

NOTICE OF AN APPLICATION FOR PLANNING PERMIT

The land affected by the application is located at: 161 Baddaginnie-Benalla Road, Benalla Crown Allotment 33, Section U Parish of Benalla

The application is for a permit to: To use and develop the land for a dwelling

The applicant for the permit is: Ms Leanne Maxwell Regional Planning Services

The application reference number is: P0049/24 DA7655

Any person who may be affected by the granting of the permit may object or make other submissions to the responsible authority.

An objection must:

- * be made to the responsible authority in writing;
- * include the reasons for the objection; and
- * state how the objector would be affected.

The responsible authority must make a copy of every objection available at its office for any person to inspect during office hours free of charge until the end of the period during which an application may be made for review of a decision on the application.

The Responsible Authority will not decide on the application before: **17 June 2024**



If you object, the Responsible Authority will tell you its decision.

ENJOY THE LIFESTYLE

www.benalla.vic.gov.au



Planning Enquiries Phone: (03) 5760 2600 Web: www.benalla.vic.gov.au Application No.:

Date Lodged: 1 1

Application for a **Planning Permit**

If you need help to complete this form, read MORE INFORMATION at the end of this form.

Any material submitted with this application, including plans and personal information, will be made r Je ment. Ating a copy of and above and above and above and above and available for public viewing, including electronically, and copies may be made for interested parties for the purpose of enabling consideration and review as part of a planning process under the Planning and Environment Act 1987. If you have any questions, please contact Council's planning department.

A Questions marked with an asterisk (*) must be completed.

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

Click for further information.

Clear Form

The Land 💶

Address of the land. Complete the Street Address and one of the Formal Land Descriptions.

Street Address *	Unit No.: St. No.: St. Name:
	Suburb/Locality: Postcode:
Formal Land Description * Complete either A or B.	A Lot No.: OLodged Plan O Title Pian O Plan of Subdivision No.:
This information can be found on the certificate of title.	OR B Crown Allotment No.: Section No.:
If this application relates to more than one address, attach a separate sheet setting out any additional property details.	Parish/Township Name:
The Proposal	able of mill out of the

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

For what use, development or other matter do you require a permit? *	none et no
has been copied her	eand or correction of the second seco
This document Environ action.	
Ptt in at any	
	Provide additional information about the proposal, including: plans and elevations; any information required by the planning scheme, requested by Council or outlined in a Council planning permit checklist; and if required, a description of the likely effect of the proposal.
i Estimated cost of any development for which the permit is required *	Cost \$ You may be required to verify this estimate. Insert '0' if no development is proposed.

Existing Conditions					
Describe how the land is used and developed now * For example, vacant, three dwellings, medical centre with two practitioners, licensed restaurant with 80 seats, grazing.					
	Provide a plan of	f the existing conditions. Photos	are also hel	pful.	
					<u> </u>
Title Information	Does the propos	al breach, in any way, an	encumbra	ance on title such a	s a restrictrive covenant,
Encumbrances on title *	section 173 agre	eement or other obligation	such as a	an easement or buil	lding envelope?
	application.)	contact Council for advice	on now to	proceed before co	ontinuing with this
	O No				
	Not applicab	le (no such encumbrance	applies).	653 50	
	Provide a full, cu The title include as 'instruments'	urrent copy of the title for each in s: the covering 'register search s for example, restrictive covenar	idividual par statement', th nts.	cel of land forming the s ne title diagram and the	subject site. associated title documents, known
1			all'	the the	
Applicant and Owner	Details 🚺	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	10 9 3h	S for d.	
Provide details of the applicant and th	e owner of the land	d.	~ 40 ¹ 10	101 HIDIE	
Applicant *	Name:	05,58	200	6	
The person who wants the	Title:	First Name		Surname:	
permit.	Organisation (if	applicable):	55		
	Postal Address:	10 JE HI CT	If it is a P.O	. Box, enter the details	here:
	Unit No.:	St. No.:	St. Nam	e:	
	Suburb/Locality	2110 NN 900		State:	Postcode:
Please provide at least one	Contact informati	ion for applicant OR contac	ct person	below	
contact phone number *	Business phone	e:		Email:	
200	Mobile phone.	<u> </u>		Fax:	
Where the preferred contact	Contact person's	details*			Same as applicant
different from the applicant, provide the details of that	Title:	First Name:		Surname:	

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

the details of that person or organisation.

Postal Address:	10 VI 31, 103	If it is a l	P.O. B	ox, enter the details h	ere:
Unit No.:	St. No.:	St. Na	ame:		
Suburb/Locality	Still 1 Mr. 400			State:	Postcode:
				-	
Contact informat	tion for applicant OR conta	act perso	on be	low	
Business phon	e:		Err	nail:	
Mobile phone:	le.		Fa	k :	
Contact person's	s details*				Samo as applicant
Name:					
Title:	First Name:			Surname:	
Organisation (if	applicable):				
Postal Address:		If it is a F	P.O. B	ox, enter the details he	ere:
Unit No.:	St. No.:	St. Na	ame:		
Suburb/Locality	/:			State:	Postcode:
Name:					Same as applicant
Title:	First Name:			Surname:	
Organisation (i	f applicable):				
Postal Address:		If it is a l	P.O. B	ox, enter the details h	ere:
Unit No.:	St. No.:	St. N	ame:		
Suburb/Locality	/:			State:	Postcode:
Owner's Signa	ture (Optional):			Date:	
					day / month / year

Declaration 🚺

This form must be signed by the applicant *

Remember it is against the law to provide false or	I declare that I am th	ne applicant; and that all t	he information in	this application is tru	ue and
misleading information,	correct; and the own	her (if not myself) has bee	n notified of the	permit application.	
heavy fine and cancellation	Signature.			Date:	oth / year
of the permit.			I		
Privacy consent	I give consent to my for public inspection determined, in accor Yes No Signature:	r personal information disc , including on Council's p rdance with Section 51 of	closed in the app ublic website, wh the Planning ar	blication to be made a hilst the application is d Environment Act 19 Date: day / mor	available being 987. th / year
Need help with the Ap	oplication?		2 Ore	UIP IIP	
General information about the planning	, g process is available a	at <u>planning.vic.gov.au</u>	ninser	2 Qu	
Contact Council's planning departmen	t to discuss the specific	requirements for this app	lication and obtai	n a planning permit ch	necklist.
		Le la		teo.	
Has there been a pre-application meeting with a council planning		If 'Yes', with wnom?:	Chi tou		
officer?	0	Date:		day / month / year	
			<u> </u>		
Checklist		tor is the second se			
	Filled in the fo	orm completely?			
Have you:	Paid or includ	ed the application fee?	Most applicati to determine t	ons require a fee to be pai he appropriate fee.	id. Contact Council
	C Provided all n	ecessary supporting infor	mation and docu	iments?	
<i>,</i>	A fuli, current	copy of title information for each indi	vidual parcel of land for	ming the subject site.	
00	A plan of exis	ting conditions.	al		
OP CT	Any informatio	on required by the planning scheme,	requested by council of	outlined in a council planning	permit checklist.
een nit he	If required, a	description of the likely effect of the p	roposal (for example, t	affic, noise, environmental imp	pacts).
25 DO MMC MARK	Completed the	e relevant council plannin	g permit checkli	st?	
at he will sold of	Signed the de	claration above?			
une de vou atio					
Jodgement @					
Lodge the completed and	Benalla Rural City	Council			
signed form, the fee	Benalla VIC 3671	1			
	Customer Service 1 Bridge Street Ea Benalla VIC 3671	Centre Ist 1			
	Contact informat Phone (03) 5760 2 Email: council@be DX: 32230	ion: 2600 enalla.vic.gov.au			



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, resent and emerging

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

Page 1 of 1

VOLUME 12431 FOLIO 428

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LAND DESCRIPTION

Crown Allotment 33 Section U Parish of Benalla. PARENT TITLE Volume 08443 Folio 223 Created by instrument AV828716J 07/07/2022

REGISTERED PROPRIETOR

Estate Fee Simple Joint Proprietors

ENCUMBRANCES, CAVEATS AND NOTICES

DIAGRAM LOCATION

SEE TP666589E FOR FURTHER DETAILS AND BOUNDARIES

ACTIVITY IN THE LAST 25 DAYS

NIL

END OF REGISTER SEARCH STATEMENT-----

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

ADMINISTRATIVE NOTICES Ô

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NIFO

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- PROPOSED OUTBUILDING

PLANNING PERMIT APPLICATION LOT 33 /125 BADDAGINNIE-BENALLA ROAD. BENALLA 3672 SITE CONTEXT PLAN

	ONTEXTICAN	
CLIENT: BLOODSTOCK	108	SHEET 1 OF 1





SURFACE & LOCATION	PREPARATION	PAINTING SYSTEM
PLASTERBOARD WALLS IN ALL AREAS EXCEPT WET AREAS	STOP-UP AND SAND SMOOTH.	1 COAT DULUX OR EQUAL APPROVED ACRYLIC SEALER/UNDERCOAT. 2 COATS DULUX WASH AND WEAR OR EQUAL APPROVED LOW SHEEN ACRYLIC.
PLASTERBOARD CEILINGS IN ALL AREAS EXCEPT WET AREAS	STOP-UP AND SAND SMOOTH.	1 COAT DULUX OR EQUAL APPROVED ACRYLIC SEALER/UNDERCOAT. 2 COATS DULUX CEILING WHITE FLAT OR EQUAL APPROVED
PLASTERBOARD CEILINGS IN ENSUITE & BATHROOM	STOP-UP AND SAND SMOOTH.	1 COAT DULUX OR EQUAL APPROVED ACRYLIC SEALER/UNDERCOAT 2 COATS DULUX AQUA ENAMEL WASH AND WEAR, KITCHEN & BATHROON CEILING FLAT WITH MOULDSHIELD OR EQUAL APPROVED
PLASTERBOARD/VILLABOARD WALLS IN ENSUITE & BATHROOM	STOP-UP AND SAND SMOOTH.	1 COAT DULUX OR EQUAL APPROVED ACRYLIC SEALER/UNDERCOAT 2 COATS DULUX AQUA ENAMEL WASH AND WEAR, KITCHEN & BATHROON CEILING FLAT WITH MOULDSHIELD OR EQUAL APPROVED
TIMBER SKIRTINGS, ARCHITRAVES & DOOR FRAMES	SAND SMOOTH AND FILL AS REQUIRED	2 COATS DULUX AQUA ENAMEL SEMI-GLOSS OR EQUAL APPROVED
DOORS	SAND LIGHTLY	2 COATS DULUX ACRYLIC SEMI-GLOSS OR EQUAL APPROVED
EXTERNAL GALVANISED STEEL BEAMS, COLUMNS AND FENCING	DEGREASE WITH MINERAL TURPENTINE	1 COAT DULUX 2PAK ETCH PRIMER OR EQUAL APPROVED 2 COATS DULUX AQUAENAMEL GLOSS OR EQUAL APPROVED
CEMENT SHEET SOFFIT LININGS ETC.	STOP-UP AND SAND AS NECESSARY	1 COAT ALKALI RESISTANT SEALER 2 COATS DULUX WEATHERSHEILD OR EQUAL APPROVED LOW SHEEN ACRYLIC

