

5.5 T220660 - Use and Development of the Land for a Dwelling - 275 Daly Road, Nar Nar Goon

Responsible GM: Lili Rosic
Author: Hamish Mival

Recommendation(s)

That Council having caused notice of Planning Application No. T220660 to be given under Section 52 of the *Planning and Environment Act 1987* and having considered all the matters required under Section 60 of the *Planning and Environment Act 1987* put forward a position to Refuse to Grant a Permit in respect of the land known and described as L1 PS815289 V12183 F695, 275 Daly Road Nar Nar Goon, for the Use and Development of Land for a Dwelling under the following grounds:

1. The proposal is inconsistent with the Municipal Planning Strategy and Planning Policy Framework and Local Planning Policy Framework, specifically:
 - a. Clauses 11.01-1R Green wedges – Metropolitan Melbourne,
 - b. Clause 11.03-3S Peri-urban areas,
 - c. Clause 14.01 Agriculture,
 - d. Clause 16.01-3S Rural residential development,
 - e. Clause 21.03-5 Rural residential and rural living development,
 - f. Clause 22.05 Western Port Green Wedge Policyas it does not protect valuable agricultural land and is an incompatible land use.
2. The proposal compromises the preservation, protection or enhancement of primary production, the Green Wedge or agriculture land, while resulting in a smaller rural residential lot that may conflict with existing or future large-scale farming operations.
3. The proposal is inconsistent with the purpose and decision guidelines of the Green Wedge Zone as it does not protect and conserve green wedge land for its agricultural resources or provide for the enhancement of primary production and does not minimise adverse impacts of siting.
4. The proposal is inconsistent with the relevant considerations of Clause 65 Decision Guidelines and the orderly planning of the area.

Attachments

1. T 220660 PA - Current docs [5.5.1 - 68 pages]
2. T 220660 PA - Locality map [5.5.2 - 1 page]
3. T220660 PA - Officer report [5.5.3 - 13 pages]

APPLICATION NO.:	T220660
APPLICANT:	Mr Ron Asling Studio Three Design & Drafting Pty Ltd

LAND:	L1 PS815289 V12183 F695 275 Daly Road, Nar Nar Goon VIC 3812
PROPOSAL:	Use and Development of Land for a Dwelling
PLANNING CONTROLS:	GWZ1 - Green Wedge Zone - Schedule 1 LSIO - Land Subject to Inundation Overlay
NOTIFICATION & OBJECTIONS:	The application has been advertised pursuant to Section 52 of the <i>Planning and Environment Act 1987</i> , by: <ul style="list-style-type: none"> Sending notices to the owners and occupiers of adjoining land. Council has received no objections to date.
KEY PLANNING CONSIDERATIONS:	Incompatible land use in the Green Wedge Zone. Appropriateness of siting.
RECOMMENDATION:	Refusal

Executive Summary

The purpose of this report is to consider an application for the Use and Development of Land for a Dwelling. A Section 79 appeal (failure to determine) has been lodged at VCAT therefore, rather than making a decision, Council must put forward a position on the application.

The site is subject to the Green Wedge Zone (Schedule 1) and Land Subject to Inundation Overlay.

An informal meeting was held with the applicant and property owner on 29 June 2023. Council's position was outlined during this meeting. It was indicated during this meeting that the application would be amended post-advertising. The application was referred to Melbourne Water as the determining authority and advertised to surrounding landholders.

A VCAT order was received by Council on 5 September 2023, pursuant to Section 79 of the *Planning and Environment Act 1987* for failure to decide. A compulsory conference is scheduled for 25 January 2024.

The application is inconsistent with Planning Policy Framework regarding agricultural and green wedge land and is inconsistent with the decision guidelines of the Green Wedge Zone. It is for these reasons that Council's position is to refuse the application.

Relevance to Council Plan

4.1 We support our productive land and employment land to grow local industries

4.1.1 Facilitate better planning for our agricultural land to support industry, innovation, local food economy and local job growth.



ePlanning

Application Summary

Portal Reference	A42266YC
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Basic Information

Proposed Use	PROPOSED SINGLE STOREY DWELLING WITH ASSOCIATED EARTHWORKS
Current Use	VACANT LAND WITH EXISTING SHED
Cost of Works	\$400,000
Site Address	275 Daly Road Nar Nar Goon 3812

Covenant Disclaimer

Does the proposal breach, in any way, an encumbrance on title such as restrictive covenant, section 173 agreement or other obligation such as an easement or building envelope?	Not Applicable, no such encumbrances apply.
---	---

Contacts

Type	Name	Address	Contact Details
Applicant	RON ASLING STUDIO THREE DESIGN & DRAFTING PTY LTD	20 TEMPLETON STREET, Euroa VIC 3666	W: 5941-1258 M: 0413-122-391 E: ron@studiothreedesign.com.au
Owner	STUART KENNY	285 DALY ROAD, Nar Nar Goon VIC 3812	
Preferred Contact	RON ASLING STUDIO THREE DESIGN & DRAFTING PTY LTD	20 TEMPLETON STREET, Euroa VIC 3666	W: 5941-1258 M: 0413-122-391 E: ron@studiothreedesign.com.au

Fees

Regulation Fee Condition	Amount	Modifier	Payable
9 - Class 4 More than \$100,000 but not more than \$500,000	\$1,330.20	100%	\$1,330.20
Total			\$1,330.20

Documents Uploaded

Date	Type	Filename
03-10-2022	A Copy of Title	275 DALY ROAD NAR NAR GOON - VIC LANDATA - Title Search Online - Vol Fol 12183 695 - 74894870_112627291.pdf
03-10-2022	Site plans	TP - LOT 1, #275 DALY ROAD NAR NAR GOON 3812 (REVISION A, 23.09.22).pdf



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20 Siding Avenue, Officer, Victoria

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Purton Road, Pakenham, Victoria

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Cardinia Shire Council
P.O. Box 7, Pakenham VIC, 3810

Email: mail@cardinia.vic.gov.au

Monday to Friday 8.30am–5pm
Phone: 1300 787 624
After Hours: 1300 787 624
Fax: 03 5941 3784

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

Lodged By

Site User	RON ASLING STUDIO THREE DESIGN & DRAFTING PTY LTD	1/25 TRELOAR LANE, PAKENHAM VIC 3810	W: 0413-122-391 M: 0413-122-391 E: ron@studiothreedesign.com.au
Submission Date	03 October 2022 - 09:33:AM		

Declaration

☒ By ticking this checkbox, I, RON ASLING, declare that all the information in this application is true and correct; and the Applicant and/or Owner (if not myself) has been notified of the application.



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20 Siding Avenue, Officer, Victoria

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The Victorian Government acknowledges the Traditional Owners of Victoria and pays respects to their ongoing connection to their Country, History and Culture. The Victorian Government extends this respect to their Elders, past, present and emerging.

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

VOLUME 12183 FOLIO 695

Security no : 124106474181X
Produced 30/05/2023 01:22 PM

LAND DESCRIPTION

Lot 1 on Plan of Subdivision 815289D.
PARENT TITLE Volume 12183 Folio 683
Created by instrument AS888895S 14/01/2020

REGISTERED PROPRIETOR

Estate Fee Simple
Sole Proprietor
STUART ROSSITER KENNY of 285 DALY ROAD NAR NAR GOON VIC 3812
AS888895S 14/01/2020

ENCUMBRANCES, CAVEATS AND NOTICES

MORTGAGE AS961485G 05/02/2020
NATIONAL AUSTRALIA BANK LTD

Any encumbrances created by Section 98 Transfer of Land Act 1958 or Section 24 Subdivision Act 1988 and any other encumbrances shown or entered on the plan set out under DIAGRAM LOCATION below.

DIAGRAM LOCATION

SEE PS815289D 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: 275 DALY ROAD NAR NAR GOON VIC 3812

ADMINISTRATIVE NOTICES

NIL

eCT Control 16089P NATIONAL AUSTRALIA BANK LTD
Effective from 05/02/2020

DOCUMENT END

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Transfer of Land

Section 45 Transfer of Land Act 1958

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1. Land/s

Land Title

Volume

Folio

Description LOT 1 ON PLAN OF SUBDIVISION
NO. 815289D AND BEING PART
OF THE LAND IN CERTIFICATES
OF TITLE VOLUME 10447 FOLIOS
773 & 774

6. Address/es of Transferee/s

Address of Transferee

Unit

Street No

285

Street Name DALY

Street Type ROAD

Locality NAR NAR GOON

State

VIC

Postcode

3812

2. Estate and Interest

FEE SIMPLE

3. Transferor/s

Transferor 1

Given Name/s STUART ROSSITER

Family Name KENNY

Transferor 2

Given Name/s ROWAN ROSSITER

Family Name KENNY

Transferor 3

Given Name/s MURRAY JOHN ROSSITER

Family Name KENNY

7. Consideration

Devise in a will *2 Nica Transfer*

8. Covenants

NONE

9. Signing

The transferor transfers to the transferee their
estate and/or interest in the land specified for the
consideration, subject to any restrictive covenant
set out or referred to in this transfer.

4. Transferee/s

Transferee

Given Name/s STUART ROSSITER

Family Name KENNY

5. Manner of Holding

SOLE PROPRIETOR

Approval Number: 35291712A

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Page 1 of 3
LV-V34-Mar-2018

Land Use Victoria contact details: www.delwp.vic.gov.au/property > Contact us

Transfer of Land

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14/01/2020 \$98.50 45N

**Transferor 1****Certifications**

- 1.The Certifier has taken reasonable steps to verify the identity of the transferor.
- 2.The Certifier holds a properly completed Client Authorisation for the Conveyancing Transaction including this Registry Instrument or Document.
- 3.The Certifier has retained the evidence supporting this Registry Instrument or Document.
- 4.The Certifier has taken reasonable steps to ensure that this Registry Instrument or Document is correct and compliant with relevant legislation and any Prescribed Requirement.

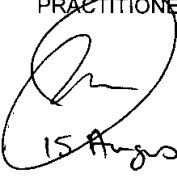
Executed on behalf of **STUART ROSSITER KENNY**
 Signer Name **TIMOTHY MEPSTEAD**
 Signer Organisation **MEPSTEAD LAWYERS**
 Signer Role **AUSTRALIAN LEGAL PRACTITIONER**
 Signature 

Execution Date

15th August 2019

Transferor 2**Certifications**

- 1.The Certifier has taken reasonable steps to verify the identity of the transferor.
- 2.The Certifier holds a properly completed Client Authorisation for the Conveyancing Transaction including this Registry Instrument or Document.
- 3.The Certifier has retained the evidence supporting this Registry Instrument or Document.
- 4.The Certifier has taken reasonable steps to ensure that this Registry Instrument or Document is correct and compliant with relevant legislation and any Prescribed Requirement.

Executed on behalf of **ROWAN ROSSITER KENNY**
 Signer Name **TIMOTHY MEPSTEAD**
 Signer Organisation **MEPSTEAD LAWYERS**
 Signer Role **AUSTRALIAN LEGAL PRACTITIONER**
 Signature 

Execution Date

15 August 2019

Approval Number: 35291712A

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14/01/2020

\$98.50

45N

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- 1.The Certifier has taken reasonable steps to verify the identity of the transferor.
- 2.The Certifier holds a properly completed Client Authorisation for the Conveyancing Transaction including this Registry Instrument or Document.
- 3.The Certifier has retained the evidence supporting this Registry Instrument or Document.
- 4.The Certifier has taken reasonable steps to ensure that this Registry Instrument or Document is correct and compliant with relevant legislation and any Prescribed Requirement.

Executed on behalf of MURRAY JOHN
ROSSITER KENNY

Signer Name TIMOTHY MEPSTEAD

Signer Organisation MEPSTEAD LAWYERS

Signer Role AUSTRALIAN LEGAL
PRACTITIONER

Signature 

Execution Date 18th August 2019

Transferee**Certifications**

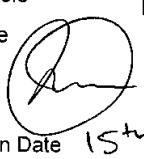
- 1.The Certifier has taken reasonable steps to verify the identity of the transferee.
- 2.The Certifier holds a properly completed Client Authorisation for the Conveyancing Transaction including this Registry Instrument or Document.
- 3.The Certifier has retained the evidence supporting this Registry Instrument or Document.
- 4.The Certifier has taken reasonable steps to ensure that this Registry Instrument or Document is correct and compliant with relevant legislation and any Prescribed Requirement.

Executed on behalf of STUART ROSSITER
KENNY

Signer Name TIMOTHY MEPSTEAD

Signer Organisation MEPSTEAD LAWYERS

Signer Role AUSTRALIAN LEGAL
PRACTITIONER

Signature 

Execution Date 15th August 2019

10. Lodging Party

Customer Code 27155

Reference KENNY

Approval Number: 35291712A

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Department of Environment, Land, Water & Planning

Electronic Instrument Statement

Mortgage Form version 1.5

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Status	Registered	Dealing Number	AS961485G
Date and Time Lodged	05/02/2020 12:59:53 PM		

Lodger Details

Lodger Code	16089P
Name	NATIONAL AUSTRALIA BANK LTD
Address	
Lodger Box	
Phone	
Email	
Reference	791686412 mortgage

MORTGAGE

Jurisdiction	VICTORIA
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Estate and/or Interest being mortgaged

FEE SIMPLE

Land Title Reference

12183/695

Mortgagor

Given Name(s)	STUART ROSSITER
Family Name	KENNY

Mortgagee

Name	NATIONAL AUSTRALIA BANK LIMITED
ACN	004044937
Australian Credit Licence	230686
Address	
Floor Type	LEVEL
Floor Number	1
Street Number	800
Street Name	BOURKE
Street Type	STREET



Department of Environment, Land, Water & Planning

Electronic Instrument Statement

Mortgage Form version 1.5

Locality	MELBOURNE
State	VIC
Postcode	3000

The mortgagor mortgages the estate and/or interest in land specified in this mortgage to the mortgagee as security for the debt or liability described in the terms and conditions set out or referred to in this mortgage, and covenants with the mortgagee to comply with those terms and conditions.

Terms and Conditions of this Mortgage

(a) Document Reference	AA1791
(b) Additional terms and conditions	NIL

Mortgagee Execution

1. The Certifier, or the Certifier is reasonably satisfied that the mortgagee it represents,:
 - (a) has taken reasonable steps to verify the identity of the mortgagor or his, her or its administrator or attorney; and
 - (b) holds a mortgage granted by the mortgagor on the same terms as this Registry Instrument or Document.
2. The Certifier has taken reasonable steps to ensure that this Registry Instrument or Document is correct and compliant with relevant legislation and any Prescribed Requirement.
3. The Certifier has retained the evidence supporting this Registry Instrument or Document.

Executed on behalf of	NATIONAL AUSTRALIA BANK LIMITED
Signer Name	TEISI MOORS
Signer Organisation	NATIONAL AUSTRALIA BANK LIMITED
Signer Role	AUTHORISED SIGNATORY
Execution Date	05 FEBRUARY 2020

File Notes:


NIL

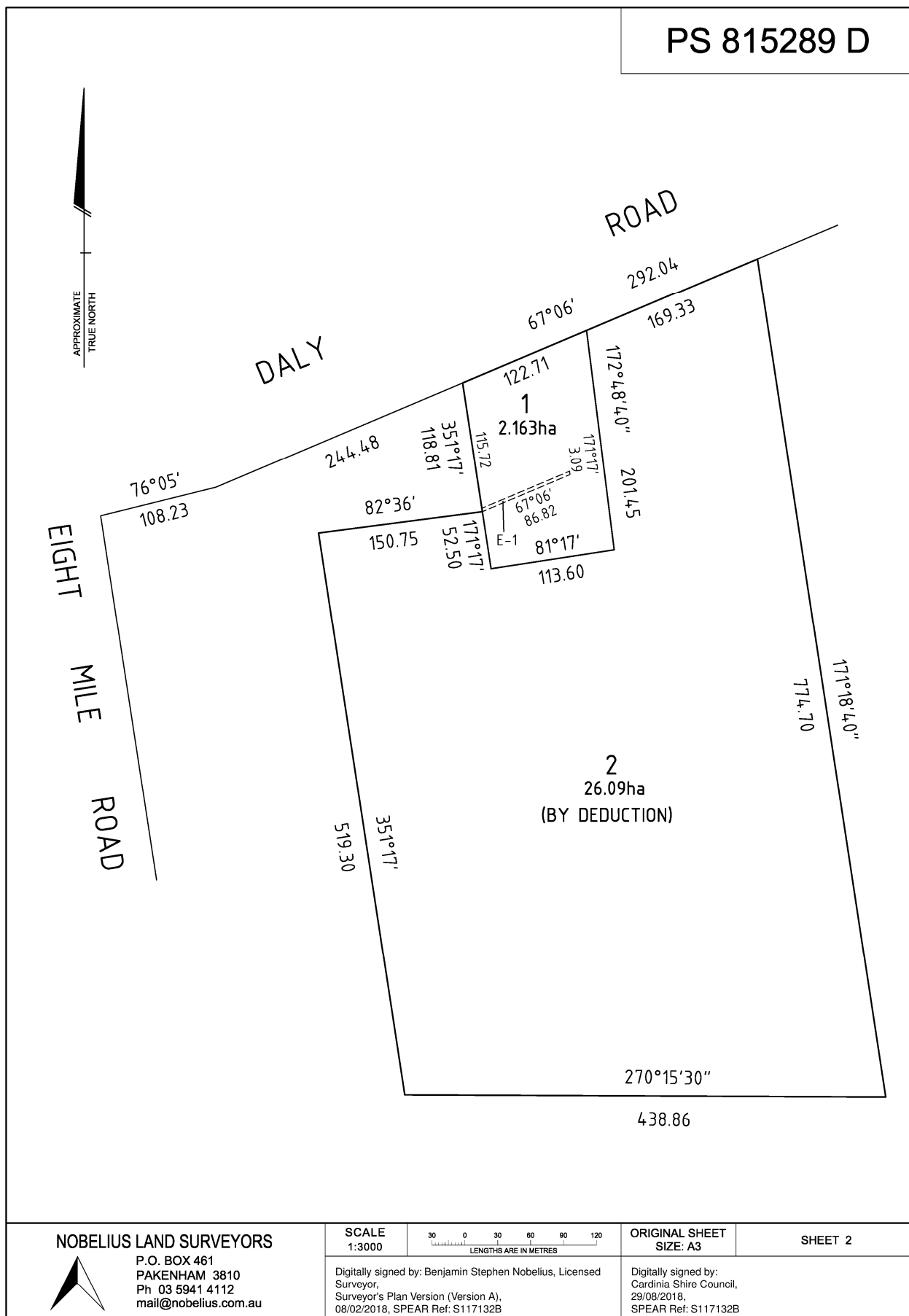
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PLAN OF SUBDIVISION		EDITION 1	PS 815289 D	
LOCATION OF LAND PARISH: Koo Wee Rup TOWNSHIP: --- SECTION: F CROWN ALLOTMENT: 31 & 32 CROWN PORTION: --- TITLE REFERENCE: Vol. 10447 Fol's. 773 & 774. LAST PLAN REFERENCE: Lots 3 & 4 PS 343751 N POSTAL ADDRESS: Daly Road, Nar Nar Goon 3812 (at time of subdivision) MCA CO-ORDINATES: E: 376 450 ZONE: 55 (of approx centre of land N: 5 780 920 GDA 94 in plan)		Council Name: Cardinia Shire Council Council Reference Number: S18/022 Planning Permit Reference: T170713 SPEAR Reference Number: S117132B Certification This plan is certified under section 6 of the Subdivision Act 1988 Public Open Space A requirement for public open space under section 18 of the Subdivision Act 1988 has not been made Digitally signed by: Sonia Higgins for Cardinia Shire Council on 29/08/2018 Statement of Compliance issued: 31/10/2018		
VESTING OF ROADS AND/OR RESERVES		NOTATIONS		
IDENTIFIER	COUNCIL/BODY/PERSON	This is a Spear Plan Lot 2 is not the subject of this Survey.		
Nil	Nil			
NOTATIONS				
DEPTH LIMITATION: 15.24m below the surface.				
SURVEY: This plan is based on partial survey. STAGING: This is/is not a staged subdivision. Planning Permit No. This survey has been connected to permanent marks No(s). SR74V27 In Proclaimed Survey Area No. 71				
EASEMENT INFORMATION				
LEGEND: A - Appurtenant Easement E - Encumbering Easement R - Encumbering Easement (Road)				
Easement Reference	Purpose	Width (Metres)	Origin	Land Benefited/In Favour Of
E-1	Drainage	3	PS 343751N	All Lots on PS 343751N
NOBELIUS LAND SURVEYORS  P.O. BOX 461 PAKENHAM 3810 Ph 03 5941 4112 mail@nobelius.com.au		SURVEYORS FILE REF: 16122 Digitally signed by: Benjamin Stephen Nobelius, Licensed Surveyor, Surveyor's Plan Version (Version A), 08/02/2018, SPEAR Ref: S117132B		ORIGINAL SHEET SIZE: A3 SHEET 1 OF 2 PLAN REGISTERED TIME: 5:33pm DATE: 29/11/2020 Roger Mellor Assistant Registrar of Titles





ePlanning

Application Summary

Portal Reference	D2239891
Reference No	T220660

Basic Information

Cost of Works	\$400,000
Site Address	275 Daly Road Nar Nar Goon VIC 3812

Covenant Disclaimer

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

Not Applicable, no such encumbrances apply.

