

PLANNING APPLICATION FORM

Section 57 & 58

OFFICE USE
ONLY

Application Number PA2026132

Assess No: A8162

PID No: 7793197

Applicant Name:	Engineering plus				
Applicant Contact Name					
Postal Address:					
Contact Phone:	Home		Work		Mobile
Email Address:					

Planning Application Lodgement Checklist

The following documents have been submitted to support the consideration of this application:

1. A current copy of the property title text, folio plan and schedule of easements ☒
2. A completed application form including a detailed description of the proposal ☒
3. A complete plan set: ☒
 - a) Floor plans ☒
 - b) Elevations (from all orientations/sides and showing natural ground level and finished surface level) ☒
 - c) Site Plan showing: ☒
 - Orientation
 - All title boundaries
 - Location of buildings and structure (both existing and proposed)
 - Setbacks from all boundaries
 - Native vegetation to be removed
 - Onsite services, connections and drainage details (including sewer, water and stormwater)
 - Cut and/or Fill
 - Car parking and access details (including construction material of all trafficable areas)
 - Fence details
 - Contours
4. Other:

*If submitting plans in over the counter please ensure they are A3.
All plans must be to scale.*

WEST TAMAR COUNCIL



Application Number: «Application Number»

APPLICANT DETAILS

Applicant Name:	Engineering plus
-----------------	------------------

Note: Full name(s) of person(s) or company making the application and postal address for correspondence.

LAND DETAILS

Owner/Authority Name: (as per certificate of title)	Charlstock Pty Ltd
--	--------------------

Location / Address:	2 Fernlack rd Greens Beach TAS 7270
Title Reference:	188403/1
Zone(s):	Landscape Conservation

Existing Development/Use:	vacant
---------------------------	--------

Existing Developed Area:	
--------------------------	--

Are any of the components in this Application seeking retrospective approval? E.g. Use and/or development that has commenced without a Planning Permit.	YES ☐
	NO ☒

(If yes please specify the relevant components):

DEVELOPMENT APPLICATION DETAILS

Proposed Use:	Residential: ☒	Visitor Accommodation: ☐	Commercial: ☐	Other: ☒
	Description of Use: Shed and residential - livable shed			

Development Type:	Building work: ☒	Demolition: ☐	Subdivision: ☐	Other: ☐
	Description of development: Holiday living and storage			

New or Additional Area:	90m ²	
Estimated construction cost of the proposed development:	100,000	
Building Materials:	Wall Type: trimdek	Colour: wodland grey
	Roof Type: custom orb	Colour: green

Application Number: «Application Number»

VISITOR ACCOMMODATION

☒ N/A

Gross Floor Area to be used per lot:		Number of Bedrooms to be used:	
Number of Carparking Spaces:		Maximum Number of Visitors at a time:	

SUBDIVISION

☒ N/A

Subdivision creating additional lots ☐

Boundary adjustment with no additional lots created ☐

Number of Lots (existing) :		Number of Lots (proposed) :	
Description:			
If applying for a subdivision which creates a new road(s), please supply three proposed names for the road(s), in order of preference:			
1.			
2.			
3.			

COMMERCIAL, INDUSTRIAL OR OTHER NON-RESIDENTIAL DEVELOPMENT/USE

☒ N/A

Hours of Operation:	Monday / Friday:		To	
	Saturday:		To	
	Sunday:		To	
Existing Car Parking:				
Proposed Car Parking:				
Number of Employees: (Existing)				
Number of Employees: (Proposed)				
Type of Machinery installed:				
Details of trade waste and method of disposal:				

Application Number: «Application Number»

APPLICANT DECLARATION

Owner:

As the owner of the land, I declare that the information contained in this application is a true and accurate representation of the proposal and I consent to this application being submitted and for Council Officers to conduct inspections as required for the proposal,

Name (print)

Signed

Date

Applicant:*(if not the owner)*

As the applicant, I declare that I have notified the owner of my intention to make this application and that the information contained in this application is a true and accurate representation of the proposal,

Name (print)

Signed

Date

Please Note: If the application involves Crown Land you will need to provide a letter of consent and this form signed by the Minister, or a delegated officer of the Crown with a copy of the delegation.

**Crown
Consent***(if required)*

Name (print)

Signed

Date

**Chief
Executive
Officer***(if required)*

Name (print)

Signed

Date

If the subject site is accessed via a right of way, the owner of the ROW must also be notified of the application.

Right of Way Owner:

As the applicant, I declare that I have notified the owner of the land encumbered by the Right Of Way, of my intent to lodge this application that will affect their land.

Name (print)

Signed

Date

OWNER: CHARLSTOCK PTY LTD

FOLIO REFERENCE:
F/R52922/1

GRANTEE:
Part of Lot 31551 81A 1R 33P Granted to
Geoffery Richard Gardner.

PLAN OF SURVEY

BY SURVEYOR: LEN C MACKENZIE
LOCATION:

Land District of DEVON.
Parish of STOCKPORT

SCALE 1: 4000 LENGTHS IN METRES

REGISTERED NUMBER

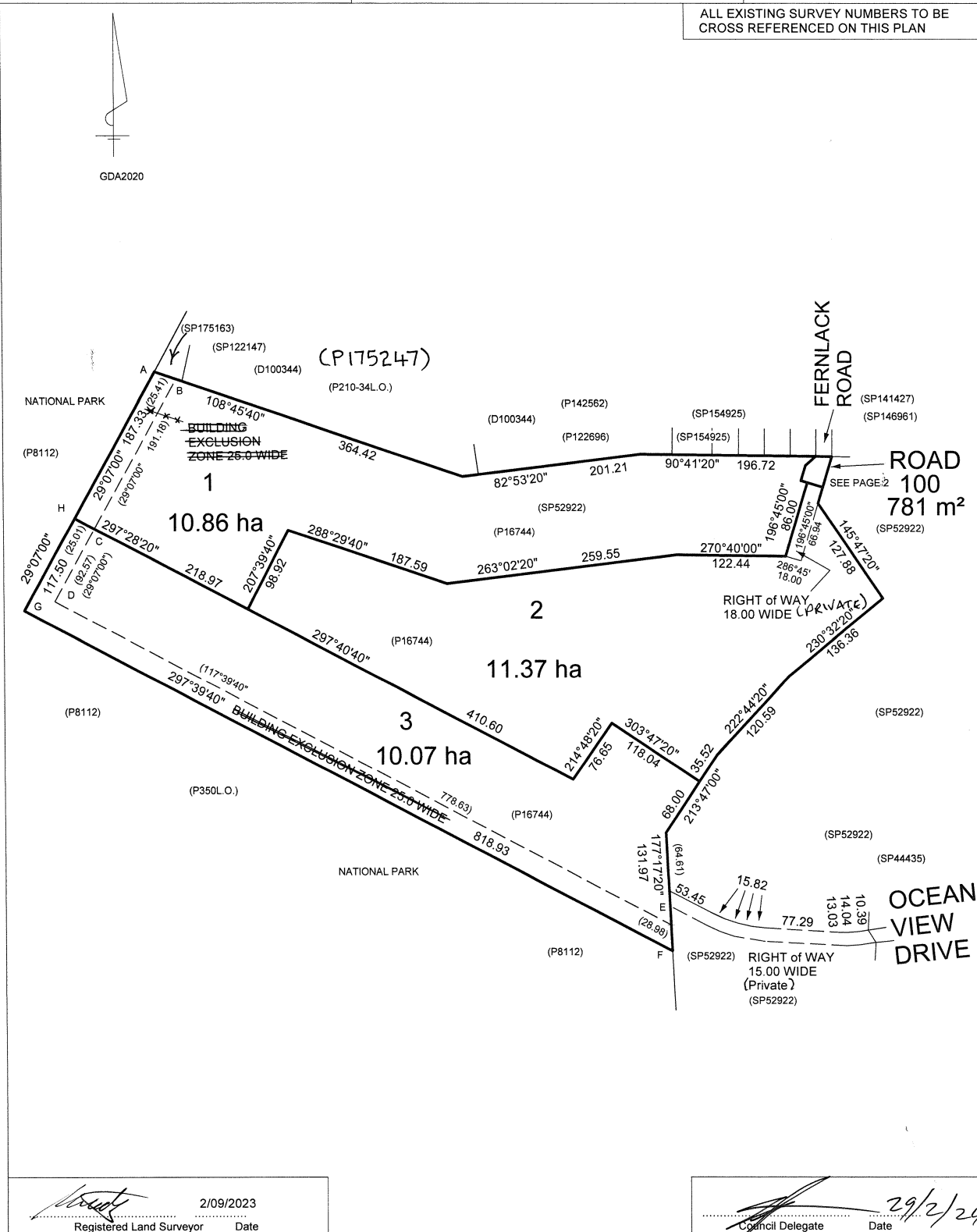
SP188403

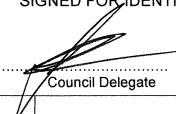
APPROVED
EFFECTIVE FROM 03 APR 2025

Len C Mackenzie

Recorder of Titles

ALL EXISTING SURVEY NUMBERS TO BE
CROSS REFERENCED ON THIS PLAN



PLAN OF SURVEY ANNEXURE SHEET SHEET 2 OF 2 SHEETS		OWNER: CHARLSTOCK PTY LTD FOLIO REFERENCE: F/R52922/1 SCALE 1: 400 LENGTH IN METRES	Registered Number SP 188403
SIGNED FOR IDENTIFICATION PURPOSES  29/2/24 Council Delegate Date		THIS ANNEXURE SHEET FORMS PART OF THE ATTACHED INDEX PLAN.  2/09/2023 Registered Land Surveyor Date	
(SP154925)		(SP154925)	FERNLACK ROAD 90°41'20" (SP141427) (SP146961)

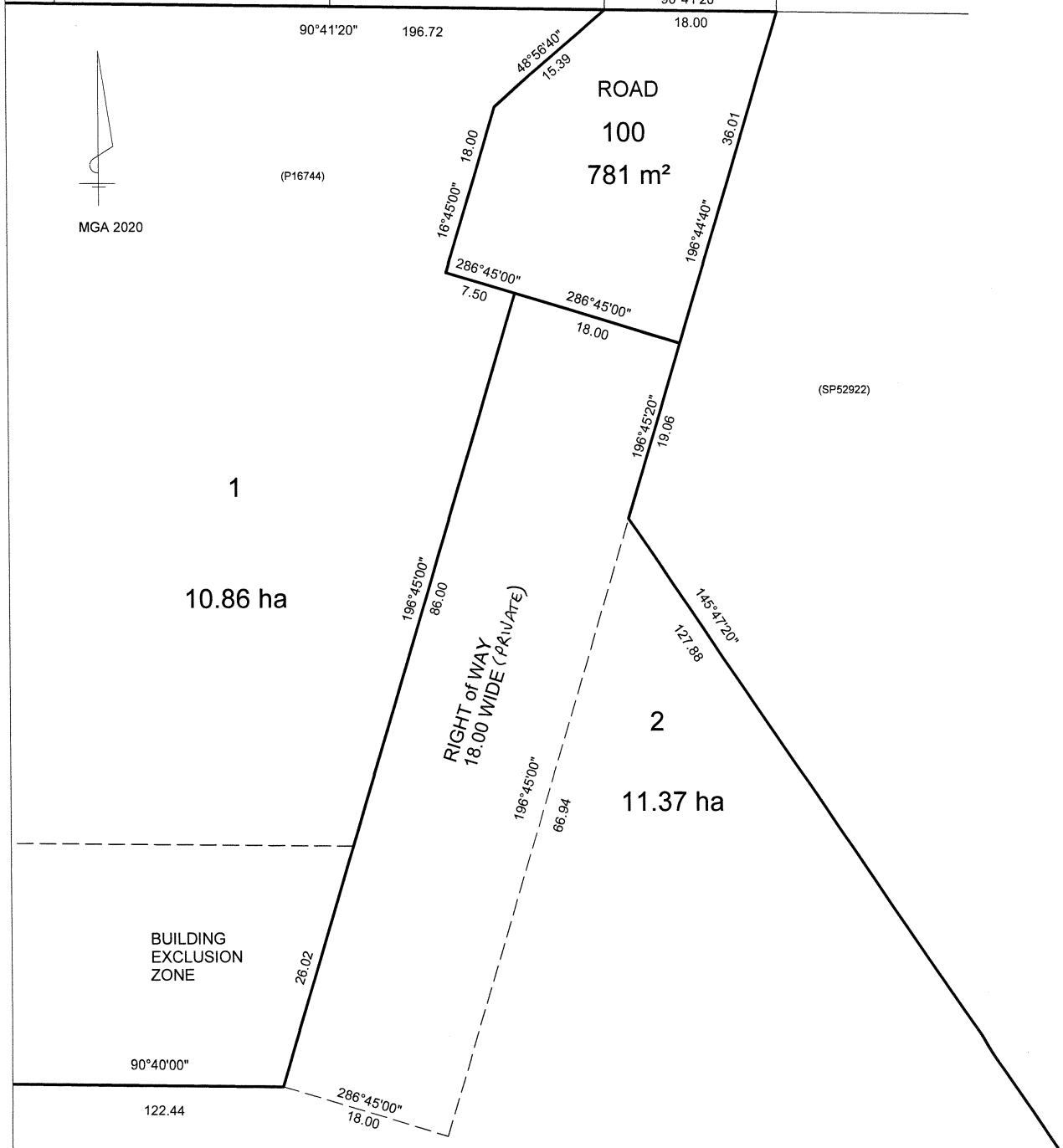
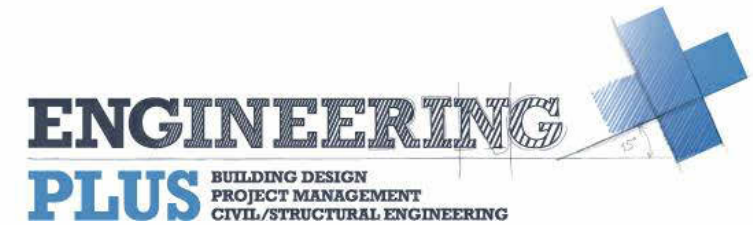


Diagram details:

- Parcel 1:** 10.86 ha. Boundaries include bearings of 90°41'20", 196°45'00", 16°45'00", 286°45'00", 196°45'00", and 90°40'00". Distances include 196.72, 18.00, 15.39, 18.00, 7.50, 86.00, 26.02, and 122.44.
- Parcel 2:** 11.37 ha. Boundaries include bearings of 48°56'40", 196°44'40", 145°47'20", 196°45'20", 196°45'00", and 196°45'00". Distances include 18.00, 36.01, 19.06, 127.88, 66.94, and 18.00.
- Road:** 100, 781 m². 18.00 m wide.
- Other:** Building Exclusion Zone, MGA 2020, and various survey points (P16744, SP52922).

DRAWING SCHEDULE

A000	COVER PAGE
A101	LOCALITY PLAN
A102	SITE PLAN
A201	FLOOR PLAN
A401	DRAINAGE PLAN



PROJECT INFORMATION

BUILDING DESIGNER:	GRANT JAMES PFEIFFER
ACCREDITATION No:	CC2211T
ZONE:	LANDSCAPE CONSERVATION
BUILDING CLASS:	CLASS 1A
LAND TITLE REFERENCE NUMBER:	188403/1
DESIGN WIND SPEED:	N3
SOIL CLASSIFICATION:	S
CLIMATE ZONE:	7
BUSHFIRE-PRONE BAL RATING:	29
ALPINE AREA:	N/A
CORROSION ENVIRONMENT:	LOW
FLOODING:	NO
LANDSLIP:	NO
DISPERSIVE SOILS:	UNKNOWN
SALINE SOILS:	UNKNOWN
SAND DUNES:	NO
MINE SUBSIDENCE:	NO
LANDFILL:	NO
GROUND LEVELS:	REFER PLAN
ORG LEVEL:	75mm ABOVE GROUND LEVEL

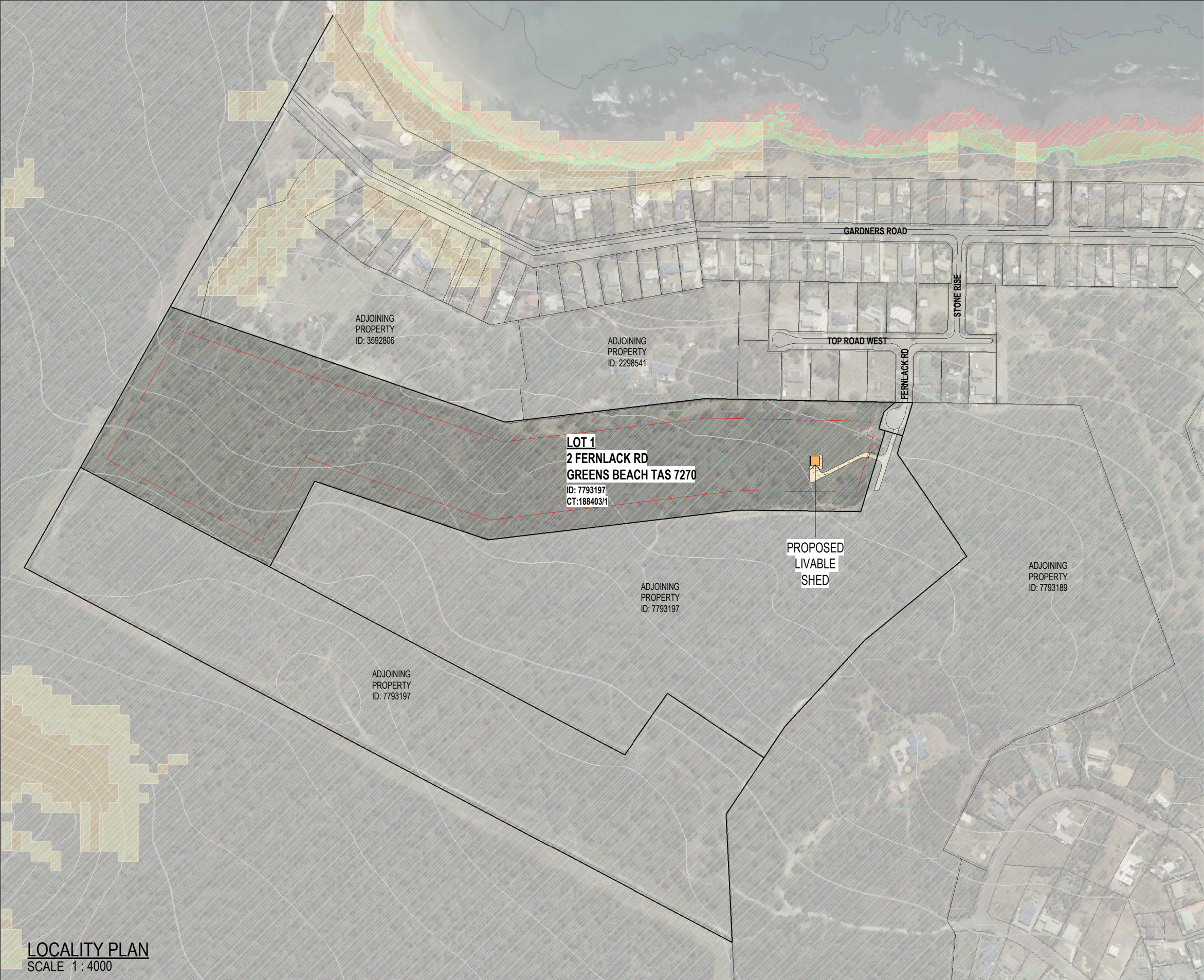
REVISION SCHEDULE			
REVISION NO	DESCRIPTION	DATE	ISSUED BY
SK1	Revision 1	05.06.25	R.A.
SK2	Revision 2	09.06.26	R.A.
A	APPROVAL	15.06.26	R.A.
B	RFI RESPONSE	05.08.26	R.A.

