



### Office Use Only

Application Number: \_\_\_\_\_ Date Lodged: \_\_\_\_ / \_\_\_\_ / \_\_\_\_

VicSmart: ☐ Yes ☐ No

VicSmart Class: \_\_\_\_\_

## Application for a Planning Permit

### ① Privacy Statement

Your application and the personal information on this form is collected by Central Goldfields Shire Council (the Shire) for the purposes of the planning process as set out in the Planning and Environment Act 1987 (PE Act).

If you do not provide your name and address, the Shire will not be able to consider your application.  
Your application will be available at the Shire offices for any person to inspect and copies may be made available on request to any person for the relevant period set out in the PE Act.

You must not submit any personal information or copyright material of third parties without their informed consent. By submitting the material, you agree that the use of the material as detailed above does not breach any third party's right to privacy and copyright.

You can request access to your personal information by contacting the Shire Town Planning Department.

① Questions marked with a star (★) must be completed.

① If the space provided on the form is insufficient, attach a separate sheet.

### Application Type

Is this a VicSmart application? ★

<input checked="" type="radio"/> No	<input type="radio"/> Yes
If yes, please specify which VicSmart class or classes: _____	
⚠ If the application falls into one of the classes listed under Clause 92 or the schedule to Clause 94, it is a VicSmart application.	

### Pre-Application Meeting

Has there been a pre-application meeting with a Council planning officer?

<input checked="" type="radio"/> No	<input type="radio"/> Yes	If 'Yes', with whom?: _____
Date: _____		day / month / year

## The Land

Civic address of the land ★

Unit No.:	St. No.: 353	St. Name: Alma-Bawenak Rd
Suburb/Locality: Bawenak		Postcode: 3465

## Formal land description ★

① Complete either A or B. This information can be found on the certificate of title. If this application relates to more than one address, attach a separate sheet setting out any additional property details.

A	Lot No.:	<input type="radio"/> Lodged Plan	<input type="radio"/> Title Plan	<input type="radio"/> Plan of Subdivision	No.:
OR					
B	Crown Allotment No.:	2	Section No.:	15	
Parish/Township Name: Mayberough					

## The Proposal

For what use, development or other matter do you require a permit? ★

① You must give full details of your proposal and attach the information required to assess the application. Insufficient or unclear information will delay your application.

Sheep breeding stud & associated dwelling, outbuildings and in accordance with the Farm Management Plan

☒ Provide additional information about the proposal, including: plans and elevations; any information required by the planning scheme, requested by Council or outlined in a Council planning permit checklist; and if required, a description of the likely effect of the proposal.

Estimated cost of development for which the permit is required ★

Cost \$ 500,000

⚠ You may be required to verify this estimate.  
Insert '0' if no development is proposed.

If the application is for land within **metropolitan Melbourne** (as defined in section 3 of the *Planning and Environment Act 1987*) and the estimated cost of the development exceeds \$1 million (adjusted annually by CPI) the Metropolitan Planning Levy must be paid to the State Revenue Office and a current levy certificate must be submitted with the application. Visit [www.sro.vic.gov.au](http://www.sro.vic.gov.au) for information.

## Existing Conditions

Describe how the land is used and developed now ★

① For example, vacant, three dwellings, medical centre with two practitioners, licensed restaurant with 80 seats, grazing.

Site is vacant

☒ Provide a plan of the existing conditions. Photos are also helpful.

## Title Information

Encumbrances on title ★

Does the proposal breach, in any way, an encumbrance on title such as a restrictive covenant, section 173 agreement or other obligation such as an easement or building envelope?

- ☐ Yes (If 'yes' contact Council for advice on how to proceed before continuing with this application.)
- ☐ No
- ☒ Not applicable (no such encumbrance applies).

☒ Provide a full, current copy of the title for each individual parcel of land forming the subject site.  
The title includes: the covering 'register search statement', the title diagram and the associated title documents, known as 'instruments', for example, restrictive covenants.



## Applicant and Owner Details

### Applicant ★

- ① The applicant is the person who wants the permit.
- ① Please provide at least one contact phone number and a full postal address.
- ① Where the preferred contact person for the application is different from the applicant, provide the details of that person.

Name:		
Title: Ms	First Name: Julie	Surname: Lee
Organisation (if applicable): Nrlinks Pty Ltd		
Postal Address: If it is a P.O. Box, enter the details here:		
Unit No.:	St. No.:	St. Name: P.O. Box 61
Suburb/Locality: Clunes	State: Vic	Postcode: 3770
Contact information for applicant OR contact person below		
Business phone:	Email: julie@nrlinks.com.au	
Mobile phone:	Fax:	
Contact person's details* Same as applicant <input checked="" type="checkbox"/>		
Name:		
Title:	First Name:	Surname:
Organisation (if applicable):		
Postal Address: If it is a P.O. Box, enter the details here:		
Unit No.:	St. No.:	St. Name:
Suburb/Locality:	State:	Postcode:

### Owner ★

- ① The person or organisation who owns the land.
- ① Where the owner is different from the applicant, provide the details of that person or organisation.

Name: Same as applicant <input type="checkbox"/>		
Title:	First Name: Beverley - anne	Surname: Lee
Organisation (if applicable):		
Postal Address: If it is a P.O. Box, enter the details here:		
Unit No.:	St. No.:	St. Name:
Suburb/Locality:	State:	Postcode:
Owner's Signature: day / month / year		



## Information Requirements

Is the required information provided? ★

① Contact Council's planning department to discuss the specific requirements for this application and obtain a planning permit checklist.

☒ Yes

☐ No

## Declaration

This form must be signed by the applicant? ★

① Remember it is against the law to provide false or misleading information, which could result in a heavy fine and cancellation of the permit.

I declare that I am the applicant and that all the information in this application is true and correct for the permit application.

Date: 26/2/2024  
day / month / year

## Checklist

Have you?

☐ Filled in the form completely?

☐ Paid or included the application fee?

⚠ Most applications require a fee to be paid. Contact Council to determine the appropriate fee.

☒ Provided all necessary supporting information and documents?

☐ A full, current copy of title information for each individual parcel of land forming the subject site.

☐ A plan of existing conditions.

☐ Plans showing the layout and details of the proposal.

☐ Any information required by the planning scheme, requested by council or outlined in a council planning permit checklist.

☐ If required, a description of the likely effect of the proposal (for example, traffic, noise, environmental impacts).

☐ If applicable, a current Metropolitan Planning Levy certificate (a levy certificate expires 90 days after the day on which it is issued by the State Revenue Office and then cannot be used). Failure to comply means the application is void.

☐ Completed the relevant council planning permit checklist?

☐ Signed the declaration above?



AERIAL VIEW FROM SOUTH EAST

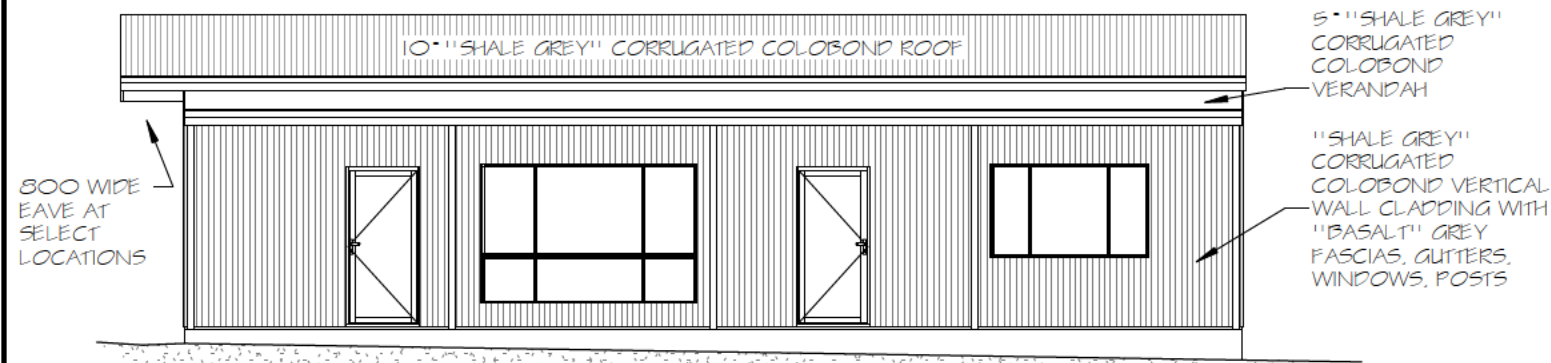


AERIAL VIEW FROM NORTH WEST

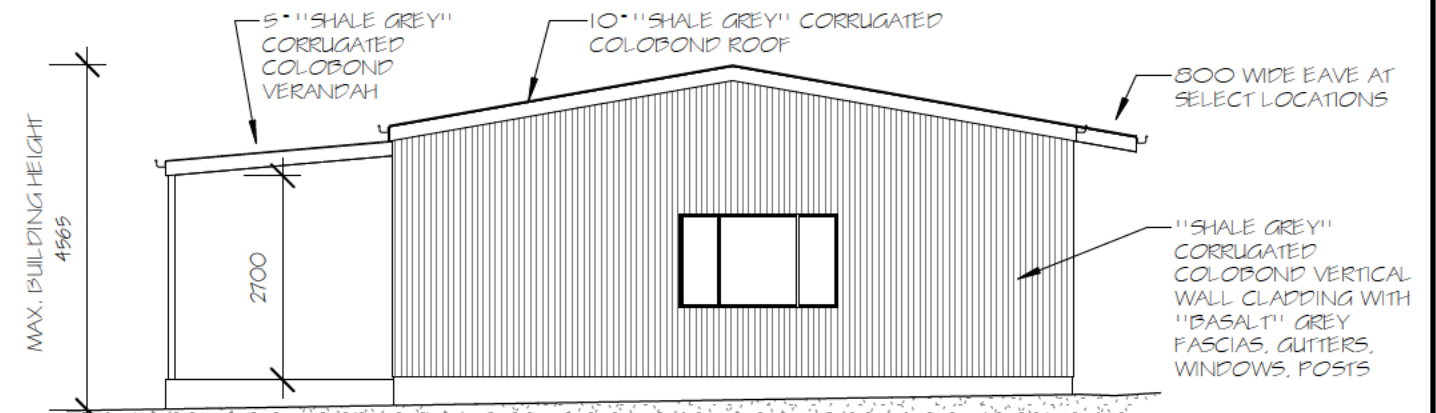
CLIENT: LEA - BOWENVALE  
 PROJECT: PROPOSED DWELLING AND 3 STEEL  
 SHEDS AT  
 353 ALMA-BOWENVALE RD,  
 BOWENVALE VIC 3465

DRAWN: NBD  
 PROJECT NO: L1002  
 DATE: 3/02/2024 2:15:52 AM

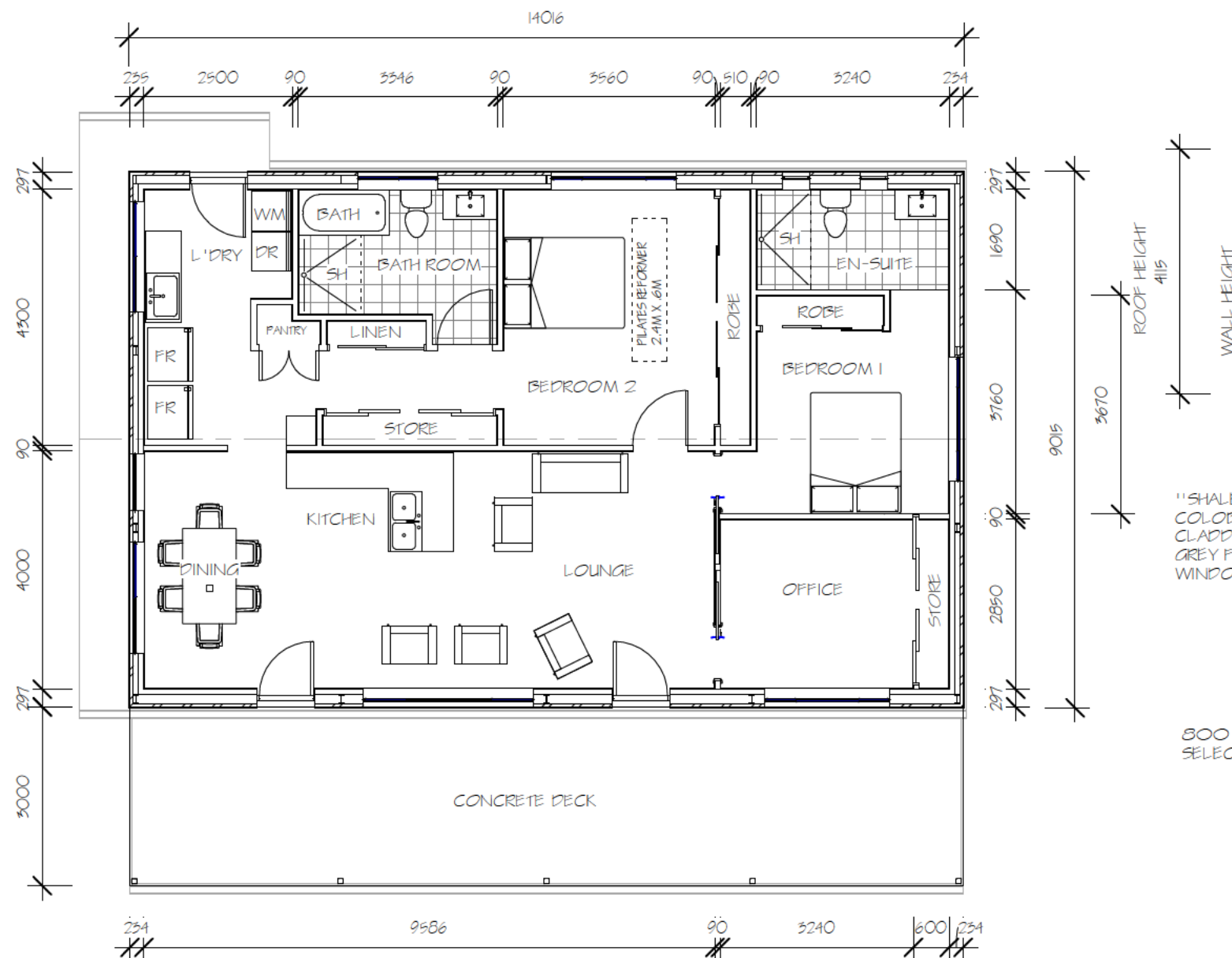
**B.F. & R. DOUGLAS**  
 BUILDING CONSULTANTS  
 REGISTERED BUILDING PRACTITIONER  
 98 HIGH ST MARYBOROUGH VIC 3465  
 Tel: 0354611220 Fax: 0354611208  
 Email: douglas1@netconnect.com.au