Documents Uploaded

Date	Type	Filename
30-05-2023	Additional Document	LOT_1_275_DALY_ROAD_NAR_NAR_GOON_3812_.pdf
30-05-2023	Additional Document	TP - LOT 1, #275 DALY ROAD NAR NAR GOON 3812 (REVISION B, 23.05.23).pdf
30-05-2023	Additional Document	TOWN PLANNING REPORT.pdf
30-05-2023	Additional Document	23E6456_275_DALY_ROAD_NAR_NAR_GOON_LCA_230523.pdf

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

Lodged By

Site User	RON ASLING STUDIO THREE DESIGN & DRAFTING PTY LTD	1/25 TRELOAR LANE, PAKENHAM VIC 3810	W: 0413-122-391 M: 0413-122-391 E: ron@studiothreedesign.com.au
Submission Date	30 May 2023 - 01:50:PM		

Declaration

☒ By ticking this checkbox, I, RON ASLING, declare that all the information in this application is true and correct; and the Applicant and/or Owner (if not myself) has been notified of the application.



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Monday to Friday 8.30am–5pm
Phone: 1300 787 624
After Hours: 1300 787 624
Fax: 03 5941 3784



SMOLDERS[®] GEOTECHNICAL

Land Capability Assessment Report

SITE ADDRESS: 275 Daly Road, NAR NAR GOON, VIC 3812

CLIENT: Ron Asling
C/- Studio Three Design & Drafting
ron@studiothreedesign.com.au
0413 122 391

DATE: 23 May 2023

REFERENCE NUMBER: 23E6456

UPDATED:



SMOLDERS GEOTECHNICAL PTY. LTD.

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SMOLDERS GEOTECHNICAL PTY. LTD.

1. Introduction

THE CONSULTANTS

Smolders Geotechnical Pty Ltd has been engaged to undertake a Land Capability Assessment (LCA) for a site at 275 Daly Road, NAR NAR GOON, VIC 3812.

The field investigation and report have been undertaken and prepared by suitably experienced staff.

I Richard Smart B.Sc (soils) PhD. undertook the site investigation and prepared this report.

Smolders Geotechnical Pty Ltd has appropriate professional indemnity insurance for this type of work.

REPORT SUMMARY

I understand that this report will accompany an application for a Septic Tank Permit to Install submitted to Cardinia Shire Council for an onsite wastewater management system for a proposed residence at the above site.

This document provides information about the site and soil conditions. It also provides a detailed Land Capability Assessment for the site and includes a conceptual design for a suitable onsite wastewater management system, including recommendations for monitoring and management requirements. A number of options are provided for both the treatment system and Land Application Area (LAA).

However, the wastewater should be treated either to secondary level by a suitable EPA-approved treatment system and the effluent applied to land via sub-surface drip irrigation or the wastewater should be treated to primary level and the effluent applied to land via a Wisconsin Mound System.

Council and/or Referral Authorities may require secondary treatment prior to disposal as policy regardless of the results of the Land Capability Assessment.

SITE OVERVIEW

The site is a partially developed, flat paddock and is consistent with a green wedge zone.

The proposed LAA is situated on flat land. The area has a very good exposure and aspect. The area is within a Land Subject to Inundation Overlay.

There are drainage ditches along the northern, eastern and southern boundaries, and dams approximately 10m west of the southwest corner of the site and 75m east of the eastern boundary line.

There is sufficient land available for sustainable onsite effluent management that maintains the required buffers to protect any nearby surface waters and floodways.

I did not observe any sensitive environmental receptors within a 30m setback from the recommended Land Application Area envelope.



SMOLDERS GEOTECHNICAL PTY. LTD.

2. Description of the Development

Site Address: 275 Daly Road, NAR NAR GOON, VIC 3812. A Land Channel Property Report provides a locality plan and indicates the location of the site of the proposed development (Appendix 9.8).

Client/Agent: Ron Asling C/- Studio Three Design and Drafting

Postal Address: 1/25 Treloar Lane, PAKENHAM VIC 3810

Contact: 0413 122 391

Council Area: Cardinia Shire Council.

Zoning: Green Wedge Zone (GWZ), Land Subject to Inundation Overlay (LSIO).

Allotment Size: 2.16 Hectares.

Domestic Water Supply: Assume not available at site.

Anticipated Wastewater Load: Assume a residence with full water-reduction fixtures at maximum occupancy. Wastewater generation = 150 L/person/day (source Table 4 of the EPA Code of Practice 891.4).

Availability of Sewer: The area is unsewered and highly unlikely to be sewerred within the next 10-20 years, due to low development density in the area and the considerable distance from existing wastewater services.

3. Site and Soil Assessment

I undertook a site investigation on the 16th May 2023.

3.1 SITE KEY FEATURES

Table 1 summarises the key features of the site in relation to effluent management proposed for the site.

NOTE:

- There is no evidence of a shallow watertable to 1.8m depth, though slight mottling within the sub-soil suggests that a seasonal water table occurs;
- There is sufficient land available for effluent disposal;
- Very good exposure and aspect;
- The site is flat;
- The risk of effluent transport offsite is low.



SMOLDERS GEOTECHNICAL PTY. LTD.

Both aerial and site photographs are appended to provide current site context (Appendix 9.1).

3.2 Table 1: Risk Assessment of Site Characteristics

Feature	Description	Level of Constraint	Mitigation Measures
Buffer Distances	All relevant buffer distances in Table 5 of the EPA Code of Practice (2016) are achievable from the proposed effluent management area.	Minor	Locate Land Application Area appropriately.
Climate	Average annual rainfall 857.2mm Scoresby (Climate Station No. 086104) Average annual evaporation 1197.0mm Scoresby Research (Climate Station No. 086104) (Appendix 9.5). Rainfall exceeds evaporation on average for 5 months of the year.	Major	Plant LAA with high evapotranspiration vegetation
Drainage	Some signs or likelihood of dampness.	Moderate	Secondary treatment and sub-surface drip irrigation or primary treatment and use of mound system.
Erosion & Landslip	No evidence of sheet or rill erosion; the erosion hazard is low. No evidence of landslip and landslip potential is low.	Nil	NN
Exposure & Aspect	Proposed Land Application Area clear with good all round aspect, and good sun and wind exposure.	Nil	NN
Soil Drainage	Sandy Clayey Silt (Sandy Clay Loam) overlying Sandy Clay, is imperfectly drained. Water removed very slowly in relation to supply, seasonal ponding, all horizons wet for periods of several months, some mottling. Permeability measured as 0.063 m/d using constant head permeameter, consistent with sandy clay/loam.	Major	plant LAA with high evapotranspiration vegetation. Access openings to tanks or other parts of system should be sealed to prevent ingress of water during flood events. Submerged equipment may need regular maintenance, anchoring of tanks to prevent lifting by flood waters.

NN: Not needed



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3.2 Table 1: Risk Assessment of Site Characteristics Continued:

Feature	Description	Level of Constraint	Mitigation Measures
Flooding	The proposed LAA envelope is located within a Land subject to Inundation Overlay.	Major	Access openings to tanks or other parts of system should be sealed to prevent ingress of water during flood events. Submerged equipment may need regular maintenance, anchoring of tanks to prevent lifting by flood waters. Raise ground level using good quality sandy loam topsoil.
Groundwater	No signs of shallow groundwater tables to 1.8m depth. Slight mottling within sub-soil	Major	Use of sub-surface drip irrigation or mound system.
Imported Fill	No fill observed on site.	Nil	NN
Land Available for LAA	Considering all the constraints and buffers, the site has ample suitable land for land application of treated effluent.	Nil	NN
Landform	Flat land in proposed LAA	Minor	NN
Rock Outcrops	No rock outcrops observed on site	Nil	NN
Run-on & Runoff	Very low likelihood of run-on or run-off.	Nil	NN
Slope	Flat land.	Nil	NN
Surface Waters	Nearest surface water is > 30 metres horizontal distance to the southwest of proposed LAA.	Minor	NN
Ground Water Bore	No bore recorded within 100m of proposed Land Application Area.	Nil	NN
Vegetation	Mixture of grasses on proposed Land Application Area.	Nil	NN

NN: Not needed



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3.3 SITE ASSESSMENT RESULTS

Based on the most constraining site features (climate, drainage and inundation) the overall land capability of the site to sustainably manage all effluent onsite is satisfactory. The proposed effluent management area is located within a Land Subject to Inundation Overlay, however; by raising the ground level with good quality sandy loam topsoil, using secondary treatment and subsurface drip irrigation, or primary treatment and use of a Wisconsin Mound System, a suitably sized holding tank for use during periods of inundation, anchoring of all septic and holding tanks and sealed access openings to all relevant parts of the system, there will be ample protection of surface waters and groundwater.

3.4 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.

The soils on site have been derived from swamp and lake deposits (MapCode Qm1) which is the regional geological setting. Appended is a Geovic Map indicating the site location (Appendix 9.7).

3.5 SOIL SURVEY AND ANALYSIS

A soil survey was carried out at the site to determine suitability for application of treated effluent. Soil investigations were conducted at 3 locations in the vicinity of the proposed LAA, as shown in the Test Site Location Plan (Figure 1/Appendix 9.3), using a 100mm hydraulic auger (2 x boreholes) to a maximum depth of 1.8m depth and a hand dug pit to a maximum depth of 800mm. This was sufficient to adequately characterise the soils as only minor variation would be expected throughout the area of interest.

Two soil types were encountered in these investigations. Full profile descriptions are provided in the appended borelogs (Appendix 9.4). Samples of all discrete soil layers for each soil type were collected for subsequent laboratory analysis of pH, electrical conductivity and Emerson Aggregate Class. Table 2 describes the soil constraints in detail for each of the soils encountered.

Soils in the vicinity of the building envelope are characterised as weakly structured sandy clay loam topsoils overlying a weakly structured to massive sandy clay lower horizon.

Considering the physical and chemical characteristics of the subsoil in this area of the site, in my opinion secondary treated effluent application via sub-surface drip irrigation or primary treated effluent application via a Wisconsin Mound System are suitable and viable disposal systems for this site.

Full Laboratory data results are appended (Appendix 9.6).

Table 2 below provides an assessment of the physical and chemical characteristics of the soil type present.



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3.6 TABLE 2: RISK ASSESSMENT OF SOIL CHARACTERISTICS

Feature	Assessment	Level of Constraint	Mitigation Measures
Cation Exchange Capacity (CEC)	6.8 (subsoil) to 9.9 (topsoil) MEQ%. No evidence of restricted plant growth. Calcium and Magnesium dominant ions on exchange sites	Minor	NN
Electrical Conductivity (ECe)	0.013 to 0.019dS/m. No evidence of restricted plant growth on site.	Minor	NN
Emerson Aggregate Class	Topsoil: Slaking/ Some dispersion Class 2	Major	Soil amelioration recommended. Apply gypsum to base of any excavation or below mound. (Min 1Kg/m ²)
	Subsoil: Slaking/ Some dispersion Class 2	Major	Soil amelioration recommended. Apply gypsum to base of any excavation. (Min 1Kg/m ²)
pH	5.6 to 5.7 No evidence of restricted plant growth on site.	Minor	NN
Rock Fragments	No rock fragments	Minor	NN
Sodicity (ESP)	1.9- to 3.0%. Non-Sodic. No evidence of restricted plant growth on site.	Minor	NN
Sodium Absorption Ratio (SAR)	0.06 – 0.08. No evidence of restricted plant growth on site. Sodium concentrations low on exchange sites.	Minor	NN
Soil Depth	Topsoil: Majority of proposed LAA has approximately 300 to 400mm depth.	Minor	NN
	Subsoil: Soil depths 300 - 1800mm (minimum thickness). No hardpans occur. No refusal in any boreholes.	Minor	NN
Soil Permeability & Design Loading Rates	Topsoil: Sandy Clay Loam; 3.5mm/day Design Loading Rate (DLR) for sub-surface drip irrigation (Code, 2016).	Minor	NN
	Subsoil: sandy clay; 3mm/day DLR for sub-surface drip irrigation (Code, 2016).	Minor	NN
Soil Texture & Structure	Topsoils: Sandy Clay Loam (Category 4b)	Moderate	Secondary treatment/sub-surface drip irrigation or primary treatment/Wisconsin Mound
	Subsoil (>400mm): sandy clay (Category 5c) in accordance with AS/NZS/NZS 1547:2012	Major	Secondary treatment/sub-surface drip irrigation or primary treatment/Wisconsin Mound
Water table Depth	Groundwater not encountered. Deepest borehole terminated at 1.8m. Slight mottling of sub-soil suggests seasonal perched water table	Major	Secondary treatment/sub-surface drip irrigation or primary treatment/Wisconsin Mound

NN: Not needed



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3.7 OVERALL LAND CAPABILITY RATING

For the soil in the proposed additional land application area (weakly structured Sandy Clay Loam topsoils overlying a weakly structured Sandy Clay), no features present a moderate or major constraint that cannot be mitigated.

Based on the results of the site and soil assessment tabled above and provided in the Appendices, the overall land capability of the proposed effluent management area is not constrained **as long as either disposal of secondary treated effluent by sub-surface drip irrigation or disposal of primary treated effluent by Wisconsin Mound is used.**

4 Waste Water Management System

The following sections provide an overview of a suitable onsite wastewater management system, with sizing and design considerations and justification for its selection. Detailed design for the system should be undertaken at the time of the building application and submitted to Council.

4.1 TREATMENT SYSTEM

The secondary effluent quality required is:

- BOD < 20 mg/L;
- SS < 30 mg/L;

Refer to the EPA website for the list of approved options that are available. Any of the secondary treatment system options are capable of achieving the desired level of performance. The property owner has the responsibility for the final selection of the secondary treatment system and must include the details of it in the Septic Tank Permit to Install application form for Council approval.

4.2 EFFLUENT MANAGEMENT SYSTEM

A range of possible land application systems have been considered, such as absorption trenches, evapotranspiration/absorption (ETA) beds wick trenches, subsurface/surface irrigation and mounds.

The nominated and preferred systems are either secondary treatment with pressure compensating subsurface irrigation or primary treatment with a Wisconsin Mound system. Subsurface irrigation will provide even and widespread dispersal of the treated effluent within the root-zone of plants. This system will provide beneficial reuse of effluent, which is desirable given that the site is possibly not serviced by town water. It will also ensure that the risk of effluent being transported off-site will be negligible. A Wisconsin Mound system may be sufficiently rarely inundated to be acceptable.

The client should note that council may require secondary treatment of effluent as standard.



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4.3 DESCRIPTION OF THE IRRIGATION SYSTEM

A detailed irrigation system design is beyond the scope of this report; however, a general description of both recommended systems is provided here for the information of the client and Council.

SUB-SURFACE DRIP IRRIGATION

Subsurface irrigation comprises a network of drip-irrigation lines that are specially designed for use with wastewater. The pipe contains pressure compensating emitters (drippers) that employ a biocide to prevent build-up of slimes and inhibit root penetration. The lateral pipes are usually 1.0m apart for loams, installed parallel along the contour. Installation depth is 150mm to 200mm in accordance with AS/NZS 1547:2012. It is critical that the irrigation pump be sized properly to ensure adequate pressure and delivery rate to the irrigation network. A sequencing valve should be installed to separate the drip lines into two or more batches, this will ensure an even disposal of the effluent across the system.

A filter is installed in the main line to remove fine particulates that could block the emitters. This must be cleaned regularly (typically monthly) following manufacturer's instructions. Vacuum breakers should be installed at the high point/s in the system to prevent air and soil being sucked back into the drippers when the pump shuts off. Flushing valves are an important component and allow periodic flushing of the lines, which should be done at six monthly intervals. Flush water can be either returned to the treatment system, or should be released to a small dedicated gravel-based trench.

All trenching used to install the pipes must be backfilled properly to prevent preferential subsurface flows along trench lines. Irrigation areas must not be subject to high foot traffic movement, and vehicles and livestock must not have access to the area otherwise compaction around emitters can lead to premature system failure.

SAND MOUND

The sand mound system comprises of a manifold and perforated pipe distribution laterals set within an aggregate distribution bed placed near to the top of an appropriately sized sand mound. The lateral pipes are sized to accommodate the hydraulic flow rates and dose volume selected by the designer. LPED lines may be used as laterals in place of perforated lines. Timer dose loading instead of demand dose loading should be used. The lateral pipes are usually 0.6m to 1.0m apart, installed parallel along the contour. Installation depth is approximately 300mm within the mound (See figure N1, AS/NZS 1547: 2012 and below).

It is essential that both the ground surface and the mound itself are properly prepared and that attention is given to the details of mound design, if the mound system is to function properly.

The mound perimeter and bed must be marked out in proper orientation and the area in the mound perimeter must be ploughed. A twin or larger mouldboard plough should be used, ploughing 18 to 20cm deep. Single ploughs should not be used, as the trace wheel runs in every furrow, compacting soil. A chisel plough may be used in place of a mouldboard plough. Roughening the surface with backhoe teeth may be satisfactory. Works should be completed within the drier months of the year to ensure minimal disturbance to the underlying soils.

The delivery pipe from the pump chamber shall be installed so it drains after dosing. The soil around the pipe shall be backfilled and compacted.

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REF NUMBER: 23E6456

275 Daly Road, NAR NAR GOON VIC



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The sand-fill media shall be:

Medium sand with a grain size of 0.25 – 1.0mm, a uniformity coefficient less than 4, less than 3% fines passing a 200 sieve (0.074 mm), free of clay, limestone and organic material;

Carefully placed on to the ploughed area and moved into place either manually or by using a light-weight tracked tractor with a blade; and

Built-up until its height reaches the elevation of the top of the distribution bed.

The distribution bed shall be:

Formed in the top of the fill media, with a level base at the design elevation and with sides shaped to the specified slope; and

Carefully filled with graded river run aggregate (20 – 60 mm, non-crushed, rounded) and levelled at a minimum depth of 150 mm.

A pre-commissioning test shall be carried out after all on-site components including the pump, have been installed but prior to covering the effluent distribution system in the distribution bed.

