BUSHFIRE ASSESSMENT REPORT

Application for a Bush Fire Safety Authority

For a proposed Special Fire Protection Purpose development on bushfire-prone land

at 535 Manchester Rd, Bindera NSW 2422.



Subject site, photo taken 09-08-2023

September 2023

Hunter Bushfire Services

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This report has been prepared in accordance with clause 44 of the Rural Fires Regulation 2013 (RF Regulation) and satisfies the application requirements for a bush fire safety authority under Section 100B of the Rural Fires Act 1997 (RF Act). These requirements are listed in Appendix I

Signed 

Sam Ferguson

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Hunter Bushfire Services

6th October 2023

BPAD Bushfire Planning & Design Accredited Practitioner Level 2

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Executive summary

Hunter Bushfire Services has been engaged by Naomi & Brian Kilby of The Steps Barrington to prepare a Bushfire Assessment Report (BAR) to apply for a Bush Fire Safety Authority (BFSA) from the NSW RFS as required for development of existing SFPP facilities. The applicants are seeking planning permission for a new reception building that will double as a refuge in case of a fire emergency. To accommodate the popularity of their business and the development of the adjoining property for commercial use, the applicants are seeking to increase the permitted occupancy of their existing consent.

The applicants are willing to take every precaution to ensure the safety of their visitors and any emergency response personnel who attend the site. A robust and comprehensive package of bushfire protection measures has been crafted to ensure the proposal can meet the aim & objectives of PBP 2019, as well as the specific objectives, variations & performance criteria applicable to the development types involved. The Steps Barrington is classed as a SFPP development due to the short-stay accommodation aspect, while the adjoining mountain bike company falls under chapter 8 of PBP 2019 – being a commercial operation with no accommodation.

This assessment considers and assesses the bushfire hazards and potential threats relevant to the proposal, and outlines the minimum mitigative measures required by PBP (2019) and addresses all submission requirements for an application for a bush fire safety authority (BFSA) under Section 100B of the *Rural Fires Act* 1997 (RF Act) as detailed in Cl.44 of the Rural Fires regulations, and listed in Appendix 2 of PBP 2019. The Aim & Objectives of PBP (2019) & the specific objectives of sections 6.2 & 6.4 of PBP (2019) are addressed in this report.

In order to determine how the proposed development is bushfire-prone, and which setbacks and other Bush Fire Protection Measures (BPM) will be appropriate, this assessment adheres to the methodology and procedures of appendix 1 of PBP (2019) and meets the performance criteria via acceptable solutions as outlined in Chapter 6 of PBP (2019).

This assessment has been made based on the bushfire hazards in and around the Site at the time of Site inspection (9th August 2023) and report production.

A bushfire hazard assessment has been undertaken and a comprehensive package of Bush fire protection measures have been proposed as recommendations of this report in order for the development to meet all applicable performance criteria of Planning for Bush Fire Protection 2019 (PBP) & achieve a better bush fire outcome than if the development did not proceed.

The proposed bushfire protection measures prioritise prevention – by reducing occupancy on days of extreme fire danger & ensuring that an emergency management & evacuation plan is to be prepared for the entire facility to ensure all aspects are considered. Minimum protection measures are recommended for the owners' dwelling and a short-stay cabin within the site, namely ember protection, provision of water storage and APZs. The provision of water storage within the site is detailed, as are the fire-fighting apparatus available on-site and details of the proposed refuge building.

In summary, the following Site-specific Bushfire Protection Measures have been generated to enable the proposal to comply with PBP (2019);

1. From the commencement of building works and in perpetuity, the property around the refuge building must be maintained as an inner protection area to the following distances and aspect in accordance with Appendix 4.1.1 of Planning for Bush Fire Protection 2019:
   - north for a distance of 36mmetres;
   - east for a distance of 93 metres;
   - south for a distance of 45 metres; and
   - west for a distance of 93 metres.
2. From the commencement of building works and in perpetuity, the property around the habitable dwellings – being the owners' residence & Riverview Cottage – must be maintained as an inner protection area for a distance of 10m metres in accordance with Appendix 4.1.1 of Planning for Bush Fire Protection 2019:
3. From the commencement of building works and in perpetuity, the property along the riverbank where campsites are located must be managed as an inner protection area over the area depicted on Figure 8 – Bush Fire Protection Measures Map, and in accordance with the requirements of Appendix 4 of Planning for Bush Fire Protection 2019.

The above APZs are in addition to APZs conditioned under previous BFSAs for the site (issued in 2007 & 2010).

4. Landscaping within the required asset protection zone(s) must comply with Appendix 4 of Planning for Bush Fire Protection 2019. In this regard, the following principles are to be incorporated:
   a) A minimum 1-metre-wide area (or to the property boundary where the setbacks are less than 1 metre), suitable for pedestrian traffic, must be provided around the immediate curtilage of the building;
   b) Planting is limited in the immediate vicinity of the building;
   c) Planting does not provide a continuous canopy to the building (i.e. trees or shrubs are isolated or located in small clusters);
   d) Landscape species are chosen to ensure tree canopy cover is less than 15% (IPA), and less than 30% (OPA) at maturity and trees do no touch or overhang buildings;
   e) Avoid species with rough fibrous bark, or which retain/shed bark in long strips or retain dead material in their canopies;
   f) Use smooth bark species of trees species which generally do not carry a fire up the bark into the crown;
   g) Avoid planting of deciduous species that may increase fuel at surface/ ground level (i.e. leaf litter);
   h) Avoid climbing species to walls and pergolas;
   i) Locate combustible materials such as woodchips/mulch, flammable fuel stores away from the building;
   j) Locate combustible structures such as garden sheds, pergolas and materials such as timber garden furniture away from the building; and
   k) Low flammability vegetation species are used.
5. New construction must comply with section 3 and section 5 (BAL 12.5) Australian Standard AS3959-2018 *Construction of buildings in bushfire-prone areas* or the relevant requirements of the *NASH Standard - Steel Framed Construction in Bushfire Areas* (incorporating amendment A - 2015). New construction must also comply with the construction requirements in Section 7.5 of *Planning for Bush Fire Protection 2019.*
6. The existing habitable buildings – Riverview Cottage & the owners dwelling - must be upgraded to improve ember protection by enclosing all openings (excluding roof tile spaces) or covering

openings with a non-corrosive metal screen mesh with a maximum aperture of 2mm. Where applicable, this includes any sub floor areas, openable windows, vents, weepholes and eaves. External doors are to be fitted with draft excluders.

7. Fences and gates must comply with Section 7.6 of Planning for Bush Fire Protection 2019. New fences and gates are to be made of either hardwood or non-combustible material. Where a fence or gate is constructed within 6m of a dwelling or in areas of BAL-29 or greater, they must be made of non-combustible material only.
8. Access roads for special fire protection purpose (SFPP) developments must comply with general requirements of Table 6.8b of Planning for Bush Fire Protection 2019:
    - SFPP access roads are two-wheel drive, all-weather roads;
    - access is provided to all structures;
    - traffic management devices are constructed to not prohibit access by emergency services vehicles;
    - access roads must provide suitable turning areas in accordance with Appendix 3; and
    - one way only public access roads are no less than 3.5 metres wide and have designated parking bays with hydrants located outside of these areas to ensure accessibility to reticulated water for fire suppression
9. The provision of water, electricity and gas must comply with the following in accordance with Table 6.8c of Planning for Bush Fire Protection 2019:
    - reticulated water is to be provided to the development where available;
    - a 10,000 litres minimum static water supply for firefighting purposes is provided for each occupied building where no reticulated water is available.
    - fire hydrant, spacing, design and sizing complies with the relevant clauses of Australian Standard AS 2419;
    - all above-ground water service pipes are metal, including and up to any taps;
    - where practicable, electrical transmission lines are underground;
    - where overhead, electrical transmission lines are proposed as follows:
        - lines are installed with short pole spacing (30m), unless crossing gullies, gorges or riparian areas; and
        - no part of a tree is closer to a power line than the distance set out in accordance with the specifications in ISSC3 *Guideline for Managing Vegetation Near Power Lines*.
    - reticulated or bottled gas is installed and maintained in accordance with AS/NZS 1596:2014 and the requirements of relevant authorities, and metal piping is used;
    - reticulated or bottled gas is installed and maintained in accordance with AS/NZS 1596:2014 - The storage and handling of LP Gas, the requirements of relevant authorities, and metal piping is used;
    - all fixed gas cylinders are kept clear of all flammable materials to a distance of 10m and shielded on the hazard side;
    - connections to and from gas cylinders are metal; polymer-sheathed flexible gas supply lines are not used; and
    - above-ground gas service pipes are metal, including and up to any outlets.
10. A Bush Fire Emergency Management and Evacuation Plan is prepared consistent with:
    - the NSW RFS document: *A Guide to Developing a Bush Fire Emergency Management and Evacuation Plan*; and/or,
    - Australian Standard AS 3745:2010 *Planning for emergencies in facilities*.
    - The Bush Fire Emergency Management and Evacuation Plan must consider a mechanism for the early relocation of occupants on days when adverse fire weather is notified or

