



SORELL COUNCIL

NOTICE OF PROPOSED DEVELOPMENT

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

SITE: 8 Simmonds Lane, Primrose Sands

PROPOSED DEVELOPMENT:

SUBDIVISION - 1 LOT & BALANCE

The relevant plans and documents can be inspected at the Council Offices at 47 Cole Street, Sorell during normal office hours, or the plans may be viewed on Council's website www.sorell.tas.gov.au until **4:45pm on Tuesday 9th March 2021**. Any person may make representation in relation to the proposal/s by letter or electronic mail (sorell.council@sorell.tas.gov.au) addressed to the General Manager. Representations must be received no later than **4:45pm on Tuesday 9th March 2021**.

APPLICANT: Rogerson & Birch Surveyors

DATE: 18 February 2021

APPLICATION NO: SA 2020 / 11 - 1



8 Simmonds Lane, Primrose Sands - The relevant plans and documents can be inspected at the Council Offices at 47 Cole Street, Sorell during normal office hours, or the plans may be viewed on Council's website at www.sorell.tas.gov.au until 4:45pm Tuesday 9th March 2021

Disclaimer: This map is a representation of the information currently held by Sorell Council. While every effort has been made to ensure the accuracy of the product, Council accepts no responsibility for any errors or omissions. Any feedback on omissions or errors would be appreciated.

23-Feb-2021

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11/13/2017



PROPOSED SUBDIVISION 1-LOT & BALANCE
8 SIMMONDS LANE, PRIMROSE SANDS

COASTAL EROSION AND WATERWAYS
AND COASTAL PROTECTION REPORT



Cover

Oblique view north over part of Primrose Sands showing bitumened Carlton Bluff Road ending in Tern Circle (upper left), and gravelled Simmonds Lane (upper centre of image) leading seawards from it.

Source: Google Earth November 2017

Refer to this report as

Cromer, W. C. (2020). *Coastal Erosion and Waterway and Coastal Protection Report, proposed subdivision (1-Lot & Balance*. Unpublished report for P. and J. Simmonds by William C. Cromer Pty. Ltd., 20 September 2020.

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COASTAL EROSION AND WATERWAY PROTECTION REPORT

1. Background

P. and J. Simmonds propose a 1-Lot & Balance subdivision at 8 Simmonds Lane, Primrose Sands (Attachments 1 and 2).

In a letter to Rogerson & Birch Surveyors dated 2 September 2020, Sorell Council requested more information about the development, and among other things required demonstration that the proposal complied with:

- *E16 Coastal Erosion Hazard Code*, and specifically E16.8.1 P1 Building and Works, and
- *E11 Waterway and Coastal Protection Code* (E11.8.1.P1 Building and Works)

This report addresses both issues.

The scope of investigations included:

- a desk-top review of the on-site wastewater report for the property,
- a desk-top review of the topography, geology, and coastal erosion hazard and waterway coastal protection overlays, of the property and environs, and
- on-site inspection and photography of the coastline in March 2018 (for the purpose of coastal erosion and waterway protection investigations¹ for P. Simmonds for an adjoining property).

Documentation provided by Rogerson & Birch included:

- the Council letter of 2 September 2020, and
- a proposal plan for the subdivision

2. Results

2.1 Brief description of the property

The property covers about 6,800m², of irregular shape, facing and sloping towards the east, southeast and south behind coastal cliffs and rocky shorelines (Attachments 1 and 2). Relief is about 10m (10 – 20mASL)

The property is partly cleared and partly timbered with eucalypts.

2.2 Geology

Published geology

The published geology (Attachment 1) shows the bedrock of the area to be Jurassic-age dolerite, covered by aeolian (windblown) sand.

¹Cromer, W. C. (2018). Landslide Risk Management and Coastal Erosion Report, proposed 3-Lot Subdivision, 1 Tern Circle, Primrose Sands. Unpublished report for P. Simmonds by William C. Cromer Pty Ltd, 18 March 2018. 41 pages





Observed geology

Site observations support the published geology. Aeolian sands are up to 2-3m thick, and there are good exposures of dolerite in sea cliffs along the full length of shoreline south and east of the proposed subdivision. No soft coastline was observed.

2.3 Coastal erosion hazard bands

A small area (about 500m²) of the western part of the proposed subdivision is in the Low Coastal Erosion Hazard Band. An even smaller (about 50m²) portion is in the High Coastal Erosion Hazard Band.

2.4 Waterway and Coastal Protection Area

A north-south strip about 20m wide along the eastern property boundary is shown to be within the Waterway and Coastal Protection Guidance area. A smaller area (about 200m²) along the southwestern boundary is also within the same map

3. Discussion

With respect to the *Coastal Erosion Hazard Code*., the doleritic sea cliffs and rocky shorelines backed by dolerite bedrock around the proposed subdivision are regarded as a relatively “hard rock” material with limited vulnerability to coastal erosion. Moreover, the property is some 10 – 20mASLmASL (and at least 40m inland) and is not subject to wave activity, and proposed building areas, accesses and services are outside the coastal erosion hazard areas.

With respect to the *Waterway and Coastal Protection Code*., there is no waterway or any other drainage line on the property, proposed building areas, accesses and services are outside the coastal erosion hazard areas, and the subdivision is not within a Potable Water Supply Area.

The projected sea level rise of up to about 0.8m by 2100 will have no unacceptable waterway or coastal erosion issues for the proposed subdivision.

- Table 1 addresses Performance Criteria P1 in Clause E16.8.1 of the *Coastal Erosion Hazard Code* for the proposed development, and
- Table 2 addresses Performance Criteria P1 in Clause E11.8.1 of the *Waterway and Coastal Protection Code* for the proposed development.

The Management Plan for the proposed subdivision is to do nothing with respect to either Code, because the site and development complies with Performance Criteria P1 in E16.8.1 and E11.8.1.





W. C. Cromer
Principal

20 September 2020

This report is and must remain accompanied by the following Attachments

- Attachment 1. Location and satellite imagery, published geology, coastal erosion hazard bands and waterway and coastal protection guidance map (4 pages)
- Attachment 2. Proposed subdivision (1 page)





Table 1. Coastal Erosion Management Plan for the proposed subdivision

Address

8 Simmonds Lane, Primrose Sands

Coastal Erosion Hazard Code

Clause E16.8.1. Subdivision in Coastal Erosion Hazard Areas

OBJECTIVE: To ensure subdivision does not create opportunity for development that will be unnecessarily exposed to unacceptable risk from erosion, recession or wave run up. Section E16.8.1 P1 states that for subdivision in a Coastal Hazard Zone, there is No Acceptable Solution, and Performance Criteria P1 must satisfy all of the following:

	Subdivision of a lot, all or part of which is within a Coastal Erosion Hazard Area must be for the purpose of one or more of the following must satisfy all of the following Performance Criteria E16.8.1 P1	Comment	Is management required?	Management Plan
(a)	separation of existing dwellings	Not applicable	No	The Management Plan is to do nothing with respect to E16.8.1 P1
(b)	creation of a lot for the purposes of public open space, public reserve or utilities;	Not applicable		
(c)	creation of a lot in which the building area, access and services are outside the Coastal Erosion Hazard Area	Building areas, accesses and services are outside the Coastal Erosion Hazard Area. See Attachment 2.		





Table 2. Waterway and Coastal Protection Management Plan for the proposed subdivision

Address

8 Simmonds Lane, Primrose Sands

Waterway and Coastal Protection Code

Clause E11.8.1. Subdivision

Low and High

OBJECTIVE: To ensure that:

(a) works associated with subdivision in proximity to a waterway, the coast, identified climate change refugia and potable water supply areas will not have an unnecessary or unacceptable impact on natural values;

(b) future development likely to be facilitated by subdivision is unlikely to lead to an unnecessary or unacceptable impact on natural values.

	Subdivision of a lot, all or part of which is within a Waterway and Coastal Protection Area, Future Coastal Refugia Area or Potable Water Supply Area, must satisfy all of the following Performance Criteria E11.8.1 P1	Comment	Is management required?	Management Plan
(a)	minimise impact on natural values;	Complies. Building areas, accesses and services are outside the Waterway and Coastal Protection area. See Attachment 2.	No	The Management Plan is to do nothing with respect to E11.8.1 P1
(b)	provide for any building area and any associated bushfire hazard management area to be either: (i) outside the Waterway and Coastal Protection Area, Future Coastal Refugia Area or Potable Water Supply Area; or (ii) able to accommodate development capable of satisfying this code	Complies with (b)(i). Proposed subdivision is not within a Potable Water Supply Area, and building areas, accesses and services are outside the Waterway and Coastal Protection area. See Attachment 2.		
(c)	if within a Potable Water Supply Area, be in accordance with the requirements of the water and sewer authority.	Complies. Proposed subdivision is not within a Potable Water Supply Area.		



