



Monday, 11 May 2020

Ref: 302227\_L01\_Rev0

Devonport City Council  
PO Box 604  
Devonport TAS 7310

**Attention: The General Manager**

**Dear Sir**

**RE: Invitation to submit representation to the Draft Devonport Local Provisions Schedule**

This representation is made by Veris Australia Pty Ltd on behalf of William David Bovill in respect of land comprised in Folio Reference 9450/29 at 126 Brooke Street, East Devonport. Our client has instructed Veris to make a representation to the Draft Devonport Local Provisions Schedule, which are currently advertised for public comment, concerning the zoning of this land.

Mr Bovill has requested that consideration be given to amending the zoning of his land from Agriculture Zone to Rural Living Zone A. This request is based on Mr Bovill's opinion as an experienced farm operator that the site is too constrained to be used for agriculture and supported by an expert agricultural report declaring the land to be "*unviable for further agricultural development*". Please see below further information detailing the request:

**Site description**

The subject site is located on the eastern edge of the established residential area of East Devonport. It has an area of approx. 3.42ha and is currently zoned Rural Resource. It is within the Operational Airspace of Devonport Airport. The Landslip Hazard within the Devonport Interim Planning Scheme 2013 (see Figure 1) indicates low risk. The subject land is within the Sassafras Wesley Vale Irrigation District.

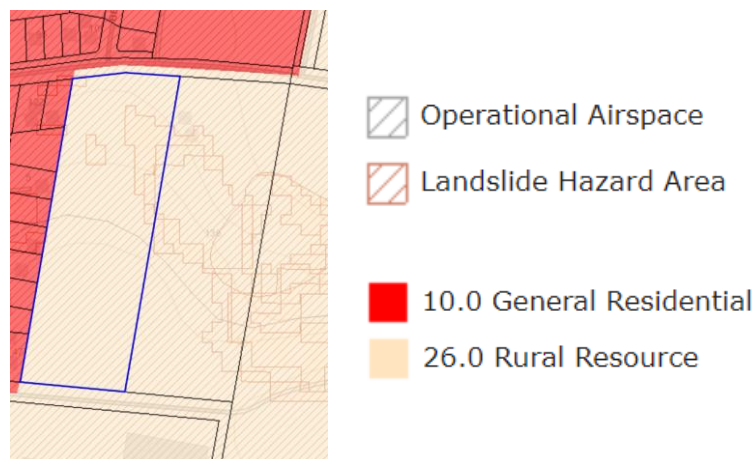


Figure 1: Site description (source: LIST)

The subject site is adjacent to residential zoned land to the north and west containing predominantly single

dwelling. The average lot size to the west is approximately 1,300m<sup>2</sup> and approximately 800m<sup>2</sup> to the north. The land to the east is zoned Rural Resource containing a single dwelling. That land is about 3.6ha and used as a hobby farm containing a residential use. The land to the south is also zoned Rural Resource containing Costa Berry farms under a long-term lease. The subject land has no common boundary with land used for commercial agriculture.

### Land Capability

The subject land consists of class 1,2 and 3 land which defines the land as Prime Agricultural land (see Figure 2).

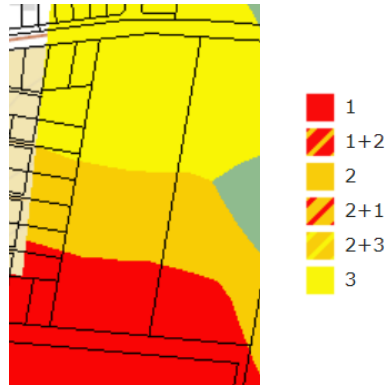


Figure 2: Land classification (source: LIST)

The “*Land Capability Handbook – Guidelines for the Classification of Land in Tasmania*” (Gross, 1999) identifies Class 1,2 and 3 land as:

#### CLASS 1

*“Land well suited to a wide range of intensive cropping and grazing activities. It occurs on flat land with deep, well drained soils, and in a climate that favours a wide variety of crops. While there are virtually no limitations to agricultural usage, reasonable management inputs need to be maintained to prevent degradation of the resource. Such inputs might include very minor soil conservation treatments, fertiliser inputs or occasional pasture phases. Class 1 land is highly productive and capable of being cropped eight to nine years out of ten in a rotation with pasture or equivalent without risk of damage to the soil resource or loss of production, during periods of average climatic conditions.”*

#### CLASS 2

*“Land suitable for a wide range of intensive cropping and grazing activities. Limitations to use are slight, and these can be readily overcome by management and minor conservation practices. However the level of inputs is greater, and the variety and/or number of crops that can be grown is marginally more restricted, than for Class 1 land.*

*This land is highly productive but there is an increased risk of damage to the soil resource or of yield loss. The land can be cropped five to eight years out of ten in a rotation with pasture or equivalent during ‘normal’ years, if reasonable management inputs are maintained.”*

#### CLASS 3

*“Land suitable for cropping and intensive grazing. Moderate levels of limitation restrict the choice of crops or reduce productivity in relation to Class 1 or Class 2 land. Soil conservation practices and sound management are needed to overcome the moderate limitations to cropping use.*

*Land is moderately productive, requiring a higher level of inputs than Classes 1 and 2. Limitations either restrict the range of crops that can be grown or the risk of damage to the soil resource is such that cropping should be confined to three to five years out of ten in a rotation with pasture or equivalent during normal years.”*

The Land Capability mapping is based on the permanent biophysical features of the land (including climate), and does not consider the economics of agricultural production.<sup>1</sup>

<sup>1</sup> Land Capability Handbook, Second Edition, (CJ Grose, 1999)

## Draft Devonport LPS

### Methodology

The State Planning Provisions (SPPs) include two standardised zones for the management of rural and agricultural areas – the Rural Zone and the Agricultural Zone. These zones have been created as a result of a recalibration of the existing Rural Resource Zone and Significant Agriculture Zone; however, the latter has not been used within the Devonport Interim Planning Scheme 2013.

The Rural Resource Zone currently applied within the Devonport Interim Planning Scheme 2013 has been broadly applied to describe a diverse range of rural locations from areas of fertile agricultural soils through to areas with very limited potential for agricultural use.

The State Government has produced a guiding mapping layer published on the Land Information System Tasmania (LIST) database based on the results of the Agricultural Land Mapping Project. The Mapping Project included a constraint analysis to recognise existing limitations such as size, existing capital value, and proximity to residential use and development.

The subject site has been identified as potentially constraint (Criteria 3) as shown in Figure 3 below.

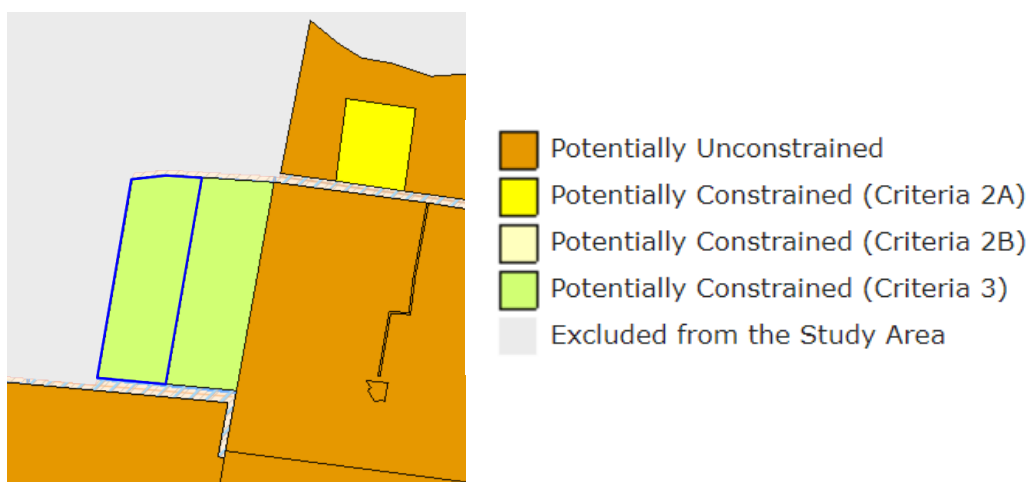


Figure 3: Land Potentially Suitable for Agricultural Zone (source: LIST)

### Proposed Zone and Codes

The Draft Devonport LPS zoning map proposes to zone the subject land to zoned Agricultural.

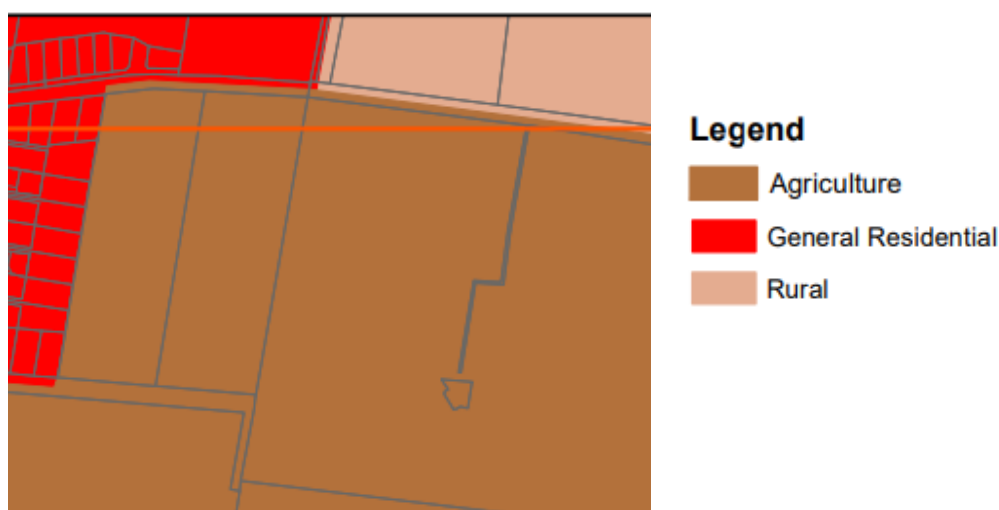


Figure 4: Tasmanian Planning Scheme - Devonport Local Provisions Schedule: Zone

## Zone Purpose

### Agriculture Zone – Tasmanian Planning Scheme

- To provide for use or development of land for agricultural use.
- To protect land for the use or development of agricultural use by minimising:
  - a) Conflict with or interference from non-agricultural uses;
  - b) Non-agricultural use or development that precludes the return of the land to agricultural use; and
  - c) use of land for non-agricultural use in irrigation districts.
- To provide for use or development that supports the use of the land for agricultural use.

The supporting report does not provide any further information why the subject site was proposed to be zoned Agriculture Zone despite the identification of being potentially constrained.

The Draft Devonport LPS further proposes two overlays that affect the subject land:

- Bushfire-Prone Areas Code Overlay
- Airport Obstacle Limitation Area Overlay

Both proposed overlays are consistent with the currently applying overlays.

