

BUSHFIRE HAZARD REPORT

PROPOSED DWELLING – 7 KING RD, LUNAWANNA



| | |
|------------------------|-------------------------------------|
| Landowner(s) | ████████████████████ |
| Report Author | Matthew Taylor – Ecotec Consultants |
| Assessment Date | 20/07/2022 |
| Version | 1.1 |

CONTENTS

| | |
|---|----|
| Executive Summary | 3 |
| Limitations and Disclaimer | 3 |
| 1. Introduction | 4 |
| 2. Site Description | 4 |
| 3. Site Assessment | 8 |
| 3. Bushfire Hazard Assessment | 10 |
| 4. Bushfire Protection Requirements | 13 |
| Construction Requirements | 13 |
| Hazard Management Area Requirements..... | 14 |
| Property Access | 16 |
| Water Supply for Firefighting | 17 |
| 5. Conclusion | 18 |
| 6. References | 18 |

EXECUTIVE SUMMARY

This bushfire assessment report has been prepared by a provisionally accredited bushfire hazard practitioner in support of a development proposed by [REDACTED]. It accompanies a development application to Kingborough Council for a new dwelling at 7 King Rd, Lunawanna. The property of interest is a parcel of residential land that is zoned Low Density Residential under the *Kingborough Interim Planning Scheme*. Bushfire prone vegetation is present on the property and a significant area of high-risk vegetation is present on the adjacent property to the north. The property is also mapped as a bushfire-prone land under the *Kingborough Interim Planning Scheme* overlay (www.thelist.tas.gov.au).

It is therefore a requirement that a bushfire hazard report and bushfire hazard management plan accompany the development application, and that the proposed development complies with relevant Tasmanian bushfire-prone area legislation (Table 1), in order to mitigate the risk posed by bushfires to the residents of the proposed development, their property, neighbours, emergency personnel and the wider community.

Bushfire hazard mitigation measures have been outlined in this report so as to achieve a Bushfire Attack Level rating of **BAL 19** in accordance with Australian Standard 3959:2018. These mitigation measures include:

- Construction within the building area footprint shown on the attached Bushfire Hazard Management Plan (Appendix 1) with a separation distance between buildings and classified vegetation of at least **23 metres**.
- Management of vegetation and fuel loads within the Hazard Management Area as outlined in the Bushfire Hazard Management Plan.
- Construction of buildings to comply with the standards for **BAL 19** as outlined in *AS 3959:2018*.
- Provision of a static water supply of at least 10,000 litres for firefighting purposes.

By adopting these measures this development will reduce the risk of bushfire to an acceptable level in accordance with Tasmanian bushfire-prone area legislation, while limiting the impact of the development on environmental values and the amenity of neighbouring properties.

Limitations and Disclaimer

Reasonable steps have been taken to ensure that the information contained within this report is accurate and reflects the conditions on and around the lot at the time of assessment. The measures contained in Australian Standard 3959-2018 cannot guarantee that a building will survive a bushfire event on every occasion. This is substantially due to the unpredictable nature and behaviour of fire and extreme weather conditions.

1. INTRODUCTION

This Bushfire Hazard Report relates to the development of a new dwelling (Class 1a) at 7 King Rd, Lunawanna in the Kingborough Local Government Area. The proposed development is in a bushfire-prone area and is therefore required to comply with the applicable bushfire-prone areas legislation and construction standards outlined in Table 1 below. This report contains a description of the site and proposed development, an assessment of the hazard posed by bushfire prone vegetation, and outlines requirements for hazard mitigation. The report accompanies a Bushfire Hazard Management Plan that presents the requirements for development and ongoing maintenance of the site.

| Legislation | Relevant code or regulation |
|--|--|
| <i>Land Use Planning and Approvals Act 1993.</i> | <i>Planning Directive 5.1 – Bushfire Prone Areas Code</i> |
| <i>Building Act 2016</i> | <i>Directors Determination – Requirements for Building in Bushfire-Prone Areas (transitional) v2.2 (DD v2.2)</i> <i>Directors Determination – Application of Requirements for Building in Bushfire-Prone Areas (transitional) (DD v1.4)</i> |
| Australian building standards | <i>AS3959 2018 – Construction in Bushfire Prone Areas</i> <i>NASH Standard – Steel Framed Construction in Bushfire Areas</i> |

Table 1. Tasmanian and National Legislation that applies to development in bushfire prone land in Tasmania

2. SITE DESCRIPTION

A preliminary investigation of the property was undertaken by a desktop review of online databases and mapping services such as the LIST. The site comprises a parcel of residential land located in the township of Lunawanna on Bruny Island. Property administrative information is provided in Table 2 and site contextual information is provided in Table 3. Maps showing property context information are provided in Figures 1-4.

| | |
|---|-------------------------------|
| Owner(s): | ████████████████████ |
| Address: | 7 King Rd, Lunawanna TAS 7150 |
| Property Area: | 1087m ² |
| Title: | 61369 / 27 |
| Local Government Area: | Kingborough Council |
| Tenure: | Freehold Title |
| Zoning: | Low Density Residential |
| Schedules, easements, covenants, or agreements | None |

Table 2. Administrative information

BUSHFIRE HAZARD REPORT – 7 King Rd, Lunawanna

| | |
|-------------------|--|
| Land use | <ul style="list-style-type: none"> - Forested land to the north with a mix of native species and radiata pines - Residential land to the east, west and south - King Road at the southern boundary |
| Topography | <ul style="list-style-type: none"> - Southwest facing aspect - Moderate slope (0-5°) from northeast to southwest |
| Vegetation | <ul style="list-style-type: none"> - Managed land on the property, with scattered remnant eucalyptus and radiata pines. - Tall forest comprising a mix of eucalyptus and radiata pines to the north - Managed land to the east, west and south of the property. - A narrow band of woodland 85m to the southwest of the property - A remnant patch (0.25ha) of threatened vegetation on private properties 55m to the south of the property (<i>DAS - Eucalyptus amygdalina forest on sandstone</i>). |
| Buildings | <ul style="list-style-type: none"> - No buildings at present |
| Roads | <ul style="list-style-type: none"> - The property adjoins King Road to the south |
| Services | <ul style="list-style-type: none"> - Electricity – powerlines are located at the southern boundary of the property - The property is not serviced by mains water. |