adverse fire activity occurs in the local government area in which the development operates.

- A copy of the Bush Fire Emergency Management and Evacuation Plan should be provided to the Local Emergency Management Committee for its information prior to occupation of the development.

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Contents

BUSHFIRE ASSESSMENT REPORT 1
Executive summary 1
Introduction 7
Aims & Objectives 7
Bushfire Hazard Assessment 16
Vegetation Hazard Classes 16
Slope Assessment 18
Bushfire Protection Measures 22
APZ 22
Landscaping 23
Construction Standards 24
Access 25
Water Supply & Services 28
Emergency Management 31
Conclusion & Recommendations 34
References 38
Abbreviations 38
APPENDIX I – SUBMISSION REQUIREMENTS 39
APPENDIX II – AHIMS BASIC SEARCH RESULTS 41
APPENDIX III – ADMIN BUILDING PLANS 43
APPENDIX IV – The Steps Barrington Map 44
APPENDIX V – 2010 NOD & GTAs 45
APPENDIX VI – Bushfire Assessment Report of Riverview Cottage 46

Figures

Figure 1 – Excerpt from Mid-coast BFRMP 12
Figure 2 – Locality Map 13
Figure 3 – Site Map 14
Figure 4 – Site Occupancy Plan 15
Figure 5 – Plant Community Type Map 17
Figure 6 – Topographical Site Map 19
Figure 7 – Site Assessment Map 21
Figure 8 – Bush Fire Protection Measures Map 33

Tables

Table 1 – Development objectives of existing SFPP facilities 8
Table 2 – Specific objectives for buildings of class 5 to 8 9
Table 3 – Site Location Details 10
Table 4 – Details of proposal 11
Table 5 – Vegetation Hazard class determination for subject site 16
Table 6 – Hazard Vegetation determination in relation to proposed refuge 16
Table 7 – Effective slope class determination - proposed refuge 18
Table 8 – Site photos 20
Table 9 – SFPP APZ offsets required for refuge (table A1.12.1) 22
Table 10 – Compliance with PBP forSFPP APZs (table 6.8b) 22
Table 11 – Compliance with PBP for Landscaping (table 6.8b) 24
Table 12 – Compliance with PBP for Construction Standards (table 6.8b) 24
Table 13 – Compliance with PBP for Access (table 6.8b) 25
Table 14 – Compliance with PBP for Services (table 6.8c) 29
Table 15 – Compliance with PBP for Emergency Management (table 6.8d) 31

Photo 1: – Site of proposed admin building & refuge 20
Photo 2: – showing riparian vegetation adjoining campsites 20
Photo 3: – site of proposed admin building - between two existing structures 20
Photo 4: – site of proposed admin building – facing south-west 20
Photo 5: – facing north-east, showing part of campground and Barrington bike park 20
Photo 6: – Area of managed vegetation for campsites next to river 20
Photo 7: – concrete tank installed on-site near storage shed. 28
Photo 8: – Storz fitting installed on SWS 28

Introduction

The proposal for The Steps Barrington is to construct a reception building that will double as an emergency refuge, and update the total occupancy figures of the facility.

The intention for any building work occurring within an existing SFPP development is to achieve a better bush fire outcome than if the development did not proceed. The applicants have taken this opportunity to commission a comprehensive update of the bushfire protection measures of the facility.

The Steps Barrington were granted consent for operation of the campground business by the RFS & Gloucester Council in 2007 and again in 2010 when the current owners purchased the campground business, however since then the adjoining land where the owners live has been incorporated into a parallel business catering to mountain bikers who are predominately day visitors to the site. Attempts to amend the consent for occupancy rates were complicated when Gloucester Council merged with Mid-Coast Council, so this opportunity is taken to update the facilities' bushfire protection measures and procedures to allow an increase of the total permitted site occupancy. This proposal is to formalise the current rates of occupancy of the bike park, being 100 day-visitors - and increase the permitted number of overnight campers from 120 to 150. These visitors as well as the 11 permitted occupants of the Riverview Cottage & up to 10 staff results in 271 site occupants in total.

This assessment is based on the bushfire hazards in and around the Site at the time of Site inspection (9th August 2023) and report production. This assessment demonstrates that the proposed development does not constitute an increased risk to persons or property in the case of a Bushfire, and has proposed commensurate bushfire protection measures to improve the preparedness of the site to a fire emergency situation.

No changes are proposed for the owners' residence and the Riverview Cottage, however as part of the facility it is a recommendation of this report that they install ember protection, a compliant water storage and a minimum APZ in order to increase the level of protection to all habitable buildings within the site.

The Aim & Objectives of PBP 2019 & the specific objectives of SFPP developments listed in section 6.2 of PBP (2019), & the objectives that apply to existing SFPP developments in section 6.4 are specified below and addressed via the Bushfire Protection Measures section of this report.

Aims & Objectives

Aim & Objectives of PBP 2019

All development on BFPL must satisfy the aim and objectives of Planning for Bush Fire Protection (PBP). *The aim of PBP is to provide for the protection of human life and minimise impacts on property from the threat of bush fire, while having due regard to development potential, site characteristics and protection of the environment.*

The objectives are to:

- afford buildings and their occupants protection from exposure to a bush fire;
- provide for a defendable space to be located around buildings;
- provide appropriate separation between a hazard and buildings which, in combination with other measures, prevent the likely fire spread to buildings;

- ensure that appropriate operational access and egress for emergency service personnel and occupants is available;
- provide for ongoing management and maintenance of BPMs; and
- ensure that utility services are adequate to meet the needs of firefighters.

Although construction levels or APZ requirements differ, it is imperative that water provision, emergency management and access provisions are provided commensurate with occupancy levels, assessed level of risk and characteristics of occupants.

6.2 Specific objectives for SFPP developments

Due to the vulnerable nature of the occupants of SFPP developments, there is more reliance on the provision of an APZ and emergency management.

The specific objectives for SFPP developments are to:

- minimise levels of radiant heat, localised smoke and ember attack through increased APZ, building design and siting;
- provide an appropriate operational environment for emergency service personnel during firefighting and emergency management;
- ensure the capacity of existing infrastructure (such as roads and utilities) can accommodate the increase in demand during emergencies as a result of the development; and
- ensure emergency evacuation procedures and management which provides for the special characteristics and needs of occupants.

The intent and performance criteria within the tables in section 6.8 of PBP 2019 must be satisfied for SFPP development.