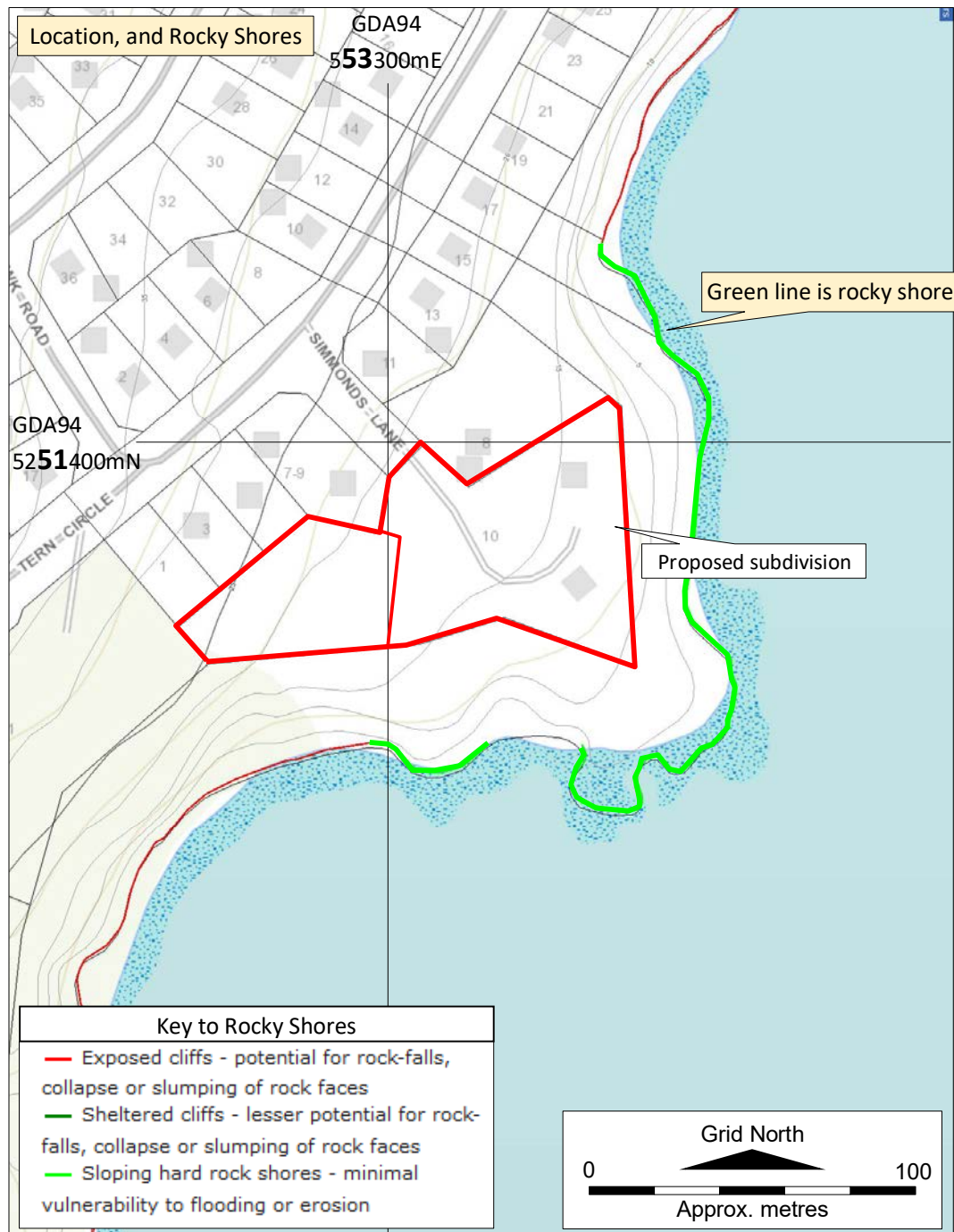


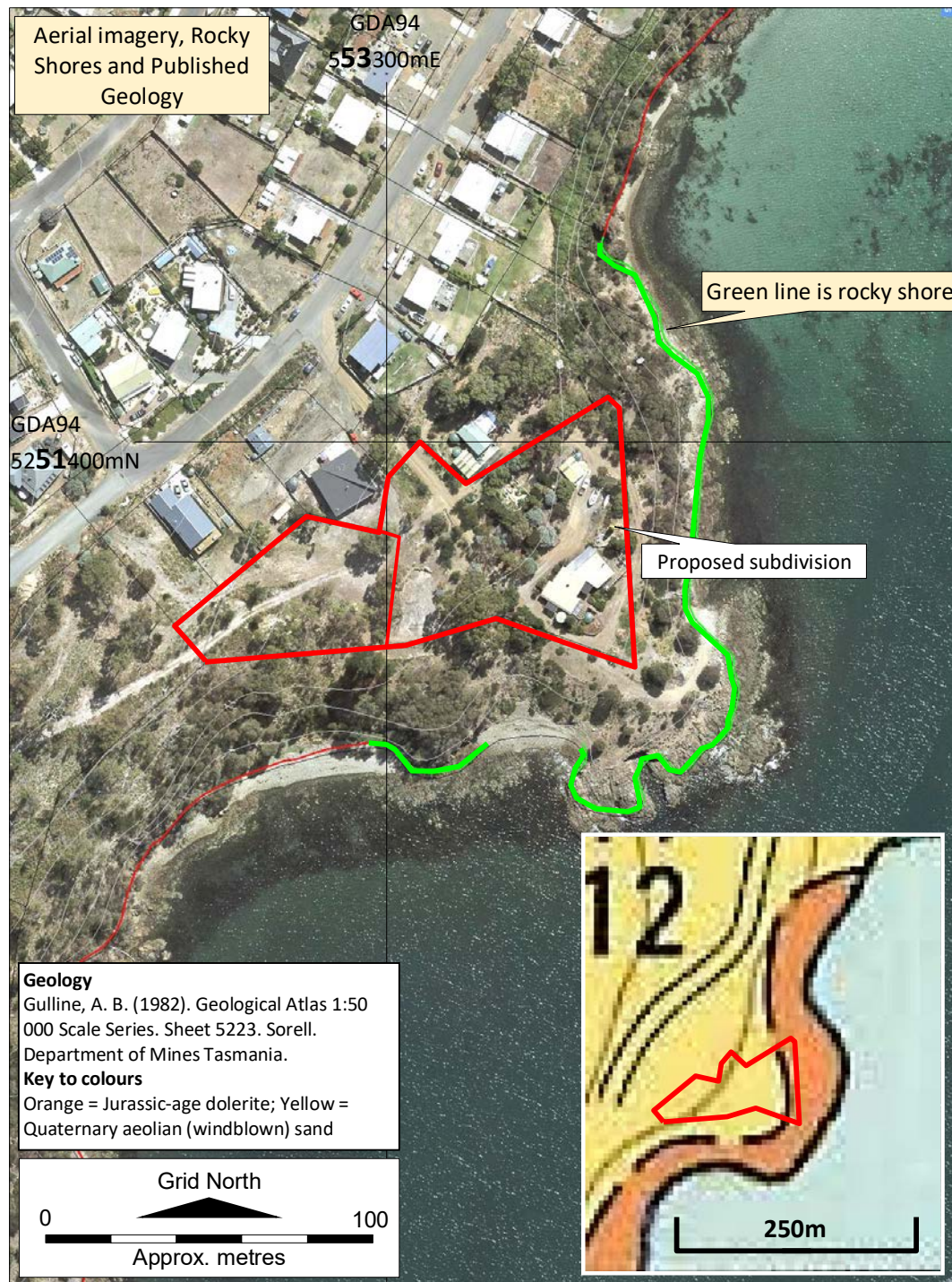
Attachment 1

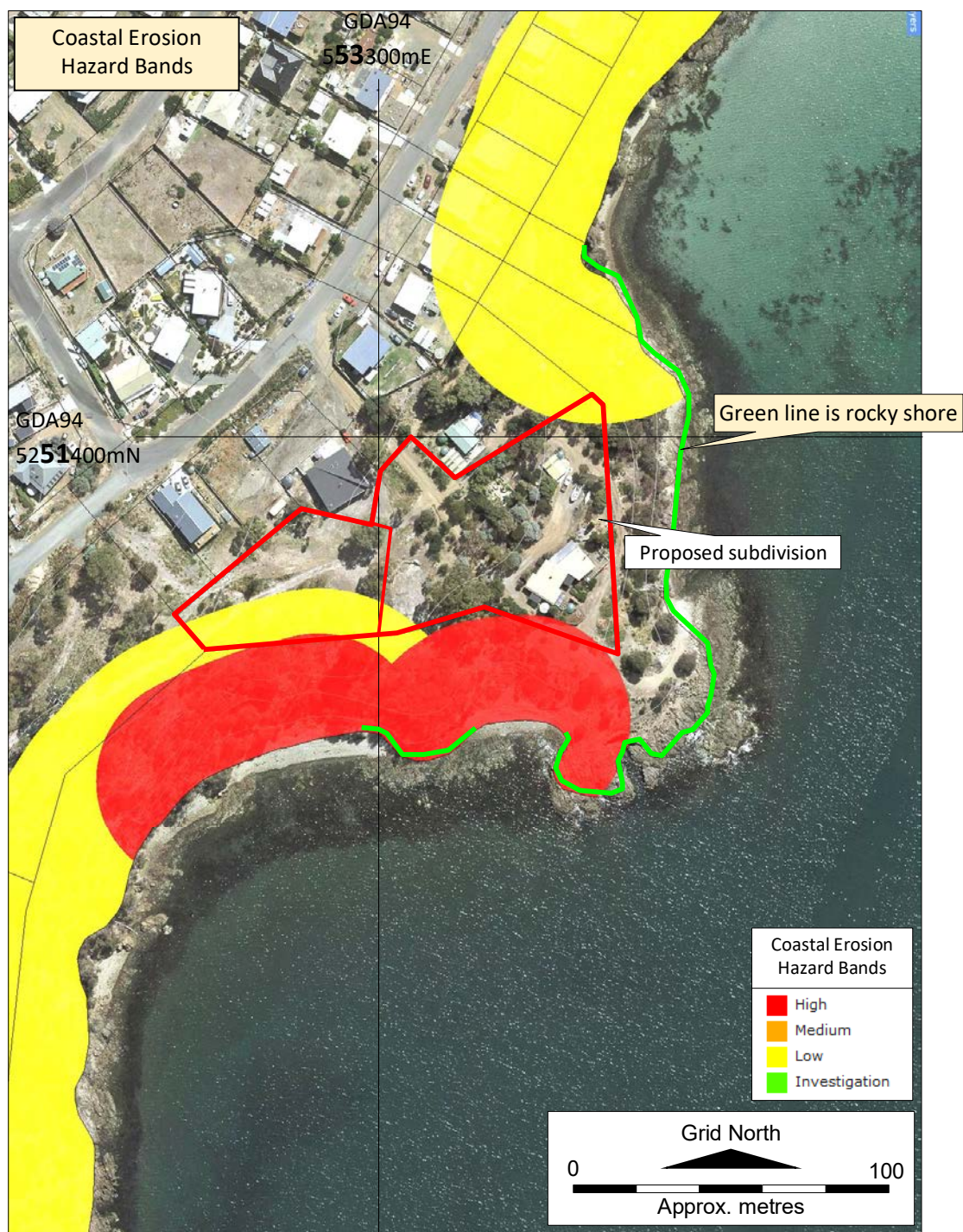
(4 pages)

Location and satellite imagery, published geology, coastal erosion hazard bands and waterway and coastal protection guidance map

Source: www.thelist.tas.gov.au and Mineral Resources Tasmania









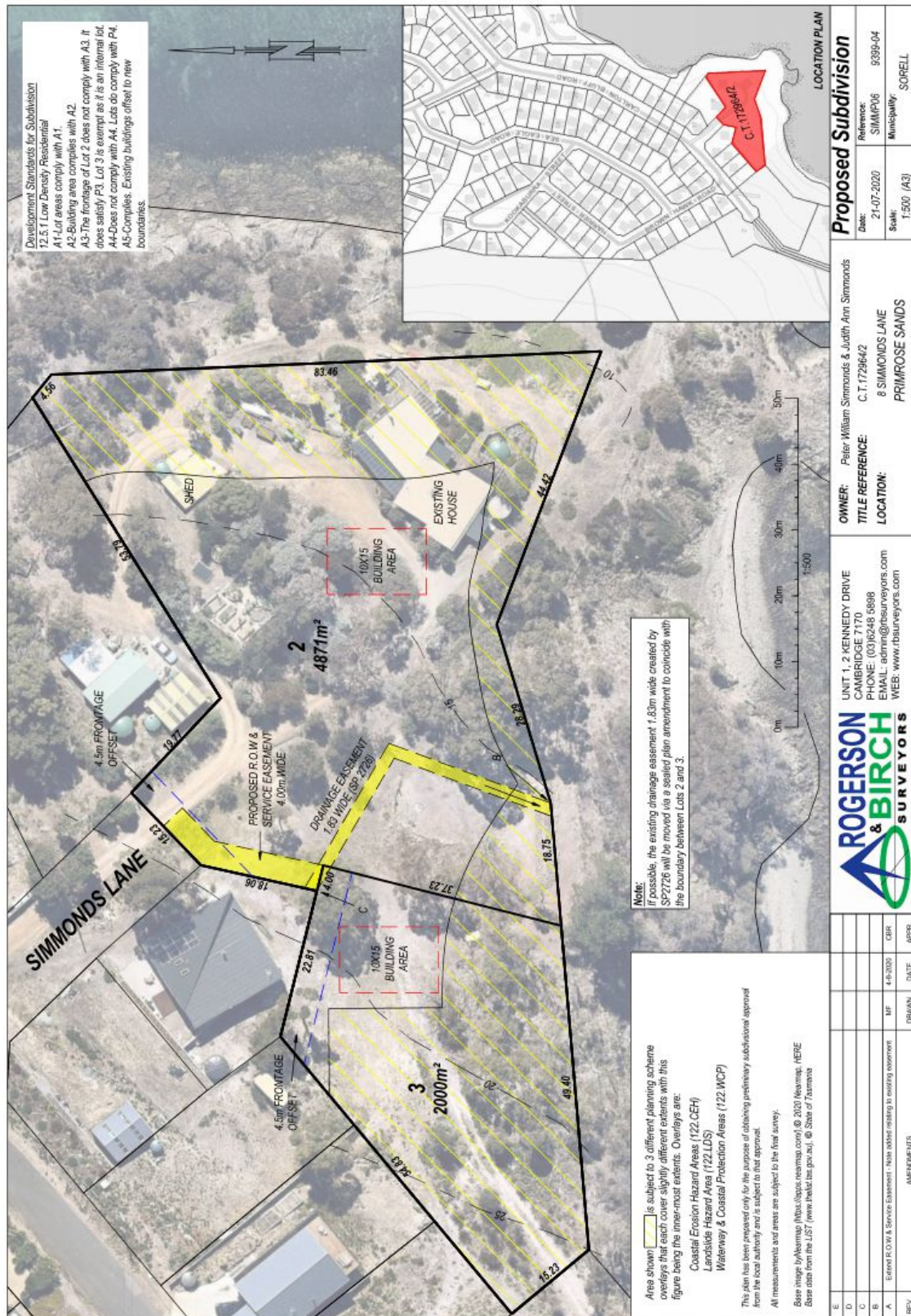


Attachment 2

(1 page)

Proposed subdivision

Source: Rogerson & Birch Surveyors 21 July 2020



BUSHFIRE HAZARD REPORT

Proposed 2 Lot Subdivision

Address: 8 Simmonds Lane, Primrose Sands TAS 7140

Title Reference: C.T.172964/2



Prepared by James Rogerson, Bushfire Hazard Practitioner
(BFP-161)
VERSION – 02
Date: 03/02/2021

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Disclaimer: The information contained within this report is based on the instructions of AS 3959-2018 the standard states that *“Although this Standard is designed to improve the performance of building when subjected to bushfire attach in a designated bushfire-prone area there can be no guarantee that a building will survive a bushfire event of every occasion. This is substantially due to the degree of vegetation management, the unpredictable nature and behaviour of fire and extreme weather conditions.”* (Standards Australia Limited, 2011)

2 INTRODUCTION

2.1 Background

This Bushfire Hazard Report and associated Bushfire Hazard Management Plan (BHMP) has been prepared by James Rogerson of Rogerson and Birch Surveyors on behalf of the proponent to form part of supporting documentation for the proposed two lot subdivision of 8 Simmonds Lane, Primrose Sands.

Under the Sorell Interim Planning Scheme 2015, E1.0 Bushfire-Prone Areas Code and Planning Directive 5.1 (PD5.1). It is a requirement that a subdivision application within a bushfire-prone area must accomplish a minimum Bushfire Attack Level (BAL) rating of BAL-19 for all future dwellings on newly formed allotments. This report also includes an associated BHMP which is also a requirement under PD5.1.

The proposed development is within a Bushfire-Prone Area overlay and there is bushfire-prone vegetation within the site & within 100m from the site. Therefore, this site is within a bushfire-prone area.