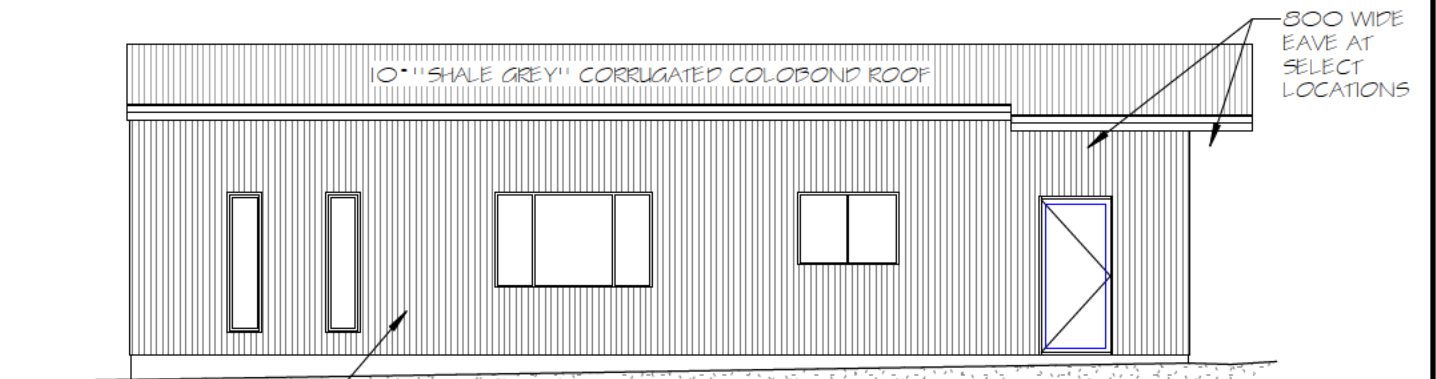
WEST ELEVATION



SOUTH ELEVATION



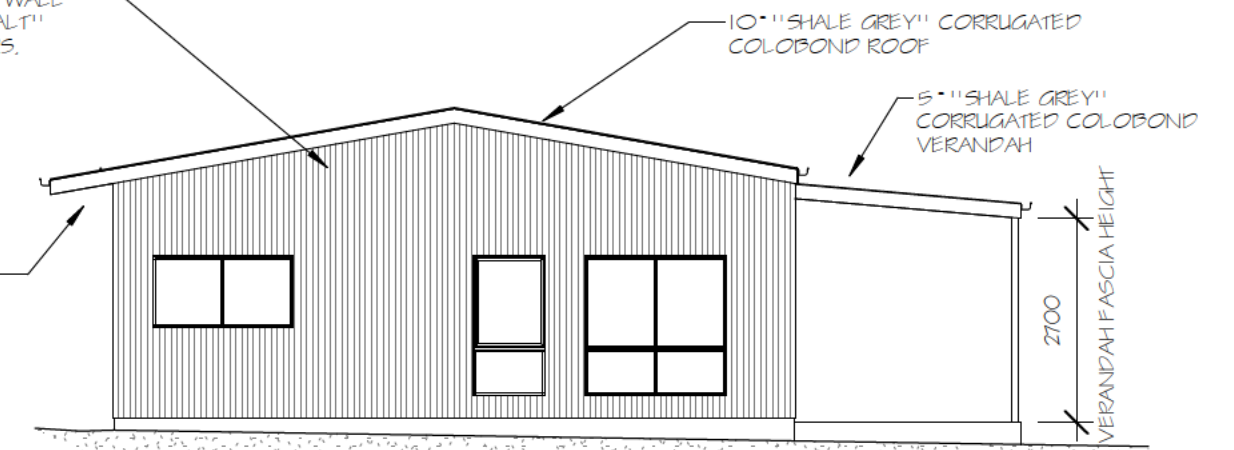
FLOOR PLAN



EAST ELEVATION

"SHALE GREY" CORRUGATED COLOBOND VERTICAL WALL CLADDING WITH "BASALT" GREY FASCIA, GUTTERS, WINDOWS, POSTS

800 WIDE EAVE AT SELECT LOCATIONS



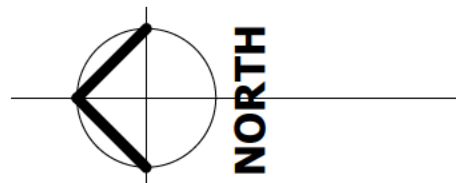
NORTH ELEVATION

## LEA - BOWENVALE

PROPOSED DWELLING AND 3 STEEL SHEDS AT 353 ALMA-BOWENVALE RD, BOWENVALE VIC 3465

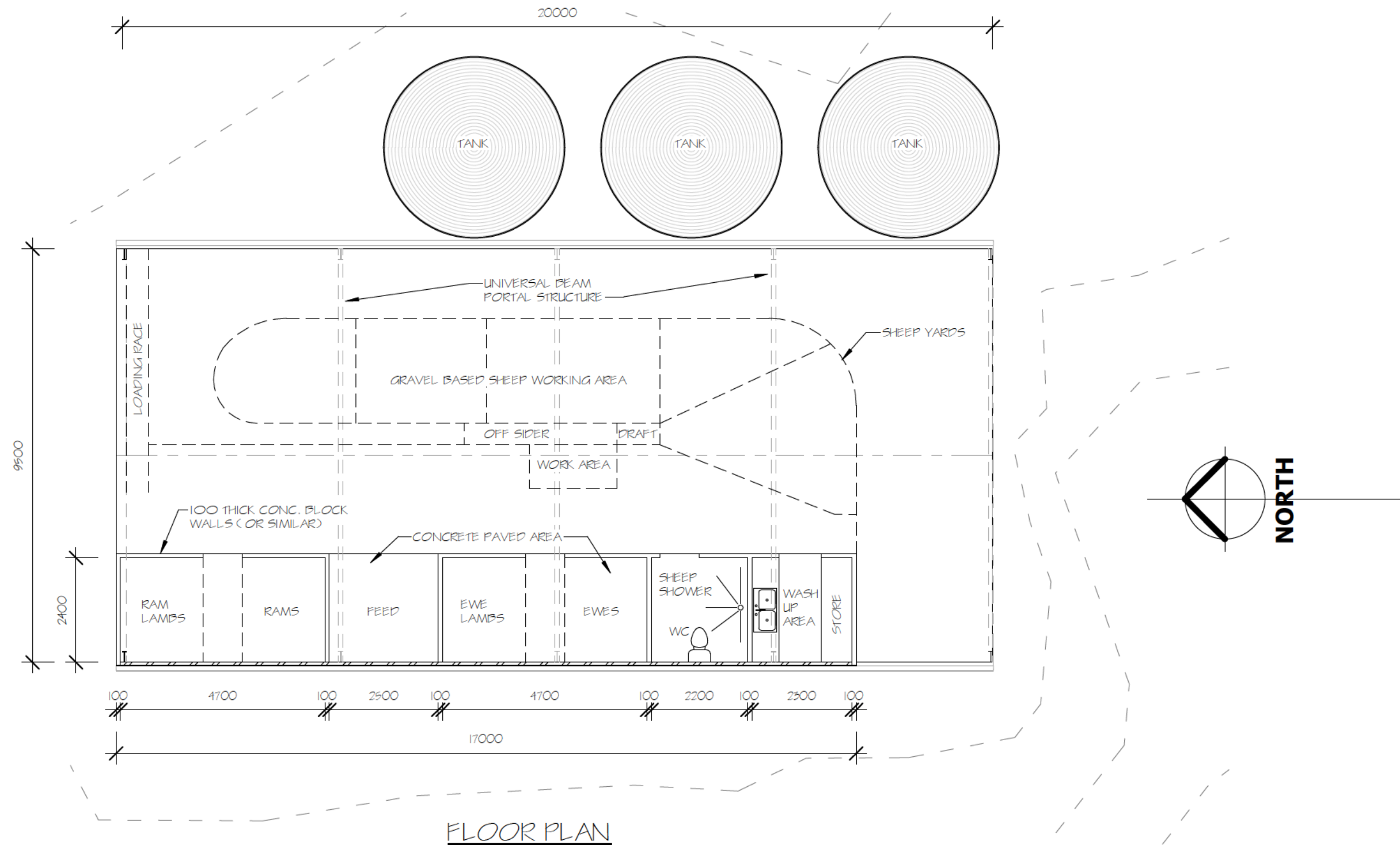
DWELLING

SHEET NO: A01	SCALE: 1:100	PROJECT NO: L1002
DESIGNED: B. DOUGLAS DF-AD1401	DRAWN: NBD	DATE: 3/02/2024 2:15:56 AM
REVISIONS:	<b>B.F. &amp; R. DOUGLAS</b> BUILDING CONSULTANTS REGISTERED BUILDING PRACTITIONER 98 HIGH ST MARYBOROUGH VIC 3465 Tel: 0354611220 Fax: 0354611208 Email: douglas1@netconnect.com.au	
Date	Description	Issue









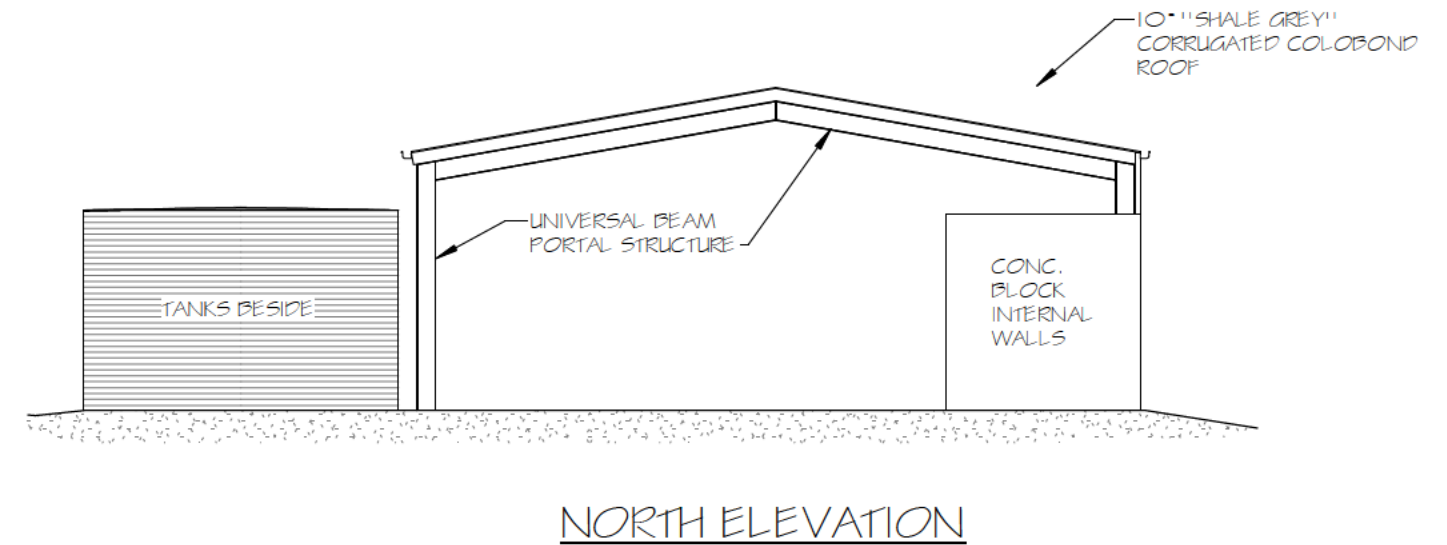
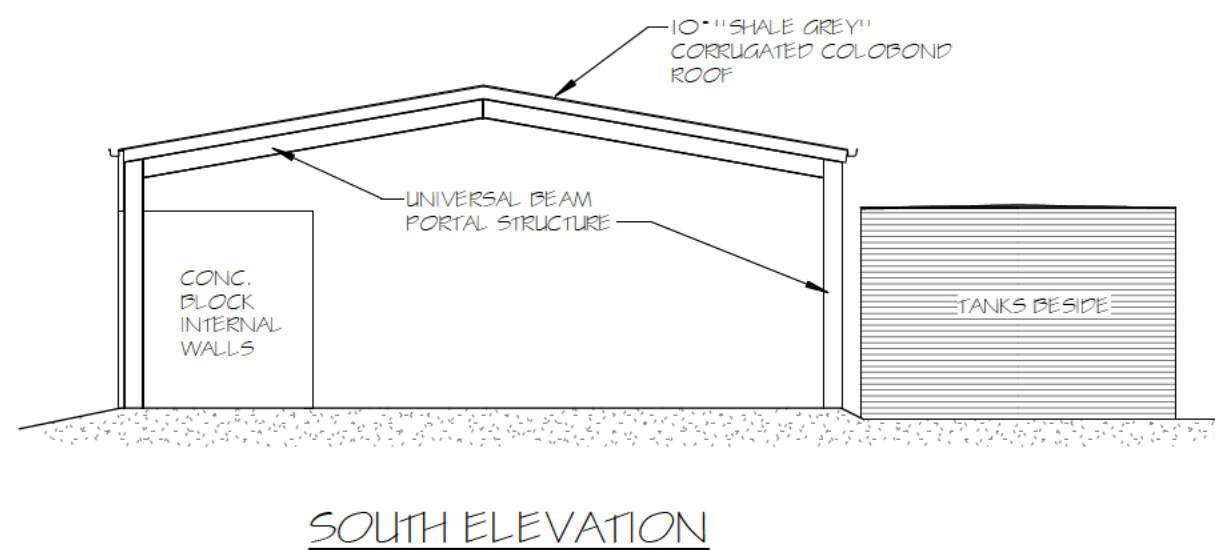
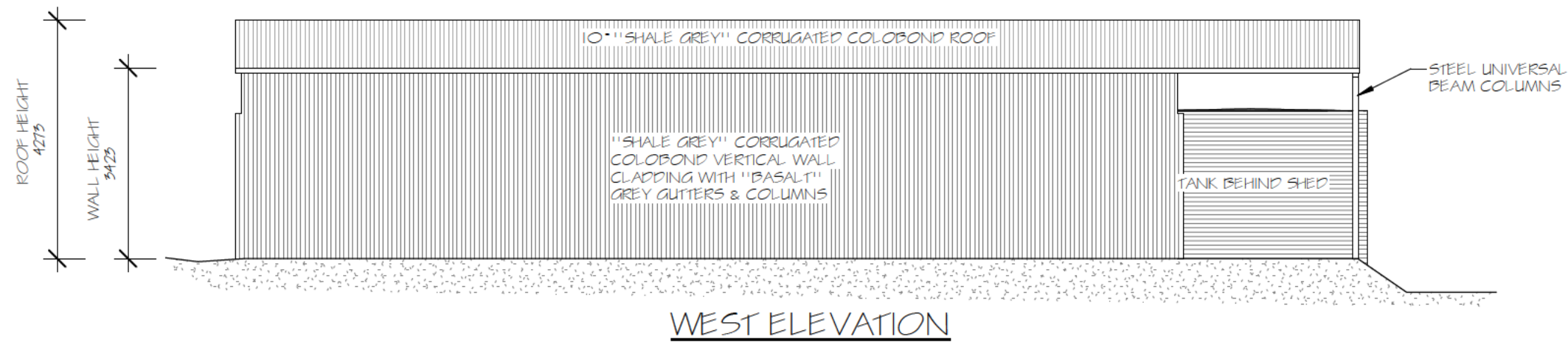
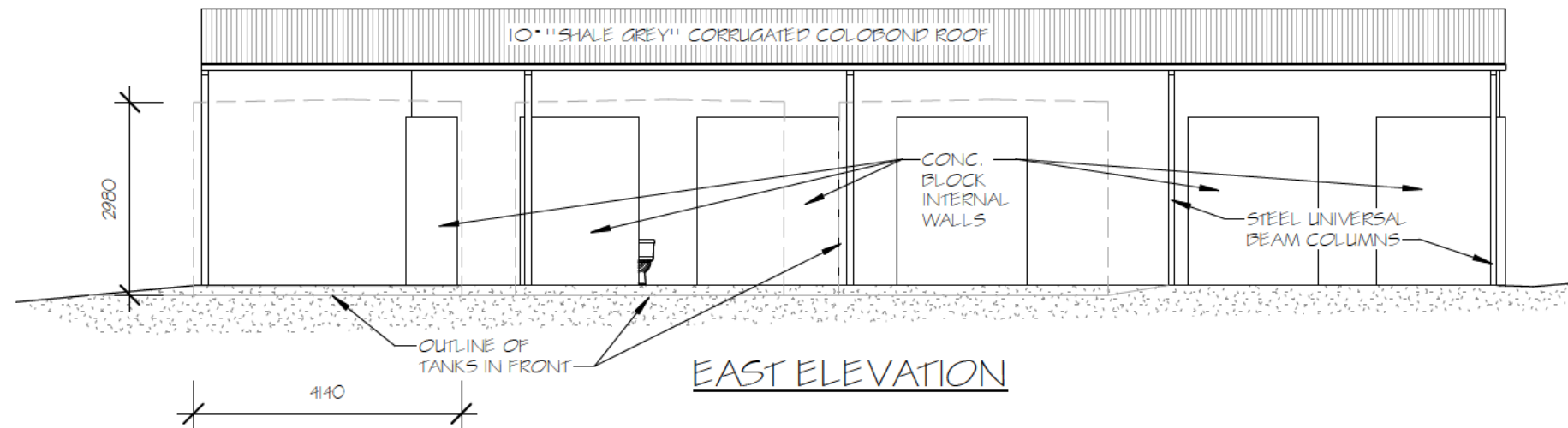
## LEA - BOWENVALE