6.4 Development of existing SFPP facilities

The objectives that apply to existing SFPP development are as follows:

Table 1 – Development objectives of existing SFPP facilities

Objective	Addressed via
provide an appropriate defendable space;	APZ
site the building in a location which ensures appropriate separation from the hazard to minimise potential for material ignition;	APZ
provide a better bush fire protection outcome for existing buildings;	Bushfire Protection Measures
new buildings should be located as far from the hazard as possible and should not be extended towards or situated closer to the hazard than the existing buildings (unless they can comply with section 6.8);	Proposed new building is not located closer to the hazard than the existing buildings.
ensure there is no increase in bush fire management and maintenance responsibility on adjoining land owners without their written confirmation;	No increase in bush fire management and maintenance responsibility is imposed on adjoining land owners by the BPMs of this report.
ensure building design and construction enhances the chances of occupant and building survival; and	Construction Standards
provide for safe emergency evacuation procedures including capacity of existing infrastructure (such as roads).	Emergency Management

6.3.1 Specific tourism uses

As acknowledged in PBP 2019, particular SFPP developments demonstrate different characteristics and may require different levels of protection. As such, tailored objectives are specific for these development types, though a BFSA is still required under RF Act s.100B.

Typically, reasons for setting tailored objectives include, but are not limited to:

- Lower occupancy levels
- The presence of a resident/manager on site, thereby improving the potential for informed emergency evacuation decisions; and
- Construction under AS 3959 or NASH Standard may be impractical. (i.e. tents and caravans)

Although construction levels or APZ requirements differ, it is imperative that water provision, emergency management and access provisions are provided commensurate with occupancy levels, assessed level of risk and characteristics of occupants.

Short-term accommodation such as this business must meet the varied performance criteria of 6.3.1 of PBP 2019, of which the Camping is the most applicable. Under this variation no construction requirements are specified for tents within the APZ of a park, provided other BPMs are in place. Careful consideration will be given to the suitability of camping in bush fire prone areas on days of elevated bush fire danger – via the Emergency Management recommended by this report. To meet these varied objectives, an APZ is specified over the campsites – where the vegetation is already managed to the standard of an APZ. APZs are shown on Figure 8 – Bush Fire Protection Measures Map.

8.3.1 Buildings of Class 5 to 8 under the NCC

The objectives for commercial buildings, as bush fire is not captured in the NCCC for class 5-8 buildings, the following objectives will be applied in relation to access, water supply and services, and emergency and evacuation planning:

Table 2 – Specific objectives for buildings of class 5 to 8

SPECIFIC OBJECTIVES	ADDRESSED IN
To provide safe access to/from the public road system for firefighters providing property protection during a bush fire and for occupant egress for evacuation;	Access
To provide suitable emergency and evacuation (and relocation) arrangements for occupants of the development;	Emergency Management
To provide adequate services of water for the protection of buildings during and after the passage of bush fire, and to locate gas and electricity so as not to contribute to the risk of fire to a building; and	Water Supply & Services
Provide for the storage of hazardous materials away from the hazard wherever possible.	Water Supply & Services

Table 3 – Site Location Details

Street Address	524 & 535 Manchester Rd, Bindera
Title Details	The Site consists of adjoining lots 681/DP786066 & 2/DP811269
Area	The total area of the two lots that comprise the subject site is approximately 138Ha.
LGA	Mid-coast
Surrounding Land Use	The site extends from a northern elevation containing steep & rugged bushland to the cleared & grassy areas along the Barrington River. To the east and west are neighbouring rural residential properties, including several short-stay tourist lodges & retreats. Agricultural production dominates the low-lying land along the Barrington River valley.
Land Zoning	The Site & surrounding land is all zoned RU1 Primary Production
Current Land Use	The site is an established campsite with over 15 years of operation. An office building is sited near the entrance to the site as are carparking areas. The proposed new admin building / refuge will be located central to the campsite. The Barrington Bike Park is located on higher ground to the north of the campsite, and a road and several bike tracks extend down across the public road to the campsite & carpark.
Topography	The site is located on a prominent bend in the river, which offers a wide riverbank area to set up tents. The ridge extends northwards into the mountains. The highest and lowest contours of the site are from 630m down to 145m ASL. The local RFS brigades habitually access the river via this site in order to refill their tankers.
FFDI & Fire history	NPWS Fire History - Wildfires and Prescribed Burns records several fires within proximity of the Site; the nearest coming to within 1.5km of the site in 2016-17. Several other smaller wildfires & prescribed burns have been conducted north of the site, on the other side of the ridge & within Copeland tops. NSW RFS Bushfire Prone Land (BFPL) data (BFPL 20230713) shows that Category 1 & 2 hazard vegetation is mapped within the Site, predominately within the northern forested area as well as along the riparian zone of the river adjoining the campsite. The Site and surrounds are located within Mid-Coast LGA, which has a Fire Danger Index (FDI) of 80 as part of the North Coast region according to NSW RFS publication "NSW Local Government Areas FDI" (May 2017).
Environmental & Cultural Significance	The proposal is not considered to constitute an impact on native species or matters of environmental or cultural significance. Some understorey management will be required to establish the SFPP APZ however the vegetation impacted is predominately grassland and regrowth from prior disturbance. A basic AHIMS Web search on 01/09/2023 returned no records of Aboriginal sites in within 200m of either lot that comprises the subject site. Two AHIMS basic search results are attached in APPENDIX II – AHIMS BASIC SEARCH RESULTS.
Access	The capacity of public roads in the vicinity to handle increased volumes of traffic in the event of a bush fire emergency is not considered ideal. The reliance on public roads will be limited by the establishment of a refuge as well as an emergency management plan with clear procedures for the site on days of elevated fire danger.

