NOTICE OF PROPOSED DEVELOPMENT

Notice is hereby given that an application has been made for planning approval for the following development:

SITE:
14 GATE FIVE ROAD, CARLTON RIVER

PROPOSED DEVELOPMENT:
DWELLING AND OUTBUILDING

The relevant plans and documents can be inspected at the Council Offices at 47 Cole Street, Sorell during normal office hours, or the plans may be viewed on Council's website at www.sorell.tas.gov.au until **Monday 22nd December 2025.**

Any person may make representation in relation to the proposal by letter or electronic mail (sorell.council@sorell.tas.gov.au) addressed to the General Manager. Representations must be received no later than **Monday 22nd December 2025.**

APPLICATION NO: **5.2025-259.1**
DATE: **5 DECEMBER 2025**

14 Gate Five Road, Carlton River

3-Dec-2025

Disclaimer

Any information extracted from this document (from the face of the document or by scale) should be verified on site. Council takes no responsibility for the accuracy of any information contained or presented in the document. While every care has been taken to ensure the accuracy of this information, Council makes no representations or warranties about the accuracy, reliability, completeness or suitability for any particular purpose and disclaims all responsibility and liability.

50 m

N

Part B: Please note that Part B of this form is publicly exhibited.

Full description of Proposal:	*Use:* Residential Home *Development:* dwelling & garage & Shed *Large or complex proposals should be described in a letter or planning report.*
Design and construction cost of proposal:	$ 750 000
Is all, or some the work already constructed:	No: ☑ Yes: ☐
Location of proposed works:	Street address: 14 Gate Five Suburb: Carlton River Postcode: ..... Certificate of Title(s) Volume: ..... Folio: .....
Current Use of Site	Residential land
Current Owner/s:	Name(s) Georgia Crawford and Hayden Davis

Is the Property on the Tasmanian Heritage Register?	No: ☑ Yes: ☐	*If yes, please provide written advice from Heritage Tasmania*
Is the proposal to be carried out in more than one stage?	No: ☐ Yes: ☑	*If yes, please clearly describe in plans*
Have any potentially contaminating uses been undertaken on the site?	No: ☑ Yes: ☐	*If yes, please complete the Additional Information for Non-Residential Use*
Is any vegetation proposed to be removed?	No: ☑ Yes: ☐	*If yes, please ensure plans clearly show area to be impacted*
Does the proposal involve land administered or owned by either the Crown or Council?	No: ☑ Yes: ☐	*If yes, please complete the Council or Crown land section on page 3*

If a new or upgraded vehicular crossing is required from Council to the front boundary please complete the Vehicular Crossing (and Associated Works) application form
https://www.sorell.tas.gov.au/services/engineering/

Part B continued: Please note that Part B of this form is publicly exhibited

Declarations and acknowledgements
• I/we confirm that the application does not contradict any easement, covenant or restriction specified in the Certificate of Title, Schedule of Easements or Part 5 Agreement for the land. • I/we consent to Council employees or consultants entering the site and have arranged permission and/or access for Council's representatives to enter the land at any time during normal business hours. • I/we authorise the provision of a copy of any documents relating to this application to any person for the purposes of assessment or public consultation and have permission of the copyright owner for such copies. • I/we declare that, in accordance with s52(1) of the *Land Use Planning and Approvals Act 1993*, that I have notified the owner(s) of the intention to make this application. • I/we declare that the information in this application is true and correct. *Details of how the Council manages personal information and how you can request access or corrections to it is outlined in Council's Privacy Policy available on the Council website.*
• I/we acknowledge that the documentation submitted in support of my application will become a public record held by Council and may be reproduced by Council in both electronic and hard copy format in order to facilitate the assessment process, for display purposes during public exhibition, and to fulfil its statutory obligations. I further acknowledge that following determination of my application, Council will store documentation relating to my application in electronic format only.
• Where the General Manager's consent is also required under s.14 of the *Urban Drainage Act 2013*, by making this application I/we also apply for that consent.

Applicant Signature:	Signature: ..... Date: 23/09/2025

Crown or General Manager Land Owner Consent
If the land that is the subject of this application is owned or administered by either the Crown or Sorell Council, the consent of the relevant Minister or the Council General Manager whichever is applicable, must be included here. This consent should be completed and signed by either the General Manager, the Minister, or a delegate (as specified in s52 (1D-1G) of the *Land Use Planning and Approvals Act 1993*). Please note: • If General Manager consent if required, please first complete the General Manager consent application form available on our website www.sorell.tas.gov.au • If the application involves Crown land you will also need a letter of consent. • Any consent is for the purposes of making this application only and is not consent to undertaken work or take any other action with respect to the proposed use or development.
I Georgia Crawford being responsible for the administration of land at 14 Gate Five declare that I have given permission for the making of this application for Sorell Council Development Application: 5.2025.259.1 - Development Application - 14 Gate Five Road, Carlton River - P1.pdf Plans Reference: P1 Date Received: 23/09/2025

Signature of General Manager, Minister or Delegate:	Signature: ..... Date: .....

RESULT OF SEARCH

RECORDER OF TITLES

Issued Pursuant to the Land Titles Act 1980

Tasmanian Government

SEARCH OF TORRENS TITLE

VOLUME	FOLIO
176611	7
EDITION	DATE OF ISSUE
4	04-Jul-2024

SEARCH DATE : 09-Dec-2024
SEARCH TIME : 02.57 PM

DESCRIPTION OF LAND

Parish of FORCETT Land District of PEMBROKE
Lot 7 on Sealed Plan 176611
Derivation : Part of Lot 4198, 27A-0R-0P Gtd. to Thomas Joseph
Prior CT 174736/8

SCHEDULE 1

M897392 TRANSFER to HAYDEN GRAHAM ROSS DAVIS and GEORGIA ELIZABETH CRAWFORD Registered 01-Sep-2021 at 12.01 PM

SCHEDULE 2

Reservations and conditions in the Crown Grant if any
SP176611 COVENANTS in Schedule of Easements
SP176611 FENCING COVENANT in Schedule of Easements
SP156457, SP172795 & SP174736 COVENANTS in Schedule of Easements
SP156457, SP172795 & SP174736 FENCING COVENANT in Schedule of Easements
SP 27944 COUNCIL NOTIFICATION under Section 468(12) of the Local Government Act 1962
E388594 MORTGAGE to B&E Ltd Registered 04-Jul-2024 at 12.01 PM

UNREGISTERED DEALINGS AND NOTATIONS

No unregistered dealings or other notations

SCHEDULE OF EASEMENTS	Registered Number
NOTE: THE SCHEDULE MUST BE SIGNED BY THE OWNERS & MORTGAGEES OF THE LAND AFFECTED. SIGNATURES MUST BE ATTESTED.	SP 176611

EASEMENTS AND PROFITS

Each lot on the plan is together with:-
(1) ~~such rights of drainage over the drainage easements shown on the plan (if any) as may be necessary to drain the stormwater and other surplus water from such lot; and~~
(2) any easements or profits a prendre described hereunder.
Each lot on the plan is subject to:-
(1) ~~such rights of drainage over the drainage easements shown on the plan (if any) as passing through such lot as may be necessary to drain the stormwater and other surplus water from any other lot on the plan; and~~
(2) any easements or profits a prendre described hereunder.
The direction of the flow of water through the drainage easements shown on the plan is indicated by arrows.

RIGHT OF WAY

Lot 8 on the plan is subject to a right of carriageway (appurtenant to Folio of the Register Volume 114193 Folio 2) over that portion of Lot 8 on the plan marked "RIGHT OF WAY (PRIVATE) 6.00 WIDE" as created by Dealing Number B821213.

FENCING COVENANT

The owner of each lot on the plan covenants with the vendor, Ian Robert Woolley, that the vendor shall not be required to fence.

RESTRICTIVE COVENANTS

Each lot on the plan is burdened by the restrictive covenants created by and more fully set forth in Sealed Plan 156457 and Sealed Plan 172795.

Subdivider: signature ..... *witness: signature* .....

(USE ANNEXURE PAGES FOR CONTINUATION) Sorell CT

SUBDIVIDER: **Ian** Robert Woolley FOLIO REF: Volume ~~172795~~ Folio ~~1~~ CT 174736 8 CT SOLICITOR & REFERENCE: Tessa Poulson, Tierney Law - 172540	PLAN SEALED BY: ~~Huon Valley~~ Council DATE: 27.2.19 7.2007.9.1 REF NO. Council Delegate
NOTE: The Council Delegate must sign the Certificate for the purposes of identification.	

ANNEXURE TO SCHEDULE OF EASEMENTS PAGE 2 OF 2 PAGES	Registered Number SP 176611
SUBDIVIDER: **Ian Robert Woolley** 174736 FOLIO REFERENCE: Volume ~~172795~~ Folio ~~1~~ 8	

SIGNED by: Ian Robert Woolley as the registered proprietor of the land contained in Folio of the Register Volume 172795 Folio 1

signature .....

in the presence of *witness: signature* .....

witness name ..... *witness occupation* .....

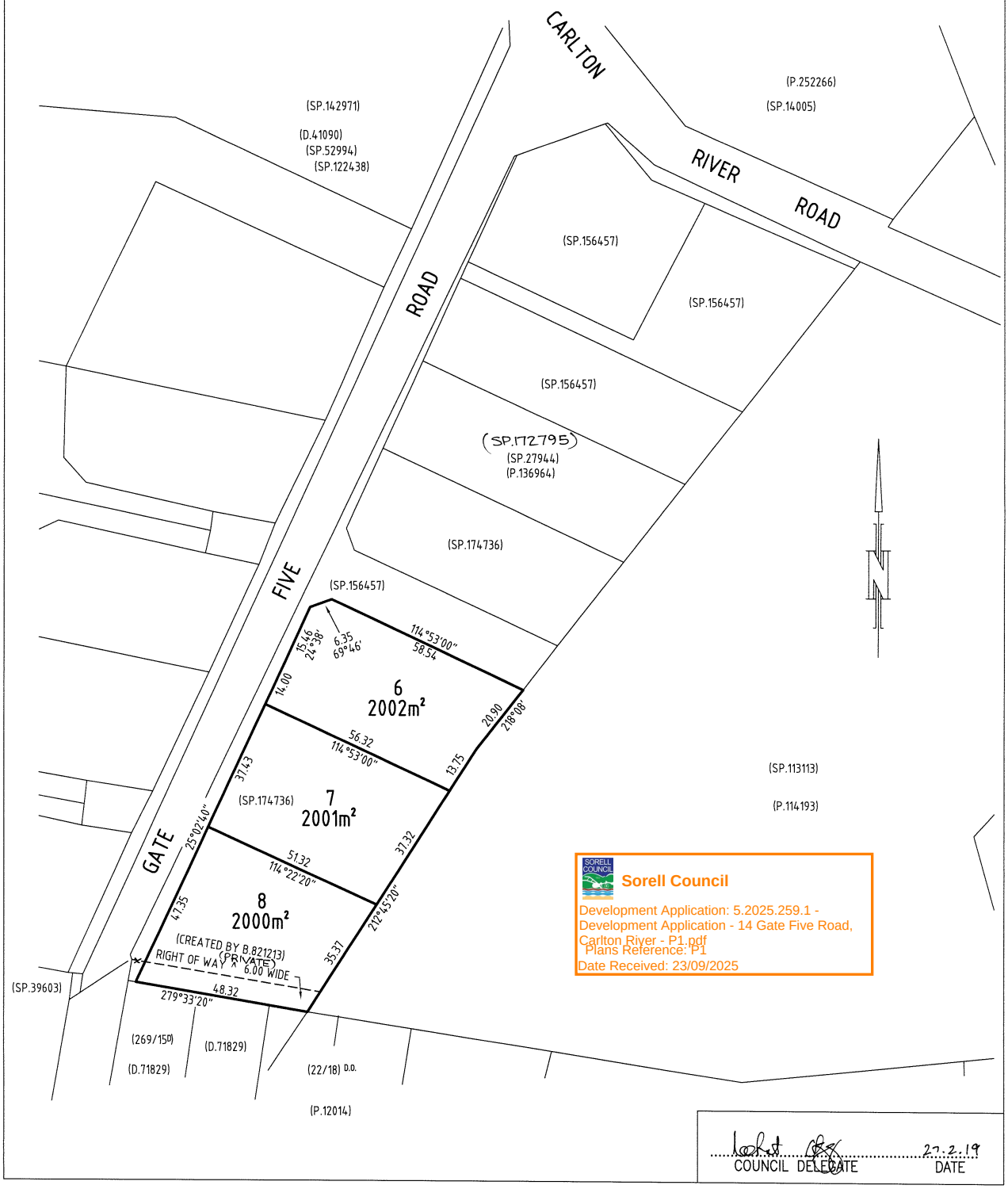
witness address .....

Tessa Poulson - Legal Practitioner
Tierney Law
8/16 Main Road, Huonville Tas 7109

NOTE: Every annexed page must be signed by the parties to the dealing or where the party is a corporate body be signed by the persons who have attested the affixing of the seal of that body to the dealing.