PROPOSED DWELLING AND 3  
STEEL SHEDS AT  
353 ALMA-BOWENVALE RD,  
BOWENVALE VIC 3465

SHEEP SHED  
- PLAN

SHEET NO: A05	SCALE: 1:100	PROJECT NO: L1002
DESIGNED: B. DOUGLAS DP-AD1401	DRAWN: NBD	DATE: 3/02/2024 2:15:57 AM
REVISIONS:		
Date	Description	Issue

**B.F. & R. DOUGLAS**  
BUILDING CONSULTANTS  
REGISTERED BUILDING PRACTITIONER  
98 HIGH ST MARYBOROUGH VIC 3465  
Tel: 0354611220 Fax: 0354611208  
Email: douglas1@netconnect.com.au



## LEA - BOWENVALE

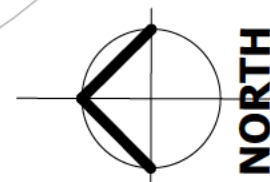
PROPOSED DWELLING AND 3  
STEEL SHEDS AT  
353 ALMA-BOWENVALE RD,  
BOWENVALE VIC 3465

ELEVATIONS  
- SHEEP  
SHED

SHEET NO: A04	SCALE: 1:100	PROJECT NO: L1002
DESIGNED: B. DOUGLAS DF-AD1401	DRAWN: NBD	DATE: 3/02/2024 2:15:57 AM
REVISIONS:		
Date	Description	Issue

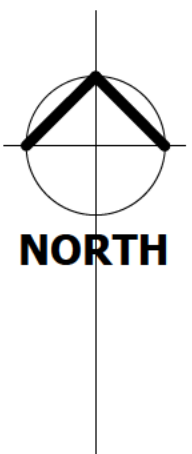
**B.F. & R. DOUGLAS**  
BUILDING CONSULTANTS  
REGISTERED BUILDING PRACTITIONER  
98 HIGH ST MARYBOROUGH VIC 3465  
Tel: 0354611220 Fax: 0354611208  
Email: douglas1@netconnect.com.au





<b>LEA – BOWENVALE</b>		SHEET NO: A05		SCALE: 1:100	PROJECT NO: L1002
		DESIGNED: B. DOUGLAS		DRAWN: NED	DATE: 3/02/2024 2:15:58 AM
PROPOSED DWELLING AND 3 STEEL SHEDS AT 353 ALMA-BOWENVALE RD, BOWENVALE VIC 3465		REVISIONS: Date Description Issue		<b>B.F. &amp; R. DOUGLAS</b> BUILDING CONSULTANTS REGISTERED BUILDING PRACTITIONER 98 HIGH ST MARYBOROUGH VIC 3465 Tel:0354611220 Fax:0354611208 Email:douglas1@netconnect.com.au	
		MACHINERY SHED			





SITE PLAN - OVERALL

PARISH OF MARYBOROUGH  
CROWN ALLOTMENT 2  
SECTION 15  
VOL. 12465 FOL. 557  
TP65576Q  
8.09 Ha

## LEA – BOWENVALE

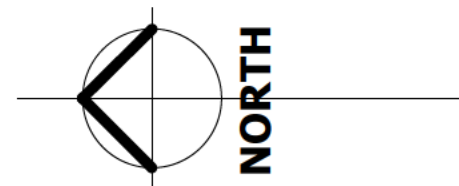
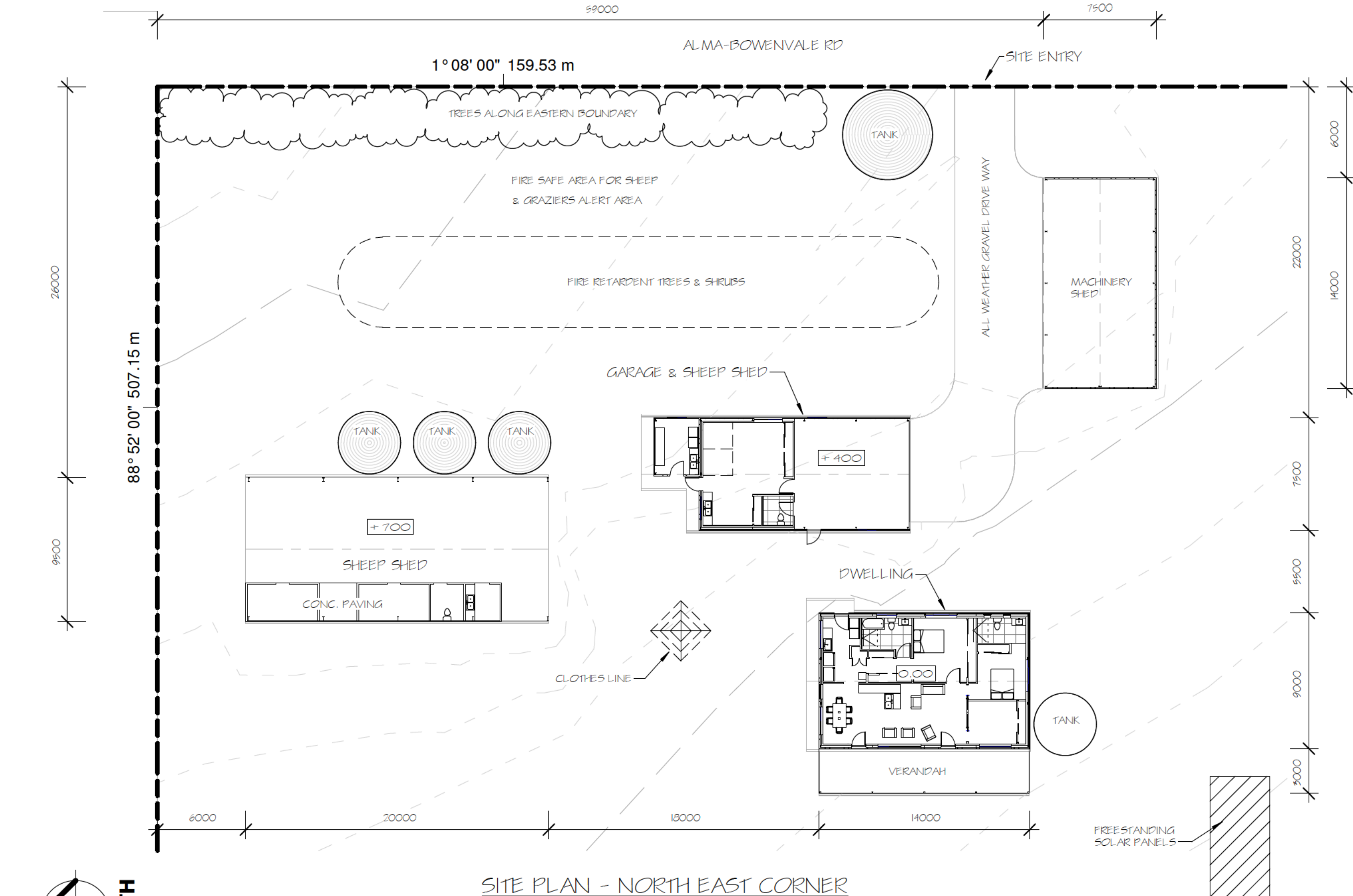
PROPOSED DWELLING AND 3  
STEEL SHEDS AT  
353 ALMA-BOWENVALE RD,  
BOWENVALE VIC 3465

SITE

SHEET NO: A06	SCALE: 1:2000	PROJECT NO: L1002
DESIGNED: B. DOUGLAS DF-AD1401	DRAWN: NBD	DATE: 3/02/2024 2:15:59 AM
REVISIONS:		
Date	Description	Issue

**B.F. & R. DOUGLAS**  
BUILDING CONSULTANTS  
REGISTERED BUILDING PRACTITIONER  
98 HIGH ST MARYBOROUGH VIC 3465  
Tel: 0354611220 Fax: 0354611208  
Email: douglas1@netconnect.com.au





SITE PLAN - NORTH EAST CORNER

## LEA - BOWENVALE

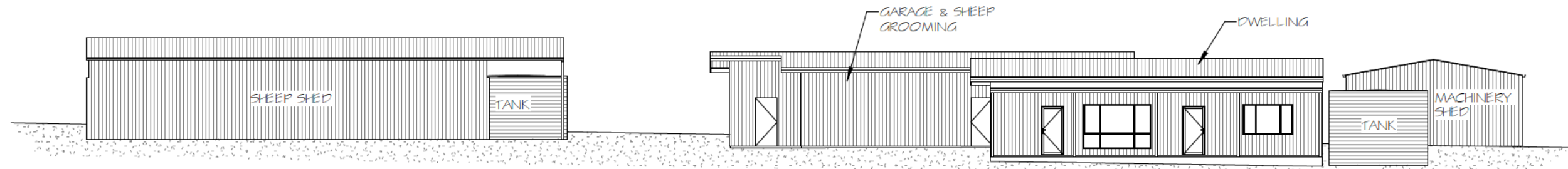
PROPOSED DWELLING AND 3  
STEEL SHEDS AT  
353 ALMA-BOWENVALE RD,  
BOWENVALE VIC 3465

SITE - NORTH  
EAST CORNER

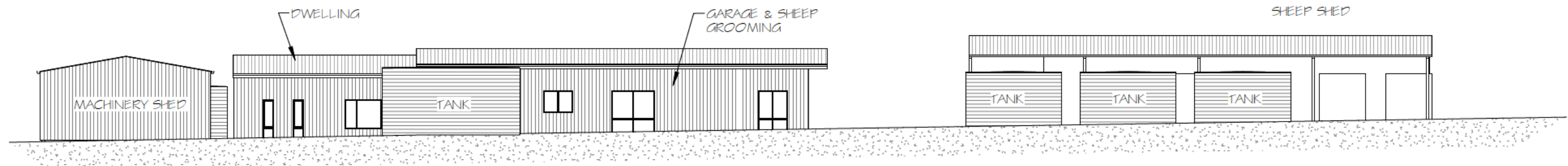
SHEET NO: A07	SCALE: 1:250	PROJECT NO: L1002
DESIGNED: B. DOUGLAS DF-AD1401	DRAWN: NED	DATE: 3/02/2024 2:16:01 AM
REVISIONS:		
Date	Description	Issue

**B.F. & R. DOUGLAS**  
BUILDING CONSULTANTS  
REGISTERED BUILDING PRACTITIONER  
98 HIGH ST MARYBOROUGH VIC 3465  
Tel: 0354611220 Fax: 0354611208  
Email: douglas1@netconnect.com.au

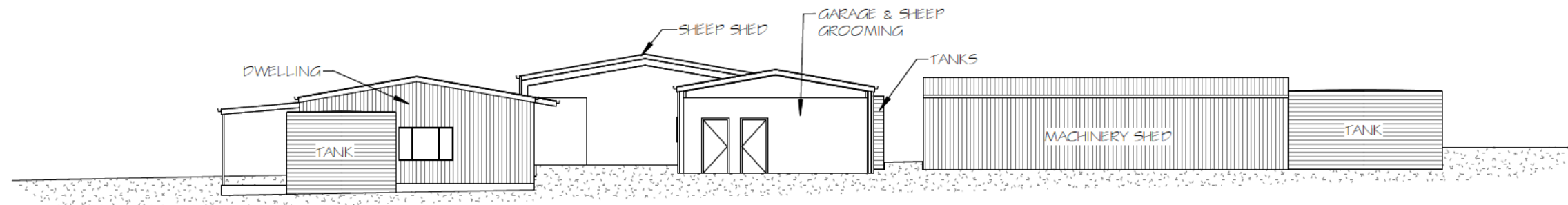




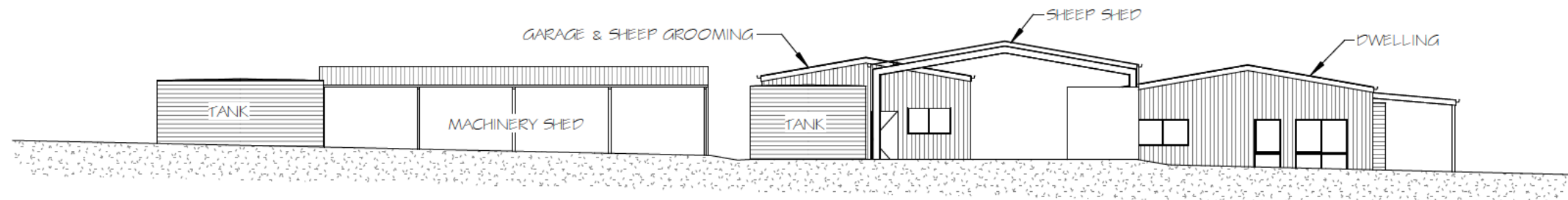
WEST ELEVATION



EAST ELEVATION



SOUTH ELEVATION



NORTH ELEVATION

## LEA – BOWENVALE

PROPOSED DWELLING AND 3  
STEEL SHEDS AT  
353 ALMA-BOWENVALE RD,  
BOWENVALE VIC 3465

ELEVATIONS  
- OVERALL

SHEET NO: A08	SCALE: 1:200	PROJECT NO: L1002
DESIGNED: B. DOUGLAS DP-AD1401	DRAWN: NBD	DATE: 3/02/2024 2:16:05 AM
REVISIONS:	<b>B.F. &amp; R. DOUGLAS</b> BUILDING CONSULTANTS REGISTERED BUILDING PRACTITIONER 98 HIGH ST MARYBOROUGH VIC 3465 Tel: 0354611220 Fax: 0354611208 Email: douglas1@netconnect.com.au	
Date		
Description		
Issue		

## REGISTER SEARCH STATEMENT (Title Search) Transfer of Land Act 1958

Page 1 of 1

VOLUME 12465 FOLIO 557

Security no : 124111883407E

Produced 16/01/2024 09:55 AM

### LAND DESCRIPTION

Crown Allotment 2 Section 15 Parish of Maryborough.  
PARENT TITLE Volume 10050 Folio 969  
Created by instrument AW682498R 30/03/2023

### REGISTERED PROPRIETOR

[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]

### ENCUMBRANCES, CAVEATS AND NOTICES

For details of any other encumbrances see the plan or imaged folio set out under DIAGRAM LOCATION below.