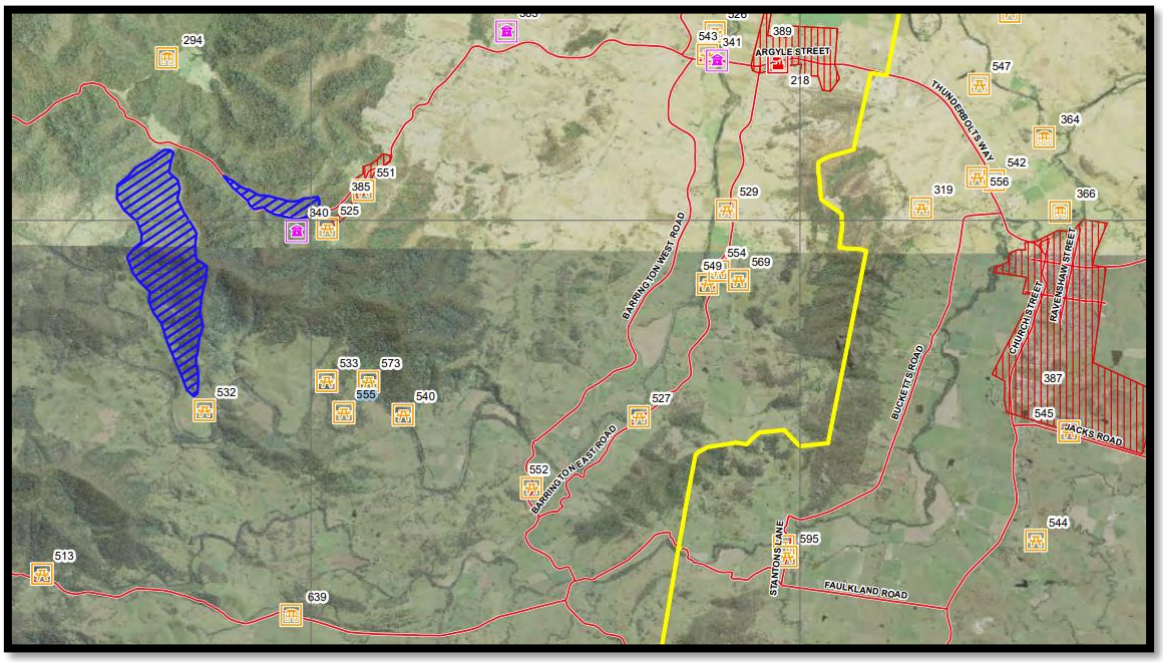
Table 4 – Details of proposal

Details of proposal	Details provided
Campground Location Plan with total occupation numbers	See Figure 4 – Site Occupancy Plan & APPENDIX IV – The Steps Barrington Map
Details of Assembly/refuge building and water supply	The building plan of the proposed administration building that will act as a refuge is appended to APPENDIX III – ADMIN BUILDING PLANS. 2x 20KL concrete water tanks are located within 4m of a hardstand area -sited adjacent to a storage shed to the south of the refuge and other tanks are sited to the north of the proposed refuge – adjacent to the Maintenance Shed. The site contains two vehicular access points to the river which are used to fill RFS tankers, as well as two dams and a water tank in close proximity to the site entrance.
Radiant heat value of Refuge Building not over 10Kw/m2	Figure 8 – Bush Fire Protection Measures Map - demonstrates how establishment of the recommended APZ will ensure the refuge building is not exposed to a level of radiant heat over 10Kw/m2
Firefighting water supply Services	Firefighting water supply is specified on Figure 8 – Bush Fire Protection Measures Map and listed below; 2x 20KL SWS 2x 10KL SWS 2x Dams 2x other water tanks A firefighting trailer is equipped with a tank and pump and is stored on-site for rapid deployment during the fire danger season.
Emergency management & Evacuation planning – distance & time for evacuation to nearest village, communication services & on-site management	Emergency management & Evacuation planning The nearest village with an RFS brigade is Barrington, located 15.2kms & approximately 19 minutes' drive to the north of the site. Since a recent flood the Rocky Crossing causeway has been closed, but when operable it offers an alternate route of access/egress to Gloucester. Communication services This operation uses Starlink internet for communications, allowing reliable WiFi at both houses, the office and the operations shed. Visitors to The Steps can access WiFi at the office. There is some mobile phone coverage up the hill as a back-up if anything happens to the Starlink. Landlines were replaced with Starlink due to greater reliability & coverage. The business has their own VHF channel and use radios to communicate throughout the site using approximately 10 handheld radios, permanent radios in the vehicles and at the office. On-site management The site hosts the primary dwelling of the owner/operators who fill the role of on-site managers. Backpackers are often employed as live-in staff so the number of overnight staff ranges from 2-5 and daytime staffing levels of 2-10 staff in total – depending on occupancy rates. This includes groundskeepers, admin staff and those involved in transporting bikers up the mountain.
Maximum number of occupants on site at any one time	Maximum occupancy of the site will be up to 100 day-visitors to the mountain bike park, and 150 campers. The site's current consent is for 120 campers, a 15% increase to 150 is proposed. The number of staff ranges from 2-10 depending on workload and occupancy rates. The Riverview cottage has council approval for up to 11 people. This cottage was not assessed during this site assessment however existing consents specify protection measures that afford a minimum level of protection –these occupants are to be included in the updated emergency management and evacuation plan.

	Total proposed occupancy for the site including the Steps Campground, Barrington Bike Park, Riverview Cottage and staff is 271 people. This is comprised of; 100 visitors to the Bike Park, 150 visitors to the campground, Up to 11 occupants of Riverview Cottage, & Up to 10 staff.
Existing DA Consent (approved numbers) and any BMP conditions imposed	An initial Bushfire safety authority was issued - dated 9 January 2007. A second Bushfire Safety Authority dated 30 June 2010; (in APPENDIX V – 2010 NOD & GTAs) included the following conditions; • 20m IPA APZ around proposed & existing structures, • Services as per PBP 2006 – 5KL SWS with 65mm Storz outlet & SWS marker to be displayed, • Access – as per PBP 2006, carriageway of 4m vertical clearance and width, & • Emergency & evacuation plans provided as per 4.2.7 of PBP 2006.
Vegetation Management Plan (if over 18 degrees)	Area under proposed APZ does not exceed 18 degrees downslope.

The site is recorded in the Mid-Coast BFRMP as entry 555, with 4 other similar commercial services identified nearby.

Figure 1 – Excerpt from Mid-coast BFRMP



The Steps, Barrington

Figure 2 - Locality Map

1:30000



subject site

assessment area

- 100m
- 140m
- NSW Cadastre

Road surface

- Pathway
- Standard R
- Vehicular T
- waterway
- waterbody
- Easement
- Road corridor

NSW SIX Imagery WMS

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0 1,000 2,000 m

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The Steps, Barrington

Figure 3 - Site Plan

1:4000

subject site

assessment area

100m

140m

NSW Cadastre

10m contours

140 - 150

150 - 220

220 - 346

Campsites

Buildings

Amenities

Cottage

Reception

Storage shed

Maintenance Shed

Dwelling

Road surface

Standard Road

Vehicular Track

waterway

waterbody

Road corridor

NSW SIX Imagery WMS

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100 200 m

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Job No: J230825 Date: 18/09/2023

The Steps, Barrington

Figure 4 - Site Occupancy Plan

1:2000



- subject site

assessment area

- 100m
- 140m
- NSW Cadastre

5m contours

- 140 - 165
- 165 - 225
- Campsites

Buildings

- Amenities
- Cottage
- Reception
- Storage shed
- Maintenance Shed

Road surface

- Standard Road
- Vehicular Track
- waterway
- waterbody
- Road corridor

NSW SIX Imagery WMS

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80 160 m

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Job No: J230825 Date: 18/09/2023

Bushfire Hazard Assessment

Vegetation Hazard Classes

All substantial areas of vegetation within 140m of the proposal & site boundaries have been assessed and classified for bushfire assessment purposes according to Keith (2004) classification, as per Appendix 1 & Figure A1.2 of PBP (2019). A site visit was undertaken, and where direct access was not possible, vegetation types were classified using Aerial Photo Interpretation (API) of satellite & drone imagery.

The site is mapped as containing a mixture of several vegetation communities – however the primary hazard vegetation class that influences likely bushfire behaviour on the site is Forest & Grassland. Figure 3 displays the PCT mapping of vegetation communities within the site, which shows a complex mix of dry rainforest, wet forest and grassy woodlands mapped within the site.

The most significant bushfire hazard vegetation within the Site assessment area in relation to the proposed refuge is the dense forest vegetation within the site and adjoining land to the north and south. Managed areas of vegetation & non vegetated areas have been excluded from this assessment under A1.10 of PBP 2019 (low threat vegetation exclusion).

Table 5 – Vegetation Hazard class determination for subject site

Direction	Description	Classification
North	The northern portion of the site is mapped as rainforest and wet sclerophyll forests, however based on my site assessment the primary bushfire hazard vegetation within the bike park is best classed as forest.	Forest
East	Forest within the eastern portion of the subject site – where PCT mapping records *Hunter Coast Sandy Creekflat Low Paperbark Scrub* & *Coastal Creekflat Layered Grass-Sedge Swamp Forest* are present. Further east is a grassland area.	Forest
South	Predominately managed land with some riparian vegetation along the river. Some areas of long grass cover steep parts of the riverbank.	Managed
West	Mapped as woodlands & dry rainforest – Keith-class resembles forests	Forest

Table 6 – Hazard Vegetation determination in relation to proposed refuge

Direction	Description	Classification
North	Predominately grassland vegetation & managed land between the refuge site and the site access.	Grassland
East	NSW PCT mapping records Dry Rainforest & Wet Sclerophyll Forests to the east of the proposed building. Grassland is the predominant vegetation for the first 90m from the proposed refuge, with regrowth occurring beyond that. According the Keith Classification, the primary hazard vegetation at the time of assessment in this direction is forest.	Forest
South	Predominant hazard vegetation south of the proposed building is grassland up to riparian vegetation along the river. Long grass covers the steep parts of the riverbank between the campsites and the Storage shed. The riparian zone is mapped as Lower North Hinterland River Oak Forest – with a vegetation formation of forested wetlands, however this is managed to the standard of an APZ within the site.	Grassland
West	PCT mapping shows a mixture of woodlands & dry rainforest. Keith class resembles forests due to understory vegetation and tree regrowth.	Forest

