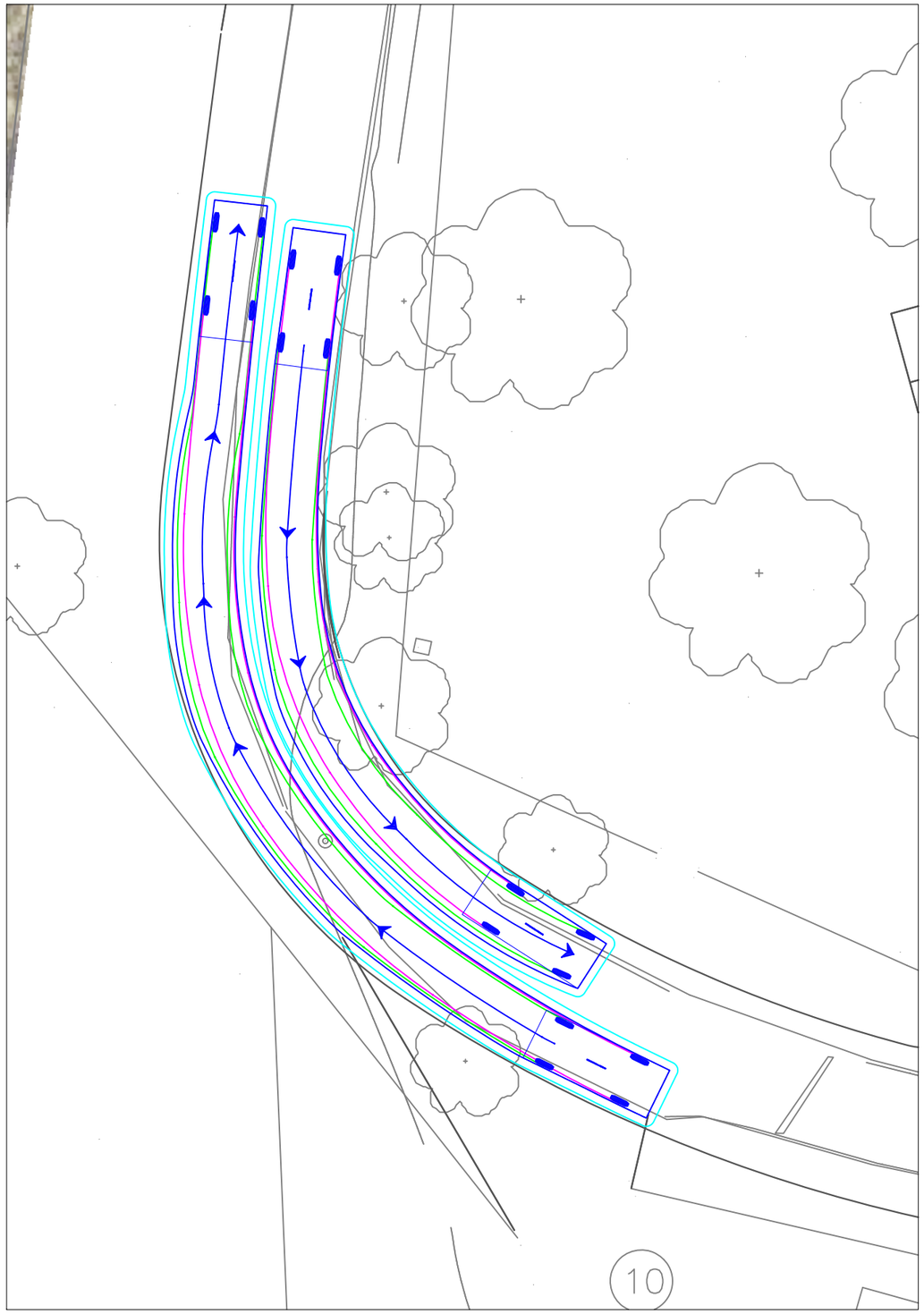
Width	:	1.94
Track	:	1.84
Kerb to Kerb Radius	:	12.5m

* actual template based on 'relevant longitudinal dimensions that affect swept path' as set out in Section B2.1 of AS/NZS 2890.1:2004