Table 3. Site context

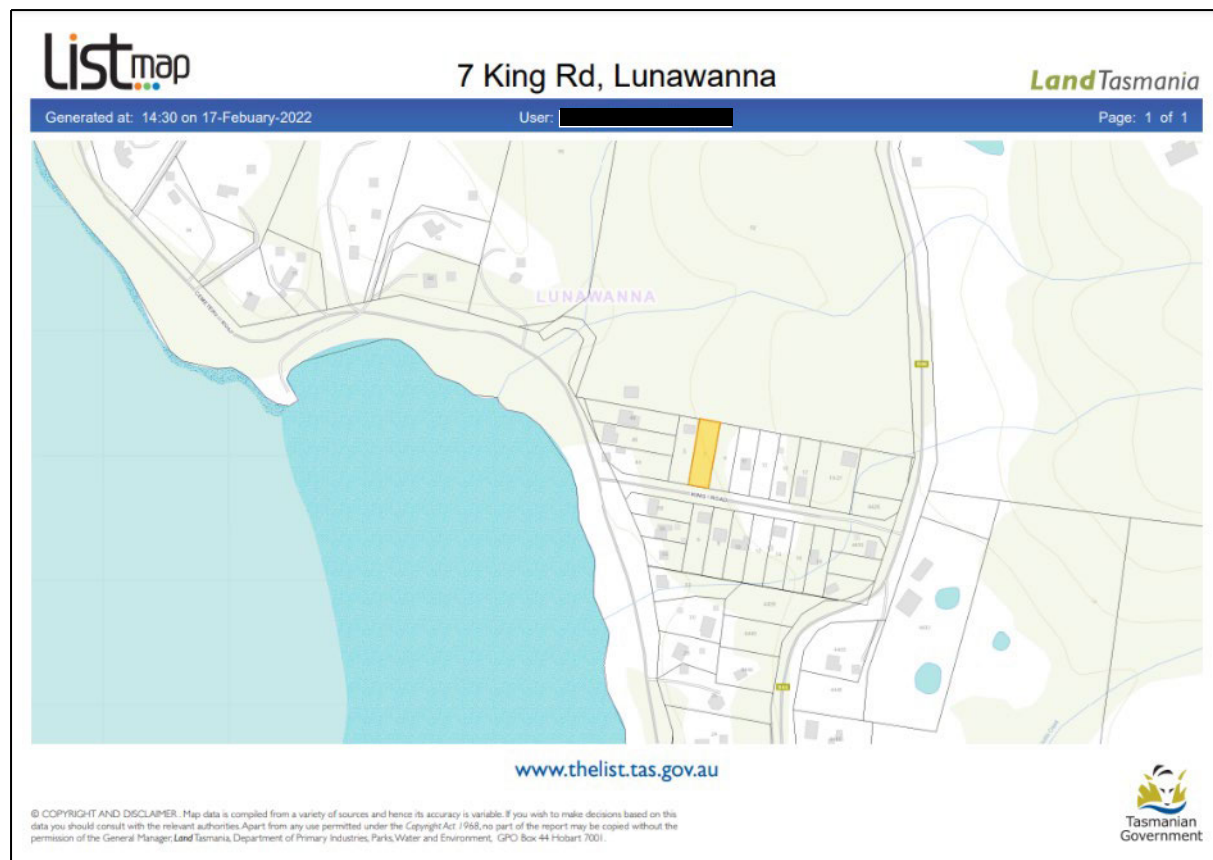


Figure 1. Locality Map

BUSHFIRE HAZARD REPORT – 7 King Rd, Lunawanna

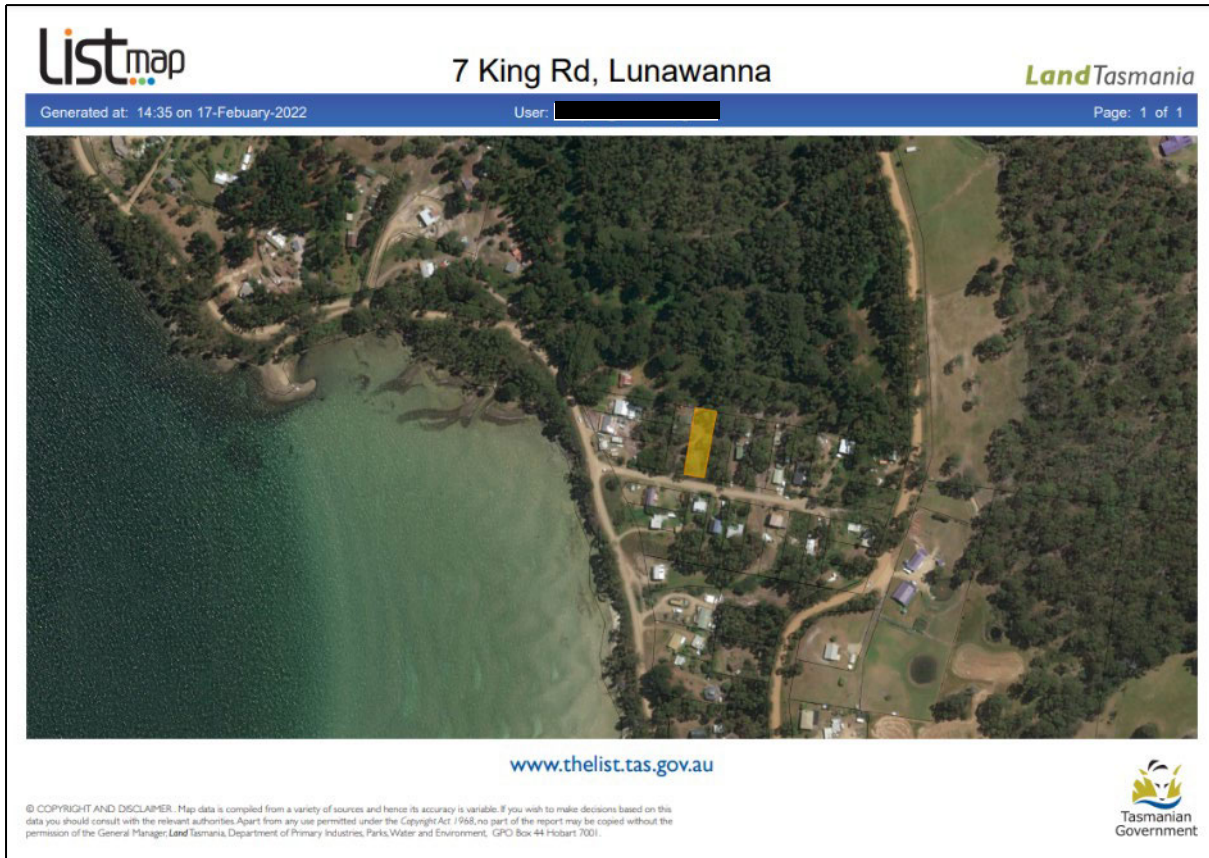


Figure 2. Aerial Map

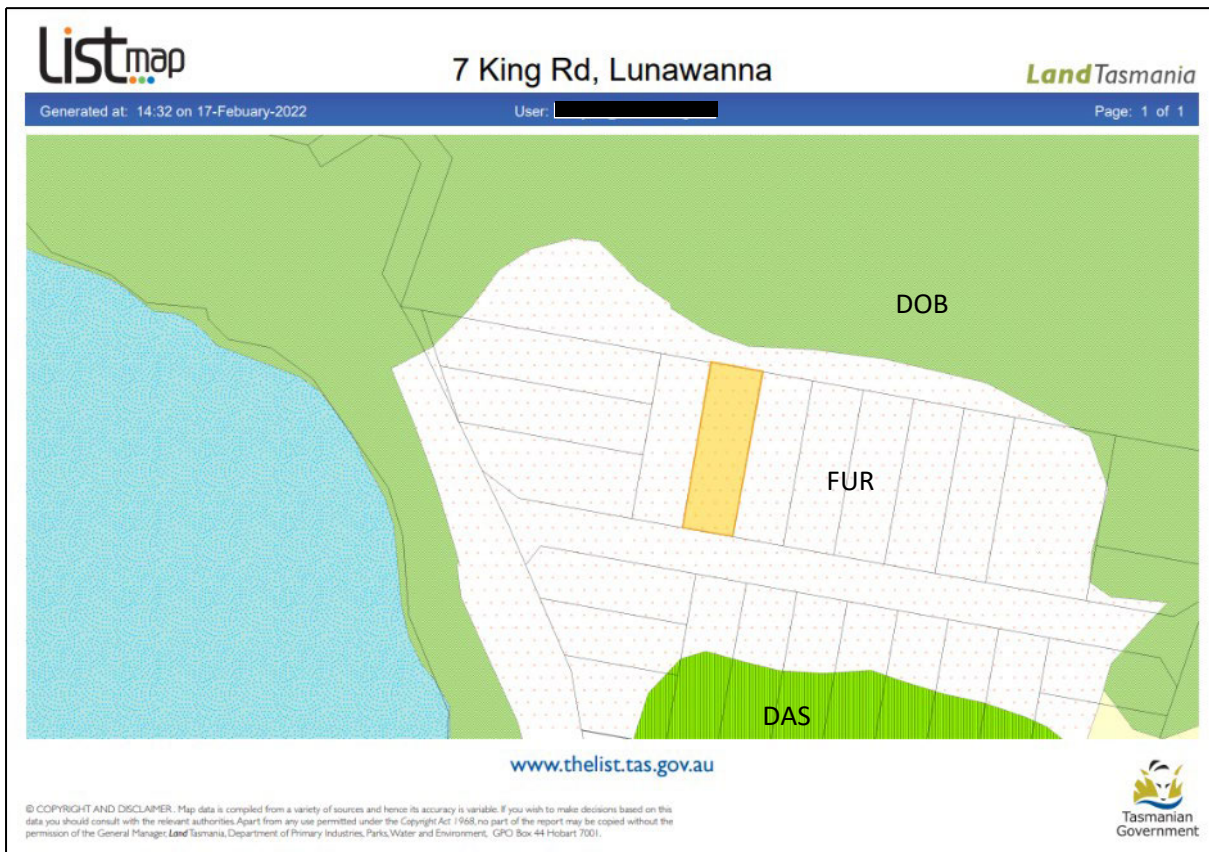


Figure 3. TASVEG 4.0 map

BUSHFIRE HAZARD REPORT – 7 King Rd, Lunawanna

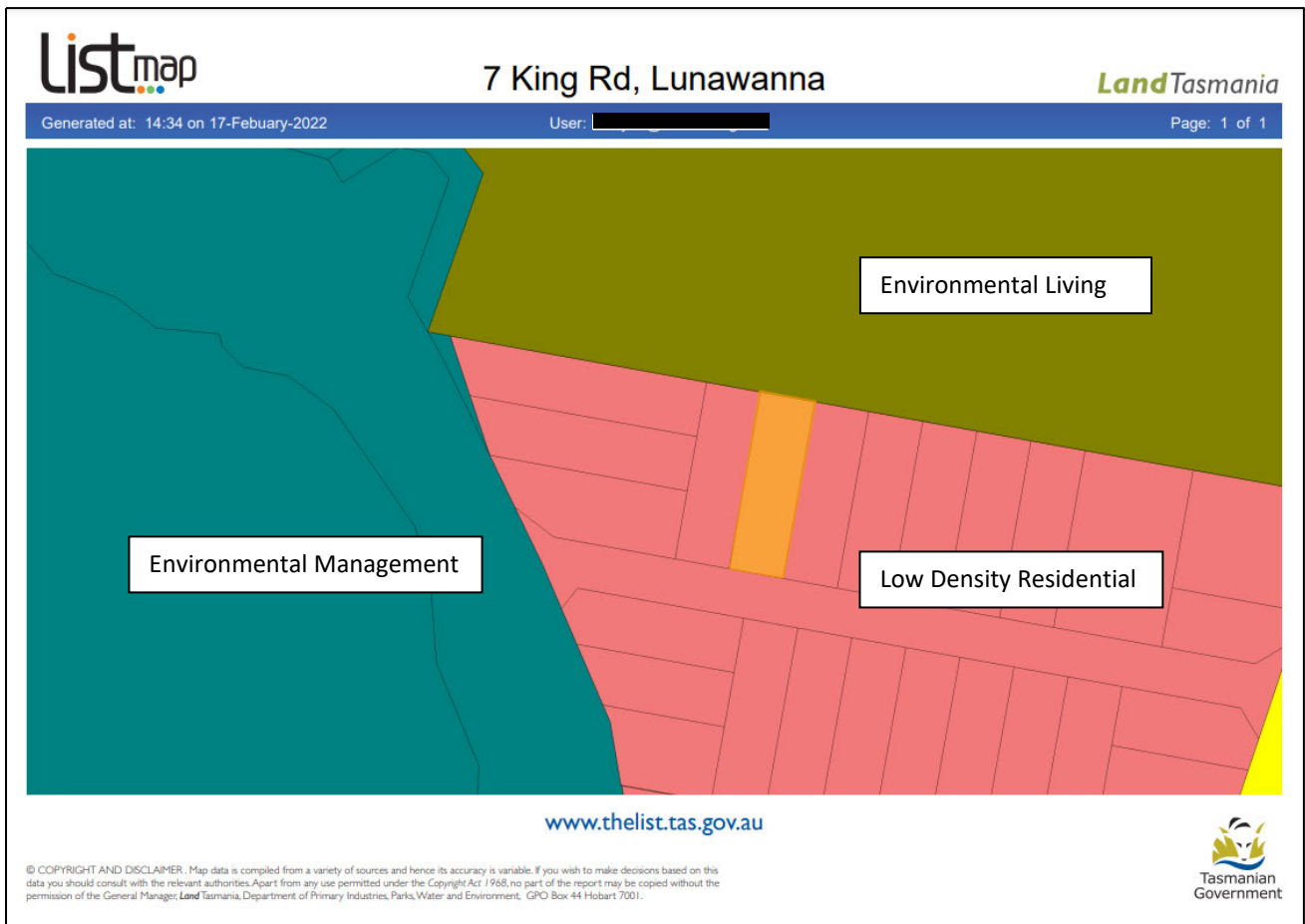


Figure 4. Zone Map

3. SITE ASSESSMENT

The site was surveyed to verify the findings of the preliminary desktop investigation and gather additional information on the vegetation and site conditions relevant to the assessment of bushfire hazard associated with this development. The assessment considered the vegetation within a 100m radius of the property in accordance with the procedures outlined in AS 3959:2018. The findings of the survey are outlined in Table 4 below.

| | |
|----------------------------------|---|
| Bushfire Hazard | Forest vegetation is present on adjacent land to the north of the property and presents a significant bushfire hazard. Fuel loads in this forest area are high and the canopy comprises high flammability species. |
| Bushfire Threat Direction | The forest vegetation to the north presents the most significant threat. Also, prevailing winds are usually from the north on days when weather conditions contribute to a heightened bushfire risk. |
| Vegetation | <p><u>Site vegetation</u></p> <ul style="list-style-type: none"> - The vegetation on the property is classified as Urban Areas (FUR) under the TASVEG classification scheme. Most of the property has been cleared of vegetation, however five remnant black peppermint (<i>Eucalyptus amygdalina</i>) trees are present and there are also several Monterey