

# DRAFT AMENDMENT & CONCURRENT APPLICATION DEVONPORT LOCAL PROVISIONS SCHEDULE

Sections 40G & 40Z(2) Land Use Planning Approvals Act 1993
An application for an amendment to the Devonport Local Provisions
Schedule of the Tasmanian Planning Scheme and a concurrent planning permit has been made which may affect you.

# **Application Details**

Application Number: AM2023.01

Proposal: Rezone part of 158 Caroline Street, East Devonport

(CT 174766/1) from Rural Living to General Residential

Application Number: PA2023.0002

Proposal: **32 lot subdivision** 

Address of the Land: 158 Caroline Street, East Devonport

Date of Notice: 13 May 2023

You are invited to view the application and any documents and plans accompanying it on the ground floor of the paranaple centre at 137 Rooke Street, Devonport or on Council's website <a href="www.devonport.tas.gov.au">www.devonport.tas.gov.au</a>

Any person may make a representation relating to the draft amendment and application in accordance with sections 40J and 41 of the Land Use Planning Approvals Act 1993, during a period of 28 days commencing on the date of this notice.

Your representation must:

- be received by close of business on 13 June 2023;
- be in writing; and
- addressed to the General Manager, Devonport City Council:
  - o P.O. Box 604, Devonport, Tasmania, 7310; or
  - o council@devonport.tas.gov.au

If you make a representation then Council must consider your submission before making its decision on the application.



**158 Caroline Street East Devonport** 

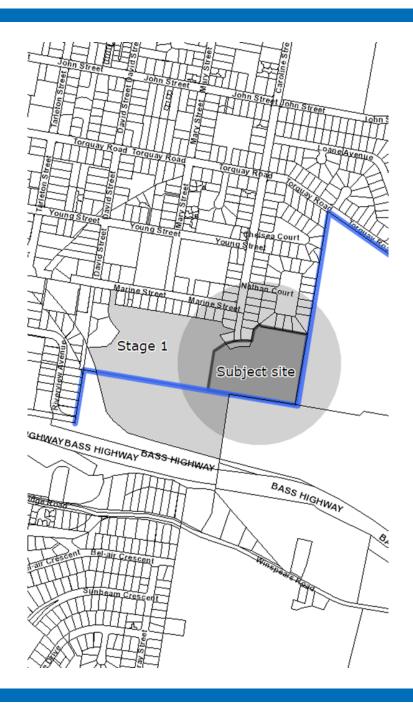
This map is made available for the purpose of providing access to Devonport City Council information and not as professional advice. The information contained on the map is diagrammatic only. All information should be verified on site, or with the appropriate State Government Department or Council Office, prior to being used for any purpose.

Devonport **City Council** 

DEVONPORT

Printed: 11-05-2023 12:30:49 Copyright © Devonport City Council





Section 40T - 158 Caroline Street, East Devonport Rezoning and Development Application



# **PDA Contributors**

Contributor	Name	Date
Surveyor		
Processing		
Reporting	John Ayers for PDA	November 2022
Review and Approval	Justine Brooks - Director	25/11/22

# **Revision History**

Revision	Description	Reviewed by	Date
0	First Issue	Justine Brooks	25/11/22

#### © PDA Surveyors, Engineers & Planners

This document is and shall remain the property of PDA Surveyors, Engineers & Planners. The unauthorised use of this document in any form whatsoever is prohibited. This document is issued for the party which commissioned it and for specific purposes connected with the above-captioned project only. It should not be relied upon by any other party or used for any other purpose. We accept no responsibility for the consequences of this document being relied upon by any other party, being used for any other purpose, or containing any error or omission due to an error or omission in data supplied to us by other parties.



# **Table of Contents**

EXECUTIVE SUMMARY	1
1.0 INTRODUCTION	7
2.0 SITE DESCRIPTION	8
3.0 STATUTORY/STRATEGIC CONSIDERATIONS - SECTION 40T OF THE ACT	12
3.1 Section 34(2) Land Use Planning and Approvals Act 1993 - LPS Criteria:	12
3.1.1 Section 34(2)(a)	12
3.1.2 Section 34(2)(b)	12
3.1.3 Section 34(2)(c)	12
3.1.3.1 Schedule 1, Part 1 - Objectives of the Resource Management and Planning Syston of Tasmania	
3.1.3.2 Schedule 1, Part 2 - Objectives of the planning process established by the Act	13
3.1.4. Section 34(2)(d)	15
3.1.4 Section 34(2)(da)	
3.1.5 Section 34(2)(e)	
3.1.5.1 Cradle Coast Regional Land Use Strategy	
3.1.5.2 Greater Devonport Residential Growth Strategy 2021-2040	
3.1.6 Section 34(2)(f)	
3.1.7 Section 34(2)(g)	
3.1.8 Section 34(2)(h)	
4. STATE POLICIES	
4.1 State Policy on the Protection of Agricultural Land 2009	
4.2 Tasmanian State Coastal Policy 1996	21
4.3 State Policy on Water Quality Management 1997	
4.4 National Environment Protection Measures	
4.5 Gas Pipeline Act 2000	30
5. DEVELOPMENT PROPOSAL - SUBDIVISION	
5.1 Proposal	
2 Services	
6.0 PLANNING SCHEME ASSESSMENT	
6.1 10. General Residential Zone	33
7. PLANNING SCHEME CODES	40
7.1 C3.0 Road and Railway Assets Code	40
7.2 C13.0 Bushfire-Prone Areas Code	42
7.3 C15.0 Landslip Hazard Code	52
8. CONCLUSION	53



APPENDICES.		55
	Subject Property Titles	
Appendix B	Proposal Plan	55
Appendix C	Bushfire Hazard Management Report	55
Appendix D	Traffic Impact Assessment	55



# SECTION 40T APPLICATION - LAND USE PLANNING AND APPROVALS ACT 1993 158 CAROLINE STREET EAST DEVONPORT - REZONING AND DEVELOPMENT APPLICATION

#### **EXECUTIVE SUMMARY**

The application proposes a combined rezoning and development approval for a 32-lot subdivision involving the property at 158 Caroline Street East Devonport - the subject site.

The application seeks to:

- (a) Rezone the east section of the property refer Figure 1 shown as Stage 2, to extend the General Residential Zone replacing the existing Rural Living Zone' A' within the urban development boundary; and
- (b) Subdivide the property to create allotments within the extended General Residential Zone. The lots range in size from 452m² to 3,974m² providing a mix of housing lots.



Figure 1 - Location and Zone Plan

The property is immediately adjacent to residential subdivisions developed through the immediate precincts and beyond, allowing for a seamless transition from the *lower density* classification to a density reflecting that of development within the immediate precinct. The proposed development adjoins the recently proposed subdivision shown as Stage 1.





Figure 2 - Development site - Aerial Photo LIST map

In response to the planning scheme Code overlays which reflect the site's characteristics, the submission includes analysis undertaken to review service infrastructure capacity, flora/fauna and bushfire hazard assessments which then underpin decisions concerning the extent of the General Residential Zone extension and the subdivision layout.

Specific technical reports addressing elements of the proposed development included:

**Midson Traffic** completed a Traffic Impact Assessment which reviewed the traffic and parking impact of the proposed 32 lot subdivision east of stage 1 concluding subject to recommendations support of the proposal on traffic grounds. The assessment considers the traffic impacts of the combined stages 1 and 2 of the property's development. The analysis reveals that traffic generation will split across the two access points of Marine and Caroline Streets and that the internal road network will ensure a low-speed environment achieving good connectivity to the external road network.

**GeoTon Pty Ltd** were engaged to review the stability issues affecting the land south of the subdivision precinct of Stage 1 (Lot 46) refer Figure 7, identifying the hazard and assessing the risk to the proposed development. The result is that the design retains the forest vegetation south of the proposed subdivision thus ensuring the stability and integrity of the land is maintained. Stage 2 development is unaffected and not impacted by stability issues.

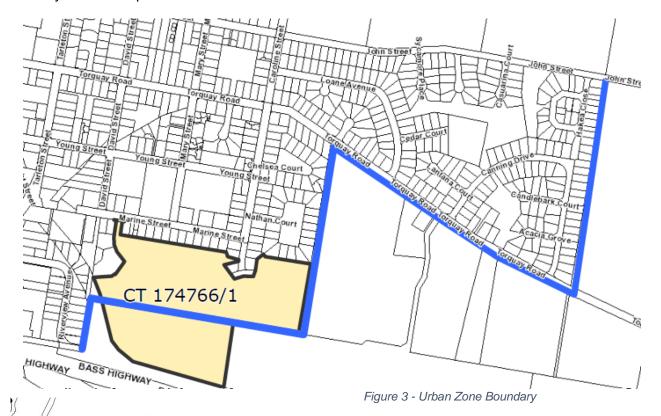
**PDA Planners & Engineers** have completed concept service design drawings and stormwater catchment/management report for the development, demonstrating sustainable infrastructure availability to service the proposed development.

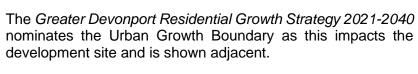


**Livingston Natural Resource Services** have completed an analysis of both stages 1 and 2 of the site's residential development and rezoning in accordance with the Bushfire-Prone Areas Code, providing Certificates under s51(2)(d) of the *Land Use Planning and Approvals Act 1993*.

# **Urban Development Zone Boundary**

The extent of urban (growth) zoning impacting the subject property is shown at Figure 3 below, within which the entirety of the subdivision is proposed. The *Cradle Coast Regional Land Use Strategy* (CCRLUS) identifies an urban growth boundary as the primary strategic tool to manage residential growth across the metropolitan area. The boundary provides for residential development within the next 5 years and represents the extent of infrastructure services available.





The CCRLUS notes that Devonport is a contained urban centre with a population of 24,250. Growth forecast show a net increase of 1245 people by 2032, with an underlying housing demand of 600 dwellings or 25 per annum. The urban land area within Devonport provides approximately 5 years forward residential supply predominantly at Ambleside and East Devonport.

Expansion options are highly constrained by proximity to productive agricultural land and other land use allocations for

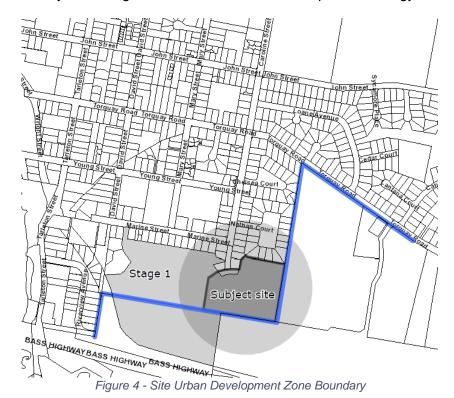


industrial and rural residential use. Internal housing growth needs to be accommodated through infill and consolidation.

The proposed rezoning of the site from the Rural Living Zone 'A' classification to General Residential will allow for development at a higher density to reflect infrastructure availability and maximise the opportunity to achieve an increased lot yield within the Urban Zone boundary, thus achieving that objective of infill consolidation.

The fact that the future residential expansion is impacted by the arable rural land suggests that the rezoning and subsequent change of residential density for the subject site is both sustainable and an imperative to ensure that the most is made of land which is zoned for residential development and occurs at densities to ensure that the opportunity of available infrastructure is maximised in terms of its capacity and the potential lot yield.

This will ensure that future demand is accommodated within the constraints of available infrastructure, ultimately achieving a more cost-effective development strategy.



In accordance with the key direction of the CCRLUS the proposed development will achieve a higher density of development with the introduction of the General Residential Zone replacing the current lower density classification. This aligns with the strategy which seeks to maximise as far as possible development within the limits of sustainable infrastructure.



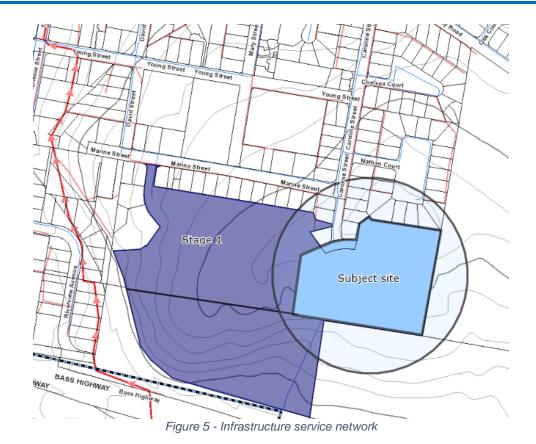


Figure 6 - Subdivision layout - Subject site







### 1.0 INTRODUCTION

The application is lodged in accordance with section 40T of the *Land Use Planning and Approvals Act 1993* (the Act) seeking approval for a combined rezoning and development application to enable the subdivision of the subject property at 158 Caroline Street East Devonport.

The proposed development will create a total of 32 lots at suburban density maximising site characteristics to achieve sustainable development within available infrastructure capacity.



The subject property is classified Rural Living Zone' A' under the *Tasmania Planning Scheme-Devonport*.

The area beyond the east boundary is zoned Agriculture reflecting the site's soil characteristics including existing use and potential for intensive agricultural use beyond the boundaries of the established precinct.

The subdivision proposal is located within the existing Urban Development boundary and is serviced with reticulated water, sewerage and stormwater. It represents stage 2 of the redevelopment of the property and is proposed to maximise potential for lot yield to achieve alignment with the strategic objective of the CCRLUS and the Greater Devonport Residential Growth Strategy 2021-2040.

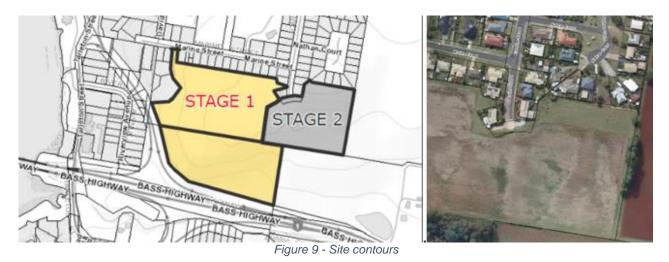
The proposed lots range in area from 452m<sup>2</sup>.to 3,974m<sup>2</sup>.



### 2.0 SITE DESCRIPTION

The property is part of the 12.02ha holding located off Marine Street East Devonport. The development site is located east of the first stage of subdivision and has direct access from Caroline Street extension intersecting with Marine Street.

The area of land to be developed within the Rural Living Zone' A' is approximately 3.18ha from which the proposal will yield 32 lots ranging in area from 452m<sup>2</sup> to 3,974m<sup>2</sup>. The site is moderately sloping from Caroline Street to the south at a slope of approximately 15°. The site is cleared of vegetation.



The development site will be accessed from the Caroline Street frontage via a proposed internal road network and is serviced with reticulated water, sewer and stormwater.

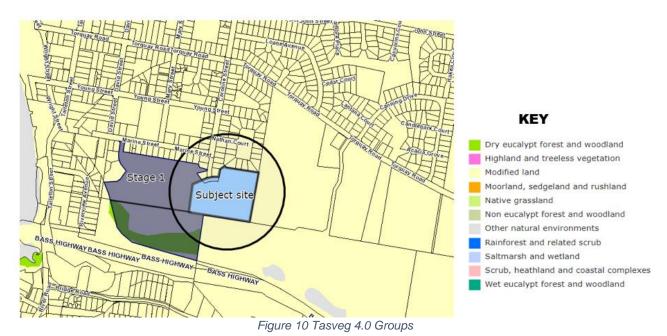






Figure 11 - Site Aerial view



Figure 12 - View looking south west - Stage 1



Figure 13 - View looking south

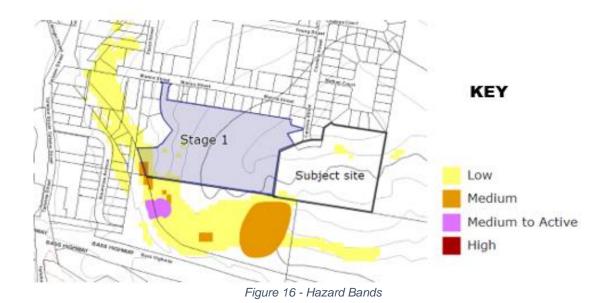


Figure 14 - View looking east boundary - Stage 2



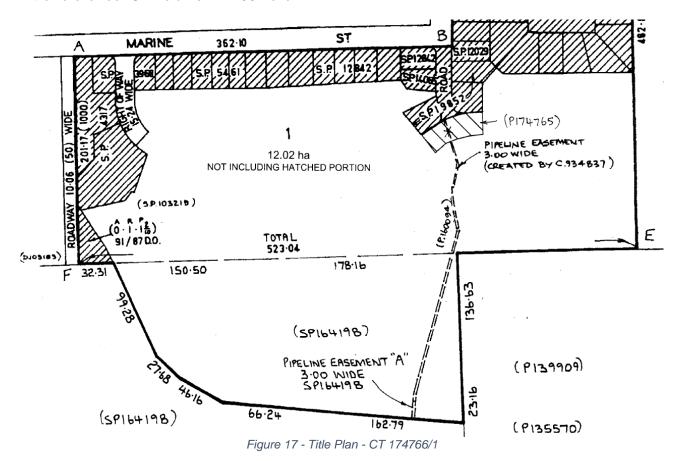


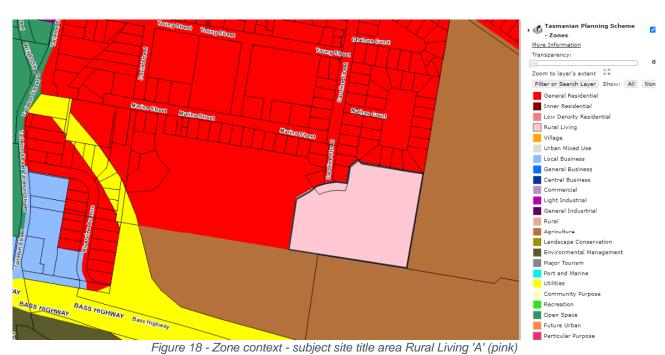
Figure 15 - Title area - subdivision site





Title reference: CT Volume 174766 Folio 1







# 3.0 STATUTORY/STRATEGIC CONSIDERATIONS - SECTION 40T OF THE ACT

- 3.1 Section 34(2) Land Use Planning and Approvals Act 1993 LPS Criteria:
  - (2) The LPS criteria to be met by a relevant planning instrument are that the instrument-
  - (a) contains all the provisions that the SPPs specify must be contained in an LPS;
  - (b) is in accordance with section 32:
  - (c) furthers the objectives set out in Schedule 1;
  - (d) is consistent with each State policy;
  - (da) satisfies the relevant criteria in relation to the TPP's (Tasmanian Planning Policies);
  - (e) as far as practicable, is consistent with the regional land use strategy, if any, for the regional area in which is situated the land to which the relevant planning instrument relates;
  - (f) has regard to the strategic plan, prepared under section 66 of the Local Government Act 1993 that applies in relation to the land to which the relevant planning instrument relates;
  - (g) as far as practicable, is consistent with and coordinated with any LPS's that apply to municipal areas that are adjacent to the municipal area to which the relevant planning instrument relates:
  - (h) has regard to the safety requirements set out in the standards prescribed under the Gas Safety Act 2019.
- 3.1.1 Section 34(2)(a)
  - (a) contains all the provisions that the SPPs specify must be contained in an LPS;

**RESPONSE:** The proposed amendment to the LPS is consistent with the Planning Scheme LPS in relation to which there will be no inconsistencies with the SPPs.

- 3.1.2 Section 34(2)(b)
  - (b) is in accordance with section 32;

**RESPONSE:** The proposed instrument is in accordance with section 32

- 3.1.3 Section 34(2)(c)
  - (c) furthers the objectives set out in Schedule 1;
- 3.1.3.1 Schedule 1, Part 1 Objectives of the Resource Management and Planning System of Tasmania

**RESPONSE:** The application for rezoning and development is in accordance with the objectives of Schedule 1 and has taken into consideration those prescribed matters relevant to the proposed development, the subject of the application, demonstrated as follows:

(a) To promote the sustainable development of natural and physical resources and the maintenance of ecological processes and generic diversity.



**RESPONSE:** The development of the subject site will not impact the natural and physical resources nor the maintenance of ecological processes and generic diversity. There are no biodiversity and landscape values of significance. The proposal consolidates development within the remnant pasture areas of the property currently zoned for low density residential development. Physical resources accessible to the site ensures sustainable development within the limits of the existing infrastructure network.

(b) To provide for the fair, orderly and sustainable use and development of air, land and water.

**RESPONSE:** The development of new allotments within the subject site at an increased density represents infill development within the Urban Growth boundary and an established residential context. The site is serviced with water, sewer and stormwater infrastructure and the development will not place significant load upon the capacity of the existing systems.

(c) To encourage public involvement in resource management and planning.

**RESPONSE:** The initiation of the planning scheme amendment will be publicly exhibited allowing the community to make representation in accordance with the resource management and planning system.

(d) To facilitate economic development in accordance with the objectives set out in paragraphs (a), (b) and (c).

**RESPONSE:** The change in zone to that of General Residential will achieve the objectives set out in paragraphs (a), (b) and (c) by enabling the development of a lot for the purposes of achieving greater density of residential development. The development is sustainable and will enable the environmentally acceptable redevelopment of the subject property in accordance with land use strategies and the capacity of existing infrastructure. The size of the new lots achieves these objectives without the need for services augmentation within the capacity of the system.

(e) To promote the sharing of responsibility for resource management and planning between the different spheres of Government, the community and industry in the State.

**RESPONSE:** The process facilitates the sharing of resource management decisions through consultation and community participation in the decisions concerning future land use proposals.

- 3.1.3.2 Schedule 1, Part 2 Objectives of the planning process established by the Act
  - (a) to require sound strategic planning and co-ordinated action by State and local government.

**RESPONSE:** The rezoning to enable the redevelopment of the subject property at increased residential density is in accordance with the identified priorities of the CCRLUS being infill development within the existing Urban Growth boundary. The proposal is in keeping with the land use strategy achieving sustainable development.

(b) to establish a system of planning instruments to be the principal way of setting objectives, policies and controls for the use, development and protection of land.



**RESPONSE:** The planning instruments including the CCRLUS provides the basis upon which the present application affecting the subject site can be assessed. Self-evidently under the existing zone, the site is earmarked for residential development within the existing serviced residential corridor.

(c) to ensure that the effects on the environment are considered and provide for explicit consideration of social and economic effects when decisions are made about the use and development of land.

**RESPONSE:** The development of the subject site will not impact the natural and physical resources nor the maintenance of ecological processes and generic diversity.

(d) to require land use and development planning and policy to be easily integrated with environmental, social, economic, conservation, and resource management policies at the State, regional and municipal levels.

**RESPONSE:** The application will achieve effective integration in terms of the social economic and environmental values, polices and strategies of state and local government, supported by regional strategy relevant to these values and parameters. The development sits within the Urban Development boundary and is sequentially coordinated to enable the sustainable redevelopment of the site.

(e) to provide for the consolidation of approvals for land use or development and related matters, and to coordinate planning approvals with related approvals.

**RESPONSE:** The approval process will achieve coordination in terms of land use and development coordinating approvals in accordance with section 40T of the *Land Use Planning and Approvals Act* 1993.

(f) to promote the health and wellbeing of Tasmanians and visitors to Tasmania by ensuring a pleasant, efficient and safe environment for working, for living and recreation.

**RESPONSE:** The proposed rezoning and development will not adversely impact the health and wellbeing of Tasmanians and visitors to the state. The development will not impact the general environment in terms of pleasant, efficient or safe environment as assessments undertaken in reference to site stability and fire hazard management indicate. Subsequent development of the new allotments will be read as a part of the existing residential precincts.

(g) to conserve those buildings, areas or other places which are of scientific, aesthetic, architectural or historical interest, or otherwise of special cultural value.

**RESPONSE:** The site is not one of scientific, aesthetic architectural or historical interest. Notwithstanding the limited environmental values of the site will not be adversely affected by the proposed action and development.

(h) to protect public infrastructure and other assets and enable the orderly provision and coordination of public utilities and other facilities for the benefit of the public.

**RESPONSE**: Public infrastructure and other assets have more than adequate capacity to meet the resultant demand of the site's future development at greater density and will be unaffected adversely as a result of the ultimate development of the subject site.



(i) to provide a planning framework which fully considers land capability.

**RESPONSE:** The existing planning framework will remain unaffected by the proposed action and future development of the subject property, allowing the proposal to be adequately considered from the perspective of land capability, infrastructure servicing *et al.* The subject site is zoned for residential development and the proposal simply increases the future density of that residential development aligning with the settlement policies and objectives of the CCRLUS achieving the appropriate balance within the capacity of existing infrastructure and the relationship to nearby property.

## 3.1.4. Section 34(2)(d)

(a) is consistent with each State policy;

**RESPONSE:** The instrument is consistent with each relevant State Policy refer to section 4.

## 3.1.4 Section 34(2)(da)

(da) satisfies the relevant criteria in relation to the TPP's (Tasmanian Planning Policies);

**RESPONSE:** The scheme does not include Tasmanian Planning Policies.

# 3.1.5 Section 34(2)(e)

(e)as far as practicable, is consistent with the regional land use strategy, if any, for the regional area in which is situated the land to which the relevant planning instrument relates;

# 3.1.5.1 Cradle Coast Regional Land Use Strategy

**RESPONSE:** The extension of the General Residential Zone to the balance of the existing title will enable the sustainable development of the site in a manner which is in keeping with that of the surrounding and nearby lots, enabling compliance with the planning scheme development standards and relevant Codes.

