DISCRETIONARY APPLICATION

For Public Display

Applicant:
P & J Sheds

Location:
240 Ellendale Road, Fentonbury

Proposal:
Secondary Residence

DA Number:
DA 2024 / 38

Date Advertised:
25 June 2024

Date Representation Period Closes:
09 July 2024

Responsible Officer:
Louisa Brown (Planning Officer)

Viewing Documents:
The relevant documents may be viewed at Council's website www.centralhighlands.tas.gov.au or at Council's Offices 19 Alexander Street, Bothwell & 6 Tarleton Street, Hamilton during normal office hours.

Representations to:

General Manager
19 Alexander Street
BOTHWELL TAS 7030

Email:
development@centralhighlands.tas.gov.au

central highlands COUNCIL

Development & Environmental Services
19 Alexander Street
BOTHWELL TAS 7030

Phone: (03) 6259 5503
Fax: (03) 6259 5722

www.centralhighlands.tas.gov.au

OFFICE USE ONLY

Application No.: _____

Property ID No.: _____

Date Received: _____

Application for Planning Approval
Use and Development

Use this form to apply for planning approval in accordance with section 57 and 58 of the *Land Use Planning and Approvals Act 1993*

Applicant / Owner Details:

Applicant Name P & J Sheds - Darryn White

Postal Address 38 McIntyre Street Phone No: 6244 4300

Mornington 7018 Fax No:

Email address admin@fairdinkumhobart.com.au dwbdac@gmail.com

Owner/s Name (if not Applicant) S & A Stephens

Postal Address 240 Ellendale Road Phone No:

Fentonbury 7140 Fax No:

Email address: navyant@yahoo.com.uk

Description of proposed use and/or development:

Address of new use and development: 240 Ellendale Road Fentonbury 7140

Certificate of Title No: Volume No 245359 Lot No: 1

Description of proposed use or development: Ancillary Dwelling

ie: New Dwelling /Additions/ Demolition / /Shed / Farm Building / Carport / Swimming Pool or detail other etc.

Current use of land and buildings: Rural Living

Eg. Are there any existing buildings on this title?
If yes, what is the main building used as?

Proposed Material

What are the proposed external wall colours: Pale Eucalypt

What is the proposed roof colour: Woodland Grey

What is the proposed new floor area m^2.: 60

What is the estimated value of all the new work proposed: $150 000

Is proposed development to be staged:	*Yes* ☐	*No* ☑	Tick ✓
Is the proposed development located on land previously used as a tip site?	*Yes* ☐	*No* ☑	
Is the place on the Tasmanian Heritage Register?	*Yes* ☐	*No* ☑	
Have you sought advice from Heritage Tasmania?	*Yes* ☐	*No* ☑	
Has a Certificate of Exemption been sought for these works?	*Yes* ☐	*No* ☑	

Signed Declaration

I/we hereby apply for a planning approval to carry out the use or development described in this application and in the accompanying plans and documents, accordingly I declare that:

1. The information given is a true and accurate representation of the proposed development. I understand that the information and materials provided with this development application may be made available to the public. I understand that the Council may make such copies of the information and materials as, in its opinion, are necessary to facilitate a thorough consideration of the Development Application. I have obtained the relevant permission of the copyright owner for the communication and reproduction of the plans accompanying the development application, for the purposes of assessment of that application. I indemnify the Central Highlands Council for any claim or action taken against it in respect of breach of copyright in respect of any of the information or material provided.

2. In relation to this application, I/we agree to allow Council employees or consultants to enter the site in order to assess the application.

3. I am the applicant for the planning permit and I have notified the owner/s of the land in writing of the intention to make this application in accordance with Section 52(1) of the *Land Use Planning Approvals Act 1993* (or the land owner has signed this form in the box below in "Land Owner(s) signature);
Applies where the applicant is not the Owner and the land is not Crown land or owned by a council, and is not land administered by the Crown or a council.

Applicant Signature (if not the Owner)	Applicant Name (*Please print*)	Date
Darryn White	Darryn White	14/06/2024

Land Owner(s) Signature	Land Owners *Name (please print)*	Date

Land Owner(s) Signature	Land Owners *Name (please print)*	Date

Refer attached Landowner Authority.

Information & Checklist sheet

	✓
1. A completed Application for Planning Approval – Use and Development form. *Please ensure that the information provides an accurate description of the proposal, has the correct address and contact details and is signed and dated by the applicant.*	❑
2. A current copy of the Certificate of Title for all lots involved in the proposal. *The title details must include, where available, a copy of the search page, title plan, sealed plan or diagram and any schedule of easements (if any), or other restrictions, including covenants, Council notification or conditions of transfer.*	❑
3. Two (2) copies of the following information - a) An analysis of the site and surrounding area setting out accurate descriptions of the following - (i) topography and major site features including an indication of the type and extent of native vegetation present, natural drainage lines, water courses and wetlands, trees greater than 5 metres in height in areas of skyline or landscape importance and identification of any natural hazards including flood prone areas, high fire risk areas and land subject to instability; (ii) soil conditions (depth, description of type, land capability etc); (iii) the location and capacity of any existing services or easements on the site or connected to the site; (iv) existing pedestrian and vehicle access to the site; (v) any existing buildings on the site; (vi) adjoining properties and their uses; and (vii) soil and water management plans. b) A site plan for the proposed use or development drawn, unless otherwise approved, at a scale of not less than 1:200 or 1:1000 for sites in excess of 1 hectare, showing - (i) a north point; (ii) the boundaries and dimensions of the site; (iii) Australian Height Datum (AHD) levels; (iv) natural drainage lines, watercourses and wetlands; (v) soil depth and type; (vi) the location and capacity of any existing services or easements on the site or connected to the site; (vii) the location of any existing buildings on the site, indicating those to be retained or demolished, and their relationship to buildings on adjacent sites, streets and access ways; (viii) the use of adjoining properties; (ix) shadow diagrams of the proposed buildings where development has the potential to cause overshadowing; (x) the dimensions, layout and surfacing materials of all access roads, turning areas, parking areas and footpaths within and at the site entrance; (xi) any proposed private or public open space or communal space or facilities; (xii) proposed landscaping, indicating vegetation to be removed or retained and species and mature heights of plantings; and (xiii) methods of minimizing erosion and run-off during and after construction and preventing contamination of storm water discharged from the site. c) Plans and elevations of proposed and existing buildings, drawn at a scale of not less than 1:100, showing internal layout and materials to be used on external walls and roofs and the relationship of the elevations to natural ground level, including any proposed cut or fill.	❑ ❑ ❑
4. A written submission supporting the application that demonstrates compliance with the relevant parts of the Act, State Polices and the Central Highlands Interim Planning Scheme 2015, including for industrial and commercial uses, the hours of operation, number of employees, details of any point source discharges or emissions, traffic volumes generated by the use and a Traffic Impact Statement where the development is likely to create more than 100 vehicle movements per day.	❑
5. Prescribed fees payable to Council. An invoice for the fees payable will be issued once application has been received.	

Information If you provide an email address in this form then the Central Highlands Council ("the Council") will treat the provision of the email address as consent to the Council, pursuant to Section 6 of the Electronic Transactions Act 2000, to using that email address for the purposes of assessing the Application under the Land Use Planning and Approvals Act 1993 ("the Act"). If you provide an email address, the Council will not provide hard copy documentation unless specifically requested. It is your responsibility to provide the Council with the correct email address and to check your email for communications from the Council. If you do not wish for the Council to use your email address as the method of contact and for the giving of information, **please tick** ✓ the box	❑
Heritage Tasmania If the Property is listed on the Tasmanian Heritage Register then the Application will be referred to Heritage Tasmania unless an Exemption Certificate has been provided with this Application. (Phone 1300 850 332 or email enquires@heritage.tas.gov.au)	
TasWater Depending on the works proposed Council may be required to refer the Application to TasWater for assessment (Phone 136992)	
Submission of Application Applications can be submitted in a number of ways as follows: • Electronically: Email to development@centralhighlands.tas.gov.au • Post: 19 Alexander Street, BOTHWELL 7030 • In Person: Development & Environmental Services Office, 19 Alexander Street, Bothwell 7030	

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E: admin@fairdinkumhobart.com.au • www.theonestopshedshop.com.au
Building Accreditation No: CC784R
A.B.N: 45 109 681 263

AGENT AUTHORISATION

Project Address:	240 Ellendale Road, Fentonbury Tas 7140

I/We

Owner Name/s:	Antony John Stephens and Shannon Meredith Stephens
Postal Address:	240 Ellendale Road, Fentonbury Tas 7140
Phone Number:	0411319239
Email Address:	navyant@yahoo.com.uk

Hereby appoint the following person/company representative:

Agent Name/s:	P&J Sheds Pty Ltd
Postal Address:	38 McIntyre Street Mornington, TAS 7018
Phone Number:	03 6244 4300
Email Address:	admin@fairdinkumhobart.com.au

to act as my/our authorised agent to apply for any required certificates and permits, and to provide any necessary information to, or communicate with the relevant council as required in accordance with the Building Act 2016.

Owner Name:	Antony Stephens	Owner Signature:		Date:	16/1/24
Owner Name:	Shannon Stephens	Owner Signature:		Date:	16/1/24

RESULT OF SEARCH

RECORDER OF TITLES

Issued Pursuant to the Land Titles Act 1980

Tasmanian Government

SEARCH OF TORRENS TITLE

VOLUME	FOLIO
245359	1
EDITION	DATE OF ISSUE
4	28-Jul-2023

SEARCH DATE : 24-Jan-2024
SEARCH TIME : 08.47 AM

DESCRIPTION OF LAND

Parish of ANGLESEA, Land District of BUCKINGHAM
Lot 1 on Plan 245359
Derivation : Part of Lot 9454 Gtd to J H Sankey
Prior CT 4311/78

SCHEDULE 1

N145139 TRANSFER to SHANNON MEREDITH STEPHENS and ANTONY JHON STEPHENS Registered 28-Jul-2023 at 12.01 PM

SCHEDULE 2

Reservations and conditions in the Crown Grant if any
E355082 MORTGAGE to MyState Bank Limited Registered 28-Jul-2023 at 12.02 PM

UNREGISTERED DEALINGS AND NOTATIONS

No unregistered dealings or other notations

05/D 475

ANNEXURE TO CERTIFICATE OF TITLE / FOLIO OF REGISTER

VOL. 4311 FOL. 78

Acting Recorder of Titles

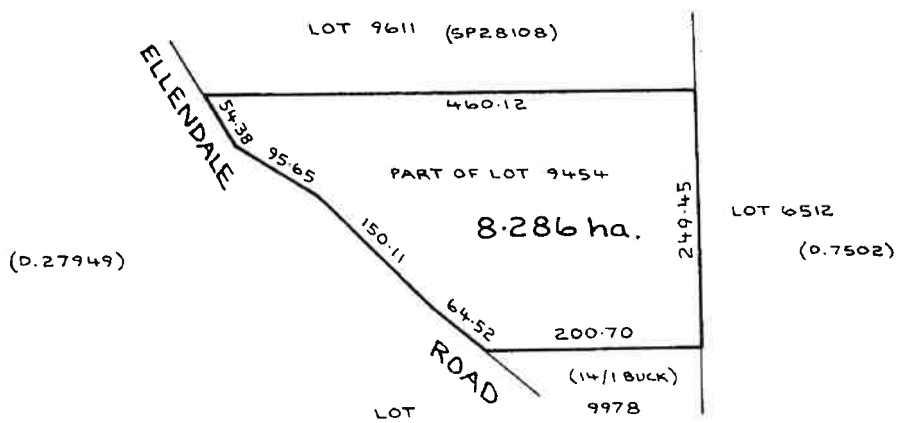
REGISTERED NUMBER

245359

Lot 1 of this plan consists of all the land comprised in the above-mentioned cancelled folio of the Register.