OWNER IAN ROBERT WOOLLEY FOLIO REFERENCE C.T.174736/8 GRANTEE PART OF LOT 4198, 27 ACRES, GRANTED TO THOMAS JOSEPH	PLAN OF SURVEY BY SURVEYOR CRAIG BRADLEY ROGERSON ROGERSON AND BIRCH SURVEYORS UNIT 1 – 2 KENNEDY DRIVE, CAMBRIDGE PARK PH 6248–5898 MOB. 0418–120–796 LAND DISTRICT OF PEMBROKE PARISH OF FORCETT SCALE 1: 1000 LENGTHS IN METRES	REGISTERED NUMBER SP176611 APPROVED EFFECTIVE FROM - 4 MAR 2019 Deputy Recorder of Titles

MAPSHEET MUNICIPAL CODE No. 124 (5425)	LAST UPI No.	LAST PLAN No. SP174736	ALL EXISTING SURVEY NUMBERS TO BE CROSS REFERENCED ON THIS PLAN



Sorell Council
Development Application: 5.2025.259.1 - Development Application - 14 Gate Five Road, Carlton River - P1.pdf
Plans Reference: P1
Date Received: 23/09/2025

COUNCIL DELEGATE 27.2.19 DATE

To Whom It May Concern,

Re: Building Proposal – 14 Gate Five Road, Carlton River, Tasmania

I am writing to submit my proposal for the development of a residential dwelling at 14 Gate Five Road, Carlton River.

The vision for this build is to create a home that is respectful of the natural surrounds, aligns with local planning requirements, and enhances the character of the Carlton River community. My intent is to design a residence that is functional, sustainable, and well-integrated into the environment. Consideration has been given to the orientation of the block, access, and preserving the natural aesthetic of the area.

Key features of the proposed build will include:

- A design that is consistent with the scale and appearance of neighbouring properties.
- Environmentally conscious choices in materials and energy use to minimise environmental impact.
- Landscaping that complements the local setting while ensuring privacy and practicality.
- Compliance with all planning and building codes, supported by professional consultation where required.

I am committed to ensuring that this development reflects both a personal vision for a family home and a broader respect for the Carlton River community. My goal is to build a residence that not only provides long-term stability for myself [and my family, if applicable] but also contributes positively to the area.

Thank you for considering this proposal. I look forward to working with Council and relevant stakeholders to ensure the project moves forward smoothly and in alignment with community and planning expectations.

Yours sincerely,

Georgia Crawford

GEO-ENVIRONMENTAL ASSESSMENT

14 Gate Five Road

Carlton River

September 2024

GES

GEO-ENVIRONMENTAL

SOLUTIONS

Investigation Details

Client:	Georgia Crawford
Site Address:	14 Gate Five Road, Carlton River
Date of Inspection:	25/06/2024
Proposed Works:	New house
Investigation Method:	AMS Power Probe - Direct Push
Inspected by:	A. Plummer

Site Details

Certificate of Title (CT):	176611/7
Title Area:	Approx. 2000 m²
Applicable Planning Overlays:	Bushfire-prone areas
Slope & Aspect:	3° SE facing slope
Vegetation:	Mixed Flora

Background Information

Geology Map:	MRT 1:250000
Geological Unit:	Quaternary Sediments
Climate:	Annual rainfall 450mm
Water Connection:	Tank
Sewer Connection:	Unserviced-On-site required
Testing and Classification:	AS2870:2011, AS1726:2017, AS1547:2012 & AS4055:2021

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

BH1 Depth (m)	BH2 Depth (m)	USCS	Description
0.00 – 0.30	0.00 – 0.40	SP	**SAND**: dark grey, dry, loose
0.30 – 0.50	0. 0 – 0.70	SW	**SAND**: light grey, slightly moist, dense
0.50 – 0.70	0.70 – 0.80	SW	**SAND**: dark brown, slightly moist, dense
0.70 – 1.80	0.80 – 2.0+	SW	**SAND**: yellow-brown, grey, slightly moist, dense
1.80 – 3.0+		SC	**CLAYEY SAND**: yellow-brown, grey, slightly moist, dense, no refusal

Site Notes

The soil onsite consist of deep sands formed from Quaternary sediments. No watertable was encountered in any of the test holes investigated.

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 S

Y_s range: **0-20mm**

Notes: This is a slightly reactive site

Wind Loading Classification

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

Wind Classification: N3

Region:	A
Terrain Category:	1.0
Shielding Classification:	PS
Topographic Classification:	T1
Wind Classification:	N3
Design Wind Gust Speed – m/s ($V_{h,u}$):	50

Wastewater Classification & Recommendations

According to AS1547-2012 for on-site wastewater management the natural soil is classified as **SANDY LOAM (Category 2)**. It is proposed to install a dual-purpose septic tank with onsite absorption sized to accommodate the expected wastewater load. A Design Loading Rate (DLR) of 20L/m^2/day has therefore been assigned for primary treated wastewater.

The proposed three-bedroom dwelling has a calculated maximum wastewater output of 600L/day. This is based on a tank water supply and a maximum occupancy of 5 people (120L/day/person).

Using the DLR of 20L/m^2/day, an absorption area of at least 30m^2 will be required. It is proposed to accommodate this by one 20m x 1.5m x 0.6m absorption trench connected to a dual-purpose septic tank (min 3000L).

A cut-off drain will not be required upslope of the application area due to the highly permeable soil onsite and the proximity to the upslope dwelling. However, all stormwater overflow will need to be directed away from the application area as necessary. A 100% reserve area will need to be set aside and kept free from development for any future wastewater requirements. There is sufficient space available onsite to accommodate the required reserve.

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

Upslope or level buildings:	3m
Downslope buildings:	6m
Upslope or level boundaries:	1.5m
Downslope boundaries:	8m
Downslope surface water:	100m

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

Construction Notes & Recommendations

The site has been classified as **Class S** - Slightly reactive site, which may experience only slight ground movement from moisture changes.

It is recommended that all footings be founded in the natural material with bearing capacities >100kPa.

All earthworks on site must comply with AS3798:2012, 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.

I also recommend that during construction that I and/or the design engineer be notified of any major variation to the foundation conditions as predicted in this report.

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

Director

GES P/L

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 waste water disposal

Assessment for	Georgia Crawford	Assess. Date	26-Jun-24
		Ref. No.	
Assessed site(s)	14 Gate Five Rd Carlton River	Site(s) inspected	25-Jun-24
Local authority	Sorell	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 = 600 (using the 'No. of bedrooms in a dwelling' method)

Septic tank wastewater volume (L/day) = 200

Sullage volume (L/day) = 400

Total nitrogen (kg/year) generated by wastewater = 1.8

Total phosphorus (kg/year) generated by wastewater = 1.2

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)	41	36	36	45	36	29	46	47	40	48	44	56
Adopted rainfall (R, mm)	41	36	36	45	36	29	46	47	40	48	44	56
Retained rain (Rr, mm)	37	32	32	41	32	26	41	42	36	43	40	50
Max. daily temp. (deg. C)												
Evapotrans (ET, mm)	130	110	91	63	42	29	32	42	63	84	105	126
Evapotr. less rain (mm)	**93**	**78**	**59**	**23**	**10**	**3**	**-10**	**0**	**27**	**41**	**65**	**76**

Annual evapotranspiration less retained rain (mm) = 463

Soil characterisitics

Texture = Sandy Loam Category = 2 Thick. (m) = 3

Adopted permeability (m/day) = 3 Adopted LTAR (L/sq m/day) = 20 Min depth (m) to water = 5

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) =	20
Width (m) =	1.5
Depth (m) =	0.6
Total disposal area (sq m) required =	30
comprising a Primary Area (sq m) of:	30
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 2 soil present is 20L/m2/day requireing an absorption area of 30m2. Therefore the system will have the capacity to cope with predicted climatic and loading events.

GES P/L

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 waste water disposal

Assessment for	Georgia Crawford	Assess. Date	26-Jun-24
		Ref. No.	
Assessed site(s)	14 Gate Five Rd Carlton River	Site(s) inspected	25-Jun-24
Local authority	Sorell	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		Remarks
					Trench	Amended	
	Expected design area	sq m	500	V. high	High	Moderate	Other factors lessen impact
	Density of disposal systems	/sq km	20	Mod.	Moderate		
	Slope angle	degrees	4	High	Very low		
	Slope form	Straight simple		High	Low		
	Surface drainage	Good		High	Very low		
	Flood potential	Site floods <1:100 yrs		High	Very low		
	Heavy rain events	Infrequent		High	Moderate		
A	Aspect (Southern hemi.)	Faces SE or SW		V. high	High		
	Frequency of strong winds	Common		High	Low		
	Wastewater volume	L/day	600	High	Moderate	No change	
	SAR of septic tank effluent		1.7	High	Low		
	SAR of sullage		2.6	High	Moderate		
	Soil thickness	m	3.0	V. high	Very low		
	Depth to bedrock	m	3.0	V. high	Very low		
	Surface rock outcrop	%	0	V. high	Very low		
	Cobbles in soil	%	0	V. high	Very low		
	Soil pH		5.5	High	Low		
	Soil bulk density	gm/cub. cm	1.4	High	Very low		
	Soil dispersion	Emerson No.	8	V. high	Very low		
	Adopted permeability	m/day	3	Mod.	Very high	Moderate	Other factors lessen impact
	Long Term Accept. Rate	L/day/sq m	20	High	Low	Moderate	

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 the capability to accept onsite wastewater.

GES P/L

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 waste water disposal

Assessment for	Georgia Crawford	Assess. Date	26-Jun-24
		Ref. No.	
Assessed site(s)	14 Gate Five Rd Carlton River	Site(s) inspected	25-Jun-24
Local authority	Sorell	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		Remarks
					Trench	Amended	
A	Cation exchange capacity	mmol/100g	30	High	High		
A	Phos. adsorp. capacity	kg/cub m	0.3	High	High		
	Annual rainfall excess	mm	-463	High	Very low		
	Min. depth to water table	m	5	High	Very low		
	Annual nutrient load	kg	3.1	High	Very low		
	G'water environ. value	Agric non-sensit		V. high	Low		
	Min. separation dist. required	m	2	High	Very low		
	Risk to adjacent bores	Very low		V. high	Very low		
	Surf. water env. value	Agric non-sensit		V. high	Low		
	Dist. to nearest surface water	m	200	V. high	Moderate		
	Dist. to nearest other feature	m	100	V. high	Low	Moderate	
	Risk of slope instability	Very low		V. high	Very low		
	Distance to landslip	m	500	V. 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

Explanatory Notes

1 Scope of Works

The methods of description and classification of soils used in this report are based largely on Australian Standard 1726 – Geotechnical Site Investigations (AS1726:2017), with reference to Australian Standard 1289 – Methods for testing soils for engineering purposes (AS1289), for eventual Site Classification according to Australian Standard 2870 (AS2870:2011) – Residential Slabs and Footings and Australian Standard 1547 (AS1547:2012) On-site domestic wastewater management.

1.1 Site Classification AS2870:2011

Site classification with reference to the above Australian Standards are based on site reactivity.

Class	Foundation Conditions	Characteristic Surface Movement
A	Most sand and rock sites with little or no ground movement from moisture changes.	**0mm**
S	Slightly reactive clay sites, which may experience only slight ground movement from moisture changes.	**0 – 20mm**
M	Moderately reactive clay or silt sites, which may experience moderate ground movement from moisture changes.	**20 – 40mm**
H-1	Highly reactive clay sites, which may experience high ground movement from moisture changes.	**40 – 60mm**
H-2	Highly reactive clay sites, which may experience very high ground movement from moisture changes.	**60 – 75mm**
E	Extremely reactive sites, which may experience extreme ground movement from moisture changes.	**>75mm**

*Note: Soils where foundation performance may be significantly affected by factors other than reactive soil movement are classified as **Class P**.*

A site is classified as **Class P** when:

- The bearing capacity of the soil profile in the foundation zone is generally less than 100kpa
- If excessive foundation settlement may occur due to loading on the foundation.
- The site contains uncontrolled fill greater than 0.8m in depth for sandy sites and 0.4m in depth for other soil materials.
- The site is subject to mine subsistence, landslip, collapse activity or coastal erosion.
- The site is underlain by highly dispersive soils with significant potential for erosion
- If the site is subject to abnormal moisture conditions which can affect foundation performance

1.2 Soil Characterisation

This information explains the terms of phrase used within the soil description area of the report.

It includes terminology for cohesive and non-cohesive soils and includes information on how the Unified Soil Classification Scheme (USCS) codes are determined.