pine (<i>Pinus radiata</i>) and Monterey cypress (<i>Cypruss macrocarpa</i>) saplings at the northern boundary of the property. Those trees are approximately 10m in height. The understory is almost entirely cleared, with occasional low bracken, native shrubs and sedges. A denser patch of shrubby weeds is located near the northern boundary of the property. Coarse woody debris is absent and there is a low density of fine fuels. <p><u>High-risk vegetation</u></p> <ul style="list-style-type: none"> - The forest vegetation to the north of the property is high risk. It comprises tall brown-top stringybark (<i>Eucalyptus obliqua</i>) with occasional Monterey pine and Monterey cypress. - The understory is dense and comprises a mixture of native and weedy shrubs. A poorly maintained firebreak separates the vegetation on the property from the forest on the neighbouring land. <p><u>Low-risk vegetation</u></p> <ul style="list-style-type: none"> - Woodland vegetation is located in a coastal reserve 88m southwest of the property but is low risk due to its narrow width (<10m). - Woodland vegetation also occurs on private properties 53m south of the property but is low risk due to its small size <0.25ha and cleared understory. - Managed vegetation occurs on properties to the east, west and south. - The property immediately to the west has a residence, sheds, a driveway, maintained lawns and a garden comprising scattered trees and shrubs. - The property immediately to the east is used for glamping, with a large camping platform, outdoor entertaining area, shed, amenities building, driveway and parking space. There are scattered trees, and the ground layer is maintained in a low fuel state, with