



## BUSHFIRE HAZARD ASSESSMENT REPORT

PROPOSED CLASSROOMS  
32 MARANOA ROAD,  
KINGSTON

Dated April 2023

Report by Samuel Walters BFP-130

Report Code: J23-1

**Bushfire  
Tasmania**

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## 1. Report Summary

The purpose of this report is to provide a Bushfire Hazard Management Plan (BHMP) and Bushfire Attack Level (BAL) assessment in compliance with Planning Directive No. 5.1 Bushfire Prone Areas Code 2022, Director's Determination Requirements for Building in Bushfire-Prone Areas (transitional) Version 2.2 2020 and Australian Standard 3959 2018 (incorporating Amendments 1 & 2) in relation to 2 proposed new classrooms as well as 2 future classrooms at Calvin Christian Secondary School 32 Maranoa Road, Kingston (C.T. 132644/1).

Our findings conclude that the potential bushfire hazard risk for the proposal is tolerable providing the recommendations and findings of this report are followed and implemented in accordance with Planning Directive No. 5.1 Bushfire Prone Areas Code 2022 (Planning Directive), Director's Determination Requirements for Building in Bushfire-Prone Areas (transitional) Version 2.2 2020 (Director's Determination) and Australian Standard 3959 2018 (incorporating Amendments 1 & 2).

Table 4.4(E) in the Director's Determination states that the deemed to satisfy solution is to provide a hazard management area (HMA) of sufficient size to achieve a minimum BAL-12.5 outcome for the proposed buildings.

Bushfire-prone vegetation that poses the greatest threat is B. Woodland.

The classrooms will have an HMA that complies with BAL-12.5 and consists of separation distances to the property boundary on all aspects. HMA currently complies with low threat conditions in line with Clause 2.2.3.2(d)(e)(f) of AS3959 2018.

All classrooms have access to a mains firefighting water supply (hydrant) on the school grounds that is within a 120m hose lay in accordance with Table 4.3A in the Director's Determination.

Existing site access deemed to comply with Table 4.2(B) in the Director's Determination.

E1.5.1 A2 and E1.5.1 A3 in Planning Directive satisfied by bushfire hazard assessment report, BHMP and the Bushfire Emergency Strategy comprising Bushfire Emergency Plan and Bushfire Action Plan (see Appendix D).

As the site is an established functioning school, it is assumed that E1.5.1 P1 in the Planning Directive is satisfied.

## 2. Introduction

### 2.1. The Proposal

The proposal involves 2 proposed new classrooms as well as 2 future classrooms at the Calvin Christian Secondary campus at 32 Maranoa Road, Kingston (C.T. 132644/1).

### 2.2. Scope of Report

Bushfire Tasmania was engaged by Christian Schools Tasmania to undertake a Bushfire Hazard Management Plan (BHMP) and BAL assessment for planning approval for a proposed new classroom within a vulnerable use setting to determine vegetation management requirements, firefighting water supply requirements, site access requirements and construction requirements to comply with Planning Directive No. 5.1 Bushfire Prone Areas Code, 20<sup>th</sup> June 2022, Director's Determination Requirements for Building in Bushfire-Prone Areas (transitional) Version 2.2 2020 and Australian Standard 3959 – Construction of Buildings in Bushfire Prone Areas 2018 (incorporating Amendments 1 & 2).

The proposal is specifically assessed in accordance with E1.5.1 P1, E1.5.1 A2 and E1.5.1 A3 in the Planning Directive as well as Table 4.2B, Table 4.3A and Table 4.4(E) in the Director's Determination.

The site is assessed to a Fire Danger Index (FDI) of 50.

### 2.3. Property Information

Address: 32 Maranoa Road, Kingston

Zoning: Community Purpose

Municipality: Kingborough

Planning Scheme: Kingborough Interim Planning Scheme 2015

### 2.4. Planning Overlays

Based on the Kingborough Interim Planning Scheme:

- Bushfire Prone Areas
- Biodiversity Protection Area

### 3. Site Conditions and Observations

#### 3.1. Site Description

The subject property is located on the across/down-slope eastern side of Maranoa Road, on the corner with Sophia Street. The property is currently accessed directly off both Maranoa Road and Sophia Street.

The topography is gently to moderately sloped in the range of 4-8° with an east north easterly aspect.

The property has a history of maintained lawns and gardens with shrubs and small to medium sized trees. It is an existing school with several school buildings and play equipment, basketball courts sports grounds, roads and pathways.

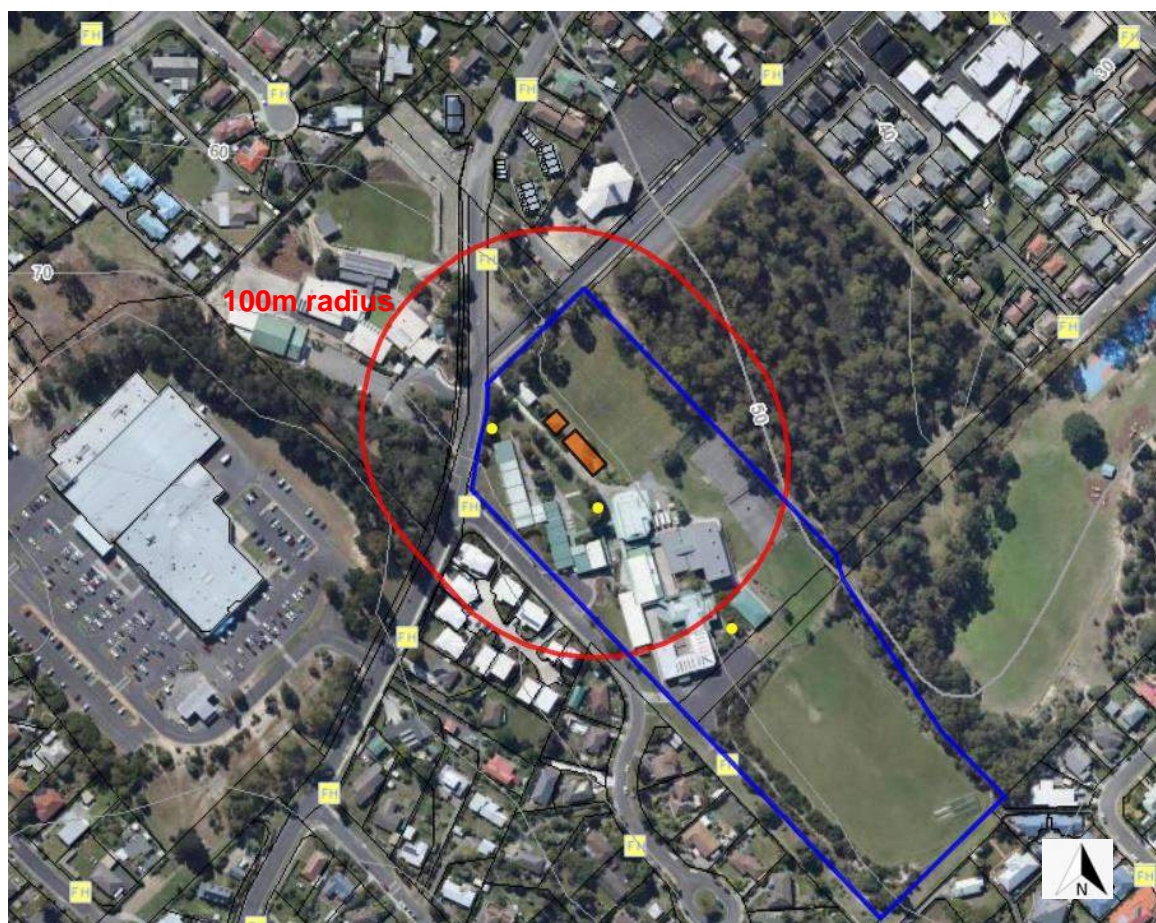


Figure 1: contoured listmap. [www.thelist.tas.gov.au](http://www.thelist.tas.gov.au) Subject property outline in blue with proposed classrooms in orange. Water hydrants shown as yellow squares and hydrants on school grounds indicated by yellow circles.

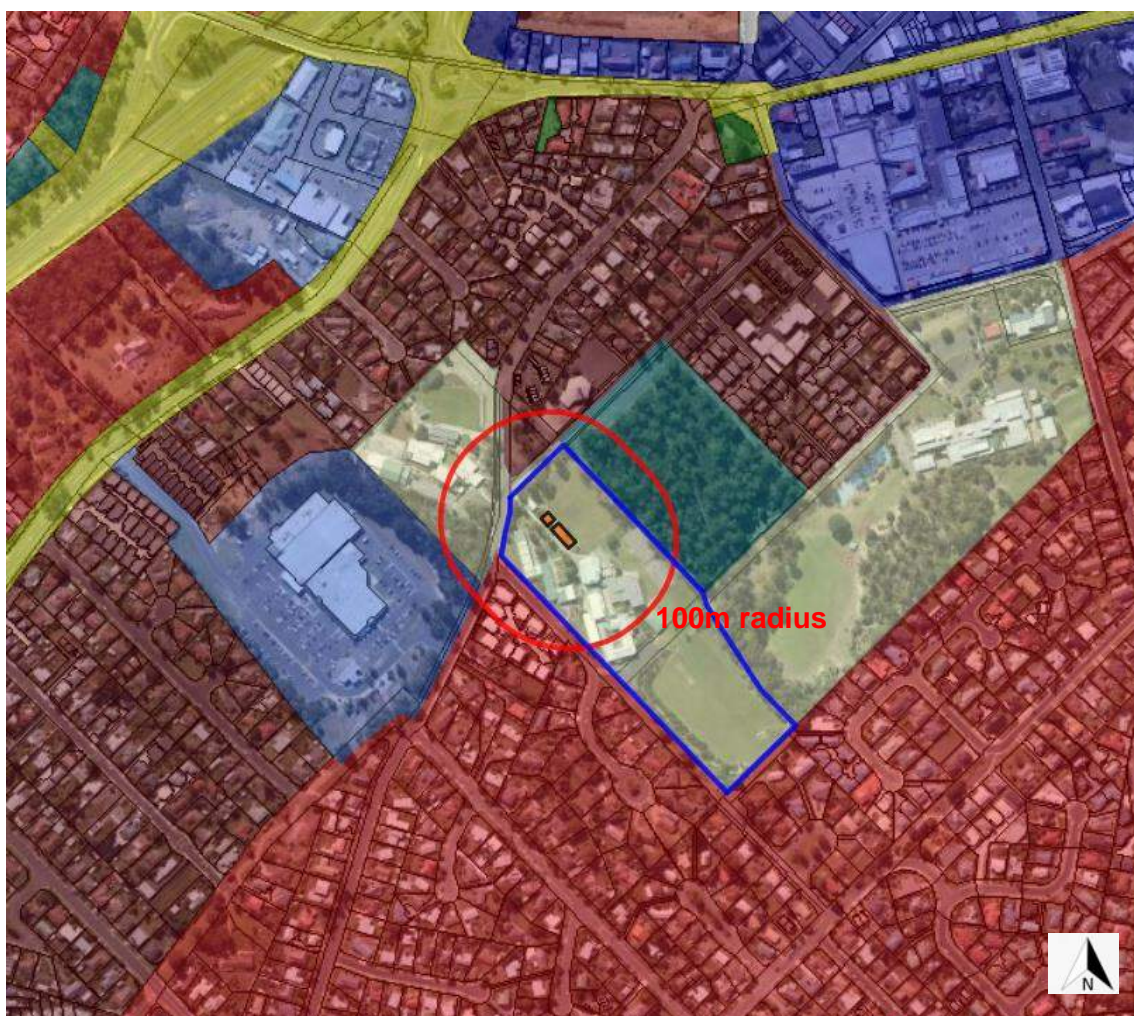


Figure 2: contoured zoning listmap. [www.thelist.tas.gov.au](http://www.thelist.tas.gov.au) Subject property outline in blue, proposed classrooms in orange. Shows site situated in community purpose zoning surrounded by low density residential and environmental management.

