

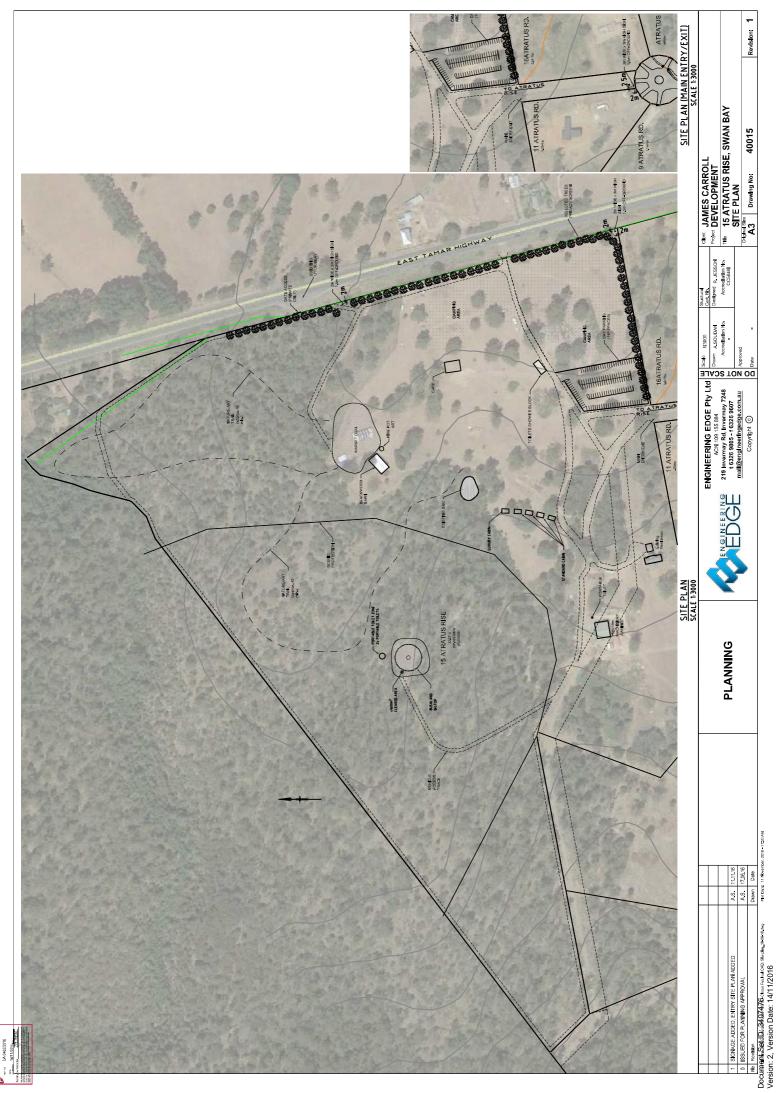
### **15 ATRATUS RISE SWAN BAY**

- Cabins, Café, Campground, Bar/Function Venue, Machinery Shed, Mountain Bike Track, Art Trail
- Cabins- Overnight and short term accommodation
- Café- To operate Wed-Sun hours ranging 8am-11pm
- Campground- Would expect 15-30 vehicles at any one day
- Bar/Function Venue- To operate mainly Fri/Sat/Sun 12-12 and during the week in peak holiday season
- Machinery Shed- To house workshop and machinery for maintaining property
- Mountain Bike Trail- To provide activities for guests and locals, a free activity with hire bikes available
- Art Trail- To engage local artists and provide a scenic walk with several sculptures from local artists
- Estimated vehicle numbers approx. 30 per day
- The design of the property is a rustic theme to cater for tourist looking for that back to nature experience, the eastern and southern boundaries will be planted out with three meter deep buffer from the highway and adjoining properties. We would like to seal our entrance to the property once most of the heavy movement of large vehicles is completed

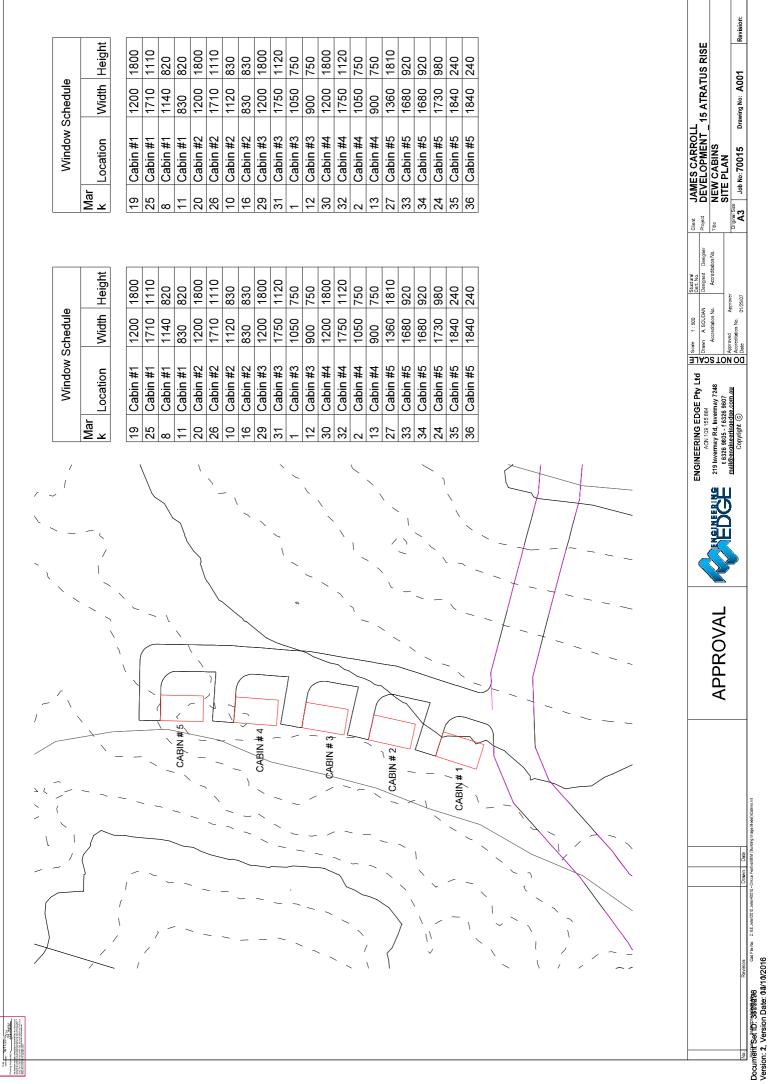


## **15 Atratus Rise Swanbay**

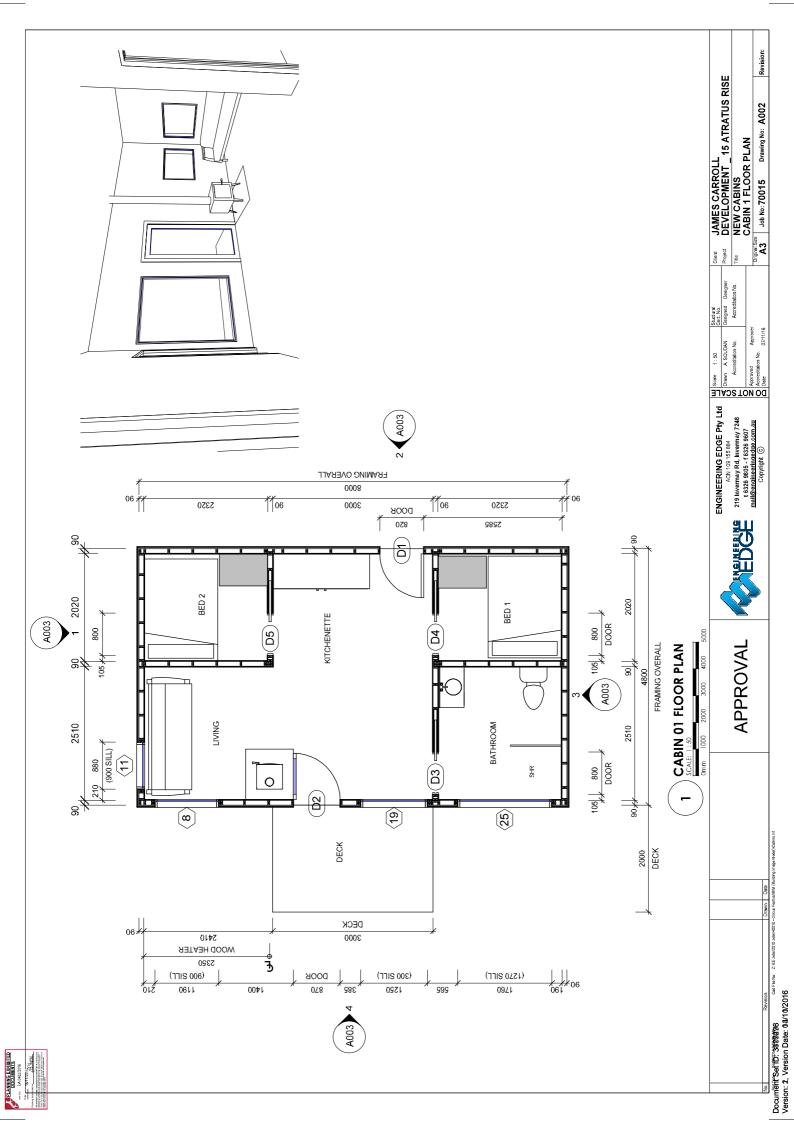
Use/Activity	Description
Caravan park and camping grounds	A seasonal caravan and camping ground operating from October to April with waste dumping facility.
Café	A café offering breakfast, lunch and dinner open from Wed-Sun and open hours range from 8am-11pm.
Blackwood Barn	A function venue available 7 days a week for Birthdays, Weddings, Corporate Functions and entertainment for camping hours ranging from 8am - 12pm depending on individual event.
Market Oval	A space for market style use, used for individual events, Circus Festival and regular markets.
Bushland Big-Top	An bigtop space available for hire for individual events and for Circus Festival.
Overall Circus Use	8 Days every 2 years for Circus Festival with operating hours 8am-2am, once a month free circus classes for local kids and occasional trapeze classes.
Nature Trail and Mountain Bike Track and Activities	Nature trails and mountain bike tracks open to all the public all year weather according with art sculptures and low impact activities available such as Frisbee golf, mini golf and a bush obstacle course with opening hours 8am - 12pm.

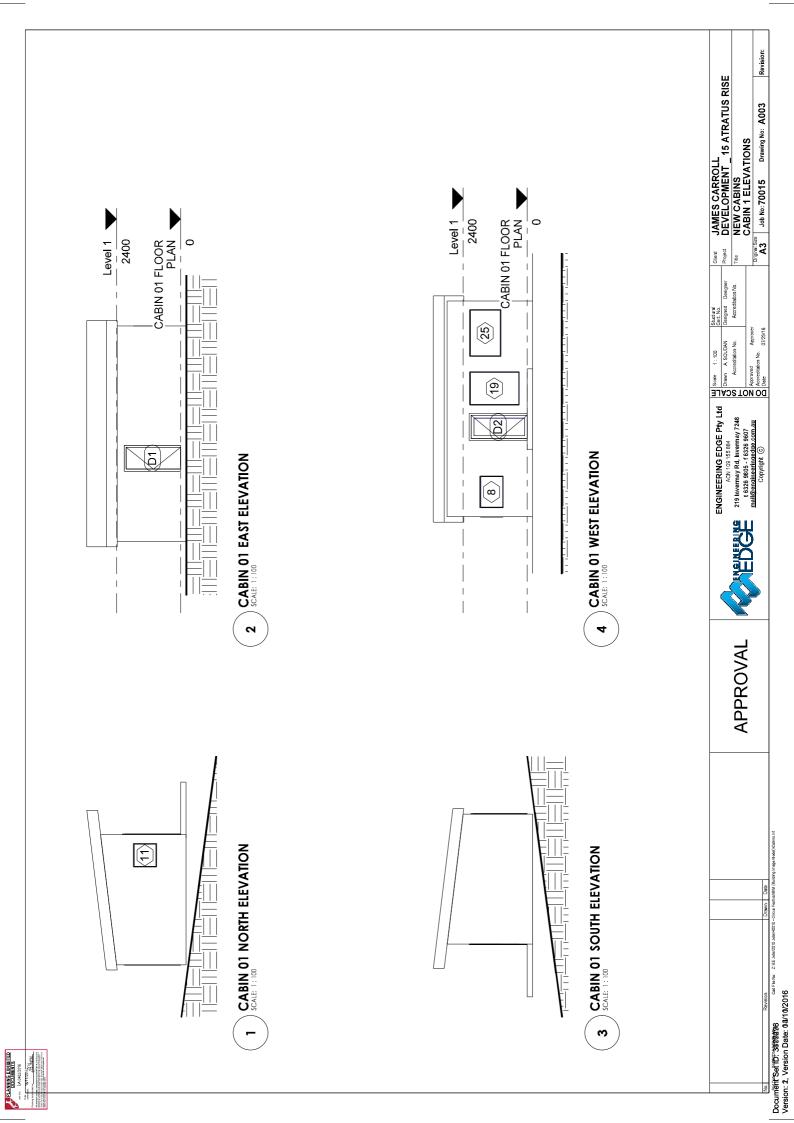


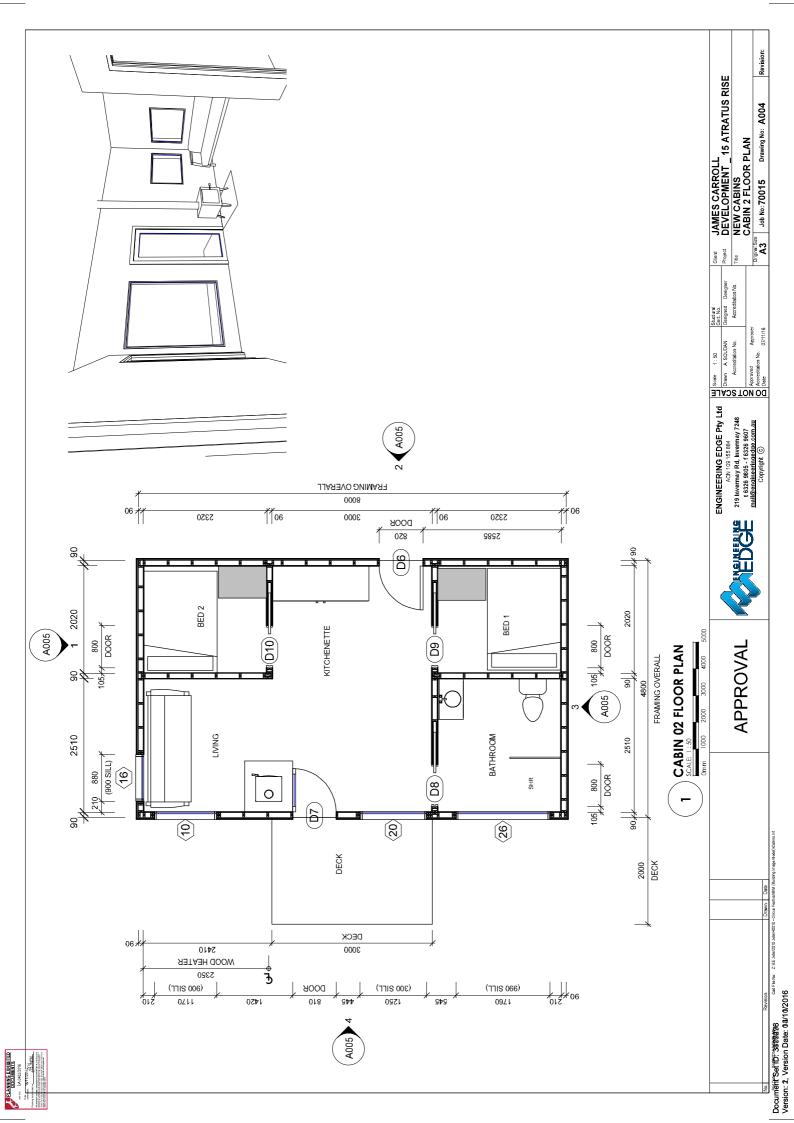
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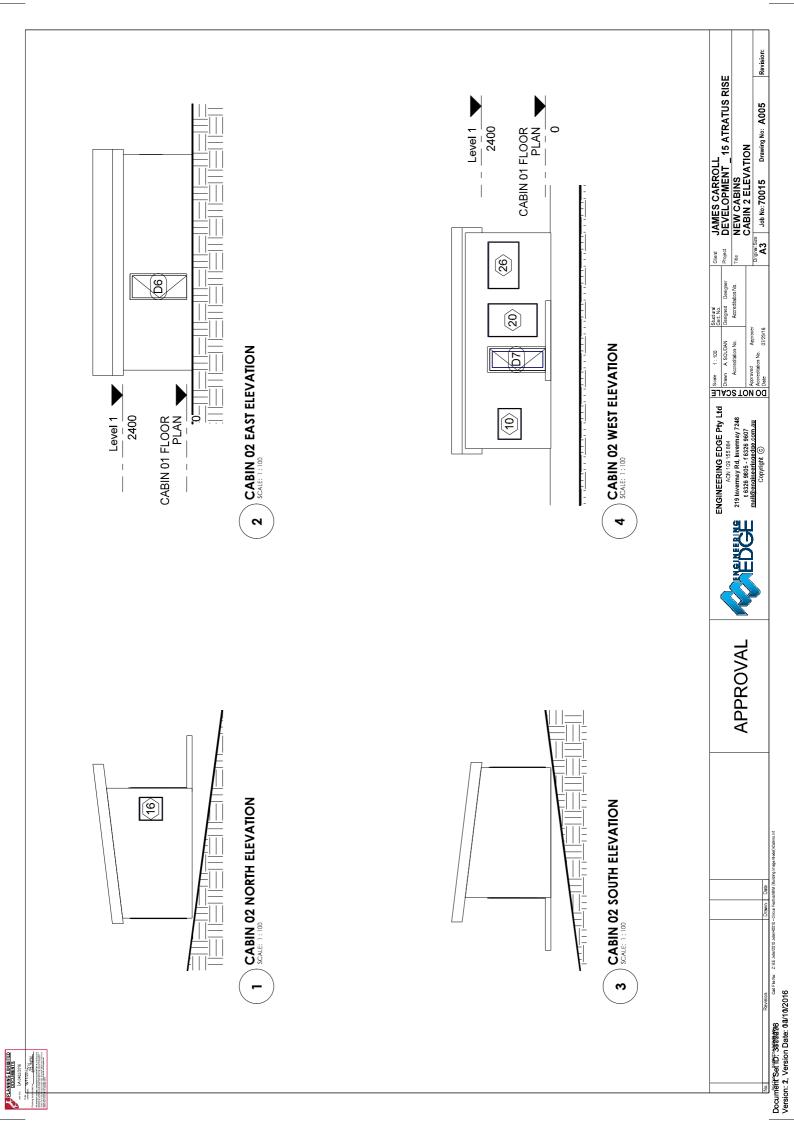


