BUSHFIRE HAZARD REPORT

BOYER ROAD PRECINCT STRUCTURE PLAN
BRIDGEWATER

November 2024

Job number: L240907
NL01924

Prepared by: James Stewart
Town Planner & Bushfire Hazard Practitioner BFP 157

Rev. no	Description	Date
1	DRAFT	08/11/2024
2	TFS CONSULTATION	
3	FINAL	

Disclaimer
This report deals with the potential bushfire risk only, all other statutory assessments sit outside of this report. This report is not to be used for future or further development on the site, other then what has been specifically provided for in the assessed plans attached. Nova Land Consulting Pty Ltd accepts no responsibility to any purchaser, prospective purchaser or mortgagee of the property who in any way rely on this report. This repot has been undertaken to guide use and development relating to bushfire risk within the Boyer Road Precinct and does not guarantee that buildings will survive in the event of a bushfire event. If characteristics of the property change or are altered from those which have been identified, the assessment may be different to that which has been identified as part of this report.

Launceston | Hobart
novaland.com.au

Executive Summary

Nova Land Consulting has been engaged by Holmes Dyer, to provide a Bushfire Risk Assessment in relation to land within the Boyer Road Precinct. The precinct has been identified by Brighton Council, to provide future residential supply within one of the fastest growing municipalities within the State.

As part of Brighton Councils strategic planning for the area, Holmes Dyer have been awarded the tender to prepare and submit a draft amendment, rezoning the site from Future Urban Zone (FUZ) to General Residential Zone (GRZ) under the *Tasmanian Planning Scheme – Brighton.*

A Specific Area Plan (SAP) for the site would be prepared and submitted as part of the draft amendment.

The purpose of this report is to guide future use and development of the site, while making recommendations in relation to:

- Bushfire risk
- BAL Ratings & setbacks for the site
- Future subdivision layout, and;
- Bushfire recommendations under the proposed SAP

The site is entirely within the boundary of a bushfire prone area shown on an overlay on a planning scheme map for the *Tasmanian Planning Scheme –Brighton.*

A bushfire event at this site or within the immediate area is likely to impact on future buildings at this location and subject development to considerable radiant heat and ember attack.

A detailed bushfire assessment and bushfire hazard management plan (BHMP) would be required for any future subdivision of the land or construction of habitable buildings on the site.

The conclusions and recommendations in this report will assist in the planning and delivery of a SAP and subdivision layout that is considered best practice in relation to bushfire hazards.

Conclusions & Recommendations

a) The site is well located, with the proposed urban areas located downslope of the heavier bushfire fuel areas.
b) Larger lots should be provided along the northern interface between urban areas and the more densely vegetated land which extends to the north. Dwellings on these lots are required to provide a 20m setback to meet BAL 19 standards.
c) Larger lots should be provided along the western interface, between urban areas and the agricultural land to the west. Dwellings on these lots are required to provide a 12m setback to meet BAL 19 standards.
d) Any lot to the north of the land associated with the State Heritage Registered dwelling at 50 Boyer Road, should provide a minimum separation of 14m setback to meet BAL 19 standards.
e) Lots must be of a sufficient size to provide hazard management areas within lot boundaries. We recommend avoiding Section 71 Agreements or bushfire easements/covenants on adjoining land where possible.
f) Public Open Space and Wildlife Corridors should be maintained as low threat vegetation by the Brighton Council. Alternatively, Council should consider perimeter breaks along residential boundaries.

g) All proposed roads, private accesses and fire trails (if applicable) must be in compliance with Table C13.1, C13.2 and C13.3 as outlined in C13.0 Bushfire Prone Areas Code of the Tasmanian Planning Scheme, and section 5 of this report.
h) Any water supply required for the subdivision must be in compliance with Table C13.4 or Table C13.5, as outlined in C13.0 Bushfire Prone Areas Code of the Tasmanian Planning Scheme, and section 5 of this report.
i) We recommend the SAP provide an acceptable solution habitable building line setback of 20m for all lots along the northern boundary of the proposed GRZ area. Any corresponding performance criteria must have regard to the presence of natural hazards.
j) We recommend the SAP provide an acceptable solution habitable building line setback of 12m for all lots along the western boundary of the proposed GRZ area. Any corresponding performance criteria must have regard to the presence of natural hazards.
k) The Holmes Dyer concept plan of subdivision generally provides good connectivity with multiple access points onto Boyer Road. The SAP should include a plan of subdivision, which is referred to under an acceptable solution. Any performance criteria which provides for an alternate lot layout must have regard to the presence of natural hazards.
l) The Homes Dyer concept plan of subdivision indicates three access points onto Boyer Road. It is recommended that at least 2 access/egress points are available onto Boyer prior to any large-scale residential development occurring on the site.
m) If a Council policy does not exist, it would be recommended that a vegetation or fire management policy be prepared which would guide Council on how to appropriately manage and vegetate public open space/wildlife areas that adjoin urban and other residential land.

Signed:

Author: James Stewart
Position: Town Planner and Accredited Bushfire Practitioner BFP 157

Table of Contents

1. Introduction

This Bushfire Hazard Report has been prepared in relation to the Boyer Road Precinct (BRP).

1.1 Scope of works

Nova Land Consulting has been engaged by Holmes Dyer, to provide a Bushfire Risk Assessment in relation to land within the BRP. The precinct has been identified by Brighton Council, to provide future residential supply within one of the fastest growing municipalities within the State.

This report will provide an analysis of the site and make recommendations regarding bushfire risk and BAL setbacks for future development.

A concept subdivision plan has been provided by Holmes Dyer. We have undertaken a review of the concept plan, and provide comments on the plan in section 6 of this report.

Several recommendations have been made in relation to the site, and which will assist in future subdivision design and the preparation of the SAP.

1.2 The subject site

The following is a summary of the relevant site information:

Property addresses	• Boyer Road, Bridgewater (CT44724/2) • 170 Boyer Road, Bridgewater (CT44724/9) • 31 Cobbs Hill Road, Bridgewater (CT152364/2) • 29 Cobbs Hill Road, Bridgewater (CT135574/1) • 25 Cobbs Hill Road, Bridgewater (CT135574/2) • 50 Boyer Road, Bridgewater (CT44724/8)
Land Area	109ha (total) 52ha (Future Urban Zone)
Zoning	• Future Urban Zone (FUZ) • Landscape Conservation Zone (LCZ)
Planning Scheme	Tasmanian Planning Scheme – Brighton
Identified on a Bushfire Overlay Map	The entirety of the site is mapped as being located within a Bushfire Prone Area under the Planning Scheme overlay.
Conservation Covenant	31 Cobbs Hill Road is currently subject to Conservation Covenant CPR9693
Water Supply	• 50 Boyer Road is identified as being within an area serviced by TasWater reticulated water. • There are no other lots on the subject site which are serviced by TasWater reticulated water.
Vehicular Access	• Boyer Road (Department of State Growth maintained). • Cobbs Hill Road (Council maintained)

1.3 Bushfire Assessment

A bushfire assessment is a process of analysing information about the potential impacts on a proposed development that are likely to occur in a bushfire hazard scenario. A 'bushfire-prone area' is an area where a bushfire event is likely to occur that may result in significant adverse impact on buildings and lives.

In Tasmania, most local Councils have a planning scheme overlay map that identifies bushfire-prone areas. Subdivision within a bushfire-prone area triggers the assessment of the Bushfire-Prone Areas Code under the planning schemes and subsequently requires assessment against the provisions of the Code.

The assessment generally requires a Bushfire Hazard Management Plan (BHMP) to be provided as part of an application for subdivision.

The bushfire assessment will determine the Bushfire Attack Level (BAL) for future lots, while measuring the possible exposure of a building to a bushfire hazard.

The BAL is assessed in accordance with Australian Standard *AS 3959-2018 construction of buildings in bushfire-prone areas.* The bushfire assessment is required to understand the fuel management requirements for the subject site and to demonstrate that new buildings within each lot can be constructed to minimum BAL19 level under the *Building Act 2016.*

Future assessment of a subdivision within the BRP must be undertaken in accordance with C13.0 Bushfire-Prone Areas Code and must accompany a subdivision application under the *Tasmanian Planning Scheme – Brighton.*

Holmes Dyer have prepared a concept subdivision plan for the BRP. While the plan is not being lodged as a formal subdivision application for assessment, it provides an indicative starting point in relation to possible lot layouts, road locations, and servicing. To assist Holmes Dyer in finalising a subdivision plan for the site, a bushfire advisory plan has been provided utilising the current subdivision concept.

1.4 References

The following documents and organisations were referred to in the preparation of this report. This report should be read in conjunction with any relevant legislation and other statutory requirements.

- C13.0 Bushfire-Prone Areas Code – Tasmanian Planning Scheme.
- Tasmanian Planning Scheme – Brighton
- Southern Tasmania Regional Land Use Strategy 2010-2035 (SRLUS)
- The Land Use Planning and Approvals Act 1993 (the Act).
- Tasmanian State Government, Director's Determination – Bushfire Hazard Areas V1.1
- Australian Standard, AS3959-2018 construction of buildings in bushfire-prone areas.
- Building Act 2016
- Tasmanian Fire Service, Bushfire Hazard Advisory Notes
- Tasmanian Fire Service

2. Site Description

2.1 Site context

The subject site consists of several titles located within the BRP. Details of the lots included as part of the subject site are shown below:

Address:	Title Number:	Lot Size	Existing buildings
Boyer Road, Bridgewater	CT44724/2	7.6ha	Existing outbuildings.
170 Boyer Road, Bridgewater	CT44724/9	17.7ha	Single dwelling and outbuildings.
50 Boyer Road, Bridgewater	CT44724/8	17.1ha	Single dwelling and outbuildings.
31 Cobbs Hill Road, Bridgewater	CT152364/2	31.3ha	Vacant land
29 Cobbs Hill Road, Bridgewater	CT135574/1	19.7ha	Single dwelling and outbuilding.
25 Cobbs Hill Road, Bridgewater	CT135574/2	10ha	Single Dwelling and outbuilding.

The BRP is located north of the River Derwent, on the periphery of an existing residential area to the east. There are established low density dwellings located to the east of the site, which are rural residential in character. Land to the west is utilised for primary industry purposes, located within a cleared rural environment. Land to the north west remains in its natural uncleared state.

The town centre of Bridgewater is located approximately 1.8km to the east, with the existing GRZ and urban areas of Bridgewater generally located on the eastern side of the Midland Highway. The Midland situated 600m to the east of the site. The Brighton Industrial estate is located north of Cobbs Hill Road, extending through to the east to include the existing Boral Quarries.

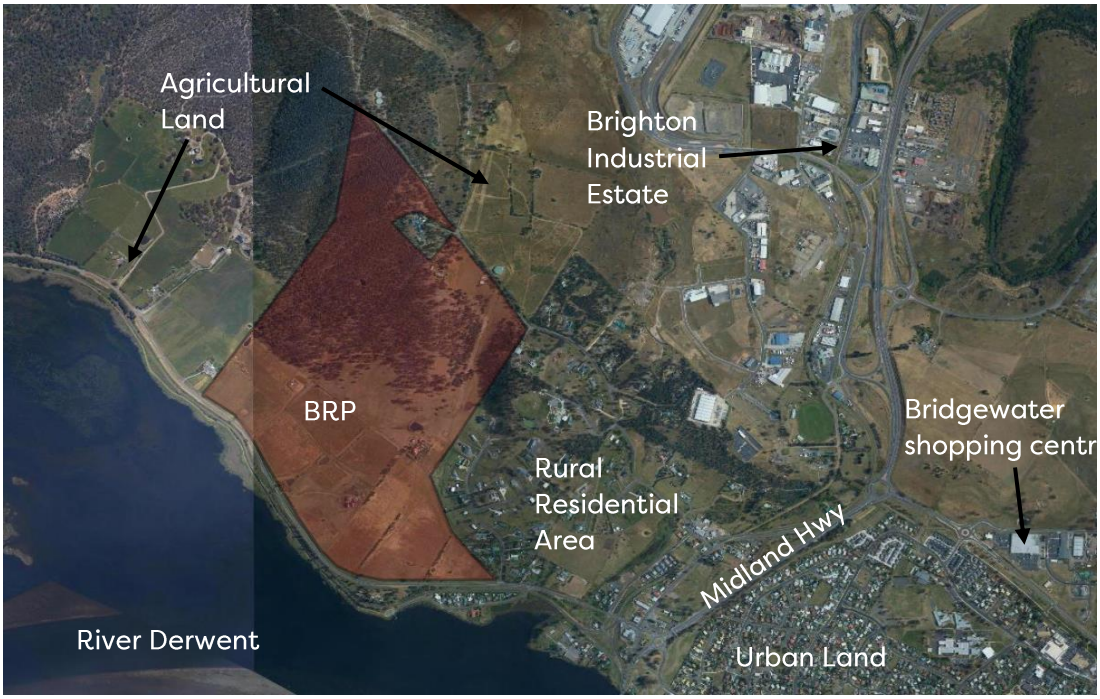


Figure 1 - Aerial view of the BRP and surrounding area (source: The LIST Map)

2.2 Planning controls

The BRP is located within the municipal area of Brighton. Therefore, the planning instrument is the *Tasmanian Planning Scheme – Brighton* (The Scheme).

The subject site is currently within the Future Urban Zone (FUZ) in the south, and the Landscape Conversation Zone (LCZ) in the north.

The purpose of this report is to analyse and support a rezoning of land from FUZ to GRZ, along with the preparation of a SAP, as part of a draft amendment application.

The subject site falls within the Bushfire-Prone Areas Overlay.

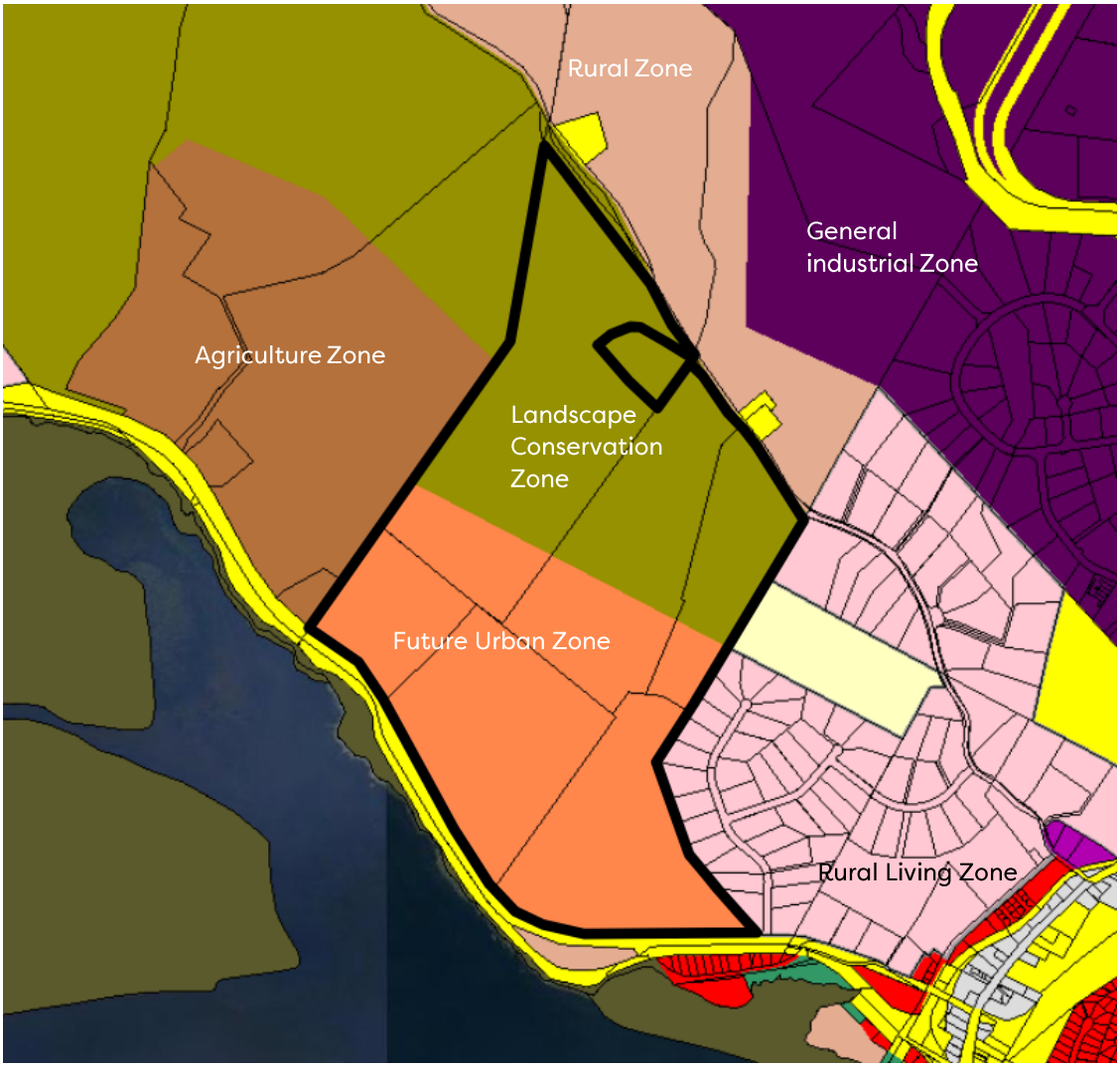


Figure 2 - Zoning map of subject site and surrounds.

3. Legislative Requirements

A bushfire hazard assessment has been prepared to support a planning scheme amendment, under Division 2 of the *Land Use Planning and Approvals Act 1993*. The legislation requires that the draft amendment must satisfy the relevant strategic planning policy considerations.

3.1 Southern Regional Land Use Strategy 2010-2035

The Southern Regional Land Use Strategy (SRLUS) is a relevant document that the draft amendment must seek to be practically consistent with.

Section 8 of the SRLUS relates to management of risks and hazards when considering land use planning.

Bushfire is identified as a key land hazard which must be taken into consideration. Policy MRH 1, relates to minimising the loss of life and property as a result of bushfire. Relevant sections of the SRLUS relating to bushfire hazards are considered below, with a response provided.