The proposal will create 32 residential allotments within the precinct which can be developed without compromising the values of the site and the nearby areas. From the *Cradle Coast Regional Land Use Strategy 2010-2030* (CCRLUS) residential and infill development is encouraged as a priority within established settlement areas and is enunciated in the form of the following principles:

# 4.11 Strategic Outcomes for Liveable and Sustainable Communities Regional settlements provide liveable and sustainable communities where -

The growth and development of centres is contained to create compact places which
optimise use of land and infrastructure services and minimise adverse impact on resources
of identified resource, natural and cultural value.

**RESPONSE:** The proposed subdivision represents infill development within the current Urban Zone (growth) boundary - refer Figure 3. The change to the zone takes advantage of the infrastructure capacity to increase density achieving the maximum development density within the urban boundary.

Infill development is defined as follows:

a. Small scale subdivision or unit development on existing residential lots; or



- **b.** Redevelopment of brownfield or greyfield sites.
- c. May resolve increase in density.

# 5.7 Strategic Outcomes for Infrastructure Provision

Development and settlement is underpinned by integrated land use and infrastructure planning to facilitate provision of adequate, appropriate and reliable infrastructure in a manner that -

- ensures infrastructure is planned and available commensurate with the use and development of land
- prioritises optimum use of existing infrastructure over provision of new or expanded services
- identifies and protects the function and capacity of existing and planned infrastructure corridors, facilities and sites

**RESPONSE:** The proposal will ensure that the infrastructure capacity is maximised in terms of the lot yield achieving consolidation of residential infill development within the projected 5-10-year development horizon.

# 4.3 Land Use Policies for Managing Growth and Development

## 4.3.1 Urban Settlement Areas

- **a.** Assume a low growth scenario under which demand is driven by internal population change and low rates of inward migration
- b. Promote established settlement areas as the focus for growth and development
- **c.** Promote optimum use of land capability and the capacity of available and planned infrastructure services
- **d.** ...
- **e.** ..
- f. Provide a pattern of settlement which maintain(s)
  - i. Separate towns, villages and communities
  - ii. Visual and functional transitional space between each individual centre
  - iii. Absence of linear development or expansion aligned to coastline, ridgeline, or river or road frontage
- g. Implement structure plans and regulatory instruments for each centre which -
  - Identify arrangements for intensification through infill, redevelopment and conversion of vacant and under-developed land, including for intensity of buildings and density of population
  - ii. identify arrangements for the expansion of urban boundaries when
    - **a.** There is insufficient capacity within existing designated land to accommodate forecast growth
    - b. Areas of expansion are contiguous with established settlement areas
    - **c.** Sequence of release is progressive from established settlement areas and consistent with the capacity and orderly provision of infrastructure services
    - d. Compact urban form is retained
    - e. ...

**RESPONSE:** The proposal will simply increase the density of development and maximise the lot yield within infrastructure capacity in accordance with the prerequisites of the new zone.

# Planned Provision for Infrastructure - support for growth and development 5.1 Context



The strategy has a particular function to achieve integrated land use and infrastructure planning to ensure processes which allocate land for development are coordinated with processes for provision of infrastructure. Integrated planning assists to make optimum use of existing and planned infrastructure and enable appropriate capacity and function is available to match demand.

#### 5.2 Strategic Outcomes

Land Use Outcomes for Integrated Land Use and Infrastructure Planning

Economic prosperity, liveable settlement and environmental health is underpinned by integrated land use and infrastructure planning to facilitate provision of adequate, appropriate and reliable infrastructure in a manner that -

- Ensures infrastructure is planned and available commensurate with the use and development of land
- Prioritises optimum use of existing infrastructure over provision of new or expanded services
- Protects the function, capacity and security of existing and planned infrastructure corridors, facilities and sites

**RESPONSE:** The proposal prioritises optimum use of existing infrastructure over provision of new or expanded services and will protect the function, capacity and security of existing infrastructure corridor, facilities and sites.

# 5.3 Land Use Policies for Integrated Land Use and Infrastructure Planning

Land use recognises the purpose of land use planning is closely linked to infrastructure planning and provision.

Land use planning processes -

- a. ....
- **b.** Recognise existing and planned infrastructure provision for services and utilities
- **C.** ...
- **d.** Direct new and intensified use or development to locations where there is available or planned infrastructure capacity and function appropriate to the need of communities and economic activity
- **e.** Require the scale and sequence of growth and development be in accordance with arrangements for the provision of infrastructure
- **f.** Require use or development (to) optimise capacity or function of infrastructure services and utilities
- **g.** Restrict use or development in locations where provision or upgrade in capacity or function of infrastructure services and utilities cannot be economically or sustainably provided



**RESPONSE:** Figure 19 below shows integrated and sequenced site development.

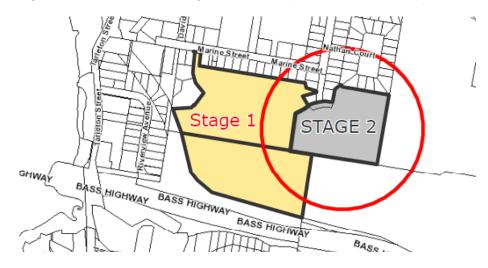


Figure 19 - Coordinated and sequenced planning

**RESPONSE:** The proposal recognises the opportunity for development within the existing planning infrastructure and as a part of stage 2 of the overall sites development, sequencing ongoing growth which accords with demand and existing available infrastructure.

- (2) An amendment of a planning scheme that would amend a local provision of the scheme or insert a new provision into the scheme may only be made under Division 2 or 2A if
  - a. The amendment is such that the local provision as amended or inserted would be directly or indirectly inconsistent with the common provisions, except in accordance with section 30EA, or an overriding local provision; and
  - b. The amendment does not revoke or amend an overriding local provision; and
  - c. The amendment is not to the effect that a conflicting local provision would, after the amendment be contained in the scheme.

**RESPONSE:** The proposed amendment will not revoke or amend the local provision and will not be inconsistent with the common provisions. The extension of the General Residential Zone will give effect to principles of the CCRLUS.

- (3) Subject to section 30EA, an amendment may be made to a local provision if
  - a. The amendment is to the effect that a common provision is not to apply to an area of land: and
  - b. A planning directive allows the planning scheme to specify that some or all of the common provisions are not to apply to such an area of land.

**RESPONSE:** Not applicable the proposal will not impact local provisions.

(4) An amendment may not be made under Divisions 2 or 2A to a common provision of a planning scheme unless the common provision, as so amended, would not be inconsistent with a planning directive that requires or permits the provision to be contained in the planning scheme.



**RESPONSE:** The introduction of the General Residential Zone is consistent with the CCRLUS nor is it inconsistent with any planning directive which permits the provision to be contained in the planning scheme.

- (5) Subject to section 30AE, an amendment of a planning scheme may be made under Division 2 or 2A if the amendment consists of
  - a. Taking an optional common provision out of the scheme, or
  - b. Taking the provision out of the scheme and replacing it with another optional common provision.

**RESPONSE:** Not applicable.

# 3.1.5.2 Greater Devonport Residential Growth Strategy 2021-2040

The Table below is an extract of strategic policy actions forming part of the *Greater Devonport Residential Growth Strategy*. The key policy elements to which the proposal applies are shown.

	Policy Direction	Key Objectives	Strategies for Implementation	Deliverability
1.	Aspirational population Growth			
2.	Residential land supply	Maintain an adequate supply of residential land to accommodate future residential growth (including aspirational growth).	Provide and maintain a minimum fifteen (15) year forward supply of both General Residential zoned land and Rural Living zoned land that is appropriately 'development ready' and not otherwise unreasonably constrained for timely or cost-effective residential use and development.	Ongoing action.
			Prepare land supply and demand analyses a minimum of every two (2) years to evaluate and monitor residential land supplies	Initial baseline study prepared and used to inform the preparation of this Strategy. Action to be repeated every two (2) years.
			In consultation with landowners explore opportunities for land releases that are consistent with this Strategy including:  (a) Support appropriate amendments to Council's planning scheme to maintain adequate residential land supplies;  (b) Appropriate mechanisms to incentivise land releases; and  (c) Engage with the State Government and other relevant agencies to support initiatives that promote land releases for delivery of increased housing and residential growth	Ongoing action
3.	Strategic direction for future residential growth	Provide overarching strategic direction for the logical and orderly growth of residential settlement areas in the Greater Devonport area.	Promote well defined orderly and compact form of residential settlement areas through the provision of urban and peri-urban growth boundaries.	The mapping of urban growth and peri-urban growth boundaries to be included /directly adopted as part of this Strategy and carried forward/incorporated into other relevant Council policies and strategies as required.
			Encourage and support appropriate opportunities for 'urban in-fill' residential	Ongoing action.



Policy Direction	Key Objectives	Strategies for Implementation	Deliverability
		use and development at suitable locations (including appropriate opportunities for the application of the Inner Residential Zone).	
		Identify 'future investigation areas' where future residential growth could be further considered and investigated.	The mapping of Future Investigation Areas to be included/directly adopted as part of this Strategy and carried forward /incorporated into other relevant Council policies and strategies as required.

Table 1 - Greater Devonport Residential Growth Strategy 2021-2040

**RESPONSE:** The instrument is consistent with the aspirations, goals and implementation (deliverability) statements of the policy.

# 3.1.6 Section 34(2)(f)

(f) has regard to the strategic plan, prepared under section 66 of the Local Government Act 1993 that applies in relation to the land to which the relevant planning instrument relates

**RESPONSE**: The instrument has regard to the Devonport City Council Strategic Plan 2009-2030 in terms of the following extract:

Goal	Outcome and Strategies	Response
Building a unique city (2)	2.1.1 Apply and review the Planning scheme as required, to ensure it delivers local community character and appropriate land use	The instrument will provide densification of residential development within the City's urban Growth Boundary
Growing a vibrant economy (3)	3.3.1 Access into, out of, and around the city is well planned and managed: Improve the City's physical access and connectivity focusing on linkages to and from key access points.	The development design draws upon recommendations from the Traffic Impact Assessment to achieve the internal road network will ensure a low-speed environment achieving good connectivity to the external road network.

Table 2- Extract Devonport City Council Strategic Plan 2009-2030

# 3.1.7 Section 34(2)(g)

(g) as far as practicable, is consistent with and coordinated with any LPS's that apply to municipal areas that are adjacent to the municipal area to which the relevant planning instrument relates;

**RESPONSE**: Consistent: The development site does not impact nor is it proximate to another municipal area (Latrobe).

# 3.1.8 Section 34(2)(h)

(h) has regard to the safety requirements set out in the standards prescribed under the Gas Safety Act 2019.

**RESPONSE:** Consistent: The development site is outside and will not impact the Tasmanian Gas Pipeline Easement.



# 4. STATE POLICIES

The following is a response to State policies where applicable.

4.1 State Policy on the Protection of Agricultural Land 2009

**RESPONSE**: Not applicable, the land is zoned for residential development.

4.2 Tasmanian State Coastal Policy 1996

**RESPONSE:** The proposal is consistent with the outcomes and objectives of the policy. Refer Table below.

	Policy Outcome	Response
	Protection of natural and cultural Values of the Coastal Zone	Response
1.1.1	NATURAL RESOURCES AND ECOSYSTEMS  The coastal zone will be managed to ensure sustainability of major ecosystems and natural processes	Consistent: The result of the development will not impact the imperative in terms of the natural process.  Management of water balance will ensure the impact on the coastal environment is imperceptible.
1.1.2	The coastal zone will be managed to protect ecological, geomorphological coastal features and aquatic environments of conservation value	Consistent: The proposed development will not impact the imperative in terms of the natural process.  Management of water balance will ensure the impact on the coastal environment is imperceptible.
1.1.3	The coastal zone will be managed to conserve the diversity of native flora and fauna and their inhabitants, including seagrass and seaweed beds, spawning and breeding areas.  Appropriate conservation measures will be adopted for the protection of migratory species and the protection and recovery of rare, vulnerable and endangered species in accordance with this policy and other relevant Acts and policies.	Consistent: The proposed subdivision will not impact the native flora and fauna and will meet this policy objective.
1.1.4	Exotic weeds within the coastal zone will be managed and controlled, where possible, and the use of native flora encouraged.	NA
1.1.5	Water quality in the coastal zone will be improved, protected and enhanced to maintain coastal and marine ecosystems, and to support other values and uses, such as contact recreation, fishing and aquaculture in designated areas.	Consistent: Water balance will be appropriately managed to lessen the potential for impacts to water quality through stormwater reticulation engineering design.
1.1.6	Appropriate monitoring programs and environmental studies will be conducted to improve knowledge, ensure guidelines and standards are met, deal with contaminates or introduced species and generally ensure sustainability of coastal ecosystems and	Consistent: The development will not generate significant impacts requiring the introduction of monitoring programs or ongoing environmental studies.



	Policy Outcome	Response
	processes and ensure that human health is not threatened.	
1.1.7	Representative ecosystems and areas of special conservation value or special aesthetic quality will be identified and protected as appropriate.	Not applicable
1.1.8	An effective system of marine reserves will continue to be established to protect marine ecosystems and fish nursery areas.	Not applicable
1.1.9	Important coastal wetlands will be identified, protected, repaired and managed so that their full potential for marine conservation and public benefit is realised. Some wetlands will be managed for multiple use, such as recreation and aquaculture, provided conservation values are not compromised.	Not applicable
1.1.10	The design and siting of buildings, engineering works and other infrastructure, including access routes in the coastal zone, will be subject to planning controls to ensure compatibility with natural landscapes.	Consistent: The management of drainage will be designed appropriately in accordance with State and local government standards.
1.1.11	Fire management, for whatever purpose, shall be carried out in a manner which will maintain ecological processes, geomorphological processes and genetic diversity of natural resources located within the coastal zone.	Consistent: The development will access reticulated water supply in the event of fire management.
1.2 C	ULTURAL AND HISTORIC RESOURCES	
1.2.1	Areas within Aboriginal sites and relics are identified will.be legally protected and conserved where appropriate.	Consistent: The development site is not within an Aboriginal conservation area.
1.2.2	All Aboriginal sites and relics in the coastal zone are protected and will be identified and managed in consultation with Tasmanian Aboriginal people in accordance with relevant State and Commonwealth legislation.	
1.3 C	ULTURAL HERITAGE	
1.3.1	Places and items of cultural and heritage will be identified, legally protected, managed and conserved where appropriate.	Consistent: There are no sites listed on the Tasmanian Heritage Register within the subject area.
1.4 C	OASTAL HAZARDS	
1.4.1	Areas subject to significant risk from natural coastal processes and hazards such as flooding, storms, erosion, landslip, littoral drift, dune mobility and sea level rise will be identified and managed to minimise the need for engineering or remediation works to protect land, property and human life.	Consistent: The site is located between the 45m and 60m contour AHD located approximately 540m from the highwater mark of the Mersey River. The subject area is not impacted by significant landslip activity.



	Policy Outcome	Response
1.4.2	Development on actively mobile landforms such as frontal dunes will not be permitted except for works consistent with Outcome 1.4.1.	Not relevant to this proposal.
1.4.3	Policies will be developed to respond to potential effects of climate change (including sea-level rise) on use and development in the coastal zone.	Consistent: The development site will not be impacted by sea-level rise and impacts such as fire related hazards will be managed in accordance with the Livingston Resources review and recommendation.
	ustainable Development of Coastal Areas and esources	
2.1 C	DASTAL USES AND DEVELOPMENT	
2.1.1	The coastal zone shall be used and developed in a sustainable manner subject to the objectives, principles and outcomes of this Policy. It is acknowledged that there are conservation reserves and other areas within the coastal zone which will not be available for development.	Consistent: The development will not impact the sustainability of the coastal environment.
2.1.2	Development proposals will be subject to environmental impact assessment as and where required by State Legislation including the Environmental Management and Pollution Control Act 1994.	Not applicable, given the distance of the development from the coast.
2.1.3	Siting design construction and maintenance of buildings, engineering works and other infrastructure, including access routes within the coastal zone will be sensitive to natural and aesthetic qualities of the coastal environment.	Not applicable, the proposed development is well removed from the direct coastal environment.
2.1.4	Competing demands for use and development in the coastal zone will be resolved by relevant statutory bodies and processes, in particular the Land Use Planning Review Panel, the Resource Management Planning and Appeal Tribunal and the Marine Planning Review Panel. Planning Schemes, marine farming development plans and other statutory plans will provide guidance for resource allocation and development in accordance with this Policy.	The application will be subject to the planning processes and appropriate assessment.
2.1.5	The precautionary principle will be applied to development which may pose serious or irreversible environmental damage to ensure that environmental degradation can be avoided, remedied or mitigated. Development proposals shall include strategies to avoid or mitigate potential adverse environmental effects.	Not applicable, as the development does not pose serious or environmental risk.
2.1.6	In determining decisions on use and development in the coastal zone, propriety will be given to those which are dependent on a coastal location for spatial, social, economic, cultural or environmental reasons.	Not applicable.



	Policy Outcome	Response
2.1.7	New industrial developments will be encouraged to locate in specified industrial zones.	Not applicable.
2.1.8	Extraction of construction materials, mineral, oil, and natural gas deposits in the coastal zone will be allowed provided access to areas is not allowed under the provisions of the Mining Act 1929.	Not applicable.
2.1.9	Exploration will be conducted in accordance with environmental standards under relevant legislation and the Mineral Exploration Code of Practice.	Not applicable.
2.1.10	Extraction will be subject to the Quarry Code of Practice and environmental assessment as required by State legislation including the Environmental Management and Pollution Control Act 1994. Adequate rehabilitation shall be carried out.	Not applicable.
2.1.11	Extraction of sand will be provided for by zoning of appropriate areas in planning schemes.	Not applicable.
2.1.12	Timber harvesting and reforestation in the coastal zone will be conducted in accordance with the Forest Practices Code and have regard to this Policy.	Not applicable.
2.1.13	Whole farm planning and sustainable farming activities will be encouraged on agricultural land in the coastal zone and in coastal catchments in order to minimise problems such as erosion, sedimentation and pollution of coastal waters including surface and ground waters.	Not applicable.
2.1.14	Management arrangements for commercial and recreational fisheries will be further developed in accordance with the objectives, principles and outcomes of this Policy, through a management planning framework designed to maintain sustainability and diversity of fish resources and their habitats and promote economic efficiency under the Living Marine Resources Management Act 1995.	Not applicable.
2.1.15	Harvesting of marine plants shall be conducted in a sustainable manner in accordance with relevant State legislation and this Policy.	Not applicable.
2.1.16	Water quality in the coastal zone and in ground water aquifers will accord with the requirements and guidelines established by the Environmental management and Pollution Control Act 1994 or the Environmental Protection (Sea Dumping) Act 1987 (as appropriate) and any other State and Commonwealth Policies and statutes.	Water quality will not be impacted by the proposed development.



	Policy Outcome	Response
2.1.17	Waste discharge into the coastal zone, including offshore waters, or likely to affect groundwater aquifers, must comply with the provisions of the Environmental management and Pollution Control Act 1994 or the Environmental Protection (Sea Dumping) Act 1987 (as appropriate) and any other State and Commonwealth Policies and statutes.	Stormwater discharge will be managed through the reticulation network and will reduce the potential for impact upon offshore waters, or groundwater aquifers.
2.1.18	Where oil pollution occurs in the coastal zone, and or, offshore areas, the National Plan to combat Pollution of the Sea by Oil, Tasmanian Supplement, will apply. Efforts to prevent or mitigate maritime accidents and pollution shall be based upon relevant ANZECC and other guidelines.	Not applicable
2.1.19	Every effort will be made to prevent introduction of foreign marine organisms and species. Relevant Commonwealth provisions for quarantine and ballast water or other ship discharges shall apply.	Not applicable.
2.2 M	ARINE FARMING	Not applicable.
2.2.1	Marine farming will be planned, developed and conducted in the coastal zone having regard to sustainable development considerations and in accordance with the Marine Farming Planning Act 1995 and other relevant terrestrial and marine resources management and planning legislation and consistent with this Policy.	Not applicable.
2.2.2	Marine Farming Development Plans will be prepared, approved and gazette under the Marine Farming Planning Act 1995 and consistent with the objectives, principles and outcomes of this Policy.	Not applicable.
2.3 TO	DURISM	Not applicable.
2.3.1	Tourism use and development in the coastal zone, including visitor accommodation and other facilities, will be directed to suitable locations based on the objectives, principles and outcomes of this Policy and subject to planning controls.	Not applicable.
2.3.2	Tourism development proposals in the coastal zone will be subject to environmental impact assessment as required by State legislation including a water safety assessment to indicate the level and type of lifesaving facilities and personnel required to protect people.	Not applicable.
2.3.3	Opportunities for tourism development will be identified wherever strategic planning occurs for the coastal zone or any part of it.	Not applicable.
2.3.4	Tourism development will be located where there is environmental capacity and where it	Not applicable.



	Policy Outcome	Response
	does not significantly conflict with the natural and aesthetic qualities of the coastal zone.	
2.4	JRBAN AND RESIDENTIAL DEVELOPMENT	
2.4.1	Care will be taken to minimise, or where possible totally avoid, any impact on environmentally sensitive areas from the expansions of urban and residential areas, including the provision of infrastructure for urban and residential areas.	Consistent: the development will have no impact upon environmentally sensitive areas.
2.4.2	Urban and residential development in the coastal zone will be based on existing towns and townships. Compact and contained planned urban and residential development will be encouraged in order to avoid ribbon development and unrelated cluster developments along the coast.	Consistent: the development will be within the boundary proposed by the <i>Greater Devonport Residential Growth Strategy 2021-2040</i> , and the existing urban zone boundary.
2.4.3	Any urban and residential development in the coastal zone, future and existing, will be identified through designation of areas in planning schemes consistent with the objectives, principles and outcomes of this Policy.	Consistent: in that the area is not so designated, but remains consistent with the principles and outcomes of the Policy.
2.5 7	TRANSPORT	
2.5.1	All transport infrastructure and associated services will be planned, developed and maintained consistent with the State Coastal policy.	Consistent.
2.5.2	Significant scenic coastal transport routes and associated facilities will be identified, planned and managed to ensure sustainable benefits for tourism and recreation value and amenity.	Consistent: Scenic coastal routes will be unaffected by the proposal.
2.5.3	New coast hugging roads will be avoided where possible with vehicular access to the coast being provided by spur roads planned, developed and maintained consistent with the State coastal Policy.	Not applicable.
2.5.4	Marine structures will be designed, sited, constructed and managed in accordance with best practice environmental management and subject to environmental impact assessment having regard to statutory requirements.	Not applicable.
2.5.5	The multiple use of port areas will be encouraged but priority will be given to efficient port operations and safety requirements subject to cultural, natural and aesthetic values not being compromised.	Not applicable.
2.6 F	PUBLIC ACCESS AND SAFETY	



	Rollov Outcome	Bosnopeo
2.6.1	The publics common right of access to and along the coast, from both land and water, will be maintained and enhanced where it does not conflict with the protection of natural and cultural coastal values, health and safety and security requirements.	Response  Consistent: public access to the coast is unaffected by the proposal.
2.6.2	Public access to an along the coast will be directed to identified access points. Uncontrolled access which has the potential to cause significant damage to the fragile coastal environment and is inconsistent with this Policy will be prevented.	Not applicable.
2.6.3	Agreements between landowners, landholders and councils or State Government to grant public access to the coast, and Aborigines access to Aboriginal sires and relics in the coastal zone over public and private land will be encouraged and shall be considered when prospering plans or approving development proposals.	Not applicable.
2.6.4	Public facilities such as lifesaving facilities and essential emergency services, parking facilities, toilet blocks, picnic sites, rubbish disposal containers, boat ramps and jetties will be provided at appropriate locations consistent with the objectives, principles and outcomes of this Policy to facilitate access to and enjoyment of recreational amenity of the coast and estuarine foreshores.	Consistent: unaffected by the proposal.
2.6.5	Councils will ensure that there will be a coastal safety assessment for any new coastal development likely to attract people to the coast to indicate the level and type of lifesaving facilities and personnel required.	Not applicable.
2.6.6	Developer contributions will be encouraged in respect to the costs of providing public access and safety services for the community.	Not applicable.
2.7 P	UBLIC LAND	Not applicable, public land will not be impacted by the proposed development.
2.7.1	All future use and development of public land in the coastal zone will be consistent with this Policy, and subject to planning controls unless otherwise provided by statute.	Not applicable
2.7.2	Future development of camping areas on public land in the coastal zone will only be permitted where such development does not conflict with then protection of natural features and cultural values, but not within 30 metres above highwater mark.	Not applicable
2.7.3	Expansion of shack sites on public land in the coastal zone will not be permitted.	Not applicable