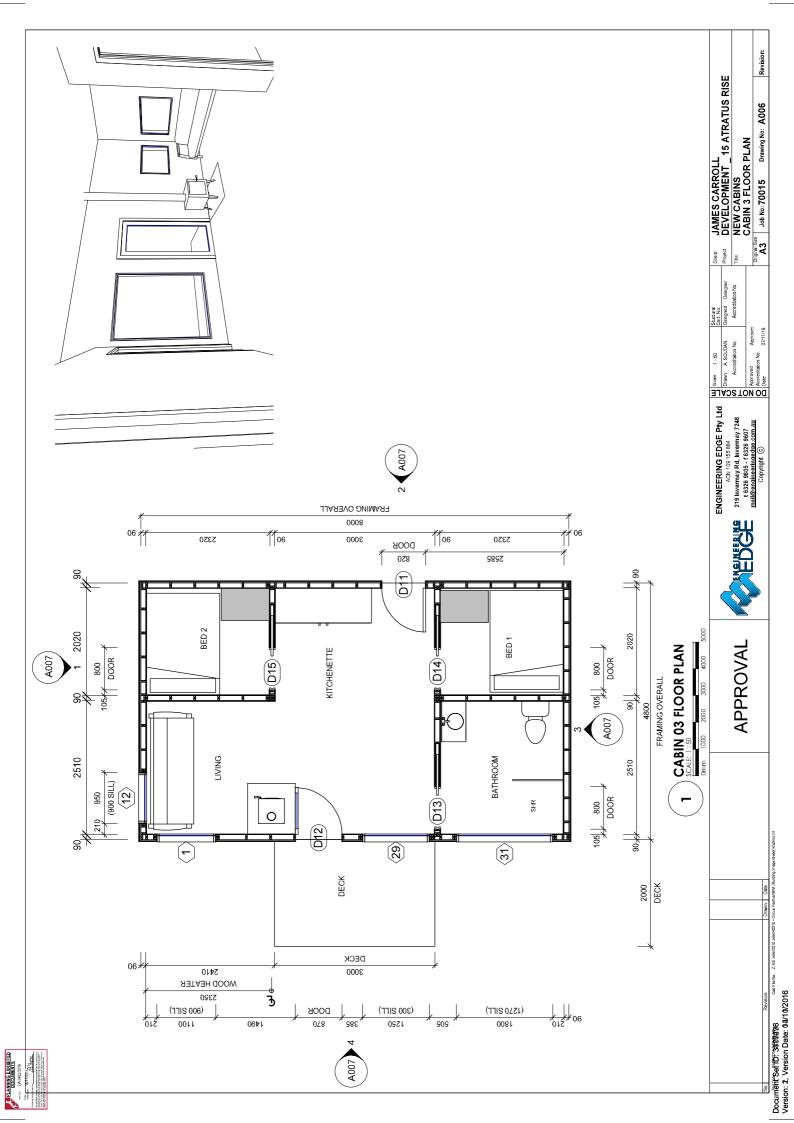
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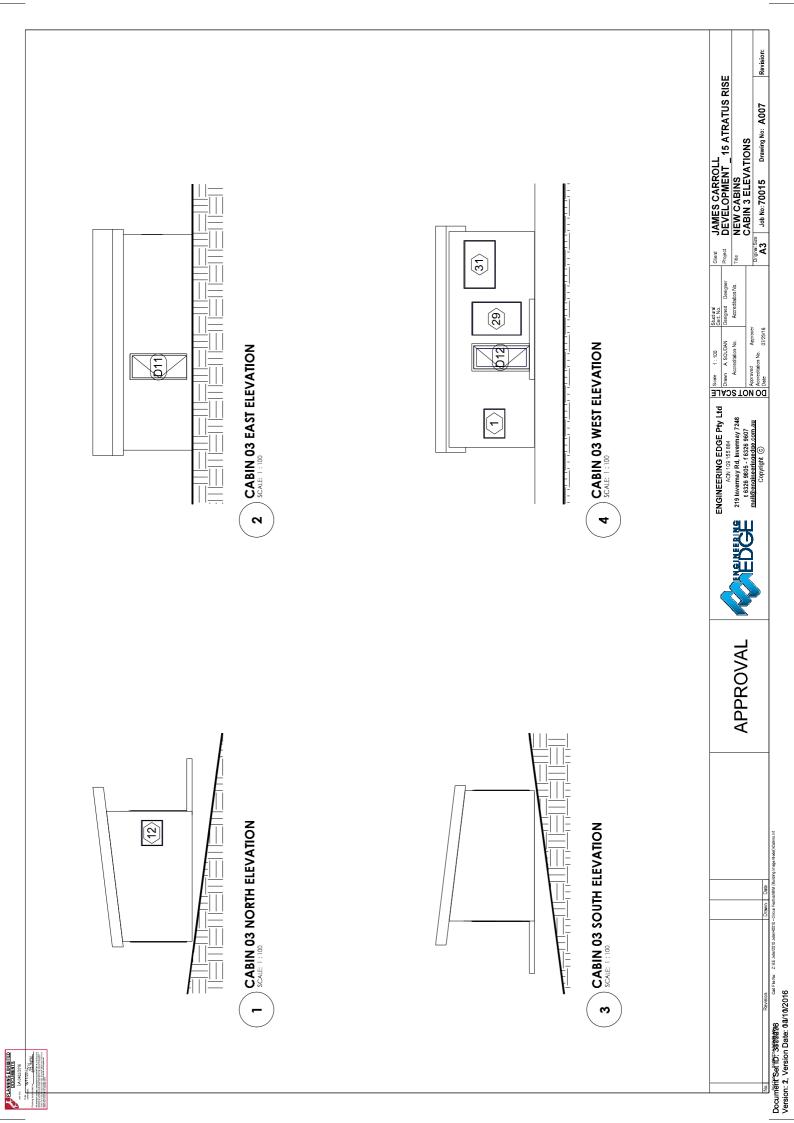