Managing Risks and Hazards	Response:
MRH 1.1 *Provide for the management and mitigation of bushfire risk at the earliest possible stage of the land use planning process (rezoning or if no rezoning required; subdivision) by the identification and protection (in perpetuity) of buffer distances or through the design and layout of lots.*	This report has been prepared to ensure Bushfire Risk is considered as part of any rezoning process. A concept subdivision plan has been prepared with comments and recommendations provided as part of this report. Buffer distances have been calculated and included in the recommended outcomes. The development of a specific area plan (SAP) can utilise bushfire setbacks as recommended in this report to ensure a hard building line is provided along the interface between urban and vegetated areas. The future subdivision and design of lot layouts will be informed through this report.
MRH 1.2 *Ensure subdivision road layout designs provide for safe exit points in areas subject to bushfire hazard.*	The bushfire prone areas code outlines requirements relating to roads, fire trails, and private accesses. This report has provided recommendations in relation to road layout design of future subdivisions. The report has recommended that at least two ingress and access points be provided onto Boyer Road as part of any larger scale subdivision.
MRH 1.3 *Allow clearance of vegetation in areas adjacent to dwellings existing at the time that planning schemes based on this Strategy come into effect, in order to implement bushfire management plans. Where such vegetation is subject to a biodiversity code, the extent of clearing allowable is to be the minimum necessary*	The areas currently zoned for FRZ are largely clear of denser and more established vegetation. The primary vegetation type in the south of the BRP is 'Grassland', which transitions to woodland as the site rises to the north. The LCZ portion of the site is generally classified as woodland, being located within an existing conservation covenant.

to provide adequate bushfire hazard protection.	Details around the extent of vegetation clearing to achieve BAL setbacks have been provided within the report. These details can assist in planning for a future subdivision. The setbacks ensure that adequate bushfire protection measures are in place in relation to vegetation management.
MRH 1.4 *Include provisions in planning schemes for use and development in bushfire prone areas based upon best practice bushfire risk mitigation and management.*	The Boyer Road SAP will be implemented over the FRZ portion of the site. The SRLUS notes that best practice bushfire risk mitigation should be examined. Best practice does not mean the same as minimum compliance. Bushfire setbacks for future habitable development have been recommended based on best practice.
MRH 1.5 *Allow new development (at either the rezoning or development application stage) in bushfire prone areas only where any necessary vegetation clearance for bushfire risk reduction is in accordance with the policies on biodiversity and native vegetation.*	Development of the area mapped FRZ will require some vegetation management of the site. This report provides setbacks to ensure that land outside of the site, is not relied on via covenants or section 71 agreements. A natural values report will be undertaken in relation to vegetation removal on the subject site. This report does not recommend or require any removal of vegetation on land zoned LCZ in order to achieve bushfire compliance.
MRH 1.6 *Develop and fund a program for regular compliance checks on the maintenance of bushfire management plans by individual landowners.*	A future subdivision application will provide recommendations relating to Bushfire. Under the Local Government Act 1993, Council provides hazard abatement. This involves inspections of land and contacting land owners where removal of fire hazards is required.

3.2 Tasmanian Planning Policies

The Tasmanian Policies are a planning instrument made under part 2A of the Act. A draft amendment is required to address the LPS criteria, as outlined in section 34 of the Act. One of the LPS criteria that is required to be considered relates to the Tasmanian Planning Policies (TPP's).

While the TPP's are currently drafted, they have not yet been declared. Nevertheless, it is viewed as pertinent to examine relevant draft TPP's relating to Bushfire, noting that they may be in place by the time a draft amendment is applied for.

Section 3.1 of the TPP's relates to Bushfire. The objective of the TPP's for bushfire is;

> *To prioritise the protection of human life and to support the resilience of settlements and communities by reducing the potential impacts of bushfire on life, property and infrastructure.*

This is achieved, by the nine strategies listed below.

Strategies:	Response:
1. *Identify and map land that is exposed to bushfire hazards, including consideration of the potential impacts of future bushfire conditions as a result of climate change, based on the best available scientific evidence*	The site is currently mapped as being within a bushfire prone area on a planning scheme overlay. The draft amendment will not seek to alter the bushfire prone areas overlay mapping. The mapping ensures that bushfire risk is appropriately considered as part of subdivision and future planning for the area.
2. *The protection of human life from harm caused by bushfire will be considered and prioritised at every stage of the planning process.*	The development of land within the FUZ can be undertaken in a manner which ensure compliance with best practice bushfire standards, and in accordance with *C13.0 Bushfire Prone Areas Code*, and *AS3959:2018 – Construction of Buildings in Bushfire Prone Areas.* Appropriate bushfire protection measures, including setbacks of future buildings, reduces the risk to human life and property.
3. *Avoid designating land for purposes that expose people, property and supporting infrastructure to risk arising from bushfire hazards, especially significant risks.*	The draft amendment will seek to see the site develop in a manner which reduces and manages any bushfire risk. Bushfire setbacks have been provided to ensure any future bushfire risk can be reduced. Overtime, it would be expected that the bushfire prone areas overlay could be amended to remove urban areas which are not required to be included in the overlay (i.e. over 100m from bushfire prone vegetation).
4. *Where it is not practical to avoid bushfire hazards, use and development is to* *a) identify the risk of harm to human life, property and infrastructure caused by bushfire;* *b) incorporate bushfire protection measures that manage the identified risk and reduce it to within a tolerable level; and* *c) provide a higher level of risk mitigation for uses deemed particularly vulnerable or hazardous.*	This report has: a) identified the risk of harm to human life, property and infrastructure b) provided recommendations that ensure the threat can be reduced to a tolerable level. c) The draft amendment does not anticipate any vulnerable or hazardous uses within the study area. Should future uses be proposed, they would be required to be assessed on their own merits.

5. *Support the efficient and safe intervention of firefighting personnel and emergency evacuation*	Future residential infrastructure will need to be constructed in accordance with the standards under C13.0 Bushfire Prone Areas Code. This includes all public roads, fire trails (if applicable), and private access (if applicable). Appropriate connectivity, including ingress and egress should be considered as part of any subdivision design. Recommendations have been made relating to ingress and egress.
6. *Facilitate the provision of firefighting infrastructure and support emergency services and the community to prevent, prepare, respond and recover from bushfire events.*	Future infrastructure will need to be constructed in accordance with the standards under C13.0 Bushfire Prone Areas Code. These incude all road infrastructure, along with water infrastructure for firefighting purposes. Ensuring future development provides for compliant infrastructure will allow the community to respond and recover in a possible bushfire event.
7. *Consider the cumulative effects of planning decisions so new use and development will not result in an unacceptable increase to bushfire risks for existing use and development.*	Should recommendations, including future building setbacks, be implemented as part of the SAP preparation and subdivision design, it is considered that new use and development of the site will not result in an unacceptable risk.
8. *When designating land for particular purposes and considering use and development in areas subject to bushfire hazards:* a) *priority should be given to minimising the impacts, associated with implementing future bushfire protection measures, on environmental values and on the cost to the community as a result of defending properties from bushfire; and* b) *where possible, avoid locations that require bushfire hazard management to be undertaken on land external to the site where that land is publicly owned and managed for conservation purposes.* c) *Allow the implementation of bushfire protection measures that are carried out in accordance with an endorsed plan, including hazard reduction burns.*	The land has been designated as being appropriate for future residential use, this is reflected in the existing FUZ. The draft amendment will rezone the site to GRZ and implement a SAP over the site. a) This report doesn't seek to impose clearing requirements outside of the site. Vegetation management will be required. The flora and fauna report will be required to address environmental values, taking into consideration this clearing. b) Bushfire hazard management will not be required to be undertaken outside of the site. c) A future subdivision will be required to provide a compliant BHMP, certified by the TFS or an accredited person. Council currently conducts fire abatement as part of their responsibilities under the Local Government Act.

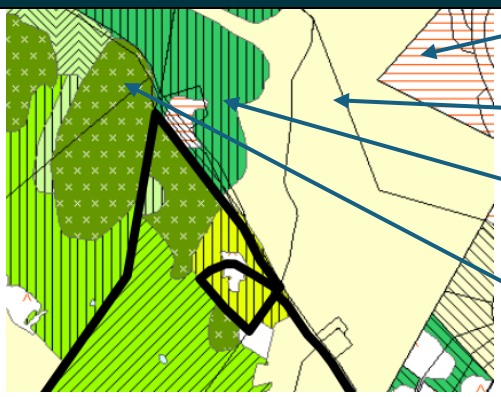
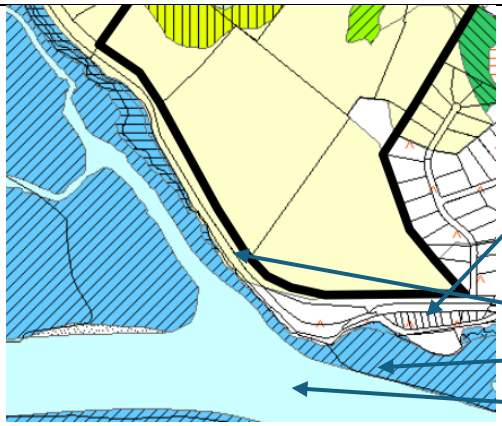
9. *Allow the implementation of bushfire protection measures that are carried out in accordance with an endorsed plan, including hazard reduction burns.*	A future subdivision of the site will be required to provide bushfire protection measures, as outlined and certified in a BHMP. Council and the TFS will liaise with landowners in relation to any hazard reduction burns if required.

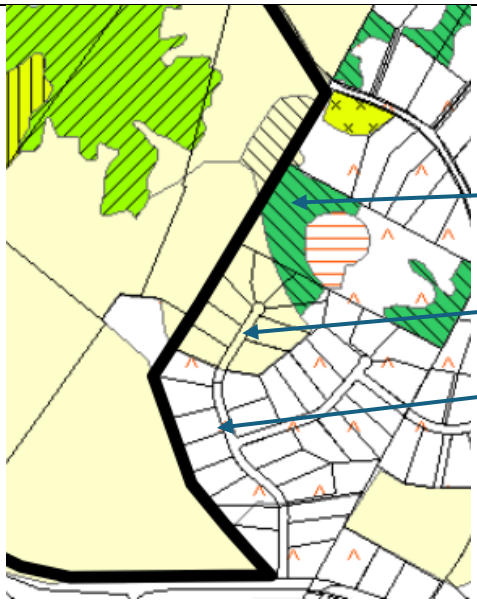
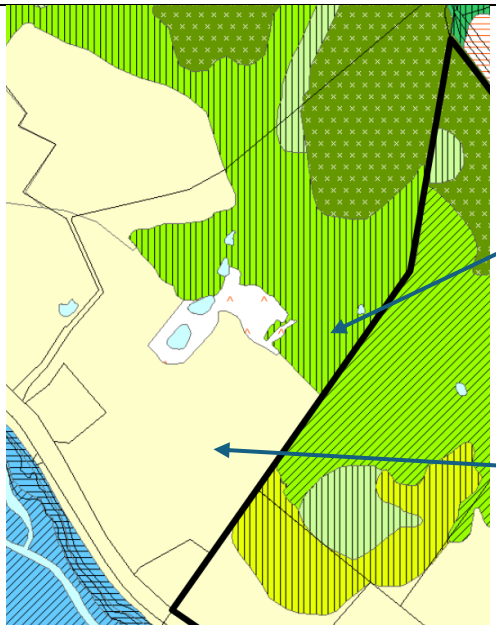
4. Bushfire Site Assessment

4.1 TasVeg Analysis

The TasVeg map 4.0 provides general information indicating potential bushfire prone vegetation, within 120m of the site, and within the subject site.

Understanding vegetation types within 100m+ of the site is a recommendation under C2.2.3.1 of AS3959:2018. For the BRP, it is considered appropriate to analyse vegetation within 120m of the site, noting that the identified vegetation does not vary greatly after 100m.

Direction	TasVeg Mapping	Comments:
North		**FUM –** Modified Land **FAG –** Agricultural Land **DTO –** Eucalyptus Forest & Woodland (tenuiramis) **DRI –** Eucalyptus Forest & Woodland (risdonii)
South		**FUR** – Urban Areas **FAG –** Agricultural Land **AHS** – Saline aquatic herb land **OAQ** – Water Body

East		**DVG** – Eucalyptus Forest & Woodland (viminalis grassy) **FAG –** Agricultural Land **FUR** – Urban Areas
West		**DAS** – Eucalyptus Forest & Woodland (on sandstone) **FAG –** Agricultural Land

Within the subject site itself, the land was primarily separated into four different vegetation types based on the TasVeg 4 mapping. These are shown below:

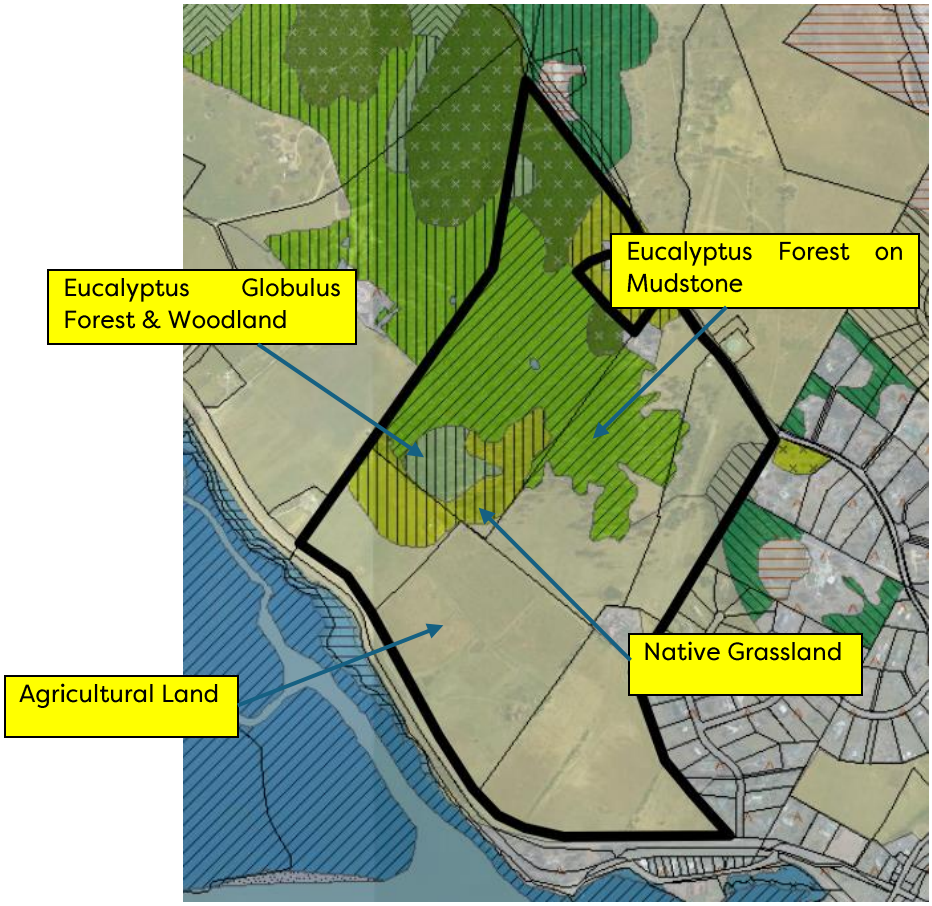


Figure 3 - TasVeg analysis of subject site

4.2 Vegetation Field Analysis

A site inspection was undertaken on Thursday 17th October 2024. The assessment focussed on those areas proposed for future development within the FUZ, however also examined land outside of the site for approximately 120m.

Land to the north of the FUZ was inspected and assessed in relation to vegetation type and bushfire risk.

For the purposes of undertaking a vegetation assessment under Table 2.3 of AS3959:2018, the vegetation has been examined against the vegetation types listed in the classification.

It was determined that both within the subject site, and within 120m of the subject site, the vegetation was classified as:

- Woodland; and
- Grassland.

A vegetation classification map, based on land 150m outside of the subject site is provided below.

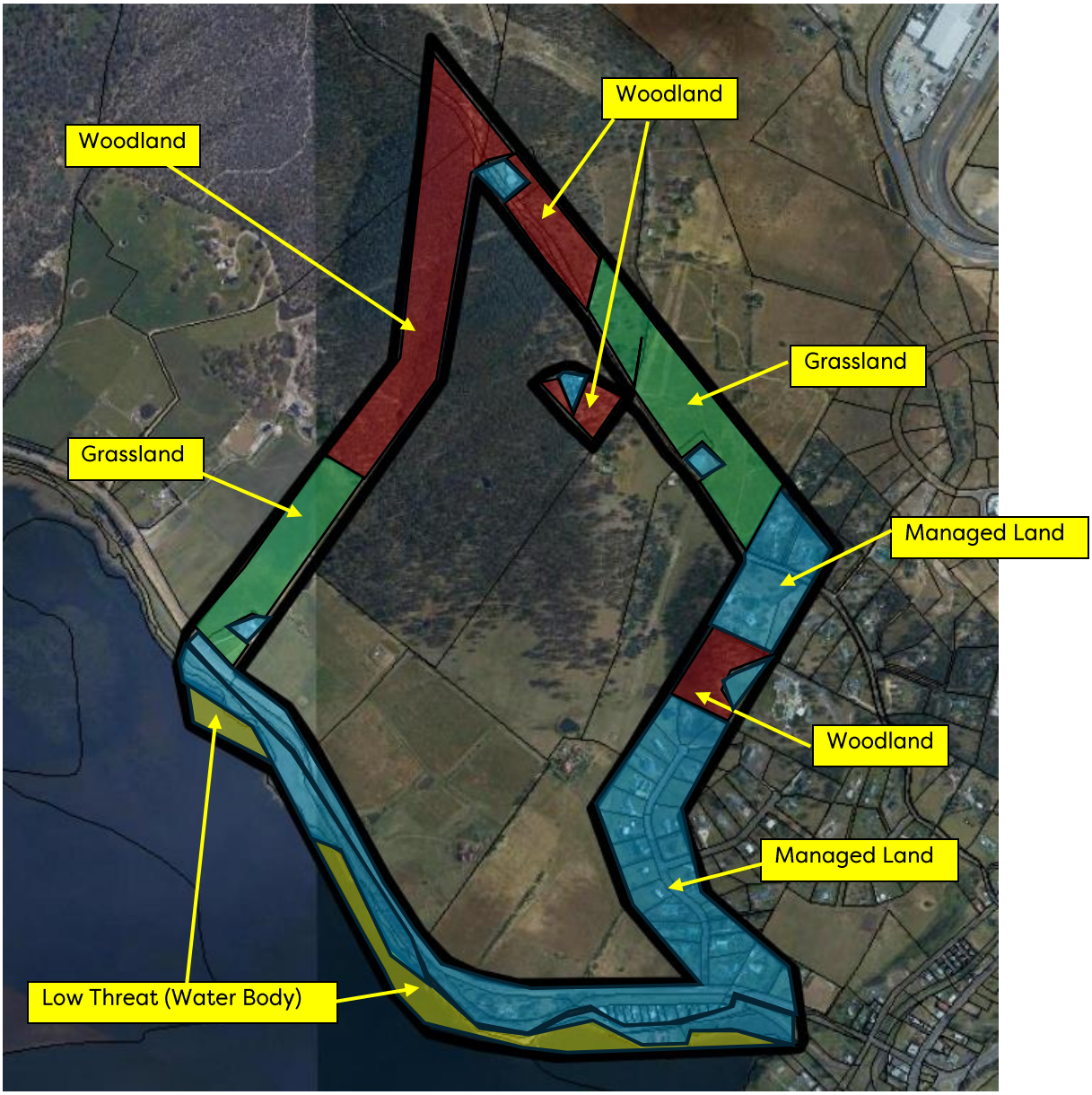


Figure 4 - Vegetation classification within 120m of subject site

A vegetation classification map, within the subject site, is provided below.