The Steps, Barrington

Figure 5 - Plant Community Type Map

1:4000

subject site

assessment area

100m

140m

NSW Cadastre

10m contours

140 - 150

150 - 220

220 - 346

Campsites

Road surface

Standard Road

Vehicular Track

waterway

waterbody

Road corridor

SVTM NSW Extant PCT

Dry Sclerophyll Forests (Shrub/grass sub-formation)

Forested Wetlands

Grassy Woodlands

Rainforests

Wet Sclerophyll Forests (Grassy sub-formation)

NSW SIX Imagery WMS

Hunter Bushfire Services

100 200 m

Disclaimer: While every effort is made to ensure this map is free of errors, there is no warranty that the map or its features are either spatially accurate or fit for a particular use. This map is provided without any warranty of any kind whatsoever, either express or implied. Reference should always be made to the Architectural Plans for site features, such as the building footprint.

Job No: J230825 Date: 18/09/2023

Slope Assessment

An assessment of the effective slope under the identified hazard vegetation was conducted for a distance of 100m around the Site. Both the average and maximum slopes were assessed to determine the gradient which would most significantly influence fire behaviour on the Site. Slopes have been categorised within the slope classification under PBP (2019) Appendix A1.4.

Slopes were assessed during site visit and confirmed by Digital Elevation Model (DEM) data during map production for inaccessible areas. This DEM data is accurate to 0.3m vertically and 0.8m horizontally (to a 95% Confidence Interval) and was sourced from NSW Spatial Services then converted to contour lines for map production.

Table 7 – Effective slope class determination - proposed refuge

Direction	Keith Class	Slope Class
North	Grassland	Upslope / Flat land
East	Forest*	5-10 Degrees downslope
South	Grassland	5-10 Degrees downslope
West	Forest	5-10 Degrees downslope

* NB: currently the primary hazard vegetation to the south and east of the proposed refuge building is grassland, however evidence of tree regrowth to the east means that it is more appropriate to establish APZs based on forest vegetation in that direction to ensure encroachment does not render the SFPP APZ for grassland inadequate. This results in a substantial area of managed vegetation around the refuge building, however due to its central location within the campsite this is an essential protection measure to ensure the radiant heat rating on the refuge is not exceeded while occupants are sheltering within.

The Steps, Barrington

Figure 6 - Topographical Site Map

1:10000

subject site

assessment area

100m

140m

NSW Cadastre

10m contours

140 - 150

150 - 220

220 - 346

346 - 488

488 - 630

Road surface

Standard Road

Vehicular Track

waterway

waterbody

Road corridor

NSW SIX Imagery WMS

MANCHESTER RD

MANCHESTER RD

ATKINS RD

Hunter Bushfire Services

400 800 m

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Job No: J230825 Date: 18/09/2023

Table 8 – Site photos



Photo 1: – Site of proposed admin building & refuge



Photo 2: – showing riparian vegetation adjoining campsites



Photo 3: – site of proposed admin building - between two existing structures



Photo 4: – site of proposed admin building – facing south-west



Photo 5: – facing north-east, showing part of campground and Barrington bike park



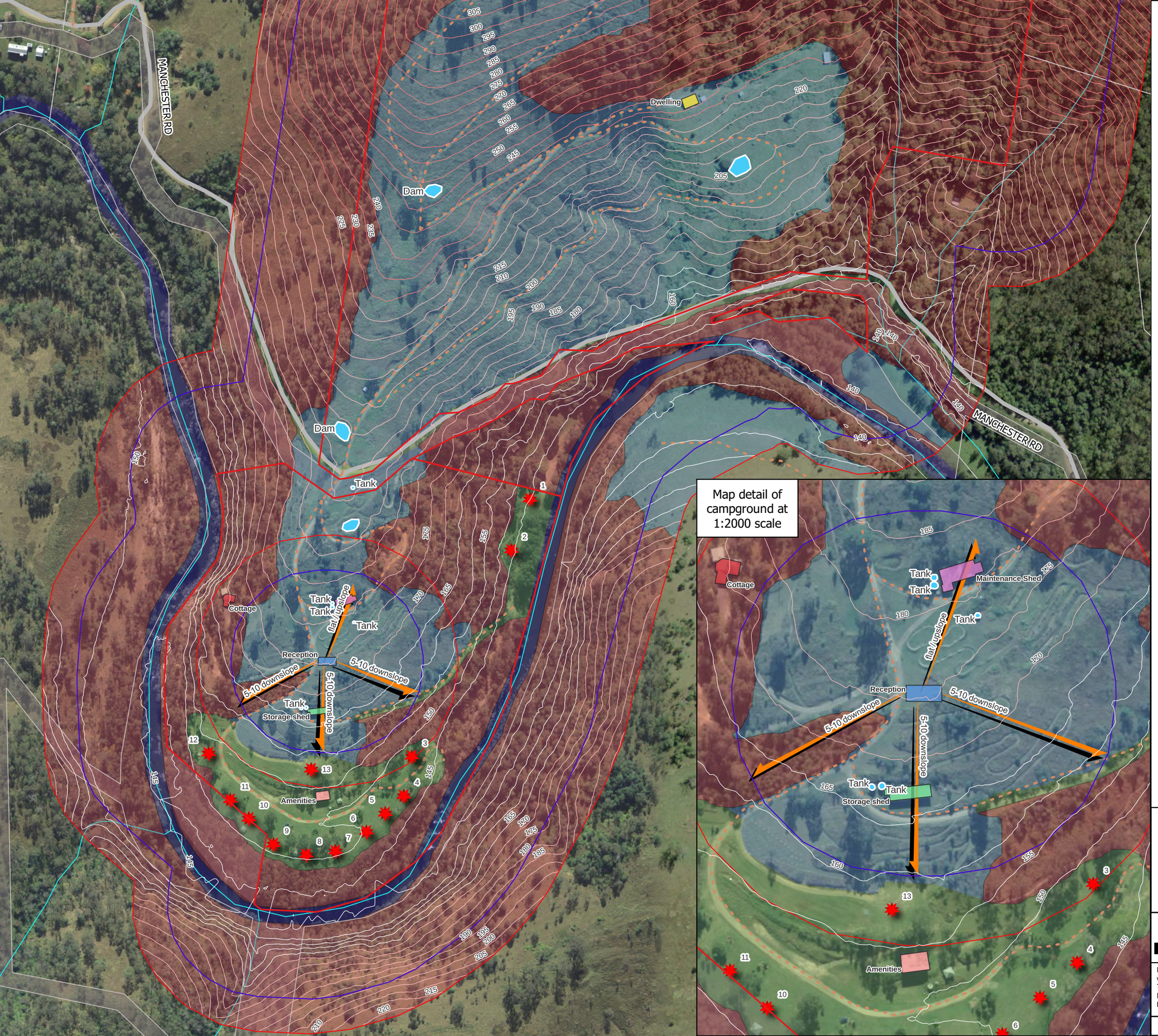
Photo 6: – Area of managed vegetation for campsites next to river

NB: further site photos available here

The Steps, Barrington

Figure 7 - Site Assessment Map

1:4000



- subject site

assessment area
- 100m
- 140m
- NSW Cadastre

5m contours
- 140 - 165
- 165 - 225
- 225 - 360
- Water supp
- Campsites

Refuge assessment area
- 100m
- 140m

Buildings
- Amenities
- Cottage
- Reception
- Storage shed
- Maintenance Shed
- Dwelling
- transects

Road surface
- Standard Road
- Vehicular Track

vegetation
- Forest
- Grassland
- Managed
- waterway
- waterbody
- Road corridor

NSW SIX Imagery WMS

Hunter Bushfire Services

100 200 m

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Job No: J230825 Date: 18/09/2023

Bushfire Protection Measures

PBP (2019) sets out a suite of BPMs and criteria that require consideration and assessment for applicable proposals on bushfire-prone land in order to provide an adequate level of protection to new developments. The acceptable solutions to the required performance criteria for these BPMs are listed for SFPP developments in Table 6.8a of PBP (2019).