### 3.2. Surrounding Area

The subject site is surrounded by low density residential, inner residential and general business zoning, with the site itself zoned community purpose. Community zoning continues to the east of the school which incorporates Kingston Primary School. It also extends to the north west to include the primary school campus of Calvin Christian.

Low density residential which extends for several hundred meters to the east, south and south west with approximately 70-100m west of the school. Beyond this to the west is an area of general business which includes the 'Kingston Town Shopping Centre'. Surrounding this is inner residential that includes all land to the north and west and continues for 200-300m.

Environmental management zoning borders the site on the north eastern aspect and includes a remnant stand of vegetation approximately 3 hectares in size.

Properties within low density residential and inner residential are typically small house lots with minimal gardens.

Land surrounding the shopping centre is sealed carparks with a remnant strip of wooded vegetation between it and Calvin Christian Primary School.

Figure 3 below gives the TasVeg4.0 listmap of the area.



Figure 3: contoured TasVeg4.0 listmap. [www.thelist.tas.gov.au](http://www.thelist.tas.gov.au) Property outline in blue, proposed classrooms in orange.



Figure 4: contoured TasVeg4.0 listmap. [www.thelist.tas.gov.au](http://www.thelist.tas.gov.au) Property outline in blue, proposed classrooms in orange. Red shading indicates down-slope bushfire prone woodland vegetation within 100m of proposal, approximately 55m from the site.



### 3.3. Additional Information

Construction not expected to be staged.

The most recent bushfire activity in the area was a planned burn in 2017-2018 within the reserve bordering the proposal.

The largest fire occurred in 1966-1967 which were the widespread devastating fires that covered a lot of south eastern Tasmania. This fire burned through the reserve adjoining the site, as well as to the north and south.

To the north, some 750m away is part of the 1997 Ridgeway fire that burnt from this localised pocket toward Hobart.

See Figure 5 below for these events on a listmap.



Figure 5: Fire History listmap. [www.thelist.tas.gov.au](http://www.thelist.tas.gov.au) Subject property outline in blue, fire events denoted by hashed areas with dates inserted.

## 4. Bushfire Attack Level Assessment

### 4.1. Vegetation

According to TasVeg4.0, the entire proposal is situated within vegetation classified as (FUR) urban areas. The suburban land and school grounds surrounding to the north west, south west and south east are well established.

This land is considered low threat with managed gardens on small housing lots as well as managed school grounds and carparks surrounding the shopping centre

The adjoining property to the north east is classed as bushfire prone woodland, having been identified as (DVG) *Eucalyptus viminalis* grassy forest and woodland. Immediately south east of this is an area classified as (DAS) *Eucalyptus amygdalina* forest and woodland on sandstone.

Both stands have large trees but with significant modification over the years. Pathways and removal of fallen trees has left areas sparse/cleared. Overall, the canopy coverage does not exceed 30%.

#### Fire Behaviour

Fire behaviour suggests that any threat to the proposed classrooms/existing school buildings would be from an up-slope to across-slope fire fanned by north westerly to northerly winds on the north eastern aspect. The resulting fire would likely be a flanking fire, however if winds shift more north easterly a head fire cannot be ruled out.

Under this situation, school buildings would likely experience ember attack, possibly with spot fires ahead of the front. Spot fires may be unpredictable/erratic depending on wind conditions.

The following table gives the predominant vegetation types for ground cover, middle growth and canopy for the surrounding area within 150m building area:

Table 1: Predominant woodland vegetation to the north east.

Vegetation Height	Species
Canopy	Eucalyptus <i>amygdalina</i> (Black Peppermint) Eucalyptus <i>obliqua</i> (Stringybark) Few Eucalyptus <i>viminalis</i> subsp <i>viminalis</i> (White Gum)
Middle Growth	Acacia <i>melanoxylon</i> (Blackwood) Leptospermum <i>scoparium</i> (Tea Tree) Acacia <i>verticillata</i> (Prickly Moses) Exocarpos <i>cupressiformis</i> (Common Native Cherry) Bedfordia <i>salicina</i> (Narrow Blanket Leaf) Banksia <i>marginata</i> (Silver Banksia) Dondonaea <i>viscosa</i> subsp <i>spatulata</i> (Broadleaf Hopbush)
Ground Cover	Assorted native and introduced pasture species Assorted native shrub species Pteridium <i>esculentum</i> (Bracken) Lomandra <i>longifolia</i> (sagg)

Vegetation on the north eastern aspect is assessed as B. Woodland in AS3959 2018. See photographs in appendix A for an indication of the surrounding vegetation.

#### 4.2. Slope

Majority of land below woodland bushfire prone vegetation ranges between approximately 0-5° with an east north easterly aspect.

### 4.3. Separation Distances

Refer to Table 2 indicating the minimum defensible space distances required from woodland bushfire prone vegetation in order to achieve BAL-12.5.

Table 2: Defendable Space Table for proposed classrooms

	North West	North East	South East	South West
Vegetation Type	Managed [AS3959 clause 2.2.3.2(d)(e)(f)]	B. Woodland	Managed [AS3959 clause 2.2.3.2(d)(e)(f)]	Managed [AS3959 clause 2.2.3.2(d)(e)(f)]
Surrounding land relative to site	Up-slope / Across/flat	Down-slope 0-5°	Up-slope / Across/flat	Up-slope / Across/flat
Minimum Defendable Space Required to achieve BAL-12.5	N/A	≥26m	N/A	N/A
Achieved Defendable Space with HMA	≥100m	55m	≥100m	≥100m

All separation distances are in accordance with Table 2.6 in AS3959 2018.

Implementation and ongoing maintenance of these separation distances and subsequent HMA would allow a BAL-12.5 compliant building solution on all aspects of the proposed classroom.

The HMA extends to the property boundary on all aspects. It is the intention for the entirety of the site to be maintained in a low threat state.

HMA compliance can be achieved by the mowing of grassland and ongoing maintenance of shrubs and tree vegetation on the subject properties. Grass should be mowed to a nominal height of 100mm or less as per Clause 2.2.3.2 (f) of AS3959 2018.

New vegetation may be planted within the HMA but must satisfy low threat conditions in accordance with AS3959 2018 clause 2.2.3.2(d)(e)(f).

New shrubs up to 2m in height can be planted either individually or in single rows but must be spaced with a minimum 4m between foliage and should not be within 6m of any building.

New vegetation <1m in height may be planted not closer than 2m from buildings.

Large plants 4m or more in height can be planted but low and mid-level growth up to 2m in height to be trimmed and maintained over time with a minimum spacing between crowns of 18m.

New vegetation 2m or more in height should not be planted within 10m of any building.

All new vegetation 1-4m in height should be spaced from large vegetation (>4m) at least 10m from tree trunk.

#### 4.4. BAL

Based on all the assessed variables, the BAL rating can be seen in Table 3. This in accordance with Table 2.6 of AS3959 2018. Table 3.1 of AS3959, 2018 (incorporating Amendments 1 & 2) describes BAL-12.5:

Table 3: BAL Rating

Bushfire Attack Level (BAL)	Heat flux exposure thresholds for classified vegetation within 100m of site	Predicted bushfire attack and levels of exposure	Construction Sections
New Classrooms BAL - 12.5 All Aspects	$\leq 12.5 \text{ kW/m}^2$	Ember attack	3 & 5

## 5. Construction Requirements

The proposed classrooms must comply with construction standards as detailed by AS3959, 2018 sections 3 and 5, specifically Clauses 5.2 to 5.8 for BAL-12.5.

## 6. Site Access & Firefighting Water Supply

### 6.1. Site Access

Site access is important for firefighting services in order to enter and exit the property under all circumstances, especially threatening and potentially dangerous conditions. There are certain design parameters that must be met to allow safe vehicle and foot access by firefighters and emergency services.

An approximate 95m long sealed access road off Maranoa Road provides access to the closest on-site fire hydrant for the proposal. This access road is 3-5m wide and opens out to 5-7m adjacent to the closest hydrant, satisfying hardstand requirements. There is a sealed access road down to the evacuation meeting point and library, which acts as a Y turning head that can be used for a turning area for fire fighting vehicles as well as the large level turning area at the evacuation point/oval on the northern side of the library.

Site access is deemed to comply with Table 4.2(B) in the Director's Determination.

## 6.2. Water Supply for Firefighting

The ability for firefighters and occupants alike to have easy and safe access to a firefighting water supply point is paramount. Water supply points and fire hydrants (whether on the subject property or along public streets and roads) must be visible and positioned to allow easy/safe approach.

The proposal is within 120m as a hose lay of a reticulated firefighting water supply (hydrant) on school grounds and therefore is deemed to comply with Table 4.3A in the Director's Determination.

Existing school buildings are within a 120m hose lay of other on-site fire hydrants.

## 7. Vulnerable Use Objectives & Requirements

### 7.1. Appropriate Site Location and Risk Exposure

This property is used as a place of education. Buildings are class 9b and as such are defined as a vulnerable use under Planning Directive 5.1. This applies also to transitional Director's Determination V2.2 2020, specifically Table 4.4(E) and Table 4.5. As per E1.5.1 P1 in the Planning Directive, any vulnerable use must only be approved on sites where the bushfire threat is tolerable and appropriate for the purpose of use. This can be achieved via imposed bushfire mitigation measures or through careful site selection and positioning.

In this case the school is established and functioning. It is therefore assumed that E1.5.1 P1 in the Planning Directive is satisfied.

### 7.2. Emergency Planning

Vulnerable use sites must have in place a Bushfire Emergency Strategy and Plan in accordance with the TFS Bushfire Emergency Planning Guidelines.

All vulnerable sites are assessed against E1.5.1 A2 in respect to emergency planning.