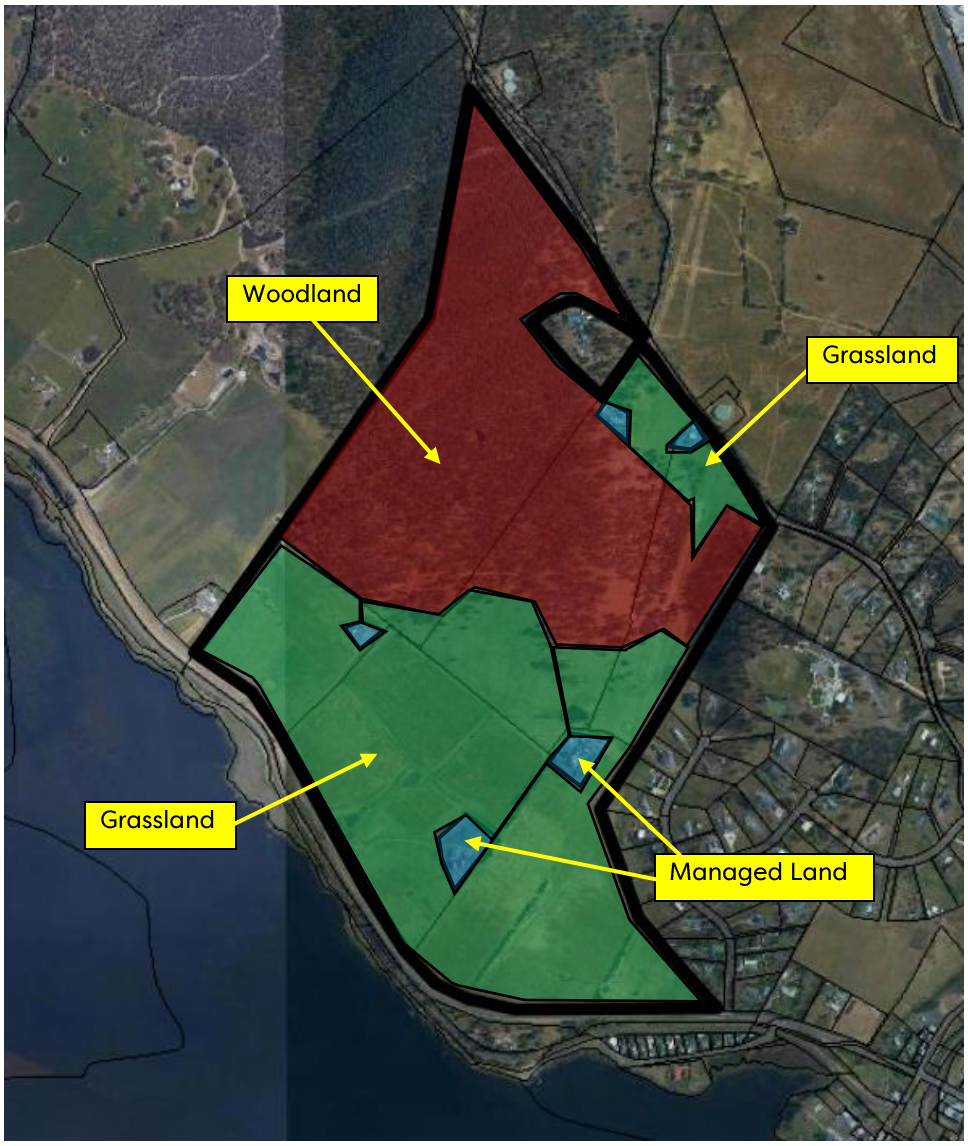


Figure 5 - Vegetation classification within the subject site

The southern parts of the site were clearly identifiable as grassland. There was no overstory present throughout the classified area. A single windbreak hedge, along with individual occasional trees were identified within the area, however the predominant vegetation type remained grassland. The grassland was low lying, with the majority of the areas used as pasture.

The central and northern parts of the site were classified as woodland. The woodland classification was based on:

- The canopy cover was estimated to be between 10%-30%
- A prominent grassy understory was present.
- The vegetation didn't provide a dense or shrubby understory. The vegetation ranged in height between 10m-20m, with the occasional larger eucalypt present.

4.3 Slope Analysis

The slope of the land under the identified vegetation was generally upslope. The block provided a low point of 10m AHD, located in the south west of the site, while the highest point of the land was situated in the north west, sitting at the 140m AHD contour. The woodland vegetation was located at or above the 30m AHD contour, with grassland generally located below this point.

The area of woodland was classified upslope from land zoned FUZ, which is proposed for rezoning as part of the draft amendment. Land to the east and west of the site was classified as upslope or flat. It was observed that land associated with the heritage listed property would potentially be classified as downslope 0-5° grassland. This is on the assumption that the larger lot associated with the heritage listed dwelling would not be entirely managed, and any lots to the north of that site would need to consider possible bushfire offsets.

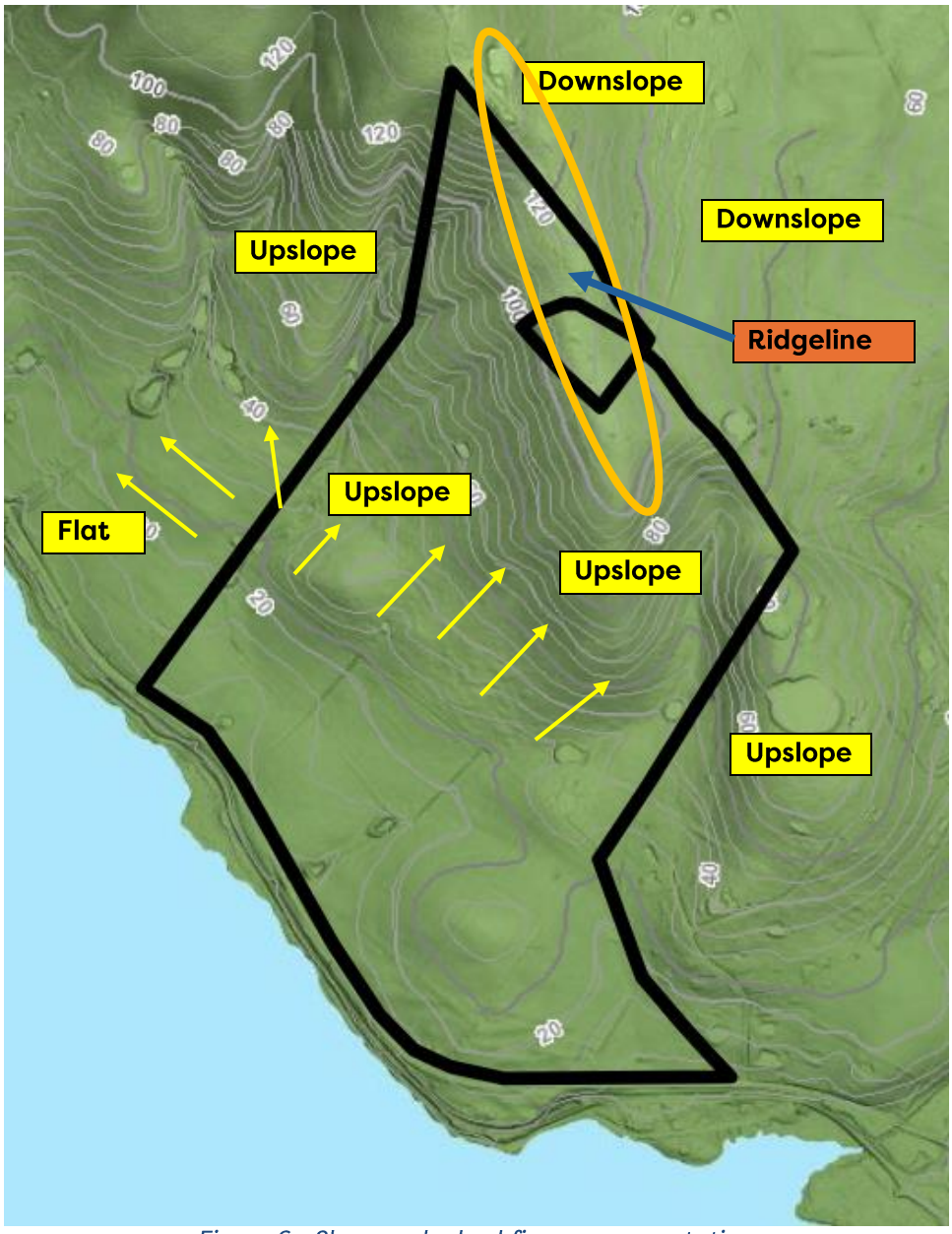


Figure 6 - Slope under bushfire prone vegetation.

4.4 Photos

Figure 7 – Looking north west from CT44724/2. Grassland on adjoining agricultural property.

Figure 8 – Looking south west, from CT44724/2, taken from northern side of title. Grassland.

Figure 9 – Looking north east from CT44724/2, woodland on the adjoining land at 31 Cobbs Hill Road. Grassy understory and open canopy were evident.

Figure 10 – Looking north from CT44724/2, woodland on the adjoining land at 31 Cobbs Hill Road.

Figure 11 – Looking south east over CT44724/2, currently grassland.

Figure 12 – Looking north from 170 Boyer Road, woodland on adjoining title. Taken from north western boundary of property.

Figure 13 – Looking south across 170 Boyer Road. Downslope grassland.

Figure 14 – Looking north west from rear boundary of 170 Boyer Road.

Figure 15 – Existing managed area around dwelling at 170 Boyer Road.

Figure 16 – Looking north from 50 Boyer Road. Paddock to the east of the heritage dwelling. Currently grassland.

Figure 17 – Looking east from 150 Boyer Road, over managed properties on Serentiy Drive.

Figure 18 – Looking east from 25 Cobbs Hill Road, managed properties on Serenity Drive.

Figure 19 – Looking east from 25 Cobbs Hill Road. Woodland at adjoining Northern Christian School site.

Figure 20 – Looking west from 25 Cobbs Hill Road, woodland on adjoining title at 29 Cobbs Hill Road.

Figure 21 – Woodland on 29 Cobbs Hill Road. Looking west from 25 Cobbs Hill Road.

Figure 22 – Woodland on north western side of 25 Cobbs Hill Road.

Figure 23 – Woodland at 31 Cobbs Hill Road, taken in the southern section of the site.

Figure 24 – Woodland at 31 Cobbs Hill Road, centrally located on the lot.

Figure 25 – Woodland at the northern end of 31 Cobbs Hill Road. Near the Cobbs Hill Road entrance.

Figure 26 – 31 Cobbs Hill Road, taken looking south form the northern end of the title.

Figure 27 – Woodland at 29 Cobbs Hill Road, in the north of the site.

Figure 28 – Looking North from Cobbs Hill Road. Grassland downslope, with the Brighton Industrial hub in the background.

5. Bushfire Protection Measures

5.1 BAL Rating and Risk Assessment

The purpose of the BAL rating assessment in this report is to identify the separation between the bushfire prone vegetation and building area within each proposed lot.

The assessment aims to achieve the minimum requirements of **BAL 19**. It also demonstrates the required protection areas required with future residential development.

The BRP provides a number of advantages when assessing the bushfire risk. The existing FUZ area, which will be the subject of the draft amendment, is located to the south of the existing heavier fuel loads of the established woodland area. The woodland (north) and grassland (north/west) are all located upslope of the future urban areas proposed for subdivision and further development.

In a bushfire event, the predominant wind and likely threat would come from the north or north west.

The bushfire Prone Areas Code currently utilises fire danger index (FDI) 50, as per the requirements of table 2.1 of AS3959. Discussion with the Tasmanian Fire Service has indicated that for the purposes of providing a 'best practice' outcome, utilising FDI 80 under AS3959 would be more consistent with the intent of the SRLUS requirements around management of natural hazards.

The definition of the various BAL ratings is shown below. Future dwellings should aim to provide a minimum BAL 19 separation.

Bushfire attack level (BAL)	Predicted bushfire attack and exposure level
BAL-LOW	Insufficient risk to warrant specific construction requirements
BAL-12.5	Ember attack, radiant heat below 12.5kW/m^2
BAL-19	Increasing ember attack and burning debris ignited by windborne embers together with increasing heat flux between 12.5-19kW/m^2
BAL-29	Increasing ember attack and burning debris ignited by windborne embers together with increasing heat flux between 19-29kW/m^2
BAL-40	Increasing ember attack and burning debris ignited by windborne embers together with increasing heat flux between 29-40kW/m^2
BAL-FZ	Direct exposure to flames radian heat and embers from the fire front.

The following setbacks have been provided based on FDI 80.

- Future dwellings in the north of the FUZ, should provide a minimum separation of **20m to the north** (BAL 19).
- Future dwellings in the west of the FUZ should provide a minimum separation of **12m to the west** (BAL 19).
- Any lot to the north of the land associated with the State Heritage Registered dwelling at 50 Boyer Road, should provide a minimum separation of **14m to the south** (BAL 19).

5.2 Hazard Management Areas

Section C13.0 *Bushfire-Prone Areas Code*, will apply to any subdivision of the site. The code requires that a Bushfire Hazard Management Area (BHMA) will be managed in accordance with the provided plan.

Existing vegetation within the BHMA needs to be strategically modified and maintained in accordance with the Bushfire Hazard Management Plan (BHMP) to achieve the following outcomes:

- to reduce the quantity of windborne sparks and embers reaching buildings;
- to reduce radiant heat at the building; and
- to halt or check direct flame attack.

The BHMA will be developed within and up to the property boundaries to provide access to a fire front for firefighting, which is maintained in a minimal fuel condition and in which there are no other hazards present that will significantly contribute to the spread of a bushfire.

The BHMA will be achieved by adoption of the following strategies:

Maintenance of Fuel Management Areas

It is the responsibility of the property owner, and in some cases Council, to maintain and manage the landscaping in accordance with the BHMP.

The BHMA is to be regularly managed and maintained. Landscaping in this area will be minimised:

- Grass maintained to a maximum height of 100mm, with fuel loads kept to less than 2 tonnes per hectare which will be maintained at this level.
- Trees and any undergrowth will be clear of (BCA) class 1 – 9 buildings on all sides.
- All undergrowth and understorey of trees (up to 2m) will be removed within the bushfire hazard management area.
- Larger trees can be maintained, where ensuring the understory is managed and a 5m canopy separation is provided.
- Pathways to 1 metre surrounding the buildings and landscaping material, will be non-combustible (stone, pebbles etc.).
- The total shrub cover will be a maximum of 20% of the available area.
- There will be a clear space from the buildings of at least four (4) times the mature height of any shrubs planted.
- Shrubs will not be planted in clumps, this is to avoid build-up of debris and dead vegetation materials.

Landscaping

- vegetation along the pathways to comprise non-flammable style succulent ground cover or plants (avoid plants that produce fine fuel which is easily ignited, plants that produce a lot of debris, trees and shrubs which retain dead material in branches or which shed long strips of bark, rough fibrous bark or drop large quantities of leaves in the spring and summer, vines on walls or tree canopies which overhang roofs)
- timber woodchip and flammable mulches cannot be used and brush and timber fencing should be avoided where possible
- Council must consider management of landscaping within the wildlife corridors, to ensure that a corridor can be maintained while not presenting an unacceptable fire risk to residents.

5.3 Roads

Table C13.1 of the code outlines the requirements for road construction as part of any subdivision. All public roads which are to be maintained by Council as the Road Authority are required to be constructed to this standard.

If a subdivision is designed to include staging, temporary turning heads may be required to ensuring adequate manoeuvring for fire trucks.

Element		Requirement
A.	Roads	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 20t, 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 7 meters 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 AS1743-2001 Road signs-Specifications.*

5.4 Property Access

Table C13.2 of the code outlines the private access requirements. Where a dwelling cannot be protected from an existing hydrant, a compliant private access will need to be provided. The majority of lots in the urban areas will generally provide for adequate protection via hydrants, however any larger lots, or internal lots, may be required to comply with the standards for private access.

Element		Requirement
A.	Property access length is less than 30m; or access is not required for a fire appliance to access a fire fighting water point.	There are no specified design and construction requirements.
B.	Property access length is 30m or greater; or access is required for a fire	The following design and construction requirements apply to property access: (a) all-weather construction;

	appliance to a fire fighting water point.	(b) load capacity of at least 20t, including for bridges and culverts; (c) minimum carriageway width of 4m; (d) minimum vertical clearance of 4m; (e) minimum horizontal clearance of 0.5m from the edge of the carriageway; (f) cross falls of less than 3 degrees (1:20 or 5%); (g) dips less than 7 degrees (1:8 or 12.5%) entry and exit angle; (h) curves with a minimum inner radius of 10m; (i) maximum gradient of 15 degrees (1:3.5 or 28%) for sealed roads, and 10 degrees (1:5.5 or 18%) for un-sealed 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 provided every 200m.
D.	Property access length is greater than 30m, and access is provided to 3 or more properties.	The following design and construction requirements apply to property access: (a) complies with requirements for B above; and (b) passing bays of 2m additional carriageway width and 20m length must be provided every 100m.

5.5 Fire Trails

Table C13.3 outlines the requirements for fire trails. Subdivision design may consider fire trails to provide support for emergency personal in a bushfire event. Properly designed perimeter fire trails along an urban interface can assist the ability of fire fighters to protect properties during a bushfire. The current concept subdivision layout would not require fire trails.