### **Request amendment to Draft Devonport LPS**

The supporting report of Devonport City Council draft Local Area Provisions Schedule states that *“whilst the majority land currently zoned Rural Resource under the Interim Scheme will transition to the Agriculture Zone (in line with the mapping layer published on the LIST) the draft LPS does propose the assignment of some areas to an alternative zone such as Rural or Rural Living where there are existing factors that significantly constrain the use of such land for agricultural purposes.”*<sup>2</sup>

The owner of the land has engaged Symon Jones, a Farm Business Consultant and member of the Australian Institute of Agricultural Science and Technology to prepare an agricultural report considering economic features for agricultural production of the site.

The report states that although it is classed as prime agricultural land and is situated within an irrigation district; it has limited agricultural value. The land has significant physical constraints which restrict its agricultural use and potential. The land is further restricted in its contribution to productive agriculture due to a lack of irrigation water. Due to its constraints it is considered *“unviable for further agricultural development”*.

The report concludes that *“The proposal for rezoning would provide a more appropriate transition between the existing and adjoining general residential zone and potential Rural Resource uses on adjoining properties.”*<sup>3</sup>

The Purpose of the Rural Living Zone is (Tasmanian Planning Scheme)

- To provide for residential use or development in a rural setting where:
  - a) services are limited; or
  - b) existing natural and landscape values are to be retained.
- To provide for compatible agricultural use and development that does not adversely impact on residential amenity.
- To provide for other use or development that does not cause an unreasonable loss of amenity, through noise, scale, intensity, traffic generation and movement, or other off site impacts.
- To provide for Visitor Accommodation that is compatible with residential character.

---

<sup>2</sup> Draft Devonport Local Provisions Schedule – Supporting Report, February 2020 page 10

<sup>3</sup> Agricultural Report by Symon Jones, 16/4/2020



The subject site is approx. 110m wide (east – west). The Agriculture Zone requires a setback to buildings for sensitive uses (e.g. residential) of 200m. This setback cannot be achieved which emphasises the existing constraint of the subject site for agricultural purposes.

#### Strategic consideration - Cradle Coast Regional Land Use Planning Framework 2010 – 2030 (2011)

The purpose of the Cradle Coast Land Use Planning Framework is to provide strategic foundation for land use planning in the Cradle Coast Region of Tasmania.

The Framework acknowledges the importance of agricultural land and proposes that all agricultural land is recognised as significant independent of size and ownership. The Framework aims to exclude use or development that has no need or reason to be located on agricultural land. (p.44)

However, the Framework also states that the planning processes recognise the importance of clean air to climatic and biological health and buffer development with potential to create adverse effect by nuisance and pollutant emissions from settlement areas. (p131).

Further, planning processes shall protect and buffer agriculture against incompatible use which may conflict and constraint potential sustainable production. Land significant for agriculture is not excluded from agricultural use unless the impact on loss of land for agricultural use and on adjoining agricultural use is minimal. (p.138/139)

The attached agricultural report supports the requested amendment by identifying the subject site as “*unviable for further agricultural development*”. The report also concludes that a potential rural residential development of the subject site is unlikely to place any further constraints on the nearby land but in fact would provide a buffer between the existing residential settlement and the agricultural land. In support of the Cradle Coast Regional Land Use Planning Framework the land to be “lost” for agricultural use is considered to have minimal impact. It furthermore allows for a buffer to minimise the potential effects by nuisance and pollutant from an agricultural use on the residential uses but also from the residential use on future agricultural use.

Based on the above Mr. Bovill requests to consider amending the zoning of the subject title to Rural Living Zone A to allow for future rural residential development to provide a buffer zone to the Agriculture Zone and the General Residential Zone. The request is supported by an agricultural report as well as a potential subdivision design accompanied by a bushfire report to illustrate potential future development opportunities for the site.

This representation has been commissioned by Mr. William David Bovill. All attached documents have been provided by him.

If you have any queries, please do not hesitate to contact our office.


Yours sincerely



Jana Rockliff








**TASMANIAN CONSULTING SERVICE**  
ENGINEERING | DESIGN | PLANNING | MANAGEMENT | CONSTRUCTION  
74 Oldaker Street, Devonport  
PO Box 1047, Devonport,  
Tasmania, Australia

Issue:	Date:	Description:	Checked	Approved
P1	17-05-19	Preliminary Issue for Internal Review ONLY	S.P.A.	S.P.A.
P	17-07-19	Issued for Client Review		



This document is and shall remain the property of Tasmanian Consulting Service (TCS).  
It shall be used only for the purpose for which it was commissioned, and only in accordance with the terms of that commission between TCS and their client.  
It shall not be copied, reproduced, or used to furnish any information for any reason without the prior agreement of TCS.  
Do not scale. Check all dimensions before commencing on-site. If in doubt, ask...

A3 Scale 1:500

William David Bovill (Owner)  
Land Comprising CT 9450 / 29  
246 Brooke Street, East Devonport  
Subdivision

SITE PLAN; EXISTING

NOT FOR CONSTRUCTION

Drawing:  
**8917-001**

Issue: P2










- Lot 1: Setback Envelope: 2,631m<sup>2</sup>  
Building Area: 1,000m<sup>2</sup>  
(32.0m x 31.25m)
- Lot 2: Setback Envelope: 2,703m<sup>2</sup>  
Building Area: 1,000m<sup>2</sup>  
(26.3m x 38.0m)
- Lot 3: Setback Envelope: 7,325m<sup>2</sup>  
Building Area: 1,000m<sup>2</sup>  
(40.0m x 25.0m)
- Lot 4: Setback Envelope: 6,104m<sup>2</sup>  
Building Area: 1,000m<sup>2</sup>  
(40.0m x 25.0m)



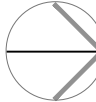




**TASMANIAN CONSULTING SERVICE**  
ENGINEERING | DESIGN | PLANNING | MANAGEMENT | CONSTRUCTION  
74 Oldaker Street, Devonport  
PO Box 1047, Devonport,  
Tasmania, Australia

T 61 3 6424 9085  
F 61 3 6424 5709  
E mail@tascon.com.au

Issue:	Date:	Description:	Checked:	Approved:
P1	17-05-19	Preliminary Issue for Internal Review ONLY	S.P.A.	S.P.A.
P	17-07-19	Issued for Client Review		



This document is and shall remain the property of Tasmanian Consulting Service (TCS).  
It shall be used only for the purpose for which it was commissioned, and only in accordance with the terms of that commission between TCS and their client.  
It shall not be copied, reproduced, or used to furnish any information for any reason without the prior agreement of TCS.  
Do not scale. Check all dimensions before commencing on-site. If in doubt, ask...

A3 Scale 1:500

Datum:

**William David Bovill (Owner)**  
**Land Comprising CT 9450 / 29**  
**246 Brooke Street, East Devonport**  
**Subdivision**

**SETOUT OF BUILDING AREAS**  
**NOT FOR CONSTRUCTION**

Drawing:  
**8917-004**  
Issue: P2



# **Agricultural Report**

## **Rezoning of Title to Enable Future Development**

**Property:**

**126 Brooke Street  
East Devonport  
Tasmania 7310**

**16/4/2020**

**Prepared by:**

**Symon Jones  
Farm Business Consulting  
[sylofive@gmail.com](mailto:sylofive@gmail.com)  
0409012366**

## Contents

1. Executive Summary.....	3
2. Preamble .....	4
3. Terms of reference (TOR).....	4
4. Scope.....	4
5. Property Description .....	5
5.1. Locality .....	6
6. Land Capabilty Classification.....	7
7. Surrounding Land Use.....	9
7.2. Value adding and economic contribution.....	9
8. Climate .....	10
9. Irrigation Feasibility .....	11
10. Conclusions .....	13
References .....	14
Attachment A - CV.....	15

## 1. Executive Summary

The agricultural report draws attention to the fact that while the land known as 126 Brook street is classed as prime agricultural land and situated in an irrigation district, it has limited agricultural value.

The report identifies the land as having significant physical constraints which restrict its agricultural use and potential.

The land area estimated at 3.42 hectares limits any agricultural activity of a commercial size and scale and any proposal to intensively farm the area would be compromised by its proximity to the adjacent neighbouring residents situated off Bovill Street and the recent subdivision activity to the north known as Driftwood Sands causing potential disruption to the residential amenity.

The land is further restricted in its contribution to productive agriculture due to a lack of irrigation water, the uncertainty of irrigation water being available, the cost of purchasing water and the significant cost of developing irrigation infrastructure to deliver water on site.

Furthermore, as the land is situated between a residential area, small hobby scale land and a commercial berry enterprise it has no connectivity to other agricultural land of significant value and therefore is considered unviable for further agricultural development.

The report identifies a pattern of residential development within immediate proximity to the land and as there is no natural buffer between the existing residential zoning and the rural resource zoning on the site, rezoning the land to rural living would seem a more appropriate buffer providing for lifestyle development lots.

The proposal for rezoning would provide a more appropriate transition between the existing and adjoining general residential zone and potential Rural Resource uses on adjoining properties.



## 2. Preamble

I am an agricultural farm business consultant holding an Associate Diploma in animal production and management from Hawkesbury Agricultural College and a member of the Australian Institute of Agricultural. (Trading as The Australian Institute of Agricultural Science and Technology.) I have been providing farm business and general agricultural advice for over 10 years as a consultant. Previously working with Davey and Maynard and Macquarie Franklin.

I have developed agricultural reports for Deloitte, Seller Muldoon Benton, Melbourne, National Australia Bank, Farm Household Allowance Scheme, and the Department of State Growth.

## 3. Terms of reference (TOR)

To develop an agricultural report as requested by Mr WD Bovill for the purpose of making an application to the Tasmanian Planning Commission to rezone a parcel of land known as 126 Brooke Street East Devonport from *Rural Resource* to *Rural Living* for the purpose of future residential development. **Client:** WD Bovill, East Devonport

**Property:** 126 Brooke Street, East Devonport. Zoning: Rural Resource (3.42 ha)

**Identification:** PID 3149 4341 CT 9450/29

**Proposal:** Rezoning of title to enable future development.

**Land Capability:** Assessed land capability: Class 1 (0.85) Class 2 (1.09) Class 3 (1.71) (*indictive areas*)

### Assessment Comments:

A field inspection and desktop study has been undertaken to confirm the findings in support of an application for rezoning. This report summarises those findings

## 4. Scope

The scope of the agricultural report is to

- provide information to support the terms of reference,
- provide a description of the property, its location, current use and value within the existing farming business, and
- identify key characteristics of the land and the surrounding area that currently restrict its use and viability as productive agricultural land, and which make it suitable for repurposing to rural living.