A Bushfire Emergency Strategy (Bushfire Emergency Plan and Bushfire Action Plan) has been created to provide primary and secondary actions in the event of a fire (see Appendix D). This also provides pre-emptive strategies and advice on bushfire emergency planning, procedures and preparedness.

The primary action is to shelter in-place in the on-site refuge, being the library and classrooms below, which can accommodate all students and staff on site.

The secondary action is to evacuate if safe to do so. The off-site refuge is the school grounds of the Calvin Christian Primary School, on the opposite side of Maranoa Road.

These plans should be reviewed annually and updated to reflect changes in occupant numbers and needs as well as alterations to the school or school grounds.

### 7.3. Bushfire Hazard Management Plan

The purpose of hazard management areas (HMA) is to provide a vegetation buffer in order to reduce fuel loads to a manageable level and aid in preservation of life and property as well as facilitate safe movement during evacuation. HMA's can be vegetated but in a manner that does not promote fire spread and helps occupants and/or firefighters to control fire activity (where possible) within the HMA.

However, HMA's are not intended as fail safe, they are highly dependent on the prevailing weather and fire conditions on the day as well as to what degree they are maintained (measured against clause 2.2.3.2 of AS3959 2018).

E1.5.1 A3 in the Planning Directive states a vulnerable use must be provided with a BHMP showing appropriate separation from the bushfire threat and bushfire protection measures.

The BHMP in Appendix C has sufficient separation to provide a BAL-12.5 deemed to satisfy outcome for all aspects of the proposed classrooms. It also indicates the nearest deemed to satisfy compliant fire hydrant and access for firefighters and emergency services. The HMA is compliant with Table 4.4(E) in the Director's Determination, site access is compliant with Table 4.2(B) and water supply compliant with Table 4.3A.

## 8. Additional Planning Requirements

### 8.1. Environmental Values & Vegetation Management

There are no specific planning scheme requirements in terms of vegetation management. In addition, there are no threatened species of flora or fauna.

Part of the HMA is within a biodiversity protection area. However, there is no need for any vegetation removal and as such will not change from existing site conditions.

## 9. Regulations

Regulations governing construction in bushfire prone areas encompass all documents relating to planning, design and implementation. These documents include:

- Tasmania Building Act 2016
- Tasmania Building Regulations 2014
- Tasmania Building Regulations 2016
- Director's Determination Requirements for Building in Bushfire-Prone Areas (transitional) Version 2.2 2020
- Planning Directive No.5.1 Bushfire-Prone Areas Code – 20<sup>th</sup> July 2022
- BCA (as part of the National Construction Code) – 2019 Amendment 1
- AS3959 (2018) (incorporating Amendments 1 & 2) – Construction of buildings in bushfire prone areas
- The ABCB Performance Standard for Private Bushfire Shelters Part 1

## 10. Report Limitations and General Information

This report aims to provide sound advice, best practice strategies and measures in accordance with AS3959 2018 (incorporating Amendments 1 & 2), Planning Directive No 5.1 Bushfire-Prone Areas Code – 20<sup>th</sup> July 2022, the Director's Determination Requirements for Building in Bushfire-Prone Areas (transitional) Version 2.2 2020 relevant to the site assessed.

We rely on information provided to us by clients and agents on behalf of clients. The assessment provided in this report relates only to the subject proposal/land/property, which has been identified in this report.

It is outside the scope of our accreditation to provide performance solutions. Bushfire Tasmania can provide performance solutions only with the advice and approval of the Tasmania Fire Service.

The purpose of recommendations contained in this report are to deliver clarity of circumstances relating to potential bushfire hazard(s). In addition, they are designed to assist in developing mitigation measures and on-going management of the site and surrounding area to provide a tolerable level of risk in accordance with all relevant standards. Any proposed future building(s) or changes in vegetation that may impact this site from a bushfire hazard perspective have not been considered in this report. No responsibility is taken for any loss as a result of actions taken which may be contrary to AS3959 2018 or the Directors Determinations. All findings and conclusions in this report are based on these.



Of particular note and importance from AS3959:

*This standard is primarily concerned with improving the ability of buildings in designated bushfire-prone areas to better withstand attack from bushfire thus giving a measure or protection to the building occupants (until the fire front passes) as well to the building itself.*

*Improving the design and construction of buildings to minimize damage from the effects of bushfire is but one of several measures available to property owners and occupiers to address damage during bushfire. Property owners should be aware that this Standard is part of a process that aims to lessen the risk of damage to buildings occurring in the event of the onslaught of bushfire. Other measures of mitigating damage from bushfire fall within the areas of planning, subdivision, siting, building design, landscaping and maintenance.*

Furthermore, compliance with AS3959 does not guarantee that no loss will occur to life or property as a result of bushfire, as stated in AS3959:

*It should be borne in mind that the measures contained in this Standard cannot guarantee that a building will survive a bushfire event on every occasion. This is substantially due to the degree of vegetation management, the unpredictable nature and behaviour of fire, and extreme weather conditions.*

*The survivability of buildings is also dependent on a combination of measures such as landscaping, water supplies, access, building design and maintenance. Care should also be exercised when siting and designing for these measures when constructing a building under this Standard.*

Monitoring current TFS advice is imperative and landowners should be aware in Catastrophic Fire Danger Rating conditions, even very well-prepared buildings may not be safe. Residents in bushland areas should not plan to defend any building, regardless of any preparations they have made.

It is the intention that based on the implementation of sound bushfire prevention measures in conjunction with on-going maintenance and keeping informed of possible fire threats that loss of property and/or life may be reduced.

The bushfire emergency plan and action plan should be developed and rehearsed to ensure occupants can realistically enforce it should the need arise. This was developed in line with the TFS Bushfire Emergency Planning Guidelines V3.0 2021, which can be used as a reference to better understand evacuation procedures and planning.

Fire warden for the site as well as other ECO staff with responsibilities for bushfire emergency should listen to ABC local radio for updates, check the TFS website or call the bushfire hotline in the event of a fire in your area. Contact emergency services for advice and to provide information of the status of the school and occupants.

This assessment and BHMP is valid for 6 years from the date of issue.

## 11. Recommendations

### Vulnerable Use Suitability

- As per E1.5.1 P1 in the Planning Directive, any vulnerable use must only be approved on sites where the bushfire threat is tolerable and appropriate for the purpose of use.

In this case the school is established and functioning. It is therefore assumed that E1.5.1 P1 in the Planning Directive is satisfied.

### Bushfire Emergency Planning

- Vulnerable sites are assessed against E1.5.1 A2 in respect to emergency planning.
- A Bushfire Emergency Strategy (Bushfire Emergency Plan and Bushfire Action Plan) has been created to provide primary and secondary actions in the event of a fire (see Appendix D).
- The primary action is to shelter in-place in the on-site refuge, being the library and classrooms below, which can accommodate all students and staff on site.
- The secondary action is to evacuate if safe to do so. The off-site refuge is the school grounds of the Calvin Christian Primary School, on the opposite side of Maranoa Road.
- These plans should be reviewed annually and updated to reflect changes in occupant numbers and needs as well as alterations to the school or school grounds.

### Hazard Management Areas

- Vulnerable use sites must satisfy E1.5.1 A3 of the Planning Directive 5.1. This states appropriate separation is required as part of a BHMP along with bushfire protection measures. The BHMP provided as part of this assessment (Appendix C) demonstrates adequate separation from the bushfire threat as well as showing compliant site access and firefighting water supply.

Table 4.4(E) in the Director's Determination states that a minimum BAL-12.5 deemed to satisfy compliant building solution must be achieved for a vulnerable use. For the proposed classrooms, separation distances to the property boundary on all aspects will provide sufficient separation to satisfy a BAL-12.5 outcome.

- HMA compliance can be achieved by the mowing of grassland and ongoing maintenance of shrubs and tree vegetation on the subject properties. Grass should be mowed to a nominal height of 100mm or less as per Clause 2.2.3.2 (f) of AS3959 2018. Refer to Section 4.3 in the report for more detail.

Future plantings must take into account the requirement to maintain the HMA's as low threat and in line with this report and Clause 2.2.3.2 (d)(e)(f) in AS3959 2018.

### Construction Requirements

- All aspects of the proposed classrooms (and future classrooms) must comply with construction standards as detailed by AS3959, 2018 sections 3 and 5, specifically Clauses 5.2 to 5.8 for BAL-12.5.

### Site Access

- An approximate 95m long sealed access road off Maranoa Road provides access to the closest on-site fire hydrant for the proposal. This access road is 3-5m wide and opens out to 5-7m adjacent to the closest hydrant, satisfying hardstand requirements. There is a sealed access road down to the evacuation meeting point and library, which acts as a Y turning head that can be used for a turning area for fire fighting vehicles as well as the large level turning area at the evacuation point/oval on the northern side of the library.

Site access is deemed to comply with Table 4.2(B) in the Director's Determination.

### Firefighting Water Supply

- The proposal is within 120m as a hose lay of a reticulated firefighting water supply (hydrant) on school grounds and therefore is deemed to comply with Table 4.3A in the Director's Determination.

## 12. Conclusion

2 new classrooms and 2 future classrooms are proposed at the Calvin Christian Secondary School, 32 Maranoa Road, Kingston. The greatest bushfire threat to the proposal is B. Woodland vegetation on the north eastern aspect.

The existing school is presumed to satisfy E1.5.1 P1 in Planning Directive 5.1. E1.5.1 A2 is satisfied with a Bushfire Emergency Plan and Bushfire Action Plan. E1.5.1 A3 and Table 4.4(E) of the Director's Determination is achieved with the BHMP attached.

Existing site access is deemed to comply with Table 4.2(B) of the Director's Determination and firefighting water supply is deemed to comply with Table 4.3A.

It is the conclusion of this bushfire hazard assessment report that if all findings and recommendations contained within this report are implemented and maintained the proposal should proceed. The classrooms can achieve a BAL-12.5 outcome in accordance with the relevant standards.

Any unforeseen circumstances at the time of this report such as alterations to vegetation or re-siting of buildings have not been considered and may require re-assessment if significantly different to site conditions/plans at the time of inspection.

The site has been assessed in accordance with Planning Directive No. 5.1 Bushfire Prone Areas Code 20<sup>th</sup> July 2022, Director's Determination Requirements for Building in Bushfire-Prone Areas (transitional) Version 2.2 2020 and Australian Standard 3959 – *Construction of Buildings in Bushfire Prone Areas 2018* (incorporating Amendments 1 & 2).