LEGEND

- REAR WHEELS
- FRONT WHEELS
- VEHICLE BODY
- BODY CLEARANCE





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REV.	REVISION NOTES	REVISION DATE
A	TOWN PLANNING	11/03/2020

GENERAL NOTES:
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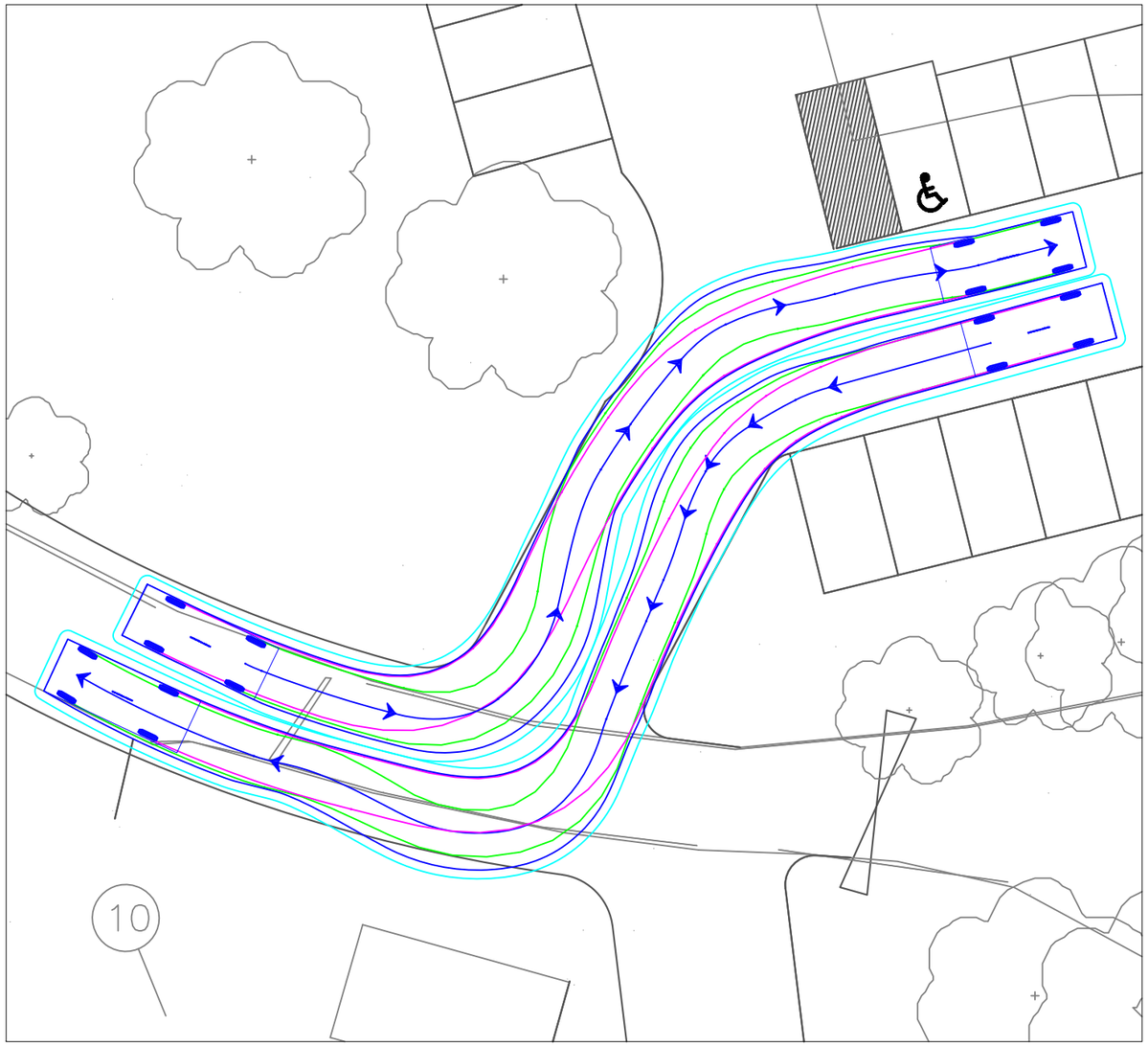
DESIGNED BY: S.GOH 11/03/2020
CHECKED BY: C.MORELLO 11/03/2020
FILE NAME: G27894-TFX-01
ISSUE: A

Traffix Group
Level 28, 459 Collins Street
MELBOURNE VICTORIA 3000
TEL : (03) 9822-2888