planted shrubs, grass, and scattered bracken. - The properties further to the east and west are occupied by houses with established gardens. - King Road is located at the southern boundary of the property. On the southern side of King Rd are properties occupied by houses with established gardens. |
| Natural Values | <ul style="list-style-type: none"> - A threatened vegetation type (<i>Eucalyptus amygdalina forest on sandstone – DAS</i>) was mapped on private land 53m to the south of the property. A field assessment of this area revealed that the community has mostly been cleared for gardens and residential development (see photos). - No threatened plants or animals have been recorded within 100m of the property. |
| Bushfire Attack Level | BAL 19 – See Table 4 for BAL Assessment |

Table 4. Bushfire hazard assessment information



Bushfire Hazard Assessment - 7 King Rd, Lunawanna

| | | |
|--|---|--|
| <p>Client: [REDACTED] Address: 7 King Road Location: Lunawanna Title: 61369/27 Date: 02/03/2022 Data Source: field survey, ESRI, LIST</p> | <p> Development title  Assessment area 100m radius  Managed Land  Woodland  Forest</p> |  <p>ecotec</p> |
|--|---|--|

3. BUSHFIRE HAZARD ASSESSMENT

The Bushfire Attack Level was calculated for the property, based on the findings of the site assessment, and in accordance with Method 1 as outlined in AS 3959:2018. Slopes and distances were assessed with a Nikon Forestry Pro II laser rangefinder/clinometer. Classified vegetation was recorded north, west, and south of the property. Managed and/or excluded land was recorded to the east. The findings of the BAL assessment are outlined in Table 5 below. Site photos are provided in Figure 5.