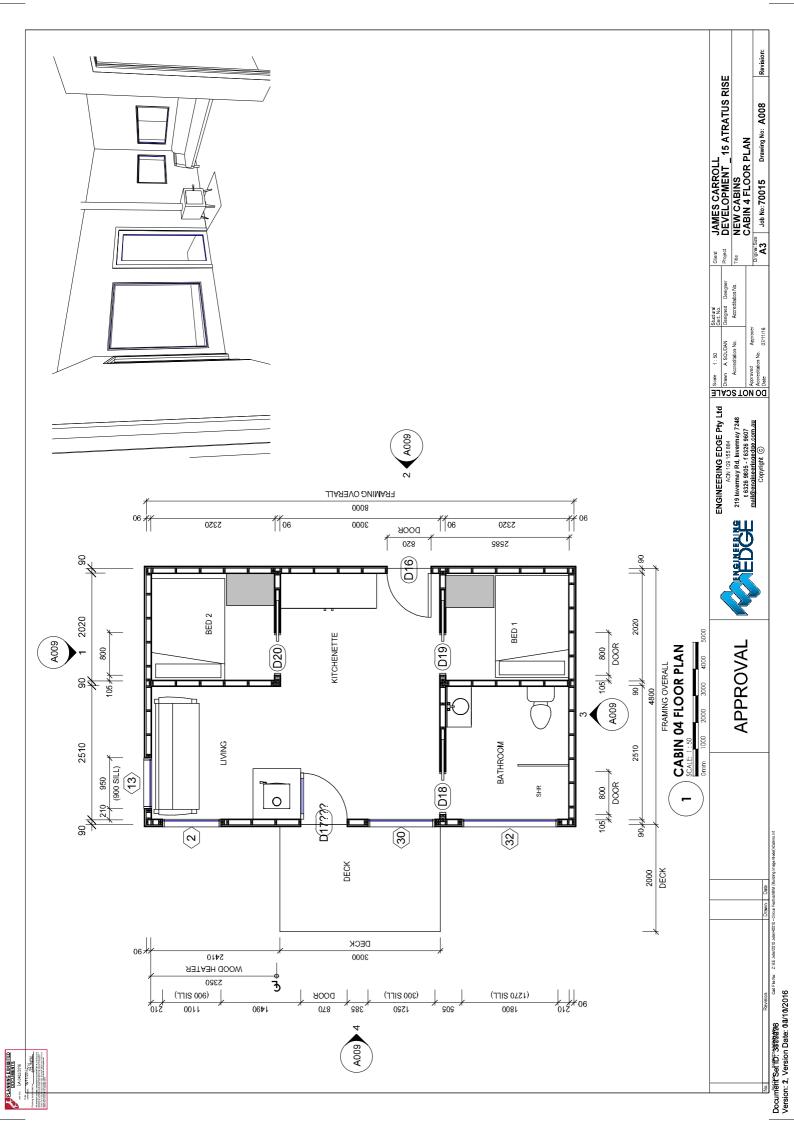


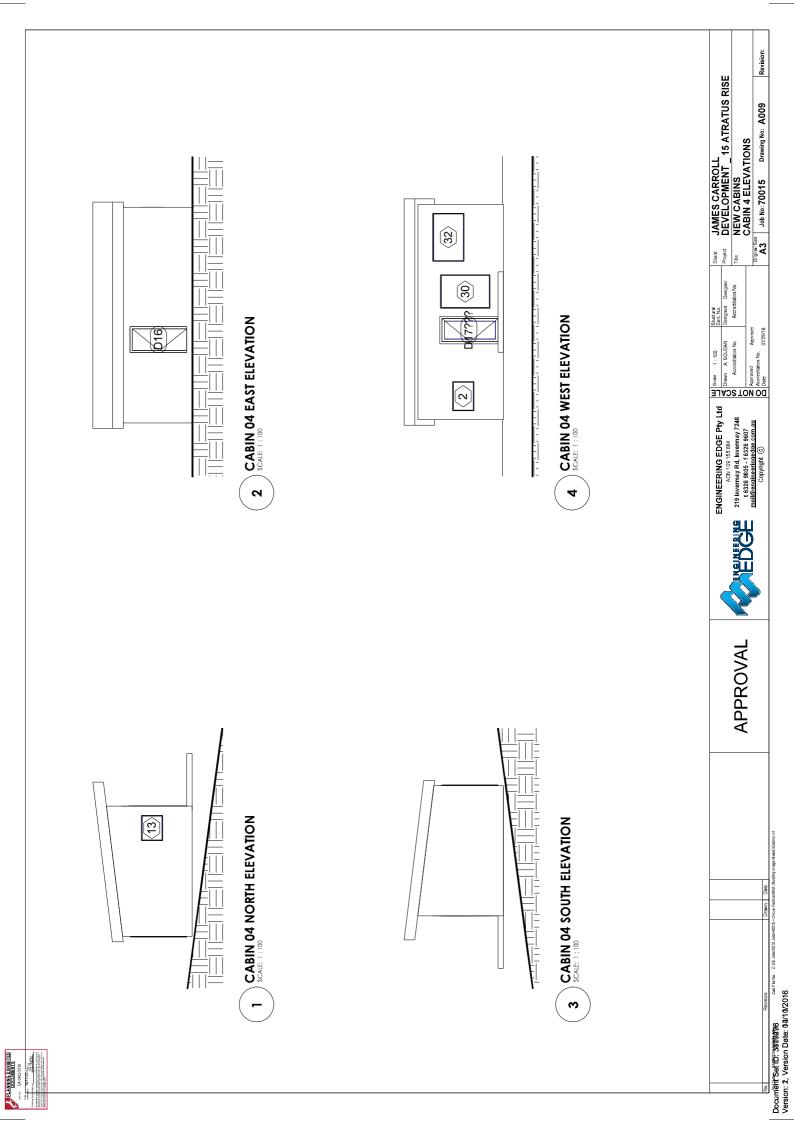


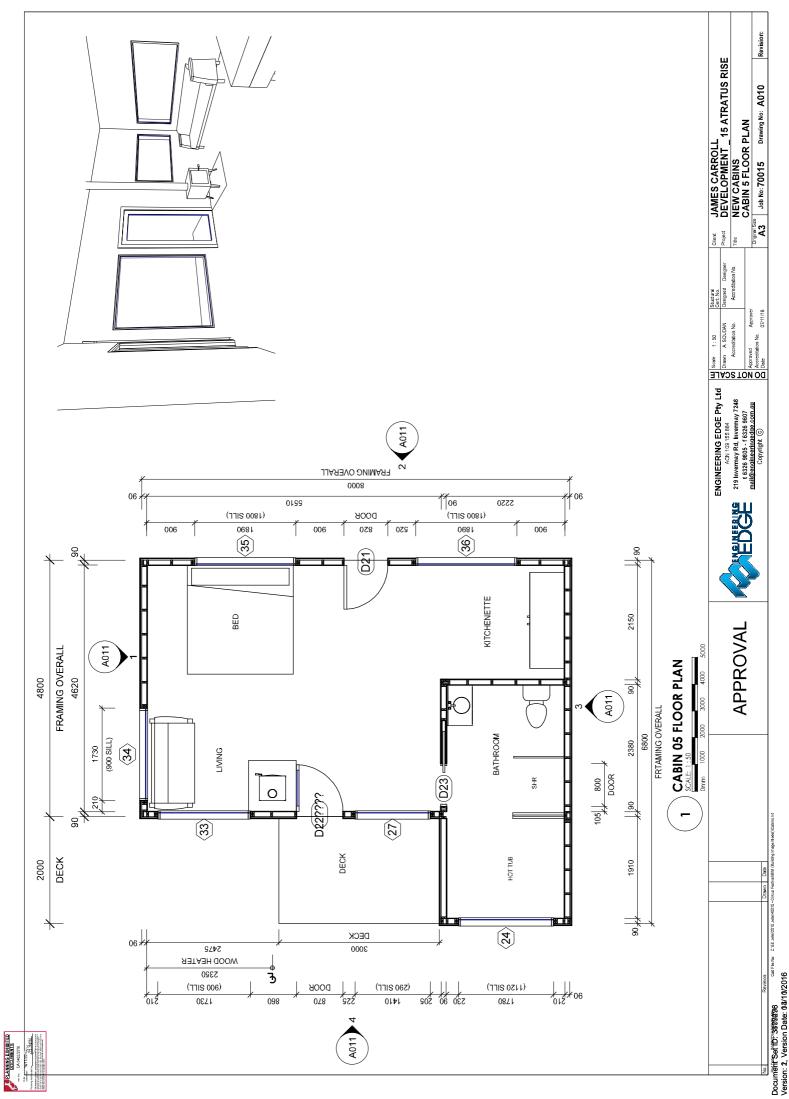


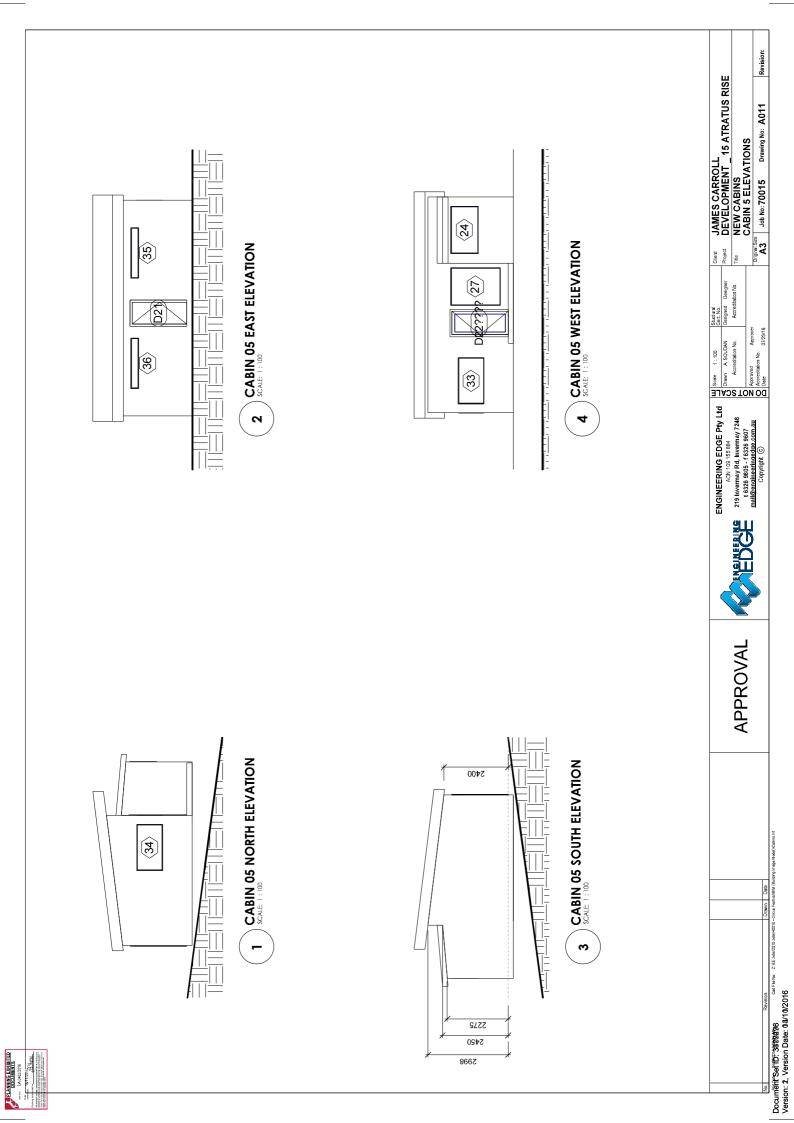


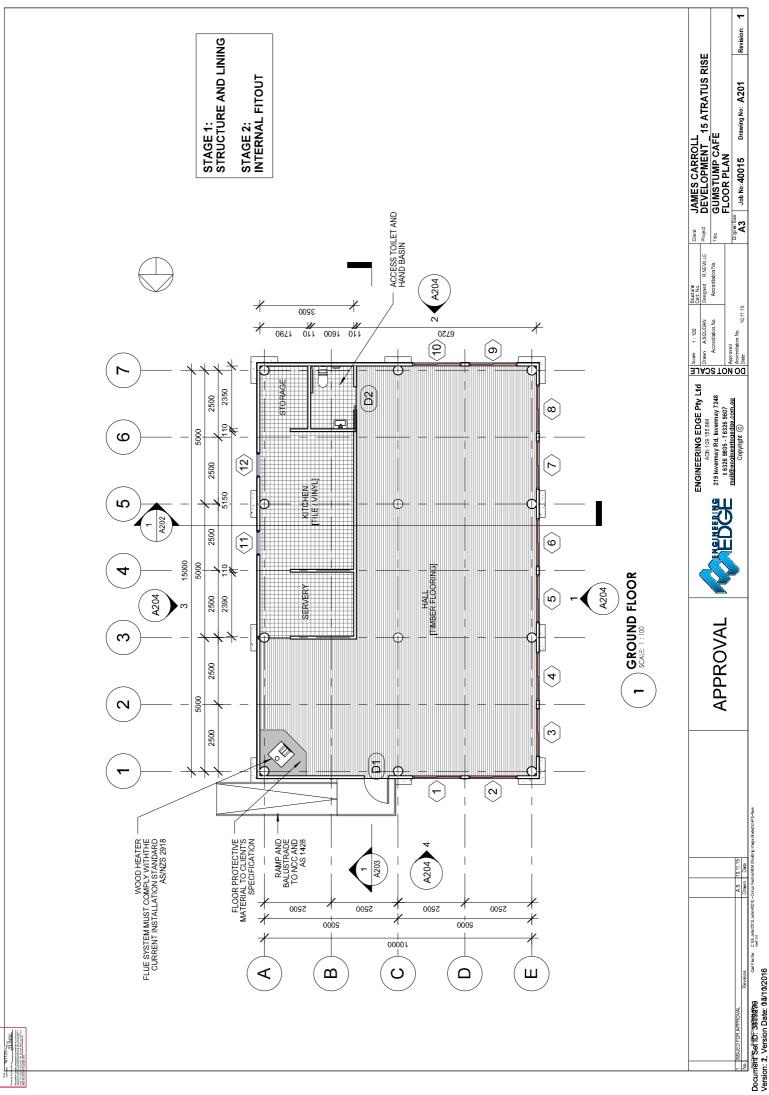




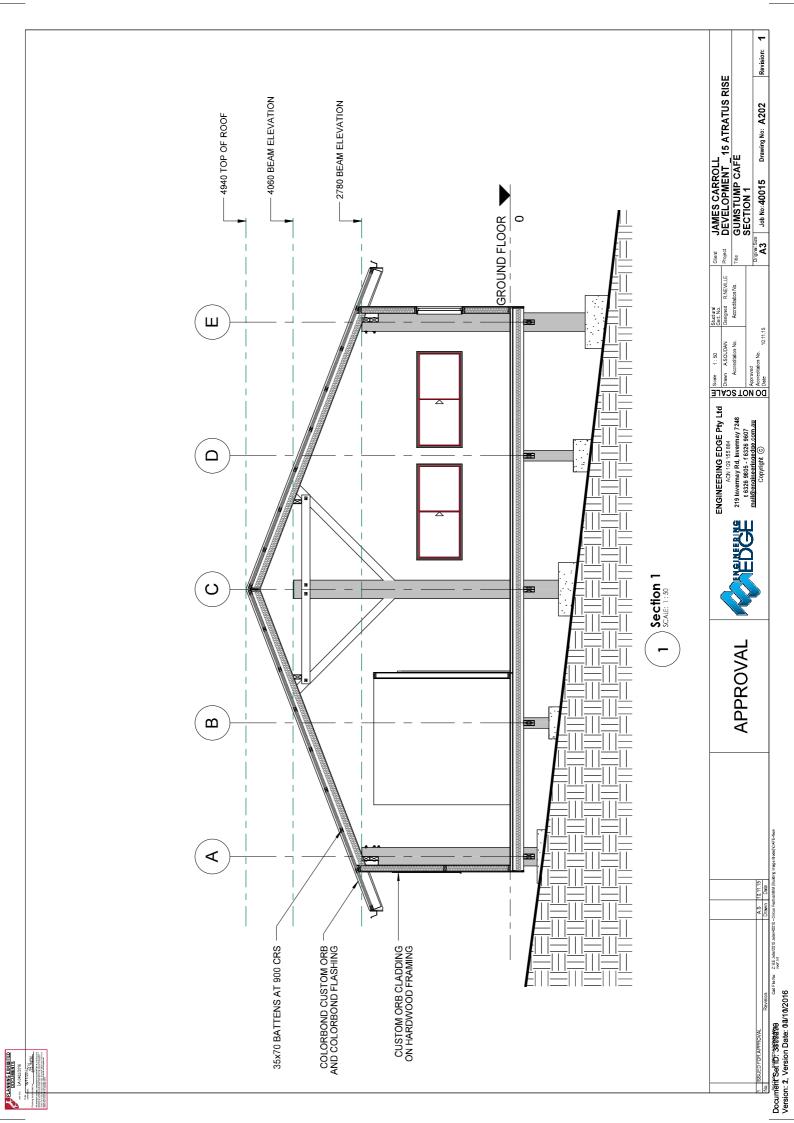


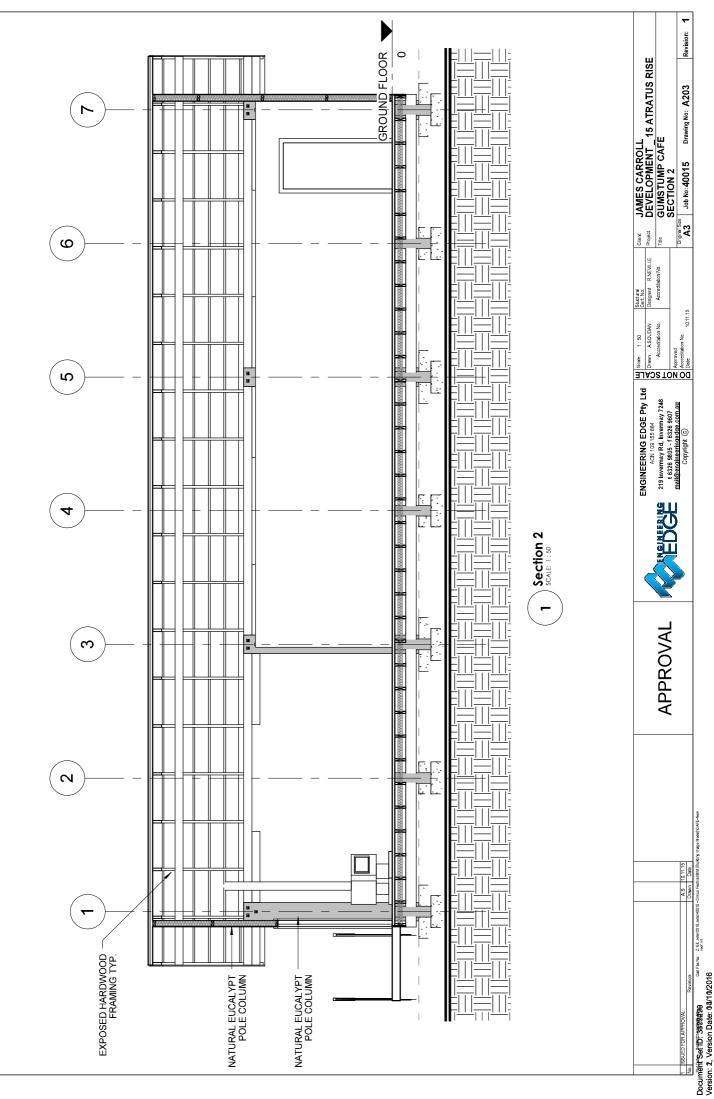


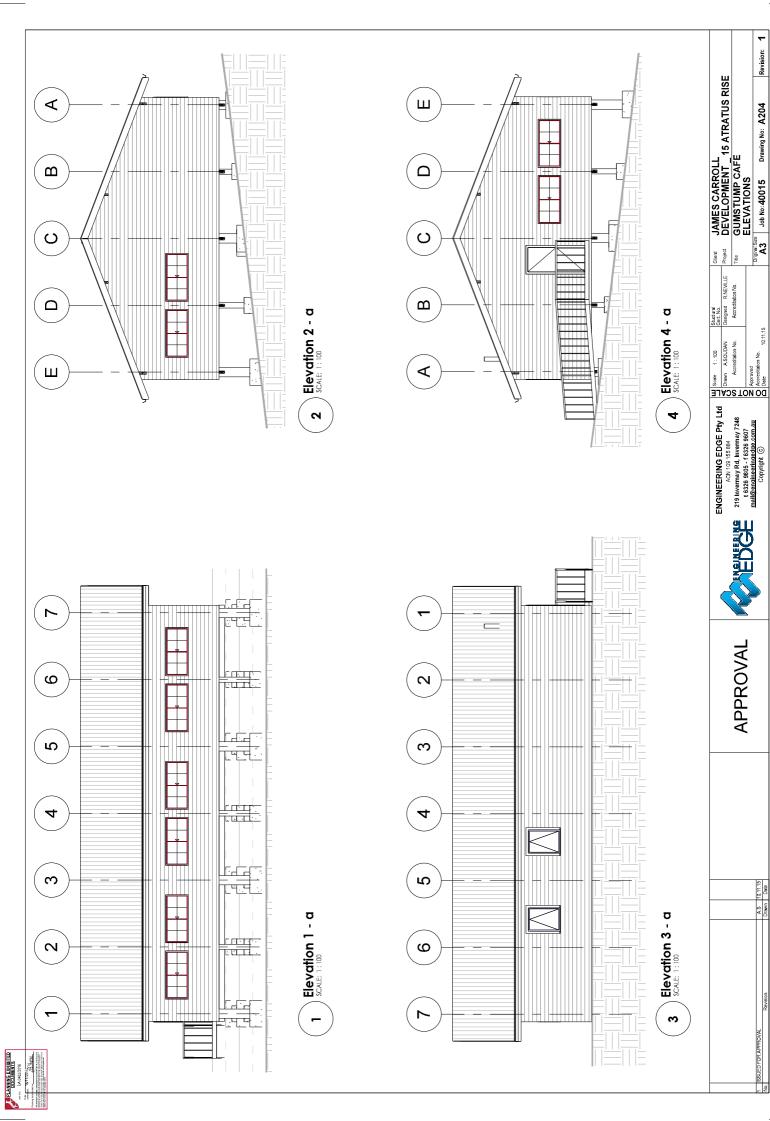




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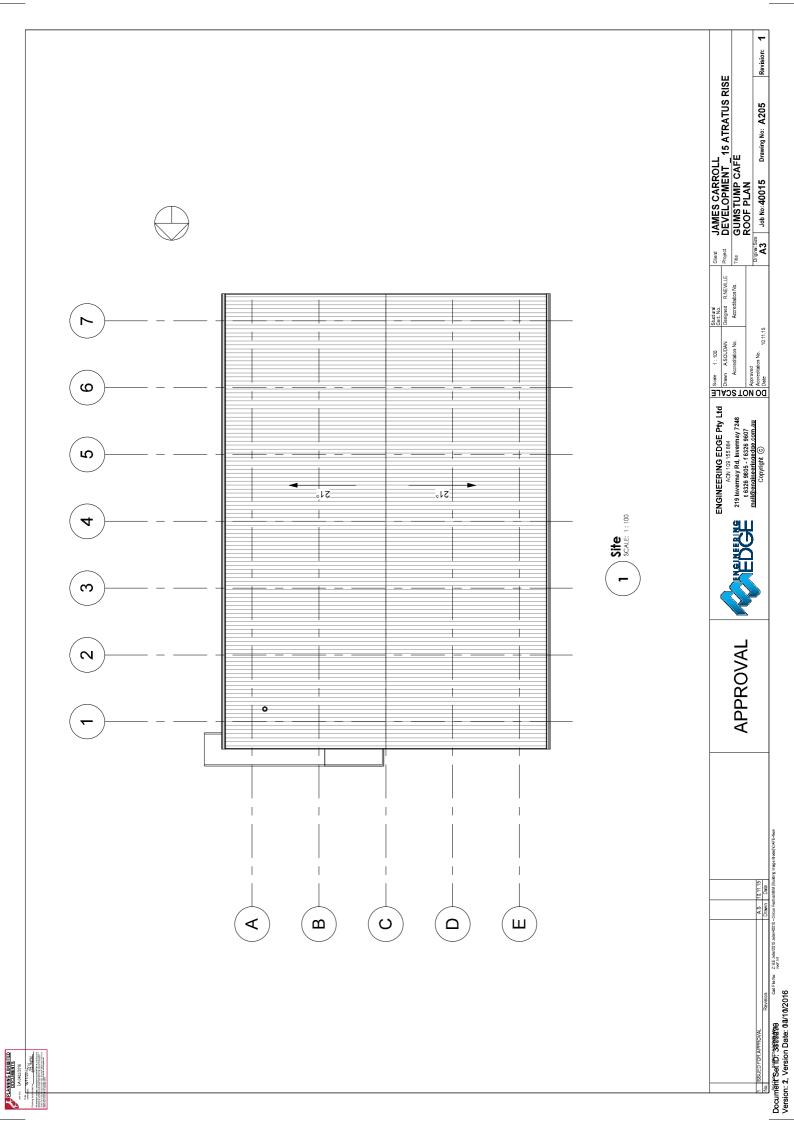