## 5. Property Description

126 Brooke Street is a vacant area of prime agricultural land zoned rural resource, comprising approximately 3.42 hectares (8.4 acres) situated on the edge of the East Devonport municipality.

\*Property Identification Number - PID 349 4341 and Title Reference 9450/29

The land has a northerly aspect and is situated between Brooke Street to the North, Upper Drew Street to the South, Bovill Street to the West and a neighbouring property to the East. There is no common boundary with any commercial farming property.

As a result, the Brooke Street property is isolated by its boundaries and restricted by its size. This limits any agricultural enterprise of significant scale. Therefore, it is not considered subservient to the main farming property.

The western boundary *Figure 1*, backs onto a developed residential area restricting intensive agricultural activities such as intensive crop management, the use of pesticides and herbicides, noise due to crop management and associated crop husbandry by way of pollution, dust and afterhours traffic.

**Figure 1:**



**Western Boundary  
Shared/ Residential**

**Figure 2:**



**North facing  
New subdivision**

**Figure 3:**



**Eastern Boundary  
Shared Neighbour**

**Figure 4:**



**Southern Boundary  
Costa Berries**

The North facing boundary *Figure 2*, is situated directly opposite a recently developed subdivision providing for further low-density housing within proximity to the land. The development imposes constraints on the type of agricultural enterprise which can be reasonably farmed without causing impact to those residents.

The east boundary is shared with a neighbour separating any larger scale farming land. (See *Figure 3*).

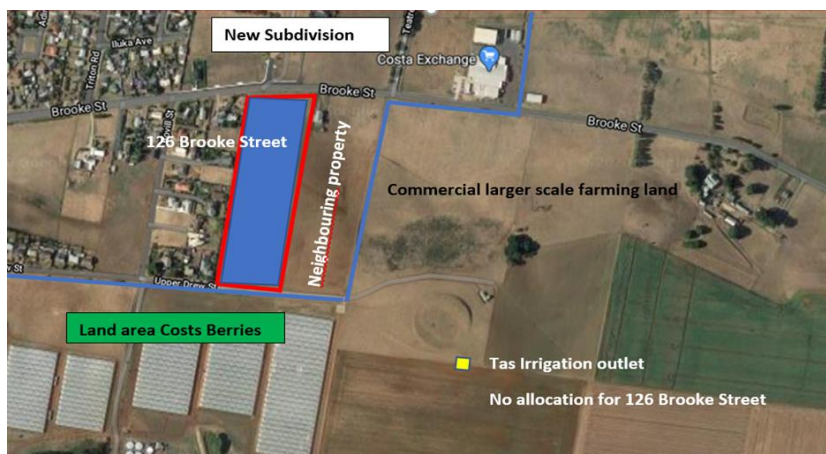
The land is used for hobby farm purposes and provides a buffer between a larger farming property and the proposed development.

All land to the south off Drew Street, is under long term lease to the Costa Berry Exchange, *Figure 4*, for which careful consideration is required when planning agricultural activities on the Brooke Street land to prevent negative impact on the sensitive and high value berry enterprise (See *figure 5*).

**Figure 5:** Map showing key land usage around 126 Brooke Street land area.



**Figure 6:** Map showing 126 Brooke Street land in relation to the surrounding area



#### Legend

- █ Boundary around 126 Brooke Street
- █ Area 126 Brooke Street
- █ Tas Irrigation outlet (no Allocation for Brooke Street)
- █ Costa Berries land

### 5.1. Locality

The greater population of Devonport at June 2018 is estimated at around 30,297 having grown at an average annual rate of 0.17% year on year over the preceding five years. Therefore, future growth in the surrounding areas is likely to continue at the current rate.

East Devonport is part of the greater Devonport municipality and has a population estimate of 4,802 people (2016 ABS Census). Its main industries are 10.9% manufacturing, 11.0% Retail trade, 13.7% health and social assistance, 8.3% accommodation and food services, 8.7% transport, postal and warehousing, 7.3% construction, 3.7% education and training, 1.9% wholesale trade, 2.6% administration and support services. (2016 ABS Census). *Figure 7* highlights the planning zones in the East Devonport area.

Recent developments include the 7.1 million Costa Berry exchange and the Piping Lane or Bellfields industrial site subdivision.

**Figure 7: Planning Scheme Zones** (*Devonport Interim planning scheme 2013 List Maps*)



## 6. Land Capability Classification

The land backs on to a general residential area and is zoned rural resource, situated in an irrigation district area; however, it has no access to irrigation water and therefore can only be used for low intensity purposes. This is despite its land capability classification described as prime agricultural land, (See Figure 7)

Prime Agricultural land is defined as being agricultural land classified as Class 1,2 or 3 land, based on the definitions and methodology from the *Land Capability Handbook*, Second Edition, (CJ Grose, 1999).

*“Land capability assessment considers the physical nature of the land (e.g. geology, soils, slope) plus other factors (e.g. climate, erosion hazard, land management practices) which determine how that land can be used without destroying its long-term potential for sustainable agricultural production. It also considers limitations that might affect agricultural use, e.g. stoniness, drainage, salinity or flooding. Land capability assessment is therefore based on the permanent biophysical features of the land (including climate), and does not consider the economics of agricultural production,*

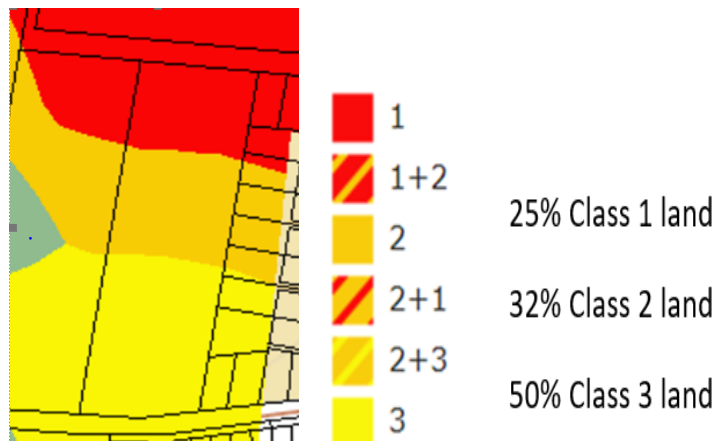
*Land capability can be interpretive and subjective. Land capability assessment should not be confused with land suitability assessment which, in addition to the biophysical features, may take into account economic, social and/or political factors in evaluating the 'best' use of a particular type of land”*

*(ref: Land Capability Handbook CJ Grose 1999 DPIWE)*

The classification system comprises seven classes of land ranked in order of increasing degree of limitation in relation to agricultural use and decreasing order of versatility. Class 1 is the best land and Class 7 the poorest. *Figures 8 and 9* highlight the Land Classification and definition criteria within the surrounding region.



**Figure 8:**  
**126 Brooke Street Land Capability Classification.**  
*(List maps land capability)*



The land is diverse in terms of soil classification, in that it is not all Class 1 land, which moderately limits or complicates its agricultural potential, in addition to being such a small area restricting enterprise scale. In addition, the existing residential development off Brooke and Bovill Streets encroaches onto the same land of the same capability and classification. *Figure 8*

The soil for Class 1 and 2 is described as a deep Red Ferrosol soil derived from parent basalt material, which is typically free draining with well-developed soil structure and a soil depth of around 80cm.

However, the area is dominated by Class 3 Red Ferrosol soil and whilst it shares similar soil characteristics as the Class 1 and Class 2 soils, the area is compromised by the slope of the land and potential for increased runoff, erosion and soil compaction leading to a shorter growing season (see *Figure 10*)

**Figure 10:** Contour lines of land. Photo depicts contour lines at 5 metre intervals and relative slope.  
*(list maps)*



**Figure 9:**  
**Coastal land classification criteria.**  
**Geology and Risk**  
*(Source – CJ Grose DPIWE)*

Typical Landform	Moderately steep to gently undulating ridge tops and associated valley sides
Geology	Tertiary basalt and sediments (Wesley Vale sands)
Soil Type	Red ferrosols on basalts and kurosolis and dermosols on Wesley Vale sediments; occasional podosols
Slope Range	0-18%
Drainage Status	Well
Permeability	Mod - high
Erosion risk	Low on basalt, mod-high on Wesley Vale Sediments.
Main Limitations	Water erosion especially under irrigation; wind erosion on sandy soils
Land Capability Classes	1,2,3

As described in *figure 11*, the red shaded area represents around 25% or 0.85 of a hectare of Class 1 land. The orange shaded area around 32% or 1.09 hectares of Class 2 land and 50% or 1.71 hectares as Class 3.

*Note: A pit soil analysis was undertaken. The features observed, identified the structure and characteristics typical of a true red ferrosol soil, was consistent with mapped data.*

The land is typical of the coastal region as described in *Figure 9*, showing land characteristics with inherent limitations and risk. Due to the degree of slope, intensive cropping will expose the land to erosion and loss of topsoil under heavy rainfall.

## 7. Surrounding Land Use

The surrounding farmland comprises predominately Class 3 and Class 4 agricultural land and is a long-established mixed farming operation.

**Figure 11:** Surrounding Land capability and Classification (enterprise suitability) (*list maps land capability*)



The land is most suited to livestock production and includes sheep and beef breeding and fattening enterprises.

With respect to the Brooke Street land, in relation to other commercial farmed land, direct access is restricted by neighbouring land. As such, the lack of direct access and lack of irrigation water makes the land less significant and valuable.

### 7.2. Value adding and economic contribution

Due to the lack of irrigation water, its relatively small size, and lack of direct access, the performance of the land in terms of its economic contribution to any farming business is significantly compromised.

The land is currently renovated and sown to new pasture, managed and maintained with grazing livestock. However, its economic productivity is poor.

The economic yield of the land is determined by pasture production influenced by seasonal climate conditions and stocking rate, also influenced by class and type of livestock and access to infrastructure.

The area of land comprising 3.42 hectares is restrictive by size but also restricted by access to available water. Therefore, the number of grazing days and subsequent livestock production is limited. Potential yield can be determined from Dairy Australia's National Dairy RDE Strategy, under

the Feed Base and Animal Nutrition program of 1 tonne of pasture dry matter consumed per 100 mm of rainfall being achievable. Adapting this strategy for beef and or sheep, an aspirational target yield in a rainfall climate of 760 mm would assume an achievable pasture target of 7.6 tonne of dry matter per hectare or a total of 26 tonne of dry matter.

To capture its rate of return using a cow/calf enterprise example, one would assume a pasture intake at 3% of body weight per day for a 550 kg cow, over the production year 365 days. One cow would consume around 6 tonne of pasture dry matter. With a theoretical stocking rate of 1.26 cows per hectare, the maintenance of 4.3 cows in total on this land would seem unviable in terms of operational scale and rate of return.