2.2 Scope

This Bushfire Report offers an investigation and assessment of the bushfire risk to establish the level of bushfire threat and vulnerability on the land for the purpose of subdivision. This report includes the following:

- A description of the land and adjacent land, and description of the use or development that may be at threat by a bushfire on the subject site;
- Calculates the level of a bushfire threat and offers opinions for bushfire mitigation measures that are consistent with AS3959-2018, the Guidelines for Development in Bushfire-Prone Areas (Tasmanian Fire Service or TFS) and Planning Directive 5.1.
- Subdivision Proposal Plan (Appendix B)
- Bushfire Hazard Management Plan (Appendix C)
- Planning Certificate (Appendix D)

2.3 Scope of BFP Accreditation

I, James Rogerson am an accredited Bushfire Practitioner (BFP-161) to assess bushfire hazard and endorse BHMP's under the the *Chief Officers Scheme for the Accreditation of Bushfire Hazard Practitioners*. I have successfully completed the *Planning for Bushfire Prone Areas Short Course* at University of Technology Sydney.

2.4 Limitations

The site assessment has been conducted and report written on the understanding that:

- The report only deals with the potential bushfire risk, all other statutory assessments are outside the scope of this report;
- The report only classifies the size, volume and status of the vegetation at the time the site assessment was conducted;
- Impacts on future development and vegetation growth have not been considered in this report. No action or reliance is to be placed on this report, other than which it was commissioned.

2.5 Proposal

The proposal is the subdivision of the current title C.T.172964 into 2 resultant titles.

Lot 1 – is vacant, with access via a ROW and proposed approximate area of 2000m².

Balance – contains a class 1a dwelling, a class 10a shed and gravel driveway with a proposed approximate area of 4871m².

3 PRE-FIELD ASSESSMENT

3.1 Site Details

Table 1

Owner Name(s)	P. W. Simmonds & J. A. Simmonds
Location	8 Simmonds Lane, Primrose Sands
Title Reference	C.T.172964/2
Property ID	2123098
Municipality	Sorell
Zoning	12.0 Low Density Residential
Planning Overlays	122.LDS Landslide Hazard Area, 122.FRE Bushfire Prone Areas, 122.CEH Coastal Erosion Hazard Areas, 122.WCP Waterway & Coastal Protection Areas.
Water Supply for Firefighting	The property is not serviced by reticulated water.
Public Access	Access to the property is off Simmonds Lane, via Carlton Bluff Road.
Fire History	No fire history shown on The LIST
Existing Development	Class 1a dwelling, class10a shed and gravel driveway.



Figure 1 Location of subject site. Source: The LIST, © State of Tasmania

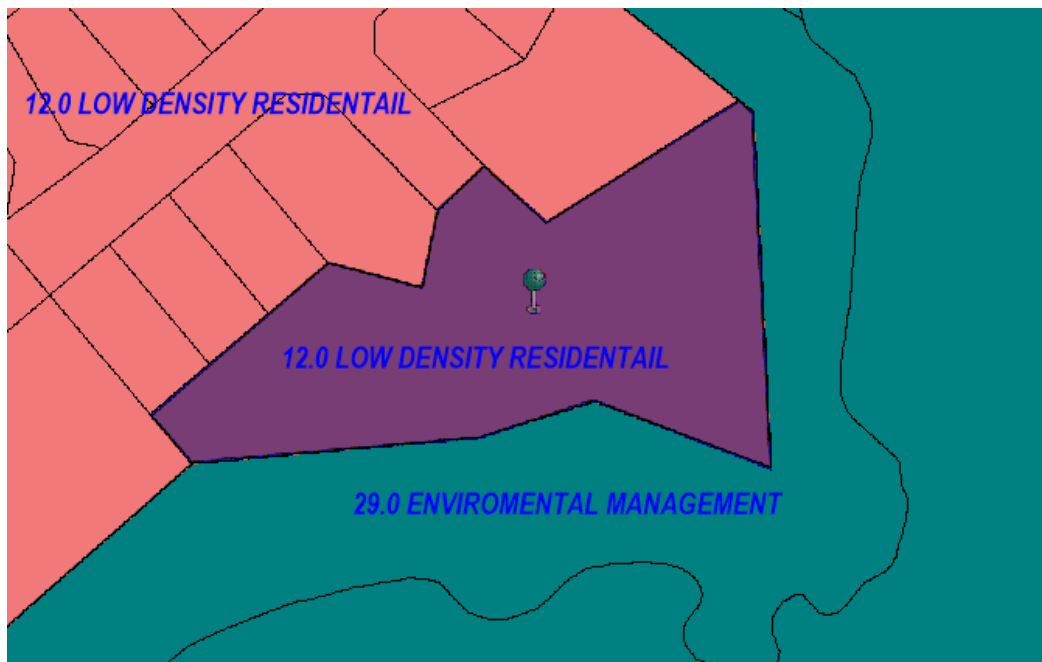


Figure 2 Planning Scheme Zoning of site and surrounding properties (subject site in blue) Source: The LIST, © State of Tasmania

3.2 TasVeg 4.0

There are two classified vegetation communities on the subject site, which are also the same communities on the surrounding land and parcels. Figure 3 below shows the classified vegetation from TASVEG4.0 (Source: The LIST).

Please note that TASVEG4.0 classification does not necessarily reflect ground conditions.

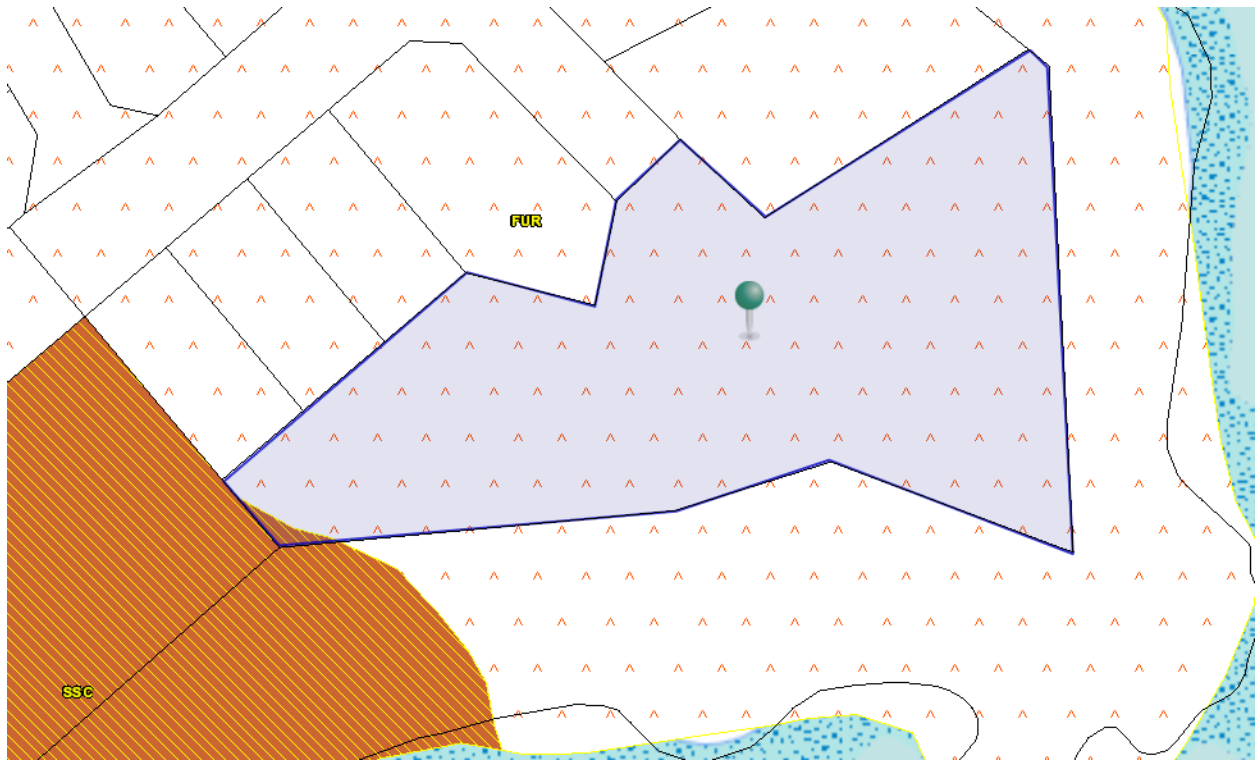


Figure 3 TASVEG4.0 communities on subject site and surrounding land. FUR – Urban Areas, SSC – Scrub, heathland and coastal complexes.

4 SITE ASSESSMENT

The site assessment was conducted by James Rogerson (BFP-161) on the 13th November 2020.

4.1 Bushfire Hazard Assessment

E1.3.1 Bushfire Prone Areas Code and Planning Directive 5.1 (PD5.1) defines Bushfire-prone areas as follows;

a) Land that is within the boundary of a bushfire-prone area shown on an overlay on a planning scheme map; or

b) 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 such map, land that is within 100m of an area of bushfire –prone vegetation equal or greater than 1ha.

The subject site is within a bushfire-prone areas overlay for the Sorell Interim Planning Scheme 2015 and the subject site is within 100m of an area of bushfire-prone vegetation equal or greater than 1ha. There is bushfire-prone vegetation inside the site also. Therefore, this proposed subdivision is within a bushfire-prone area as per the Sorell Interim Planning Scheme 2015.

For the purposes of the BAL Assessment, vegetation within 100m of the proposed subdivision site were assessed and classified in accordance with AS3959-2018 Simplified Procedure (Method 1) (relevant fire danger index: 50).

BUSHFIRE THREAT DIRECTION

The primary bushfire threat to the subdivision is from the unmanaged woodland within the subject site, in addition to the woodland in the council reserve strip east and south from the site.

Prevailing Winds: The prevailing winds for this site are primarily north westerly.

4.2 Vegetation and Effective Slope

Vegetation and relevant effective slopes within 100m of the proposed subdivision have been inspected and classified in accordance with AS 3959-2018. Effective Slope refers to the slope of the land underneath the classified bushfire-prone vegetation relative to the building site and not the slope between the vegetation and the building site. The effective slope affects a fires rate of spread and flame length and is an acute aspect of bushfire behaviour.

WITHIN THE SITE

The site at present contains an existing class 1a dwellings in addition to existing class10a shed and an all-weather gravel driveway. The gravel driveway commences at the end of Simmonds Lane and has two loops. First loop around the dwelling (which does encroach into the reserve, the second loop around the shed into and through the property to the north which has recently been subdivided off this title and is also owned by Peter Simmonds. The subject site is a large low density residential property currently at 6871m² in area. Across the parcel the land is sloping uphill in an east to east direction. Land directly surrounding the dwelling is well maintained and predominately used as private open space, as such the land is classified as LOW THREAT in accordance with Clause 2.2.3.2 (e) (f) of AS3959-2018. To the west of the shed within the balance is a small cultivated garden, however surrounding the garden are some heaths >2m high with a foliage cover of >30% and are therefore classed as GROUP D SCRUB per Table 2.3 of AS3959-2018. At the south of both proposed lots are trees <30m high, <30% foliage cover with a mainly grassy understory and are therefore classed as GROUP B WOODLAND per Table 2.3 of AS3959-2018. The remainder lot is grassed and therefore classed as GROUP G GRASSLAND per Table 2.3 of AS3959-2018.

NORTH OF THE SITE

To the north upslope of the proposed subdivision are developed lots, with the exception of 2 undeveloped lots which are adjacent to lot 1. These developed lots consist of class 1a dwellings, class 1a sheds, gravel or bitumen driveways and well maintained lawns and gardens and are classed as LOW THREAT per Clause 2.2.3.2 of AS3959-2018. The two vacant parcels being zoned low density residential cannot be classed as low threat per Bushfire Hazard Advisory Note 01 on the TFS website (BHAN-01) and is therefore classed as GROUP G GRASSLAND.

EAST OF THE SITE

East of the site downslope >20° is the council reserve, within this reserve the vegetation is sheoak forest, as this has a predominately clear understory it is therefore classed as GROUP B WOODLAND per Table 2.3 of AS3959-2018. Further east is the water areas of Frederick Henry Bay and Primrose Beach.

SOUTH OF THE SITE

South of the site downslope >5°-10° (balance) and >10°-15° (lot 1) is the same council reserve. In this portion of the reserve the trees are <30m high<30% foliage cover and with a mainly clear grassy understory and is therefore classed as GROUP B WOODLAND per Table 2.3 of AS3959-2018. This woodland is part of the woodland fuel mentioned above for within the site.

WEST OF THE SITE

West up the site upslope are vacant lots part of a recent subdivision. The vegetation on these lots are trees <30m high, >30% foliage cover with clear grassy understory and are therefore classed as GROUP B WOODLAND per Table 2.3 of AS3959-2018. As per above north of the site section, these parcels being low density residential cannot be classed as low threat per BHAN-01.

Figure 4 below (page 10) shows the relationship between the subject site and the surrounding vegetation.