Element		Requirement
A.	All fire trails	The following design and construction requirements apply: (a) all-weather, 4-wheel drive construction; (b) load capacity of at least 20t, including for bridges and culverts;

		(c) minimum carriageway width of 4m; (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) dips less than 7 degrees (1:8 or 12.5%) entry and exit angle; (h) curves with a minimum inner radius of 10m; (i) maximum gradient of 15 degrees (1:3.5 or 28%) for sealed fire trails, and 10 degrees (1:5.5 or 18%) for un-sealed fire trails; (j) gates if installed at fire trail entry, have a minimum width of 3.6m, and if locked, keys are provided to TFS; and (k) 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 hammerhead "T" or "Y" turning head 4m wide and 8m long.
B.	Fire trail length is 200m or greater.	The following design and construction requirements apply: (a) the requirements for A above; and (b) passing bays of 2m additional carriageway width and 20m length provided every 200m.

5.6 Reticulated Fire Fighting Water Supply

Table C13.4 outlines the requirements for fire fighting water supply in reticulated areas.

Based on the future GRZ being applied to the site, it is expected that a reticulated firefighting water supply will be provided for the subdivision.

Future development will connect to the reticulated water supply and provide hydrants. The indicative locations of hydrants will be marked on a BHMP associated with a future plan of subdivision, generally providing hydrants at 60m intervals and at street intersections.

Table C13.4 Reticulated water supply for firefighting.

Element		Requirement
A.	Distance between building area to be protected and water supply.	The following requirements apply: (a) the building area to be protected must be located within 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.
B.	Design criteria for fire hydrants	The following requirements apply: (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.
C.	Hardstand	A hardstand area for fire appliances must be: (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) a minimum width of 3m constructed to the same standard as the carriageway; and (d) connected to the property access by a carriageway equivalent to the standard of the property access.

5.7 Static Water Supply for Fire Fighting

Table C13.4 outlines the requirements for static fire fighting water supply in areas not serviced by a reticulated supply.
While it is expected that the majority of lots can be serviced via hydrants in a reticulated network, there may be some occasions where a static water supply is required.
The BHMP for a future subdivision will be required to identify these lots and provide recommendations on compliant static water supply.

Element		Requirement
A.	Distance between building area to be protected and water supply.	The following requirements apply: (a) the building area to be protected must be located within 90m of the fire fighting water point of a static water supply; and (c) the distance must be measured as a hose lay, between the fire fighting water point and the furthest part of the building area.
B.	Static Water Supplies	A static water supply: (a) may have a remotely located offtake connected to the static water supply; (b) may be a supply for combined use (fire fighting and other uses) but the specified minimum quantity of fire fighting water must be available at all times; (c) must be a minimum of 10,000l per building area to be protected. This volume of water must not be used for any other purpose including fire fighting sprinkler or spray systems; (d) must be metal, concrete or lagged by non-combustible materials if above ground; and (e) if a tank can be located so it is shielded in all directions in compliance with section 3.5 of Australian Standard AS 3959-2009 Construction of buildings in bushfire-prone areas, the tank may be constructed of any material provided that the lowest 400mm of the tank exterior is protected by: (i) metal; (ii) non-combustible material; or (iii) fibre-cement a minimum of 6mm thickness.

6. BRP – Concept Subdivision Layout

A concept subdivision plan has been provided by Holmes Dyer. The plan applies to the FUZ section of the site, and provides an indicative urban lot layout which includes the following:

- 287 residential lots;
- A new road network that provides three new access points onto Boyer Road.
- Public open space that has been designed to incorporate overland flow paths and serve as wildlife corridors.
- Retention of existing dwellings onto new lots within the site.
- Road connectivity with one cul de sac currently shown.
- Pedestrian walking trails that link into Boyer Road.

Figure 29 - Concept subdivision plan for BRP. Source: Holmes Dyer

From a landscape risk perspective, the concept plan of subdivision provides some advantages. The areas proposed for residential development are located downslope from the existing heavier fuel loads to the north. The River Derwent is located to the south, and existing managed residential lots to the east.

It will be critical to manage the interface between the residential land in the north of the subdivision, and the bushfire prone vegetation located to the north. Equally, it will be important to ensure there is appropriate management between future dwellings in the west, and the adjoining agricultural land.

The rear setbacks for buildings along the urban/bush and grassland interface should be contained within the residential lots. This report does not recommend that section 71 (part 5) agreements or covenants be entered into to allow for maintenance of land outside of the site.

To this end, we note that the lot sizes currently shown to the north and west will need to be increased to provide with the recommended setbacks as provided in section 5 of this report.
The concept plan provides large areas of public open space, which transect the sites, appearing to provide for the overland flow path, while also providing an opportunity for walking trails and wildlife corridors. Understanding how these areas of public open space will be used and managed will be critical. Council as the relevant authority will need to agree to not only take ownership of any public open space, but also to maintain public open space as low threat vegetation. A conflict can arise where revegetation of wildlife corridors is proposed when adjoining land shown for residential purposes. The corridors have the potential to present a fire risk as they adjoin large residential areas, both within the site, and to the east along Serentiy Drive. If Brighton Council is not going to maintain the public open space corridors as low threat vegetation, then controls should be built into the SAP around revegetation and/or perimeter breaks. Future subdivision design will need to consider whether building setbacks will be required from any public open space areas.

The subdivision provides a road network which is considered generally appropriate within a bushfire prone area. Cul de sacs have been reduced, and there are three access points onto Boyer Road. Providing multiple entry/exit points into a residential area ensures multiple avenues of escape in a bushfire event. Perimeter roads can provide a buffer between residential development and a bushfire threat. We acknowledge that while such roads provide a practical benefit in relation to bushfire, they are not always cost effective from a developer perspective.

We recommend that any SAP look at ensuring at least two new road points be provided onto Boyer Road as part of any large scale subdivision.

We would recommend that the SAP provide a road layout plan, that generally encourages developers to adhere to a particular design or plan of subdivision that has been inserted into the SAP. Any performance criteria that allows developers to deviate away from compliance with the plan, should provide for consideration of natural hazards.

7. Conclusions and Recommendations

This report has been prepared to consider and provide recommendations for a draft amendment of the Boyer Road Precinct. Once developed, the precinct anticipated providing an additional 300 residential lots.

The site has been analysed from a bushfire risk perspective, and concluded that with appropriate recommendations being followed, the risk can be managed to a tolerable level.

The denser areas of vegetation are located upslope from the proposed urban areas, while the land to the east and west presents a lower risk in relation to bushfire. Future subdivision of the site will need to ensure appropriate roads layouts are provided, seeking to maximise connectivity while reducing dead end streets and cul de sacs. Multiple access points onto Boyer Road are encouraged, as are building lines for habitable development between the interface of urban areas and classified vegetation.

We conclude that future development of the site for residential purposes is appropriate subject to recommendations being adhered to.

a) The site is well located, with the proposed urban areas located downslope of the heavier bushfire fuel areas.
b) Larger lots should be provided along the northern interface between urban areas and the more densely vegetated land which extends to the north. Dwellings on these lots are required to provide a 20m setback to meet BAL 19 standards.
c) Larger lots should be provided along the western interface, between urban areas and the agricultural land to the west. Dwellings on these lots are required to provide a 12m setback to meet BAL 19 standards.
d) Any lot to the north of the land associated with the State Heritage Registered dwelling at 50 Boyer Road, should provide a minimum separation of 14m setback to meet BAL 19 standards.
e) Lots must be of a sufficient size to provide hazard management areas within lot boundaries. We recommend avoiding Section 71 Agreements or bushfire easements/covenants on adjoining land where possible.
f) Public Open Space and Wildlife Corridors should be maintained as low threat vegetation by the Brighton Council. Alternatively, Council should consider perimeter breaks along residential boundaries.
g) All proposed roads, private accesses and fire trails (if applicable) must be in compliance with Table C13.1, C13.2 and C13.3 as outlined in C13.0 Bushfire Prone Areas Code of the Tasmanian Planning Scheme, and section 5 of this report.
h) Any water supply required for the subdivision must be in compliance with Table C13.4 or Table C13.5, as outlined in C13.0 Bushfire Prone Areas Code of the Tasmanian Planning Scheme, and section 5 of this report.
i) We recommend the SAP provide an acceptable solution habitable building line setback of 20m for all lots along the northern boundary of the proposed GRZ area. Any corresponding performance criteria must have regard to the presence of natural hazards.
j) We recommend the SAP provide an acceptable solution habitable building line setback of 12m for all lots along the western boundary of the proposed GRZ area. Any corresponding performance criteria must have regard to the presence of natural hazards.
k) The Holmes Dyer concept plan of subdivision generally provides good connectivity with multiple access points onto Boyer Road. The SAP should include a plan of subdivision, which is referred to under an acceptable solution. Any performance criteria which provides for an alternate lot layout must have regard to the presence of natural hazards.
l) The Homes Dyer concept plan of subdivision indicates three access points onto Boyer Road. It is recommended that at least 2 access/egress points are available onto Boyer prior to any large-scale residential development occurring on the site.
m) If a Council policy does not exist, it would be recommended that a vegetation or fire management policy be prepared which would guide Council on how to appropriately manage and vegetate public open space/wildlife areas that adjoin urban and other residential land.

Annexure 1 – BRP Bushfire Advisory Plan

NOVA LAND CONSULTING

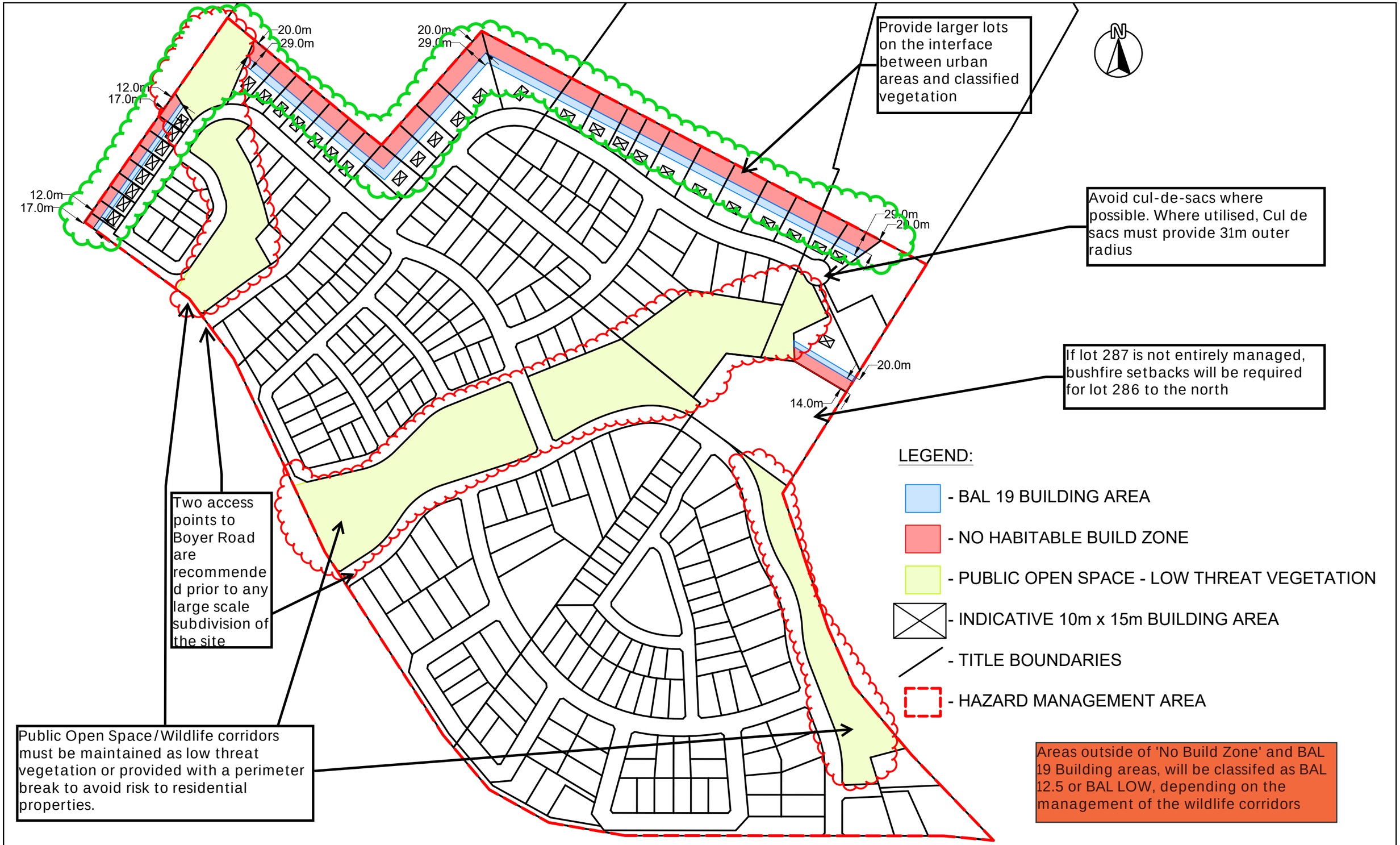
156 George Street,
Launceston 7250
132 Davey Street,
Hobart 7000

Phone (03) 6709 8116
Email: info@novaland.com.au

BOYER ROAD PRECINCT
BUSHFIRE ADVISORY PLAN

(C.T.44724/1, PID 1972194) (C.T.44724/9, PID 7676396)
(C.T.44724/8, PID 7676361) (C.T.152364/2, PID 2808927)
(C.T.135574/1, PID 2097491) (C.T.135574/2, PID 2097504)

File name	L240906_BHMP_071124.dwg
Job Number	L240906
Drawn	NJK
Scale	1:8000@A3
Date	07/11/24
Edition	V1.0
Sheet	1/2



NOVA LAND CONSULTING
156 George Street,
Launceston 7250
132 Davey Street,
Hobart 7000

Phone (03) 6709 8116
Email: info@novaland.com.au

BOYER ROAD PRECINCT
BUSHFIRE ADVISORY PLAN
(C.T.44724/1, PID 1972194) (C.T.44724/9, PID 7676396)
(C.T.44724/8, PID 7676361) (C.T.152364/2, PID 2808927)
(C.T.135574/1, PID 2097491) (C.T.135574/2, PID 2097504)

File name	L240906_BHMP_071124.dwg
Job Number	L240906
Drawn	NJK
Scale	1:4000@A3
Date	07/11/24
Edition	V1.0
Sheet	2/2

Annexure 2 – BRP Concept Subdivision Plan.

CONCEPT PLAN (SOUTH)

Boyer Road Precinct

WALKING TRAIL

WILDLIFE CORRIDOR

N

0 20 40 60 80 100 m

1:4,000 @ A3

HOLMES DYER

1792-002 R1 > 16.09.2024

NOVA LAND CONSULTING

Land Surveying | Town Planning | Project Management
w novaland.com.au
e info@novaland.com.au

Launceston
156 George Street
Launceston 7250
p (03) 6709 8116

Hobart
Rear studio, 132 Davey Street
Hobart 7000
p (03) 6227 7968

BUSHFIRE HAZARD REPORT

BOYER ROAD PRECINCT STRUCTURE PLAN
BRIDGEWATER

November 2024

Job number: L240907
NL01924

Prepared by: James Stewart
Town Planner & Bushfire Hazard Practitioner BFP 157

Rev. no	Description	Date
1	FINAL	8/11/2024
2	LAYOUT UPDATES	21/05/2025

Disclaimer
This report deals with the potential bushfire risk only, all other statutory assessments sit outside of this report. This report is not to be used for future or further development on the site, other then what has been specifically provided for in the assessed plans attached. Nova Land Consulting Pty Ltd accepts no responsibility to any purchaser, prospective purchaser or mortgagee of the property who in any way rely on this report. This repot has been undertaken to guide use and development relating to bushfire risk within the Boyer Road Precinct and does not guarantee that buildings will survive in the event of a bushfire event. If characteristics of the property change or are altered from those which have been identified, the assessment may be different to that which has been identified as part of this report.

Launceston | Hobart
novaland.com.au

Executive Summary

Nova Land Consulting has been engaged by Holmes Dyer, to provide a Bushfire Risk Assessment in relation to land within the Boyer Road Precinct. The precinct has been identified by Brighton Council, to provide future residential supply within one of the fastest growing municipalities within the State.

As part of Brighton Councils strategic planning for the area, Holmes Dyer have been awarded the tender to prepare and submit a draft amendment, rezoning the site from Future Urban Zone (FUZ) to General Residential Zone (GRZ) under the *Tasmanian Planning Scheme – Brighton.*

A Specific Area Plan (SAP) for the site would be prepared and submitted as part of the draft amendment.

The purpose of this report is to guide future use and development of the site, while making recommendations in relation to:

- Bushfire risk
- BAL Ratings & setbacks for the site
- Future subdivision layout, and;
- Bushfire recommendations under the proposed SAP

The site is entirely within the boundary of a bushfire prone area shown on an overlay on a planning scheme map for the *Tasmanian Planning Scheme –Brighton.*

A bushfire event at this site or within the immediate area is likely to impact on future buildings at this location and subject development to considerable radiant heat and ember attack.

A detailed bushfire assessment and bushfire hazard management plan (BHMP) would be required for any future subdivision of the land or construction of habitable buildings on the site.

The conclusions and recommendations in this report will assist in the planning and delivery of a SAP and subdivision layout that is considered best practice in relation to bushfire hazards.