### DIAGRAM LOCATION

SEE TP065576Q FOR FURTHER DETAILS AND BOUNDARIES

### ACTIVITY IN THE LAST 125 DAYS

NIL

-----END OF REGISTER SEARCH STATEMENT-----

Additional information: (not part of the Register Search Statement)

Street Address: 353 ALMA-BOWENVALE ROAD BOWENVALE VIC 3465

### ADMINISTRATIVE NOTICES

[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]

# Imaged Document Cover Sheet

The document following this cover sheet is an imaged document supplied by LANDATA®, Secure Electronic Registries Victoria.

Document Type	<b>Plan</b>
Document Identification	<b>TP065576Q</b>
Number of Pages (excluding this cover sheet)	<b>2</b>
Document Assembled	<b>16/01/2024 09:55</b>

**Copyright and disclaimer notice:**

© State of Victoria. This publication is copyright. No part may be reproduced by any process except in accordance with the provisions of the Copyright Act 1968 (Cth) and for the purposes of Section 32 of the Sale of Land Act 1962 or pursuant to a written agreement. The information is only valid at the time and in the form obtained from the LANDATA® System. None of the State of Victoria, LANDATA®, Secure Electronic Registries Victoria Pty Ltd (ABN 86 627 986 396) as trustee for the Secure Electronic Registries Victoria Trust (ABN 83 206 746 897) accept responsibility for any subsequent release, publication or reproduction of the information.

The document is invalid if this cover sheet is removed or altered.



TITLE PLAN		EDITION 2		TP 65576Q	
Location of Land			Notations		
Parish: MARYBOROUGH			ANY REFERENCE TO MAP IN THE TEXT MEANS THE DIAGRAM SHOWN ON THIS TITLE PLAN		
Township:					
Section: 15					
Crown Allotment: 1, 2, 3, 3A, 4					
Crown Portion:					
Last Plan Reference:					
Derived From: VOL 10050 FOL 969					
Depth Limitation: 15.24 m (CA 1, 2, 3, 3A)					
Description of Land / Easement Information			THIS PLAN HAS BEEN PREPARED FOR THE LAND REGISTRY, LAND VICTORIA, FOR TITLE DIAGRAM PURPOSES AS PART OF THE LAND TITLES AUTOMATION PROJECT COMPILED: 05/07/1999 VERIFIED: PB		
<p>GOVERNMENT ROAD</p> <p>GOVERNMENT ROAD</p> <p>GOVERNMENT ROAD</p> <p>GOVERNMENT ROAD</p> <p>1 8.084 ha</p> <p>1A</p> <p>2 8.090 ha</p> <p>3A 6.164 ha</p> <p>4 8.417 ha</p> <p>178°52' 6.293 ha</p> <p>88°52' 399.72</p> <p>88°51' 399.72</p> <p>88°52' 507.15</p> <p>88°52' 507.15</p> <p>268°52' 507.15</p> <p>268°52' 506.54</p> <p>268°52' 506.54</p> <p>178°52' 571.33</p> <p>178°52' 132.97</p> <p>178°52' 66.79</p> <p>113°34' 273.99</p> <p>178°52' 125.33</p> <p>178°52' 64.37</p> <p>202.38</p> <p>202.18</p> <p>159.53</p> <p>159.53</p> <p>245.63</p> <p>245.63</p> <p>166.17</p> <p>166.17</p> <p>358°52' 773.71</p>					
LENGTHS ARE IN METRES		Metres = 0.3048 x Feet Metres = 0.201168 x Links		Sheet 1 of 1 sheets	

[illegible]

# LAND CAPABILITY ASSESSMENT

## Ballarat Soil Testing

*Specialising in building site soil classification  
& land capability assessments*

ABN 24 586 140 741

<b>SUMMARY:</b>	
Primary treatment device	Septic tank with 3000 - 3500 L capacity
Land application system	Conventional trench and bed system of 120 <i>lineal metres</i> <ul style="list-style-type: none"><li>• Length of each trench - 30 metres</li><li>• Width of each trench - 1.0 metre</li><li>• Spacing between trenches - 2.0 metres</li><li>• Total effluent field area - 300 m<sup>2</sup></li></ul>
Loading rate	600L/day
Soil category (AS/NZ 1547:2012)	5a - strongly structured light clay
Design loading rate (DLR)	5 mm/day

<b>JOB:</b>	
Reference No	BL150823
Date	August 16, 2023

<b>SITE:</b>	
Proposed development	New dwelling with on-site effluent treatment
Property address	Lot 2 - 353 Alma - Bowenvale Road, Bowenvale
Shire council	Central Goldfields Shire Council

<b>PREPARED FOR:</b>	
Client name	Beverley-Anne Lea
Address	55 Peddie Avenue, Portland West VIC 3305

<b>PREPARED BY:</b>	
Geologist	S. O'Loughlin
Address	313 Scott Street, Buninyong
Telephone	0419 536 910
Email	ballaratsoiltesting@gmail.com

REVIEW:	DATE:	DETAILS:
A	August 16, 2023	Initial draft for submission
B		
C		
D		
E		
F		

## Table of contents

1	COMMISSION	5
2	LOCALITY AND SITE DESCRIPTION	6
2.1	The site	6
2.2	The locality and surrounding land	6
3	PROPOSED DEVELOPMENT	7
3.1	Construction	7
3.2	Wastewater	7
3.3	Intended water supply and sewer source	7
4	SITE AND SOIL ASSESSMENT	8
4.1	Work undertaken	8
4.2	Site assessment	8
4.3	Soil key features	9
4.4	Geology	9
4.5	Local Mine Hazards	9
4.6	Soil	10
4.7	Soil profile determination	10
4.8	Soil assessment	10
4.9	Groundwater Assessment	11
4.10	Victorian Planning Provision – Overlays	11
4.11	Overall assessment results and land capability rating	12
5	WASTEWATER MANAGEMENT SYSTEM	13
5.1	Overview	13
5.2	Treatment system	13
5.3	Type of land application system	13
5.4	Sizing the absorption trenches and beds system	14
5.5	Siting and configuration of the irrigation system	14
5.6	Buffer distances	15
5.7	Installation of the irrigation system	15



5.8	Monitoring, operation and maintenance	16
6	CONCLUSIONS	17
	ATTACHMENT 1 – LOCALITY PLAN	18
	ATTACHMENT 2 – SOIL TESTING PROGRAM PLAN	19
	ATTACHMENT 3 – PROPOSED WASTEWATER TREATMENT PLAN	20
	ATTACHMENT 4 – SAMPLE HOLE RESULTS	21
	ATTACHMENT 5 – TRENCH BED SIZING CALCULATIONS	22
	ATTACHMENT 6 – CODE OF PRACTICE ONSITE WASTEWATER MANAGEMENT – APPENDIX D: SEPTIC TANKS	23
	ATTACHMENT 7 – VICPLAN PLANNING PROPERTY REPORT	24
	ATTACHMENT 8 – REDUCING WASTEWATER	25

# 1 Commission

When a property developer, potential buyer or land holder considers subdividing land or building one or more premises, they must first determine whether wastewater can be sustainably managed and absorbed by the land within the property boundaries without negatively impacting the beneficial uses of surface waters and groundwater.

It is the responsibility of the property owner to prove to Council that the proposed onsite wastewater treatment and recycling system will operate sustainably on the property without adverse impacts on public health or the environment.

The objective of this investigation is to conduct a Land Capability Assessment (LCA) and propose a suitable type of onsite wastewater management system for the proposed residential development at the above address.

This document provides a detailed LCA for the allotment, information about the site and soil conditions along with monitoring and management recommendations.

This report has been written to comply with all relevant and current Victorian legislation, guidelines, codes and standards, including:

- AS/NZS 1547:2012, Onsite domestic wastewater management;
- AS/NZS 1547:1994, Onsite domestic wastewater management;
- Code of Practice Onsite Wastewater Management, Publication No. 891.4, July 2016, Environmental Protection Authority;
- Land Capability Assessment for Onsite Domestic Wastewater Management, Publication 746.1, March 2003, EPA Victoria;
- Victorian Land Capability Assessment Framework, January 2014, Municipal Association of Victoria.

Exclusion of liability:

- Please be advised, it is the property owner's responsibility when applying for a Planning Permit or Septic Tank Permit, or a consultant might lodge an LCA if they are acting on behalf of the property owner to obtain a Planning or Septic Tank Permit should the property owner direct the consultant to do so.
- It is the responsibility of the property owner to prove to Council that the proposed onsite wastewater treatment and recycling system will operate sustainably on the property without adverse impacts on public health or the environment.
- This LCA document does not substitute a Planning Permit or Septic Tank Permit nor does it provide guidance or recommend the suitability of an allotment for purchase. That is the responsibility of the client. Ballarat Soil Testing assumes no responsibility for the decision of the client to purchase an allotment.

## 2 Locality and site description

### 2.1 The site

	Site shape, dimensions, size, gradient and drainage
The site has a total area of:	8.71 ha (Lot 2)
The ground surface is:	Relatively flat.
The gradient of the site is:	Slight slope falling to southwest in proposed effluent field area.
The drainage on site is:	Good

	Existing use and development on the site
The current use of the site is:	Vacant
The buildings or works located on the site are:	None

	Existing access arrangements
The main vehicle access to the site is provided from:	Gate access from Alma - Bowenvale Road.
The space available for vehicle maneuverability can be considered:	Excellent
The site is located:	Please refer to Attachment 1.

	Existing vegetation
Describe the vegetation on the site, including the type, location, extent and any other relevant information:	Pasture grasses across site.

### 2.2 The locality and surrounding land

	Existing use and development on adjacent sites
Describe the land and existing land uses around the subject land:	Rural residential and farming. FZ - Farming Zone.

### 3 Proposed development

#### 3.1 Construction

	Building
The proposed building on site is:	New dwelling with on-site effluent treatment.
The number of bedrooms/study is proposed to be:	3 x bedrooms.
The maximum occupancy is proposed to be:	4 x people.

#### 3.2 Wastewater

	Wastewater system
Target effluent quality:	<p>Primary treatment systems, such as septic tanks, use physical methods such as screening, flocculation, sedimentation, flotation and composting to remove the gross solids from the wastewater, plus biological anaerobic and aerobic microbial digestion to treat the wastewater and the biosolids.</p> <p>Unlike secondary standard effluent, primary treated effluent does not have a specific water quality standard. Consequently, primary treated effluent can only be dispersed to land via below-ground applications.</p>
Anticipated wastewater load:	<p>Daily household wastewater generation is estimated by multiplying the potential occupancy, which is based on the number of bedrooms (plus one person), by the Minimum Wastewater Flow Rates.</p> <p>Assessments should include any additional room(s) shown on the house plan such as a study, library or sunroom that could be closed off with a door, as a bedroom for the purposes of the following calculations.</p> <p>Assuming construction of a 3 x bedroom dwelling with water-saving fixtures, 4 x people maximum occupancy and wastewater generation of 150L/day/person.</p> <p>Therefore: Total Design Load = 600L/day.</p>

#### 3.3 Intended water supply and sewer source

	Services
Domestic water supply	Reticulated water supply is not available.
Availability of sewer	No town sewerage system is available.



## 4 Site and soil assessment

### 4.1 Work undertaken

	Assessment
Assessor:	Stephen O'Loughlin
Date:	August 15, 2023

### 4.2 Site assessment

Feature	Description	Level of constraint	Mitigation measures
Aspect (affects solar radiation received)	North	Nil	NN
Climate (difference between annual rainfall and pan evaporation)	Rainfall approximates to evaporation	Moderate	Conventional absorption trench system with 1.0 metre wide trenches to be installed.
Erosion (or potential for erosion)	Nil or minor	Nil	NN
Exposure to sun and wind	Full sun	Nil	NN
Fill (imported)	No fill	Nil	NN
Flood frequency (ARI)	Less than 1 in 100 years	Nil	NN
Groundwater bores	No bores onsite or on neighbouring properties	Nil	There is no groundwater bore on this allotment.
Land area available for LAA	Exceeds LAA and duplicate LAA and buffer distance requirements	Nil	NN
Landslip (or landslip potential)	Nil	Nil	NN
Rock outcrops (% of surface)	<10%	Nil	NN
Slope Form (affects water shedding ability)	Straight side-slopes	Moderate	NN

Slope gradient (%) for absorption trenches and beds	<6%	Nil	NN
Soil Drainage (qualitative)	No visible signs or likelihood of dampness, even in wet season	Nil	NN
Stormwater run-on	Low likelihood of stormwater run-on	Nil	NN
Surface waters - setback distance (m)	Setback distance complies with requirements in EPA Code of Practice 891.4 (as amended)	Nil	NN
Vegetation coverage over the site	Plentiful vegetation with healthy growth and good potential for nutrient uptake	Nil	NN
Soil Drainage (Field Handbook definitions)	Well drained. Water removed from the soil readily, excess flows downward. Some horizons may remain wet for several days after addition	Minor	Adopt DLR = 5mm/day. Conventional absorption trench system with 1.0 metre wide trenches to be installed.

\*NN: not needed

### 4.3 Soil key features

The site's soils have been assessed for their suitability for onsite wastewater management by a combination of soil survey and desktop review of published soil survey information as outlined below.

### 4.4 Geology

	Geological mapping
Geological Survey Code:	Ocl
Description:	Deep marine turbidites and hemipelagic sediments: sandstone, mudstone, black shale and minor granule quartz conglomerate; mostly thick-bedded sandstone, coarse- to fine-grained, often graded, diffusely stratified to cross laminated, moderately to well sorted.
Reference:	WOHLT, K.E., TAYLOR, D.H., SIMONS, B.A. & MAGART, A.P.M., 2000. Maryborough 1:50,000 geological map. Geological Survey of Victoria.

### 4.5 Local Mine Hazards

	DPI Search for Mine Hazard results
Department of Primary Industries records:	"indicate that there may have been mining activity on this site and that there may be evidence of that activity remaining on this site. This evidence may include mine openings."

## 4.6 Soil

	Soil conditions
The predominant soil profile on site is:	Silty loam to depths of 100 - 200mm overlying stiff silty clay.
Sample hole results:	Please refer to Attachment 4 for sample hole results.