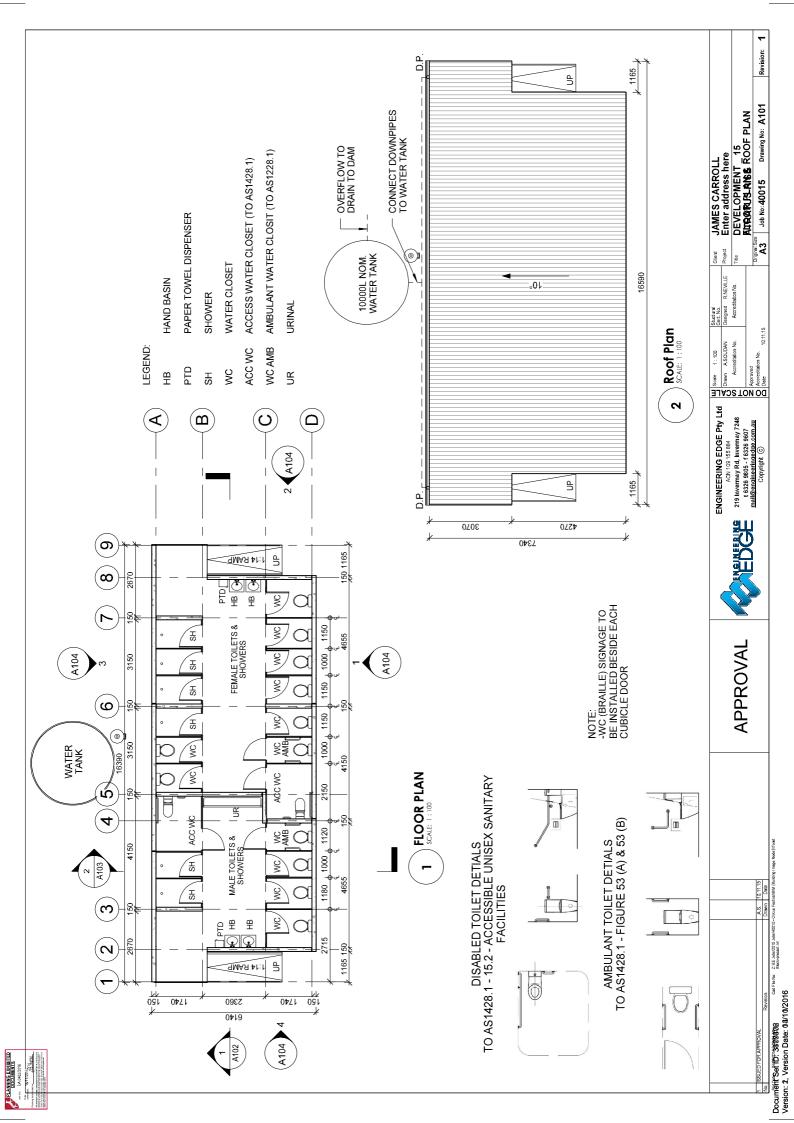


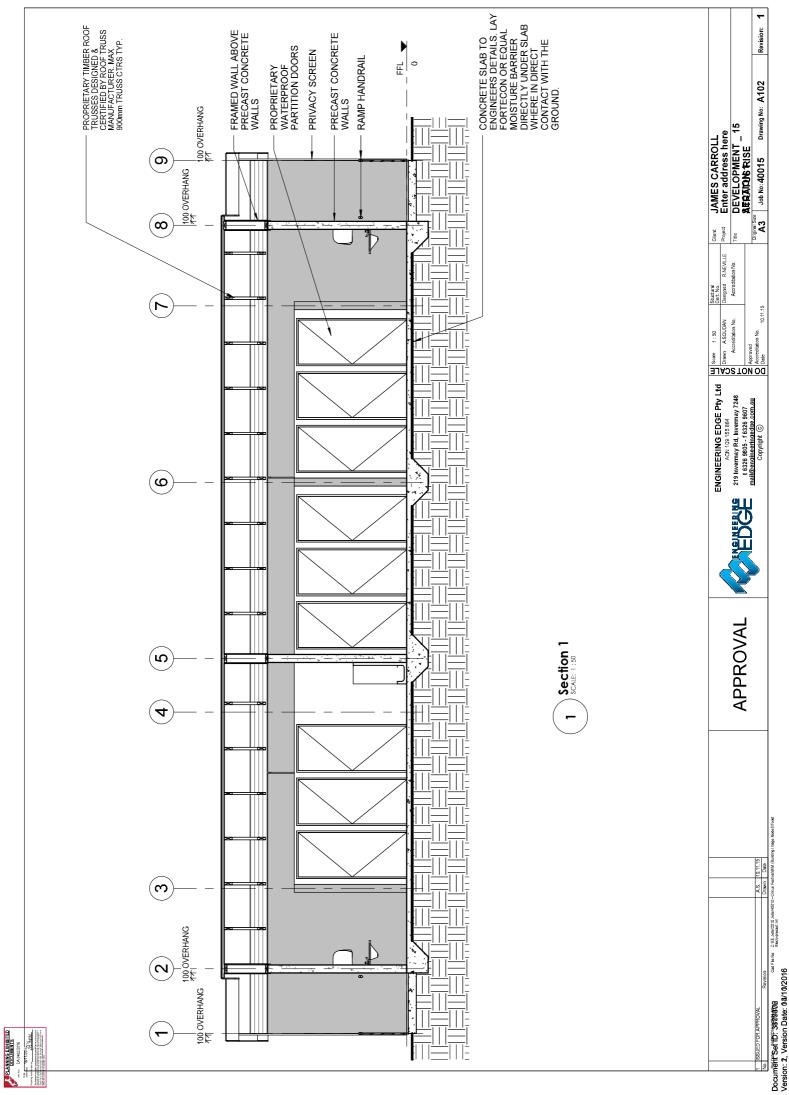


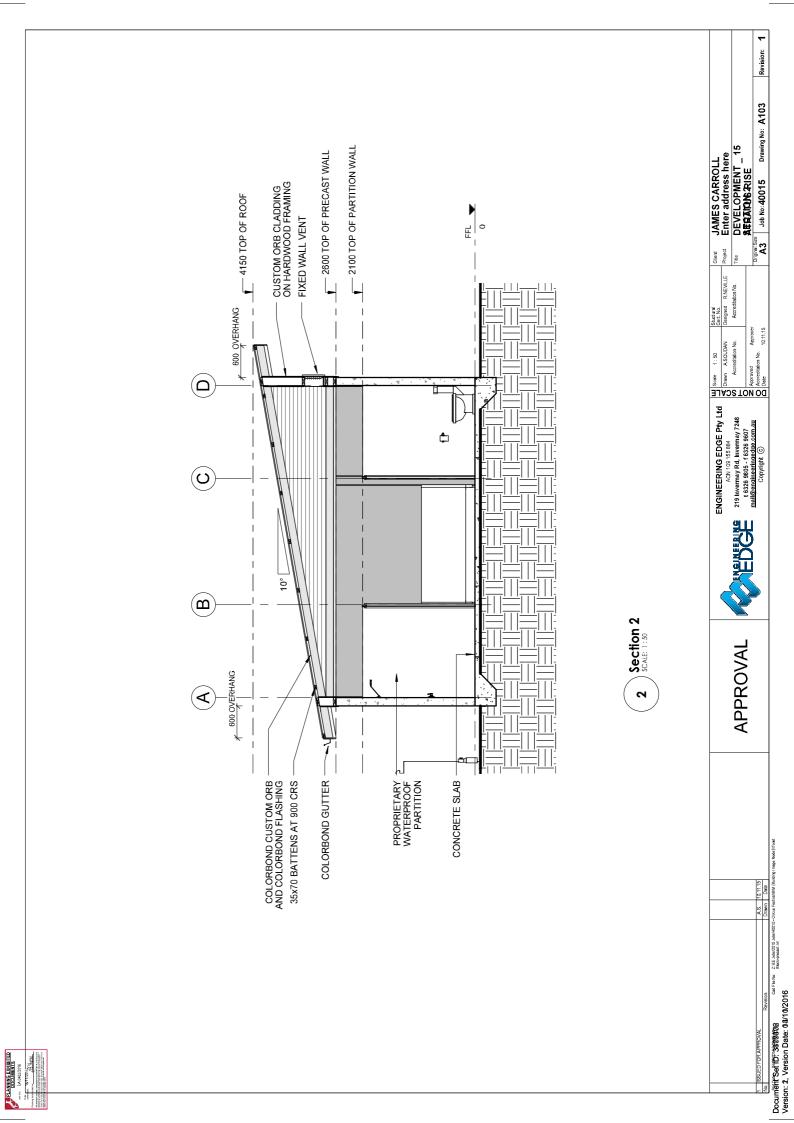
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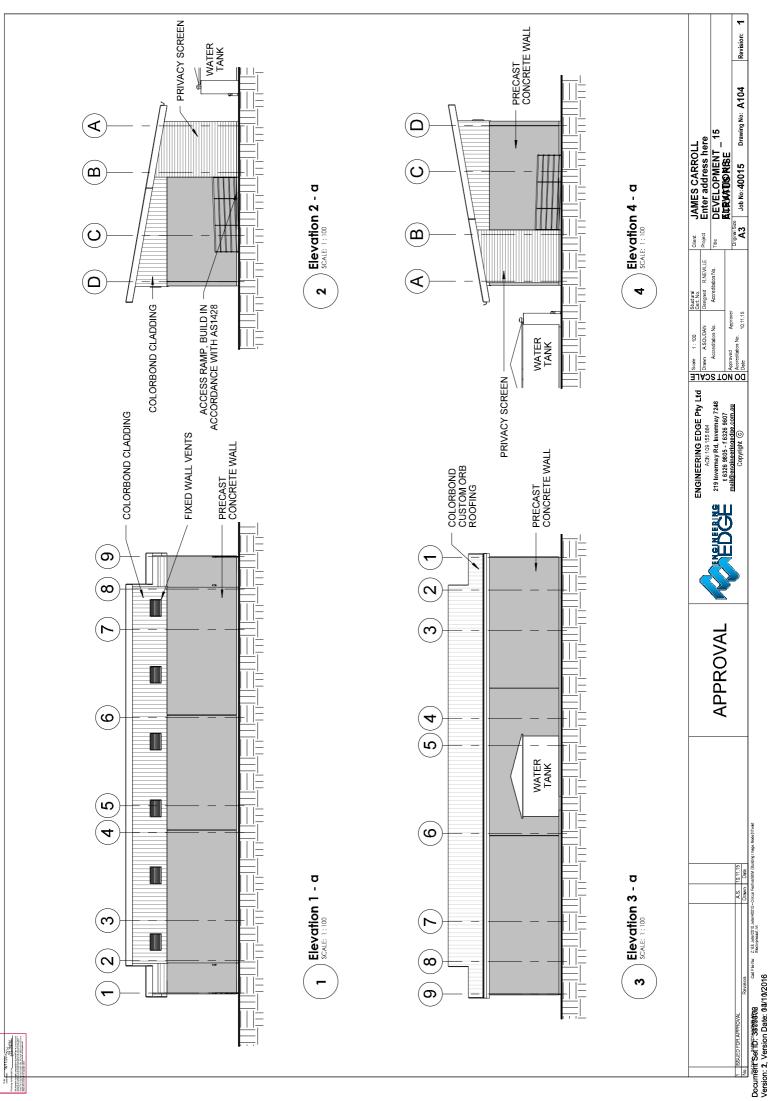
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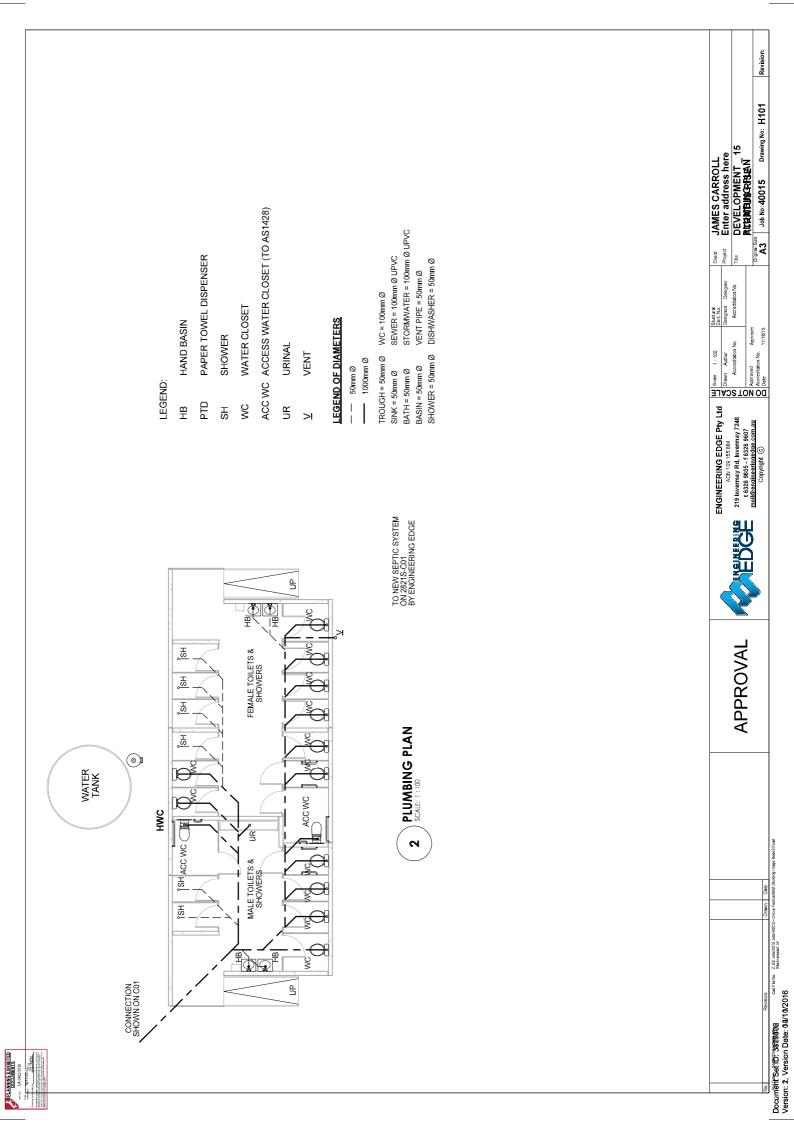