| Bushfire Attack Level Assessment | | | | |
|--|--|----------------|--------------|--------------|
| Date | 12/02/2022 | | | |
| Assessor | Matthew Taylor | | | |
| BAL Classification | BAL 19 (rating when BHMP requirements have been met) | | | |
| DIRECTION | NORTH | SOUTH | EAST | WEST |
| Vegetation classification | Forest | Woodland | Managed Land | Managed land |
| Distance to classified vegetation | 0m | 53m | 0m | 0m |
| Effective slope under vegetation | Upslope | Downslope 0-5° | Upslope | Flat |
| Exclusions | - | e, f | e, f | e, f |
| Current BAL rating | BAL FZ | BAL 12.5 | BAL LOW | BAL LOW |
| Fire Danger Index: FDI 50 - applicable to all of Tasmania | | | | |
| Exclusions <ul style="list-style-type: none"> a) Vegetation of any type that is more than 100m from the site b) Single areas of vegetation less than 1ha in area and not within 100m of other areas of vegetation being classified vegetation c) Multiple areas of vegetation less than 0.25 hectares in area and not within 20m of the site, or each other, or of other areas of vegetation being classified vegetation d) Strips of vegetation less than 20m in width, regardless of length and not within 20m of the site or each other, or other areas of vegetation being classified vegetation e) Non-vegetated areas, that is, areas permanently cleared of vegetation, including waterways, exposed beaches, roads, footpaths, buildings, and rocky outcrops. f) Vegetation regarded as low threat due to factors such as flammability, moisture content or fuel load. This includes grassland managed in a minimal fuel condition, wetlands, maintained lawns, golf courses, maintained public reserves and parklands, sporting fields, vineyards, orchards, cultivate gardens, nature strips and windbreaks. g) Land zoned inner residential, general residential or village and less than 1500m² in area (<i>Bushfire Prone Areas Advisory Note No 1 – 2014</i>) | | | | |

Table 5. Bushfire Attack Level Assessment

BUSHFIRE HAZARD REPORT – 7 King Rd, Lunawanna



North Aspect – Upslope – Bare ground and introduced shrubs on property, forest on neighbouring property to north



West Aspect – Flat – Managed land on neighbouring property



South Aspect – 0-5° – Frontage onto King Road and managed land on neighbouring properties

Figure 5. Site photos

BUSHFIRE HAZARD REPORT – 7 King Rd, Lunawanna



East Aspect – Upslope – Managed land on neighbouring property



Narrow band of woodland vegetation in coastal reserve 88m southwest of the property



Gardens and modified woodland vegetation on neighbouring properties 53m to the south

Figure 5 (continued). Site photos

4. BUSHFIRE PROTECTION REQUIREMENTS

The property is in a bushfire prone area and the proposed development must therefore comply with Tasmanian bushfire-prone area legislation in order to mitigate the threat of bushfire to residents, their assets, emergency services personnel and the wider community. Specifically, the development must comply with bushfire protection measures outlined in the following standards:

- *Directors Determination – Application of Requirements for Building in Bushfire-Prone Areas (transitional) (v2.2)*
- *Australian Standard 3959 – Construction of Buildings in Bushfire Prone Areas; or*
- *NASH Standard – Steel Framed Construction in Bushfire Areas*

The following section of this report details bushfire protection measures for construction requirements, property access, water supply for firefighting and hazard management areas. The attached *Bushfire Hazard Management Plan* details property specific measures that will contribute towards compliance with the above standards.

Construction Requirements

Habitable buildings in bushfire prone areas must be designed and constructed to resist bushfire attack from burning embers, radiant heat, and flame contact. Buildings on this property must be constructed to the standards outlined for **BAL 19** in *AS 3959:2018 (Sections 3 and 7)*. Details are provided in Table 6.

| |
|---|
| Existing bushfire protection measures |
| Not applicable |
| Development requirements |
| <ul style="list-style-type: none"> - Building work must be designed and constructed to meet the requirements of BAL 19 in accordance with <i>AS 3959:2018</i> or <i>NASH Standard – Steel Framed Construction in Bushfire Areas</i> - BAL 19 construction standards apply to the entire building and to any attached or adjacent structures within 6 metres of the building. Alternatively, provide fire separation between the habitable building and adjacent Class 10 structures in accordance with Section 3.2 of AS3959. |
| Compliance with applicable standards |
| Development in accordance with the requirements outlined above will comply with <i>Section 4.1 - Directors Determination – Requirements for Building in Bushfire Prone Areas (transitional) (v2.2)</i> |

Table 6. Details of construction requirements

Hazard Management Area Requirements

A Hazard Management Area (HMA) is a zone where fuel loads are maintained at a low level so as to mitigate the impact of ember attack, radiant heat and direct flame on people and buildings. The HMA for the proposed development is shown on the map presented in Appendix 1 – Bushfire Hazard Management Plan. The HMA provides a **23-metre separation distance** between the building area and high-risk forest vegetation upslope to the north. Details are provided in Table 7.

| |
|---|
| Existing bushfire protection measures |
| The property is mostly cleared of vegetation at present. |
| Development requirements |
| <p>The entire site is to be managed as a Hazard Management Area (HMA). The Hazard Management Area must provide a separation distance of 23-metres between the building area and forest vegetation upslope at the northern property boundary.</p> <p>The HMA must be maintained in a low fuel condition throughout the bushfire season. An example of a hazard management area is provided in Figure 6. Best practice advice for management of HMAs can be found on the Tasmanian Fire Service website. Management will include a number of strategies such as:</p> <ul style="list-style-type: none"> - Removal of fallen limbs, sticks, leaf, and bark litter - Maintaining grass at less than a 100mm height - Removing bark and other flammable mulch (especially from against buildings) - Thinning out understory vegetation to provide horizontal separation between fuels - Pruning low-hanging tree branches (<2m from the ground) to provide vertical separation between fuel layers - Pruning larger trees to maintain horizontal separation between canopies - Minimize the storage of flammable materials such as firewood - Maintaining vegetation clearance around vehicular access and water supply points - Use of low-flammability species for landscaping purposes where appropriate - Clearing out any accumulated leaf and other debris from roof gutters <p>Additional site-specific fuel reduction or management may be required. An effective hazard management area does not require removal of all vegetation. Rather, vegetation must be designed and maintained in a way that limits opportunity for vertical and horizontal fire spread in the vicinity of the building being protected. Retaining some established trees can even be beneficial in terms of protecting the building from wind and ember attack. Ongoing maintenance for the life of the building being protected is critically important. A poorly maintained hazard management area will significantly increase risk to assets and occupants in a bushfire, regardless of construction standard. *</p> <p>*Text sourced from TFS website: (http://www.fire.tas.gov.au/userfiles/alanar/file/Nov%202019/190341%20TFS%20Building%20for%20Bushfire_Hazard%20Management%20Area_5%20July.pdf)</p> |
| Compliance with applicable standards |
| Development in accordance with the requirements outlined above will comply with <i>Section 4.4 - Directors Determination – Requirements for Building in Bushfire Prone Areas (transitional) (v2.2)</i> |