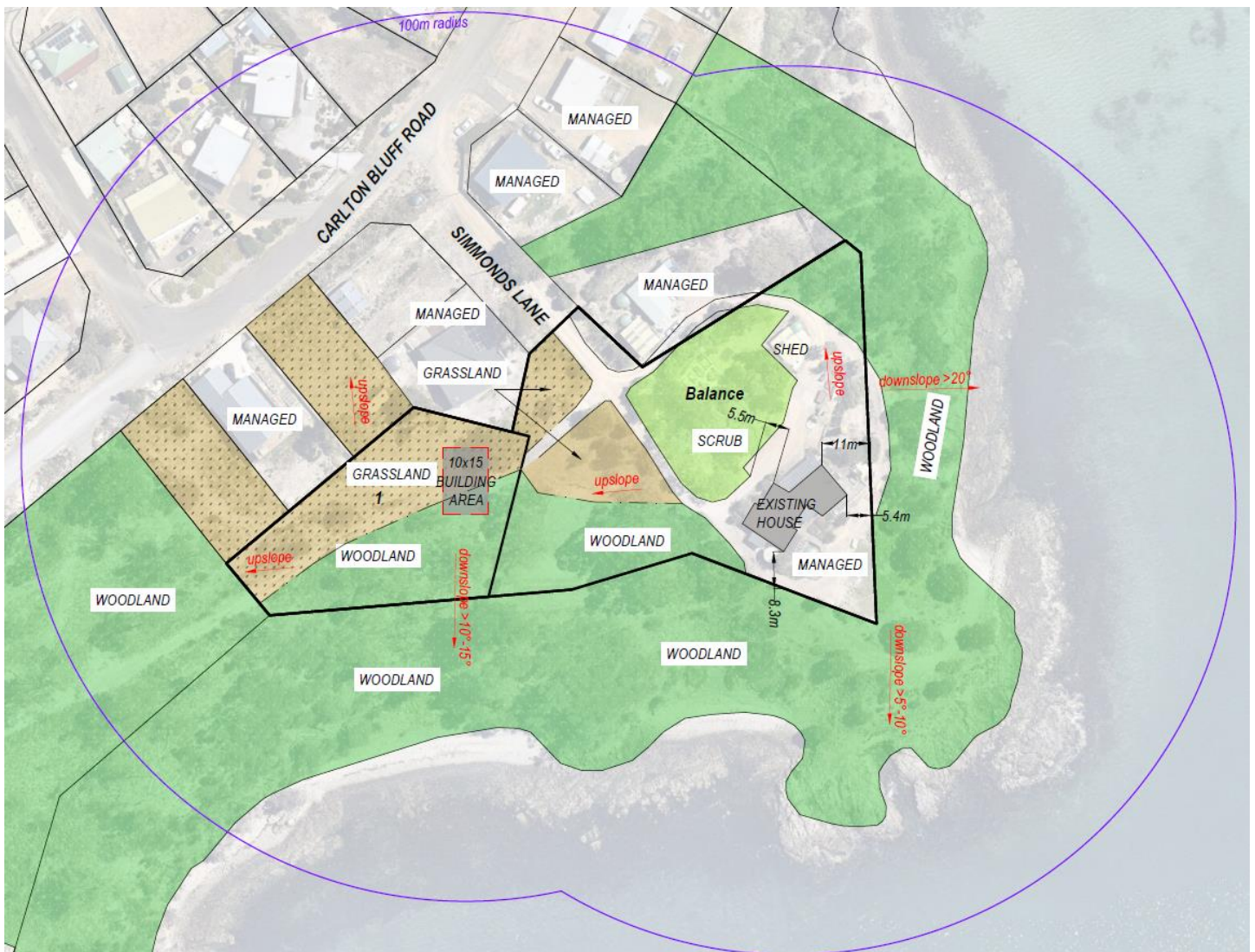


Figure 4 classified vegetation (within 100m of site) and existing separation from bushfire-prone vegetation (not to scale)

4.2 Bushfire Attack Level (BAL)

Table 2 BAL rating for each lot and required separation distances

BALANCE – EXISTING DWELLING				
DIRECTION OF SLOPE	NORTH-EAST	SOUTH-EAST	SOUTH-WEST	NORTH-WEST
Vegetation Classification	MANAGED WOODLAND	MANAGED WOODLAND	MANAGED WOODLAND	MANAGED SCRUB
Existing Horizontal distance to classified vegetation	5m	15m	8m	6m
Effective Slope under vegetation	Downslope >20°	Downslope >5°-10°	Downslope >5°-10°	Upslope
Exemption*				
Current BAL value for each side of the site	BAL-FZ	BAL-29	BAL-FZ	BAL-FZ
Separation distances to achieve BAL-19	36m	23m	23m	19m
Separation distances to achieve BAL-12.5	48m	32m	32m	27m

LOT 1 – VACANT				
DIRECTION OF SLOPE	NORTH	EAST	SOUTH	WEST
Vegetation Classification	GRASSLAND MANAGED	GRASSLAND SCRUB WOODLAND	WOODLAND	GRASSLAND MANAGED WOODLAND
Existing Horizontal distance to classified vegetation	0m 6m (M)	0m (G) 38m (D) 90m (B)	0m	0m & 40m (G) 61m (B)
Effective Slope under vegetation	Upslope	Downslope >5°-10°	Downslope >10°-15°	Upslope
Exemption*				
Current BAL value for each side of the site	BAL-FZ	BAL-FZ	BAL-FZ	BAL-FZ
Separation distances to achieve BAL-19	10m	13m	28m	10m
Separation distances to achieve BAL-12.5	14m	19m	40m	14m

Bushfire Attack Level shall be classified BAL-LOW per Section 2.2.3.2 of AS3959-2018 where the vegetation is one or a combination of any of the following Exemptions:

- a) Vegetation of any type that is more than 100m from the site.
- b) Single areas of vegetation less than 1 hectare in area and not within 100m of other areas of vegetation being classified.
- c) Multiple areas of vegetation less than 0.25 ha in area and not within 20m of the site, or each other.
- d) Strips of vegetation less than 20m in width (measured perpendicular to the elevation exposed to the strip of vegetation) regardless of length and not within 20m of the site or each other, or other areas of vegetation being classified.
- e) Non-vegetated areas, including waterways, roads, footpaths, buildings and rocky outcrops.
- f) Low threat vegetation, including grassland managed in a minimal fuel condition, maintained lawns, golf courses, maintained public reserves and parklands, vineyards, orchards, cultivated gardens, commercial nurseries, nature strips and windbreaks.

NOTE: Minimal fuel condition means there is insufficient fuel available to significantly increase the severity of the bushfire attack (recognizable as short-cropped grass for example, to a nominal height of 100mm).

The BAL level will also be classified as BAL-LOW if Grassland fuel is <50m from the site for any effective slope per Table 2.6 of AS3959-2018.

Where there was more than one classified vegetation the closet threat was calculated in the BAL table above for each aspect.

BAL ratings are as stated below:

BAL LOW	BAL 12.5	BAL 19	BAL 29	BAL 40	BAL FZ
There is insufficient risk to warrant any specific construction requirements, but there is still some risk	Ember attack and radiant heat below 12.5 kW/m ²	Increasing ember attack and windborne debris, radiant heat between 12.5 kW/m ² and 19 kW/m ²	Increasing ember attack and windborne debris, radiant heat between 19kW/m ² and 29 kW/m ²	Increasing ember attack and windborne debris, radiant heat between 29 kW/m ² and 40 kW/m ² . Exposure to flames from fire front likely	Direct Exposure to flames, radiant heat and embers from the fire front

5 BUSHFIRE PROTECTION MEASURES

5.1 Hazard Management Areas (HMA)

Hazard Management Area is *“the area between a habitable building or building area and bushfire-prone vegetation, which provides access to a fire front for fire fighting, 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 bushfire.”* (Tasmania Planning Commission, 2017).

Compliance

Building areas of both lots require a Hazard Management Area to be established and maintained between the bushfire vegetation and the area at distance equal to, or greater than specified for the BAL table 2.6 of AS3959-2018.

At present the existing dwelling on the balance does not have separation distances compliant with a BAL-19 rating, and cannot be achieved to the NE, SE and SW. BAL-19 can be achieved to the NW. To achieve BAL-19 to the NW requisite fuel removal needs to occur. As The existing dwelling is in close proximity to the title boundaries at the east and south-west aspects the HMA will cease at these boundaries. Lot 1 does not have separation distances compliant with a BAL-19 rating. All aspects need to be able to reach a BAL-19 rating to be compliant with E1.6.1 A1 (b). All aspects are currently BAL-FZ for the building area on lot 1. A BAL-19 HMA for lot 1 can be achieved with some on-site vegetation clearing to reach the required separation distances specified in the BAL table 2.6 of AS3959-2018. Requisite fuel removal that needs to occur for lot 1 to establish their HMA's must happen prior to sealing of titles.

The land directly surrounding the existing dwelling on lot 1 needs to be kept in a minimal fuel condition as it is presently and needs to continue to do so in perpetual.

The minimum separation distances for each lot are as stated below. Due to existing land use within lot 2 minimum separation distances may already be achieved.

BALANCE – Separation Distances (Existing Dwelling)				
Aspect	North-East	South-East	South-West	North-West
BAL-19	36m	23m	23m	19m

LOT 1 – Separation Distances (Vacant)				
Aspect	North	East	South	West
BAL-19	10m	13m	28m	10m

The Tasmanian Fire Service provides the following advice regarding the implementation and maintenance of Hazard management areas:

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

Additional site-specific fuel reduction or management may be required. An effective hazard management area does not require removal of all vegetation. Rather, vegetation must be designed and maintained in a way that limits opportunity for vertical and horizontal fire spread in the vicinity of the building being protected. Retaining some established trees can even be beneficial in terms of protecting the building from wind and ember attack

5.2 Public and Fire Fighting Access

Public Access

The proposed subdivision fronts Simmonds Lane via Carlton Bluff Road. Simmonds Lane & Carlton Bluff Road are sealed bitumen roads which is maintained by the Sorell Council and have typical widths of 5m-6m and 6.5-7m respectively.

No upgrades required to Simmonds Lane and Carlton Bluff Road.

Property Access

Current Conditions:

The existing access off Simmonds Lane to the existing dwelling on the balance is an all-weather gravel driveway which loops around the dwelling and has a typical width of approx. 2.5m – 8m for a length of approx. 198m for the entire loop. Further access is from the property to the north which owned by the same as the subject site, this access connects to the main loop and forms a figure 8 shape or two loops. The access is fairly wide in front of the dwelling which forms adequate room for a hammerhead “Y” turning area. There is an access off the main access into lot 1 which is a dirt track which runs through the property into the parcels to the west. This access will not be used as part of the development for lot 1. Lot 1 will be accessed via a ROW.



Figure 5 Site entrance off Simmonds Lane (bitumen to gravel is approx. boundary line)

Compliance:

Balance

Access to the existing dwelling on the balance is >30m but <200m and therefore must comply with the relevant standards of Acceptable Solution A1 and Table E2 (B) of PD5.1 demonstrated in table 3 below. There is adequate room for a hammerhead “Y” turning head of 4m wide and 8m long. Portions of the access less than 4m wide need to be widened to meet the requirements stated below.

Lot 1

Proposed access to the building area for lot 1 is >30m but < 200m and therefore must comply with the relevant standards of Acceptable Solution A1 and Table E2 (B) of PD5.1 demonstrated in the table 3 below.

The required clearances for the access need to be maintained.

Table 3

Access Standards: (access length greater than 30m but less than 200m)

As per E.1.6.2 and Table E2 (B) of PD5.1

- a) All-weather construction;
- b) Load capacity of at least 20 t, including bridges and culverts;
- c) Minimum carriageway width of 4m;
- d) Minimum vertical clearance of 4m;
- e) Minimum horizontal clearance of 0.5m from the edge of the carriageway;
- f) Cross falls less than 3 degrees (1:20 or 5%)
- g) Dips less than 7 degrees (1:8 or 12.5%);
- h) Curves with a minimum inner radius of 10m;
- i) Maximum gradient of 15 degrees (1:3.5 or 28%) for sealed roads, and 10 degrees (1:5.5 or 18%) for unsealed road; and
- j) Terminate with a turning area for fire appliances provided by one of the following
 - i. A turning circle with a minimum outer radius of 10m; or
 - ii. A property access encircling the building; or
 - iii. A hammerhead 'T' or 'y' turning head 4m wide and 8m long.

5.3 Water Supply for Fire Fighting

Current Conditions:

Site assessment confirmed the building areas on both lots are not serviced by reticulated water. The existing house on the balance has two tanks for domestic use only.

Compliance:

Both lots must be provided with a firefighting water supply that meet the requirements for Acceptable Solution A2 of section E:1.6.3 of PD5.1. Firefighting water supply requirements must be provided prior to occupancy of future dwellings or in the case of existing buildings of the balance lot before the issue of titles. Static water supply requirements are as below in table 4.