	Policy Outcome	Response
2.7.4	Shacks currently located on public land in the coastal zone will continue to be subject to review under the Shack Site Categorisation Program of the Tasmanian Property Services Group.	Not applicable.
2.8 R	ECREATION	Not applicable.
2.8.1 2.8.2		Not applicable.
2.8.3	Suitable recreation opportunities will be identified through strategic planning and may be provided in appropriate locations where they do not adversely affect sensitive coastal ecosystems and landforms or in designated areas where such effects can be remedied or mitigated.	Not applicable.
2.8.4	Special recreational vehicle areas may be established as an environmental protection measure and as a means of limiting unauthorised moto vehicle activity in environmentally sensitive areas.	Not applicable.
	ared Responsibility for Integrated inagement of Coastal Areas and Resources	
3.1 SH	ARED RESPONSIBILITY FOR MANAGEMENT	Not applicable
3.1.1	Provision will be made for consistency in policy interpretation and implementation by all spheres of government throughout Tasmania, including consistency in changes to planning schemes affected by this Policy.	Not applicable
3.1.2	Coastal management should be considered as an integral component of regional planning undertaken in the State.	Not applicable
3.1.3	Provision shall be made for effective coordination of the activities of governments, industry and local communities in interpreting and implementing the State Coastal Policy.	Not applicable
3.1.4	Provision for effective and greater involvement of Aboriginal people in areas of particular interest to Aboriginal people will be made as part of the community participation process.	Not applicable
3.1.5	Planning authorities, the Land Use Planning Review Panel and the Marine Farming Planning Review Panel will use their best endeavours to function in a coordinated and collaborative manner to effectively and efficiently implement the State Coastal Policy.	Not applicable
3.1.6	Council will prepare strategic and operational plans for their municipal areas having regard to the principles, objectives and outcomes of this	Not applicable



	Policy Outcome	Response
	Policy and will be encouraged to function in a coordinated and collaborative manner with adjacent councils and other planning authorities.	
3.1.7	State government agencies and planning authorities will participate with other State, Territory and Commonwealth agencies in relevant forums to foster a national approach to coastal zone management.	
3.2 INSTITUTIONAL ARRANGEMENTS		Not applicable
3.2.1	State Coastal Advisory Committee comprising representatives of State and local government and the community will be established to facilitate implementation, coordination, consistent interpretation, and evaluation of this Policy.	Not applicable
3.2.2	The State Coastal Advisory Committee will be supported by the Coastal and Marine Program in the Department of Environment and Land Management.	Not applicable
3.2.3	The Tasmanian Government will provide funding and other resources considered necessary for the effective implementation of this Policy.	Not applicable
3.2.4	A high level of coastal expertise will progressively be developed in agencies responsible for implementation of the State Coastal Policy.	Not applicable
3.2.5	The effectiveness of institutional arrangements will be reviewed three years from the date of implementation of the State Coastal Policy.	Not applicable
3.3 PU	IBLIC PARTICIPATION AND INFORMATION	
3.3.1	Public awareness of coastal issues and community participation in managing the coastal zone will be encouraged and facilitated, including networking between community groups working in the coastal zone.	The application will be advertised as a part of the land use planning process.
3.3.2	Advice and information will be provided to coastal community groups through councils and State Government agencies responsible for coastal planning and management on the implementation and interpretation of the State Coastal Policy, on government assistance programs or other matters relevant to the coastal zone.	As above
3.3.3	Community projects and action which benefit the coastal zone and are consistent with this Policy will be encouraged and assisted through the Coastal and Marine Program of the Department of Environment and Land Management or other relevant government programs.	Not applicable



	Policy Outcome	Response
3.3.4	Communities will be given the opportunity to make submissions to all plans or policies affecting the coastal zone. Consultative meetings with interested community groups and individuals in local or regional areas will be held in conjunction with the release of policies and plans wherever possible.	Not applicable
3.3.5	Research into coastal processes and matters related to the coastal zone planning and management of government or research institutions will be encouraged and assisted where possible.	Not applicable

# 4.3 State Policy on Water Quality Management 1997

**RESPONSE:** The State Policy on Water Quality Management 1997 seeks to achieve the sustainable management of Tasmania's surface water and groundwater resources by protecting or enhancing their quality while allowing for sustainable development in accordance with the objectives of the Tasmanian Resource Management and Planning System.

The subdivision design provides an effective and efficient reticulated drainage system to ensure water quality is managed so as to maintain flows and quality in accordance with requirements of Council and the existing network.

#### 4.4 National Environment Protection Measures

**RESPONSE:** Not applicable.

# 4.5 Gas Pipeline Act 2000

**RESPONSE:** Not applicable, the development site is outside and will not impact the Gas pipeline easement.



## 5. DEVELOPMENT PROPOSAL - SUBDIVISION

## 5.1 Proposal

The proposal will create 32 residential allotments with access via a new internal road network to Caroline Street. The lots range in size from 452m<sup>2</sup> to 3,974m<sup>2</sup> designed to provide a mix of residential types and densities.

Figure 20 below shows the subdivision proposal layout which is included at Appendix B.



Figure 20 - Plan of subdivision

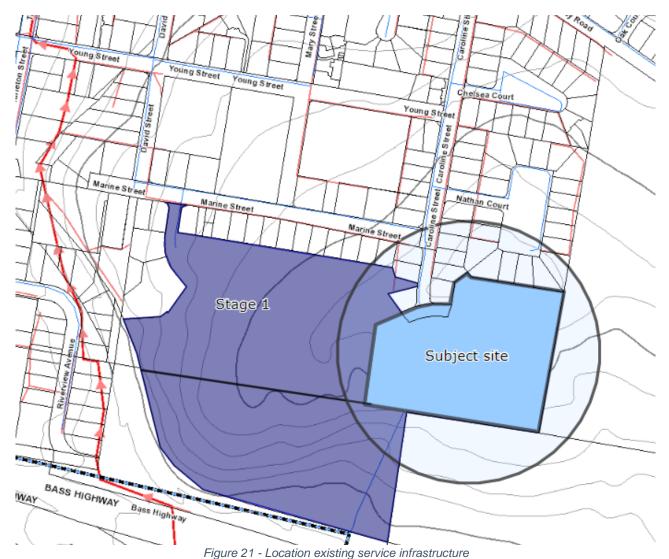
Table 2 - Lot Areas

Lot No.	Lot size m²	Lot No	Lot size m <sup>2</sup>
47	570	63	724
48	647	64	723
49	690	65	452
50	636	66	747
51	541	67	923
52	1003	68	458
53	3974	69	569
<i>54</i>	1158	70	1361
<i>55</i>	639	71	927
56	705	72	724
57	465	73	649
58	679	74	600
59	689	75	769
60	794	76	710
61	1046	77	465
62	873	78	600



## 2 Services

The property will access water, sewer and stormwater infrastructure servicing the existing Marine Street precincts. The layout of these services and potential connection points are shown on concept drawings included at Appendix B.



Section 40T - 158 Caroline Street, East Devonport - Rezoning and Development Application



#### 6.0 PLANNING SCHEME ASSESSMENT

## 6.1 10. General Residential Zone

## 8.1 Zone Purpose Zone Purpose Statements

8.1.1	To provide for residential use or development that accommodates a range of dwelling types at suburban densities, where full infrastructure services are available or can be provided.
8.1.2	To provide for the efficient utilisation of available social, transport and other service infrastructure.
8.1.3	To provide for non-residential use that:
(a)	primarily serves the local community; and
(b)	does not cause unreasonable loss of amenity through scale, intensity, noise, activity outside of business hours, traffic generation and movement, or other offsite impacts.
8.1.4	To provide for Visitor Accommodation that is compatible with residential character.

## **RESPONSE: Complies with 8.1.1**

The proposal complies with the zone purpose statements allowing for the development which will:

- accommodate further dwelling types at suburban densities;
- build upon the efficient use of all services available;
- achieve a layout and design respecting neighbourhood character and natural landscape, providing a high standard of residential development;
- achieve urban consolidation adding to the range of residential density.

## 8.6 Development Standards for Subdivision

## 8.6.1 Lot Design

## **Objective:**

That each lot:

- (a) has an area and dimensions appropriate for use and development in the zone;
- (b) is provided with appropriate access to a road:
- (c) contains areas which are suitable for development appropriate to the zone purpose, located to avoid natural hazards; and
- (d) is oriented to provide solar access for future dwellings.

## **RESPONSE: Complies**

- (a) the proposed development will create lots of adequate site area for the purposes of residential use;
- (b) access will be provided via an internal road network connecting to Caroline and Marine Streets;
- (c) the lot will contain a building area suitable for residential development, avoiding natural hazards;
- (d) all lots are oriented to ensure solar access for future dwellings.



ceptable Solutions	Performance Criteria	
•	P1	
· ·	<ul><li>Each lot, or a lot proposed in a plan of subdivision must have sufficient useable area and dimensions suitable for its intended use, having regard to:</li><li>(a) the relevant requirements for development of buildings on the lots;</li></ul>	
Have an area of not less than 450m2 and:		
a, all setbacks required by clause 8.4.2	(b) the intended location of buildings on the lots;	
A1, A2 and A3, and 8.5.1 A1 and A2	(c) the topography of the site;	
b. easements or other title restrictions that limit or restrict development; and	(d) the presence of any natural hazards;	
(ii) existing buildings are consistent with the	<ul><li>(e) adequate provision for private open space; and</li></ul>	
	(f) the pattern of development existing on established properties in the area.	
Be required for the provision of Utilities; or		
lot provided each lot is within the same		
	x 15m with a gradient not steeper than 12 in 5 clear of:  a. all setbacks required by clause 8.4.2 A1, A2 and A3, and 8.5.1 A1 and A2  b. easements or other title restrictions that limit or restrict development; and	

# RESPONSE: Complies with A1(a)(i).

The proposed lots have an area greater than the minimum 450m², are capable of containing the required building envelopes, meeting the prerequisite requirements. The plan of subdivision demonstrates compliance with these requirements.

A2	P2
Each lot or a lot proposed in a plan of subdivision, excluding for public open space, a riparian or littoral reserve or Utilities, must have a frontage not less than 12m.	Each lot or a lot proposed in a plan of subdivision, excluding for public open space, a riparian or littoral reserve or Utilities, must be provided with a frontage or legal connection to a road by a right of carriageway, that is sufficient for the intended use, having regard to:
	(a) the width of frontage proposed, if any;
	(b) the number of other lots which have the land subject to the right of carriageway



	as their sole or principal means of access;	
	(c) the topography of the site;	
	(d) the functionality and useability of the frontage;	
	the ability to manoeuvre vehicles on the site; and;	
	(e) the pattern of development existing on established properties in the area; and not less than 3.6m wide.	
standard A2.	3, all remaining lots within the proposal meet the m requirement of 3.6m which is sufficient for the	
A3	P3	
Each lot or lot proposed in a plan of subdivision, must be provided with a vehicular access from the boundary of the lot to a road in accordance with the requirements of the road authority.	must be provided with a vehicular access to a	
	(a) the topography of the site;	
	(b) the distance between the lot or building area and the carriageway;	
	(c) the nature of the road and the traffic;	
	(d) the anticipated nature of vehicles likely to access the site; and	
	(e) the ability for emergency services to access the site.	
RESPONSE: Complies with A3.  Each lot is provided with access to an internal return the requirements of the road authority and connections.	pad which will be constructed in accordance with ect to the existing local road network.	
A4	P4	
Any lot in a subdivision with a new road, must have the long axis of the lot between 30 degrees		



west of true north and 30 degrees east of true north.	Subdivision must provide for solar orientation of lots adequate to provide solar access for future
	dwellings, having regard to:
	<ul> <li>(a) the size, shape and orientation of the lots;</li> <li>(b) the topography of the site;</li> <li>(c) the extent of overshadowing from adjoining properties;</li> <li>(d) any development on the site;</li> <li>(e) the location of roads and access to lots; and</li> <li>(f) the existing pattern of subdivision in the area.</li> </ul>

## **RESPONSE: Complies with P4**

All lots within the proposed subdivision will provide adequate area for solar access for future dwellings given their relative site area and lot orientation.

## 10.6.2 Roads

## Objective:

That the arrangement of new roads within a subdivision provides for:

- (a) safe, convenient and efficient connections to assist accessibility and mobility of the community;
- (b) the adequate accommodation of vehicular, pedestrian, cycling and public transport traffic; and
- (c) the efficient ultimate subdivision of the entirety of the land and of surrounding land.

Acceptable Solutions	Performance Criteria
A1	P1
The subdivision includes no new roads.	The arrangement and construction of roads within a subdivision must provide an adequate level of access, connectivity, safety and convenience for vehicles, pedestrians and cyclists, having regard to:
	(a) any road network plan by the council;
	(b) the existing and proposed road hierarchy;
	(c) the need for connecting roads and pedestrian and cycling, to common boundaries with adjoining land, to facilitate future subdivision potential;
	(d) maximising connectivity with the surrounding road, pedestrian, cycling and public transport networks;



(e) m	nini	mising	the tra	avel di	stan	ce betv	veen
k	ey	destin	ations	such	as	shops	and
S	erv	ices ar	nd publ	ic tran	spoi	t routes	;;

- (f) access to public transport;
- (g) the efficient and safe movement of pedestrians, cyclists and public transport;
- (h) the need to provide bicycle infrastructure on new arterial and collector roads in accordance with the Guide to Road Design Part 6A: Paths for Walking and Cycling 2016;
- (i) the topography of the site; and
- (j) the future subdivision potential of any balance lots on adjoining or adjacent land.

## **RESPONSE:** Complies with P1.

The proposed new internal road network connects directly to the existing public road network (Caroline Street) and is designed to satisfy the qualifications of **Performance Criteria P1** providing specifically appropriate level of access and the safety and convenience of vehicles, pedestrians and cyclists, which is confirmed by the TIA prepared by Midson Traffic. A design layout for road construction and access is provided with the application.

## 8.6.3 Services

## Objective:

That the subdivision of land provides services for future use and development of the land.

## **RESPONSE:** Complies.

The proposed development will be connected to all reticulated services suitable for the future use and development of the land.

Acceptable Solutions	Performance Criteria
A1	P1
Each lot or a proposed lot in a plan of subdivision, excluding for public open space, a riparian or littoral reserve or Utilities, must have a connection to a full water supply service.	, , , , , , , , , , , , , , , , , , , ,



(a) flow rates;
(b) the quality of potable water;
(c) any existing or proposed infrastructure to provide the water service and its location;
(d) the topography of the site; and
(e) any advice from a regulated entity.

## **RESPONSE: Complies with A1**

The new lots will connect to an existing potable water supply. An indicative concept services design is provided as part of the application.

# A2 P2

Each lot or a proposed lot in a plan of subdivision, excluding for public open space, a riparian or littoral reserve or Utilities, must have a connection to a reticulated sewerage system.

No Performance Criteria.

## **RESPONSE: Complies with A2**

The new lots will connect to the existing reticulated sewerage system. An indicative concept services design is provided as part of the application.

## A3 P3

Each lot or a proposed lot in a plan of subdivision, excluding for public open space, a riparian or littoral reserve or Utilities, must have a connection to a public stormwater system.

Each lot or a proposed lot in a plan of subdivision, excluding for public open space, a riparian or littoral reserve or Utilities, must be capable of accommodating an on-site stormwater management system adequate for the future use and development of the land, having regard to:

- (a) the size of the lot;
- (b) topography of the site;
- (c) soil conditions;
- (d) any existing buildings on the site;
- (e) any area of the site covered by impervious surfaces; and
- (f) any watercourse on the land.

## **RESPONSE:** Complies with P3.

A reticulated stormwater system serves the existing neighbourhood subdivisions. A new stormwater main will connect to the existing culvert on Bass Highway. This culvert discharges to Bison Creek.





Approx. land area (ha)	9.93	
Land use	General Residential & Local Business	
Hydraulic modelling undertaken	2019	
Nominal minor system capacity	Less than 1EY (< 1 in 1 ARI)	
Risk assessment undertaken	2019	
Risk Rating	Low-Medium	

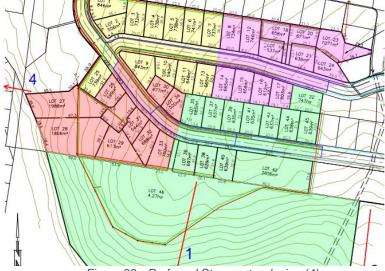


Figure 22 - Preferred Stormwater design (4)



## 7. PLANNING SCHEME CODES

## 7.1 C3.0 Road and Railway Assets Code

## **C3.1 Code Purpose**

The purpose of the Road and Railway Assets Code is:

- C3.1.1 To protect the safety and efficiency of the road and railway networks; and
- C3.1.2 To reduce conflicts between sensitive uses and major roads and the rail network.

## C3.5 Use Standards

## C3.5.1 Traffic generation at a vehicle crossing, level crossing or new junction

## Objective:

To minimise any adverse impacts on the safety and efficiency of the road or rail network from vehicular traffic generated from the site at an existing or new vehicle crossing or level crossing or new junction.

## **RESPONSE: Complies**

The internal road network is designed to junction with Marine and Caroline Street junctions. The *Midson Traffic* assessment concludes that the design of access and junctions maintain an acceptable level of safety for all road users.

## **Acceptable Solutions**

## A1.1

For a category 1 road or a limited access road, vehicular traffic to and from the site will not require:

- a) a new junction
- b) a new vehicle crossing; or
- c) a new level crossing

## A1.2

For a road excluding a category 1 road or a limited access road, written consent for a new junction, vehicle crossing or level crossing to serve the use and development has been issued by the road authority.

## A1.3

For the rail network, written consent for a new private level crossing to serve the use and development has been issued by the rail authority.

#### •

**Performance Criteria** 

Vehicular traffic to and from the site must minimise any adverse effects on the safety of the junction, vehicle crossing or level crossing or safety or efficiency of the road or rail network having regard to:

- a) any increase in traffic caused by the use;
- b) the nature of the traffic generated by the use:
- c) the nature of the road:
- d) the speed limit and traffic flow of the road;
- e) any alternative access to the road;
- f) the need for the use:
- g) any traffic impact assessment; and
- h) any advice received from the rail or road authority.

## A1.4



Vehicular traffic to and from the site, using an existing vehicle crossing or private level crossing, will not increase by more than:

- (a) the amounts in Table C3.1; or
- (b) allowed by a licence issued under Part IVA of the *Roads and Jetties Act 1935* in respect to a limited access road.

#### A1.5

Vehicular traffic must be able to enter and leave a major road in a forward direction.

## RESPONSE: A1, A1.2 and A1.3 - Not applicable

The proposal will not impact a category 1 road, limited access road or rail network.

## **RESPONSE A1.4**

The vehicle movements to and from the site will increase by more than the amounts in Table C3.1 and therefore **Performance Criteria P1** must be addressed.

#### **RESPONSE P1**

The internal road network is designed to junction with Marine and Caroline Street junctions. The Traffic Impact Assessment prepared by *Midson Traffic* concludes that the design of internal road network, access and junctions maintain an acceptable level of safety for all road users ensuring a low-speed environment with good connectivity to the external road network.

Based upon the Traffic Impact Assessment, the *Midson Traffic* analysis concludes that the requirements of **Clause C3.5.1** are met and specifically, that the traffic generation will not have any significant adverse impacts on the capacity of the junction or the surrounding road network.

In reference to **Performance Criteria** the TIA observes and concludes as follows:

- (a) The Traffic Impact Assessment prepared by *Midson Traffic* notes that the development will generate an increase in vehicle movements of approximately 71 per day at Marine Street, with a peak generation vehicle movement of 7 per hour at the site's access at Marine Street. The increase in traffic at the Caroline Street junction will be 166 vehicles per day with a peak of 18 vehicles per hour. The report concludes that the road junctions can cater for the relatively small peak hour traffic generation with a high level of service.
- (b) Traffic generation will be residential in nature:
- (c) Marine and Caroline streets are minor collector roads and carry relatively low traffic volumes;
- (d) The posted speed limit of both Marine and Caroline streets is 50 km/h. Traffic volumes impacting both roads is estimated to be in the order of 200 vehicles per day.
- (e) The two accesses to the site will ensure a good level of service onto the subject site when fully developed:
- (f) The junctions are required to provide access to the lots created by the subdivision;
- (g) Refer Appendix D Traffic Impact Assessment;
- (h) There has been no written advice relative to the development issued by the road authority.



## 7.2 C13.0 Bushfire-Prone Areas Code

## **Summary Bushfire Hazard Management Report - Livingston Natural Resources**

As the site is located within an area designated bushfire prone, a Bushfire Hazard report has been prepared by **Livingston Natural Resources** and has reviewed the subdivision proposal in terms of fire hazard management. The report recommends measures to enable adequate fire protection in the form of fire management areas for those proposed lots which exceed BAL Low Risk.

The report has reviewed both the initial proposal for residential development with direct access from Caroline Street and the proposed 32 lot subdivision forming part of this application for rezoning to the General Residential classification and subsequent development of the land.

The report observes that staged development of lots requires hazard management areas that must be in place and maintained to preserve the BAL ratings. At the completion of development and sealing of the titles at any stage, all lots within 50m of a developed lot with the exception of lot 46 and portions of lots 27, 28, 42 and 53 must be managed as low threat vegetation in perpetuity.

Lot 46 with the exception of a small area outside the landslip area and retained vegetation can remain, with management of relative fuel loads as either grassland or woodland at or before stage 4 titles are sealed. Lots 27, 28, 42 and 53 may have grassland fuel loads on areas outside their specific hazard management areas for habitable buildings on the lot or adjacent lot subject to review at the time of build planning.

Vegetation requirements for lot 46 must be in place prior to sealing of titles for lots 36, 38, 40 or 42. The woodland provision can be achieved with the management of the understorey requiring limited if any tree removal.

Hazard management for stage 5 and the rezoned site (present proposal) will require the entire area to be low threat unless staging occurs. If staged, all areas within a developed lot within the subdivision area must be managed as low threat with the exception of lot 53 which may have grassland fuel loads on areas outside the specific hazard management areas for habitable buildings on the lot or adjacent lot subject to review at the time of build planning.

The report concludes that all lots within the subdivision have building areas at BAL 19 or lower, with hazard management during staging some lots can achieve BAL low ratings. Lots on the eastern and southern portion of the residential development require a setback for their building area for construction BAL 19 and a larger setback for BAL 12.5 construction.

The Bushfire Hazard Management Report is included at Appendix C.





Figure 23 Hazard Management Areas - Extract Bushfire Hazard Management report, Livingston Natural Resources

## C13.1 Purpose of the Bushfire-Prone Areas Code

C13.1.1 To ensure that use and development is appropriately designed, located, serviced and constructed, to reduce the risk to human life and property, and the cost to the community, caused by bushfires.

## C13.2 Application of this Code

C13.2.1 This code applies to:

- (a) subdivision of land that is located within, or partially within, a bushfire-prone area; and
- (b) a use, on land that is located within, or partially within a bushfire-prone area, that is a vulnerable use or hazardous use

## C13.4 Use or Development Exempt from this Code

The following use or development is exempt from this code:

- (a) any use or development that the TFS or an accredited person, having regard to the objective of all applicable standards in this code, certifies there is insufficient increase in risk to the use or development from bushfire to warrant any specific bushfire protection measures; and
- (b) adjustment of a boundary in accordance with clause 9.3 of the planning scheme.

## C13.6 Development Standards for Subdivision

## C13.6.1 Subdivision: Provision of hazard management areas

## Objective

That subdivision provides for hazard management areas that:



- (a) facilitate an integrated approach between subdivision and subsequent building on a lot;
- (b) provide for sufficient separation of building areas from bushfire-prone vegetation to reduce the radiant heat levels, direct flame attack and ember attack at the building area; and
- (c) provide protection for lots at any stage of a staged subdivision.

**RESPONSE:** The subdivision design and management measures will ensure compliance with the objective.

## **Acceptable Solutions**

#### Α1

- (a) TFS or an accredited person certifies that there is insufficient increase in risk from bushfire to warrant the provision of hazard management areas as part of a subdivision; or
- (b) the proposed plan of subdivision:
- (i) shows all lots are within or partly within bushfire-prone area, including those developed at each stage of a staged subdivision;
- (ii) shows the building area for each lot;
- (iii) shows hazard management areas between bushfire-prone vegetation and each building area that have dimensions equal to or greater than, the separation distances required for BAL 19 in table 2.4.4 of Australian Standard as 3959-2009 construction of buildings in a bushfireprone areas; and
- (iv) is accompanied by a bushfire hazard management plan that addresses all the individual lots and that is certified by the TFS or accredited person showing hazard management areas equal to or greater than, the separation distances required for BAL 19 in table 2.4.4 of Australian Standard as 3959-2009 construction of buildings in a bushfire-prone areas: and
  - (c) if hazard management areas are to be located on land external to the proposed subdivision the application is accompanied by the written consent of the owner of that land to enter into an

## Performance Criteria

#### P1

A proposed plan of subdivision shows adequate hazard management areas in relation to the building areas shown on the lots within a bushfire-prone area, having regard to:

- (a) the dimensions of hazard management areas:
- (b) a bushfire risk assessment of each lot at any stage of a staged subdivision;
- (c) the nature of the bushfire-prone vegetation including the type, fuel load, structure and flammability;
- (d) the topography, including site slope;
- (e) any other potential forms of fuel and ignition sources;
- (f) separation distances from the bushfireprone vegetation not unreasonably restricting subsequent development;
- (g) an instrument that facilitates management of fuels located on land external to the subdivision; and
- (h) any advice from the TFS.



agreement under section 71 of the Act that will be registered on the title of the neighbouring property providing for the affected land to be managed in accordance with the bushfire hazard management plan.