Table 7. Details of Hazard Management Area requirements

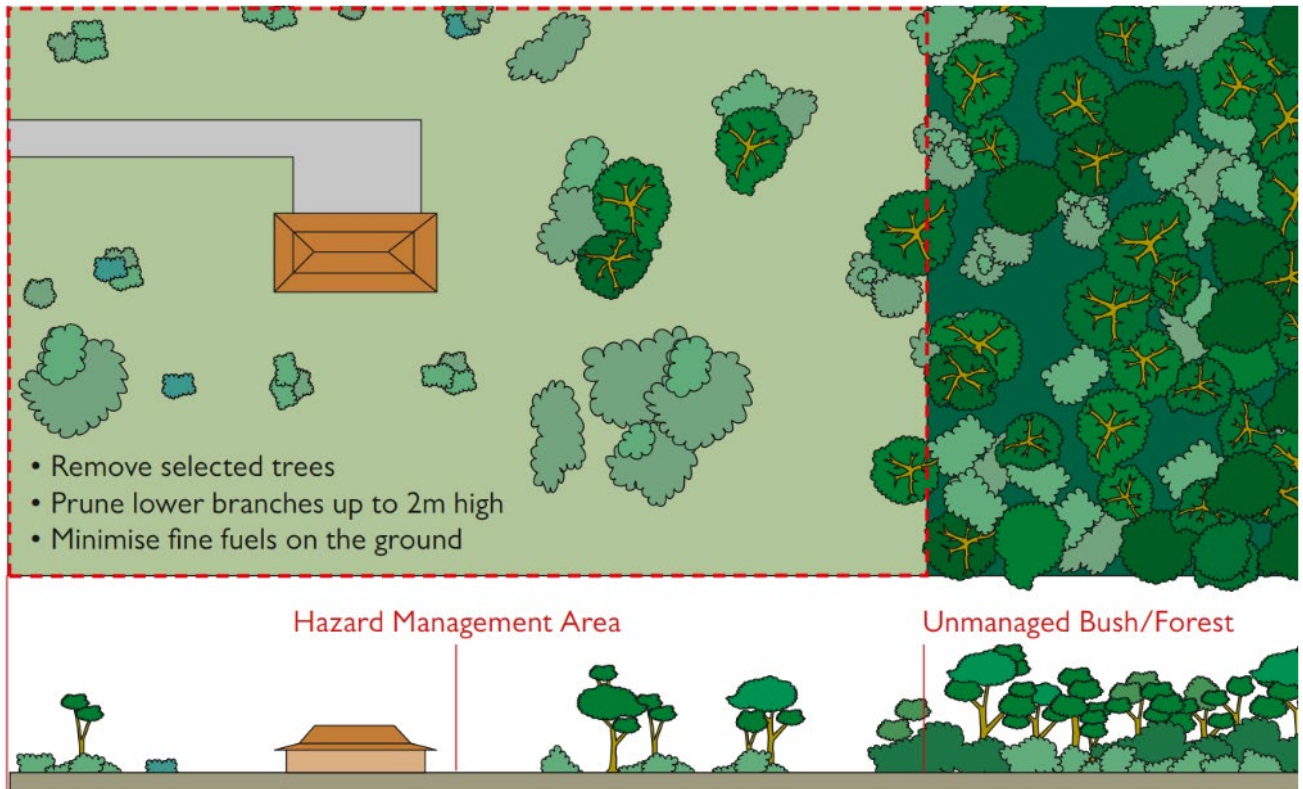


Figure 6. A typical Hazard Management Area as recommended by the Tasmanian Fire Service

Property Access

In order to ensure safe access and egress of residents and emergency personnel, vehicular access must be designed to prevent obstruction of domestic and emergency vehicles and provide access to bushfire prone vegetation. Details are provided in Table 8. There is currently no existing driveway access onto the property. The proposed driveway will be approximately 25 metres in length.

| |
|---|
| Existing bushfire protection measures |
| None. |
| Development requirements |
| <p>There are no specified design or construction requirements, because:</p> <ul style="list-style-type: none"> - Property access length is less than 30 metres - Access is not required for a fire appliance to access a firefighting water point. A water point will be provided at the frontage to King Rd (see Table 9 for details). <p>NOTE: A compliant access, turning area and hardstand is required where access to the firefighting water point is greater than 30m.</p> |
| Compliance with applicable standards |
| Development in accordance with the requirements outlined above will comply with <i>Section 4.2 - Directors Determination – Requirements for Building in Bushfire Prone Areas (transitional) (v2.2)</i> |

Table 8. Details of property access requirements

Water Supply for Firefighting

The supply of an adequate, accessible, and reliable water supply is essential for the protection of lives and property by emergency services personnel. The proposed development is not serviced by a reticulated water supply, therefore a static supply of at least 10,000 litres must be provided along with associated infrastructure. Details are provided in Table 9.

| Existing bushfire protection measures |
|--|
| None. |
| Development requirements |
| <p><u>Access to water supply</u></p> <ul style="list-style-type: none"> - The building area to be protected must be located within 90 metres of the firefighting water point - The distance must be measured as a hose lay, between the firefighting water point and the furthest part of the building area <p><u>Static water supply</u></p> <ul style="list-style-type: none"> - Must be a minimum of 10,000 litres per building area to be protected - This volume of water must not be used for any other purpose including firefighting sprinkler or spray systems - Must be metal, concrete, or lagged by non-combustible materials if above ground <p><u>Water offtake point</u></p> <ul style="list-style-type: none"> - A remotely located water offtake point will be located at the frontage of the property onto King Rd. <p><u>Fittings and pipework for connection to firefighting equipment</u></p> <ul style="list-style-type: none"> - Must have a minimum nominal internal diameter of 50mm - Be fitted with a valve with a minimum nominal internal diameter of 50mm - Be metal or lagged by non-combustible materials if above ground - Where buried, have a minimum depth of 300mm - Provide a DIN or NEN standard forged Storz 65 mm coupling fitted with a suction washer - Ensure the coupling is accessible and available for connection at all times - Ensure the coupling is fitted with a blank cap and securing chain (minimum 220 mm length) - Where a remote offtake is installed, ensure the offtake is in a position that is: <ul style="list-style-type: none"> o Visible and accessible to allow connection by firefighting equipment; o At a working height of 450 – 600mm above ground level; and o Protected from possible damage, including damage by vehicles <p><u>Identification of firefighting water point</u></p> <ul style="list-style-type: none"> - The firefighting water point for a static water supply must be identified by a sign permanently fixed to the exterior of the assembly in a visible location. - The sign must comply with the Tasmania Fire Service Water Supply Signage Guideline published by the Tasmania Fire Service (http://www.fire.tas.gov.au/userfiles/jackl/file/BuildingForBushfire/TFS_Water_Signage_Guidelines_v1.0_201702.pdf). <p><u>Hardstand</u></p> <ul style="list-style-type: none"> - A hardstand area is not required as a water offtake point will be provided within 3 metres of King Road. <p>NOTE: A compliant access, turning area and hardstand is required where access to the firefighting water point is greater than 30m.</p> |
| Compliance with applicable standards |
| Development in accordance with the requirements outlined above will comply with <i>Section 4.3 - Directors Determination – Requirements for Building in Bushfire Prone Areas (transitional) (v2.2)</i> |