NON COHESIVE – SAND & GRAVEL		
Consistency Description	**Field Test**	**Dynamic Cone Penetrometer blows/100 mm**
Very loose (VL)	Easily penetrated with 13 mm reinforcing rod pushed by hand.	0 - 1
Loose (L)	Easily penetrated with 13 mm reinforcing rod pushed by hand. Can be excavated with a spade; 50 mm wooden peg can be easily driven.	1 - 3
Medium dense (MD)	Penetrated 300 mm with 13 mm reinforcing rod driven with 2 kg hammer, - hard shovelling.	3 - 8
Dense (D)	Penetrated 300 mm with 13 mm reinforcing rod driven with 2 kg hammer, requires pick for excavation: 50 mm wooden peg hard to drive.	8 - 15
Very dense (VD)	Penetrated only 25 - 50 mm with 13 mm reinforcing rod driven with 2 kg hammer.	>15

COHESIVE - SILT & CLAY		
Consistency Description	**Field Test**	**Indicative undrained shear strength kPa**
Very soft	Easily penetrated >40 mm by thumb. Exudes between thumb and fingers when squeezed in hand.	<12
Soft	Easily penetrated 10 mm by thumb. Moulded by light finger pressure	>12 and <25
Firm	Impression by thumb with moderate effort. Moulded by strong finger pressure	>25 and <50
Stiff	Slight impression by thumb cannot be moulded with finger.	>50 and <100
Very Stiff	Very tough. Readily indented by thumbnail.	>100 and <200
Hard	Brittle. Indented with difficulty by thumbnail.	>200

1.3 USCS Material Descriptions

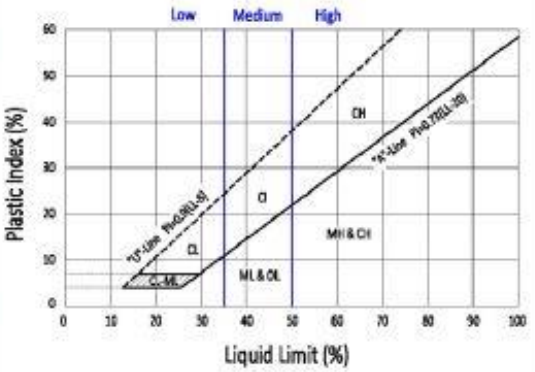
Soils for engineering purposes are the unconsolidated materials above bedrock, they can be residual, alluvial, colluvial or aeolian in origin.

Major Divisions		Particle size mm	USCS Group Symbol	Typical Names	Laboratory Classification				
					% < 0.075 mm (2)	Plasticity of fine fraction	$C_u = \frac{D_{60}}{D_{10}}$	$C_c = \frac{(D_{30})^2}{(D_{10})(D_{60})}$	NOTES
COARSE GRAINED SOILS (more than half of material less than 63 mm is larger than 0.075 mm)	BOULDERS	200							
	COBBLES	63							
	GRAVELS (more than half of coarse fraction is larger than 2.36 mm)	coarse 20 / medium 6 / fine 2.36	GW	Well graded gravels and gravel-sand mixtures, little or no fines	0-5	—	>4	Between 1 and 3	(1) Identify fines by the method given for fine-grained soils.
			GP	Poorly graded gravels and gravel-sand mixtures, little or no fines, uniform gravels	0-5	—	Fails to comply with above		
			GM	Silty gravels, gravel-sand-silt mixtures (1)	12-50	Below 'A' line or PI<4	—	—	
			GC	Clayey gravels, gravel-sand-clay mixtures (1)	12-50	Above 'A' line and PI>7	—	—	
	SANDS (more than half of coarse fraction is smaller than 2.36 mm)	coarse 0.6 / medium 0.2 / fine 0.075	SW	Well graded sands and gravelly sands, little or no fines	0-5	—	>6	Between 1 and 3	(2) Borderline classifications occur when the percentage of fines (fraction smaller than 0.075 mm size) is greater than 5% and less than 12%. Borderline classifications require the use of SP-SM, GW-GC.
			SP	Poorly graded sands and gravelly sands, little or no fines	0-5	—	Fails to comply with above		
			SM	Silty sands, sand silt mixtures (1)	12-50	Below 'A' line or PI<4	—	—	
			SC	Clayey sands, sand-clay mixtures (1)	12-50	Above 'A' line and PI>7	—	—	
FINE GRAINED SOILS (more than half of material less than 63 mm is smaller than 0.075 mm	SILTS & CLAYS (Liquid Limit ≤50%)		ML	Inorganic silts, very fine sands, rock flour, silty or clayey fine sands or clayey silts with slight plasticity					
			CL CI	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays					
			OL	Organic silts and clays of low plasticity					
	SILTS & CLAYS (Liquid Limit >50%)		MH	Inorganic silts, mic- aceous or diato-maceous fine sands or silts, elastic silts					
			CH	Inorganic clays of high plasticity, fat clays					
			OH	Organic silts and clays of high plasticity					
	HIGHLY ORGANIC SOILS		PT	Peat and other highly organic soils					

Use the gradation curve of material passing 63 mm for classification of fractions according to the criteria given in 'Major Divisions'

Plasticity Chart

For classification of fine grained soils and fine fraction of coarse grained soils.



Grain size analysis is performed by two processes depending on particle size. Sand silt and clay particles are assessed using a standardised hydrometer test, and coarse sand and larger is assessed through sieving by USCS certified sieves. For more detail see the following section.

Soil Classification	Particle Size
Clay	Less than 0.002mm
Silt	0.002 – 0.06mm
Fine/Medium Sand	0.06 – 2.0mm
Coarse Sand	2.0mm – 4.75mm
Gravel	4.75mm – 60.00mm

1.4 Bearing Capacities and DCP testing.

DCP and PSP weighted penetrometer tests – Dynamic Cone Penetrometer (DCP) and Perth Sand Penetrometer (PSP) tests are carried out by driving a rod into the ground with a falling weight hammer and measuring the blows for successive 100mm increments of penetration. Normally, there is a depth limitation of 1.2m but this may be extended in certain conditions by the use of extension rods. The methods for the two tests are quite similar.

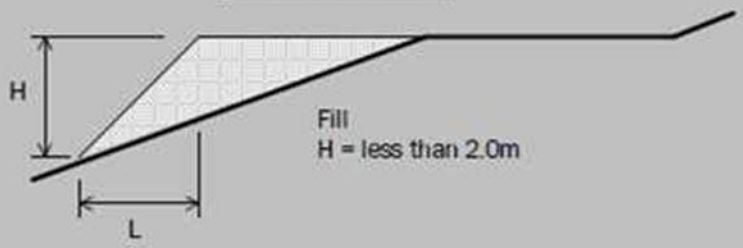
- Dynamic Cone Penetrometer – a 16mm rod with a 20mm diameter cone end is driven with a 9kg hammer dropping 510mm (AS 1289, Test 6.3.2).
- Perth Sand Penetrometer – a 16mm diameter flat-ended rod is driven with a 9kg hammer, dropping 600mm (AS 1289 Test 6.3.3). This test was developed for testing the density of sands and is mainly used in granular soils and filling.

Site Anomalies – During construction GES will need to be notified of any major variation to the foundation conditions as predicted in this report.

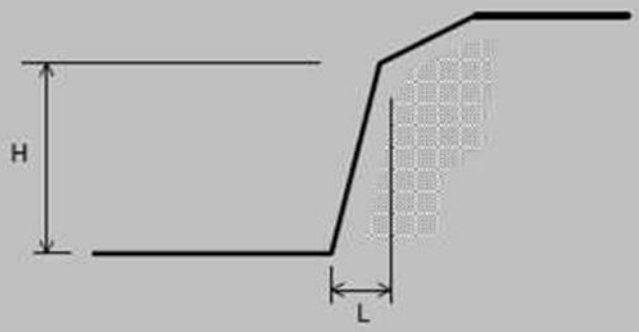
1.5 Batter Angles for Embankments *(Guide Only)*

Note : Retaining walls or other form of soil retaining methods must be adopted where the slope ratio is greater than that indicated in the table below :-

FILL EMBANKMENTS



CUT EMBANKMENTS



MATERIAL TYPE (refer soils report)		EMBANKMENT SLOPES (Height : Length)	
		Compacted Fill	Cutting
Stable Rock (A*)		2 : 3	6 : 1
Sand (A*)		1 : 2	2 : 3
Silt (P*)		1 : 4	1 : 4
Clay	Firm Clay	1 : 2	1 : 1
	Soft Clay	Not Suitable	2 : 3
Soft Soils (P*)		Not Suitable	Not Suitable

Glossary of Terms

Bearing Capacity – Maximum bearing pressure that can be sustained by the foundation from the proposed footing system under service loads which should avoid failure or excessive settlement.

Clay – (Mineral particles less than 0.002mm in diameter). Fine grained cohesive soil with plastic properties when wet. Also includes sandy clays, silty clays, and gravelly clays.

Dynamic Cone Penetrometer (DCP) – Field equipment used to determine underlying soil strength and therefore bearing capacity (kPa) by measuring the penetration of the device into the soil after each hammer blow.

Dispersive soil – A soil that has the ability to pass rapidly into suspension in water.

Footing – Construction which transfers the load from the building to the foundation.

Foundation – Ground which supports the building

Landslip – Foundation condition on a sloping site where downhill foundation movement or failure is a design consideration.

Qualified Engineer – A professional engineer with academic qualifications in geotechnical or structural engineering who also has extensive experience in the design of the footing systems for houses or similar structures.

Reactive Site – Site consisting of clay soil which swells on wetting and shrinks on drying by an amount that can damage buildings on light strip footings or unstiffened slabs. Includes sites classified as S, M, H-1, H-2 & E in accordance with AS2870-2011.

Sand – (Mineral particles greater than 0.02mm in diameter). Granular non-cohesive, non-plastic soil that may contain fines including silt or clay up to 15%.

Services – Means all underground services to the site including but not limited to power, telephone, sewerage, water & storm water.

Silt – (Mineral particles 0.002 – 0.02mm in diameter). Fine grained non-cohesive soil, non-plastic when wet. Often confers a silky smoothness of field texture, regularly includes clay and sand to form clayey silts, sandy silts and gravelly silts.

Site – The site title, as denoted by address, lot number, or Certificate of Title (CT) number, or Property Identification Number (PID).

Surface Movement (Ys) – Design movement (mm) at the surface of a reactive site caused by moisture changes.

Disclaimer

This Report has been prepared in accordance with the scope of services between Geo-Environmental Solutions Pty. Ltd. (GES) and the Client. 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 discussed 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 geotechnical parameter or the soil conditions over the whole area of the site. Soil and rock samples collected from the investigation area are assumed to be representative of the areas from where they were collected and not indicative of the entire site. The conclusions discussed within this report are based on observations and/or testing at these investigation points.

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 a party.

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

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.
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 > 100m 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 8m of 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 A6 (a) No limiting layer identified
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

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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: 14 Gate Five Rd, Carlton River

System Capacity: 600L/day

Summary of Design Criteria

DLR: 20L/m^2/day.

Absorption area: 30m^2

Reserve area location /use: Assigned

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 QUALIFIED PERSON – ASSESSABLE ITEM

Section 321

Form 55

To: Georgia Crawford *Owner /Agent*

14 Gate Five Road *Address*

Carlton River 7173 *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: 14 Gate Five Road

Carlton River 7173

Lot No:

Certificate of title No: 176611/7

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: J10602

Date: 26/09/2024

CERTIFICATE OF THE RESPONSIBLE DESIGNER

Section 94
Section 106
Section 129
Section 155

Form **35**

To: Georgia Crawford *Owner name*
14 Gate Five Road *Address*
Carlton River 7173 *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 Georgia Crawford
Designer's project reference No. J10602
Address: 14 Gate Five Road
Lot No: 176611/7
Carlton River 7173

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:

Dual-purpose septic tank with onsite absorption

Design documents provided:

The following documents are provided with this Certificate –

Document description:

Drawing numbers:	Prepared by: Geo-Environmental Solutions	Date: Sep-24
Schedules:	Prepared by:	Date:
Specifications:	Prepared by: Geo-Environmental Solutions	Date: Sep-24
Computations:	Prepared by:	Date:
Performance solution proposals:	Prepared by:	Date:
Test reports:	Prepared by: Geo-Environmental Solutions	Date: Sep-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 - 14 Gate Five Dr, Carlton River - Sep-24

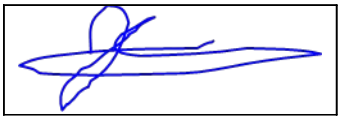
Geo-Environmental Assessment - 14 Gate Five Dr, Carlton River - Sep-24

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		26/09/2024
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.