## **RESPONSE:** Complies with A1 (b)(i)-(iv)

All lots are shown within the plan relative to the bushfire prone area overlay, providing the building area for the new lots showing bushfire hazard management areas, and confirmation that the development of a habitable building will meet BAL-19 of AS 3959-2009. The hazard management areas are not located on land external to the proposed subdivision.

## C13.6.2 Subdivision: Public and firefighting access

## Objective:

That access roads to, and the layout of roads, tracks and trails, in a subdivision:

- (a) allow safe access and egress for residents, firefighters and emergency service personnel;
- (b) provide access to the bushfire-prone vegetation that enables both property to be defended when under bushfire attack and for hazard management works to be undertaken;
- (c) are designed and constructed to allow for fire appliances to be manoeuvred;
- (d) provide access to water supplies for fire appliances;
- (e) are designed to allow connectivity, and where needed, offering multiple evacuation points.

**RESPONSE:** Complies with the objective, the existing access road Marine and Caroline streets, and the internal road network design demonstrates compliance with the relevant standard for access and firefighting.

#### **Acceptable Solutions Performance Criteria** Α1 (a) TFS or an accredited person certifies A proposed plan of subdivision shows access that there is insufficient increase in risk and egress for residents, fire-fighting vehicles and emergency service personnel to enable from bushfire to warrant specific protection from bushfires, having regard to: measures for public access in the subdivision for the purposes of firefighting; or (a) Appropriate design measures, including; (b) A proposed plan of subdivision showing (i) two-way traffic; the layout of roads, fire trails and the location of property access to building (ii) all weather surfaces;



areas is included in a bushfire hazard management plan that:

- (i) demonstrates proposed roads will comply with Table E1, proposed private accesses will comply with Table E2 and proposed fire trails will comply with Table E3; and
- (ii) is certified by the TFS or an accredited person.
- (iii) height and width of any vegetation clearances;
- (iv) load capacity
- (v) provision of passing bays;
- (vi) traffic control devices;
- (vii) geometry, alignment and slope of roads, tracks and trails;
- (viii) use of through roads to provide for connectivity;
- (ix) limits on the length of cul-de-sacs and dead-end roads:
- (x) provision of turning areas;
- (xi) provision of parking areas;
- (xii) perimeter access; and
- (xiii) fire trails;
- (b) the provision of access to:
  - (i) bushfire-prone vegetation to permit the undertaking of hazard management works; and
  - (ii) firefighting water supplies; and
- (c) any advice from the TFS.

## RESPONSE: Complies with A1(b)(i) and (ii).

The Bushfire Hazard report confirms the area for hazard management for those lots which do not reach BAL *Low Risk*. Future indicative water service is demonstrated as part of the indicative infrastructure layout to service the development.

## **Table C1 Standards for Roads**

Element		Requirement
Α.	Roads	Unless development standards in the zone require a higher standard, the following apply:
		(a) two-wheel drive, all weather construction;



(b) load capacity of at least 20t, including for bridges and culverts;
<ul><li>(c) minimum carriageway width is 7m for a through road, or 5.5 m for a dead-end or cul-de-sac road;</li></ul>
(d) minimum horizontal clearance of 4m;
(e) minimum vertical clearance of 2m from the edge of the carriageway;
(f) cross falls of less than 3 degrees (1:20 or 5%);
(g) maximum gradient of 15 degrees (1:3.5 or 28%) for sealed roads, and 10 degrees (1:5.5 or 18%) for unsealed roads;
(h) curves have a minimum inner radius of 10m;
<ul><li>(i) dead-end or cul-de-sac roads are not more than 200m in length unless the carriageway is 7m in width;</li></ul>
(j) dead-end or cul-de-sac roads having a turning circle with a minimum 12m outer radius; and
(k) carriageway less than 7m wide have 'No Parking' zones on one side, indicated by a road sign that complies with Australian Standard AS1743-2001 Road signs-Specifications.

# Table C2 Standards for property access

Element		Requirement
Α.	Property access length is	There is no specified design and construction requirements
	less than 30m; or access	
	is not required for a fire	
	appliance to access a	
	firefighting water point.	
B.	Property access length is	The following design and construction requirements apply to the
D.	30m or greater; or access	, , , , , , , , , , , , , , , , , , , ,
		property access:
	is required for a fire	( ) II
	appliance to a firefighting	(a) all weather construction;
	water point.	
		(b) load capacity of at least 20t, including for bridges and
		culverts;
		,
		(c) minimum carriageway width of 4m;
		(c) minimum camageway watti of 4m,
		(d) minimum vertical alcoronae of Ame
		(d) minimum vertical clearance of 4m;
		(e) minimum horizontal clearance of 0.5m from the edge of
		the carriageway;
		(f) cross falls of less than 3 degrees (1:20 or 5%);
		J (,



		(g) dips less than 7 degrees (1:8 or 12.5%) entry and exit level;				
		(h) curves with a minimum inner radius of 10m;				
		(i) maximum gradients of 15 degrees (1:3.5 or 28%) for sealed roads, and 10 degrees (1:5.5 or 18%) for unsealed roads; and				
		(j) terminate with a turning area for fire appliances provided by one of the following:				
		(i) a turning circle with a minimum 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.				
C.	Property access length is 200m or greater.	The following design and construction requirements apply to property access:				
		(a) the requirements for B above; and				
		(b) passing bays of 2m additional carriageway width and 20m length must be provided every 100m.				

## C13.6.3 Subdivision: Provision of water supply for firefighting purposes

## **Objective:**

That an adequate, accessible and reliable water supply for the purposes of firefighting can be demonstrated at the subdivision stage and allow for the protection of life and property associated with the subsequent use and development of bushfire-prone areas.

**RESPONSE:** the development complies with the objective.

Acceptable Solutions	Performance Criteria
A1	P1
In areas serviced with reticulated water by the water corporation;  (a) TFS or an accredited person certifies that there is an insufficient increase in risk from bushfire to warrant the provision of a water supply for firefighting purposes;	No Performance Criterion.
(b) a proposal plan of subdivision showing the layout of fire hydrants, and building areas, is included in a bushfire hazard management plan approved by the TFS	



or accredited person as being compliant with Table E4; or

(c) a bushfire hazard management plan certified by the TFS or accredited person demonstrates that the provision of water supply for firefighting purposes is sufficient to manage the risks to property and lives in the event of a bushfire.

## **RESPONSE:** Complies with A1(c)

The subdivision complies with reticulated water supply and fire hydrant requirements as per the requirements of Table C4 to the Code. The indicative service design provided by PDA demonstrates compliance.

## **A2**

In areas that are not serviced by reticulated water by the water corporation:

- (a) the TFS or an accredited person certifies that there is insufficient increase in risk from bushfire to warrant provision of a water supply for firefighting purposes;
- (b) the TFS or an accredited person certifies that a proposed plan of subdivision demonstrates that a static water supply, dedicated to firefighting, will be provided and located compliant with Table E5; or
- (c) a bushfire hazard management plan certified by the TFS or an accredited person demonstrates that the provision of a water supply for firefighting purposes is sufficient to manage the risks to property and lives in the vent of bushfire.

P2

No Performance Criterion.

**REPONSE:** Not applicable, all reticulated services are available to the site.

## Table C4 Reticulated water supply for firefighting

Element		Requirement
A.	Distance	The following requirements must apply:
	between	



	1 11 11	( ) TI   1 III
	building area to	(a) The building area to be protected must be located within 120m of
	be protected	
	and water	(4)
	supply.	firefighting water point and the furthest point of the building area.
B.	Design criteria for fire	The following requirements must apply:
	hydrants	(a) Fire hydrant system must be designed and constructed in accordance with <i>Taswater Supplement to Water Supply Code of Australia WSA 03-2011-3.1 MRWA 2<sup>nd</sup> Edition;</i> and
		(b) Fire hydrants are not installed in parking areas.
C.	Hardstand	A hardstand area for firefighting appliances must be:
		(a) No more than 3m from the hydrant, measured as a hose lay;
		(b) No closer than 6m from a 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.

# Table C5 Static water supply for firefighting

Elen	nent	Requirement
A.	Distance between building area to be protected and water supply	The following requirements apply:  (a) the building area to be protected must be located within 90m of firefighting water point of a static water supply; and  (b) the distance must be measured as a hose lay, between the firefighting water point and the furthest point of the building area.
В.	Static Water Supplies	<ul> <li>A static water supply:</li> <li>(a) may have a remotely located offtake connected to the static water supply;</li> <li>(b) may be a supply for combined use (firefighting and other uses) but the specified minimum quantity of firefighting water must be available at all times;</li> <li>(c) must be a minimum of 10,000L per building area to be protected. This volume of water must be used for any other purpose including firefighting sprinkler or spray systems;</li> <li>(d) must be metal, concrete or lagged by non-combustible materials if above ground; and</li> </ul>



(e) if a tank can be located so it is shielded in a	
compliance with section 3.5 of Australian Standard Construction of buildings in bushfire-prone areas, the constructed of any material provided that the lowes tank exterior is protected by:	AS 3959-2009 he tank may be
(i) metal;	
(ii)non-combustible material; or	
(iii) fibre-cement a minimum of 6mm thickness.	
C. Fittings, pipework and accessories fittings and pipework associated with a firefighting water property must:	point for a static
(including stands and (a) have a minimum nominal diameter of 50mm;	
tank supports) (b) be fitted with a valve with a minimum nominal inter 50mm;	rnal diameter of
(c) be metal or lagged by non-combustible materials if	above ground;
(d) if buried, have a minimum depth of 300mm;	
(e) provide a DIN or NEN standard forged Storz 65mm with a suction washer for connection to firefighting	
(f) ensure the coupling is accessible and available fo all times;	r connection at
(g) ensure the coupling is fitted with a blank cap and (minimum 200mm length);	securing chain
(h) ensure underground tanks have either an opening a less than 250mm diameter or a coupling compliant and	
(i) if a remote offtake is installed, ensure the offtake that is;	is in a position
(i) visible;	
(ii) accessible to allow construction by firefighting e	equipment;
(iii) at a working height of 450 - 600mm above grou	und level; and
(iv) protected from possible damage including dama	age by vehicles.
D. Signage for static water a sign permanently fixed to the exterior of the assemble connections.  The firefighting water point for a static water supply must a sign permanently fixed to the exterior of the assemble connections.	



		(a) comply with the water tank signage requirements within Australian Standard AS 2304-2011n 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 firefighting 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.

## 7.3 C15.0 Landslip Hazard Code

## C15.1 Code Purpose

The purpose of the Landslip Hazard Code is:

C15.1.1 To ensure that a tolerable risk can be achieved and maintained for the type, scale and intensity and intended life of use or development on land within a landslip hazard area.

## C15.2 Application of the Code

## C15.2.1 This Code applies to:

- (a) use or development of land within a landslip hazard; or
- (b) use or development of land identified in a report, that is lodged with an application, or required in response to a request under section 54 of the Act, as having potential to cause or contribute to a landslip.
- C15.2.2 The planning authority may only make a request under clause C15.2.1(b) where it reasonably believes, based on information in its possession, that the use or development of land has the potential to cause or contribute to landslip.

#### Review:

The subdivision site footprint shown below is outside the areas impacted by medium hazard bands, in relation to which *GeoTon* have provided detailed assessment as part of the subdivision design for the area shown as Stage 1 at *figure 24* below. The proposed development site the subject of this application is not impacted by medium or higher risk hazard bands.





Figure 24 - Landslip Hazard Bands - development site

#### 8. CONCLUSION

In accordance with the CCRLUS the proposed development will achieve a higher density of development with the introduction of the General Residential Zone replacing the current lower-density Rural Living A classification. This aligns with the strategy which seeks to maximise as far as possible development within the limits of sustainable infrastructure.

In effect, the proposal substitutes density requirements for residential living to reflect the availability of services, and current development standards within the precinct, achieving infill development thereby maximising potential residential development within the existing urban growth boundary.

The analysis provided by technical reports relevant to the proposal include:

**Midson Traffic** completed a Traffic Impact Assessment concluding subject to recommendations the development is supported on traffic grounds. The internal road network is designed to junction with Marine and Caroline Street junctions. The Traffic Impact Assessment concludes that the design of internal road network, access and junctions maintain an acceptable level of safety for all road users ensuring a low-speed environment with good connectivity to the external road network.

**GeoTon Pty Ltd** were engaged to review the stability issues affecting the land south of the subdivision precinct of Stage 1 (Lot 50) refer Figure 7, identifying the hazard and assessing the risk to the proposed development. The result is that the design retains the forest vegetation south of the proposed subdivision thus ensuring the stability and integrity of the land is maintained. Stage 2 development is unaffected and not impacted by stability issues.

**PDA Planners & Engineers** have completed concept service design and stormwater management reports for the development, demonstrating sustainable infrastructure availability to service the proposed development.

**Livingston Natural Resource Services** have completed an analysis of both stages 1 and 2 of the site's residential development and rezoning in accordance with the Bushfire-Prone Areas Code, providing Certificates under s51(2)(d) of the *Land Use Planning and Approvals Act 1993*.



The introduction of the General Residential Zone to this section of the property will enable the sustainable development of the site in a manner which is in keeping with that of the immediately proximate and nearby lots, achieving compliance with the planning scheme development standards and relevant Codes.

The proposal will create 32 residential allotments within the precinct which can be developed without compromising the values of the site and surrounding precincts.

The fact that the future residential expansion is impacted by the arable rural land suggests that the rezoning and subsequent change of residential density for the subject site is both sustainable and an imperative to ensure that the most is made of land which is zoned for residential development and occurs at densities to ensure that the opportunity of available infrastructure is maximised in terms of its capacity and the potential lot yield. This will ensure that future demand is accommodated within the constraints of available infrastructure, ultimately achieving a more cost-effective development strategy.

It is submitted that the proposal complies with the objectives of the CCRLUS and thereby the *Land Use Planning and Approvals Act 1993* - land use planning system, meeting the requirements of the planning scheme standards and relevant code imperatives.

The CCRLUS supports the change in zoning in that supply within the municipality is well below the 10 years supply stipulated at clause 4.7 and should be increased. Both the CCRLUS and Draft *Greater Devonport Residential Growth Strategy 2021-2040* support increasing General Residential land supply through infill development.



# **APPENDICES**

Appendix A Subject Property Titles

Appendix B Proposal Plan

Appendix C Bushfire Hazard Management Report

Appendix D Traffic Impact Assessment

## Contact

For any enquiries, please contact one of our offices

#### **HOBART**

A: 127 Bathurst Street, Hobart, TAS 7000

**P:** (03) 6234 3217 **E:** pda.hbt@pda.com.au

#### **KINGSTON**

A: 6 Freeman Street, Kingston, TAS 7050

**P:** (03) 6229 2131 **E:** pda.ktn@pda.com.au

#### **HUONVILLE**

A: 8/16 Main Street, Huonville, TAS 7109 (by appointment)

**P:** (03) 6264 1277

E: pda.huon@pda.com.au

#### **EAST COAST**

A: 3 Franklin Street, Swansea, TAS 7190 (by appointment)

P: (03) 6130 9099

E: pda.east@pda.com.au

#### **LAUNCESTON**

A: 3/23 Brisbane Street, Launceston, TAS 7250

**P:** (03) 6331 4099

E: pda.ltn@pda.com.au

#### **DELORAINE**

A: 16 Emu Bay Road, Deloraine, TAS 7304 (by appointment)

**P:** (03) 6362 2993 **E:** pda.ltn@pda.com.au

#### **BURNIE**

A: 6 Queen Street, Burnie, TAS 7320

**P:** (03) 6431 4400

E: pda.bne@pda.com.au

## **DEVONPORT**

A: 77 Gunn Street, Devonport, TAS 7310

**P:** (03) 6423 6875

E: pda.dpt@pda.com.au

#### **WALTER SURVEYS**

A: 127 Bathurst Street, Hobart, TAS 7000 (Civil Site Surveying and Machine Control)

**P:** 0419 532 669 (Tom Walter)

**E:** tom.walter@waltersurveys.com.au



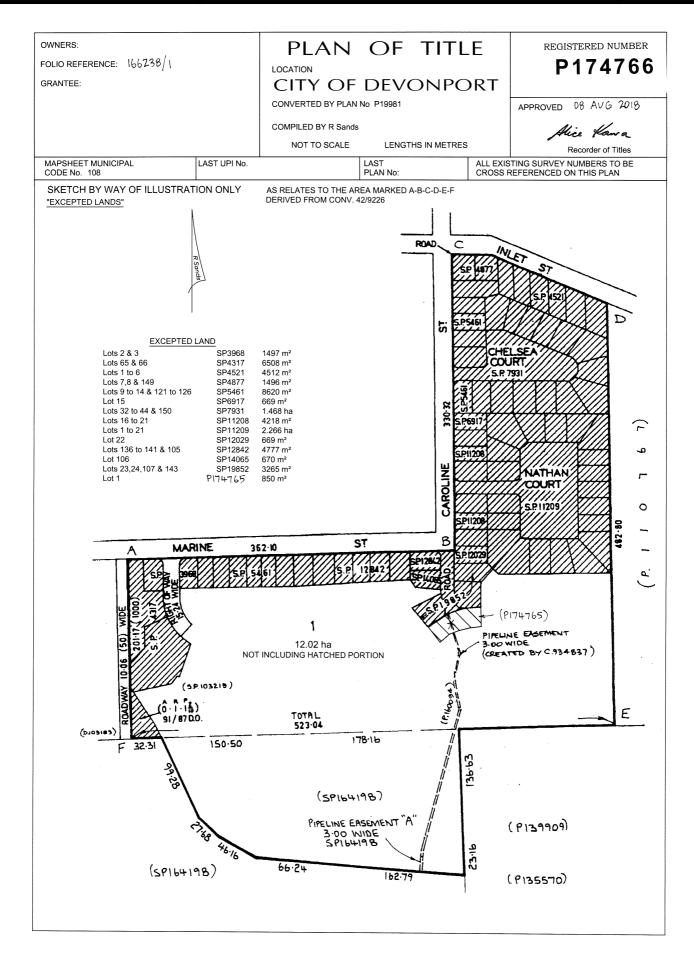


# **FOLIO PLAN**

RECORDER OF TITLES



Issued Pursuant to the Land Titles Act 1980



Search Date: 28 Jan 2022 Search Time: 05:51 PM Volume Number: 174766 Revision Number: 01 Page 1 of 1



# **RESULT OF SEARCH**

RECORDER OF TITLES

Issued Pursuant to the Land Titles Act 1980



#### SEARCH OF TORRENS TITLE

VOLUME	FOLIO
174766	1
EDITION	DATE OF ISSUE
3	04-Nov-2021

SEARCH DATE : 28-Jan-2022 SEARCH TIME : 05.50 PM

## DESCRIPTION OF LAND

City of DEVONPORT

Lot 1 on Plan 174766

Being in part the land described in Conveyance No. 42/9226

Excepting thereout For Excepted Lands see Plan

Derivation: Part of Lot 181 Granted to Robert Stewart and

Part of 150 Acres Granted to Charles Oldaker

Prior CT 166238/1

## SCHEDULE 1

M923709 TRANSFER to VOS CONSTRUCTION & JOINERY PTY LTD Registered 04-Nov-2021 at noon

#### SCHEDULE 2

D27090 Land is limited in depth to 15 metres, excludes minerals and is subject to reservations relating to drains sewers and waterways in favour of the Crown

BENEFITTING EASEMENT :(appurtenant to the land marked ABCDEF on Plan 174766) a right of way and passage at all times with or without horses cattle carts and carriages in over and upon the Roadway 10.06 (50) wide on Plan 174766

BURDENING EASEMENT: right of carriageway [appurtenant to Lot 65 and 66 on Sealed Plan 4317) over the land marked Right of Way 15.24 wide on Plan 174766

C934837 BURDENING EASEMENT: A Pipeline Easement in favour of Tasmanian Water and Sewerage Corporation (North-Western Region) Pty Ltd over the land marked Pipeline Easement 3.00 wide on Plan 174766 Registered 18-Aug-2011 at 12.01 PM

SP164198 BURDENING EASEMENT: a pipeline easement in favour of Tasmanian Water and Sewerage Corporation (North Western Region) Pty Ltd over the land marked Pipeline Easement 'A' 3.00 wide on Plan 174766

D27090 FENCING PROVISION in Transfer

D27150 ADHESION ORDER under Section 110 of the Local Government (Building and Miscellaneous Provisions)



# **RESULT OF SEARCH**

**RECORDER OF TITLES** 

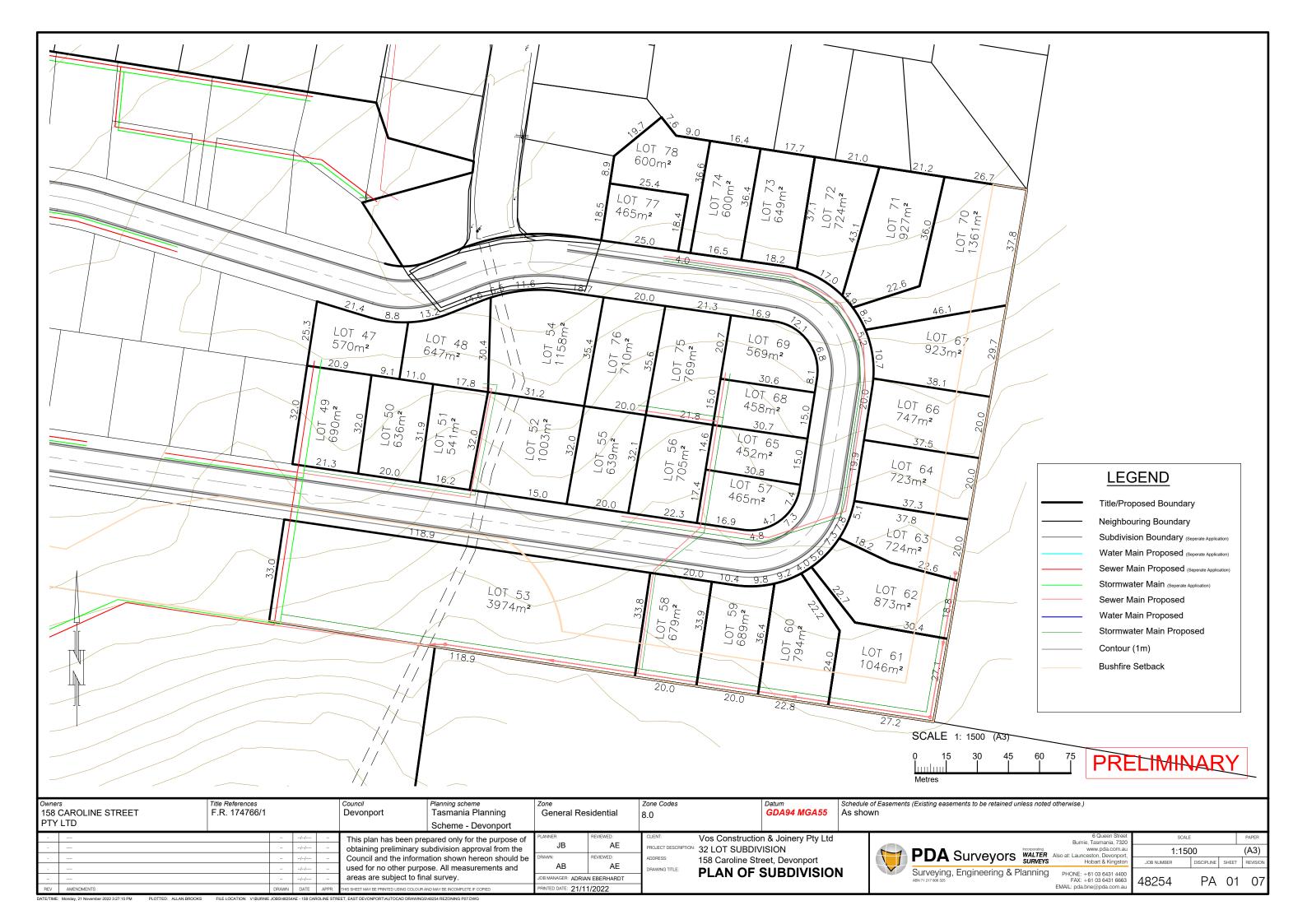


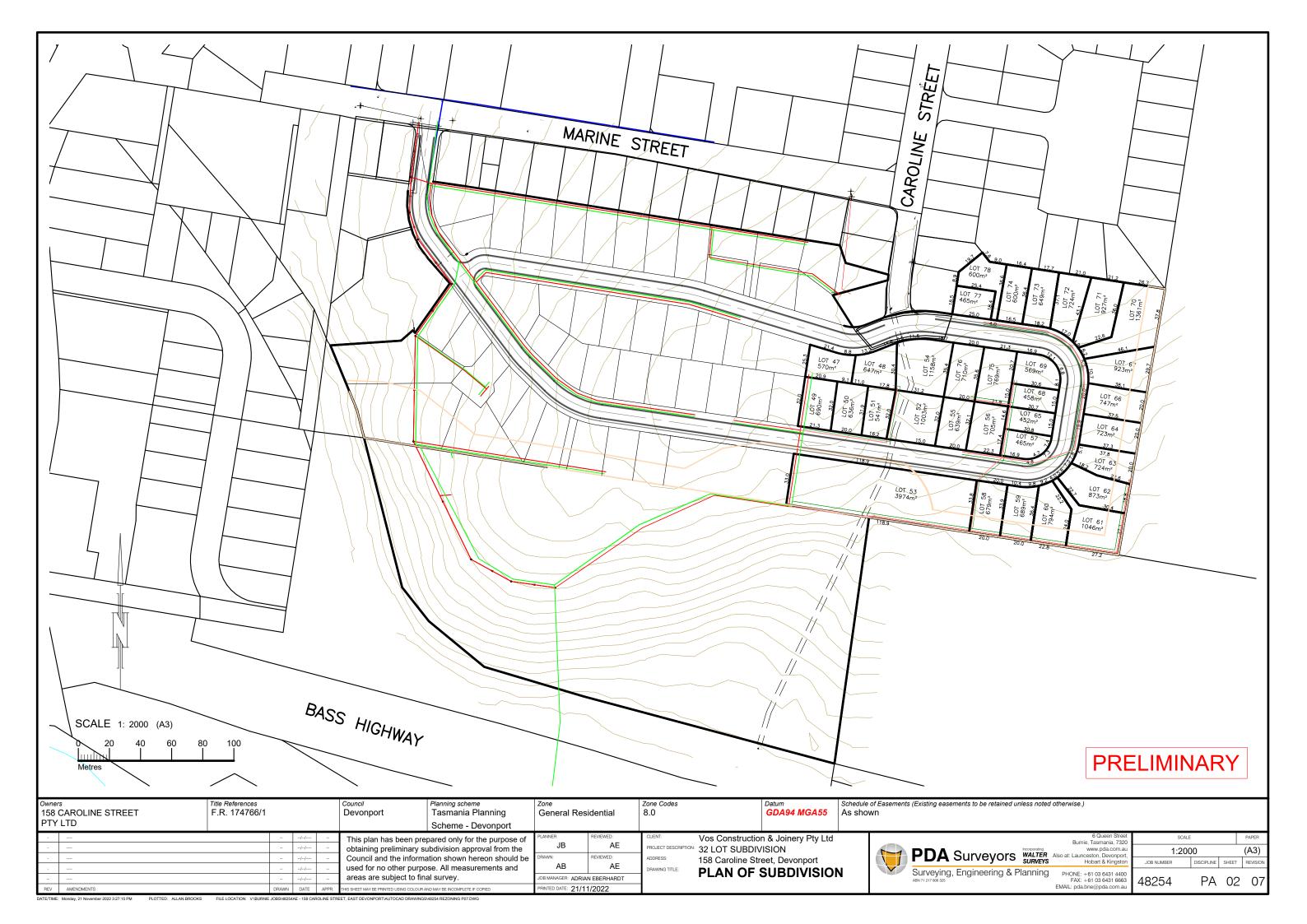
Issued Pursuant to the Land Titles Act 1980