103 BANNONS LANE, YARRAMBAT
DESIGN VEHICLE SWEPT PATHS
PROPOSED RESTAURANT DEVELOPMENT

SCALE: 1:200 (A3) 0 2 4
SHEET NO.: 01/04
JOB NO.: G27894

B99 INTERNAL PASSING 1



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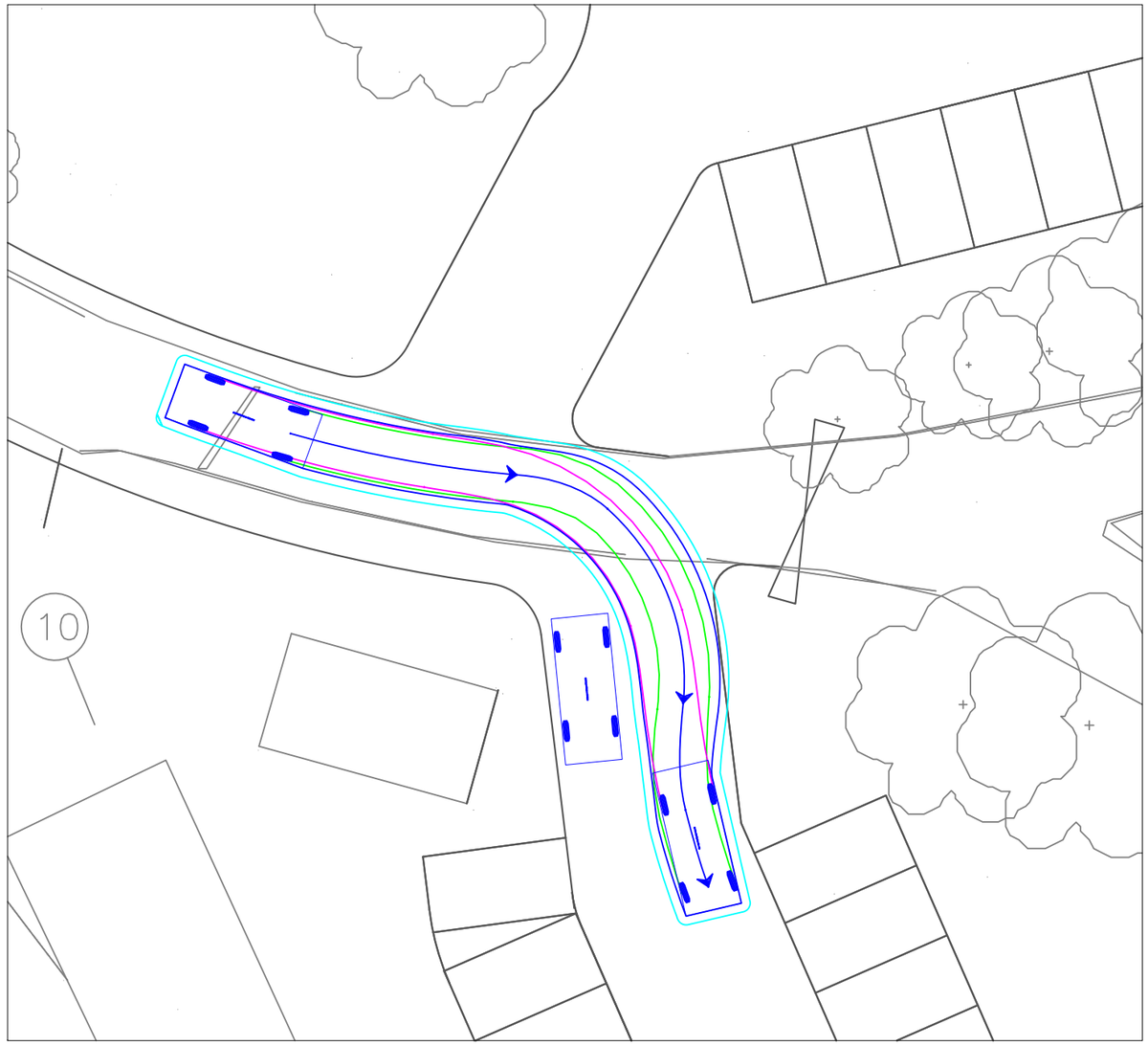