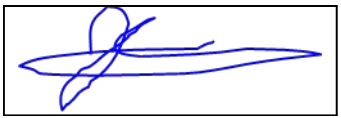
I confirm that the proposed works are not Certifiable Works, in accordance with the Guidelines for TasWater CCW Assessments, by virtue that all of the following are satisfied:

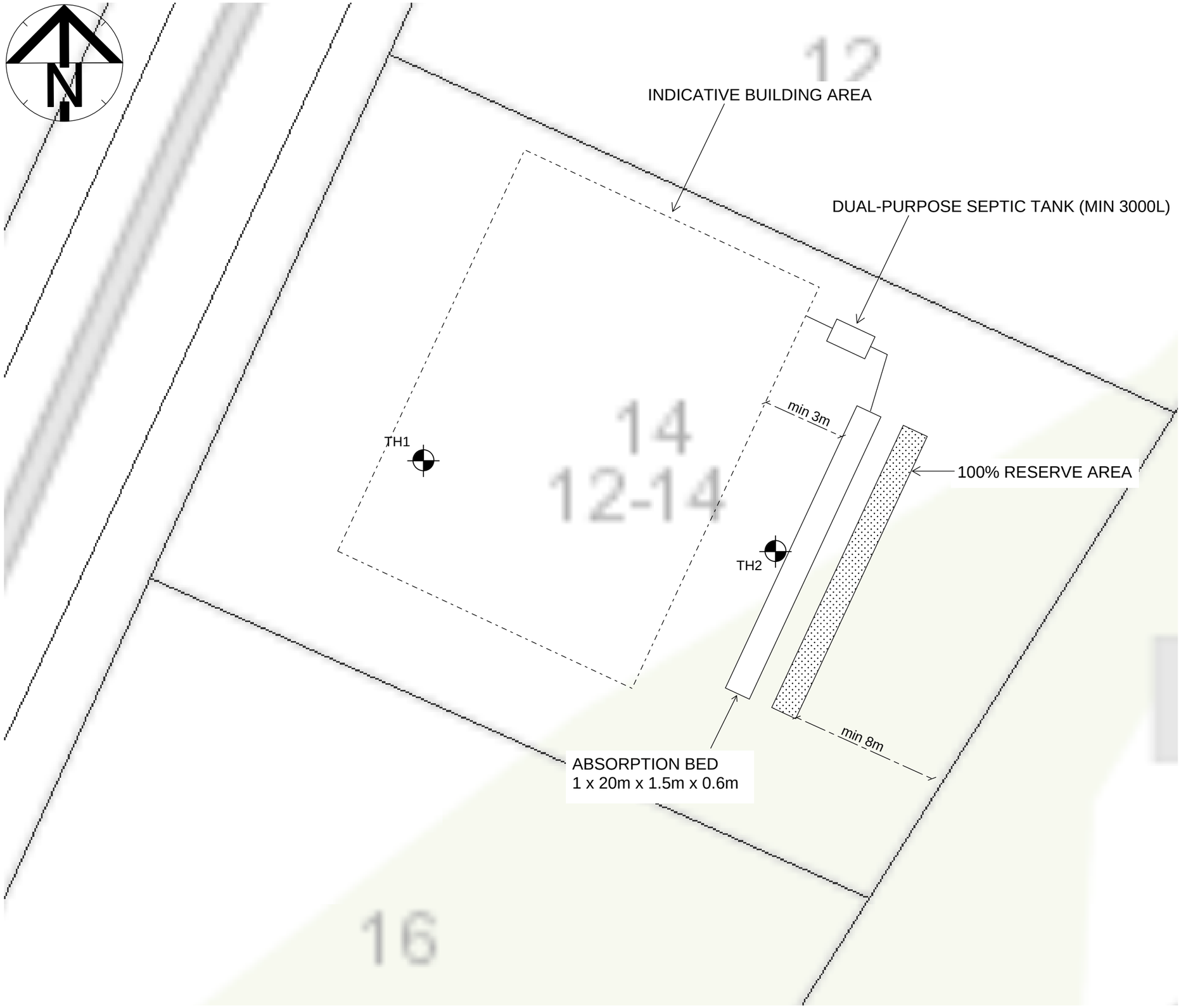
- [x] The works will not increase the demand for water supplied by TasWater
- [x] The works will not increase or decrease the amount of sewage or toxins that is to be removed by, or discharged into, TasWater's sewerage infrastructure
- [x] The works will not require a new connection, or a modification 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		26/09/2024



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Wastewater system:

Dual-purpose septic tank (min 3000L)

Absorption Bed
1 x 20m x 1.5m x 0.6m

Min 3m from upslope buildings
Min 1.5m from upslope or level boundaries
Min 8m from downslope boundary
Min 100m from downslope surface water

Refer to GES report

Dr. John Paul Cumming
Building Services Designer-Hydraulic
CCC774A

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29 Kirksway Place Battery Point
T| 62231839 E| office@geosolutions.net.au

26/9/2024

Do not scale from these drawings. Dimensions to take precedence over scale.	14 Gate Five Rd CARLTON RIVER 7173	C.T.: 176611/7	Date: 26/9/2024	On-Site Wastewater Management Plan	1:250 @ A3	Sheet 1 of 1 Drawn by: SR

Design notes:

1. Absorption trench dimensions of up to 20m long by 0.60m deep by 1.5m wide.
2. Base of trenches to be excavated level and smearing and compaction avoided.
3. Lower 450mm of bed to be filled with 20mm drainage aggregate and slotted 100mm distribution pipes packed into upper 100mm of aggregate
4. Final finished surface with sandy loam from on site to be 100 mm above natural surface to allow for settlement.
5. Construction on slopes up to 20% to allow trench depth range 650mm upslope edge to 450mm on down slope edge.
6. On slopes over 5% the sandy loam cover should be 75-100mm above natural with a toes no less than 500mm in length to avoid surface water accumulation (up slope ag drain also recommended to divert surface water flows).
7. The distribution pipe grid must be absolutely level to allow even distribution of effluent around the absorption area – it is recommended that the level be verified by running water into the system before backfilling and commissioning the trench
8. The slotted 90-100mm PVC distribution pipes must be slotted at “8 and 4 o’clock” when looking at the pipe section end-on, with the slots running level along the horizontal length of the pipe – please see figure 2 – or commercially available pre-slotted PVC pipe utilised
9. All works on site to comply with AS3500 and Tasmanian Plumbing code.

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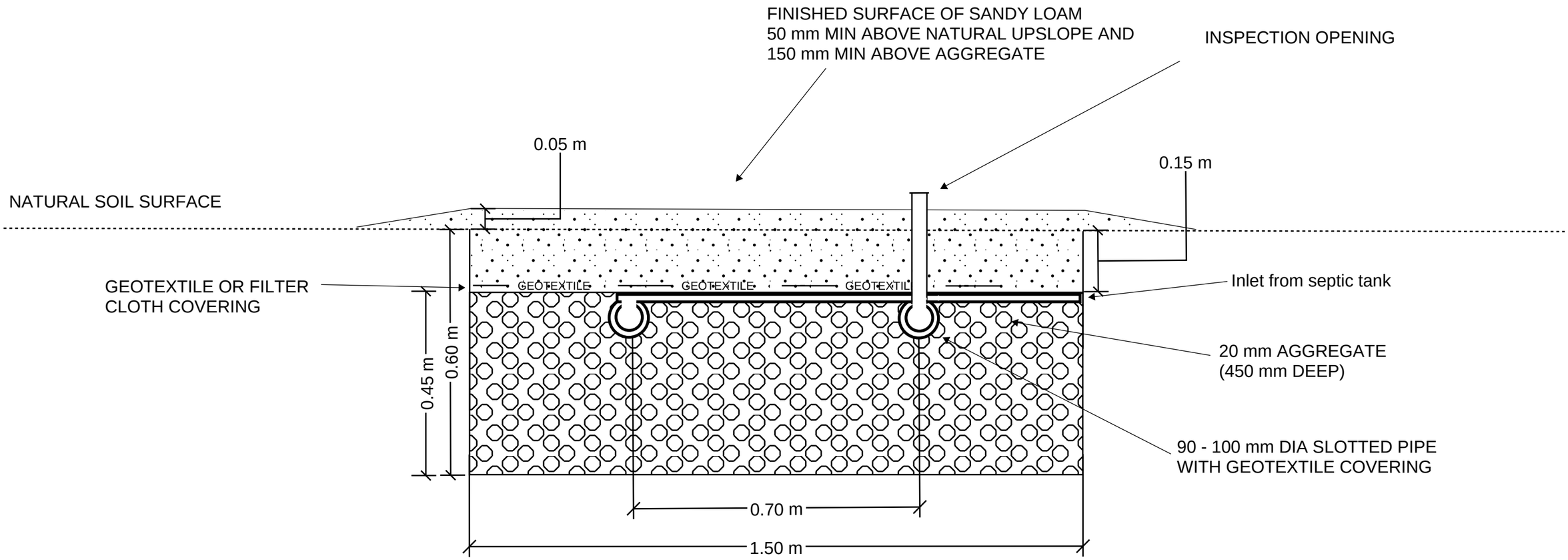

Do not scale from these drawings. Dimensions to take precedence over scale.				Absorption Trench Design- Slotted Pipe

Figure 2 - Distribution Pipe Detail

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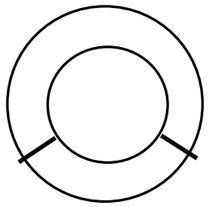
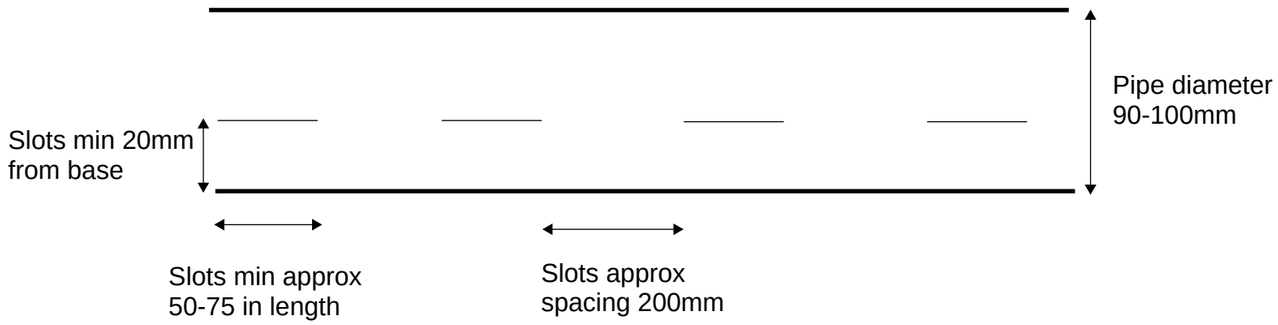
Cross Section

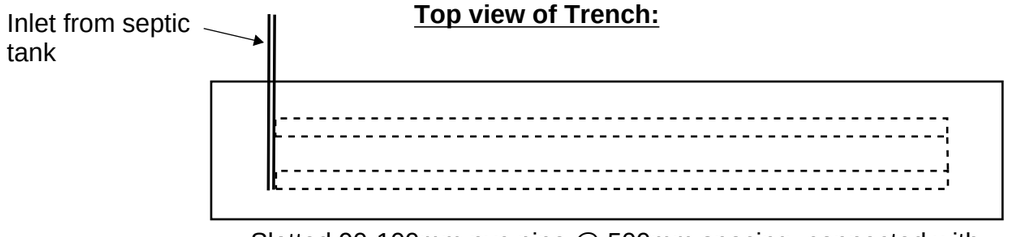


Slotted 100mm distribution pipe
- slots at "8 and 4 o'clock"

Side View



Top view of Trench:



Slotted 90-100mm pvc pipe @ 500mm spacing- connected with
90 degree corner joins- 500mm spacing from ends of trench

Do not scale from these drawings. Dimensions to take precedence over scale.	Geo-Environmental Solutions		Date: Feb 20	Terraced Absorption Trench Detail	Sheet 2 of 2