Act 1993 Registered 09-Jul-2013 at noon

## UNREGISTERED DEALINGS AND NOTATIONS

No unregistered dealings or other notations





# **Bushfire Hazard Management Report: Subdivision**

Report for: PDA Surveyors

**Property Location: 158 Caroline Street, East Devonport** 

Prepared by: Scott Livingston

**Livingston Natural Resource Services** 

299 Relbia Road Relbia, 7258

**Date:** 28<sup>th</sup> June 2022



## Summary

Client: PDA Surveyors, Vos Construction & Joinery Pty Ltd

Current zoning: General Residential, Rural Living, Agriculture **Property** identification: Tasmanian Planning Scheme- Devonport 2021

158 Caroline Street, East Devonport, CT 174766/1, PID 3604651

**Proposal:** A 46 lot + balance & road subdivision in 4 stages is proposed from

> one existing title at 158 Caroline Street, East Devonport. A further 30 lots on the balance lot is proposed following rezoning to general

residential.

Assessment A field inspection of the site was conducted to determine the

comments: Bushfire Risk and Attack Level.

Assessment by:

Scott Livingston,

Master Environmental Management,

Natural Resource Management Consultant.

Accredited Person under part 4A of the Fire Service Act 1979:

Accreditation # BFP-105.

R Lungs

# Contents

	3
BAL AND RISK ASSESSMENT	3
Roads	20
PROPERTY ACCESS	24
FIRE FIGHTING WATER SUPPLY	24
Conclusions	25
REFERENCES	25
APPENDIX 1 – MAPS	26
APPENDIX 2 – PHOTO	30
APPENDIX 3 –BUSHFIRE HAZARD MANAGEMENT PLAN	32
CERTIFICATE UNDER S51(2)(d) LAND USE PLANNING AND APPROVALS ACT 1993	
APPENDIX 5 –BUSHFIRE HAZARD MANAGEMENT PLAN REZONING	39
CERTIFICATE UNDER S51(2)(d) LAND USE PLANNING AND APPROVALS ACT 1993	
CERTIFICATE OF QUALIFIED PERSON – ASSESSABLE ITEM	. 45
CERTIFICATE OF QUALIFIED PERSON – ASSESSABLE ITEM	45
CERTIFICATE OF QUALIFIED PERSON – ASSESSABLE ITEM  Figure 1: Proposed Lots and building areas. Stages 1-4  Figure 2: Proposed Lots and Building Areas (Stage 5+ rezoning)	14
Figure 1: Proposed Lots and building areas. Stages 1-4	14 16
Figure 1: Proposed Lots and building areas. Stages 1-4	14 16 17
Figure 1: Proposed Lots and building areas. Stages 1-4	14 16 17 19
Figure 1: Proposed Lots and building areas. Stages 1-4	14 16 17 19
Figure 1: Proposed Lots and building areas. Stages 1-4	14 16 17 19
Figure 1: Proposed Lots and building areas. Stages 1-4	14 16 17 19 23 26
Figure 1: Proposed Lots and building areas. Stages 1-4	14 16 17 19 23 26 27
Figure 1: Proposed Lots and building areas. Stages 1-4	14 16 17 19 23 26 27
Figure 1: Proposed Lots and building areas. Stages 1-4  Figure 2: Proposed Lots and Building Areas (Stage 5+ rezoning)  Figure 3: vegetation management Stage 4 lot 46.  Figure 4: Stages 1-4 Hazard Management  Figure 5: Preferred requirements for Water Supply and Access for Subdivisions in Rural  Zones (CFA 2006)  Figure 6: Location existing lot in blue  Figure 7: Aerial Image  Figure 8: Proposed Subdivision Plan  Figure 9: Subdivision Plan Rezoning  Figure 10: south across lots	14 16 17 19 23 26 27 28 29
Figure 1: Proposed Lots and building areas. Stages 1-4  Figure 2: Proposed Lots and Building Areas (Stage 5+ rezoning)  Figure 3: vegetation management Stage 4 lot 46.  Figure 4: Stages 1-4 Hazard Management  Figure 5: Preferred requirements for Water Supply and Access for Subdivisions in Rural  Zones (CFA 2006)  Figure 6: Location existing lot in blue  Figure 7: Aerial Image  Figure 8: Proposed Subdivision Plan  Figure 9: Subdivision Plan Rezoning.  Figure 10: south across lots  Figure 11: south across lot 46, vegetation management area.	14 16 17 19 23 26 27 28 29 30
Figure 1: Proposed Lots and building areas. Stages 1-4  Figure 2: Proposed Lots and Building Areas (Stage 5+ rezoning)  Figure 3: vegetation management Stage 4 lot 46.  Figure 4: Stages 1-4 Hazard Management  Figure 5: Preferred requirements for Water Supply and Access for Subdivisions in Rural  Zones (CFA 2006)  Figure 6: Location existing lot in blue  Figure 7: Aerial Image  Figure 8: Proposed Subdivision Plan  Figure 9: Subdivision Plan Rezoning  Figure 10: south across lots	14 16 17 23 26 27 28 29 30 31

#### **DESCRIPTION**

A  $46 \text{ lot} + \text{balance } \& \text{ road subdivision in 4 stages is proposed from one existing title at 158 Caroline Street, East Devonport. A further 30 lots on the balance lot is proposed for rezoning to general residential. The area is mapped as bushfire prone.$ 

The property is currently within 3 zones under the Tasmanian Planning Scheme- Devonport. The 45 residential lots in stages 1-4 are zoned General Residential, Lot 46 is zoned Agriculture and lots 47-78 are zoned Rural Living A with a proposed Rezoning to General Residential.

The property has no existing buildings. The northern portion (residential zones) is currently grassland. Proposed lot 46 has forest on the majority of the area, with the hilltop grassland. The forested area has active landslips and retention of the vegetation on steeper slopes is recommended in the Geo Technical report, upper fringes of the forest are outside this retention requirement. The forest is to the south of proposed residential areas and bounded by low threat area except to the east where grassland occurs. Any fire threat will have a limited run (<150 from the south). Land to the north and west is low threat residential or major road infrastructure. Land to the east is grassland on areas occasionally cropped.

The property has frontage to Caroline and Marine Streets, and non accessible frontage to the Bass Hwy and East Devonport interchange roads. The subdivision will be serviced by a reticulated water supply.

See Appendix 1 for maps and site plan, and appendix 2 for photographs.

#### **BAL AND RISK ASSESSMENT**

The land is mapped as Bushfire Prone in Planning Scheme Overlays. **VEGETATION AND SLOPE** 

Stages 1-4

Stage	Lot		North	East	South	West
		Vegetation within 100m of lot boundaries	0-100m low threat	0-100m grassland (on lots)	0-100m grassland (on lots)	0->20m grassland (on lots), >20-100m low threat
1	1~8	Slope (degrees, over 100m)	Upslope flat	Upslope flat	Downslope up to 0-5°	Downslope up to 0-5°
		Bal Rating at boundary Bal Rating with	BAL Low	BAL FZ	BAL FZ	BAL FZ
		setbacks and HMA		BAL	Low	

	9~13	Vegetation within 100m of lot boundaries Slope (degrees, over 100m)	0-50+m grassland (on lots)50+- 100m low threat Upslope flat	0-100m grassland (on lots) Upslope flat	0-100m grassland (on lots) Downslope up to 0-5°	0->20m grassland (on lots), >20-100m low threat Downslope up to 0-5°
		Bal Rating at boundary	BAL FZ	BAL FZ	BAL FZ	BAL FZ
		Bal Rating with setbacks and HMA	BAL Low			
	25	Vegetation within 100m of lot boundaries	0-60+m grassland (on lots,)60+- 100m low threat	0-100m grassland (on lots)	0-80m grassland, 80-100m forest (on lots)	0-100m low threat
		Slope (degrees, over 100m)	Upslope flat	Upslope flat	Downslope up to 0-5°	Downslope up to 0-5°
		Bal Rating at boundary	BAL FZ	BAL FZ	BAL FZ	BAL Low
		Bal Rating with setbacks and HMA	BAL 12.5			
2	27	Vegetation within 100m of lot boundaries	eastern portion: 0- 100m grassland (on lots , ) western portion:60+- 100m low threat	0-100m grassland (on lots)	0-40m grassland, 40-100m forest (on lots)	0-100m low threat
		Slope (degrees, over 100m)	Upslope flat	Upslope flat	Downslope up to 0-5°	Downslope up to 0-5°
		Bal Rating at boundary	BAL FZ	BAL FZ	BAL FZ	BAL Low
		Bal Rating with setbacks and HMA	BAL 19			
	28	Vegetation within	eastern portion: 0- 100m grassland (on lots ), western portion:0- 25m grassland (on lots )25-	0-100m	0-100m	
		100m of lot boundaries	100m low threat	grassland (on lots)	forest (on lots)	0-100m low threat

	Slope (degrees, over 100m)	Upslope flat	Upslope flat	Downslope up to 0-5°	Downslope up to 0-5°
	Bal Rating at boundary	BAL FZ	BAL FZ	BAL FZ	BAL Low
	Bal Rating with setbacks and HMA		BA	L 19	
	Vegetation within 100m of lot boundaries	0-100m grassland (on lots )	0-100m grassland (on lots)	0-20m grassland, 20-100m forest (on lots)	0- 50m grassland (on lots) 50- 100m low threat
29	Slope (degrees, over 100m)	Upslope flat	Upslope flat	Downslope up to 0-5°	Downslope up to 0-5°
	Bal Rating at boundary	BAL FZ	BAL FZ	BAL FZ	BAL FZ
	Bal Rating with setbacks and HMA		BA	L 19	
	Vegetation within 100m of lot boundaries	0-100m grassland (on lots)	0-100m grassland (on lots)	0-100m grassland (on lots)	0-65m grassland (on lots), 65- 100m low threat
30	Slope (degrees, over 100m)	Upslope flat	Upslope flat	Downslope up to 0-5°	Downslope up to 0-5°
	Bal Rating at boundary Bal Rating with	BAL FZ	BAL FZ	BAL FZ	BAL FZ
	setbacks and HMA		BAL	12.5	
	Vegetation within 100m of lot boundaries	0-100m grassland (on lots)	0-100m grassland (on lots)	0-80m grassland, 80-100m forest (on lots)	0-100m grassland (on lots)
31	Slope (degrees, over 100m)	Upslope flat	Upslope flat	Downslope up to 0-5°	Downslope up to 0-5°
	Bal Rating at boundary	BAL FZ	BAL FZ	BAL FZ	BAL FZ
	Bal Rating with setbacks and HMA		BAL	Low	
32,	Vegetation within 100m of lot boundaries	0-100m grassland (on lots)	0-100m grassland (on lots)	0-60m grassland, 60-100m forest (on lots)	0-100m grassland (on lots)
33	Slope (degrees, over 100m)	Upslope flat	Upslope flat	Grassland :Downslope up to 0-5° Forest 10- 15°	Downslope up to 0-5°

	Bal Rating with setbacks and HMA		BAL FZ	BAL FZ	BAL FZ	BAL FZ	
					5/ BAL19	<u> </u>	
		Vegetation within	0-100m	0-100m	0-100m	0-100m	
		100m of lot boundaries	grassland (on lots)	grassland (on lots)	grassland (on lots)	grassland (on lots)	
		Slope (degrees, over	1013)	(OIT IOES)	Downslope	Downslope	
	34	100m)	Upslope flat	Upslope flat	up to 0-5°	up to 0-5°	
	34	100111)	орзюре нас	орзюре нас	up 10 0 3	ар 10 0 3	
		Bal Rating at boundary	BAL FZ	BAL FZ	BAL FZ	BAL FZ	
		Bal Rating with					
		setbacks and HMA			Low	T	
				0-50+m			
		Vegetation within		grassland (on lots),	0-100m	0-100m	
		100m of lot	0100m low	50+-100m	grassland (on	grassland	
	8,	boundaries	threat	low threat	lots)	(on lots)	
	12,	Slope (degrees, over			Downslope	Downslope	
	18, 19	100m)	Upslope flat	Upslope flat	up to 0-5°	up to 0-5°	
	19						
		Bal Rating at boundary	BAL Low	BAL FZ	BAL FZ	BAL FZ	
		Bal Rating with					
		setbacks and HMA	0-50+m BAL Low				
			grassland (on				
		Vegetation within	lots), 50+-	0-100m	0-100m	0-100m	
		100m of lot	100m low	grassland	grassland (on	grassland	
		boundaries	threat	(on lots)	lots)	(on lots)	
3	14, 15	Slope (degrees, over			Downslope		
	15	100m)	Upslope flat	Upslope flat	up to 0-5°	Upslope flat	
		Del Detine et herreden.	BAL FZ	DAL 57	DA1 57	BAL FZ	
		Bal Rating at boundary	BALFZ	BAL FZ	BAL FZ	BALFZ	
		Bal Rating with setbacks and HMA	BAL Low				
			0-50+m				
		.,	grassland (on				
		Vegetation within 100m of lot	lots), 50+- 100m low	0-100m	0-100m	0-100m	
		boundaries	threat	grassland (on lots)	grassland (on lots)	grassland (on lots)	
	16,	Slope (degrees, over		(311.13.3)	Downslope	(3.1.1013)	
	17	100m)	Upslope flat	Upslope flat	up to 0-5°	Upslope flat	
		Bal Rating at boundary	BAL FZ	BAL FZ	BAL FZ	BAL FZ	
		Bal Rating with	DALIZ	DALIZ	DALIZ	DALIZ	
		setbacks and HMA		BAL Low	, BAL 12.5		
L	I	1		3, 12 23 11,			

	20, 21	Vegetation within 100m of lot boundaries Slope (degrees, over 100m) Bal Rating at boundary	0-60+m grassland (on lots,)60+- 100m low threat Upslope flat	0-100m grassland (on lots) Upslope flat	0-60m grassland, 60-100m forest (on lots) Downslope up to 0-5°	0-100m grassland (on lots) Downslope up to 0-5°	
		Bal Rating with setbacks and HMA	DALLE	l	.Low	DALLE	
	23	Vegetation within 100m of lot boundaries Slope (degrees, over	0100m low threat	0-45m low threat, 45- 100m grassland (on lots) Downslope	0-100m grassland (on lots) Downslope	0-100m grassland (on lots)	
		Bal Rating at boundary Bal Rating with	Upslope flat  BAL Low	up to 0-5° BAL 12.5	up to 0-5° BAL FZ	Upslope flat  BAL FZ	
		setbacks and HMA	BAL Low				
	24	Vegetation within 100m of lot boundaries Slope (degrees, over	0-19m grassland (on lots,)19- 100m low threat	0-40m low threat, 40- 100m grassland (on lots) Downslope	0-100m grassland (on lots) Downslope	0-100m grassland (on lots)	
		100m)	Upslope flat	up to 0-5°	up to 0-5°	Upslope flat	
		Bal Rating at boundary Bal Rating with setbacks and HMA	BAL FZ	BAL 12.5	BAL FZ	BAL FZ	
		Vegetation within 100m of lot boundaries	0-50+m grassland (on lots), 50+- 100m low threat	0-100m grassland (on lots)	0-100m grassland (on lots)	0-100m grassland (on lots)	
4	22	Slope (degrees, over 100m)	Upslope flat	Upslope flat	Downslope up to 0-5°	Upslope flat	
		Bal Rating at boundary Bal Rating with	BAL FZ	BAL FZ	BAL FZ	BAL FZ	
	35, 37	setbacks and HMA  Vegetation within  100m of lot boundaries	BAL 12.5 0-100m grassland (on lots)	0-100m grassland (on lots)	0-100m grassland (on lots)	0-100m grassland (on lots)	
	<u> </u>	Souridaries	1013)	(3111013)	1013)	(311 1013)	

	Slope (degrees, over 100m)	Upslope flat	Upslope flat	Downslope up to 0-5°	Downslope up to 0-5°		
	Bal Rating at boundary	BAL FZ	BAL FZ	BAL FZ	BAL FZ		
	Bal Rating with setbacks and HMA	D. L. L.		Low	D. LET E		
				0-60m			
	Vegetation within 100m of lot boundaries	0-100m grassland (on lots)	0-100m grassland (on lots)	grassland, 60-100m forest (on lots)	0-100m grassland (on lots)		
36, 38	Slope (degrees, over 100m)	Upslope flat	Upslope flat	Grassland :Downslope up to 0-5° Forest 10- 15°	Downslope up to 0-5°		
	Bal Rating at boundary	BAL FZ	BAL FZ	BAL FZ	BAL FZ		
	Bal Rating with setbacks and HMA		BAL 12.5/ BAL19				
	Vegetation within 100m of lot boundaries	0-100m grassland (on lots)	0-100m grassland (on lots)	0-48m grassland, 48-100m forest (on lots)	0-100m grassland (on lots)		
39, 41, 43, 44, 45	Slope (degrees, over 100m)	Upslope flat	Upslope flat	Grassland :Downslope up to 0-5° Forest 10- 15°	Upslope flat		
	Bal Rating at boundary	BAL FZ	BAL FZ	BAL FZ	BAL FZ		
	Bal Rating with setbacks and HMA		BAL	12.5			
	Vegetation within 100m of lot boundaries	0-100m grassland (on lots)	0-100m grassland (on lots)	0-8m grassland, 8- 100m forest (on lots)	0-100m grassland (on lots)		
40	Slope (degrees, over 100m)	Upslope flat	Upslope flat	Grassland :Downslope up to 0-5° Forest 10- 15°	Upslope flat		
	Bal Rating at boundary	BAL FZ	BAL FZ	BAL FZ	BAL FZ		
	Bal Rating with setbacks and HMA		BAL 12.	5/ BAL19			

		Vegetation within 100m of lot boundaries	0-100m grassland (on lots)	0-100m grassland (on lots)	0-100m forest (on lots)	0-100m grassland (on lots)	
	42	Slope (degrees, over 100m)	Upslope flat	Downslope up to 0-5°	10-15°	Upslope flat	
		Bal Rating at boundary	BAL FZ	BAL FZ	BAL FZ	BAL FZ	
		Bal Rating with setbacks and HMA	BAL 12.5/ BAL19				
		Vegetation within	0-100m				
		100m of lot	grassland (on	0-100m	0-100m low	0-100m low	
		boundaries	lots)	grassland	threat	threat	
4b	46	Slope (degrees, over			Grassland :Downslope up to 0-5° Forest 10-	Downslope	
		100m)	Upslope flat	Upslope flat	15°	up to 0-5°	
		Bal Rating at boundary	BAL FZ	BAL FZ	BAL Low	BAL Low	
		Bal Rating with		DAL 43	E / DAL40		
		setbacks and HMA	BAL 12.5/ BAL19				

# **Stage 5+ Rezoning Required**

Lot		North	East	South	West	
	Vegetation within 100m of lot boundaries	0-20+m grassland (on lots), 20+m - 100m low threat	0-100m grassland (on lots)	0-85m grassland (on lots) 85- 100m forest (lot 46)	0-100m grassland (on lots*)	
47, 48	Slope (degrees, over 100m)	Upslope flat	Upslope flat	Grassland :Downslope up to 0-5° Forest 10- 15°	Upslope flat	
	Bal Rating at boundary	BAL FZ	BAL FZ	BAL FZ	BAL FZ	
	Bal Rating with setbacks and HMA	BAL 12.5				
40~52	Vegetation within 100m of lot boundaries	0-100m grassland (on lots)	0-100m grassland (on lots)	0-50m grassland (on lots) 50- 100m forest (lot 46)	0-100m grassland (on lots*)	
49~52	Slope (degrees, over 100m)	Upslope flat	Upslope flat	Grassland :Downslope up to 0-5° Forest 10- 15°	Upslope flat	

	Bal Rating at							
	boundary	BAL FZ	BAL FZ	BAL FZ	BAL FZ			
	Bal Rating with							
	setbacks and							
	HMA		E	BAL 12.5				
				eastern portion				
				0-100m				
				grassland,				
	Vegetation	0-100m	0-100m	westernportion	0.400			
	within 100m of lot boundaries	grassland (on	grassland (on	0-100m forest	0-100m grassland			
	lot boundaries	lots)	lots)	(lot 46) Grassland	(on lots)			
53				:Downslope up to				
	Slope (degrees,			0-5° Forest 10-				
	over 100m)	Upslope flat	Upslope flat	15°	Upslope flat			
	Bal Rating at	орогоро пас	оролоро пас		- Сропоротнае			
	boundary	BAL FZ	BAL FZ	BAL FZ	BAL FZ			
	Bal Rating with							
	setbacks and							
	НМА		E	BAL 12.5				
		0-18m						
	Vegetation	grassland (on	0-100m	0-85m grassland				
	within 100m of	lots), 18-100m	grassland (on	(on lots), 85-	0-100m grassland			
	lot boundaries	low threat	lots)	100m grassland	(on lots)			
				Grassland				
54	Slope (degrees,			:Downslope up to 0-5° Forest 10-				
34	over 100m)	Upslope flat	Upslope flat	15°	Upslope flat			
	Bal Rating at	орзюре нас	орзюре нас	15	орзюре нас			
	boundary	BAL FZ	BAL FZ	BAL FZ	BAL FZ			
	Bal Rating with			1				
	setbacks and							
	HMA		BAL Lo	ow/ BAL 12.5				
	Vegetation	0-100m	0-100m	0-50m grassland				
	within 100m of	grassland (on	grassland (on	(on lots) 50-	0-100m grassland			
	lot boundaries	lots)	lots)	100m grassland	(on lots)			
	Slope (degrees,							
55, 56	over 100m)	Upslope flat	Upslope flat	Downslpoe 0-5°	Upslope flat			
	Bal Rating at							
	boundary	BAL FZ	BAL FZ	BAL FZ	BAL FZ			
	Bal Rating with							
	setbacks and		_	42 5				
	HMA		0-50m	BAL 12.5				
	Vegetation	0-100m	grassland (on	0-50m grassland	0-55m grassland			
	within 100m of	grassland (on	lots) 50-100m	(on lots) 50-	(on lots), 55-100			
57	lot boundaries	lots)	grassland	100m grassland	grassland			
		1013)	6143314114	Toom grassiand	81 03310110			
	Slope (degrees,	lingle as first	lingless fi-+	Downslass 0.5°	Unclose flat			
	over 100m)	Upslope flat	Upslope flat	Downslpoe 0-5°	Upslope flat			