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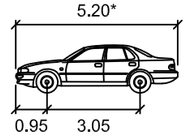
LEGEND

- REAR WHEELS
- FRONT WHEELS
- VEHICLE BODY
- BODY CLEARANCE

VEHICLE USED IN SIMULATION



99th percentile
(AS/NZS 2890.1:2004)

Width	: 1.94
Track	: 1.84
Kerb to Kerb Radius	: 12.5m

* actual template based on 'relevant longitudinal dimensions that affect swept path' as set out in Section B2.1 of AS/NZS 2890.1:2004

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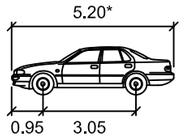
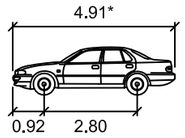
VEHICLES USED IN SIMULATION



99th percentile
(AS/NZS 2890.1:2004)

Width	: 1.94
Track	: 1.84
Kerb to Kerb Radius	: 12.5m

* actual template based on 'relevant longitudinal dimensions that affect swept path' as set out in Section B2.1 of AS/NZS 2890.1:2004



85th percentile
(AS/NZS 2890.1:2004)

Width	: 1.87m
Track	: 1.77m
Kerb to Kerb Radius	: 11.5m

* actual template based on 'relevant longitudinal dimensions that affect swept path' as set out in Section B2.1 of AS/NZS 2890.1:2004

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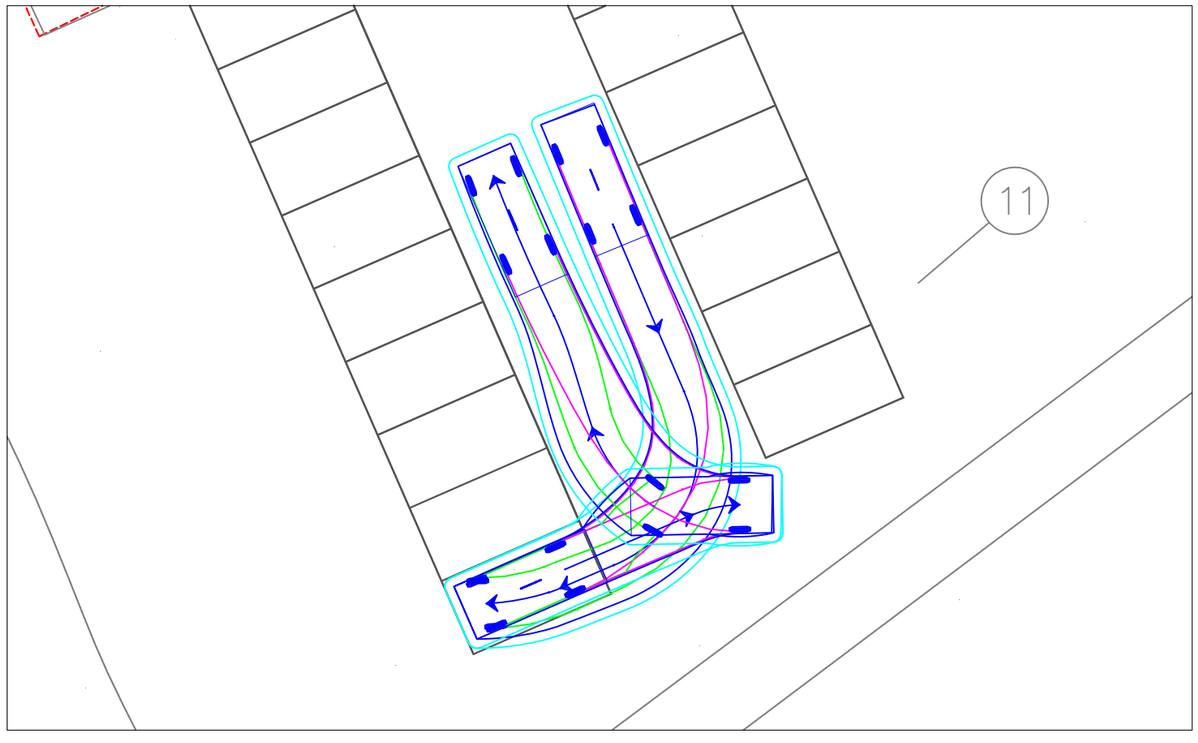
B99 INTERNAL AISLE 3-POINT TURN