ISSUED FOR APPROVAL PROPOSED LIVABLE SHED

PROJECT NO: EP2026-145

G.S. & S.A. LANE
LOT 1, 2 FERNLACK RD
GREENS BEACH TAS 7270

WEST TAMAR COUNCIL



NOTE:
THE ENTIRETY OF THE PROPERTY LOT
SITS WITHIN BUSHFIRE-PRONE AREAS
AND PRIORITY VEGETATION AREA

NOTE:
ALL WORKS ARE TO COMPLY WITH BUT NOT LIMITED TO THE LATEST NATIONAL CONSTRUCTION CODE (NCC) OF AUSTRALIA AND RELEVANT LOCAL AUTHORITIES, UNLESS SPECIFIED. IN SUCH CASES, A RELEVANT REPORT WILL BE PRESENTED. MEASUREMENTS INDICATED ON DRAWINGS ARE CLEAR DIMENSIONS TO STRUCTURAL FRAMELINE AND DO NOT INCLUDE PLASTERBOARD LININGS OR INTERNAL FINISHES. UNLESS OTHERWISE STATED, ALL PROPOSED INTERNAL WALLS ARE SHOWN AS STRUCTURAL STUDS ONLY. BUILDER IS TO VERIFY ALL INTERNAL WIDTHS AND CLEARANCES PRIOR TO CONSTRUCTION TO ENSURE STRICT COMPLIANCE WITH CURRENT NCC STANDARDS. SPECIAL ATTENTION MUST BE GIVEN TO MINIMUM CLEAR WIDTHS FOR ACCESSIBLE CORRIDORS, DOORWAYS, AND SANITARY COMPARTMENT REQUIREMENTS. BUILDERS MUST VERIFY ALL MEASUREMENTS, SERVICES, MATERIALS, AND LEVELS ON-SITE PRIOR TO CONSTRUCTION AND NOTIFY ENGINEERING PLUS OF ANY ERRORS OR DISCREPANCIES FOUND. DRAWINGS ARE TO BE READ IN CONJUNCTION WITH ENGINEERING DRAWINGS. DO NOT PROCEED WHERE DISCREPANCIES EXIST BETWEEN ENGINEERING AND ARCHITECTURAL DRAWINGS. ENGINEERING PLUS DOES NOT ACCEPT ANY RESPONSIBILITY FOR MISCONSTRUCTION RESULTING FROM A FAILURE TO VERIFY SITE CONDITIONS OR ADHERE TO THE NCC STANDARDS MENTIONED ABOVE.

Accredited Building Designer
Designer Name : G. Pfeiffer
Accreditation No : CC2211T
Revision Number : B
Revision Description : RFI RESPONSE
Revision Date : 05.08.26
Revision Issued By : R.A.

Date Drawn: Issue Date
Drawn: R.A.
Checked: R.A.
Approved: J. Pfeiffer
Scale: As Shown @ A3

Client: G.S. & S.A. LANE
Project: PROPOSED LIVABLE SHED
Page: LOCALITY PLAN
Address: LOT 1, 2 FERNLACK RD
GREENS BEACH TAS 7270

APPROVAL

EP2026-145

A101



- SIGN SIMILAR TO ABOVE PICTURE TO BE PERMANENTLY FIXED TO THE STATIC WATER SUPPLY
- SIGN SIZE DIMENSIONS
- MIN. 300mm x 300mm
- LETTERING TO BE UPPERCASE AND NOT LESS THAN 100mm IN HEIGHT

BAL NOTES:

- FIREFIGHTING WATER SUPPLY TO BE A MIN. 10000L PER BUILDING TO BE PROTECTED. THIS VOLUME OF WATER MUST NOT BE USED FOR ANY OTHER PURPOSE INCLUDING FIRE FIGHTING SPRINKLER OR SPRAY SYSTEMS
- WATER TANK MUST BE METAL, CONCRETE OR LAGGED BY NON-COMBUSTABLE MATERIALS AND ALL ABOVE GROUND PIPES & FITTINGS TO BE MADE FROM NON-RUSTING, NON-COMBUSTIBLE AND NON-DEFORMING MATERIALS
- TANK TO BE LOCATED A MINIMUM 6.0m FROM DWELLING AND WITHIN 3.0m OF A HARDSTAND AREA
- WATER TANK OR CONNECTION POINT TO BE FITTED WITH A MALE 64mm 5v THREAD COUPLING WITH MINIMUM DELIVERY OF 270L PER MINUTE

A MODIFIED 4C ACCESS ROAD IS AN ALL-WEATHER ROAD WHICH COMPLIES WITH THE AUSTRALIAN ROAD RESEARCH BOARD "UNSEALED ROADS MANUAL– GUIDELINES TO GOOD PRACTICE", 3RD EDITION, MARCH 2009 AS A CLASSIFICATION 4C ACCESS ROAD AND THE FOLLOWING MODIFIED REQUIREMENTS:

- ALL-WEATHER CONSTRUCTION;
- LOAD CAPACITY OF AT LEAST 20 TONNES, INCLUDING FOR BRIDGES AND CULVERTS;
- MINIMUM CARRIAGEWAY WIDTH OF 4 METRES;
- MINIMUM VERTICAL CLEARANCE OF 4 METRES;
- MINIMUM HORIZONTAL CLEARANCE OF 0.5 METRES FROM THE EDGE OF THE CARRIAGEWAY;
- CROSS FALLS OF LESS THAN 3° (1:20 OR 5%);
- DIPS LESS THAN 7° (1:8 OR 12.5%) ENTRY AND EXIT ANGLE;
- CURVES WITH A MINIMUM INNER RADIUS OF 10 METRES;
- MAXIMUM GRADIENT OF 15° (1:3.5 OR 28%) FOR SEALED ROADS, AND 10° (1:5.5 OR 18%) FOR UNSEALED ROADS; AND
- TERMINATE WITH A TURNING AREA FOR FIRE APPLIANCES PROVIDED BY ONE OF THE FOLLOWING:
 - A TURNING CIRCLE WITH A MINIMUM INNER RADIUS OF 10 METRES;
 - A PROPERTY ACCESS ENCIRCLING THE BUILDING; OR
 - A HAMMERHEAD"Y" OR "Y" TURNING HEAD 4 METRES WIDE AND 8 METRES LONG.

DRAINAGE
ALL DRAINAGE WORK SHOWN IS PROVISIONAL ONLY AND IS SUBJECT TO AMENDMENT TO COMPLY WITH THE REQUIREMENTS OF THE LOCAL AUTHORITIES. ALL WORK IS TO COMPLY WITH THE REQUIREMENTS OF NATIONAL PLUMBING AND DRAINAGE CODE AS3500 AND MUST BE CARRIED OUT BY A LICENCED TRADESMAN ONLY.

LEGEND	
	SEWER
	EXISTING SEWER
	WATER
	EXISTING WATER
	STORMWATER
	EXISTING STORMWATER

NOTE:
THE ENTIRETY OF THE PROPERTY LOT SITS WITHIN BUSHFIRE-PRONE AREAS AND PRIORITY VEGETATION AREA



NOTE:
ALL WORKS ARE TO COMPLY WITH BUT NOT LIMITED TO THE LATEST NATIONAL CONSTRUCTION CODE (NCC) OF AUSTRALIA AND RELEVANT LOCAL AUTHORITIES, UNLESS SPECIFIED. IN SUCH CASES, A RELEVANT REPORT WILL BE PRESENTED. MEASUREMENTS INDICATED ON DRAWINGS ARE CLEAR DIMENSIONS TO STRUCTURAL FRAMELINE AND DO NOT INCLUDE PLASTERBOARD LININGS OR INTERNAL FINISHES. UNLESS OTHERWISE STATED, ALL PROPOSED INTERNAL WALLS ARE SHOWN AS STRUCTURAL STUDS ONLY. BUILDER IS TO VERIFY ALL INTERNAL WIDTHS AND CLEARANCES PRIOR TO CONSTRUCTION TO ENSURE STRICT COMPLIANCE WITH CURRENT NCC STANDARDS. SPECIAL ATTENTION MUST BE GIVEN TO MINIMUM CLEAR WIDTHS FOR ACCESSIBLE CORRIDORS, DOORWAYS, AND SANITARY COMPARTMENT REQUIREMENTS. BUILDERS MUST VERIFY ALL MEASUREMENTS, SERVICES, MATERIALS, AND LEVELS ON-SITE PRIOR TO CONSTRUCTION AND NOTIFY ENGINEERING PLUS OF ANY ERRORS OR DISCREPANCIES FOUND. DRAWINGS ARE TO BE READ IN CONJUNCTION WITH ENGINEERING DRAWINGS. DO NOT PROCEED WHERE DISCREPANCIES EXIST BETWEEN ENGINEERING AND ARCHITECTURAL DRAWINGS. ENGINEERING PLUS DOES NOT ACCEPT ANY RESPONSIBILITY FOR MISCONSTRUCTION RESULTING FROM A FAILURE TO VERIFY SITE CONDITIONS OR ADHERE TO THE NCC STANDARDS MENTIONED ABOVE.

Accredited Building Designer
Designer Name : G. Pfeiffer
Accreditation No : CC2211T
Revision Number : B
Revision Description : RFI RESPONSE
Revision Date : 05.08.26
Revision Issued By : R.A.

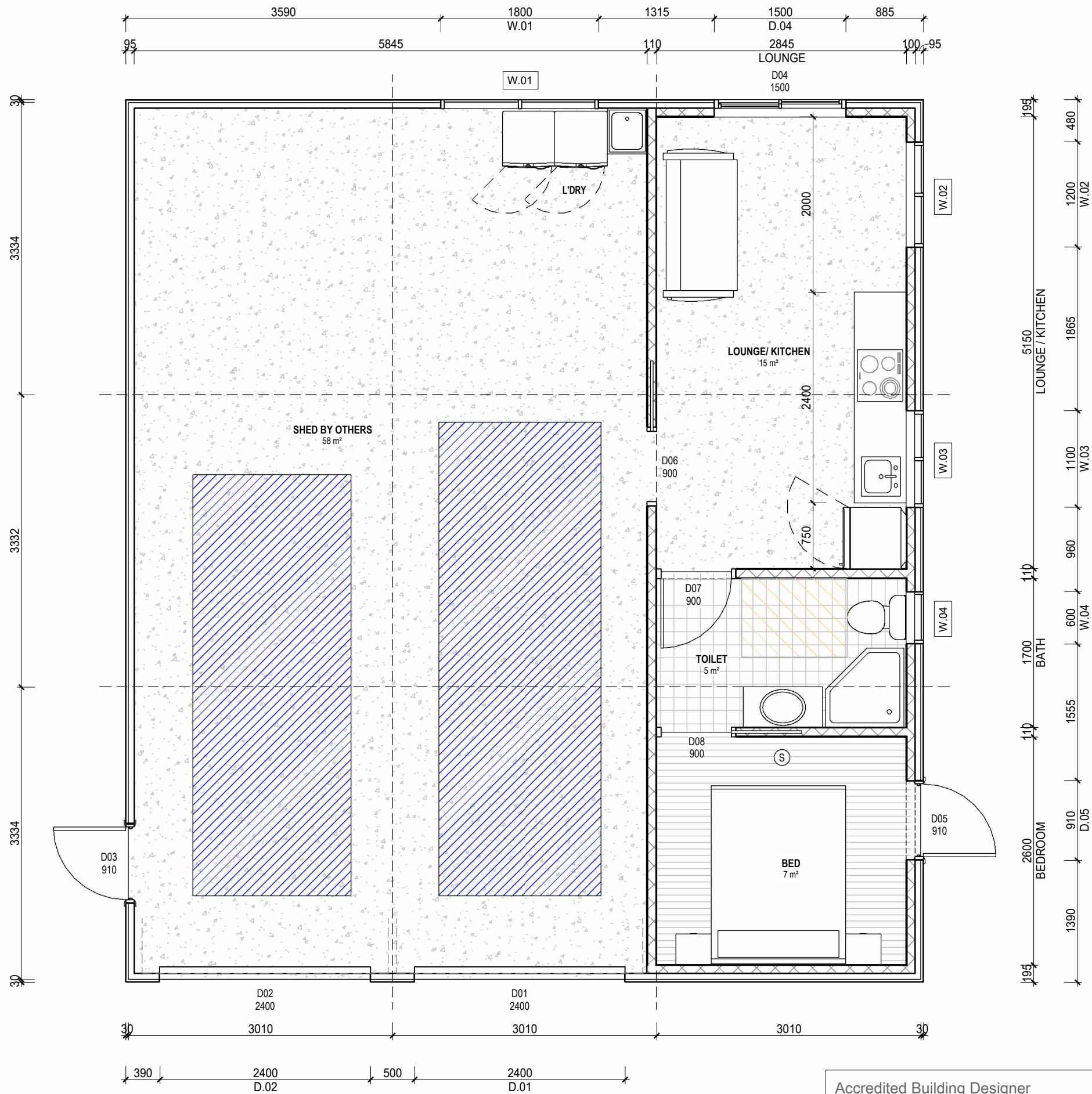
Date Drawn: Issue Date
Drawn: R.A.
Checked: R.A.
Approved: J. Pfeiffer
Scale: As Shown @ A3

Client: G.S. & S.A. LANE
Project: PROPOSED LIVABLE SHED
Page: SITE PLAN
Address: LOT 1, 2 FERNLACK RD
GREENS BEACH TAS 7270

APPROVAL

EP2026-145

A102



DOOR SCHEDULE

MARK	HEIGHT	WIDTH	NOTES
01	3000	2400	ROLLER
02	2400	2400	ROLLER
03	2110	910	HINGED
04	2200	1500	STACKED SLIDER
05	2110	910	HINGED
06	2100	900	HINGED
07	2100	900	HINGED
08	2100	900	CAVITY SLIDER

GLAZING SCHEDULE

MARK	SILL	HEIGHT	WIDTH	TYPE
01	1100	1000	1800	FIXED/ AWNING
02	1100	1000	1200	FIXED/ AWNING
03	1100	1000	1100	FIXED/ AWNING
04	1500	600	600	AWNING

DISCLAIMER
ALL WINDOWS & DOORS SHOWN ON PLAN ARE APPROX. BASED OFF STANDARD MANUFACTURING SIZES. ALL WINDOW DIMENSIONS TO BE CONFIRMED ON SITE BY BUILDER PRIOR TO ORDERING AND MANUFACTURING.

IF WINDOW HEIGHT IS GREATER THAN 2.0m TO HAVE PERMANENTLY FIXED ROBUST SCREEN INSTALLED OR HAVE AN OPENING RESTRICTED TO 125mm.

SMOKE ALARMS

PROVIDE AND INSTALL SMOKE ALARMS & HARD WIRE TO BUILDING POWER SUPPLY TO AS 3786. CEILING MOUNTED WITH 9VDC ALKALINE BATTERY BACKUP TO LOCATIONS INDICATED ON PLAN AND IN ACCORDANCE WITH NCC STANDARDS

(S) - DENOTES INTERCONNECTED SMOKE DETECTORS

FLOOR COVERINGS

- CARPET
- CONCRETE
- TIMBER DECKING
- TILE
- VINYL TIMBER FLOORING

info@engineeringplus.com.au
Ph 03 6337 7021

FLOOR LEVEL
SCALE 1:50

Accredited Building Designer
Designer Name : G. Pfeiffer
Accreditation No : CC2211T
Revision Number : B
Revision Description : RFI RESPONSE
Revision Date : 05.08.26
Revision Issued By : R.A.