PH. ANGLESEA

MEAS. IN METRES



INDEX OF DRAWINGS - BY DARRYN WHITE CC1623W

ADDITIONAL DRAWINGS / ENGINEERING
TO BE PROVIDED BY NORTHERN CONSULTING ENGINEERS

JOB NO - 16834

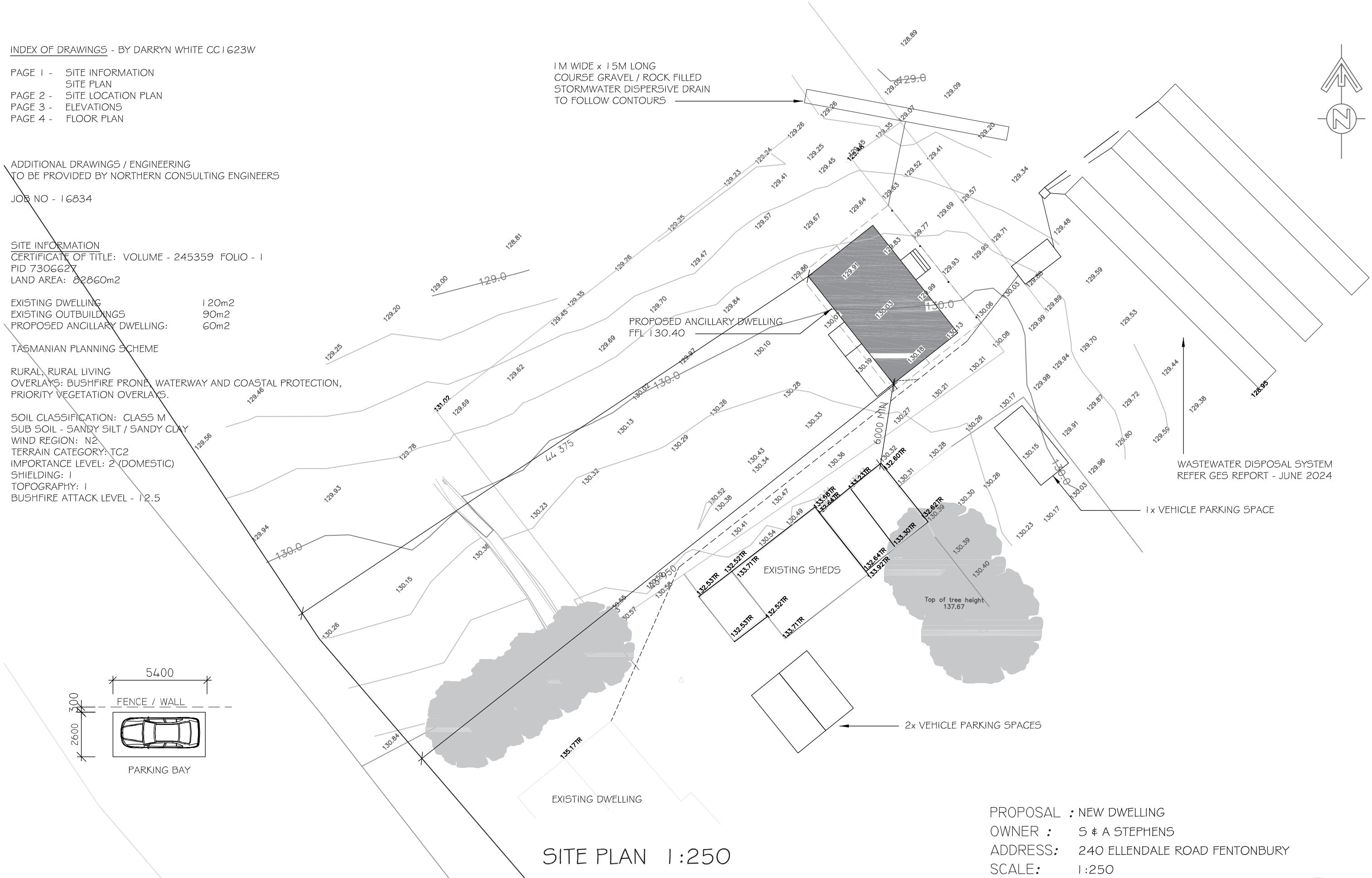
SITE INFORMATION
CERTIFICATE OF TITLE: VOLUME - 245359 FOLIO - 1
PID 7306627
LAND AREA: 82860m2

EXISTING DWELLING	120m2
EXISTING OUTBUILDINGS	90m2
PROPOSED ANCILLARY DWELLING:	60m2

TASMANIAN PLANNING SCHEME

RURAL, RURAL LIVING
OVERLAYS: BUSHFIRE PRONE, WATERWAY AND COASTAL PROTECTION, PRIORITY VEGETATION OVERLAYS.

SOIL CLASSIFICATION: CLASS M
SUB SOIL - SANDY SILT / SANDY CLAY
WIND REGION: N2
TERRAIN CATEGORY: TC2
IMPORTANCE LEVEL: 2 (DOMESTIC)
SHIELDING: 1
TOPOGRAPHY: 1
BUSHFIRE ATTACK LEVEL - 12.5



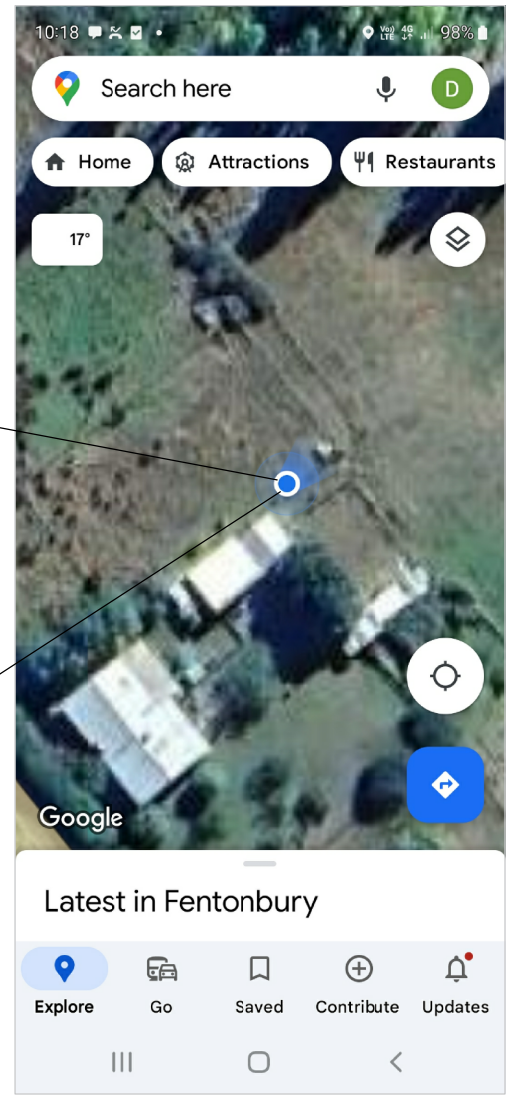
SITE PLAN 1:250

PROPOSAL :	NEW DWELLING
OWNER :	S & A STEPHENS
ADDRESS:	240 ELLENDALE ROAD FENTONBURY
SCALE:	1:250
DATE:	14th JUNE 2024
AMENDED:	
DRAWN BY:	D WHITE CC1623W
PAGE:	01 / 04
JOB NO :	16834

P&J SHEDS PTY LTD. 38 McIntyre Street, Mornington, TAS, 7018. P: (03) 62 44 4300 F: (03) 6244 4355 E: admin@fairdinkumhobart.com.au ABN: 45109681263

10 X 6 ANCILLARY DWELLING
APPROX. LOCATION

SHEDS



PROPOSAL : NEW DWELLING
OWNER : S & A STEPHENS
ADDRESS: 240 ELLENDALE ROAD FENTONBURY
SCALE: NTS
DATE: 14th JUNE 2024
AMENDED:
DRAWN BY: D WHITE CC1623W
PAGE: 02 / 04
JOB NO : 16834

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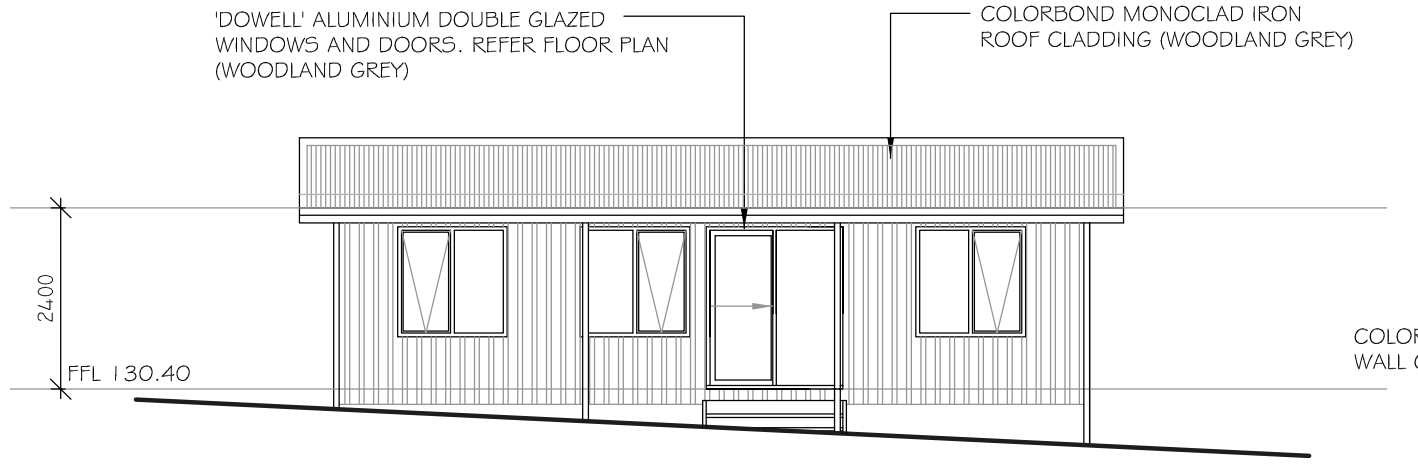
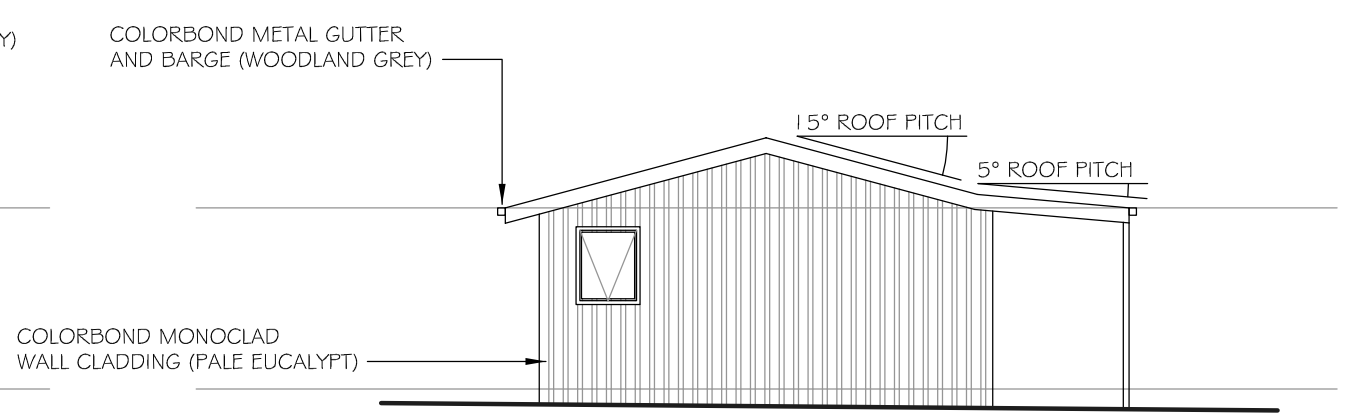
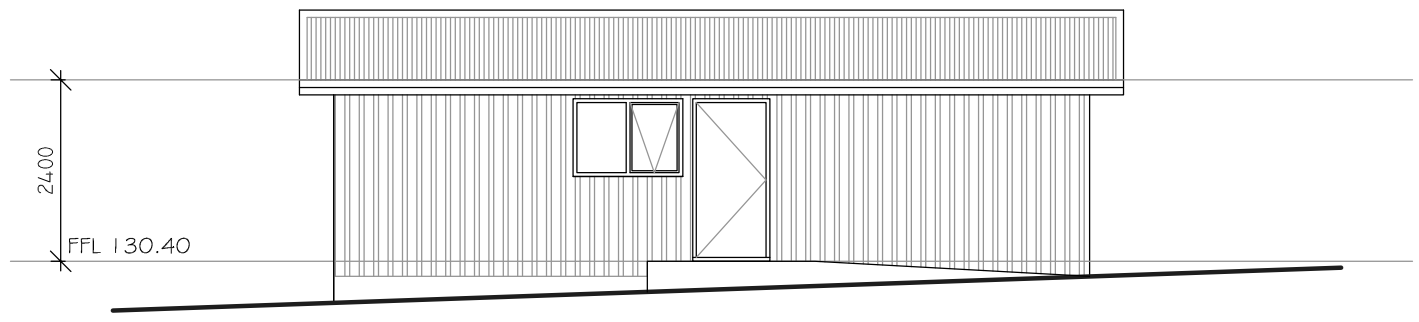


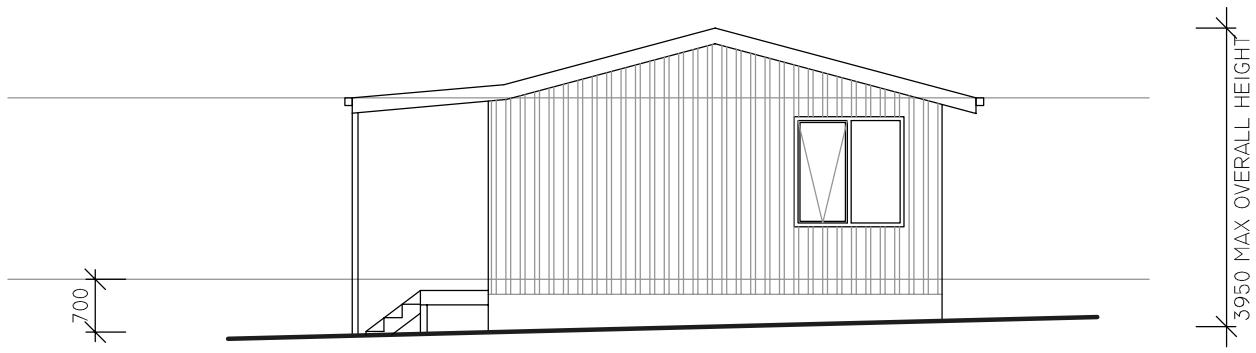
NORTH EAST ELEVATION



SOUTH EAST ELEVATION



SOUTH WEST ELEVATION



NORTH WEST ELEVATION

PROPOSAL : NEW DWELLING
OWNER : S & A STEPHENS
ADDRESS: 240 ELLENDALE ROAD FENTONBURY
SCALE: 1:100
DATE: 14th JUNE 2024
AMENDED:
DRAWN BY: D WHITE CC1623W
PAGE: 03 / 04
JOB NO : 16834