BUSHFIRE ATTACK LEVEL	no. date revisions abla abla bla bla bla bla bla b
BAL - 12.5	
DOOR SCHEDULE	
TYPE - (PROFILE TO BE SELECTED BY OWNER, WXH)	
1020 x 2400 SOLID CORE 4 PANEL CRAFTWOOD FACE, PROVIDE KEYED LOCKSET	
2 / 320 x 2400 DOUBLE GLAZED SWING DOOR UNIT, PROVIDE KEYED LOCKSET	
2 / 820 x 2400 DOUBLE GLAZED SWING DOOR UNIT, PROVIDE KEYED LOCKSET	
820 x 2400 DOUBLE GLAZED SWING DOOR UNIT, PROVIDE KEYED LOCKSET & FLYDOOR	
4145 x 2400 DOUBLE GLAZED BI-FOLD DOOR UNIT	
4145 x 2400 DOUBLE GLAZED BI-FOLD DOOR UNIT	
820 x 2100 DOUBLE GLAZED SWING DOOR UNIT, PROVIDE KEYED LOCKSET & FLYDGOR	
820 x 2040 SOLID CORE, WATERPROOF QUALITY, COLORBOND CLAD, PROVIDE KEYED LOCKSET	
5400 x 2150 AUTO PANEL LIFT DOOR	
5400 x 2400 AUTO PANEL LIFT DOOR	
820 x 2340 SOLID CORE CRAFTWOOD FACE	
2/990 X 2400 NOM. SLIDING DOORS CRAFTWOOD INSERTS	
2/990 X 2400 NOM. SLIDING DOORS. CRAFTWOOD INSERTS	
2/720 x 2340 SOLID CORE CRAFTWOOD FACE CAVITY SLIDERS	
1/820 x 2340 SOLID CORE CR FTWOOD FACE CAVITY SLIDERS	
820 x 2340 SOLID CORE CRAFTWOOD FACE	madin iyons
820 X 2340 SOLID CORE (RAFTWOOD FACE CAVITY SLIDER	
820 x 2840 SOLID CORE CRAFTWOOD FACE	17 PLEASANT STREET SOUTH, BALLARAT 3350
720 x 2340 SOLID CORE CRAFTWOOD FACE	T. (03) 5331 4653 E. admin@madinlyons.com.au
PROVIDE LFT OFF FINGES 820 x 2340 SOLID CORE CRAFTWOOD FACE CAVITY SLIDER	ACN. 005 786 621
2/620 x 2340 YOLLD CORE CRAFTWOOD FACE	TONY LYONS DP-AD1059
	PHIL ROGERS DP-AD38659
2/990 X 2400 NOW, SLIDING DOORS, CRAFTWOOD INSERTS PAINT FINISH, STIGBAR OR EQUAL APPROVED	project Proposod Rosidanco & Attachod
PAINT FINSH, STEGRAR OR EQUAL APPROVED	Garage
PROVIDE LIFT OFF HINGES	
820x 2340 SOLID CORE CHAFTWOOD FACE	
820 x 2340 SOLID CORE CRATTWOOD FACE	Lat 4 Candan - Esontan Daad
2/865 X 2400 NOM. SLIDING DOORS. CRAFTWOOD INSERTS PAINT FINISH, STEGBAR OR EQUAL APPROVED	Lot 4 Gordon - Egerton Road
620 x 2340 SOLID CORE CRAFTWOOD FACE	Mount Egerton
820 x 2340 SOLID CORE CRAFTWOOD FACE	client
2/830 X 2400 NOM. SLIDING DOORS. CRAFTWOOD INSERTS PAINT FINISH, STEGBAR OR EQUAL APPROVED	Jenna & Damian Tooney
2/830 X 2400 NOM. SLIDING DOORS. CRAFTWOOD INSERTS PAINT FINISH, STEGBAR OR EQUAL APPROVED	drawing
820 x 2340 SOLID CORE CRAFTWOOD FAC	Proposed Floor Plan &
2/830 X 2400 NOM. SLIDING DOORS. CRAFTWOOD INSERTS PAINT FINISH, STEGBAR OR EQUAL APPROVED	
2/830 X 2400 NOM. SLIDING DOORS. CRAFTWOOD INSERTS PAINT FINISH, STEGBAR OR EQUAL APPROVED	
820 x 2340 SOLID CORE CRAFTWOOD FACE	
820 x 2340 SOLID CORE CRAFTWOOD FACE WITH RIVEN RP8SI CONCEALED BOTTON SEAL MORTICED INTO BOTTON OF DOOR	date May 2018 drawn S.Callahan
AND RP945I JAMB SEALS 820 x 2340 SOLID CORE CRAFTWOOD FACE	checked NOT CHECKED
PROVIDE LIFT OFF HINGES 820 x 2340 SOLID CORE CRAFTWOOD FACE	drg no. 2 of 7
820 x 2340 SOLID CORE CRAFTWOOD FACE	revision A scale AS INDICATED AT A1
	printed
BOTTOM VENTS (300w x 500h POWDERCOAT ALUMINIUM x 2	P
I ERNAL DOOR NOTES	FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALING.
IOMINATED ON PLAN.	CHECK ALL DIMENSIONS ON SITE PRIOR TO COMMENCEMENT OF ANY WORK OR SHOP DRAWINGS.
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Geoscience + Planning

A the formulation the strength of the strength LAND CAPABILITY

ALLOTMENT 33 SECTION U PARISH OF BENALLA

Land Capability Assessment 125 Baddaginnie-Benalla Road Benalla

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Introduction	5 <u>}</u>
Methodology	and the state of the second
Site Assessment	
Soil Assessment	
Site Risk Analysis	
Wastewater Management	
Conclusion and Recommendations	
References	
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Appendices:	
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Appendix A - Site Photos Appendix B - Site Plan	
Appendix C - Soil Excavation Logs	
Appendix D – Water and Nutrient Balance	
Appendix E – Soil Laboratory Results	
Appendix F – Groundwater Report	
In ESO	

Appendix B – Site Photos Appendix C – Soil Excavation Logs Appendix D – Water and Nutrient Balance Appendix E – Soil Laboratory Results Appendix F – Groundwater Report



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Report Version	
Report Date	February 2024
Prepared by	Simon Hollis
Assessors Academic and Professional Qualifications	Bachelor Applied Science (Environmental Management) Advanced Diploma Spatial Information and Surveying Graduate Diploma Land Rehabilitation Graduate Diploma Rural and Regional Planning Master of Science (Geoscience)
IMITATIONS	ing procurpor purpos

LIMITATIONS

The findings contained within this Land Capability Assessment are derived from methodologies provided by relevant Code of Practice and Australian Standard and due regard has been given to undertake all aspects of the study in accordance with the requirements with best practice and relevant standards. Whilst the findings contained in this report represent a reasonable interpretation of site conditions, it does not indicate that these findings represent the actual state of the site at all points. The Information contained in this document have been produced by GeoPlan Consulting for the use of the person or organisation for which it has been prepared and GeoPlan undertakes no duty to or accepts any responsibility to any third party who may rely on this document.

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EXECUTIVE SUMMARY SITE AND SOIL ASSAY	to the store of th
SOIL DEPTH	Soil depths across the study area are greater than 1.0 metres impermeable layer not encountered.
DEPTH TO WATERTABLE	Groundwater not encountered although (seasonally) saturated soils possible. According to DEECA Groundwater Resource website depth to water table is <5m: <u>https://mapshare.vic.gov.au/Geocortex/Essentials/EXT/REST/TempFiles</u> /groundwater_report_20240218_111624.pdf?guid=3f15ea05-9670- 41e4-a5f3-cf24b73c60db&contentType=application%2Fpdf
TOPOGRAPHY	Flat
(SUBSOIL)	and the the training
SUBSOIL – B2 (DESIGN) HORIZON	Reddish-brown, strongly pedal, medium clay
EMERSON CLASS	B2 Horizon - 1
pH [*] (1:5 Water)	B2 Horizon – 6.8
ELECTRICAL CONDUCTIVITY (1:5 WATER) * dS/m	B2 Horizon – 0.04
EXCHANGEABLE SODIUM % (ESP) *	B2 Horizon – 8%
SUBSOIL SOIL PERMEABILITY (Ksat) (m/day	 0.05 m/day Soil permeability was determined using the Talsma-Hallam and visual / tactile methods.
SOIL CATEGORY (AS/NZ1547:2012)	6a
DESIGN LOADING RATE (TRENCHES & BEDS) (mm/day)	Refer to notes 2 and 3 to Table L1 in <i>Australian Standard AS/NZS</i> 1547:2012
DESIGN IRRIGATION RATE (mm/day)	3
DESIGN LOADING RATE (EVAP/TRANS) (mm/day)	5
	Laboratories



EXECUTIVE	SUMMAR	Y		O	see as set out in the contained a set out in the contained a set out in the a set out in the a set of the a s
Indicative La Treatment Standard	nd Applicatio Septic Tank Capacity (Litres)	n Design Recon Land Application Method	Construction Requirements (Relevant AS/NZS 1547/2012 Construction Diagram)	Bedroom Dwelling Calculated Length (m)	Indicative LAA Area (m ²) [,]
Primary or Secondary Treatment (AWTS or Sand Filter)	3500L	Subsurface irrigation*	ne PMJ DE MJ	620 m ² (S 510 m ² (Wa	Standard Fixtures) ater Saving Fixtures)
*Using water balance	e as shown at Apper	dix C (9 th Decile weby	ear rainfall – Benalla)	1	





a above and An investigation has been undertaken to assess the overall capability of 125 Baddaginnie-Benalla Road Benalla for the purpose of on-site wastewater management and to investigate the merits of undertaking future un-sewered development on the land. This report provides information about:

- Soil conditions; •
- Site constraints;
- General indicative advice about appropriate wastewater treatment system and land application methods in response to overall site and soil characteristics; and

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Indicative wastewater land application area sizing

The findings of this report have been made in context of prioritising public and environmental health with generic design recommendations framed on achieving sustainable wastewater disposal with acceptable residual environmental and public health risk.

Methodology

The field component of the land capability assessment was undertaken on 1 February 2024 employing the methodology of Victorian EPA publication No. 746.1 Land Capability Assessment for Onsite Domestic Wastewater Management and Publication 891.4 Victorian Code of Practice - Onsite Wastewater Management 2016 (CoP). It was also undertaken in accordance with Australian Standard AS/NZS 1547:2012 On-site Domestic Wastewater Management. The indicative wastewater disposal system dimensions have been calculated using the Code of Practice and water balance modelling.

The study methodology has comprised the following:

- A desktop study of relevant geological, topographical, climate and soil references;
- Soil and site assessment:

This included the drilling, logging and sampling of two investigation bore holes across the subject land in order to establish soil profile conditions and identify spatial variations across the subject land. A 75mm hand auger was used to drill the bore holes;

- Soil permeability was derived using the Talsma-Hallam method and the visual / tactile method which included an assessment of sub-soil texture and structure;
- This document has been the this document has been the this document from the third and the the third and the the third and the the third and the the third and the third and the the the third and the Water and nutrient balance analysis based on the 9th decile wet year rainfall derived from the mean monthly rainfall data for the Benalla Weather Station (Bureau of Meteorology Station No. 082170); and

Analysis of findings and report writing.



and

Benalla Planning Scheme Farming Zone (FZ)

The Schedule to Clause 35.07-2 (Farming Zone) of the *Benalla Planning Scheme* seeks inter alia to protect water quality and waterways as natural resources in accordance with the provisions of relevant State Environment Protection Policies, and particularly in accordance with Clauses 33 and 35 of the *State Environment Protection Policy (Waters of Victoria)*. A key purpose of this LCA is to demonstrate compliance with the requirements of the Farming Zone of the *Benalla Planning Scheme*.

	Site Assessm Table 1 Site Summary	ent Response
	Site Address	125 Baddaginnie-Benalla Road, Benalla
	Zone	Farming Zone (FZ)
	Catchment Status	Not a Declared Special Water Supply Catchment
	Existing Development	The study area portion of the subject land is cleared with no development.
	Climate Benalla Weather Station (Bureau of Meteorology Station No. 02002)	Rainfall – 644mm 9 th Decile – 773mm Evaporation – Approx 1400mm <u>http://www.bom.gov.au/climate/averages/tables/cw_082002.shtml</u>
	Aspect	
	Vegetation	Pasture grasses and no evidence of hydrophilic species at the study site
	Landform	Linear-planar
	Slope	~2%
	Fill So So So	None evident - natural profiles observed
	Rocks and Rock Outcrop	None observed
- C	Surface Water	The nearest waterway is One-mile Creek located > 100m east of the study area.
100	Flood Potential	Less than 1:100 AEP (not located within FO)
inert has not	Stormwater run-on and upslope seepage	Given the location of the study area and topography significant stormwater run- on is not expected.
This doct an antent of this and the series of the series o	Depth to Groundwater	Groundwater not encountered although (seasonally) saturated soils possible. According to DEECA Groundwater Resource website depth to water table is <5m: <u>https://mapshare.vic.gov.au/Geocortex/Essentials/EXT/REST/TempFiles/ground</u> <u>water report 20240218 111624.pdf?guid=3f15ea05-9670-41e4-a5f3-</u> <u>cf24b73c60db&contentType=application%2Fpdf</u>
	Site Drainage and Subsurface Drainage	The presence of (red) mottling within the observed profiles is indicative of a soil moisture regime that has fluctuation. The overall reddish colour of the subsoil is typically indicative of good drainage.



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Soil Assessment

Overview

Two assessment boreholes were drilled within the study area (Appendix B). This was sufficient to adequately characterise the soils of the immediate landscape and subject land for the purpose of the dwelling proposal. Excavation logs are provided at Appendix C. The soils are characterised by:

			C ^C	35 BY DOCIN
Table 2: 9	65,66			
Horizon	Lower Horizon Depth (mm)	Colour	Field Texture	Structure
A1	0-~100	Dark Brown	Loam	Moderate
A2	~100 - ~200	Brown	Clay Loam	Moderate
B1	~200-500	Brownish-red	Light Clay	Strong
B2*	~500 - 1000	Reddish-Brown	Medium Clay	Strong
Reddish o Limited n Subsoil w	colour of subsoil ind nottles indicate som las strongly pedal	icates that the subsoil is well the soil moisture fluctuations	drained	

ubsoil was strongly pedal

*B2 Horizon has been adopted as the design horizon WHILL OCHMEN

Nutrients

able to must only Clay-rich soils such as those found on this site can fix large amounts of phosphorous. Phosphate-rich effluent seeping through these soils will lose most of the phosphorous within a few metres. The limiting nutrient for this site is nitrogen and no phosphorous balance is required.

Nitrogen, that is contained in organic compounds forms nitrate-N when processed in an aerated treatment nitroge noweve groundw site land a **Table 8**. plant. Alternate periods of wetting and drying, with the presence of organic matter promotes reduction to nitrogen gas (denitrification). Plant roots absorb nitrates at varying rates depending on the plant species however a feature of nitrate is that it is mobile and can be readily leached. Accordingly, it can enter groundwater via deep seepage and surface waters via overland flow and near-surface lateral flow. Indicative Site land application sizing has been made with reference to a nitrogen balances shown at Appendix D and



sug

Subsoil Sodicity, Emerson Class, Salinity and pH

Soil particle flocculation is important because water moves mostly in large pores between soil aggregates. Soils with a high Exchangeable Sodium Percentage (ESP) will have reduced permeability (Ksat). Aggregate stability is also impacted by the amount of soluble salts (EC) in the soils. The high exchangeable sodium cation (ESP) rating and Emerson class 1 suggest that the subsoil could be susceptible to dispersion and that soil management should include measures to reduce soil dispersion. A summary of design horizon ESP, Emerson Class, Salinity and pH is provided at **Table 3** and **Appendix E.**

	Table 3: Sodicity Emerson Class Salinity and	рН*	N
	Design Horizon	111.40	
	Emerson Class	Ne pland to	
	Electrical Conductivity (1:5 Water) d/Sm	e of the or une of the	0.04
	рН (1:5 Water)	20 JS 00 JY 2	6.8
	Sodium % of cations	OL SOLISSII	8
	* Determined by Nutrient Advantage Laboratory	UN ONE	
ois document has be	en copied and made available information will be available information withis draw and the available information will be available avail	Scutter	
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Permeability and AS/NZ1547:2012 Soil Category

Saturated hydraulic conductivity was measured using a constant head permeameter. The visual / tactile method which included an assessment of sub-soil texture and structure was also employed. A summary of results is provided in Table 4. Pursuant to EPA publication 891.4 (CoP) the indicative permeability of soils in the study area was ~ 0.05 m/day (Category 6a soil).