1	Bal Rating at		1				
	boundary	BAL FZ	BAL FZ	BAL FZ	BAL FZ		
	Bal Rating with						
	setbacks and						
	HMA		E	BAL Low			
			0-34m+				
	Vegetation	0-100m	grassland (on				
	within 100m of	grassland (on	lots)34+-100m		0-100m grassland		
	lot boundaries	lots)	grassland	0-100m grassland	(on lots)		
58, 59,	Slope (degrees,						
60	over 100m)	Upslope flat	Upslope flat	Downslpoe 0-5°	Upslope flat		
	Bal Rating at	DA1 57	DAL 57	DA1 57	DA1 57		
	boundary	BAL FZ	BAL FZ	BAL FZ	BAL FZ		
	Bal Rating with setbacks and						
	HMA		RΔI ′	12.5/ BAL19			
	Vegetation	0-100m	D/(E)	LZ.57 Bricis			
	within 100m of	grassland (on	0-100m		0-100m grassland		
	lot boundaries	lots)	grassland	0-100m grassland	(on lots)		
	Slope (degrees,						
61	over 100m)	Upslope flat	Upslope flat	Downslpoe 0-5°	Upslope flat		
91	Bal Rating at			·			
	boundary	BAL FZ	BAL FZ	BAL FZ	BAL FZ		
	Bal Rating with						
	setbacks and						
	НМА		BAL :	12.5/ BAL19			
		0-35+m					
	Vegetation	grassland (on lots), 35+-					
	within 100m of	100m low	0-100m		0-100m grassland		
	lot boundaries	threat	grassland	0-100m grassland	(on lots)		
62, 63,	Slope (degrees,			8	( = = = = = = = = = = = = = = = = = = =		
64, 66,	over 100m)	Upslope flat	Upslope flat	Downslpoe 0-5°	Upslope flat		
67	Bal Rating at	opsiope nat	орогоре пас	Downsipee o s	орогоре пас		
	boundary	BAL FZ	BAL FZ	BAL FZ	BAL FZ		
	Bal Rating with						
	setbacks and						
	HMA		BAL:	12.5/ BAL19			
		0-35+m	0.50				
	Magatatia	grassland (on	0-50m	0.50			
	Vegetation within 100m of	lots), 35+- 100m low	grassland (on	0-50m grassland	0.100m grassland		
	lot boundaries	threat	lots) 50-100m grassland	(on lots) 50- 100m grassland	0-100m grassland (on lots)		
6E 60		tineat	grassiariu	TOOIII BI assialiu	(OITTOLS)		
65, 68, 69	Slope (degrees, over 100m)	Upslope flat	Upslope flat	Downslpoe 0-5°	Upslope flat		
	Bal Rating at	Opsiope nat	opsiope nat	Powiisibos 0-2	Obside ligi		
	boundary	BAL FZ	BAL FZ	BAL FZ	BAL FZ		
	Bal Rating with		1		<u> </u>		
	setbacks and						
	НМА		BAL	12.5/ BAL19			
				•			

	Vegetation within 100m of lot boundaries	0100m low threat	0-100m grassland	0-100m grassland (on lots)	0-100m grassland (on lots)			
70	Slope (degrees, over 100m)	Upslope flat	Upslope flat	Downslpoe 0-5°	Upslope flat			
	Bal Rating at boundary	BAL FZ	BAL FZ	BAL FZ	BAL FZ			
	Bal Rating with setbacks and HMA		BAL	12.5/ BAL19				
	Vegetation within 100m of lot boundaries	0100m low threat	0-100m grassland	0-100m grassland (on lots)	0-100m grassland (on lots)			
71	Slope (degrees, over 100m)	Upslope flat	Upslope flat	Downslpoe 0-5°	Upslope flat			
	Bal Rating at boundary	BAL FZ	BAL FZ	BAL FZ	BAL FZ			
	Bal Rating with setbacks and HMA		BAL 12.5					
	Vegetation within 100m of lot boundaries	0100m low threat	0-28m grassland (on lots), 28-100m grassland	0-100m grassland (on lots)	0-80m grassland (on lots), 80- 100m low threat			
72, 73, 74	Slope (degrees, over 100m)	Upslope flat	Upslope flat	Downslpoe 0-5°	Upslope flat			
	Bal Rating at boundary	BAL FZ	BAL FZ	BAL FZ	BAL FZ			
	Bal Rating with setbacks and HMA		BAL Low					
	Vegetation within 100m of lot boundaries	0-55m grassland )on lots) 55-100m low threat	0-100m grassland (on lots)	0-100m grassland (on lots)	0-100m grassland (on lots)			
75, 76	Slope (degrees, over 100m)	Upslope flat	Upslope flat	Downslpoe 0-5°	Upslope flat			
	Bal Rating at boundary	BAL FZ	BAL FZ	BAL FZ	BAL FZ			
	Bal Rating with setbacks and HMA	BAL Low						
72, 73,	Vegetation within 100m of lot boundaries	0100m low threat	0-28m grassland (on lots), 28-100m grassland	0-100m grassland (on lots)	0-45m low threat, 45-100m grassland (on lots)			
74	Slope (degrees, over 100m)	Upslope flat	Upslope flat	Downslpoe 0-5°	Upslope flat			
	Bal Rating at boundary	BAL FZ	BAL FZ	BAL FZ	BAL FZ			

Bal Rating wit	
setbacks and	
HMA	BAL Low

#### **BUILDING AREA BAL RATING**

Setback distances for BAL Ratings have been calculated based on the vegetation that will exist after development and management of land within the subdivision and have also considered slope gradients.

Where no setback is required for fire protection other Planning Scheme setbacks may need to be applied, other building constraints such as topography have not been considered. The BAL ratings applied are in accordance with the Australian Standard AS3959-2018, *Construction of Buildings in Bushfire Prone Areas*, and it is a requirement that any habitable building, or building within 6m of a habitable building be constructed to the BAL ratings specified in this document as a minimum.

Bushfire Attack Level (BAL)	Predicted Bushfire Attack & Exposure Level
BAL-Low	Insufficient risk to warrant specific construction requirements
BAL-12.5	Ember attack, radiant heat below 12.5kW/m <sup>2</sup>
BAL-19	Increasing ember attack and burning debris ignited by windborne embers together with increasing heat flux between 12.5-19kW/m²
BAL-29	Increasing ember attack and burning debris ignited by windborne embers together with increasing heat flux between 19-29kW/m²
BAL-40	Increasing ember attack and burning debris ignited by windborne embers together with increasing heat flux between 29-40kW/m²
BAL-FZ	Direct exposure to flames radiant heat and embers from the fire front

#### **BUILDING SETBACKS**

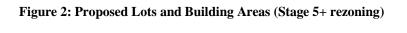
		Ve	getation Type	
<b>BAL Rating</b>	Slope	Grassland	Woodland	Forest
BAL Low	all slopes	50m	100m	100m
	upslopes and flat	14m	22m	32m
	Downslope 0 - 5°	16m	26m	38m
BAL 12.5	Downslope 5 - 10°	19m	32m	46m
	Downslope 10 - 15°	22m	40m	56m
	Downslope 15° - 20°	25m	48m	67m
	upslopes and flat	10m	15m	23m
	Downslope 0 - 5°	11m	18m	27m
BAL19	Downslope 5 - 10°	13m	23m	34m
	Downslope 10 - 15°	15m	28m	41m
	Downslope 15° - 20°	17m	36m	51m

#### PROPOSED LOT BAL RATING



Figure 1: Proposed Lots and building areas. Stages 1-4





#### **HAZARD MANAGEMENT AREAS**

Staged development of lotlots requires hazard management areas that must be in place and maintained to preserve the BAL ratings of lots. At the completion of development / sealing of titles at any stage all subdivision lots within 50m of a developed lot with the exception of Lot 46 and portions of lots 27, 28, 42 and 53 must be managed as low threat vegetation in perpetuity. Lot 46 with the exception of a small area outside the landslip required retained vegetation can remain as per current vegetation, that small area will require management of fuels as either grassland or woodland at or before stage 4 titles are sealed. The required grassland is within an area currently infested with gorse and woodland area is dominated by blackwoods. Lots 27, 28, 42 and 53 may have grassland fuel loads on areas outside their specific hazard management areas for habitable buildings on the lot or adjacent lot subject to review at the time of building planning.

Vegetation management requirements for lot 46 must be in place prior to sealing of titles for lots 36,38, 40 or 42. The woodland provision can be achieved with the management of the understory and will require limited if any tree removal.

The owner of a lot is responsible for hazard management within their lot.

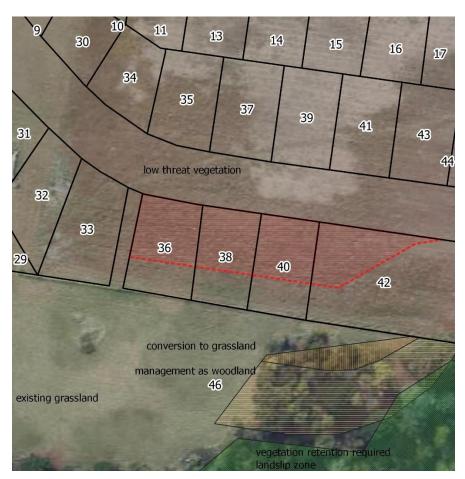


Figure 3: vegetation management Stage 4 lot 46

Hazard Management for Stage 5+rezoning will require the entirety of the development area to be low threat unless staging occurs, if staged all areas within a developed lot within that subdivision area must be managed as low threat with the exception of lot 53 which may have

grassland fuel loads on areas outside the specific hazard management areas for habitable buildings on the lot or adjacent lot subject to review at the time of building planning.

Low Threat: managed gardens or chards or lawns maintained to < 100mm in height.

Grassland: may be unmown grass, tree canopy cover must be < 5%

Woodland: must have a grassy understory with only occasional shrubs and a tree canopy

cover of less than 30%.

Forest: no hazard management requirements.



Figure 4: Stages 1-4 Hazard Management

Subdivision roads within bushfire prone areas must comply with the relevant elements of Table C13.1 Tasmanian Planning Scheme. All proposed roads are through roads with the exception of a small cul de sac servicing lots 27, 28 & 29. The turn head on this cul de sac may have a turn head reduced to the LGAT standard 9m radius and standard kerbs as assessed under performance criteria below. Temporary turn heads for the terminus of any staged road with the exception of the short section of the southern road at stage 1 must have compliant 12m radius turn heads, these may be gravelled with no kerb requirement. The stage 1 southern road junction services only 1 lot and the intersection provides adequate turn capability within 30m of the lot. Assessment against performance criteria for the cul de sac head is given below.

**Table C13.1 Standards for Roads** 

Element	;	Requirement
		Unless the development standards in the zone require a higher standard, the following apply:
		(a) two-wheel drive, all-weather construction;
		(b) load capacity of at least 20 tonnes, including for bridges and culverts;
		(c) minimum carriageway width is 7m for a through road, or 5.5m for a dead-end or cul-de-sac road;
		(d) minimum vertical clearance of 4m;
		(e) minimum horizontal clearance of 2m from the edge of the carriageway;
		(f) cross falls of less than 3 degrees (1:20 or 5%);
A.	Roads.	(g) maximum gradient of 15 degrees (1:3.5 or 28%) for sealed roads, and 10 degrees (1:5.5 or 18%) for unsealed roads;
		(h) curves have a minimum inner radius of 10m;
		(i) dead-end or cul-de-sac roads are not more than 200m in length unless the carriageway is 7m in width;
		(j) dead-end or cul-de-sac roads have a turning circle with a minimum 12m outer radius; and
		carriageways less than 7m wide have 'No Parking' zones on one side, indicated by (k) a road sign that complies with <i>Australian Standard</i> , <i>AS 1743-2001 Road signs-Specifications</i> .

#### Cul de sac Assessment against E1.6.2P1

The Stage 2 Cul de sac head turn provision that meets with requirements of LGAT standards for width (9m radius) but is less than Bushfire Code provisions (12m radius). The cul de sac is 37m in length and services 3 lots (27, 28, 29), the turn head provision is 22.5m wide with an 18m road reserve width.

# E1.6.2 Subdivision: Public and fire fighting access Performance Criteria P1

A proposed plan of subdivision shows access and egress for residents, fire-fighting vehicles and emergency service personnel to enable protection from bushfires, having regard to:

- (a) appropriate design measures, including:
  - (i) two way traffic;
  - (ii) all weather surfaces;
  - (iii) height and width of any vegetation clearances;
  - (iv) load capacity;
  - (v) provision of passing bays;
  - (vi) traffic control devices;
  - (vii) geometry, alignment and slope of roads, tracks and trails;
  - (viii) use of through roads to provide for connectivity;
  - (ix) limits on the length of cul-de-sacs and dead-end roads;
  - (x) provision of turning areas;
  - (xi) provision for parking areas;
  - (xii) perimeter access; and
  - (xiii) fire trails;
- (b) the provision of access to:
  - (i) bushfire-prone vegetation to permit the undertaking of hazard management works; and
  - (ii) fire fighting water supplies; and
- (c) any advice from the TFS.

#### **Response:**

- (i) Road design allows two way traffic; 7m carriageway.
- (ii) Road design for paved road allows all weather trafficability.
- (iii) Road design and road reserve width allows sufficient room for horizontal and vertical vegetation clearances as per Bushfire Prone Areas Code.
- (iv) Road design allows appropriate load capacity (LGAT standards).
- (v) Road is greater than 6m allowing passing.
- (vi) No traffic control devices are indicated on plans.
- (vii) All road geometry is within required Bushfire Prone Areas Code standards, no tracks or trails indicated on plans.
- (viii) Dead end roads connect to a through road and provide for connectivity, by linking to a through road at no longer than 370m during staging and will have Bushfire Code compliant temporary turn heads.
- (ix) The cul de sac head will result in a dead end of 180m which meets acceptable standards without additional width requirement.
- (x) The proposed turn head at the cul de sac meets LGAT standards for residential roads. Additional T turn provision will be available at the cul de sac junction and stage 1 road intersection and the temporary turn at the stage 2 road terminus. The proposed (LGAT standard) turn head) has a 18m diameter turn provision. Turning areas provided at intersections and cul de sac head, exceed the 16m T turn requirement for a fire appliance other than aerial appliances (Ref 2,3,4,6). Urban Heavy Pumper requires 19.2m curb to curb (Ref 4)., a 4x2 Medium pumper tanker 16-20m curb to curb).
- (xi) No restriction on parking is proposed, road design with 3 property crossovers at the turn head indicates it is unlikely that parking would occur within the turn area
- (xii) No fire trails are part of the proposal,

- (b) the provision of access to:
  - (i) Perimeter Roads: The Bass Hwy serves as a perimeter road to the southern portion of the retained bushfire prone vegetation. Lots 28, 46 and the balance lot provide access through grassland to the forest perimeter. The perimeter road requirement for performance criteria is for access to undertake hazard management works and not fire suppression. Access via grassland is considered acceptable as this is likely to occur in dry conditions, non emergency situations. With the exception of a portion of the eastern section lot 46 the forest perimeter is within 120m hose ay of a hydrant and hard stand. This forest perimeter is within 120m hose lay of a hydrant if crossing of the boundary fence was considered acceptable, the boundary portion of lot 42 will be on an area that will be managed as low threat at stage 4. The eastern perimeter of the forest area and balance lot portion of the subdivision is adjacent to grassland, noting these areas are regularly cropped and temporarily low threat. The northern perimeter of the subdivision is residential or other low threat areas.
  - (ii) Water Supply: Proposed roads provide compliant access to water supply points. No access for water supply is require in the cul de sac.
- (c) No specific advice was sort from TFS for this proposal. TFS have previously provided endorsement of 9m radius turning heads in residential subdivision where the threat is considered low (ref 8 a & b).

#### **Comment:**

Developed residential areas to the north have multiple cul de sac heads that are below the acceptable solution requirement of the code, and many providing only 1 16m diameter turn on the carriageway. Fire service personnel will be aware of this constraint within residential areas and the reduction in turn on a cul de sac not required for water supply access should not affect standard procedures that allow T turns. Where fire appliances egress from the site and require a turn provision it is likely any emergency situation has passed, and adequate time will be available for safe negation of any reduced turn provision. Any habitable buildings requiring access from the Stage 2 cul de sac will be serviced by a hydrant within a BAL Low area. There is no requirement for fire appliances to enter the cul de sac. The alternative to a reduced turn head is making the 3 serviced lots have pan handle access and not construct a road, as no access would be required to the water supply point. Those accesses would not need to comply with any design or construction requirements.

The Queensland and Victorian Fire Authorities guidelines show how an appliance can turn within an 18m diameter turn head without reliance on areas outside the carriageway. Noting both of these standards only require the turn head when constructed roads are greater than 60m in length. (figure 5)

Turning Bays		
Performance Requirement	CFA Standard	
Provision is made for fire trucks to turn at the end of dead end roads.	Constructed roads more than 60 m in length from the nearest intersection must have a turning circle with a minimum radius of 8 m (including roll-over curbs if they are provided).  Other solutions using T or Y heads of specified dimensions are also appropriate (figure 8).	

# BATTLE AXE LOT AND CARRIAGEWAY EASEMENTS ACCESS

Battle Axe and Carriageway Easement Access Width		
Performance Requirement	CFA Standard	
Driveways are wide enough for fire trucks to gain access to a safe working area close to buildings and water supplies	Constructed driveways within battle axe lot or carriageway easement must be:  • A minimum trafficable width of 3.5 m  • A minimum 0.5 m clearance to structures either side of the trafficable width  • Maintained with minimum vertical clearance of 4m (figure 9)	

#### Rationale

It is dangerous for emergency vehicles to be required to back along roads for excessive distances. Turning is normally carried out after the incident is under control when an emergency movement is not required. Even then, large trucks backing can create safety concerns.

Fire trucks occasionally need to seek an alternative route necessitating a 180-degree turn in emergency conditions. Using a three-point turn, fire trucks require a turning circle radius of 8m to turn safely. Alternative designs using specified T or Y heads are also appropriate. This area needs to be clear of obstructions.

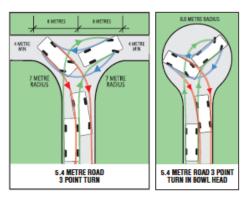


figure: 8

#### Rationale

If the distance from the road to a dwelling and water supply is less than 30 m it is possible to fight a fire from the road. Greater distances may require the driveway to be used for access.

It is dangerous for a fire truck to be backed along a driveway, particularly if the driveway is narrow or there is poor clearance.

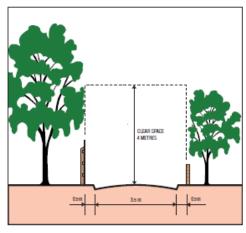


figure: 9

13

Figure 5: Preferred requirements for Water Supply and Access for Subdivisions in Rural Zones (CFA 2006).

The following documents have been referenced in the above justification:

- 1. Tasmanian Planning Scheme-Bushfire Prone Areas Code
- 2. Guidelines for Development in Bushfire Prone Areas of Tasmania, Tasmania Fire Service (2005).
- 3. Preferred requirements for Water Supply and Access for Subdivisions in Rural Zones (CFA 2006).
- 4. Fire Hydrant and Vehicle Access Guidelines or Residential, Commercial and Industrial Lots, Queensland Fire and Emergency Services (2019).
- 5. Planning for Bushfire Protection, NSW Rural Fire Service (2019)
- 6. Guidelines for Planning in Bushfire prone Area 1.3Western Australian planning Commission.

(2017)

- 7. Ausroads Design Vehicles and Turning Path templates Ausroads (2013)
- 8. TFS endorsed BHMP with 9m turn heads:
  - a. Bushfire Hazard Management Report 86 Burghley Street Longford, Woolcott Surveys November 2021 (PLN21-0323, Northern Midlands Council.) TFS endorsement variation to acceptable solutions, Tom O'Connor 14/1/2022)
  - Bushfire Hazard Report, Friend Street George Town, Woolcott Surveys January 2022, (DA 2022/10 George Town Council) TFS endorsement of performance criteria, Tom O Connor TFS, undated)

#### **PROPERTY ACCESS**

Access to bushfire prone lots must comply with the relevant elements of Table C13.1 Tasmanian Planning Scheme. No access to water supply points will be required, the majority of lots will have access less than 30m and no specific design or construction requirements apply

#### FIRE FIGHTING WATER SUPPLY

The subdivision will be serviced by a reticulated water supply, additional hydrants will be required to fully service building areas via a 120m hose lay. New hydrants must meet the requirements of Table C13.4 Tasmanian Planning Scheme at all stages of development.

**Table C13.4 Reticulated Water Supply for Fire Fighting** 

Element		Requirement		
		The	following requirements apply:	
Distance between building area to be		(a)	the building area to be protected must be located within 120m of a fire hydrant; and	
Α.	protected and water supply.	(b)	the distance must be measured as a hose lay, between the fire fighting water point and the furthest part of the building area.	
В.	Design criteria for fire hydrants.  (a) accordance with <i>TasWater Supplement to Water Supp Code of Australia, WSA 03-2011-3.1 MRWA 2nd edition</i> and		fire hydrant system must be designed and constructed in accordance with <i>TasWater Supplement to Water Supply Code of Australia, WSA 03-2011-3.1 MRWA 2nd edition</i> ;	
C.	Hardstand.	A ha (a) (b) (c) (d)	no more than 3m from the hydrant, measured as a hose lay; no closer than 6m from the building area to be protected; with a minimum width of 3m constructed to the same standard as the carriageway; and connected to the property access by a carriageway equivalent to the standard of the property access.	

#### **CONCLUSIONS**

A 48 + balance lot & road subdivision is proposed from one existing title CT 174766/1 at 158 Caroline Street, East Devonport in 4 stages. A further 30 lots on the balance are proposed subject to rezoning. The area is mapped as bushfire prone.

All lots within the subdivision have building areas at BAL 19 or lower, with hazard management during staging some Lots can achieve BAL Low ratings.

Lots on the eastern and southern portion of the residential development require a setback for their building area for construction to BAL 19 and a larger setback for BAL 12.5 construction.

Staged development of lot requires hazard management areas that must be in place and maintained to preserve the BAL ratings of lots. At the completion of development / sealing of titles all subdivision lots with the exception of Lot 46 and portions of lots 27, 28, 42 and 53 must be managed as low threat vegetation in perpetuity. Lot 46 with the exception of a small area outside the landslip required retained vegetation can remain as per current vegetation, that small area will require management of fuels as either grassland or woodland at or before stage 4 titles are sealed. Lots 27, 28, 42 and 53 may have grassland fuel loads on areas outside their specific hazard management areas for habitable buildings.

The owner of a lot is responsible for hazard management within their lot.

Subdivision roads must comply with the relevant elements of Table C13.1 Tasmanian Planning Scheme, with the exception of the Stage 2 cul de sac which may be constructed to LGAT Residential design standards.

The subdivision will be serviced by a new reticulated supply. New hydrants must meet the requirements of Table C13.4 of the Tasmanian Planning Scheme.

#### REFERENCES

Australian Building Codes Board. (2015). National Construction Code - Volume 2. ABCB.

Bushfire Planning Group. (2005). Guidelines for Development in Bushfire Prone Areas of Tasmania.

Department of Justice (Tasmania). (2017). Determination - Requirements for building in bushfire prone areas 2017.

Department of Premier and Cabinet (Tasmania). (2017). Building Act 2016.

Department of Premier and Cabinet (Tasmania). (2017). Building Regulations 2016.

Standards Australia Limited. (20018). AS 3959-2018 Construction of buildings in bushfire prone areas (incorporating Amendments Nos 1, 2 and 3).

Tasmanian Planning Commission. (2021). Tasmanian Planning Scheme

Tasmanian Planning Commission. (2017). Planning Directive No. 5.1 - Bushfire-Prone Areas Code.