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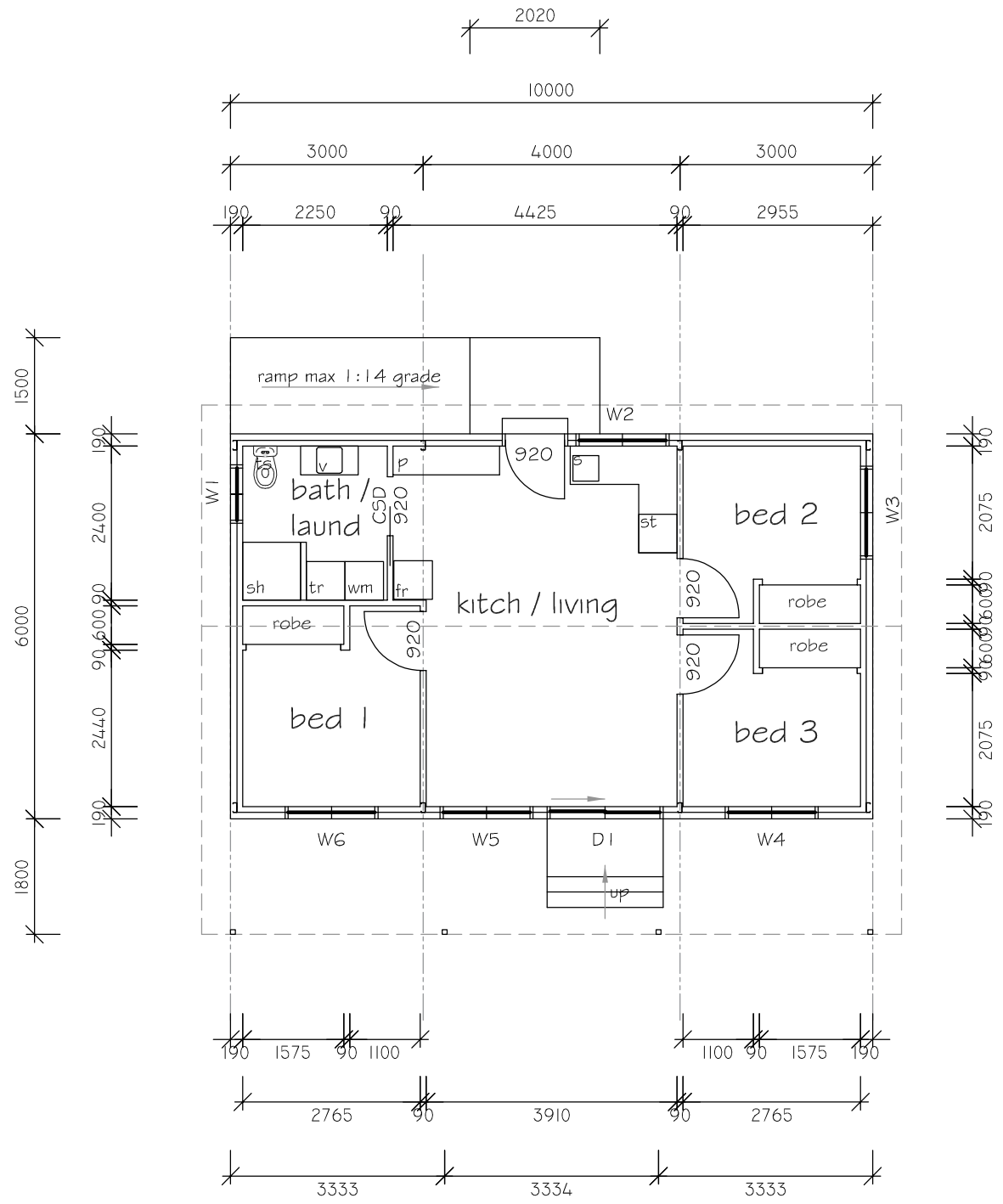

FLOOR PLAN 1:100

FIXTURES AND FITTINGS
fr - 600 x 600 FRIDGE
st - 600 X 600 STOVE
s - SINGLE BOWL SINK
p - 450d x 1660w PANTRY CUPBOARD

ts - TOILET SUITE
v - 450 x 900 VANITY
sh - 900 x 900 SHOWER UNIT WITH SCREEN
tr - 600 x 600 LAUNDRY TROUGH
wm - 600 x 600 WASHING MACHINE

DOWELL - URBANLINE - WINDOWS AND DOOR
W1 - 1029high x 850 wide - AWNING SASH - OBSCURE DOUBLE GLAZED
W2 - 1029high x 1450 wide - AWNING SASH/ FIXED - DOUBLE GLAZED
W3 - 1457high x 1450 wide - AWNING SASH/ FIXED - DOUBLE GLAZED
W4 - 1457high x 1450 wide - AWNING SASH/ FIXED - DOUBLE GLAZED
W5 - 1457high x 1450 wide - AWNING SASH/ FIXED - DOUBLE GLAZED
W6 - 1457high x 1450 wide - AWNING SASH/ FIXED - DOUBLE GLAZED

D1 - 2100high x 1810 wide - SLIDING DOOR - DOUBLE GLAZED

STORMWATER ROOF CATCHMENT TO DISCHARGE TO APPROVED ROCK FILLED STORMWATER DISPERSIVE DRAIN.

GROSS FLOOR AREA - 60m2

PROPOSAL : NEW DWELLING
OWNER : S & A STEPHENS
ADDRESS: 240 ELLENDALE ROAD FENTONBURY
SCALE: 1:100
DATE: 14th JUNE 2024
AMENDED:
DRAWN BY: D WHITE CC1623W
PAGE: 04 / 04
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P&J SHEDS PTY LTD. 38 McIntyre Street, Mornington, TAS, 7018. P: (03) 62 44 4300 F: (03) 6244 4355 E: admin@fairdinkumhobart.com.au ABN: 45109681263

GES

GEO-ENVIRONMENTAL

SOLUTIONS

Proposed Residential Development

243 Ellendale Road, Fentonbury

Bushfire Hazard Report

Applicant: S & A Stephens

May 2024 J10461v1

GEO- ENVIRONMENTAL SOLUTIONS
29 Kirksway Place, Battery Point, Tasmania. 7004. T|62231839 E|office@geosolutions.net.au www.geosolutions.net.au

Contents

Disclaimer

The measures contained in Australian Standard 3959-2018 cannot guarantee that a building will survive a bushfire event on every occasion. This is substantially due to the unpredictable nature and behaviour of fire and extreme weather conditions.

Reasonable steps have been taken to ensure that the information contained within this report is accurate and reflects the conditions on and around the lot at the time of assessment. The assessment has been based on the information provided by you or your designer.

Authorship

This report was prepared by Mark Van den Berg BSc. (Hons.) FPO (planning) of Geo Environmental Solutions. Base data for mapping: TasMap, Digital and aerial photography: Mark Van den Berg, GoogleEarth.

1.0 Purpose

This bushfire hazard report is intended to provide information in relation to the construction of a new class 1a building in a bushfire-prone area. It will demonstrate compliance with the *Directors Determination – Bushfire Hazard Areas*, *version 1.1,12th April 2021*. Provide a certificate of others (form 55) as specified by the Director of Building Control for bushfire hazard and give guidance by way of a certified bushfire hazard management plan which shows a means of protection from bushfires in a form approved by the Chief Fire Officer of the Tasmania Fire Service.

2.0 Summary

Site details & compliance

Title reference	245359/1
PID	7306627
Address	240 Ellendale Road, Fentonbury
Applicant	S & A Stephens
Municipality	Central Highlands
Planning Scheme	Tasmanian Planning Scheme - Central Highlands
Zoning	Rural Living
Land size	~8.2Ha
Bushfire Attack Level	BAL-12.5
Certificate of others (form 55)	Complete and attached
Bushfire Hazard Management Plan	Certified & Attached

The construction of a new Class 1a building is proposed at 240 Ellendale Road, Fentonbury. This project requires demonstrated compliance with the Director's Determination – Bushfire Hazard Areas, version 1.1, 12th April 2021. The site is located in a bushfire-prone area, and the bushfire attack level has been determined as 'BAL-12.5'. Provisions for property access, water supplies for firefighting, and hazard management areas, in addition to construction standards, will be required as detailed in this report and on the Bushfire Hazard Management Plan (BHMP).

3.0 Introduction

This bushfire hazard report has been completed to form part of supporting documentation for a building permit application for the proposed development. The proposed development site has been identified as being in a bushfire prone area. A site-specific bushfire hazard management plan has been provided for compliance purposes.

4.0 Proposal

Construction of a new class 1a building and associated property access at 240 Ellendale Road, Fentonbury as per the site plan located at appendix B.

5.0 Bushfire Attack Level (BAL) Assessment

5.1 Methods

The Bushfire attack level has been determined through the application of section 2 of AS3959-2018 'Simplified Procedure'. Vegetation has been classified using a combination of onsite observations and remotely sensed data to be consistent with table 2.3 of AS359-2018. Slope and distances have been determined by infield measurement and/or the use of remotely sensed data (aerial/satellite photography, GIS layers from various sources) analysed with proprietary software systems. Where appropriate vegetation has been classified as low threat.

5.2 Site Description

The proposal is located at 240 Ellendale Road, Fentonbury, in the municipality of Central Highlands and is zoned Rural Living under the Tasmanian Planning Scheme – Central Highlands. Access to the lot will be by an existing crossover from Ellendale Road, a council-maintained road. The lot is ~8.2 Ha, is irregular in shape the site is located approximately 1.5km south-west of Ransleys Hill (Figure 1).
Adjacent lands surrounding the lot are zoned Rural Living and carry bushfire-prone vegetation. The site carries grassland vegetation and is located within a rural setting which is characterised by grassland vegetation which extends into landscape scale forests and woodlands to the east and west of the site. The site is isolated from the population centres of New Norfolk and Ouse by significant tracts of bushfire-prone vegetation. The site has gentle slopes with no definitive aspect, bushfire attack at the site will likely take the form of head fires approaching from the north of the site.
Vegetation surrounding the lot was assessed (Table 1) and described as 'Grassland and woodland vegetation' or excluded from the assessment as low threat vegetation (as per AS3959-2018). The classified vegetation potentially having the greatest impact on the site occurs to the north, of the site (Figure 2). The vegetation classification system as defined in AS 3959-2018 Table 2.3 and Figure 2.4 (A to H) has been used to determine vegetation types within 100 metres of the site (Table 1).

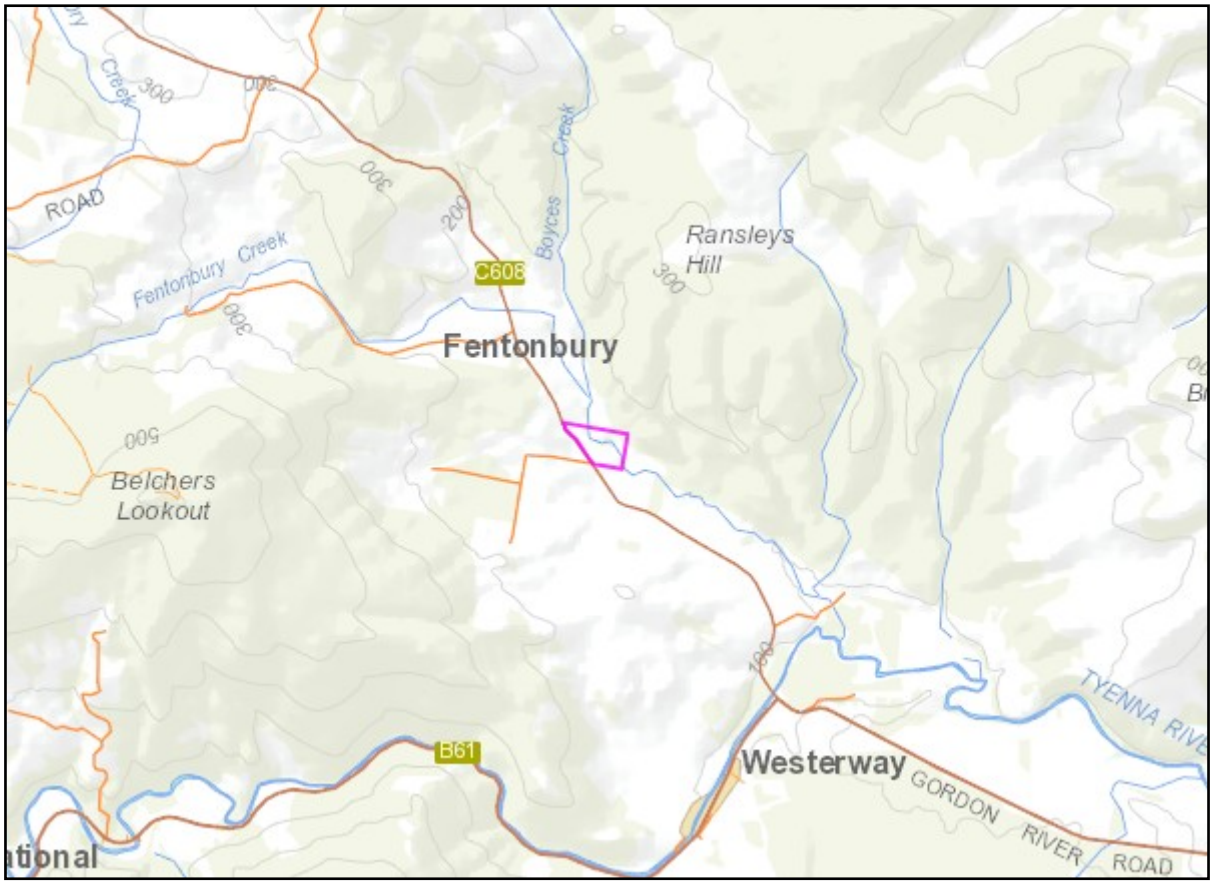


Figure 1. The lot in a topographical context (lot outlined in pink), blue pin marks the approximate location of the site.