Date Drawn: Issue Date
Drawn: R.A.
Checked: R.A.
Approved: J. Pfeiffer
Scale: As Shown @ A3

Client: G.S. & S.A. LANE
Project: PROPOSED LIVABLE SHED
Page: FLOOR PLAN
Address: LOT 1, 2 FERNLACK RD
GREENS BEACH TAS 7270

APPROVAL

EP2026-145

A201

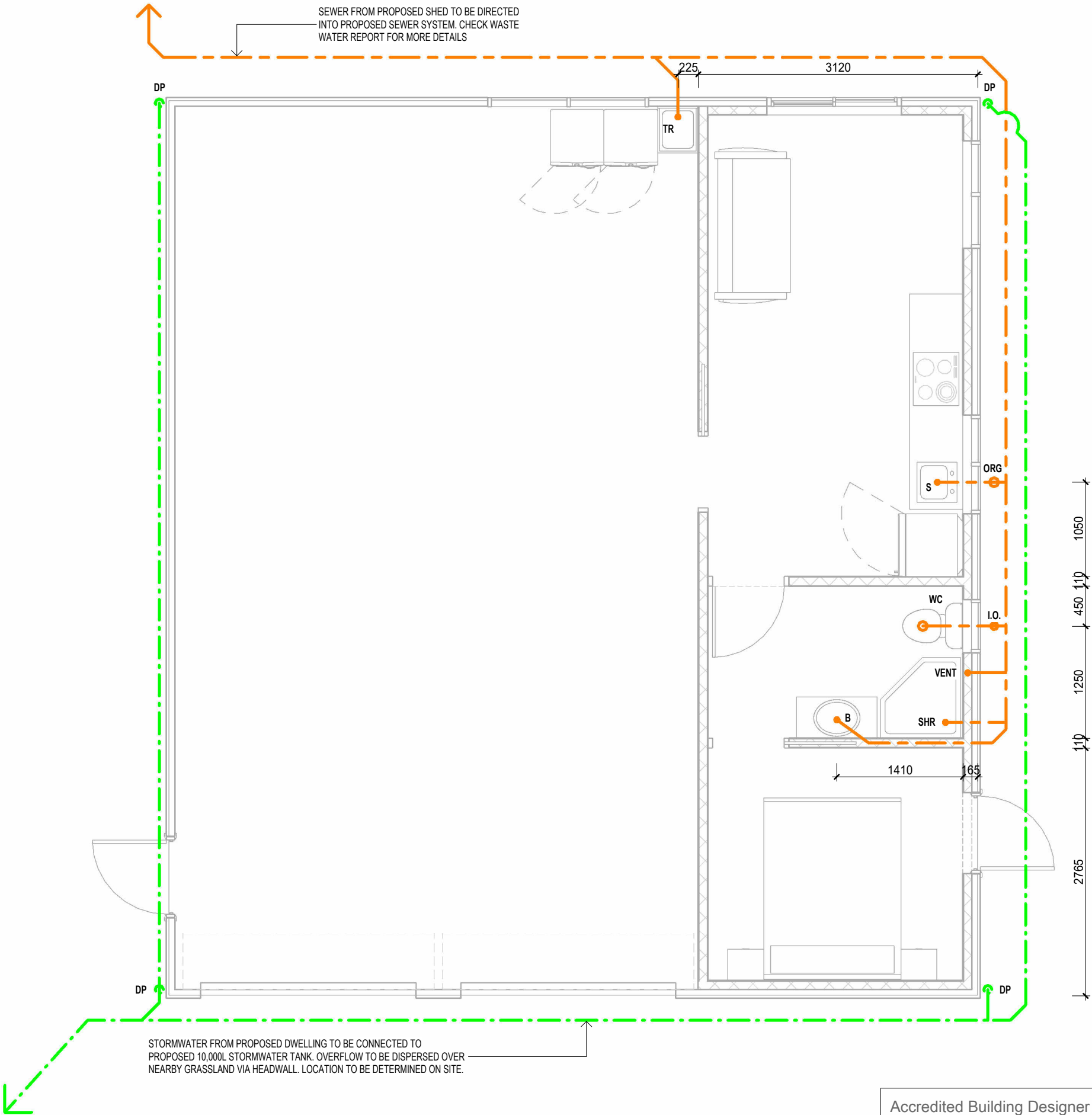
PLUMBING NOTES:
ALL DRAINAGE WORK SHOWN IS PROVISIONAL ONLY AND IS SUBJECT TO AMENDMENT TO COMPLY WITH THE REQUIREMENTS OF THE LOCAL AUTHORITIES.
ALL WORK IS TO COMPLY WITH THE REQUIREMENTS OF AS/NZS 3500 & THE TASMANIAN PLUMBING CODE. AND MUST BE CARRIED OUT BY A LICENCED TRADESMAN ONLY.

LEGEND OF DIAMETERS
TROUGH = 50mm
SINK = 50mm
BATH = 40mm
BASIN = 40mm
SHOWER = 50mm
WC = 100mm
SEWER = 100mm DIA. uPVC
ORG OVERFLOW RELIEF GULLY
EV VENT
DP DOWNPIPE 90mm DIA
STORMWATER = 100mm DIA uPVC

THE INSTALLATION OF WATER PIPE LINES, INSTALLED WITH THE PRODUCT HIS 311 REHAU, WILL REQUIRE THE MAIN COLD WATER LINE TO BE DN 25mm WITH DN 16mm BRANCHES & HOT WATER MAIN LINES TO BE DN 20mm WITH DN 16mm BRANCHES TO FIXTURES, ALL OTHER PRODUCTS USED ARE TO COMPLY WITH THE REQUIREMENTS OF AS/NZS 3500.5.2021 & AS/NZS 3500.1.2021

HOT WATER INSTALLATION SHALL DELIVER HOT WATER TO ALL SANITARY FIXTURES USED FOR PERSONAL HYGIENE AT 50deg C, KITCHEN SINK & LAUNDRY SHALL BE 60deg C TO COMPLY WITH REQUIREMENTS OF AS/NZS 3500.5.2021 SECTION 3.4

PLUMBING FIXTURE	ABBREVIATION
BASIN	B
BATH	BTH
SHOWER	SHR
CLOTHES WASHING MACHINE	CWM
DISHWASHING MACHINE	DWM
FLOOR WASTE GULLY	FWG
OVERFLOW RELIEF GULLY	ORG
HOT WATER CYLINDER	HWC
SINK	S
TROUGH, LAUNDRY	TR(L)
WATER CLOSET PAN	W.C
INSPECTION OPENING	IO
DOWNPIPE	DP



DRAINAGE PLAN
SCALE 1 : 50

Accredited Building Designer
Designer Name : G. Pfeiffer
Accreditation No : CC2211T
Revision Number : B
Revision Description : RFI RESPONSE
Revision Date : 05.08.26
Revision Issued By : R.A.

Date Drawn: Issue Date
Drawn: R.A.
Checked: R.A.
Approved: J. Pfeiffer
Scale: As Shown @ A3

Client: G.S. & S.A. LANE
Project: PROPOSED LIVABLE SHED
Page: DRAINAGE PLAN
Address: LOT 1, 2 FERNLACK RD
GREENS BEACH TAS 7270

APPROVAL

EP2026-145

A401

To:

Planning Department
West Tamar Council

Attention: Patrick McMahon

Subject: Response to Request for Additional Information – Planning Application PA2026132

Proposal: Residential Combined Dwelling and Shed

Property: Lot 1 Ocean View Drive, Greens Beach TAS 7270

Assessment Number: A8162

This letter is submitted in response to Council's **Request for Additional Information dated 25 June 2026** regarding above planning application.

1. Title and folio of the adjoining property (188403/2), as well as the folio plan for the applicant's land

The Certificate of Title (CT188403-01) and Sealed Plan (SP188403) previously submitted remain the only available documents pending issue of title following settlement. In response to Council's request, the folio plan for the adjoining access land (CT188403/2) has been included with this submission.

2. P1.1 and P1.2 of C7.6.2

- **P1.1 – Clearance of Native Vegetation**

The proposed dwelling, shed, wastewater system and associated BAL29 defensible space are located within an existing slashed clearing that has been maintained for many years and currently contains an existing caravan pad. The total development footprint, including the BAL29 area, is approximately **400 m²**.

No additional vegetation clearance is required for the building footprint outside the existing cleared area. The only additional clearing required is approximately **100 m²** of low understorey vegetation to achieve BAL29 compliance, as recommended in the Bushfire Hazard Report.

Alternative building locations were considered but would require greater vegetation removal, increased earthworks and less suitable wastewater outcomes. The proposed location therefore represents the least environmentally intrusive option.

- **P1.2 – Minimising Impacts on Priority Vegetation**

The proposal has been designed to minimise impacts on native vegetation by utilising an existing disturbed area, limiting earthworks and retaining the majority of vegetation across the site. The existing access track will be upgraded rather than constructing a new access.

A revegetation plan forms part of the proposal and will restore previously slashed areas using native species. Where practical, vegetation removed during construction will be relocated within the revegetation areas. These measures ensure that impacts on priority vegetation are minimised and appropriately managed.

3. Clause 22.4.4 – Landscape Protection

- P1 – Landscape Values

The proposal occupies less than 400 m² of an approximately 11-hectare property, with more than 90% of the site remaining undisturbed. Vegetation removal has been limited to the minimum extent necessary for bushfire protection, with no trees greater than 10 metres proposed for removal.

The dwelling has been positioned within the existing cleared area to minimise disturbance to the surrounding bushland. A comprehensive revegetation strategy will further soften the development over time and improve the visual character of the site.

- P2.1 – Siting to Minimise Landscape Impact

The selected building location utilises relatively level ground, limiting cut and fill to less than one metre and reducing construction impacts. The dwelling is a modest single-storey building with an approximate ridge height of 3.9 metres and has been positioned to take advantage of existing vegetation screening.

Although the eastern portion of the site is visible from Fernlack Road due to historical clearing, additional native planting between the dwelling and road frontage will significantly reduce long-term visual impacts while maintaining the landscape values of the locality.

4. Bushfire report

Bushfire report attached.

5. 22.4.2 A5 or justify the PC.

P5 – Exterior Finishes

The proposed external finish is Colorbond Woodland Grey, which has a Solar Reflectance Index of approximately 31%. This subdued natural colour has been selected to complement the surrounding bushland and minimise the visual prominence of the development. Combined with the proposed revegetation works, the external finishes will ensure the dwelling integrates appropriately with the landscape and does not adversely affect neighbouring properties.

The proposal has been carefully designed to respond to the environmental, landscape and bushfire constraints of the site. By locating the development within an existing cleared area, minimising vegetation removal, limiting earthworks and incorporating revegetation measures, the proposal achieves an appropriate balance between residential development and environmental protection.

We trust the above addresses Council's request for additional information.

Kind regards,



Ritika Agrawal
Engineering plus
05th August 2026

BUSH FIRE HAZARD ASSESSMENT REPORT

NEW CLASS 1A DWELLING – LOT 1, 2 FERNLACK ROAD – GREENS BEACH

23RD JUNE 2026



Disclaimer: The information in this report is ensuring compliance with the Tasmanian Planning Scheme, West Tamar Local Provision Schedule, and consistent with, the Director's Determination 16th July 2024 – Bushfire Hazard Areas V1.2, *Building Act 2016 & Building Regulations 2016* (Part 5 Division 6). The information stated within this report is also based on the instructions of *AS 3959 – 20018 – Construction of buildings in bush fire-prone areas*. The purpose of this code is to ensure that use and development is appropriately designed, located, serviced, and constructed, to reduce the risk to human life and property, and the cost to the community, caused by bushfires.

"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."

GPM P/L has taken all reasonable steps to ensure that the information and data collected in the preparation of this assessment is accurate and reflects the conditions on and adjoining the site and allotment on the date of assessment. GPM P/L do not warrant or represent that the information contained within this assessment report is free from errors or omissions and accepts no responsibility for any loss, damage, cost or expense (direct or indirect) incurred as result of a person taking action in respect to any representation, statement or advice referred to in this report. This report is only to be used for the purpose of which it was commissioned.

Document Version: 01 – 23rd June 2026

CONTENTS

Executive Summary	3
Introduction	4
Description of Proposal	5
Bushfire Site Assessment	6
Other Considerations	14
Conclusions / Recommendations	15
Report Preparation & Certification	16
Definitions	17
References	18
Appendixes	
- Title Plan	19
- Aerial View of Allotment	20
- TasVeg 5.0 Map	20
- Natural & Cultural Values Map	21
- Photo of Development Site	21
- Photos of Surrounding Vegetation	22
- Accreditation Documentation	24
- Copy of Insurances	25
Engineering Plus Drawings, Project No. EP2026-145, Rev 2.0, 09/06/2026.EP2026-145	
2 FERNLACK RD Shed Plans, Ranbuild, LAUNC2-12023	
Bushfire Hazard Management Plan (BHMP) Map	
Form 55	
TFS Water Signage Guidelines V1.0 201702	

EXECUTIVE SUMMARY

The development consists of a new Class 1A Dwelling. The development site is located on the urban fringe of Greens Beach, in a relatively new subdivision, ±15km northwest of Beaconsfield. The building site is surrounded by consolidated areas of forest to the west and south and fernland to the north and east. The proposed private access/egress is off Fernlack Road which adjoins the eastern boundary of the subject allotment.

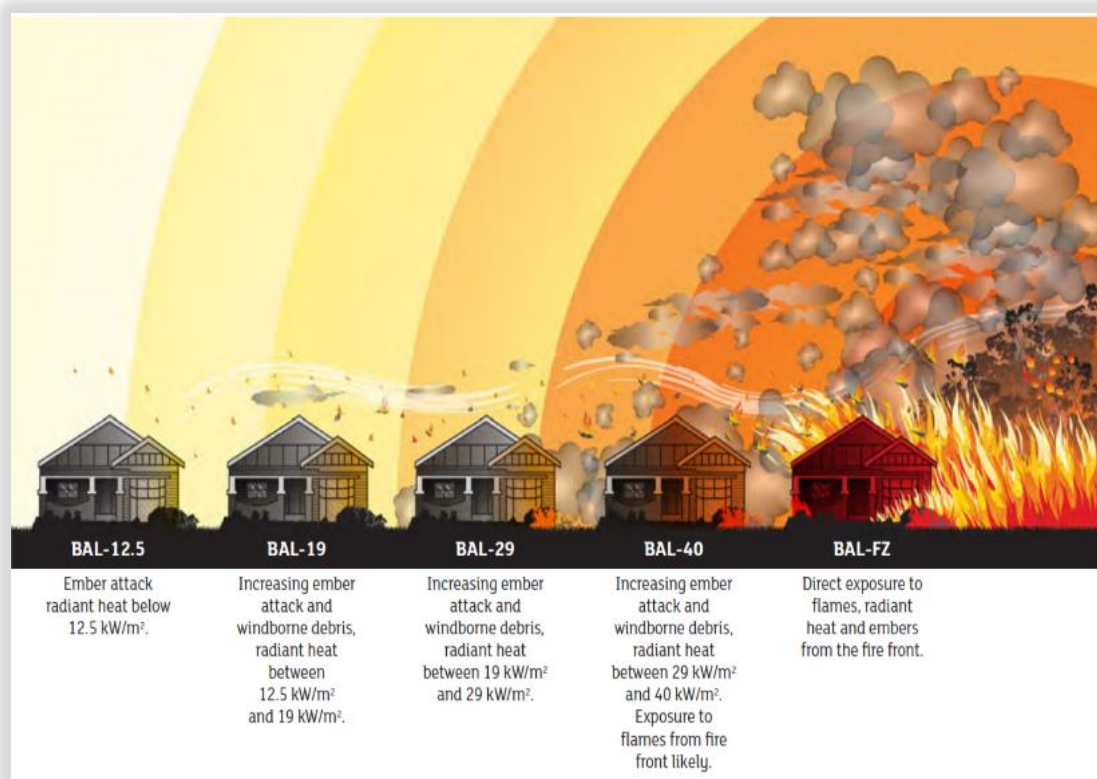
Assessment of the allotment has concluded that there is a risk of bushfire associated with the development due to the location of the bushfire prone vegetation communities that exists within 100m of the development, as listed above.

The proposed development is located within an area of Landscape Conservation Zoning. The lot size is 10.86ha. The development site is accessed via ±130m of existing private road that runs off Fernlack Road.

Using ASA3959 – 2018 Simplified procedure (Method 1), the Bushfire Attack Level of the site and the associated construction requirements will be classified as BAL 29. BAL – 29 is described as being exposed to “Increasing ember, windborne debris and radiant heat between 19 kW/m² and 29 kW/m².”

The BAL classification provided provides specifications for construction standards and the determination of the hazard management area defined in the Bushfire Hazard Management Plan (BHMP). A BAL 29 solution has been designated and the development does not require the clearing of vegetation from neighbouring properties as acceptable distances for the proposed hazard management area can be met within the property boundaries or by utilising adjoining managed ground.

The Bushfire Attack Level (BAL) Report and Bushfire Hazard Management Plan (BHMP) has been prepared under the *Building Act 2016 & Building Regulations 2016 (Part 5 Division 6)* and Director’s Determination 16th July 2024 – Bushfire Hazard Areas V1.2.



INTRODUCTION

Client(s): Greg Lane

Development Type / BCA Classification: New Class 1A Dwelling.

Building Floor Plans: As per attachments.

Construction Materials:

- Will be required to achieve BAL 29 rating standard.
- As per attached drawings.

Date of Site Inspection: June 2026

Inspected by: Justin Cashion – Ground Proof Mapping P/L

This proposal will ensure that “use and development is appropriately designed, located, serviced and constructed, to reduce the risk to human life and property, and the cost to the community, caused by bushfires.”

This Bushfire Risk assessment report will define the sites Bushfire Attack Level classification and determine its compliance with the requirements of the National Construction Code (NCC), 2022 and AS3959 Construction of Buildings in Bushfire Prone Areas 2018.