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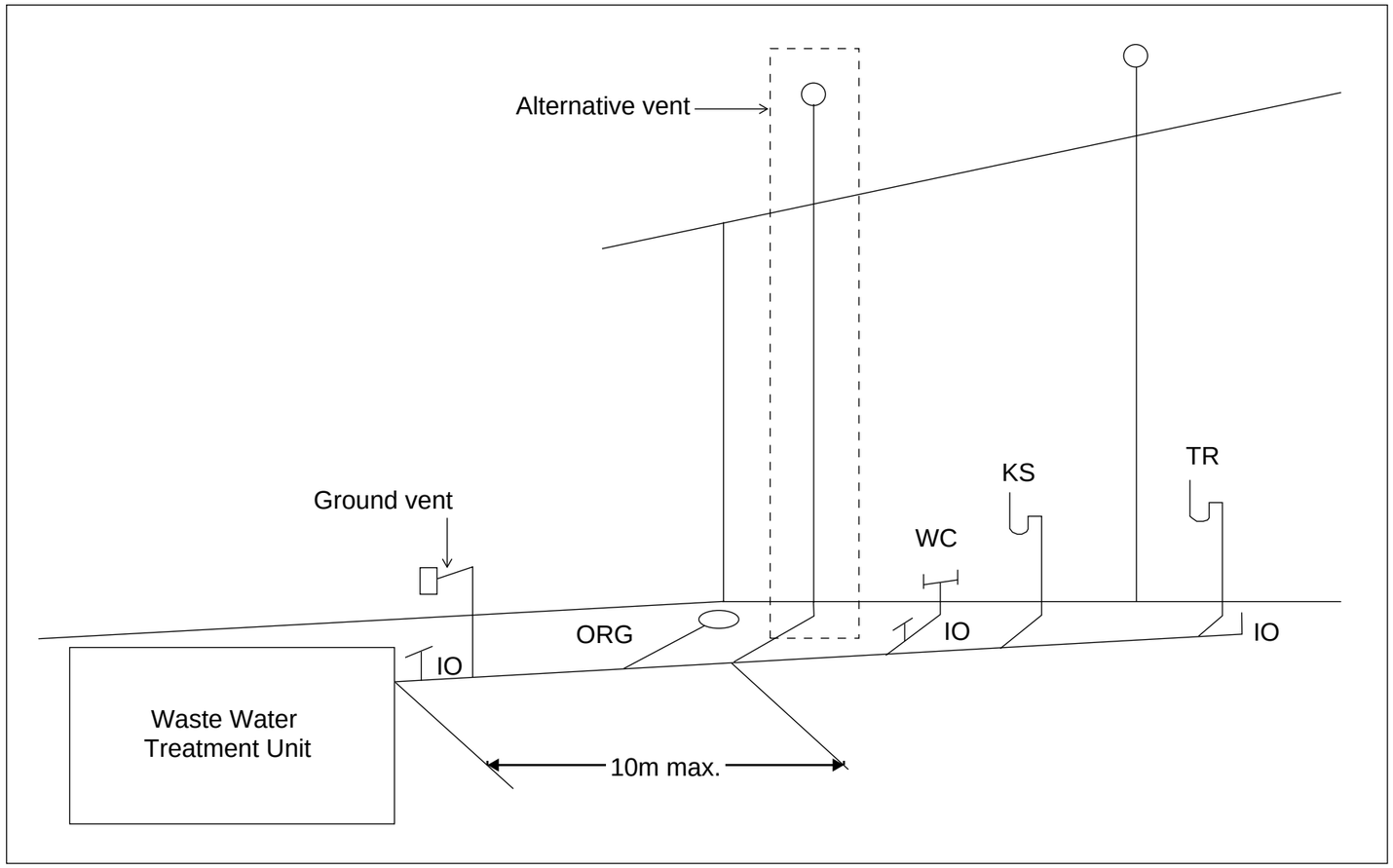


Tas Figure C2D6 Alternative Venting Arrangements

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

Do not scale from these drawings. Dimensions to take precedence over scale.				Tas Figure C2D6 Alternative Venting Arrangements		Sheet 1 of 1

GES
GEO-ENVIRONMENTAL
SOLUTIONS

Proposed Residential Development – 14 Gate Five Road, Carlton River

Bushfire Hazard Report

Applicant: G. Crawford

July 2024 J10602v1

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 proposal. It will demonstrate compliance with the *Building Regulations 2016*, and the *Directors Determination – Bushfire Hazard Areas*, *version 1, 6th February 2020*. 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	176611/7
PID	9871829
Address	14 Gate Five Road, Carlton River
Applicant	G. Crawford
Municipality	Sorell
Planning Scheme	Tasmanian Planning Scheme - Sorell
Zoning	Low Density Residential
Land size	~0.2Ha
Bushfire Attack Level	BAL-12.5
Certificate of others (form 55)	Complete and attached
Bushfire Hazard Management Plan	Certified & Attached

The development of a new class 1a building at 14 Gate Five Road, Carlton River, requires demonstrated compliance with the Building Regulations 2016 and the Director's Determination – Bushfire Hazard Areas, version 1.1, 8th February 2021. The site is located in a bushfire-prone area, with a Bushfire Attack Level (BAL) of BAL-12.5. Provisions for property access, water supplies for firefighting, hazard management areas, and 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

It is proposed that a new class 1a building and associated property access is developed at 14 Gate Five Road, Carlton River (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 14 Gate Five Road, Carlton River, in the municipality of Sorell. Access to the lot will be by an existing crossover from Gate Five Road a council-maintained road. The lot is ~0.2 Ha, is broadly rectangular in shape and is located approximately 0.51km north-east of Steeles Island (Figure 1). Adjacent lands surrounding the lot carry a mosaic of grassland and patches of retained native woodland vegetation, residential development further fragments bushfire-prone vegetation. At a landscape scale the site occurs on the eastern extent of the Carlton River Settled area which is characterised by residential developments on large lots which interface with bushfire-prone vegetation, landscape scale bushfire-prone vegetation occurs to the north-east of the site and is discontinuous with bushfire-prone vegetation adjacent to the site. The lot has gentle slopes with a generally easterly aspect which may influence fire behaviour. Vegetation surrounding the lot was assessed (Table 1) and described as 'woodland and grassland' 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-east 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).

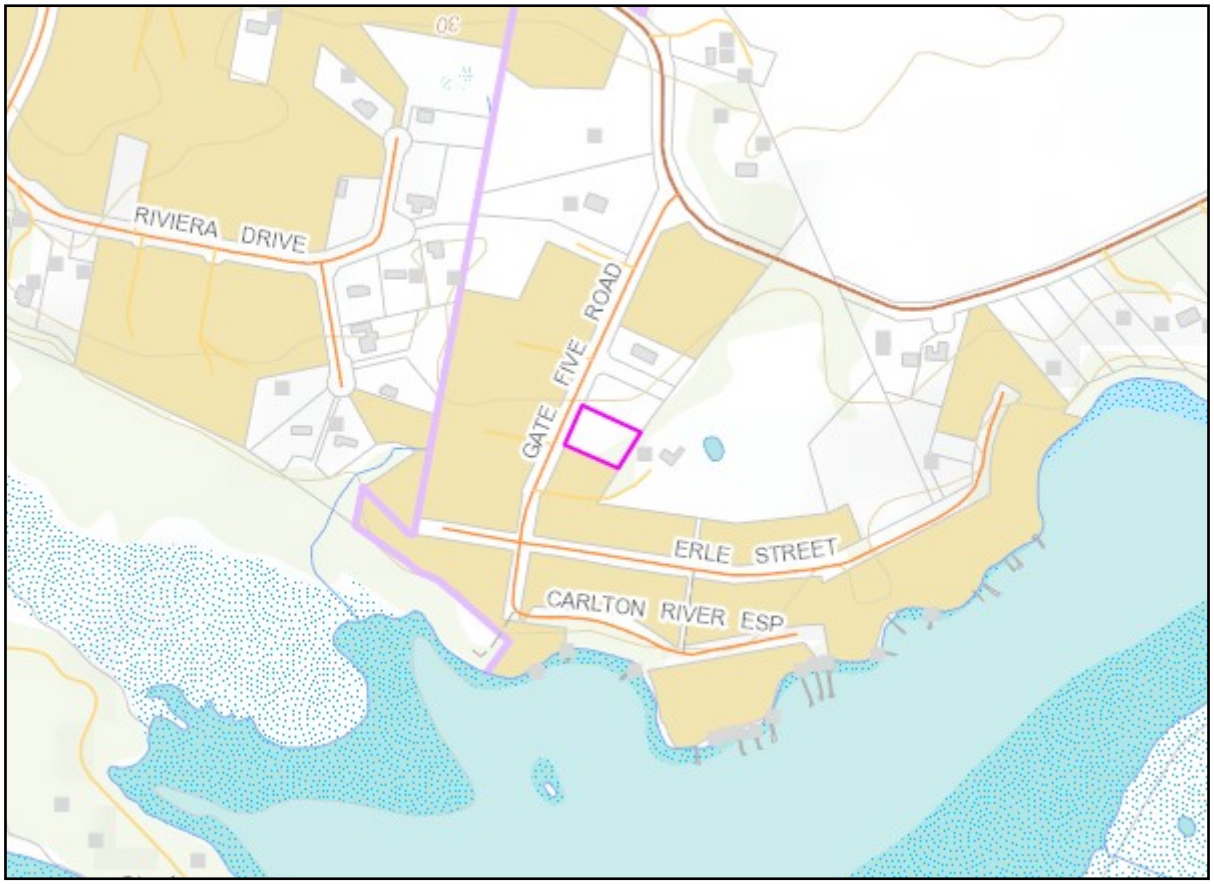


Figure 1. The lot in a topographical context (lot outlined in pink).

Figure 2. Shows the approximate location of the Lot (pink line) in the context of the adjacent lands and classified vegetation.

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	Exclusion 2.2.3.2 (e, f)^^	upslope	0 to 45 metres	Title boundary	**BAL-12.5**
	Woodland^	upslope	45 to 100 metres		
	--	--	--		
	--	--	--		
South-east	Grassland^	>0 to 5º downslope	0 to 25 metres	Title boundary	**BAL-LOW**
	Exclusion 2.2.3.2 (e, f)^^	flat 0º	25 to 75 metres		
	Grassland^	flat 0º	75 to 100 metres		
	--	--	--		
South-west	Exclusion 2.2.3.2 (e, f)^^	>0 to 5º downslope	0 to 100 metres	Title boundary	**BAL-LOW**
	--	--	--		
	--	--	--		
	--	--	--		
North-west	Exclusion 2.2.3.2 (e, f)^^	upslope	0 to 100 metres	Title boundary	**BAL-LOW**
	--	--	--		
	--	--	--		
	--	--	--		

^ 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 site has been determined as BAL-12.5. 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 less than 30 metres in length, in this circumstance there are no specific design or construction standards for property access.

6.2 Water supplies for fire fighting

The site is not serviced by a reticulated water supply; therefore a dedicated, static firefighting water supply will be provided in accordance with table 2 below.

Table 2. Requirements for Static Water Supplies dedicated for Firefighting

Element		Requirement
A.	Distance between building area to be protected and water supply	The following requirements apply: (a) The building area to be protected must be located within 90 metres of the firefighting water point of a static water supply; and (b) The distance must be measured as a hose lay, between the firefighting water point and the furthest part of the building area
B.	Static Water Supplies	A static water supply: (a) May have a remotely located offtake connected to the static water supply; (b) May be a supply for combined use (firefighting and other uses) but the specified minimum quantity of firefighting water must be available at all times; (c) Must be a minimum of 10,000 litres per building area to be protected. This volume of water must not be used for any other purpose including firefighting sprinkler or spray systems; (d) Must be metal, concrete or lagged by non-combustible materials if above ground; and (e) If a tank can be located so it is shielded in all directions in compliance with Section 3.5 of AS 3959:2018, the tank may be constructed of any material provided that the lowest 400 mm of the tank exterior is protected by: (i) metal; (ii) non-combustible material; or (iii) fibre-cement a minimum of 6 mm thickness.
C.	Fittings, pipework and accessories (including stands and tank supports)	Fittings and pipework associated with a firefighting water point for a static water supply must: (a) Have a minimum nominal internal diameter of 50mm; (b) Be fitted with a valve with a minimum nominal internal diameter of 50mm; (c) Be metal or lagged by non-combustible materials if above ground; (d) Where buried, have a minimum depth of 300mm; (e) Provide a DIN or NEN standard forged Storz 65 mm coupling fitted with a suction washer for connection to firefighting equipment; (f) Ensure the coupling is accessible and available for connection at all times; (g) Ensure the coupling is fitted with a blank cap and securing chain (minimum 220 mm length); (h) Ensure underground tanks have either an opening at the top of not less than 250 mm diameter or a coupling compliant with this Table; and (i) Where a remote offtake is installed, ensure the offtake is in a position that is: (i) Visible; (ii) Accessible to allow connection by firefighting equipment; (iii) At a working height of 450 – 600mm above ground level; and (iv) Protected from possible damage, including damage by vehicles.
D.	Signage for static water connections	The firefighting water point for a static water supply must be identified by a sign permanently fixed to the exterior of the assembly in a visible location. The sign must: (a) comply with water tank signage requirements within AS 2304:2019; or (b) comply with the Tasmania Fire Service Water Supply Signage Guideline published by the Tasmania Fire Service.

Element		Requirement
E.	Hardstand A hardstand area for fire appliances must be provided:	(a) No more than three metres from the firefighting water point, measured as a hose lay (including the minimum water level in dams, swimming pools and the like); (b) No closer than six metres from the building area to be protected; (c) With a minimum width of three metres constructed to the same standard as the carriageway; and (d) Connected to the property access by a carriageway equivalent to the standard of the property access.

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 2. Compliance with the Directors Determination - Bushfire Hazard Areas, version 1.1, 8th April 2021.