Figure 2. Shows the approximate location of the lot (pink line) in the context of the adjacent lands and classified vegetation, blue pin marks the approximate location of the site

Table 1. Bushfire Attack Level (BAL) Assessment

Azimuth	Vegetation Classification	Effective Slope	Distance to Bushfire-prone vegetation	Hazard management area width	Bushfire Attack Level
North-east	Grassland^	flat 0º	0 to 100 metres	14 metres	**BAL-12.5**
	--	--	--		
	--	--	--		
	--	--	--		
South-east	Grassland^	flat 0º	0 to 100 metres	14 metres	**BAL-12.5**
	--	--	--		
	--	--	--		
	--	--	--		
South-west	Grassland^	upslope	0 to 47 metres	14 metres	**BAL-12.5**
	Exclusion 2.2.3.2 (e, f)^^	flat 0º	47 to 57 metres		
	Grassland^	upslope	57 to 100 metres		
	--	--	--		
North-west	Grassland^	flat 0º	0 to 100 metres	14 metres	**BAL-12.5**
	--	--	--		
	--	--	--		
	--	--	--		

^ Vegetation classification as per AS3959-2018 and Figures 2.4(A) to 2.4 (H).
* Low threat vegetation as per Bushfire Prone Areas Advisory Note (BHAN) No.1-2014, version 3, 8/11/2017.
^^ Exclusions as per AS3959-2018, section 2.2.3.2, (a) to (f).

6.0 Results

The bushfire attack level for the building area has been assessed and classified as BAL-12.5, indicating a moderate to low risk profile. The site is susceptible to ember attack and may experience relatively low levels of radiant heat exposure. The construction components of the building are expected to withstand a maximum heat flux of 12.5 kW/m2.

6.1 Property Access

Property access is not required for a fire appliance to access a firefighting water point. An existing hydrant is located on Ellendale Road. In this circumstance there are no specific design or construction requirements for property access.

6.2 Water supplies for fire fighting

Dedicated water supplies for firefighting are provided by fire hydrants connected to a reticulated water supply system managed by Tas Water. The hydrants conform with the following specifications;

- The building area to be protected is located within 120 metres of a fire hydrant; and
- The distance has been measured as a hose lay, between the firefighting water connection point and the furthest part of the building area.

In this circumstance there are no further requirements for the provision of firefighting water supplies.

6.3 Hazard management area.

A hazard management area will need to be established and maintained for the life of the development and is shown on the BHMP. Guidance for the establishment and maintenance of the hazard management area is given below and on the BHMP.

A hazard management area is the area, between a habitable building or building area and the bushfire prone vegetation, which provides access to a fire front for firefighting, which is maintained in a minimal fuel condition and in which there are no other hazards present which will significantly contribute to the spread of a bushfire. This can be achieved through, but is not limited to the following strategies;

- Remove fallen limbs, sticks, leaf and bark litter;
- Maintaining grass at less than a 100mm height;
- Avoid or minimise the use of flammable mulches (especially against buildings);
- Thin out under-story vegetation to provide horizontal separation between fuels;
- Prune low-hanging tree branches (<2m from the ground) to provide vertical separation between fuel layers;
- Remove and or prune larger trees to maintain horizontal separation between canopies;
- Minimise the storage of flammable materials such as firewood;
- Maintaining vegetation clearance around vehicular access;
- Use low-flammability plant species for landscaping purposes where possible;

- Clear out any accumulated leaf and other debris from roof gutters and other debris accumulation points.

7.0 Compliance

Table 3. Compliance with the Directors Determination Requirements for Building in Bushfire Hazard Areas, version 1, 6th February 2020.

Requirements	Compliance
2.3.1 Design & Construction Requirements	Clause 2.3.1 requires buildings to be constructed in accordance with AS3959-2018 or NASH standard – Steel Framed Construction in Bushfire Areas consistent with the BAL determined for the site and is applicable to Class 1, 2 and 3 buildings or a class 10a building associated with a Class 1, 2 or 3 building. The proposal is for the construction of a new class 1a building, if the proposal is designed and constructed in accordance with the requirements for BAL-12.5, they will comply with clause 2.3.1.
2.3.2 Property Access	Clause 2.3.2 requires property access to be designed and constructed to comply with table 2 of the determination and is applicable from the public roadway to within (at minimum) 90 metres of the furthest part of the building/s and includes access to a hardstand for the firefighting water point. In this circumstance there is no requirement for minimum design and construction standards for property access as property access is not required to access a firefighting water connection point. The proposal will compliant with clause 2.3.2.
2.3.3 Water Supply for Firefighting	Clause 2.3.3 requires that a new building in a bushfire-prone area is provided with a firefighting water supply. In this circumstance a reticulated water supply consistent with table 3A is available to the site and is shown on the BHMP. The proposal is compliant with clause 2.3.3.
2.3.4 Hazard management areas	Hazard management areas specified which are consistent with table 4 and which achieve the minimum separation dimensions required for the BAL assessed of table 2.6 of AS3959.
3. Bushfire hazard management plan and certificate	A bushfire hazard management plan has been prepared for work for which this division applies and has been certified in accordance with the Chief Officers requirements by an accredited person.
4.5 Emergency Plan	The proposal is for the construction of a class 1a building therefore in this circumstance Emergency Plans are not required for compliance with the determination.

8.0 Guidance

The defendable space (hazard management area) around a building is critical for providing occupants and/or fire fighters with safe access to the building in order that firefighting activities may be undertaken. The larger the defendable space, the safer it will be for those defending the structure. Some desirable characteristics of a hazard management area are:

- The area directly adjacent to the building has a significant amount of flammable material removed such that there is little to no material available to burn around the building;
- Includes non-flammable areas such as paths, driveways, short cropped lawns;
- Establishment of orchards, vegetable gardens, dams or wastewater effluent disposal areas on the fire prone side of the building;
- Creating wind breaks and radiation shields such as non-combustible fences and low flammability hedges;
- It is not necessary to remove all vegetation from the defendable space, trees can provide protection from wind borne embers and radiant heat in some circumstances.

9.0 Further Information

For further information on preparing yourself and your property for bushfires visit the Tasmania Fire Service website at www.fire.tas.gov.au or phone 1800 000 699 for information on:

- Preparing a bushfire survival plan
- Preparing yourself and your home for a bushfire
- Guidelines for development in bushfire prone areas in Tasmania
- Fire resisting plants for the urban fringe and rural areas
- Using fire outdoors
- Fire permits
- Total fire bans
- Bushfires burning in Tasmania

10.0 References

Australian Building Codes Board, *National Construction Code, Building Code of Australia,* Australian Building Codes Board, Canberra.

Building Amendment (Bushfire-Prone Areas) Regulations 2016

Directors Determination – Bushfire Hazard Areas, version 1.1, 12th April 2021.

The Bushfire Planning Group 2005, *Guidelines for development in bushfire prone areas of Tasmania – Living with fire in Tasmania,* Tasmania Fire Service, Hobart.

Tasmania Fire Service 2013, *Building for Bushfire – Planning and Building in Bushfire-Prone Areas for Owners and Builders*.

Tasmanian Planning Scheme Central Highlands Tasmanian Planning Commission 2022, Tasmanian Planning Commission, Hobart.

Standards Australia, AS3959-2018 Construction of buildings in bushfire-prone areas. Sydney, NSW., Australia.

11.0 Limitations Statement

This Bushfire Hazard Report has been prepared in accordance with the scope of services between Geo-Environmental Solutions Pty. Ltd. (GES) and the applicant named in section 2. To the best of GES's knowledge, the information presented herein represents the Client's requirements at the time of printing of the Report. However, the passage of time, manifestation of latent conditions or impacts of future events may result in findings differing from that described in this Report. In preparing this Report, GES has relied upon data, surveys, analyses, designs, plans and other information provided by the Client and other individuals and organisations referenced herein. Except as otherwise stated in this Report, GES has not verified the accuracy or completeness of such data, surveys, analyses, designs, plans and other information.

The scope of this study does not allow for the review of every possible bushfire hazard condition and does not provide a guarantee that no loss of property or life will occur as a result of bushfire. As stated in AS3959-2018 “It should be borne in mind that the measures contained in this Standard cannot guarantee that a building will survive a bushfire event on every occasion. This is substantially due to the degree of vegetation management, the unpredictable nature and behaviour of fire, and extreme weather conditions”. In addition, no responsibility is taken for any loss which is a result of actions contrary to AS3959-2018 or the Tasmanian Planning Commission Bushfire code.

This report does not purport to provide legal advice. Readers of the report should engage professional legal practitioners for this purpose as required. No responsibility is accepted for use of any part of this report in any other context or for any other purpose by third party.

Appendix A – Site Photos

Figure 3. Northern azimuth from the site.