Table 4 – Requirements for Static Water Supply E1.6.3 A2 E5

- A. Distance between building area to be protected and water supply
- a) the building area to be protected must be located within 90m of the fire fighting water point of a static water supply; and
 - b) the distance must be measured as a hose lay, between the fire fighting water point and the furthest part of the building area
- B. Static Water supplies
- a) may have a remotely located offtake connected to the static water supply;
 - b) may be a supply for combined use (fire fighting and other uses) but the specified minimum quantity of fire fighting water must be available at all times;
 - c) must be a minimum of 10,000L per building area to be protected. This volume of water must not be used for any other purpose including fire fighting sprinkler or spray systems;
 - d) must be metal, concrete or lagged by non-combustible materials if above ground; and
 - e) if a tank can be located so it is shielded in all directions in compliance with section 3.5 of Australian Standard AS 3959-2009 Construction of buildings in bushfire-prone areas, the tank may be constructed of any material provided that the lowest 400mm of the tank exterior is protected by:
 - (i) metal;
 - (ii) non-combustible material; or
 - (iii) fibre-cement a minimum of 6mm thickness.
- C. Fittings, pipework and accessories (including stands and tank supports)
- Fittings and pipework associated with a fire fighting water point for a static water supply must:
- (a) have a minimum nominal internal diameter of 50mm;
 - (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) if buried, have a minimum depth of 300mm [S1];
 - (e) provide a DIN or NEN standard forged Storz 65mm coupling fitted with a suction washer for connection to fire fighting equipment;
 - (f) ensure the coupling is accessible and available for connection at all times;
 - (g) ensure the coupling is fitted with a blank cap and securing chain (minimum 220mm length);
 - (h) ensure underground tanks have either an opening at the top of not less than 250mm diameter or a coupling compliant with this Table; and
 - (i) if a remote offtake is installed, ensure the offtake is in a position that is:
 - (i) visible;
 - (ii) accessible to allow connection by fire fighting equipment;
 - (iii) at a working height of 450 – 600mm above ground level; and
 - (iv) protected from possible damage, including damage by vehicles.
- D. Signage for static water connections
- The fire fighting water point for a static water supply must be identified by a sign permanently fixed to the exterior of the assembly in a visible location. The sign must:
- a) comply with water tank signage requirements within Australian Standard AS 2304-2011 Water storage tanks for fire protection systems; or
 - b) comply with the Tasmania Fire Service Water Supply Guideline published by the Tasmania Fire Service.

E. Hardstand

A hardstand area for fire appliances must be:

- a) no more than 3m from the fire fighting water point, measured as a hose lay (including the minimum water level in dams, swimming pools and the like);
- b) no closer than 6m from the building area to be protected;
- c) a minimum width of 3m 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.

5.4 Construction Standards

All future habitable buildings within the specified building areas or additions to existing dwellings on each lot must be designed and constructed to the minimum BAL ratings specified in the Bushfire Hazard Management Plan (Appendix C) and to BAL construction standards in accordance with AS3959-2018 or subsequent edition as applicable at the time of building approval.

The BAL-19 building setback lines on the BHMP defines the minimum setbacks for habitable buildings.

Future class10a buildings within 6m of a Class 1a must be constructed to the same BAL as the dwelling.

6 STATUTORY COMPLIANCE

The applicable bushfire requirements are specified in Planning Directive 5.1 – Bushfire-Prone Areas Code.

Clause	Compliance
E1.4 Use or development exempt from this code	N/A
E1.5 Use Standards	
E1.5.1 Vulnerable Uses	N/A
E1.5.2 Hazardous Uses	N/A
E1.5 Development Standards for Subdivision	
E1.6.1 Provision of Hazard Management Areas.	<p>To comply with the Acceptable Solution A1, the proposed plan of subdivision must;</p> <ul style="list-style-type: none"> • Show building areas for each lot; and • Show hazard management areas between these building areas and that of the bushfire vegetation with the separation distances required for BAL 19 in Table 2.6 of <i>Australian Standard AS 3959 – 2018 Construction of buildings in bushfire-prone areas</i>. <p>The proposed building area on both lots can achieve a BAL-19 rating with some on-site vegetation clearing to reach the required separation distances specified in the BAL table 2.6 of AS3959-2018. The HMA needs to be established prior to occupancy of future buildings on the site.</p> <p>Subject to the compliance with the BHMP the proposal satisfy the Acceptable Solution.</p>
E1.6.2 Public and firefighting access; A1	<p>Access length to the building areas on both lots are greater than 30m but less than 200m and therefore must meet the requirements outlined in section 5.2 of the report.</p> <p>Subject to the compliance with the BHMP the proposal satisfies the Acceptable Solution.</p>
E1.6.3 A1- b) Provision of water supply for firefighting purposes.	<p>Both lots must comply with static water supply requirements (as outlined in section 5.3).</p> <p>Subject to the implementation of static water supply requirements outlined in Section 5.3 & BHMP being implemented, the proposal complies with the clause</p>

7 CONCLUSION & RECOMMENDATIONS

The proposed subdivision is endorsed that each lot can meet the requirements of PD5.1, E1.0 Bushfire-prone Areas Code for a maximum BAL rating of BAL-19 for both lots. Providing compliance with measures outlined in the BHMP (Appendix C) and sections 5 & 6 of this report.

Recommendations:

- The HMA's within the subdivision be applied in accordance with section 5.1 of this report and the BHMP (Appendix C) prior to the issue of titles. The future HMA for the balance lot if required be implemented prior to a dwelling built in the building area.
- Requisite fuel removal for both lots in order to establish the BAL-19 HMA must be done prior to the issue of titles.
- Sorell Council condition the planning approval on the compliance with the BHMP (Appendix C).
- Static water supply, hardstand and turning head area for the balance needs to be installed prior to sealing of titles.

8 REFERENCES

Department of Primary Industries and Water, The LIST, viewed OCT/NOV 2020, www.thelist.tas.gov.au

Standards Australia, 2018, *AS 3959-2018 – Construction of buildings in bushfire-prone areas*, Standards Australia, Sydney.

Tasmanian Planning Commission, 2015, *Sorell Interim Planning Scheme 2015*, viewed OCT/NOV 2020, www.iplan.tas.gov.au

Building Act 2016. The State of Tasmania Department of Premier and Cabinet. <https://www.legislation.tas.gov.au/view/html/inforce/current/act-2016-025>

Building Regulations 2016. The State of Tasmania Department of Premier and Cabinet. <https://www.legislation.tas.gov.au/view/html/inforce/current/sr-2016-110>

9 APPENDIX A – SITE PHOTOS



Figure 6 – Woodland east of the balance



Figure 7 – Grassland (foreground) & woodland (background) in lot 1, view looking south



Figure 8 – Existing dwelling & access with room for fire appliance turning



Figure 9 – Council reserve SE of the dwelling



Figure 10 – Scrub fuel NW of the dwelling (view looking SW)



Figure 11 – Proposed entrance to lot 1

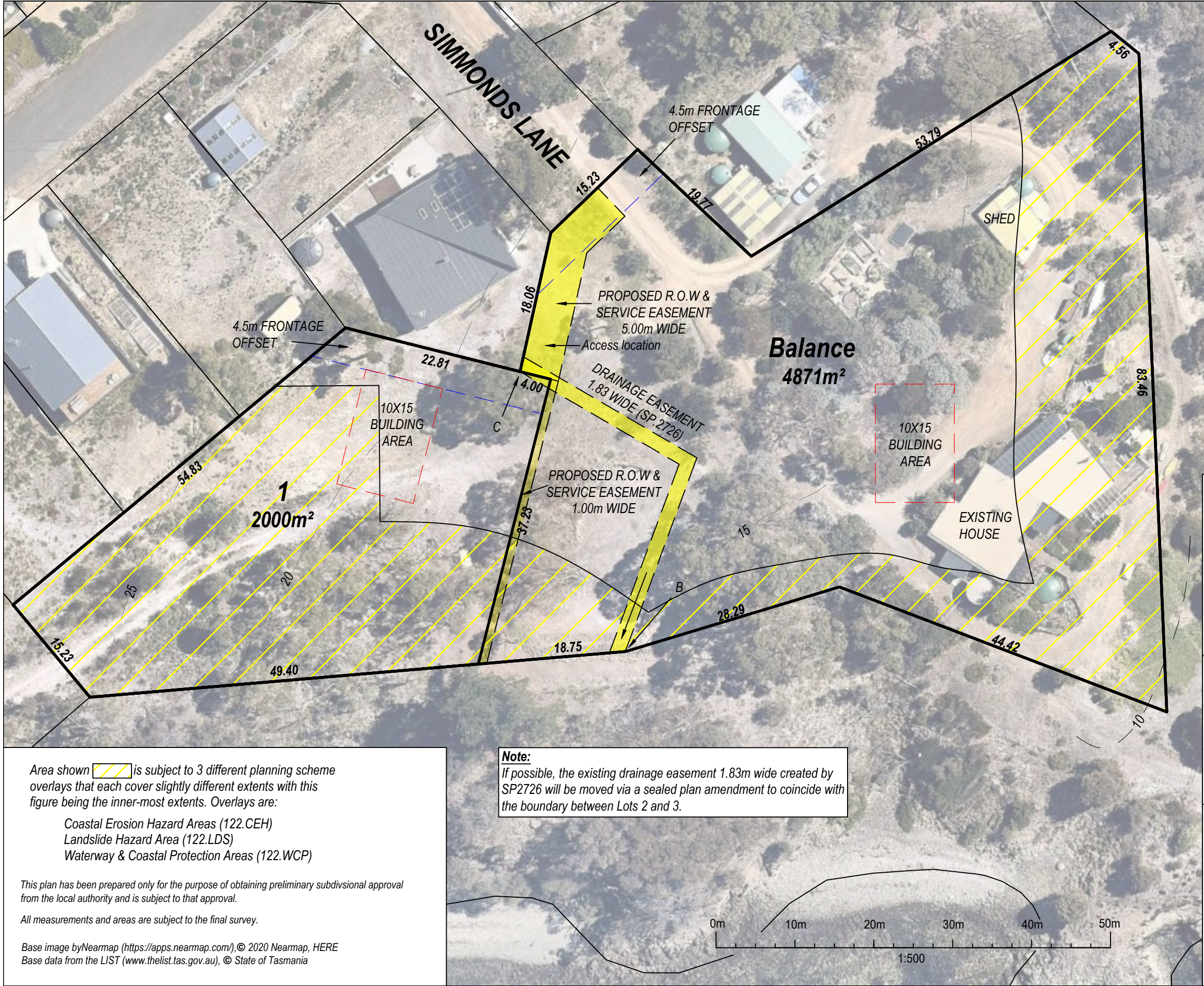


Figure 12 – Proposed building area for lot 1, with managed land in the background (view looking north)



Figure 13 – Entrance to Simmons Lane

10 APPENDIX B – SUBDIVISION PROPOSAL PLAN



Development Standards for Subdivision
12.5.1 Low Density Residential
A1-Lot areas comply with A1.
A2-Building area complies with A2.
A3-The frontage of Lot 2 does not comply with A3. It does satisfy P3. Lot 3 is exempt as it is an internal lot.
A4-Does not comply with A4. Lots do comply with P4.
A5-Complies. Existing buildings offset to new boundaries.

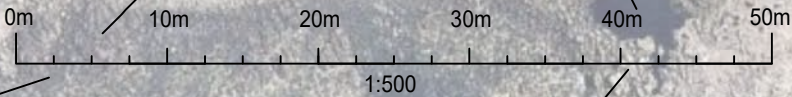


Note:
If possible, the existing drainage easement 1.83m wide created by SP2726 will be moved via a sealed plan amendment to coincide with the boundary between Lots 2 and 3.

Area shown is subject to 3 different planning scheme overlays that each cover slightly different extents with this figure being the inner-most extents. Overlays are:
Coastal Erosion Hazard Areas (122.CEH)
Landslide Hazard Area (122.LDS)
Waterway & Coastal Protection Areas (122.WCP)

This plan has been prepared only for the purpose of obtaining preliminary subdivisional approval from the local authority and is subject to that approval.
All measurements and areas are subject to the final survey.

Base image by Nearmap (<https://apps.nearmap.com/>), © 2020 Nearmap, HERE
Base data from the LIST (www.thelist.tas.gov.au), © State of Tasmania



E				
D				
C	Plan updated to match BHMP	JR	04-02-21	CBR
B	Lot numbers updated	MG	2-10-20	CBR
A	Extend R.O.W & Service Easement - Note added relating to existing easement	MF	4-8-2020	CBR
REV	AMENDMENTS	DRAWN	DATE	APPR.