## 4.7 Soil profile determination

	Assessment
Field work:	2 x boreholes were established and excavated in the area of the proposed wastewater management system effluent field area.
Method of drilling or excavation:	Trailer-mounted soil sampling machine
Method of classification:	The soil was classified according to AS/NZS 1547-1994/2012 while considering Bowenvale's temperate climate.
Site and test plan:	Please refer to Attachment 2.
Reporting:	Please refer to Attachment 4.

## 4.8 Soil assessment

Feature	Assessment	Level of Constraint	Mitigation Measures
Soil category (AS/NZ 1547:2012)	4a - moderately structured silty clay loam overlying 5a - strongly structured silty clay (light clay).		
Soil depth	Topsoil: 100 - 200mm	Minor	Conventional absorption trench system with 1.0 metre wide trenches to be installed.
Soil Permeability & Design Loading Rates	Subsoil: 5a - strongly structured light clay: 0.12 - 0.5 m/day saturated conductivity ( $K_{sat}$ ) (AS/NZS1547:2012); 5 mm/day Design Loading Rate (DLR) for irrigation system and 3 mm/day Design Irrigation Rate (DIR) for irrigation system (Code of Practice, 2016).	Moderate	Adopt DLR = 5mm/day.
Gleying	Nil	Nil	NN
Mottling	Very well to well-drained soils generally have uniform brownish or reddish colour	Nil	NN

pH	5.5 - 8 is the optimum range for a wide range of plants	Nil	NN
Rock Fragments	0 - 10%	Nil	NN
Soil Depth to Rock or other impermeable layer	>1.5 m	Nil	NN
Soil Structure (pedality)	Highly to moderately-structured	Nil	NN
Soil Texture, Indicative Permeability	5a	Moderate	Adopt DLR = 5mm/day.
Watertable Depth (m) below the base of the LAA	>2m	Nil	NN

\*NN: not needed

## 4.9 Groundwater Assessment

	Visualising Victoria's Groundwater Data Search
VVG records:	Groundwater depth: < 5m Groundwater salinity: 7000 - 13000mg/L

## 4.10 Victorian Planning Provision – Overlays

Overlay	Assessment
Planning Zone:	FZ - Farming Zone
Planning Overlay:	BMO - Bushfire Management Overlay
Declared Special Water Supply Catchment Area:	Loddon River (Laanecoorie).



#### 4.11 Overall assessment results and land capability rating

Based on the most constraining site features and soil assessment, the overall land capability of the proposed effluent management area is not constrained.

The site is in the Loddon River (Laanecoorie) Declared Special Water Supply Catchment Area.

However the site is larger than 8000m<sup>2</sup>, it is characterized by light clays with adequate topsoils to depths of 100 - 200mm and is not subject to flooding.

The proposed effluent management area is located above the 1:100 flood level and by using primary treatment and conventional absorption trench and beds, there will be ample protection of surface waters and groundwater.

## 5 Wastewater management system

### 5.1 Overview

This report provides recommendations for treatment and land application systems that are appropriate to the land capability. The following sections provide an overview of a suitable system, with sizing and design considerations and justification for its selection. Detailed design for the system is beyond the scope of this study, but should be undertaken at the time of building application and submitted to Council.

### 5.2 Treatment system

#### Septic tank

**This site requires a 3000 - 3500 L septic tank that will provide primary treatment of domestic wastewater, including separation of suspended material.**

In this system, household wastewater first flows into a primary septic tank where solids settle to bottom of the tank to form a sludge layer, and grease and fat float to the surface to form a scum layer. Clarified effluent then flows (or is pumped via a pump well) to the absorption trench or bed for treatment and disposal.

### 5.3 Type of land application system

#### Absorption trenches and beds

**Conventional absorption trenches and beds for primary treated effluent are applicable for this site.**

The depth and overall basal area depend on soil type and anticipated wastewater volume, climate and site features.

**It is recommended that the trenches on this site be excavated to a maximum width of 1000mm and a depth of 400mm. Each trench is to be a maximum of 30 metres in length with 2 metre spacings between trenches.**

In a conventional septic tank and absorption system, wastewater is gravity-fed or pumped from the septic tank to the absorption area. Trenches or beds are usually built below ground and can be media-filled or consist of a durable self-supporting arch resting on gravel (or occasionally coarse sand).

Effluent is typically distributed along the length of the trench or bed through slotted or drilled 100 millimetre distribution pipes, and then filtered through the gravel and sand to the underlying soil. A clogging layer or biomat develops along the bottom and sides of the trench and acts as a further filter.

This filtering process helps remove pathogens, toxins and other pollutants. Nutrients in the effluent are taken up by vegetation (normally grass) planted across the absorption trench area, incorporated in the biomat, and, in the case of phosphorus, adsorbed onto clay particles in the soil.

## 5.4 Sizing the absorption trenches and beds system

To determine the necessary size of the absorption trenches and beds system, water balance modelling has been undertaken using the method and water balance tool developed for the Victorian Land Capability Assessment Framework (2014). The calculations are summarised below, with full details provided in Attachment 5.

	Data used in the water balance
Average daily effluent load	600 L/day
Design loading rate (DLR)	5 mm/day
Selected trench or bed width	1.0 metre
Spacing between each trench or bed	2.0 metres
Total effluent field area	300 m <sup>2</sup>

### Size

**As a result of these calculations, a proposed 3 x bedroom dwelling on this site requires at least 120 lineal metres of conventional absorption trenches and beds.**

Number of habitable rooms	Number of occupants	Total daily household wastewater	Length of trench
2	3	450	90 m
3	4	600	120 m
4	5	750	150 m

## 5.5 Siting and configuration of the irrigation system

### Description

It is preferable to keep the irrigation area as high on the property and a maximum distance from the boundaries as possible.

**The preferred area is to the west of the proposed dwelling building envelope.**

Attachment 3 shows an envelope of land that is suitable for effluent management. Final placement and configuration of the irrigation system will be determined by the client and/or system installer, provided it remains within this envelope.

Whilst there is ample area for application of the effluent, it is important that appropriate buffer distances to any waterways be maintained. It is important to note that buffers are measured as the overland flow path for run-off water from the effluent irrigation area.



It is recommended that the owner consult an irrigation expert familiar with effluent irrigation equipment to design the system, and an appropriately registered plumbing/drainage practitioner to install the system. The irrigation plan must ensure even application of effluent throughout the entire irrigation area.

## 5.6 Buffer distances

### Description

Setback buffer distances from effluent land application areas and treatment systems are required to help prevent human contact, maintain public amenity and protect sensitive environments. The relevant buffer distances for this site, taken from Table 5 of the Code (2016) are:

- 300 metres from a dam, lake or reservoir (potable water supply);
- 100 metres from waterways (potable water supply);
- 60 metres from waterways, wetlands (continuous or ephemeral, non-potable); estuaries, ocean beach at high-tide mark; dams, lakes or reservoirs (stock and domestic, non-potable);
- 20 metres from groundwater bores in Category 2b to 6 soils; and
- 6 metres if area up-gradient and 3 metres if area down-gradient of property boundaries, swimming pools and buildings (conservative values for primary effluent).

**All buffer distances are achievable.**

The site plan in Attachment 3 shows the location of the proposed wastewater management system components and other relevant features.

## 5.7 Installation of the irrigation system

### Description

Installation of the irrigation system must be carried out by a suitably qualified, licensed plumber or drainer experienced with effluent irrigation systems.

To ensure even distribution of effluent, it is essential that the pump capacity is adequate for the size and configuration of the irrigation system, taking into account head and friction losses due to changes in elevation, pipes, valves, fittings etc. An additional, optional measure to achieve even coverage is to divide the irrigation area into two or more separate sub-zones; dosed alternately using an automatic indexing or sequencing valve.

The irrigation area and surrounding area must be vegetated or revegetated immediately following installation of the system, preferably with turf. The area should be fenced or otherwise isolated (such as by landscaping), to prevent vehicle and stock access; and signs should be erected to inform householders and visitors of the extent of the effluent irrigation area and to limit their access and impact on the area.

Stormwater run-on is not expected to be a concern for the proposed irrigation area, due to the landform of the site and its relatively gentle slopes. However, upslope diversion berms or drains may be constructed if this is deemed to be necessary during installation of the system, or in the future. Stormwater from roofs and other impervious surfaces must not be disposed of into the wastewater treatment system or onto the effluent management system.

## 5.8 Monitoring, operation and maintenance

### Description

Maintenance is to be carried out in accordance with the EPA Certificate of Approval of the selected secondary treatment system and Council's permit conditions. The treatment system will only function adequately if appropriately and regularly maintained.

To ensure the treatment system functions adequately, residents must:

- Have a suitably qualified maintenance contractor service the treatment system at the frequency required by Council under the permit to use;
- Use household cleaning products that are suitable for septic tanks;
- Keep as much fat and oil out of the system as possible; and
- Conserve water (AAA rated fixtures and appliances are recommended).

To ensure the land application system functions adequately, residents must:

- Regularly harvest (mow) vegetation within the LAA and remove this to maximise uptake of water and nutrients;
- Monitor and maintain the irrigation system following the manufacturer's recommendations, including flushing the irrigation lines;
- Regularly clean in-line filters;
- Not erect any structures and paths over the LAA;
- Avoid vehicle and livestock access to the LAA, to prevent compaction and damage; and
- Ensure that the LAA is kept level by filling any depressions with good quality topsoil (not clay).

## 6 Conclusions

As a result of our investigations we conclude that sustainable onsite wastewater management is feasible with appropriate mitigation measures, as outlined, for the proposed 3 x bedroom dwelling at Lot 2 - 353 Alma - Bowenvale Road, Bowenvale.

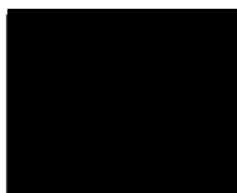
Based on the most constraining site features and soil assessment, the overall land capability of the proposed effluent management area is not constrained.

- The site is in the Loddon River (Laanecoorie) Declared Special Water Supply Catchment Area.
- However the site is larger than 8000m<sup>2</sup>, it is characterized by light clays with adequate topsoils to depths of 100 - 200mm and is not subject to flooding.
- The proposed effluent management area is located above the 1:100 flood level and by using primary treatment and conventional absorption trench and beds, there will be ample protection of surface waters and groundwater.

Specifically, we recommend the following:

- Primary treatment of wastewater by an EPA-accredited septic tank.
- Land application of wastewater in a 120 *linear metres* (minimum) conventional trench and bed system.
  - Length of each trench - 30 metres
  - Width of each trench - 1.0 metre
  - Spacing between trenches - 2.0 metres
  - Total effluent field area - 300 m<sup>2</sup>
- Location of Land Application Area to the west of the proposed dwelling building envelope.
- 5a - strongly structured light clay should be considered to have a DLR of 5mm/d.
- Installation of water saving devices in the new residence to reduce the effluent load for onsite disposal.
- Use of low phosphorus and low sodium (liquid) detergents to improve effluent quality and maintain soil properties.
- Operation and management of the treatment and disposal system in accordance with manufacturer's recommendations, the EPA Certificate of Approval, the EPA Code of Practice (2016) and the recommendations made in this report.

If there are any queries regarding the content of this report please contact this office.



**STEPHEN O'LOUGHLIN**  
Geologist

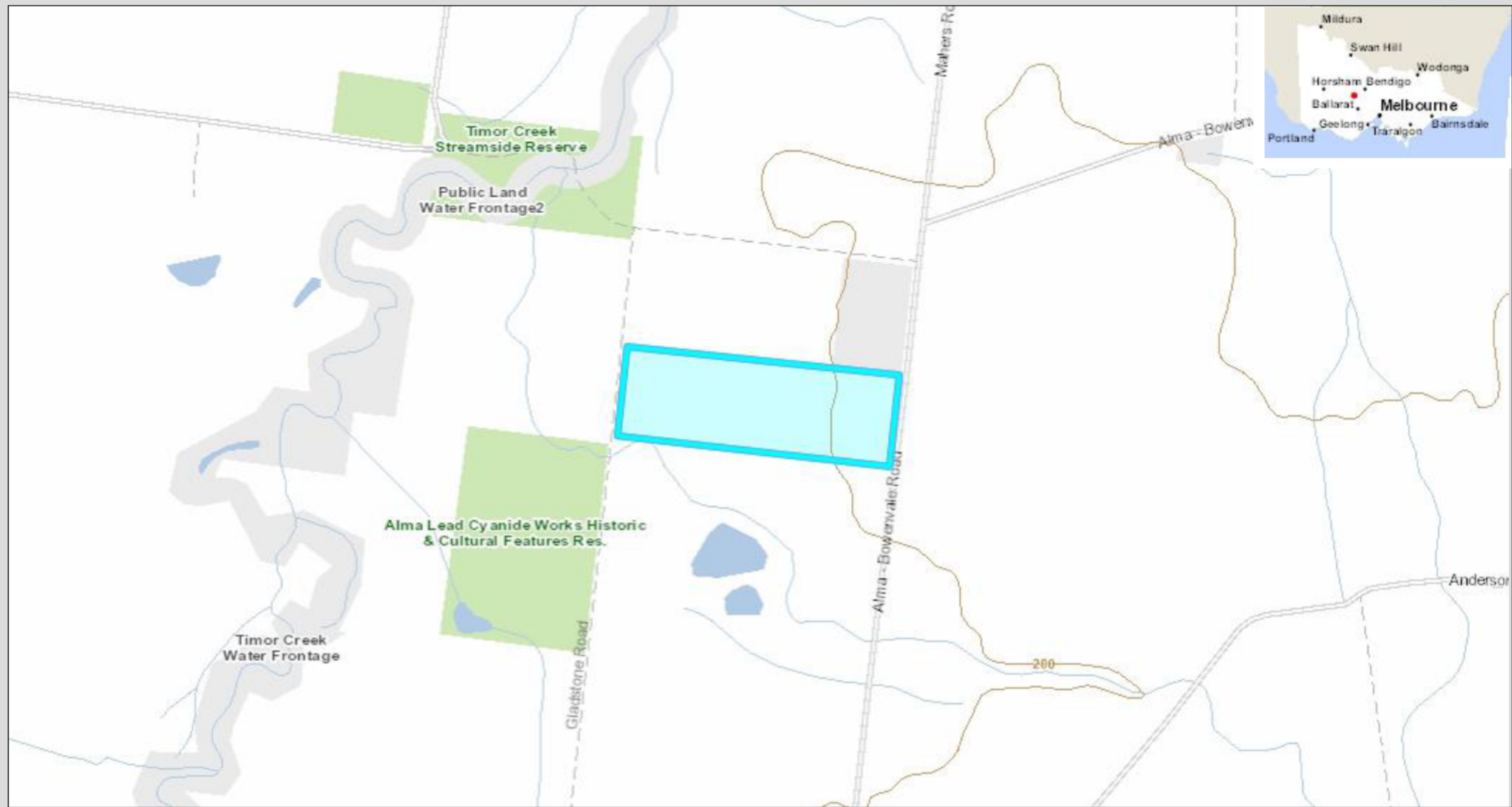
## **Attachment 1 – Locality plan**

Plan included on next page.