Conclusions & Recommendations

a) The site is well located, with the proposed urban areas located downslope of the heavier bushfire fuel areas.
b) Larger lots should be provided along the northern interface between urban areas and the more densely vegetated land which extends to the north. Dwellings on these lots are required to provide a 20m setback to meet BAL 19 standards.
c) Larger lots should be provided along the western interface, between urban areas and the agricultural land to the west. Dwellings on these lots are required to provide a 12m setback to meet BAL 19 standards.
d) Any lot to the north of the land associated with the State Heritage Registered dwelling at 50 Boyer Road, should provide a minimum separation of 14m setback to meet BAL 19 standards.
e) Lots must be of a sufficient size to provide hazard management areas within lot boundaries. We recommend avoiding Section 71 Agreements or bushfire easements/covenants on adjoining land where possible.
f) Public Open Space and Wildlife Corridors should be maintained as low threat vegetation by the Brighton Council. Alternatively, Council should consider perimeter breaks along residential boundaries.
g) All proposed roads, private accesses and fire trails (if applicable) must be in compliance with Table C13.1, C13.2 and C13.3 as outlined in C13.0 Bushfire Prone Areas Code of the

Tasmanian Planning Scheme, and section 5 of this report. The proposed 'T' turning heads in the north west of the site should be replaced with compliant cul-de-sac turning heads.

h) Any water supply required for the subdivision must be in compliance with Table C13.4 or Table C13.5, as outlined in C13.0 Bushfire Prone Areas Code of the Tasmanian Planning Scheme, and section 5 of this report.
i) We recommend the SAP provide an acceptable solution habitable building line rear setback of 20m for all lots along the northern boundary of the proposed GRZ area. Any corresponding performance criteria must have regard to the presence of natural hazards.
j) We recommend the SAP provide an acceptable solution habitable building line rear setback of 12m for all lots along the western boundary of the proposed GRZ area. Any corresponding performance criteria must have regard to the presence of natural hazards.
k) The Holmes Dyer concept plan of subdivision generally provides good connectivity with multiple access points onto Boyer Road. The SAP should include a plan of subdivision, which is referred to under an acceptable solution. Any performance criteria which provides for an alternate lot layout must have regard to the presence of natural hazards.
l) The three cul-de-sacs in the west of the site, should seek to provide gated connectivity for fire appliances within the open space network. This connectivity may not be required depending on staging, management of vegetation within 100m of cul de sacs, and surrounding development proposed at the time of subdivision.
m) Any proposed shelter belt in the west must be provided as a single row of trees, so as not to increase the fuel load or change the vegetation classification to the west.
n) The Homes Dyer concept plan of subdivision indicates three access points onto Boyer Road. It is recommended that at least 2 access/egress points are available onto Boyer prior to any large-scale residential development occurring on the site.
o) If a Council policy does not exist, it would be recommended that a vegetation or fire management policy be prepared which would guide Council on how to appropriately manage and vegetate public open space/wildlife areas that adjoin urban and other residential land.

Signed:

Author: James Stewart
Position: Town Planner and Accredited Bushfire Practitioner BFP 157

Table of Contents

1. Introduction

This Bushfire Hazard Report has been prepared in relation to the Boyer Road Precinct (BRP).

1.1 Scope of works

Nova Land Consulting has been engaged by Holmes Dyer, to provide a Bushfire Risk Assessment in relation to land within the BRP. The precinct has been identified by Brighton Council, to provide future residential supply within one of the fastest growing municipalities within the State.

This report will provide an analysis of the site and make recommendations regarding bushfire risk and BAL setbacks for future development.

A concept subdivision plan has been provided by Holmes Dyer. We have undertaken a review of the concept plan, and provide comments on the plan in section 6 of this report.

Several recommendations have been made in relation to the site, and which will assist in future subdivision design and the preparation of the SAP.

1.2 The subject site

The following is a summary of the relevant site information:

Property addresses	• Boyer Road, Bridgewater (CT44724/2) • 170 Boyer Road, Bridgewater (CT44724/9) • 31 Cobbs Hill Road, Bridgewater (CT152364/2) • 29 Cobbs Hill Road, Bridgewater (CT135574/1) • 25 Cobbs Hill Road, Bridgewater (CT135574/2) • 50 Boyer Road, Bridgewater (CT44724/8)
Land Area	109ha (total) 52ha (Future Urban Zone)
Zoning	• Future Urban Zone (FUZ) • Landscape Conservation Zone (LCZ)
Planning Scheme	Tasmanian Planning Scheme – Brighton
Identified on a Bushfire Overlay Map	The entirety of the site is mapped as being located within a Bushfire Prone Area under the Planning Scheme overlay.
Conservation Covenant	31 Cobbs Hill Road is currently subject to Conservation Covenant CPR9693
Water Supply	• 50 Boyer Road is identified as being within an area serviced by TasWater reticulated water. • There are no other lots on the subject site which are serviced by TasWater reticulated water.
Vehicular Access	• Boyer Road (Department of State Growth maintained). • Cobbs Hill Road (Council maintained)

1.3 Bushfire Assessment

A bushfire assessment is a process of analysing information about the potential impacts on a proposed development that are likely to occur in a bushfire hazard scenario. A 'bushfire-prone area' is an area where a bushfire event is likely to occur that may result in significant adverse impact on buildings and lives.

In Tasmania, most local Councils have a planning scheme overlay map that identifies bushfire-prone areas. Subdivision within a bushfire-prone area triggers the assessment of the Bushfire-Prone Areas Code under the planning schemes and subsequently requires assessment against the provisions of the Code.

The assessment generally requires a Bushfire Hazard Management Plan (BHMP) to be provided as part of an application for subdivision.

The bushfire assessment will determine the Bushfire Attack Level (BAL) for future lots, while measuring the possible exposure of a building to a bushfire hazard.

The BAL is assessed in accordance with Australian Standard *AS 3959-2018 construction of buildings in bushfire-prone areas.* The bushfire assessment is required to understand the fuel management requirements for the subject site and to demonstrate that new buildings within each lot can be constructed to minimum BAL19 level under the *Building Act 2016.*

Future assessment of a subdivision within the BRP must be undertaken in accordance with C13.0 Bushfire-Prone Areas Code and must accompany a subdivision application under the *Tasmanian Planning Scheme – Brighton.*

Holmes Dyer have prepared a concept subdivision plan for the BRP. While the plan is not being lodged as a formal subdivision application for assessment, it provides an indicative starting point in relation to possible lot layouts, road locations, and servicing. To assist Holmes Dyer in finalising a subdivision plan for the site, a bushfire advisory plan has been provided utilising the current subdivision concept.

1.4 References

The following documents and organisations were referred to in the preparation of this report. This report should be read in conjunction with any relevant legislation and other statutory requirements.

- C13.0 Bushfire-Prone Areas Code – Tasmanian Planning Scheme.
- Tasmanian Planning Scheme – Brighton
- Southern Tasmania Regional Land Use Strategy 2010-2035 (SRLUS)
- The Land Use Planning and Approvals Act 1993 (the Act).
- Tasmanian State Government, Director's Determination – Bushfire Hazard Areas V1.1
- Australian Standard, AS3959-2018 construction of buildings in bushfire-prone areas.
- Building Act 2016
- Tasmanian Fire Service, Bushfire Hazard Advisory Notes
- Tasmanian Fire Service

2. Site Description

2.1 Site context

The subject site consists of several titles located within the BRP. Details of the lots included as part of the subject site are shown below:

Address:	Title Number:	Lot Size	Existing buildings
Boyer Road, Bridgewater	CT44724/2	7.6ha	Existing outbuildings.
170 Boyer Road, Bridgewater	CT44724/9	17.7ha	Single dwelling and outbuildings.
50 Boyer Road, Bridgewater	CT44724/8	17.1ha	Single dwelling and outbuildings.
31 Cobbs Hill Road, Bridgewater	CT152364/2	31.3ha	Vacant land
29 Cobbs Hill Road, Bridgewater	CT135574/1	19.7ha	Single dwelling and outbuilding.
25 Cobbs Hill Road, Bridgewater	CT135574/2	10ha	Single Dwelling and outbuilding.

The BRP is located north of the River Derwent, on the periphery of an existing residential area to the east. There are established low density dwellings located to the east of the site, which are rural residential in character. Land to the west is utilised for primary industry purposes, located within a cleared rural environment. Land to the north west remains in its natural uncleared state.

The town centre of Bridgewater is located approximately 1.8km to the east, with the existing GRZ and urban areas of Bridgewater generally located on the eastern side of the Midland Highway. The Midland situated 600m to the east of the site. The Brighton Industrial estate is located north of Cobbs Hill Road, extending through to the east to include the existing Boral Quarries.

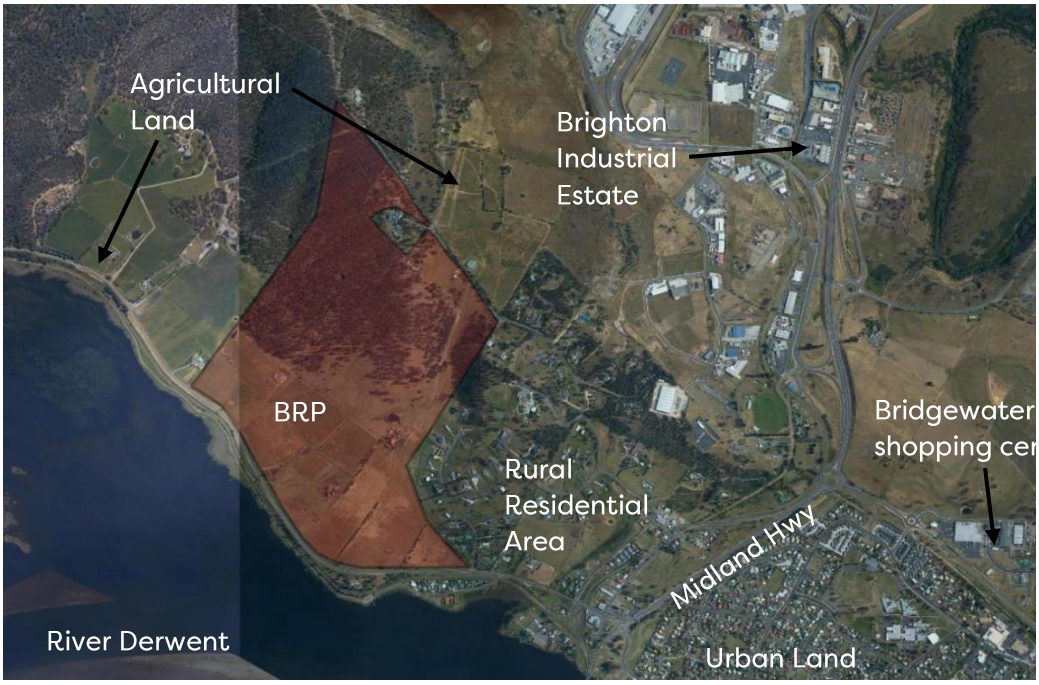


Figure 1 - Aerial view of the BRP and surrounding area (source: The LIST Map)

2.2 Planning controls

The BRP is located within the municipal area of Brighton. Therefore, the planning instrument is the *Tasmanian Planning Scheme – Brighton* (The Scheme).

The subject site is currently within the Future Urban Zone (FUZ) in the south, and the Landscape Conversation Zone (LCZ) in the north.

The purpose of this report is to analyse and support a rezoning of land from FUZ to GRZ, along with the preparation of a SAP, as part of a draft amendment application.

The subject site falls within the Bushfire-Prone Areas Overlay.

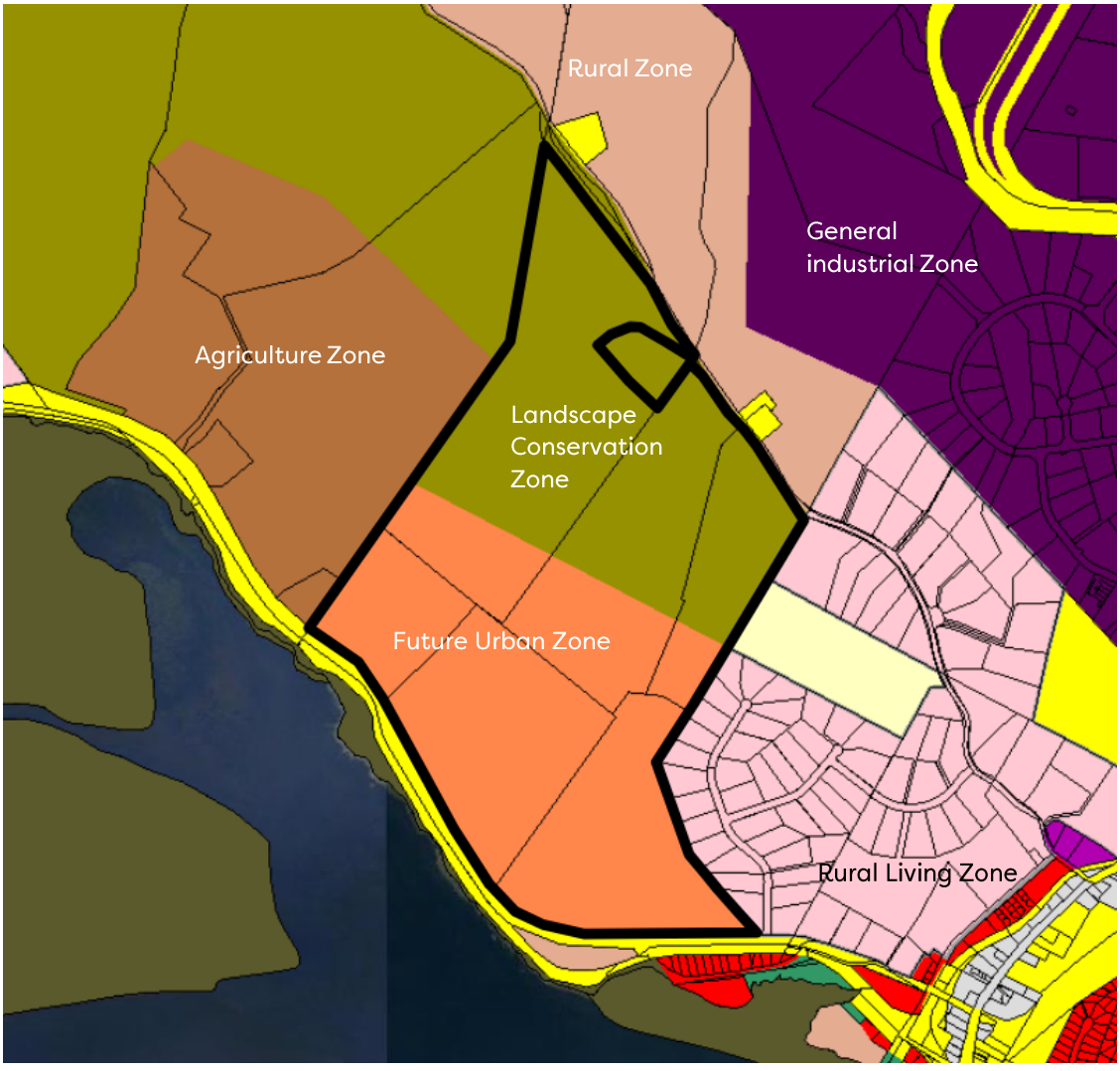


Figure 2 - Zoning map of subject site and surrounds.

3. Legislative Requirements

A bushfire hazard assessment has been prepared to support a planning scheme amendment, under Division 2 of the *Land Use Planning and Approvals Act 1993*. The legislation requires that the draft amendment must satisfy the relevant strategic planning policy considerations.

3.1 Southern Regional Land Use Strategy 2010-2035

The Southern Regional Land Use Strategy (SRLUS) is a relevant document that the draft amendment must seek to be practically consistent with.

Section 8 of the SRLUS relates to management of risks and hazards when considering land use planning.

Bushfire is identified as a key land hazard which must be taken into consideration. Policy MRH 1, relates to minimising the loss of life and property as a result of bushfire. Relevant sections of the SRLUS relating to bushfire hazards are considered below, with a response provided.

Managing Risks and Hazards	Response:
MRH 1.1 *Provide for the management and mitigation of bushfire risk at the earliest possible stage of the land use planning process (rezoning or if no rezoning required; subdivision) by the identification and protection (in perpetuity) of buffer distances or through the design and layout of lots.*	This report has been prepared to ensure Bushfire Risk is considered as part of any rezoning process. A concept subdivision plan has been prepared with comments and recommendations provided as part of this report. Buffer distances have been calculated and included in the recommended outcomes. The development of a specific area plan (SAP) can utilise bushfire setbacks as recommended in this report to ensure a hard building line is provided along the interface between urban and vegetated areas. The future subdivision and design of lot layouts will be informed through this report.
MRH 1.2 *Ensure subdivision road layout designs provide for safe exit points in areas subject to bushfire hazard.*	The bushfire prone areas code outlines requirements relating to roads, fire trails, and private accesses. This report has provided recommendations in relation to road layout design of future subdivisions. The report has recommended that at least two ingress and access points be provided onto Boyer Road as part of any larger scale subdivision.
MRH 1.3 *Allow clearance of vegetation in areas adjacent to dwellings existing at the time that planning schemes based on this Strategy come into effect, in order to implement bushfire management plans. Where such vegetation is subject to a biodiversity code, the extent of clearing allowable is to be the minimum necessary*	The areas currently zoned FUZ are largely clear of denser and more established vegetation. The primary vegetation type in the south of the BRP is 'Grassland', which transitions to woodland as the site rises to the north. The LCZ portion of the site is generally classified as woodland, being located within an existing conservation covenant.

to provide adequate bushfire hazard protection.	Details around the extent of vegetation clearing to achieve BAL setbacks have been provided within the report. These details can assist in planning for a future subdivision. The setbacks ensure that adequate bushfire protection measures are in place in relation to vegetation management.
MRH 1.4 *Include provisions in planning schemes for use and development in bushfire prone areas based upon best practice bushfire risk mitigation and management.*	The Boyer Road SAP will be implemented over the FUZ portion of the site. The SRLUS notes that best practice bushfire risk mitigation should be examined. Best practice does not mean the same as minimum compliance. Bushfire setbacks for future habitable development have been recommended based on best practice.
MRH 1.5 *Allow new development (at either the rezoning or development application stage) in bushfire prone areas only where any necessary vegetation clearance for bushfire risk reduction is in accordance with the policies on biodiversity and native vegetation.*	Development of the area mapped FUZ will require some vegetation management of the site. This report provides setbacks to ensure that land outside of the site, is not relied on via covenants or section 71 agreements. A natural values report will be undertaken in relation to vegetation removal on the subject site. This report does not recommend or require any removal of vegetation on land zoned LCZ in order to achieve bushfire compliance.
MRH 1.6 *Develop and fund a program for regular compliance checks on the maintenance of bushfire management plans by individual landowners.*	A future subdivision application will provide recommendations relating to Bushfire. Under the Local Government Act 1993, Council provides hazard abatement. This involves inspections of land and contacting land owners where removal of fire hazards is required.

3.2 Tasmanian Planning Policies

The Tasmanian Policies are a planning instrument made under part 2A of the Act. A draft amendment is required to address the LPS criteria, as outlined in section 34 of the Act. One of the LPS criteria that is required to be considered relates to the Tasmanian Planning Policies (TPP's).