Whilst it is acknowledged that some crops could be grown without irrigation water, yields would be significantly reduced or even unviable. Irrigation extends the length of the growing season well into the summer months and at times allows the growing of more than one crop a season in some areas.

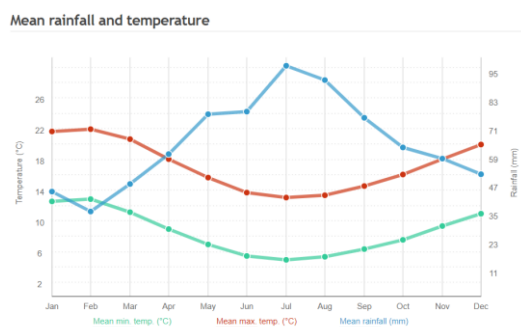
*Note: Irrigation water required for the Brooke Street land is estimated at around 5 megalitres per hectare or a total of 17 megalitres based on climate data and the crop factor of the crop.*

## 8. Climate

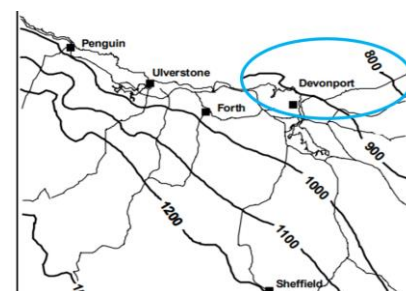
Whilst the climate is described as temperate maritime with drier summers and cool, mild wetter winters, irrigation is considered essential to achieve economic and reliable productivity. This is a reflection on the seasonal distribution of precipitation rather than the lack of rainfall throughout the region.

Rainfall is estimated at around 760 mm (Figures 12,13,14). Yearly totals vary due to seasonal climate variability. Precipitation in the area is winter dominant with around 25% of annual rainfall falling during the months of July and August, January through to March is the driest period with around 15% of annual rainfall.

**Figure 12:** Mean rainfall & Temperature



**Figure 13:** Rainfall mm/annum  
Simplified rainfall isohyet diagram from the Forth survey area



**Figure 14:** Mean Rainfall chart (Bureau of Meteorology)

Rainfall														
Mean rainfall (mm)	42.6	36.1	48.7	59.1	75.2	78.3	97.0	89.5	74.3	61.1	56.8	52.3	764.5	1962 2020
Decile 5 (median) rainfall (mm)	34.9	31.3	40.2	49.0	67.4	72.2	89.3	81.7	76.4	59.4	57.6	47.0	758.4	1962 2020
Mean number of days of rain ≥ 1 mm	4.8	4.3	5.5	7.1	9.0	9.5	11.9	11.7	10.0	8.1	7.2	6.3	95.4	1962 2020

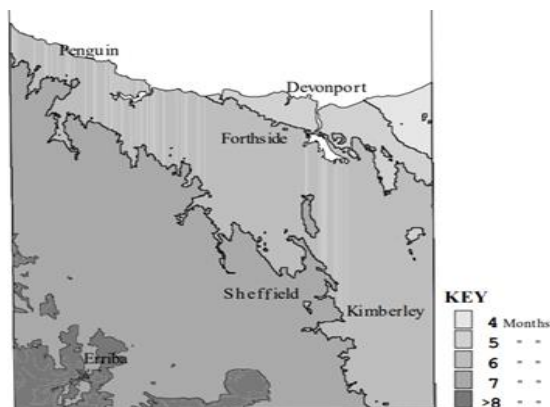
## Evaporation

Where rainfall totals may seem adequate, using evaporation as a measure, ESOCLIM data shows that there are only 5 months of the year where rainfall exceeds evaporation for the Devonport East Devonport area. *Figure 15*

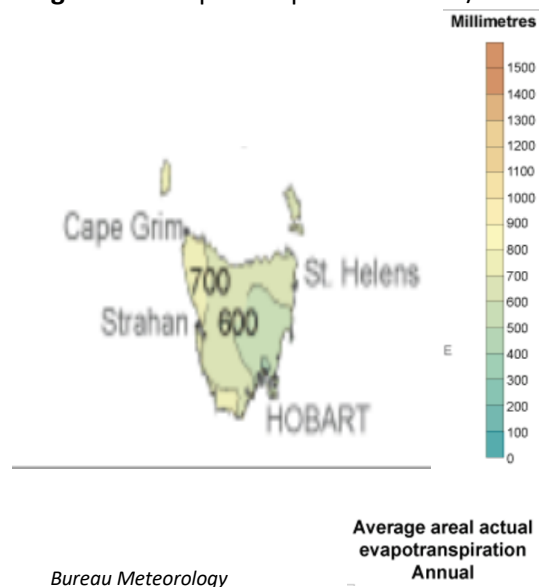
**Evapotranspiration** is the added water lost through evaporation and plant transpiration and significantly impacts pasture and crop production and must be replaced through irrigation to meet crop requirements.

Bureau of meteorology data shows evapotranspiration, average estimated losses of 700 mm for the Devonport area, almost the equivalent of rainfall received for the year, creating a water deficit over the summer period. *Figure 16.*

**Figure 15:** Number of months that rainfall exceeds evaporation across the Forth survey area (as calculated from ESOCLIM data) (*Forth weather station/ DPIWE land capability*)



**Figure 16:** Evapotranspiration in mm/annum

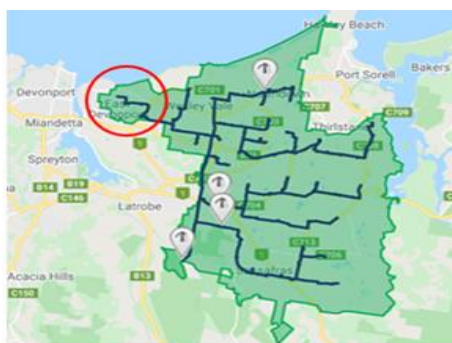


## 9. Irrigation Feasibility

The Sassafras Wesley Vale Irrigation Scheme commenced operations during the 2011 -12 irrigation season to address irrigation water deficits. It delivers 5,460 megalitres of water to the townships of Sassafras, Harford, Thirlstane, Moriarty, Wesley Vale, Pardoe and East Devonport. The scheme was fully subscribed meaning there is no additional water available. (*see Figure 17*).



**Figure 17: Sassafras/Wesley Vale Irrigation Scheme** (Source Tasmanian irrigation)



The Brooke Street land has no irrigation services and therefore significant capital investment is required to install necessary infrastructure to deliver water to the land. A plan of the capital development to achieve an irrigation service is shown in Figure 18 and a breakdown of estimated capital development cost is shown in Table 1.

The closest Tasmanian Irrigation outlet is 350 meters from the Brooke Street land and currently delivers in excess of 80 Megalitres to the Costa Berry facility as shown in Figure 19.

**Figure 18: Irrigation development Plan**  
(Showing indicative pipe work and storage)



**Figure 19: TI Irrigation outlet ( Costa)**



Additional water delivery capacity from this outlet is unavailable.

A tranche three Sassafras Wesley Vale Irrigation Scheme upgrade is proposed with an indicative capital cost of water expected to sell for \$1390 - \$1450 per megalitre. However, obtaining water from the tranche 3 upgrade is unknown at this stage. Regardless, it is not the intention from the landowner to apply for water as the development cost, and financial returns are not deemed to be feasible.

17 Megalitres would be required for the site plus additional delivery hardware with an estimated capital cost of at \$100,000 or \$30,000 /hectare. This would appear to be unsustainable.

**Table 1: Estimated breakdown of Irrigation Capital Investment**

Capital Investment	Unit cost	No of Units	Cost
TI Irrigation Water	\$1,450	17	\$24,650
Underground Pipe	\$90	60	\$5,400
Trenching and installation	\$9	350	\$3,150
Pump Installation/shed	1	12,000	\$12,000
Holding Dam 40*30*5	1	30,000	\$30,000
Hydro /Wiring	1	25,000	\$25,000
<b>Estimated Total Capital Investment</b>			<b>\$100,200</b>

## 10. Conclusions

The loss of approximately 3.4 hectares of prime agricultural land to rural living on this title is considered to have little effect on the surrounding agricultural area. Its physical limitations such as size and location significantly limit its agricultural potential.

The title of the land is geographically constrained by the adjacent residential zones, and the house and land to the east and therefore it has no connectivity to other agricultural land of commercial scale, or the area currently farmed by Costs Berries to the south.

Whilst the land classification and capability study identify the characteristics of the Brooke Street land as being prime agricultural land, there are significant questions relating to its commercial suitability and viability as prime agricultural land due to lack of irrigation water, infrastructure, the cost benefit of securing the water and infrastructure, land area and proximity to the adjacent residential areas. Furthermore, while the land is currently used for some grazing activity any type of activity associated with irrigated intensive cropping has potential to affect the residential amenity causing greater concern or conflict for residents. Indeed, any proposed buffer or setback which would reduce the impact of dust or spray drift would severely compromise the already small area of available farming land.

Therefore, rezoning of the land is unlikely to place any further constraints on the nearby land. It is also unlikely that this title would be attractive for farming in conjunction with other holdings.

Finally, Principle 3 of the State Policy on the Protection of Agricultural land 2009 states the following: *'Agricultural land is a valuable resource and its use for the sustainable development of agriculture should not be unreasonably confined or restrained by non-agricultural use or development'*.

As described in the report the observations have identified existing unintentional restraints through urban development and natural physical limitations. The land is not subservient to the existing farming land surrounding it and therefore any development should not impact on the same surrounding agricultural land due to the natural buffer of the neighbouring small allotment and the pre-existing residential boundaries.

## References

DPIWE (2009) Cadastre Parcels Dataset. Tas Map Department of Primary Industries, Parks Ware and Environment.

List Maps Tasmania Interim Planning scheme 2013

Grose, C. J., (1999). Land Capability Handbook: Guidelines for the Classification of Agricultural Land in Tasmania (Second Edition). Tasmania Australia. Department of Primary Industries water and Environment.

Tasmanian Irrigation

State policy on the Protection of Agricultural Land 2009

## Attachment A - CV



### Position:

- Farm Business Consultant

### Qualifications:

- Ass Dip Animal Production
- Cert 1V Farming

### Area of Expertise:

- Dairy and Beef farm management
- Receivership and transitional farm management
- Farm business budgets and advice.
- Farm design and development
- Feed budgeting
- Stock management
- Pasture coaching
- Milk quality management

### Contact Details:

M: 0409 012 366

0418 676 089

[sylofive@gmail.com](mailto:sylofive@gmail.com)

Symon Jones

### *Symon Jones Farm Business Consulting*

1 beach Street

Leith

TASMANIA 7315

ABN 36 599 299 487

Email [sylofive@gmail.com](mailto:sylofive@gmail.com)

### INTRODUCTION

Symon has pursued a 30-year professional career within the rural industry with an initial primary focus in the dairy industry. He combines his wide range of practical skills with specialist training undertaken at the Hawkesbury Agricultural College (NSW).