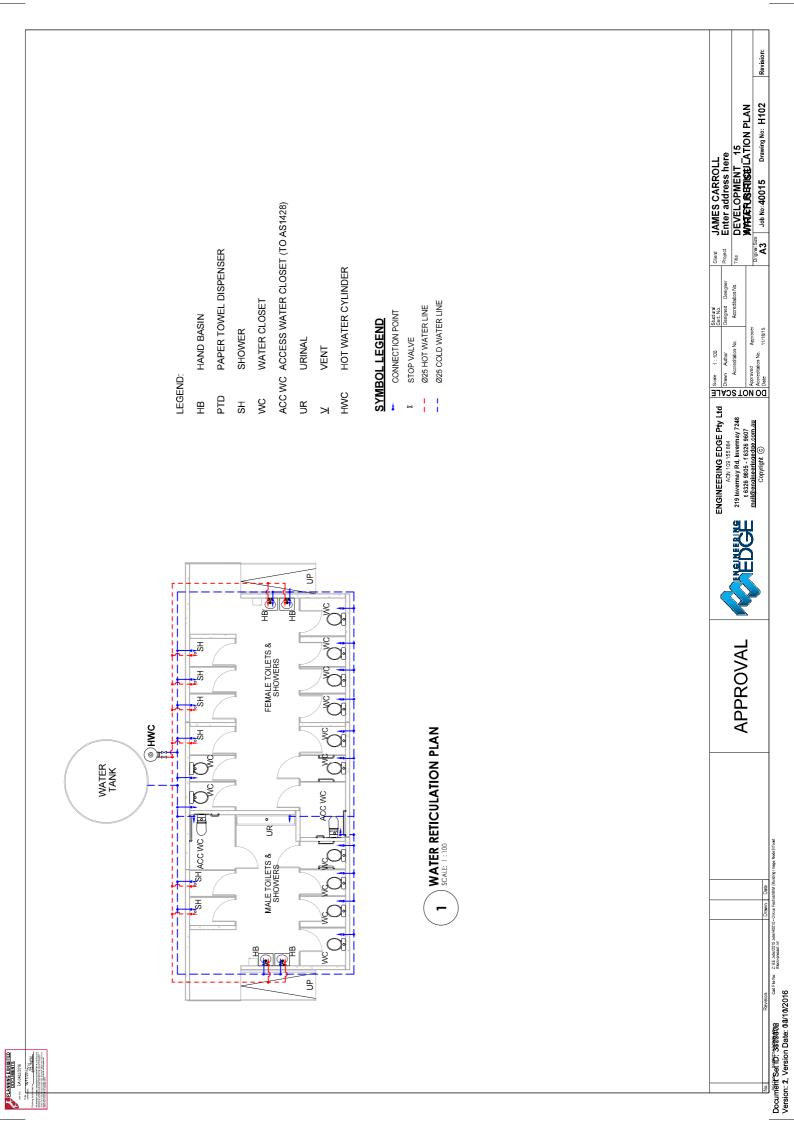


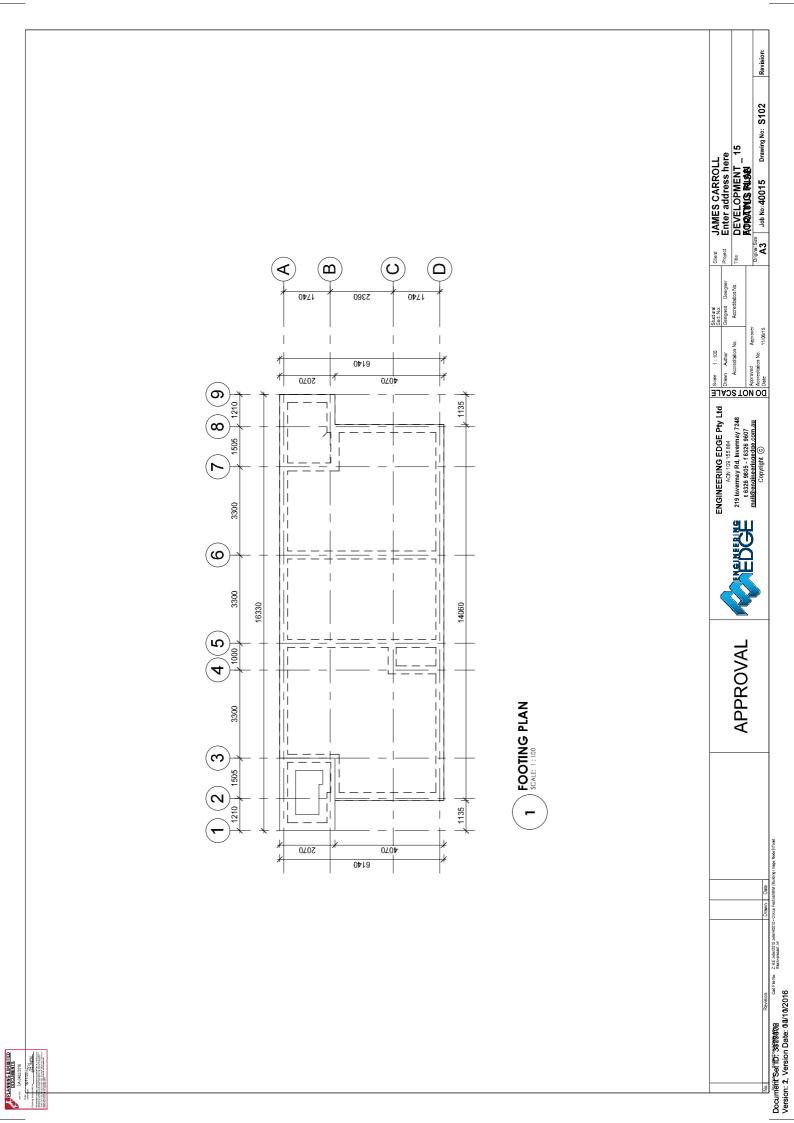


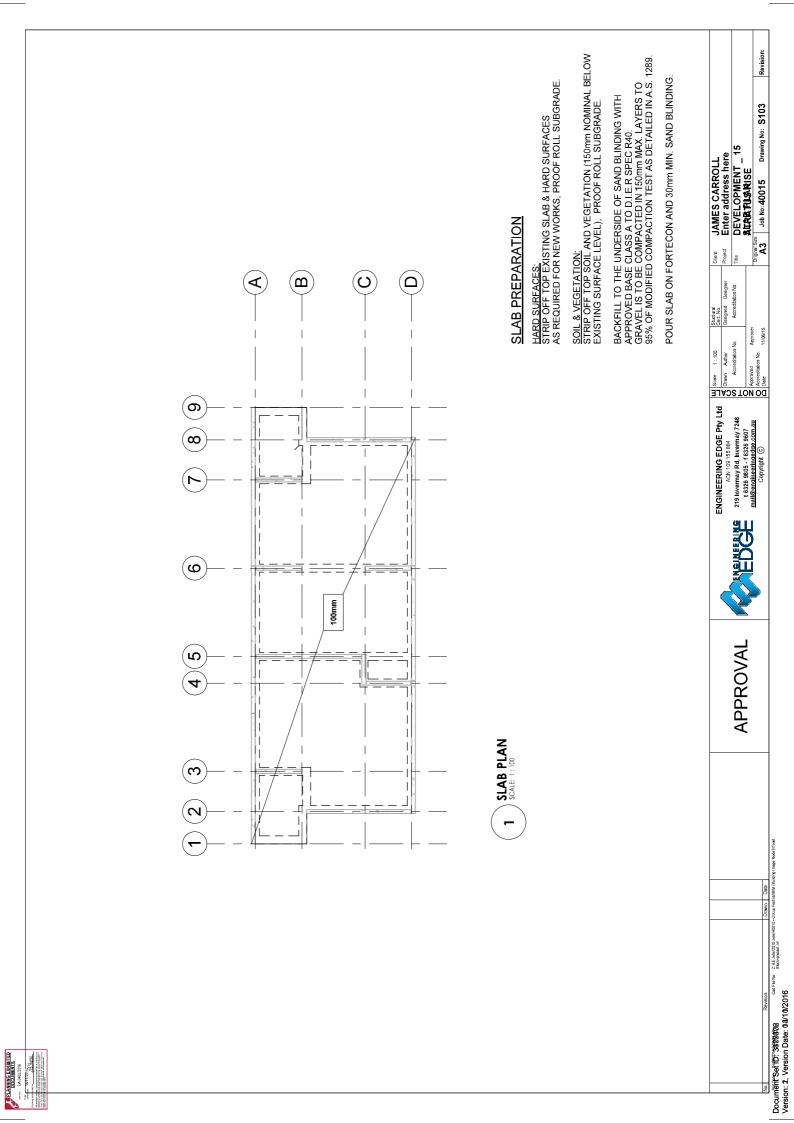


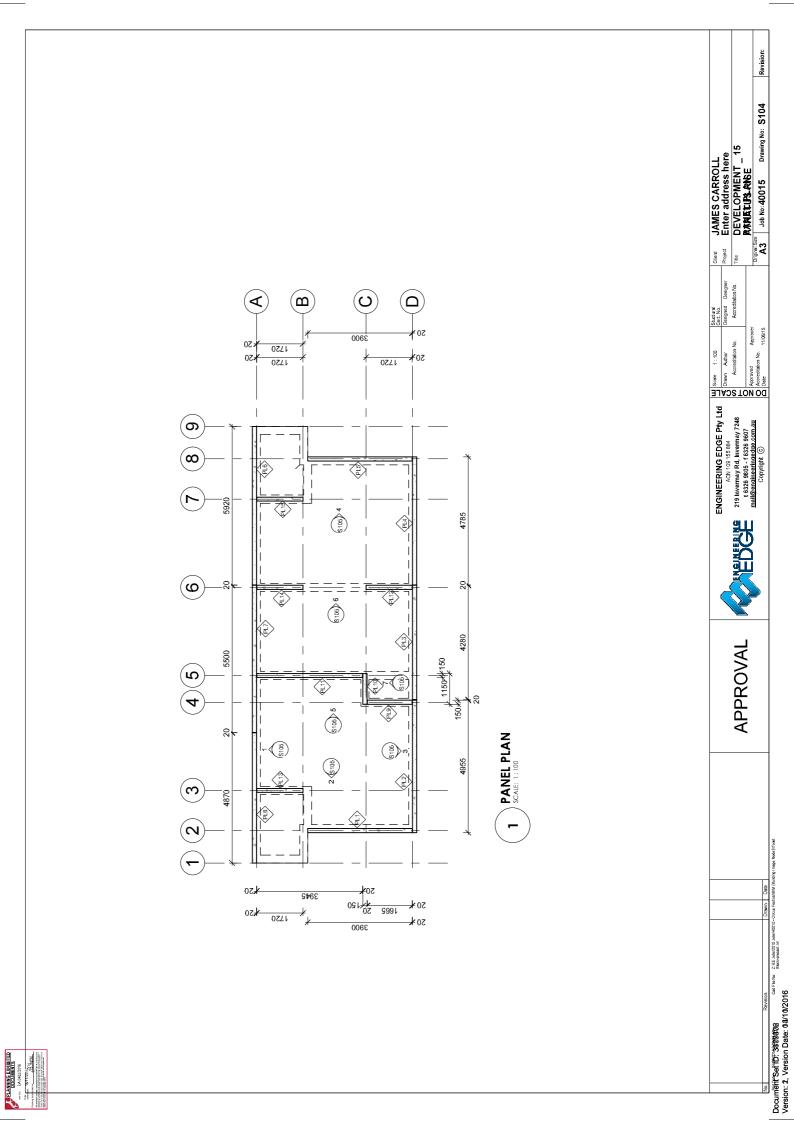
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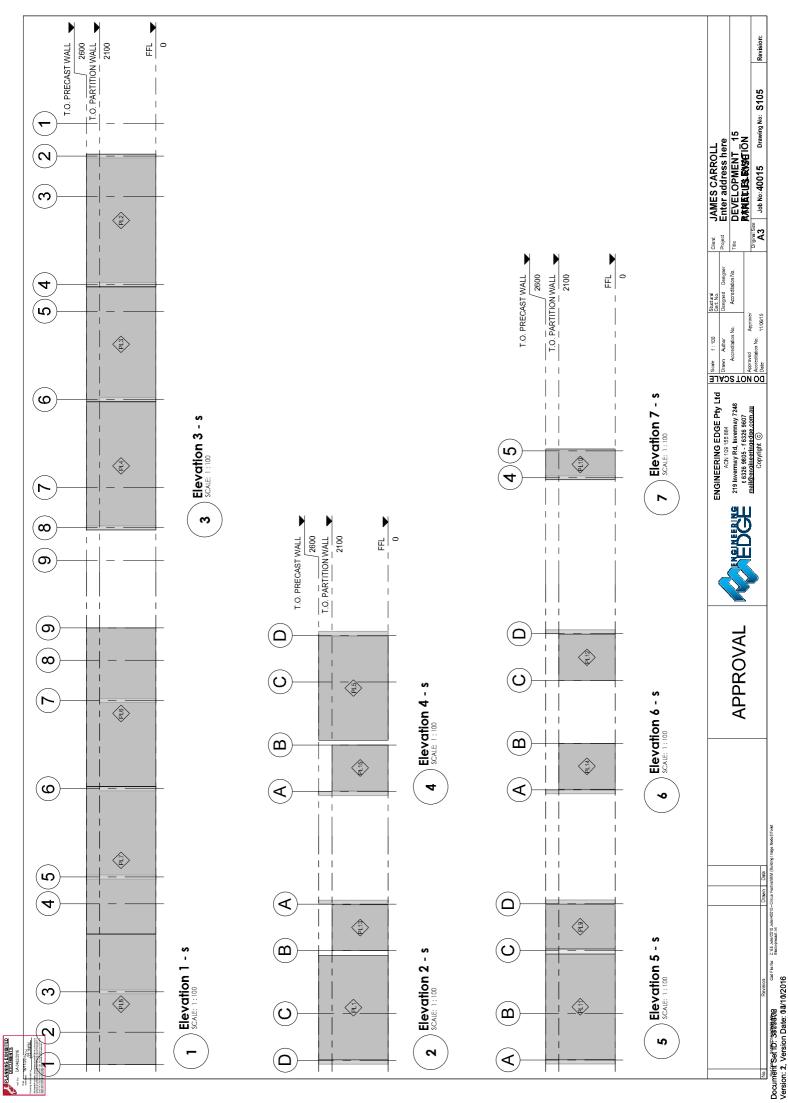


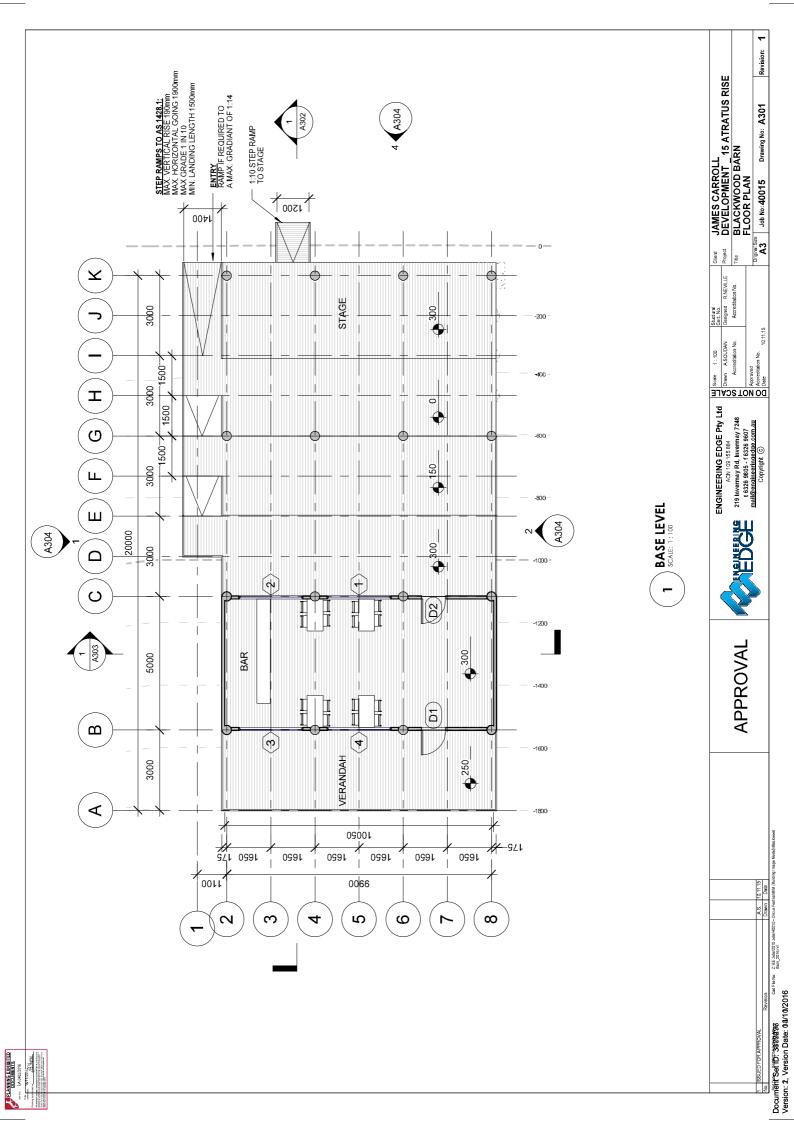


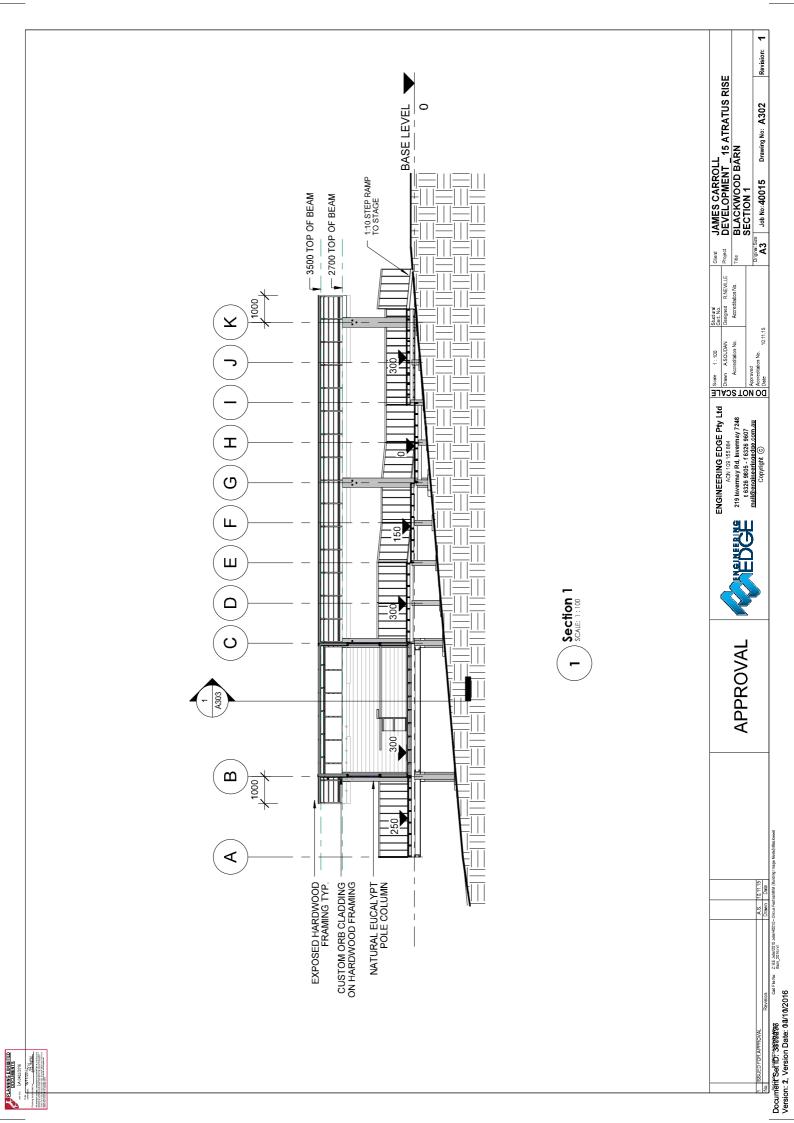


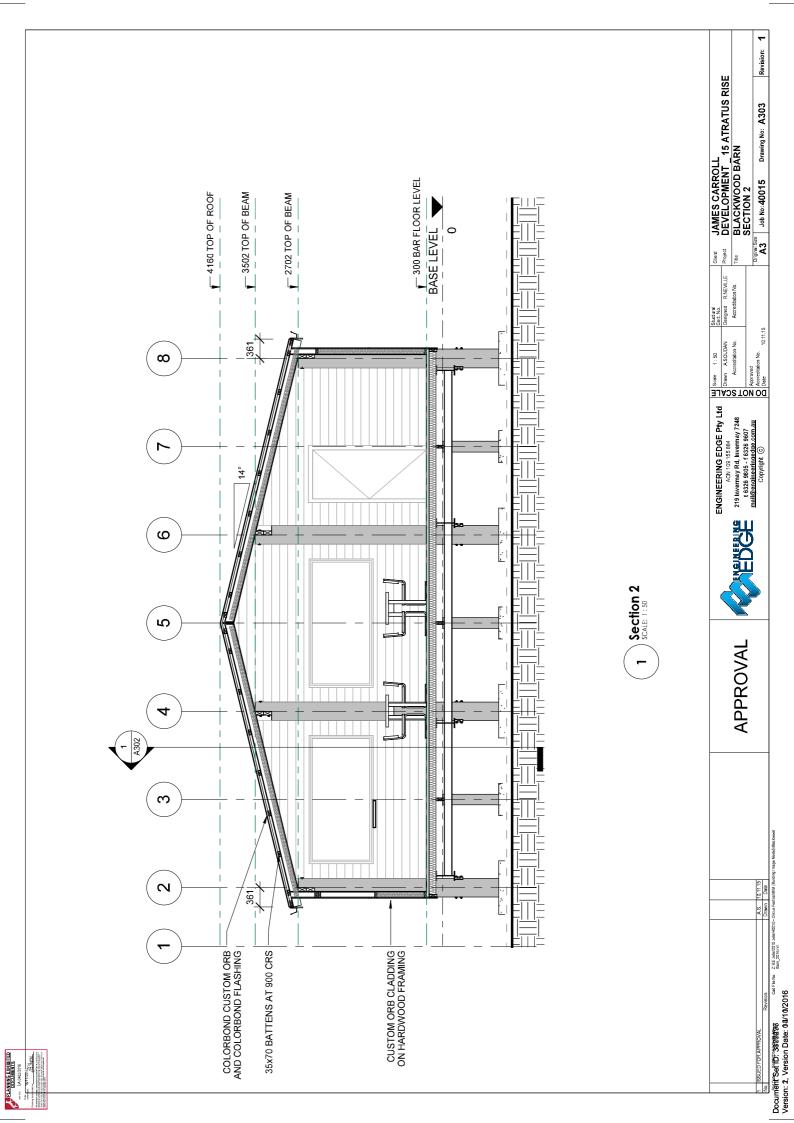


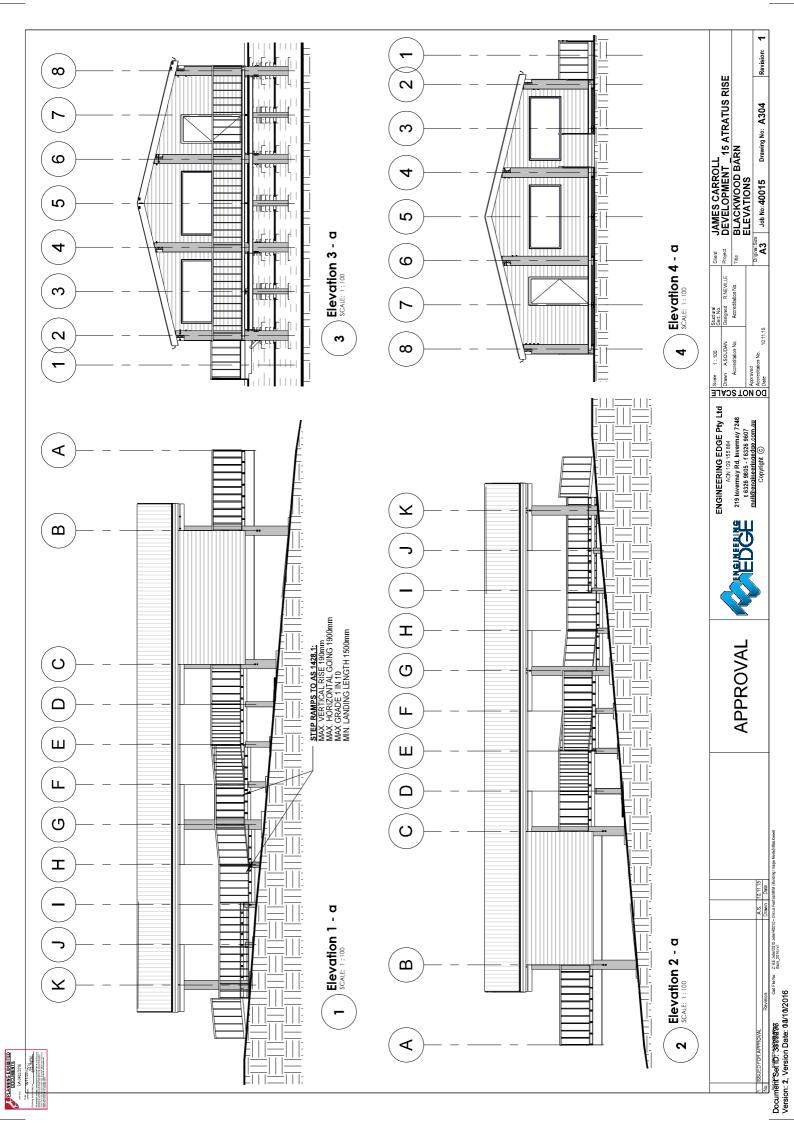


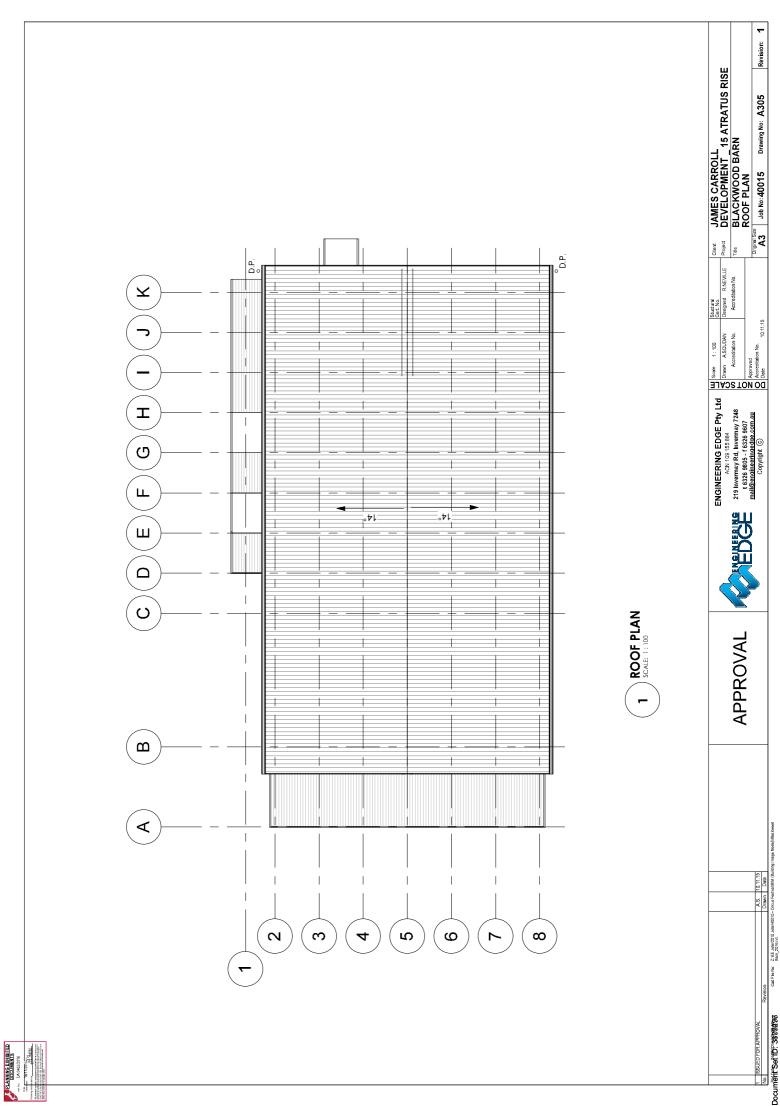






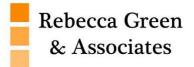






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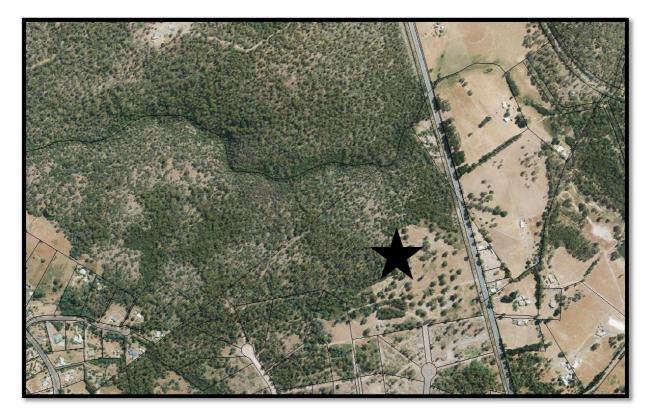




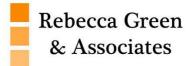
# Bushfire Hazard Assessment Report & Bushfire Hazard Management Plan

Tasmanian Circus Festival

15 Atratus Rise, Swan Bay







### **Prepared for (Client)**

James Carroll

15 Atratus Rise

SWAN BAY TAS 7252

### Assessed & Prepared by

Rebecca Green

Senior Planning Consultant & Accredited Bushfire Hazard Assessor

Rebecca Green & Associates

PO Box 2108 LAUNCESTON TAS 7250

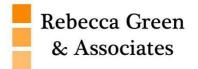
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Version 1

4 December 2015

Job No: RGA-B317





## **Executive Summary**

The proposed development at the 15 Atratus Rise, Swan Bay, is subject to bushfire threat. A bushfire attack under extreme fire weather conditions is likely to subject buildings at this site to considerable radiant heat, ember attack along with wind and smoke.