Table 4: Hydraulic Conductivity





A range of s of onsite was in Table 1 of Management. A range of site features have been assessed in terms of the degree of limitation they present for a range of onsite wastewater management systems (Table 5). Reference is made to the rating scale described in Table 1 of EPA Publication 746. Land Capability Assessment for On-site Domestic Wastewater



	TABLE 5 - LAN	D CAPABI	LITY C	LASS RATING		
LAND FEATURES	Low	Medium	1	High	Limiting / unsuitable	Ameliorative Measures & Risk Reduction
Available land for Land Application Area (LAA)	Lot size exceeds LAA and duplicate	Meets LAA and duplicate LAA	ł	Meets LAA and partial duplicate LAA	Insufficient LAA area	Ut II O DO
Aspect	North, north-east or north-west	East, west, or s west	outh-	South or south-east	South – full shade	× 24 . 5 . 60
Exposure	Full sun and / or high wind or minimal shading	Partial shade		Limited light, little wind, heavily shaded area	Perpetual shade	Section 2
Slope Form	Convex or divergent side slopes	Straight sideo slopes	l	Concave or convergent side slopes	Locally depressed	S
Slope Gradient Trenches & beds	< 5%	5 – 10%		10 - 15%	> 15%	
Slope Gradient Subsurface Irrigation	< 10%	10 – 30%		30 - 40%	×40%	
Site drainage Run off / run on	Low Likelihood	Moderate likel	ihood	High likelihood	Cut off drain not possible	
Landslip *	Low Potential	Mod Potential		High Potential	Existing	
Erosion Potential	Low	Moderate	C	CHigh C CUIL	No practical amelioration	
Flood / inundation	Never	< 1 AEP	20	<5%AEP	> 5% AEP	
Distance to surface waters (m)	Buffer distances exceeds all Code requirements	Buffer distance complies with Code requirem	es all nerts	Buffer distances do not comply with all/some Code requirements	< 40 m	Waterway >100m to
Distance to	No bores on site or	Buffer distance	5	Buffer distances do not	No suitable	east
groundwater bores (m)	within a significant distance	comply with th Code	ie O	comply with the Code	treatment method	
Vegetation	Plentiful / healthy vegetation	Moderate vegetation	C'J	Sparse or limited vegetation	Propagation not possible	
Depth to water table (potentiometric) (m)	> 2 m	2-15m	50	1.5 m	1.5 m - Surface	
Depth to water table (seasonal parched) (m)	> 1.5 m	< 0.5 m		0.5 – 1.5 m	0.5m - Surface	
Rainfall ** (9th decile) (mm)	< 500 mm	500 – 750 mm		750 – 1000 mm	> 1000 mm	Land application area sizing based on water balance
Pan evaporation (mean) (mm)	1250 - 1500 mm	1000 – 1250 m	ım	750 – 1000 mm	< 750 mm	
		Soi	il Profile	Characteristics		
Structure	High or moderately structured	Weakly structured	Struct	ureless, massive or hardpan		Application of Gypsum based on Emerson Class and ESP
Fill materials	Nil or mapped good quality topsoil	Mapped variable depth and quality materials	Variat uncon	ole quality and / or trolled filling	Uncontrolled poor quality / unsuitable filling	
Thickness of soil (m) at the	ne location of:					
Subsurface irrigation	> 1.4 m	>1.4m	< 1.4	m	< 1.2 m	
Permeability	> 1. J III	1 - 1.5 11	0.751	I	< 0.75 m	
Permeability *** (limiting horizon) (m /	0.15 – 0.3	0.03 – 0.15 0.3 – 0.6	0.01 - 0.6 - 3	- 0.03 3.0	> 3.0 < 0.03	Larger LAA





8

Algorithm has become a widely used on-site wastewater Management Plan, the Edis and recognised as an accurate measure of risk. Using the Edis Algorithm, the risk rating for the subject land is **2.6 (low)**. 5 25 BY rectified

Table 6 Edis Algorithm Risk Assessment						
Feature	Low (Rating of 1)	Medium (Rating of 2)	High (Rating (19)	Risk Rating		
R res Distance to reservoir	>15km	2-15km	~2km0`			
R Soil Soil Type Rating	1	2		3		
R riv Distance to River	>80m	40-80m 5	<40m	1		
R str Distance to stream	>80m	0 40-80m 0	جگ ^۲ <40m	1		
R drain Distance to drain	>40m	(2 10-40m)	<10m	2		
R Lot Lot Size (ha)	2 10had	2-10ha	0.2-2ha	1		
R LCA LCA rating		3	4	2		
R Fail System fail rate	201 <5%) 	5-10%	>10%	2		
R Dens Density (dwellings / KM2)	<20	20-40	>40	1		

Rn = ((R Res + R soil) x (R riv + R str + R drain + R lot) + (2 x R LCA) + (3 x R fail x R den)) / 10

Edis Risk Rating 2.6 (Low)

This document has be this document ten ing this document we high this any disserting that any disserting Low Risk = Rn of <2.5 Medium Risk = Rn of 2.5 – 5 High Risk = Rn of >5





Wastewater Management

in the opy of and This Land Capability Assessment has been prepared to provide general advice as to the most appropriate treatment and land application systems at the proposed lot given the intrinsic site and soil characteristics of the study site. The following sections provide an overview of suitable systems at the subject land with general advice about sizing and design considerations, and their justification for selection.

Buffer Distances and Land Application Area Siting

0,

As a general rule, future land application areas shall be sited so that:

- Where practical, they are exposed to prevailing winds and not shaded from sunlight, or are placed where nearby plants can help evapotranspiration of the effluent;
- They do not affect, or are not affected by and comply with requirements for setback distances from buildings, property boundaries, retaining walls and embankments; and
- Sufficient setbacks from surface water buffer distances are provided to prevent human contact, maintain public amenity and protect sensitive environments.

These principles will be required to inform land application area siting as will the prescribed setbacks within Publication 891.4 Victorian Code of Practice Onsite Wastewater Management July 2016.

The nominated land application area shown at Appendix B provides CoP compliant surface water setbacks.

Theoretical Wastewater Flow and Organic Material Loading



leand

Table 7 Indicative Design Daily Wastewater Flowrate and Organic Material Loading Rate Calculations

	Calculation Input	Notes 🔬 🔊 👌			
No. Bedrooms	4				
Calculated occupancy	5	As per CoP			
Design hydraulic flow	180 (standard water fixtures)	As per CoP			
rates (L/person/day)	150 (water saving fixtures)	100.00			
	0,00				
Daily wastewater flow	900 (standard water fixtures) 🔗	Calculated as per CoP			
rate [*]	750 (standard water fixtures)				
Organic material	60 8 61 40	As per CoP			
loading design rates	AND CONTRACTOR	0			
(g BOD / Person / day)	e die un chit				
Total Organic Material	300 20 2	Calculated as per CoP			
Loading Design Rate	all a start				
(g BOD / day)	CONTRACTION OF THE STREET				
	ATT A C US is				
*Design hydraulic flow rate and organic material design rate calculated in accordance with EPA publication 891.4					

Septic Tank Capacity

Pursuant to Table J1 of AS/NZS 1547:2012, the minimum operational capacity for an all-waste septic tank in this instance is recommended to be:

3500L (4 Bedroom / Design Flow1000-1400 l/day)

This capacity provides for sludge storage capacity providing for a maximum interval prior to desludging / pump out of 5 years (based on scum and sludge accumulation rates in AS/NZS 1547:2012).

Treatment and Land Application Options

Appendix K of AS/NZS 1547:2012 provides guidance on system selection. It summarizes common site and soil constraints and provides advice on land application systems that are best suited to the prevailing conditions. As a general rule, the more severe and numerous the constraints the fewer options, the riskier the system and greater maintenance and installation costs.

AS/NZS 1547:2012 requires, inter alia, the selection of the land application system to take into account:

(a) The volume of wastewater produced;

(b) The quality of the effluent discharging from the wastewater treatment unit;

(c) The nature of the soil profile and resulting soil category;

(d) The DLR/DIR associated with the soil category, (based on best available knowledge of the LTAR);

Land Capability Assessment 125 Baddaginnie-Benalla Road Benalla

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(e) The required spacing between trenches/beds/irrigation lines or sprays;

- (f) Surface water and groundwater levels and movements; and
- (g) Local climate.

The chief constraint at the study site is relatively low-permeability Category 6a subsoils and potentially address address as set out ind a abo dispersive subsoils. Table K2 of AS/NZS 1547:2012 makes the following recommendations to address ⊘ and mitigate these constraints:

- Employ a larger application area;
- Reduce wastewater flow using water-saving devices;
- Dose effluent so wet the soil more than once a day;
- Place soil of good permeability within land application area;
- Install when soils are dry or only slightly moist;
- Avoid heavy equipment on application area when soils are moist or wet;
- Avoid smearing sides and bottoms of trenches and beds;
- Minimise domestic water use;
- . Minimise discharge of sodium salts to application area:
- 50% . Alternate between different parts of the land application area.
- Apply Gypsum to receiving soil (min 1kg/m2) to all disturbed soil surface areas;
- Avoid construction during wet weather
- Fill and close any trenches as required and cover with good topsoil as soon as possible;
- Construct interceptor bunds and drains to divert surface run-on and subsurface seepage around the land application area;
- Use water loving plants within the land application area;
- Import soil to raise ground level; and
- Avoid soaps and detergents with high sodium content.

Primary or secondary treatment would be suitable treatment options at the site however given the low Ksat, dispersive subsoils and shallow water table consideration should be given to secondary treatment of wastewater via an Aerated Wastewater Treatment System (AWTS). On-site wastewater disposal systems designed, constructed, operated and maintained in accordance with the recommendations of AS/NZS 1547 2012 with appropriate regard to the site constraints is unlikely to impact on the beneficial use of surface waters and groundwater in the area.

Land Application Area Sizing Calculations

Primary or Secondary Treatment - Subsurface Irrigation

Within the proposed lot subsurface irrigation would be an appropriate land application method, particularly given the Category 6a subsoils. The preferred approach to calculate subsurface irrigation area land application area sizing is to undertake a water and nutrient balance calculation using AS/NZS 1547:2012. This method takes into account rainfall, evaporation and soil porosity to calculate the appropriate land application area.

The water balance seeks to find the minimum disposal area for a given wastewater discharge rate in this instance. The CoP indicates that the appropriate Design Irrigation Rate (DIR) as being 3mm / day in the Category 5b subsoils. Water and nutrient balance also assumes 30mg/litre N in the effluent, a denitrification rate of 20%, with N uptake of 220 kg/ha/year for a pasture comprising a rye/clover mix and sequential zoned dosing of the irrigation area, providing a conservative estimate of the nitrogen content in the deep seepage and lateral flow.

Without taking into account further expected denitrification below the root zone and in the groundwater (reported to be in the vicinity of 80%), denitrification in the lateral flow (external to the irrigation areas but within the curtilage of the allotment) and plant uptake in the lateral flow, the area required for Nitrogen uptake is shown in Table 8 and Appendix D using 9th decile wet year rainfall from

his document in Planning and the Planning document



the nearby Benalla weather station within the Category 6a subsoils. A land application area of this size should provide a sustainable land application area with no surface discharge in the 9th decile wet year and adequate on-site attenuation of nutrients.

		10 - 01 - 01
Table 8:	4 Bedroc	om Dwelling
Area for Nitogen Uptake^	Standard Fixtures	Water Saving Fixtures
Land Application Area	620m ²	510 m²
Area for Nitrogen Uptake	358 m²	299 m ³

^ Using water balance using Code of Practice hydraulic load, 9th decile wet year, Category 6a soll

Conclusion and Recommendatio

The results of this study have concluded the following:

- The subject land is sufficiently clear of environmental constraints to assume successful on-site domestic wastewater management. Surface and ground waters should not be impacted if CoP setbacks and are applied and AS/NZS 1547:2012 design recommendations adopted. The statutory setbacks have considerable in-built redundancy. CoP ground and surface water setbacks can be achieved utilising secondary wastewater treatment.
- The lot size lot size is substantially larger than the indicative land application area sizing calculated by this study, thereby supporting the notion that all wastewater should be able to be treated and retained within the bounds of the lot. Using 9th decile wet year rainfall, the calculations of this report suggest an indicative subsurface irrigation land application area of 620 m2 (standard water fixtures) is likely to be appropriate for a future 4-bedroom dwelling within the Category 6a subsoils observed at the site.

 y Ga suk
 y/VZS 1547:2012 provides site constraints and serve to site limitations may be overc advice though the site-spereability subsoils can be with AS/NZS 1547:2012; and
 The development can or guidelines of the AS/NZS 1547:2012 provides system selection and design modifications that cater for specific site constraints and serve to reduce risk to an acceptable level in such situations. Many inherent site limitations may be overcome by applying AS/NZS 1547:2012 system selection and design advice though the site-specific land capability assessment process. The relatively low permeability subsoils can be addressed via system design and management in accordance

The development can occur in a manner that is consistent with the requirements and decision guidelines of the Benalla Planning Scheme.



Key Site Constraints and Recommended Design Response

As identified and discussed in this report, the chief constraints at the subject land is:

Low permeability Category 6a subsoils.