To finish the distribution bed:

Additional aggregate shall be placed on the distribution bed to a total depth of 225 mm

A suitable backfill barrier such as filter cloth shall be installed over the aggregate

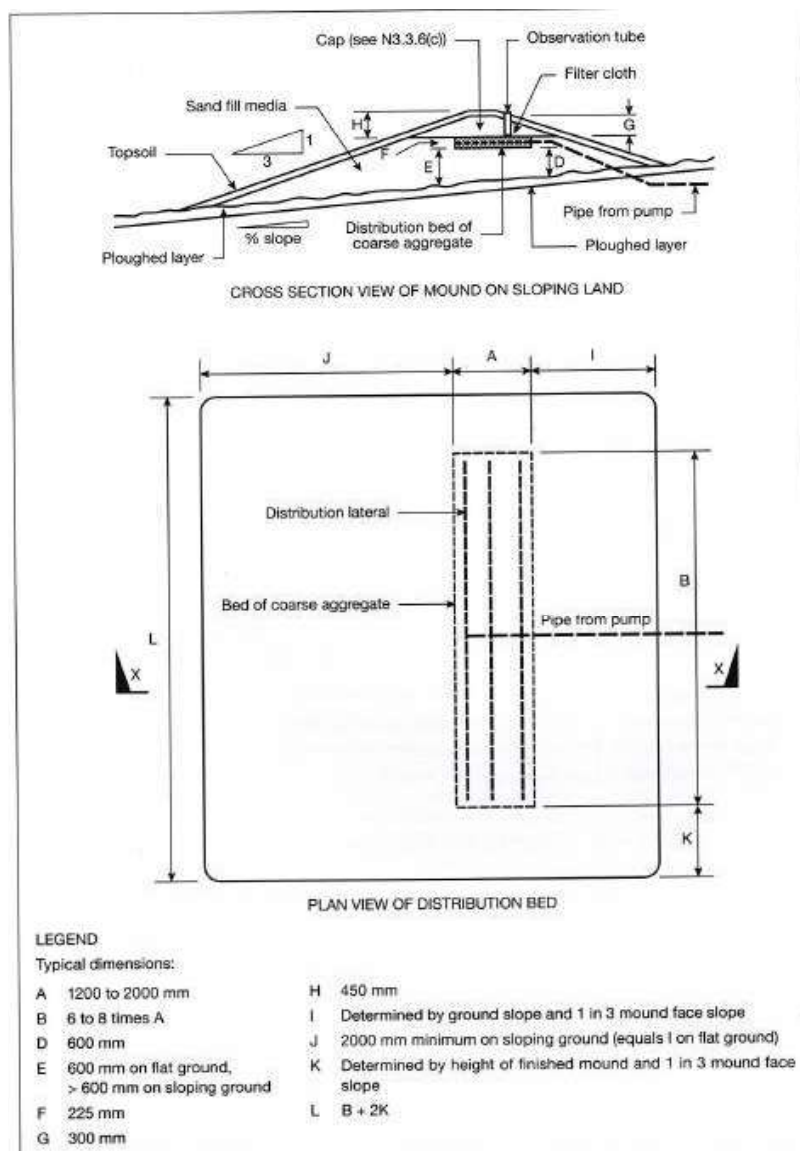
A fine textured soil material such as silt loam shall be placed over the top of the distribution bed to a depth of approximately 300 mm with thickness reducing towards the sides

A further 150 mm (minimum) layer of good quality topsoil shall be placed over the entire mound surface: and

The mound surface shall be grassed using grasses adapted to the area.

An installation and commissioning report shall be produced to include the 'as-built' details following construction, the results of construction inspections and commissioning process. This report shall be provided to the property owner and, if required, to the regulatory authority.

The mound system is illustrated below.





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4.4 SIZING THE IRRIGATION SYSTEM

3-bedroom dwelling – four occupants.

SUB-SURFACE DRIP IRRIGATION

To determine the necessary size of the irrigation area, detailed water balance modelling has been considered using the Excel water balance tool in the Victorian Land Capability Assessment Framework (2014) and the EPA Code (2016). The final sizing of the irrigation system has been undertaken adopting a DIR from Table 9 of the EPA code (2016). We have used a DLR/DIR of 3.5 mm/d (Table 9. EPA 2016) to take into account the Sandy Clay Loam topsoil within the proposed LAA. The minimum area required using the detailed water balance method is 237 **square metres** **(say 240 square metres)**. The spreadsheet calculations are shown below on p.16.

Precipitation and evaporation data for Scoresby Research Station (site number 086104), the most representative weather station for Daly Road, has been used in the modelling. (See Appendix 9.5 for complete data).

As well as water balance modelling a preliminary nutrient balance has been considered to check that the Land Application Area is of sufficient size to ensure nutrients are assimilated by the soils and vegetation. It is acknowledged that a proportion of nitrogen will be retained in the soil through processes such as mineralisation and volatilisation.

Reference: Victoria Land Capability Assessment Framework Jan 2014 (app 2).

NOTE: Soil has a high PRI (phosphorus retention index) in clayey soils. Phosphorus is readily removed under these circumstances from wastewater fixation in clayey soil by the action of adsorption. Phosphate in dispersed effluent is lost within a few centimetres of the soil.

This leaves nitrogen (N) as the limiting factor in this proposed development.

EPA performance criteria for Aerated Wastewater Treatment Systems (AWTS) is TKN 25mg/L. Adopt TKN 25mg/L as design criteria. Calculation shown on page 17.

Minimum area required for N uptake = 199 sq m (say 200 sq m).

WISCONSIN MOUND

We have used DLR/DIRs of 8.0 mm/d for primary treated effluent via Wisconsin Mound to take into account the weakly structured Sandy Clay Loam soils within the proposed LAA. The minimum basal area required is **86.0 sq m for a Wisconsin Mound** **(Loading of the aggregate within the mound must not exceed 40 mm/d)**. The spreadsheet calculations are shown below on p.18.

Climate data for Scoresby Research Institute (site number 086104), the most representative weather station for Daly Road, has been used in the modelling. (See Appendix 9.5 for complete data).

Therefore, adopt 240 sq m as required minimal area required for effluent sub-surface drip irrigation or 86 sq m as minimal basal area required for a Wisconsin Mound system for a 3-bedroom residence.

I am of the opinion that the area required for nitrogen assimilation and phosphorus can be met by the above sized Land Application Area.

The client should note that Council may consider a study or other utility room as a potential bedroom.

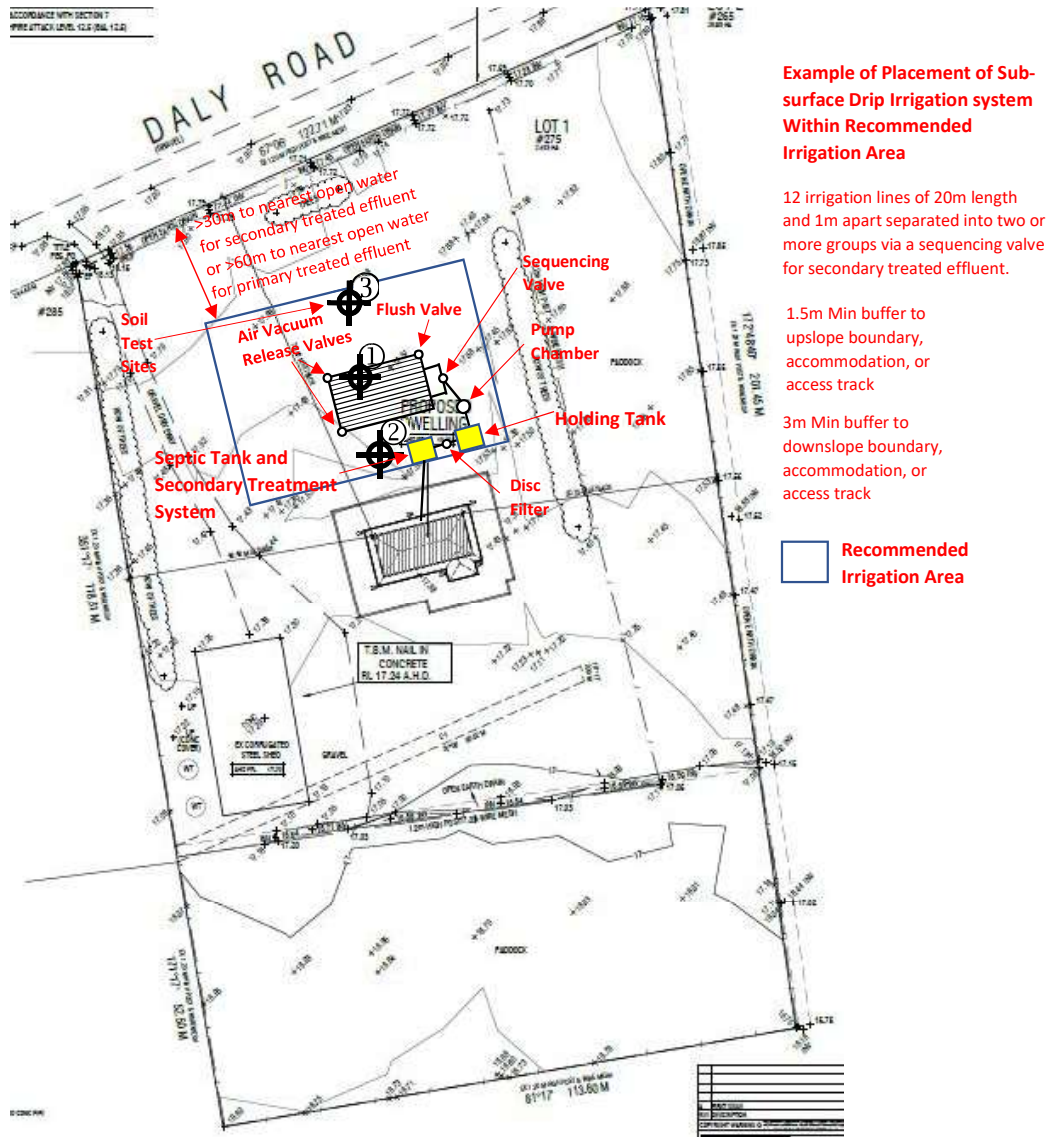


Figure 1. Test Site Location Plan, showing an example of the location of a sub-surface, pressure compensating, drip irrigation system with secondary treated effluent.



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Summary and Discussion

It is worth noting that modeling includes several significant factors of conservatism:

- Hydraulic load. This assumes a maximum occupancy of four persons within the residence at a rate of 150 Litres/person/day.

It is likely that the actual occupancy and water usage will be less than this;

- From the nutrient balances, in the absence of site-specific data very conservative estimates of crop nutrient uptake rates and total nitrogen lost to soil processes are considered.



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Victorian Land Capability Assessment Framework																
Please read the attached notes before using this spreadsheet																
Irrigation area sizing using Nominated Area Water Balance for Zero Storage																
Site Address:		275 Daly Road, Nar Nar Goon, VIC 3812														
Date:		Assessor:														
INPUT DATA																
Sub-surface Drip Irrigation																
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 Irrigation Rate	DIR	3.5	mm/day	Based on soil texture class/permeability and derived from Table 9 in the EPA Code of Practice (2013)												
Nominated Land Application Area	L	237	m ²	1												
Crop Factor	C	0.6-0.8	unitless	Estimates evapotranspiration as a fraction of pan evaporation; varies with season and crop type ²												
Rainfall Runoff Factor	RF	0.8	unitless	Proportion of rainfall that remains onsite and infiltrates, allowing for any runoff												
Mean Monthly Rainfall Data	Scoresby Research (086104)		BoM Station and number													
Mean Monthly Pan Evaporation Data	Scoresby Research (086104)		BoM Station and number													
Parameter	Symbol	Formula	Units	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Days in month	D		days	31	28	31	30	31	30	31	30	31	30	31	31	365
Rainfall	R		mm/month	52.4	37.5	46.9	66.8	82	66.4	69.6	83.1	77.8	78.1	75	71.3	806.9
Evaporation	E		mm/month	173.6	154	124	81	52.7	39	43.4	58.9	78	105.4	132	155	1197
Crop Factor	C		unitless	0.80	0.80	0.70	0.70	0.60	0.60	0.60	0.60	0.70	0.80	0.80	0.80	
OUTPUTS																
Evapotranspiration	ET	ExC	mm/month	139	123	87	57	32	23	26	35	55	84	106	124	890.5
Percolation	B	DIRxD	mm/month	108.5	98	108.5	105.0	108.5	105.0	108.5	108.5	105.0	108.5	105.0	108.5	1277.5
Outputs		ET+B	mm/month	247.4	221.2	195.3	161.7	140.1	128.4	134.5	143.8	159.6	192.8	210.6	232.5	2168.0
INPUTS																
Retained Rainfall	RR	RxCRF	mm/month	39.3	28.125	35.175	50.1	61.5	49.8	52.2	62.325	58.35	58.575	56.25	53.475	605.175
Applied Effluent	W	(QxD)/L	mm/month	78.5	70.9	78.5	75.9	78.5	75.9	78.5	78.5	75.9	78.5	75.9	78.5	924.1
Inputs		RR+W	mm/month	117.8	99.0	113.7	126.0	140.0	125.7	130.7	140.8	134.3	137.1	132.2	132.0	1529.2
STORAGE CALCULATION																
Storage remaining from previous month			mm/month	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Storage for the month	S	(RR+W)-(ET+B)	mm/month	-129.6	-122.2	-81.6	-35.7	-0.1	-2.7	-3.9	-3.0	-25.3	-55.8	-78.4	-100.5	
Cumulative Storage	M		mm	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Maximum Storage for Nominated Area	N		mm	0.00												
	V	NxL	L	0												
LAND AREA REQUIRED FOR ZERO STORAGE			m ²	89	87	116	161	237	229	226	228	178	139	117	104	
MINIMUM AREA REQUIRED FOR ZERO STORAGE:				237.0	m ²											
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														
NOTES																
¹ This value should be the largest of the following: land application area required based on the most limiting nutrient balance or minimum area required for zero storage																
² Values selected are suitable for pasture grass in Victoria																



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Victorian Land Capability Assessment Framework									
Please read the attached notes before using this spreadsheet									
Nitrogen Balance									
Site Address:		275 Daly Road, Nar Nar Goon, VIC 3812							
SUMMARY - LAND APPLICATION AREA REQUIRED BASED NITROGEN BALANCE									199 m ²
INPUT DATA ¹									
Wastewater Loading					Nutrient Crop Uptake				
Hydraulic Load	600	L/day	Crop N Uptake	220	kg/ha/yr	which equals	60.27	mg/m ² /day	
Effluent N Concentration	25	mg/L							
% N Lost to Soil Processes (Geary & Gardner 1996)	0.2	Decimal							
Total N Loss to Soil	3000	mg/day							
Remaining N Load after soil loss	12000	mg/day							
NITROGEN BALANCE BASED ON ANNUAL CROP UPTAKE RATES									
Minimum Area required with zero buffer			Determination of Buffer Zone Size for a Nominated Land Application Area (LAA)						
Nitrogen	199	m ²	Nominated LAA Size	237	m ²				
			Predicted N Export from LAA	-0.83	kg/year				
			Minimum Buffer Required for excess nutrient	0	m ²				
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						
NOTES									
¹ Model sensitivity to input parameters will affect the accuracy of the result obtained. Where possible site specific data should be used. Otherwise data should be obtained from a reliable source such as: <ul style="list-style-type: none"> - EPA Guidelines for Effluent Irrigation - Appropriate Peer Reviewed Papers - Environment and Health Protection Guidelines: Onsite Sewage Management for Single Households - USEPA Onsite Systems Manual 									



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Victorian Land Capability Assessment Framework																
Please read the attached notes before using this spreadsheet																
Irrigation area sizing using Nominated Area Water Balance for Zero Storage																
Site Address:		275 Daly Road, Nar Nar Goon, VIC 3812														
Date:		Assessor:														
INPUT DATA																
Wisconsin Mound																
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 Irrigation Rate	DIR	8.0	mm/day	Based on soil texture class/permeability and derived from Table 9 in the EPA Code of Practice (2013)												
Nominated Land Application Area	L	237	m ²	1												
Crop Factor	C	0.6-0.8	unitless	Estimates evapotranspiration as a fraction of pan evaporation; varies with season and crop type ²												
Rainfall Runoff Factor	RF	0.8	unitless	Proportion of rainfall that remains onsite and infiltrates, allowing for any runoff												
Mean Monthly Rainfall Data	Scoresby Research (086104)			BoM Station and number												
Mean Monthly Pan Evaporation Data	Scoresby Research (086104)			BoM Station and number												
Parameter	Symbol	Formula	Units	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Days in month	D		days	31	28	31	30	31	30	31	31	30	31	30	31	365
Rainfall	R		mm/month	52.4	37.5	46.9	66.8	82	66.4	69.6	83.1	77.8	78.1	75	71.3	806.9
Evaporation	E		mm/month	173.6	154	124	81	52.7	39	43.4	58.9	78	105.4	132	155	1197
Crop Factor	C		unitless	0.80	0.80	0.70	0.70	0.60	0.60	0.60	0.60	0.70	0.80	0.80	0.80	
OUTPUTS																
Evapotranspiration	ET	ExC	mm/month	139	123	87	57	32	23	26	35	55	84	106	124	890.5
Percolation	B	DIRxD	mm/month	248.0	224	248.0	240.0	248.0	240.0	248.0	248.0	240.0	248.0	240.0	248.0	2920.0
Outputs		ET+B	mm/month	386.9	347.2	334.8	296.7	279.6	263.4	274.0	283.3	294.6	332.3	345.6	372.0	3810.5
INPUTS																
Retained Rainfall	RR	RxCF	mm/month	39.3	28.125	35.175	50.1	61.5	49.8	52.2	62.325	58.35	58.575	56.25	53.475	605.175
Applied Effluent	W	(QxD)/L	mm/month	78.5	70.9	78.5	75.9	78.5	75.9	78.5	78.5	75.9	78.5	75.9	78.5	924.1
Inputs		RR+W	mm/month	117.8	99.0	113.7	126.0	140.0	125.7	130.7	140.8	134.3	137.1	132.2	132.0	1529.2
STORAGE CALCULATION																
Storage remaining from previous month			mm/month	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Storage for the month	S	(RR+W)-(ET+B)	mm/month	-269.1	-248.2	-221.1	-170.7	-139.6	-137.7	-143.4	-142.5	-160.3	-195.3	-213.4	-240.0	
Cumulative Storage	M		mm	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Maximum Storage for Nominated Area	N		mm	0.00												
	V	NxL	L	0												
LAND AREA REQUIRED FOR ZERO STORAGE				m ²	54	53	62	73	85	84	84	84	76	68	62	58
MINIMUM AREA REQUIRED FOR ZERO STORAGE:				86.0 m ²												
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														
NOTES																
¹ This value should be the largest of the following: land application area required based on the most limiting nutrient balance or minimum area required for zero storage																
² Values selected are suitable for pasture grass in Victoria																



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4.5 SITING AND CONFIGURATION OF THE LAND APPLICATION AREA

Considering the allotment's size there is sufficient space for the location of a subsurface drip irrigation or a mound system on the allotment.

If the pressure compensating drip irrigation system is to be used, it may need to be installed in a raised pad, constructed of good quality sandy loam topsoil, to ensure that it does not become inundated during flood events.

The Catchment Management Authority, Local Council or EPA may insist on changes to this recommendation due to the existence of the Land Subject to Inundation Overlay.

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

As a result of our visit, I can confirm that the sub-surface drip irrigation or mound system can be placed in the nominated LAA envelope delineated on the provided site plan (Appendix 9.3/figure 1).

4.6 DISPOSAL SYSTEM DESCRIPTION

Disposal design should be adopted from Irrigation System designs within AS/NZS 1547:2012.

The Test Site Location Plan (figure 1 and Appendix 9.3) shows an area of land that has been investigated and is considered suitable for effluent management and maintains the relevant buffers.

Final placement and configuration of the irrigation system will be determined by the client and/or system installer, provided it remains within the allotment boundaries and satisfies the minimum area required according to the water and nutrient balances.

Whilst there is ample area for application of the effluent, it is important that appropriate buffer distances to neighbouring properties 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.

4.7 BUFFER DISTANCES

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:

- 20 metres from groundwater bores.
- 60 or 30 metres (Primary/secondary treatment respectively) from non-potable watercourses.
- 100m from potable watercourses.