The measures required to be assessed are listed below and have been derived from the Bushfire Hazard Assessment in this report:

- APZ
- Landscaping and Fuel Management
- Construction Standards
- Access
- Services – Water supply, Gas and Electricity
- Emergency Management

APZ

The primary hazard vegetation class in relation to the proposed refuge building is forest on a 5–10-degree downslope. The minimum required APZ in this case (A1.12.1) is 93m.

To ensure the facility manages this land to the standard of an IPA APZ as per A4.1.1 of PBP (2019) this APZ is a key recommendation of this report.

The minimum required APZs for the refuge building as per table A1.12.1 of PBP 2019 is listed in the table below;

Table 9 – SFPP APZ offsets required for refuge (table A1.12.1)

Direction	Keith Class	Slope Class	Minimum SFPP APZ
North	Grassland	Upslope / Flat land	36m
East	Forest	5-10 Degrees downslope	93m
South	Grassland	5-10 Degrees downslope	45m
West	Forest	5-10 Degrees downslope	93m

Table 10 – Compliance with PBP forSFPP APZs (table 6.8b)

No	Performance Criteria	Complies	Acceptable Solutions	Complies	Response
ASSET PROTECTION ZONES					
1	radiant heat levels of greater than 10kW/m² (calculated at 1200K) will not be experienced	Able to Comply	the building is provided with an APZ in accordance with Table A1.12.1 in Appendix 1.	Able to comply	This building is able to provide an SFPP APZ in accordance with Table A1.12.1 as described in Table 9 above & Figure 8 – Bush Fire Protection Measures Map.

No	Performance Criteria	Complies	Acceptable Solutions	Complies	Response
	on any part of the building.				
5	APZ maintenance is practical, soil stability is not compromised and the potential for crown fires is minimised.	Able to Comply	APZs are located on lands with a slope less than 18 degrees	Able to Comply	The area to be managed as an APZ is less than 18 degrees
6	• APZs are managed and maintained to prevent the spread of fire to the building. • the APZ is provided in perpetuity.	Able to Comply	the APZ is managed in accordance with the requirements of Appendix 4 of this document, and is wholly within the boundaries of the development site;	Able to Comply	The APZ is to be managed in accordance with the requirements of Appendix 4 of PBP
7		Able to Comply	APZ are wholly within the boundaries of the development site; and	Able to Comply	The APZ can be provided wholly within the boundaries of the site
		Able to Comply	other structures located within the APZ need to be located further than 6m from the refuge building.	Able to Comply	Any other structures located within the APZ are to be located further than 6m from the refuge building.

Landscaping

All future landscaping within the APZ of the Site should be designed and managed to minimise impact of bushfire based on the principles set out in PBP (2019) being:

- Prevent flame contact / direct ignition on the site
- Provide a defendable space for property protection;
- Reduce fire spread;
- Deflect and filter embers;
- Provide shelter from radiant heat; and
- Reduce wind speed.

In this manner, consideration should be given to species selection, planting location, flammability and size at maturity to ensure discontinuous canopy/ structure both vertically and horizontally to ensure the above principles are met.

Ongoing fuel management across the site as part of the maintenance regime must give due consideration to Appendix 4 Asset Protection Zone Requirements of PBP (2019) which provides guidance on maintenance activities to assist in achieving the landscape principles.

Table 11 – Compliance with PBP for Landscaping (table 6.8b)

No	Performance Criteria	Complies	Acceptable Solutions	Complies	Response
LANDSCAPING					
1	landscaping is designed and managed to minimise flame contact and radiant heat to buildings, and the potential for wind-driven embers to cause ignitions.	Able to Comply	• landscaping is in accordance with Appendix 4; and • fencing is constructed in accordance with section 7.6	Able to Comply	Fuel loads within the APZs of the campgrounds are managed to the standards of an IPA APZ. Scope for further vegetation management exists within the site.

Furthermore, the applicants are encouraged to take advantage of the 10/50 code for which the site qualifies – in order to ensure fuel is removed in the vicinity of the Riverview Cottage & the owners dwelling, regardless of conditioned APZs.

Construction Standards

The proposed refuge building is able to comply with the acceptable solutions to this performance criteria by being constructed to BAL-12.5. This building will be used to take refuge from a fire – this will be addressed in the updated *fire emergency & evacuation plan* that is a key recommendation of this report.

Table 12 – Compliance with PBP for Construction Standards (table 6.8b)

No	Performance Criteria	Complies	Acceptable Solutions	Complies	Response
CONSTRUCTION STANDARDS					
1	the proposed building can withstand bush fire attack in the form of wind, embers, radiant heat and flame contact.	Able to Comply	a construction level of BAL-12.5 under AS 3959 or NASH Standard and section 7.5 of PBP is applied.	Able to Comply	The proposed refuge building must comply with BAL 12.5 as per AS3959 or the Nash standard.

Access

Adequate ingress/ egress and the provision of defendable space are requirements of Table 6.8b, and Appendix 3 of PBP (2019). The intent of measures is to provide safe operational access for emergency services personnel in suppressing a bush fire, while occupants are accessing or egressing an area.

Table 13 – Compliance with PBP for Access (table 6.8b)

No	Performance Criteria	Complies	Acceptable Solutions	Complies	Response
Access (General Requirements)					
1	Firefighting vehicles are provided with safe, all-weather access to structures and hazard vegetation.	Yes	SFPP access roads are two-wheel drive, all-weather roads.	Yes	The property access road is of a standard that allows two-wheel drive, all weather access.
2		Yes	Access is provided to all structures.	Yes	All structures within the subject site have direct vehicular access established.
3		Yes	traffic management devices are constructed to not prohibit access by emergency services vehicles;	Yes	No traffic management devices are within the site that would prohibit access by emergency services vehicles.
4		Yes	access roads must provide suitable turning areas in accordance with Appendix 3; and	Yes	The access roads have suitable turning areas in multiple locations.
		Not Applicable	one way only public access roads are no less than 3.5 metres wide and have designated parking bays with hydrants located outside of these areas to ensure accessibility to reticulated water for fire suppression.	Not Applicable	No one-way only public access roads are proposed for this site.

No	Performance Criteria	Complies	Acceptable Solutions	Complies	Response
5	the capacity of access roads is adequate for firefighting vehicles	Yes	the capacity of road surfaces and any bridges/ causeways is sufficient to carry fully loaded firefighting vehicles (up to 23 tonnes); bridges and causeways are to clearly indicate load rating.	Yes	the capacity of road surfaces and any bridges/ causeways is sufficient to carry fully loaded firefighting vehicles (up to 23 tonnes)
6	there is appropriate access to water supply.	Not Applicable	Hydrants are located outside of parking reserves and road carriageways to ensure accessibility to reticulated water for fire suppression.	Not Applicable	No hydrants are present.
7		Not Applicable	Hydrants are provided in accordance with the relevant clauses of AS2419.1:2005.	Not Applicable	No hydrants are present.
8		Yes	There is suitable access for a Category 1 fire appliance to within 4m of the static water supply where no reticulated supply is available.	Yes	The site is supplied with several water storage tanks and dams. 2x 20KL tanks are installed on site next to storage shed - within 4m of a hardstand area.
PERIMITER ROADS					
9	perimeter access roads are designed to allow safe access and egress for firefighting vehicles while occupants are evacuating as well as	Not Applicable	N/A	Not Applicable	No perimeter roads are proposed for this site.