Pursuant to Table K2 of AS/NZS 1547/2012 the following are recommended to address mitigate this constraint:

- Reduce wastewater flow using water-saving devices; 0
- Irrigation systems designed using water balance (Appendix D); 0
- Dose effluent so as to wet the soil more than once a day; 0
- Placement of soil of good permeability around LAA; 0
- Install when soils are dry or slightly moist;
- Avoid heavy equipment on application area when soils are moist or wet; 0
- Avoid smearing sides and bottoms of trenches and beds, 0
- Minimise domestic water use; 0
- Minimise discharge of sodium salts to application area; and 0
- Alternate application between different parts of the land application area. 0

Potentially dispersive (High ESP) soils

High exchangeable sodium cation (ESP) rating suggest that the subsoil is susceptible to dispersion and that soil management should include measures to reduce soil dispersion. Pursuant to Table K2 of AS/NZS 1547/2012 the following are recommended to address mitigate this constraint:

- Avoid smearing bottoms of trenches and beds;
- Fill and close trenches as required and cover with good topsoil as soon as possible;
- Avoids soaps and detergents with high sodium content;
- Minimise discharges containing sodium salts;
- Apply Gypsum to receiving soil (min 1kg/m2) to all disturbed soil surface areas; and
- Avoid construction during wet weather.

Shallow Water Table

Pursuant to Table K2 of AS/NZS 1547/2012 the following are recommended to address mitigate

- Employ a larger land application area;
- Reduce Design Loading Rate;
- Import soil to raise ground surface level;
- Select dry or slightly moist conditions for installation;
- Minimise water use; and
- Minimise pedestrian traffic on land application area.

Primary and Secondary Treatment

Primary or secondary treatment would be suitable treatment options at the site however given the low Ksat, dispersive subsoils and shallow water table consideration should be given to secondary treatment of wastewater via an Aerated Wastewater Treatment System (AWTS). On-site wastewater disposal systems designed, constructed, operated and maintained in accordance with the recommendations of AS/NZS 1547:2012 with appropriate regard to the site constraints is unlikely to impact on the beneficial use of surface waters and groundwater in the area.



System Management Recommendations

Reserve Areas

Although reserve areas are not required for subsurface irrigation by the *CoP* they are nevertheless recommended as they provide an additional safety measure. A reserve area of 100% of the design area should be considered as part of the risk management process to be available at the site for expansion, for resting of the land application system, or for duplication of the land application system if other circumstances require this at some future time. The reserve area needs to be protected from any development that would prevent it being used in the future.

Soil Renovation

To improve soil structure and improve the stability of peds after receiving saline wastewater, gypsum application is recommended. Gypsum may be broadcast over the land application area at a rate of 1kg/m2 and can be rebroadcast over the land application area at the same rate at a recurrence interval of 5 years.

Load Balancing

A load balancing mechanism enables short-term storage and sustainable flows to the distribution area over extended time. Surge flows are possible due to special events or gatherings and such situations can cause the system may become overwhelmed for a period. This potential problem can be eliminated by installing a plant with a load balancing facility (or equivalent function) which enables short-term storage and sustainable flows to the distribution area over extended time. Another benefit of the load balancing facility is that it can also provide temporary storage should the plant fail or if there is a power outage.

As Constructed Plans

Upon completion of system installation, 'as constructed' plans should be provided to Council and kept on file.

Zone Dosing

This document Planning docume Future land application areas should be irrigated sequentially by zones to promote the creation of alternating and transient aerobic and anaerobic soil conditions. The nominated indicative site land application area is sized conservatively for nitrogen attenuation, using pasture grass (rye/clover mix), which has a nitrogen uptake of 220 kg/ha/year. A benefit of zoned dosing is that it will increase the efficiency of the land application area for removing nitrogen from the soil.

The principle risk of undersized land application area is that they are at risk of becoming anaerobic for long periods, with the risk of microbial build-up. Microbial build-up leads to secretion of microbial polysaccharides, which cover soil particles and restrict the ability of the soil to absorb nutrients and ultimately attenuate pathogens. Over time polysaccharides can coat the interior of pipes and block drainage holes if drainage is slow due to an overloaded land application area. This in turn can lead to effluent surcharge from the ends of the drainage pipes, forming preferential flow paths through overlying soil and draining to nearby surface waters. Alternating aerobic and anaerobic conditions created by zoned dosing assists in the prevention of the build-up of microbial polysaccharides, enhancing effluent renovation.

Pressure Compensated Subsurface Disposal

Pressure compensated subsurface disposal is recommended by this study. This system delivers effluent directly into the soil and for a surface flow containing effluent to occur, the effluent has to rise against gravity, through at least 150mm of soil. To ensure proper functioning there is a requirement for the pressure compensated distribution network to be placed parallel to contours and/or horizontal for even effluent distribution.



Stormwater Control

Waste water systems should be protected from rainfall run-off using methods such as the installation and use of bunds, cut-off drains, or improved surface drainage to prevent systems from hydraulic overloading. In addition, the land application system shall be shaped to shed rainfall.

Water Reducing Fixtures

It is recommended that future residences within the subject land be fitted with full water-reduction fixtures including the combined use of reduced flush toilets, shower-flow restrictors, aerator faucets, front-load washing machines and flow/pressure control valves on all water-use outlets.

Land use activity

Activities within the land application areas such as recreation activities, or grazing animals shall be controlled or prohibited so that soil compaction or interference with the function of the land application system is minimised and people avoid potential contact with effluent residues.

Unless allowed for in the design, future land application areas shall not:

- Be paved or sealed;
- Be subject to vehicular traffic (other than a pedestrian-controlled lawnmower);
- Be subject to regular foot traffic such as pathways;
- Have structures or buildings erected on it.

With regard to the land application system the following are also recommended:

- Regularly mowing of vegetation within the land application area;
- Heavy equipment should be avoided on LAA when soils are moist or wet;
- nit system the ion within the la be avoided on LAA in aintenance of the tre commendations. The operation and maintenance of the treatment and disposal system in accordance with



References

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Jns. Standards Australia / Standards New Zealand (2012). AS/NZS 1547:2012 Onsite Domestic Wastewater



Appendix A - Site Photos





View to the north east across study area



View to the south across study area



Appendix B – Site Plan



Notes

Not to scale. For setback distances refer to EPA Publication 891.4.

Disclaimer: Due regard has been made to undertake all aspects of this study in accordance with the requirements of best practice and relevant standards. LAA calculations have been made with due regard to AS/NZS1547:2012 and whilst the findings represent a reasonable interpretation of site conditions. It does not indicate that these findings represent the actual state of the site at all points. The complex interactions between the soil, climate, topography and wastewater mean that there is no one correct answer and the nominated results should be viewed in this context. The paucity specific evaporation data is a limiting factor with regard to LAA calculations GEODIAN Geoscience + Planning nominated results should be viewed in this context. The paucity of

EXECUTIVE SUMMARY

Indicative Land Application Design Recommendations – 4 Bedroom Dwelling							
Treatment Standard	Septic Tank Capacity (Litres)	Land Application Method	Construction Requirements (Relevant AS/NZS 1547/2012 Construction Diagram)	Calculated Length (m)	Indicative LAA Area (m ²)		
Primary or Secondary Treatment (AWTS or Sand Filter)	3500L	Subsurface irrigation*	М1	620 m² (St 510 m² (Wat	andard Fixtures) er Saving Fixtures)		

Warning: locate underground services prior to construction





Appendix C – Soil Excavation Logs

GEO Geoscience + PI	olan			Coess as By taking all
Horizon	Depth mm	Borehole 1	Borehole 2	
A1	~ 100	Dark Brown	DarkBrown	
		Loam		
		Moderately Pedal	Moderately Pedal	
		Moist	Moist	
		~2% Coarse	~2% Coarse	
		Fragments O	Fragments	
A2	~ 100 - ~200	Brown	Brown	
		Clay Loam	Clay Loam	
		Moderately Pedal	Moderately Pedal	
		Moist	Moist	
	2	~2% Coarse	~2% Coarse	
		Fragments	Fragments	
B1	~200-~500	Brownish Red	Brownish Red	
	6 8	Church Clay	Light Clay	
	il in the	Strongly Pedal	Strongly Pedal	
	CON COL CO	NIOIST	IVIOIST	
-05	11, 00, 11	Fragmonts	2% Codise	
P2 0	~=00 ~1000	Poddich Brown	Poddich Brown	
DE	500 - 1000	Modium Clay	Modium Clay	
in the sille	Cr. O.	Strongly Dodal	Strongly Dodal	
of the st		Moist	Strongly Peual	
N. 2. V.	all	~2% Coarso	~2% Coarso	
Shi an an		Z% COdise	Z% COdise	
A RESE		riagilients	Flagments	
CUT ACT				
and				



Appendix D – Water and Nitrogen Balance 9th Decile Wet Year – Standard Fixtures

Geoplan with permission from Paul Williams and Associates WATER/NITROGEN BALANCE (20/30 irrigation): 4BR dwelling with no wet month storage Rainfall Station: Benalla Evaporation Station: BoM