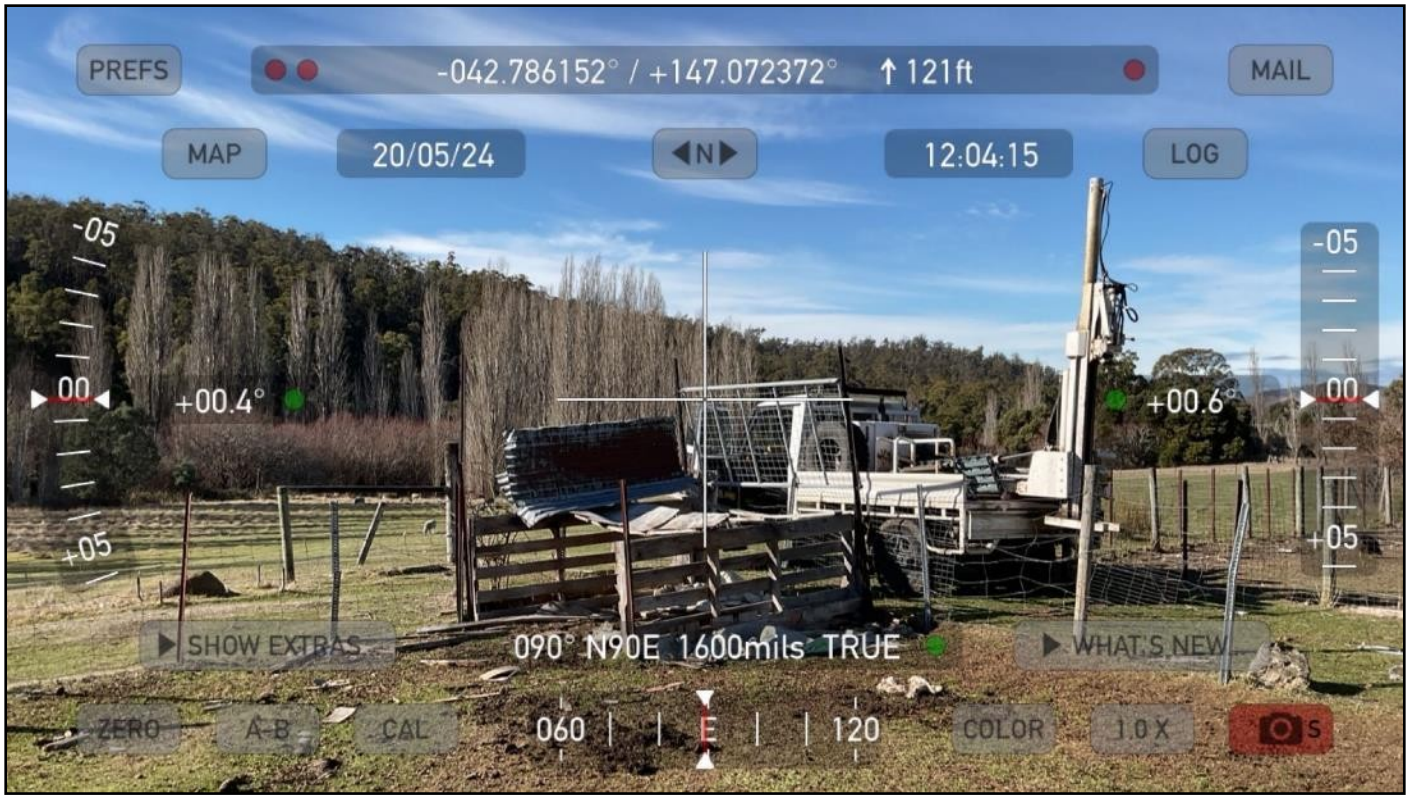
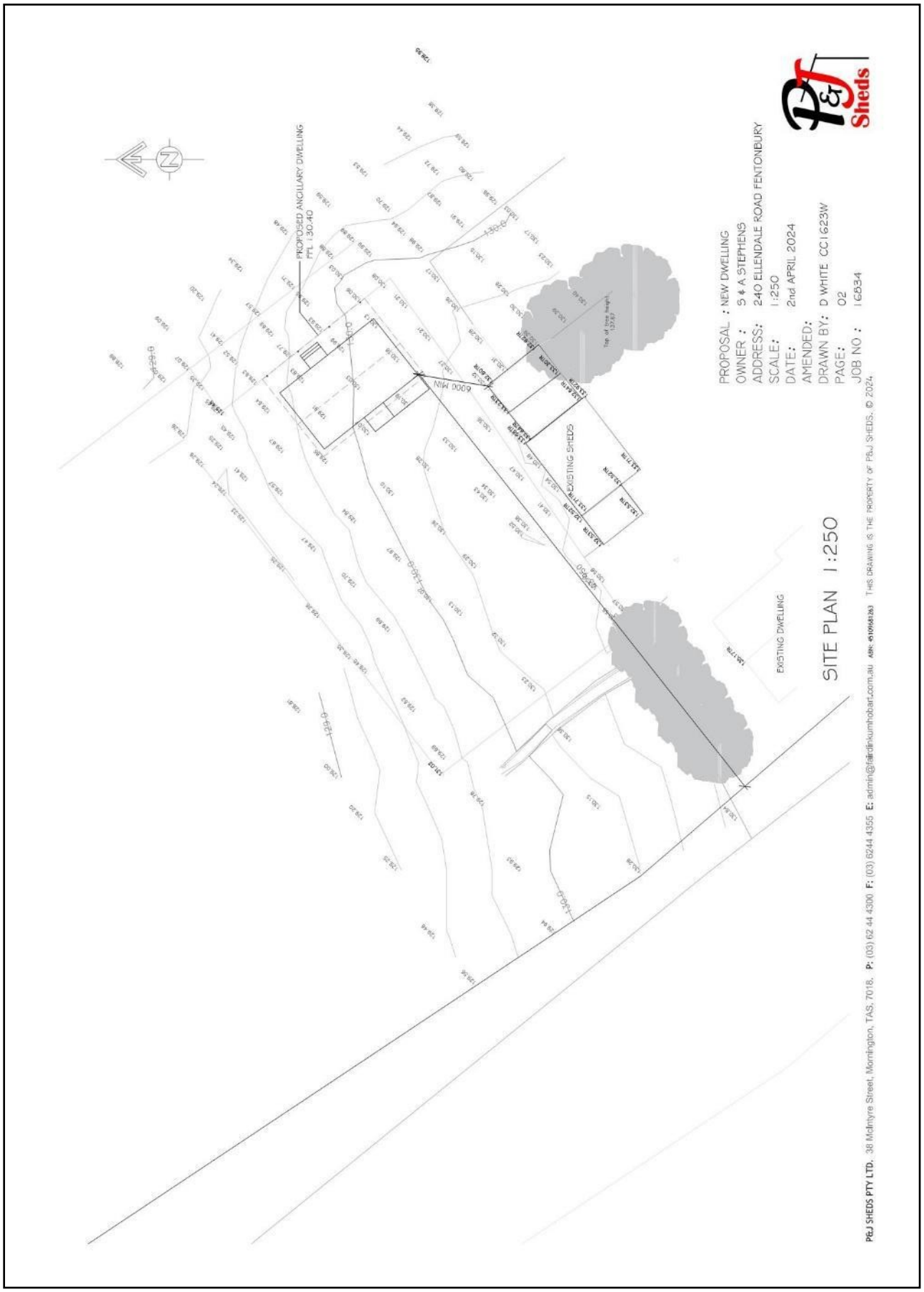


Figure 4. Eastern azimuth from the site.

Figure 5. Southern azimuth from the site.

Figure 5. Western azimuth from the site

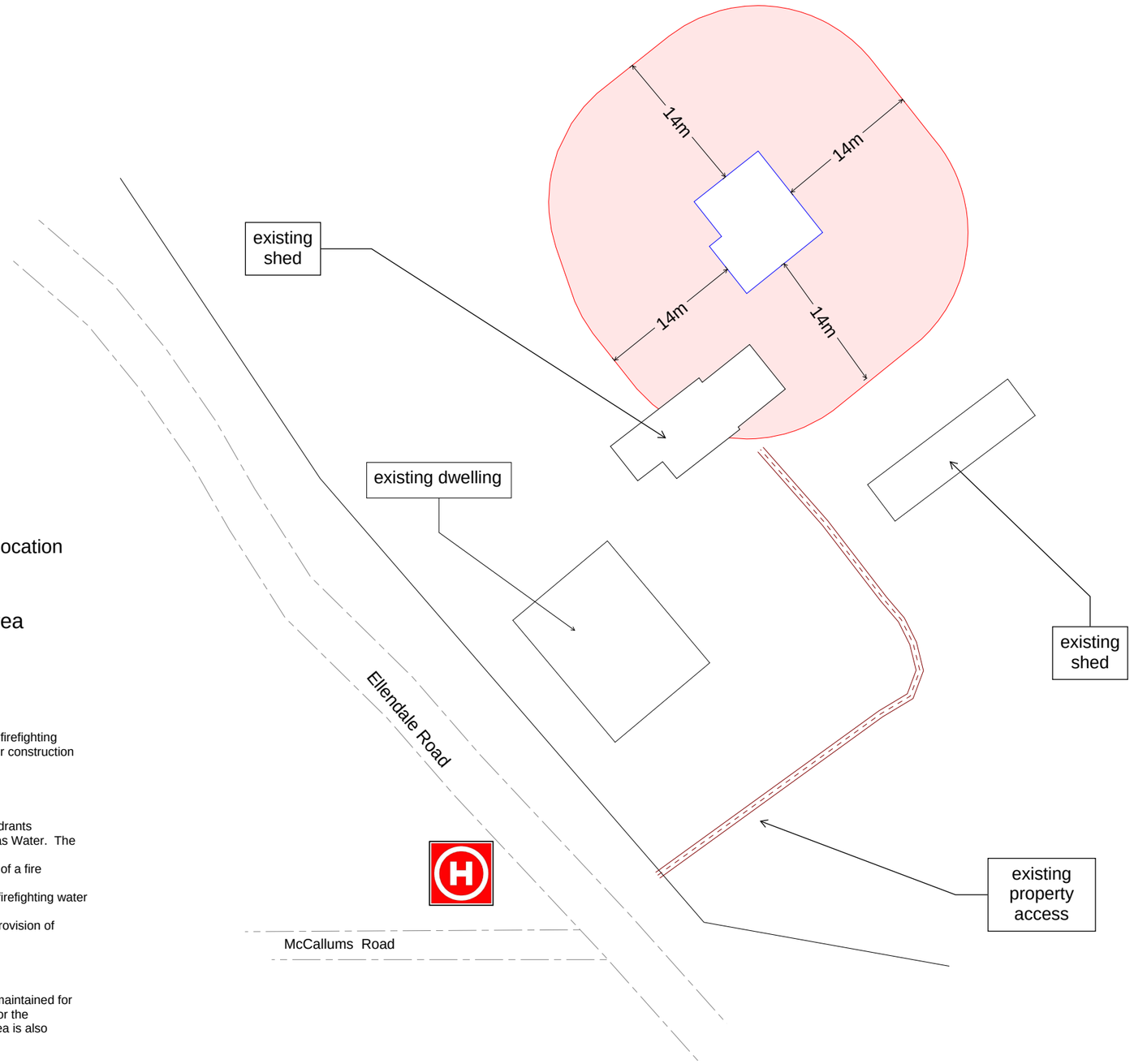
Appendix B - Site Plan



BUSHFIRE HAZARD MANAGEMENT PLAN

Bushfire Hazard Management Plan, 240 Ellendale Road,
Fentonbury. May 2024. J10461v1.
Tasmanian Planning Scheme - Central Highlands

GEO-ENVIRONMENTAL SOLUTIONS
29 Kirksway Place, Battery Point.
T| 62231839 E| office@geosolutions.net.au



Building Area

Approx. existing hydrant location

Hazard Management Area

Compliance Requirements

Standards for Property Access

Property access is not required for a fire appliance to access a firefighting water point. In this circumstance there are no specific design or construction requirements for property access.

Water Supplies for Firefighting

Dedicated water supplies for firefighting are provided by fire hydrants connected to a reticulated water supply system managed by Tas Water. The hydrants conform with the following specifications;
•The building area to be protected is located within 120 metres of a fire hydrant; and
•The distance has been measured as a hose lay, between the firefighting water connection point and the furthest part of the building area.
In this circumstance there are no further requirements for the provision of firefighting water supplies.

Hazard Management Areas

A hazard management area is required to be established and maintained for the life of the building and is shown on this BHMP. Guidance for the establishment and maintenance of the hazard management area is also provided.

Building Specifications to BAL-12.5 of AS3959-2018

Hazard Management Area

A hazard management area is the area, between a habitable building or building area and the bushfire prone vegetation, which provides access to a fire front for firefighting, which is maintained in a minimal fuel condition and in which there are no other hazards present which will significantly contribute to the spread of a bushfire. This can be achieved through, but is not limited to the following actions;

- Remove fallen limbs, sticks, leaf and bark litter;
- Maintain grass at less than a 100mm height;
- Remove pine bark and other flammable mulch (especially from against buildings);
- Thin out under-story vegetation to provide horizontal separation between fuels;
- Prune low-hanging tree branches (<2m from the ground) to provide (vertical separation between fuel layers;
- Prune larger trees to maintain horizontal separation between canopies;
- Minimise the storage of flammable materials such as firewood;
- Maintain vegetation clearance around vehicular access and water supply points;
- Use low-flammability species for landscaping purposes where appropriate;
- Clear out any accumulated leaf and other debris from roof gutters and other accumulation points.

It is not necessary to remove all vegetation from the hazard management area, trees may provide protection from wind borne embers and radiant heat under some circumstances.

Certification No. J10461

Mark Van den Berg
Acc. No. BFP-108
Scope 1, 2, 3A, 3B, 3C.

Do not scale from these drawings. Dimensions to take precedence over scale. Written specifications to take precedence over diagrammatic representations.	S & A Stephens 240 Ellendale Road, Fentonbury, Tas., 7140	C.T.: 245359/1 PID: 7306627	Date : 30/05/2024	Bushfire Hazard Management Plan 240 Ellendale Road, Fentonbury. May 2024. J10461v1. Bushfire Hazard Report 240 Ellendale Road, Fentonbury. May 2024. J10461v1.	Drawing Number: A01	Sheet 1 of 1 Prepared by: MvdB

CERTIFICATE OF QUALIFIED PERSON – ASSESSABLE ITEM

Section 321

Form 55

To: P & J Sheds *Owner /Agent*

38 McIntyre Street *Address*

Mornington 7018 *Suburb/postcode*

Qualified person details:

Qualified person: Mark Van den Berg

Address: 29 Kirksway Place

Battery Point TAS 7004

Phone No: 03 6223 1839

Fax No:

Licence No: BFP-108

Email address: mvandenberg@geosolutions.net.au

Qualifications and Insurance details: Accredited to report on bushfire hazards under Part IVA of the Fire Service Act.
BFP-108 scope 1, 2, 3a, 3b, 3c.
Sterling Insurance PI policy No. 17080170

(description from Column 3 of the Director's Determination - Certificates by Qualified Persons for Assessable Items

Speciality area of expertise: Analysis of bushfire hazards in bushfire prone areas

(description from Column 4 of the Director's Determination - Certificates by Qualified Persons for Assessable Items)

Details of work:

Address: 240 Ellendale Road

Fentonbury 7140

Lot No:

Certificate of title No: 245359/1

The assessable item related to this certificate: New building work in a bushfire prone area.

(description of the assessable item being certified)
Assessable item includes –
- *a material;*
- *a design*
- *a form of construction*
- *a document*
- *testing of a component, building system or plumbing system*
- *an inspection, or assessment, performed*

Certificate details:

Certificate type: Bushfire Hazard

(description from Column 1 of Schedule 1 of the Director's Determination - Certificates by Qualified Persons for Assessable Items n)

This certificate is in relation to the above assessable item, at any stage, as part of - *(tick one)*

building work, plumbing work or plumbing installation or demolition work: **X**

or

a building, temporary structure or plumbing installation:

In issuing this certificate the following matters are relevant –

Documents:	The attached Bushfire Hazard Report and Bushfire Hazard Management Plan for the address detailed above in 'details of work'
Relevant calculations:	Reference the above report.
References:	AS3959-2018 Construction of Buildings in Bushfire-prone Areas. Directors Determination for: Bushfire Hazard Areas v1.1 or Requirements for Building in Bushfire-prone Areas (transitional) v2.2

Substance of Certificate: (what it is that is being certified)

Bushfire Attack Level Assessment in accordance with AS3959-2018 and determination of other mitigation measures as required by the relevant Directors Determination as cited in the Bushfire Hazard Report.

Scope and/or Limitations

Scope: This report was commissioned to identify the Bushfire Attack Level for the existing property. Limitations: The inspection has been undertaken and report provided on the understanding that;-1. The report only deals with the potential bushfire risk all other statutory assessments are outside the scope of this report. 2. The report only identifies the size, volume and status of vegetation at the time the site inspection was undertaken. 3. Impacts of future development and vegetation growth have not been considered.