Symon practices as an independent Agri business consultant, having a current engagement with Rogers Reidy Hobart and with the Institute of Agriculture as a Senior Dairy Development and Extension officer. Symon recently owned and operated a 500 cow dairy operation on the North West Coast of Tasmania and has been recognised for his efforts as a nominee, finalist and winner of the Tasmanian Dairy Business Awards.

Symon is an experienced farm business and grazing management consultant working with both dairy and beef clients throughout Tasmania. He has assisted in the management of a number of dairy, prime lamb and cropping operations including some larger scale dairy farms owned by a large investment group.

Symon has successfully managed a number of dairy, beef and cropping farms through the receivership process by providing farm business advice, strategic planning and day to day operational management and has developed a strong network of farmer and agribusiness professionals across both Tasmania and Victoria to assist him in this role.

During his career, Symon has also provided assistance to other practicing dairy farmers in his role as a pasture coach and mentor within the Department of Primary industry, Parks, Water and Environment (DPIWE) for the 20/12 and Pasture Plus extension programs.

Symon is former farmer, director, and Chairman of the Dairy Tasmania Board and the Tasmanian regional farmer delegate on the Fonterra Australia Supplier Forum.

## PROFESSIONAL EXPERIENCE.

2015- 2020 Independent Consultant farm business management for Rogers Reidy, Hobart

Deloitte Launceston/Hobart, Tasmanian Institute of Agriculture.

Farm business applications Department of State Growth and Development.

2015: Six-year appointment as Farmer Director and Chairman of the Dairy Tasmania board.

2015: Four-year appointment as Fonterra Australia Supplier forum delegate

2015: Management Barrington dairy/cropping property Receivers as mortgagee in Possession.

2014: Receiver Management - Mackay Rural dairy, Dairy Plains

2014: Receiver management, Tomahawk Dairy, Colac Western Victoria.

2013: Receiver management, White Water Dairy Smithton, Tas

2012: Receiver management, Blackwood Park Westbury, Tas

2012: Receiver management, Skerritt Dairy Campbell Town, Tas

2011: Receiver management, Keroo Dairies Smithton, Tas

2011 – 2013: Consultant - Macquarie Franklin (agribusiness)

2007-2011: Consultant - Davey & Maynard (agribusiness)

2005 – 2007: Pasture Coach - DPIWE

2002 – 2005: Companion Focus farm participant - DPIWE

2004 – 2005: Pasture Plus working group chairman

2001: Field Officer, Vegetables - Forth Farm Produce

1999: Productivity Specialist, Fertiliser - Incitec Pivot

1996: Marcus Oldham Rural Leadership Course participant

1993: Present: Owner/operator dairy business

1992: US Dairy Tour Minnesota

1990: Share farming - Circular Head



## Environmental Service and Design Pty Ltd

ABN 97 107 517 144 ACN 107 517 144

### Office

74-80 Minna Road  
Heybridge TAS 7316  
Phone : (03) 6431 2999  
Fax: (03) 6431 2933  
[www.esandd.com.au](http://www.esandd.com.au)

### Postal

PO Box 651  
Burnie TAS 7320

# Bushfire Hazard Management Report

**246 Brooke Street EAST DEVONPORT**



Applicant:

**William David Bovill  
246 Brooke Street  
EAST DEVONPORT TAS 7310**

Prepared by:

Bruce Harpley  
Environmental Service and Design Pty Ltd  
Version 1: 5 December 2019

Contact Phone Number:

0429 355 259

E- Mail:

[bharpley@esandd.com.au](mailto:bharpley@esandd.com.au)

## Table of Contents

Certificate under s51(2)(d) <i>Land Use Planning and Approvals Act 1993</i>	3-7
Scope of Assessors Accreditation	8
Disclaimer	8
Re-Certification – Ability to Re-Evaluate	8
 <u>Section 1</u>	
Introduction	9
 <u>Section 2</u>	
2.1 Property Details	9
2.2 Surrounding land use	9
2.3 Vegetation	10
2.4 Topography	11
2.5 Access	12
2.6 Water Supply	13-14
 <u>Section 3</u>	
3.0 Site Assessment	14-16
3.1 Fire Danger Index	16
3.2 BAL Assessment	17-20
3.3 Risk Assessment	21
3.4 Conclusion	21
 <u>Section 4</u>	
Bushfire Hazard Management Plan	22-29
Attachment A – Bushfire Hazard Area Plan	23
Attachment B – Hazard Management Plan – Specification	24
Attachment C – Proposed Subdivision Plan	25
Attachment D – Table E2 – Standards for Property Access	26
Attachment E – Table E5 – Static Water Supply for Fire Fighting	27-29



---

## CODE E1 – BUSHFIRE-PRONE AREAS CODE

### CERTIFICATE<sup>1</sup> UNDER S51(2)(d) *LAND USE PLANNING AND APPROVALS ACT 1993*

---

#### 1. Land to which certificate applies<sup>2</sup>

*Land that is the Use or Development Site that is relied upon for bushfire hazard management or protection.*

Name of planning scheme or instrument:

Devonport Interim Planning Scheme 2013

Street address:

246 Brooke Street East Devonport

Certificate of Title / PID:

9450/29

*Land that is not the Use or Development Site that is relied upon for bushfire hazard management or protection.*

Street address:

N/A

Certificate of Title / PID:

#### 2. Proposed Use or Development

Description of Use or Development:

(Provide a brief description of the proposed use or development; including details of scale, siting and context.)

4 lot subdivision

---

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

<sup>2</sup> If the certificate relates to bushfire management or protection measures that rely on land that is not in the same lot as the site for the use or development described, the details of all of the applicable land must be provided.



### Code Clauses<sup>3</sup>:

☐ E1.4 Exempt Development

☐ E1.5.1 Vulnerable Use

☐ E1.5.2 Hazardous Use

☒ E1.6.1 Subdivision

### 3. Documents relied upon<sup>4</sup>

#### Documents, Plans and/or Specifications

Title: Rezoning and Subdivision – Proposal Site Plan

Author: Tasmanian Consulting Service

Date: 10 October 2019 Version: P3

#### Bushfire Hazard Report

Title: Bushfire Hazard Management Report

Author: Bruce Harpley

Date: 5 December 2019 Version: 1

#### Bushfire Hazard Management Plan

Title: Bushfire Hazard Management Plan and Specification

Author: Bruce Harpley

Date: 5 December 2019 Version: 1

#### Other Documents

Title: N/A

Author:

<sup>3</sup> Indicate by placing X in the corresponding ☐ for the relevant clauses of E1.0 Bushfire-prone Areas Code.

<sup>4</sup> List each document that is provided or relied upon to describe the use or development, or to assess and manage risk from bushfire. Each document must be identified by reference to title, author, date and version.

Date:

Version:

**4. Nature of Certificate<sup>5</sup>**

<input type="checkbox"/>	<b>E1.4 – Use or development exempt from this code</b>		
	<b>Assessment Criteria</b>	<b>Compliance Requirement</b>	<b>Reference to Applicable Document(s)</b>
<input type="checkbox"/>	E1.4 (a)	Insufficient increase in risk	

<input type="checkbox"/>	<b>E1.5.1 – Vulnerable Uses</b>		
	<b>E1.5.1.1 Standards for vulnerable use</b>		
	<b>Assessment Criteria</b>	<b>Compliance Requirement</b>	<b>Reference to Applicable Document(s)</b>
<input type="checkbox"/>	E1.5.1.1 P1.	Risk is mitigated	
<input type="checkbox"/>	E1.5.1.1 A2	BHMP	
<input type="checkbox"/>	E1.5.1.1 A3	Emergency Plan	

<input type="checkbox"/>	<b>E1.5.2 – Hazardous Uses</b>		
	<b>E1.5.2.1 Standards for hazardous use</b>		
	<b>Assessment Criteria</b>	<b>Compliance Requirement</b>	<b>Reference to Applicable Document(s)</b>
<input type="checkbox"/>	E1.5.2.1 P1.	Risk is mitigated	
<input type="checkbox"/>	E1.5.2.1 A2	BHMP	
<input type="checkbox"/>	E1.5.2.1 A3	Emergency Plan	

<input checked="" type="checkbox"/>	<b>E1.6.1 – Development standards for subdivision</b>		
	<b>E1.6.1.1 Subdivision: Provision of hazard management areas</b>		
	<b>Assessment Criteria</b>	<b>Compliance Requirement</b>	<b>Reference to Applicable Document(s)</b>
<input type="checkbox"/>	E1.6.1.1 P1.	Hazard Management Areas are sufficient to mitigate risk	

<sup>5</sup> The certificate must indicate by placing X in the corresponding ☐ for each applicable standard and the corresponding compliance test within each standard that is relied upon to demonstrate compliance to Code E1

<input type="checkbox"/>	E1.6.1.1 A1. (a)	Insufficient increase in risk	
X	E1.6.1.1 A1. (b)	Provides BAL 19 for all lots	Refer section 3.2 and 3.3
<input type="checkbox"/>	E1.6.1.1 A1. (c)	Consent for Part 5 Agreement	

<b>E1.6.1.2 Subdivision: Public and fire fighting access</b>			
	<b>Assessment Criteria</b>	<b>Compliance Requirement</b>	<b>Reference to Applicable Document(s)</b>
<input type="checkbox"/>	E1.6.1.2 P1.	Access is sufficient to mitigate risk	
<input type="checkbox"/>	E1.6.1.2 A1. (a)	Insufficient increase in risk	
X	E1.6.1.2 A1. (b)	Access complies with Tables E1, E2 & E3	Refer section 2.5

<b>E1.6.1.3 Subdivision: Provision of water supply for firefighting purposes</b>			
	<b>Assessment Criteria</b>	<b>Compliance Requirement</b>	<b>Reference to Applicable Document(s)</b>
<input type="checkbox"/>	E1.6.1.3 A1. (a)	Insufficient increase in risk	
X	E1.6.1.3 A1. (b)	Reticulated water supply complies with Table E4	Refer section 2.6
<input type="checkbox"/>	E1.6.1.3 A1. (c)	Water supply consistent with the objective	
<input type="checkbox"/>	E1.6.1.3 A2. (a)	Insufficient increase in risk	
X	E1.6.1.3 A2. (b)	Static water supply complies with Table E5	Refer section 2.6
<input type="checkbox"/>	E1.6.1.3 A2. (c)	Static water supply is consistent with the objective	

## 5. Bushfire Hazard Practitioner<sup>6</sup>

Name:	Bruce Harpley	Phone No:	0429 355 259
Address:	Environmental Service & Design Pty Ltd	Fax No:	6431 2933
	PO Box 651	Email Address:	bharpley@esandd.com.au
	BURNIE		7320
Accreditation No:	BFP – 140	Scope:	1, 2, 3A and 3B

## 6. Certification<sup>7</sup>

I, certify that in accordance with the authority given under Part 4A of the Fire Service Act 1979 –

The use or development described in this certificate is exempt from application of Code E1 – Bushfire-Prone Areas in accordance with Clause E1.4 (a) because there is an insufficient increase in risk to the use or development from bushfire to warrant any specific bushfire protection measure in order to be consistent with the objectives for all the applicable standards identified in Section 4 of this Certificate.