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Bushfire Tasmania

### 13. References

- AS3959-2018 Construction of buildings in bushfire prone areas, Standards Australia, Sydney (incorporating Amendments 1 & 2).
- Director's Determination Requirements for Building in Bushfire-Prone Areas (transitional) Version 2.2 2020,
- Director's Determination – Application of Requirements for Building in Bushfire-Prone Areas (transitional) Version 1.4 2021.
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- Planning Directive No.5.1 Bushfire-Prone Areas Code – 20<sup>th</sup> July 2022.
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- Bushfire Planning Group, *Guidelines for Development in Bushfire Prone Areas of Tasmania*, Tasmania Fire Service, Hobart, 2005.
- [www.fire.tas.gov.au](http://www.fire.tas.gov.au)
- TFS *Bushfire Emergency Planning Guidelines* Version 3.0, 2021. Tasmania Fire Service.
- TFS *Building for Bushfire booklet*, Tasmania Fire Service, June 2020.
- TFS *Water Supply Signage Guideline* Version 1.0, Tasmania Fire Service, February 2017.
- TFS *Firefighting Water Supplies booklet*, Tasmania Fire Service.

**Appendix A – Site Photographs**

**Photograph 1 – Looking north east from closest on-site fire hydrant (left). Proposed classrooms on right side of access road.**



**Photograph 2 – Looking north east along access road off Maranoa Road. Proposed classrooms site on the right.**



Photograph 3 – Looking south from access road and closest on-site fire hydrant (on the right as per photo 1). Primary action in case of bushfire route toward onsite refuge (library) on the left.



Photograph 4 – Looking north toward evacuation meeting point from northern side of library.



Photograph 5 – Looking east north east from near photo 4 location toward courts and woodland beyond. Library and classrooms on the right.



Photograph 6 – Looking south west from entrance to Secondary campus (end of driveway seen in photo 23). Primary school campus opposite side of Maranoa Road on the right.





Photograph 7 – Looking north-north west from entrance to Secondary campus off Maranoa Road. Primary school campus opposite side of Maranoa Road and route of secondary action off-site refuge.



Photograph 8 – Looking north from entrance to Secondary campus off Maranoa Road. Primary school campus opposite side of Maranoa Road (left).



Photograph 9 – Looking north from start of pathway into woodland bushfire prone vegetation to the south east of proposal. Wire fence on left separates managed level area of school grounds.



Photograph 10 – Looking north west along western section of bushfire prone vegetation, bordering the school grounds. Cleared pockets/strips are scattered throughout.



**Photograph 11 – Looking north east from 10m north of photo 10.**



**Photograph 12 – Looking north west along eastern boundary of school grounds. Cleared and managed pathway strip approximately 9-11m wide, frequent use by community.**



Photograph 13 – Looking east north east from 50m north east of proposed classroom. Paths through the reserve are common, with cleared strips ranging from 2-10m wide.



Photograph 14 – Looking north along path seen on the left in photo 13.



Photograph 15 – Looking east north east into woodland from just north of photo 14 location.



Photograph 16 – Looking north west from middle of bushfire prone vegetation (same path as photo's 14 and 15).



Photograph 17 – Looking north along Sophia Street from near Sophia Street carpark. School grounds, small carpark and buildings on right.



Photograph 18 – Looking north within school grounds. Admin/office building on the left/middle. Undercover walkway leading toward library on right.



Photograph 19 – Looking east from undercover walkway toward library entrance (on-site refuge for shelter in-place). Evacuation assembly area on the left.



Photograph 20 – Internal courtyard adjacent to library, which can be used as evacuation assembly area.



Photograph 21 – Looking south toward evacuation assembly area from southern side of sports ground area.



Photograph 22 – Looking north-north west from assembly area. Sports ground on right and driveway on left (path toward off-site refuge).





Appendix B – Architectural/Designer Plans

CALVIN RELOCATABLE CLASSROOMS 2  
DEVELOPMENT APPLICATION 14/04/2023



PROJECT DETAILS	
DESIGNER NAME	JAWSARCHITECTS
ACCREDITATION NUMBER	CCK4711
OWNER/ CLIENT	Calvin Christian School
PROJECT ADDRESS	Secondary School Campus
LAND TITLE REF. NO. (EVIDENCE FORS AND VOLUMES)	V132844
TOTAL FLOOR AREA	Site 45.42m <sup>2</sup> GRA1 & GRA2 179m <sup>2</sup>
DESIGN WIND SPEED	* Engineer to confirm
SOIL CLASSIFICATION	* Engineer to confirm
BUSHFIRE FIVE PERCENT AREA RATING (BUSHFIRE ATTACK LEVEL)	* To be confirmed
ALPINE AREA	N/A
COMMONWEALTH ENVIRONMENT	LOW
OTHER KNOWN SITE HAZARDS (FLOODING, LANDSLIP, DISPERSIVE SOILS, SHAPE, SOILS, SANDS/DUMPS, BURIED CONDUITS, LANDFILL ETC)	N/A
CURRENT ZONE	?

DRAWING No.	DESCRIPTION
DA01	COVER PAGE
DA02	SITE PLAN
DA03	GROUND FLOOR PLAN
DA04	ROOF PLAN
DA05	ELEVATIONS
DA06	SECTIONS
DA07	3D VIEWS

23012 DA01

**JAWSARCHITECTS**  
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 10/100 MARANOA RD  
 KINGSTON TAS 7050  
 TEL: 081 455 1234  
 WWW.JAWSARCHITECTS.COM.AU

**PROJECT NAME:**  
**CALVIN RELOCATABLE CLASSROOMS 2**  
 Secondary School Campus 32 Maranoa Rd,  
 Kingston TAS 7050  
 For Calvin Christian School

**STATUS:** DEVELOPMENT APPLICATION

**DRAWING NAME:** COVER PAGE

**SCALE:** AS SHOWN @ A3  
**DATE:** 14/04/2023  
**DRAWN:** HL  
**CHECKED:** DV  
**ACCREDITED DESIGNER:** CCK4711  
**ACCREDITED NUMBER:** CCK4711  
**CAD REF:**

**CALVIN**  
CALVIN CHRISTIAN SCHOOLS



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**PROJECT NAME:**  
**CALVIN RELOCATABLE CLASSROOMS 2**  
 Secondary School Campus 32 Maranoa Rd,  
 Kingston TAS 7050  
 For Calvin Christian School

**STATUS:** DEVELOPMENT APPLICATION

**DRAWING NAME:** SITE PLAN

**SCALE:** AS SHOWN @ A3  
**DATE:** 14/04/2023  
**DRAWN:** HL  
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**ACCREDITED DESIGNER:** CCK4711  
**ACCREDITED NUMBER:** CCK4711  
**CAD REF:**

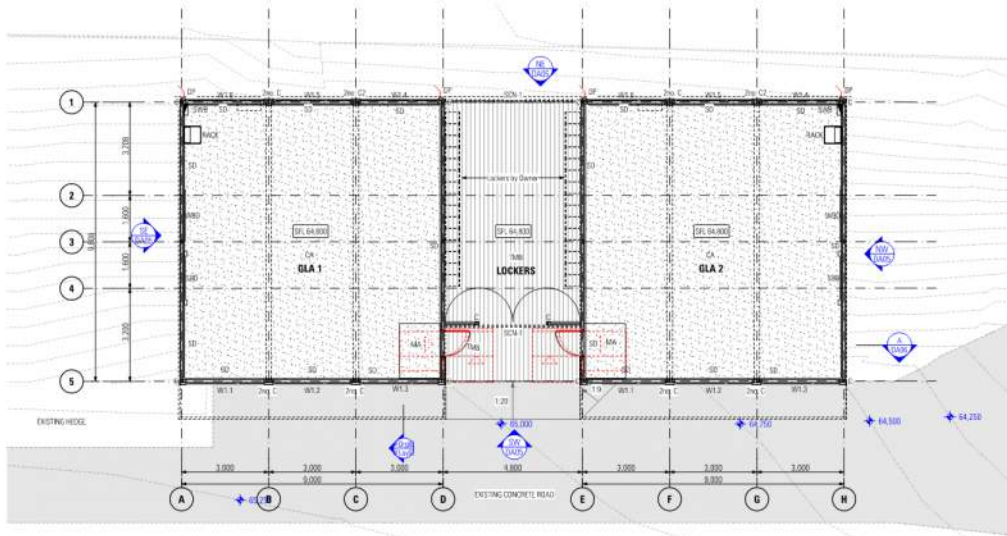
**CALVIN**  
CALVIN CHRISTIAN SCHOOLS

23012 DA02

# Bushfire Hazard Assessment Report

## 32 Maranoa Road, Kingston

CODE	DESCRIPTION
C	Column
CE	Column
CA	Corner Tie
CP	Cover plate
MA	Mesh Mat
GU	Heat Pump Outdoor Unit
RACK	Deck Rack
SB	Strawboard
SCS1	Screen - Type 1
SCS2	Screen - Type 2
SD	Sliding Door



23012 DA03

**GROUND FLOOR PLAN**

1:100

**JAWS ARCHITECTS**

14/04/2023  
14/04/2023  
14/04/2023  
14/04/2023  
14/04/2023

PROJECT NAME  
**CALVIN RELOCATABLE CLASSROOMS 2**  
Secondary School Campus 32 Maranoa Rd  
Kingston TAS 7955  
For  
Calvin Christian School



STATUS **DEVELOPMENT APPLICATION**

REV	DESCRIPTION	DATE
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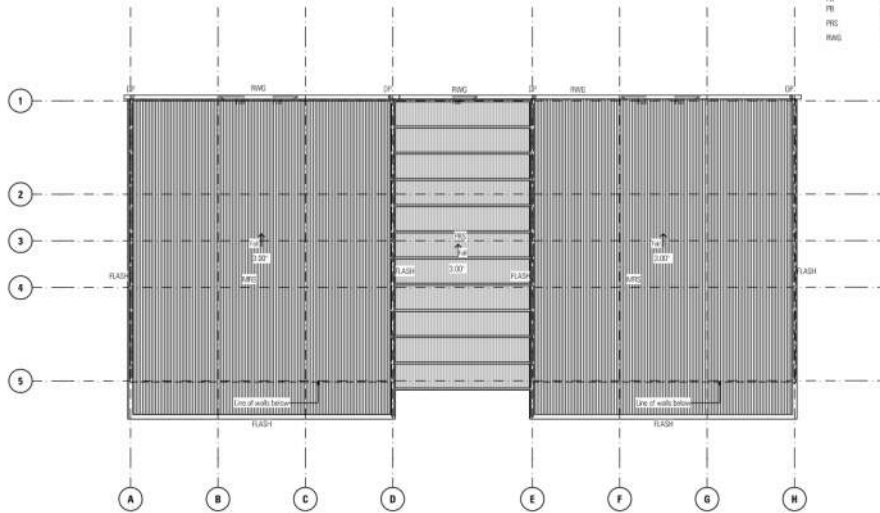
DRAWING NAME