While the TPP's are currently drafted, they have not yet been declared. Nevertheless, it is viewed as pertinent to examine relevant draft TPP's relating to Bushfire, noting that they may be in place by the time a draft amendment is applied for.

Section 3.1 of the TPP's relates to Bushfire. The objective of the TPP's for bushfire is;

> *To prioritise the protection of human life and to support the resilience of settlements and communities by reducing the potential impacts of bushfire on life, property and infrastructure.*

This is achieved, by the nine strategies listed below.

Strategies:	Response:
1. *Identify and map land that is exposed to bushfire hazards, including consideration of the potential impacts of future bushfire conditions as a result of climate change, based on the best available scientific evidence*	The site is currently mapped as being within a bushfire prone area on a planning scheme overlay. The draft amendment will not seek to alter the bushfire prone areas overlay mapping. The mapping ensures that bushfire risk is appropriately considered as part of subdivision and future planning for the area.
2. *The protection of human life from harm caused by bushfire will be considered and prioritised at every stage of the planning process.*	The development of land within the FUZ can be undertaken in a manner which ensure compliance with best practice bushfire standards, and in accordance with *C13.0 Bushfire Prone Areas Code*, and *AS3959:2018 – Construction of Buildings in Bushfire Prone Areas.* Appropriate bushfire protection measures, including setbacks of future buildings, reduces the risk to human life and property.
3. *Avoid designating land for purposes that expose people, property and supporting infrastructure to risk arising from bushfire hazards, especially significant risks.*	The draft amendment will seek to see the site develop in a manner which reduces and manages any bushfire risk. Bushfire setbacks have been provided to ensure any future bushfire risk can be reduced. Overtime, it would be expected that the bushfire prone areas overlay could be amended to remove urban areas which are not required to be included in the overlay (i.e. over 100m from bushfire prone vegetation).
4. *Where it is not practical to avoid bushfire hazards, use and development is to* *a) identify the risk of harm to human life, property and infrastructure caused by bushfire;* *b) incorporate bushfire protection measures that manage the identified risk and reduce it to within a tolerable level; and* *c) provide a higher level of risk mitigation for uses deemed particularly vulnerable or hazardous.*	This report has: a) identified the risk of harm to human life, property and infrastructure b) provided recommendations that ensure the threat can be reduced to a tolerable level. c) The draft amendment does not anticipate any vulnerable or hazardous uses within the study area. Should future uses be proposed, they would be required to be assessed on their own merits.

5. *Support the efficient and safe intervention of firefighting personnel and emergency evacuation*	Future residential infrastructure will need to be constructed in accordance with the standards under C13.0 Bushfire Prone Areas Code. This includes all public roads, fire trails (if applicable), and private access (if applicable). Appropriate connectivity, including ingress and egress should be considered as part of any subdivision design. Recommendations have been made relating to ingress and egress.
6. *Facilitate the provision of firefighting infrastructure and support emergency services and the community to prevent, prepare, respond and recover from bushfire events.*	Future infrastructure will need to be constructed in accordance with the standards under C13.0 Bushfire Prone Areas Code. These incude all road infrastructure, along with water infrastructure for firefighting purposes. Ensuring future development provides for compliant infrastructure will allow the community to respond and recover in a possible bushfire event.
7. *Consider the cumulative effects of planning decisions so new use and development will not result in an unacceptable increase to bushfire risks for existing use and development.*	Should recommendations, including future building setbacks, be implemented as part of the SAP preparation and subdivision design, it is considered that new use and development of the site will not result in an unacceptable risk.
8. *When designating land for particular purposes and considering use and development in areas subject to bushfire hazards:* a) *priority should be given to minimising the impacts, associated with implementing future bushfire protection measures, on environmental values and on the cost to the community as a result of defending properties from bushfire; and* b) *where possible, avoid locations that require bushfire hazard management to be undertaken on land external to the site where that land is publicly owned and managed for conservation purposes.* c) *Allow the implementation of bushfire protection measures that are carried out in accordance with an endorsed plan, including hazard reduction burns.*	The land has been designated as being appropriate for future residential use, this is reflected in the existing FUZ. The draft amendment will rezone the site to GRZ and implement a SAP over the site. a) This report doesn't seek to impose clearing requirements outside of the site. Vegetation management will be required. The flora and fauna report will be required to address environmental values, taking into consideration this clearing. b) Bushfire hazard management will not be required to be undertaken outside of the site. c) A future subdivision will be required to provide a compliant BHMP, certified by the TFS or an accredited person. Council currently conducts fire abatement as part of their responsibilities under the Local Government Act.

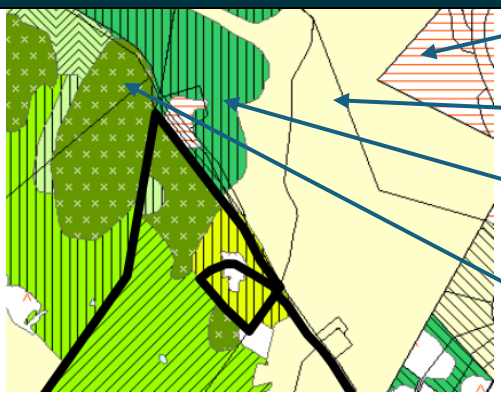
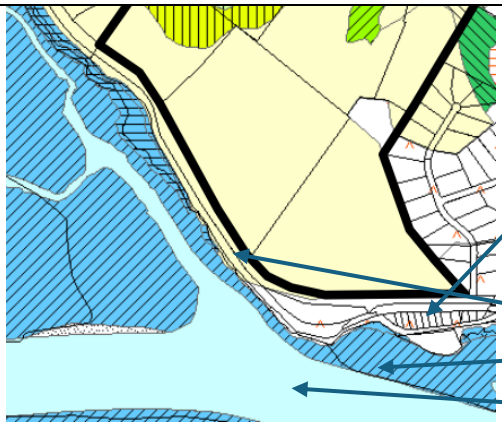
9. *Allow the implementation of bushfire protection measures that are carried out in accordance with an endorsed plan, including hazard reduction burns.*	A future subdivision of the site will be required to provide bushfire protection measures, as outlined and certified in a BHMP. Council and the TFS will liaise with landowners in relation to any hazard reduction burns if required.

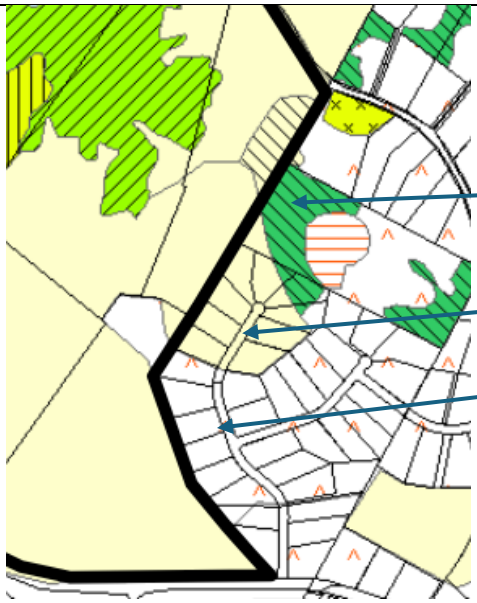
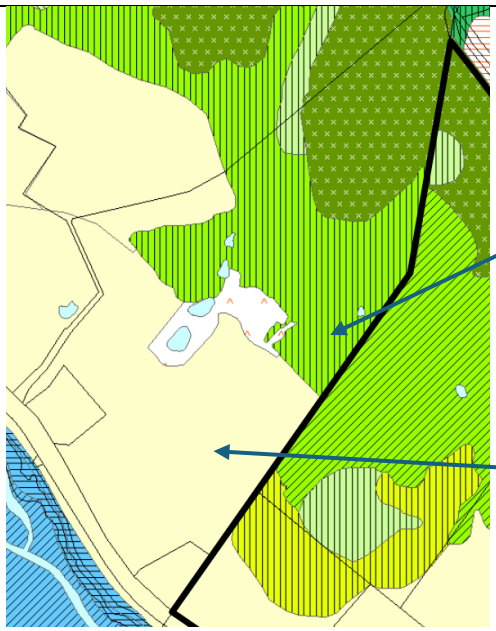
4. Bushfire Site Assessment

4.1 TasVeg Analysis

The TasVeg map 4.0 provides general information indicating potential bushfire prone vegetation, within 120m of the site, and within the subject site.

Understanding vegetation types within 100m+ of the site is a requirement under C2.2.3.1 of AS3959:2018. For the BRP, it is considered appropriate to analyse vegetation within 150m of the site, noting that the identified vegetation does not vary greatly after 100m.

Direction	TasVeg Mapping	Comments:
North		**FUM –** Modified Land **FAG –** Agricultural Land **DTO –** Eucalyptus Forest & Woodland (tenuiramis) **DRI –** Eucalyptus Forest & Woodland (risdonii)
South		**FUR** – Urban Areas **FAG –** Agricultural Land **AHS** – Saline aquatic herb land **OAQ** – Water Body

East		**DVG** – Eucalyptus Forest & Woodland (viminalis grassy) **FAG –** Agricultural Land **FUR** – Urban Areas
West		**DAS** – Eucalyptus Forest & Woodland (on sandstone) **FAG –** Agricultural Land

Within the subject site itself, the land was primarily separated into four different vegetation types based on the TasVeg 4 mapping. These are shown below:

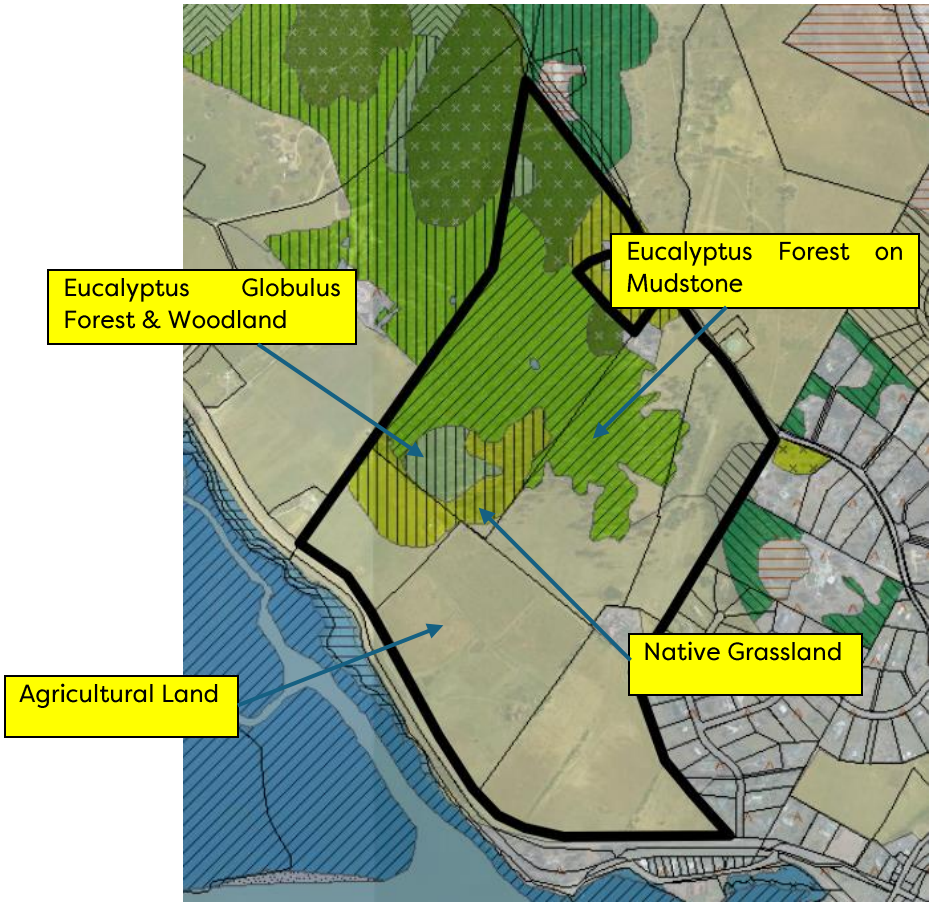


Figure 3 - TasVeg analysis of subject site

4.2 Vegetation Field Analysis

A site inspection was undertaken on Thursday 17th October 2024. The assessment focussed on those areas proposed for future development within the FUZ, however also examined land outside of the site for approximately 120m.

Land to the north of the FUZ was inspected and assessed in relation to vegetation type and bushfire risk.

For the purposes of undertaking a vegetation assessment under Table 2.3 of AS3959:2018, the vegetation has been examined against the vegetation types listed in the classification.

It was determined that both within the subject site, and within 150m of the subject site, the vegetation was classified as:

- Woodland; and
- Grassland.

A vegetation classification map, based on land 150m outside of the subject site is provided below.

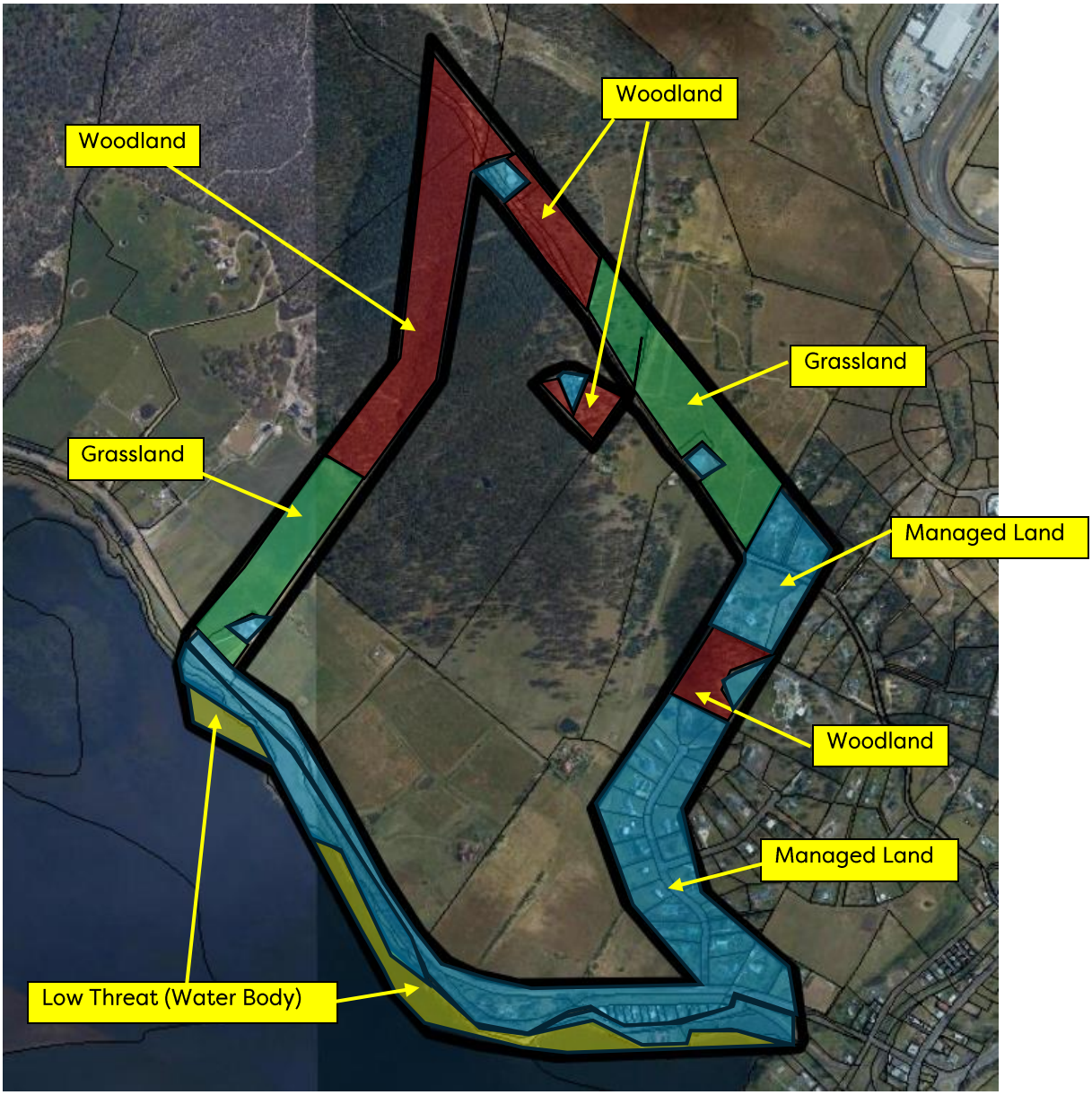


Figure 4 - Vegetation classification within 150m of subject site

A vegetation classification map, within the subject site, is provided below.