☐

or

There is an insufficient increase in risk from bushfire to warrant the provision of specific measures for bushfire hazard management and/or bushfire protection in order for the use or development described to be consistent with the objective for each of the applicable standards identified in Section 4 of this Certificate.

☐

and/or

The Bushfire Hazard Management Plan identified in Section 4 of this certificate is in accordance with the Chief Officer's requirements and can deliver an outcome for the use or development described that is consistent with the objective and the relevant compliance test for each of the applicable standards identified in Section 4 of this Certificate.

☒

Signed:  
certifier



Date:

5 December  
2019

Certificate No:

6970-1

<sup>6</sup> A Bushfire Hazard Practitioner is a person accredited by the Chief Officer of the Tasmania Fire Service under Part IVA of Fire Service Act 1979. The list of practitioners and scope of work is found at [www.fire.tas.gov.au](http://www.fire.tas.gov.au).

<sup>7</sup> The relevant certification must be indicated by placing X in the corresponding ☐.  
BAL Assessment: 246 Brooke Street East Devonport

## Scope of Assessors Accreditation

**Bruce Harpley (BFP-140)** is accredited by the Chief Officer of the Tasmania Fire Service under Section 60B of the *Fire Service Act 1979* for scope of works:

1. *Certify a Bushfire Hazard Management Plan for the purposes of the Building Act 2016*
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*
- 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.*
- 3B. *Certify a Bushfire Hazard Management Plan meets the Acceptable Solutions for small subdivisions for the purposes of the Land Use Planning and Approvals Act 1993.*

Works performed by **Bruce Harpley (BFP-140)** that require Tasmania Fire Service endorsement:

- 3C. *Certify a Bushfire Hazard Management Plan meets the Acceptable Solutions for large subdivisions for the purposes of the Land Use Planning and Approvals Act 1993.*
4. *Certify an Emergency Management Strategy or Bushfire Emergency Plan*

## Disclaimer

This document has been prepared for the sole use of the client and for a specific purpose, as expressly stated in the document. *Environmental Services and Design Pty Ltd* undertakes no duty nor accepts any responsibility to any third party not being the intended recipient of this document. The information contained in this document has been carefully compiled based on the clients' requirements and *Environmental Services and Design Pty Ltd's* experience, having regard to the assumptions that *Environmental Services and Design Pty Ltd* can reasonably be expected to make in accordance with sound professional principles. *Environmental Services and Design Pty Ltd* may also have relied on information provided by the client and/or other external parties to prepare this document, some of which may not have been verified. Subject to the above conditions, *Environmental Services and Design Pty Ltd* recommends this document should only be transmitted, reproduced or disseminated in its entirety.

Bushfires in Tasmania are an unpredictable natural phenomenon and preparing a Bushfire Hazard Management Plan increases your chances of defending your property and assists in the protection the people whom frequent it. This Fire Hazard Management Plan in no way guarantees immunity from a bushfire in or around your property or the effects thereof.

Any measures implemented based on the advice from *Environmental Services and Design Pty Ltd*, is offered as potential methods of reducing your properties risk of fire damage only and is not to be relied upon as a total solution. It in no way guarantees that any or all buildings on site will survive the effects of a bushfire nor does it guarantee the safety and security of any individuals whom frequent the property.

In the event that any advice or other services rendered by *Environmental Services and Design Pty Ltd* constitutes a supply of services to a consumer under the Trade Practices Act 1974 (as amended), then *Environmental Services and Design Pty Ltd's* liability for any breach of any conditions or warranties implied under the Act shall not be excluded but will be limited to the cost of having the advice or services supplied again.

Nothing in this Disclaimer affects any rights or remedies to which you may be entitled under the Trade Practices Act 1974 (as amended).

Each paragraph of this disclaimer shall be deemed to be separate and severable from each other. If any paragraph is found to be illegal, prohibited or unenforceable, then this shall not invalidate any other paragraphs.

## Re-Certification – Ability to Re-Evaluate

If in the event that the land owner requests a re-assessment of this plan due to a reduced or eliminated bushfire risk in the future; an Accredited Bushfire Assessor can over-ride any or all of the requirements or provisions of this plan. This provision serves to formally expunge any Part 5 Agreement with a Council Planning Authority (if placed on a Title as a condition of Permit) or to reduce the construction standards required under *AS3959 Construction of Buildings in Bushfire Prone Areas* (as amended) if the bushfire risk is reduced to **BAL – LOW** or a threat no longer exists.

## Section 1

### 1. Introduction

Environmental Services and Design Pty Ltd has been engaged by Tasmanian Consulting Service on behalf of the owners to complete a bushfire hazard management assessment for a 4 lot subdivision of land at 246 Brooke Street East Devonport CT 9450/29. The proposal includes rezoning of the lot from rural resource to rural living.

Lots 1 and 2 are to be accessed from Brooke Street while lots 3 and 4 are to be accessed from Upper Drew Street.

The purpose of this report is to document the assessment under Planning Directive 5.1 - Bushfire-Prone Areas Code and identify the bushfire attack level and any bushfire hazard management areas in accordance with AS3959-2018.

## Section 2

### 2.1 Property Details

Property Address	246 Brooke Street East Devonport
Certificate of Title	9450/29
Type of Application	Subdivision
Area	Lot 1 – 4975m <sup>2</sup> , lot 2 – 6819m <sup>2</sup> , lot 3 - 12,281m <sup>2</sup> and lot 4 – 10,609m <sup>2</sup>
Zoning	Rural Resource (proposed change to rural living)
Surrounding Zoning	North and West – General residential South and East – Rural resource
Planning Scheme	Devonport Interim Planning Scheme 2013
Existing land Use	Agriculture

### 2.2 Surrounding land use

Surrounding land uses noted during the site assessment are:

- North – Road and developed and vacant residential lots; and
- South – Green houses; and
- East – Agriculture; and
- West – Developed residential.

## 2.3 Vegetation Assessment

### Lot 1

Site assessment determined vegetation in relation to the building envelope shown for lot 1 within 100m as:

- North – low threat – roadway and residential development for over 100m;
- South – grassland for over 100m;
- East – grassland 11.5m; and
- West – low threat – residential development for over 100m

### Lot 2

Site assessment determined vegetation in relation to the building envelope for lot 2 as:

- North – low threat – roadway and residential development for over 100m;
- South – grassland for over 100m;
- East – grassland 15m; and
- West – grassland 12m.

### Lot 3

Site assessment determined vegetation in relation to building envelope for lot 3 as:

- North – grassland for over 100m;
- South – grassland for over 100m;
- East – grassland for over 100m; and
- West – Low threat – residential development.

### Lot 4

Site assessment determined vegetation in relation to building envelope for lot 3 as:

- North – grassland for over 100m;
- South – grassland 42m then low threat – roadway and greenhouses;
- East – grassland for over 100m; and
- West – Low threat – residential development.

Vegetation is assessed as grassland to the east and within all 4 lots as the area is greater than 1500m<sup>2</sup>, zoning is to change to rural living and does not meet the exemption requirements of AS3959 clause 2.2.3.2.

## 2.4 Topography

Site slopes vary in relation to the proposed building envelopes and are assessed as follows:

### Lot 1

- North – 6° down slope;
- South – up slope;
- East – across slope; and
- West – across slope.

### Lot 2

- North – 6° down slope;
- South – up slope;
- East – across slope; and
- West – across slope.

### Lot 3

- North – 8° down slope;
- South – up slope;
- East – across slope; and
- West – across slope.

### Lot 4

- North – 2-8° down slope;
- South – up slope;
- East – across slope; and
- West – across slope.



## 2.5 Access

### Lot 1 and 2

Proposal shows an 8m wide double driveway shared between lots 1 and 2 from Brooke Street. Proposal does not describe construction of the driveway.

Each lot will have rights to an access with a minimum width of 8m. Access length to the building envelope is between 20m – 31m.

As noted in section 2.6 below access is not required for firefighting appliances to access a static water point.

Property access for lots 1 and 2 complies with the requirements of Planning Directive 5.1 Bushfire-Prone Areas Code Table E2 element A.

### Lot 3

Access to lot 3 is proposed from Upper Drew Street and proposal shows an 8m wide double driveway shared with lot 4. Proposal does not detail the construction of the driveway. Length of access to the building envelope exceeds 30m but is less than 200m.

Access will be required to a static water point for firefighting purposes. Access will require hardstand of the same construction to the static water supply tank.

Access must comply with the requirements of Table E2 of planning Directive 5.1 Bushfire-Prone Areas Code. A copy of Table E2 is attached and forms part of the Bushfire Hazard Management Plan specification.

### Lot 4

Access to lot 4 is proposed from Upper Drew Street and proposal shows an 8m wide double driveway shared with lot 3. Proposal does not detail the construction of the driveway. Length of access to the building envelope is between 39m - 42m.

As noted in section 2.6 below access is not required for firefighting appliances to access a static water point.

Property access for lot 4 complies with the requirements of Planning Directive 5.1 Bushfire-Prone Areas Code Table E2 element A.

## 2.6 Water Supply

There is a reticulated water supply to the area and fire hydrants were identified on the northern side of Brooke Street opposite lot 1 and lot 2.

### Lot 1

The furthest point of the building envelope is within a 120m hose lay of the hydrant on the northern side of Brooke Street to the north west of the proposed access.

Reticulated water supply for firefighting purposes meets the requirements of Planning Directive 5.1 Bushfire-Prone Areas Code Table E4 element A.

### Lot 2

The furthest point of the building envelope is within a 120m hose lay of the hydrant on the northern side of Brooke Street to the north east of the proposed access.

Reticulated water supply for firefighting purposes meets the requirements of Planning Directive 5.1 Bushfire-Prone Areas Code Table E4 element A.



Hydrant – northern side of Brooke Street

### Lot 3

The proposal includes installation of a hydrant in Upper Drew Street to the south west of the access to lots 3 and 4. With an access length greater than 100m the hydrant is not within a 120m hose lay of the furthest portion of the building envelope.

A static water supply for firefighting purposes is required.

Static water supply must be within a 90m hose lay of the building to be protected, have a minimum 10,000L capacity and be metal, concrete or lagged with non-combustible material if above-ground.