**GROUND FLOOR PLAN**

SCALE  
DATE  
DRAWN  
CHECKED  
ACCREDITED DESIGNER  
ACCREDITED NUMBER  
CAD REF

AS SHOWN @ A3  
14/04/2023  
SV  
CC24711

CODE	DESCRIPTION	NOTES
A/C	Indoor A/C unit	Refer Electrical Engineer's documentation for details
AFB	Square perforated plasterboard	Dymonk Aquaflex™ 12mm Square perforated plasterboard for wallboards
CP	Cover plate	190x19 stainless Tin Galv. Clear Finish
DP	Downpipe	Min. 100mm Dia. Galvalume Woodland Grey
FLASH	Flashing / Capping	Flashed to window flashing colour - Galvalume Woodland Grey. External wall flashing colour - Galvalume Woodland Grey
MRS	Mesh Roof Sheeting	Fireweave Profile - Galvalume Woodland Grey
PI	10mm Plasterboard Ceiling	10mm Thick Bulk jointed/plastered Paint Finish
PE	10mm Plasterboard Ceiling	10mm Thick Bulk jointed/plastered Paint Finish
PRS	Polycarbonate Roof Sheeting	Fireweave Profile. Colour: Black. Install with safety mesh
RMS	Reinforce Concrete Slab	Half Round Saw Cut - Galvalume Woodland Grey



23012 DA04

**ROOF PLAN**

1:100

**JAWS ARCHITECTS**

14/04/2023  
14/04/2023  
14/04/2023  
14/04/2023  
14/04/2023

PROJECT NAME  
**CALVIN RELOCATABLE CLASSROOMS 2**  
Secondary School Campus 32 Maranoa Rd  
Kingston TAS 7955  
For  
Calvin Christian School



STATUS **DEVELOPMENT APPLICATION**

REV	DESCRIPTION	DATE
01	DEVELOPMENT APPLICATION	14/04/2023

DRAWING NAME

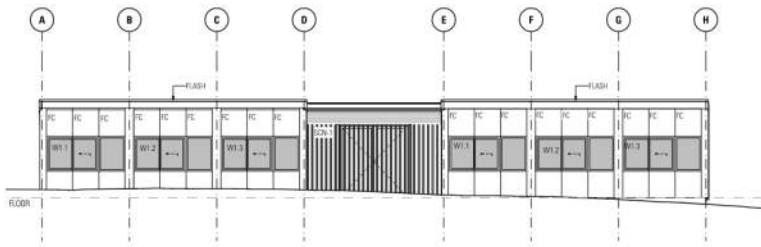
**ROOF PLAN**

SCALE  
DATE  
DRAWN  
CHECKED  
ACCREDITED DESIGNER  
ACCREDITED NUMBER  
CAD REF

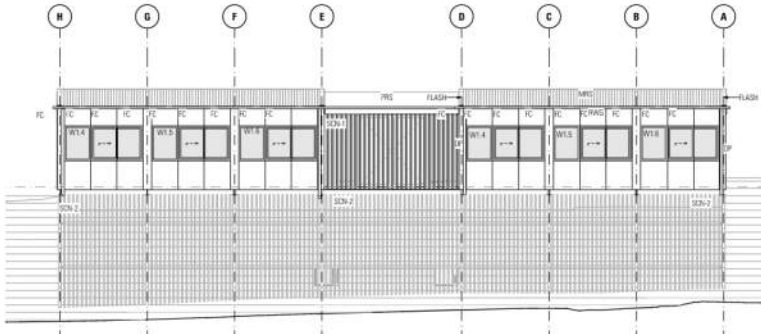
AS SHOWN @ A3  
14/04/2023  
SV  
CC24711

# Bushfire Hazard Assessment Report

## 32 Maranoa Road, Kingston

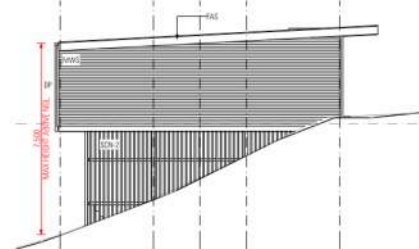


**SOUTH-WEST ELEVATION**  
1:100

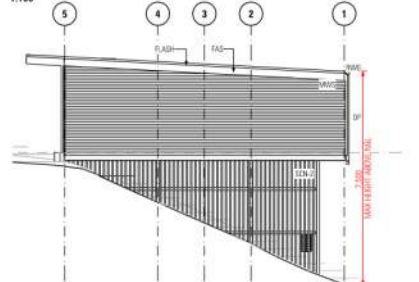


**NORTH-EAST ELEVATION**  
1:100

CODE	DESCRIPTION	NOTES
C	Column	Steel Column - Painted
C2	Column	Steel Column - Painted
FAS	Painted Fascia Board	200 Aluminium Classic Smooth Whiteboard
FC	Flux Cement Coating	James Hardie 8.5mm Thick Emulc Panel - Paint Colourboard Surface
MMIS	Metal Mesh Screening	Colour On Profile - Coloured Woodland Grey
OS1	Overhang Outdoor Use	Hydro-Technical Engineer's Drawings for details
SCN 1	Screen - Type 1	Aluminium - Timber look across
SCN 2	Screen - Type 2	Timber - 75x125mm Rough sawn pine horizontal



**SOUTH-EAST ELEVATION**  
1:100



**NORTH-WEST ELEVATION**  
1:100

**23012 DA05**

**JAWSARCHITECTS**  
 10/100 MARANOA ROAD, KINGSTON TAS 7050  
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**PROJECT NAME:**  
**CALVIN RELOCATABLE CLASSROOMS 2**  
 Secondary School Campus 32 Maranoa Rd,  
 Kingston TAS 7050  
 For  
 Calvin Christian School

**CALVIN**  
 CHRISTIAN SCHOOLS ASSOCIATION

**STATUS: DEVELOPMENT APPLICATION**

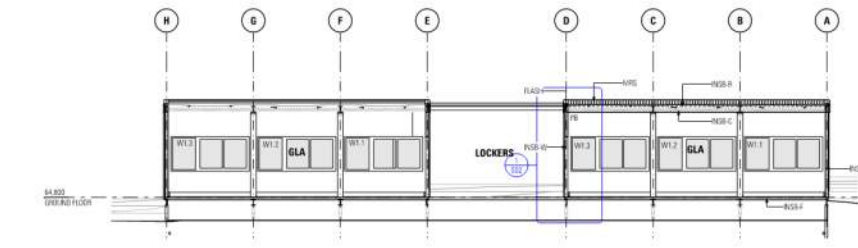
REV	DESCRIPTION	DATE
01	DEVELOPMENT APPLICATION	14/04/2023

**DRAWING NAME: ELEVATIONS**

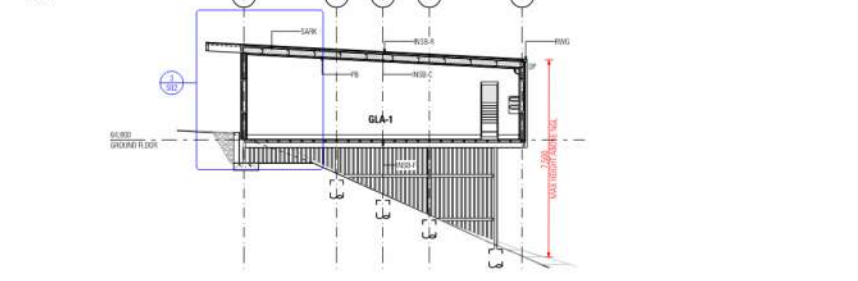
SCALE	DATE	DRAWN	CHECKED	ACCREDITED DESIGNER	ACCREDITED NUMBER	CAD REF
AS SHOWN @ A3	14/04/2023	HL	SV	SV	0254711	



CODE	DESCRIPTION
INS-C	Roof Insulation - Ceiling
INS-F	Roof Insulation - Floor
INS-R	Roof Insulation - Roof
INS-W	Roof Insulation - Wall
MRS	Metal Roof Cladding
FB	Green Fluorocarbon Cladding
SARK	Sarking



**SECTION**  
1:100



**SECTION**  
1:100

**23012 DA06**

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**PROJECT NAME:**  
**CALVIN RELOCATABLE CLASSROOMS 2**  
 Secondary School Campus 32 Maranoa Rd,  
 Kingston TAS 7050  
 For  
 Calvin Christian School

**CALVIN**  
 CHRISTIAN SCHOOLS ASSOCIATION

**STATUS: DEVELOPMENT APPLICATION**

REV	DESCRIPTION	DATE
01	DEVELOPMENT APPLICATION	14/04/2023

**DRAWING NAME: SECTIONS**

SCALE	DATE	DRAWN	CHECKED	ACCREDITED DESIGNER	ACCREDITED NUMBER	CAD REF
AS SHOWN @ A3	14/04/2023	HL	SV	SV	0254711	



Bushfire Hazard Assessment Report  
32 Maranoa Road, Kingston



23012 DA07

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WE CAN HELP YOU WITH:  
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**PROJECT NAME**  
**CALVIN RELOCATABLE CLASSROOMS 2**  
Secondary School Campus 32 Maranoa Rd,  
Kingston TAS 7058  
For  
Calvin Christian School



STATUS: **DEVELOPMENT APPLICATION**

REV	DESCRIPTION	DATE
01	DEVELOPMENT APPLICATION	14/04/2023

DRAWING NAME:

**3D VIEWS**

SCALE: AS SHOWN @ A3  
DATE: 14/04/2023  
DRAWN: DV  
CHECKED: DV  
ACCREDITED DESIGNER: DV  
ACCREDITED NUMBER: 0254710  
CAD REF:

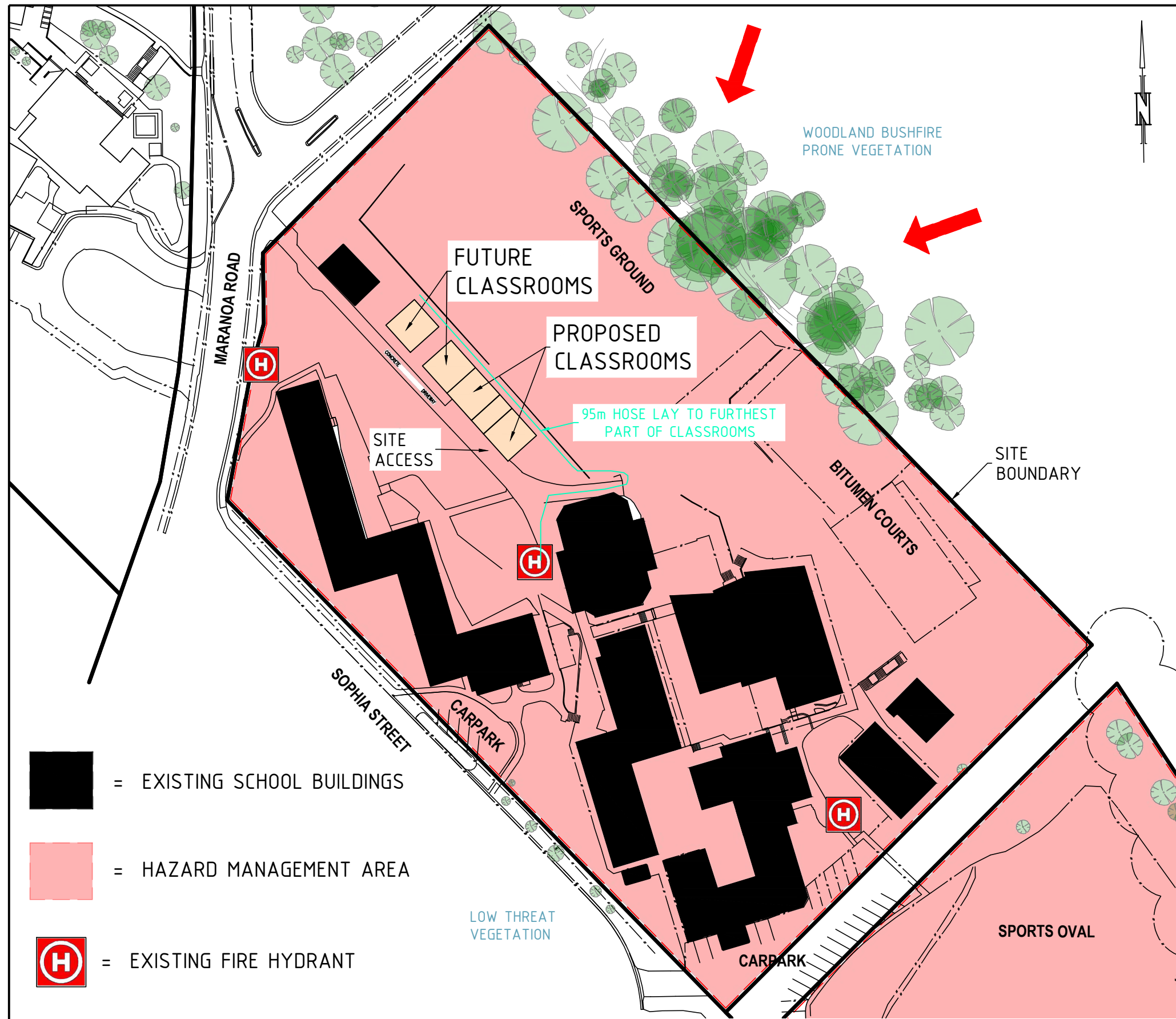


**Appendix C – Bushfire Hazard Management Plan**

See attached

Appendix D – Bushfire Emergency Plan and Bushfire Action Plan

See attached



**VEGETATION MANAGEMENT**

IN ACCORDANCE WITH TABLE 2.6 IN AS3959, 2018, E1.5.1 A2 & A3 OF PLANNING DIRECTIVE 5.1 BUSHFIRE-PRONE AREAS CODE 2017 AND TABLE 4.4(E) IN TRANSITIONAL DIRECTORS DETERMINATION V2.2 2020.

- SEPARATION DISTANCES ARE REQUIRED TO THE PROPERTY BOUNDARY ON ALL ASPECTS, PROVIDING BAL-12.5 COMPLIANCE FOR ALL ASPECTS OF THE PROPOSED CLASSROOMS.

TO SATISFY HMA VEGETATION REQUIREMENTS, GRASS MUST BE REGULARLY MOWN TO A NOMINAL 100mm OR LESS HEIGHT AS PER AS3959 2018 CLAUSE 2.2.3.2(F). EXISTING SHRUBS AND TREES TRIMMED AND MAINTAINED. EXISTING SITE AND VEGETATION CONDITIONS SATISFY LOW THREAT STATUS IN LINE WITH AS3959 2018 CLAUSE 2.2.3.2(D)(E)(F).

**GENERAL VEGETATION MANAGEMENT INFORMATION:**

NEW VEGETATION MAY BE PLANTED WITHIN THE HMA BUT MUST SATISFY LOW THREAT CONDITIONS IN ACCORDANCE WITH AS3959 2018 CLAUSE 2.2.3.2(D)(E)(F). NEW SHRUBS UP TO 2m IN HEIGHT CAN BE PLANTED EITHER INDIVIDUALLY OR IN SINGLE ROWS BUT MUST BE SPACED WITH A MINIMUM 4m BETWEEN FOLIAGE AND SHOULD NOT BE WITHIN 6m OF ANY BUILDING.

NEW VEGETATION <1m IN HEIGHT MAY BE PLANTED NOT CLOSER THAN 2m FROM BUILDINGS. LARGE PLANTS 4m OR MORE IN HEIGHT CAN BE PLANTED BUT LOW AND MID-LEVEL GROWTH UP TO 2m IN HEIGHT TO BE TRIMMED AND MAINTAINED OVER TIME WITH A MINIMUM SPACING BETWEEN CROWNS OF 18m. NEW VEGETATION 2m OR MORE IN HEIGHT SHOULD NOT BE PLANTED WITHIN 10m OF ANY BUILDING.

ALL NEW VEGETATION 1-4m IN HEIGHT SHOULD BE SPACED FROM LARGE VEGETATION (>4m) AT LEAST 10m FROM TREE TRUNK.

**SITE ACCESS**

- EXISTING ACCESS TO A FIREFIGHTING WATER SUPPLY IS DEEMED TO COMPLY WITH TABLE 4.2(B) IN TRANSITIONAL DIRECTORS DETERMINATION V2.2 2020 WITH REGARD TO E1.5.1 A2 & A3 OF PLANNING DIRECTIVE 5.1 BUSHFIRE-PRONE AREAS CODE 2017.

**WATER SUPPLY**

- RETICULATED FIREFIGHTING WATER SUPPLY (HYDRANTS) ARE WITHIN 120m OF THE ENTIRE PROPOSED BUILDINGS (AS A HOSE LAY) AND THEREFORE IN ACCORDANCE WITH TABLE 4.3A IN TRANSITIONAL DIRECTORS DETERMINATION V2.2 2020 WITH REGARD TO E1.5.1 A2 & A3 OF PLANNING DIRECTIVE 5.1 BUSHFIRE-PRONE AREAS CODE 2017.
- EXISTING CLASSROOMS ALSO WITHIN A 120m HOSE LAY FROM EXISTING HYDRANTS.

**EMERGENCY PLANNING**

- AS PER BUSHFIRE EMERGENCY STRATEGY (BUSHFIRE EMERGENCY PLAN AND BUSHFIRE ACTION PLAN) BY BUSHFIRE TASMANIA DATED 26 APRIL 2023 IN ACCORDANCE WITH E1.5.1 A2 OF PLANNING DIRECTIVE 5.1 BUSHFIRE-PRONE AREAS CODE 2022.
- PRIMARY ACTION IS TO SHELTER IN-PLACE. ON-SITE REFUGE IS LIBRARY AND ATTACHED CLASSROOMS.
- SECONDARY ACTION IS TO EVACUATE TO OFF-SITE REFUGE, BEING THE SCHOOL GROUNDS OF CALVIN CHRISTIAN PRIMARY CAMPUS AT 35 MARANOA ROAD OPPOSITE.

**RECOMMENDATIONS**

MINIMUM SEPARATION DISTANCES ARE TO BE MAINTAINED AS LOW THREAT AND IN ACCORDANCE WITH CLAUSES 2.2.3.2(d)(e)(f) OF AS3959 2018, BHMP AND BUSHFIRE HAZARD ASSESSMENT REPORT.

IT IS THE INTENTION FOR THE ENTIRETY OF THE SUBJECT SITE TO BE CONSIDERED LOW THREAT VEGETATION.

WE RECOMMEND USE OF LOW FLAMMABILITY PLANTS. EXAMPLES IN THE TASMANIA FIRE SERVICE BOOKLET FIRE RESISTING GARDEN PLANTS FOR THE URBAN FRINGE AND RURAL AREAS, 2017.

CONSTRUCTIONS REQUIREMENTS FOR THE PROPOSED CLASS 9A CLASSROOMS MUST COMPLY WITH CONSTRUCTION STANDARDS AS DETAILED BY AS3959, 2018 SECTIONS 3 AND 5 SPECIFICALLY CLAUSES 5.2 TO 5.8 FOR BAL-12.5.

**BUSHFIRE HAZARD MANAGEMENT PLAN**  
SCALE 1:1000

		CLIENT: CALVIN CHRISTIAN SECONDARY SCHOOL ADDRESS: 32 MARANOA ROAD KINGSTON	SHEET: BUSHFIRE HAZARD MANAGEMENT PLAN PROJECT: PROPOSED CLASSROOMS ISSUE: PLANNING APPROVAL	DRAWN: SW SCALE: 1:1000 PROJECT No. J23-1	APPROVED: SW BFP-130 SIZE: A3 DATE: 26/04/2023 SHEET No. [ ] REV No. A
21 Dysart Street Clifton Beach 0438 559 371 sam@bushfiretasmania.com.au	PLANNING APPROVAL 26/4/2023	Version: 1, Version Date: 15/04/2024			

# BUSHFIRE EMERGENCY PLAN

## Name of Site / Facility

Calvin Christian Secondary School

## Address of Site / Facility

32 Maranoa Road, Kingston, Tasmania 7050

Plan Prepared By Sam Walters

Plan Approved By Scott Ambrose (ECO)

BFP No. 130

Date Approved 17 April, 2023

Plan Version V.2

The purpose of this plan is to identify procedures for occupants and site managers to follow in the event of bushfire emergency.

This plan is comprised of:

1. Bushfire Emergency Plan (BEP)
2. Bushfire Action Plan (BAP)

This plan must be reviewed annually, prior to the bushfire season.

Information within this plan must be maintained, and key personnel must review their responsibilities under this plan.



**REVIEW ANNUALLY**

**COPY TO TFS**

**fire@fire.tas.gov.au**



## Contents

1.0	Primary Emergency Management Action.....	2
2.0	Site Contact(s) & Details.....	2
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7.0	Evacuation Procedures .....	5
8.0	Procedures Following Bushfire .....	8
9.0	Pre-emptive Procedures .....	9
10.0	Attachments.....	9

## Document Control

Revision	Date	Details
V.1	31/08/2022	Bushfire Emergency Strategy for Calvin Christian Secondary School Campus
V.2	17/04/2023	Bushfire Emergency Strategy for Calvin Christian Secondary School Campus (Amended to include proposed additional classrooms)



### 3.0 Roles & Responsibilities

The following table identifies the emergency control organisation (ECO) – the individuals responsible for implementing the emergency procedures in the event of a bushfire emergency.