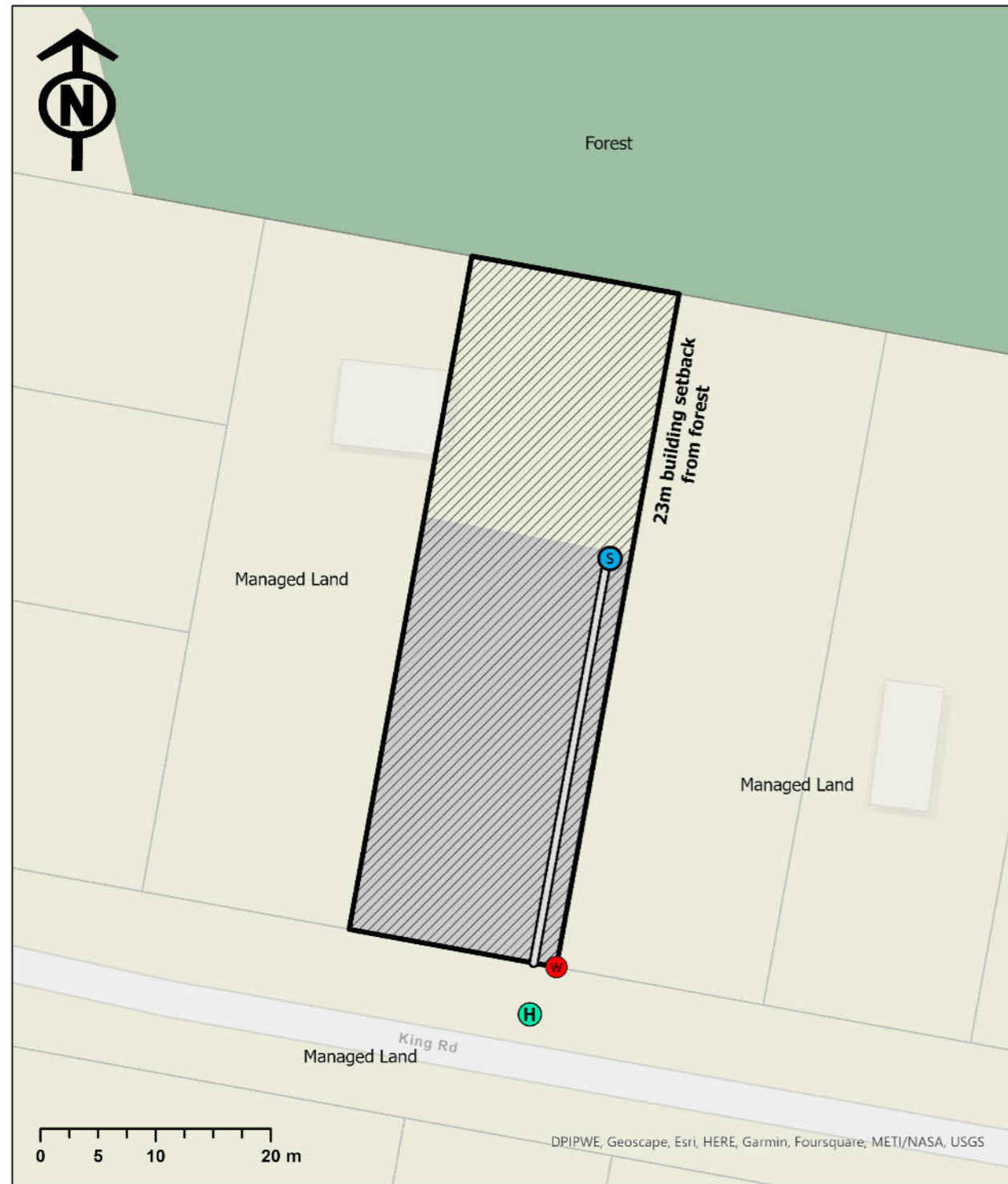
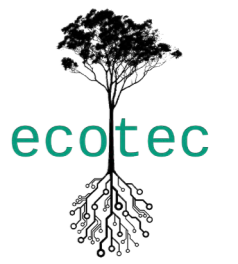
Table 9. Details of water supply requirements

5. CONCLUSION

The proposed residential development at 7 King Rd, Lunawanna is located within a bushfire-prone area. Forest vegetation to the north of the proposal presents the greatest hazard to residential buildings and people, with managed vegetation on remaining boundaries presenting a low risk. Hazard managed separation distances must be maintained between bushfire prone vegetation and habitable buildings. Residents will be responsible for maintaining low-fuel loads within the Hazard Management Area. A Bushfire Hazard Management Plan has been prepared and is attached to this report as Appendix 1. It provides a map and specific details on the hazard management measures required for this development. Adherence to the design features that have been outlined in this report will ensure that the proposed development will comply with bushfire-prone areas legislation (see Table 1, page 4) and will thereby ensure that the threat of bushfire to residents, their property, emergency personnel and the wider community are mitigated and reduced to an acceptable level.