No	Performance Criteria	Complies	Acceptable Solutions	Complies	Response
	providing a safe operational environment for emergency service personnel during firefighting and emergency management on the interface.				
NON-PERIMITER ROADS					
10	non-perimeter access roads are designed to allow safe access and egress for firefighting vehicles while occupants are evacuating.	Not Applicable	• N/A	Not Applicable	No non-perimeter roads are proposed for this site.

Water Supply & Services

The Site may comply with the acceptable solutions for services listed in Table 6.8c of PBP (2019).

The proposal is able to satisfy these requirements given that the site has a compliant SWS tank of 20KL at an accessible location within the site. Four other water tanks are located within the Steps campsite, in addition to dams. A 10KL SWS is required to be provided each for Riverview Cottage & the owners dwelling, and is to be fitted with a 65mm Storz fitting to allow RFS tanker connection. The Steps has a firefighting trailer fitted out with water storage and pump for firefighting purposes, which is stored within the site and kept available for firefighting purposes.



Photo 7: – concrete tank installed on-site near storage shed.



Photo 8: – Storz fitting installed on SWS

.

Table 14 – Compliance with PBP for Services (table 6.8c)

	PERFORMANCE CRITERIA	ACCEPTABLE SOLUTION	Compliance
Water supplies	an adequate water supply is provided for firefighting purposes	▪ reticulated water is to be provided to the development where available; or ▪ a 10,000 litres minimum static water supply for firefighting purposes is provided for each occupied building where no reticulated water is available.	Reticulated water is not available at this site however several compliant static water storages are provided, as well as several dams and the river being accessible. The supply of water provided for firefighting purposes within the site is considered adequate. A compliant SWS is required for the owner's dwelling and Riverview Cottage.
	water supplies are located at regular intervals; and the water supply is accessible and reliable for firefighting operations	▪ fire hydrant, spacing, design and sizing complies with the relevant clauses of Australian Standard AS 2419.1:2005; ▪ hydrants are not located within any road carriageway; and ▪ reticulated water supply to urban subdivisions uses a ring main system for areas with perimeter roads.	Not applicable – hydrants are not available at this rural location.
	flows and pressure are appropriate	▪ fire hydrant flows and pressures comply with the relevant clauses of AS 2419.1:2005	Not applicable
	the integrity of the water supply is maintained	▪ all above-ground water service pipes are metal, including and up to any taps	Able to comply. Will be a recommendation of this report to be a condition of the BFSA
Electricity	location of electricity services limits the possibility of ignition of surrounding bush land or the fabric of buildings	▪ where practicable, electrical transmission lines are underground; ▪ where overhead, electrical transmission lines are proposed as follows; o lines are installed with short pole spacing of 30m, unless crossing gullies, gorges or riparian areas; and o no part of a tree is closer to a power line than the distance set out in *ISSC3 Guideline for Managing Vegetation Near Power Lines*	Able to comply. Will be a recommendation of this report to be a condition of the BFSA.

Gas Services	location and design of gas services will not lead to ignition of surrounding bushland or the fabric of buildings	▪ reticulated or bottled gas is installed and maintained in accordance with AS/NZS 1596:2014 - The storage and handling of LP Gas, the requirements of relevant authorities, and metal piping is used; ▪ all fixed gas cylinders are kept clear of all flammable materials to a distance of 10m and shielded on the hazard side; ▪ connections to and from gas cylinders are metal; ▪ polymer-sheathed flexible gas supply lines are not used; and ▪ above-ground gas service pipes are metal, including and up to any outlets	Able to comply. Will be a recommendation of this report to be a condition of the BFSA.

Emergency Management

Any fire within the site would be attended in the first instance by Barrington Rural Fire Brigade, with assistance available from the next closest brigade at Gloucester RFB. When the Rocky Crossing is repaired then an alternate route of assistance from Gloucester River RFB will be possible. To assist emergency responders from the NSW RFS, any hydrants or tanks' connection points are to be readily accessible and clearly marked. A key recommendation of this report is the updating of the emergency management & evacuation plan for all occupants of the site, being the campground visitors, the bike park visitors, any occupants of the Riverview cottage and all staff.

Table 15 – Compliance with PBP for Emergency Management (table 6.8d)

No	Performance Criteria	Complies	Acceptable Solutions	Complies	Response
EMERGENCY MANAGEMENT					
1	a Bush Fire Emergency Management and Evacuation Plan is prepared.	Able to Comply	• Bush Fire Emergency Management and Evacuation Plan is prepared consistent with: ○ The NSW RFS document: A Guide to Developing a Bush Fire Emergency Management and Evacuation Plan; ○ NSW RFS Schools Program Guide; ○ Australian Standard AS 3745:2010 Planning for emergencies in facilities; and ○ Australian Standard AS 4083:2010 Planning for emergencies – Health care facilities (where applicable). • the Bush Fire Emergency Management and Evacuation Plan	Able to Comply	A Bush Fire Emergency Management and Evacuation plan must be prepared or updated - consistent with the applicable documents including the NSW RFS document: *A Guide to Developing a Bush Fire Emergency Management and Evacuation Plan.* A copy of the Bush Fire Emergency Management and Evacuation Plan should be provided to the Local Emergency Management Committee for its information prior to occupation of the development.

No	Performance Criteria	Complies	Acceptable Solutions	Complies	Response
			should include planning for the early relocation of occupants. • Note: A copy of the Bush Fire Emergency Management and Evacuation Plan should be provided to the Local Emergency Management Committee for its information prior to occupation of the development.		
	appropriate and adequate management arrangements are established for consultation and implementation of the Bush Fire Emergency Management and Evacuation Plan.		• an Emergency Planning Committee is established to consult with residents (and their families in the case of aged care accommodation and schools) and staff in developing and implementing an Emergency Procedures Manual; and • detailed plans of all emergency assembly areas including on site and off-site arrangements as stated in AS 3745:2010 are clearly displayed, and an annually emergency evacuation is conducted.		Any existing emergency response plans shall be updated to reflect the proposed new building & occupant numbers. It must take into account all occupants of the site.

The Steps, Barrington

Figure 8 - Site Assessment Map

1:1800

- subject site
- assessment area
  - 100m
  - 140m
  - NSW Cadastre
- 5m contours
  - 140 - 165
  - 165 - 225
- Water supply
- Campsites
- Buildings
  - Amenities
  - Cottage
  - Reception
  - Storage shed
  - Maintenance Shed
- Road surface
  - Standard Road
  - Vehicular Track
- APZ offsets
- 10m APZ
- SFPP APZ
- Campsite APZ
- vegetation
  - Forest
  - Grassland
  - Managed
  - waterway
  - waterbody
  - Road corridor
- NSW SIX Imagery WMS

MANCHESTER RD
Tank
Tank
Tank
Maintenance Shed
10m
Cottage
36m
93m
Reception
93m
45m
Tank
Tank
Storage shed
Amenities
1
2
3
4
5
6
7
8
9
10
11
12
13

Map detail of dwelling APZ at 1:2000 scale

Dwelling

Hunter Bushfire Services

70 140 m

Disclaimer: While every effort is made to ensure this map is free of errors, there is no warranty that the map or its features are either spatially accurate or fit for a particular use. This map is provided without any warranty of any kind whatsoever, either express or implied. Reference should always be made to the Architectural Plans for site features, such as the building footprint.

Job No: J230825 Date: 18/09/2023

Conclusion & Recommendations

Hunter Bushfire Services has been engaged by Naomi & Brian Kilby of The Steps Barrington to prepare a Bushfire Assessment Report (BAR) to apply for a Bush Fire Safety Authority (BFSA) from the NSW RFS as required for development of existing SFPP facilities. The applicants are seeking planning permission for a new reception building that will double as a refuge in case of a fire emergency. To accommodate the popularity of their business the applicants are seeking to vary the permitted occupancy of their existing consent.