Requirements	Compliance
2.3.1 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. The BHMP specifies construction to BAL-12.5 standards of AS3959-2018. If the proposed buildings are designed and constructed in accordance with BAL-12.5 construction standards the development 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

Requirements	Compliance
	minimum) 90 metres of the furthest part of the building/s and includes access to a hardstand for the firefighting water point. Property access is less than 30 metres in length, in this circumstance there are no specific design or construction standards for property access. If the requirements of section 6.1 of this report are implemented the proposal will comply with clause 2.3.2.
2.3.3 Water Supply for Firefighting	Clause 2.3.3 requires that a new building constructed in a bushfire-prone area is provided with a dedicated firefighting water supply in accordance with tables 3A or 3B. Static water supplies consistent with table 3B have been specified in this report and are required for compliance on the BHMP. If the requirements of section 6.2 of this report are implemented the proposal will comply with clause 2.3.3.
2.3.4 Hazard Management Areas	Clause 2.3.4 requires that new buildings in bushfire-prone areas are provided with an HMA which is compliant with table 4. The HMA must have the minimum separation distances required for the BAL determined for the site and, have an HMA established which reduces fuels and other hazards so that fuels and other hazards do not significantly contribute to the bushfire attack. HMA's are shown on the BHMP and are specified to the minimum widths required to achieve BAL-12.5 for the site. This report and the BHMP specify requirements for hazard management areas. If the HMA's are established in accordance with the BHMP the proposal will comply with clause 2.3.4
2.3.5 Emergency Plan	The proposal is for a class 1a building, in this circumstance there is no requirement for emergency plans for compliance purposes.

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

Determination, Director of Building Control – Requirements for Building in Bushfire-Prone Areas (transitional), version 2.2 6th February 2020. Consumer, Building and Occupational Services, Department of Justice, Tasmania.

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- Sorell, 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 6. Western azimuth from the site.

Appendix B - Site Plan

BUSHFIRE HAZARD MANAGEMENT PLAN

Bushfire Hazard Management Plan, 14 Gate Five Road,
Carlton River. July 2024. J10602v1.
Tasmanian Planning Scheme - Clarence

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

Compliance Requirements

Property Access

Property access is less than 30 metres in length. In this circumstance there are no minimum design or construction requirements for property access.

Water Supplies for Firefighting

The site is not serviced by a reticulated water supply, therefore a dedicated, static firefighting water supply will be provided in accordance with the following;

A) Distance between building area to be protected and water supply
The following requirements apply:
(a) The building area to be protected must be located within 90 metres of the fire fighting water point of a static water supply; and
(b) The distance must be measured as a hose lay, between the fire fighting water point and the furthest part of the building area.

B) Static Water Supplies
A static water supply:
(a) May have a remotely located offtake connected to the static water supply;
(b) May be a supply for combined use (fire fighting and other uses) but the specified minimum quantity of fire fighting water must be available at all times;
(c) Must be a minimum of 10,000 litres per building area to be protected. This volume of water must not be used for any other purpose including fire fighting sprinkler or spray systems;
(d) Must be metal, concrete or lagged by non-combustible materials if above ground; and
(e) If a tank can be located so it is shielded in all directions in compliance with Section 3.5 of AS 3959-2009, the tank may be constructed of any material provided that the lowest 400 mm of the tank exterior is protected by:
(i) metal;
(ii) non-combustible material; or
(iii) fibre-cement a minimum of 6 mm thickness.

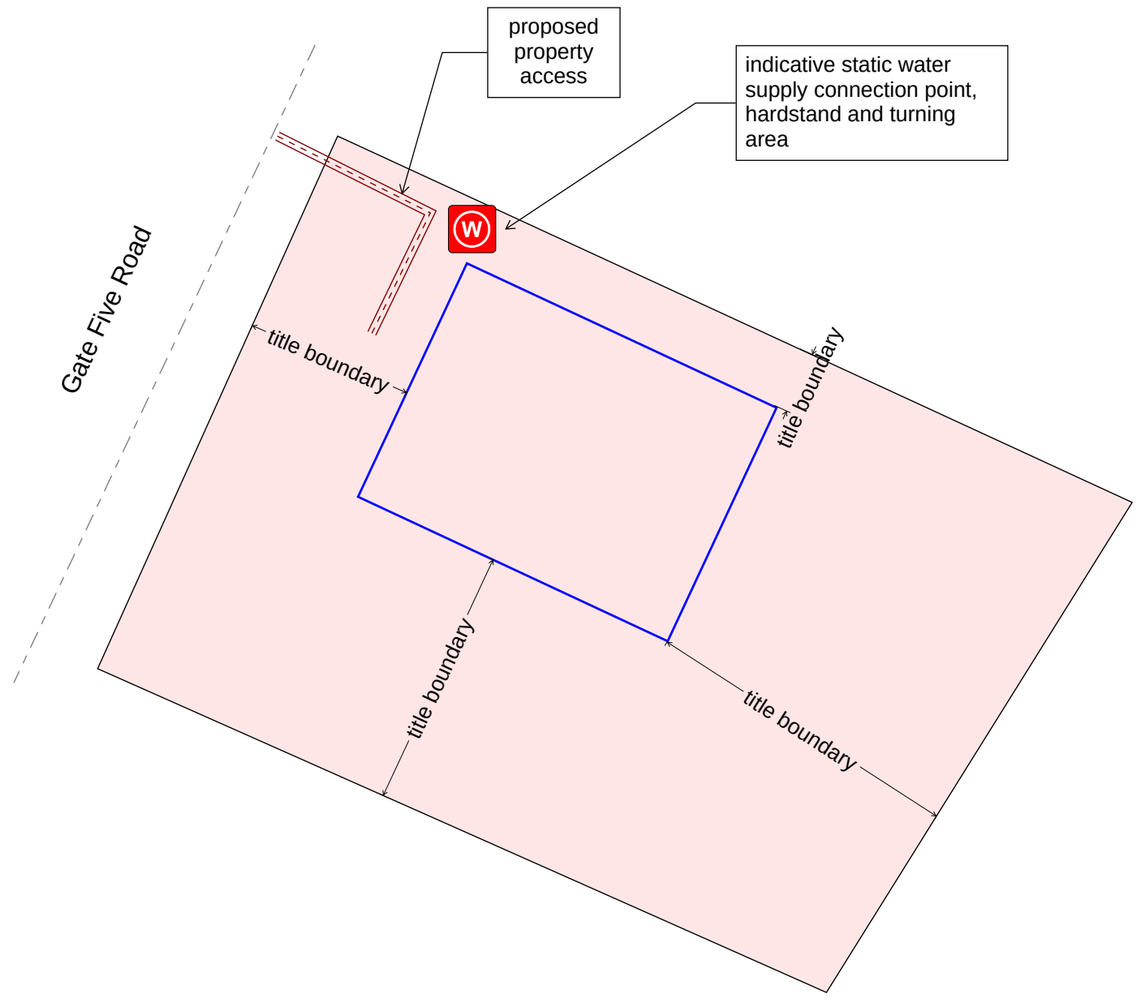
C) Fittings and pipework associated with a fire fighting water point for a static water supply must:
(a) Have a minimum nominal internal diameter of 50mm; (2) Be fitted with a valve with a minimum nominal internal diameter of 50mm;
(b) Be fitted with a valve with a minimum nominal internal diameter of 50mm;
(c) Be metal or lagged by non-combustible materials if above ground;
(d) Where buried, have a minimum depth of 300mm (compliant with AS/NZS 3500.1-2003 Clause 5.23);
(e) Provide a DIN or NEN standard forged Storz 65 mm coupling fitted with a suction washer for connection to fire fighting equipment;
(f) Ensure the coupling is accessible and available for connection at all times;
(g) Ensure the coupling is fitted with a blank cap and securing chain (minimum 220 mm length);
(h) Ensure underground tanks have either an opening at the top of not less than 250 mm diameter or a coupling compliant with this Table; and
(i) Where a remote offtake is installed, ensure the offtake is in a position that is:
(i) Visible;
(ii) Accessible to allow connection by fire fighting equipment,
(iii) At a working height of 450 – 600mm above ground level; and
(iv) Protected from possible damage, including damage by vehicles.

D) Signage for static water connections
The fire fighting water point for a static water supply must be identified by a sign permanently fixed to the exterior of the assembly in a visible location. The sign must comply with the Tasmania Fire Service Water Supply Signage Guideline published by the Tasmania Fire Service

E) Hardstand
A hardstand area for fire appliances must be provided:
(a) No more than three metres from the fire fighting water point, measured as a hose lay (including the minimum
water level in dams, swimming pools and the like); (b) No closer than six metres from the building area to be protected;
(c) With a minimum width of three metres constructed to the same standard as the carriageway; and
(d) Connected to the property access by a carriageway equivalent to the standard of the property access.

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 Area

Static Water Supply Point

Hazard Management Area

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. J10602

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.	G. Crawford C/O 14 gate Five Road, Carlton River, Tas., 7173	C.T.: 176611/7 PID: 9871829	Date : 16/07/2024	Bushfire Hazard Management Plan 14 Gate Five Road, Carlton River. July 2024. J10602v1. Bushfire Hazard Report 14 Gate Five Road, Carlton River. July 2024. J10602v1.	Drawing Number: A01	Sheet 1 of 1 Prepared by: MvdB

CERTIFICATE OF QUALIFIED PERSON – ASSESSABLE ITEM

Section 321

Form **55**

To: Georgia Crawford *Owner /Agent*

14 Gate Five Road *Address*

Carlton River 7173 *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: 14 Gate Five Road

Carlton River 7173

Lot No:

Certificate of title No: 176611/7

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:*	*Date:*
		J10602	16/07/2024

SITE INFORMATION

LAND TITLE REFERENCE	**CT 176611/7**	
TERRAIN CATEGORY	**TC1.0**	TERRAIN WITH A FEW OBSTACLES
WIND CLASSIFICATION	**N3**	SITE CLASSIFICATION TO AS4055-2006 REPORT BY JOHN PAUL CUMMING GEO-ENVIRONMENTAL SOLUTIONS
SHIELDING CLASSIFICATION	**PS**	PARTIAL SHIELDING
SOIL CLASSIFICATION	**S**	SITE CLASSIFICATION TO AS2870-2011 REPORT BY JOHN PAUL CUMMING GEO-ENVIRONMENTAL SOLUTIONS
CLIMATE ZONE	**7**	www.abcb.gov.au map
BAL LEVEL	**12.5**	AS PER BUSHFIRE REPORT
CORROSION ENVIRONMENT	**MODERATE**	FOR STEEL SUBJECT TO THE INFLUENCE OF SALT WATER, BREAKING SURF OR HEAVY INDUSTRIAL AREAS, REFER TO BCA SECTION 3.4.2.2 & BCA TABLE 3.4.4.2. CLADDING AND FIXINGS TO MANUFACTURERS RECOMMENDATIONS.
OTHER HAZARDS	**N/A**	HIGH WIND, EARTHQUAKE, FLOODING, LANDSLIP , DISPERSIVE SOILS, SAND DUNES, MINE SUBSIDENCE, SNOW AND ICE OR OTHER RELEVANT FACTORS.

AREA SCHEDULE

SITE AREA	: 2001m²
FLOOR AREA : RESIDENCE	: 142.46m²
FLOOR AREA : GARAGE	: 49.38m²
FLOOR AREA : DECK	: 25.71m²
FLOOR AREA : ALFRESCO	: 29.07m²