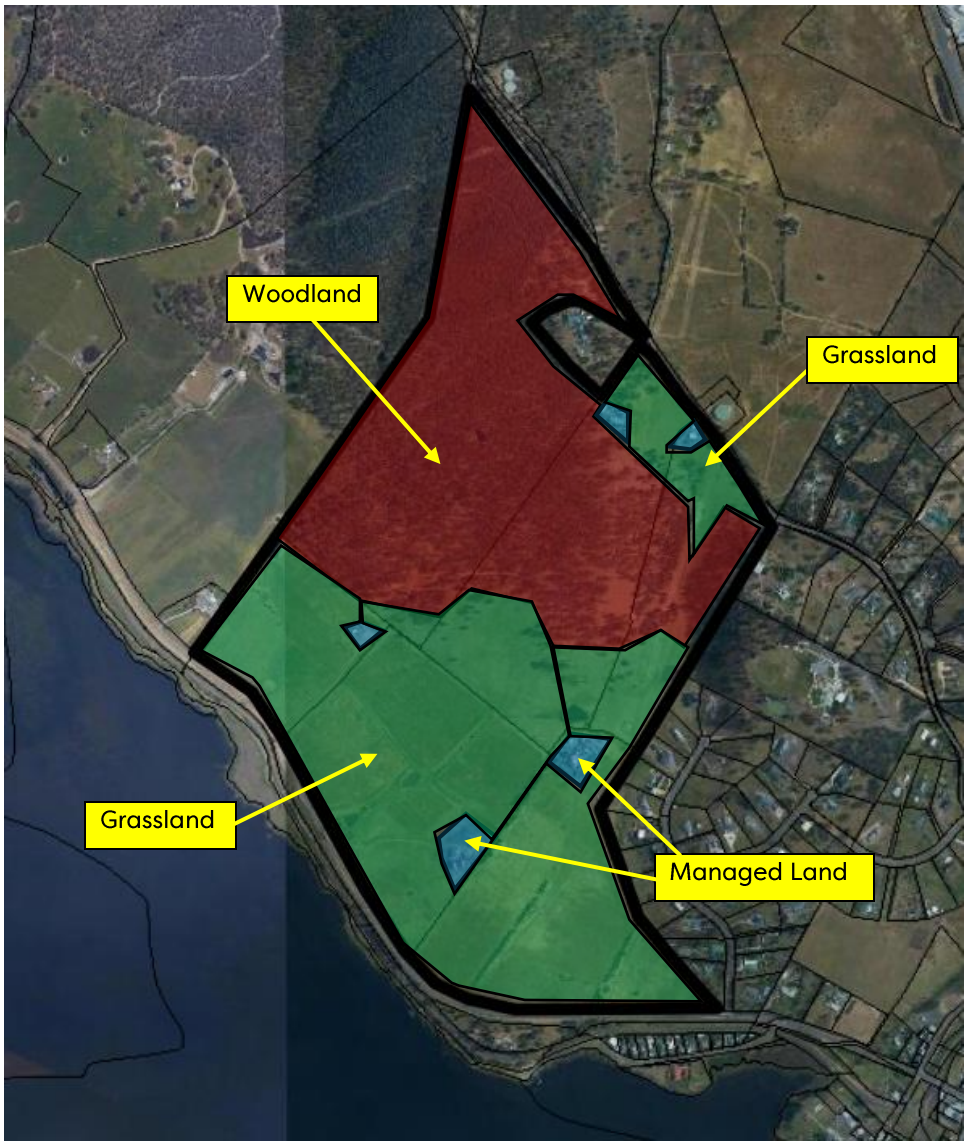


Figure 5 - Vegetation classification within the subject site

The southern parts of the site were clearly identifiable as grassland. There was no overstory present throughout the classified area. A single windbreak hedge, along with individual occasional trees were identified within the area, however the predominant vegetation type remained grassland. The grassland was low lying, with the majority of the areas utilised as pasture.

The central and northern parts of the site were classified as woodland. The woodland classification was based on:

- The canopy cover was estimated to be between 10%-30%
- A prominent grassy understory was present.
- The vegetation didn't provide a dense or shrubby understory. The vegetation ranged in height between 10m-20m, with the occasional larger eucalypt present.

4.3 Slope Analysis

The slope of the land under the identified vegetation was generally upslope. The block provided a low point of 10m AHD, located in the south west of the site, while the highest point of the land was situated in the north west, sitting at the 140m AHD contour. The woodland vegetation was located at or above the 30m AHD contour, with grassland generally located below this point.

The area of woodland was classified upslope from land zoned FUZ, which is proposed for rezoning as part of the draft amendment. Land to the east and west of the site was classified as upslope or flat. It was observed that land associated with the heritage listed property would potentially be classified as downslope 0-5° grassland. This is on the assumption that the larger lot associated with the heritage listed dwelling would not be entirely managed, and any lots to the north of that site would need to consider possible bushfire offsets.

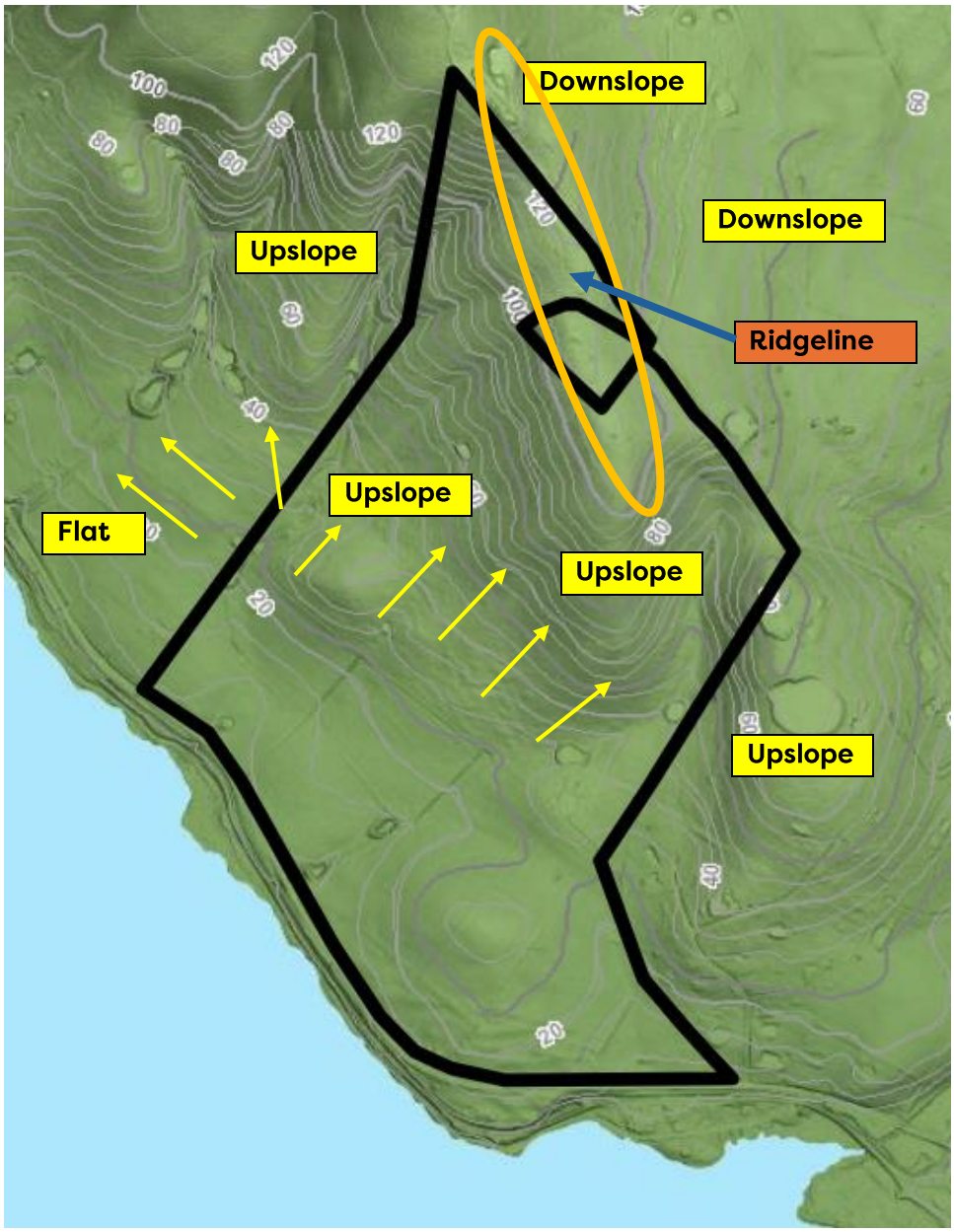


Figure 6 - Slope under bushfire prone vegetation.

4.4 Photos

Figure 7 – Looking north west from CT44724/2. Grassland on adjoining agricultural property.

Figure 8 – Looking south west, from CT44724/2, taken from northern side of title. Grassland.

Figure 9 – Looking north east from CT44724/2, woodland on the adjoining land at 31 Cobbs Hill Road. Grassy understory and open canopy were evident.

Figure 10 – Looking north from CT44724/2, woodland on the adjoining land at 31 Cobbs Hill Road.

Figure 11 – Looking south east over CT44724/2, currently grassland.

Figure 12 – Looking north from 170 Boyer Road, woodland on adjoining title. Taken from north western boundary of property.

Figure 13 – Looking south across 170 Boyer Road. Downslope grassland.

Figure 14 – Looking north west from rear boundary of 170 Boyer Road.

Figure 15 – Existing managed area around dwelling at 170 Boyer Road.

Figure 16 – Looking north from 50 Boyer Road. Paddock to the east of the heritage dwelling. Currently grassland.

Figure 17 – Looking east from 150 Boyer Road, over managed properties on Serentiy Drive.

Figure 18 – Looking east from 25 Cobbs Hill Road, managed properties on Serenity Drive.

Figure 19 – Looking east from 25 Cobbs Hill Road. Woodland at adjoining Northern Christian School site.

Figure 20 – Looking west from 25 Cobbs Hill Road, woodland on adjoining title at 29 Cobbs Hill Road.

Figure 21 – Woodland on 29 Cobbs Hill Road. Looking west from 25 Cobbs Hill Road.

Figure 22 – Woodland on north western side of 25 Cobbs Hill Road.

Figure 23 – Woodland at 31 Cobbs Hill Road, taken in the southern section of the site.

Figure 24 – Woodland at 31 Cobbs Hill Road, centrally located on the lot.

Figure 25 – Woodland at the northern end of 31 Cobbs Hill Road. Near the Cobbs Hill Road entrance.

Figure 26 – 31 Cobbs Hill Road, taken looking south form the northern end of the title.

Figure 27 – Woodland at 29 Cobbs Hill Road, in the north of the site.

Figure 28 – Looking North from Cobbs Hill Road. Grassland downslope, with the Brighton Industrial hub in the background.

5. Bushfire Protection Measures

5.1 BAL Rating and Risk Assessment

The purpose of the BAL rating assessment in this report is to identify the separation between the bushfire prone vegetation and building area within each proposed lot.

The assessment aims to achieve the minimum requirements of **BAL 19**. It also demonstrates the required protection areas required with future residential development.

The BRP provides a number of advantages when assessing the bushfire risk. The existing FUZ area, which will be the subject of the draft amendment, is located to the south of the existing heavier fuel loads of the established woodland area. The woodland (north) and grassland (north/west) are all located upslope of the future urban areas proposed for subdivision and further development.

In a bushfire event, the predominant wind and likely threat would come from the north or north west.

The bushfire Prone Areas Code currently utilises fire danger index (FDI) 50, as per the requirements of table 2.1 of AS3959. Discussion with the Tasmanian Fire Service has indicated that for the purposes of providing a 'best practice' outcome, utilising FDI 80 under AS3959 would be more consistent with the intent of the SRLUS requirements around management of natural hazards.

The definition of the various BAL ratings is shown below. Future dwellings should aim to provide a minimum BAL 19 separation.

Bushfire attack level (BAL)	Predicted bushfire attack and exposure level
BAL-LOW	Insufficient risk to warrant specific construction requirements
BAL-12.5	Ember attack, radiant heat below 12.5kW/m^2
BAL-19	Increasing ember attack and burning debris ignited by windborne embers together with increasing heat flux between 12.5-19kW/m^2
BAL-29	Increasing ember attack and burning debris ignited by windborne embers together with increasing heat flux between 19-29kW/m^2
BAL-40	Increasing ember attack and burning debris ignited by windborne embers together with increasing heat flux between 29-40kW/m^2
BAL-FZ	Direct exposure to flames radian heat and embers from the fire front.

The following setbacks have been provided based on FDI 80.

- Future dwellings in the north of the FUZ, should provide a minimum separation of **20m to the north** (BAL 19).
- Future dwellings in the west of the FUZ should provide a minimum separation of **12m to the west** (BAL 19).
- Any lot to the north of the land associated with the State Heritage Registered dwelling at 50 Boyer Road, should provide a minimum separation of **14m to the south** (BAL 19).

5.2 Hazard Management Areas

Section C13.0 *Bushfire-Prone Areas Code*, will apply to any subdivision of the site. The code requires that a Bushfire Hazard Management Area (BHMA) will be managed in accordance with the provided plan.

Existing vegetation within the BHMA needs to be strategically modified and maintained in accordance with the Bushfire Hazard Management Plan (BHMP) to achieve the following outcomes:

- to reduce the quantity of windborne sparks and embers reaching buildings;
- to reduce radiant heat at the building; and
- to halt or check direct flame attack.

The BHMA will be developed within and up to the property boundaries to provide access to a fire front for firefighting, which is maintained in a minimal fuel condition and in which there are no other hazards present that will significantly contribute to the spread of a bushfire.

The BHMA will be achieved by adoption of the following strategies:

Maintenance of Fuel Management Areas

It is the responsibility of the property owner, and in some cases Council, to maintain and manage the landscaping in accordance with the BHMP.

The BHMA is to be regularly managed and maintained. Landscaping in this area will be minimised:

- Grass maintained to a maximum height of 100mm, with fuel loads kept to less than 2 tonnes per hectare which will be maintained at this level.
- Trees and any undergrowth will be clear of (BCA) class 1 – 9 buildings on all sides.
- All undergrowth and understorey of trees (up to 2m) will be removed within the bushfire hazard management area.
- Larger trees can be maintained, where ensuring the understory is managed and a 5m canopy separation is provided.
- Pathways to 1 metre surrounding the buildings and landscaping material, will be non-combustible (stone, pebbles etc.).
- The total shrub cover will be a maximum of 20% of the available area.
- There will be a clear space from the buildings of at least four (4) times the mature height of any shrubs planted.
- Shrubs will not be planted in clumps, this is to avoid build-up of debris and dead vegetation materials.

Landscaping

- vegetation along the pathways to comprise non-flammable style succulent ground cover or plants (avoid plants that produce fine fuel which is easily ignited, plants that produce a lot of debris, trees and shrubs which retain dead material in branches or which shed long strips of bark, rough fibrous bark or drop large quantities of leaves in the spring and summer, vines on walls or tree canopies which overhang roofs)
- timber woodchip and flammable mulches cannot be used and brush and timber fencing should be avoided where possible
- Council must consider management of landscaping within the wildlife corridors, to ensure that a corridor can be maintained while not presenting an unacceptable fire risk to residents.

5.3 Roads

Table C13.1 of the code outlines the requirements for road construction as part of any subdivision. All public roads which are to be maintained by Council as the Road Authority are required to be constructed to this standard.

If a subdivision is designed to include staging, temporary turning heads may be required to ensuring adequate manoeuvring for fire trucks.

Element		Requirement
A.	Roads	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 20t, 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 7 meters 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 AS1743-2001 Road signs-Specifications.*

5.4 Property Access

Table C13.2 of the code outlines the private access requirements. Where a dwelling cannot be protected from an existing hydrant, a compliant private access will need to be provided. The majority of lots in the urban areas will generally provide for adequate protection via hydrants, however any larger lots, or internal lots, may be required to comply with the standards for private access.

Element		Requirement
A.	Property access length is less than 30m; or access is not required for a fire appliance to access a fire fighting water point.	There are no specified design and construction requirements.
B.	Property access length is 30m or greater; or access is required for a fire	The following design and construction requirements apply to property access: (a) all-weather construction;

	appliance to a fire fighting water point.	(b) load capacity of at least 20t, including for bridges and culverts; (c) minimum carriageway width of 4m; (d) minimum vertical clearance of 4m; (e) minimum horizontal clearance of 0.5m from the edge of the carriageway; (f) cross falls of less than 3 degrees (1:20 or 5%); (g) dips less than 7 degrees (1:8 or 12.5%) entry and exit angle; (h) curves with a minimum inner radius of 10m; (i) maximum gradient of 15 degrees (1:3.5 or 28%) for sealed roads, and 10 degrees (1:5.5 or 18%) for un-sealed 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 provided every 200m.
D.	Property access length is greater than 30m, and access is provided to 3 or more properties.	The following design and construction requirements apply to property access: (a) complies with requirements for B above; and (b) passing bays of 2m additional carriageway width and 20m length must be provided every 100m.

5.5 Fire Trails

Table C13.3 outlines the requirements for fire trails. Subdivision design may consider fire trails to provide support for emergency personal in a bushfire event. Properly designed perimeter fire trails along an urban interface can assist the ability of fire fighters to protect properties during a bushfire.

Element		Requirement
A.	All fire trails	The following design and construction requirements apply: (a) all-weather, 4-wheel drive construction; (b) load capacity of at least 20t, including for bridges and culverts;

		(c) minimum carriageway width of 4m; (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) dips less than 7 degrees (1:8 or 12.5%) entry and exit angle; (h) curves with a minimum inner radius of 10m; (i) maximum gradient of 15 degrees (1:3.5 or 28%) for sealed fire trails, and 10 degrees (1:5.5 or 18%) for un-sealed fire trails; (j) gates if installed at fire trail entry, have a minimum width of 3.6m, and if locked, keys are provided to TFS; and (k) 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 hammerhead "T" or "Y" turning head 4m wide and 8m long.
B.	Fire trail length is 200m or greater.	The following design and construction requirements apply: (a) the requirements for A above; and (b) passing bays of 2m additional carriageway width and 20m length provided every 200m.

5.6 Reticulated Fire Fighting Water Supply

Table C13.4 outlines the requirements for fire fighting water supply in reticulated areas.

Based on the future GRZ being applied to the site, it is expected that a reticulated firefighting water supply will be provided for the subdivision.

Future development will connect to the reticulated water supply and provide hydrants. The indicative locations of hydrants will be marked on a BHMP associated with a future plan of subdivision, generally providing hydrants at 60m intervals and at street intersections.

Table C13.4 Reticulated water supply for firefighting.

Element		Requirement
A.	Distance between building area to be protected and water supply.	The following requirements apply: (a) the building area to be protected must be located within 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.
B.	Design criteria for fire hydrants	The following requirements apply: (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.
C.	Hardstand	A hardstand area for fire appliances must be: (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) a minimum width of 3m constructed to the same standard as the carriageway; and (d) connected to the property access by a carriageway equivalent to the standard of the property access.

5.7 Static Water Supply for Fire Fighting

Table C13.4 outlines the requirements for static fire fighting water supply in areas not serviced by a reticulated supply.
While it is expected that the majority of lots can be serviced via hydrants in a reticulated network, there may be some occasions where a static water supply is required.
The BHMP for a future subdivision will be required to identify these lots and provide recommendations on compliant static water supply.

Element		Requirement
A.	Distance between building area to be protected and water supply.	The following requirements apply: (a) the building area to be protected must be located within 90m of the fire fighting water point of a static water supply; and (c) the distance must be measured as a hose lay, between the fire fighting water point and the furthest part of the building area.
B.	Static Water Supplies	A static water supply: (a) may have a remotely located offtake connected to the static water supply; (b) may be a supply for combined use (fire fighting and other uses) but the specified minimum quantity of fire fighting water must be available at all times; (c) must be a minimum of 10,000l per building area to be protected. This volume of water must not be used for any other purpose including fire fighting sprinkler or spray systems; (d) must be metal, concrete or lagged by non-combustible materials if above ground; and (e) if a tank can be located so it is shielded in all directions in compliance with section 3.5 of Australian Standard AS 3959-2009 Construction of buildings in bushfire-prone areas, the tank may be constructed of any material provided that the lowest 400mm of the tank exterior is protected by: (i) metal; (ii) non-combustible material; or (iii) fibre-cement a minimum of 6mm thickness.