part. part. TEM. UNIT iii JAN FEB MAR APR MAY JUN AUG SEP OCT NOV DEC YEAA Bays in month: iii J 0 J YEAA 30 31 30 31 30 31 30 31 30 31 30 31 30 31 30 31 30 31 30 31 30 31 30 31 30 31 30 31 30 31 30 31 30 31 30<	punt: punt: Term form for the set of the se	Data	Benalla Eab 22											2	50	4 6	SCV.
IteM UNII JAN PEB Model APR Model JOL AUG SEP UC NUV UEC Tread Bays in month: mm A 280 175 150 80 401 301 31 31 30	Libb ONI John John Peak More Nov John John Add Bale Out More Nov John John Add Bale Table Eragentinto (Mae) mm A 201 171 150 80 40 30	Date.	100-22					400					050	Sour (<u>0</u> .	SX	VEAD
Evaporation (Mean) mm A 250 175 150 80 40 30 30 50 80 425 175 200 1385 Effective rainfal mm 82 38 39 59 53 48 52 75 66 35 29 44 56 67 997 Effective rainfal mm 82 38 109 98 109 105 109 102 122 50 70 66 35 60 70 96 55 Vegotaraiprization(VAu) mm C1 100 70 66 45 63 102 130 127 135 1236 Vegotaraiprization(VAu) mm C2 170 129 0 <td< td=""><td>Evolution (Mean) mm A 250 175 190 00 40 30 30 50 MB 125 175 200 1388 Effector anrind mm B1 84 49 74 66 60 61 84 83 80 60 797 Effector anrind mm B2 83 99 53 44 52 75 66 33 28 46 44 <</td><td>Days in month:</td><td>UNIT</td><td># D</td><td>JAN 31</td><td>28</td><td>31</td><td>30 30</td><td>31</td><td>30</td><td>31</td><td>31</td><td>30</td><td>31</td><td>30</td><td>31</td><td>365</td></td<>	Evolution (Mean) mm A 250 175 190 00 40 30 30 50 MB 125 175 200 1388 Effector anrind mm B1 84 49 74 66 60 61 84 83 80 60 797 Effector anrind mm B2 83 99 53 44 52 75 66 33 28 46 44 <	Days in month:	UNIT	# D	JAN 31	28	31	30 30	31	30	31	31	30	31	30	31	365
Tradinal (Str Duck wite year algustio) mm 62 44 63 60 <td>Influidur annu yeu algonolo, m bi bi< bi<<!--</td--><td>Evaporation (Mean)</td><td>mm</td><td>A</td><td>250</td><td>175</td><td>150</td><td>80</td><td>40</td><td>30</td><td>30</td><td>50</td><td>80</td><td>125</td><td>175</td><td>200</td><td>1385</td></td>	Influidur annu yeu algonolo, m bi bi< bi< </td <td>Evaporation (Mean)</td> <td>mm</td> <td>A</td> <td>250</td> <td>175</td> <td>150</td> <td>80</td> <td>40</td> <td>30</td> <td>30</td> <td>50</td> <td>80</td> <td>125</td> <td>175</td> <td>200</td> <td>1385</td>	Evaporation (Mean)	mm	A	250	175	150	80	40	30	30	50	80	125	175	200	1385
Peak seepage Los ¹ mm B3 109 98 109 105 109 109 105 109 109 105 107 106 106 106 106	Personspan Loss Imm B3 199 99 105 109 109 105 100 100 105 109 105 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 1	Effective rainfall	/ mm mm	B1 B2	48	49	59	53	48	52	94 75	66	35	29	48	67 54	596
Levaporation (XA) mm C1 100 70 60 32 16 12 12 20 32 50 70 80 554 Waste Loading(CH3B-B2) mm C2 170 129 109 109 44 77 65 45 63 102 130 127 135 123 155 123 123 155 123 123 155 123 123 155 123 123 155 127 135 123 123 130 127 135 123 123 130 127 135 123 130 127 135 123 130 127 135 123 130 127 135 123 130 127 135 123 130 127 135 130 173 144 145 144 145 144 145 133 130 130 123 130 130 130 130 130	Livesportation (CMA) mm C1 100 70 60 32 16 12 12 20 32 50 70 80 554 Net accaling(CMA) mm C1 100 0	Peak seepage Loss ¹	mm	B3	109	98	109	105	109	105	109	109	105	(109	105	109	1278
Intervation magon Intervation	Interview Interview <t< td=""><td>Evapotranspiration(IXA) Waste Loadino(C1+R3-R2)</td><td>mm</td><td>C1 C2</td><td>100</td><td>70</td><td>60 109</td><td>32 84</td><td>16 77</td><td>12</td><td>45</td><td>63</td><td>102</td><td>50 130</td><td>70</td><td>80 135</td><td>554 1236</td></t<>	Evapotranspiration(IXA) Waste Loadino(C1+R3-R2)	mm	C1 C2	100	70	60 109	32 84	16 77	12	45	63	102	50 130	70	80 135	554 1236
International internatintereal international international international inte	L(100.B48 txisgion arss(10))) E P	Net evaporation from lagoons	L	NL	0	0	0	0	0	0	R	0	50	20.	0	0	0
L L E C2000 21900	Lindia Hassistement L E L/100/L L/100/L <t< td=""><td>(10(0.8A-B1xlagoon area(ha)))</td><td>l</td><td>-</td><td>27000</td><td>25200</td><td>27000</td><td>27000</td><td>27000</td><td>27000</td><td>27000</td><td>27000</td><td>27000</td><td>27000</td><td>27000</td><td>27000</td><td>339500</td></t<>	(10(0.8A-B1xlagoon area(ha)))	l	-	27000	25200	27000	27000	27000	27000	27000	27000	27000	27000	27000	27000	339500
Irrigation Area(E/C2)annual. m ² G Insertion G Insertion G	Irrigation Area (E/C2)annual. m ² G Integration Area (E/C2)annual. m ² G Integration Area (E/C2)annual. m ³ Integration Area (E/C2)annual. Integration Area (E/C2)annual. Integration Area (E/C2)Area (E/C)Area (E/C2)Area (E/C2)Area (E/C)Area (E/C)Area (E/C)Area (E/C)Area (E/C)Area	Total Irrigation Water(E-NL)/G	mm	F	2/900	25200	2/900	2/000	45	27000	2/900	45	27000	45	44	45	530
Surcharge mm H -125 -88 -64 -41 -32 -21 0 -18 -58 -83 -90 0 Actual seepage loss nm J -17 10 44 64 77 54 108 91 47 24 22 19 588 Direct Crop Coefficient: I 0.4	Surcharge mm H -125 -88 -64 41 -32 -21 0 -18 -68 -85 -83 09 0 Actual seegale biss mm H -12 0.4 <t< td=""><td>Irrigation Area(E/C2)annual.</td><td>m²</td><td>G</td><td></td><td></td><td></td><td></td><td>(</td><td></td><td></td><td>5</td><td>20.</td><td></td><td></td><td></td><td>620</td></t<>	Irrigation Area(E/C2)annual.	m²	G					(5	20.				620
Direct Crog Coefficient: 1 0.4	Drect Cro2 Conficient: 1 0.4	Surcharge Actual seepage loss	mm	H	-125	-88	-64 44	-41	-32	-21	108	-18	-58 47	-85	-83	-90 19	0
Rainfall Retained: 80 % K 1. Seepage loss (peak) equals deep seepage plus lateral flow:8mm(_10% ksat) Wastewater(Irrigation): 900 L M 0.7 0.7 0.8 0.4	I Asergage loss (peak) N L Lagoon Area: 0 hs L Watewate(ringaton): 900 L M 0.7 0.7 0.6 0.5 0.45 0.4	Direct Crop Coefficient:		1	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	Shade:
Lagon Area J in L Wastewater(irrigation): 900 L M 0.7 0.7 0.7 0.6 0.5 0.45 0.45 0.55 0.66 0.7 0.7 Pasture: Seepage Loss (Peak): 3.5 mm N 0.4 0.6 0.6 0.6 0.6<	Lagoon Vede. 0 <t< td=""><td>Rainfall Retained:</td><td>80 %</td><td>K</td><td></td><td>1. Seepag</td><td>je loss (pea</td><td>k) equals de</td><td>ep seepag</td><td>plus lateral</td><td>flow:8mm</td><td><10% ksat)</td><td></td><td></td><td></td><td></td><td></td></t<>	Rainfall Retained:	80 %	K		1. Seepag	je loss (pea	k) equals de	ep seepag	plus lateral	flow:8mm	<10% ksat)					
Seepage Loss (Peak): 3.5 mm N 0.4	Sepage Los (Peak): 3.5 mm N 0.4	Wastewater(Irrigation):	900 L	M	0.7	0.7	0.7	0.6	0.5	6/45	<u>60.4</u>	0.45	0.55	0.65	0.7	0.7	Pasture:
Irrig Area(No storage): bz/l m P 2 0.8	Img nyka(kyš storáge): BZÚ m* P2 0.8 0.8 0.9 0.0.8 0.8 </td <td>Seepage Loss (Peak):</td> <td>3.5 mm</td> <td>N</td> <td>0.4</td> <td>Shade:</td>	Seepage Loss (Peak):	3.5 mm	N	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	Shade:
Nitrogen in Effluent: 30 mg/L R Dentrification Rate: 20 % S Plant Uptake: 200 % S Plant Uptake: 220 kg/ha/yr T Mean daily seepage loss: 1.6 mm U Annual N load: 7.88 kg/yr V Area for N uptake: 358 m² W Application Rate: 2.5 mm K 265.8843 200 5.77.60 520.40 474300 403000 280860 631160 804140 787400 836380	Nitrogen in Effluent: 30 mg/L R Dentrification Rate: 20 % S Plant Uptake: 220 kg/ha/yr T Mean daily seegage loss: 1.6 mm U Soecles: Kg/ha/yr pH Annual N koad: 7.88 kg/yr V Area for N uptake: 335 m^* W Application Rate: 2.5 mm K 220 6.1-7.9 Clover 180 6.1-6.9 Cumnos 90 6.1-6.9 Application Rate: 2.5 mm K 220 6.1-7.9 Clover 180 6.1-6.9 Cumnos 90 5.6-6.9 Cumn'a 220 6.1-7.9 Area for N uptake: 2.5 mm K 220 Sorghum 90 5.6-6.9 Poplars 115 5.8-8.5 265.8843 1056420 798560 677660 522040 474300 403000 280860 389980 631160 804140 787400 836380	Application Rate:	2.0 mm	Q 2	0.8	0.8	0.7	0.8	0.8	0.6	0.8	0.8	0.8	0.8	0.8	0.8	MAV:
Dentrification Rate: 20 % S Plant Uptake: 220 kg/ha/yr T Mean daily seepage loss: 1.6 mm U Annual N bad: 7.88 kg/yr V Annual N bad: 2.5 mm Kg/ka/se 220 6.1-7.9 Ze55.8843 2.5 mm Kg/clove 220 5.1-7.9 Ze55.8843 1054620 798560 677660 522040 474300 403000 280860 389980 631160 804140 787400 836380	Dentrification Rate: 20 % S Plant Uptake: 220 kg/ha/yr T Man daily seepage loss: 1.6 mm U Annual N load: 7.88 kg/r V Area for N uptake: 338 m ² W Application Rate: 2.5 mm x 105-66.9 Couch grass 180 6.1-6.9 Euroshyptis 9.0 5.6-6.8 Couch grass 200 6.1-7.9 Lucerine 2.5 mm 2.5 mm 2.00 6.1-7.9 Lucerine 2.20 5.7-5 P radiata 150 5.6-8.9 2005 2.5 m x 2.00 5.204.0 403020 2.80-8.9 Poplars 115 5.6-8.5 2005 2.5 mm x 2.00 5.204.0 474300 403000 280860 631160 804140 787400 836380	Nitrogen in Effluent:	30 mg/L	R			10	$\overline{\mathcal{O}}$	2	2	NITROG	EN UPTAKE	:				
Plant Uptake: 220 Kg/kg/rass 200 5.6-8.5 Bern grass 100 5.6-9.9 Grapes 200 6.1-7.9 Mean daily seepage loss: 1.6 mm U U 0.5-8.5 Bern grass 200 6.1-7.9 Clover 180 6.1-6.9 Lours 90 6.6-6.9 Couch grass 280 6.1-6.9 Lours 105 6.6-6.9 Couch grass 280 6.1-6.9 Counria 220 6.1-7.9 Clover 180 6.1-6.9 Counria 105 6.6-6.9 Ryeclover 220 Sorghum 90 5.6-6.9 Poplars 115 5.6-8.5 265.8843 1054920 798560 677660 522040 474300 403000 280860 38	Plant day seepage los: 1.6 mm U Annual N load: 7.88 kg/yr V Area for N uptake: 359 m² W Application Rate: 2.5 mm V 265.8843 1 105/4620 617660 522040 474300 403000 280860 53160 804140 787400 836380	Denitrification Rate:	20 %	s		Species.	<u></u>	Kg/ha.yr	RH	Species:		Kg/ha.yr	pH	Species:		Kg/ha.yr	pH
Annual N load: 7.88 kg/yr V Area for N uptake: 358 m ² W Application Rate: 2.5 mm K 265.8843 1 1054620 798560 677660 522040 474300 403000 280860 389980 631160 804140 787400 836380	Annual N load: 7.88 kg/yr V Area for N uptake: 358 m ² W Application Rate: 2.5 mm K 265.8843 1054220 798568 677660 522040 474300 403000 280860 389980 631160 804140 787400 836380	Plant Uptake: Mean daily seepage loss:	220 kg/ha/yr 1.6 mm	U		Eucalyptu	s .	200	5.6-6.9	Bent grass Couch gra	\$\$	170 280	5.6-6.9 6.1-6.9	Grapes		200	0 6.1-7.9 0 6.1-6.9
Area for N uptake: 358 m² W Tell fescue (100-320) 6.1-6.9 Buffalo (soft) 150-320 5.5-7.5 P radiata 150 5.6-6.9 Application Rate: 2.5 mm X Rye/clover 220 Sorghum 90 5.6-6.9 Poplars 115 5.6-8.5 265.8843 1 1054620 798560 677660 522040 474300 403000 280860 389980 631160 804140 787400 836380	Area for N uptake: 358 m² W Tellfescue (100-320) 6.1-6.9 Buffalo (soft) 150-320 5.5-7.5 P radiata 150 5.6-6.9 Application Rate: 2.5 mm X Ryaclover 220 Sorghum 90 5.6-6.9 Poplars 115 5.6-8.5 265.8843 1054920 798560 677660 522040 474300 403000 280860 389980 631160 804140 787400 836380	Annual N load:	7.88 kg/yr	V	3	Lucerne	0,	220	6.1-7.9	Clover		180	6.1-6.9	C cunn'a		220	6.1-7.9
265.8843 1054820 798560 677660 522040 474300 403000 280860 389980 631160 804140 787400 836380	265.8843 265.8843 1054020 798560 677660 522040 474300 403000 280860 389980 631160 804140 787400 836380 1054020 798560 677660 522040 474300 403000 280860 389980 631160 804140 787400 836380 1054020 798560 677660 522040 474300 403000 280860 389980 631160 804140 787400 836380 1054020 798560 677660 522040 474300 403000 280860 389980 631160 804140 787400 836380 1054020 798560 677660 522040 474300 403000 280860 389980 631160 804140 787400 836380 1054020 798560 677660 522040 474300 403000 280860 389980 631160 804140 787400 836380 1054020 798560 677660 522040 474300 403000 280860 389980 631160 804140 787400 836380 1054020 798560 677660 522040 474300 403000 280860 389980 631160 804140 787400 836380 1054020 798560 677660 522040 474300 403000 280860 389980 631160 804140 787400 836380	Area for N uptake: Application Rate:	358 m ²	W	e s	Tal fescu Rve/clove	e	150-320	6.1-6.9	Buffalo (so Sorghum	ft)	150-320	5.5-7.5	P radiata Poplars		150	5.6-6.9
	anthas been on the on the tiputte	, cc	ied and	Su.	1054820	798560	677660	522040	474300	403000	280860	389980	631160	804140	787400	836380]



9th Decile Wet Year – Water Saving Fixtures

Geoplan with permission from Paul Williams and Associates WATER/NITROGEN BALANCE (20/30 irrigation): 4BR dwelling with no wet month storage

Rainan S	,
Location:	
Date:	