B85 END SPACE ACCESS - NORTHERN CARPARK

B85 END SPACE ACCESS - SOUTHERN CARPARK



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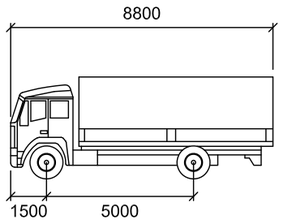
VEHICLE USED IN SIMULATION

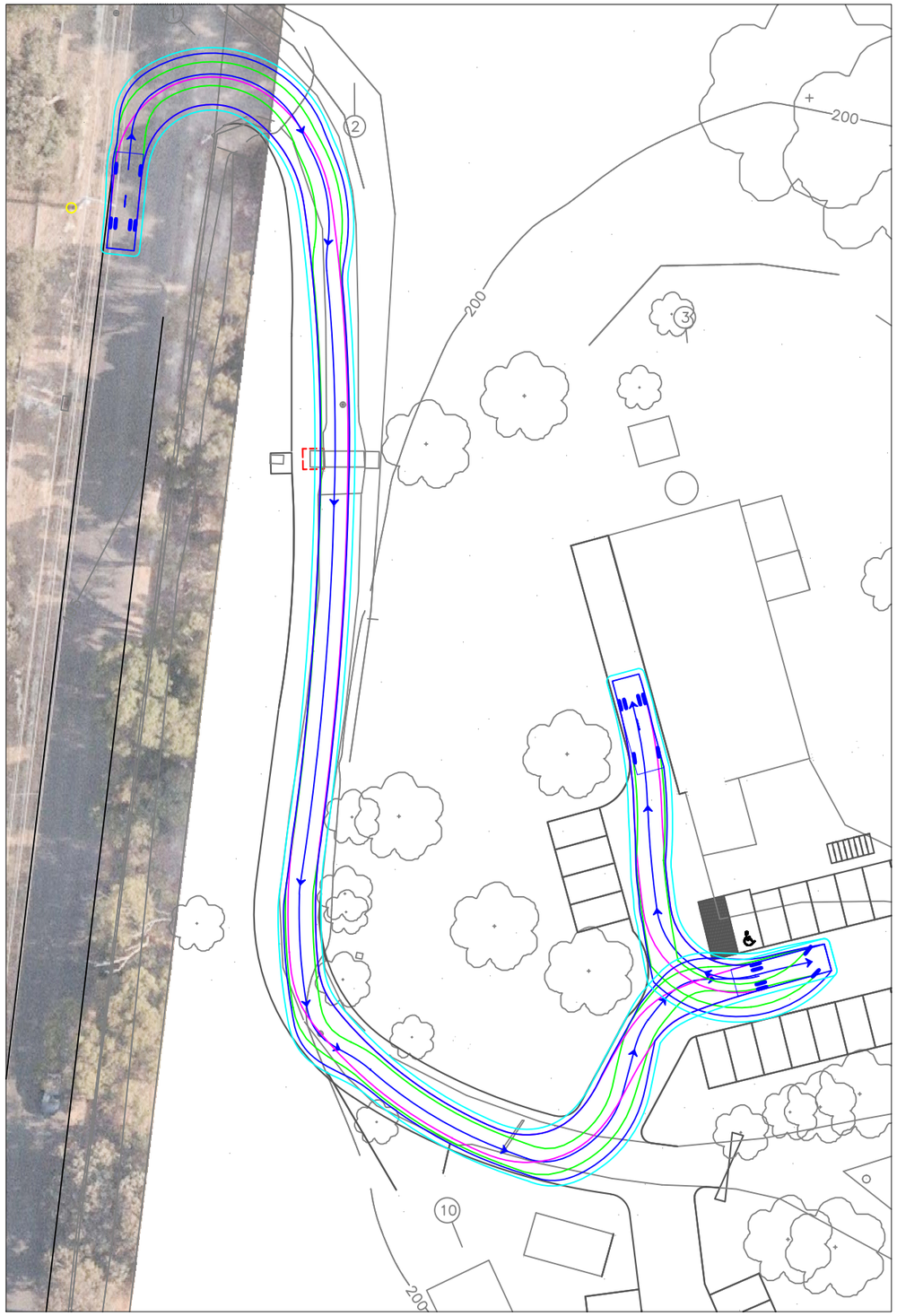


MRV (AS 2890.2)		mm
Width	:	2500
Track	:	2500
Lock to Lock Time	:	6.0
Steering Angle	:	34.0