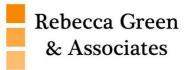
The site requires bushfire protection measures to protect the buildings and people that may be on site during a bushfire.

These measures include provision of hazard management areas in close proximity to the buildings, implementation of safe egress routes, establishment of a water supply and construction of buildings as described in AS 3959-2009 Construction of Buildings in Bushfire Prone Areas.

Primary responsibilities identified within this report:

Occupior	- Establish and maintain Upzard
Occupier	Establish and maintain Hazard
	Management Areas as described in this
	report, including egress and access
	routes.
	<ul> <li>Maintain adequate turning facilities for</li> </ul>
	emergency vehicles on site, as described
	in this report.
	<ul> <li>Extend and maintain adequate water</li> </ul>
	supplies for firefighting purposes, as
	described in this report.
	• The camping area, Bushland Bigtop,
	toilets/showers, stage, Blackwood Bar,
	Awnings and Treat Tribe on site to be
	erected to meet BAL-Low. It is noted
	that these structures within the site are
	temporary and/or non-habitable
	structures.
	<ul> <li>Construct/modify the proposed five</li> </ul>
	cabins to meet <b><u>BAL-19</u></b> (AS3959-2009).
	<ul> <li>Construct/modify the café to meet <u>BAL-</u></li> </ul>
	<u><b>12.5</b></u> (AS3959-2009).
	<ul> <li>Establish/maintain an Emergency</li> </ul>
	Evacuation Plan for the Visitor
	Accommodation Use.

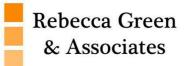




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## Schedule 1 – Bushfire Report

## 1.0 Introduction

The Bushfire Attack Level (BAL) Report and Bushfire Hazard Management Plan (BHMP) has been prepared for submission with a Planning Permit Application under the *Land Use Planning and Approvals Act 1993; Bushfire-Prone Areas Code* and/or a Building Permit Application under the *Building Act 2000 & Regulations 2004.* 

The Bushfire Attack Level (BAL) is established taking into account the type and density of vegetation within 100 metres of the proposed building site and the slope of the land; using the simplified method in AS 3959-2009 Construction of Buildings in Bushfire Prone Areas; and includes:

- The type and density of vegetation on the site,
- Relationship of that vegetation to the slope and topography of the land,
- Orientation and predominant fire risk,
- Other features attributing to bushfire risk.

On completion of assessment, a Bushfire Attack Level (BAL) is established which has a direct reference to the construction methods and techniques to be undertaken on the buildings and for the preparation of a Bushfire Hazard Management Plan (BHMP).

#### 1.1 Scope

This report was commissioned to identify the Bushfire Attack Level for the existing property. ALL comment, advice and fire suppression measures are in relation to compliance with *Bushfire-Prone Areas Code* of the Launceston Interim Planning Scheme 2015, the Building Code of Australia and Australian Standards, *AS 3959-2009, Construction of buildings in bushfire-prone areas*.

#### 1.2 Limitations

The inspection has been undertaken and report provided on the understanding that:-

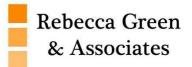
- 1. The report only deals with the potential bushfire risk, all other statutory assessments are outside the scope of this report.
- 2. The report only identifies the size, volume and status of vegetation at the time the site inspection was undertaken and cannot be relied upon for any future development.
- 3. Impacts of future development and vegetation growth have not been considered.

#### No action or reliance is to be placed on this report; other than for which it was commissioned.

#### 1.3 Proposal

Tasmanian Circus Festival including permanent structures (5 x cabins, café) and temporary structures/works and/or non-habitable structures including camping area, Bigtop, main stage, bar, awnings and toilets/showers.





## 2.0 Site Description for Proposal (Bushfire Context)

## 2.1 Locality Plan

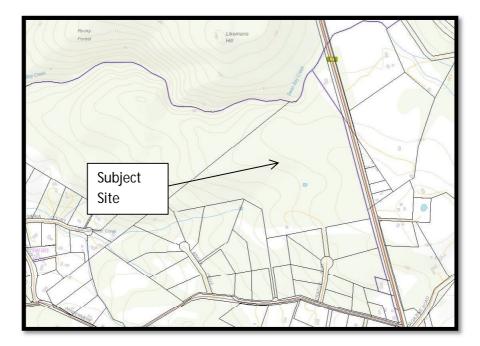
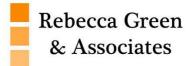


Figure 1: Location Plan of 15 Atratus Rise

#### 2.2 Site Details

Property Address	15 Atratus Rise, Swan Bay
Certificate of Title	Volume 166203 Folio 1
Owner	James Patrick Carroll and Schontal Anne Kathriner
Existing Use	Residential / rural
Type of Proposed Building Work	Tasmanian Circus Festival including permanent structures (5 x cabins, café) and temporary structures/works and/or non-habitable structures including camping area, Bigtop, main stage, bar and awnings.
Water Supply	On-site for fire fighting purposes
Road Access	Street Frontage – Atratus Rise and East Tamar Highway



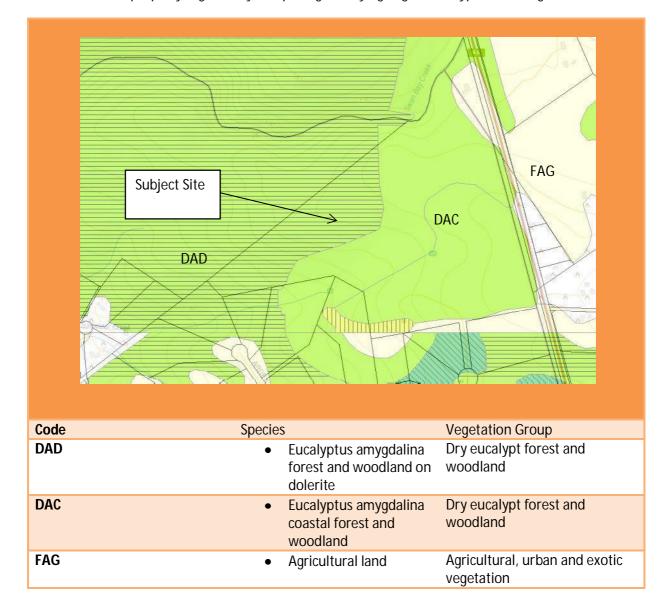


## 3.0 Bushfire Site Assessment

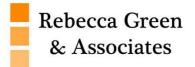
## 3.1 Vegetation Analysis

#### 3.1.1 TasVeg Classification

Reference to Tasmanian Vegetation Monitoring & Mapping Program (TASVEG) indicates the land in and around the property is generally comprising of varying vegetation types including:







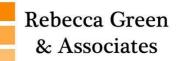
### 3.1.2 Site & Vegetation Photos



Looking south towards are of car parking and camping area

Looking west towards area of cabins and trapeze





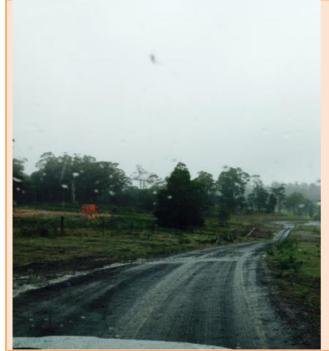


View looking north of cafe

View looking east of cafe







Access looking towards Atratus Rise



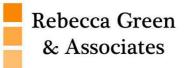


# Rebecca Green & Associates

Vegetation classification AS3959	North □ North-East ⊠	South □ South-West ⊠	East □ South-East ⊠	West □ North-West ⊠
Group A	Forest	Forest	Forest	Forest
Group B	⊠ Woodland	$\boxtimes$ Woodland	$\boxtimes$ Woodland	$\boxtimes$ Woodland
Group C	□ Shrub-land	Shrub-land	Shrub-land	Shrub-land
Group D	🗆 Scrub	🗆 Scrub	🗆 Scrub	🗆 Scrub
Group E	🗆 Mallee-Mulga	🗆 Mallee-Mulga	🗆 Mallee-Mulga	🗆 Mallee-Mulga
Group F	Rainforest	Rainforest	Rainforest	Rainforest
Group G	Grassland	Grassland	Grassland	Grassland
	Managed Land	Managed Land	Managed Land	Managed Land
Effective				
slope (degrees)	□ >0-5 <sup>0</sup>	⊠ >0-5 <sup>0</sup>	□ >0-5 <sup>0</sup>	⊠ >0-5 <sup>0</sup>
(ucyrccs)	□ >5-10 <sup>0</sup>	$\square > 5-10^{\circ}$	$\square > 5-10^{\circ}$	$\Box > 5-10^{\circ}$
	□ >10-15 <sup>0</sup>	□ >10-15 <sup>0</sup>	□ >10-15 <sup>0</sup>	$\square > 10-15^{\circ}$
	□ >15-20 <sup>0</sup>	□ >15-20 <sup>0</sup>	□ >15-20 <sup>0</sup>	□ >15-20 <sup>0</sup>
Distance to classified vegetation	Metres 0	Metres 0	Metres 0	Metres 0
Likely direction of bushfire attack				
Prevailing winds				
Exclusions	a b c d e f	abcdef	abcdef	abcdef
BAL Value (FDI 50)	<b>BAL – FZ</b> (May be reduced to BAL-19 if Specified Hazard Management Area established and maintained)	BAL – FZ (May be reduced to BAL-19 if Specified Hazard Management Area established and maintained)	<b>BAL – FZ</b> (May be reduced to BAL-19 if Specified Hazard Management Area established and maintained)	BAL – FZ (May be reduced to BAL-19 if Specified Hazard Management Area established and maintained)

## 3.2 BAL Assessment – Cabins

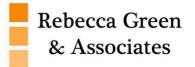




## BAL Assessment – Cafe

Vegetation classification AS3959	North ⊠ North-East □	South ⊠ South-West □	East ⊠ South-East □	West ⊠ North-West □
Group A	Forest	Forest	Forest	Forest
Group B	Woodland	Woodland	Woodland	U Woodland
Group C	Shrub-land	Shrub-land	Shrub-land	Shrub-land
Group D	🗌 Scrub	🗌 Scrub	🗌 Scrub	🗆 Scrub
Group E	Mallee-Mulga	🗆 Mallee-Mulga	🗆 Mallee-Mulga	🗆 Mallee-Mulga
Group F	Rainforest	Rainforest	Rainforest	□ Rainforest
Group G	Grassland	Grassland	Grassland	Grassland
	Managed Land	Managed Land	Managed Land	Managed Land
Effective	⊠ Up/0 <sup>0</sup>	⊠ Up/0 <sup>0</sup>	⊠ Up/0 <sup>0</sup>	□ Up/0 <sup>0</sup>
slope	□ >0-5 <sup>0</sup>	□ >0-5 <sup>0</sup>	□ >0-5 <sup>0</sup>	⊠ >0-5 <sup>0</sup>
(degrees)	□ >5-10 <sup>0</sup>	□ >5-10 <sup>0</sup>	□ >5-10 <sup>0</sup>	□ >5-10 <sup>0</sup>
	□ >10-15 <sup>0</sup>	□ >10-15 <sup>0</sup>	□ >10-15 <sup>0</sup>	□ >10-15 <sup>0</sup>
	□ >15-20 <sup>0</sup>	□ >15-20 <sup>0</sup>	□ >15-20 <sup>0</sup>	□ >15-20 <sup>0</sup>
Distance to classified vegetation	Metres 0	Metres 0	Metres 0	Metres 0
Likely direction of bushfire attack				
Prevailing winds				
Exclusions	a b c d e f	abcdef	abcdef	abcdef
BAL Value (FDI 50)	BAL – FZ (May be reduced to BAL-12.5 if Specified Hazard Management Area established and maintained)	BAL – FZ (May be reduced to BAL-12.5 if Specified Hazard Management Area established and maintained)	BAL – FZ (May be reduced to BAL-12.5 if Specified Hazard Management Area established and maintained)	BAL – FZ (May be reduced to BAL-12.5 if Specified Hazard Management Area established and maintained)





The Bushfire Attack Level shall be classified BAL-LOW where the vegetation is one or a combination of any of the following:

- (a) Vegetation of any type that is more than 100 metres from the site.
- (b) Single areas of vegetation less than 1 hectare in area and not within 100m of other areas of vegetation being classified.
- (c) Multiple areas of vegetation less than 0.25 hectare in area and not within 20 metres of the site, or each other.
- (d) Strips of vegetation less than 20 metres in width (measured perpendicular to the elevation exposed to the strip of vegetation) regardless of length and not within 20 metres of the site or each other, or other areas of vegetation being classified.
- (e) Non-vegetated areas, including waterways, roads, footpaths, buildings and rocky outcrops.
- (f) Low threat vegetation, including grassland managed in a minimal fuel condition, maintained lawns, golf courses, maintained public reserves and parklands, vineyards, orchards, cultivated gardens, commercial nurseries, nature strips and windbreaks.

NOTE: Minimal fuel condition means there is insufficient fuel available to significantly increase the severity of the bushfire attack (recognisable as short-cropped grass for example, to a nominal height of 100mm).

BAL – LOW	The risk is considered to be VERY LOW. There is insufficient risk to warrant any specific construction requirements but there is still some risk.
BAL – 12.5	<b>The risk is considered to be LOW.</b> There is a risk of ember attack. The construction elements are expected to be exposed to a heat flux not greater than 12.5 kW/m <sup>2</sup> .
BAL – 19	The risk is considered to be MODERATE.There is a risk of ember attack and burning debris ignited by windborneembers and a likelihood of exposure to radiant heat. The constructionelements are expected to be exposed to a heat flux not greater than 19kW/m².
BAL – 29	The risk is considered to be HIGH. There is an increased risk of ember attack and burning debris ignited by windborne embers and a likelihood of exposure to an increased level of radiant heat. The construction elements are expected to be exposed to a heat flux not greater than 29 kW/m <sup>2</sup> .
BAL – 40	The risk is considered to be VERY HIGH. There is a much increased risk of ember attack and burning debris ignited by windborne embers, a likelihood of exposure to a high level of radiant heat and some likelihood of direct exposure to flames from the fire front.





	The construction elements are expected to be exposed to a heat flux no greater than 40 kW/m <sup>2</sup> .	
BAL – FZ	<b>The risk is considered to be EXTREME.</b> There is an extremely high risk of ember attack and burning debris ignited by windborne embers, and a likelihood of exposure to an extreme level of radiant heat and direct exposure to flames from the fire front. The construction elements are expected to be exposed to a heat flux greater than 40 kW/m <sup>2</sup> .	

## 3.2 Specified Hazard Management Areas

Hazard management areas are to be established <u>and maintained</u> between the bushfire prone vegetation and the building at a distance equal to, or greater than the separation distance specified for the Bushfire Attack Levels (BAL) in table 2.4.4 of *Australian Standard 3959-2009 Construction of Buildings in Bushfire Prone Areas.* 

Where the Hazard Management Areas can be increased around the building and the classified vegetation in accordance with table 2.4.4 of Australian Standard 3959, the risk from bushfire attack can reduce.

#### Cabins

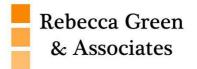
Distance from Predominant vegetation for BAL 19	North/ North-East	South/ <b>South-West</b>	East/ South-East	West/ North-West
	15-<22	18-<26	15-<22	18-<26
	Metres	Metres	Metres	Metres

#### Cafe

Distance from Predominant vegetation for BAL 12.5	<b>North/</b> North-East	South/ South-West	<b>East/</b> South-East	West/ North-West
	14-<50	14-<50	14-<50	16-<50
	Metres	Metres	Metres	Metres

The separation distance for the SPECIFIED Hazard Management Area is to be shown on the attached Bushfire Hazard Management Plan measured from the external walls (Façade) of the building in metres along the ground to the bushfire hazard vegetation (if applicable).





## 3.3 Outbuildings

Applicable. Separate camping area, Bushland Bigtop, toilets/showers, stage, Blackwood Bar, Awnings and Treat Tribe is BAL-LOW as more than 6 metres from Habitable Building.

## 3.4 Road Access

Roads are to be constructed to provide vehicle access to the site to assist firefighting and emergency personnel to defend the building or evacuate occupants; and provide access at all times to the water supply for firefighting purposes on the building site.

Private access roads are to be constructed from the entrance to the property cross over with the public road through to the dwelling and water storage area on the site. Private access roads are to be designed, constructed and maintained to a standard not less than a Modified 4C Access Road.

Existing Road Access and Driveways	Access via direct road frontage and internal roads
New Road Access and Driveways	Private access driveway / roads are to be constructed from the entrance of the property cross over at the public road through to the café and cabins and on-site dedicated fire fighting water supply (where provided). Private access roads are to be designed, constructed and maintained to a standard not less than a "Modified 4C Access Road", with a minimum width of access of 4 metres with passing bays measuring 2 metres by 20 metres every 100 metres of the length of the driveway (minimum 2 in total).

## 3.5 Water Supply

A building that is constructed in a designated bushfire prone area must provide access at all times to a sufficient supply of water for firefighting purposes on the building site.

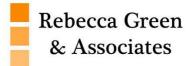
The exterior elements of a Class 1 building in a designated Bushfire prone area must be within reach of a 120m long hose (lay) connected to –

- (i) A fire hydrant with a minimum flow rate of 600L per minute and pressure of 200kpa; or
- (ii) A stored water supply in a water tank, swimming pool, dam or lake available for firefighting at all times which has the capacity of at least 10,000L for each separate building.

	Existing On-Site Water Supply	On site water supply is required.
1	It should be recognized that although water supply as specified above may be in compliance with the	

It should be recognised that although water supply as specified above may be in compliance with the requirements of the Building Code of Australia, the supply may not be adequate for all firefighting situations.





## 4.0 Bushfire Hazard and Risk Assessment

## 4.1 Fire History

There is no evidence of bushfires on the land or surrounding area.