I certify the matters described in this certificate.

Qualified person:

Signed:

Certificate No: J10461

Date: 30/05/2024

GEO-ENVIRONMENTAL ASSESSMENT

240 Ellendale Road

Fentonbury

June 2024

GEO-ENVIRONMENTAL

SOLUTIONS

Investigation Details

Client:	P & J Sheds
Site Address:	240 Ellendale Road, Fentonbury
Date of Inspection:	20/05/2024
Proposed Works:	Alterations/Additions
Investigation Method:	Geoprobe 540UD - Direct Push
Inspected by:	C. Cooper

Site Details

Certificate of Title (CT):	245359/1
Title Area:	Approx. 8.299 ha
Applicable Planning Overlays:	Bushfire-prone areas
Slope & Aspect:	5° NE facing slope
Vegetation:	Grass & Weeds
Ground Surface:	Undisturbed

Background Information

Geology Map:	MRT 1:250000
Geological Unit:	Triassic Sandstone
Climate:	Annual rainfall 850mm
Water Connection:	Mains
Sewer Connection:	Unserviced-On-site required
Testing and Classification:	*AS2870:2011, AS1726:2017 & AS1547:2012*

Investigation

A number of bore holes were completed to identify the distribution and variation of the soil materials at the site, bore hole locations are indicated on the site plan. See soil profile conditions presented below. Tests were conducted across the site to obtain bearing capacities of the material at the time of this investigation.

Soil Profile Summary

BH 1 Depth (m)	BH 2 Depth (m)	USCS)	Description
0.00-0.20	0.00-0.30	**SM**	**Sandy SILT**: Brown, dry, medium dense.
0.20-0.70		**SM**	**Sandy SILT**: Pale brown, dry, medium dense.
0.70-0.90	0.30-1.10	**CI**	**Sandy CLAY**: Medium plasticity, Orange-brown-grey, slightly moist, stiff, (BH1 refusal on rock).
	1.00-1.50	**SC**	**Clayey SAND**: Brown-white, slightly moist, very dense to refusal on rock.

Wastewater Soil Profile Summary

BH 3 Depth (m)	Horizon	Description
0.00-0.30	A1	**Sandy SILT (SM)**: Brown, dry, medium dense.
0.30-1.20	A2	**Sandy SILT (SM)**: Pale brown, dry, medium dense.
1.20-1.50	BC	**Sandy CLAY (CI)**: Medium plasticity, Orange-brown-grey, slightly moist, stiff, refusal on rock.

Site Notes

Soils on site are developing from Triassic Sandstone. The soils consist of windblown sands over clay subsoils developing from bedrock.

Site Classification

The site has been assessed and classified in accordance with AS2870:2011 *"Residential Slabs and Footings".*

The site has been classified as:

Class M

Y_s range: **20-40mm**

Notes: Soils on site are have plastic and reactive characteristics, however, these soils are shallow and not likely to exhibit maximum ground surface movement potential with an indicative Y's range of 20-40mm. All foundations must be founded into the underlying bedrock

Wind Loading Classification

According to *"AS4055:2021 - Wind Loads for Housing"* the house site is classified below:

Wind Classification:	**N2**
Region:	A
Terrain Category:	2.0
Shielding Classification:	PS
Topographic Classification:	T1
Wind Classification:	N2
Design Wind Gust Speed – m/s ($V_{h,u}$):	40

Wastewater Classification & Recommendations

The new build will involve adding a three bedroom ancillary dwelling. The current wastewater system is not large enough to accommodate the additional flows therefore a new septic system for both buildings is to be installed. The existing septic tank and related absorption area are to be disconnected and decommissioned from use. All parts of the redundant system should be emptied by a licensed liquid waste contractor. The septic tank should be disinfected with ag lime or hydrated lime. Where possible, the old system should be removed from the site. Alternatively, the lid and base of the septic tank are to be broken up to below ground level and the tank filled with compacted clean fill and the surface relevelled. If settling occurs over time then additional fill may be required. The inlet and outlet pipes on the tank must be permanently sealed or plugged.

According to AS1547-2012 (on-site waste-water management) the natural soil is classified as **Sandy Loam (category 2).** It is proposed to install a dual-purpose septic tank with on-site absorption. A Design Loading Rate (DLR) of 15L/m^2/day has been assigned for primary treated effluent.

The existing house and proposed ancillary have a calculated maximum wastewater output of 1500L/day. This is based on a mains water supply and a maximum occupancy of 10 people (150L/day/person).

Using the DLR of 15L/m^2/day, an absorption area of at least 100m^2 will be required to accommodate the expected flows. This can be accommodated by three 20m x 1.8m x 0.6m terraced absorption trenches connected to a dual-purpose septic tank (min 4500L) via a three-way splitter box with speed levelers to ensure equal distribution. For all calculations please refer to the Trench summary reports. Due to the highly permeable topsoils a cut-off drain will not be required. A 100% reserve area should be set aside for future wastewater requirements. There is sufficient space available on site to accommodate the reserve due to the large property size (>2ha). Therefore, a formal reserve area has not been assigned.

The following setback distances are required to comply with the Building Act 2016:

Upslope or level buildings:	3m
Downslope buildings:	10m
Upslope or level boundaries:	1.5m
Downslope boundaries:	12m
Downslope surface water:	57m

Compliance with Building Act 2016 Guidelines for On-site Wastewater Management Systems is outlined in the attached table.

During construction GES will need to be notified of any variation to the soil conditions or wastewater loading as outlined in this report.

Construction Notes & Recommendations

The site has been classified as **Class M**. It is recommended the foundations be placed on the underlying bedrock to minimise the potential for significant foundation movement.

All earthworks on site must comply with AS3798:2007, and I further recommend that consideration be given to drainage and sediment control on site during and after construction. Care should also be taken to ensure there is adequate drainage in the construction area to avoid the potential for weak bearing and foundation settlement associated with excessive soil moisture.

During construction GES will need to be notified of any variation to the soil conditions or wastewater loading as outlined in this report.

Dr John Paul Cumming B.Agr.Sc (hons) PhD CPSS GAICD

Director

GES Pty Ltd

Land suitability and system sizing for on-site wastewater management

Trench 3.0 (Australian Institute of Environmental Health)

Assessment Report

Site assessment for on site wastewater disposal

Assessment for	P & J Sheds	Assess. Date	6-Jun-24
		Ref. No.	
Assessed site(s)	240 Ellendale Road, Fentonbury	Site(s) inspected	20-May-24
Local authority	Central Highlands	Assessed by	John Paul Cumming

This report summarises wastewater volumes, climatic inputs for the site, soil characteristics and sustem sizing and design issues. Site Capability and Environmental sensitivity issues are reported separately, where 'Alert' columns flag factors with high (A) or very high (AA) limitations which probably require special consideration for system design(s). Blank spaces on this page indicate data have not been entered into TRENCH.

Wastewater Characteristics

Wastewater volume (L/day) used for this assessment = 1,500 (using the 'No. of bedrooms in a dwelling' method)
Septic tank wastewater volume (L/day) = 500
Sullage volume (L/day) = 1,000
Total nitrogen (kg/year) generated by wastewater = 7.8
Total phosphorus (kg/year) generated by wastewater = 4.7

Climatic assumptions for site (Evapotranspiration calculated using the crop factor method)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Mean rainfall (mm)	35	33	40	50	71	58	78	91	82	70	46	53
Adopted rainfall (R, mm)	35	33	40	50	71	58	78	91	82	70	46	53
Retained rain (Rr, mm)	30	28	34	42	60	49	66	78	70	60	39	45
Max. daily temp. (deg. C)												
Evapotrans (ET, mm)	130	110	91	63	42	29	32	42	63	84	105	126
Evapotr. less rain (mm)	**100**	**82**	**57**	**21**	**-18**	**-20**	**-35**	**-36**	**-7**	**24**	**66**	**81**

Annual evapotranspiration less retained rain (mm) = 316

Soil characterisitics

Texture = Sandy Loam Category = 2 Thick. (m) = 1.5
Adopted permeability (m/day) = 3 Adopted LTAR (L/sq m/day) = 15 Min depth (m) to water = 3

Proposed disposal and treatment methods

Proportion of wastewater to be retained on site:	All wastewater will be disposed of on the site
The preferred method of on-site primary treatment:	In dual purpose septic tank(s)
The preferred method of on-site secondary treatment:	In-ground
The preferred type of in-ground secondary treatment:	Trench(es)
The preferred type of above-ground secondary treatment:	None
Site modifications or specific designs:	Not needed

Suggested dimensions for on-site secondary treatment system

Total length (m) =	60
Width (m) =	1.8
Depth (m) =	0.6
Total disposal area (sq m) required =	110
comprising a Primary Area (sq m) of:	108
and a Secondary (backup) Area (sq m) of:	

Sufficient area is available on site

To enter comments, click on the line below 'Comments'. (This yellow-shaded box and the buttons on this page will not be printed.)

Comments

The calculated DLR for the Category 5 soil present is 15L/sq m/day with a required absorption area of 108sq m for the two three bedroom dwellings on mains water. Therefore the system will have the capacity to cope with predicted climatic and loading events.

GES Pty Ltd

Land suitability and system sizing for on-site wastewater management

Trench 3.0 (Australian Institute of Environmental Health)

Site Capability Report

Site assessment for on site wastewater disposal

Assessment for	P & J Sheds	Assess. Date	5-Jun-24
		Ref. No.	
Assessed site(s)	240 Ellendale Road, Fentonbury	Site(s) inspected	20-May-24
Local authority	Central Highlands	Assessed by	John Paul Cumming

This report summarises data relating to the physical capability of the assessed site(s) to accept wastewater. Environmental sensitivity and system design issues are reported separately. The 'Alert' column flags factors with high (A) or very high (AA) site limitations which probably require special consideration in site acceptability or for system design(s). Blank spaces indicate data have not been entered into TRENCH.

Alert	Factor	Units	Value	Confid level	Limitation Trench	Limitation Amended	Remarks
	Expected design area	sq m	5,000	V. high	Very low		
	Density of disposal systems	/sq km	2	High	Very low		
	Slope angle	degrees	6	V. high	Low		
	Slope form	Convex spreading		V. high	Very low		
	Surface drainage	Imperfect		High	Moderate		
	Flood potential	Site floods 1 in 50-75 yrs		High	Moderate		
	Heavy rain events	Infrequent		High	Moderate		
	Aspect (Southern hemi.)	Faces NE or NW		V. high	Low		
	Frequency of strong winds	Common		High	Low		
	Wastewater volume	L/day	1,500	High	Very high	Moderate	Other factors lessen impact
	SAR of septic tank effluent		2.1	High	Moderate		
	SAR of sullage		1.7	High	Low		
	Soil thickness	m	1.5	V. high	Very low		
	Depth to bedrock	m	1.5	High	Moderate		
	Surface rock outcrop	%	0	V. high	Very low		
	Cobbles in soil	%	0	V. high	Very low		
	Soil pH		6.5	High	Very low		
	Soil bulk density	gm/cub. cm	1.5	High	Low		
	Soil dispersion	Emerson No.	7	V. high	Very low		
AA	Adopted permeability	m/day	3	High	Very high		
	Long Term Accept. Rate	L/day/sq m	15	High	Very low		

To enter comments, click on the line below 'Comments' . (This yellow-shaded box and the buttons on this page will not be printed.)

Comments

The site has good capability to accept onsite wastewater.

GES Pty Ltd

Land suitability and system sizing for on-site wastewater management

Trench 3.0 (Australian Institute of Environmental Health)

Environmental Sensitivity Report

Site assessment for on site wastewater disposal

Assessment for	P & J Sheds	Assess. Date	5-Jun-24
		Ref. No.	
Assessed site(s)	240 Ellendale Road, Fentonbury	Site(s) inspected	20-May-24
Local authority	Central Highlands	Assessed by	John Paul Cumming

This report summarises data relating to the environmental sensitivity of the assessed site(s) in relation to applied wastewater. Physical capability and system design issues are reported separately. The 'Alert' column flags factors with high (A) or very high (AA) limitations which probably require special consideration in site acceptability or for system design(s). Blank spaces indicate data have not been entered into TRENCH.

Alert	Factor	Units	Value	Confid level	Limitation Trench	Limitation Amended	Remarks
AA	Cation exchange capacity	mmol/100g	15	High	Very high		
A	Phos. adsorp. capacity	kg/cub m	0.4	High	High		
	Annual rainfall excess	mm	-316	High	Very low		
	Min. depth to water table	m	3	V. high	Very low		
	Annual nutrient load	kg	12.6	High	Moderate		
	G'water environ. value	Agric non-sensit		High	Low		
	Min. separation dist. required	m	3	High	Very low		
	Risk to adjacent bores	Very low		High	Very low		
	Surf. water env. value	Agric non-sensit		High	Low		
A	Dist. to nearest surface water	m	72	High	High		
	Dist. to nearest other feature	m	61	V. high	Low		
	Risk of slope instability	Low		High	Low		
	Distance to landslip	m	243	High	Very low		

To enter comments, click on the line below 'Comments'. (This yellow-shaded box and the buttons on this page will not be printed.)

Comments

The wastewater system complies with the required setbacks to downslope surface water. There is a low environmental risk associated with onsite wastewater disposal.