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- 6 or 3 metres if area up-gradient and 3 or 1.5 metres if area down-gradient of property boundaries, swimming pools and buildings (conservative values for primary or secondary effluent respectively).

These are conservative values for primary and secondary effluent.

All buffer distances are achievable.

4.8 INSTALLATION OF THE IRRIGATION SYSTEM

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, and recommended, optional measure to achieve even coverage is to divide the irrigation area into two or more separate sub-zones of equal size; 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. The irrigation lines should be installed approximately horizontal.



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5 Monitoring, Operation and Maintenance

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 system at the frequency required by Council under the permit to use;
- Use low phosphorous household cleaning products that are suitable for septic tanks;
- Sink strainer to be used to catch food particles;
- system should be dosed more than once per day;
- scrape all dishes to remove grease and fats before washing;
- do not install a garbage grinder waste disposal system;
- do not allow sanitary napkins or hygiene products to enter the system;
- do not dispose of aggressive toxic cleaning agents in the system;
- do not dispose of any solvents or paints in the system;
- do not allow bleach, whiteners, nappy soakers, spot removers or disinfectants to enter the system;
- 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 chosen system following the manufacturer's recommendations;
- Dose the LAA more than once a day
- Regularly clean in-line filters (following manufacturers instructions);
- 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).



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6 Stormwater Management

As mentioned above, stormwater is a concern in this case. Therefore, access openings to tanks or other parts of the system should be sealed to prevent ingress of water during flood events. Roof stormwater must not be disposed of in the Land Application Area. Council may decide that the irrigation system must be installed in/on a raised pad constructed of good quality sandy loam topsoil to ensure that inundation of the system does not occur.



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7 Conclusions

As a result of my investigations I conclude that sustainable onsite wastewater management is feasible with appropriate mitigation measures as outlined for a future residential development on this allotment.

Specifically, I recommend the following:

- Treatment of wastewater by an EPA-accredited treatment system;
- Location of Land Application Area within the envelope nominated.
- Access openings to tanks of other parts of the system should be sealed to prevent ingress of water during flood events
- Installation in/on a raised pad constructed of good quality sandy loam topsoil to ensure that inundation of the system does not occur
- Land application of treated effluent to a suitably sized subsurface drip irrigation or Wisconsin Mound system area (which may be subdivided into two or more evenly sized zones using an indexing or sequencing valve);
- Application of Gypsum to the base of all drip irrigation trenches/soil surface beneath the mound prior to installation of the system;
- Installation of water saving fixtures and appliances in the new residence to reduce the effluent load;
- Use of low phosphorus and low sodium (liquid) detergents to improve effluent quality and maintain soil properties for growing plants; and
- 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.

For and on behalf of SMOLDERS GEOTECHNICAL PTY. LTD.

A handwritten signature in blue ink, appearing to read "Richard Smart", written over a horizontal line.

Dr. Richard Smart
B.Sc. (Soils) PhD.



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8 References

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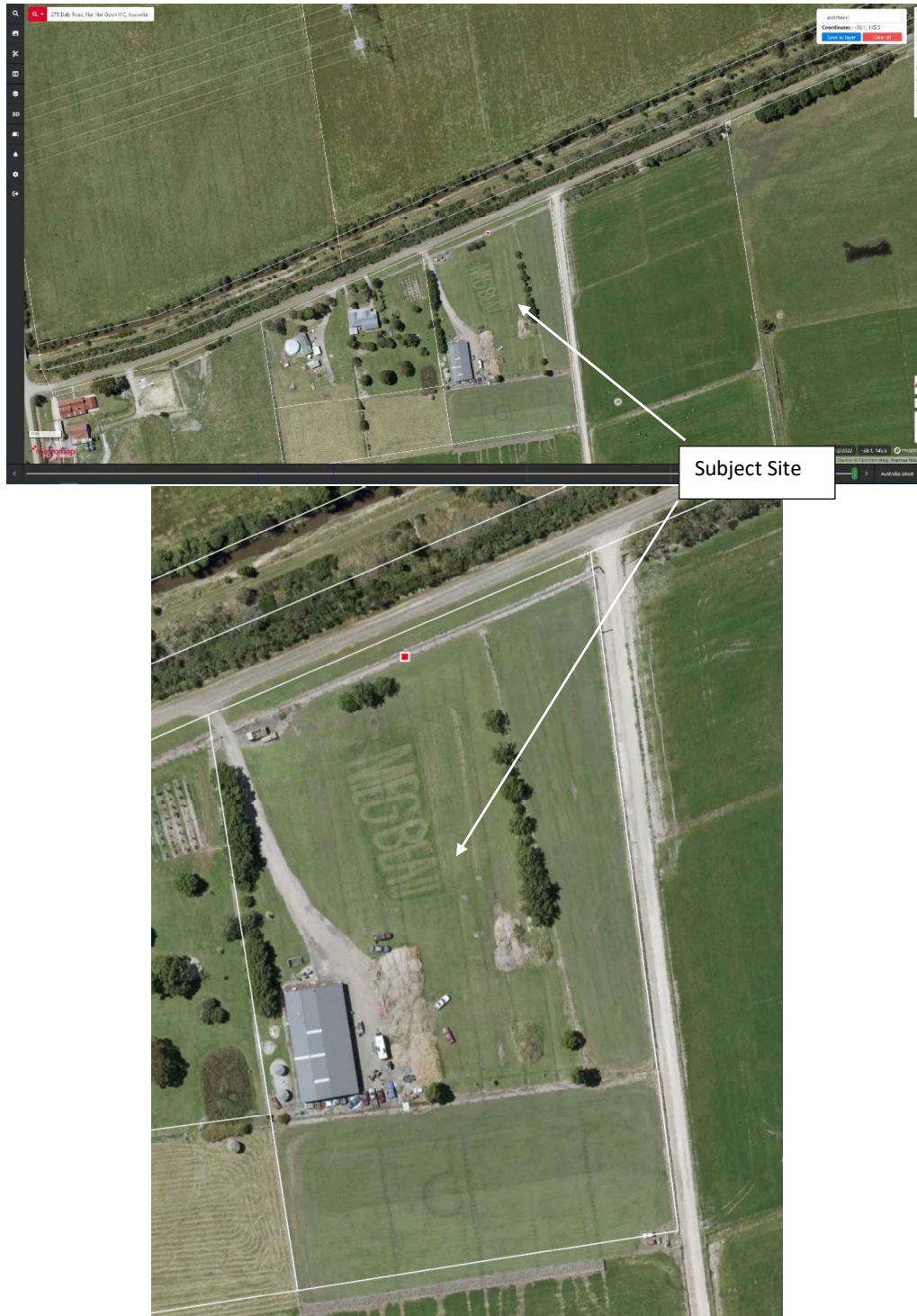
9 Appendices

- 9.1 Aerial and Site Photographs
- 9.2 Floor Plan
- 9.3 Test Site Location Plan
- 9.4 Borelog Descriptions
- 9.5 Bureau of Meteorology Climate Report
- 9.6 Analytical Laboratory Results
- 9.7 Geological Map
- 9.8 Land Channel Property Report



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9.1 Aerial and Site Photographs



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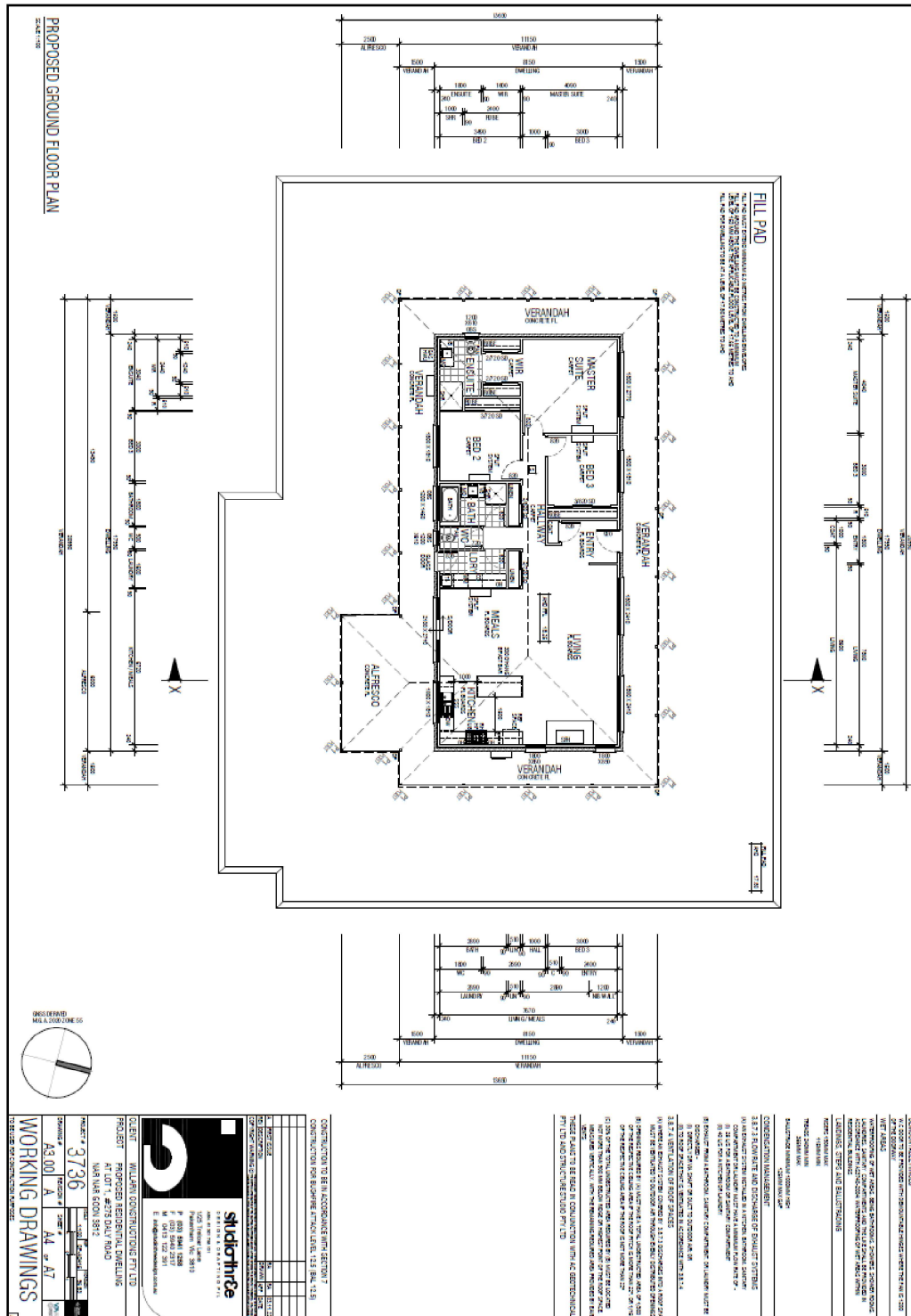
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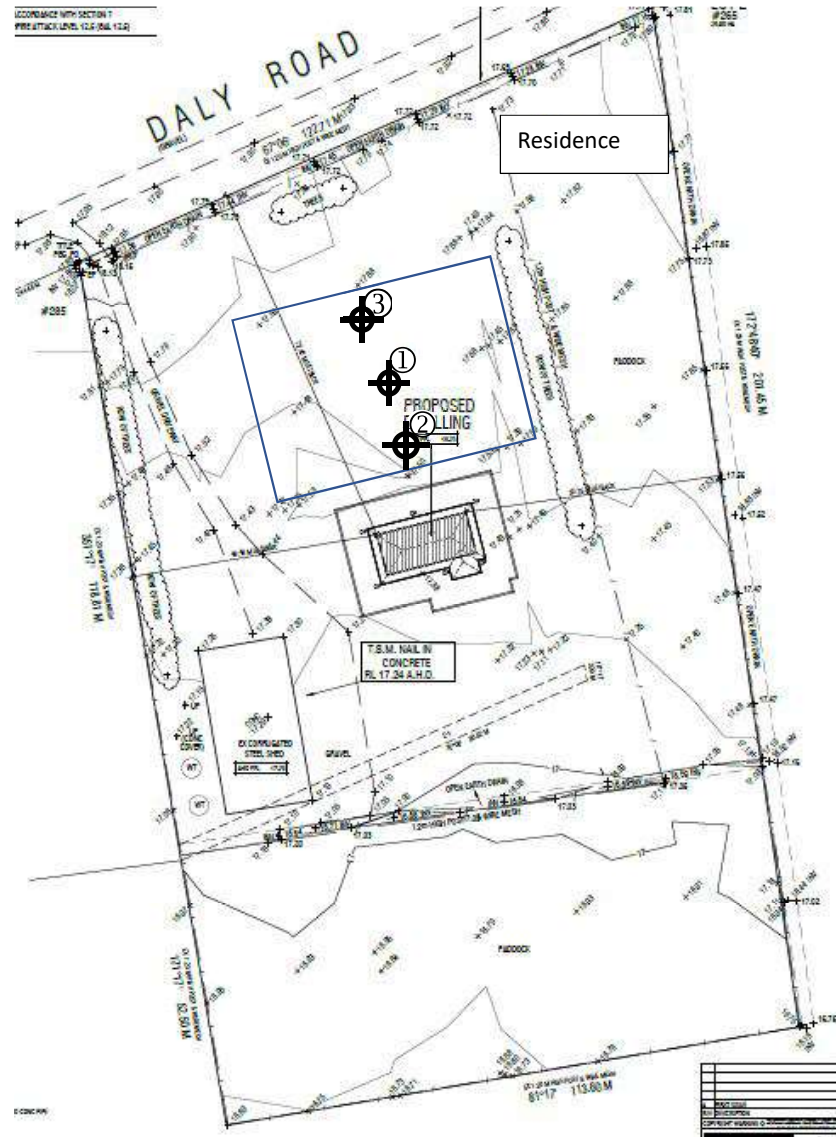


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9.2 Floor Plan



9.3 Test Site and LAA Location Plan



SOIL TEST SITES



RECOMMENDED IRRIGATION AREA



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9.4 Borelog Description


PROJECT ADDRESS:		275 Daly Road, NAR NAR GOON, VIC		16/05/2023		Richard Smart		FIELD WORK DATE:		SUPERVISING GEOLOGIST:	
REFERENCE NUMBER:		23E6456		BORELOG 1		BORELOG 2		BORELOG 3			
Depth mm	SOIL PROFILE Hand Dug Pit	Fill	Cat	Depth mm	SOIL PROFILE Mechanical Auger	Fill	Cat	Depth mm	SOIL PROFILE Mechanical Auger	Fill	Cat.
100	Sandy Clay Loam: Br/Gr, moist, firm Weakly structured Ribbon Length 40mm		4b	100	Sandy Clay Loam: Br/Gr, moist, firm Weakly structured Ribbon Length 40mm		4b	100	Sandy Clay Loam: Br/Gr, moist, firm Weakly structured Ribbon Length 40mm		4b
200				200				200			
300				300				300			
400				400				400			
500	Sandy Clay: Gr/Br, Mottled orange at depth, moist stiff Weakly structured, 70mm ribbon		5c	500	Sandy Clay: Gr/Br, Mottled orange at depth, moist stiff Weakly structured, 70mm ribbon		5c	500	Sandy Clay: Gr/Br, Mottled orange at depth, moist stiff Weakly structured, 70mm ribbon		5c
600				600				600			
700				700				700			
800				800				800			
900	End of Borehole: No Refusal			900	End of Borehole: No Refusal			900	End of Borehole: No Refusal		
1000				1000				1000			
1100				1100				1100			
1200				1200				1200			
1300				1300				1300			
1400				1400				1400			
1500				1500				1500			
1600				1600				1600			
1700				1700				1700			
1800				1800				1800			
1900				1900				1900			
2000	End of Borehole: No Refusal			2000	End of Borehole: No Refusal			2000	End of Borehole: No Refusal		
2100				2100				2100			
2200				2200				2200			
2300				2300				2300			
2400				2400				2400			
2500				2500				2500			
2600				2600				2600			
2700				2700				2700			
2800				2800				2800			
2900				2900				2900			
3000				3000				3000			
3100				3100				3100			
3200				3200				3200			
3300				3300				3300			
				3400				3400			
				3500				3500			

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9.5 Bureau of Meteorology Climate Report

Site name: SCORESBY RESEARCH INSTITUTE				Site number: 086104		Commenced: 1948									
Latitude: 37.87° S		Longitude: 145.26° E		Elevation: 80 m		Operational status: Open									
Statistics	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	Years	
Rainfall															
Mean rainfall (mm)	53.4	51.7	53.4	69.0	86.2	69.9	72.1	80.0	81.5	85.0	82.1	74.2	857.2	66	1948-2023
Highest rainfall (mm)	192.5	212.4	184.8	201.2	188.3	171.8	180.5	188.0	188.8	204.4	178.3	188.8	1237.1	72	1948-2023
Date	1963	2011	1970	2020	1982	1977	1952	1975	1992	2022	1992	1993	1952		
Lowest rainfall (mm)	2.2	0.3	4.0	18.4	12.4	13.7	25.5	28.2	28.8	13.4	19.1	3.7	512.8	72	1948-2023
Date	2009	1960	1991	2018	2009	1972	1970	1982	2006	2006	1959	1972	1997		
Decile 1 rainfall (mm)	19.8	8.2	19.0	28.4	44.8	31.4	40.9	41.2	41.7	37.9	29.2	26.9	847.7	72	1948-2023
Decile 5 (median) rainfall (mm)	52.4	37.5	48.9	66.8	82.0	68.4	69.8	83.1	77.8	78.1	75.0	71.3	847.0	72	1948-2023
Decile 9 rainfall (mm)	95.3	107.0	84.7	113.0	138.0	105.8	108.1	115.0	128.5	148.7	148.1	142.4	1080.8	72	1948-2023
Highest daily rainfall (mm)	69.0	145.4	89.4	78.2	57.0	74.2	68.9	41.0	67.1	63.0	55.9	68.0	145.4	72	1948-2023
Date	29 Jan 1963	03 Feb 2005	22 Mar 1970	06 Apr 1977	18 May 1974	01 Jun 2013	14 Jul 1952	17 Aug 1983	20 Sep 1959	31 Oct 2010	09 Nov 1954	03 Dec 2003	03 Feb 2005		
Mean number of days of rain	8.9	7.8	10.3	12.4	16.4	16.9	18.8	18.2	18.0	15.4	13.8	11.5	168.2	72	1948-2023
Mean number of days of rain ≥ 1 mm	6.3	5.3	6.9	8.3	11.6	11.0	12.2	13.3	11.5	11.2	10.0	8.0	115.8	72	1948-2023
Mean number of days of rain ≥ 10 mm	1.8	1.4	1.6	2.0	2.8	1.9	1.8	2.2	2.5	2.8	2.9	2.4	26.1	72	1948-2023
Mean number of days of rain ≥ 25 mm	0.4	0.6	0.3	0.5	0.3	0.2	0.2	0.2	0.4	0.3	0.5	0.6	4.5	72	1948-2023
Statistics	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	Years	
Other daily elements															
Mean daily wind run (km)	225	211	201	192	190	196	233	243	241	231	229	225	218	47	1965-2022
Maximum wind gust speed (km/h)	80	74	88	78	72	78	74	83	78	85	89	83	89	20	2001-2023
Date	28 Jan 2005	14 Feb 2018	21 Mar 2013	02 Apr 2008	20 May 2020	14 Jun 2018	01 Jul 2008	21 Aug 2009	19 Sep 2003	28 Oct 2007	30 Nov 2015	19 Dec 2021	30 Nov 2015		
Mean daily sunshine (hours)	8.8	8.6	7.2	5.5	4.4	3.9	4.1	4.6	5.4	6.3	7.2	8.0	6.2	16	1965-1979
Mean daily solar exposure (MJ/m ²)	23.8	20.6	15.9	10.8	7.4	6.0	6.7	9.4	12.9	17.3	20.7	23.5	14.6	33	1990-2023
Mean number of clear days														0	1988-1998
Mean number of cloudy days														0	1988-1998
Mean daily evaporation (mm)	5.8	5.5	4.0	2.7	1.7	1.3	1.4	1.9	2.8	3.4	4.4	5.0	3.3	23	1965-1994