Locality Plan

Lot 2 - 353 Alma - Bowenvale Road, Bowenvale



508 0 254 508 Meters

GDA\_1994\_VICGRID94  
© The State of Victoria, Department of Energy, Environment and Climate Action 2023



Disclaimer: This map is a snapshot generated from Victorian Government data. This material may be of assistance to you but the State of Victoria does not guarantee that the publication is without flaw of any kind or is wholly appropriate for your particular purposes and therefore disclaims all liability for error, loss or damage which may arise from reliance upon it. All persons accessing this information should make appropriate enquiries to assess the currency of the data.

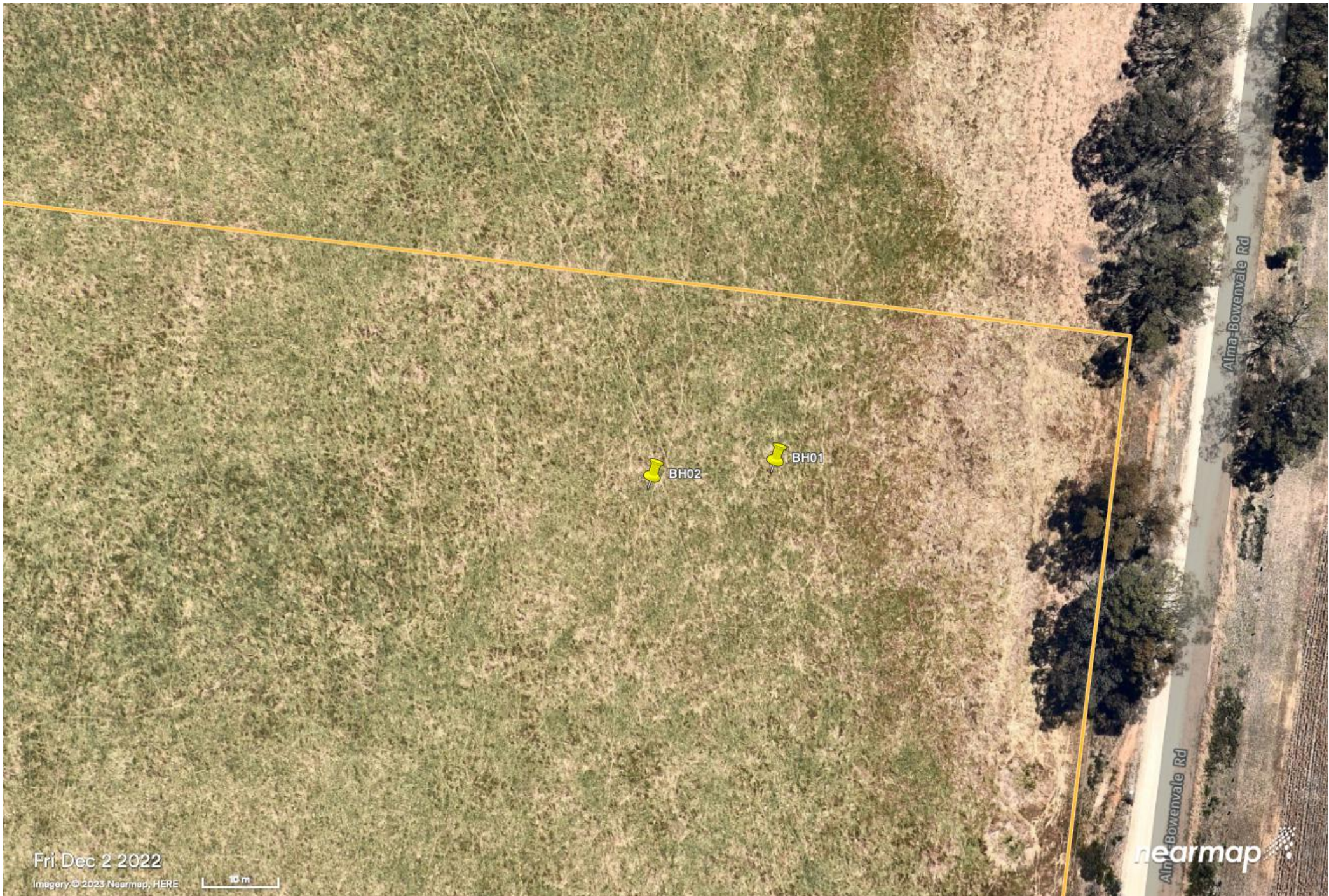
Map Created on 16-Aug-2023

Scale 1:10,000

## **Attachment 2 – Soil testing program plan**

Plan included on next page.





Fri Dec 2 2022

Imagery © 2023 Neermap, HERE

10 m

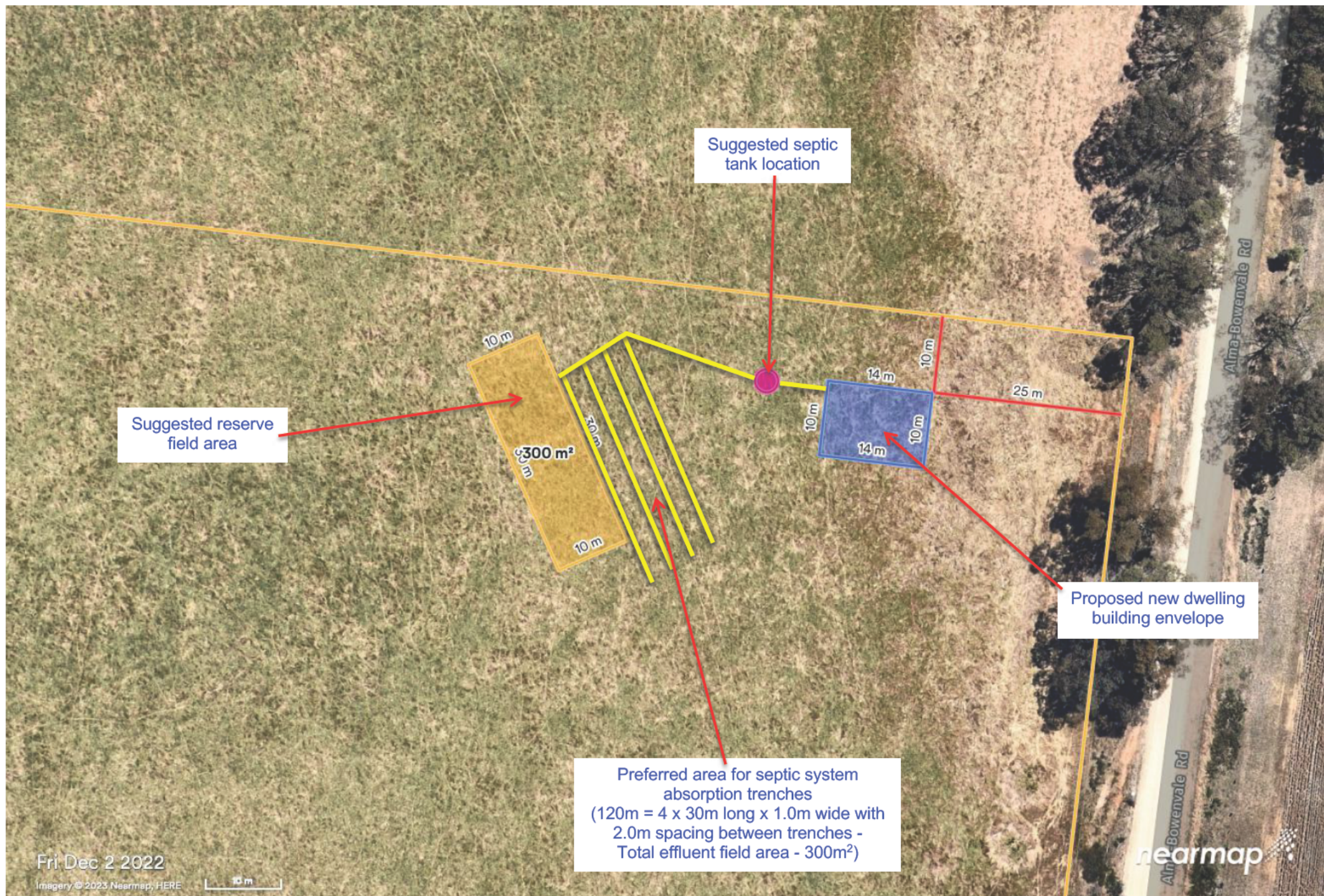
nearmap



## **Attachment 3 – Proposed wastewater treatment plan**

Plan included on next page.





Suggested septic tank location

Suggested reserve field area

Proposed new dwelling building envelope

Preferred area for septic system absorption trenches  
(120m = 4 x 30m long x 1.0m wide with 2.0m spacing between trenches - Total effluent field area - 300m²)

Fri Dec 2 2022

Imagery © 2023 Nearmap, HERE

10 m

nearmap



## Attachment 4 – Sample hole results

**Sample Hole BH01**

Depth (mm)	Description	Fill	Moisture	Consistency	DLR (mm/day)	Reactivity
100	Silty LOAM; dark brown	–	Slightly moist	Firm	10	–
200	Silty CLAY; red/brown	–	Slightly moist	Stiff	5	Moderate
300						
400						
500	Silty CLAY; brown/orange/white	–	Slightly moist	Stiff	5	Moderate
600						
700	Sandy CLAY; light brown/orange/white	–	Slightly moist	Stiff	5	Moderate
800						
900						
1000						
1100						
1200						
1300	END OF HOLE					
1400						
1500						

**Sample Hole BH02**

Depth (mm)	Description	Fill	Moisture	Consistency	DLR (mm/day)	Reactivity
100	Silty LOAM; dark brown	–	Slightly moist	Firm	10	–
200						
300	Silty CLAY; brown	–	Slightly moist	Stiff	5	Moderate
400						
500						
600	Silty CLAY; light brown/white	–	Slightly moist	Stiff	5	Moderate
700						
800						
900						
1000						
1100	Sandy CLAY; light brown/orange/white	–	Slightly moist	Stiff	5	Moderate
1200						
1300						
1400						
1500	END OF HOLE					

**Attachment 5 – Trench bed sizing calculations**

Spreadsheet included on next page.

# Victorian Land Capability Assessment Framework

## Trench & Bed Sizing

### FORMULA FOR TRENCH AND BED SIZING

$L = Q/DLR \times W$			From AS/NZS 1547:2012
Where:	Units		
L = Trench or bed length	m		Total trench or bed length required
Q = Design Wastewater Flow	L/day		Based on maximum potential occupancy and derived from Table 4 in the EPA Code of Practice (2013)
DLR = Design Loading Rate	mm/day		Based on soil texture class/permeability and derived from Table 9 in the EPA Code of Practice (2013)
W = Trench or bed width	m		As selected by designer/installer

### INPUT DATA

Design Wastewater Flow	Q	600	L/day	Based on maximum potential occupancy and derived from Table 4 in the EPA Code of Practice (2013)
Design Loading Rate	DLR	5.0	mm/day	Based on soil texture class/permeability and derived from Table 9 in the EPA Code of Practice (2013)
Trench basal area required	B	120.0	m <sup>2</sup>	
Selected trench or bed width	W	1.0	m	As selected by designer/installer

### OUTPUT

Required trench or bed length	L	120.0	m
-------------------------------	---	-------	---

### CELLS

	Please enter data in blue cells
XX	Red cells are automatically populated by the spreadsheet
XX	Data in yellow cells is calculated by the spreadsheet, DO NOT ALTER THESE CELLS

**Attachment 6 – Code of Practice Onsite Wastewater Management –  
Appendix D: Septic Tanks**

Table included on next page.

## Appendix D: Septic Tanks

### Commissioning

After installation or desludging, and before use, a septic tank must be two-thirds filled with clean water to:

- provide ballast in the tank to prevent groundwater lifting the tank out of the ground
- reduce odours
- enable any subsequent secondary treatment plant to be switched on, commissioned and used immediately.

When domestic wastewater from the dwelling flows into the septic tank it contains sufficient microbiological organisms to start and continue the treatment process. There is no need to 'feed' or dose a new or deslugged septic tank with starter material or micro-organisms. If odour occurs after the commissioning of a system, a cup of garden lime can be flushed down the toilet each day until the odour disappears. If the odour persists, the property should seek professional advice from a plumber.

### Sludge and scum

As organic matter from the wastewater and inert material, such as sand, settle to the bottom of the tank a layer of sludge forms. This layer contains an active ecosystem of mainly anaerobic micro-organisms which digest the organic matter and reduce the volume of sludge. Scum forms as a mixture of fats, oils, grease and other light material floats on top of the clarified liquid that has separated from the solids. When the clarified liquid flows out of the septic tank it is called 'primary treated effluent'.

It is not necessary or recommended that householders pour commercial products that are reputed to dissolve sludge build-up, down the toilet or sink. A teaspoon of granulated yeast flushed down the toilet once a fortnight may assist with microbial activity, though such a procedure is not an alternative to regular sludge and scum pump-out (Lord 1989).

### Desludging septic tanks

Over time, the sludge and scum layers build up and need to be removed for the tank to function properly. The level of solids accumulation in the tank cannot be accurately predicted, and will depend on the waste load to the tank. Therefore, the sludge and scum depth should be checked annually by a contractor. If a septic tank is under a maintenance contract, regular assessment (every 1 to 3 years) of the sludge and scum layers must be part of the maintenance agreement.

The sludge and scum need to be pumped-out with a vacuum suction system when their combined thickness equals 50% of the operational depth of the tank. The frequency of pump-out depends on:

- whether the tank is an adequate size for the daily wastewater flow
- the composition of the household and personal care products
- the amount of organic matter, fat, oil and grease washed down the sinks
- the use of harsh chemicals such as degreasers
- overuse of disinfectants and bleaches
- the use of antibiotics and other drugs, especially dialysis and chemotherapy drugs
- whether any plastic or other non-organic items are flushed into the tank.

A well-functioning septic tank – one that is not overloaded with liquid, organic matter or synthetic material – typically only needs to be deslugged once every 3 to 8 years (depending on the size of the tank). A septic tank connected to a home with a frequently used dishwasher will need to be pumped out more frequently (typically every 3 to 4 years) than a home with no dishwasher connected (typically every 5 to 6 years). A holiday home will need to be pumped out less frequently. Large (6,000 L) domestic septic tanks which are common in New Zealand and the USA and have started to be installed in Victoria, have been proven to require desludging only once every 10 to 15 years (Bounds, 1994).

After pump-out, tanks must not be washed out or disinfected. They should be refilled with water to reduce odours and ensure stability of plumbing fixtures. A small residue of sludge will always remain and will assist in the immediate re-establishment of bacterial action in the tank.

Householders should keep a record of their septic tank pump-outs and notify the local Council that a pump-out was undertaken in accordance with the Council Permit.

### Septic tank failure

It is critical that a septic tank is not used as a rubbish receptacle. Septic tanks are designed solely for the treatment of water and organic materials. Items such as sanitary napkins, tampons, disposable nappies, cotton buds, condoms, plastic bags, stockings, clothing and plastic bottles will cause the septic tank to fail and require costly removal of these items. If a tank is contaminated or poisoned by household materials it should be pumped out immediately to enable the microbiological ecosystem to re-start.



# Code of Practice Onsite Wastewater Management

---

Without the removal of the scum and sludge, sewage biosolids will increasingly be discharged into the soil absorption trenches and will eventually cause them to fail. This can force untreated sewage onto the ground surface and cause:

- noxious odours
- a boggy backyard
- a health hazard to the family, pets, visitors and neighbours from the pathogens in the sewage
- environmental degradation of the property, surrounding area and waterways from the nutrients, organic matter and other pollutants in the discoloured water
- and
- a public health risk to drinking water supplies in potable water supply catchments.