Static water supply must comply with the requirements of Planning directive 5.1 Bushfire-Prone Areas Code Table E5 elements a to E.

A copy of Table E5 is attached and forms part of the Bushfire Hazard Management Plan specification.

#### Lot 4

The furthest point of the building envelope is within a 120m hose lay of the proposed new hydrant on Upper Drew Street to the west of the proposed access.

Reticulated water supply for firefighting purposes meets the requirements of Planning Directive 5.1 Bushfire-Prone Areas Code Table E4 element A.

### 3.0 Site Assessment

A site assessment was carried out on 2 December 2019 and a desk top study was carried out on 5 December 2019. The proposal plan, prepared by Tasmanian Consulting Service, is at attachment C. Relevant site photographs are below.



Lots 1 and 2 – north





Lots 1 and 2 – South from northern boundary



Lot 4 – south



Lot 3 and 4 – east

### 3.1 Fire Danger Index

The fire danger index as per Table 2.1 AS3959-2009 for Tasmania is 50.

### 3.2 BAL Assessment – Lot 1

Vegetation classification (refer Table 2.3)	North	<input checked="" type="checkbox"/>	South	<input checked="" type="checkbox"/>	East	<input checked="" type="checkbox"/>	West	<input checked="" type="checkbox"/>
	North East	<input type="checkbox"/>	South West	<input type="checkbox"/>	South East	<input type="checkbox"/>	North West	<input type="checkbox"/>
Group A Forest								
Group B Woodland								
Group C Scrub land								
Group D Scrub								
Group E Mallee/Mulga								
Group F Rainforest								
Group G Grassland			X		X			
Low threat vegetation	X						X	
Exclusions	Insert relevant exclusion paragraph descriptor from clause 2.2.3.2							
	(e) & (f)							
Prevailing winds	<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input checked="" type="checkbox"/>	
Distance to classified vegetation	Show distance in metres							
	>100m		14m		11.5m		>100m	
Effective Slope	Upslope							
Slope under the classified vegetation	Upslope/0°	<input type="checkbox"/>	Upslope/0°	<input checked="" type="checkbox"/>	Upslope/0°	<input checked="" type="checkbox"/>	Upslope/0°	<input checked="" type="checkbox"/>
	North	<input checked="" type="checkbox"/>	South	<input checked="" type="checkbox"/>	East	<input checked="" type="checkbox"/>	West	<input checked="" type="checkbox"/>
	North East	<input type="checkbox"/>	South West	<input type="checkbox"/>	South East	<input type="checkbox"/>	North West	<input type="checkbox"/>
	Downslope							
	>0 to 5	<input type="checkbox"/>	>0 to 5	<input type="checkbox"/>	>0 to 5	<input type="checkbox"/>	>0 to 5	<input type="checkbox"/>
	>5 to 10	<input checked="" type="checkbox"/>	>5 to 10	<input type="checkbox"/>	>5 to 10	<input type="checkbox"/>	>5 to 10	<input type="checkbox"/>
	>10 to 15	<input type="checkbox"/>	>10 to 15	<input type="checkbox"/>	>10 to 15	<input type="checkbox"/>	>10 to 15	<input type="checkbox"/>
	>15 to 20	<input type="checkbox"/>	>15 to 20	<input type="checkbox"/>	>15 to 20	<input type="checkbox"/>	>15 to 20	<input type="checkbox"/>
BAL Value for each side of site	Low		12.5		19		Low	

### 3.2 BAL Assessment – Lot 2

Vegetation classification (refer Table 2.3)	North North East	<input checked="" type="checkbox"/> <input type="checkbox"/>	South South West	<input checked="" type="checkbox"/> <input type="checkbox"/>	East South East	<input checked="" type="checkbox"/> <input type="checkbox"/>	West North West	<input checked="" type="checkbox"/> <input type="checkbox"/>
Group A Forest								
Group B Woodland								
Group C Scrub land								
Group D Scrub								
Group E Mallee/Mulga								
Group F Rainforest								
Group G Grassland			X		X		X	
Low threat vegetation	X							
Exclusions	Insert relevant exclusion paragraph descriptor from clause 2.2.3.2							
	(e) & (f)							
Prevailing winds	<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input checked="" type="checkbox"/>	
Distance to classified vegetation	Show distance in metres							
	>100m		14m		15m		14m	
Effective Slope	Upslope							
Slope under the classified vegetation	Upslope/0° <input type="checkbox"/>		Upslope/0° <input checked="" type="checkbox"/>		Upslope/0° <input checked="" type="checkbox"/>		Upslope/0° <input checked="" type="checkbox"/>	
	North <input checked="" type="checkbox"/>		South <input checked="" type="checkbox"/>		East <input checked="" type="checkbox"/>		West <input checked="" type="checkbox"/>	
	North East <input type="checkbox"/>		South West <input type="checkbox"/>		South East <input type="checkbox"/>		North West <input type="checkbox"/>	
	Downslope							
	>0 to 5 <input type="checkbox"/>		>0 to 5 <input type="checkbox"/>		>0 to 5 <input type="checkbox"/>		>0 to 5 <input type="checkbox"/>	
	>5 to 10 <input checked="" type="checkbox"/>		>5 to 10 <input type="checkbox"/>		>5 to 10 <input type="checkbox"/>		>5 to 10 <input type="checkbox"/>	
	>10 to 15 <input type="checkbox"/>		>10 to 15 <input type="checkbox"/>		>10 to 15 <input type="checkbox"/>		>10 to 15 <input type="checkbox"/>	
	>15 to 20 <input type="checkbox"/>		>15 to 20 <input type="checkbox"/>		>15 to 20 <input type="checkbox"/>		>15 to 20 <input type="checkbox"/>	
BAL Value for each side of site	Low		12.5		12.5		19	



### 3.2 BAL Assessment – Lot 3

Vegetation classification (refer Table 2.3)	North North East	<input checked="" type="checkbox"/> <input type="checkbox"/>	South South West	<input checked="" type="checkbox"/> <input type="checkbox"/>	East South East	<input checked="" type="checkbox"/> <input type="checkbox"/>	West North West	<input checked="" type="checkbox"/> <input type="checkbox"/>
Group A Forest								
Group B Woodland								
Group C Scrub land								
Group D Scrub								
Group E Mallee/Mulga								
Group F Rainforest								
Group G Grassland	X		X		X			
Low threat vegetation							X	
Exclusions	Insert relevant exclusion paragraph descriptor from clause 2.2.3.2							
							(f)	
Prevailing winds	<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input checked="" type="checkbox"/>	
Distance to classified vegetation	Show distance in metres							
	19m		15m		14m		15m	
Effective Slope	Upslope							
	Upslope/0°	<input type="checkbox"/>	Upslope/0°	<input checked="" type="checkbox"/>	Upslope/0°	<input checked="" type="checkbox"/>	Upslope/0°	<input checked="" type="checkbox"/>
Slope under the classified vegetation	North	<input checked="" type="checkbox"/>	South	<input checked="" type="checkbox"/>	East	<input checked="" type="checkbox"/>	West	<input checked="" type="checkbox"/>
	North East	<input type="checkbox"/>	South West	<input type="checkbox"/>	South East	<input type="checkbox"/>	North West	<input type="checkbox"/>
	Downslope							
	>0 to 5	<input type="checkbox"/>	>0 to 5	<input type="checkbox"/>	>0 to 5	<input type="checkbox"/>	>0 to 5	<input type="checkbox"/>
	>5 to 10	<input checked="" type="checkbox"/>	>5 to 10	<input type="checkbox"/>	>5 to 10	<input type="checkbox"/>	>5 to 10	<input type="checkbox"/>
	>10 to 15	<input type="checkbox"/>	>10 to 15	<input type="checkbox"/>	>10 to 15	<input type="checkbox"/>	>10 to 15	<input type="checkbox"/>
	>15 to 20	<input type="checkbox"/>	>15 to 20	<input type="checkbox"/>	>15 to 20	<input type="checkbox"/>	>15 to 20	<input type="checkbox"/>
BAL Value for each side of site	12.5		12.5		12.5		Low	



### 3.2 BAL Assessment – Lot 4

Vegetation classification (refer Table 2.3)	North North East	<input checked="" type="checkbox"/> <input type="checkbox"/>	South South West	<input checked="" type="checkbox"/> <input type="checkbox"/>	East South East	<input checked="" type="checkbox"/> <input type="checkbox"/>	West North West	<input checked="" type="checkbox"/> <input type="checkbox"/>
Group A Forest								
Group B Woodland								
Group C Scrub land								
Group D Scrub								
Group E Mallee/Mulga								
Group F Rainforest								
Group G Grassland	X		X		X			
Low threat vegetation							X	
Exclusions	Insert relevant exclusion paragraph descriptor from clause 2.2.3.2							
Prevailing winds	<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		(f) <input checked="" type="checkbox"/>	
Distance to classified vegetation	Show distance in metres							
	16m		14m		14m		>100m	
Effective Slope	Upslope							
Slope under the classified vegetation	Upslope/0°	<input type="checkbox"/>	Upslope/0°	<input checked="" type="checkbox"/>	Upslope/0°	<input checked="" type="checkbox"/>	Upslope/0°	<input checked="" type="checkbox"/>
	North	<input checked="" type="checkbox"/>	South	<input checked="" type="checkbox"/>	East	<input checked="" type="checkbox"/>	West	<input checked="" type="checkbox"/>
	North East	<input type="checkbox"/>	South West	<input type="checkbox"/>	South East	<input type="checkbox"/>	North West	<input type="checkbox"/>
	Downslope							
	>0 to 5	<input checked="" type="checkbox"/>	>0 to 5	<input type="checkbox"/>	>0 to 5	<input type="checkbox"/>	>0 to 5	<input type="checkbox"/>
	>5 to 10	<input type="checkbox"/>	>5 to 10	<input type="checkbox"/>	>5 to 10	<input type="checkbox"/>	>5 to 10	<input type="checkbox"/>
	>10 to 15	<input type="checkbox"/>	>10 to 15	<input type="checkbox"/>	>10 to 15	<input type="checkbox"/>	>10 to 15	<input type="checkbox"/>
	>15 to 20	<input type="checkbox"/>	>15 to 20	<input type="checkbox"/>	>15 to 20	<input type="checkbox"/>	>15 to 20	<input type="checkbox"/>
BAL Value for each side of site	12.5		12.5		12.5		Low	

### 3.3 Risk Assessment

In relation to lots 1, 2 and 4 the following factors have been considered:

- Proposed access complies with the requirements of Table E2 element A of Planning Directive 5.1 - Bushfire-Prone Areas Code; and
- Reticulated water supply for firefighting complies with the requirements of Planning Directive 5.1 – Bushfire-Prone Area Code; and
- Bushfire Attack Levels at section 3.2 are valid for the assessed vegetation and slopes based on distances from the proposed building envelopes.