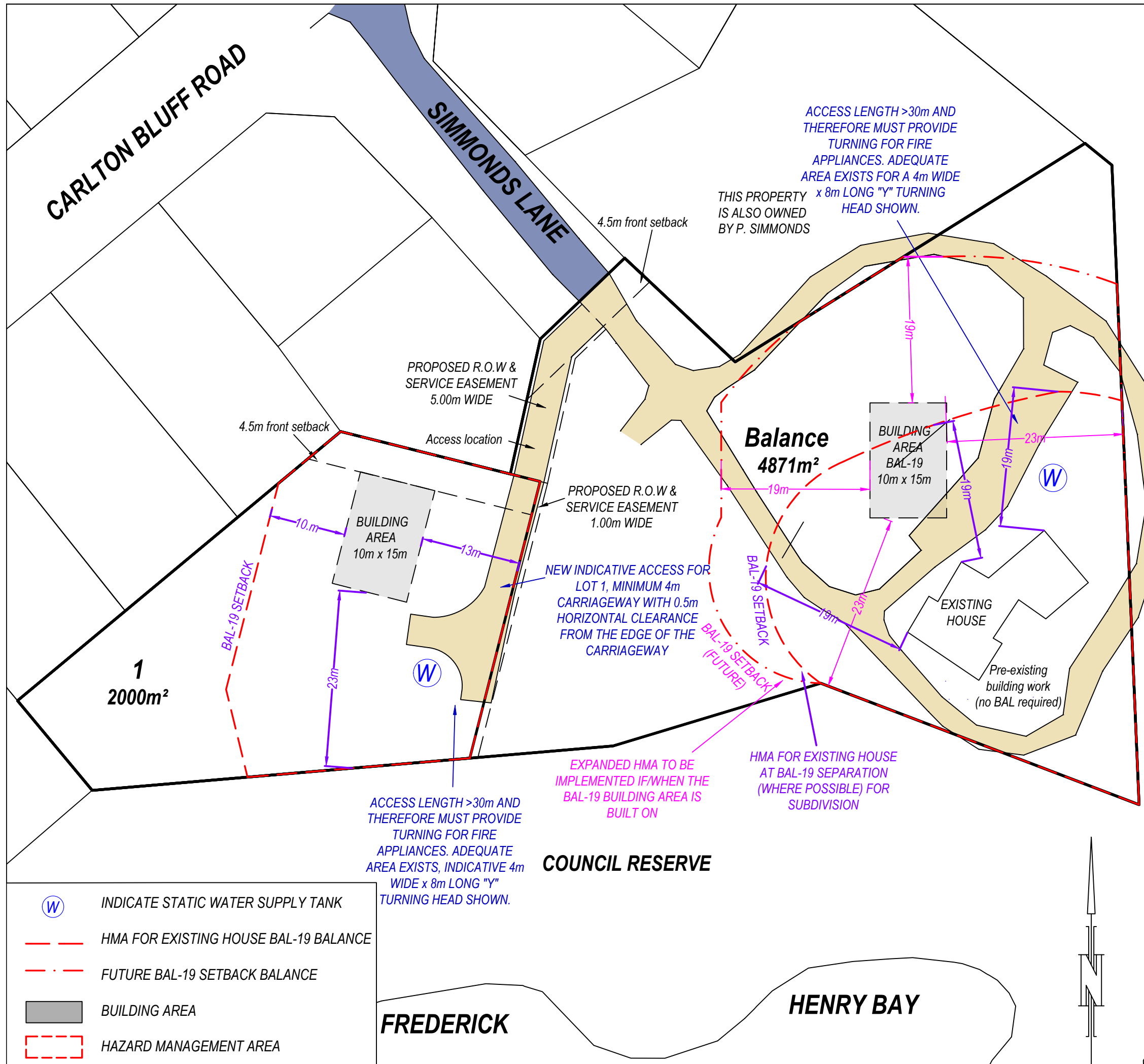
UNIT 1, 2 KENNEDY DRIVE
CAMBRIDGE 7170
PHONE: (03)6248 5898
EMAIL: admin@rbsurveyors.com
WEB: www.rbsurveyors.com

OWNER: Peter William Simmonds & Judith Ann Simmonds
TITLE REFERENCE: C.T.172964/2
LOCATION: 8 SIMMONDS LANE
PRIMROSE SANDS

Proposed Subdivision

Date: 21-07-2020	Reference: SIMMP06 9399-04
Scale: 1:500 (A3)	Municipality: SORELL

11 APPENDIX C – BUSHFIRE HAZARD MANAGEMENT PLAN



BUSHFIRE HAZARD MANAGEMENT PLAN

LOCATION:	8 Simmonds Lane, Primrose Sands 7173
TITLE REFERENCE:	C.T.172964/2
PROPERTY ID:	2123098
MUNICIPALITY:	Sorell
DATE:	3rd February 2021 (v3)
SCALE: 1:500 @ A3	REFERENCE: SIMMP06

- REQUIREMENTS**
- HAZARD MANAGEMENT AREAS (HMA)**
 - HMA to be established to distances indicated on this plan and as set out in Section 5.1 of the Bushfire Hazard Report.
 - Vegetation in the HMA needs to be strategically modified and then maintained in a low fuel state to protect future dwellings from direct flame contact and intense radiant heat. An annual inspection and maintenance of the HMA should be conducted prior to the bushfire season. All grasses or pastures must be kept short (<100 mm) within the HMA. Fine fuel loads at ground level such as leaves, litter and wood piles must be minimal to reduce the quantity of wind borne sparks and embers reaching buildings; and to halt or check direct flame attack.
 - Some trees can be retained provided there is horizontal separation between the canopies; and low branches are removed to create vertical separation between the ground and the canopy. Small clumps of established trees and/or shrubs may act to trap embers and reduce wind speeds.
 - No trees to overhang houses to prevent branches or leaves from falling on the building.
 - Non-combustible elements including driveways, paths and short cropped lawns are recommended within the BHMA.
 - Fine fuels (leaves bark, twigs) should be removed from the ground periodically (per-fire season) and all grasses or pastures must be kept short (<100 mm).
 - CONSTRUCTION STANDARDS**
 - Future dwellings or additions to existing dwellings within the specified building areas to be designed and constructed to BAL ratings shown on this plan in accordance with AS3959-2018 at the time of building approval
 - Future outbuilds within 6m of a class 1a dwelling must be constructed to the same BAL as the dwelling
 - Siting of building outside the specified building areas will require further assessment.
 - PUBLIC AND FIRE-FIGHTING ACCESS REQUIREMENTS**
 - Access to all lots must comply with the design and construction requirements specified in Section 5.2 of the Bush Fire Report.
 - STATIC FIRE-FIGHTING WATER SUPPLY**
 - 4.1 New habitable dwellings and existing dwellings must be supplied with a static water supply that is:
 - Dedicated solely for fire fighting purposes;
 - Minimum capacity of 10,000L;
 - is accessible by fire fighting vehicles and within 3.0m of a hardstand area; and
 - Consistent with the specifications outlined in section 5.3 if the Bushfire Report.

This plan is to be read in conjunction with the preceding *Bushfire Hazard Report "Proposed 2 Lot Subdivision 8 Simmonds Lane, Primrose Sands TAS 7173" dated 30/11/2020.*

BHMP BY JAMES ROGERSON
ACCREDITED BUSHFIRE PRACTITIONER (BFP-161), scopes: 1, 2 & 3B
PROVISIONALLY ACCREDITED (BFP-P), scopes: 3A, 3C

12 APPENDIX D – PLANNING CERTIFICATE

BUSHFIRE-PRONE AREAS CODE

CERTIFICATE¹ UNDER S51(2)(d) *LAND USE PLANNING AND APPROVALS ACT 1993*

1. Land to which certificate applies

The subject site includes property that is proposed for use and development and includes all properties upon which works are proposed for bushfire protection purposes.

Street address:

8 Simmonds Lane, Primrose Sands TAS 7173

Certificate of Title / PID:

C.T. 172964/2 PID:2123098

2. Proposed Use or Development

Description of proposed Use and Development:

SUBDIVISION OF C.T.172964/2 INTO 2 RESULTANT TITLES

Applicable Planning Scheme:

Sorell Interim Planning Scheme, 2015

3. Documents relied upon

This certificate relates to the following documents:

Title	Author	Date	Version
SUBDIVISION PROPOSAL PLAN	ROGERSON & BIRCH SURVEYORS	04/02/2021	9399-24
BUSHFIRE HAZARD REPORT – 8 SIMMONDS LANE, PRIMROSE SANDS	JAMES ROGERSON – ROGERSON & BIRCH SURVEYORS	03/02/2021	3
BUSHFIRE HAZARD MANGAEMENT PLAN– 8 SIMMONDS LANE, PRIMROSE SANDS	JAMES ROGERSON – ROGERSON & BIRCH SURVEYORS	03/02/2021	2

¹ This document is the approved form of certification for this purpose and must not be altered from its original form.

4. Nature of Certificate

The following requirements are applicable to the proposed use and development:

<input type="checkbox"/>	E1.4 / C13.4 – Use or development exempt from this Code	
	Compliance test	Compliance Requirement
<input type="checkbox"/>	E1.4(a) / C13.4.1(a)	

<input type="checkbox"/>	E1.5.1 / C13.5.1 – Vulnerable Uses	
	Acceptable Solution	Compliance Requirement
<input type="checkbox"/>	E1.5.1 P1 / C13.5.1 P1	<i>Planning authority discretion required. A proposal cannot be certified as compliant with P1.</i>
<input type="checkbox"/>	E1.5.1 A2 / C13.5.1 A2	
<input type="checkbox"/>	E1.5.1 A3 / C13.5.1 A2	

<input type="checkbox"/>	E1.5.2 / C13.5.2 – Hazardous Uses	
	Acceptable Solution	Compliance Requirement
<input type="checkbox"/>	E1.5.2 P1 / C13.5.2 P1	<i>Planning authority discretion required. A proposal cannot be certified as compliant with P1.</i>
<input type="checkbox"/>	E1.5.2 A2 / C13.5.2 A2	
<input type="checkbox"/>	E1.5.2 A3 / C13.5.2 A3	

<input type="checkbox"/>	E1.6.1 / C13.6.1 Subdivision: Provision of hazard management areas	
	Acceptable Solution	Compliance Requirement
<input type="checkbox"/>	E1.6.1 P1 / C13.6.1 P1	<i>Planning authority discretion required. A proposal cannot be certified as compliant with P1.</i>
<input type="checkbox"/>	E1.6.1 A1 (a) / C13.6.1 A1(a)	
<input checked="" type="checkbox"/>	E1.6.1 A1 (b) / C13.6.1 A1(b)	Provides BAL-19 for all lots (including any lot designated as 'balance')
<input type="checkbox"/>	E1.6.1 A1(c) / C13.6.1 A1(c)	

<input type="checkbox"/>	E1.6.2 / C13.6.2 Subdivision: Public and fire fighting access	
	Acceptable Solution	Compliance Requirement
<input type="checkbox"/>	E1.6.2 P1 / C13.6.2 P1	
<input type="checkbox"/>	E1.6.2 A1 (a) / C13.6.2 A1 (a)	
<input checked="" type="checkbox"/>	E1.6.2 A1 (b) / C13.6.2 A1 (b)	Access complies with relevant Tables

<input type="checkbox"/>	E1.6.3 / C13.1.6.3 Subdivision: Provision of water supply for fire fighting purposes	
	Acceptable Solution	Compliance Requirement
<input type="checkbox"/>	E1.6.3 A1 (a) / C13.6.3 A1 (a)	
<input type="checkbox"/>	E1.6.3 A1 (b) / C13.6.3 A1 (b)	
<input type="checkbox"/>	E1.6.3 A1 (c) / C13.6.3 A1 (c)	
<input type="checkbox"/>	E1.6.3 A2 (a) / C13.6.3 A2 (a)	
<input checked="" type="checkbox"/>	E1.6.3 A2 (b) / C13.6.3 A2 (b)	Static water supply complies with relevant Table
<input type="checkbox"/>	E1.6.3 A2 (c) / C13.6.3 A2 (c)	

5. Bushfire Hazard Practitioner

Name:

JAMES ROGERSON

Phone No:

0488372283

Postal
Address:

UNIT 1-2 KENNEDY DRIVE,
CAMBRIDGE PARK

Email
Address:

JAMES@RBSURVEYORS.COM

Accreditation No:

BFP – 161

Scope:

1, 2, 3B

6. Certification

I certify that in accordance with the authority given under Part 4A of the *Fire Service Act 1979* that the proposed use and development:

- ☐ Is exempt from the requirement Bushfire-Prone Areas Code because, having regard to the objective of all applicable standards in the Code, there is considered to be an insufficient increase in risk to the use or development from bushfire to warrant any specific bushfire protection measures, or
- ☒ The Bushfire Hazard Management Plan/s identified in Section 3 of this certificate is/are in accordance with the Chief Officer's requirements and compliant with the relevant **Acceptable Solutions** identified in Section 4 of this Certificate.

Signed:
certifier



Name:

JAMES ROGERSON

Date:

12/08/2020

Certificate
Number:

(for Practitioner Use only)

ROCK SOLID GEOTECHNICS PTY LTD

2/10/2020

CLIENT:

Mr Peter Simmonds

primroseeeleven@icloud.com

Peter Hofto

163 Orielson Road

ORIELTON

TAS 7172

PH 0417 960 769

peter@rocksolidgeotechnics.com.au

Geotechnical Assessment - Subdivision of Land at 8 Simmonds Lane, Primrose Sands

This report assesses the onsite wastewater potential of the land designated for a two-lot subdivision at 8 Simmonds Lane, Primrose Sands.

Proposed Lot 1 can sustain an onsite wastewater system for a single, three-bedroom dwelling, in compliance with the 2015 Sorell Council's Planning Scheme E.23.9.1.

INTRODUCTION

Mr Peter Simmonds has proposed a two-Lot subdivision at 8 Simmonds Lane, Primrose Sands ([Figure 1](#)).

This assessment considers investigation requirements outlined in the 2015 Sorell Council Interim Planning Scheme and the Australian Standard AS1547-2012 – Onsite Domestic Wastewater Management Code, specifically:

- As proposed Lot 1 is under 5000m², it is not able to meet the Acceptable Solution under E23.9.1 A2, and therefore must be assessed under, and demonstrate compliance with, Performance Criteria E.23.9.1 P1 which states:
- "The area of a new lot must be adequate to accommodate a land application area of sufficient size to comply with the requirements of AS/NZ 1547 for a dwelling containing a minimum of 3 bedrooms'."