This report will satisfy associated Council Building Requirements.

DESCRIPTION OF PROPOSAL

Proposal: New Class 1A Dwelling

Applicants Name(s): Greg Lane

Location: Lot 1 Fernlack Road – Greens Beach

Property ID: 7793197

Title Reference: 188403/1

Area Schedule: 93m²

Lot Size: 10.86ha

Zoning: Landscape Conservation

Code Overlay:

Bushfire Prone Areas Code

Natural Assets Code

Council: West Tamar

Defendable Space – Maintain the vegetation in a “low fuel” state within the required distance set out in this report (as shown on the Bushfire Hazard Management Plan) to satisfy ongoing compliance. This must be continually managed in perpetuity.

Access – Existing access is onto Fernlack Road (Council maintained street/road) via ±130m of private access driveway. Further requirements are needed to satisfy access and egress as outlined further in this report (road and passing bay ‘as constructed’).

Water Supply – No existing static firefighting water supply. Further requirements to satisfy water supply as outlined further in this report.

Construction – Construct and maintain the proposed dwelling to a minimum specification complying with BAL – 29 in accordance with AS3959 2018, Sections 3 and 7.

Surrounding Area - The subject allotment is surrounded by varying sized allotments consisting of similar vegetation types to the west, south and east and residential allotments to the north with managed ground associated with existing residential development.

Predominant Fire Direction – The predominant fire direction during the summer period is from the North and North West. The vegetation that triggers the assessment provides a realistic fire threat under predominant fire weather conditions.

BUSHFIRE SITE ASSESSMENT

Vegetation

Classifiable bushfire prone vegetation within 100m of the site of development consists of *Eucalyptus amygdalina* costal forest and woodland (DAC), with forest characteristics to the west and south and Pteridium esculentum fernland (FPF) with grassland characteristics to the north and east. Some minor further vegetation clearing/modification is required in the southern and western sections of the designated hazard management area (HMA) for this development to comply with hazard management area specifications, and the ongoing maintenance of this hazard management area should continue in perpetuity. The maintenance management requirements are specified further in this report.

Slope / Aspect

The effective slope class across the development site is gently sloping to the north, whilst the surrounding areas within 100m of the development are within the 0 - 5° range. The aspect is predominantly northerly. The altitude for the proposed dwelling is at ±32m.

Distances to Vegetation

Appropriate distances to assessable flammable vegetation from the all façades, allows for the construction standards for the dwelling to be classified within those required for a BAL rating of 29, if proposed hazard management areas are maintained in perpetuity. The required HMA for BAL 29 rating is shown on the attached BHMP map.

Assessment and HMA

The proposed development is located in a coastal forested urban interface and the risk of bushfire attack is considered to be a realistic threat. Using AS3959-2018 Simplified Procedure (Method 1) the Bushfire Attack Level of the site and the associated construction requirements will be classified as BAL – 29.

Bushfire Attack Level (BAL) – Steps 1 to 5 Summary Results

For calculations based on Tasmania's FDI of 50, please refer to Table 1 below:

	North	East	South	West
Vegetation to 100m	Grassland	Grassland	Forest	Forest
Vegetation Classification	G	G	A	A
Effective Slope	Downslope 0 - 5°	Downslope 0 - 5°	Level/Upslope	Level/Upslope
Current BAL	BAL 12.5	BAL 12.5	BAL FZ	BAL FZ
Proposed BAL	BAL 29	BAL 29	BAL 29	BAL 29
HMA for BAL 29	7m+	7m+	16m+	16m+

*2.2.3.2:

(e) Exclusions – Non-vegetated areas, including waterways, roads, footpaths, buildings and rocky outcrops.

(f) Exclusions—Low threat vegetation, including grassland managed in a minimal fuel condition, maintained lawns, golf courses, maintained public reserves and parklands, vineyards, or chards, cultivated gardens, commercial nurseries, nature strips and windbreaks.

HMA Requirements

As per Director's Determination – Bushfire Hazard Areas, Table 4, Requirements for Hazard Management Area:

Element B: Hazard management areas for new buildings on lots not provided with a BAL at the time of subdivision

Requirement: A new building must:

- a) Be located on the lot so as to be provided with a HMA no smaller than the separation distances required for BAL 29; and
- b) Have a HMA established in accordance with a certified bushfire hazard management plan (BHMP).

HMA Guidelines

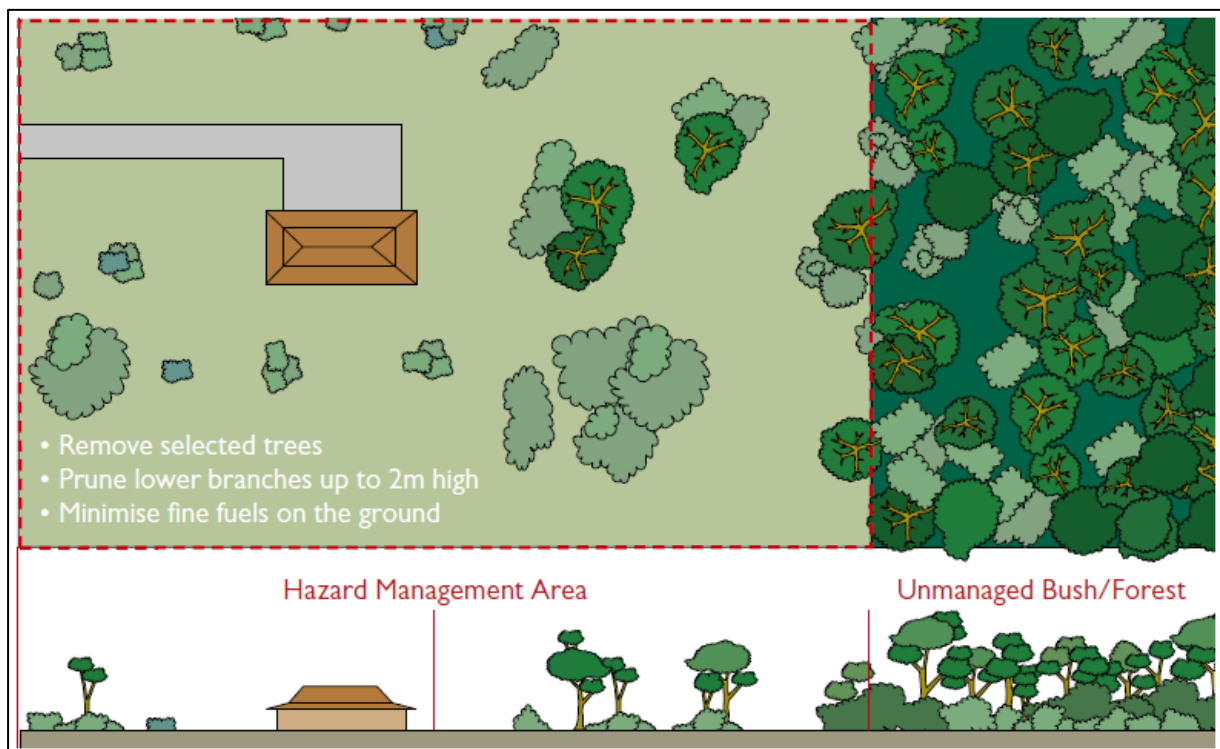
Please note that the implementation of the HMA must comply prior to occupancy certification.

The HMA requirements listed in Table 1 are the minimum distances required to achieve a compliance rating of BAL – 29. The HMA (defendable space area), should have significant fuel reduction carried out to ensure compliance with low threat vegetation classification. This single zone hazard management area must be managed and kept in a minimum fuel condition at all times "where fine fuels are minimised to the extent that the passage of fire will be restricted, e.g. short green lawns, paths, driveways etc." All grassed areas within this zone need to be short cropped and kept to a nominal height of 100mm.

The four design principles for this area are to:

- (1) Create space
- (2) Remove flammable objects or materials
- (3) Separate fuel
- (4) Selection, location and maintenance of trees

The diagram below explains this requirement.



Other recommendations Include:

- Trees and large shrubs should be pruned to remove branches within 2 m of the ground.
- Use only mown lawn, bare ground (driveways, paths etc.) or non-flammable native succulent ground cover plants immediately adjacent to buildings (within 2 metres).
- Total understorey canopy cover should be less than 20%.
- Total eucalypt overstorey to be <5%.
- Separate tree crowns by four metres.
- Shrubs should be isolated or in small clumps; avoid continuous canopies.
- New trees should not be planted closer to buildings than their expected full height.
- Avoid planting or retaining trees and shrubs with rough fibrous bark, or which retain shed bark in long strips (ribbon bark) (e.g. any of the stringy bark group of eucalypts).
- Avoid planting or retaining trees and shrubs that retain dead material in their canopies (e.g. most conifers, and most *Melaleuca* and *Leptospermum* species).
- Avoid planting or retaining shrubs under trees.
- Canopies of trees and shrubs should not touch walls or overhang buildings.
- Avoid planting or retaining trees and shrubs that deposit large quantities of litter in a short period, particularly in spring and summer.
- Combustible mulches should not be used, except in very limited quantities around the base of shrubs; use non-combustible mulches, such as pebble, scoria or gravel, or mown grass.
- Shrubs should not be allowed to grow to within 2 m of windows with annealed (standard) glass, or within 1 m of windows with heat toughened glass or walls with timber cladding.
- Locate any combustible materials, such as woodpiles, flammable fuel stores etc., outside the Hazard Management Area.



Figure 1: This photo illustrates a maintained hazard management zone in the foreground with unmanaged vegetation in the background.

Some thought should be given to other landscaping alternatives using such plants as described in the “Fire Resisting Garden Plants” booklet produced by the Tasmania Fire Service (TFS) available on the website @ www.fire.tas.gov.au

Access/Egress

The primary principles for specifications in regards to access and egress, is to provide safe access to properties for residents, and to allow emergency service vehicles access to assist with firefighting and protection of buildings. This also enables emergency personnel to evacuate residents when required and provide access to the water supply and dwelling for firefighting purposes. Existing constructed access to the dwelling is via a private road accessed off Fernlack Road (Council maintained street/road) and is $\pm 130\text{m}$ in length. As per Director's Determination – Bushfire Hazard Areas, Table 2 Requirements for Property Access:

To the Static Water Supply

Element B: Property access length is 30m or greater; or access is for a fire appliance to a firefighting water point.

Requirement: The following design and construction requirements apply to property access:

- a) All weather construction;
- b) Load capacity of at least 20 tonnes, including for bridges and culverts;
- c) Minimum carriageway width of 4 metres;
- d) Minimum vertical clearance of 4 metres;
- e) Minimum horizontal clearance of 0.5 metres from the edge of the carriageway;
- f) Cross falls of less than 3 degrees (1:20 or 5%);
- g) Dips less than 7 degrees (1:8 or 12.5%) entry and exit angle;
- h) Curves with a minimum inner radius of 10 metres;
- i) Maximum gradient of 15 degrees (1:3.5 or 28%) for sealed roads, and 10 degrees (1:5.5 or 18%) for unsealed roads; and
- j) Terminate with a turning area for fire appliances provided by one of the following:
 - i. A turning circle with a minimum inner radius of 10 metres;
 - ii. A property access encircling the building; or
 - iii. A hammerhead "T" or "Y" turning head 4 metres wide and 8 metres long.

Please note that access must comply with the specifications above and must be implemented prior to Certificate of Occupancy.

Water Supply

A new building constructed in a bushfire-prone area, must be provided with a water supply dedicated for firefighting purposes.

Reticulated Water Supply for Firefighting: **Not Applicable.**

Static Water Supply for Firefighting: **Applicable as per below.**

Please note that the implementation of the static water supply to specification must comply prior to occupancy certification.

As per Director's Determination – Requirements for Building in Bushfire-Prone Area, Table 3B, Requirements for Static Water Supply for Firefighting:

Element A: Distance between building area to be protected and water supply

Requirement: The following requirements apply:

- (a) The building area to be protected must be located within 90 metres of the water connection point of a static water supply; and
- (b) The distance must be measured as a hose lay, between the water connection point and the furthest part of the building area.

Element B: Static Water Supplies

Requirement: 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 3959-2009, 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.

Element C: Fittings, pipework and accessories (including stands and tank supports)

Requirement: Fittings and pipework associated with a water connection 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 (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 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.

Element D: Signage for static water connections

Requirement: 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 comply with the Tasmanian Fire Service Water Supply Signage Guideline published by the Tasmania Fire Service.

This document is attached as an appendix to this report.

Element E: Hardstand

Requirement: A hardstand area for fire appliances must be provided:

- (a) No more than three metres from the water connection 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.

Please note that the location for the proposed static water supply is shown on the attached BHMP map.

Please note that the static water supply must comply with the specifications above and must be implemented prior to Certificate of Occupancy.

Construction

The buildings and elements shall be designed, constructed, and maintained in accordance with Construction Sections 3 and 7 of AS 3959-2018 *Construction of Buildings in Bushfire Prone Areas* for BAL – 29.

BAL – AS3959 – Construction Requirements

	BAL – LOW	BAL – 12.5	BAL – 19	BAL – 29	BAL – 40	BAL – FZ
SUBFLOOR SUPPORTS	No special construction requirements	No special construction requirements	No special construction requirements	Enclosure by external wall or by steel, bronze or aluminium mesh, non-combustible supports where the subfloor is unenclosed, naturally fire resistant timber stumps or posts on 75mm metal stirrups	If enclosed by external wall refer below 'External Walls' section in table or non-combustible subfloor supports or tested for bushfire resistance to AS1530.8.1	Subfloor supports – enclosure by external wall or non-combustible with an FRL of 30/-/- or be tested for bushfire resistance to AS1530.8.2
FLOORS	No special construction requirements	No special construction requirements	No special construction requirements	Concrete slab on ground, enclosure by external wall, metal mesh as above or flooring less than 400mm above ground level to be non-combustible, naturally fire resistant timber or protected on the underside with sarking or mineral wool insulation	Concrete slab on ground, enclosed by external wall or protection of underside with non-combustible material such as fibre cement sheet or be non-combustible or be tested for bushfire resistance to AS1530.8.1	Concrete slab on ground or enclosure by external wall or an FRL of 30/30/30 or protection of underside with 30 minute incipient spread of fire system or to be tested for bushfire resistance to AS1530.8.2
EXTERNAL WALLS	No special construction requirements	As for BAL-19	External walls – Parts less than 400mm above ground or decks etc to be of non-combustible material, 6mm fibre cement clad or bushfire resistant/naturally fire resistant timber	Non-combustible material (masonry, brick veneer, mud brick, aerated concrete, concrete), timber framed, steel framed walls sarked on the outside and clad with 6mm fibre content sheeting or steel sheeting or bushfire resisting timber	Non-combustible material (masonry, brick veneer, mud brick, aerated concrete, concrete), timber framed, steel framed walls sarked on the outside and clad with 9mm fibre content sheeting or steel sheeting or be tested for bushfire resistance to AS1530.8.1	Non-combustible material (masonry, brick veneer, mud brick, aerated concrete, concrete) with minimum thickness of 90mm or an FRL of -/30/30 when tested from outside or be tested for bushfire resistance to AS1530.8.2
EXTERNAL WINDOWS	No special construction requirements	As for BAL-19 except that 4mm Grade A safety glass can be used in place of 5 mm toughened glass	Protected by bushfire shutter, completely screened with steel, bronze or aluminium mesh or 5mm toughened glass or glass blocks within 400mm of ground, deck etc. Openable portion metal screened with frame of metal or metal reinforced PVC-U or bushfire resisting timber	Protected by bushfire shutter, completely screened with steel, bronze or aluminium mesh or 5mm toughened glass or glass with openable portion metal screened and frame of metal or metal reinforced PVC-U or bushfire resisting timber and portion within 400mm of ground level screened.	Protected by bushfire shutter or 5mm toughened glass. Openable portion screened with steel or bronze mesh.	Protected by bushfire shutter or FRL of -/30/- and openable portion screened with steel or bronze mesh or be tested for bushfire resistance to AS1530.8.2

	BAL – LOW	BAL – 12.5	BAL – 19	BAL – 29	BAL – 40	BAL – FZ
EXTERNAL DOORS	No special construction requirements	As for BAL-19 except that door framing can be naturally fire resistant (high density) timber	Protected by bushfire shutter, or screened with steel bronze or aluminium mesh or glazed with 5mm toughened glass, non-combustible or 35mm solid timber for 400mm above threshold, metal or bushfire resisting timber framed for 400mm above ground, decking, etc tight fitting with weather strips at base.	Protected by bushfire shutter, or screened with steel bronze or aluminium mesh or non-combustible or 35mm solid timber for 400mm above threshold. Metal or bushfire resisting timber framed tight fitting with weather strips at base.	Protected by bushfire shutter, non-combustible or 35mm solid timber, metal framed tight-fitting with weather strips at base	Protected by bushfire shutter or tight-fitting with weather strips at base and an FRL or -/30/-
ROOFS	No special construction requirements	As for BAL-19	Non-combustible covering. Roof/wall junction sealed. Openings fitted with non-combustible ember guards. Roof to be fully sarked.	Non-combustible covering. Roof/wall junction sealed. Openings fitted with non-combustible ember guards. Roof to be fully sarked.	Non-combustible covering. Roof/wall junction sealed. Openings fitted with non-combustible ember guards. Roof to be fully sarked and no roof mounted evaporative coolers	Roof with FRL of 30/30/30 or tested for bushfire resistance to AS1530.8.2. Roof/wall junction sealed. Openings fitted with non-combustible ember guards. No roof mounted evaporative coolers
VERANDAHS DECKS ETC	No special construction requirements	As for BAL-19	Enclosed sub-floor space – no special required for materials except within 400mm of ground. No special requirements for supports or framing. Decking to be non combustible or bushfire resistant within 300mm horizontally and 400mm vertically from a glazed element.	Enclosed sub –floor space or non-combustible or bushfire resistant timber supports. Decking to be non-combustible	Enclosed sub-floor space or non-combustible supports. Decking to be non-combustible	Enclosed sub-floor space or non-combustible supports. Decking to have no gaps and be non-combustible

OTHER CONSIDERATIONS

Natural and Cultural Values

As the allotment is zoned as Landscape Conservation and is covered by the Natural Assets Code (Priority Vegetation Area), further approval maybe required to undertake vegetation management within the defined HMA. No further natural or cultural values were identified on site or through desktop assessments, which would prevent the clearing and or maintenance of vegetation communities within the Hazard Management Area for achieving BAL – 29 classification. The following resources were checked as part of the desktop assessment;

- Natural Values Atlas – DPIPWE 2026
- TasVeg 5.0 – Tasmanian Government / DPIPWE 2026
- The List – DPIPWE 2026

Other Environmental or Planning Issues

No further environmental or planning issues were identified on site or through desktop assessments, including review of the Tasmanian Planning Scheme – West Tamar Local Provision Schedule.