6. REFERENCES

- Australian Building Codes Board (2019). *National Construction Code - Volume 2*. ABCB.
- Standards Australia Limited (2020). *AS 3959-2018 Amendment 2:2020 - Construction of buildings in bushfire prone areas (incorporating Amendments Nos 1 and 2)*. Sydney: SAI Global Limited.
- Department of Justice (Tasmania). (2020). *Directors Determination - Requirements for building in bushfire prone areas (transitional) v2.2*. Hobart, TAS, Australia.
- Tasmanian Planning Commission. (2017). *Planning Directive 5.1 Bushfire-Prone Areas Code*. Hobart: Tasmanian Planning Commission.
- Tasmanian Planning Commission. (2018). *Tasmanian Planning Scheme - Section C13.0 Bushfire-Prone Areas Code*. Hobart: Tasmanian Planning Commission.
- Resource Management & Conservation Division of the Department Primary Industry & Water (2020). *TASVEG 4.0, Tasmanian Vegetation Map*. Tasmania
- Tasmanian Government, Land Information System Tasmania, www.thelist.tas.gov.au



| | | |
|---|---|--|
| Client: [REDACTED] Address: 7 King Rd Location: Lunawanna Title: 61369/27 Date: 20/07/2022 Data Source: field survey, ESRI, LIST | <ul style="list-style-type: none"> Property boundary Hazard Management Area (Entire Property) Building Area Driveway Static water supply (10,000 L) Water access point Hardstand and turning area (King Rd) | |
|---|---|--|

NOTES

Bushfire Hazard Assessment Report

- This Bushfire Hazard Management Plan is to be read in conjunction with the preceding Bushfire Hazard Report (Ecotec – March 2022), which provides additional detail on hazard mitigation requirements.

Existing and Proposed Use

- The property is currently vacant residential land.
- A new residential building is proposed (Class 1a).

| | |
|--|---|
| <p>Bushfire Hazard Management Area</p> <ul style="list-style-type: none"> - The entire property must be managed as a Hazard Management Area (HMA). - Buildings must be constructed within the Building Area to ensure a separation distance between buildings and classified vegetation that is compliant with requirements for BAL 19 as per AS 3959. - Vegetation in the Hazard Management Area must be maintained in a low fuel state: <ul style="list-style-type: none"> o Removing of fallen limbs, sticks, leaf, and bark litter o Maintaining grass at less than a 100mm height o Thinning out understory vegetation to provide horizontal separation between fuels o Pruning low-hanging tree branches to provide vertical separation between fuel layers o Pruning larger trees to maintain horizontal separation between canopies o Use of low-flammability species for landscaping purposes where appropriate - Fences should be made of non-combustible material. - Paths and other non-combustible landscaping features should be located adjacent to buildings. - See DD v2.2 Section 4.4 | <p>Public and Firefighting Access Requirements</p> <ul style="list-style-type: none"> - There are no specified design or construction requirements: <ul style="list-style-type: none"> o Property access length is less than 30 metres: and o Access is not required for a firefighting appliance to access a water offtake point, because a water offtake point is to be located at the frontage onto King Rd. - NOTE: A compliant access, turning area and hardstand is required where access to the firefighting water point is greater than 30m. - See DD v2.2 Section 4.2 |
| <p>Construction Standards – BAL 19</p> <ul style="list-style-type: none"> - Building work must be designed and constructed to meet the requirements of BAL 19 in accordance with <i>AS 3959:2018</i> or <i>NASH Standard – Steel Framed Construction in Bushfire Areas</i> - BAL 19 construction standards apply to the entire building and to any attached or adjacent structures within 6 metres of the building. - See DD v2.2 Section 4.1 | <p>Static Fire Fighting Water Supply</p> <ul style="list-style-type: none"> - Building must be provided with a 10,000-litre static water supply dedicated for firefighting purposes - A water offtake point is to be located at the frontage of the property within 3m of King Rd (see map). - A hardstand is not required. King Road provides adequate access to the water offtake point for a firefighting appliance. - See DD v2.2 Section 4.3 |

| | |
|-------------------------------------|----------------|
| Bushfire Hazard Practitioner | Matthew Taylor |
| Accreditation Number | BFP - P |
| Scope of Accreditation | 1, 2, 3A, 3B |
| Date | 20/07/2022 |
| Signed | |

CERTIFICATE OF QUALIFIED PERSON – ASSESSABLE ITEM

Section 321

To: Owner /Agent
 Address
 Suburb/postcode

Form **55**

Qualified person details:

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

Qualifications and Insurance details:

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

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

Details of work:

Address: Lot No:
 Certificate of title No:
The assessable item related to this certificate:
(description of the assessable item being certified)
Assessable item includes –

- a material;
- a design
- a form of construction
- a document
- testing of a component, building system or plumbing system
- an inspection, or assessment, performed

Certificate details:

Certificate type:
(description from Column 1 of Schedule 1 of the Director's Determination - Certificates by Qualified Persons for Assessable Items n)

This certificate is in relation to the above assessable items, at any stage, as part of – (tick one)

building work, plumbing work or plumbing installation or demolition work

OR

a building, temporary structure or plumbing installation

In issuing this certificate the following matters are relevant –

| | |
|------------------------|--|
| Documents: | <ul style="list-style-type: none">- Bushfire Hazard Report v1.1 20/07/2022- Bushfire Hazard Management Plan v1.1 20/07/2022 |
| Relevant calculations: | N/A |
| References: | <ul style="list-style-type: none">- Standards Australia Limited (2020). AS 3959-2018 Amd 2:2020 Construction of buildings in bushfire prone areas (incorporating Amendments Nos 1 and 2). Sydney: SAI Global Limited.- Tasmanian Government, Land Information System Tasmania, www.thelist.tas.gov.au- Department of Justice (Tasmania). (2020). Determination - Requirements for building in bushfire prone areas (transitional) v2.2 Hobart, TAS, Australia. |


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

| |
|---|
| <ul style="list-style-type: none">- Bushfire Hazard Assessment and Bushfire Attack Level (BAL) classification- The proposed development location has a rating of BAL 19- Bushfire Hazard Management Plan with management recommendations in accordance with the Directors Determination – Requirements for building in bushfire prone areas (transitional) v2.2 and AS3959-2018. |
|---|

Scope and/or Limitations

| |
|---|
| Reasonable steps have been taken to ensure that the information contained within this report is accurate and reflects the conditions on and around the lot at the time of assessment. The measures contained in Australian Standard 3959-2018 cannot guarantee that a building will survive a bushfire event on every occasion. This is substantially due to the unpredictable nature and behaviour of fire and extreme weather conditions. |
|---|

I certify the matters described in this certificate.

| | | | |
|-------------------|---|--|--|
| Qualified person: | <p style="text-align: center;"><i>Signed:</i></p> <div style="border: 1px solid black; padding: 5px; text-align: center;"></div> | <p style="text-align: center;"><i>Certificate No:</i></p> <div style="border: 1px solid black; width: 100px; height: 40px;"></div> | <p style="text-align: center;"><i>Date:</i></p> <div style="border: 1px solid black; padding: 5px; text-align: center;">21/07/2022</div> |
|-------------------|---|--|--|