Days in month: D D 31 28 31 30 31 31 30 30 31 31 30 31 31 30 31 31 30 31 31 30 31 31 30 31 31 30 31 31 30 31 31 31	ІТЕМ		UNIT	#	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPC	OCT	O NOV	SX DEC	YEAR
Participant mm B1 48 49 74 66 95 95 92 44 96 67 97 Effective rainfal mm B2 38 98 69 105 108 105 108 105 108 105 108 105 108 105 108 105 108 105 108 105 108 105 108 105 108 105 108 105 108 105 108 105 10 100 10 100 10 100	Days in month: Evaporation (Mean)		mm	D	31 250	28	31 150	30 80	31 40	30 30	31 30	31 50	30	31	30	31 200	365 1385
Effective rainfal mm R2 38 39 59 53 44 55 75 66 55 22 66 65 66 66 60	Rainfall (9th Decile wet year adjusted)		mm	B1	48	49	74	66	60	65	94	82	44	36	60	67	997
Image constraint Image constraint <thimage constraint<="" th=""> <thimage constraint<="" t<="" td=""><td>Effective rainfall Peak seepage Loss¹</td><td></td><td>mm mm</td><td>B2 B3</td><td>38</td><td>39 98</td><td>59</td><td>53</td><td>48</td><td>52 105</td><td>75</td><td>66</td><td>35</td><td>29</td><td>48</td><td>54</td><td>596 1278</td></thimage></thimage>	Effective rainfall Peak seepage Loss ¹		mm mm	B2 B3	38	39 98	59	53	48	52 105	75	66	35	29	48	54	596 1278
Waste Landing (C1+B3-B2) mm C2 170 129 109 84 77 65 45 63 108 127 135 1238 Net vegotation from lagoons L NL 0	Evapotranspiration(IXA)		mm	C1	109	70	60	32	16	12	12	20	32	50	70	80	554
refer expansion rrom sagoons L NL U <t< td=""><td>Waste Loading(C1+B3-B2)</td><td></td><td>mm</td><td>C2</td><td>170</td><td>129</td><td>109</td><td>84</td><td>77</td><td>65</td><td>45</td><td>63</td><td>102</td><td>130</td><td>127</td><td>135</td><td>1236</td></t<>	Waste Loading(C1+B3-B2)		mm	C2	170	129	109	84	77	65	45	63	102	130	127	135	1236
Volume of Wastewater L E 23250 21000 23250 22500 23250	Net evaporation from lagoons (10(0.8A-B1xlagoon area(ha)))		L	NL	0	0	0	0	0	0	0 0	S. 3		0°	0	0	0
Total Imgation Water(ENLyG) mm F 46 41 46 44 46 44 46 57 ingation Arag(E(2)annual. mn H -125 -88 -64 40 -31 -21 0 -17 -58 -84 -48 -89 0 Actual seepage loss mm H -125 -88 -64 40 -31 -21 0 -17 -58 -84 -43 -89 0 Actual seepage loss mm J -16 10 45 65 -76 -84 -44 0.4	Volume of Wastewater		L	Е	23250	21000	23250	22500	23250	22500	23250	23250	22500	23250	22500	23250	273750
Surcharge mm H -125 -88 -64 -40 -31 -21 -58 -64 -83 -89 00 Actual seepage loss mm J -16 10 45 65 78 64 106 91 47 24 22 19 595 Direct Crop Configient: 1 0.4	Total Irrigation Water(E-NL)/G Irrigation Area(E/C2)annual		mm m ²	F	46	41	46	44	46	044	× 46	46	Notes -	46	44	46	537 510
Actual sepaga loss mm J -1.6 10 4.5 65 78 84 0.0 91 4.7 2.4 2.2 19 595 Direct Crop Coefficient: 1 0.4<	Surcharge		mm	н	-125	-88	-64	-40	-315	-21	0.0	-17	-58	-84	-83	-89	0
Date: 1 0.4 <td>Actual seepage loss</td> <td></td> <td>mm</td> <td>J</td> <td>-16</td> <td>10</td> <td>45</td> <td>65</td> <td>78</td> <td>84</td> <td>109</td> <td>91</td> <td>47</td> <td>24</td> <td>22</td> <td>19</td> <td>595 Sheeder</td>	Actual seepage loss		mm	J	-16	10	45	65	78	84	109	91	47	24	22	19	595 Sheeder
Lagon Area: 0 ha L CROP FACTOR Wastwater(trigation): 750 L M 0.7 0.7 0.6 0.5 0.45 0.4<	Rainfall Retained:	80	%	ĸ	0.4	1. Seepag	e loss (peal	k) equais de	ep seepage	0.4 plus lateral	flow:8mm (≥0.4 ×10% ksat)	0.4	0.4	0.4	0.4	Shade:
Wastewater(Imgaton): 750 L M 0.7 0.4	Lagoon Area:	0	ha	L						CROP	FACTOR						-
Irrig'n Area(No storage): 510 m² P2 0.8	vvastewater(Irrigation): Seepage Loss (Peak):	750	L mm	M N	0.7	0.7	0.7	0.6	0.5	0.45	-0.4	0.45	0.55	0.65	0.7	0.7	Pasture: Shade:
Application Rate: 2.0 mm Q 0.8 0.8 0.7 0.7 0.6 0.6 0.6 0.7 0.8 0.8 0.8 MAY: Ntrogen in Effuent: 30 mg/L R R Ntrogen in Effuent: 200 % S Ntrogen in Effuent: Ntrogen in Effective: Ntrogen in Effective: Ntrogen in Effectin: Ntrogen in Effictive:	Irrig'n Area(No storage):	510	m²	P2	0.8	0.8	C 0.8	0.8	-0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	Fescue:
Introduction Rate: 200 No	Application Rate:	2.0	mm ma/l	Q	0.8	0.8	0.7	0.7	0.6	2,0.6	0.6	0.6	0.7	0.8	0.8	0.8	MAV:
Plant Uptake: 220 kg/ha/yr T Mean daily seepage loss: 1.6 mm U Annual N load: 6.57 kg/yr V Area for N uptake: 299 m ² W Application Rate: 2.5 mm V 221.5702 221.5702 221.5702 657430 429420 390150 331500 231030 320790 519180 661470 647700 687990	Denitrification Rate:	20	%	s		Species:		Kg(ha.yr	Ha	Species:		Kg/ha.yr	pН	Species:		Kg/ha.yr	pН
Mean daily seepage loss: 1.8 mm U Annual N load: 6.57 kg/yr V Area for N uptake: 299 m ² W Application Rate: 2.5 mm V 221.5702 221.5702 Sorghum 90 5.6-6.9 Couch grass 2.80 6.1-6.9 Lemons 90 6.1-6.9	Plant Uptake:	220	kg/ha/yr	т	.0	Ryegrass	<u>XV .</u>	200	5.6-8.5	Bent grass		170	5.6-6.9	Grapes		200	6.1-7.9
Instruction Instruction <thinstruction< th=""> <thinstruction< th=""></thinstruction<></thinstruction<>	Mean daily seepage loss: Annual N load:	6.57	mm ka/vr		2	Eucalyptu	s'	90	5.6-6.9 6 1-7 9	Couch gras	SS	280	6.1-6.9	Lemons C cupp's		90	6.1-6.9
Application Rate: 2.5 mm Keyelower 220 Sorghum 90 5.6-6.9 Poplars 115 5.6-8.5 221.5702 865510 656880 557430 429420 390150 331500 231030 320790 519180 661470 647700 687990	Area for N uptake:	299	m²	w	ତଁ ଏ	Tal fescu	KY,	150-320	6.1-6.9	Buffalo (so	ft)	150-320	5.5-7.5	P radiata		150	5.6-6.9
221.5702 36/5376 656888 557430 429420 390150 331500 231030 320790 519180 661470 647700 687990 66/61470 647700 687990 66/61470 647700 687990	Application Rate:	2.5	mm	P¥-]	2.	Rye/clove	0 5	220)	Sorghum		90	5.6-6.9	Poplars		115	5.6-8.5
		221.5702	~ ~ ~	21	°.	<u>,</u> 0`.	0										
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Appendix E – Soil Laboratory Results

Nutrient Advantage	SO	IL ANA REPO	LYSIS RT	ASPAC	3King of S
Report Number: 754682				Sar	-06-
GEOPLAN PO BOX 92 TAWONGA STH VIC 3698			WOILD RECOGNISED ACCREDITATION	Report Authorised Paul Kennelly Laboratory Manager NATA Accredited Laboratory Number: (1958	
Sample Number: 030179004 Test Code: E75 Purchase Order No: SIMON HOLLIS Convert Name: GEOPLAN	Paddo Samp Samp	ock Name: BADDA le Name: BADDA le Depth: 0 to 60	GINNIE RD GINNIE RD cm	Date Sampled: 2-Feb-2024 Date Received: 12-Feb-2024 Date of Report: 19-Feb-2024	
Grower Name: GEOFLAN			<u> </u>		
Analyte	Result	Units	Method Code	Analyte Testing Period	
Available Potassium *	180	mg/kg	04-026-ICP8 · S	15/02/2024 to 16/02/2024	
Emerson Class ^	1	×0'	N A	19/02/2024 to 19/02/2024	
Soil Colour	Yellow-red		04-042-PHYS	19/02/2024 to 19/02/2024	
Soil Texture	Clay	(1, 0, 0)	04-042-PHYS	19/02/2024 to 19/02/2024	
pH (1:5 CaCl2)	5.1	S. KO. M	04-031-PH	15/02/2024 to 16/02/2024	
Liming Required t/ha pH 5.5 ^	0.0	Wha 🔊	04-047-PH_BUFFER	19/02/2024 to 19/02/2024	
Liming Required t/ha pH 6.0 ^	0.0	t/ha	04-047-PH_BUFFER	19/02/2024 to 19/02/2024	
Liming Required t/ha pH 6.5 ^	0.0	tina 🖉 🔧	04-047-PH_BUFFER	19/02/2024 to 19/02/2024	
Nitrate Nitrogen	5.0	mg/kg	04-063-FIA3	15/02/2024 to 16/02/2024	
Ammonium Nitrogen	< 2.9 O	, mg/kg	04-063-FIA3	15/02/2024 to 16/02/2024	
Potassium (Amm-acet.)	0.47	cmol(+)/kg	04-026-ICP8	15/02/2024 to 16/02/2024	
Calcium (Amm-acet.)	5.10	✓ ′ cmol(+)/kg	04-026-ICP8	15/02/2024 to 16/02/2024	
Magnesium (Amm-acet.)	(d:3 , C)	cmol(+)/kg	04-026-ICP8	15/02/2024 to 16/02/2024	
Sodium (Amm-acet.)	0.88	cmol(+)/kg	04-026-ICP8	15/02/2024 to 16/02/2024	
Aluminium (KCI)	. 21	mg/kg	04-027-ICP9	15/02/2024 to 16/02/2024	
Aluminium (KGI)	0.23	cmol(+)/kg	04-027-ICP9	15/02/2024 to 16/02/2024	
Cation Exclusinge Capacity (Amm-acet.)	11.0	cmol(+)/kg	04-026-ICP8	16/02/2024 to 16/02/2024	
Sodium % of cations	8.0	%	04-026-ICP8	16/02/2024 to 16/02/2024	
Aluminium % of Cations	2.1	%	04-026-ICP8	16/02/2024 to 16/02/2024	
Calcium/Magnesium Ratio	1.2		04-026-ICP8	15/02/2024 to 16/02/2024	
pH (1:5 Water)	6.8		04-031-PH	15/02/2024 to 16/02/2024	
Electrical Conductivity (1:5 water)	0.04	dS/m	04-031-PH	15/02/2024 to 16/02/2024	
Chloride	<10	mg/kg	04-063-FIA3	15/02/2024 to 16/02/2024	
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Page 1 of 2



Appendix F – Groundwater Report

	Groundwater Re	esource Repo
Groundwater catchment: Goulburn - Broken Depth to water table: < 5m Water table salinity (r	VICGRID94 Easting: ng/L): 1001 - 3500	2584597 Northing: 2548
Groundwater layers (Aquifers and Aquitards)	Depth below surface	Groundwater salinit (mg/L)
UTQA Upper Tertiary / Quaternary Aquifer layered clay, sands and silt	Control and Contro	501 - 1000
BSE Mesozoic and Palaeozoic Bedrock (basement) sedimentary (fractured rock): Sandstone, siltstone, mudstone shale. Igneous (fractured rock): includes volcanics, granites, granodiorites.		1001 - 3500
Groundwater management unit (GMU)	Depth below surface (m)	PCV (ML/yr)
BROKEN GMA BROKEN GMA BROKEN GMA BROKEN GMA A BROKEN GMA A A A A A A A A A A A A A	ALL	3,732

Land Management Plan



This docur

His document of the transfer o The aim of the business is to establish a property to facilitate the retraining of retired racehorses, to Passist in rehoming them into the equestrian industry as performance horses. The aim would be to have approximately 4 horses in training at any one time.

2) Summary of Land Management Issues - Erosion, salinity, pest plants and animals, wet areas, soil types, remnant vegetation, water courses;

The site has been very well maintained by the previous owner who has used the land for grazing cattle. The land is native grasses that has been supplemented with a clover/rye mix. There is little to no erosion or salinity issues due to a large number of mature eucalypts trees. There are some lower areas which have been improved to ensure adequate drainage to the property, this runs into One Mile Creek that is located on the neighboring property. Notably the property has Spiny Rush (Juncus Acutus) and Cape Weed (Arctotheca) present, on occasion rabbits have been sighted 3Pecifieo occasion rabbits have been sighted. 55 75

3) Description of how the land management issues will be addressed;

I plan to improve the property by following a strict management plan that will include improvement of pasture, removing the pest weeds and clearing the debris from the Eucalypts trees. The property will be fenced to ensure no overgrazing and to protect low-lying areas through the wetter months.

Fencing will be "Stallion Rail" which is essentially electrified post and rail.

The effluent disposal area will located at least 60 meters from the existing waterways which is in accordance with the EPA guidelines.

No native vegetation is proposed to be removed with additional plantings of approximately 50 semi mature Pyrus Calleryana (Ornamental Pear Capital) to act as a windbreak around the perimeter of the property.

- _

	the property.		·
	The property is current one large paddock with no intern	al fencing the propos	sed image shows the
	helow details which are planned	ar forfolling, the proper	
	- Horse Paddocks		
	Heree Arene		
	- Horse Arena		
	- Stables		
	- Horse Shelters		
	- Entrance Road		
	- Lane Ways		
	 Proposed dwelling site 		
	est at he do with		
	Activities/Actions	Proposed timeline	Proposed completion
	Install access gate/Driveway off Baddaginnie-Benalla Road	1 st July 2024	7 th July 2024
	Earthworks/Cut pads for Horse Arena/Stables/House site	1 st July 2024	14 th July 2024
	Revegetate with Pyrus Calleryana	Winter 2024	Spring 2024
	Install fencing for horse paddocks	Winter 2024	Spring 2024
6	Construct Horse Arena & Stables	Spring 2024	Summer 2024
is.	Construct Horse Shelters	Spring 2024	Summer 2025
1	Install internal roads	Summer 2025	Winter 2025
8	Construct Dwelling	Summer 2025	Winter 2025
×2	"Ingt		

Weed Control

Weed name	Control Measure	J	F	Μ	А	Μ	J	J	А	S	0	Ν	D
Cape Weed	Mow/Slash												
Cape Weed	Spray Herbicide											жС	2
Cape Weed	Dig Out										RO .	5	de la
Spiny Rush	Mow/Slash									21.	Č.	2	в
Spiny Rush	Spray Herbicide								. C	20	5.9	20	
Spiny Rush	Dig Out								<u>j</u>	K	. 0		

Spiny Rush	Dig Out							- O	X	. Ø		
Pest Animal Control												
Pest name	Control Measure	J	F	Μ	A	M J	$\mathbb{C}\mathcal{S}$	A	S	0	Ν	D
Rabbits	Contractor is engaged to monitor and eradicate which includes checking and filling rabbit burrows.	.0	0000 000000000000000000000000000000000				5 20. 20.					
Erosion Amelioration Measu	Erosion Amelioration Measures											
Activity/Actions	·10. :0; . N	$\sim 10^{\circ}$	5	Pror	posed t	imelin	e .	Prop	osed	com	oletio	n

Activity/Actions	Proposed timeline	Proposed completion
There is no erosion on the property due to careful	All year round	Ongoing
management which includes keeping stock numbers to no		
more than 6 horses however on average most likely 4.		
Horses are rotated to ensure paddocks are maintained with		
vegetation cover.		

vegetation cover.		
Acid Soil Amelioration Measures		
He Colling Me House		
Activity/Actions	Proposed timeline	Proposed completion
Spread Lime	Autumn every year	Ongoing
Spread Gypsum S	Autumn & Spring every year	Ongoing
Spread Fertilizer	Autumn every year	Ongoing

Water – Fencing off or protecting all water resources

Activity/Actions	Proposed timeline	Proposed completion
There are currently no dams on the property.	N/A	N/A

Property Management Planning – Proposed Farm Improvements

Activity/Actions		Proposed timeline	Proposed completion
Planting of Pyrus Calleryana, waterin	g until	Winter 2024	Ongoing
established			<u>ب</u>
Spreading of Lime & Fertilizer		Autumn every year	Ongoing O
Spreading of Gypsum		Autumn & Spring every year	Ongoing N R
Monitoring paddock vegetation/Rotat	ing stock	Ongoing	Ongoing N of of
Monitoring fences		Ongoing	Ongoing S
This document response of the document of the document response of the document of the documen		Purpose used to cum portion the strict of the strict of the providence of the strict of the providence of the strict of the stri	as set taktiviteo





TOWN PLANNING SUBMISSION Use and development of a dwelling in the Farming Zone.