Demonstration of wastewater system compliance to *Building Act 2016 Guidelines for On-site Wastewater*

Acceptable Solutions	**Performance Criteria**	**Compliance**
A1 Horizontal separation distance from a building to a land application area must comply with one of the following: a) be no less than 6m; or b) be no less than: (i) 3m from an upslope building or level building; (ii) If primary treated effluent to be no less than 4m plus 1m for every degree of average gradient from a downslope building; (iii) If secondary treated effluent and subsurface application, no less than 2m plus 0.25m for every degree of average gradient from a downslope building.	P1 a) The land application area is located so that (i) the risk of wastewater reducing the bearing capacity of a building's foundations is acceptably low.; and (ii) is setback a sufficient distance from a downslope excavation around or under a building to prevent inadequately treated wastewater seeping out of that excavation	Complies with A1 (b) (i) Land application area will be located with a minimum separation distance of 3m from an upslope or level building. Complies with A1 (b) (ii) Land application area will be located with a minimum separation distance of 10m from a downslope building.
A2 Horizontal separation distance from downslope surface water to a land application area must comply with (a) or (b) (a) be no less than 100m; or (b) be no less than the following: (i) if primary treated effluent 15m plus 7m for every degree of average gradient to downslope surface water; or (ii) if secondary treated effluent and subsurface application, 15m plus 2m for every degree of average gradient to down slope surface water.	P2 Horizontal separation distance from downslope surface water to a land application area must comply with all of the following: a) Setbacks must be consistent with AS/NZS 1547 Appendix R; b) A risk assessment in accordance with Appendix A of AS/NZS 1547 has been completed that demonstrates that the risk is acceptable.	Complies with A2 (a) Land application area located > 57m from downslope surface water

A3 Horizontal separation distance from a property boundary to a land application area must comply with either of the following: (a) be no less than 40m from a property boundary; or (b) be no less than: (i) 1.5m from an upslope or level property boundary; and (ii) If primary treated effluent 2m for every degree of average gradient from a downslope property boundary; or (iii) If secondary treated effluent and subsurface application, 1.5m plus 1m for every degree of average gradient from a downslope property boundary.	P3 Horizontal separation distance from a property boundary to a land application area must comply with all of the following: (a) Setback must be consistent with AS/NZS 1547 Appendix R; and (b) A risk assessment in accordance with Appendix A of AS/NZS 1547 has been completed that demonstrates that the risk is acceptable.	Complies with A3 (b) (i) Land application area will be located with a minimum separation distance of 1.5m from an upslope or level property boundary Complies with A3 (b) (ii) Land application area will be located with a minimum separation distance of 12m from a downslope property boundary.
A4 Horizontal separation distance from a downslope bore, well or similar water supply to a land application area must be no less than 50m and not be within the zone of influence of the bore whether up or down gradient.	P4 Horizontal separation distance from a downslope bore, well or similar water supply to a land application area must comply with all of the following: (a) Setback must be consistent with AS/NZS 1547 Appendix R; and (b) A risk assessment completed in accordance with Appendix A of AS/NZS 1547 demonstrates that the risk is acceptable	Complies with A4 No bore or well identified within 50m

A5 Vertical separation distance between groundwater and a land application area must be no less than: (a) 1.5m if primary treated effluent; or (b) 0.6m if secondary treated effluent	P5 Vertical separation distance between groundwater and a land application area must comply with the following: (a) Setback must be consistent with AS/NZS 1547 Appendix R; and (b) A risk assessment completed in accordance with Appendix A of AS/NZS 1547 that demonstrates that the risk is acceptable	Complies with A5 (a) No groundwater encountered
A6 Vertical separation distance between a limiting layer and a land application area must be no less than: (a) 1.5m if primary treated effluent; or (b) 0.5m if secondary treated effluent	P6 Vertical setback must be consistent with AS/NZS1547 Appendix R.	Complies with P6 vertical setback of 0.6m consistent with AS/NZS 1547 Appendix R
A7 nil	P7 A wastewater treatment unit must be located a sufficient distance from buildings or neighbouring properties so that emissions (odour, noise or aerosols) from the unit do not create an environmental nuisance to the residents of those properties	Complies

ASSESSMENT OF HORIZONTAL AND VERTICAL SETBACK DISTANCES

(adapted from Table R1 in AS1547 - to be used in conjunction with Site Constraint Table)

Site feature	**Setback distance range** (m)	**Site constraint items of specific concern** (from Site Constraint Table)	**Assessment**	**Adopted setback distance** (m)
	Horizontal setback distance (m)			
Property boundary	1.5 – 50	A, D, J	12	>12
Buildings/houses	2.0 – > 6	A, D, J	2	>2m
Surface water	15 – 100	A, B, D, E, F, G, J	57	57
Bore, well	15 – 50	A, C, H, J	N/A	N/A
Recreational areas (Children's play areas, swimming pools and so on)	3 – 15	A, E, J	N/A	N/A
In-ground water tank	4 – 15	A, E, J	N/A	N/A
Retaining wall and Embankments, escarpments, cuttings	3.0 m or 45° angle from toe of wall (whichever is greatest)	D, G, H	N/A	N/A
	Vertical setback distance (m)			
Groundwater	0.6 – > 1.5	A, C, F, H, I, J	0.6	N/A
Hardpan or bedrock	0.5 – ≥ 1.5	A, C, J	0.5	0.6

SITE CONSTRAINT RATING

(adapted from Table R2 in AS1547 - used as a guide in determining appropriate setback distances)

Item	Site/system feature	Constraint scale (see Note 1) LOWER / Examples of constraint factors (see Note 2)	HIGHER	Sensitive features	Comment	Constraint Rating
A	Microbial quality of effluent	Effluent quality consistently producing ≤ 10 cfu/100 mL *E. coli* (secondary treated effluent with disinfection)	Effluent quality consistently ^{6} *E. coli* (for example, primary treated effluent)	Groundwater and surface pollution hazard, public health hazard	Primary treated effluent	Moderate
B	Surface water	Category 1 to 3 soils, no surface water down gradient within > 100 m, low rainfall area	Category 4 to 6 soils, permanent surface water <50 m down gradient, high rainfall area, high resource/environmental value	Surface water pollution hazard for low permeable soils, low lying or poorly draining areas	Downslope surface water 57m	Complies with Acceptable Solutions
C	Groundwater	Category 5 and 6 soils, low resource/environmental value	Category 1 and 2 soils, gravel aquifers, high resource/environmental value	Groundwater pollution hazard	Sandy Loam (category 2) soil No groundwater encountered	Low
D	Slope	0 – 6% (surface effluent application) 0 – 10% (subsurface effluent application)	> 10% (surface effluent application), > 30% subsurface effluent application	Off-site export of effluent, erosion	<10 slope subsurface effluent	Low
E	Position of land application area in landscape.	Downgradient of surface water, property boundary, recreational area	Upgradient of surface water, property boundary, recreational area	Surface water pollution hazard, off-site export of effluent	Downslope boundary minimum 12m	Complies with Acceptable Solutions
F	Drainage	Category 1 and 2 soils, gently sloping area	Category 6 soils, sites with visible seepage, moisture tolerant vegetation, low lying area	Groundwater pollution hazard	Sandy Loam (category 2) soil No visible seepage or moisture tolerant sp	Complies with Acceptable Solutions
G	Flood potential	Above 1 in 20 year flood contour	Below 1 in 20 year flood contour	Off-site export of effluent, system failure, mechanical faults	Above 1:20 year flood contour	Complies with Acceptable Solutions

SITE CONSTRAINT RATING (cont)

Item	Site/system feature	Constraint scale (see Note 1) LOWER — Examples of constraint factors (see Note 2)	HIGHER	Sensitive features	Comment	Constraint Rating
H	Geology and soils	Category 3 and 4 soils, low porous regolith, deep, uniform soils	Category 1 and 6 soils, fractured rock, gravel aquifers, highly porous regolith	Groundwater pollution hazard for porous regolith and permeable soils	Sandy Loam (category 2) soil High permeability	Complies with Acceptable Solutions
I	Landform	Hill crests, convex side slopes, and plains	Drainage plains and incise channels	Groundwater pollution hazard, resurfacing hazard	side slope	Complies with Acceptable Solutions
J	Application method	Drip irrigation or subsurface application of effluent	Surface/above ground application of effluent	Off-site export of effluent, surface water pollution	Subsurface application	Low

AS1547:2012 – Loading Certificate – Septic System Design

This loading certificate sets out the design criteria and the limitations associated with use of the system.

Site Address: 240 Ellendale Road, Fentonbury

System Capacity: 10 people @ 150L/person/day

Summary of Design Criteria

DLR: 15L/m^2/day.

Absorption area: 108m^2

Reserve area location /use: Not Assigned - more than 100% available

Water saving features fitted: Standard fixtures

Allowable variation from design flows: 1 event @ 200% daily loading per quarter

Typical loading change consequences: Expected to be minimal due to capacity of system and site area (provided loading changes within 25% of design)

Overloading consequences: Continued overloading may cause hydraulic failure of the absorption area and require upgrading/extension of the area. Risk considered acceptable due to visible signs of overloading and owner monitoring.

Underloading consequences: Lower than expected flows will have minimal consequences on system operation unless the house has long periods of non occupation. Under such circumstances additional maintenance of the system may be required. Risk considered acceptable.

Lack of maintenance / monitoring consequences: Issues of underloading/overloading and condition of the absorption area require monitoring and maintenance, if not completed system failure may result in unacceptable health and environmental risks. Septic tank de-sludging must also be monitored to prevent excessive sludge and scum accumulation. Monitoring and regulation by the property owner required to ensure compliance.

Other operational considerations: Owners/occupiers must be aware of the operational requirements and limitations of the system, including the following; the absorption area must not be subject to traffic by vehicles or heavy stock and should be fenced if required. The absorption area must be kept with adequate grass cover to assist in evapotranspiration of treated effluent in the absorption trenches. The septic tank must be desludged at least every 3 years, and any other infrastructure such as septic tank outlet filters must also be cleaned regularly (approx. every 6 months depending upon usage). Foreign materials such as rubbish and solid waste must be kept out of the system.

CERTIFICATE OF THE RESPONSIBLE DESIGNER

Section 94
Section 106
Section 129
Section 155

Form **35**

To: P & J Sheds *Owner name*
38 McIntyre Street *Address*
Mornington 7018 *Suburb/postcode*

Designer details:

Name: John-Paul Cumming
Category: Bld. Srvcs. Dsgnr. - Hydraulic
Business name: Geo-Environmental Solutions
Phone No: 03 6223 1839
Business address: 29 Kirksway Place
Battery Point 7004
Fax No: N/A
Licence No: CC774A
Email address: office@geosolutions.net.au

Details of the proposed work:

Owner/Applicant P & J Sheds
Designer's project reference No. J10461
Address: 240 Ellendale Road
Lot No: 245359/1
Fentonbury 7140

Type of work: Building work ☐ Plumbing work ☒ *(X all applicable)*

Description of work:
On-site wastewater management system - design

(new building / alteration / addition / repair / removal / re-erection water / sewerage / stormwater / on-site wastewater management system / backflow prevention / other)

Description of the Design Work (Scope, limitations or exclusions): *(X all applicable certificates)*

Certificate Type:	Certificate	Responsible Practitioner
	☐ Building design	Architect or Building Designer
	☐ Structural design	Engineer or Civil Designer
	☐ Fire Safety design	Fire Engineer
	☐ Civil design	Civil Engineer or Civil Designer
	☒ Hydraulic design	Building Services Designer
	☐ Fire service design	Building Services Designer
	☐ Electrical design	Building Services Designer
	☐ Mechanical design	Building Service Designer
	☐ Plumbing design	Plumber-Certifier; Architect, Building Designer or Engineer
	☐ Other (specify)	

Deemed-to-Satisfy: ☒ Performance Solution: ☐ *(X the appropriate box)*

Other details:

Septic tank with onsite absorption trenches.

Design documents provided:

The following documents are provided with this Certificate –

Document description:

Drawing numbers:	Prepared by: Geo-Environmental Solutions	Date: Jun-24
Schedules:	Prepared by:	Date:
Specifications:	Prepared by: Geo-Environmental Solutions	Date: Jun-24
Computations:	Prepared by:	Date:
Performance solution proposals:	Prepared by:	Date:
Test reports:	Prepared by: Geo-Environmental Solutions	Date: Jun-24

Standards, codes or guidelines relied on in design process:

AS1547:2012 On-site domestic wastewater management.

AS3500 (Parts 0-5)-2013 Plumbing and drainage set.

Any other relevant documentation:

Geo-Environmental Assessment - 240 Ellendale Road Fentonbury - Jun-24

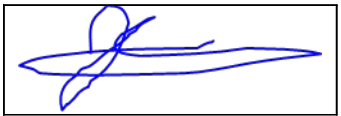
Geo-Environmental Assessment - 240 Ellendale Road Fentonbury - Jun-24

Attribution as designer:

I John-Paul Cumming, am responsible for the design of that part of the work as described in this certificate;

The documentation relating to the design includes sufficient information for the assessment of the work in accordance with the *Building Act 2016* and sufficient detail for the builder or plumber to carry out the work in accordance with the documents and the Act;

This certificate confirms compliance and is evidence of suitability of this design with the requirements of the National Construction Code.