INVESTIGATION

A field survey was completed on Monday 19 September, 2020, encompassing field mapping of geological and geomorphological features and hazards to assess the site for onsite wastewater disposal potential. Test holes were completed on proposed Lot 1 (4WD mounted SAMPLA25 mechanical auger with 100mm diameter solid flight augers).

The 1:50000 Mines Department Geological Map 'Sorell' indicates that the site is underlain by Quaternary sands over Jurassic dolerite.

Lot 1 is a 2000m², vacant site lying at the southwestern end of Simmonds Lane, bounding the Foreshore reserve to the south. There is no evidence of erosion or other geotechnical hazards on the site. The site is covered in grass, sags, ferns and minor reeds, and gum trees. Lot 1 generally slopes to the south/southeast at 8-10 degrees. The land from the southern or lower side of the Lot slopes steeply to the foreshore.

Test holes were completed to assess the site for onsite wastewater disposal suitability. The locations of the test holes are marked on [Figure 1](#). The profiles encountered in the [Test Holes](#) consisted of:

0.00 – 0.20m	SAND: fine grained, dark grey, rootlets – TOPSOIL
0.20 – 0.60m	SAND: fine grained, grey, dry to interface with underlying clay then very moist
0.60 – 1.20m	sandy CLAY: medium to high plasticity, dark greyish brown, 25-30% fine to medium grained sand, moist
1.20 – 2.10m	SAND: fine to medium grained, yellowish brown, some clay, slightly moist – EXTREMELY WEATHERED DOLERITE
2.10m+	Holes terminated at required depths – 2.10m.

Groundwater was not encountered in either of the holes.

The site is classified as CLASS 1 (SAND) over CLASS 5 (light CLAY).

[Plate 1](#) – [Test Hole #1](#) - Looking to the northwest.



SITE AND SOIL EVALUATION REPORT

Location:

8 Simmonds Lane, Primrose Sands

Owner:

Mr Peter Simmonds

Site Plan:

See attached

Soil Category:

(as stated in AS/NZS 1547-2000)

1,...2,...3,...4,...5,...6

Modified Emerson Test Required

No

If Yes, Emerson Class No.

Soil Profile:

The locations of the test holes are nominated on the site plan.

Geology:

Quaternary sediments over dolerite bedrock

Slope:

8-10 degrees

Drainage lines / water courses:

Nil

Vegetation:

Grass, sags, ferns, minor reeds, gum trees

Site History: (land use)

Vacant land

Aspect:

South/southeast

Pre-dominant wind direction:

Northwest to southwest

Site Stability: Will on-site wastewater disposal affect site stability?

No

Is geological advice required?

No

Drainage/Groundwater:

Not encountered

Depth to seasonal groundwater (m):

Not Encountered

Are surface or sub-surface drains required upslope of the land application area

Yes

Date of Site Evaluation:

14-9-2020

Weather Conditions:

(on the day of evaluation and during the last week)

Fine / Rain

Name:

Peter Hofto

Signed:

<u>Company:</u>	Rock Solid Geotechnics Pty Ltd
<u>Address:</u>	163 Orielton Road, Orielton TAS 7172
<u>Phone:</u>	0417 960 769
<u>Email:</u>	peter@rocksolidgeotechnics.com.au
<u>Qualifications:</u>	BSc (Hons) – Geology/Geophysics

WASTEWATER DISPOSAL

Table E23.1 states that a Class 5 site requires 100m² of Land Application Area (LAA) per bedroom, or 300m² for a 3-bedroom residence. Table E23.1 states that a Class 1 site requires 50m² of Land Application Area (LAA) per bedroom, or 150m² for a 3-bedroom residence.

A LAA must also be in a suitable location to be acceptable. It is therefore logical that the LAA setback distance requirements in the planning scheme are also addressed.

Compliance Table		Code E23
Acceptable Solutions	Performance Criteria	Compliance achieved by
E.23.9.1 Development Standards for New Lots		
A1 A new lot must have an area no less than: 5,000 m ² .	P1 The area of a new lot must be adequate to accommodate a LAA of sufficient size to comply with the requirements of AS/NZ1547 for a dwelling containing a minimum of 3 bedrooms.	Cannot comply with A1 Complies with P1 Class 5 CLAY site Total 300m ² . Class 1 SAND site Total 150m ² .
E23.10 Development Standards for Land Application Areas		
A2 Horizontal separation distance from downslope surface water to a LAA must comply with any of the following: (a) be no less than 100m; (b) if the site is within a high rainfall area or the site soil category is 4, 5 or 6, be no less than the following: (i) if primary treated effluent standard or surface application, 50m plus 7m for every degree of average gradient from downslope surface water; (ii) if secondary treated effluent standard and subsurface application, 50m plus 2m for every degree of average gradient from down slope surface water.	P2 Horizontal separation distance from downslope surface water for a LAA must satisfy all of the following: (a) effluent must be no less than secondary treated effluent standard & applied through a subsurface land application system; (b) be no less than 15m; (c) the surface water is not of high resource or environmental value; (d) the average gradient is no more than 16 degrees; (e) the site is not in a flood prone area with an ARI of no less than 20 years;	Can comply with A2 73m from foreshore. (100m from foreshore cannot be attained) Conditional on the site having a Class 1, 2, or 3 classification. Setback required 15m + 2m/average gradient to HWL (17 degrees) = 49m setback required.

<p>(c) if the site is not within a high rainfall area or the site soil category is not 4, 5 or 6, be no less than the following;</p> <p>(i) if primary treated effluent 15m plus 7m for every degree of average gradient from downslope surface water;</p> <p>(ii) if secondary treated effluent & subsurface application, 15m plus 2m for every degree of average gradient from down slope surface water.</p>	<p>(f) either of the following applies:</p> <p>(i) the site soil category is 1, 2 or 3;</p> <p>(ii) a raised bed is used.</p>	<p>Cannot comply with P2 >16° from HWM.</p>
<p>A3</p> <p>Horizontal separation distance from a property boundary to a LAA must comply with either of the following:</p> <p>(a) be no less than 40m from a property boundary;</p> <p>(b) be no less than:</p> <p>(i) 1.5m from an upslope or level property boundary; &</p> <p>(ii) if primary treated effluent 2m for every degree of average gradient from a downslope property boundary; or</p> <p>(iii) if secondary treated effluent and subsurface application, 1.5m plus 1m for every degree of average gradient from a downslope property boundary.</p>	<p>P3</p> <p>Horizontal separation distance from a property boundary to a LAA must satisfy all of the following:</p> <p>(a) effluent must be no less than secondary treated effluent standard & applied through a subsurface land application system;</p> <p>(b) be no less than 1.5m</p> <p>(c) the average gradient is no more than 16 degrees;</p> <p>(d) either of the following applies:</p> <p>(i) the vertical separation between the LAA & groundwater or any limiting layer is no less than 1.5m;</p> <p>(ii) a raised bed is used to achieve a minimum vertical separation of 1.5m between the LAA & groundwater or any limiting layer.</p>	<p>Complies with A3</p> <p>Minimum 1.5m setback from upper and side-slope boundaries.</p> <p>Minimum 11.5m setback from lower-slope boundary.</p>
<p>A4</p> <p>Horizontal separation distance from a downslope bore, well or similar water supply to a LAA must be no less than 50m.</p>	<p>P4</p> <p>Horizontal separation distance from a downslope bore, well or similar water supply to a LAA must satisfy all of the following:</p> <p>(a) effluent must be no less than secondary treated effluent standard & applied through a subsurface land application system;</p> <p>(b) be no less than 15m;</p> <p>(c) the water is not high resource value water.</p>	<p>Complies with A4</p> <p>No known potable bores in the area.</p>
<p>A5</p> <p>Vertical separation distance between groundwater & a LAA must be no less than 1.5m.</p>	<p>P5</p> <p>Vertical separation distance between groundwater & a LAA must satisfy all of the following:</p> <p>(a) effluent must be no less than secondary treated effluent standard & applied through a subsurface land application system;</p> <p>(b) vertical separation distance must be no less than 0.5m, (whether 'in ground' or by use of a raised bed).</p>	<p>Complies with A5</p> <p>Groundwater not encountered.</p>
<p>A6</p> <p>Vertical separation distance between a limiting layer & a LAA must be no less than 1.5m.</p>	<p>P6</p> <p>Vertical separation distance between a limiting layer & a LAA must satisfy all of the following:</p> <p>(a) effluent must be no less than secondary treated effluent standard & applied through a subsurface land application system;</p> <p>(b) vertical separation distance must be no less than 0.5m, (whether 'in ground' or by use of a raised bed).</p>	<p>Complies with A6</p> <p>Limiting layer not encountered.</p>

Compliance with Code E23 is conditional on the Land Application Area complying with E23.10.A2 or P2.

The LAA cannot comply with P2 due to the slope of the site, measured down to the high water mark on the foreshore to the south (slope to foreshore exceeds 16 degrees).

Compliance with Code E23.10.A2 can be attained if the proposed LAA on Lot 1 can be classified as Class 1, 2, or 3. This classification will mean that the minimum required setback distance of the LAA from the high water mark on the foreshore to the south is 49m.

As stated above in order to comply with Code E23.10.A2 the proposed LAA on Lot 1 needs to have a site classification of Class 1, 2, or 3. The profiles encountered in the test holes encountered 600mm of sand over the sandy clay. An additional 500mm thickness of sand will need to be added to the LAA to ensure a Class 1 classification.

It is recommended to add 500mm of sandy loam to the 150m² LAA as marked on the accompanying plan. The sandy loam can be battered down to natural ground level, and planted with grass cover.

RECCOMENDATIONS

The site cannot comply with the setback distance requirements of the Performance Criteria **E23.10.P2** as outlined in the 2015 Sorell Council Interim Planning Scheme Wastewater Code E23.

The site can comply with the setback distance requirements of the Acceptable Solutions **E23.10.A2** as outlined in the 2015 Sorell Council Interim Planning Scheme Wastewater Code E23.

Proposed Lot 1 can sustain an onsite wastewater system for a single, three-bedroom dwelling, in compliance with the 2015 Sorell Council's Planning Scheme E.23.9.1.



Peter Hofto
ROCK SOLID GEOTECHNICS P/L

CONDITIONS OF INVESTIGATION

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This report contains observations & interpretations based often on limited subsurface evaluation. Where interpretative information or evaluation has been reported, this information has been identified accordingly & is presented based on professional judgement. RSG does not accept responsibility for variations between interpreted conditions & those that may be subsequently revealed by whatever means.

Due to the possibility of variation in subsurface conditions & materials, the characteristics of materials can vary between sample & observation sites. RSG takes no responsibility for changed or unexpected variations in ground conditions that may affect any aspect of the project. The classifications in this report are based on samples taken from specific sites. The information is not transferable to different sites, no matter how close (ie if the development site is moved from the original assessment site an additional assessment will be required).

It is recommended to notify the author should it be revealed that the sub-surface conditions differ from those presented in this report, so additional assessment & advice may be provided.

Investigations are conducted to standards outlined in Australian Standards:

- AS1726-1993: Geotechnical Site Investigations
- AS1547-2012: Onsite Domestic Wastewater Management

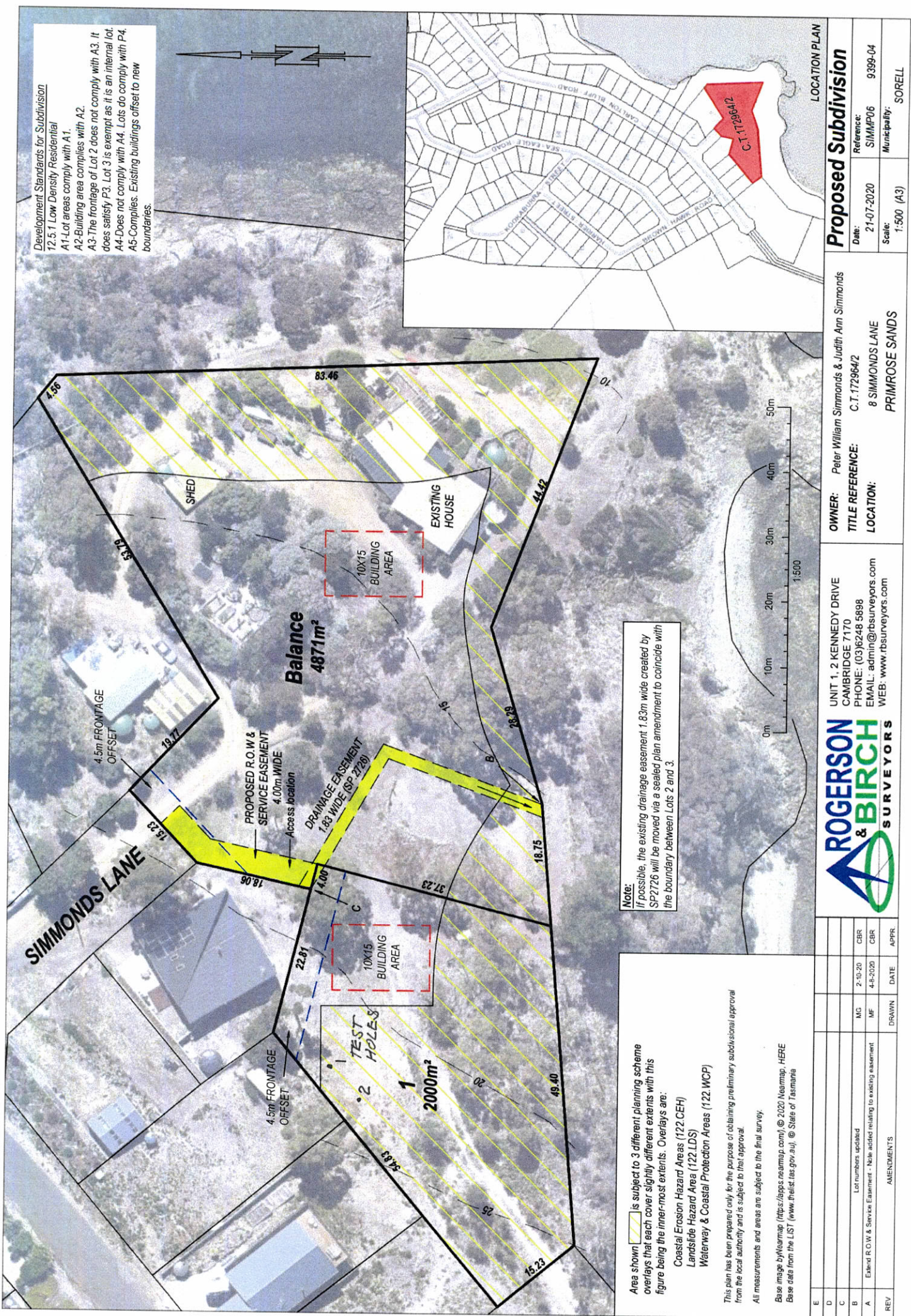
& as specified in 'Guidelines for Geotechnical Assessment of Subdivisions and Recommended Code of Practise for Site Classification to AS2870 in Tasmania' - Institute of Engineers, Tasmanian Division.