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9.6 Laboratory Results

Groundswell Batch # : GS23351

Groundswell laboratories*" A New Force in Analytical Testing "***CERTIFICATE OF ANALYSIS**

Client Name :	Smolders Geotechnical Pty Ltd	Groundswell Batch # :	GS23351
Client Address :	PO Box 7299, Upper Ferntree Gully, VIC 3156	Project Name :	275 Daly Road, Nar Nar Goon, Victoria
Client Mobile # :	0488 773 060	Project # :	23E6456
Project Manager :	Xavier Smolders	Date Samples Received :	17/05/2023
E-mail :	enquires@smoldersgeotechnical.com.au	Sample Matrix :	Soil
Project Sample Manager :	Xavier Smolders	Sample # Submitted :	2
E-mail :	enquires@smoldersgeotechnical.com.au	Groundswell Quote # :	Not Applicable
		Date CoFA Issued :	19/05/2023

Paul Woodward
Managing Director
paul@groundswelllabs.com.au

Reference AF56.Rev4 Date Issued : 19/5/2014

Groundswell Laboratories Pty Ltd ABN 24 133 248 923
116 Moray Street, South Melbourne, Victoria, 3205 Ph (03) 8669 1450 Fax (03) 8669 1451 E-mail : admin@groundswelllabs.com.au
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Groundswell Batch # : GS23351

Soil Analysis Results

Client Sample ID			Sample 1	Sample 2			
Laboratory Sample Number			GS23351-1	GS23351-2			
Date Sampled			16/05/2023	16/05/2023			
Analytes	Units	LOR					
pH	pH Units	0.1	5.6	5.7			
Electrical Conductivity @ 25°C	dS/m	0.005	0.019	0.013			
Exchangeable Calcium	mg/Kg	1	1230	589			
Exchangeable Magnesium	mg/Kg	1	410	428			
Exchangeable Potassium	mg/Kg	1	57	40			
Exchangeable Sodium	mg/Kg	1	43	46			
CEC	MEQ%	0.1	9.9	6.8			
ESP	%	0.1	1.9	3.0			
Sodicity Rating	---	---	Non-Sodic	Non-Sodic			
SAR		0.01	0.06	0.08			

Reference AF56.Rev4 Date Issued : 19/5/2014

Comments :

- 1- pH & electrical conductivity determined & reported on a 1:5 soil:water extraction
- 2- CEC determined by soil chemical method 15B1 'Exchangeable bases and cation exchange capacity - 1M ammonium chloride at pH 7.0, no pre-treatment for soluble salts'
- 3- ESP, sodicity rating & SAR determined by calculation using the exchangeable cation results

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Groundswell Batch #: GS23351

Soil Analysis Results						
Client Sample ID			Sample 1	Sample 1	Sample 2	Sample 2
Laboratory Sample Number			GS23351-1	GS23351-1	GS23351-2	GS23351-2
Date Sampled			16/05/2023	16/05/2023	16/05/2023	16/05/2023
Analytes	Units	LOR				
Sample Type	---	---	Air Dried Aggregates	Re-moulded Ped	Air Dried Aggregates	Re-moulded Ped
EmersonAggregate Class - 2 Hours	---	---	Slaking / Some Dispersion	Slaking / Some Dispersion	Slaking / Some Dispersion	Slaking / Some Dispersion
EmersonClass Number	---	---	Class 2	Class 2	Class 2	Class 2
EmersonAggregate Class - 20 Hours	---	---	Slaking / Some Dispersion	Slaking / Some Dispersion	Slaking / Some Dispersion	Slaking / Some Dispersion
EmersonClass Number	---	---	Class 2	Class 2	Class 2	Class 2
Addition of 1M HCl	---	---	---	---	---	---
1:5 Soil:Water 10 minute extraction	---	---	---	---	---	---
EmersonClass Number	---	---	---	---	---	---

Reference AF96.lev4 Date issued : 18/5/2014

Comments :

1- Classification conducted in accordance with Emmerson 'A classification of soil aggregates based on their coherence in water', 1967 & AS1289.C8.1-1980

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Groundswell Batch #: GS23351

Inorganics Quality Control Report

Client Sample ID							
Laboratory Sample Number							
QC Parameter			Method Blank		Laboratory Control Standard (LCS)		
			Method Blank	Within GSL Acceptance Criteria (<LOR) (Pass/Fail)	LCS (%R)	LCS (%R) Acceptance Criteria	Within GSL Acceptance Criteria (Pass/Fail)
Analyte	Units	LOR					
pH	pH units	0.1	NA	NA	6.97	7.00 ± 0.1 pH Unit	Pass
Conductivity	dS/m	0.005	<0.005	Pass	97%	80-120%	Pass
Exchangeable Calcium	mg/Kg	1	<1	Pass	101%	70-130%	Pass
Exchangeable Magnesium	mg/Kg	1	<1	Pass	103%	70-130%	Pass
Exchangeable Potassium	mg/Kg	1	<1	Pass	102%	70-130%	Pass
Exchangeable Sodium	mg/Kg	1	<1	Pass	99%	70-130%	Pass
CEC	MEQ%	0.1	NA	NA	NA	NA	NA
ESP	%	0.1	NA	NA	NA	NA	NA
SAR	---	0.01	NA	NA	NA	NA	NA

Reference AFS6.Rev4 Date Issued: 3/11/2010

Comments:

- 1- Exchangeable cations LCS values based on independent water standards
- 2- NA = Not Applicable

Groundswell Laboratories Pty Ltd ABN 24 133 248 923
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Smolders Geotechnical Pty. Ltd.
p: 0488 773 060
e: enquiries@smoldersgeotechnical.com.au
p: PO Box 7299, Upper Ferntree Gully, VIC 3156



DATE: 17 May 2023

To: Groundswell Laboratories
116 Moray Street
South Melbourne, VIC 3205SITE: 275 Daly Road
NAR NAR GOON, VIC

REF No.: 23E6456

Please perform the following soil tests:

- i Emerson Aggregate Class
- ii Cation Exchange Capacity
- iii Electrical Conductivity (EC)
- iv pH
- v Sodicity – Exchangeable Sodium Percentage (ESP)
- iv Sodium Absorption Ratio (SAR)

For the following Three (3) sample from Two (2) locations:

DATE	SAMPLE	TEST SITE	DEPTH (mm)	MATERIAL	LAB ID
16/05/2023	1	PIT1	200-300 mm	SOIL	
16/05/2023	2	PIT1	400-500 mm	SOIL	

We request that the sample be put through on the accelerated turnaround stream.Yours sincerely
For and on behalf of SMOLDERS GEOTECHNICAL PTY. LTD.

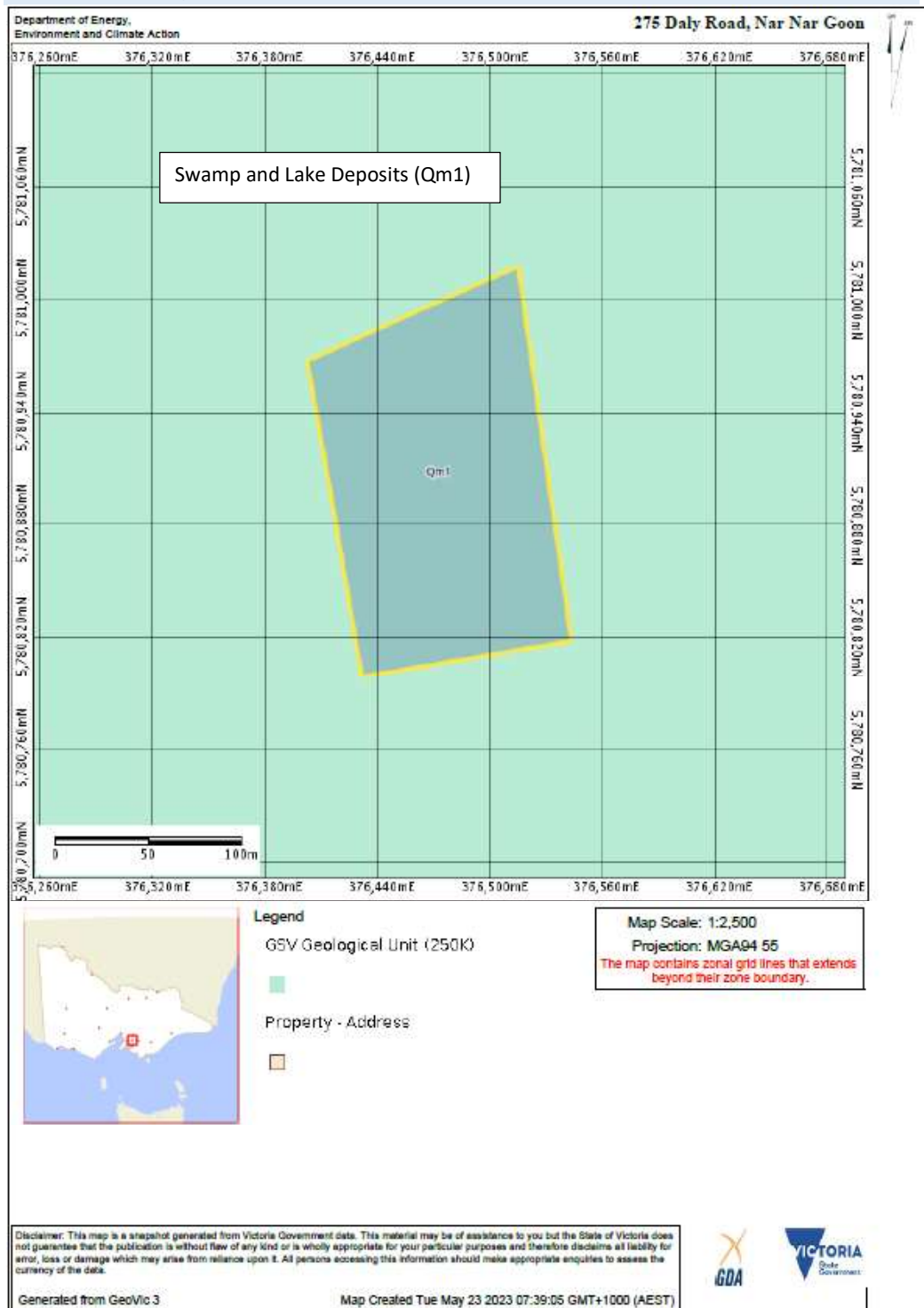
Xavier Smolders

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9.7 Geovic Map



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9.8 Land Channel Property Report

PROPERTY REPORT

From www.planning.vic.gov.au at 29 May 2023 07:44 AM

PROPERTY DETAILS

Address: **275 DALY ROAD NAR NAR GOON 3812**

Lot and Plan Number: **Lot 1 PS815289**

Standard Parcel Identifier (SPI): **1/PS815289**

Local Government Area (Council): **CARDINIA** www.cardinia.vic.gov.au

Council Property Number: **5000027033**

Directory Reference: **Vicroads 96 B3**

SITE DIMENSIONS

All dimensions and areas are approximate. They may not agree with those shown on a title or plan.

Area: 21641 sq. m (2.16 ha)
Perimeter: 609 m
 For this property:
 — Site boundaries
 — Road frontages

Dimensions for individual parcels require a separate search, but dimensions for individual units are generally not available.

Calculating the area from the dimensions shown may give a different value to the area shown above.

For more accurate dimensions get copy of plan of title and Property Certificates

UTILITIES

Rural Water Corporation: **Southern Rural Water**

Melbourne Water Retailer: **South East Water**

Melbourne Water: **Inside drainage boundary**

Power Distributor: **AUSNET**

STATE ELECTORATES

Legislative Council: **EASTERN VICTORIA**

Legislative Assembly: **NARRACAN**

PLANNING INFORMATION

Property Planning details have been removed from the Property Reports to address duplication with the Planning Property Reports which are DELWP's authoritative source for all Property Planning information.

The Planning Property Report for this property can found here - [Planning Property Report](#).

Planning Property Reports can be found via these two links:
Vicplan <https://mapshare.vic.gov.au/vicplan/>
Property and parcel search <https://www.land.vic.gov.au/property-and-parcel-search>

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PROPERTY REPORT: 275 DALY ROAD NAR NAR GOON 3812

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PROPERTY REPORT**Area Map**

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 PROPERTY REPORT: 275 DALY ROAD NAR NAR GOON 380

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PLANNING PROPERTY REPORT

Environment,
Land, Water
and PlanningFrom www.planning.vic.gov.au at 10 May 2023 07:48 AM

PROPERTY DETAILS

Address: **275 DALY ROAD NAR NAR GOON 3812**
 Lot and Plan Number: **Lot 1 PS815289**
 Standard Parcel Identifier (SPI): **1\PS815289**
 Local Government Area (Council): **CARDINIA**
 Council Property Number: **5000027033**
 Planning Scheme: **Cardinia**
 Directory Reference: **Vicroads 96 B3**

www.cardinia.vic.gov.au[Planning Scheme - Cardinia](#)

UTILITIES

Rural Water Corporation: **Southern Rural Water**
 Melbourne Water Retailer: **South East Water**
 Melbourne Water: **inside drainage boundary**
 Power Distributor: **AUSNET**

STATE ELECTORATES

Legislative Council: **EASTERN VICTORIA**
 Legislative Assembly: **NARRACAN**

OTHER

Registered Aboriginal Party: **Bunurong Land Council Aboriginal Corporation**

[View location in VVPlan](#)

Planning Zones

[GREEN WEDGE ZONE \(GWZ\)](#)[GREEN WEDGE ZONE - SCHEDULE 1 \(GWZ1\)](#)

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PLANNING PROPERTY REPORT: 275 DALY ROAD NAR NAR GOON 3812

Page 1 of 5



SMOLDERS GEOTECHNICAL PTY. LTD.

PLANNING PROPERTY REPORT



Planning Overlay

LAND SUBJECT TO INUNDATION OVERLAY (LSIO)

LAND SUBJECT TO INUNDATION OVERLAY SCHEDULE (LSIO)



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PLANNING PROPERTY REPORT: 275 DALY ROAD, NAR NAR GOON, VIC

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Page **43** of **46**
 REF NUMBER: 23E6456
 275 Daly Road, NAR NAR GOON VIC

PLANNING PROPERTY REPORT



Areas of Aboriginal Cultural Heritage Sensitivity

All or part of this property is an 'area of cultural heritage sensitivity'.

'Areas of cultural heritage sensitivity' are defined under the Aboriginal Heritage Regulations 2018, and include registered Aboriginal cultural heritage places and land form types that are generally regarded as more likely to contain Aboriginal cultural heritage.

Under the Aboriginal Heritage Regulations 2018, 'areas of cultural heritage sensitivity' are one part of a two part trigger which require a 'cultural heritage management plan' be prepared where a listed 'high impact activity' is proposed.

If a significant land use change is proposed (for example, a subdivision into 3 or more lots), a cultural heritage management plan may be triggered. One or two dwellings, works ancillary to a dwelling, services to a dwelling, alteration of buildings and minor works are examples of works exempt from this requirement.

Under the Aboriginal Heritage Act 2006, where a cultural heritage management plan is required, planning permits, licences and work authorities cannot be issued unless the cultural heritage management plan has been approved for the activity.

For further information about whether a Cultural Heritage Management Plan is required go to:
<http://www.gov.vic.gov.au/ahc/question.aspx>

More information, including links to both the Aboriginal Heritage Act 2006 and the Aboriginal Heritage Regulations 2018, can also be found here - <https://www.aboriginal.vic.gov.au/aboriginal-heritage-legislation>



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 PLANNING PROPERTY REPORT: 275 DALY ROAD NAR NAR GOON 985 Page 5 of 5



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PLANNING PROPERTY REPORT



Further Planning Information

Planning scheme data last updated on 17 May 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, particular, 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>.

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PLANNING PROPERTY REPORT



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://maps.here.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 5217 of the local planning scheme. For more information see [Native Vegetation \(Clause 5217\)](#) with local variations in [Native Vegetation \(Clause 5217\) Schedule](#).

To help identify native vegetation on this property and the application of Clause 5217 please visit the Native Vegetation Information Management system <https://nvim.delwp.vic.gov.au/> and [Native vegetation \(environment.vic.gov.au\)](#) or please contact your relevant council.

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

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PLANNING PROPERTY REPORT: 275 DALY ROAD NAR NAR GOON 382

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27 February 2023

Cardinia Shire Council
mail@cardinia.vic.gov.au

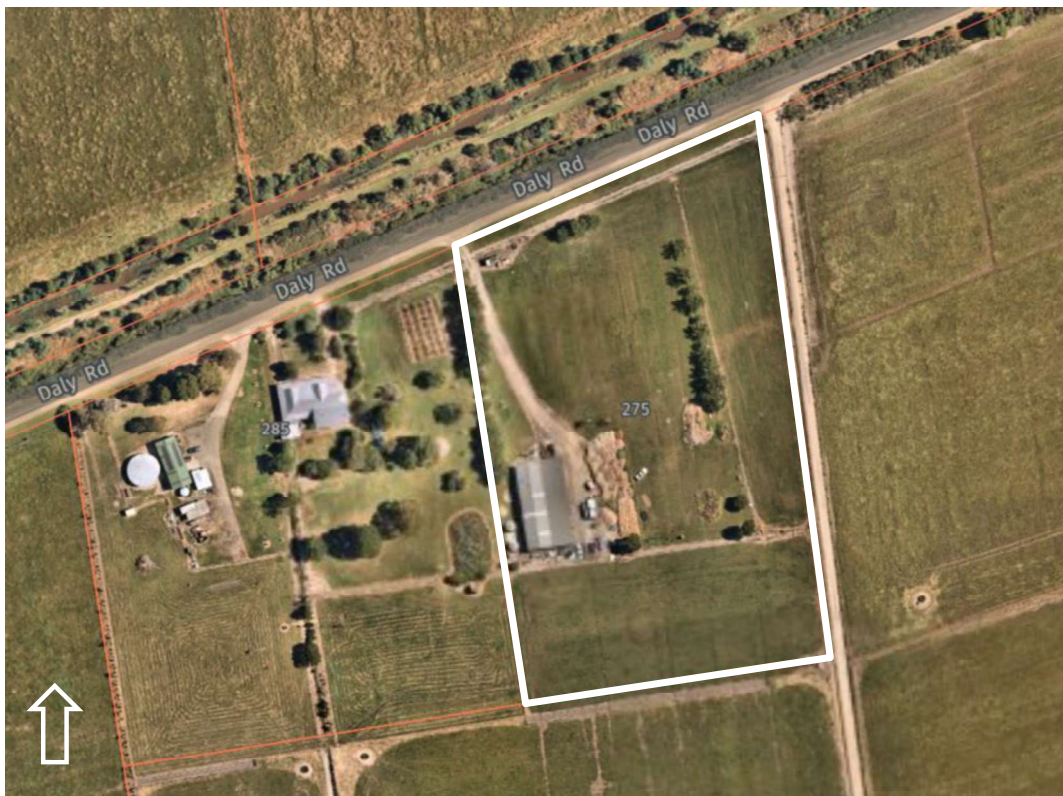
Dear Sir / Madam

**Re: Planning permit application T220660
275 Daly Road NarNarGoon**

XWB Consulting has been engaged by Studio Three Design and Drafting Pty Ltd to prepare a planning report for a dwelling on 275 Daly Road NarNarGoon in response to a letter from Council dated 21 November 2022 seeking further information. Details of the application are set out below.

Land and locality

The land is located on the south side of Daly Road approximately 350m east of Eight Mile Road. The land has an area of 2.163ha and is shown on the aerial photograph below:



The land contains a large rural shed with the balance of the land comprising open paddocks.