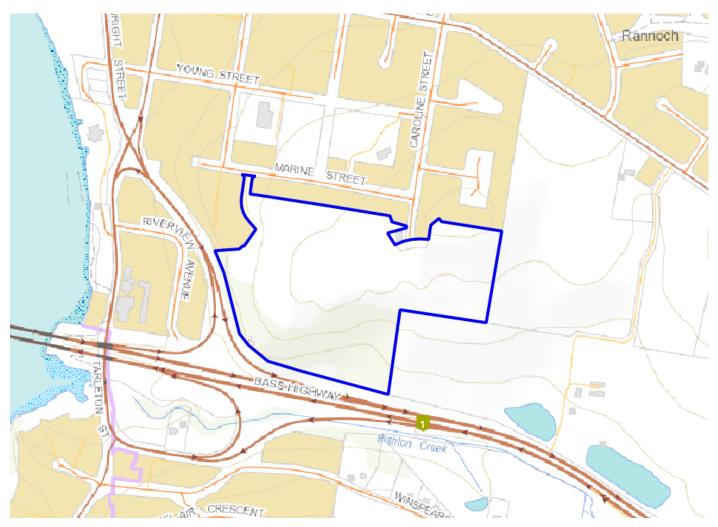


Figure 6: Location existing lot in blue



Figure 7: Aerial Image

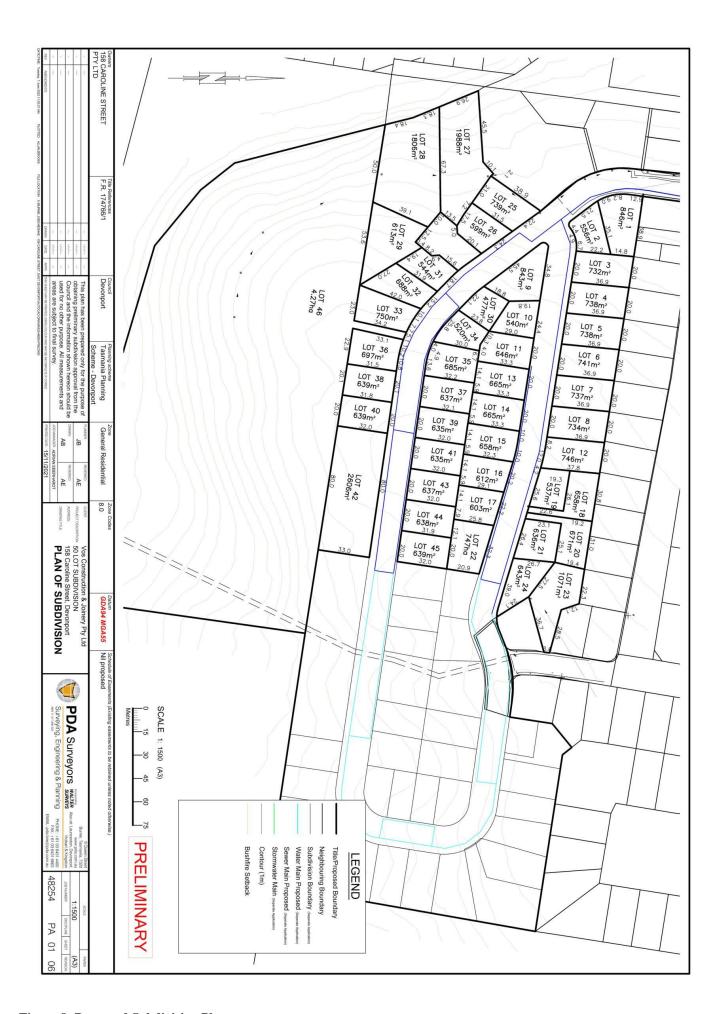


Figure 8: Proposed Subdivision Plan

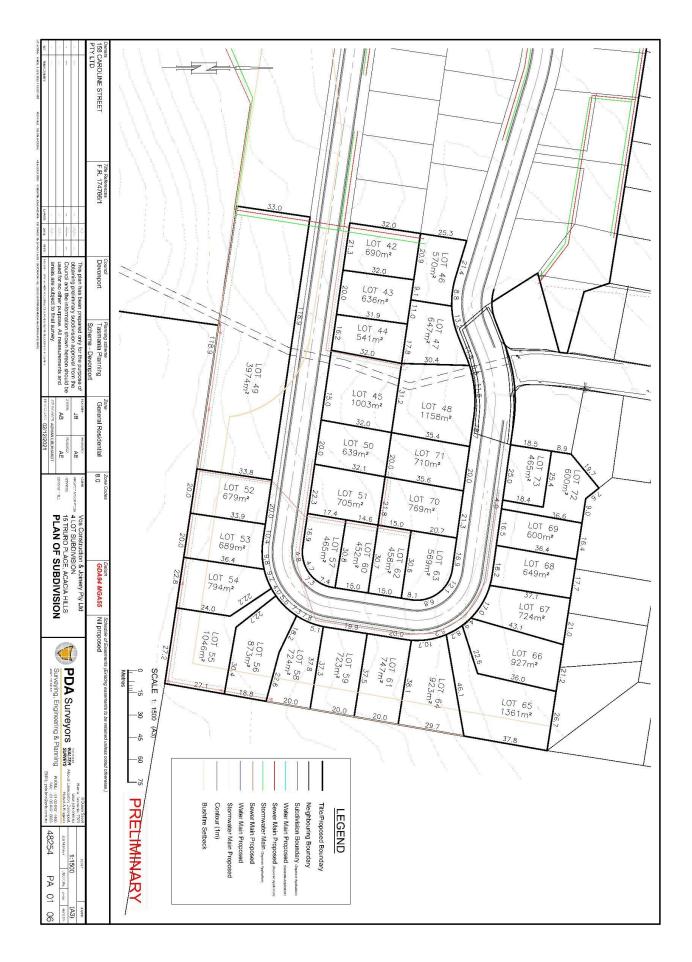


Figure 9: Subdivision Plan Rezoning



Figure 10: south across lots



Figure 11: south across lot 46, vegetation management area



Figure 12: west along lot 46 northern boundary



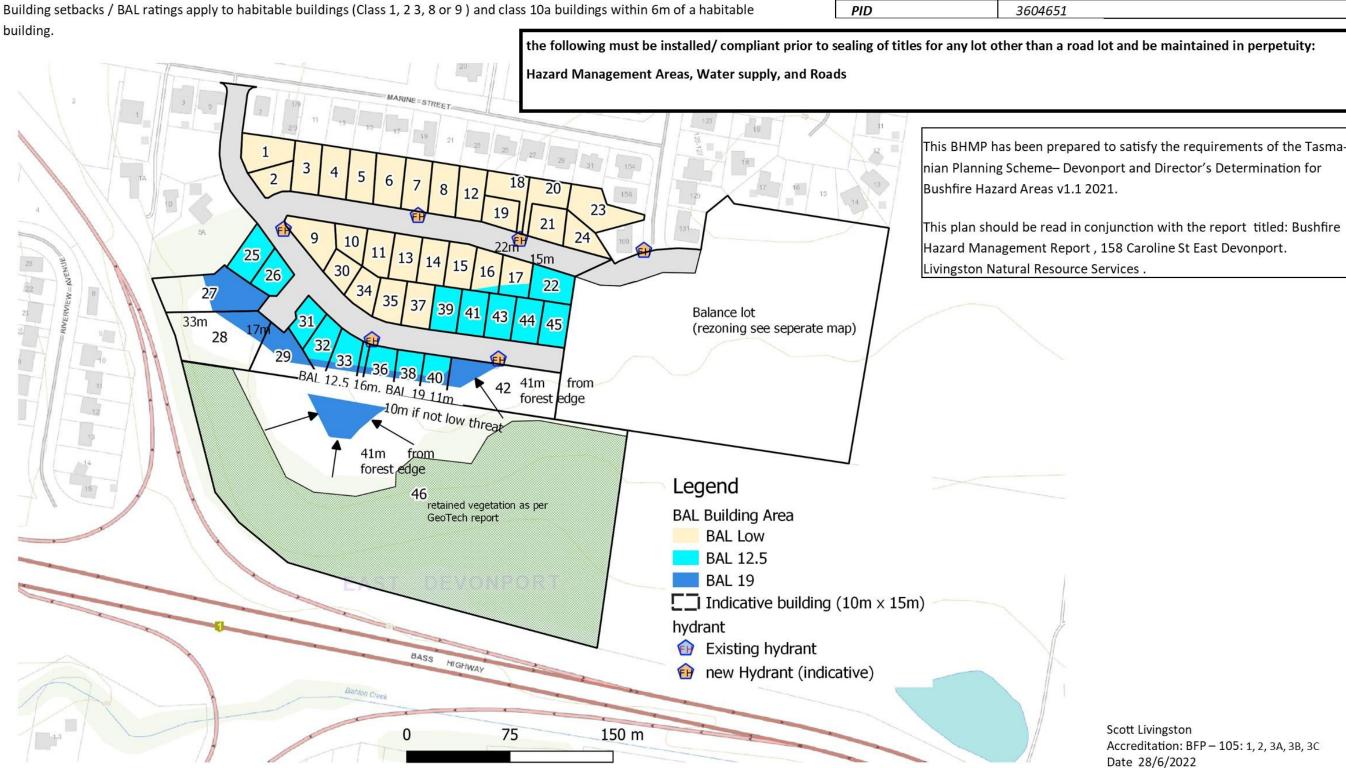
Figure 13: north east across eastern boundary (classified as grassland)

# **Bushfire Hazard Management Plan: Subdivision**

# Construction: BAL Low, BAL 12.5, BAL 19 as shown

Buildings in Bushfire Prone Area to be built in accordance with the Building Code of Australia and Australian Standard AS3959.

Proposed Development	Subdivision, 64 lots and road s from 1 lot	
Plan of Subdivision	PDA Surveyors 48254 P06a	
Property Owner	Vos Construction & Joinery Pty Ltd	
Address	158 Caroline Street, East Devonport	
СТ	174766/1	
PID	3604651	



SRL22/33S



Scott Livingston Accreditation: BFP – 105: 1, 2, 3A, 3B, 3C Date 28/6/2022

SRL22/33S

# **Water Supply**

A reticulated water supply to the standards below must be in place prior to sealing of titles for any of lot.

#### Distance between building area to be protected and water supply.

- a. the building area to be protected must be located within 120m of a fire hydrant; 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.

#### Design criteria for fire hydrants.

- a. fire hydrant system must be designed and constructed in accordance with TasWater Supplement to Water Supply Code of Australia, WSA 03-2011-3.1 MRWA 2nd edition; and
- b. fire hydrants are not installed in parking areas.

#### Hardstand. A hardstand area for fire appliances must be provided:

- a. no more than 3m from the hydrant, measured as a hose lay;
- b. no closer than 6m from the building area to be protected;
- c. with 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.

# Roads

Roads to the standards below must be in place prior to sealing of titles for a stage. With the exception of the Stage 2 cul de sac which may be constructed to LGAT residential standards unless otherwise specified by planning approval.

- a. two-wheel drive, all-weather construction;
- b. load capacity of at least 20 tonnes, including for bridges and culverts:
- c. minimum carriageway width is 7m for a through road, or 5.5m for a dead-end or cul-de-sac road;
- d. minimum vertical clearance of 4m;
- e. minimum horizontal clearance of 2m from the edge of the carriageway;
- f. cross falls of less than 3 degrees (1:20 or 5%);
- g. maximum gradient of 15 degrees (1:3.5 or 28%) for sealed roads, and 10 degrees (1:5.5 or 18%) for unsealed roads;
- h. curves have a minimum inner radius of 10m;
- dead-end or cul-de-sac roads are not more than 200m in length unless the carriageway is 7m in width;
- j. dead-end or cul-de-sac roads have a turning circle with a minimum
   12m outer radius; and
- k. carriageways less than 7m wide have 'No Parking' zones on one side, indicated by a road sign that complies with Australian Standard, AS 1743-2001 Road signs-Specifications.

Scott Livingston

Accreditation: BFP – 105: 1, 2, 3A, 3B, 3C

Date 28/6/2022

SRL22/33S

The Lungston

#### **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

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: 158 Caroline Street, East Devonport

Certificate of Title / PID: CT 174766/1, PID 3604651,

# 2. Proposed Use or Development

Subdivision, 64 lots & road from 1 lot

Applicable Planning Scheme: Tasmanian Planning Scheme -Devonport

#### 3. Documents relied upon

This certificate relates to the following documents:

Title	Author	Date	Version
Bushfire Hazard Management Report 158 Caroline Street, East Devonport	Scott Livingston	10/3/2022	1
Bushfire Hazard Management Plan 158 Caroline Street, East Devonport	Scott Livingston	10/3/2022	1
Plan of Subdivision	PDA surveyors	15/11/2021	PO6a

## 4. Nature of Certificate

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

E1.4 / C13.4 – Use or development e	/ C13.4 – Use or development exempt from this Code	
Compliance test	Compliance Requirement	

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

	E1.4(a) / C13.4.1(a)	Insufficient increase in risk	
	E151/C1251 Value and Living		
	E1.5.1 / C13.5.1 – Vulnerable Uses  Acceptable Solution Compliance Requirement		
	Acceptable Solution	Compliance Requirement	
	E1.5.1 P1 / C13.5.1 P1	Planning authority discretion required. A proposal cannot be certified as compliant with P1.	
	E1.5.1 A2 / C13.5.1 A2	Emergency management strategy	
	E1.5.1 A3 / C13.5.1 A2	Bushfire hazard management plan	
	E1.5.2 / C13.5.2 – Hazardous Uses		
	Acceptable Solution	Compliance Requirement	
	E1.5.2 P1 / C13.5.2 P1	Planning authority discretion required. A proposal cannot be certified as compliant with P1.	
	E1.5.2 A2 / C13.5.2 A2	Emergency management strategy	
	E1.5.2 A3 / C13.5.2 A3	Bushfire hazard management plan	
	F1 (1 / C12 (1 C ) )		
$\boxtimes$	E1.6.1 / C13.6.1 Subdivision: Provisi	1	
	A		
	Acceptable Solution	Compliance Requirement	
	Acceptable Solution E1.6.1 P1 / C13.6.1 P1	Planning authority discretion required. A proposal cannot be certified as compliant with P1.	
	-	Planning authority discretion required. A proposal	
	E1.6.1 P1 / C13.6.1 P1	Planning authority discretion required. A proposal cannot be certified as compliant with P1.	
	E1.6.1 P1 / C13.6.1 P1  E1.6.1 A1 (a) / C13.6.1 A1(a)	Planning authority discretion required. A proposal cannot be certified as compliant with P1.  Insufficient increase in risk  Provides BAL-19 for all lots (including any lot	
	E1.6.1 P1 / C13.6.1 P1  E1.6.1 A1 (a) / C13.6.1 A1(a)  E1.6.1 A1 (b) / C13.6.1 A1(b)  E1.6.1 A1(c) / C13.6.1 A1(c)	Planning authority discretion required. A proposal cannot be certified as compliant with P1.  Insufficient increase in risk  Provides BAL-19 for all lots (including any lot designated as 'balance')  Consent for Part 5 Agreement	
	E1.6.1 P1 / C13.6.1 P1  E1.6.1 A1 (a) / C13.6.1 A1(a)  E1.6.1 A1 (b) / C13.6.1 A1(b)  E1.6.1 A1(c) / C13.6.1 A1(c)  E1.6.2 / C13.6.2 Subdivision: Public	Planning authority discretion required. A proposal cannot be certified as compliant with P1.  Insufficient increase in risk  Provides BAL-19 for all lots (including any lot designated as 'balance')  Consent for Part 5 Agreement  and fire fighting access	
	E1.6.1 P1 / C13.6.1 P1  E1.6.1 A1 (a) / C13.6.1 A1(a)  E1.6.1 A1 (b) / C13.6.1 A1(b)  E1.6.1 A1(c) / C13.6.1 A1(c)	Planning authority discretion required. A proposal cannot be certified as compliant with P1.  Insufficient increase in risk  Provides BAL-19 for all lots (including any lot designated as 'balance')  Consent for Part 5 Agreement	
	E1.6.1 P1 / C13.6.1 P1  E1.6.1 A1 (a) / C13.6.1 A1(a)  E1.6.1 A1 (b) / C13.6.1 A1(b)  E1.6.1 A1(c) / C13.6.1 A1(c)  E1.6.2 / C13.6.2 Subdivision: Public	Planning authority discretion required. A proposal cannot be certified as compliant with P1.  Insufficient increase in risk  Provides BAL-19 for all lots (including any lot designated as 'balance')  Consent for Part 5 Agreement  and fire fighting access	

E1.6.2 A1 (b) / C13.6.2 A1 (b)	Access complies with relevant Tables	
211012111 (6)/ 6161612111 (6)	All access except cul de sac head	

$\boxtimes$	E1.6.3 / C13.1.6.3 Subdivision: Prov	ision of water supply for fire fighting purposes
	Acceptable Solution	Compliance Requirement
	E1.6.3 A1 (a) / C13.6.3 A1 (a)	Insufficient increase in risk
$\boxtimes$	E1.6.3 A1 (b) / C13.6.3 A1 (b)	Reticulated water supply complies with relevant Table
	E1.6.3 A1 (c) / C13.6.3 A1 (c)	Water supply consistent with the objective
	E1.6.3 A2 (a) / C13.6.3 A2 (a)	Insufficient increase in risk
	E1.6.3 A2 (b) / C13.6.3 A2 (b)	Static water supply complies with relevant Table
	E1.6.3 A2 (c) / C13.6.3 A2 (c)	Static water supply consistent with the objective

5. Bu	ıshfire H	azard Practitioner		
Name:	Scott Liv	ingston	Phone No:	0438 951 021
Postal Address:	1799 Reinia Road		Email Address:	scottlivingston.lnrs@gmail.com
Accreditati	on No:	BFP – 105	Scope:	1, 2, 3A, 3B, 3C
6. Ce	ertification	on .		
	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 <b>Acceptable Solutions</b> identified in Section 4 of this Certificate.			
<b>Signed:</b> certifier		R Lungol		
Name:		Scott Livingston	<b>Date:</b> 28/6//202	22
			Certificate Number: SRL 22/3	33S

(for Practitioner Use only)

# **Bushfire Hazard Management Plan: Rezoning & Subdivision**

## Construction: BAL Low, BAL 12.5, BAL 19 as shown

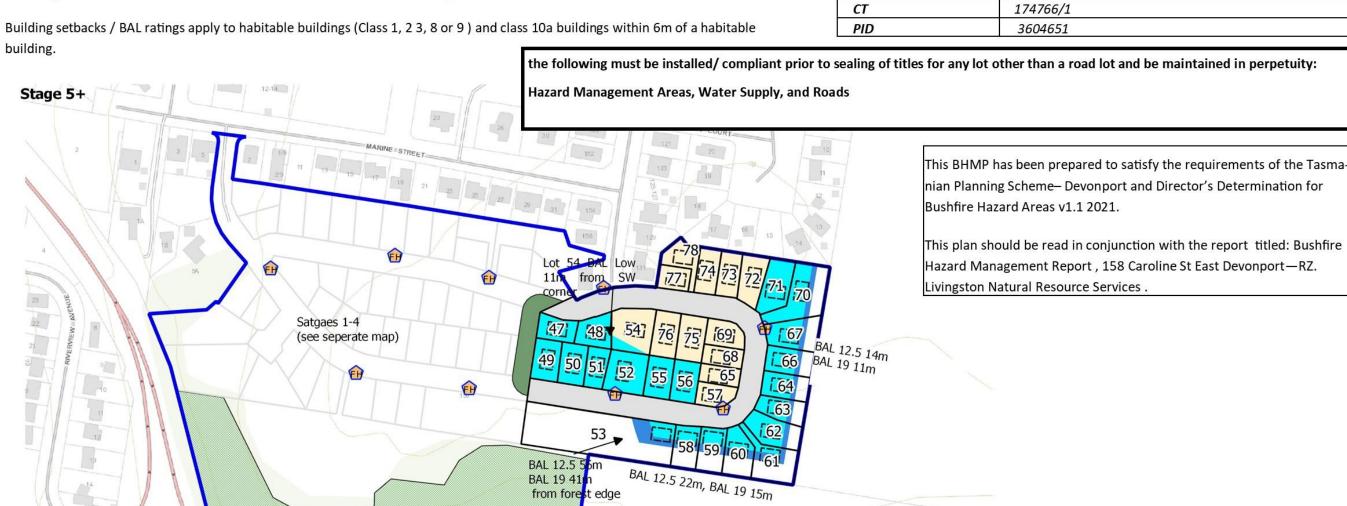
Buildings in Bushfire Prone Area to be built in accordance with the Building Code of Australia and Australian Standard AS3959.

retained vegetation as per GeoTech report

75

150 m

Proposed Development	Subdivision, 30 lots and roads from 1 lot
Plan of Subdivision	PDA Surveyors 48254 Rezoning P06
Property Owner	Vos Construction & Joinery Pty Ltd
Address	158 Caroline Street, East Devonport
СТ	174766/1
PID	3604651



Legend

hydrant

BAL Building Area
BAL Low
BAL 12.5
BAL 19

**Existing hydrant** 

new Hydrant (indicative)

 $\square$  Indicative building (10m × 15m)

Low threat vegetation if Stage 1-4 not developed

Scott Livingston
Accreditation: BFP – 105: 1, 2, 3A, 3B, 3C
Date 28/6/2022

SRL22/34S

# **Water Supply**

A reticulated water supply to the standards below must be in place prior to sealing of titles for any of lot.

#### Distance between building area to be protected and water supply.

- a. the building area to be protected must be located within 120m of a fire hydrant; 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.

#### Design criteria for fire hydrants.

- a. fire hydrant system must be designed and constructed in accordance with TasWater Supplement to Water Supply Code of Australia, WSA 03-2011-3.1 MRWA 2nd edition; and
- b. fire hydrants are not installed in parking areas.

#### Hardstand. A hardstand area for fire appliances must be provided:

- a. no more than 3m from the hydrant, measured as a hose lay;
- b. no closer than 6m from the building area to be protected;
- c. with 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.

## Roads

Roads to the standards below must be in place prior to sealing of titles for a stage.

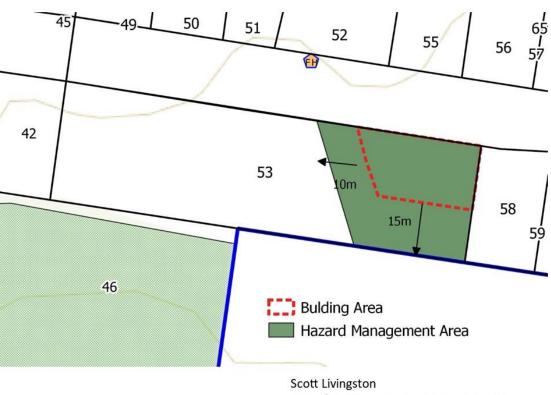
- a. two-wheel drive, all-weather construction;
- b. load capacity of at least 20 tonnes, including for bridges and culverts;
- c. minimum carriageway width is 7m for a through road, or 5.5m for a dead-end or cul-de-sac road;
- d. minimum vertical clearance of 4m;
- e. minimum horizontal clearance of 2m from the edge of the carriageway;
- f. cross falls of less than 3 degrees (1:20 or 5%);
- g. maximum gradient of 15 degrees (1:3.5 or 28%) for sealed roads, and 10 degrees (1:5.5 or 18%) for unsealed roads;
- h. curves have a minimum inner radius of 10m;
- i. dead-end or cul-de-sac roads are not more than 200m in length unless the carriageway is 7m in width;
- j. dead-end or cul-de-sac roads have a turning circle with a minimum 12m outer radius; and
- k. carriageways less than 7m wide have 'No Parking' zones on one side, indicated by a road sign that complies with *Australian Standard, AS 1743-2001 Road signs-Specifications*.

# **Hazard Management Areas**

All areas of the subdivision with the exception of Lot 53 must be managed as low threat vegetation within 50m of a Bal Low rated lot and 16m of a Bal 12.5 rated lot from sealing of titles for a lot other than a road lot. This may include earlier stages if not developed.

Lot 53 must be low threat vegetation within 14m of lot 58 boundary prior to sealing of titles. Lot 53 must be low threat vegetation within 10m west and 15m south of the building area prior to commencement of construction of a habitable building on the lot. The balance of lot 53 may be grassland.

The owner of a lot is responsible for management of fuels within their lot (s)



Scott Livingston Accreditation: BFP – 105: 1, 2, 3A, 3B, 3C Date 28/6/2022

SRL22/34S

#### **BUSHFIRE-PRONE AREAS CODE**

# CERTIFICATE<sup>2</sup> 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: 158 Caroline Street, East Devonport

Certificate of Title / PID: CT 174766/1, PID 3604651,

#### 2. Proposed Use or Development

**Description of proposed Use and Development:** 

Subdivision, 30 lots & road from 1 lot

**Applicable Planning Scheme:** 

Tasmanian Planning Scheme -Devonport

#### 3. Documents relied upon

This certificate relates to the following documents:

Title	Author	Date	Version
Bushfire Hazard Management Report 158 Caroline Street, East Devonport RZ	Scott Livingston	28/6/2022	1
Bushfire Hazard Management Plan 158 Caroline Street, East Devonport RZ	Scott Livingston	28/6/2022	1
Plan of Subdivision	PDA Surveyors	2/12/22	RZ PO6

#### 4. Nature of Certificate

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

<sup>&</sup>lt;sup>2</sup> This document is the approved form of certification for this purpose and must not be altered from its original form.

	Compliance test	Compliance Requirement
	E1.4(a) / C13.4.1(a)	Insufficient increase in risk
	E1.5.1 / C13.5.1 – Vulnerable Uses	
	Acceptable Solution	Compliance Requirement
	E1.5.1 P1 / C13.5.1 P1	Planning authority discretion required. A proposal cannot be certified as compliant with P1.
	E1.5.1 A2 / C13.5.1 A2	Emergency management strategy
	E1.5.1 A3 / C13.5.1 A2	Bushfire hazard management plan
	E1.5.2 / C13.5.2 – Hazardous Uses	
	Acceptable Solution	Compliance Requirement
	Treeepensie solution	
	E1.5.2 P1 / C13.5.2 P1	Planning authority discretion required. A proposal cannot be certified as compliant with P1.
	E1.5.2 A2 / C13.5.2 A2	Emergency management strategy
	E1.5.2 A3 / C13.5.2 A3	Bushfire hazard management plan
$\boxtimes$	E1.6.1 / C13.6.1 Subdivision: Provisi	an of hazard management areas
	Acceptable Solution	Compliance Requirement
	E1.6.1 P1 / C13.6.1 P1	Planning authority discretion required. A proposal cannot be certified as compliant with P1.
	E1.6.1 A1 (a) / C13.6.1 A1(a)	Insufficient increase in risk
$\boxtimes$	E1.6.1 A1 (b) / C13.6.1 A1(b)	Provides BAL-19 for all lots (including any lot designated as 'balance')
	E1.6.1 A1(c) / C13.6.1 A1(c)	Consent for Part 5 Agreement
	E1 ( 2   C12 ( 2 C) 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
$\boxtimes$	E1.6.2 / C13.6.2 Subdivision: Public	
	Acceptable Solution E1.6.2 P1 / C13.6.2 P1	Planning authority discretion required. A proposal cannot be certified as compliant with P1.