CONCLUSIONS / RECOMMENDATIONS

This assessment covers the minimum requirements for the construction of a new Class 1A Dwelling. It is important to note that the assessment covers only the requirements from a bushfire perspective and not any other building regulations.

The development site is located in a coastal forest/urban fringe setting, within 100m of highly flammable vegetation communities. The risk of bushfire attack needed to be considered as the site is classified as being in a Bushfire Prone Area and may be susceptible to bushfires in the future.

By building to construction standards of a BAL – 29 rating, the hazard management area distances are specified. The management and ongoing maintenance of this hazard management area in a low fuel state, in perpetuity, as prescribed in this plan is of upmost priority in regards to bushfire risk. Private access and egress requirements and static firefighting water supply requirements have been defined in this report. When the development is built following the construction guidelines of AS3959 – 2018 and other recommendations outlined in this report, it will ensure compliance with the *Building Act 2016* & *Building Regulations 2016*.

This report should be considered in conjunction with all other planning documents for this proposed development in case of conflict. It is the client's responsibility to provide this report to all relevant parties that are involved with the planning, development or construction of this proposed extension. Any changes in relation to these functions that may alter the proposed BAL rating, need to be addressed with GPM P/L as there may be a necessity for a new assessment to be undertaken.

Other valuable resources in regards to bushfires and planning and preparation are available on the Tasmania Fire Service (TFS) website @ www.fire.tas.gov.au

REPORT PREPARATION & CERTIFICATION

This Bushfire Risk Assessment Report was prepared by:

Justin Cashion – Ground Proof Mapping P/L.

Signature: *Justin Cashion*

Date: 23/06/2026

This Bushfire Risk Assessment Report is certified by:

Justin Cashion – Ground Proof Mapping P/L.

Signature: *Justin Cashion*

Date: 23/06/2026

Accredited Person under part 4A of the Fire Service Act 1979: Accreditation No: **BFP-112**

Certificate: **GPM 26 - 030**

DEFINITIONS

Term	Definition
accredited person	Means as defined in the act
BAL	A means of measuring the severity of a building's potential exposure to ember attack, radiant heat and direct flame contact, using increments of radiant heat expressed in kilowatts per square metre, which is the basis for establishing the requirements for construction to improve protection of building elements from attack by a bushfire (AS 3959-2018).
BAL ratings	Used as the basis for establishing the requirements for construction to improve protection of a (proposed) building from bushfire attack. There are 6 BAL ratings; low, 12.5, 19, 29, 40 and FZ.
bushfire hazard management plan	Means as defined in the Act
bushfire-prone area	Means: land that is within the boundary of a bushfire-prone area shown on an overlay on a planning scheme map; and where there is no overlay on a planning scheme map, or where the land is outside the boundary of a bushfire-prone area shown on an overlay on such a map, land that is within 100m of an area of bushfire-prone vegetation equal to or greater than 1 hectare.
bushfire-prone vegetation	Means contiguous vegetation including grasses and shrubs but not including maintained lawns, parks and gardens, nature strips, plant nurseries, golf courses, vineyards, orchards or vegetation on land that is used for horticultural purposes.
contiguous	Means separated by less than 20m.
defendable space	An area of land around a building where vegetation is modified and managed to reduce the effects of flame contact and radiant heat associated with a bushfire.
hazard management zone / area	Means the zone / area, between a habitable building or building area and 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.
Part 5 agreement	Means as defined in the Act.
TFS	Means the Tasmanian Fire Service.
slope	The slope under the classified vegetation in relation to the (proposed) building.
static water supply	Means water stored in a tank, swimming pool, dam, or lake that is available for firefighting purposes at all times.
vegetation	The vegetation that presents a bushfire hazard within 100 metres of the development and is classified in accordance with Clause 2.2.3 of AS 3959-2018.

REFERENCES

- Standards Australia Limited. (2011). *AS 3959 – 2018 – Construction of buildings in bush fire-prone areas*.
- Tasmanian Planning Scheme, West Tamar Local Provision Schedule.
- Australian Building Codes Board. (2022). *National Construction Code - ABCB*.
- Director's Determination 16th July 2024 – Bushfire Hazard Areas V1.2.
- *Building Act 2016 & Building Regulations 2016* (Part 5 Division 6).
- UTS:CLG / TFS. Development and Building in Bushfire Prone Areas course resources.
- Engineering Plus Drawings, Project No. EP2026-145, Rev 2.0, 09/06/2026.
- 2 FERNLACK RD Shed Plans, Ranbuild, LAUNC2-12023.

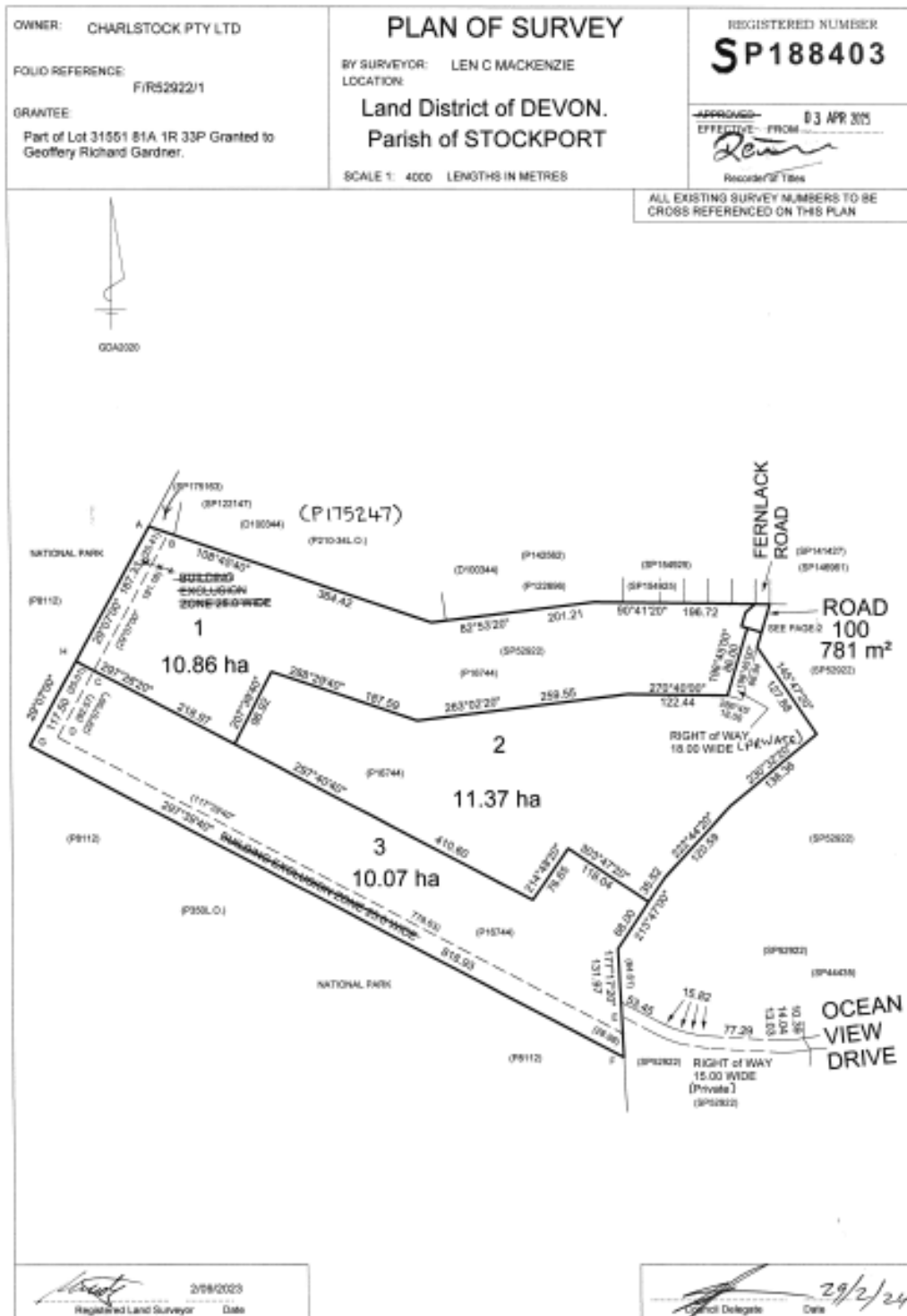


Figure 1: Title Plan (Lot 1).

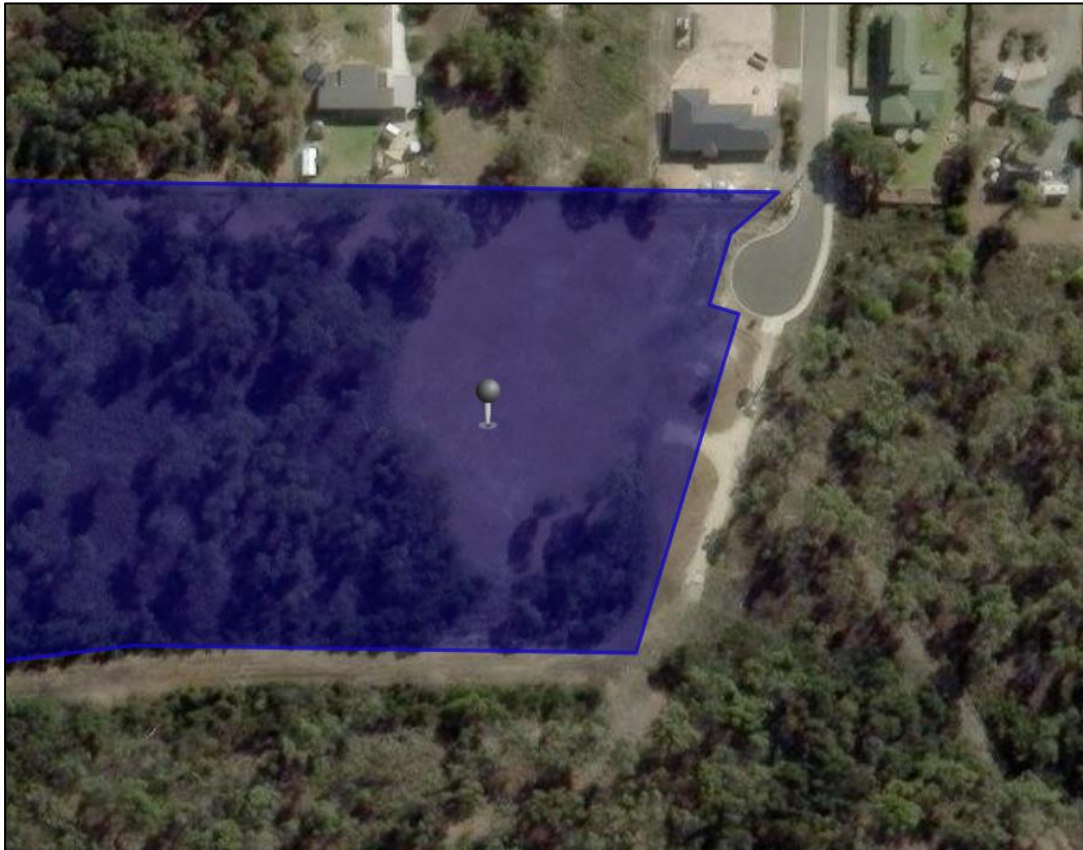
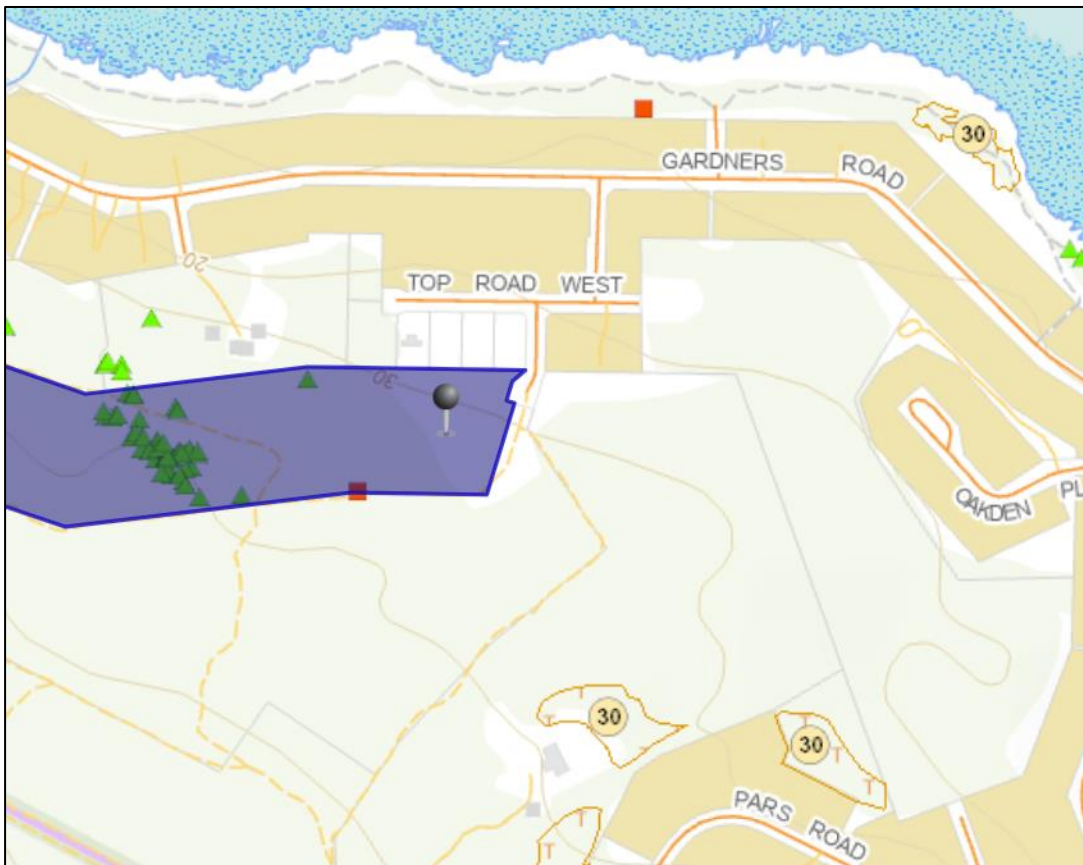


Figure 2: Aerial View of allotment.



Figures 3a & 3b: TasVeg 5.0 & Natural & Cultural Values Maps.



Figure 4: Photo of development site.



Figure 5: Photo to the north.



Figure 6: Photo to the east.



Figure 7: Photo to the south.



Figure 8: Photo to the west.



Bushfire Hazard Practitioner Accreditation Certificate

In accordance with Section 60D of the Fire Service Act 1979

Justin Cashion

Accreditation No: BFP - 112

Accreditation Category: 2

Is hereby granted accreditation to perform the functions of an Accredited Person under Part 4A of the Fire Service Act 1979 with the following conditions and restrictions:

Scope of Work		Status
1	Certify a Bushfire Hazard Management Plan for the purposes of the Building Act 2016.	Accredited
2	Certify an Exemption from a Bushfire Hazard Management Plan for the purposes of the Building Act 2016 or the Land Use Planning and Approvals Act 1993.	Accredited
3A	Certify a Bushfire Hazard Management Plan meets the Acceptable Solutions for Vulnerable Uses and Hazardous Uses for the purposes of the Land Use Planning and Approvals Act 1993.	Accredited
3B	Certify a Bushfire Hazard Management Plan meets the Acceptable Solutions for small subdivisions (less than 10 lots) for the purposes of the Land Use Planning and Approvals Act 1993.	Accredited
3C	Certify a Bushfire Hazard Management Plan meets the Acceptable Solutions for large subdivisions (more than 10 lots, or multiple stages) for the purposes of the Land Use Planning and Approvals Act 1993.	Accredited
4	Certify an Emergency Management Strategy or Bushfire Emergency Plan for all uses and classes of building for the purposes of the Building Act 2016 or the Land Use Planning and Approvals Act 1993.	Not Accredited
Conditions Conform with requirements of the Chief Officer's Scheme for the Accreditation of Bushfire Hazard Practitioners, and Bushfire Hazard Advisory Notes issued by the Chief Officer.		

This accreditation remains valid until such time that it is surrendered, varied, suspended or revoked.


 Jeff Harper AFSM
 A/CHIEF OFFICER

1 May 2018

Figure 9: Accreditation Documentation.