In relation to lot 3 the following factors have been considered:

- Access must comply with the requirements of Table E2 element B of Planning Directive 5.1 - Bushfire-Prone Areas Code; and
- A static water supply for firefighting purposes is required; and
- Static water supply must comply with the requirements of Planning Directive 5.1 – Bushfire-Prone Area Code Table E5 elements A to E.

### 3.4 Conclusion

Having regard to all the provisions of clause E1.6 of Planning Directive No 5.1 Bushfire-prone Areas Code there is a requirement for a hazard management plan.

The attached hazard management plan indicates that each of the proposed lots has hazard management areas equal to or greater than BAL 19.

Copies of Table E2 element B and Table E5 are included as attachments D and E and form part of the hazard management plan specification.

# **Bushfire Hazard Management Plan**

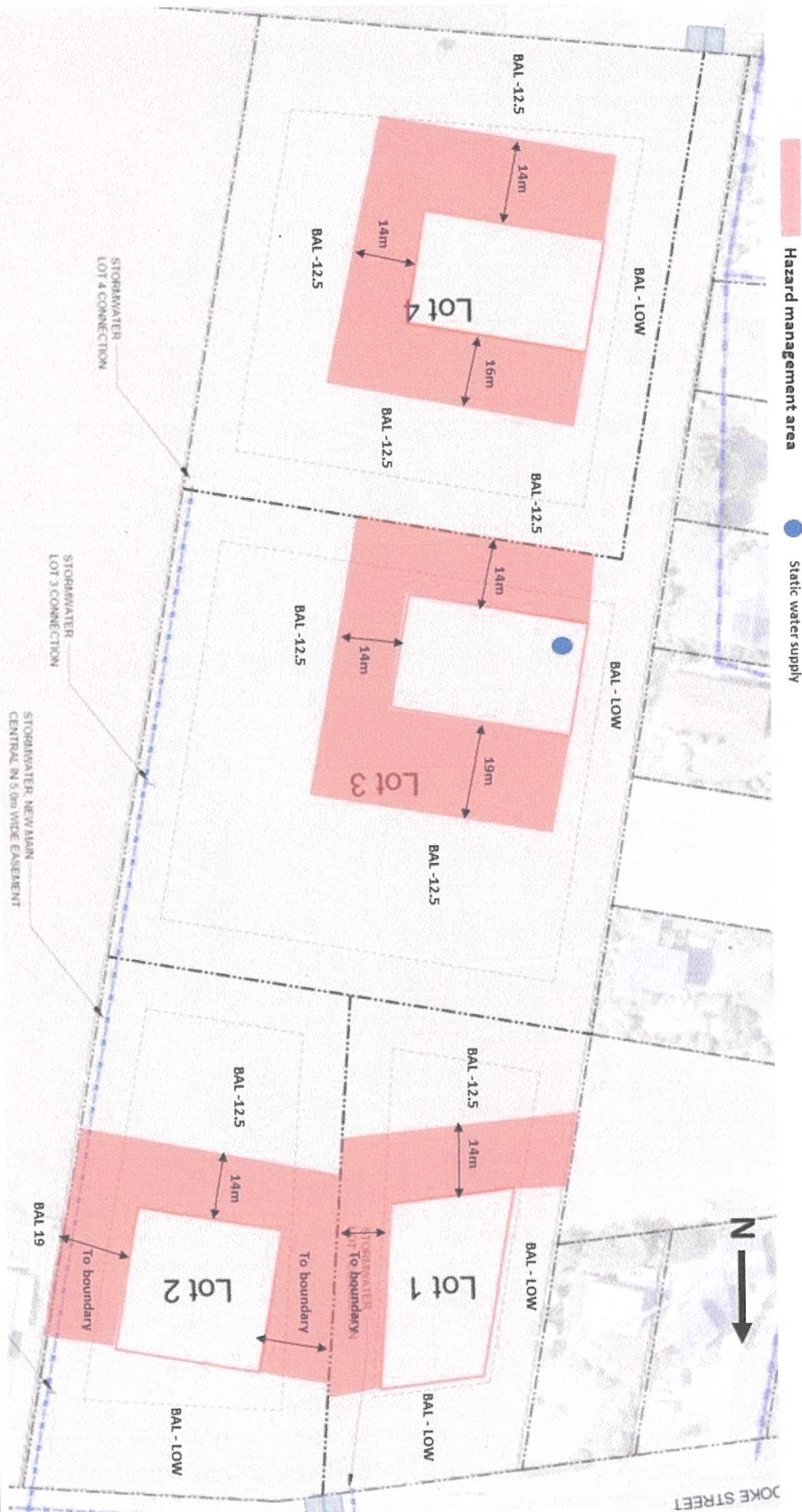
## **Plan and Specifications** (including hazard management areas)

Attachment A

Environmental Services and Design Pty Ltd  
PO Box 651  
BURNIE TAS 7320  
[www.esandl.com.au](http://www.esandl.com.au)  
(03) 6431 2999



**Bushfire Hazard Management Plan**  
**Hazard Management Areas**  
**246 Brooke Street East Devonport**  
**Title Reference: 9450/29**



This plan has been prepared only for the purpose of complying with EI Bushfire-prone Areas Code and the information shown hereon must not be used for any other purpose. All dimensions and areas are in meters.

Drawn: Bruce Harpley BFP-140

Scale: NTS  
Date: 5 December 2019

Drawing No: 6970-1  
Revision No: 0

This Bushfire Hazard Management Plan must be read in conjunction with the requirements detailed in Attachment B of this plan







<div><div><div><div></div><div></div></div><div><div></div><div></div></div></div><div><div>TASMANIAN CONSULTING SERVICE</div><div>ENGINEERING DESIGN PLANNING MANAGEMENT CONSTRUCTION</div><div>25 GLENVIEW DRIVE, Devonport TASMANIA 7310</div><div>08 1342 8888</div><div>08 1342 8888</div><div>info@tcsn.com.au</div></div></div>						Drawing 8917-002 P3		
Scale	Designation	Checked / Approved	<div>This document is the property of Tasmanian Consulting Service. It is to be used only for the purpose for which it was prepared and is not to be used for any other purpose without the written consent of Tasmanian Consulting Service. It is to be kept confidential and not to be disclosed to any third party without the written consent of Tasmanian Consulting Service.</div>					
P1	17-07-19	3 P.A.						
P2	17-07-19	3 P.A.						
P3	10-10-19	3 P.A.	SITE PLAN: PROPOSED					
P3			NOT FOR CONSTRUCTION					

## Attachment D – Standards for property access – element B

B.	Property access length is 30m or greater; or access is required for a fire appliance to a fire fighting water point.	<p>The following design and construction requirements apply to property access:</p> <ul style="list-style-type: none"> <li>(a) all-weather construction;</li> <li>(b) load capacity of at least 20t, including for bridges and culverts;</li> <li>(c) minimum carriageway width of 4m;</li> <li>(d) minimum vertical clearance of 4m;</li> <li>(e) minimum horizontal clearance of 0.5m from the edge of the carriageway;</li> <li>(f) cross falls of less than 3 degrees (1:20 or 5%);</li> <li>(g) dips less than 7 degrees (1:8 or 12.5%) entry and exit angle;</li> <li>(h) curves with a minimum inner radius of 10m;</li> <li>(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</li> <li>(j) terminate with a turning area for fire appliances provided by one of the following: <ul style="list-style-type: none"> <li>(i) a turning circle with a minimum outer radius of 10m; or</li> <li>(ii) a property access encircling the building; or</li> <li>(iii) a hammerhead "T" or "Y" turning head 4m wide and 8m long.</li> </ul> </li> </ul>
----	--	---



**Attachment E – Table E5 Static water supply for fire fighting**

Element	Requirement
A. Distance between building area to be protected and water supply.	<p>The following requirements apply:</p> <p>(a) the building area to be protected must be located within 90m of the fire fighting water point of a static water supply; and</p> <p>(b) the distance must be measured as a hose lay, between the fire fighting water point and the furthest part of the building area.</p>
B. Static Water Supplies	<p>A static water supply:</p> <p>(a) may have a remotely located offtake connected to the static water supply;</p> <p>(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;</p> <p>(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;</p> <p>(d) must be metal, concrete or lagged by non-combustible materials if above ground; and</p> <p>(e) if a tank can be located so it is shielded in all directions in compliance with section 3.5 of <i>Australian Standard AS 3959-2009 Construction of buildings in bushfire-prone areas</i>, the tank may be constructed of any material provided that the lowest 400mm of the tank exterior is protected by:</p> <ul style="list-style-type: none"> <li>(i) metal;</li> <li>(ii) non-combustible material; or</li> <li>(iii) fibre-cement a minimum of 6mm thickness.</li> </ul>



C.	Fittings, pipework and accessories (including stands and tank supports)	<p>Fittings and pipework associated with a fire fighting water point for a static water supply must:</p> <ul style="list-style-type: none"> <li>(a) have a minimum nominal internal diameter of 50mm;</li> <li>(b) be fitted with a valve with a minimum nominal internal diameter of 50mm;</li> <li>(c) be metal or lagged by non-combustible materials if above ground;</li> <li>(d) if buried, have a minimum depth of 300mm<sup>2</sup>;</li> <li>(e) provide a DIN or NEN standard forged Storz 65mm coupling fitted with a suction washer for connection to fire fighting equipment;</li> <li>(f) ensure the coupling is accessible and available for connection at all times;</li> <li>(g) ensure the coupling is fitted with a blank cap and securing chain (minimum 220mm length);</li> <li>(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</li> <li>(i) if a remote offtake is installed, ensure the offtake is in a position that is: <ul style="list-style-type: none"> <li>(i) visible;</li> <li>(ii) accessible to allow connection by fire fighting equipment;</li> <li>(iii) at a working height of 450 – 600mm above ground level; and</li> <li>(iv) protected from possible damage, including damage by vehicles.</li> </ul> </li> </ul>
----	---	--

D.	Signage for static water connections.	<p>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:</p> <ul style="list-style-type: none"> <li>(a) comply with water tank signage requirements within <i>Australian Standard AS 2304-2011 Water storage tanks for fire protection systems</i>; or</li> <li>(b) comply with the Tasmania Fire Service Water Supply Guideline published by the Tasmania Fire Service.</li> </ul>
E.	Hardstand	<p>A hardstand area for fire appliances must be:</p> <ul style="list-style-type: none"> <li>(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);</li> <li>(b) no closer than 6m from the building area to be protected;</li> <li>(c) a minimum width of 3m constructed to the same standard as the carriageway; and</li> <li>(d) connected to the property access by a carriageway equivalent to the standard of the property access.</li> </ul>