	Name: (print)	*Signed*	*Date*
Designer:	John-Paul Cumming		06/06/2024
Licence No:	CC774A		

Assessment of Certifiable Works: (TasWater)

Note: single residential dwellings and outbuildings on a lot with an existing sewer connection are not considered to increase demand and are not certifiable.

If you cannot check ALL of these boxes, LEAVE THIS SECTION BLANK.

TasWater must then be contacted to determine if the proposed works are Certifiable Works.

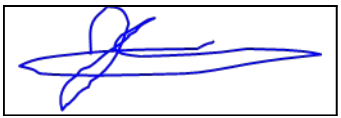
I confirm that the proposed works are not Certifiable Works, in accordance with the Guidelines for TasWater CCW Assessments, by virtue that all of the following are satisfied:

- [x] The works will not increase the demand for water supplied by TasWater
- [x] The works will not increase or decrease the amount of sewage or toxins that is to be removed by, or discharged into, TasWater's sewerage infrastructure
- [x] The works will not require a new connection, or a modification to an existing connection, to be made to TasWater's infrastructure
- [x] The works will not damage or interfere with TasWater's works
- [x] The works will not adversely affect TasWater's operations
- [x] The work are not within 2m of TasWater's infrastructure and are outside any TasWater easement
- [x] I have checked the LISTMap to confirm the location of TasWater infrastructure
- [x] If the property is connected to TasWater's water system, a water meter is in place, or has been applied for to TasWater.

Certification:

I ..... John-Paul Cumming..... being responsible for the proposed work, am satisfied that the works described above are not Certifiable Works, as defined within the *Water and Sewerage Industry Act 2008,* that I have answered the above questions with all due diligence and have read and understood the Guidelines for TasWater CCW Assessments.

Note: the Guidelines for TasWater Certification of Certifiable Works Assessments are available at: www.taswater.com.au

	Name: (print)	*Signed*	*Date*
Designer:	John-Paul Cumming		06/06/2024

CERTIFICATE OF QUALIFIED PERSON – ASSESSABLE ITEM

Section 321

Form **55**

To: P & J Sheds *Owner /Agent*

38 McIntyre Street *Address*

Mornington 7018 *Suburb/postcode*

Qualified person details:

Qualified person: John-Paul Cumming

Address: 29 Kirksway Place

Battery Point 7004

Phone No: 03 6223 1839

Fax No:

Licence No: AO999

Email address: jcumming@geosolutions.net.au

Qualifications and Insurance details: Certified Professional Soil Scientist (CPSS stage 2)

(description from Column 3 of the Director's Determination - Certificates by Qualified Persons for Assessable Items

Speciality area of expertise: AS2870-2011 Foundation Classification

(description from Column 4 of the Director's Determination - Certificates by Qualified Persons for Assessable Items)

Details of work:

Address: 240 Ellendale Road

Fentonbury 7140

Lot No:

Certificate of title No: 245359/1

The assessable item related to this certificate: Classification of foundation Conditions according to AS2870-2011

(description of the assessable item being certified)
Assessable item includes –
- *a material;*
- *a design*
- *a form of construction*
- *a document*
- *testing of a component, building system or plumbing system*
- *an inspection, or assessment, performed*

Certificate details:

Certificate type: Foundation Classification

(description from Column 1 of Schedule 1 of the Director's Determination - Certificates by Qualified Persons for Assessable Items n)

This certificate is in relation to the above assessable item, at any stage, as part of - *(tick one)*

building work, plumbing work or plumbing installation or demolition work ☒

or

a building, temporary structure or plumbing installation: ☐

In issuing this certificate the following matters are relevant –

Documents:	The attached soil report for the address detailed above in 'details of work'
Relevant calculations:	Reference the above report.
References:	AS2870:2011 residential slabs and footings AS1726:2017 Geotechnical site investigations CSIRO Building technology file – 18.

Substance of Certificate: (what it is that is being certified)

Site Classification consistent with AS2870-2011.

Scope and/or Limitations

The classification applies to the site as inspected and does not account for future alteration to foundation conditions as a result of earth works, drainage condition changes or variations in site maintenance.

I, John-Paul Cumming certify the matters described in this certificate.

Qualified person:

Signed:

Certificate No: J10461

Date: 06/06/2024

Wastewater system:

Dual-purpose septic tank (min 4500L)

Three-way splitter box

Terraced Absorption Trenches
3 x 20m x 1.8m x 0.6m

Min 3m separation

Min 3m from upslope buildings
Min 10m from downslope buildings
Min 1.5m from upslope or level boundaries
Min 10m from downslope boundary
Min 57m from downslope surface water

Refer to GES report

GES
GEO-ENVIRONMENTAL SOLUTIONS
29 Kirksway Place Battery Point
T| 62231839 E| office@geosolutions.net.au

Dr. John Paul Cumming
Building Services Designer-Hydraulic
CCC774A

6/06/2024

Do not scale from these drawings. Dimensions to take precedence over scale.	P & J Sheds 240 Ellendale Road, Fentonbury 7140	C.T.: 245359/1 PID: 7306627	Date: 6/06/2024	On-Site Wastewater Management Plan	Drawing Number:	Sheet 1 of 1 Drawn by: LR

Design notes:

1. Absorption trench dimensions of up to 20m long by 0.45m deep by 1.8m wide – total storage volume calculated at average 35% porosity.
2. Base of trenches to be excavated level and smearing and compaction avoided.
3. 350mm Arch should be placed in the centre of trench
4. Geotextile or filter cloth to be placed over the distribution arch to prevent clogging
5. Construction on slopes up to 20% to allow trench depth range 700mm upslope edge to 450mm on down slope edge
6. Dispersive soils gypsum to be incorporated into the base of the trench at a rate of 1kg/m^2
7. All works on site to comply with AS3500 and Tasmanian Plumbing code.

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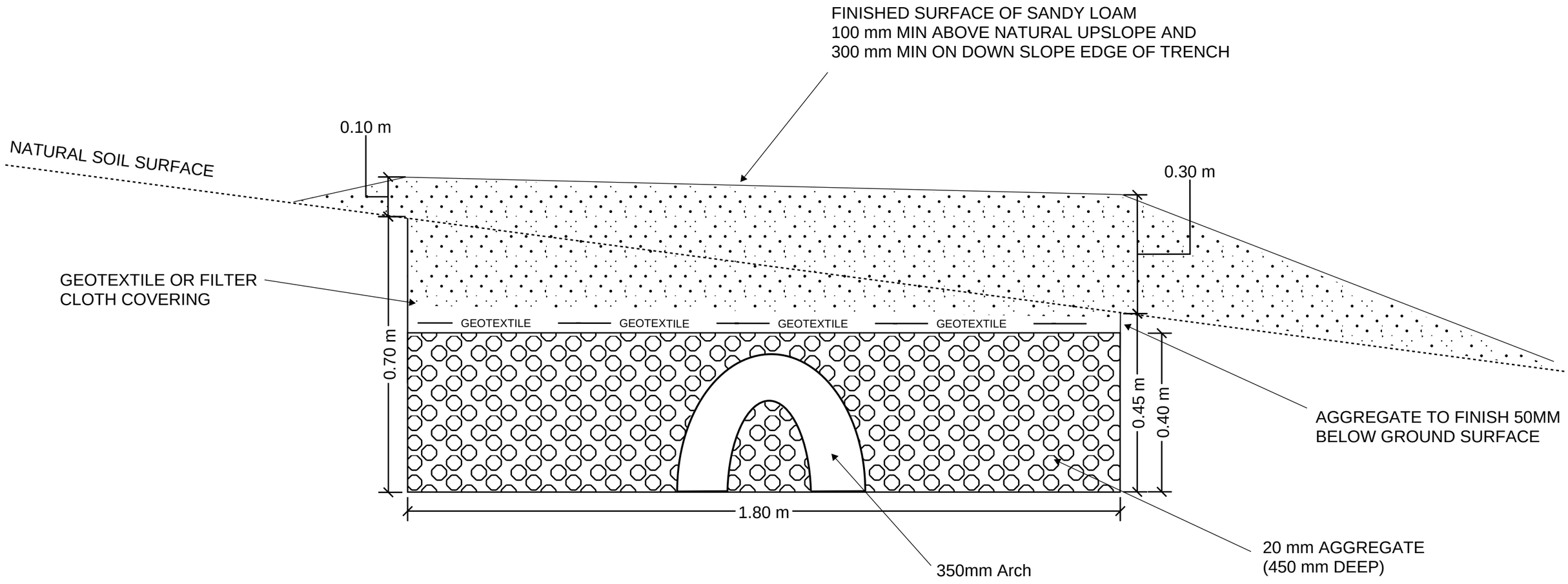

Do not scale from these drawings. Dimensions to take precedence over scale.	Geo-Environmental Solutions			Terraced Absorption Trench Detail	Sheet 1 of 1

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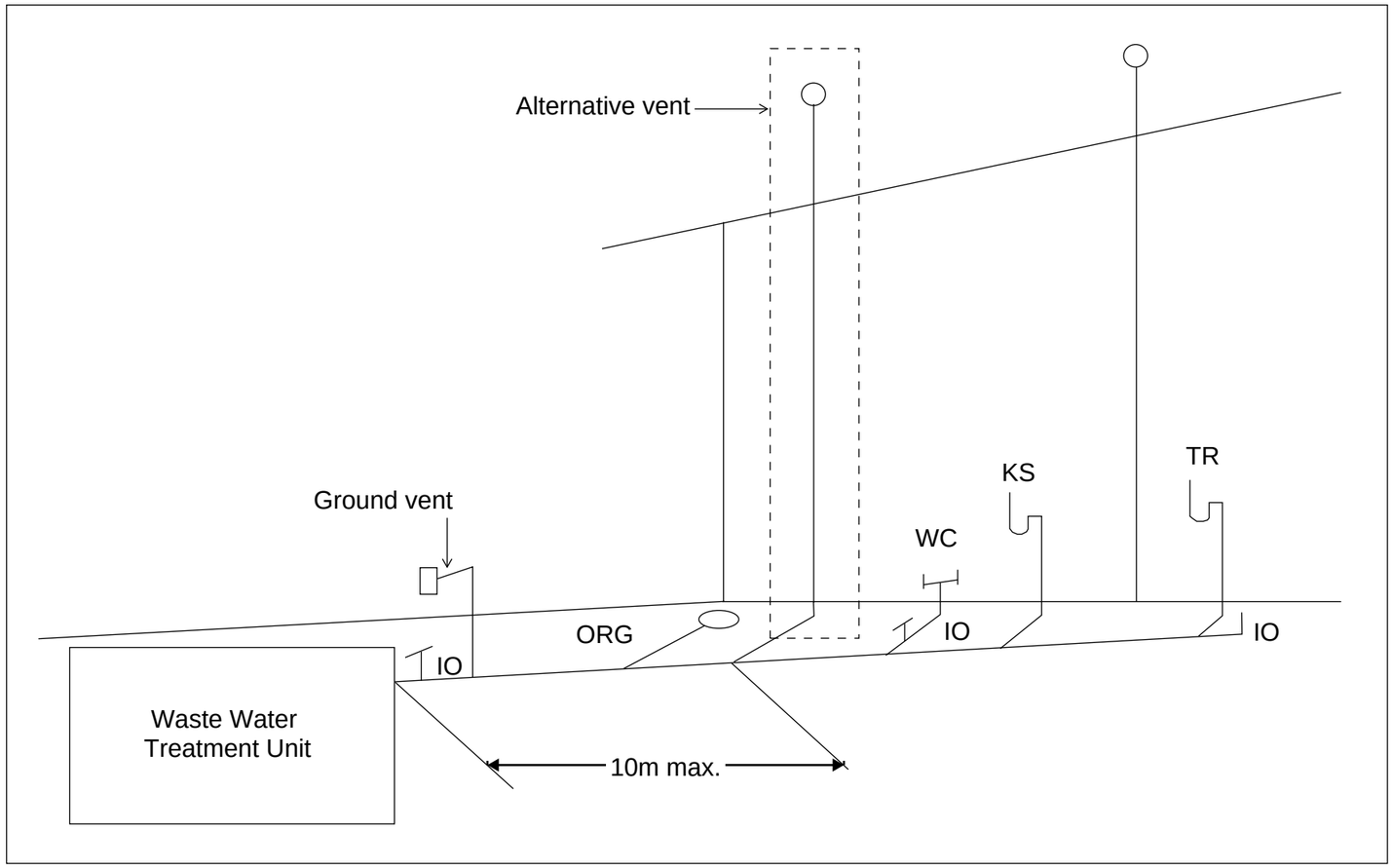

Tas Figure H101.2 Alternative Venting Arrangements

Vents must terminate in accordance with AS/NZS 3500.2

Alternative venting to be used by extending a vent to terminate as if an upstream vent, with the vent connection between the last sanitary fixture or sanitary appliance and the on-site wastewater management system. Use of a ground vent in not recommended

Inspection openings must be located at the inlet to an on-site wastewater management system treatment unit and the point of connection to the land application system and must terminate as close as practicable to the underside of an approved inspection opening cover installed at the finished surface level

Access openings providing access for desludging or maintenance of on-site wastewater management system treatment unites must terminate at or above finished surface level

Alternative vent is the preferred arrangement where possible.

Do not scale from these drawings. Dimensions to take precedence over scale.				Tas Figure H101.2 Alternative Venting Arrangements		Sheet 1 of 1