DRAWING INDEX

REV.	AMENDMENT	DATE

PROPOSED RESIDENCE
14 GATE FIVE ROAD
CARLTON

BUILDING DESIGNER
CHRISTOPHER.G.KEAN
CC17176
PH:0417 534 776

CLIENT:
H. DAVIS &
G CRAWFORD

ADDRESS:
14 GATE FIVE ROAD
CARLTON

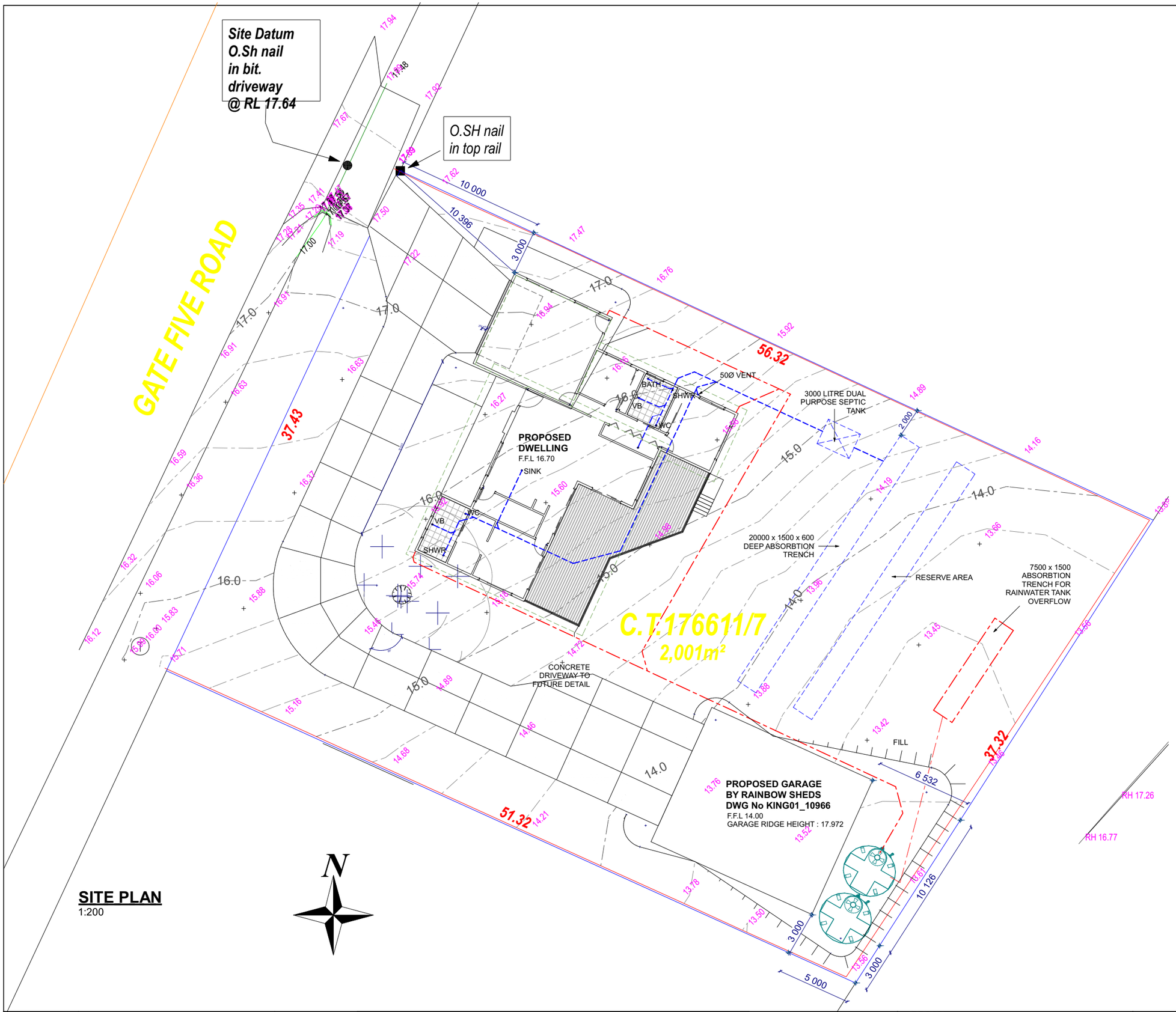
DRAWING TITLE
COVER SHEET

Scale: **NTS**

Date: **08/03/2025**

Project # **020525**

SHEET #A01



SITE PLAN
1:200

NOTES & LEGEND

SOIL AND WATER MANAGEMENT STRATEGIES

DOWNPIPES TO BE CONNECTED INTO RAINWATER STORAGE TANK AS SOON AS ROOF IS INSTALLED

INSTALL AG DRAIN TO CUT AREA PRIOR TO FOOTING EXCAVATION.

DENOTES 100mm SEWER

DENOTES 100mm STORMWATER

EXCAVATED MATERIAL TO BE PLACES UPSIDE OF AG DRAIN. TO BE REMOVED WHEN BUILDING WORKS ARE COMPLETE AND USED AS FILL ON SITE FOR ANY LOW POINTS. INSTALL A SEDIMENT FENCE ON DOWNSLOPE OF MATERIAL.

CONSTRUCTION VEHICLES TO BE PARKED ON THE STREET OR THE DRIVEWAY ONCE GRAVEL IS COMPACTED, TO PREVENT TRANSFERRING DEBRIS ONTO GATE FIVE ROAD.

SOIL AND WATER MANAGEMENT STRATEGIES

(SECTION 121 OF THE BUILDING ACT)

IF EXCAVATION IS TO A LEVEL BELOW THAT OF THE ADJOINING OWNERS FOOTING, ALONG THE TITLE BOUNDARY OR WITHIN 3 METRES OF A BUILDING BELONGING TO AN ADJOINING OWNER, THE BUILDER MUST (AS A MINIMUM) PROVIDE AND MAINTAIN A GUARD TO SUPERVISE THE EVCAVATION. ADJOINING OWNER TO BE NOTIFIED USING FORM 6(BUILDING AND PROTECTION WORK NOTICE) BY THE BUILDING SURVEYOR

REV.	AMENDMENT	DATE

PROPOSED RESIDENCE
14 GATE FIVE ROAD
CARLTON

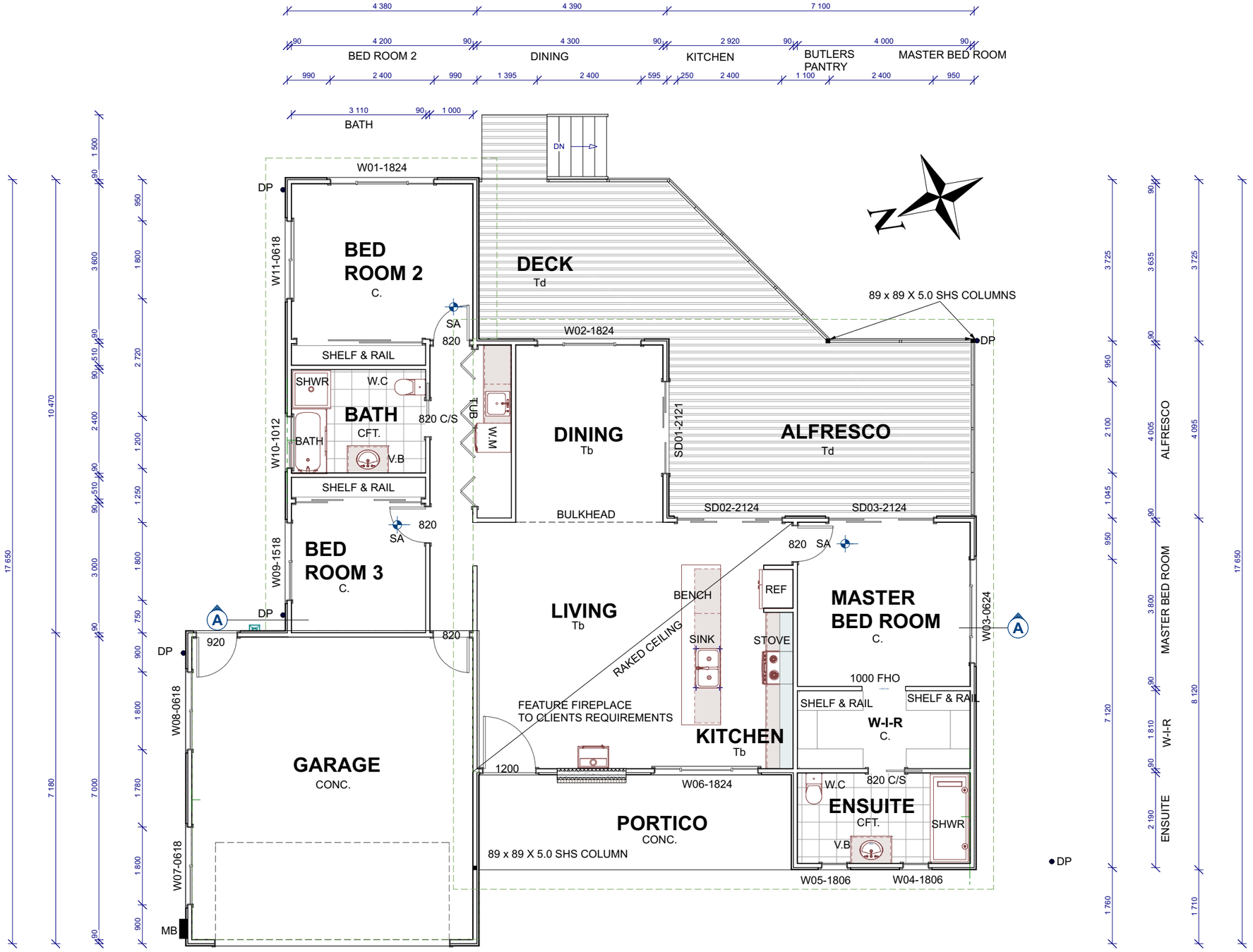
BUILDING DESIGNER
CHRISTOPHER.G.KEAN
CC17176
PH:0417 534 776

CLIENT:
H. DAVIS &
G CRAWFORD

ADDRESS:
14 GATE FIVE ROAD
CARLTON

DRAWING TITLE
SITE PLAN

Scale: **1:250**
Date: **08/03/2025**
Project # **020525**
SHEET #A02



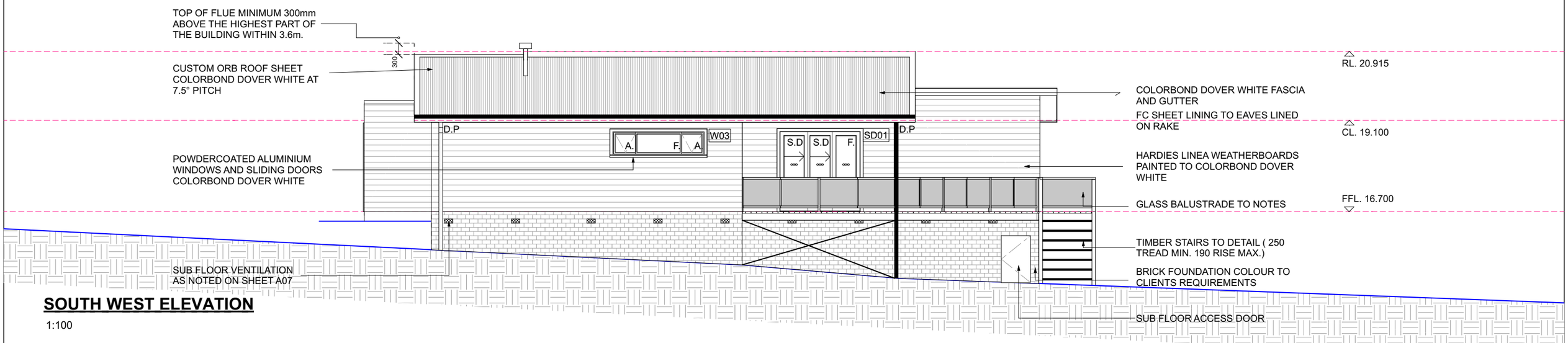
LEGEND AND NOTES

	HARDIES LINEA WEATHERBOARDS 90mm STUD WALL WITH R2.5HD BATTS, 10mm PLASTERBOARD LINING
	90mm STUD WALL WITH 10mm PLASTERBOARD LINING EACH SIDE U.N.O
	GLASS BALUSTRADE MIN. 100O HIGH TO COMPLY WITH AS1288. 40Ø STAINLESS STEEL HANDRAIL AND VERTICALS, SUPPLIED AS A COMPLETE APPROVED SYSTEM WITH TOUGHENED GLASSAND SECURELY FIXED TO PERIMETER BEAM. THE COMPLETE SYSTEM MUST BE CAPABLE OF BEARING LOADING FORCES ACCORDING TO AS1170.1
HWC-	HOT WATER CYLINDER LOCATED UNDER HOUSE
CONC.-	CONCRETE FLOOR FINISH
CFT. -	CERAMIC FLOOR TILES
C. -	CARPET WITH AIRSTEP STEPMAX (OR EQUIVALENT) FOAM UNDERLAY
Tb.	VINYL TIMBER BOARDS COLOUR AND STYLE TO CLIENTS REQUIREMENTS
Td.	TIMBER DECKING BOARDS 136 x 25 SILVER TOP ASH OR SIMILAR BUSHFIRE RATED TIMBER
DP.	100Ø DOWNPIPE
MB.	METER BOX
	SMOKE ALARM, HARD WIRED WITH BATTERY BACKUP. TO AS3786 AND PART 3.7.2 OF CURRENT BCA. ALL SMOKE ALARMS ARE TO BE INTERCONNECTED.