Any assessment that has included an onsite wastewater system design will require a further site visit / inspection once the system has been installed. After the inspection to verify that the system has been installed as per RSG's design a statement will be provided. An additional fee applies for the site visit & issuing the certificate.

RSG is not responsible for the correct installation of wastewater systems. Any wastewater installation is the sole responsibility of the owner/agent and certified plumber. Any variation to the wastewater design must be approved by RSG, and an amended Special Plumbing Permit obtained from the relevant council. The registered plumber must obtain a copy and carefully follow the details in the council issued Special Plumbing Permit. A "Certificate of Completion" will be based on surface visual inspection only, to verify the location of the system. All underground plumbing works are the responsibility of the certified plumber.

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PETER HOFTO
ROCK SOLID GEOTECHNICS PTY LTD



Development Standards for Subdivision
12.5.1 Low Density Residential
A1-Lot areas comply with A1.
A2-Building area complies with A2.
A3-The frontage of Lot 2 does not comply with A3. It does satisfy P3. Lot 3 is exempt as it is an internal lot.
A4-Does not comply with A4. Lots do comply with P4.
A5-Complies. Existing buildings offset to new boundaries.

Note:
If possible, the existing drainage easement 1.83m wide created by SP2726 will be moved via a sealed plan amendment to coincide with the boundary between Lots 2 and 3.

Area shown [yellow hatched] is subject to 3 different planning scheme overlays that each cover slightly different extents with this figure being the inner-most extents. Overlays are:
Coastal Erosion Hazard Areas (122 CEH)
Landslide Hazard Area (122 LDS)
Waterway & Coastal Protection Areas (122 WCP)

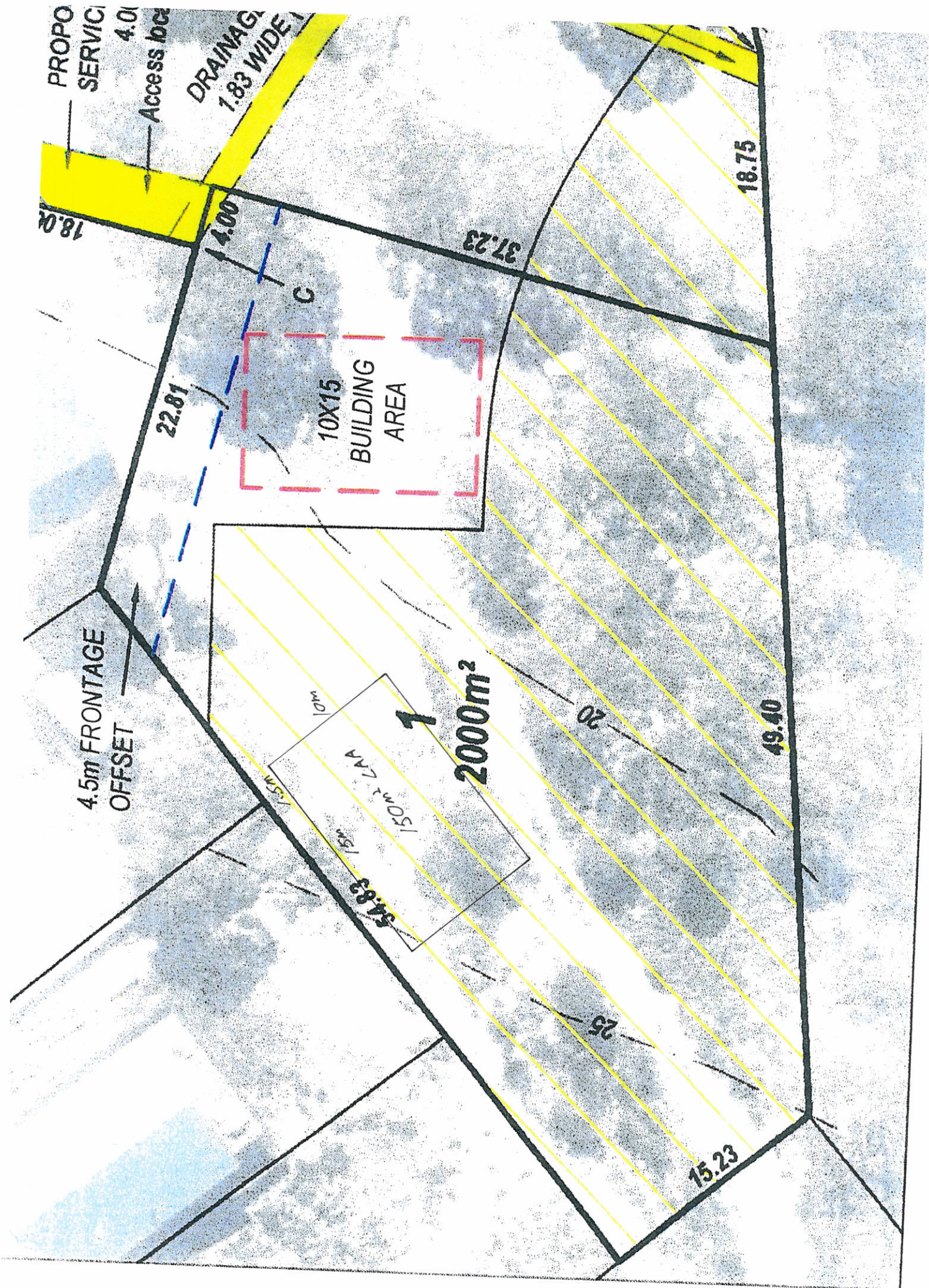
This plan has been prepared only for the purpose of obtaining preliminary subdivisional approval from the local authority and is subject to final approval.
All measurements and areas are subject to the final survey.

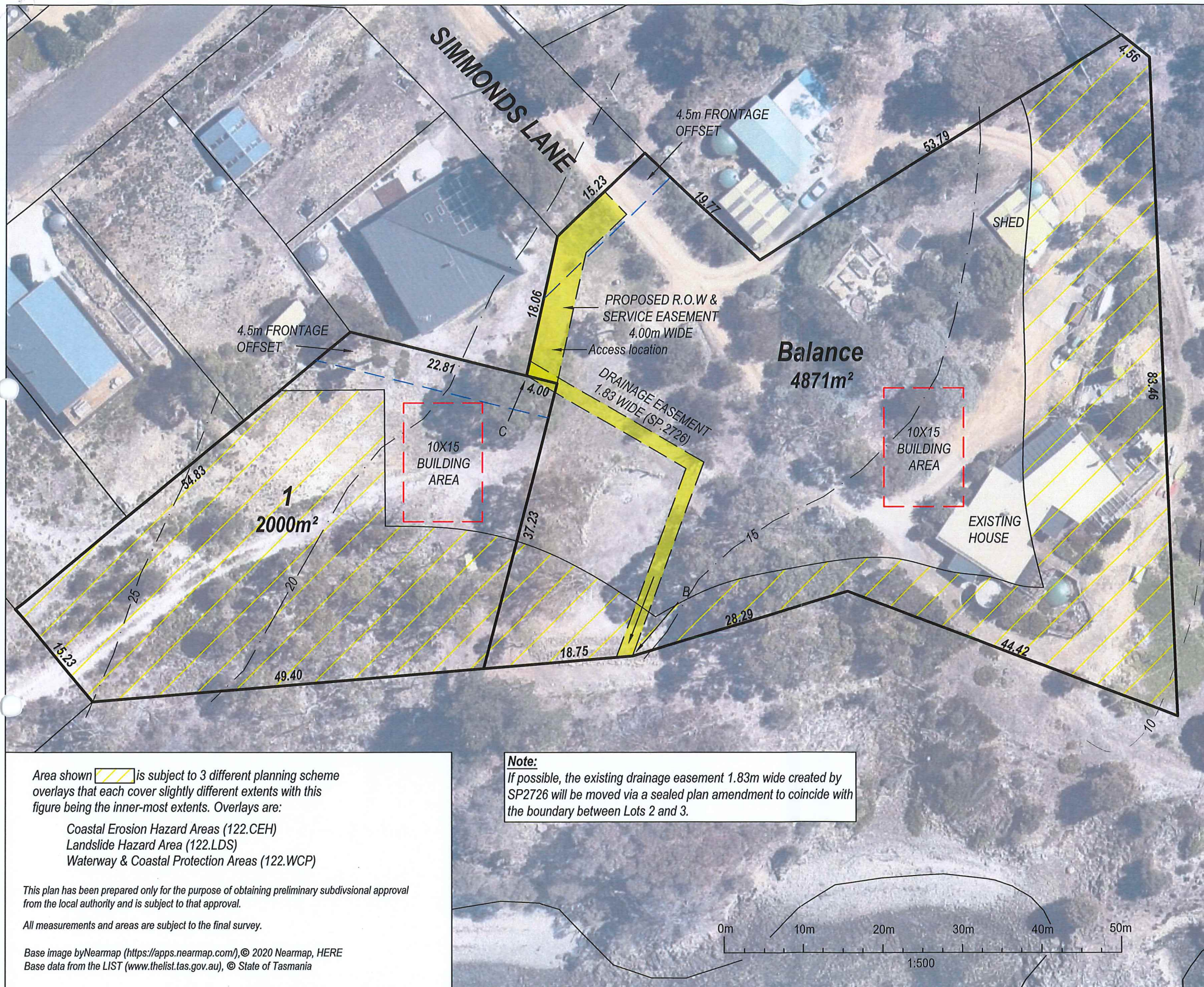
Base image by Nearmap (<https://apps.nearmap.com/>) © 2020 Nearmap. HERE
Base data from the LIST (www.thelist.tas.gov.au/) © State of Tasmania

AMENDMENTS				DATE				DRAWN				APPR			
REV															
A	Extend R.O.W & Service Easement - Note added relating to existing easement	MF	4-8-2020												
B	Lot numbers updated	MG	2-10-20												
C															
D															
E															
PROPOSED SUBDIVISION															
OWNER: Peter William Simmonds & Judith Ann Simmonds				TITLE REFERENCE: C.T.172964/2				LOCATION: 8 SIMMONDS LANE PRIMROSE SANDS				Date: 21-07-2020			
Reference: SIMMP06				Municipality: SORELL				Scale: 1:500 (A3)				Reference: 9399-04			




GDA94 MGA55 : 553254E, 5251377N 1:425 **Disclaimer and Copyright Notice**





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- Coastal Erosion Hazard Areas (122.CEH)
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This plan has been prepared only for the purpose of obtaining preliminary subdivisional approval from the local authority and is subject to that approval.

All measurements and areas are subject to the final survey.

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Note:

If possible, the existing drainage easement 1.83m wide created by SP2726 will be moved via a sealed plan amendment to coincide with the boundary between Lots 2 and 3.



LOCATION PLAN

REV	AMENDMENTS	DRAWN	DATE	APPR.
E				
D				
C				
B	Lot numbers updated	MG	2-10-20	CBR
A	Extend R.O.W & Service Easement - Note added relating to existing easement	MF	4-8-2020	CBR



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OWNER: Peter William Simmonds & Judith Ann Simmonds
TITLE REFERENCE: C.T.172964/2
LOCATION: 8 SIMMONDS LANE
PRIMROSE SANDS

Proposed Subdivision

Date:	21-07-2020	Reference:	SIMMP06 9399-04
Scale:	1:500 (A3)	Municipality:	SORELL