Daly Road is a rural standard road with a gravel pavement.

The land was created as a result of a resubdivision under planning permit TT170713. The land is contained in Certificate of Title Volume 12183 Folio 695 and the title is not affected by any restrictive covenant/s.

The land is within an area of Aboriginal cultural heritage sensitivity as shown on the mapping provided by the Department of Transport and Planning. A Cultural heritage management Plan is not required as a single dwelling is not defined as a high impact activity under Regulation 48 of the Aboriginal Heritage Regulations 2018.

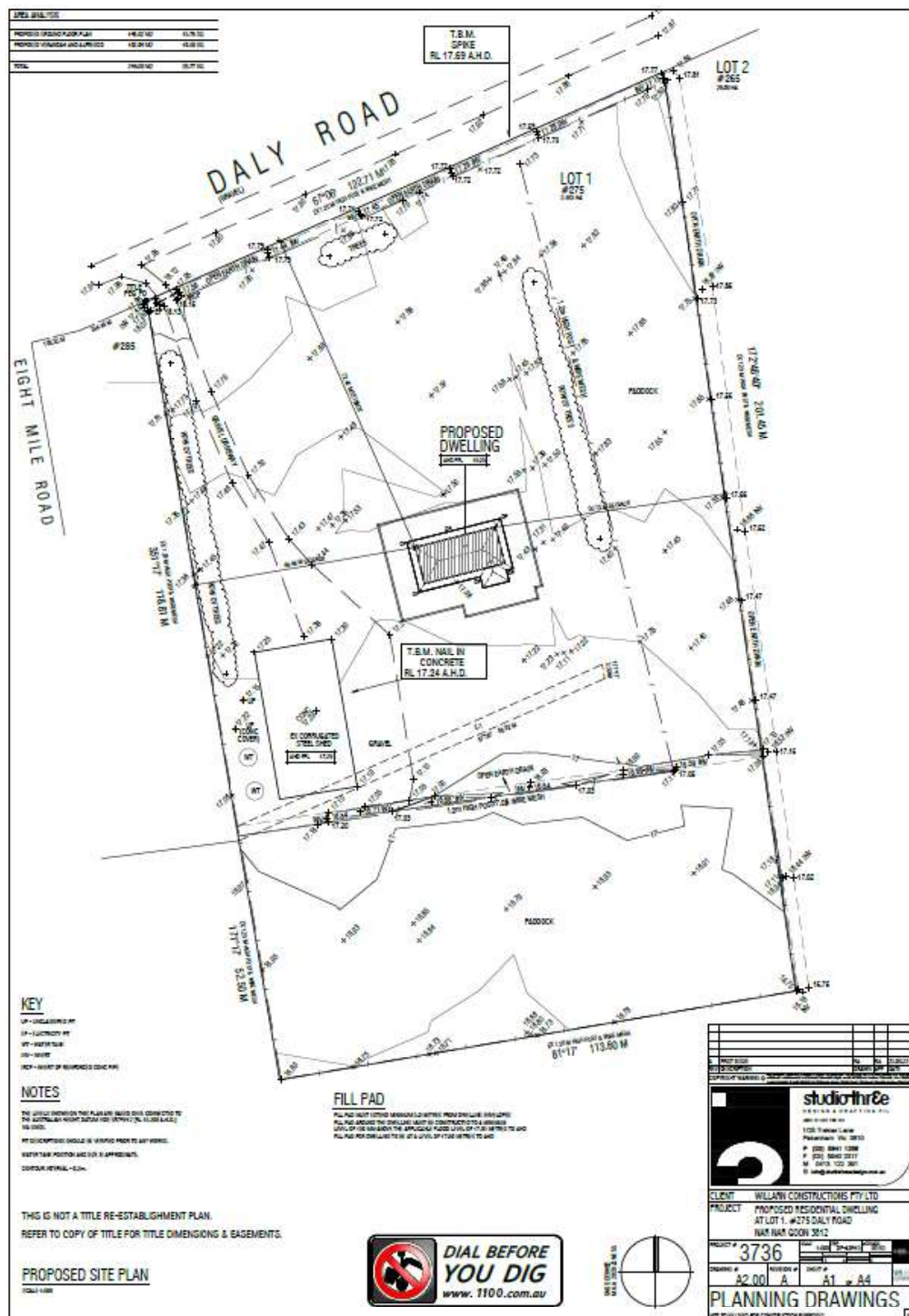
The surrounding land comprises open paddocks used for grazing purposes. There is a dwelling to the west along Daly Road on a smaller lot of 1.477ha. There are broiler farms located to the north west and north east of the land however they are located more than 1km from the proposed dwelling.

Proposal

The application proposes the use and development of the land for a dwelling as shown on the site plan on the following page. Detailed plans of the dwelling have been submitted with the application.

The dwelling:

- Is setback 72.46m from Daly Road.
- Is setback 49.48m from the western boundary.
- Is setback 50.15m from the eastern boundary.
- Has a floor area of 248.66sqm including verandahs and alfresco areas.
- Is constructed on a fill pad and the floor level of the dwelling is 18.25m AHD which is 600mm above the applicable flood level for the property.
- Has a maximum height of 5.8m to the pitch of the roof.
- Comprises brick wall with a metal roof.



Planning provisions

Planning Policy

The following state planning provisions are relevant to the planning permit application:

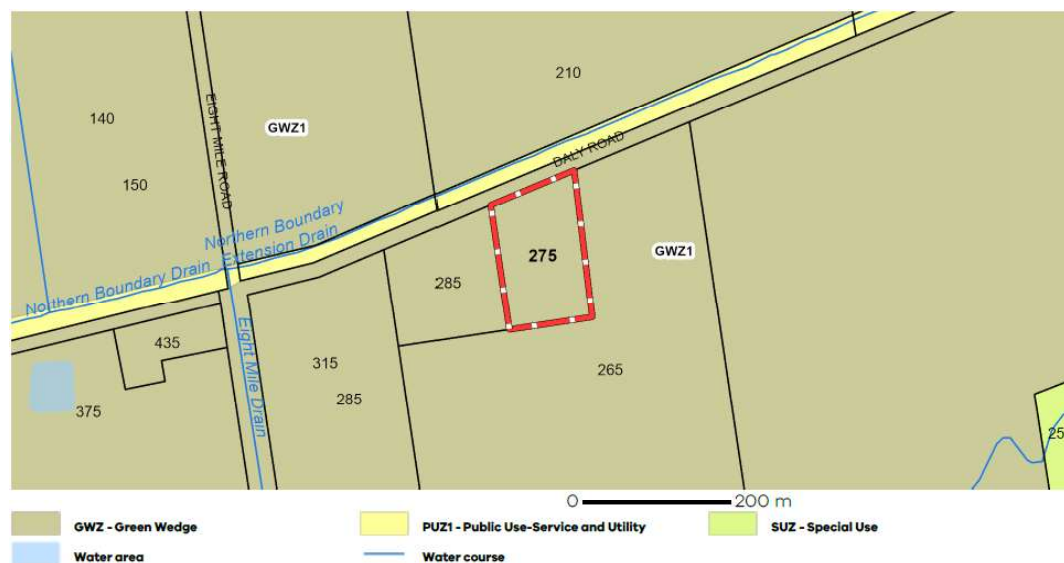
- 11.01-1R Green wedges
- 13.03-1S Floodplain management
- 14.01- 1S Protection of agricultural land

The following local planning provisions are relevant to the planning permit application:

- 21.02-1 Catchment and coastal management
- 21.04-2 Agriculture
- 22.05 Westernport Green Wedge Policy

Zones

The land is in a Green Wedge Zone Schedule 1 (GWZ1) under the Cardinia Planning Scheme as shown on the plan below:



The purpose of the Green Wedge Zone is:

- To implement the Municipal Planning Strategy and Planning Policy Framework.
- To provide for the use of land for agriculture.
- To recognise, protect and conserve green wedge land for its agricultural, environmental, historic, landscape, recreational and tourism opportunities, and mineral and stone resources.

- To encourage use and development that is consistent with sustainable land management practices.
- To encourage sustainable farming activities and provide opportunity for a variety of productive agricultural uses.
- To protect, conserve and enhance the cultural heritage significance and the character of open rural and scenic non-urban landscapes.
- To protect and enhance the biodiversity of the area.

A permit is required for the use and development of a dwelling under the provisions of the Green Wedge Zone.

Overlays

The land is within a Land Subject to Inundation Overlay under the Cardinia Planning Scheme as shown on the plans below:



The purpose of the Land Subject to Inundation Overlay is:

- To implement the Municipal Planning Strategy and the Planning Policy Framework.
- To identify land in a flood storage or flood fringe area affected by the 1 in 100 year flood or any other area determined by the floodplain management authority.
- To ensure that development maintains the free passage and temporary storage of floodwaters, minimises flood damage, is compatible with the flood hazard and local drainage conditions and will not cause any significant rise in flood level or flow velocity.
- To reflect any declaration under Division 4 of Part 10 of the *Water Act, 1989* where a declaration has been made.
- To protect water quality in accordance with the provisions of relevant State Environment Protection Policies, particularly in accordance with Clauses 33 and 35 of the State Environment Protection Policy (Waters of Victoria).

- To ensure that development maintains or improves river and wetland health, waterway protection and flood plain health.

A planning permit is required under the overlay for buildings and works associated with a dwelling.

Consideration of proposal

The Green Wedge Zone specifies requirements to be met for the use of land for a dwelling. These are set out in the table below:

Requirement	Response
Access to the dwelling must be provided via an all-weather road with dimensions adequate to accommodate emergency vehicles	Daly Road is an all weather gravel road sufficient to accommodate heavy vehicles. As such it is suitable to accommodate emergency vehicles.
The dwelling must be connected to a reticulated sewerage system or if not available, the waste water must be treated and retained on-site in accordance with the State Environment Protection Policy (Waters of Victoria) under the Environment Protection Act 1970.	Reticulated sewerage is not available to the lot. Wastewater will be treated and retained on-site in accordance with the State Environment Protection Policy (Waters of Victoria) under the Environment Protection Act 1970. Adequate areas are available for wastewater absorption trenches.
The dwelling must be connected to a reticulated potable water supply or have an alternative potable water supply with adequate storage for domestic use as well as for fire fighting purposes.	Reticulated water supply is not available to the lot. Water tanks will be provided for domestic use as well as for fire fighting purposes.
The dwelling must be connected to a reticulated electricity supply or have an alternative energy source.	Reticulated electricity is available to the lot and will be connected to the dwelling.

The land is owned by Stuart Kenny and Mr Kenny's family was owned and farmed properties in the area including the adjoining lot (Lot 2 PS815289) which has recently been sold. Mr Kenny has retained the smaller lot to build a dwelling on and remain within the area. It is acknowledged that the land is a small lot with limited capacity for agricultural purposes. In issuing the planning permit which created the current lot, Council acknowledged that the lot did not compromise the use of the adjoining land for agricultural purposes and that it was consistent with the irregular pattern of small lots along Daly Road. It would have been clear to Council at the time that the likely outcome for the lot was a dwelling, otherwise why would a resubdivision have been supported in the first place? There is an existing farm/machinery shed on the property and Mr Kenny continues to provide farming services to support agricultural activities in the area utilising his own farming machinery.

The construction of a dwelling on the lot will not remove land from agricultural production and will not adversely affect the ongoing use of adjoining properties for agricultural purposes consistent with state planning policy. There is capacity on the lot for a small number of holding paddocks for horses/livestock. The dwelling will allow Mr Kenny to continue providing farming services in the area. The lot is on the border between Precincts 1 and 3 under the Westernport Green Wedge Policy and is outside the higher quality soils in Precinct 1 where non soil based uses are discouraged.

The proposed dwelling is a single storey dwelling with brick walls and a metal roof. It is typical of dwelling recently constructed in rural areas of the Cardinia Shire. The dwelling is setback 72.46m from the road, 15.4m from the rear boundary and approximately 50m from side boundaries. This meets the setback requirements of the Green Wedge Zone that require a setback of 20m from the road and 5m from side and rear boundaries. The proposed dwelling is setback approximately 100m from the dwelling to the west at 285 Daly Road.

The land is included with a Land Subject to Inundation Overlay. The land is located within the Koo Wee Rup Flood Protection District (Zone 1) and the applicable flood depth for the property is 300mm above the natural surface levels.

Melbourne Water Guidelines require the proposed dwelling to be constructed with finished floor levels no lower than 600mm above the applicable flood depth of 300mm from the natural surface level. (900mm above the natural surface level).

A fill pad that extends a minimum of 5.0 metres from the dwelling/ building line and a minimum of 150mm above the applicable flood depth of 300mm from the natural surface level must be provided. (450mm above the natural surface level).

The proposed dwelling meets these requirements.

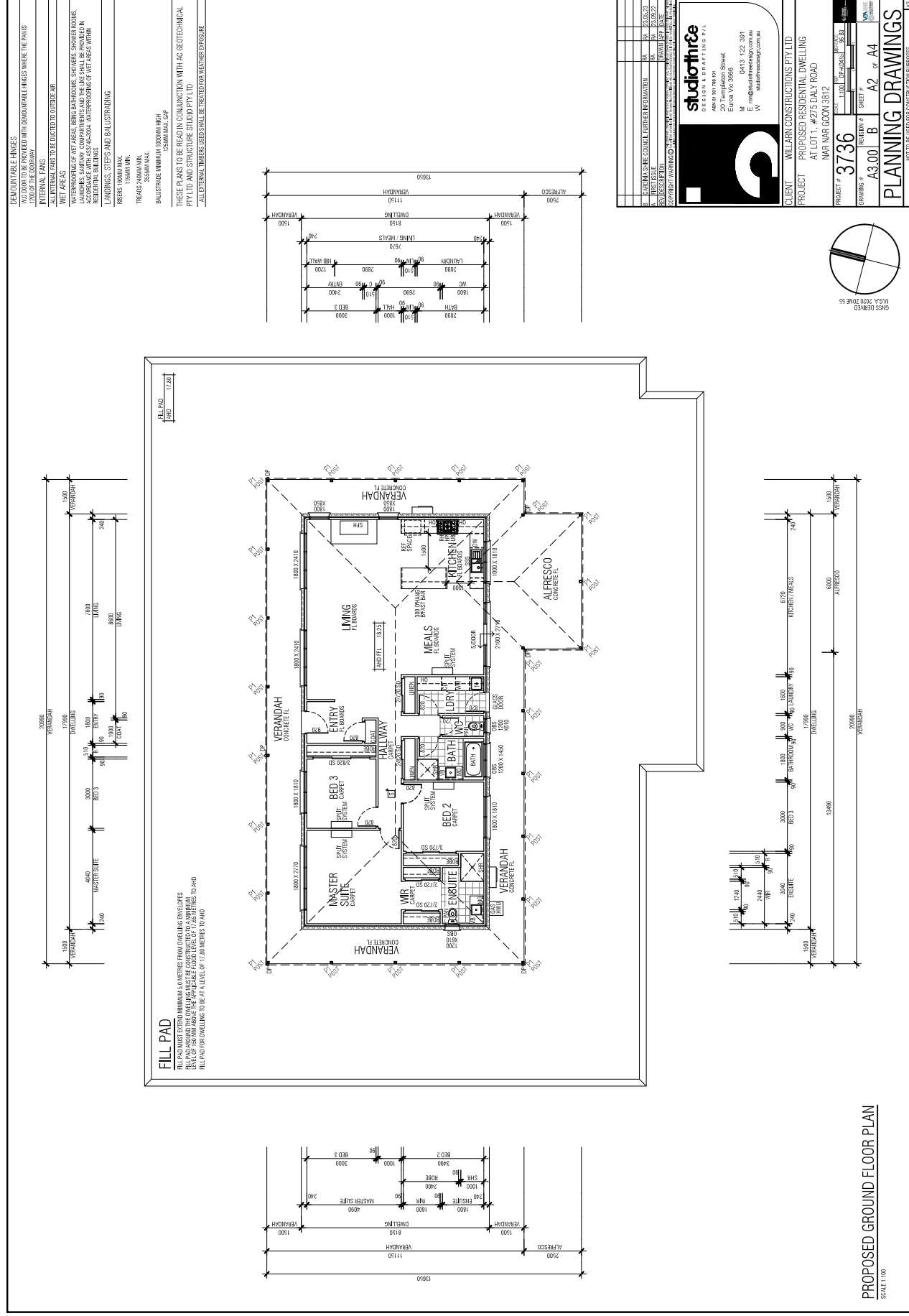
Conclusion

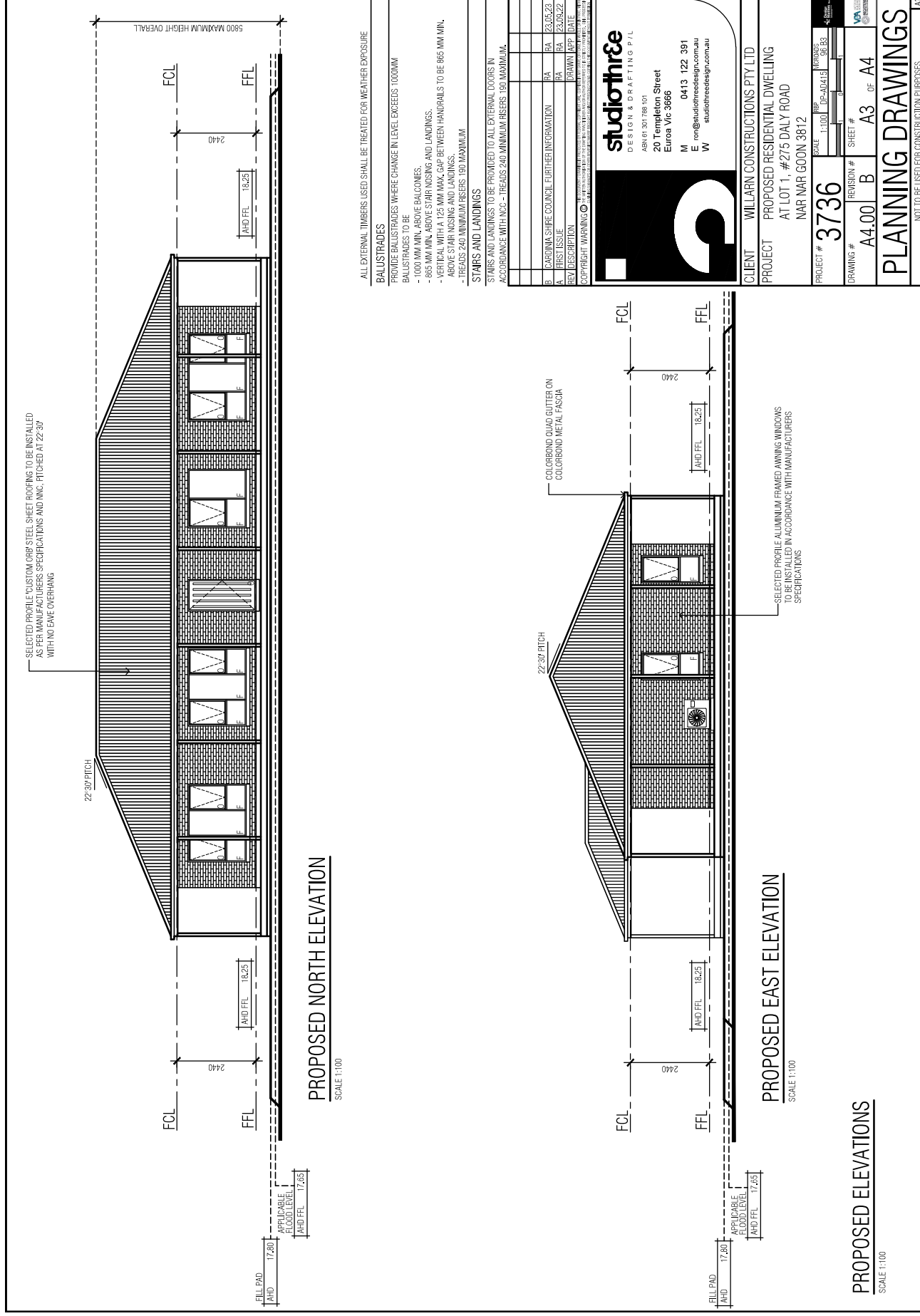
The proposal is considered to be consistent with state and local planning policy. The proposal is also consistent with the purposes of the Green Wedge Zone and the Land Subject to Inundation Overlay. It considered a permit should be issued subject to appropriate conditions.