## 4.2 Bushfire Attack

The influence on fire behaviour in the area is likely to be the continuity of fuel and the direction of the winds driving the fire. Fires could approach the site through continuous fuels from the west and northwest. Fires approaching from the east would be moving through partly cleared areas which would slow the spread of smaller fires but are unlikely to be sufficient to affect major bushfires. Severe fire weather in Tasmania is generally associated with strong, dry, northerly to north-westerly winds ahead of major cold fronts which then back round to the west and southwest as the front passes. Therefore the major bushfire threat to the site is likely to come from fires to the northwest and west of the site.

## 4.3 Overall Risk Assessment

The bushfire risk on the site is considered to be moderate and would not preclude the proposed development provided the bushfire protection measures recommended in this report are incorporated into the development.

## 5.0 Bushfire-Prone Areas Code Assessment Criteria

Assessment has been completed below to demonstrate the BAL and BHMP have been developed in compliance with the Acceptable Solutions and/or the Performance Criteria as specified in the Bushfire-Prone Areas Code.

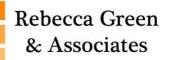
#### E1.4 – Exemptions – Not applicable.

#### E1.5 Vulnerable Uses

E1.5.1.1 Standards	for Vulnerable Use
	Comments
□ A1	Not applicable
⊠ P1	Not applicable as visitor accommodation.
⊠ A2	The proposal is for visitor accommodation. A core bushfire protection measure for this facility is to ensure that the establishment and maintenance of the hazard management areas, implementation of water supply dedicated for firefighting purposes and safe egress are undertaken. There is a commitment by the occupier that an Emergency Evacuation Plan is to be maintained and approved by the TFS prior to commencement (occupancy) of the use, and conforming to the TFS Guidelines. The Plan will include designated emergency meeting points, which provide protection to fire fighter and evacuees; and information to staff, occupants and visitors on bushfire safety and evacuation procedures.



□ P2

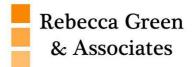


It is noted that the area for the camping ground is likely to be constructed to BAL-LOW, as well as Bushland Bigtop, toilets/showers, stage, Blackwood Bar, Awnings and Treat Tribe. The proposal provides for some separation for the camping area, sufficient access and adequate on-site water supply for fire-fighting purposes and exceeds the minimum requirements. A Building Surveyor will have to certify BAL-LOW for the construction of the separate camping area, Bushland Bigtop, toilets/showers, stage, Blackwood Bar, Awnings and Treat Tribe when it comes time to assess the building application.

#### E1.6.3 Development Standards for New Habitable Buildings on Pre-existing Lots

E1.6.3.1	Hazard manag	gement areas for habitable buildings
		Comments
⊠ A1	(c)	Specified distances for Hazard Management Areas for BAL 12.5 as specified on the plan are in accordance with AS3959 for café and BAL 19 for the cabins. The proposal complies.
🗆 P1		
⊠ A2		The applicable hazard management areas are located wholly within the title. Not applicable.
🗆 P2		
E1.6.3.2	Private access	
		Comments
⊠ A1	(c)	Property has road frontage, and plans demonstrate that private access will be to within 30 metres of the furthest part of a habitable building measured as a hose lay.
🗆 P1		
⊠ A2		Internal private access and hardstand to be supplied within 3m of the static water supply point. Located on site.
🗆 P2	No PC	
🖾 A3		Existing access and new access to be upgraded/ constructed to comply.
🗆 P3		
E1.6.3.3	Water supply	for fire fighting purposes
		Comments
⊠ A1	(d)	A minimum 10,000 litre non-combustible tank dedicated for fire fighting water supply is already provided no closer than 6m to the building (café and five cabins) total 60,000 litres with additional supply of 10,000 for the camping area and other non-habitable structures during the event of the Circus Festival (this could be a mobile set-up).





#### E1.6.5 Development Standards for Vulnerable Uses

E1.6.5.1	Vulnerable u	ses: Provision of hazard management areas for habitable buildings
		Comments
⊠ A1	(b)	Specified distances for Hazard Management Areas for BAL 12.5 as specified on the plan are in accordance with AS3959 for café and BAL 19 for the cabins. The proposal complies. It is recommended that a 10 metre wide hazard management area, where possible should be maintained around the proposed camping area.
🗆 P1	No PC	
⊠ A2		The applicable hazard management areas are located wholly within the title. Not applicable.
🗆 P2		
⊠ A2		Not applicable.
🗆 P2	No PC	

## 6.0 Layout Options

Not relevant to this proposal.

## 7.0 Other Planning Provisions

Not relevant to this proposal.

## 8.0 Conclusions and Recommendations

Mitigation from bushfire is dependent on the careful management of the site by maintaining reduced fuel loads within the hazard management areas and within the site.

The site has been assessed as requiring buildings to conform to or exceed BAL 12.5 (cafe) and BAL 19 (Cabins) and BAL LOW (camping area, Bushland Bigtop, toilets/showers, stage, Blackwood Bar, Awnings and Treat Tribe) requirements based on AS 3959 – 2009 Construction of Buildings in Bushfire Prone Areas.

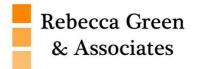
#### <u>Access</u>

The driveway is to be constructed/upgraded of all-weather construction, with a minimum width of access of 4 metres, with a minimum load of 20 tonnes. Passing bays measuring 2 metres by 20 metres every 100 metres of the length of the driveway must be installed (minimum 2 required).

#### Water Supplies

The cafe is to be supplied with a water supply tank at least 10,000 litres, the cabins each with a water supply tanks at least 10,000 litres with a fitting suitable for TFS access. With additional supply of 10,000 litres for the camping area and other non-habitable structures during the event of the Circus Festival (this could be a mobile set-up).





#### Fuel Managed Areas

The site of the proposed cafe is on cleared parts of the site, but are all still in close proximity to grassland. The cabins are in a more bushland setting. Given the needs of the business of the site, early evacuation of guests and staff is a preferable option to providing bushfire protection on the lot. In the event of a bushfire all guests and staff should evacuate to a safe area following the procedures in the Bushfire Emergency Plan which is to be developed.

It is recommended that a 10 metre wide hazard management area, where possible should be maintained around the proposed camping area. Leaf litter should be regularly removed. Hazard Management Areas as detailed within the plan shall be constructed and maintained as detailed in Section 2 of Schedule 2 (where applicable).





## Schedule 2 – Bushfire Hazard Management Plan

## **1.0 Introduction**

The Bushfire Hazard Management Plan (BHMP) is developed from the results of a Bushfire Attack Level (BAL) Assessment Report prepared for the site in accordance with Australian Standard 3959. The BHMP provides reference and information to existing and subsequent owners on their responsibilities for the establishment, maintenance and future management of their property to reduce the risk of bushfire attack and includes: -

- Establishment of a Hazard Management Area in and around the existing and/or proposed buildings,
- Specifications of Private access road construction,
- Provision on firefighting water supply,
- Construction requirements in relation to the Building Code of Australia, dependent on the Bushfire Attack Level and requirements of Australian Standard 3959.
- Reduction and removal of vegetation and fuel loads in and around the property, buildings and Hazard Management Areas,
- Ongoing maintenance responsibilities by successive owners for perpetuity.

A copy of the plan MUST also be provided to ALL current and successive owners to make them aware of their continuing obligations to maintain the plan and protection measures attributed to their property in to the future.

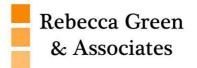
## 2.0 Hazard Management Areas

The Hazard Management Area (defendable space) is provided between the vegetation and the buildings subject to bushfire risk. The space provides for management of vegetation and reduction in fuel loads in an attempt to:

- Prevent flame impingement on the dwelling;
- Provide a defendable space for property protection;
- Reduce fire spread;
- Deflect and filter embers;
- Provide shelter from radiant heat; and
- Reduce wind speed.

The *Bushfire-Prone Areas Code*, requires a hazard management area to be established <u>and</u> <u>maintained</u> between the bushfire prone vegetation and the building at a distance equal to, or greater than the separation distance specified for the Bushfire Attack Levels (BAL) in *AS 3959-2009 Construction of Buildings in Bushfire Prone Areas*.





#### 2.1 Vegetation (Fuel) Management

Managing an area in a minimum fuel condition generally means a reduction in the amount and altering the arrangement of fuels. Most fine fuels are at or close to the ground, often as part of a grass, litter or shrub layer. If there is enough fuel, when a fire comes these fuels will ignite the trees above or set the bark alight which will burn up into the tree canopy causing the most dangerous of bushfire situation; a crown fire.

To prevent crown fires occurring it is necessary to remove the "ladder of fuel" between the ground and the tree crowns and to make sure the amount of ground fuel is not sufficient to set the crowns alight. Without fire burning below, a crown fire should not be sustained. Further removing continuity and separation of the vegetation canopies both horizontally and vertically will assist.

All vegetation will burn under the influence of bushfire; shrub layers need to be modified to remove tall continuous walls of vegetation and establish clear separation between the ground and the bottom of the tree canopy. Further minimisation of flammable ground litter such as leafs, twigs, bark, ferns and debris will further reduce fuel load with potential to burn or contribute to the growth of a bushfire.

Fuels do not need to be totally removed however fuels close to the building and inside the Hazard Management Area are to be kept to a minimum. As a general practice 5 tonnes per hectare is accepted as being controllable with normal firefighting resources. This can be visualised as grass cut to about 10 centimetres in height or ground litter about 2 centimetres thick. This is considered to be a low fuel level.

#### 2.2 Other Risk Management Actions

Other actions that can be implemented to reduce the bushfire risk in the Hazard Management Areas include:

- 1. Establishing non-combustible paths and driveways around buildings.
- 2. Establish plantings of low flammability shrub species.
- 3. Ensure garden beds and shrubs are established well away from buildings.
- 4. Tree planting to be located at the outer edge of the Hazard Management Area and spaced well apart to ensure canopy separation.
- 5. Cut lawns short and maintain.
- 6. Remove fallen limbs, leaf and bark litter.
- 7. Avoid using pine bark and other flammable mulch in gardens.
- 8. Prune trees to ensure canopy separation horizontally and vertically, remove low hanging branches to ensure separation from ground litter.
- 9. Where the amount of land permits extend the vegetation management in to a secondary hazard management zone.





## 3.0 On-going Site Management and Maintenance

On-going maintenance is required to the buildings and landscaping within the hazard management area to ensure the continued performance of the bushfire mitigation measures which have been designed into the development for occupant and community protection.

Specified Hazard Management Areas are only a minimum distance required; owners are encouraged to establish a greater management area where land area and opportunity permits. An additional fuel modified buffer zone between the Hazard Management Area and the bushfire vegetation will only improve the protection level and reduce the risk to the property during a bushfire event.

Preparedness comes down to diligent annual maintenance in and around the buildings and Hazard Management Areas particularly during the period of greatest risk; August to February of each year.

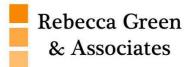
#### Recommendation:

- 1. Locate wood piles or other flammable storage well away from the dwelling.
- 2. Solid non-combustible fencing such as steel provides a fire and heat radiation shield to the dwelling.
- 3. Metal flywire screens prevent sparks and embers from entering the building.
- 4. Seal gaps under floor spaces, roof space, under eaves, external vents, skylights, chimneys and wall cladding.
- 5. Remove ladder fuels from the under storey of larger trees. Prune canopies to provide separation.
- 6. Rake up leaf litter and vegetation debris. Cut grass and maintain to less than 10cm.
- 7. Keep garden beds well away from the dwelling and use non-combustible garden mulches including rock or stones.
- 8. Establish plantings of low flammability shrub species.
- 9. Seal all gaps in external claddings.
- 10. Keep roof gutters clear of leaf litter, bark and similar debris, remove and maintain. Install gutter guards to assist.
- 11. Flammable fuels such as gas bottles should be located on the opposite side of the house to the likely direction of a bushfire.
- 12. Seal gaps in roofing to prevent the entry of embers.
- 13. Surround the dwelling with non-combustible paths.
- 14. Outbuildings to be at least 6m from the main dwelling.
- 15. Ensure hoses provide coverage to the whole site. Use metal hose fittings.
- 16. Flammable fuels and the like to be stored in minimum volumes well away from the dwelling.

## 4.0 Vehicular Access

Roads are to be constructed to provide vehicle access to the site to assist firefighting and emergency personnel to defend the building or evacuate occupants; and provide access at all times to the water supply for firefighting purposes on the building site.





Private access roads are to be constructed from the entrance to the property cross over with the public road through to the dwelling and water storage area on the site (if applicable). Private access roads are to be designed, constructed and maintained to a standard not less than a Modified 4C Access Road.

The 4C Access Road is an all-weather road which is classified by and complies with Australian Road Research Boards *"Unsealed Roads Manual – Guidelines to Good Practice", 3<sup>rd</sup> Edition, March 2009.* 

Substantially a single lane two-way road generally dry weather formed (natural materials) track/road with operating speeds standard of <20-40 km/h depending on terrain with a minimum carriageway width is 4 metres.

#### **Recommendations:**

With the following modified requirements (if applicable):

- (i) Single lane private access road less than 6m carriageway width must have 20m long passing bays of 6m carriageway width not more than 100m apart (applicable in this case).
- (ii) A private access road longer than 100m must be provided with a driveway encircling the building, or hammerhead "T" or "Y" turning head 4m wide and 8m long, or a trafficable circular turning area of 10m radius (applicable in this case).
- (iii) Culverts and bridges must be designed for a minimum vehicle load of 20 tonnes.
- (iv) Vegetation must be cleared for a height of 4m, above the carriageway, and
- (v) 2m each side of the carriageway.

## 5.0 Water Supply

A building that is constructed in a designated bushfire prone area must provide access at all times to a sufficient supply of water for firefighting purposes on the building site.

#### **Recommendations:**

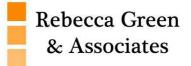
The exterior elements of a Class 1 building in a designated Bushfire prone area must be within reach of a 120m long hose (lay) connected to –

- (i) A fire hydrant with a minimum flow rate of 600L per minute and pressure of 200kPa; or
- (ii) A stored water supply in a water tank, swimming pool, dam or lake available for fire fighting at all times which has the capacity of at least 10,000L for each separate building.

#### 5.1 Reticulated Water Supply

Not applicable to this proposal.





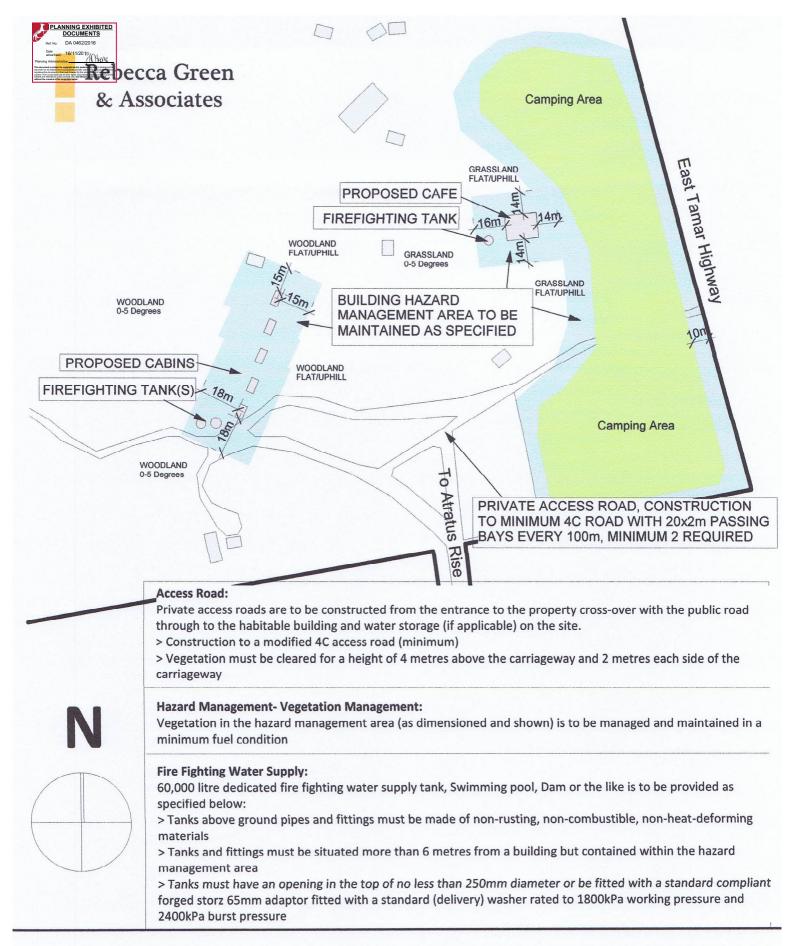
#### 5.2 On-Site Dedicated Fire Fighting Water Supply

A water tank(s) of at least 60,000 litres and above ground pipes and fittings used for a stored water supply must be made of non-rusting, non-combustible, non-heat-deforming materials and must be situated more than 6m from a building. Hardstanding must be provided within 3m of a static water supply.

With additional supply of 10,000 litres for the camping area and other non-habitable structures during the event of the Circus Festival (this could be a mobile set-up).

The water tank must have an opening in the top of not less than 250mm diameter or be fitted with a 65mm outlet and DIN or NEN Standard compliant forged Storz 65mm adaptor fitted with a standard (delivery) washer rated to 1800kPa working pressure and 2400kPa burst pressure.

It should be recognised that although water supply as specified above may be in compliance with the requirements of the Building Code of Australia the supply may not be adequate for all fire fighting situations.