Michael Sims
Senior Account Executive

Marsh Pty Ltd
ABN 86 004 651 512
Ground Floor,
93 Clarendon Street,
Launceston, Tasmania 7250
Tel: (03) 63333214
Michael.Sims@marsh.com

Justin Cashion
Ground Proof Mapping Pty Ltd
81 Elizabeth Street
Norwood TAS 7250

5 August 2025

Dear Justin,

Confirmation of Cover Ground Proof Mapping Pty Ltd

INSURANCE CLASS	INSURER	POLICY NO	COVERAGE	POLICY PERIOD
Public Liability	Lloyd's of London through CFC Underwriting Ltd	3290298	\$20,000,000 any one claim	31/08/2025 - 31/08/2026
Professional Indemnity	Lloyd's of London through CFC Underwriting Ltd	3290298	\$1,000,000 any one claim \$2,000,000 in the aggregate	31/08/2025 - 31/08/2026
Motor Vehicle	Allianz Australia Insurance Ltd - GC	138RN00066VSD	Section 1 - Market Value or Sum Insured whichever is the lesser Section 2 - \$35,000,000	01/04/2025 - 01/04/2026
Workers' Compensation	Allianz Australia Insurance Ltd	LWL0016802	Liability at Common Law - Unlimited	01/04/2025 - 01/04/2026

*Inclusive of FSLVESL, Statutory Charges and Fees.

Occupation including but not limited to:

- Bushfire Management & Mitigation Planning
- Bushfire Attack Level (BAL), Bushfire Hazard Management Plans (BHMP's), Bushfire Emergency Plans, Bushfire Evacuation & Action Plans
- Planning and Supervision of Low & High Intensity Burn Programs
- Unplanned Bushfire Suppression under direction/supervision of one of Tasmania's 3 Fire Agency bodies; Tasmanian Fire Service (TFS), Sustainable Timber Tasmania (STT) and Parks and Wildlife Service/DPIPWE (PWS).
- Providing Nationally Accredited Fire Training under qualification for specific fire management modules
- Vegetation assessments & plans
- Ecological assessments & plans
- Post Fire Regeneration and Rehabilitation Plans

THANK YOU

We are here to assist you with all your insurance needs, so please call us if you have any questions or visit our website for information about other products/services at www.marsh.com.au.

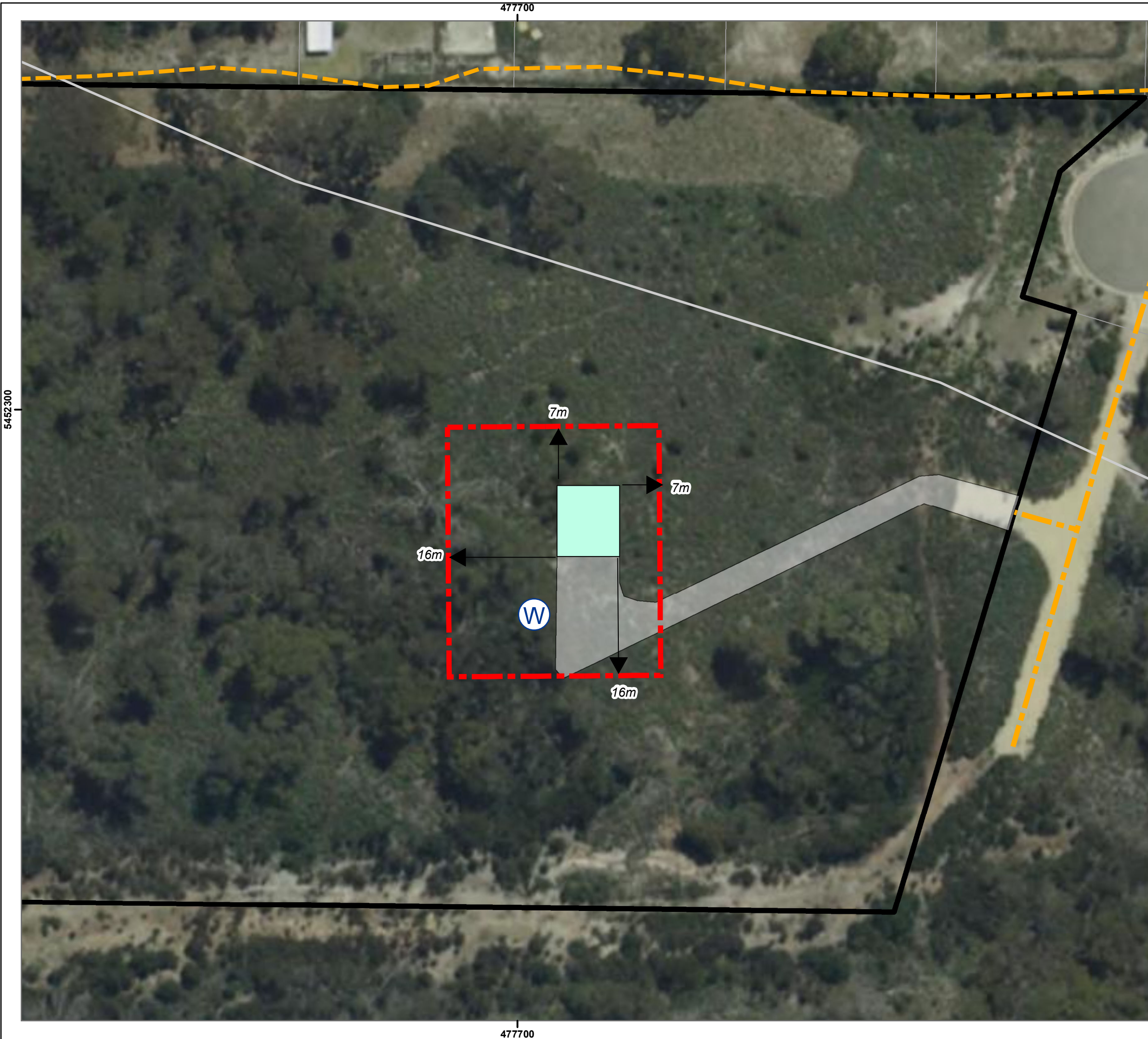
Yours faithfully,

Michael Sims
Senior Account Executive
Michael.Sims@marsh.com

Our Ref: 870-GROPRO 211-05/08/2025 - SIMSM

Confirmation of Cover

Figure 10: Copy of Insurance.



Important:
PROJECTION: Universal Transverse Mercator (UTM).
HORIZONTAL DATUM: Geocentric Datum of Australia 1994(GDA94)
MAP GRID: Mapping Grid of Australia (MGA94)

Disclaimer:
Whilst GPM (and its agents) make every reasonable effort to locate and identify features on the land which is the subject of this map not all features either above or below the surface have been located. Users are advised to independently verify all data for accuracy and completeness prior to use.



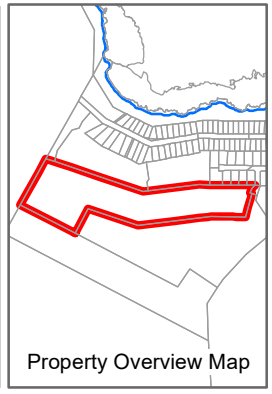
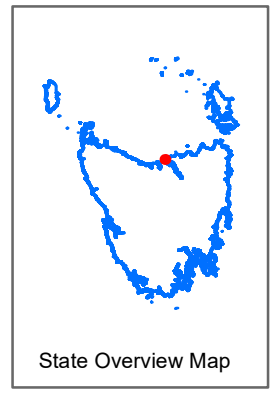
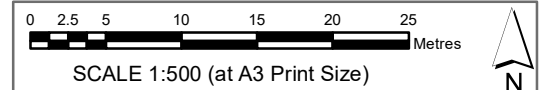
Bushfire Hazard Management Plan Map

PID Number: 7793197
Client: Greg Lane
Address: 2 Fernlack Road
Greens Beach 7270
Production Date: 23/06/2026
Assessor: Justin Cashion
Accreditation No.: BFP - 112 (1, 2, 3a & 3b)
Notes:
Class 1A Dwelling
BAL 29 Solution

*BHMP should be read in conjunction with
Bushfire Hazard Report GPM 26 - 030
Base data from theLIST (www.thelist.tas.gov.au), © State of Tasmania

Legend

- West Tamar Cadastre
- 2 Fernlack Road
- Proposed Dwelling Footprint
- Proposed Access
- BAL 29 Hazard Management Area
- Existing Access
- Proposes Static Water Supply
- 10m Contours Statewide
- Hydrology Lines



17 July 2026

Reference No. GL26347Ab

Greg and Ann Lane
63/11 Innovation Parkway
BIRTINYA TAS 4575

Dear Sir and Madam

**RE: Site Classification & On-site Wastewater Disposal Assessment and
Design
2 Fernlack Road, Greens Beach**

We have pleasure in submitting herein our report detailing the results of the geotechnical investigation conducted at the above site.

Should you require clarification of any aspect of this report, please contact Brett Street on (03) 6326 5001.

For and on behalf of

Geoton Pty Ltd



Tony Barraiera

Director – Principal Geotechnical Engineer

Rev No.	Date	Written By	Reviewed By	Description
Ab	17/07/26	B Street	T Barraiera	Original

1 INTRODUCTION

A limited scope investigation has been conducted for Greg and Ann Lane at the site of a proposed residential development at 2 Fernlack Road, Greens Beach.

The investigation has been conducted to assess the following:

- The general subsurface conditions at the site and consequently assign a Site Classification in accordance with AS 2870 – 2011 “Residential Slabs and Footings”;
- The surrounding topography and provide a Wind Classification in accordance with AS 4055 – 2021 “Wind Loads for Housing”; and
- The suitability of the site for the disposal of domestic wastewater and the design of an on-site wastewater system in accordance with AS/NZS 1547:2012 “On-site Domestic Wastewater Management”.

A site sketch of the proposed location of the shed was provided. We understand the proposed shed will have 1 bedroom.

2 FIELD INVESTIGATION

The field investigation was conducted on 03 July 2026 and involved the drilling of 4 boreholes by auger rig to depths of 2.0m.

Dynamic Cone Penetration (DCP) tests were conducted in the granular soils encountered in the investigation. In addition, the permeability of the site was tested using a constant head permeameter.

The results of the field and tests are shown on the borehole logs.

The logs of the boreholes are included in Appendix A and their locations are shown on Figure 1 attached.

3 SITE CONDITIONS

The site is approximately 10.5 ha in size, heavily vegetated and is an undeveloped allotment. The proposed development is to be located within the northeastern portion of the site on recently cleared land. A minor cut to fill building platform has been constructed for the proposed shed (Plate 1). The proposed wastewater disposal area is to be located downslope of the shed to the north on a gentle slope. The ground surface within the disposal area is sparsely vegetated, comprising predominantly exposed sand with scattered small ferns (Plate 2).

Site Classification & On-site Wastewater Disposal Assessment and Design



Plate 1: View of the proposed shed location looking southwest 03/07/2026.



Plate 2: View of the proposed wastewater disposal area looking north 03/07/2026.

The Mineral Resources Tasmania (MRT) Digital Geological Atlas, 1:25,000 Series, shows the site to be located on Tertiary period sediments, with this being generally confirmed by the field data.

Examination of the LIST Landslide Planning Map – Hazard Bands Overlay indicates that the site is not within a mapped landslide hazard band.

The investigation indicated that the soil profile varied slightly across the site. Borehole BH1 encountered gravel fill to a depth of 0.1m, underlain by sand to the investigated depth of 2.0m. Borehole BH2 encountered silty sand topsoil to a depth of 0.15m, underlain by sand to the investigated depth of 2.0m. Boreholes BH3 and BH4 encountered silty sand topsoil to the depths of 0.15m, overlying sand to the depths of 0.8m and 1.8m, underlain by clayey sand to sandy clay to the investigated depths of 2.0m.

The boreholes did not encounter any signs of groundwater seepage over the investigated depths.

Full details of soil conditions encountered are presented on the borehole logs.

4 SITE CLASSIFICATION

After allowing due consideration of the site geology, drainage and soil conditions, the site has been classified as follows:

CLASS S (AS 2870)

Foundation designs in accordance with this classification are to be subject to the overriding conditions of the Foundations section below.

This classification is applicable only for ground conditions encountered at the time of this investigation. If cut or fill earthworks are carried out, then the site classification will need to be re-assessed, and possibly changed.

5 FOUNDATIONS

Particular attention should be paid to the design of footings as required by AS 2870 – 2011.

In addition to normal founding requirements arising from the above classification, particular conditions at this site dictate that the founding medium for all footings would be as follows:

SAND (SP) – fine grained, orange

Encountered beneath the gravel fill and loose sands 0.25m (BH1) from the existing ground surface

An allowable bearing pressure of **100 kPa** is available for edge beams, strips and pads founded as above, provided the site is prepared as follows:

- Earthworks should be carried out in accordance with AS3798-2007, Guidelines on Earthworks for Commercial and Residential Developments.
- All topsoil should be removed from the building footprint.
- The natural sand foundation should be proof rolled prior to slab on ground construction.

- All sands disturbed in the base of footing excavations should be compacted.

No structure should be founded on fill without the footings extending through the fill to the natural soils.

If groundwater is encountered in site or footing excavations it is recommended that subsoil drains are installed discharging to the stormwater system.

The site classification presented assumes that the current natural drainage and infiltration conditions at the site will not be markedly affected by the proposed site development work. Care should therefore be taken to ensure that surface water is not permitted to collect adjacent to the structure and that significant changes to seasonal soil moisture equilibria do not develop as a result of service trench construction or tree root action.

Attention is drawn to Appendix B of AS 2870 and CSIRO Building Technical File BTF18 “Foundation Maintenance and Footing Performance: A Homeowner’s Guide” as a guide to maintenance requirements for the proposed structure.

Although the borehole data provides an indication of subsurface conditions at the site, variations in soil conditions may occur in areas of the site not specifically covered by the field investigation. The base of all footing or beam excavations should therefore be inspected to ensure that the founding medium meets the requirements referenced herein with respect to type and strength of founding material.

The boreholes were backfilled shortly after being drilled, not allowing time for groundwater seepage flows to develop. Groundwater seepages or higher groundwater levels can occur during and/or after a prolonged period of wet weather or a heavy rainfall event.

6 WIND CLASSIFICATION

After allowing due consideration of the region, terrain, shielding and topography, the site has been classified as follows:

WIND CLASSIFICATION N3 (AS 4055)

Table 1: Wind Classification Parameters.

REGION	TERRAIN CATEGORY	SHIELDING	TOPOGRAPHY
A	TC1	NS	T1

7 EFFLUENT DISPOSAL

The AS/NZS 1547:2012 and the *Building Act 2016*: Director’s Guidelines for On-site Wastewater Management Systems provide guidelines for typical wastewater flow allowances under a range of circumstances.

The documents recommend a typical wastewater flow of 120 litres/person/day for households on tank water. As the shed is 1 bedroom, a population equivalent of 2 persons with a wastewater design flow rate of **240L/day** has been adopted.

7.1 Permeability of Soil and Soil Category

The permeability (K_{sat}) at the site was measured at 1.5m/day. For massive Category 1 soils the indicative permeability from AS/NZS 1547 Table 5.1 is >3.0m/day. As the sands at the site are medium dense and the measured permeability was lower than the indicative permeability, therefore a conservative value of 1.5m/day has been adopted.

- Adopted Permeability – 1.5m/day.

Based on the findings of the borehole investigation and the results of the permeability test, the soil has been classified as follows:

- Texture – Sand (Table E1 from AS1547-2012);
- Structure – Massive (Table E4 from AS/NZS1547-2012); and
- Category – 1 (Table E1 from AS/NZS1547:2012).

7.2 Disposal and Treatment Method

This site assessment indicates that the site is suitable for the disposal of domestic effluent by way of a septic tank, which is required to have a minimum capacity of **3,000L**, and absorption trenches.

The sand within the proposed effluent disposal area is assessed as having sufficient depth to provide an adequate attenuation period for the breakdown of pathogens within the treated effluent.

7.3 Design Loading Rate

The adopted design loading rate for the absorption trenches has been set at a conservative rate of 15mm/day as outlined in AS/NZS 1547:2012 Table L1.

7.4 Absorption Trench System

Guidelines for the design of the trench systems are outlined in AS/NZS 1547:2012 Appendix L. The method of determining the dimensions for the trenches is outlined in AS/NZS 1547:2012 Section L4 and is as follows:

$$L = \frac{Q}{\text{DLR} \times W}$$

Where L = Length in metres

Q = Design daily flow rate in L/day

DLR = Design Loading Rate in mm/day

W = Trench width in metres (set at 1.0m)

As the DLR value has been set at 15mm/day and the design daily flow rate (Q) has been set at 240L/day, when the parameters are inserted in the above equation the trench dimensions required are as follows:

- Trench length = 16m (**1 x 16m trench**)
- Trench width = 1.0m
- Trench depth = 0.45m

The trench is to be installed along the contours.

This would give a disposal area of approximately 16m². These dimensions may be modified to suit the client's needs provided that the total length remains and the spacing between and around the trenches is adhered to.

There is adequate secondary (back-up) area of 16m² if required.

The trench is to be located in the area shown on the site plan.

The trench is to be constructed as per the cross sections located on Drawing WW-13, attached. The arch trench is the preferred trench type.

7.5 Setbacks

The minimum separation distance between the disposal area and horizontal and vertical features is based on Appendix R from AS/NZS 1547:2012 "Recommended Setback Distances for Land Application Systems" and Section 3.1 from the *Building Act 2016: Director's Guidelines for On-site Wastewater Management Systems*. The following minimum setbacks are required:

- 50.0m from downslope watercourses and sensitive features;
- 10.0m from downslope property boundaries;
- 1.5m from cross-slope or up-slope property boundaries;
- 6.0m from downslope buildings;
- 3.0m from cross-slope or up-slope buildings;
- 3.0m from downslope cut batters; and
- 50.0m from groundwater bores.