Positive actions a property owner can take to help a septic tank function well:

- Use soapy water (made from natural unscented soap), vinegar and water or bi-carbonate of soda and water to clean toilets and other water fixtures and fittings.
- Read labels to learn which bathroom and laundry products are suitable for septic tanks. Generally plain, non-coloured, unscented and unbleached products will contribute to a well-functioning septic tank.
- Use detergents with low levels of salts (e.g. liquid detergents), sodium absorption ratio, phosphorus and chlorine (see [www.lanfaxlabs.com.au](http://www.lanfaxlabs.com.au)).
- Wipe oils and fats off plates and saucepans with a paper towel and dispose of in the kitchen compost bin.
- Use a sink strainer to restrict food scraps entering the septic system.
- Ensure no structures such as pavements, driveways, patios, sheds or playgrounds are constructed over the tank or absorption trench area.
- Ensure the absorption trench area is not disturbed by vehicles or machinery.
- Engage a service technician to check the sludge and scum levels, pumps and alarms annually.
- Keep a record of the location of the tank and the trenches and all maintenance reports (including the dates of tank pump-outs, tank inspections and access openings) and ensure the service technician sends a copy of the maintenance report to the local Council
- Have the tank desludged when the combined depth of the scum and sludge is equal to the depth of the middle clarified layer.

Indications of failing septic tanks and soil absorption trenches

- Seepage along effluent absorption trench lines in the soil
- Lush green growth down-slope of the soil absorption trench lines
- Lush green growth down-slope of the septic tank
- Inspection pits and/or the soil absorption trenches consistently exhibiting high water levels
- Soil absorption trench lines become waterlogged after storms
- General waterlogging around the land disposal area
- Presence of dead and dying vegetation (often native vegetation) around and down-slope of the land disposal areas
- A noxious odour near the tank and the land disposal area
- Blocked water fixtures inside the house, with sewage overflowing from the relief point
- High sludge levels within the primary tank (within about 150 mm of inlet pipe)
- Flow obstructed and not able to pass the baffle in the tank
- The scum layer blocking the effluent outflow.

## Decommissioning treatment systems

### Septic tanks

When a septic tank is no longer required it may be removed, rendered unusable or reused to store stormwater. The contents of the tank must first be pumped out by a sewage sludge contractor. The contractor must also hose down all inside surfaces of the tank and extract the resultant wastewater. Where the tank will no longer be used but will remain in the ground, the contractor must first disinfect the tank by spreading (broadcasting) hydrated lime over all internal surfaces in accordance with the WorkSafe safety precautions associated with using lime (i.e. wearing gloves, safety goggles and not using lime on a windy day).

# Code of Practice Onsite Wastewater Management

---

Under no circumstances should anyone enter the tank to spread the lime or for any other reason, as vapours in confined spaces can be toxic.

A licensed plumbing practitioner must disconnect the tank from the premises and from the absorption trench system. The inlet and outlet pipes on the tank must be permanently sealed or plugged. To demolish a tank, the bottom of the tank is broken and then the lid and those parts of the walls that are above ground are collapsed into the tank. The tank is then filled with clean earth or sand.

Before a tank may be used to store stormwater a licensed plumbing practitioner must disconnect it from the premises and the trench system and connect an overflow pipe from the tank to the stormwater legal point of discharge. Before disinfecting the tank, it must be pumped out, the inside walls hosed down and then pumped out again. The tank is to be filled with fresh water and disinfected, generally with 100 mg/L of pool chlorine (calcium hypochlorite or sodium hypochlorite) to provide a resultant minimum 5 mg/L of free residual chlorine after a contact time of 30 minutes. However, advice should be obtained from a chemical supplier about safety precautions, dosage and concentrations to provide adequate disinfection for any tank. The chlorine is not to be neutralised, but be allowed to dissipate naturally for at least 1 week, during which time the water must not be used. Pumps may be installed to connect the tank to the irrigation system. The contents of the tank must not be used for any internal household purposes or to top-up a swimming pool. The water may only be used for garden irrigation. The tank and associated irrigation system must be labelled to indicate the water is unfit for human consumption in accordance with AS/NZS 3500: Plumbing and Drainage (Blue Mountains City Council 2008).

## Secondary treatment systems

All treatment systems must be decommissioned by a licensed plumbing practitioner.

## **Attachment 7 – VicPlan planning property report**

Report included on next page.

# PLANNING PROPERTY REPORT

From [www.planning.vic.gov.au](http://www.planning.vic.gov.au) at 16 August 2023 04:57 PM

## PROPERTY DETAILS

Address: **353 ALMA-BOWENVALE ROAD BOWENVALE 3465**  
Crown Description: **Allot. 2 Sec. 15 PARISH OF MARYBOROUGH**  
Standard Parcel Identifier (SP): **2-15\PP3071**  
Local Government Area (Council): **CENTRAL GOLDFIELDS**  
Council Property Number: **20100.0353**  
Planning Scheme: **Central Goldfields**  
Directory Reference: **Vicroads 58 D2**

[www.centralgoldfields.vic.gov.au](http://www.centralgoldfields.vic.gov.au)

[Planning Scheme](#) [Central Goldfields](#)

## UTILITIES

Rural Water Corporation: **Goulburn-Murray Water**  
Urban Water Corporation: **Central Highlands Water**  
Municipal Water: **Outside drainage boundary**  
Power Distributor: **POWERCOR**

## STATE ELECTORATES

Legislative Council: **WESTERN VICTORIA**  
Legislative Assembly: **RIPON**

## OTHER

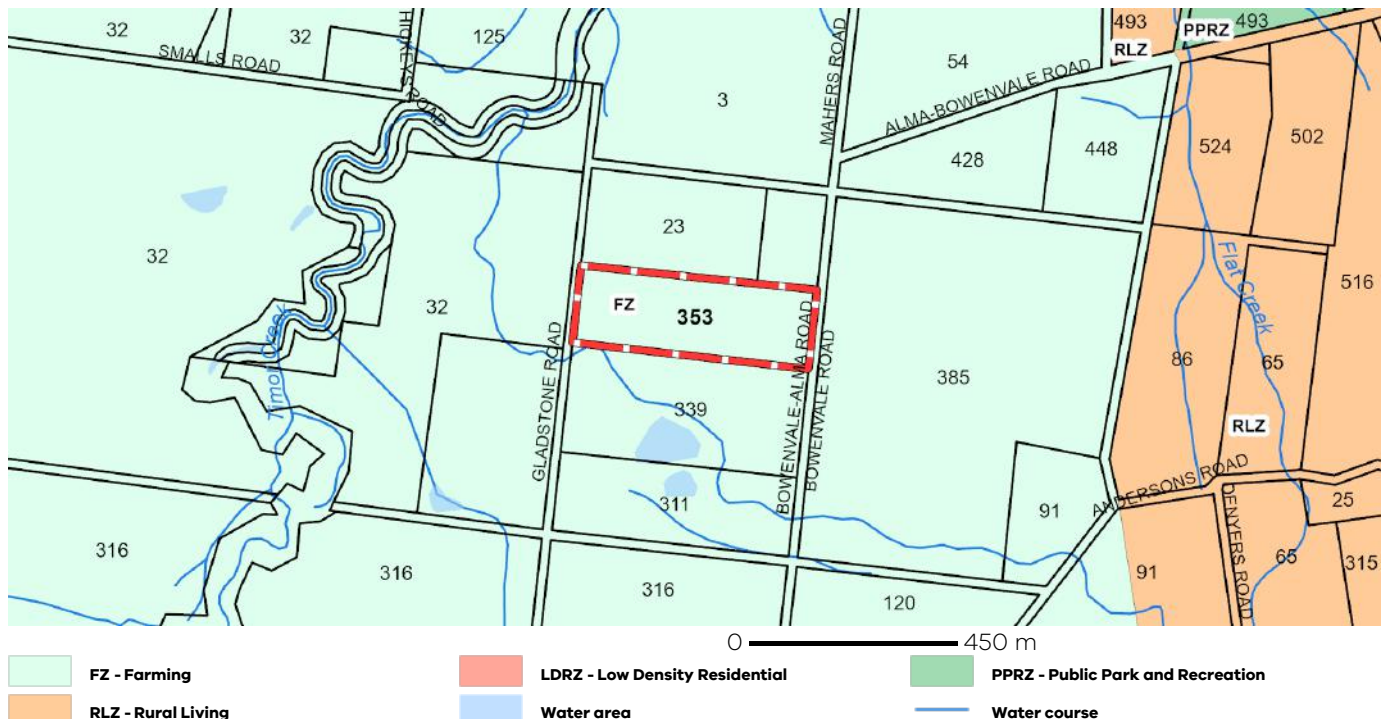
Registered Aboriginal Party: **Dja Dja Wurrung Clans Aboriginal Corporation**

[View location in VicPlan](#)

## Planning Zones

[FARMING ZONE \(FZ\)](#)

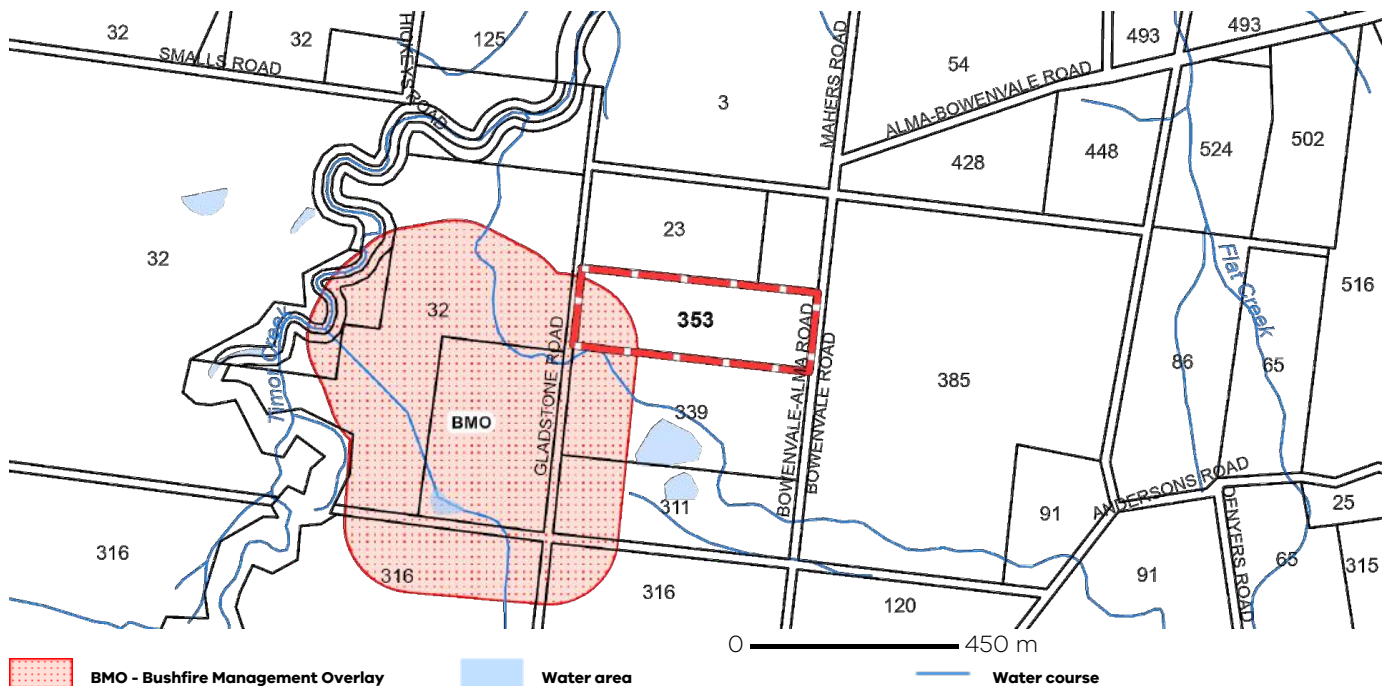
[SCHEDULE TO THE FARMING ZONE \(FZ\)](#)



Note: labels for zones may appear outside the actual zone - please compare the labels with the legend.

## Planning Overlays

### BUSHFIRE MANAGEMENT OVERLAY (BMO)



Note: due to overlaps, some overlays may not be visible, and some colours may not match those in the legend



# PLANNING PROPERTY REPORT

## OTHER OVERLAYS

Other overlays in the vicinity not directly affecting this land

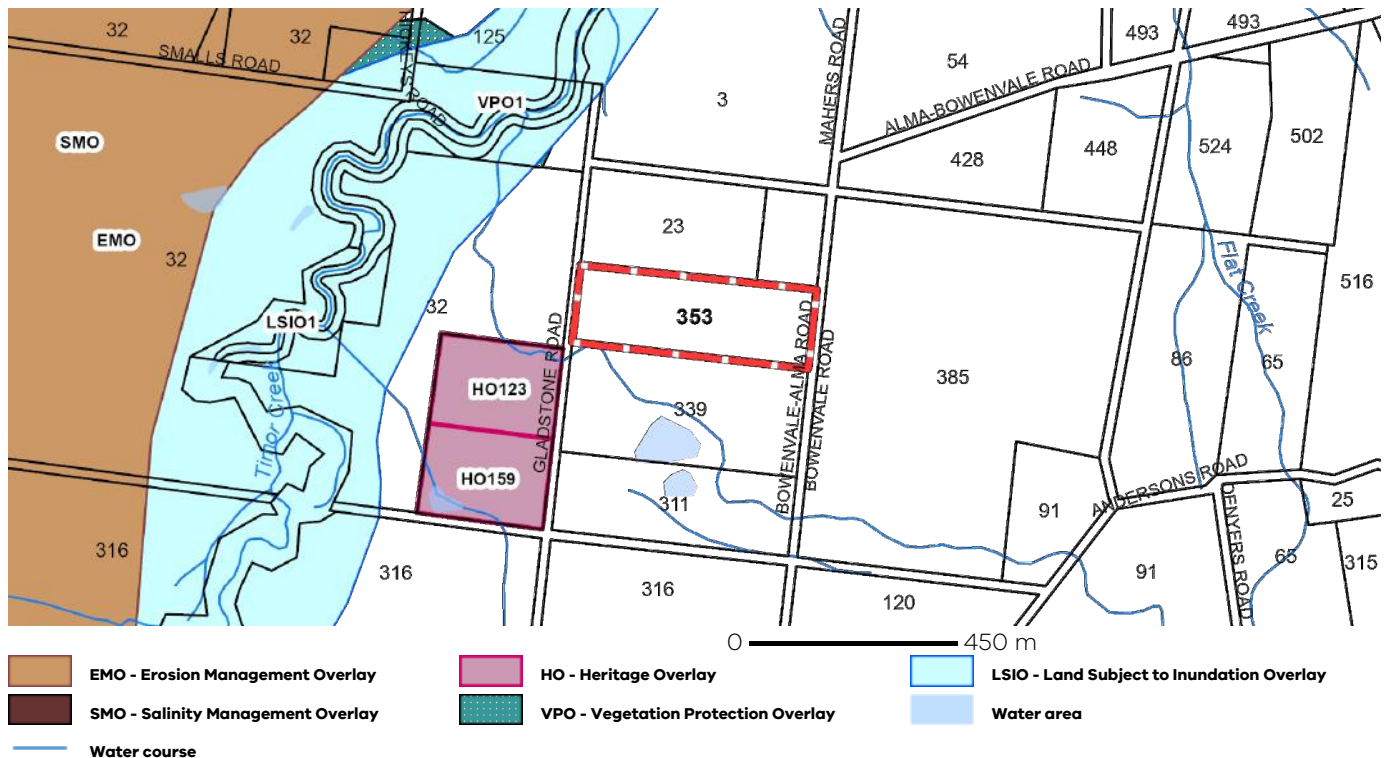
[EROSION MANAGEMENT OVERLAY \(EMO\)](#)

[HERITAGE OVERLAY \(HO\)](#)

[LAND SUBJECT TO INUNDATION OVERLAY \(LSIO\)](#)

[SALINITY MANAGEMENT OVERLAY \(SMO\)](#)

[VEGETATION PROTECTION OVERLAY \(VPO\)](#)



Note: due to overlaps, some overlays may not be visible, and some colours may not match those in the legend

## Further Planning Information

Planning scheme data last updated on 10 August 2023.