# **BUSHFIRE HAZARD MANAGEMENT PLAN**

## 15 Atratus Rise, Swan Bay

Bushfire Attack Level - BAL 12.5 (Cafe), BAL 19 (Cabins) BAL LOW (camping area, Bushland Bigtop, toilets/showers, stage, Blackwood Bar, Awnings and Treat Tribe) Date: 4 December 2015



Form 55





То	: James Carroll				Owner /Agent		
	15 Atratus Rise				Address	Form	55
	Swan Bay		72	52	Suburb/postcode	1 0111	
			123	52	]		
Certifier details							
From	: Rebecca Green				]		
Address:	PO Box 2108				Phone No:		0409 284 42
	Launceston		72	50	Fax No:		
Accreditation No: (if applicable)	BFP-116 Email	address:	a	dmin@	Prgassociates.	com.au	
Or qualifications and Insurance details:	Accredited to report on bushf hazards under Part IVA of the <i>Services Act 1979</i>			of the D	otion from Column 3 Director of Building C ination)		1
Speciality area of expertise:	Analysis of hazards in bushfire areas	prone			tion from Column 4 d irector of Building Co ination)		1
Details of work:							
Address:	15 Atratus Rise					Lot No:	1
	Swan Bay		72	52	Certificate of	title No:	166203
The work related to this certificate:	Tasmanian Circus Festival including structures (5 x cabins, café) and no temporary structures/works includ Bigtop, Main stage, Bar, toilets/sho	n-habita ing cam	able/ ping	, area,	(description of the certified )	work or par	t work being
Certificate deta	ils:						
Certificate type:	Bushfire Hazard				tion from Column 1 ( irector of Building Co ination)		1
	This certificate is in	relation	to a	n applio	cation for a new	building p	/ ermit. <i>OR</i>
n issuing this certific	This certificate is in re ate the following matters are relevant		o any	/ stage o	of building work	before co	mpletion.
Documents:	Bushfire Attack Level Assessn		Rei	oort			
	Bushfire Hazard Managemen 2015, Job No. RGA-B317)				Green & Asso	ciates, 4	Decembe
Relevant calculations:	N/A						



References:

Planning Directive No 5, Bushfire-Prone Areas Code Australian Standard 3959-2009

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

- Assessment of the site Bushfire Attack Level (BAL-Low camping area, Bigtop, Main stage, Bar, toilets/showers and awnings) and (BAL-19 - Cabins) and (BAL-12.5 – Café) to Australian Standard 3959
- 2. Bushfire Hazard Management Plan

#### Scope and/or Limitations

#### Scope

This report and certification was commissioned to identify the Bushfire Attack Level for the existing property. <u>All</u> comment, advice and fire suppression measures are in relation to compliance with *Planning Directive No 5, Bushfire-Prone Areas Code* issued by the Tasmanian Planning Commission, the *Building Act 2000 & Regulations 2004, Building Code of Australia* and *Australian Standard 3959-2009, Construction of buildings in bushfire-prone areas.* 

#### Limitations

The assessment has been undertaken and report provided on the understanding that:-

- 1. The report only deals with the potential bushfire risk all other statutory assessments are outside the scope of this certificate.
- 2. The report only identifies the size, volume and status of vegetation at the time the inspection was undertaken and cannot be relied upon for any future development.
- 3. Impacts of future development and vegetation growth have not been considered.
- 4. No assurance is given or inferred for the health, safety or amenity of the general public, individuals or occupants in the event of a Bushfire.
- 5. No warranty is offered or inferred for any buildings constructed on the property in the event of a Bushfire.

No action or reliance is to be placed on this certificate or report; other than for which it was commissioned.

I certify the matters described in this certificate.

Certifier:

Green

Date:	
4 December	
2015	

Certificate No. RG-275/2015





# Attachment 1 – Certificate of Compliance to the Bushfire-prone Area Code under Planning Directive No 5



## Code E1 – Bushfire-prone Areas Code

## Certificate under s51(2)(d) Land Use Planning and Approvals Act 1993

Office Use

Date Received

Permit Application No

PID

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

Name of planning scheme or instrument: Launceston Interim Planning Scheme 2015.(The Scheme)

Use or Development Site	Certificate of Title / PID
Street Address	CT 166203/1
	PID 3245804
15 Atratus Rise	
Swan Bay, Tasmania	
Swall Day, Tastiallia	
Land that is not the Liss or Douglanment Cite relied upon for hughfire herord	Contificate of Title / DID
Land that is not the Use or Development Site relied upon for bushfire hazard	Certificate of Title / PID
management or protection	
Street Address	

2.	Proposed Use or Development (provide a description in the space	
	below)	
	Tasmanian Circus Festival including permanent structures (5 x cabins, café) and temporary/non- habitable structures/works including camping area, Bigtop, main stage, bar, toilets/showers and awnings	

- ⊠ Vulnerable Use
- Hazardous Use
- □ Subdivision
- New Habitable Building on a lot on a plan of subdivision approved in accordance with Bushfire-prone Areas Code.
- New habitable on a lot on a pre-existing plan of subdivision
- Extension to an existing habitable building
- Habitable Building for a Vulnerable Use

<sup>&</sup>lt;sup>1</sup> If the certificate relates to bushfire management or protection measures that rely on land that is not in the same lot as the site for the use or development described, the details of all of the applicable land must be provided.



	3. Documents relied upon <sup>2</sup>
	Document or certificate description:
	Description of Use or Development <sup>3</sup> (Proposal or Land Use Permit Application)
	Documents, Plans and/or Specifications
	Title: Overall Action Site Plan
	Author: Engineering Edge Pty Ltd
	Date: 10.11.15
$\boxtimes$	Bushfire Report <sup>4</sup>
	Title: Bushfire Hazard Assessment Report & Bushfire Hazard Management Plan
	Author: Rebecca Green
	Date: 4 December 2015
$\boxtimes$	Bushfire Hazard Management Plan <sup>5</sup>
	Title: Bushfire Hazard Assessment Report & Bushfire Hazard Management Plan
	Author: Rebecca Green
	Date: 4 December 2015
	Other documents
	Title:
	Author:
	Date:

<sup>5</sup> If there is more than one Bushfire Hazard Management Plan, each document must be identified by reference to its title, author, date and version

<sup>&</sup>lt;sup>2</sup> List each document that is provided or relied upon to describe the use or development, or to assess and manage risk from bushfire, including its title, author, date, and version.

<sup>&</sup>lt;sup>3</sup> Identify the use or development to which the certificate applies by reference to the documents, plans, and specifications to be provided with the permit application to describe the form and location of the proposed use or development. For habitable buildings, a reference to a nominated plan indicating location within the site and the form of development is required.

<sup>&</sup>lt;sup>4</sup> If there is more than one Bushfire Report, each document must be identified by reference to its title, author, date and version.

4. Nature of Certificate <sup>6</sup>				
Applicable Standard	Assessment Criteria	Compliance Test: Certificate of Insufficient Increase in Risk	Compliance Test: Certified Bushfire Hazard Management Plan	Reference to applicable Bushfire Risk Assessment or Bushfire Hazard Management Plan <sup>7</sup>
E1.4 – Use or development exempt from this code	code			
E1.4. (identify which exemption applies)		No specific measures required because the use or development is consistent with the objective for each of the applicable standards identified in this Certificate	Not Applicable	
_				
E1.5.1 - Vulnerable Use				
E1.5.1.1 – location on bushfire-prone land	A2	Not Applicable	Tolerable level of risk and provision $\left  {\mathop {igs D} } \right $ for evacuation	
E1.5.2 - Hazardous Use				
E1.5.2.1 – location on bushfire-prone land	A2	Not Applicable	Tolerable level of risk from exposure to dangerous substances, ignition potential, and contribution to intensify fire	
E1.6.1 - Subdivision				
E1.6.1.1 - Hazard Management Area	A1	No specific measure for hazard management	Provision for hazard management areas in accordance with BAL 19 Table 2.4.4 AS3959	
E1.6.1.2 - Public Access	A1	No specific public access measure for fire fighting	☐ Layout of roads and access is consistent with objective	
E1.6.1.3 - Water Supply	A1	No specific water supply	Not Applicable	

PLANNING EXHIBITED DOCUMENTS Part No: DA04622016

 Sector states a constant and a procession of the sector states and a procession of the sector states of the procession of the sector states of the sector states of the sector states and an and a sector states of the sector states and an and a sector states of the <sup>6</sup> The certificate must indicate by placing a X in the corresponding  $\Box$  for each applicable standard and the corresponding compliance test within each standard that is relied upon to demonstrate compliance to Code E1

<sup>7</sup> Identify the Bushfire Risk Assessment report or Bushfire Hazard Management Plan that is relied upon to satisfy the compliance test

PLANNING EXHIBITED DOCUMENTS an so. DOCUMENTS and the DOCUMENTS and the DOCUMENTS an
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	Water supply is consistent with objective			Provision for hazard management areas in accordance with BAL 19 Table 2.4.4 AS3959 and managed consistent with objective	Private access is consistent with objective	Private access to static water supply is consistent with objective	Water supply is consistent with objective
			de				
for fire fighting	No specific water supply measure for fire fighting		rroved in accordance with Co	No specific measure for hazard management	No specific private access for fire fighting	Not Applicable	No specific water supply measure for fire fighting
Reticulated water supply	A2 Non- reticulated water supply		subdivision app	A1	A1	A2	A1
			E1.6.2 - Habitable Building on lot on a plan of subdivision approved in accordance with Code	E1.6.2.1 - Hazard Management Area	E1.6.2.2 – Private Access		E1.6.2.3 - Water Supply
		ļ					

$\boxtimes$	E1.6.3 - Habitable Building (pre-existing lot)						
	E1.6.3.1 - Hazard Management Area	A1	No specific measure for hazard management		Provision for hazard management is consistent with objective; or		
				1	Provision for hazard management areas in accordance with BAL 29 Table 2.4.4 AS3959 and managed consistent with objective	$\boxtimes$	
	E1.6.3.2 - Private Access	A1	No specific private access measure for fire fighting		Private access is consistent with objective	$\boxtimes$	
		A2	Not applicable		Private access to static water supply is consistent with objective	$\boxtimes$	
	E1.6.3.3 - Water Supply	A1	No specific water supply measure for fire fighting		Water supply is consistent with objective	$\boxtimes$	



	E1.6.4 - Extension to Habitable Building				
	E1.6.4.1 – hazard management	A1	No specific hazard management measure	Provision for hazard management is consistent with objective; or	
				 Provision for hazard management areas in accordance with BAL 29 Table 2.4.4 AS3959 and managed consistent with objective	
[					

$\boxtimes$	E1.6.5 – Habitable Building for Vulnerable Use					
	E1.6.5.1 – hazard management	A1	No specific measure for hazard management		<ul> <li>Bushfire hazard management consistent with objective; or</li> </ul>	Consistent with objective.
					Provision for hazard management	
					areas in accordance with BAL 12.5	
				•	Table 2.4.4 AS3959 and managed	
				_	consistent with objective	



5.	Bushfire H					
Name	Rebecca	Green		Phone No:	0409 284 422	
Address:	PO Box 2 Launcest	108 on TAS 7250		Fax No:		
			Email address:	admin@rgassociates.com.au		
Fire Servic Accreditat		BFP-116	Scope:	1, 2, 3A, 3	В, ЗС	

#### 6. Certification

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

Bushfire-Prone Areas in accordance with Clause E1.4(a) because there is an insufficient increase in risk to warrant specific measures for bushfire hazard management and/or bushfire protection in order to be consistent with the objective for all of the applicable	
standards identified in Section 4 of this Certificate	

#### or

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

and/or

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

Green

Date 4 December 2015

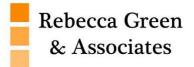




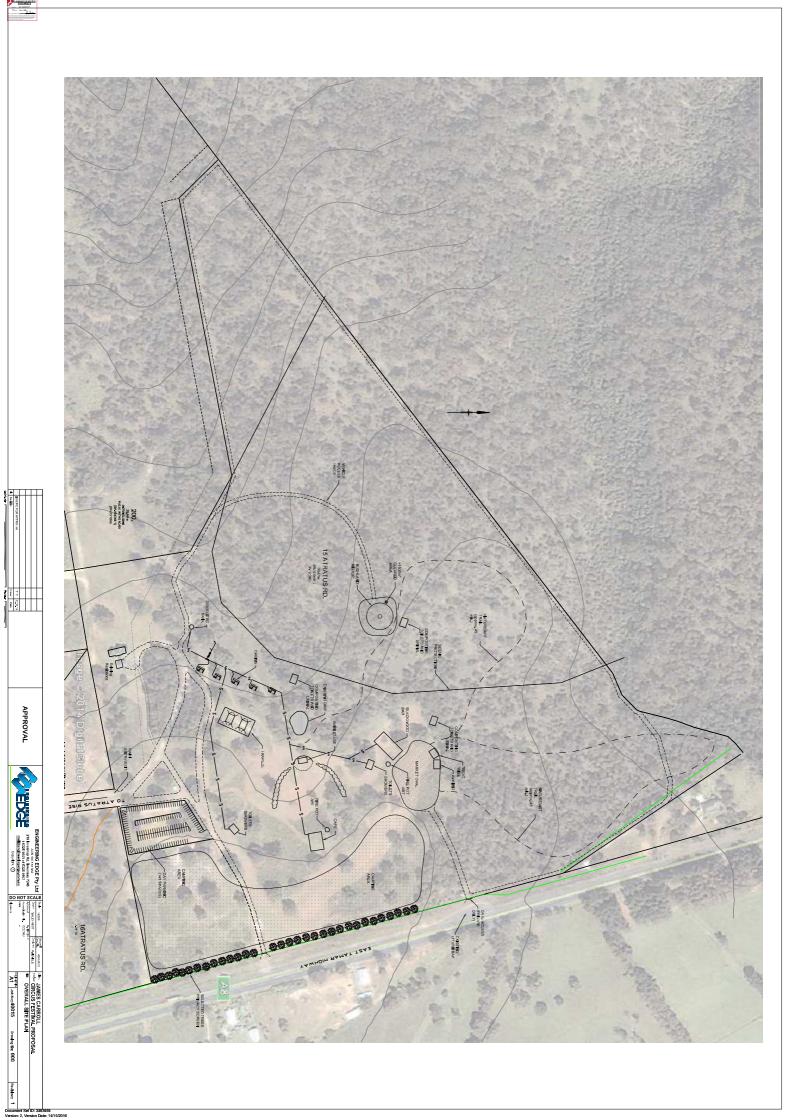
VERANDAS DECKS ETC.	ROOFS	EXTERNAL DOORS	EXTERNAL WINDOWS	EXTERNAL WALLS	FLOORS	SUBFLOOR SUPPORTS	
No special construction requirements	No special construction requirements	No special construction requirements	No special construction requirements	No special construction requirements	No special construction requirements	No special construction requirements	BAL-LOW
As for BAL-19	As for BAI-19	As for BAL-19 except that door framing can be naturally fite reactant (high density) timber	As for BAL-19 except that 4 mm Gradie A safety glass can be used in place of 5 mm tougheered glass	As for BAL-19	No special construction regularizeds	No special construction requirements	BAL-12.5
Exclused sits Nor space - no special regularment for matricle corps within 400 mm of ground. No special regularments for supports or farming. Deving the non-correlativity and 400 mm vertically within 300 mm hartaontally and 400 mm vertically terms to grant determine.	Non-contractible covering 'Rochwell Janctics sealed. Openagy fitted with non-constantiale entrier garets. Noof to be fully safeed	Protected by backline, adulter, or conneed with steel, scource or alemnatum mesh or glocal with Steel trappend glass may be constantive as a Stem solid timber for 400 nm alower threaded, mesh or textelle making inteller famolar 4400 nm alower ground, decking, els. (tg)of ditting with weather strips at here	Protected by boothine shufter, completing screened with their, knows or advanteammeds or Yame togghored gate or gives to const with 440 mm or ground, dat 4t. Chevrolite portion metal screened with frame of metal or media realized WC-L1 or boothine reacting timber	Scienci wills - Parts less than 400 mm above growal a decks dr. to be of non-contextifier material, 6 mm thes comer chal or heather rescient/inducity file resistant timber	No special construction regularization	No special construction reparements	BAL-19
Foctored sub-floor quies or non-contextable or boother evolution? Under supports: Decking to be non-contextable	Nes carabattile covering facel wall justites sealed Cyanogy fitted with non-contractable entire guards. Boot to be help varied	Protected by bushle shutter, or screened with steel, borner or administrameth or on- combaristice, or 5 mm rolet thread by 400 mm above threadual. Metal or bushler resching thread framethight binding with wordner stelps at lone	Producted by boother sharter or completely screened with store a duration much, or strem toggreen give with speaked points screened and frame of media or markin entropy by a constraint resting their and points with 400 mm of ground land screened land screened	Non-contectible material (mocrary, brick verse- material, availed covering, covering), their farmed, their farmed works, can be outside and day with 6 mm flate covering a state sheeting of transfer resoluted timber	Concrete sists on ground, enclosure by external well, medi masin a shown or flooring less than 600 mit above ground level to be not constrainting, naturally the resistant tanker or protocoled on the underside with stating or mercal wood instalation	Endoare by extend will or by steel, brone or dominium medi, non-contractifies supports where the subflore is unexistent, animally the resistant broker stamps or posits on 75 mm media stimuja	BAL-29
Enclosed sub-floor space or non-combustible support. Orching to be non-combustible	Non-contractable covering, Bodfwall Jacobon solided Opening: Bitted with non-combactable ember guards. Eard to be fully satisfied and no not meaned responsible covers	Protocted by basiline shutter, non-combactible or 35 mm solid titteler, metal & ament tight titting with weather skrips at base	Protected by hostilite duties or Sram toghenet glass. Operable parties screened with steel or brown encode	Non-combactible material (masowy), brich veneer, mud bioL, wertied concrete, concrete/or three fameto or short famor and subschool in the outside and clayouth 9 mm these coment sheeting or claid sheeting or technol for unather resistance is AS S200.8.1	Coverte sibi on grand, exclose by external wall or protectors of undersite with a non-combostible material such as line connect steek or be non-combostible or be testelle to hadhen restance to AS (50).8.1	Fenderated by actural wall refer below "Erterna" Walty section is table to non-manifestive subtrar supports or tooled for bushfler rescharer; th AS 1520.8.1	BAL-40
Enclosed side floor space or non-combon tible supports. Decking its have so gaps and be non-combonitie	Roof with FRL of 30(20)20 or tested for boothte restance to X5 152.02.2 Roof/wall junction saided Opening: fitted with non-combectible entry games. No nor manufacture entry games No nor manufacture entry games and an	Production by how there is that there or tigget effecting with resources citigs at bases and an FRL of -720 -	Protected by bushle shutter or Fit of -301-and operative portion screened with scient or transcements to the tasked for bushline resistance to AS 1530.8.2	Non-contrastité nuterial (nusceny, text vener, mai text, avante d'arcinet, concrete) vetto nateman téchnicci d'9 min d'an Ru d' -/3/030 winn texte finn ordiste of the texted for bueffite restrace to Al 1530 R.2	Concrete stab on granet or enclosure by enciencial walk or an FLX of 30/2020 or protection of underside with 30 mituale incipient special of the system or the excited for beathire resolutions to AS FEXO8.2	Subhor supports- enclosure by encircumal wall or prais-consociable with an FRL of 2014 - or to-bested for bushline restations to AC 529.02.2	BAL-FZ (FLAME ZONE)

## Attachment 2 – AS3959-2009 Construction Requirements

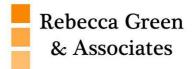




Attachment 3 – Site Plan







## References

(a) Tasmanian Planning Commission 2012, *Tasmanian Planning Directive No. 5, Bushfire-Prone Areas Code*, Tasmania.

(b) Australian Standards, AS 3959-2009, *Construction of buildings in bushfire-prone areas*, Standards Australia, Sydney NSW.

(c) Resource Management & Conservation Division of the Department Primary Industry & Water September 2006, TASVEG, *Tasmanian Vegetation Map*, Tasmania.

(d) Tasmanian Government, Land Information System Tasmania, www.thelist.tas.gov.au