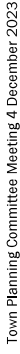


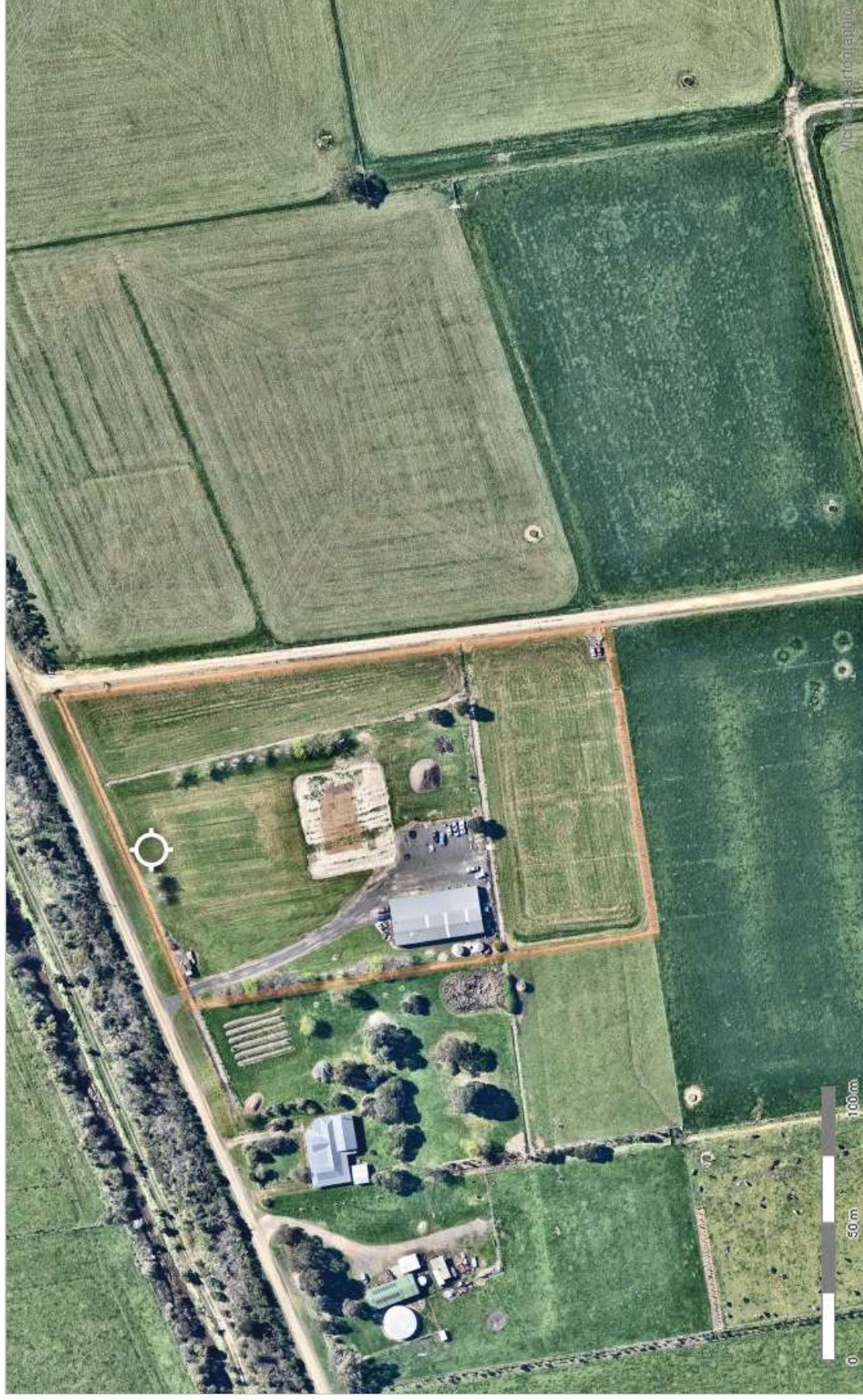
Phil Walton
XWB Consulting











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[View map online](#)



T220660 PA - 275 Daly Road, Nar Nar Goon

APPLICATION FOR CONSIDERATION
REFUSAL
OFFICER REPORT



Application Details:

Proposal	Use and Development of Land for a Dwelling
Applicant	Mr Ron Asling Studio Three Design & Drafting Pty Ltd
Date Received:	3 October 2022
Statutory Days:	322 days as of 18 October 2023
Section 50/50A/57A Amendment	<input checked="" type="checkbox"/> None
Application Number	T220660
Planner	Hamish Mival
Land/Address	L1 PS815289 V12183 F695, 275 Daly Road, Nar Nar Goon VIC 3812
Property No.	5000027033
Zoning	GWZ1 - Green Wedge Zone - Schedule 1
Overlay/s	LSIO - Land Subject to Inundation Overlay
Permit Trigger(s)	<ul style="list-style-type: none"> Pursuant to Clause 35.04-1 Green Wedge Zone (Schedule 1) a Planning Permit is required to use the land for a Dwelling. Pursuant to Clause 35.04-5 Green Wedge Zone (Schedule 1) a Planning Permit is required to construct or carry out a building or works associated with a Section 2 Use (Dwelling) and 100m from a dwelling not in same ownership. Pursuant to Clause 44.04-2 Land Subject to Inundation Overlay a Planning Permit is required to construct a building or construct or carry out works.
Aboriginal Cultural Sensitivity	<input checked="" type="checkbox"/> Yes; a CHMP is:
	<input checked="" type="checkbox"/> Not required A single dwelling is exempt from CHMP requirements pursuant to Regulation 9 of the <i>Aboriginal Heritage Regulations 2018</i>
Section 55 Referrals	<input checked="" type="checkbox"/> Yes, list below:
	<ul style="list-style-type: none"> Melbourne Water
Registered restrictions on Title	<input checked="" type="checkbox"/> None

Recommendation	<input checked="" type="checkbox"/> Council put forward a position to refuse the proposal
Ward Councillor communications	<input checked="" type="checkbox"/> None
Documents relied on	<ul style="list-style-type: none"> • Development Plans prepared by Studio Three Design & Drafting • Town Planning Submission prepared by Phil Walton of XWB Consulting • Land Capability Assessment Report prepared by Smolders Geotechnical • Title Documents

Proposal

Proposal is for the use and development of the land for a dwelling. The dwelling is to be located approximately in the centre of the lot, close in proximity to the existing shed on the land. It is to be accessed by an existing gravel driveway. The area in front of the dwelling is to be used for an effluent disposal field.

To accommodate the dwelling, a fill pad is proposed to raise the land above the applicable flood level. The applicable flood level is 17.65m AHD, with the fill pad being to 17.8m AHD and the finished floor level of the dwelling being 18.25m AHD. The fill pad is to extend around the dwelling to a distance of 5m.

The dwelling is to be set back 72.46m from the front boundary, 49.48m from the western boundary and 50.15m from the eastern boundary. It is to be approximately 13.65m wide at its widest point and 20.99m long at its widest point, with an approximate floor area of 248.66sqm (including veranda's and alfresco). Verandas are to run the entire perimeter of the structure, with the main structure itself to be approximately 8.15m wide and 17.99m long.

The structure is to be simple in design, constructed from brick and a pitched steel sheet roof. The veranda is to have concrete flooring. The dwelling will be approximately 2.44m in height at the wall, while the maximum height of the dwelling at the peak of the roof will be 5.8m. No colour schedule has been provided.

The lot does not have available reticulated water, and so water will be supplied through water tanks. Reticulated electricity is available and will be connected to the dwelling.

The plans are provided below:

NOTE: USE OF LAND FOR A DWELLING

1. ACCESS TO THE DWELLING MUST BE PROVIDED VIA AN ALL-WEATHER ROAD WITH A MINIMUM DIMENSION OF 3.5 M WITH ALL-WEATHER GRAVEL ROAD ADJACENT TO ACCOMMODATE EMERGENCY VEHICLES.
2. ALL WASTEWATER FROM THE DWELLING MUST BE TREATED AND RETURNED WITHIN THE LOT IN ACCORDANCE WITH THE REQUIREMENTS OF THE ENVIRONMENT PROTECTION WASTE-WATER MANAGEMENT SYSTEM.

REFER TO LAND CAPABILITY ASSESSMENT REPORT

DWELLING DEVELOPMENTAL PVT LTD
REFERENCE #286568
DATED: 20 MAY 2023

3. THE PROPOSED DWELLING MUST BE CONNECTED TO A POTABLE WATER SUPPLY WITH ADEQUATE STORAGE FOR DOMESTIC USE AS WELL AS FOR FIRE FIGHTING PURPOSES.
- EXISTING TWO WATER TANKS NEAR EXISTING SHED.
- TWO EXISTING WATER TANKS CONTAIN 25,000 LITRES EACH.
- TO BE USED FOR BOTH DOMESTIC USE AND FIRE FIGHTING PURPOSES.
4. THE DWELLING MUST BE CONNECTED TO A RETICULATED ELECTRICITY SUPPLY POWER DISTRIBUTION - AUGNET.

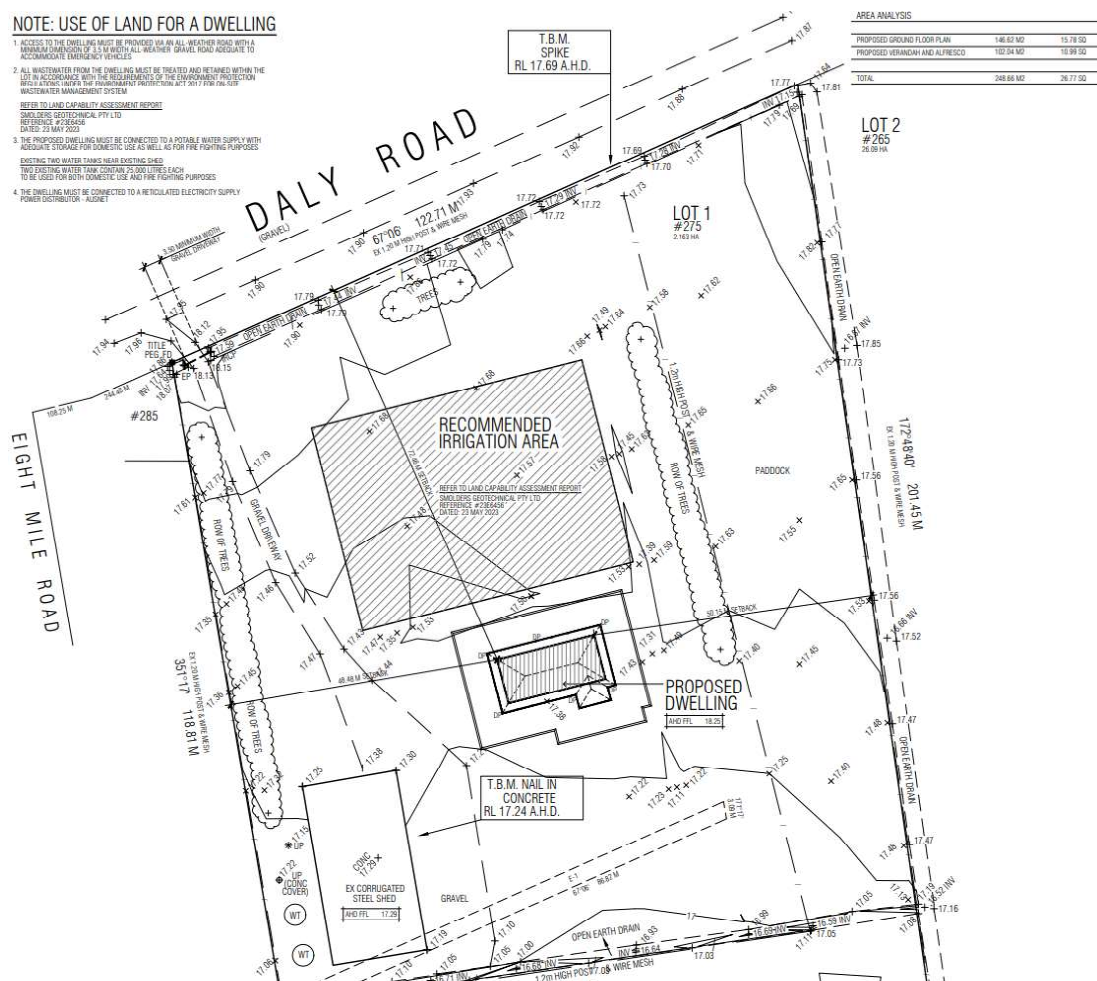


Figure 1 - Proposed site plan

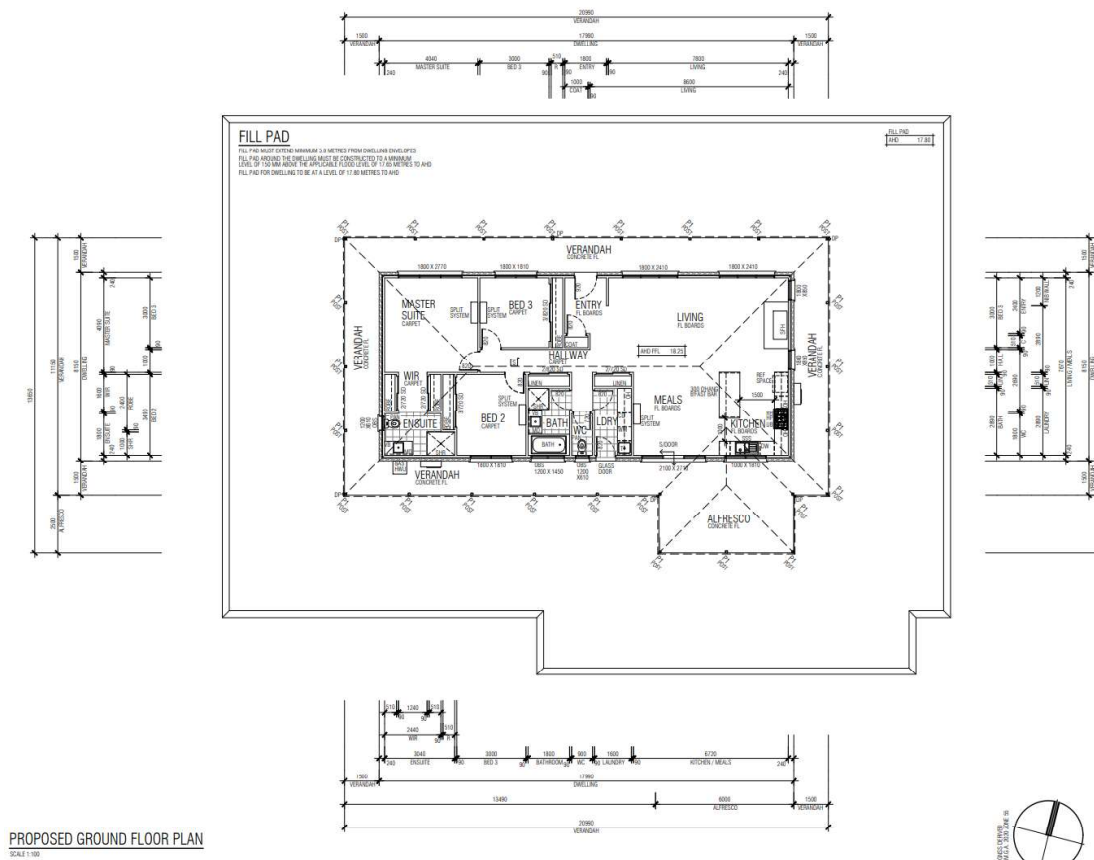
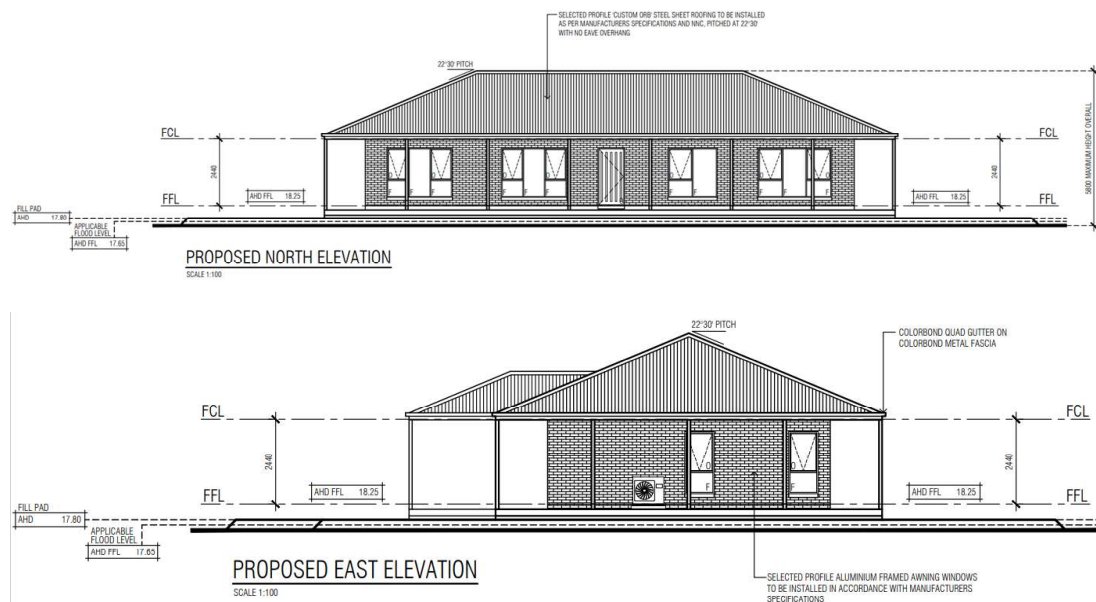


Figure 2 - Proposed floor plan



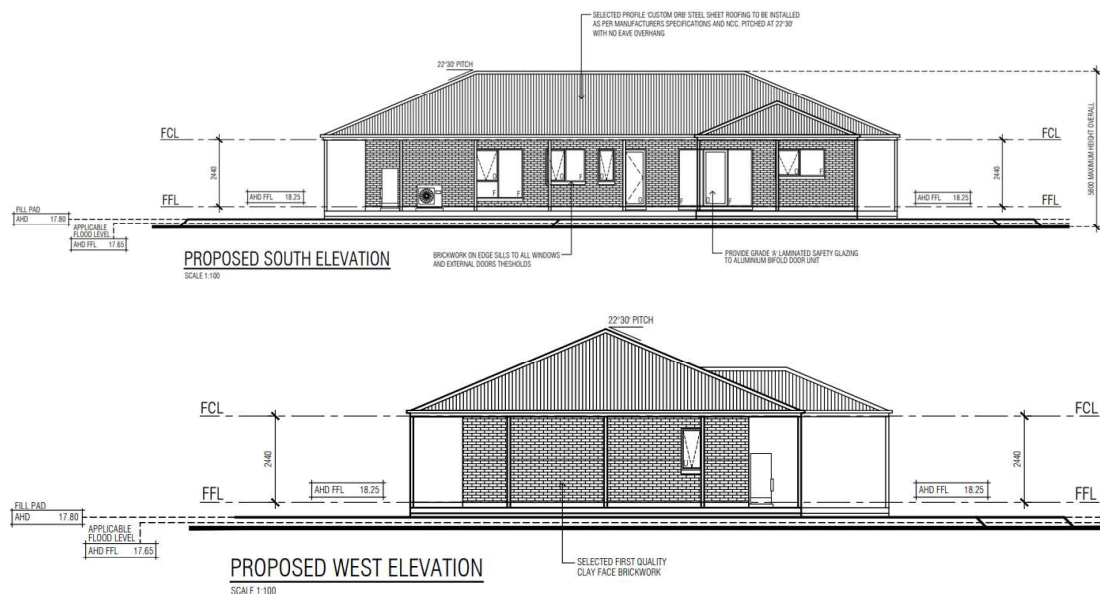


Figure 3 - Proposed elevation plans

Subject site & locality



Figure 4 - Aerial image of site

An inspection of the site and the surrounding area has been undertaken.