6. BRP – Concept Subdivision Layout

A concept subdivision plan has been provided by Holmes Dyer. The plan applies to the FUZ section of the site, and provides an indicative urban lot layout which includes the following:

- 388 residential lots;
- A new road network that provides three new access points onto Boyer Road.
- Public open space that has been designed to incorporate overland flow paths and serve as wildlife corridors.
- Retention of existing dwellings onto new lots within the site.
- Road connectivity with four cul de sacs, and two 'T' turning heads.

Figure 29 - Concept subdivision plan for BRP. Source: Holmes Dyer

From a landscape risk perspective, the concept plan of subdivision provides some advantages. The areas proposed for residential development are located downslope from the existing heavier fuel loads to the north. The River Derwent is located to the south, and existing managed residential lots to the east.

It will be critical to manage the interface between the residential land in the north of the subdivision (referred to as Precinct 'C'), and the bushfire prone vegetation located to the north. It is understood that the draft SAP provisions require lots within Precinct 'C' to have a minimum lot size of 1000m^2 as part of an acceptable solution, or 750m^2 under the performance criteria.

Equally, it will be important to ensure there is appropriate management between future dwellings in the west, and the adjoining agricultural land. The concept plan currently indicates a perimeter road in the north west, which would provide a adequate buffer between the bushfire prone vegetation on the adjoining agricultural land, and the proposed residential lots. A shelter belt is shown on the north western boundary. It is recommended the shelter belt be provided as a single row of trees, so as not to increase the fuel load or change the vegetation classification to the west.

The rear setbacks for buildings along the urban/bush and grassland interface should be contained within the residential lots. This report does not recommend that section 71 (part 5) agreements or covenants be entered into to allow for management of land outside of the site. The draft SAP criteria for Precinct 'C' appropriately requires a 20m wide hazard management area be provided on the interface of bushfire prone vegetation to the north.

The concept plan provides large areas of public open space, which transect the sites, appearing to provide for the overland flow path, while also providing an opportunity for walking trails and wildlife corridors. Understanding how these areas of public open space will be used and managed will be critical. Council as the relevant authority will need to agree to not only take ownership of any public open space, but also to maintain public open space as low threat vegetation. A conflict can arise where revegetation of wildlife corridors is proposed when adjoining land shown for residential purposes. The corridors have the potential to present a fire risk as they adjoin large residential areas, both within the site, to the east along Serentiy Drive and in the north west of the site, adjoining agricultural land.

If Brighton Council is not going to maintain the public open space corridors as low threat vegetation, then controls should be built into the SAP around revegetation and/or perimeter breaks. Future subdivision design will need to consider whether building setbacks will be required from any public open space areas.

The subdivision provides a road network which is considered appropriate within a bushfire prone area, noting three access points onto Boyer Road. Providing multiple entry/exit points into a residential area ensures multiple avenues of escape in a bushfire event.

While four cul-de-sacs are proposed, the location of cul-de-sacs are generally central and separate from any bushfire threat. As part of a subdivision design, a fire trail link could be explored to provide improved connectivity for emergency vehicles utilising the open space network (i.e. gated shared user trail).

The plan shows two 'T' turning heads in the west. It is recommended these turning heads be replaced with bushfire compliant cul-de-sacs. Perimeter roads can provide a buffer between residential development and a bushfire threat. We acknowledge that while such roads provide a practical benefit in relation to bushfire, they are not always cost effective from a developer perspective.

We recommend that any SAP look at ensuring at least two new road points be provided onto Boyer Road as part of any large scale subdivision.

We would recommend that the SAP provide a road layout plan, that generally encourages developers to adhere to a particular design or plan of subdivision that has been inserted into the SAP. Any performance criteria that allows developers to deviate away from compliance with the plan, should provide for consideration of natural hazards.

7. Conclusions and Recommendations

This report has been prepared to consider and provide recommendations for a draft amendment of the Boyer Road Precinct. Once developed, the precinct anticipated providing an additional 388 residential lots.

The site has been analysed from a bushfire risk perspective, and concluded that with appropriate recommendations being followed, the risk can be managed to a tolerable level.

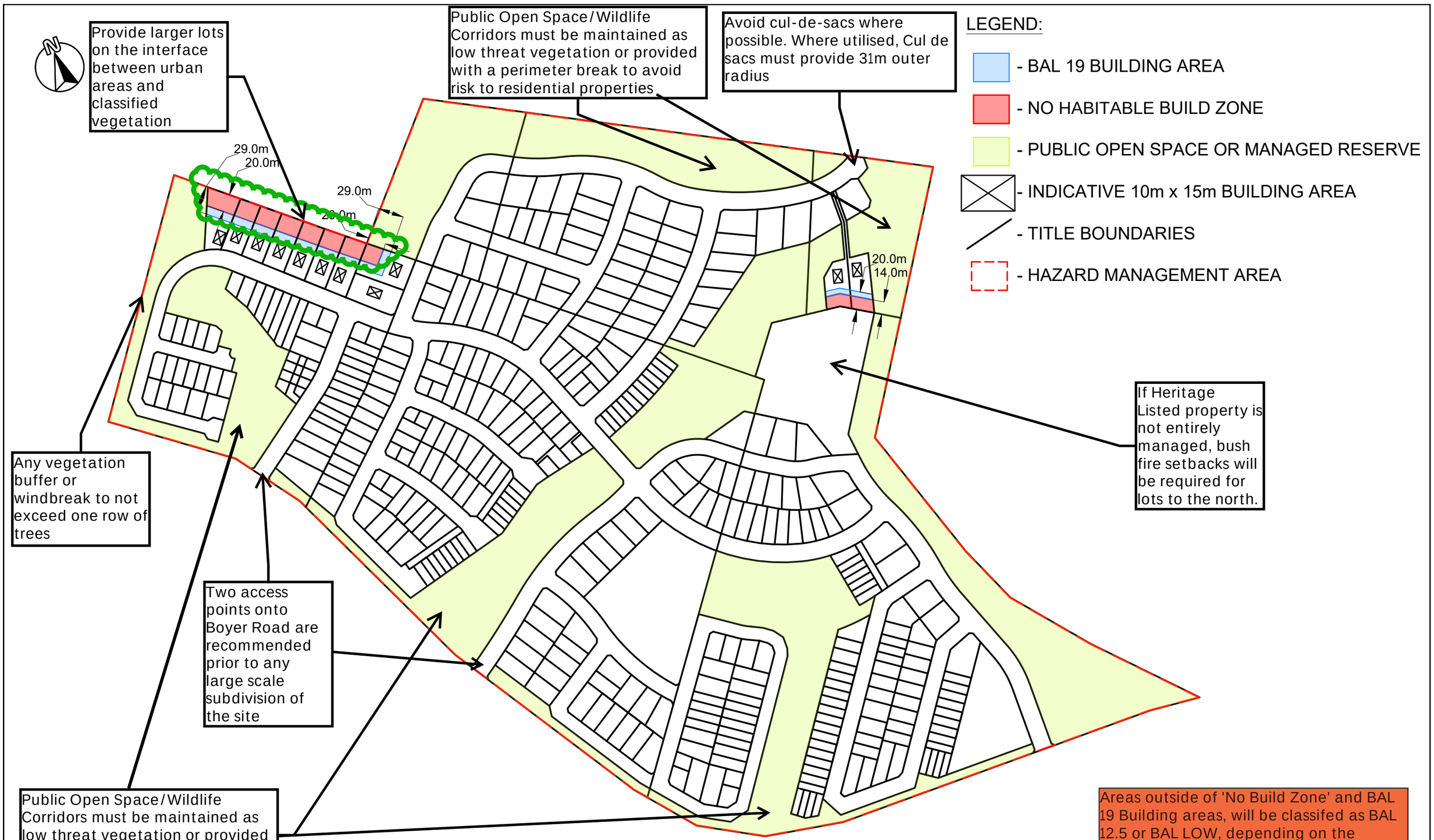
The denser areas of vegetation are located upslope from the proposed urban areas, while the land to the east and west presents a lower risk in relation to bushfire. Future subdivision of the site will need to ensure appropriate roads layouts are provided, seeking to maximise connectivity while reducing dead end streets and cul de sacs. Multiple access points onto Boyer Road are encouraged, as are building lines for habitable development between the interface of urban areas and classified vegetation.

We conclude that future development of the site for residential purposes is appropriate subject to recommendations being adhered to.

a) The site is well located, with the proposed urban areas located downslope of the heavier bushfire fuel areas.
b) Larger lots should be provided along the northern interface between urban areas and the more densely vegetated land which extends to the north. Dwellings on these lots are required to provide a 20m setback to meet BAL 19 standards.
c) Larger lots should be provided along the western interface, between urban areas and the agricultural land to the west. Dwellings on these lots are required to provide a 12m setback to meet BAL 19 standards.
d) Any lot to the north of the land associated with the State Heritage Registered dwelling at 50 Boyer Road, should provide a minimum separation of 14m setback to meet BAL 19 standards.
e) Lots must be of a sufficient size to provide hazard management areas within lot boundaries. We recommend avoiding Section 71 Agreements or bushfire easements/covenants on adjoining land where possible.
f) Public Open Space and Wildlife Corridors should be maintained as low threat vegetation by the Brighton Council. Alternatively, Council should consider perimeter breaks along residential boundaries.
g) All proposed roads, private accesses and fire trails (if applicable) must be in compliance with Table C13.1, C13.2 and C13.3 as outlined in C13.0 Bushfire Prone Areas Code of the Tasmanian Planning Scheme, and section 5 of this report. The proposed 'T' turning heads in the north west of the site should be replaced with compliant cul-de-sac turning heads.
h) Any water supply required for the subdivision must be in compliance with Table C13.4 or Table C13.5, as outlined in C13.0 Bushfire Prone Areas Code of the Tasmanian Planning Scheme, and section 5 of this report.
i) We recommend the SAP provide an acceptable solution habitable building line setback of 20m for all lots along the northern boundary of the proposed GRZ area. Any corresponding performance criteria must have regard to the presence of natural hazards.
j) We recommend the SAP provide an acceptable solution habitable building line setback of 12m for all lots along the western boundary of the proposed GRZ area. Any corresponding performance criteria must have regard to the presence of natural hazards.

k) The Holmes Dyer concept plan of subdivision generally provides good connectivity with multiple access points onto Boyer Road. The SAP should include a plan of subdivision, which is referred to under an acceptable solution. Any performance criteria which provides for an alternate lot layout must have regard to the presence of natural hazards.
l) The three cul-de-sacs in the west of the site, should seek to provide gated connectivity for fire appliances within the open space network. This connectivity may not be required depending on staging, management of vegetation within 100m of cul de sacs, and surrounding development proposed at the time of subdivision.
m) Any proposed shelter belt in the west must be provided as a single row of trees, so as not to increase the fuel load or change the vegetation classification to the west.
n) The Homes Dyer concept plan of subdivision indicates three access points onto Boyer Road. It is recommended that at least 2 access/egress points are available onto Boyer prior to any large-scale residential development occurring on the site.
o) If a Council policy does not exist, it would be recommended that a vegetation or fire management policy be prepared which would guide Council on how to appropriately manage and vegetate public open space/wildlife areas that adjoin urban and other residential land.

Annexure 1 – BRP Bushfire Advisory Plan



NOVA LAND CONSULTING

156 George Street,
Launceston 7250
132 Davey Street,
Hobart 7000

Phone (03) 6709 8116
Email: info@novaland.com.au

BUSHFIRE HAZARD MANAGEMENT PLAN

BOYER ROAD PRECINT
(C.T.44724/1, PID 1972194) (C.T.44724/9, PID 7676396)
(C.T.44724/8, PID 7676361) (C.T.152364/2, PID 2808927)
(C.T.135574/1, PID 2097491) (C.T.135574/2, PID 2097504)

File name	L240907_BHMP_220525.dwg
Job Number	L240907
Drawn	NJK
Scale	1:4000@A3
Date	22/05/25
Edition	V1.0
Sheet	1/1

Bushfire Assessment Based on Stamped Plans
James Stewart – BFP 157. Scope of Work: 1, 2, 3B, 3C
NOVA LAND CONSULTING

Annexure 2 – BRP Concept Subdivision Plan.

Agriculture

Landscape Conservation

Rural Living

Cobbs Hill Road

FUTURE PEDESTRIAN LINK TO SCHOOL

Community Purpose

EXISTING BUILDING

SMALLER LOTS CLOSE TO OPEN SPACE

VIEW CORRIDOR & BUILDING LINE

NO BUILDING WITHIN VIEW CORRIDOR

STATE HERITAGE PLACE

General Residential

Residential Density (Net): 15 dw/ha

Environmental Management

SMALLER LOTS CLOSE TO OPEN SPACE

EXISTING BUILDING

Tranquillity Crescent

Samuel Street

Rural Living

Serenity Drive

VIEW CORRIDOR & BUILDING LINE

Environmental Management

SMALLER LOTS CLOSE TO OPEN SPACE

Boyer Road

Utilities

Rural

ALTERNATIVE 4

Boyer Road Precinct

- Road Pavement 11m in 20.0m Road Reserve
- Road Pavement 8.9m in 18.0m Road Reserve
- Road Pavement 6.9m in 15.0m Road Reserve
- Traditional Lots
- Diverse Housing Typologies
- Low Density
- Strata Lots
- Mixed Use Precinct
- Irrigation Pipeline
- Zone Boundary
- Hazard Management Area
- Open Space Network
- Shelter Belt
- Stormwater Basin

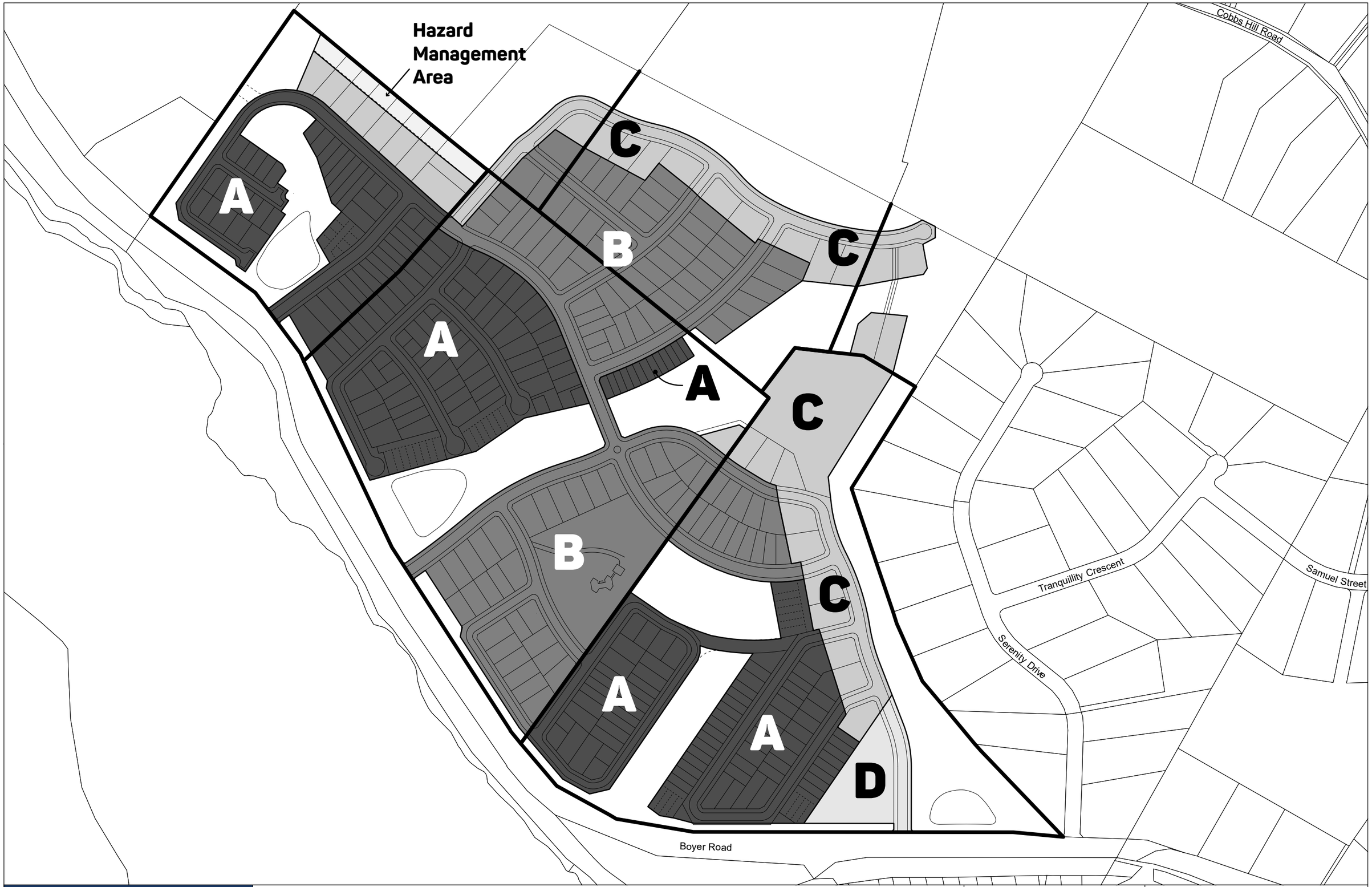
N

0 20 40 60 80 100 m

1:4,000 @ A3

HOLMES DYER

1792-025 R3 > 28.04.2025



PRECINCT PLAN

Boyer Road Precinct

A – Medium density: min. 250m² lots + smaller lots adjacent open space

B – Low-medium density: min. 500m² lots + smaller lots adjacent open space

C – Low density: min. 1000m² lots plus hazard management zones

D – Medium density: min. 200m² lots + mixed use and non-residential use

N

0 20 40 60 80 100 m

1:4,000 @ A3

HOLMES DYER

1792-020 R2 > 16.05.2025

NOVA LAND CONSULTING

Land Surveying | Town Planning | Project Management
w novaland.com.au
e info@novaland.com.au

Launceston
156 George Street
Launceston 7250
p (03) 6709 8116

Hobart
Rear studio, 132 Davey Street
Hobart 7000
p (03) 6227 7968