The closest groundwater bore mapped on the LIST is 600m from the wastewater disposal area.

7.6 Wastewater Recommendations

It is recommended that the following actions are undertaken in looking after your system:

- Septic tanks **must be** pumped out at least every 3 to 5 years or more frequently depending on usage;
- Minimise domestic water use;

Site Classification & On-site Wastewater Disposal Assessment and Design

- Minimise the use of non-biodegradable detergents;
- Minimise the use of detergents containing phosphorous (eg calgon and similar);
- Avoid discharging polluting chemicals into wastewater systems; and
- Monitor quality of groundwater.

8 REFERENCES

Department of Justice. (2017). *Building Act 2016 Director's Guidelines for On-site Wastewater Management Systems v2.0*. Consumer, Building and Occupational Services.

Standards Australia Limited. (2011). *AS 2870: Residential Slabs and Footings Construction*. Sydney: SAI Global Limited.

Standards Australia Limited. (2012). *AS/NZS 1547 On-site Domestic Wastewater Management*. Sydney: SAI Global Limited.

Standards Australia Limited. (2017). *AS 1726: Geotechnical Site Investigation*. Sydney: SAI Global Limited.

Standards Australia Limited. (2021). *AS 4055: Wind Loads for Housing*. Sydney: SAI Global Limited.

Attachments:

Limitations of report

Drawing 1 – Locality Plan

Drawing 2 – Site Plan

Drawing WW-01 Typical Cut-off Drain Section

Drawing WW-13 – Typical Trench Sections

Appendix A – Borehole Logs & Explanation Sheets

Appendix B – Certificate Forms

Geotechnical Consultants - Limitations of report

These notes have been prepared to assist in the interpretation and understanding of the limitations of this report.

Project specific criteria

The report has been developed on the basis of unique project specific requirements as understood by Geoton and applies only to the site investigated. Project criteria are typically identified in the Client brief and the associated proposal prepared by Geoton and may include risk factors arising from limitations on scope imposed by the Client. The report should not be used without further consultation if significant changes to the project occur. No responsibility for problems that might occur due to changed factors will be accepted without consultation.

Subsurface variations with time

Because a report is based on conditions which existed at the time of subsurface exploration, decisions should not be based on a report whose adequacy may have been affected by time. For example, water levels can vary with time, fill may be placed on a site and pollutants may migrate with time. In the event of significant delays in the commencement of a project, further advice should be sought.

Interpretation of factual data

Site assessment identifies actual subsurface conditions only at those points where samples are taken and at the time they are taken. All available data is interpreted by professionals to provide an opinion about overall site conditions, their likely impact on the proposed development and recommended actions. Actual conditions may differ from those inferred to exist, as it is virtually impossible to provide a definitive subsurface profile which includes all the possible variabilities inherent in soil and rock masses.

Report Recommendations

The report is based on the assumption that the site conditions as revealed through selective point sampling are indicative of actual conditions throughout an area. This assumption cannot be substantiated until earthworks and/or foundation construction is almost complete and therefore the report recommendations can only be regarded as preliminary. Where variations in conditions are encountered, further advice should be sought.

Specific purposes

This report should not be applied to any project other than that originally specified at the time the report was issued.

Interpretation by others

Geoton will not be responsible for interpretations of site data or the report findings by others involved in the design and construction process. Where any confusion exists, clarification should be sought from Geoton.

Report integrity

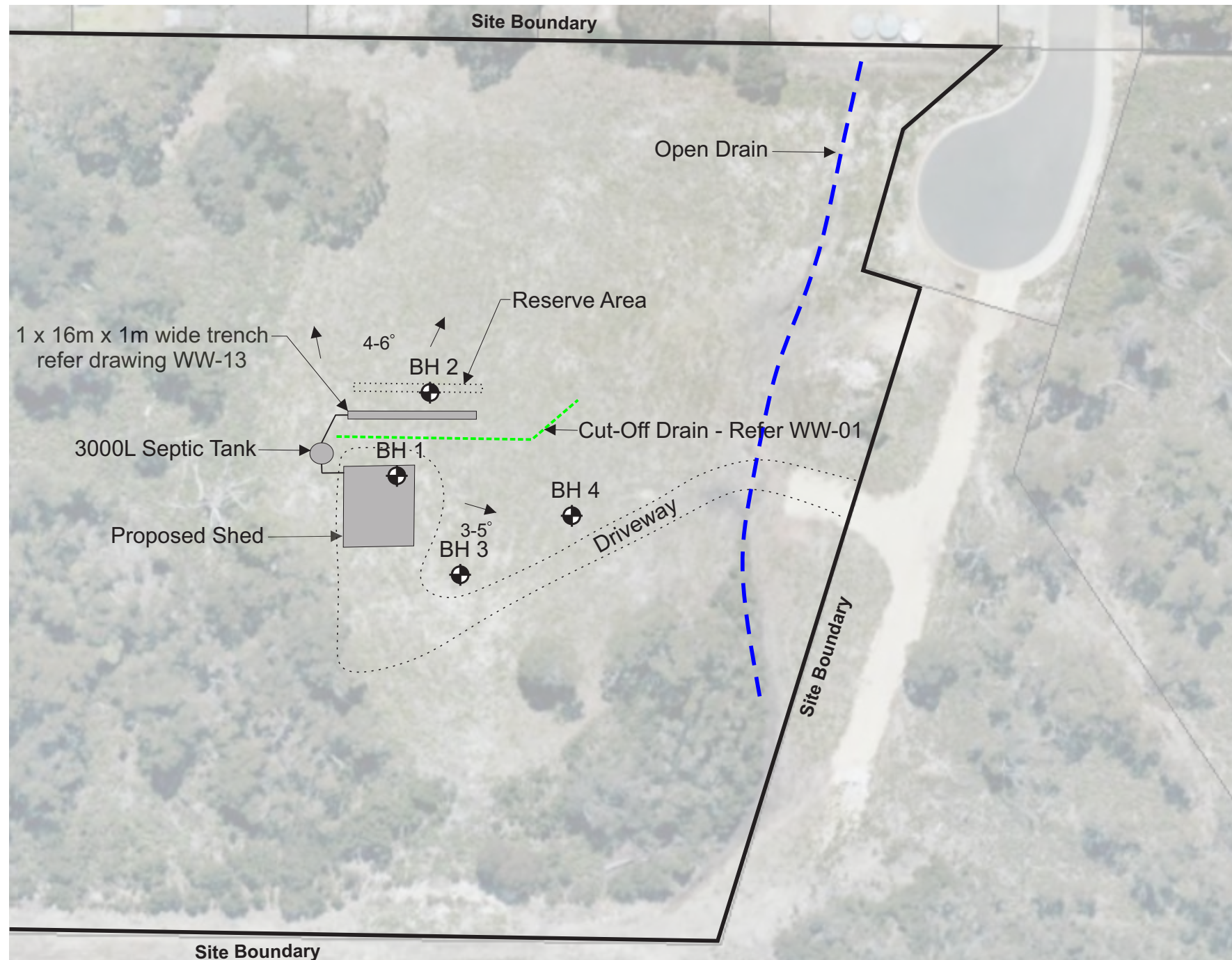
The report as a whole presents the findings of the site assessment and the report should not be copied in part or altered in any way.

Geoenvironmental issues

This report does not cover issues of site contamination unless specifically required to do so by the client. In the absence of such a request, Geoton take no responsibility for such issues.



				Client: GREG & ANN LANE			
				Project: 2 FERNLACK ROAD GREENS BEACH			
Date	16/07/2026	Drawn	BS	Title: LOCALITY PLAN			
Scale	As Shown	Approved	-				
Original size	A3	Rev		Project no: GL26347A		Drawing no. 1	



NOTES

PLUMBING CONNECTIONS TO BE CARRIED OUT IN ACCORDANCE WITH PLUMBING CODES AND REGULATIONS

VENTS, OVERFLOW RELIEF GULLY AND INSPECTION OPENINGS TO BE PROVIDED AS PER THE PLUMBING CODES AND REGULATIONS

TRENCHES ARE TO BE SET BACK:

- 50.0m from downslope watercourses and sensitive features;
- 10.0m from downslope property boundaries;
- 1.5m from cross-slope or up-slope property boundaries;
- 6.0m from downslope buildings;
- 3.0m from cross-slope or up-slope buildings;
- 3.0m from downslope cut batters; and
- 1.5m vertically from a limiting layer (bedrock).

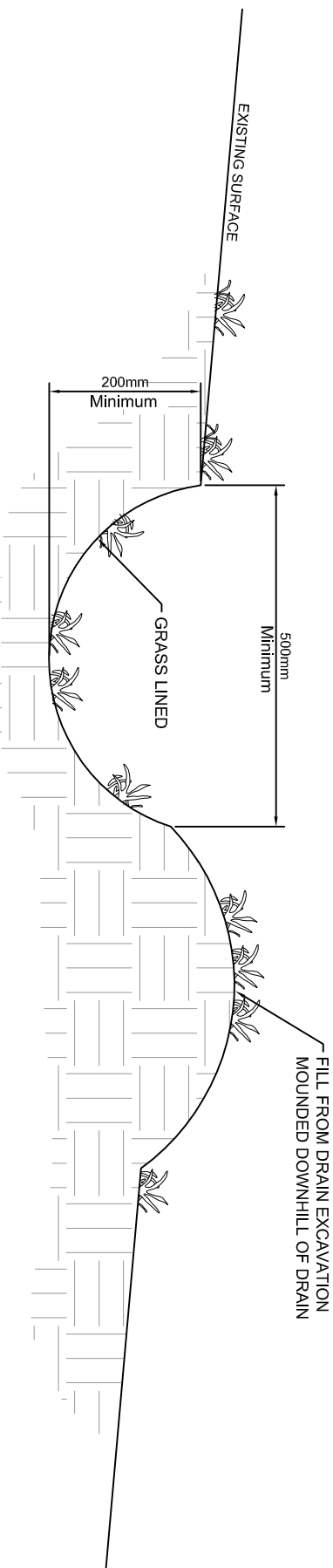
Approximate Scale (m)



Legend

- BH 1
⊕ Approximate Borehole Location
- 5° Approximate Slope angle in Degrees
- Contour in Metres

GEOTON Pty Ltd				Client: GREG & ANN LANE	
				Project: 2 FERNLACK ROAD GREENS BEACH	
Date	16/07/2026	Drawn	BS	Title: SITE PLAN	
Scale	As Shown	Approved	-	Project no: GL26347A	
Original size	A3	Rev		Drawing no.	2



TYPICAL CUT-OFF DRAIN SECTION

SCALE 1:10

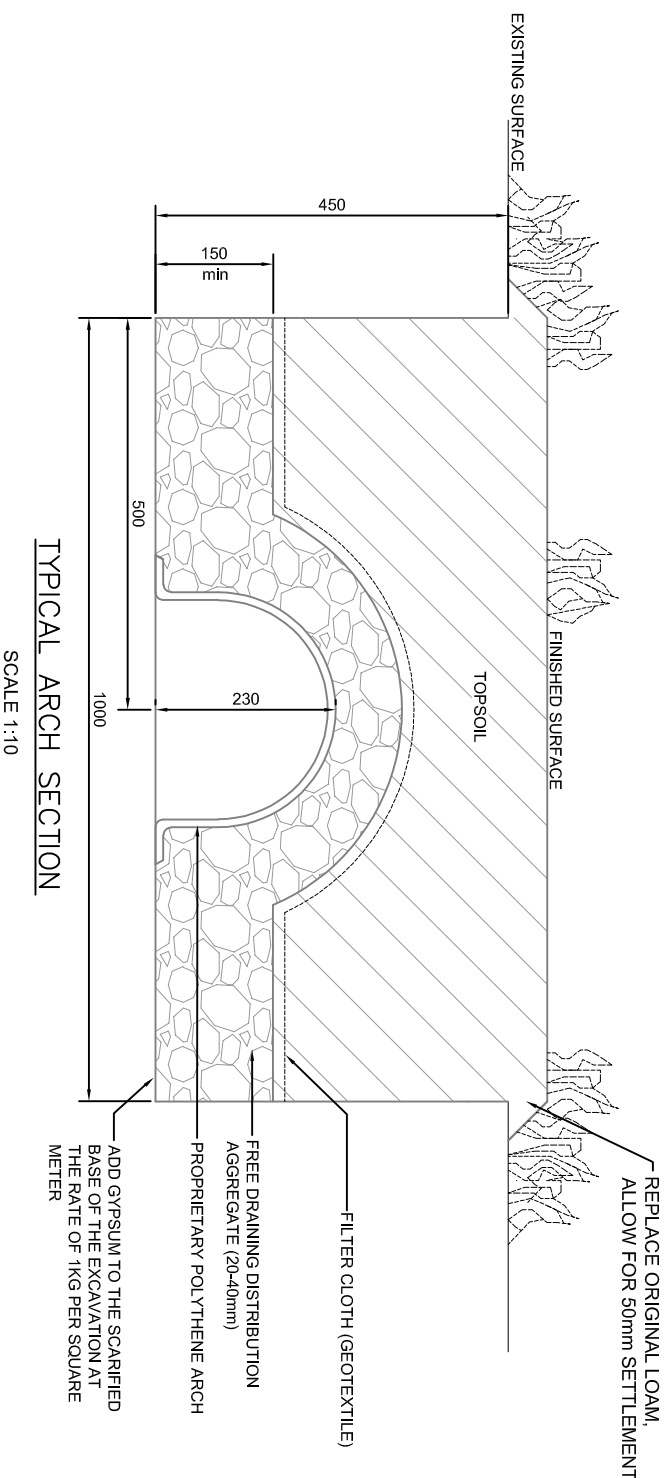
SCALE



DRAWING:	WW-01
DATE:	06/01/25
REVISION:	A
SCALE:	@ A4
DRAWN:	B.STREET
DESIGNED:	T.BARRIERA
APPROVED:	T.BARRIERA

NOTES:

- (A) Pipe and fittings complying with AS 2439.2, AS 2696.2, AS/NZS 4129, AS/NZS 4130, or AS/NZS 1477 are suitable materials.
- (B) The distribution aggregate shall be carefully placed into the trench, so as to avoid damage to both the trench base and sidewalls and the pipework. Care shall also be taken when placing backfill over in situ distribution aggregate during or after heavy rainfall.
- (C) Do not compact the trench or expose to traffic. The trench floor should be level, evenly raked and have no low spots



SCALE



DRAWING:	WM-13
DATE:	06/01/2025
REVISION:	A
SCALE:	@ A4
DRAWN:	B.STREET
DESIGNED:	T.BARRIERA
APPROVED:	T.BARRIERA

Appendix B

Borehole Logs

ENGINEERING BOREHOLE LOG: BH1

Client : Greg and Ann Lane

Project : Site Classification and On-Site Wastewater Assessment & Design

Location : 2 Fernlack Rd, Greens Beach TAS 7270, Australia

Easting : 477796.39

Northing : 5452365.87

Location : N/A

Azimuth :

Sheet : 1 OF 1

Job No : GL26347A

Logged : Brett Street

Logged Date : 03/07/2026

Drill Rig : Honey Badger - 95mm

Method	Penetration	Water	Samples	Testing	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture condition	Consistency density, index	Structure, Additional Observations
				DCP							
ADV				0			.	FILL - GRAVEL - fine to medium, grey,	D	MD	
				3			SW	SAND - fine to medium grained, light orange,	M	L	
				4	0.25		SP	SAND - fine grained, orange,	M	MD	
				4							
				4							
				4	0.50						
				5							
				4							
				4	0.75						
				5							
				7	1.00						
					1.25						
					1.50						
					1.75						
								BH1 Terminated at 2 m			

ENGINEERING BOREHOLE LOG: BH2

Drill Rig : Honey Badger - 95mm

Method	Penetration	Water	Samples	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture condition	Consistency density, index	Structure, Additional Observations
ADV						SM	TOPSOIL - Silty SAND - medium grained, black,	M	L	
				0.25		SW	SAND - fine to medium grained, grey,	M	MD	
				0.50						
				0.75		SP	SAND - fine grained, white,	M	MD	
				1.00						
				1.25						
				1.50						
				1.75						
							BH2 Terminate at 2 m			

ENGINEERING BOREHOLE LOG: BH3

Client : Greg and Ann Lane
Project : Site Classification and On-Site Wastewater Assessment & Design
Location : 2 Fernlack Rd, Greens Beach TAS 7270, Australia

Easting : 477796.39
Northing : 5452365.87
Elevation : N/A
Azimuth :

Sheet : 1 OF 1
Job No : GL26347A
Logged : Brett Street
Logged Date : 03/07/2026
Drill Rig : Honey Badger - 95mm

Method	Penetration	Water	Samples	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture condition	Consistency density, index	Structure, Additional Observations
ADV						SM	TOPSOIL - Silty SAND - fine to medium grained, black,	M	L	
				0.25		SW	SAND - fine to medium grained, grey,	M	MD	
				0.50						
				0.75						
				1.00						
				1.25						
				1.50						
				1.75						
						CI	Sandy CLAY - medium plasticity to high plasticity, grey,	M	St	
							BH3 Terminate at 2 m			

ENGINEERING BOREHOLE LOG: BH4

Drill Rig : Honey Badger - 95mm

Method	Penetration	Water	Samples	Depth (m)	Graphic Log	Classification Code	Material Description	Moisture condition	Consistency density, index	Structure, Additional Observations
ADV						SM	TOPSOIL - Silty SAND - medium grained, black,	M	L	
				0.25		SW	SAND - fine to medium grained, grey,	M	MD	
				0.50						
				0.75						
				1.00		SC	Clayey SAND - medium grained, orange,	M	MD	
				1.25						
				1.50						
				1.75						
							BH4 Terminate at 2 m			

Investigation Log Explanation Sheet

METHOD – BOREHOLE

TERM	Description
AS	Auger Screwing*
AD	Auger Drilling*
RR	Roller / Tricone
W	Washbore
CT	Cable Tool
HA	Hand Auger
DT	Diatube
B	Blank Bit
V	V Bit
T	Tungsten Carbide Bit

* Bit shown by suffix e.g. ADT

METHOD – EXCAVATION

TERM	Description
N	Natural exposure
X	Existing excavation
H	Backhoe bucket
B	Bulldozer blade
R	Ripper
E	Excavator
ME	Manual Excavation
NDD	Non Destructive Digging

SUPPORT

TERM	Description
M	Mud
N	Nil
C	Casing
S	Shoring

PENETRATION

1	2	3	4	
				No resistance ranging to Refusal

WATER

Symbol	Description
	Water inflow
	Water outflow
	17/3/08 water on date shown

NOTES, SAMPLES, TESTS

TERM	Description
U ₅₀	Undisturbed sample 50 mm diameter
U ₆₃	Undisturbed sample 63 mm diameter
U ₈₁	Undisturbed sample 81 mm diameter
D	Disturbed sample
N	Standard Penetration Test (SPT)
N*	SPT – sample recovered
N _c	SPT with solid cone
V	Vane Shear
PP	Pocket Penetrometer
P	Pressuremeter
B _s	Bulk sample
E	Environmental Sample
R	Refusal – Material cannot be penetrated
DCP	Dynamic Cone Penetrometer (blows/100mm)
PL	Plastic Limit
PI	Plasticity Index
LL	Liquid Limit
LS	Linear Shrinkage
I _{ss}	Shrink Swell Index

CLASSIFICATION SYMBOLS AND SOIL DESCRIPTION

Based on AS 1726:2017

MOISTURE

TERM	Description
D	Dry
M	Moist
W	Wet

CONSISTENCY/DENSITY INDEX

TERM	Description
VS	Very Soft
S	Soft
F	Firm
St	Stiff
VSt	Very Stiff
H	Hard
Fr	Friable
VL	Very Loose
L	Loose
MD	Medium Dense
D	Dense
VD	Very Dense

Soil Description Explanation Sheet (1of 2)

DEFINITION

In engineering terms, soil includes every type of uncemented or partially cemented inorganic or organic material found in the ground. In practice, if the material can be remoulded or disintegrated by hand in its field condition or in water it is described as a soil. Other materials are described using rock description terms.