A **planning scheme** sets out policies and requirements for the use, development and protection of land. This report provides information about the zone and overlay provisions that apply to the selected land. Information about the State and local policy, particularly, general and operational provisions of the local planning scheme that may affect the use of this land can be obtained by contacting the local council or by visiting <https://www.planning.vic.gov.au>

This report is NOT a **Planning Certificate** issued pursuant to Section 199 of the **Planning and Environment Act 1987**. It does not include information about exhibited planning scheme amendments, or zonings that may affect the land. To obtain a Planning Certificate go to Titles and Property Certificates at Landata - <https://www.landata.vic.gov.au>

For details of surrounding properties, use this service to get the Reports for properties of interest.

To view planning zones, overlay and heritage information in an interactive format visit <https://mapshare.maps.vic.gov.au/vicplan>

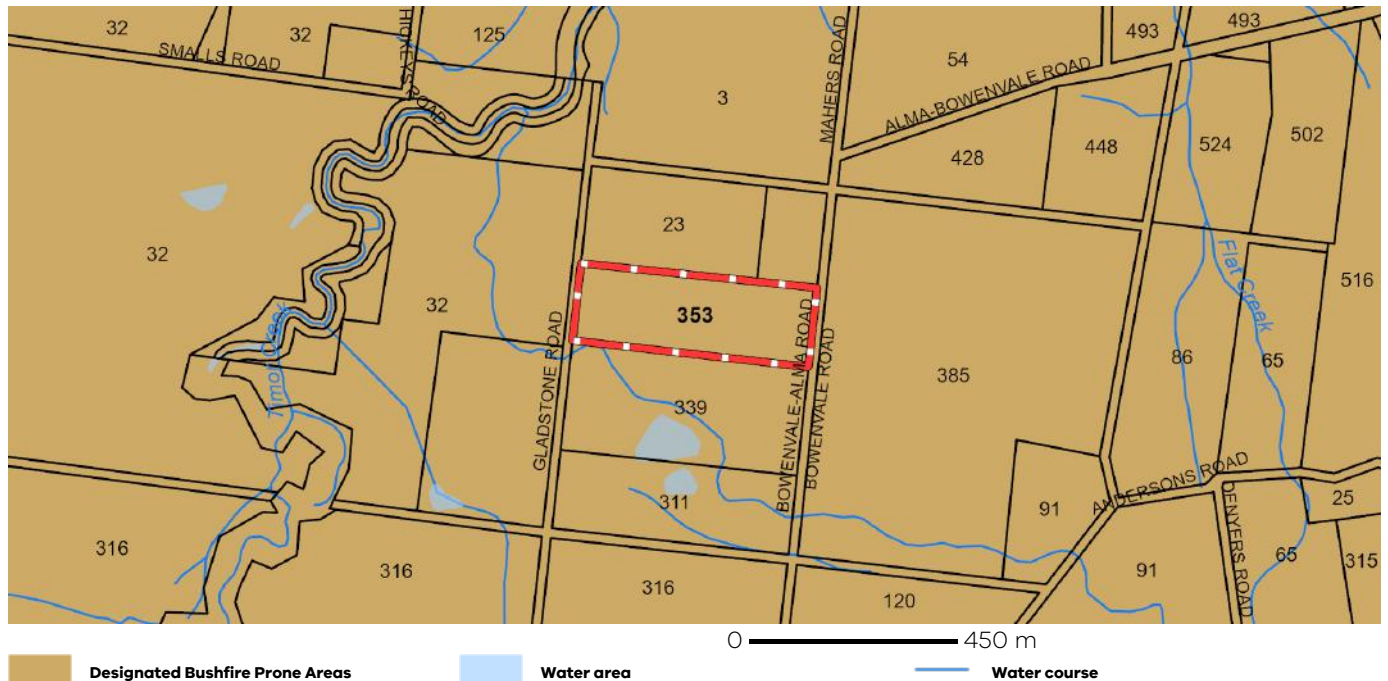
For other information about planning in Victoria visit <https://www.planning.vic.gov.au>

## Designated Bushfire Prone Areas

**This property is in a designated bushfire prone area. Special bushfire construction requirements apply to the part of the property mapped as a designated bushfire prone area (BPA). Planning provisions may apply.**

Where part of the property is mapped as BPA, if no part of the building envelope or footprint falls within the BPA area, the BPA construction requirements do not apply.

Note: the relevant building surveyor determines the need for compliance with the bushfire construction requirements.



Designated BPA are determined by the Minister for Planning following a detailed review process. The Building Regulations 2018, through adoption of the Building Code of Australia, apply bushfire protection standards for building works in designated BPA.

Designated BPA maps can be viewed on VicPlan at <https://mapshare.vic.gov.au/vicplan/> or at the relevant local council.

Create a BPA definition plan in [VicPlan](#) to measure the BPA.

Information for lot owners building in the BPA is available at <https://www.planning.vic.gov.au>.

Further information about the building control system and building in bushfire prone areas can be found on the Victorian Building Authority website <https://www.vba.vic.gov.au>. Copies of the Building Act and Building Regulations are available from <http://www.legislation.vic.gov.au>. For Planning Scheme Provisions in bushfire areas visit <https://www.planning.vic.gov.au>.

## Native Vegetation

Native plants that are indigenous to the region and important for biodiversity might be present on this property. This could include trees, shrubs, herbs, grasses or aquatic plants. There are a range of regulations that may apply including need to obtain a planning permit under Clause 52.17 of the local planning scheme. For more information see [Native Vegetation \(Clause 52.17\)](#) with local variations in [Native Vegetation \(Clause 52.17\) Schedule](#).

To help identify native vegetation on this property and the application of Clause 52.17 please visit the Native Vegetation Information Management system <https://nvim.delp.vic.gov.au/> and [Native vegetation \(environment.vic.gov.au\)](https://www.environment.vic.gov.au) or please contact your relevant council.

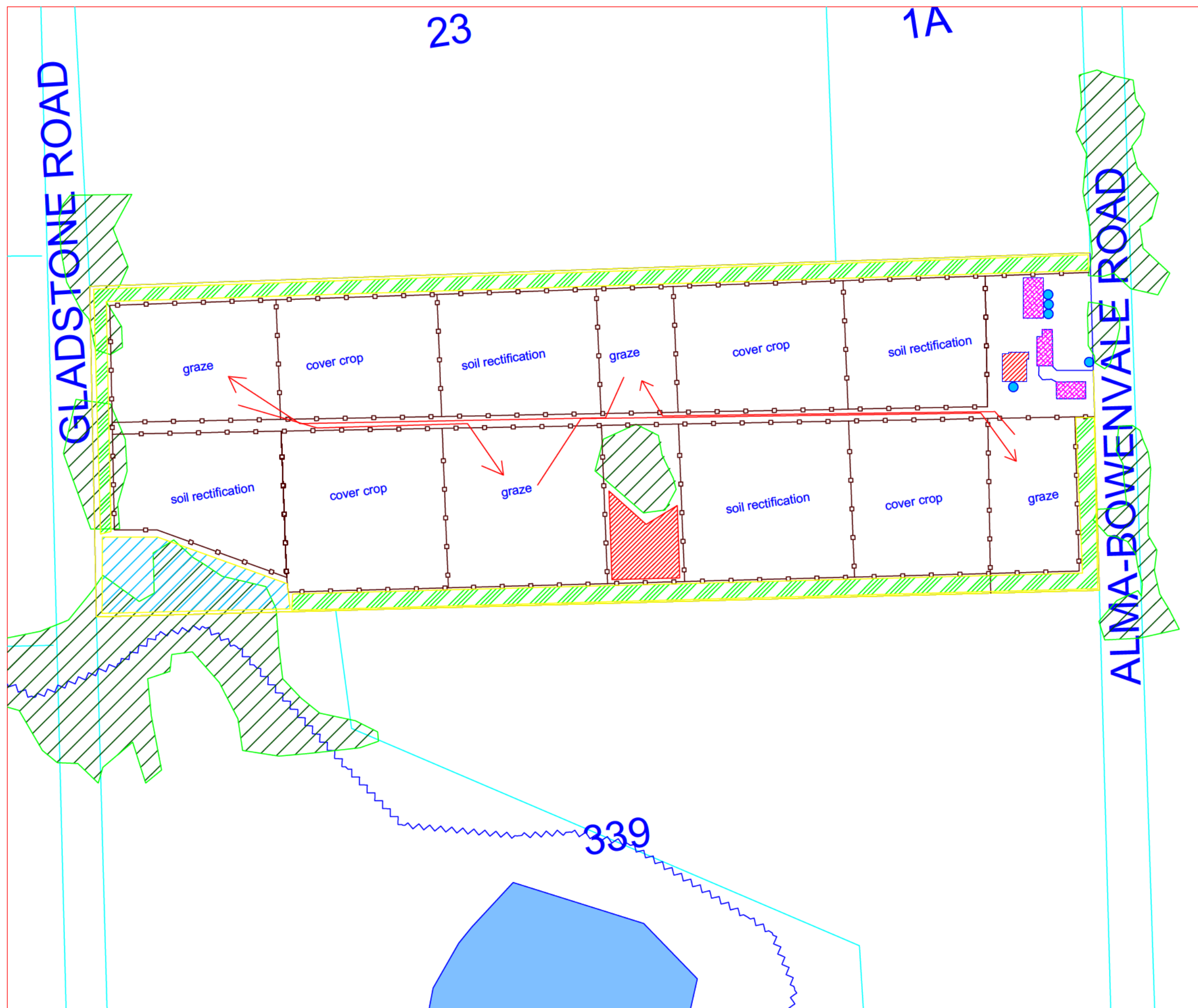
You can find out more about the natural values on your property through NatureKit [NatureKit \(environment.vic.gov.au\)](https://www.environment.vic.gov.au)

## Attachment 8 – Reducing Wastewater

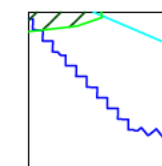
In accordance with the principles of the waste hierarchy, the following steps are recommended to limit the amount of wastewater generated and beneficially use the resultant water resource onsite:

	Suggestions
1. Avoid generating excess wastewater by:	<ul style="list-style-type: none"> <li>a) constructing a house with fewer bedrooms</li> <li>b) installing a dry composting toilet</li> <li>c) not installing a spa</li> <li>d) not installing a bath (low flow rate shower only)</li> <li>e) not installing a kitchen food waste grinder.</li> </ul>
2. Reduce the volume of wastewater generated by installing:	<p>High 'Water Efficiency Labelling Scheme' (WELS)-rated water-efficient fittings (minimum '3 Stars' for appliances and minimum '4 Stars' for all fittings and fixtures):</p> <ul style="list-style-type: none"> <li>a) water-efficient clothes washing machines (front or top loading)</li> <li>b) dual-flush (6.5/3.5L or less) toilets</li> <li>c) water-efficient shower roses</li> <li>d) water-efficient dishwashers</li> <li>e) aerated taps</li> <li>f) hot and cold water mixer taps (especially for the shower)</li> <li>g) flow restrictors</li> <li>h) hot water system fitted with a 'cold water diverter' which recirculates the initial flow of cold water until it is hot enough for a shower.</li> </ul>
3. Reuse (another use without any treatment) wastewater by:	<ul style="list-style-type: none"> <li>a) washing fruit and vegetables in tap water in a container and reusing the water for another purpose in the house such as watering pot plants</li> <li>b) collecting the initial cold water from showers in buckets and using it for another purpose such as soaking feet, hand washing clothes or washing the car on the lawn.</li> </ul>
4. Recycle wastewater after treatment by using it to:	<ul style="list-style-type: none"> <li>a) water gardens and lawn areas</li> <li>b) flush toilets with effluent from an EPA-approved 10/10/10 greywater system</li> <li>c) supply effluent to the cold water tap of the washing machine from an EPA-approved 10/10/10 greywater treatment system</li> </ul>

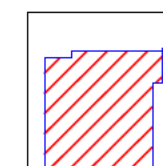




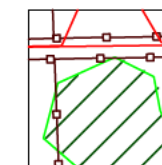
# LEGEND



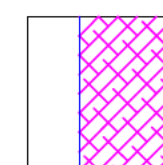
EXISTING WATERWAY



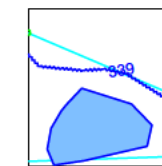
PROPOSED DWELLING



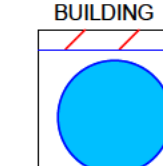
EXISTING REMANT VEGETATION



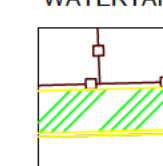
PROPOSED FARM BUILDING



EXISTING DAM



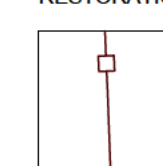
PROPOSED WATERTANK



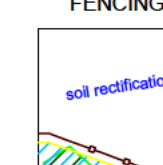
PROPOSED WINDBREAKS



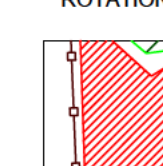
RIPARIAN RESTORATION



PROPOSED FENCING



PROPOSED ROTATION



PROPOSED SILVOPASTURE

**Note:**  
The contractor shall verify all dimensions and all underground services at the site before commencing work. The contractor shall verify all levels from the consulting engineer prior to construction.

**DO NOT SCALE  
FROM DRAWINGS**

**PROJECT:**  
353 Alma-Bowenvale  
Road, Bowenvale

**PROJECT  
NO:** 2530

**DATE:**  
FEB 2024

**DWG TITLE:**  
PROPOSED FARM  
MANAGEMENT  
PLAN

**SCALE:** 1:2000 @A3



**DRAWINGS FOR  
PLANNING PERMIT ONLY  
NOT TO BE USED FOR  
CONSTRUCTION**



**NATURAL  
RESOURCE  
LINK PTY LTD**  
54 Frazer Street  
Clunes 3370  
[julie@nrlinks.com.au](mailto:julie@nrlinks.com.au)

Four Planning & Permit Consultants