The site is located on the southern side of Daly Road, an unsealed local access road.

A crossover is located in the north-west corner of the lot. A drainage easement runs through the lower half of the lot.

The site currently contains a shed, which the owner of the land is said to use for the holding of farming machinery used off site.

The topography of the land is extremely flat. There is little vegetation on the lot, with scattered trees running along the former boundaries of the lot.

The surrounding area is characterised by its large lot sizes, used for a combination of grazing and horticulture. Cardinia's Horticultural zoned land starts approximately 500m to the south. The Nar Nar Goon township is approximately 3.1km to the north-west.

The main characteristics of the surrounding area are:

East and South

- 265 Daly Road: Irregular shaped Lot 2 within the same subdivision. Approximately 25.3ha in size, it is portioned into paddocks.

West

- 285 Daly Road: Square shaped lot, approximately 2.3ha in size. Contains a dwelling and various sheds.

North

- Daly Road.

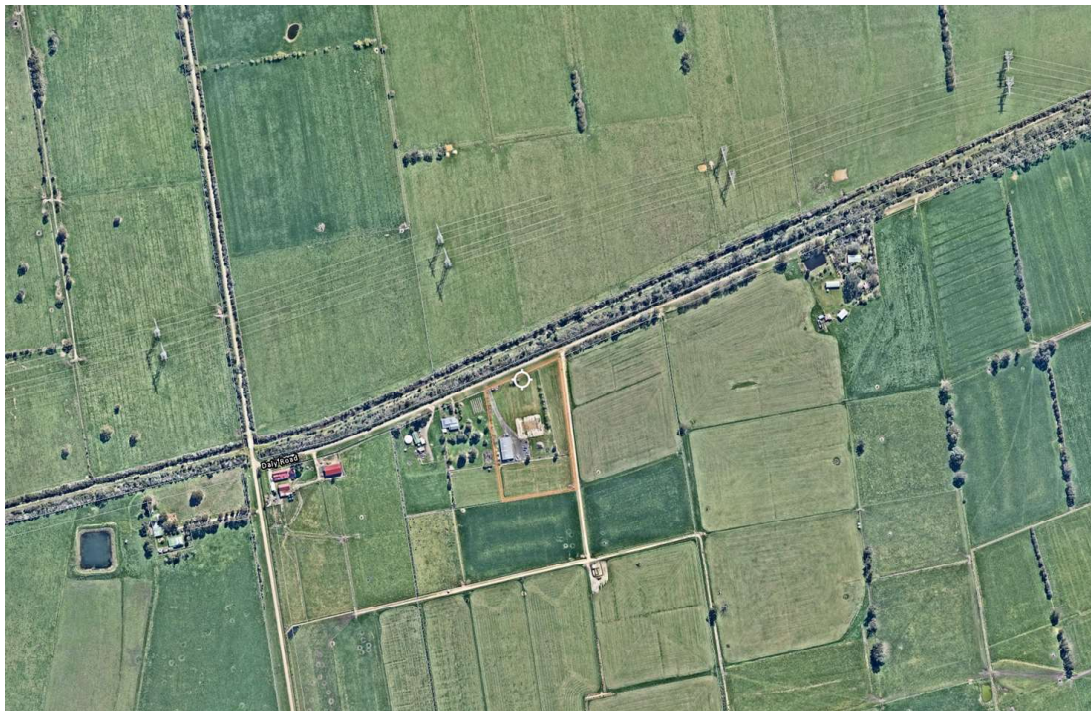


Figure 5 - Aerial image of surrounding area

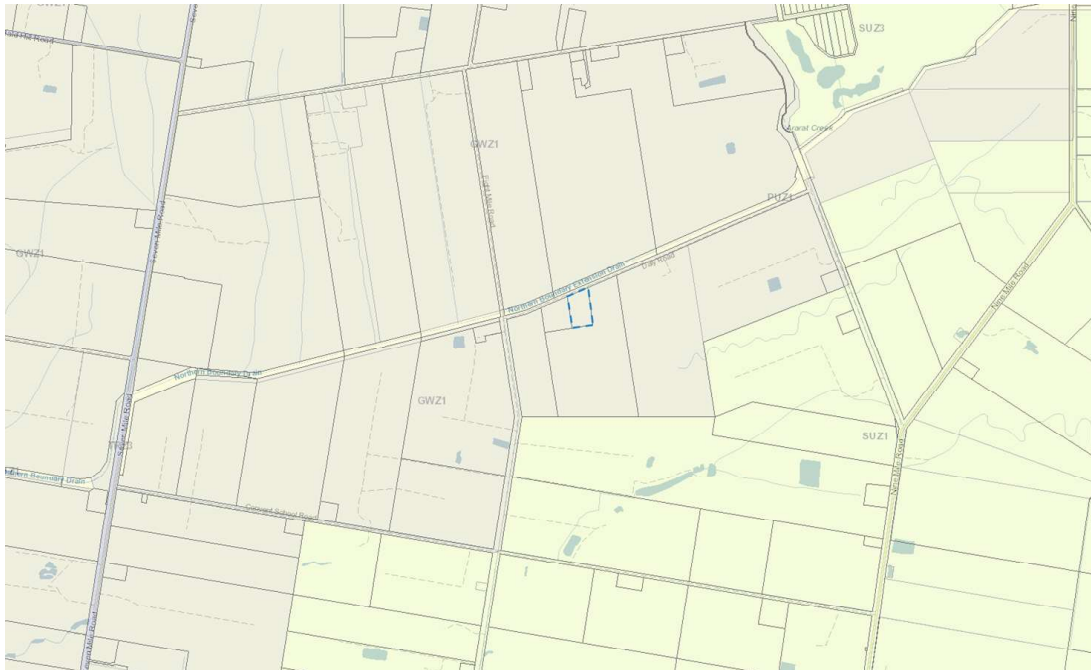


Figure 6 - Surrounding zoning map

Permit/Site History

The history of the site includes:

There is no recent Planning Permit history for the subject lot, however there is history relating to the subdivision of the land.

- Planning Permit T170713 (Issued 18 January 2018): *'Two lot boundary realignment'*
This involved the realignment of boundaries between two lots in an original 4 lot subdivision. Lots 1 & 2 of this original subdivision remain unchanged, while the original Lots 3 & 4 have formed a new Lot 1 & 2 on PS815289D. The subject lot is Lot 1 and has increased in size from an original 1ha to 2.163ha.

Planning Scheme Provisions

Zone

The land is subject to the following zones:

- Green Wedge Zone Schedule 1

Overlays

The land is subject to the following overlays:

- LSIO - Land Subject to Inundation Overlay

Planning Policy Framework (PPF)

The relevant clauses of the PPF are:

- Clause 11.01 Victoria
 - Clause 11.01-1R Green wedges – Metropolitan Melbourne

- Clause 11.03 Planning for Places
 - Clause 11.03-3S Peri-urban areas
- Clause 13.03 Floodplains
 - Clause 13.03-1S Floodplain management
- Clause 13.04 Soil Degradation
 - Clause 13.04-3S Salinity
- Clause 14.01 Agriculture
 - Clause 14.01-1S Protection of agricultural land
 - Clause 14.01-1R Protection of agricultural land – Metropolitan Melbourne
- Clause 15.01 Built Environment
 - Clause 15.01-2S Building design
 - Clause 15.01-5S Neighbourhood character
 - Clause 15.01-6S Design for rural areas
- Clause 16.01 Residential Development
 - Clause 16.01-3S Rural residential development

Local Planning Policy Framework (LPPF)

The relevant clauses of the LPPF are:

- Clause 21.02 Environment
 - Clause 21.02-1 Catchment and coastal management
- Clause 21.03 Settlement and Housing
 - Clause 21.03-5 Rural residential and rural living development
- Clause 22.05 Western Port Green Wedge Policy

Relevant Particular/General Provisions and relevant incorporated or reference documents

The relevant provisions/ documents are:

- Clause 51.02 Metropolitan Green Wedge Land: Core Planning Provisions
- Clause 65.01 Approval of an Application or Plan
- Clause 66.03 Referral of Permit Applications under other State Standard Provisions
- *Cardinia Western Port Green Wedge Management Plan (Incorporated Document - May 2017)*

Planning Permit Triggers

The proposal requires a planning permit under the following clauses of the Cardinia Planning Scheme:

- Pursuant to Clause 35.04-1 Green Wedge Zone (Schedule 1) a Planning Permit is required to use the land for a Dwelling.
- Pursuant to Clause 35.04-5 Green Wedge Zone (Schedule 1) a Planning Permit is required to construct or carry out a building or works associated with a Section 2 Use (Dwelling), 100m from a dwelling not in same ownership.
- Pursuant to Clause 44.04-2 Land Subject to Inundation Overlay a Planning Permit is required to construct a building or construct or carry out works.

Public Notification

The application has been advertised pursuant to Section 52 of the *Planning and Environment Act 1987*, by:

- Sending notices to the owners and occupiers of adjoining land.

Council has received no objections to date.

Referrals

External Referrals/Notices:

Referrals/ Notice	Referral Authority	Brief summary of response
Section 55 Referrals	Melbourne Water [Determining]	No objection (subject to conditions)
Section 52 Notices	None	N/A

Internal Referrals:

Internal Council Referral	Advice/ Response/ Conditions
Strategic Planning	Object to the proposal for the following reasons: <ul style="list-style-type: none"> ▪ Residential land use in an agricultural zone. ▪ No agricultural use taking place.
Health	No objection, subject to conditions.

Assessment

The proposal requires a permit for the use pursuant to the Green Wedge Zone and the development pursuant to the Green Wedge Zone and Land Subject to Inundation Overlay.

Planning Policy Framework Policy

Clause 11.01-1R Green wedges – Metropolitan Melbourne

The proposal is not within an existing settlement, however there are approximately three dwellings within 500m to the west of the site. The land is within some of the shire's most productive agricultural land, with land 500m to the south being zoned Special Use for horticultural purposes. No agricultural use is proposed with the dwelling. The proposal therefore does not meet the objective of this policy, as it does not protect the green wedge from inappropriate development.

Clause 11.03-3S Peri-urban areas

Much like the above, the land is within the peri-urban area of Melbourne. The lot itself can be classified as being strategically important for agriculture. In this instance, development is not taking place in an established settlement. The lot is entirely outside of any urban growth boundaries. The proposal can be considered dispersed settlement, which is discouraged. The proposal therefore does not meet the objective of this policy, as it does not adequately manage growth in the peri-urban area.

Clause 13.03 Floodplains

The land is identified as being affected by inundation. This has been adequately mitigated through the use of fill pad, and the proposal meets the objective of the policy as life and property would be protected in a flood event.

Clause 13.04-3S Salinity

The land has not been identified within the provided Land Capability Assessment as having shallow groundwater, however due to its location on a floodplain there is a risk of contributing to salinity. It is considered that erosion can be adequately mitigated, and the proposed fill pad will address any salinity concerns.

Clause 14.01 Agriculture

The lot is within the Westernport region and identified within Clause 21.01-5 Strategic framework plan as being for general agricultural use. The land is therefore identified as being productive agricultural land. Rural residential lots are in high demand within the shire and should not be encouraged. The proposal would contribute to an unplanned loss of the land for agricultural use and would create a permanent change in land use. The proposal does not direct housing growth into new settlements and is direct development of an isolated small lot in a rural zone for a residential use.

Cardinia Shire does not desire the removal of land from primary production. The proposed use and development are not compatible with surrounding uses. As a whole, the proposal does not meet the objective of the policy, as it does not protect the state's agricultural base by preserving productive farmland.

Clause 15.01 Built Environment

The proposed dwelling has a conservative design and is to be constructed from natural toned materials. The use of verandas and brick is consistent with other dwellings in rural areas. Its siting within the site however is not consistent with policy, being located approximately in the centre of the lot and at odds with similar rural dwellings in the area. The approximate 70m setback from the front boundary is large, and approximately double that of dwellings in immediate surrounds. While it may contribute to a more open feel, it also further reduces available land for agriculture. On balance, while the design of the dwelling is acceptable, the proposal does not generally meet the objectives of Clause 15.01 Built Environment.

*Clause 16.01-3S Rural residential development**Clause 21.03-5 Rural residential and rural living development*

The proposal is not in a location identified as being suitable for rural residential development and is approximately 3.1km in distance from the Nar Nar Goon township. It does not maintain the long-term sustainable use and management of the existing natural resource attributes in agricultural production. The land is a comparatively small lot in a rural zone. The proposal therefore does not meet the objective of these policies, as the land is not suitable for rural residential development, is not closely integrated with an existing township and would result in environmental degradation.

Clause 21.02-1 Catchment and coastal management

The land is within the Western Port catchment. No vegetation is proposed for the development. Soil erosion and sediment run-off can be adequately managed, and stormwater can be effectively managed. The land is not identified as having shallow groundwater. A proposed fill pad will suitably reduce risk in a flooding scenario. The proposal therefore meets the objectives of the policy.

Clause 22.05 Western Port Green Wedge Policy

As outlined above, the proposal would introduce an inappropriate land use. It would not protect the green wedge soils, a finite land use. The subject lot is identified as being within Precinct 3 (Railway Precinct), and bordering Precinct 1 (Agriculture, horticulture and soil based food production).

Precinct 3 is to provide a "sensitive transition from urban townships to green wedge land", with the aim of protecting land that is of agricultural significance. The precinct seeks to ensure the protection of the Urban Growth Boundary (UGB). Although the townships of Nar Nar Goon and Tynong are not subject to their own UGB's, the subject lot is in proximity to the Metropolitan UGB, while also falling far outside it.

Non-rural land uses are discouraged in this precinct, while non-soil based agricultural uses are encouraged. Considering the lots close proximity to Precinct 1, it can also be established that the land is also viable for soil-based agriculture. The proposal would also not be compatible with this soil-based agriculture in proximity.

The proposal would not result in a restructuring of a comparatively small lot and is a large distance from any established township. It does not meet the long-term directions or preferred land uses for the area. For these reasons, it is inconsistent with the policy.



Figure 7 - Surrounding precinct map within the Green Wedge. Subject site is marked in red.

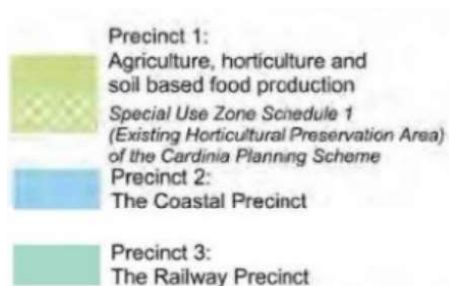


Figure 8 - Each precinct within the Green Wedge. The subject lot is within Precinct 3, in close proximity to Precinct 1.

Clause 35.04 Green Wedge Zone (Schedule 1)

The proposal requires a permit under the Green Wedge Zone (GWZ) for the use and buildings and works.

The proposed dwelling would superficially meet the requirements for the use. Access would be provided by a gravel driveway, an on-site wastewater management system would be installed, on-site potable water would be provided through water tanks and the dwelling would be connected to reticulated electricity.

However, the proposed use of a dwelling in this location and context is inappropriate. The use would relate poorly to surrounding land uses, with no substantive agricultural uses taking place on the land. Although there are other dwelling uses taking place on surrounding lots, there are only three dwellings in close proximity. All three of these lots have clear agricultural uses taking place in the form of animal husbandry.

Any approval of a dwelling in the proposed location may create future land use conflicts between land uses and developments. In factoring typical day to day farming practices on pastoral land, including chemical drift, noise and odours, that are conducted in close proximity to any residential use will induce amenity concerns. Council surmises that the proposal increases the chances of 'right to farm' conflict, thus compromising nearby landowner's ability to manage their farmland without impositions. Such an effect would be detrimental to achieving the outcomes sought by the GWZ and planning policy framework.

Regarding the dwelling itself, it is poorly sited within the property, being located approximately in the centre of the lot and further reducing usable land for agricultural purposes. While a provided Land Capability Assessment has identified the location of the effluent disposal area to be suitable, other parts of the land have not been assessed, which may have allowed for the siting of the dwelling further forward within the property. Additionally, the setback of the dwelling does not respect the prevailing setbacks along Daly Road, being approximately double that of neighbouring properties.

It is noted that the design of the dwelling itself is conservative and relatively traditional, resembling that of other dwellings in rural areas. It is of a modest size. Suitably muted colour tones are used, along with natural materials such as brick. No issue is taken with the design of the dwelling itself, and it is well suited for the area. Regardless of this, the approval of a dwelling in this location and siting sets a precedent for further erosion of the green wedge and the validation of these types of smaller lots.

Land Subject to Inundation Overlay (LSIO)

The proposal requires a permit under the LSIO for buildings and works.

To accommodate the proposed dwelling, a fill pad is proposed to bring the structure above the applicable flood level for the area. The application was referred to Melbourne Water as the determining authority, who did not object subject to amended plans. These are to include a higher fill pad and a fill pad of reduced size. Council does not hold any issues with the proposed flood mitigation methods, and it is deemed that flood risk has been adequately mitigated.

Clause 65.01 Approval of an Application or Plan

The proposal has been assessed against the relevant State and Local Planning policies. It has been assessed against the GWZ and LSIO, and all relevant matters within. The orderly planning of the area has been considered. Its effect on the environment, human health and amenity of the area have been considered. Potential for increased salinity has been considered, and the degree of flood risk has been considered.

Conclusion

The proposal is concluded to be a poor outcome that increases rural residential living within the Green Wedge. As such, the proposal compromises the preservation, protection or enhancement of primary production, the Green Wedge or agriculture land.

With the reinforcement of the urban growth boundary and clear policy to discourage residential uses within the GWZ, Council continues to take action towards the protection of this land. Once a dwelling and its use have been approved, it can legally take place forever. This is not the future vision for this land and should not be encouraged. Precedence would be clearly established for similar lots within the green wedge zone. Therefore, the application should be refused.

Recommendation

Position to refuse to grant a Planning Permit

That Council having caused notice of Planning Application No. T220660 to be given under Section 52 of the *Planning and Environment Act 1987* and having considered all the matters required under Section 60 of the *Planning and Environment Act 1987* decides to put forward a position to Refuse to Grant a Permit in respect of the land known and described as L1 PS815289 V12183 F695, 275 Daly Road Nar Nar Goon, for the Use and Development of Land for a Dwelling under the following grounds:

1. The proposal is inconsistent with the Municipal Planning Strategy and Planning Policy Framework and Local Planning Policy Framework, specifically:
 - a. Clauses 11.01-1R Green wedges – Metropolitan Melbourne,
 - b. Clause 11.03-3S Peri-urban areas,
 - c. Clause 14.01 Agriculture,
 - d. Clause 16.01-3S Rural residential development,
 - e. Clause 21.03-5 Rural residential and rural living development,
 - f. Clause 22.05 Western Port Green Wedge Policyas it does not protect valuable agricultural land and is an incompatible land use.
 2. The proposal compromises the preservation, protection or enhancement of primary production, the Green Wedge or agriculture land, while resulting in a smaller rural residential lot that may conflict with existing or future large-scale farming operations.
 3. The proposal is inconsistent with the purpose and decision guidelines of the Green Wedge Zone as it does not protect and conserve green wedge land for its agricultural resources or provide for the enhancement of primary production and does not minimise adverse impacts of siting.
 4. The proposal is inconsistent with the relevant considerations of Clause 65 Decision Guidelines and the orderly planning of the area.
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