CLASSIFICATION SYMBOL AND SOIL NAME

Soils are described in accordance with the AS 1726: 2017 as shown in the table on Sheet 2.

PARTICLE SIZE DEFINITIONS

NAME	SUBDIVISION	SIZE (mm)
BOULDERS		>200
COBBLES		63 to 200
GRAVEL	Coarse	19 to 63
	Medium	6.7 to 19
	Fine	2.36 to 6.7
SAND	Coarse	0.6 to 2.36
	Medium	0.21 to 0.6
	Fine	0.075 to 0.21
SILT		0.002 to 0.075
CLAY		<0.002

MOISTURE CONDITION

Coarse Grained Soils

Dry Non-cohesive and free running.

Moist Soil feels cool, darkened in colour.
Soil tends to stick together.

Wet As for moist but with free water forming when handling.

Fine Grained Soils

Moist, dry of Plastic Limited – $w < PL$

Hard and friable or powdery.

Moist, near Plastic Limit – $w \approx PL$

Soils can be moulded at a moisture content approximately equal to the plastic limit.

Moist, wet of Plastic Limit – $w > PL$

Soils usually weakened and free water forms on hands when handling.

Wet, near Liquid Limit - $w \approx LL$

Wet, wet of Liquid Limit - $w > LL$

CONSISTENCY TERMS FOR COHESIVE SOILS

TERM	UNDRAINED STRENGTH s_u (kPa)	FIELD GUIDE
Very Soft	≤ 12	Exudes between the fingers when squeezed in hand
Soft	12 to 25	Can be moulded by light finger pressure
Firm	25 to 50	Can be moulded by strong finger pressure
Stiff	50 to 100	Cannot be moulded by fingers
Very Stiff	100 to 200	Can be indented by thumb nail
Hard	>200	Can be indented with difficulty by thumb nail
Friable	–	Can be easily crumbled or broken into small pieces by hand

RELATIVE DENSITY OF NON-COHESIVE SOILS

TERM	DENSITY INDEX (%)
Very Loose	≤ 15
Loose	15 to 35
Medium Dense	35 to 65
Dense	65 to 85
Very Dense	> 85

DESCRIPTIVE TERMS FOR ACCESSORY SOIL COMPONENTS

DESIGNATION OF COMPONENT	IN COARSE GRAINED SOILS		IN FINE GRAINED SOILS	TERM
	% Fines	% Accessory coarse fraction	% Sand/ gravel	
Minor	≤ 5	≤ 15	≤ 15	Trace
	>5, ≤ 12	>15, ≤ 30	>15, ≤ 30	With
Secondary	>12	>30	>30	Prefix

SOIL STRUCTURE

ZONING		CEMENTING	
Layer	Continuous across the exposure or sample.	Weakly cemented	Easily disaggregated by hand in air or water.
Lens	Discontinuous layer of different material, with lenticular shape.		
Pocket	An irregular inclusion of different material.	Moderately cemented	Effort is required to disaggregate the soil by hand in air or water.

GEOLOGICAL ORIGIN

WEATHERED IN PLACE SOILS

Extremely Weathered material	Material is weathered to such an extent that it has soil properties. Structure and/or fabric of parent rock material retained and visible.
Residual soil	Structure and/or fabric of parent rock material not retained and visible.

TRANSPORTED SOILS

Aeolian soil	Carried and deposited by wind.
Alluvial soil	Deposited by streams and rivers.
Colluvial soil	Soil and rock debris transported downslope by gravity.
Estuarine soil	Deposited in coastal estuaries, and including sediments carried by inflowing rivers and streams, and tidal currents.
Fill	Man-made deposit. Fill may be significantly more variable between tested locations than naturally occurring soils.
Lacustrine soil	Deposited in freshwater lakes.
Marine soil	Deposited in a marine environment.

Soil Description Explanation Sheet (2 of 2)

SOIL CLASSIFICATION INCLUDING IDENTIFICATION AND DESCRIPTION

FIELD IDENTIFICATION PROCEDURES (Excluding particles larger than 63 mm and basing fractions on estimated mass)					GROUP SYMBOL	PRIMARY NAME	
COARSE GRAINED SOIL More than 65% of soil excluding oversize fraction is larger than 0.075 mm	(A 0.075 mm particle is about the smallest particle visible to naked eyes)	GRAVEL More than half of coarse fraction is larger than 2.36 mm	CLEAN GRAVEL (Little or no fines)	Wide range in grain size and substantial amounts of all intermediate particle sizes	GW	GRAVEL	
				Predominantly one size or a range of sizes with some intermediate sizes missing	GP	GRAVEL	
			GRAVEL WITH FINES (Appreciable amount of fines)	Non-plastic fines (for identification procedures see ML and MH below)	GM	Silty GRAVEL	
				Plastic fines (for identification procedures see CL, CI and CH below)	GC	Clayey GRAVEL	
		SAND More than half of coarse fraction is smaller than 2.36 mm	CLEAN SAND (Little or no fines)	Wide range in grain size and substantial amounts of all intermediate sizes	SW	SAND	
				Predominantly one size or a range of sizes with some intermediate sizes missing	SP	SAND	
			SAND WITH FINES (Appreciable amount of fines)	Non-plastic fines (for identification procedures see ML and MH below)	SM	Silty SAND	
				Plastic fines (for identification procedures see CL, CI and CH below)	SC	Clayey SAND	
FINE GRAINED SOIL More than 35% of soil excluding oversize fraction is smaller than 0.075 mm		IDENTIFICATION PROCEDURES ON FRACTIONS <0.075 mm					
			DRY STRENGTH	DILATANCY	TOUGHNESS		
		SILT & CLAY (low to medium plasticity, LL ≤ 50)	None to Low	Slow to Rapid	Low	ML	SILT
			Medium to High	None to Slow	Medium	CL, CI	CLAY
	Low to Medium		Slow	Low	OL	ORGANIC SILT	
	SILT & CLAY (high plasticity, LL > 50)	Low to Medium	None to Slow	Low to Medium	MH	SILT	
		High to Very High	None	High	CH	CLAY	
		Medium to High	None to Very Slow	Low to Medium	OH	ORGANIC CLAY	
	Highly Organic Soil	Readily identified by colour, odour, spongy feel and frequently by fibrous texture.			Pt	PEAT	
	• LL – Liquid Limit.						

• LL – Liquid Limit.

COMMON DEFECTS IN SOILS

TERM	DEFINITION	DIAGRAM	TERM	DEFINITION	DIAGRAM
PARTING	A surface or crack across which the soil has little or no tensile strength. Parallel or sub parallel to layering (e.g. bedding). May be open or closed.		SOFTENED ZONE	A zone in clayey soil, usually adjacent to a defect in which the soil has a higher moisture content than elsewhere.	
FISSURE	A surface or crack across which the soil has little or no tensile strength, but which is not parallel or sub parallel to layering. May be open or closed. May include desiccation cracks.		TUBE	Tubular cavity. May occur singly or as one of a large number of separate or inter-connected tubes. Walls often coated with clay or strengthened by denser packing of grains. May contain organic matter.	
SHEARED SEAM	Zone in clayey soil with roughly parallel near planar, curved or undulating boundaries containing closely spaced, smooth or slickensided, curved intersecting fissures which divide the mass into lenticular or wedge-shaped blocks.		TUBE CAST	An infilled tube. The infill may be uncemented or weakly cemented soil or have rock properties.	
SHEARED SURFACE	A near planar curved or undulating, smooth, polished or slickensided surface in clayey soil. The polished or slickensided surface indicates that movement (in many cases very little) has occurred along the defect.		INFILLED SEAM	Sheet or wall like body of soil substance or mass with roughly planar to irregular near parallel boundaries which cuts through a soil mass. Formed by infilling of open defects.	

Appendix B

Certificate Forms

CERTIFICATE OF QUALIFIED PERSON – ASSESSABLE ITEM

Section 321

Form **55**

To: Owner /Agent
 Address
 Suburb/postcode

Qualified person details:

Qualified person:
Address: Phone No:
 Fax No:
Licence No: Email address:

Qualifications and Insurance details: (description from Column 3 of the Director's Determination - Certificates by Qualified Persons for Assessable Items)

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

Details of work:

Address: Lot No:
 Certificate of title No:
The assessable item related to this certificate: (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: (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:	Geoton Pty Ltd, Report Reference No. GL26347Ab, dated 17/07/2026
Relevant calculations:	Refer to report
References:	AS 2870 – 2011 Residential Slabs and Footings Construction AS 4055 – 2021 Wind Loads for Housing CSIRO Building Technical File 18

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

Site Classification in accordance with AS2870 - 2011
Wind Loading in accordance with AS 4055 - 2021
Findings and recommendations of report

Scope and/or Limitations

The classification applies to the site as investigated at the time and does not account for any future alteration to foundation conditions resulting from earthworks, drainage condition changes or site maintenance variations.

I certify the matters described in this certificate.

	<i>Signed:</i>	<i>Certificate No:</i>	<i>Date:</i>
Qualified person:		GL26347Ab	17/07/2026

CERTIFICATE OF THE RESPONSIBLE DESIGNER

Section 94
Section 106
Section 129
Section 155

To: Owner name
 Address
 Suburb/postcode

Form **35**

Designer details:

Name: Category:

Business name: Phone No:
Business address:
 Fax No:
Licence No: Email address:

Details of the proposed work:

Owner/Applicant Designer's project reference No.
Address: Lot No:

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

Description of work:

New building
on-site wastewater management system

(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:

All design documents provided in Report GL26347Ab, dated 17/07/2026

Design documents provided:

The following documents are provided with this Certificate –

Document description:

Drawing numbers:	Prepared by:	Date:
Schedules:	Prepared by:	Date:
Specifications:	Prepared by:	Date:
Computations:	Prepared by:	Date:
Performance solution proposals:	Prepared by:	Date:
Test reports:	Prepared by:	Date:

Standards, codes or guidelines relied on in design process:

All design documents are contained within report
AS/NZS1547:2012 On-site domestic-wastewater management

Any other relevant documentation:**Attribution as designer:**

I Tony Barriera of Geoton Pty Ltd 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:

Tony Barriera



17/07/2026

Licence No:

CC6220P

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:

- ☐ The works will not increase the demand for water supplied by TasWater
- ☐ 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
- ☐ The works will not require a new connection, or a modification to an existing connection, to be made to TasWater's infrastructure
- ☐ The works will not damage or interfere with TasWater's works
- ☐ The works will not adversely affect TasWater's operations
- ☐ The work are not within 2m of TasWater's infrastructure and are outside any TasWater easement
- ☐ I have checked the LISTMap to confirm the location of TasWater infrastructure
- ☐ 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 Tony Barriera of Geoton Pty Ltd 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

	<i>Name: (print)</i>	<i>Signed</i>	<i>Date</i>
Designer:	Tony Barriera		17/07/2026

LOADING CERTIFICATE

To: Greg and Ann Lane	Owner /Agent	Certificate Ref: AS/NZS 1547:2012 Section 7.4.2
63/11 Innovation Parkway	Address	
Birtinya QLD	Suburb/postcode	
4575		

Details of work:

Address:	2 Fernlack Road	Lot No:	1
	Greens Beach TAS	Certificate of title No:	188403/1
	7270		
The work related to this certificate:	On-site domestic-wastewater management	<i>(description of the work or part work being certified)</i>	

Certificate details:

In issuing this certificate the following matters are relevant –

Documents:	Report GL26347Ab dated 17/07/2026 Drawing 1 – Locality Plan Drawing 2 – Site Plan Drawing WW-01 – Typical Cut-off Drain Drawing WW-13 – Typical Trench Section
Relevant calculations:	Contained in the above
References:	AS/NZS1547:2012 On-site domestic-wastewater management

Substance of Certificate:

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

Wastewater Characteristics

Population equivalent used for this assessment = 2 (1 Bedroom)
Wastewater volume (L/day) used for this assessment = 240 (120 Litres per person)
Approximate blackwater volume (L/day) = 96
Approximate greywater volume (L/day) = 144

Soil Characteristics/Design Criteria

Texture (Table E1 from AS/NZS 1547) = Sand
Soil category (Table E1 from AS/NZS 1547) = 1
Soil structure (Table E4 from AS/NZS 1547) = Massive
Indicative permeability (Table 5.1 from AS/NZS 1547) = >3.0m/day
Adopted permeability = 1.5m/day
Adopted Design Loading Rate = 15mm/day
Soil thickness for disposal = >2.0m
Minimum depth (m) to water = >2.0m

Dimensions for On-Site Treatment System

Disposal and treatment methods = Septic tank and absorption trench

Site modification and specific design = N/A

Primary disposal area required = 16m²

Reserve disposal area required = 16m²

Location and use of Reserve area = Reserve area located to the north of the proposed dwelling, currently vacant

Is there sufficient area available on site for disposal (including reserve) = Yes

Notes

The purpose of the reserve area is to allow for future extension of the land application system to allow a factor of safety against unforeseen malfunction or failure, perhaps following increased household occupancy or inadvertent misuse of the system.

The land application area may be reduced to account for flow reductions by water-saving devices, provided the organic loading rate is not higher than it would have been without the flow reduction.

Allowable Variation from Design Flow

Based on a septic tank capacity of 3000L and wastewater design volume of 240L/day the allowable variation from design flow (peak loading events) would be an additional 760L/day (Total flow of 1000L/day as per table J1 of AS/NZS 1547:2012).

System Limitations

Consequences of overloading the system:

Overloading the system can result in failure of the septic tank and land application system. This is a serious health and environmental hazard and can lead to any one or more of the following:

- Spread of infectious disease;
- Breeding of mosquitoes and attraction of flies and rodents;
- Nuisance and unpleasantness;
- Pollution of waterways;
- Contamination of bores, wells and groundwater; and
- Alteration to local ecology.

Consequences of under loading the system:

Under loading the system may result in the bacteria to stop working and system failure.

Operation Requirements

Refer to Section T5.2.1 of AS/NZS 1547:2012 for additional requirements.

For on-site system to work well the following is required:

- Reduce sludge building up through scraping all dishes to remove fats/grease; don't use a food waste disposal unit; and don't put sanitary napkins into the system.
- To keep bacteria working in the septic tank use biodegradable soaps; use a low phosphorous detergent; don't use powerful bleaches and disinfectants; and don't put chemicals or paint down the drain.
- Conservation of water will reduce the volume of effluent requiring disposal to the land application area, make it last longer and improve its performance.

Maintenance Requirements

Refer to Section T5.2.2 of AS/NZS 1547:2012 for additional requirements.

Maintenance of the system should include the following:

- Septic tanks must be inspected at least annually and pumped out regularly once the scum and sludge occupy two thirds of the tank volume. Typically a septic

tank must be pumped out at least every 3 to 5 years or more frequently depending on usage.

- Grease traps must be inspected at least quarterly and cleaned out regularly.
- Deep rooting trees or shrubs should not be grown over absorption trenches or pipes.
- Surface water diversion drains should be maintained upslope of and around the land application area and kept clean to reduce seepage of rainwater into the trenches.
- Maintain disposal area by maintaining plants and mowing grass to ensure that plants/grasses take up nutrients with maximum efficiency.
- Check disposal area for blockages such as wet spots and uneven grass colour.

I certify the matters described in this certificate.

Certifier:

Signed:



Date:

17/07/2026

Certificate No.

GL26347Ab