	E1.6.2 A1 (a) / C13.6.2 A1 (a)	Insufficient increase in risk
$\boxtimes$	E1.6.2 A1 (b) / C13.6.2 A1 (b)	Access complies with relevant Tables

$\boxtimes$	E1.6.3 / C13.1.6.3 Subdivision: Provi	ision of water supply for fire fighting purposes
	Acceptable Solution	Compliance Requirement
	E1.6.3 A1 (a) / C13.6.3 A1 (a)	Insufficient increase in risk
$\boxtimes$	E1.6.3 A1 (b) / C13.6.3 A1 (b)	Reticulated water supply complies with relevant Table
	E1.6.3 A1 (c) / C13.6.3 A1 (c)	Water supply consistent with the objective
	E1.6.3 A2 (a) / C13.6.3 A2 (a)	Insufficient increase in risk
	E1.6.3 A2 (b) / C13.6.3 A2 (b)	Static water supply complies with relevant Table
	E1.6.3 A2 (c) / C13.6.3 A2 (c)	Static water supply consistent with the objective

5. Bu	ıshfire H	azard Practitioner			
Name:	Scott Liv	ringston	]	Phone No:	0438 951 021
Postal Address:	299 Re	lbia Road		Email Address:	scottlivingston.lnrs@gmail.com
Accreditati	on No:	BFP – 105		Scope:	1, 2, 3A, 3B, 3C
6. Ce	ertificatio	on			
developme   □	Is exempthe objectinsufficitions specific The Busins/are in	V	Bushfire-Prone Andards in the Consuse or developments, or at Plan/s identified Officer's request	Areas Codode, there ment from ied in Security	tion 3 of this certificate and compliant with the
Signed: certifier		A Lungal	1		
Name:		Scott Livingston	Date:	28/6/2022	2
			Certificate Number:	SRL 22/3	4S

(for Practitioner Use only)

# CERTIFICATE OF QUALIFIED PERSON – ASSESSABLE ITEM

Section 321

To:	Vos Construction & Joinery Pty Ltd		Owner /Agent			
	3 Hudson Fysh Drive			 Fo	rm <b>55</b>	
	Western Junction 7212		Suburb/postcode			
Qualified perso	on details:					
Qualified person:	Scott Livingston					
Address:	299 Relbia			Phone No:	0438	951 201
	Relbia	72	258	Fax No:		
Licence No:	BFP-105 Email address:	SCO	ottlivin	gston.lnrs@	gmail.d	com
Qualifications and Insurance details:  Speciality area of expertise:	Bushfire Assessment (description of the content of			iption from Columr or of Building Contr nination) ription from Colum or of Building Cont	rol's n 4 of the	
expertise.			Deteri	mination)		
Details of work	:					
Address:	158 Caroline Street				Lot No:	1-94
	East Devonport	73	330	Certificate of	f title No:	174766/1
The assessable item related to this certificate:	Bushfire Attack Level (BAL)		certified) Assessable item - a material; - a design - a form of co - a document - testing of a system or p	ne assessable item being includes –		
Certificate deta	ils:					
Certificate type:	Certificate type:  Bushfire Hazard  (description from Column 1 of Schedule 1 of the Director of Building Control's Determination)					
This certificate is in relation to the above assessable item, at any stage, as part of - (tick one)  building work, plumbing work or plumbing installation or demolition work:						
	or					tallation:
a building, temporary structure or plumbing installation:  In issuing this certificate the following matters are relevant –						

Documents:	Bushfire Attack Level Assessment & Report
Relevant calculations:	
odiodiations.	
References:	Australian Standard 3959
	Building Amendment Regulations 2016
	Director of Building Control, Determinations
	• Categories of Building Control and Demolition Work (July 2017)
	• Requirements for Building in Bushfire Prone Areas. (July 2017)
	• Application of Requirements for Building in Bushfire Prone Areas. (Feb 2017)
	Director of Building Control (2021) Director's Determination for Bushfire
	Hazard Areas v1.1 2021

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

1. Assessment of the site Bushfire Attack Level (BAL) to Australian Standards 3959

Bushfire Hazard Management Plan

Assessed as – BA	L Low, BAL 12.5, BAL 19		
	liant with DTS requirements, tables 1, 2 rd Areas v1.1 2021.	, 3A/3B & 4, Director'	s Determination
	Scope and/or Limitatio	ns	
	Goope and of Enmaded	110	
comment, advice Building Control,	ommissioned to identify the Bushfire Attained fire suppression measures are in rel Determination- Requirements for Buildir and Australian Standards, AS 3959-2001 eas.	ation to compliance wing in Bushfire Prone Are	th Director of eas, the Building
<ol> <li>The report of outside the scope</li> <li>The report inspection was ur</li> </ol>	s been undertaken and report provided only deals with the potential bushfire risk of this report.  only identifies the size, volume and statundertaken and cannot be relied upon for of future development and vegetation gr	all other statutory asso as of vegetation at the t any future developmer	essments are time the site
I certify the matters	s described in this certificate.		
Qualified person:	Signed:	Certificate No:	Date: 28/6/2022
Quaimeu person:	The Lungel	SRL22/33S	20/0/2022





## **Voss Construction & Joinery Pty Ltd**

## 158 Caroline St, Devonport Stage 2, Traffic Impact Assessment

**June 2022** 







## Contents

1.	Intr	oduction	4
	1.1	Background	4
	1.2	Traffic Impact Assessment (TIA)	4
	1.3	Statement of Qualification and Experience	4
	1.4	Project Scope	5
	1.5	Subject Site	5
	1.6	Reference Resources	6
2.	Exis	sting Conditions	7
	2.1	Transport Network	7
	2.2	Road Safety Performance	8
3.	Prop	posed Development	9
	3.1	Development Proposal	9
4.	Traf	ffic Impacts	11
	4.1	Trip Generation	11
	4.2	Trip Assignment	11
	4.3	Access Impacts	12
	4.4	Sight Distance	13
	4.5	Pedestrian Impacts	14
	4.6	Road Safety Impacts	14
	4.7	Internal Road Network Assessment	14
5.	Con	clusions	16



## Figure Index

Figure 1	Subject Site & Surrounding Road Network	6
Figure 2	Marine Street	7
Figure 3	Caroline Street/ Marine Street Junction	8
Figure 4	Proposed Development Plans	9
Figure 5	Overall Subdivision Including Stage 1	10

### Table Index

Table 1 LGAT Standard Drawings – Road Requirements, Residential 15



#### 1. Introduction

#### 1.1 Background

Midson Traffic were engaged by Voss Construction and Joinery Pty Ltd to prepare a traffic impact assessment for a proposed 32 lot residential subdivision development at 158 Caroline Street, Devonport. The subdivision represents a second stage of a 49-lot subdivision.

A traffic impact assessment for Stage 1 of the subdivision was previously prepared by Midson Traffic in February 2022. This report builds on the findings of the February traffic impact assessment.

#### 1.2 Traffic Impact Assessment (TIA)

A traffic impact assessment (TIA) is a process of compiling and analysing information on the impacts that a specific development proposal is likely to have on the operation of roads and transport networks. A TIA should not only include general impacts relating to traffic management, but should also consider specific impacts on all road users, including on-road public transport, pedestrians, cyclists and heavy vehicles.

This TIA has been prepared in accordance with the Department of State Growth (DSG) publication, *Traffic Impact Assessment Guidelines*, August 2020. This TIA has also been prepared with reference to the Austroads publication, *Guide to Traffic Management*, Part 12: *Traffic Impacts of Developments*, 2019.

Land use developments generate traffic movements as people move to, from and within a development. Without a clear understanding of the type of traffic movements (including cars, pedestrians, trucks, etc), the scale of their movements, timing, duration and location, there is a risk that this traffic movement may contribute to safety issues, unforeseen congestion or other problems where the development connects to the road system or elsewhere on the road network. A TIA attempts to forecast these movements and their impact on the surrounding transport network.

A TIA is not a promotional exercise undertaken on behalf of a developer; a TIA must provide an impartial and objective description of the impacts and traffic effects of a proposed development. A full and detailed assessment of how vehicle and person movements to and from a development site might affect existing road and pedestrian networks is required. An objective consideration of the traffic impact of a proposal is vital to enable planning decisions to be based upon the principles of sustainable development.

This TIA also addresses the relevant clauses in C2.0, *Parking and Sustainable Transport* Code, and C3.0, *Road and Railway Assets* Code, the Tasmanian Planning Scheme – Devonport, 2021.

#### 1.3 Statement of Qualification and Experience

This TIA has been prepared by an experienced and qualified traffic engineer in accordance with the requirements of Council's Planning Scheme and The Department of State Growth's, *Traffic Impact Assessment Guidelines*, August 2020, as well as Council's requirements.

The TIA was prepared by Keith Midson. Keith's experience and qualifications are briefly outlined as follows:

26 years professional experience in traffic engineering and transport planning.



- Master of Transport, Monash University, 2006
- Master of Traffic, Monash University, 2004
- Bachelor of Civil Engineering, University of Tasmania, 1995
- Engineers Australia: Fellow (FIEAust); Chartered Professional Engineer (CPEng); Engineering Executive (EngExec); National Engineers Register (NER)

#### 1.4 Project Scope

The project scope of this TIA is outlined as follows:

- Review of the existing road environment in the vicinity of the site and the traffic conditions on the road network.
- Provision of information on the proposed development with regards to traffic movements and activity.
- Identification of the traffic generation potential of the proposal with respect to the surrounding road network in terms of road network capacity.
- Review of the parking requirements of the proposed development. Assessment of this parking supply with Planning Scheme requirements.
- Traffic implications of the proposal with respect to the external road network in terms of traffic efficiency and road safety.

#### 1.5 Subject Site

The subject site is located at 158 Caroline Street, Devonport. The site is currently a large vacant lot located immediately north of the Bass Highway.

The subject site and surrounding road network is shown in Figure 1.



Figure 1 Subject Site & Surrounding Road Network

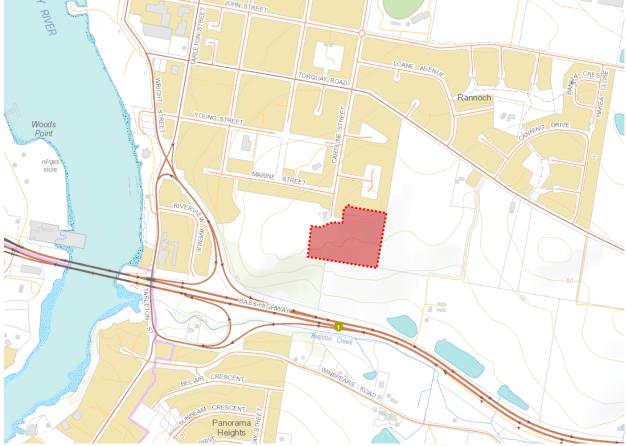


Image Source: LIST Map, DPIPWE

#### 1.6 Reference Resources

The following references were used in the preparation of this TIA:

- Tasmanian Planning Scheme Devonport, 2021 (Planning Scheme)
- Austroads, Guide to Traffic Management, Part 12: Traffic Impacts of Developments, 2019
- Austroads, Guide to Road Design, Part 4A: Unsignalised and Signalised Intersections, 2021
- Department of State Growth, Traffic Impact Assessment Guidelines, 2020
- Roads and Maritime Services NSW, *Guide to Traffic Generating Developments*, 2002 (RMS Guide)
- Roads and Maritime Services NSW, *Updated Traffic Surveys*, 2013 (Updated RMS Guide)
- Australian Standards, AS2890.1, Off-Street Parking, 2004 (AS2890.1:2004)



## 2. Existing Conditions

#### 2.1 Transport Network

For the purposes of this report, the transport network consists of Marine Street and Caroline Street. Other roads such as Tarleton Street and Bass Highway were considered in the broader context of the surrounding network but were not assessed in detail.

#### 2.1.1 Marine Street

Marine Street connects between David Street and Caroline Street, providing local connectivity for a small residential catchment area, including the subject site. Marine Street carries a relatively low traffic volume, in the order of 200 vehicles per day. The General Urban Speed Limit of 50-km/h applies to Marine Street. It has a sealed pavement width of approximately 7.5 metres with wider road verges. A footpath has been constructed on the northern side of Marine Street for approximately half its length.

Marine Street near the subject site is shown in Figure 2.

Figure 2 Marine Street





#### 2.1.2 Caroline Street

Caroline Street connects between Marine Street at its southern end and Upper Drew Street at its northern end. It provides connectivity for residential and rural properties along its length. Caroline Street carries a relatively low traffic volume near the subject site, estimated to be in the order of 200 vehicles per day.

The General Urban Speed Limit of 50-km/h applies to Caroline Street. Caroline Street connects to Marine Street at a T-junction with Caroline Street having priority. The intersection is shown in Figure 3



Figure 3 Caroline Street/ Marine Street Junction



#### 2.2 Road Safety Performance

Crash data can provide valuable information on the road safety performance of a road network. Existing road safety deficiencies can be highlighted through the examination of crash data, which can assist in determining whether traffic generation from the proposed development may exacerbate any identified issues.

Crash data was obtained from the Department of State Growth for a 5+ year period between  $1^{st}$  January 2017 and  $31^{st}$  January 2022 for the full length of Marine Street and Caroline Street between Torquay Road and Marine Street.

No crashes were reported during this time.



## 3. Proposed Development

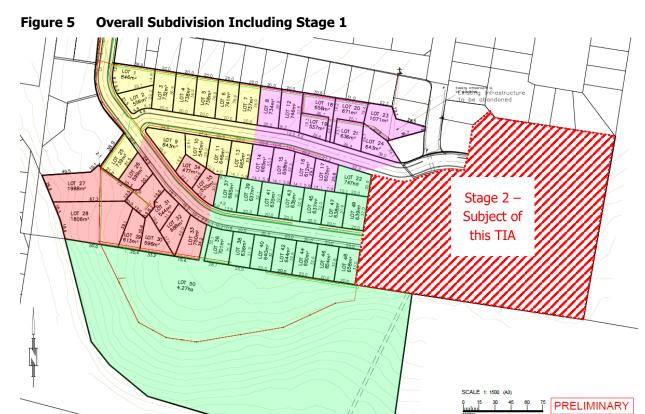
#### 3.1 Development Proposal

The development proposal is a 32-lot residential subdivision. Access will be provided at two locations: the termination of Caroline Street; and Marine Street via the road network of Stage 1 of the subdivision.

The proposed development is shown in Figure 4. The layout of Stage 1 of the subdivision is shown in Figure 5.









### 4. Traffic Impacts

#### 4.1 Trip Generation

Traffic generation rates were sourced from the RMS Guide. The RMS Guide (and RMS updated surveys) states the following traffic generation rates for residential developments:

Daily vehicle trips
 Weekday peak hour vehicle trips
 7.4 per dwelling
 0.78 per dwelling

Based on these rates, the traffic generation from the subdivision when fully developed (with all dwellings occupied within the subdivision) is likely to be in the order of 237 vehicles per day, with a peak of 25 vehicles per hour.

The previous stage of the subdivision will generate 363 vehicles per day with a peak of 38 vehicles per day. When considering the potential of the fully developed land associated with Stages 1 and 2, the traffic generation is likely to reach 600 vehicles per day with a peak of 63 vehicles per hour.

#### 4.2 Trip Assignment

Traffic will access the site at two locations. The subdivision is located at the western end of the subject site and therefore the Marine Street access is likely to carry a higher traffic volume than the Caroline Street access.

A distribution of 70%/ 30% has been assumed for traffic utilising the Caroline Street and Marine Street. This equates to:

Caroline Street junction: 166 vehicles per day, peak of 18 vehicles per hour
 Marine Street junction (via Stage 1): 71 vehicles per day, peak of 7 vehicles per hour

When considering the traffic generation of Stages 1 and 2 of the subdivision combined, the split of traffic at each access would be as follows:

Caroline Street junction: 275 vehicles per day, peak of 29 vehicles per hour
 Marine Street junction (via Stage 1): 325 vehicles per day, peak of 34 vehicles per hour



#### 4.3 Access Impacts

The Acceptable Solution A1.4 of Clause C3.5.1 of the Planning Scheme states "Vehicular traffic to and from the site, using an existing vehicle crossing or private level crossing, will not increase by more than the amounts in Table C3.1".

Table C3.1 specifies a maximum increase of 20% of 40 vehicles per day, whichever is greater. For the two access locations connecting to the subdivision, this equates to:

Caroline Street
 51 vehicles per day (20% of 254 vehicles per day)

Marine Street
 40 vehicles per day (40 vpd greater than 20% of 109 vpd)

The increased traffic generated by the subdivision exceeds these requirements at both accesses and therefore the Acceptable Solution A1.4 is not met.

The Performance Criteria P1 of Clause C3.5.1 of the Planning Scheme states:

"Vehicular traffic to and from the site must minimise any adverse effects on the safety of a junction, vehicle crossing or level crossing or safety or efficiency of the road or rail network, having regard to:

- (a) any increase in traffic caused by the use;
- (b) the nature of the traffic generated by the use;
- (c) the nature of the road;
- (d) the speed limit and traffic flow of the road;
- (e) any alternative access to a road;
- (f) the need for the use;
- (g) any traffic impact assessment; and
- (h) any advice received from the rail or road authority".

The following is relevant with respect to the development proposal:

- a. <u>Increase in traffic</u>. The increase in traffic at the Marine Street access will be approximately 71 vehicles per day (as an increase from Stage 1 of the subdivision) and the peak traffic generation increase at the access will be approximately 7 vehicles per hour. Similarly, the increase in traffic at the Caroline Street junction will be 166 vehicles per day with a peak of 18 vehicles per hour. The road junctions to the site can cater for the relatively small peak hour traffic generation with a high level of service.
- b. <u>Nature of traffic</u>. The traffic generation will be residential in nature. This is consistent with traffic currently utilising Marine Street.



- c. <u>Nature of road</u>. Marine Street and Caroline Street are minor collector roads that carries relatively low traffic volumes.
- d. <u>Speed limit and traffic flow of road</u>. The posted speed limit of Marine Street and Caroline Street is 50-km/h. Traffic volumes in both roads are estimated to be in the order of 200 vehicles per day.
- e. <u>Alternative access</u>. The two accesses to the site will ensure a good level of service once the subject site is fully subdivided.
- f. <u>Need for use</u>. The junctions are required to provide access to the lots associated with the subdivision.
- g. Traffic impact assessment. This report documents the findings of a traffic impact assessment.
- h. <u>Road authority advice</u>. No written advice was received by Council (as road authority). Council provided advice that the development requires a TIA to accompany the development application.

Based on the above assessment, the development meets the requirements of Performance Criteria P1 of Clause C3.5.1 of the Planning Scheme. Specifically, the traffic generation will not have any significant adverse impacts on the capacity of the junction or the surrounding road network.

#### 4.4 Sight Distance

The availability of sufficient sight distance at an access or junction of a road is critical for road safety. Austroads defines Safe Intersection Sight Distance (SISD) as follows:

"SISD Provides sufficient distance for a driver of a vehicle on the major road to observe a vehicle on a minor road approach moving into a collision situation (e.g. in the worst case, stalling across the traffic lanes) and to decelerate to a stop before reaching the collision point.

Is viewed between two points to provide inter-visibility between drivers and vehicles on the major road and minor road approaches. It is measured from a driver eye height of 1.1 m above the road to points 1.25m above the road which represents drivers seeing the upper part of cars.

Assumes that the driver on the minor road is situated at a distance of 5.0 m (minimum of 3.0 m) from the lip of the channel or edge line projection of the major road. SISD allows for a 3 second observation time for a driver on the priority legs of the intersection to detect the problem ahead (e.g. car from minor road stalling in through lane) plus the SSD.

Provides sufficient distance for a vehicle to cross the non-terminating movement on two-lane two-way roads, or undertake two-stage crossings of dual carriageways, including those with design speeds of 80-km/h or more.

Should also be provided for drivers of vehicles stored in the centre of the road when undertaking a crossing or right-turning movement.

Enables approaching drivers to see an articulated vehicle, which has properly commenced a manoeuvre from a leg without priority, but its length creates an obstruction.



Is measured along the carriageway from the approaching vehicle to the conflict point, the line of sight having to be clear to a point 5.0 m (3.0 m minimum) back from the holding line or stop line on the side road".

The Austroads SISD requirements are applicable to road junctions. For a 50-km/h frontage road, the Austroads SISD requirement is 97 metres. The available sight distance exceeds 100 metres in both directions from the proposed junction along Marine Street, thus meeting Austroads SISD requirements (noting that full sight distance is available to the cul-de-sac termination of Marine Street to the west of the junction, and full sight distance is available to the Caroline Street junction to the east).

#### 4.5 Pedestrian Impacts

The proposed development is likely to generate a relatively small amount of pedestrian activity associated with the residential lots. Whilst there is a general lack of pedestrian specific infrastructure, there is sufficient nature strip area to cater for the general pedestrian needs associated with the development.

#### 4.6 Road Safety Impacts

No significant adverse road safety impacts are foreseen for the proposed development. This is based on the following:

- The relatively small peak hour traffic generation of 25 vehicles per hour will not have any significant impact on the traffic efficiency and general operation of the connectivity with the intersections of Marine Street and Caroline Street, as well as the surrounding road network.
- The existing road safety performance of the network in the vicinity of the subject site does not indicate that there are any current road safety deficiencies that may be exacerbated by the proposed development. Noting specifically that no crashes have been reported in Marine Street or Caroline Street in the past five years.
- Adequate sight distances is available at the access for the prevailing vehicle speeds on Marine Street in accordance with Austroads requirements.

#### 4.7 Internal Road Network Assessment

The subdivision will create a circular internal road that will connect to Stage 1 of the subdivision.

Council relies on the design criteria of LGAT Tasmanian Standard Drawings and Subdivision Guidelines, 2013. The requirements for residential subdivision roads are reproduced in Table 1. The following standards are applicable for the internal road network:

- Road design should be in accordance with Austroads Guidelines.
- LGAT Standard Drawings and Tasmanian Subdivision Guidelines.



Table 1 LGAT Standard Drawings – Road Requirements, Residential

ROAD TYPES	ROAD TYPE	ROAD LENGTH / NUMBER OF TENEMENTS	MINIMUM ROAD WIDTH	MINIMUM RESERVATION WIDTH	MINIMUM FOOTPATH REQUIREMENTS		
1 - Arterial	- Arterial						
2 - Sub Arterial		Detail design required					
3 - Collector	Through Road	Any length	11.0m	20.0m	Both Sides		
	Through Road	Any length	8.9m	18.0m	One Side Only		
4 - Local	Cul-De-Sac	Length > 150m	8.9m	18.0m	One Side Only		
	Cul-De-Sac	Length ≤ 150m and / or No. of equiv. tenements ≤ 15	6.9m	15.0m	One Side Only		

The appropriate road design for the internal roads within the subdivision is a road reservation width of 18 metres with a sealed road width of 8.9 metres. The road reservation width of 18 metres is available on the subdivision plans.

The layout of the internal road network will ensure a low-speed environment, with good connectivity to the external road network.

The junction with the internal subdivision road with Caroline Street should be a T-junction with the internal road having priority. The junction of the internal road with Marine Street should be a T-junction with Marine Street having priority.



#### 5. Conclusions

This traffic impact assessment (TIA) investigated the traffic and parking impacts of a proposed 32-lot residential subdivision development at 158 Caroline Street, Devonport. The subdivision is a second stage of a previous subdivision. A TIA was prepared for Stage 1 of the subdivision in February 2022.

The key findings of the TIA are summarised as follows:

- The proposed development is likely to generate 237 vehicles per day, with 25 vehicles per hour during peak periods. The total traffic generation of stages 1 and 2 of the subdivision will be 600 vehicles per day, with a peak of 63 vehicles per hour.
- Traffic generation will be split across the two accesses. The Marine Street access will carry approximately 325 vehicles per day with a peak of 34 vehicles per hour. The Caroline Street junction will carry approximately 275 vehicles per day with a peak of 29 vehicles per hour.
- The available sight distance at the Marine Street meets the Austroads SISD sight distance requirements.

Based on the findings of this report and subject to the recommendations above, the proposed development is supported on traffic grounds.



Midson Traffic Pty Ltd ABN: 26 133 583 025

28 Seaview Avenue Taroona TAS 7053

T: 0437 366 040 E: admin@midsontraffic.com.au W: www.midsontraffic.com.au

#### © Midson Traffic Pty Ltd 2022

This document is and shall remain the property of Midson Traffic Pty Ltd. The document may only be used for the purposes for which it was commissioned and in accordance with the Terms of Engagement for the commission. Unauthorised use of this document in any form whatsoever is prohibited.

#### **Document Status**

Revision	Author	Review	Date
0	Keith Midson	Zara Kacic-Midson	17 June 2022