At Crown Allotment 33 PTP586237, 125 Baddaginnie-Benalla Road, Benalla

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1. INTRODUCTION

This application proposes the use and development of land for the construction of a dwelling in association with for thoroughbred retaining facility for retired racehorses.

It is well known that retired racehorses' welfare poses a huge challenge to the racing industry, amid calls for a change across the board.

Last breeding season, around 14,000 thoroughbred foals hit the ground in Australia. Thousands are being retired each year and not all of them are adequately re-purposed. Whilst many successful female racehorses go on to have a breeding career, geldings and the slower runners are often exposed to racing's wastage threat.

An ABC program exposed the widespread slaughter of racehorses for pet food and human consumption in NSW and Queensland, which has led to increased scrutiny including public awareness of how the industry operates nationwide.

In Victoria, veterinarians will be sent to Victorian farms to euthanise retired racehorses to save them from being killed in abattoirs and knackeries, as part of the Victorian racing industry's response to ABC investigation that exposed cruel treatment of thoroughbreds.

The owner is passionate about providing support to ex-racehorses and is proposing to provide a facility where there is an opportunity for training and rehoming. The owner also competes nationally in show events, where she has retrained ex-racehorses.

The mission of the owner is to spread awareness about the range of possibilities the ex-horses can bring into the right person's life. These ex-racehorses are and can be used as top show or performance horses, companions, therapy horses or trail mounts. Many thoroughbreds are making the transition successfully and having a positive impact on people's lives.

The address is known as Crown Allotment 33 Section U, 125 Baddaginnie-Benalla Road, Benalla and totals approximately 4.12 hectares in area. The lot is not encumbered on title with any covenants or agreements.

The planning application is accompanied by various documents, including:

- Application form
- Elevations of proposed dwelling and shed
- Site Plan
- Planning Report
- Titles and Title Plan
- Land Capability Assessment

2. SUBJECT SITE & SURROUNDS

The subject site is located on the corner of Baddaginnie-Benalla Road and Golden Vale Road. It is irregular in shape and totals approximately 4.12 hectares in area.



The site is generally flat and contains remnant vegetation contained mainly along the western and southern boundary and also scattered throughout the site.

The immediate area is a mixture of some farming lots including some smaller allotments used as lifestyle properties and usually developed. The site is located less than 1 km from the outskirts of Benalla. The surrounding land is used for grazing and also horse enterprises





Figure 2: Aerial of Subject Site and Surrounding Area



Figure 3: Lot Layout (LASSI April 2024)

3. PROPOSAL

this

The application seeks permission for the use and development of a dwelling to oversee the retraining centre. The new proposed owner who wishes to purchase the land competes nationally in dressage and show jumping. It is intended the facility will also cater for ex-racehorses which is part of the rehoming program whilst seeking a permanent home.

The application proposes the development of a dwelling, horse arena and farm shed/stables.

The dwelling is a single storey with the following floor plan:

Master bedroom with ensuite & wir, 3 x bedrooms with bir, study, play room, store, kitchen, pantry, living, laundry dining, family, outdoor room, bathroom, powder room, alfresco, and double garage.

documer The dwelling will be constructed from face brickwork, weatherboard cladding and corrugated colorbond metal roof in 'wallaby' 'curfmint' and ' corrugated colorbond metal roof in 'wallaby', 'surfmist' and 'monument' colours.

The colorbond shed will be 12m wide and 20m long with a total height of 5.353m. A total of 10 windows will be provided on each bay on the east and west elevation, with a single entry door and 4m wide roller door provided on the north elevation.

The dwelling will be setback 93m from the southern boundary and 12m from the eastern boundary. Details are provided on the Site Plan, in regard, to setback distances of the proposed shedding, and effluent field location.





PLANNING PERMIT TRIGGERS

11- at 21. Clause 35.07-4 Farming Zone – Use and development of a dwelling



5. ZONES

5.1 **FARMING ZONE**

The purpose of the Farming Zone is:

- To implement the Municipal Planning Strategy and the Planning Policy Framework, • coò
- To provide for the use of land for agriculture.
- To encourage the retention of productive agricultural land. •
- bove and To ensure that non-agricultural uses, including dwellings, do not adversely affect the • use of land for agriculture.
- To encourage the retention of employment and population to support rural • communities.
- To encourage use and development of land based on comprehensive and sustainable land management practices and infrastructure provision.
- To provide for the use and development of land for the specific purposes identified in a schedule to this zone.



	REGIONAL PLANNING	
7. OTHI	ER PLANNING CONTROLS	
7.1 AREAS	S OF ABORIGINAL CULTURAL HERITAGE SENSTIVIITY	
Victoria	Department of Premier and Cabinet	0 200
Project Name:	Use	j.
Project Location:	: Baddaginnie-Benalla Road Benalla	
Date:	25-Apr-2024	
	QUESTION	
Question 1	Is the proposed activity , or all the proposed activities, exempt	
Answer:	ON THE BASIS OF THE ANSWERS YOU HAVE ENTERED	
	YOU ARE NOT REQUIRED BY THE REGULATIONS TO PREPARE A CULTURAL HERITAGE MANAGEMENT PLAN	
	FOR THIS PROJECT	
	This process list is for information purposes only; the result must not be relied upon by a statutory authority in deciding whether a cultural heritage management plan is required for a proposed activity.	



7.2 **BUSHFIRE PRONE AREA**



REGIONAL

PLANNING

8.

CLAUSE 02.01 CONTEXT

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This clause identifies Benalla Rural City covers an area of 2354 square kilometres, has a population of 14,020 (VIF 2019) and is situated in Victoria's north east approximately 180 kilometres from Melbourne. The urban centre of Benalla is the major city and supports a network of smaller towns including Baddaginnie, Goorambat, Devenish, Swanpool, Tatong, Thoona and Winton

Benalla Rural City is a diverse rural municipality based on the Broken River. It also includes fertile agricultural and along the Hollands Creek which is a major tributary to the Broken River.

The municipality is strategically located on the nationally significant Hume and Midland Highways and Melbourne to Sydney Railway. This convergence of transport routes means Benalla is a significant transport hub which is a major benefit to local industry.

The economy is focussed on Benalla's regional centre role, agricultural production, tourism and manufacturing. It is dominated by and manufacturing. It is dominated by employment in the manufacturing, retail trade, agriculture and health and community services sectors.

The Benalla Central Business District (CBD) serves a large rural hinterland and provides a wide range of higher order community services and facilities but faces strong competition from Shepparton and Wangaratta.

Figure 10: Bushfire Prone Area – Map



The municipality has a strong industrial base located to the north and east of Benalla. The industries are generally based on specialist manufacturing, processing of timber products, value adding to agricultural produce and providing a service base for the region.

The rural areas of the municipality are acknowledged for good soils and access to irrigation water. The major agricultural industries are prime lamb, beef production and broad acrecropping, with some irrigation and dairying. More recent agricultural uses include viticulture,

horticulture and forestry. CLAUSE 02.03-4 NATURAL RESOURCE MANAGEMENT Agriculture This clause identifies The rural areas of the municipality comprise high quality and versatile agricultural land. Rural production is a very important component of the municipality is agricultural land. Rural production is a very important component of the municipality's economy, and a finite resource. This asset is threatened from inappropriate subdivision and housing development.

Rural activities produce off-site effects that can be incompatible with residential uses. Farming practices in rural areas should not be diminished by encroachment of incompatible development in rural zones. However, a one-off excision of an unwanted rural dwelling may limit the distortion of rural land prices.

The fragmentation of high quality agricultural and is discouraged as farm sizes have progressively increased. Farm consolidation is a fundamental long-term objective.

In protecting agricultural areas, Council seeks to:

- Limit subdivision and new dwellings on high quality and versatile agricultural land.
- Maintain the sustainable use and productive potential of rural land.
- Discourage non-agricultural uses where they will impact agriculture.
- Avoid the fragmentation of productive agricultural land by subdivision, particularly lots for housing
- Encourage alternative agricultural pursuits.
- Support proposals for non-agricultural uses in rural areas only when they are compatible with surrounding agricultural use and can be justified in terms of broader community benefit.
- Encourage agricultural practices that are not detrimental to the environment.
- Encourage the consolidation of farm lots.
 - Locate intensive animal industries in areas that minimise land use conflict.

CLAUSE 14.01-1S PROTECTION OF AGRICULTURAL LAND

This clause is of relevance as the objective is to protect the state's agricultural base by preserving productive farmland.



CLAUSE 14.01-1L RURAL DWELLINGS AND SUBDIVISION POLICY

This clause is of relevance as the application is proposing a dwelling and the lot is under 40 hectares in area.

Strategies

Discourage dwellings on existing small lots except where either:

Substantial services and infrastructure works have been completed;
The site has no agricultural potential and native vegetation will be retained;
It will not inhibit the agricultural practices of existing farms. Ensure dwellings and subdivisions are designed to respond to the site, landform, vegetation, waterways, drainage lines, services, adjoining land uses, dwellings and ongoing agricultural activities.

Ensure dwellings and subdivision can contain and treat on-site effluent and wastewater in accordance with the State Environment Protection Policy (Waters of Victoria) under the Environment Protection Act 1970.

Locate dwellings on land where the agricultural guality is low and is not subject to flooding.

Ensure the proposed dwelling is necessary for the continued agricultural use of the land.

CLAUSE 14.02-1S CATCHMENT PLANNING AND MANAGEMENT

This clause is of relevance as the site is located near a number of waterways. The objective is to assist with the protection and restoration of catchments, water bodies, groundwater, and the marine environment.

CLAUSE 14.02-25 WATER QUALITY

This clause is of relevance to this application as the objective is to protect water quality.

CLAUSE 17.01-1S DIVERSIFIED ECONOMY

This clause is of relevance as the objective is to strengthen and diversity the economy.

PARTICULAR PROVISIONS

The particular provisions are specific pre-requisites or planning provisions for a range of particular uses and development, that apply consistently across the State. It is noted that there are no particular provisions that are applicable to the proposal.



10. **GENERAL PROVISIONS**

9.1 CLAUSE 65.01 DECISION GUIDELINES - APPROVAL OF AN APPLICATION OR **PLAN**

taking a source and The Responsible Authority must decide whether the proposal will produce acceptable outcomes in terms of decision guidelines of this Clause. Clause 65.01 sets out the matters the Responsible Authority must consider when assessing an application to subdivide land.

11. PLANNING ASSESSMENT

Based on the provisions of the Benalla Planning Scheme and the decision guidelines, the following, are considered to be key planning considerations relevant to the proposed replacement dwelling and change of use to dependent persons unit.

 Planning Policy Framework
 Farming Zone Decision Guidelines
 10.1 PLANNING POLICY FRAMEWORK
 Planning Policies seek to support and enhance agricultural pursuits by ensuring future development, particularly residential development, does not result in the permanent removal of productive agricultural land or inhibit the continuation and development of existing agricultural uses. These objectives are reiterated in the purpose of the Farming Zone.

Planning Policy has emphasised the need to protect agricultural land, particularly from encroachment of non-agricultural development. In this case the development of a dwelling on the site, would serve to enhance the use of the subject site for agriculture.

The key matter requiring consideration in this case is the demonstrated requirement for a dwelling on the site. The impact of the dwelling on the land and the ability to sustain viable agricultural use Planning Policy Framework seeks to support and enhance agricultural use by ensuring that future development, particularly residential development, does not result in the permanent removal of agricultural land or inhibit the continuation of existing or future agricultural uses.

The proposal demonstrates a nexus between agricultural land use and the necessity of a dwelling on the land. The proposal is consistent with the relevant policies and vision within the PPF relating to protection and sustainable use of agricultural land. The proposal is also deemed consistent to specific objectives and strategies sought in the Municipal Strategic Statement. The proposal will not result in 'fragmentation' of agricultural land as the land will continue to be used for agriculture.

The development of the subject site for a dwelling is said to be consistent with the planning policy in relation to rural and regional development, as the end result will be one which will allow the agricultural use on the land to occur and the dwelling is required to support the agricultural use.



The dwelling on the subject land will assist the owners to run an agricultural use without impacting the surrounding land uses. The surrounding area is fragmented in terms of agricultural land as the lot sizes in the area are smaller in size to sustain a large scale agriculture. The most effective option to gain agricultural yield from these lots is to allow small scale agricultural uses (like the one proposed in this case) to enhance the protection of agricultural land.