Position	Name	Area of Responsibility	Mobile Phone No.
School Principal	<b>Scott Ambrose</b> / Stelle Carmichael	Fire Warden and Initial Contact	0409 196 404
Head of Year 12	<b>Simon Boonstra</b> / Bonny Moroni	Deputy Warden	0458 600 286
Executive Assistant	<b>Julie Berg</b> / Sue Dishington	Communication Officer	03 6229 4829
	<b>Mel Quinn</b> / Carrie-Ann Oudman	Warden Admin	03 6229 4829
Assistant Principal	<b>Bonny Moroni</b> / Scott Ambrose	Warden#1 Office Admin	
	<b>Martin Huber</b> / Kyle Fifield	Warden#2 Rooms 16-22	
	<b>Wayne Amos</b> / Geoff Rayner	Warden#3 PAC / Rooms 11-13	
	<b>Chris Evenhuis</b> / Mirri Grice	Warden#4 Science / Art / Tech & Rooms 8-10	
Librarian	<b>Marc Mumford</b> / Darren Ferguson	Warden#5 Library / HUB & Rooms 26-28	
	<b>Marcus de Puit</b> / Julian Crombie	Warden#6 Rooms 25, 29, 30, 31	
	<b>Malcolm Hart</b> / David Smith	Warden#7	
	Patrick Stam / Nathan Bosker	First Aid Officer	

### 4.0 Emergency Contacts

Dial '000' for emergency assistance.



The following table identifies important contacts and information sources for bushfire emergency management purposes.

Name / Organisation	Details	Phone No. / Website
Fire, Police, Ambulance	Fire or Emergency	000
Tasmania Fire Service	Bushfire Hotline	1800 000 699
Tasmania Fire Service	Incident Information	<a href="http://www.fire.tas.gov.au">www.fire.tas.gov.au</a>
Bureau of Meteorology	Fire Weather Information	<a href="http://www.bom.gov.au">www.bom.gov.au</a>
Local ABC Radio Station	Bushfire Alerts	936 am ABC radio

## 5.0 Preparations prior to bushfire season

### 5.1 Site Maintenance

#### Actions

1. Maintain the Hazard Management Area ensuring lawns and grassed areas are kept below 100 mm in height, shrubs and trees trimmed and maintained, removal of combustible rubbish/debris materials.
2. Ensure firefighting water connection points / hydrants are clearly visible with appropriate signage and clear of vegetation around the hydrants
3. Ensure no hazards are present which would contribute to increased fire intensity, removing rubbish piles etc.
4. Ensure lawns and grassed areas are kept green if water supply allows
5. Ensure property access/egress and pathways are kept clear and easily trafficable
6. Ensure defensible spaces around buildings and assembly areas are maintained
7. Ensure firefighting pumps, hoses and equipment are serviced and operational
8. Ensure first aid kits, fire extinguishers, emergency lighting etc. are current and serviceable
9. Ensure Roofs and gutters are free from leaf litter and debris
10. Ensure supplies such as drinking water are available in on-site refuge

### 5.2 Emergency Management

#### Actions

1. Review Bushfire Emergency Plan to ensure details, procedures and contact phone numbers are correct.
2. Ensure Staff have been informed of, and are familiar with, the procedures laid out in the Bushfire Emergency Plan.
3. Ensure revised and current versions of the Emergency Plan and Action Plan are available for review, for example placed in the school office as well as in on-site refuge (library).
4. Ensure nominated off-site shelter is still a safe choice, confirming contact details if appropriate.
5. Make contact with management at off-site refuges confirming use during fire season.
6. Place current version of emergency plan and action plan in premises in visible location
7. Ensure the nominated escape route to shelter is still a viable choice. If not, update Action Plan
8. Rehearse emergency strategy to ensure staff and ECO are able to enact if the need arises.

# SHELTER-IN-PLACE

## 6.0 Shelter-In-Place Procedures

Evaluation of bushfire risk and the safety of occupants has determined that the **PRIMARY** action to follow under normal bushfire conditions is to shelter at a designated on-site refuge.

### 6.1 On-Site Refuge(s)

#### Designated On-Site Refuges

1. Inside library and 2 classrooms below. Students and staff to be directed as per ECO advice.

2.

3.

4.

### 6.2 Sheltering Procedures

Trigger(s)	Actions
1. Instructed by Tasmanian Fire Service (TFS) or Tasmanian Police to shelter in-place; or	Fire Warden(s) to move occupants into on-site refuge, providing protection from radiant heat.
2. Prevented from Evacuation due to road closure etc; or	Fire Warden(s) to account for all occupants and advise TFS (000) that people are sheltering on site.
3. Fire in close proximity, considered too dangerous to leave.	Monitor building interior for outbreaks of fire within and extinguish if possible.
4.	Soak towels and place under doors to exclude embers.
5.	Wear sturdy clothing and footwear if available.
6.	Monitor building exterior for outbreaks of fire within and extinguish if safe to do so.
7.	First Aid Officer to ensure occupants have all necessary medication(s).
8.	Supply drinking water.
9.	Ensure people can exit structure if it catches fire.
10.	Keep abreast of fire situation via ABC radio, TFS website and bushfire hotline.

Once the threat has passed, refer to: ***Procedures Following Bushfire.***

# EVACUATION

## 7.0 Evacuation Procedures

Evaluation of bushfire risk and the safety of employees and occupants has determined that the **SECONDARY** action to follow under normal bushfire conditions is to evacuate to a designated off-site refuge.

### 7.1 Assembly Points

#### Designated Evacuation Assembly Points

1. Assemble on concrete / gravel area adjacent to library entrance

2.

3.

4.

### 7.2 Off-Site Refuge(s)

#### Primary Off-Site Refuge

Name of venue: School grounds of Calvin Christian Primary School Campus

Address of venue: 35 Maranoa Road, Kingston (directly opposite the Secondary Campus)

Nearest cross-street: Denison Street

Map reference: GDA94 MGA55 524827E, 5241497N

Venue phone number: School Office 03 6229 4829

Travel time to venue: 3-5 minutes walking or 1min by car

#### Secondary Off-Site Refuge

Name of venue:

Address of venue:

Nearest cross-street:

Map reference:

Venue phone number:

Travel time to venue:

## 7.3 Evacuation Transportation Arrangements

### Primary Transportation Arrangements

Type of transport: Staff and students will walk to off-site refuge

### Secondary Transportation Arrangements (i)

Name, number & type of vehicles required: Parent's / Guardian's vehicles

Phone number: School office will contact parents/guardians

Time required before transport on-site: Variable. Students to remain at off-site refuge until arrival

### Secondary Transportation Arrangements (ii)

Number & type of vehicles required: School bus on site - Toyota Coaster (25ppl), Hi Ace (14ppl)

Name of transport provider: Available Staff on the day:  
(Scott Ambrose, Bonny Moroni, Stelle Carmichael)

Phone number: 0409 196 404 (Scott) or 03 6229 4829 (office)

Purpose: If required, transport any remaining staff & students and/or sick & vulnerable to off-site refuge

## 7.4 Evacuation Procedures

Trigger(s)	Actions
1. Emergency Warning Alert for Area; or	Fire Warden to direct evacuation by phone and advise Emergency Services including number of occupants to be evacuated.
2. Direction to evacuate from Tasmania Fire Service or Tasmania Police	Occupants to proceed to Evacuation Assembly point.
3. Direct threat to on-site refuge (shelter in-place deemed at risk)	All occupants are to be accounted for.
4.	Close all doors and windows in building.
5.	Wear sturdy clothing and footwear if available.
6.	Ensure first aid and medications are carried.
7.	Carry drinking water.
8.	Using Bushfire Action Plan, occupants to evacuate to nominated Off-site Shelter (school grounds of Calvin Christian Primary Campus)
9.	Look ahead for clear path, do not walk/drive through smoke or flame. If path is blocked, return to premises and shelter on site.

Once the threat has passed, refer to: ***Procedures Following Bushfire.***

## 8.0 Procedures Following Bushfire

### 8.1 Shelter-In-Place

#### Actions

1. Ensure the safety of all people and seek medical assistance for those requiring it.
2. Fire Warden to account for all occupants and ensure Tasmania Fire Service /Tasmania Police are aware of situation with occupants. (Sheltering, Safe/ injured etc.) as well as fire situation / threat
3. Ensure all people drink plenty of water to avoid dehydration.
4. Fire Warden or designated ECO staff to scout for any external spot fires and extinguish if safe to do.
5. Chief warden to regularly seek information / updates and ensure fire front has passed. Updates can be monitored via ABC radio, TFS website and bushfire hotline.
6. No person should attempt to re-enter fire affected buildings or areas until safe and advised by Tasmania Fire Service /Tasmania Police.
7. Fire warden to establish through Tasmania Fire Service that it is safe to leave the refuge.
8. Fire warden to arrange for students and staff to return to classrooms if safe to do so.
9. Fire warden / ECO staff to arrange for students to be collected by parents / guardians if deemed unsafe to return to classrooms.
10. Chief Warden to review Emergency Plan for effectiveness, make note of weaknesses and amend as necessary.

### 8.2 Evacuate

#### Actions

1. Ensure the safety of all occupants and seek medical assistance for those requiring it.
2. Fire Warden to account for all occupants and ensure Tasmania Fire Service /Tasmania Police are aware of situation with occupants. (Sheltering, Safe/ injured etc.) as well as fire situation / threat
3. Fire warden to scout for fires surrounding and extinguish if safe to do so.
4. No person should attempt to re-enter fire affected buildings or areas until safe and advised by Tasmania Fire Service /Tasmania Police
5. Fire warden to arrange for students and staff to return to classrooms if safe to do so.
6. Fire warden / ECO staff to arrange for students to be collected by parents / guardians if deemed unsafe to return to classrooms.
7. Be aware of updates to fire situation through ABC radio, TFS website or bushfire hotline.
8. Chief Warden to review Emergency Plan for effectiveness, make note of weaknesses and amend as necessary.