FLOOR PLAN
1:100

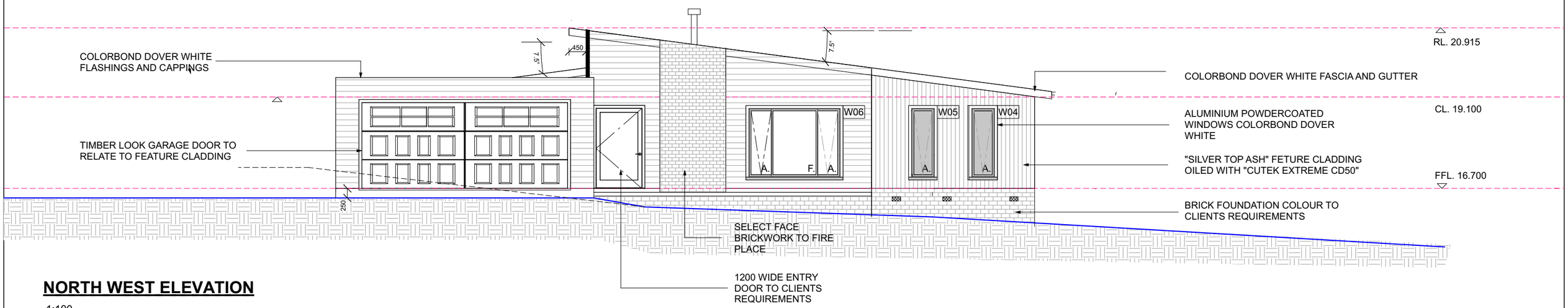
Sorell Council
Development Application: 5.2025.259.1 - Response to Request For Information - 14 Gate Five Road, Carlton River - P4.pdf
Plans Reference: P4
Date Received: 27/11/2025

REV.	AMENDMENT	DATE	PROPOSED RESIDENCE 14 GATE FIVE ROAD CARLTON	BUILDING DESIGNER CHRISTOPHER.G.KEAN CC17176 PH:0417 534 776	CLIENT: H. DAVIS & G CRAWFORD	ADDRESS: 14 GATE FIVE ROAD CARLTON	DRAWING TITLE FLOOR PLAN	Scale: 1:100	Date: 08/03/2025	Project # 020525	SHEET #A03



SOUTH WEST ELEVATION

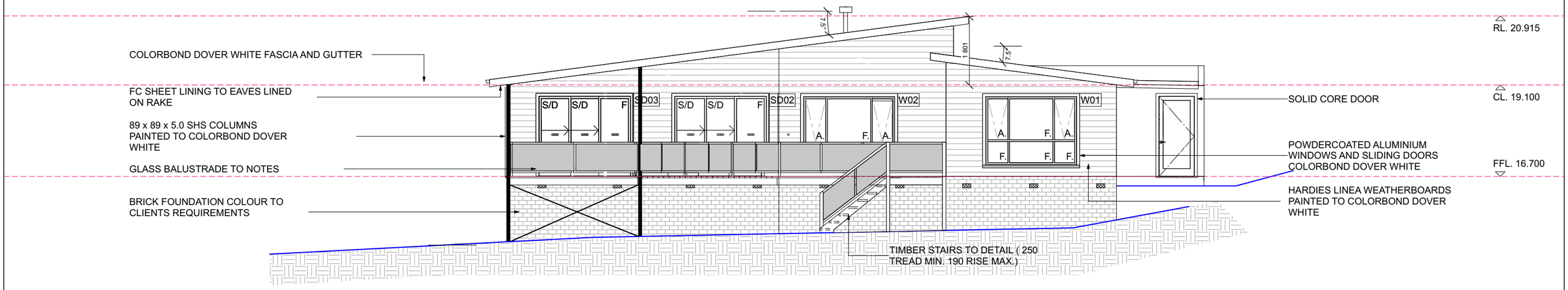
1:100



NORTH WEST ELEVATION

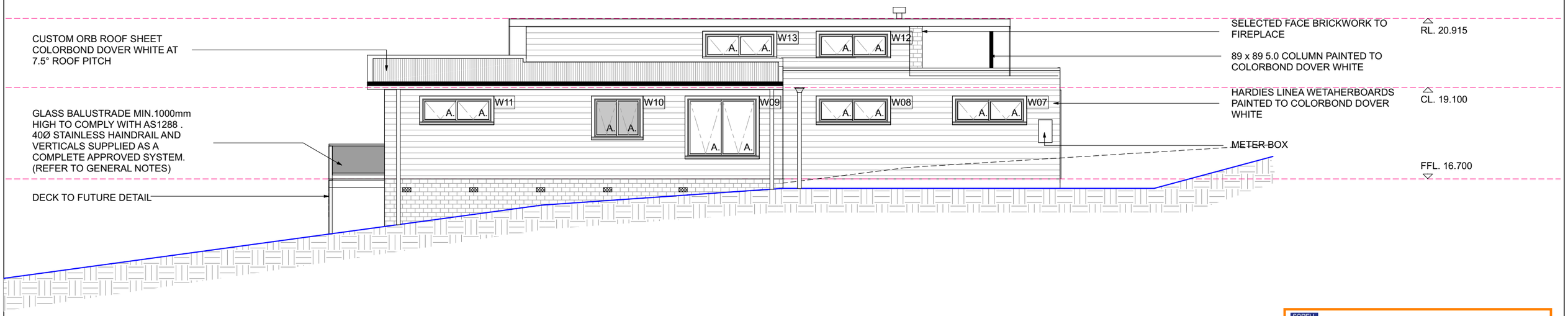
1:100

REV.	AMENDMENT	DATE	PROPOSED RESIDENCE 14 GATE FIVE ROAD CARLTON	BUILDING DESIGNER CHRISTOPHER.G.KEAN CC17176 PH:0417 534 776	CLIENT: H. DAVIS & G CRAWFORD	ADDRESS: 14 GATE FIVE ROAD CARLTON	DRAWING TITLE PROPOSED ADDITIONS FLOOR PLAN	Scale: 1:100 Project # 020525	Date: 08/03/2025 SHEET #A04



SOUTH EAST ELEVATION

1:100



NORTH EAST ELEVATION

1:100

REV.	AMENDMENT	DATE

PROPOSED RESIDENCE
14 GATE FIVE ROAD
CARLTON

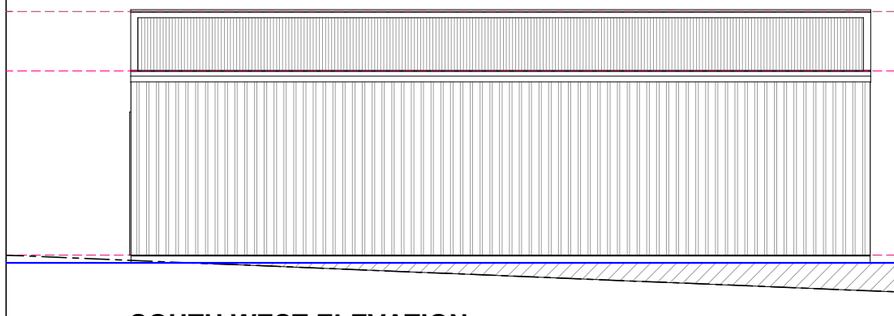
BUILDING DESIGNER
CHRISTOPHER.G.KEAN
CC17176
PH:0417 534 776

CLIENT:
H. DAVIS &
G CRAWFORD

ADDRESS:
14 GATE FIVE ROAD
CARLTON

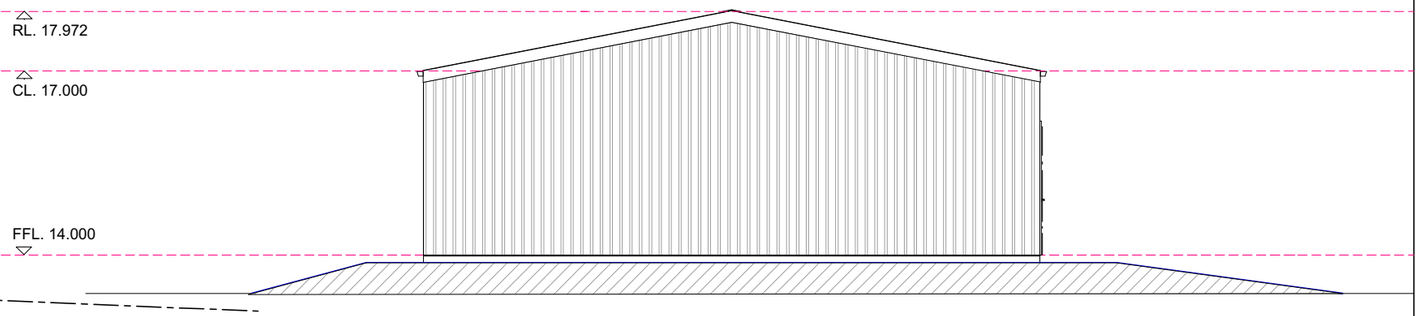
DRAWING TITLE
ELEVATIONS

Scale: **1:100**
Date: **08/03/2025**
Project # **020525**
SHEET #A05



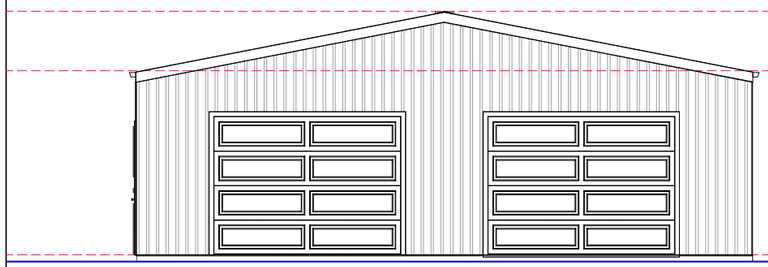
SOUTH WEST ELEVATION

1:100



SOUTH EAST ELEVATION

1:100



NORTH WEST ELEVATION

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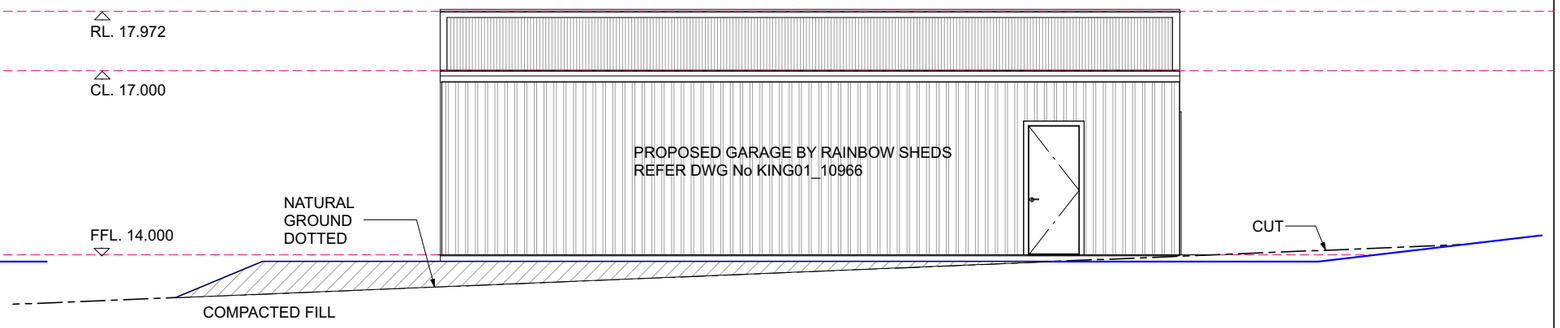

NORTH EAST ELEVATION

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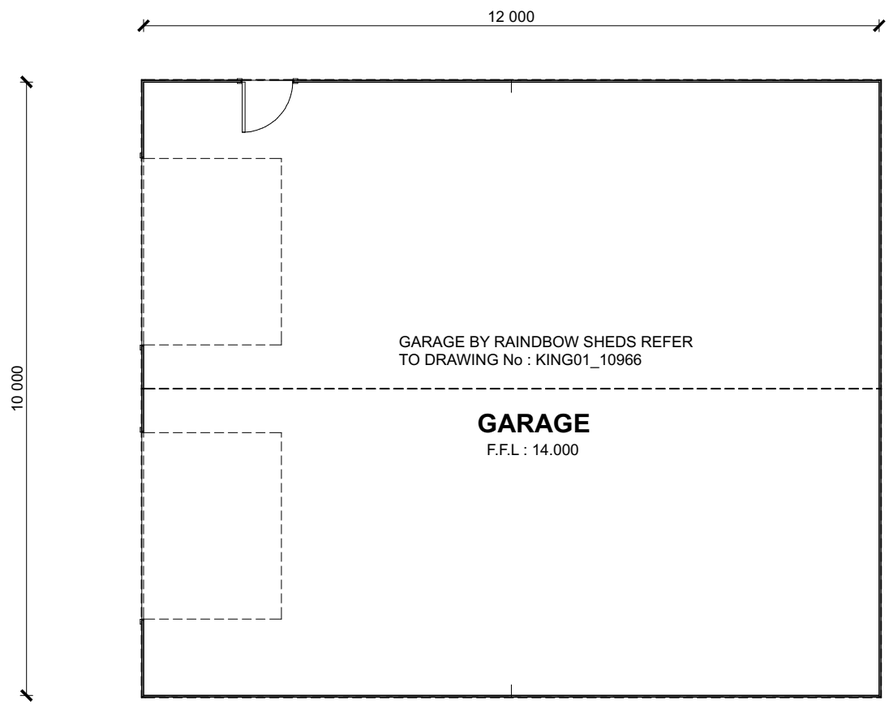

GARAGE PLAN

1:100

REV.	AMENDMENT	DATE

PROPOSED RESIDENCE
14 GATE FIVE ROAD
CARLTON

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CHRISTOPHER.G.KEAN
CC17176
PH:0417 534 776

CLIENT:
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G CRAWFORD

ADDRESS:
14 GATE FIVE ROAD
CARLTON

DRAWING TITLE
GARAGE PLAN

Scale: **1:100**
Project # **020525**
Date: **08/03/2025**
SHEET #A07