The policies under Clause 14 seek to protect agricultural land and avoid fragmentation of agricultural land. As mentioned above the land is already fragmented as the area displays a character of small parcels within the Farming Zone. The proposal in this regard seeks to protect the agricultural land by introducing an agricultural use that can occur on the land without the need of a bigger land parcel and the dwelling is required to support the agricultural use. The nature of the agricultural use being proposed requires the owners to live on the property and without residing on the land it would be unable to continue such a unique agricultural operation.

The construction of a dwelling on this lot will not contribute to a fragmentation of rural land. The area is already fragmented containing rural land holdings and effectively removed lots on which dwellings have been permitted from agricultural production. This proposal does not contribute to the further fragmentation of rural land.

Clause 14.01-1L primary purpose is to ensure that the development of dwellings and excision of existing dwellings are consistent with the use of land for sustainable rural uses. In relation to dwellings in the FZ, the policy seeks to support a dwelling where the dwelling will not result in the property being removed from agricultural production and the primary use of the land will continue to be agriculture, existing agricultural activity on adjoining land will not be compromised and the proportion of the property used for the dwelling and ancillary infrastructure is minimised and located on the area of lowest agricultural quality.

The application states that the site has a capacity for the proposed agricultural use. The management of the operation would require various animal husbandry practices to monitor and manage horses such as managing feed and water during times of drought, rotation of paddocks within the site and improvements to the pasture and other land management practices to manage weeds and pests. All these operations obviously cannot occur without living on the site as it requires ongoing presence.

The dwelling on the subject land will protect the agricultural land as it is required for agriculture. The site is currently not used for agriculture and has not been used for agriculture for quite some time. The owner's intention is to live on the land and do an agricultural operation that the land can sustain in long term.

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Only a small fraction of the land will be taken out of agriculture for the dwelling and the dwelling is needed so the landowner can properly attend to the farming pursuits, thus it is considered that this farmland will continue to be protected and enhanced as a result of productive farming pursuits as detailed in the farm management plan.



The primary purpose of the land for farming will remain as the farm dwelling is needed to ensure that the agricultural operations can be sustained and further developed as part of an established business enterprise. The dwelling will remain a secondary element in relation to how the land is going to be used. It is not a rural residential land use but a farm dwelling which contributes to productive farming and ensure the lands agricultural values and outputs are enhanced. The proposed farm dwelling is compatible with its rural setting given its purpose to assist with legitimate farming pursuits that cannot be properly undertaken or developed King without occupation of the land.

The need and rationale for the dwelling ensures agriculture is the predominant use of the land in accordance with the Farm Plan. It is submitted that the proposed farm dwelling facilitates and supports the continued and enhanced operation of the land for a productive farming enterprise. The dwelling is related to enhance agricultural production. ner

	and and a few sol	
Farming Zone – Clause 35.07-6 Decision	Assessment	
Guidelines	o. The rest of the second s	
General Issues	No on other	
	The proposal is consistent with policy that is	
The Municipal Planning Strategy and the	compatible with economic, social and	
Planning Policy Framework.	environmental objectives of the state.	
Any Regional Catchment Strategy and	There is no regional catchment strategy	
associated plan applying to the land.	applying to the land.	
The capability of the land to accommodate	The land has the capability to accommodate	
the proposed use or development, including	ing the proposed use. The area of the land	
the disposal of effluent.	large and effluent disposal in association	
21 1. 20 0	with the dwelling can be managed on site.	
How the use or development relates to	A farm management plan has been prepared	
sustainable land management.	to ensure the sustainable management of	
	the land.	
Whether the site is suitable for the use or	The site is suitable for the proposed use. The	
development and whether the proposal is	main aim for the proposal is to support the	
compatible with adjoining and nearby land	nd agriculture use which is consistent with the	
uses.	zone. The surrounding area comprises varied	
and the second sec	lot sizes being used for various agricultural	
In son	uses and rural lifestyle. The proposal will be	
	compatible with the surrounding area in a	
	sense that the agricultural use will continue	
Ý l	to occur on site.	
How the use and development makes use of	The existing infrastructure on the property	
existing infrastructure and services.	will be used in association with the	
	agricultural use for rettaining of ex-	
	racehorses.	

10.2 FARMING ZONE DECISION GUIDELINES



The impact of buildings and works on significant views.	The proposed dwelling has generous setbacks from each boundary and will not impact any significant views.
Agricultural issues and the impacts from no	on-agricultural uses
whether the use or development will support and enhance agricultural production.	Ine proposal will enhance the agricultural use via the implementation of the farming enterprise which involves horse retraining including assisting with the rehoming of ex- racehorses not suitable for show eventing or competition.
Whether the use or development will adversely affect soil quality or permanently remove land from agricultural production. The potential for the use or development to	The dwelling occupies a small portion of the land, with the majority of the land being used for the agricultural operation. The proposal will not limit agricultural
limit the operation and expansion of adjoining and nearby agricultural uses.	activities in the area as the proposal itself involves an agricultural use.
agricultural use.	the capacity to sustain the agricultural use.
The agricultural qualities of the land, such as soil quality, access to water and access to rural infrastructure.	The site will be improved to be and to be provided with water and access to rural infrastructure.
Any integrated land management plan prepared for the site.	A Farm Management Plan has been prepared for the site which provides details how the land will be managed
Accommodation issues	
Whether the dwelling will result in the loss or fragmentation of productive agricultural land.	The dwelling will occupy a small portion of the land with the majority of the land used for agricultural operation. It can be argued that the land to be used for dwelling will be permanently removed from agriculture however as mentioned above it will be a small portion when compared to the overall size of the land.
Whether the dwelling will be adversely affected by agricultural activities on adjacent and nearby land due to dust, noise, odour, use of chemicals and farm machinery, traffic and hours of operation.	The dwelling will not be affected by agricultural activities as it will be setback reasonably from the boundaries.
Whether the dwelling will adversely affect the operation and expansion of adjoining and nearby agricultural uses.	This has been discussed above under the policy.
The potential for the proposal to lead to a concentration or proliferation of dwellings in	There is no potential for the dwelling to lead to a concentration or proliferation of dwellings.

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	REGIONAL PLANNING
the area and the impact of this on the use of	
the land for agriculture.	
The potential for accommodation to be	Not applicable
adversely affected by noise and shadow	
flicker impacts if it is located within one	
kilometre from the nearest title boundary of	
land subject to:	
- A permit for a wind energy facility: or	N. O. O
- An application for a permit for a wind	
energy facility:	SO TOX THOU
– An incorporated document approving a	C Do By Sou
wind energy facility:	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
- A proposed wind energy facility for which	10 ⁰ 10 ⁰ 0 ⁵⁰
- A proposed wind energy racinty for which an action has been taken under section 8(1)	OP OPPINIE
	anill set se Pr
8(3) or 8(1) of the Environment Effects Act	
1978	NO Y AND LEON
The potential for accommodation to be	Not applicable
adversely affected by vehicular traffic, noise.	
blasting, dust and vibration from an existing	80 13 80 HV
or proposed extractive industry operation if	too the tick
it is located within 500 metres from the	0, 5 ⁰ . 5 ^{°°}
nearest title boundary of land on which a	NY of the
work authority has been applied for or	N'ILLE.
granted under the Mineral Resources	C ²
(Sustainable Development) Act 1990.	
and the second sec	
Environmental issues	
The impact of the proposal on the natural	The proposal will not impact the soil and
physical features and resources of the area,	water quality as discussed above.
in particular on soil and water quality	
The impact of the use or development on the	No native vegetation is required to be
flora and fauna on the site and its surrounds.	removed.
The need to protect and enhance the	No native vegetation is required to be
biodiversity of the area, including the	removed.
retention of vegetation and faunal habitat	
and the need to revegetate land including	
riparian buffers along waterways, gullies,	
ridgelines, property boundaries and saline	
discharge and recharge area.	
The location of on-site effluent disposal	The site plan provides details of the effluent
areas to minimise the impact of nutrient	disposal field.
loads on waterways and native vegetation.	
Design and siting issues	



			-
	The need to locate buildings in one area to	Complies. The scale of the development is	
	avoid any adverse impacts on surrounding	small when compared with the size of the	
	agricultural uses and to minimise the loss of	land. The location of the dwelling has been	
	productive agricultural land.	selected to manage the site in terms of	
		agricultural use.	8 >
	The impact of the siting, design, height, bulk,	The dwelling is to be constructed of muted	7 0.00
	colours and materials to be used on the	tones, and located with generous setbacks	Rie
	natural environment, major roads, vistas and	where there are no adverse impacts	07
	water features and the measures to be	anticipated.	
	undertaken to minimise any adverse impacts.	SSO tarcific	
	The impact on the character and appearance	Not applicable to the site	-
	of the area or features of architectural		
	historic or scientific significance or of natural	10° 10° 00°	
	scenic beauty or importance	OF ON UN	
	The location and design of existing and	Access to the site will be in accordance with	-
	proposed infrastructure including roads gas	Council's condition with the appropriate	
	water drainage telecommunications and	utilities such as water sentic system and	
	sewerage facilities	drainage being undertaken as part of the	
	sewerage lacinties.	approved development	
	Whether the use and development will	The use and development of the land for a	-
	require traffic management measures	dwelling will not require any significant	
	require traine management measures.	traffic management measures	
	The need to locate and design buildings used	Not applicable	-
	for accommodation to avoid or reduce noise	Not applicable.	
	and chadow flicker impacts from the	C ^{D1}	
	and shadow micker impacts from the		
	located within one kilomatra from the		
	not title boundary of land subject to:		
	A parmit for a wind aparau facility or		
	- A permit for a wind energy facility, of		
	- All application for a permit for a wind		
	An incorporated designent approving a		
	- An incorporated document approving a		
	wind energy facility, of		
	- A proposed wind energy facility for which		
Ö	an action has been taken under section o(1),		
-un	Q(Z), $Q(A) = f$ the Equivalence of Effects Act.		
2002	o(5) Of o(4) Of the Environment Effects Act		
Silles	1970 The solution of the state of the sign have been been been been been been been be	Netsuslinde	-
30, 90	The need to locate and design buildings used	Not applicable.	
	for accommodation to avoid or reduce the		
il al	impact from venicular traffic, noise, blasting,		
\sim	aust and vibration from an existing or		
	proposed extractive industry operation if it is		
	located within 500 metres from the nearest		
	title boundary of land on which a work		
	authority has been applied for or granted		l

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under the *Mineral Resources* (Sustainable Development) Act 1990.

11 RELEVANT VCAT CASE & FURTHER CONSIDERATION

In Dinning v Macedon Ranges SC [2018] VCAT 490, Member David while approving a dwelling in association with an ex-racehorse refuge/retraining centre (similar to the proposal) made following comments:

"36...I accept that the proposed use for the retraining of horses represents intensification of agricultural use relative to the low intensity grazing use to which the land has been put in the past. I find that the small area of land to be lost to agriculture for a proposed dwelling is counterbalanced by the increased intensification of agricultural use on the site.

37. I therefore do not accept the Councils contention that the proposal is contrary to the purpose of the FZ regarding the use of land for agriculture, retention of productive agricultural land, and ensuring that non-agricultural uses (including dwellings) do not adversely affect the use of land for agriculture."

The above decision has the relevance to the proposal as the current proposal is seeking to introduce a new agricultural use in contrast to conventional agricultural uses. The land can sustain the agricultural as confirmed via the provision of management plans.

The proposal will contribute to agricultural production on a small scale and is considered to be complementary to the current farming activities being undertaken in the surrounding area. There will be limited impact to the soil quality and the addition of dwelling will not impact agricultural production.

Clause 71.02-3 (Integrated Decision Making) states that:

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Society has various needs and expectations such as land for settlement, protection of the environment, economic wellbeing, various social needs, proper management of resources and infrastructure. Planning aims to meet these needs and expectations by addressing aspects of economic, environmental and social wellbeing affected by land use and development.

Planning and responsible authorities should endeavour to integrate the range of planning policies relevant to the issues to be determined and balance conflicting objectives in favour of net community benefit and sustainable development for the benefit of present and future generations. However, in bushfire affected areas, planning and responsible authorities must prioritise the protection of human life over all other policy considerations.

Planning authorities should identify the potential for regional impacts in their decision making and coordinate strategic planning with their neighbours and other public bodies to achieve sustainable development and effective and efficient use of resources.

The proposal will be able to balance conflicting objectives and will result in sustainable development of the land. The objectives in relation to the protection of agricultural land will



be achieved by resulting in a dwelling which is required for agriculture. The proposal will result in net community benefit.

The proposal will also be consistent with the objectives of planning in Victoria specified under Ating a above and ating a above and bere Section 4 of the Planning and Environment Act 1987 as it will result in fair, orderly, economic and sustainable use, and development of land by proposing a development in farming zone which will be able to protect agricultural land.

12 CONCLUSION

The proposal seeks approval for building and works associated with a dwelling, where the report has assessed against the relevant policy and controls of the Benalla Planning Scheme as follows:

- The proposal has policy support at Planning Policy Framework.
- The proposed development of a dwelling meets the purpose of the farming zone including policy.
- It is considered that it complies with the overall planning considerations and environmental standards.
- The proposed development has been sited and the use is compatible with surrounding landscapes and is buffered by generous setbacks from any adjoining properties.
- The proposal will not impact the water quality as it is proposed to be developed which satisfies the EPA Code of Practice.

Scheme, g Scheme The assessment undertaken in this report has demonstrated the application is consistent with the Planning Policy Framework and the requirements of the Farming Zone, including Clause his document you action, distribution or convince of the top of top of the top of top 65 of the Benalla Planning Scheme. It is therefore requested that approval of a planning