# PRE-EMPTIVE

## 9.0 Pre-emptive Procedures

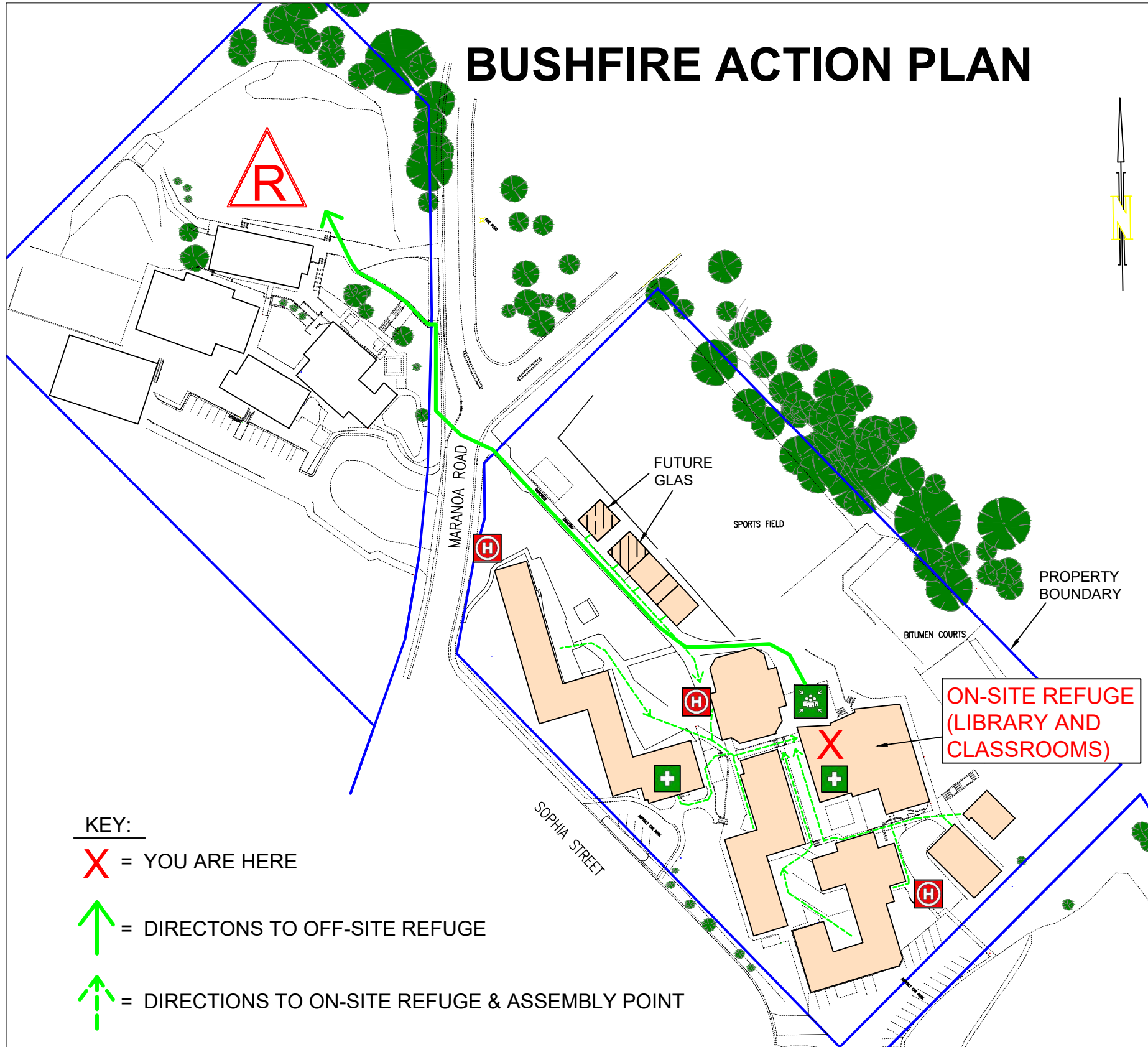
Evaluation of bushfire risk and the safety of occupants has determined that the following pre-emptive measures should be implemented outside of normal bushfire conditions.

Trigger(s)	Actions
1. Catastrophic Fire Conditions forecast	Consider closing facility and evacuating site. Inform parents / guardians if school to be closed. Seek advice from Tasmania Fire Service if decision to close is warranted / appropriate.
2. Advice or Act and Watch warning issued for the area	Consider closing facility and evacuating site. Seek advice from Tasmania Fire Service if decision to close is warranted / appropriate.
3. Emergency Warning issued for the area	Consider closing facility and evacuating site. Seek advice from Tasmania Fire Service if decision to close is warranted / appropriate.
4. Specific Advice from Tasmania Fire Service / Tasmania Police about a threat in the area	Take actions in line with advice received.
5. Unexpected fire or smoke on or near the school	Contact Tasmania Fire Service (000) and report observations and follow advice. ECO / Fire Warden to be notified.
6.	
7.	
8.	
9.	
10.	

## 10.0 Attachments

- Occupant/employee register
- Parent/guardian contact register
- Bushfire Action Plan** (BAP)
- Off-Site refuge map**

# BUSHFIRE ACTION PLAN



**KEY:**

**X** = YOU ARE HERE

**↑** = DIRECTIONS TO OFF-SITE REFUGE

**↑** = DIRECTIONS TO ON-SITE REFUGE & ASSEMBLY POINT

**EMERGENCY DIAL**  
**000**

**IN CASE OF BUSHFIRE**

ENSURE ALL PERSONS ARE ACCOUNTED FOR

ATTEMPT TO MAKE CONTACT WITH CHIEF OR DEPUTY FIRE WARDENS

CONTACT TASMANIA FIRE SERVICE FOR SITUATION UPDATE ON 1800 000 699

**PRIMARY ACTION**

PROCEED TO ON-SITE LIBRARY / CLASSROOM REFUGE AS SHOWN MARKED WITH **X**

CLOSE ALL WINDOWS AND DOORS AND ISOLATE AIRCONDITIONING PLANT

DIAL 000 - ADVISE OF SITUATION

**SECONDARY ACTION**

ASSEMBLE AT EVACUATION ASSEMBLY POINT

EVACUATE TO OFF-SITE REFUGE - PRIMARY CAMPUS SCHOOL GROUNDS DIRECTLY OPPOSITE AT 35 MARANOA ROAD

APPROXIMATELY 200m AWAY TO NORTH WEST, VIA SECONDARY CAMPUS ACCESS ROAD AND CROSSING MARANOA ROAD TO FOLLOW FOOTPATH NORTH APPROX. 3-5min WALK OR 1min BY CAR

**BUSHFIRE ACTION PLAN**  
CALVIN CHRISTIAN SECONDARY  
32 MARANOA ROAD  
KINGSTON, TAS 7050

PLAN REVISED AND CURRENT AS OF APRIL 2023

**SITE CONTACT 1**  
SCOTT AMBROSE  
PRINCIPAL  
FIRE WARDEN  
0409 196 404

**SITE CONTACT 2**  
SIMON BOONSTRA  
HEAD OF YEAR  
DEPUTY WARDEN  
0458 600 286

**APPROVED**  
CHIEF OFFICER, TASMANIA FIRE SERVICE  
PER HILSTON, BUSHFIRE RISK UNIT

26.04.2023

Tasmania Fire Service

	EVACUATION ASSEMBLY POINT		OFF-SITE REFUGE PRIMARY CAMPUS GROUNDS
	FIRST AID KIT		FIRE HYDRANT

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# BUSHFIRE-PRONE AREAS CODE

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

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### 1. Land to which certificate applies

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

**Street address:**

32 Maranoa Road, Kingston

**Certificate of Title / PID:**

C.T. 132644/1

### 2. Proposed Use or Development

**Description of proposed Use and Development:**

Proposed class 9b classrooms (Vulnerable Use)  
2 proposed and 2 future

**Applicable Planning Scheme:**

Kingborough interim Planning Scheme 2015

### 3. Documents relied upon

This certificate relates to the following documents:

Title	Author	Date	Version
Bushfire Hazard Assessment Report for Proposed Classrooms at 32 Maranoa Road, Kingston, report code J23-1	Samuel Walters Bushfire Tasmania	April 2023	1.0
Bushfire Hazard Management Plan for 32 Maranoa Road, Kingston dated 26/04/2023, code J23-1	Samuel Walters Bushfire Tasmania	26/04/2023	Rev A
Calvin Relocatable Classrooms 2, 32 Maranoa Road, Kingston for Calvin Christian School plans by Jaws Architects – Ref 23012 DA01-DA07	Jaws Architects	14/04/2023	Rev 01
Bushfire Emergency and Action Plan for 32 Maranoa Road, Kingston, approved by TFS / Bushfire Tasmania 26 April 2023.	Bushfire Tasmania	26 April 2023	Rev 02

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

#### 4. Nature of Certificate

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

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

<input checked="" type="checkbox"/>	<b>E1.5.1 / C13.5.1 – Vulnerable Uses</b>	
	<b>Acceptable Solution</b>	<b>Compliance Requirement</b>
<input checked="" type="checkbox"/>	<b>E1.5.1 P1</b> / C13.5.1 P1	<i>Existing school presumed to satisfy.</i>
<input checked="" type="checkbox"/>	<b>E1.5.1 A2</b> / C13.5.1 A2	Emergency management strategy
<input checked="" type="checkbox"/>	<b>E1.5.1 A3</b> / C13.5.1 A2	Bushfire hazard management plan

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

<input type="checkbox"/>	<b>E1.6.1 / C13.6.1 Subdivision: Provision of hazard management areas</b>	
	<b>Acceptable Solution</b>	<b>Compliance Requirement</b>
<input type="checkbox"/>	E1.6.1 P1 / C13.6.1 P1	<i>Planning authority discretion required. A proposal cannot be certified as compliant with P1.</i>
<input type="checkbox"/>	E1.6.1 A1 (a) / C13.6.1 A1(a)	Insufficient increase in risk
<input type="checkbox"/>	E1.6.1 A1 (b) / C13.6.1 A1(b)	Provides BAL-19 for all lots (including any lot designated as 'balance')
<input type="checkbox"/>	E1.6.1 A1(c) / C13.6.1 A1(c)	Consent for Part 5 Agreement

<input type="checkbox"/>	<b>E1.6.2 / C13.6.2 Subdivision: Public and fire fighting access</b>	
	<b>Acceptable Solution</b>	<b>Compliance Requirement</b>
<input type="checkbox"/>	E1.6.2 P1 / C13.6.2 P1	<b><i>Planning authority discretion required. A proposal cannot be certified as compliant with P1.</i></b>
<input type="checkbox"/>	E1.6.2 A1 (a) / C13.6.2 A1 (a)	Insufficient increase in risk
<input type="checkbox"/>	E1.6.2 A1 (b) / C13.6.2 A1 (b)	Access complies with relevant Tables

<input type="checkbox"/>	<b>E1.6.3 / C13.1.6.3 Subdivision: Provision of water supply for fire fighting purposes</b>	
	<b>Acceptable Solution</b>	<b>Compliance Requirement</b>
<input type="checkbox"/>	E1.6.3 A1 (a) / C13.6.3 A1 (a)	Insufficient increase in risk
<input type="checkbox"/>	E1.6.3 A1 (b) / C13.6.3 A1 (b)	Reticulated water supply complies with relevant Table
<input type="checkbox"/>	E1.6.3 A1 (c) / C13.6.3 A1 (c)	Water supply consistent with the objective
<input type="checkbox"/>	E1.6.3 A2 (a) / C13.6.3 A2 (a)	Insufficient increase in risk
<input type="checkbox"/>	E1.6.3 A2 (b) / C13.6.3 A2 (b)	Static water supply complies with relevant Table
<input type="checkbox"/>	E1.6.3 A2 (c) / C13.6.3 A2 (c)	Static water supply consistent with the objective

## 5. Bushfire Hazard Practitioner

Name:

Samuel Walters

Phone No:

0438 559 371

Postal Address:

21 Dysart Street  
Clifton Beach  
TAS 7020

Email Address:

sam@bushfiretasmania.com.au

Accreditation No:

BFP – 130

Scope:

3A

## 6. Certification

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

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

Signed:  
certifier



Name:

Samuel Walters

Date:

26/04/2023

Certificate Number:

J23-1 001

(for Practitioner Use only)