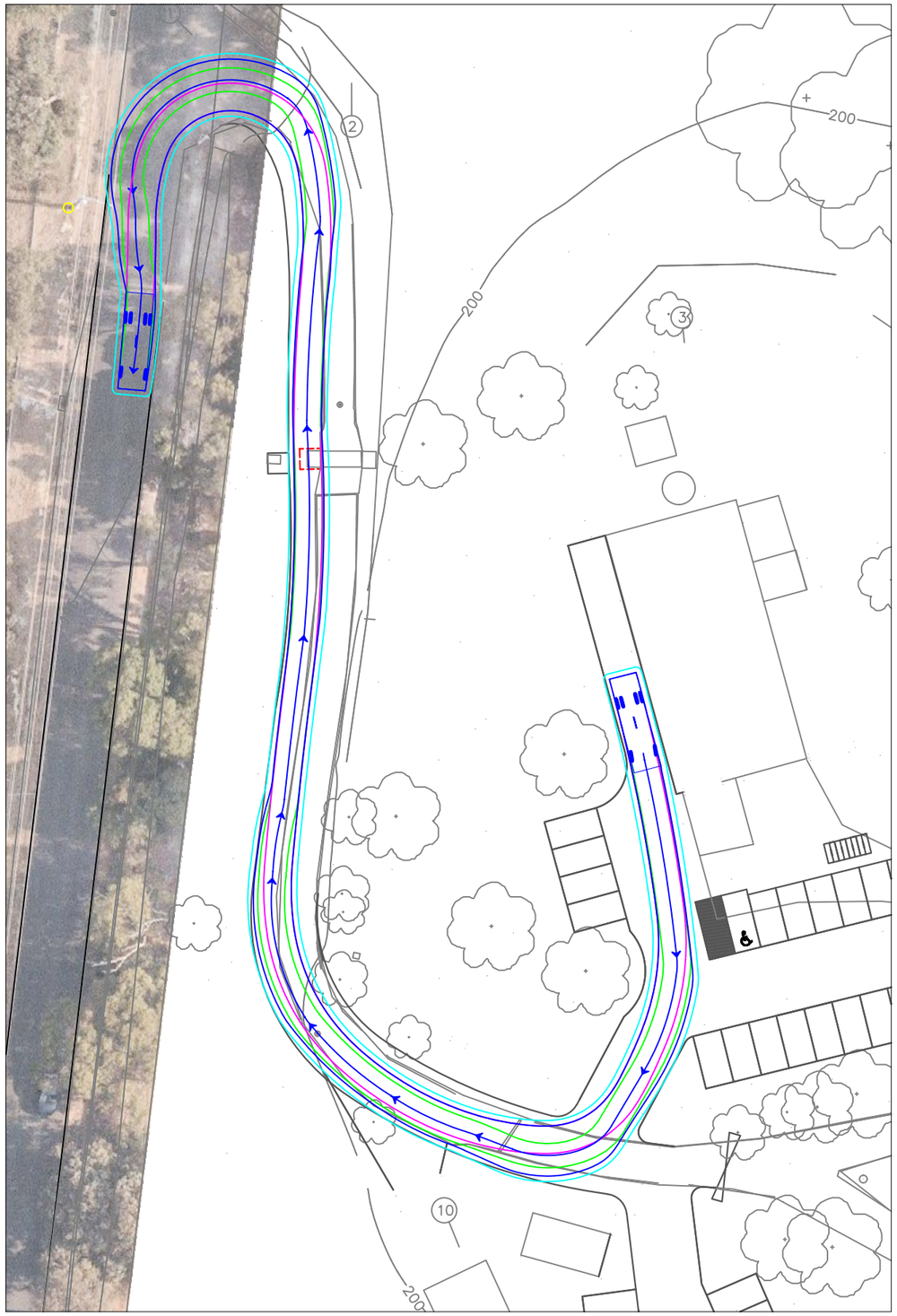
LEGEND

- REAR WHEELS
- FRONT WHEELS
- VEHICLE BODY
- BODY CLEARANCE

8.8 MRV SITE ACCESS - INGRESS



8.8 MRV SITE ACCESS - EGRESS



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