The applicants are willing to take every precaution to ensure the safety of their visitors and any emergency response personnel who attend the site. A robust and comprehensive package of bushfire protection measures has been crafted to ensure the proposal can meet the aim & objectives of PBP 2019, as well as the specific objectives, variations & performance criteria applicable to the development types involved. The Steps Barrington is classed as a SFPP development due to the short-stay accommodation aspect, while the adjoining mountain bike company falls under chapter 8 of PBP 2019 – being a commercial operation with no accommodation.

This assessment considers and assesses the bushfire hazards and potential threats relevant to the proposal, and outlines the minimum mitigative measures required by PBP (2019) and addresses all submission requirements for an application for a bush fire safety authority (BFSA) under Section 100B of the *Rural Fires Act* 1997 (RF Act) as detailed in Cl.44 of the Rural Fires regulations, and listed in Appendix 2 of PBP 2019. The Aim & Objectives of PBP (2019) & the specific objectives of sections 6.2 & 6.4 of PBP (2019) are addressed in this report.

In order to determine how the proposed development is bushfire-prone, and which setbacks and other Bush Fire Protection Measures (BPM) will be appropriate, this assessment adhered to the methodology and procedures of appendix 1 of PBP (2019) and met the performance criteria via acceptable solutions as outlined in Chapter 6 of PBP (2019).

This assessment has been made based on the bushfire hazards in and around the Site at the time of Site inspection (9th August 2023) and report production.

An assessment has been undertaken and a comprehensive package of Bush fire protection measures have been proposed as recommendations of this report in order for the development to meet all applicable performance criteria of Planning for Bush Fire Protection 2019 (PBP) & achieve a better bush fire outcome than if the development did not proceed. The proposed bushfire protection measures prioritise prevention – by limiting the number of occupants on days of extreme fire danger & recommending that an emergency management & evacuation plan is to be prepared for the entire facility to ensure all aspects are considered.

Minimum protection measures are recommended for the owners' dwelling and a short-stay cabin within the site, namely ember protection, provision of water storage and APZs. The provision of water storage within the site is detailed, as are the fire-fighting apparatus available on-site and details of the proposed refuge building.

In summary, the following Site-specific Bushfire Protection Measures have been generated to enable the proposal to comply with PBP (2019);

1. From the commencement of building works and in perpetuity, the property around the refuge building must be maintained as an inner protection area to the following distances and aspect in accordance with Appendix 4.1.1 of Planning for Bush Fire Protection 2019:
   - north for a distance of 36mmetres;
   - east for a distance of 93 metres;
   - south for a distance of 45 metres; and
   - west for a distance of 93 metres.
2. From the commencement of building works and in perpetuity, the property around the habitable dwellings – being the owners' residence & Riverview Cottage – must be maintained as an inner protection area for a distance of 10m metres in accordance with Appendix 4.1.1 of Planning for Bush Fire Protection 2019:
3. From the commencement of building works and in perpetuity, the property along the riverbank where campsites are located must be managed as an inner protection area over the area depicted on Figure 8 – Bush Fire Protection Measures Map, and in accordance with the requirements of Appendix 4 of Planning for Bush Fire Protection 2019.

The above APZs are in addition to APZs conditioned under previous BFSAs for the site (issued in 2007 & 2010).

4. Landscaping within the required asset protection zone(s) must comply with Appendix 4 of Planning for Bush Fire Protection 2019. In this regard, the following principles are to be incorporated:
   l) A minimum 1 metre wide area (or to the property boundary where the setbacks are less than 1 metre), suitable for pedestrian traffic, must be provided around the immediate curtilage of the building;
   m) Planting is limited in the immediate vicinity of the building;
   n) Planting does not provide a continuous canopy to the building (i.e. trees or shrubs are isolated or located in small clusters);
   o) Landscape species are chosen to ensure tree canopy cover is less than 15% (IPA), and less than 30% (OPA) at maturity and trees do no touch or overhang buildings;
   p) Avoid species with rough fibrous bark, or which retain/shed bark in long strips or retain dead material in their canopies;
   q) Use smooth bark species of trees species which generally do not carry a fire up the bark into the crown;
   r) Avoid planting of deciduous species that may increase fuel at surface/ ground level (i.e. leaf litter);
   s) Avoid climbing species to walls and pergolas;
   t) Locate combustible materials such as woodchips/mulch, flammable fuel stores away from the building;
   u) Locate combustible structures such as garden sheds, pergolas and materials such as timber garden furniture away from the building; and
   v) Low flammability vegetation species are used.
5. New construction must comply with section 3 and section 5 (BAL 12.5) Australian Standard AS3959-2018 *Construction of buildings in bushfire-prone areas* or the relevant requirements of the *NASH Standard - Steel Framed Construction in Bushfire Areas* (incorporating amendment A - 2015). New construction must also comply with the construction requirements in Section 7.5 of *Planning for Bush Fire Protection 2019.*
6. The existing habitable buildings – Riverview Cottage & the owners dwelling - must be upgraded to improve ember protection by enclosing all openings (excluding roof tile spaces) or covering

openings with a non-corrosive metal screen mesh with a maximum aperture of 2mm. Where applicable, this includes any sub floor areas, openable windows, vents, weepholes and eaves. External doors are to be fitted with draft excluders.

7. Fences and gates must comply with Section 7.6 of Planning for Bush Fire Protection 2019. New fences and gates are to be made of either hardwood or non-combustible material. Where a fence or gate is constructed within 6m of a dwelling or in areas of BAL-29 or greater, they must be made of non-combustible material only.
8. Access roads for special fire protection purpose (SFPP) developments must comply with general requirements of Table 6.8b of Planning for Bush Fire Protection 2019:
    - SFPP access roads are two-wheel drive, all-weather roads;
    - access is provided to all structures;
    - traffic management devices are constructed to not prohibit access by emergency services vehicles;
    - access roads must provide suitable turning areas in accordance with Appendix 3; and
    - one way only public access roads are no less than 3.5 metres wide and have designated parking bays with hydrants located outside of these areas to ensure accessibility to reticulated water for fire suppression
9. The provision of water, electricity and gas must comply with the following in accordance with Table 6.8c of Planning for Bush Fire Protection 2019:
    - reticulated water is to be provided to the development where available;
    - a 10,000 litres minimum static water supply for firefighting purposes is provided for each occupied building where no reticulated water is available.
    - fire hydrant, spacing, design and sizing complies with the relevant clauses of Australian Standard AS 2419;
    - all above-ground water service pipes are metal, including and up to any taps;
    - where practicable, electrical transmission lines are underground;
    - where overhead, electrical transmission lines are proposed as follows:
        - lines are installed with short pole spacing (30m), unless crossing gullies, gorges or riparian areas; and
        - no part of a tree is closer to a power line than the distance set out in accordance with the specifications in ISSC3 *Guideline for Managing Vegetation Near Power Lines*.
    - reticulated or bottled gas is installed and maintained in accordance with AS/NZS 1596:2014 and the requirements of relevant authorities, and metal piping is used;
    - reticulated or bottled gas is installed and maintained in accordance with AS/NZS 1596:2014 - The storage and handling of LP Gas, the requirements of relevant authorities, and metal piping is used;
    - all fixed gas cylinders are kept clear of all flammable materials to a distance of 10m and shielded on the hazard side;
    - connections to and from gas cylinders are metal; polymer-sheathed flexible gas supply lines are not used; and
    - above-ground gas service pipes are metal, including and up to any outlets.
10. A Bush Fire Emergency Management and Evacuation Plan is prepared consistent with:
    - the NSW RFS document: *A Guide to Developing a Bush Fire Emergency Management and Evacuation Plan*; and/or,
    - Australian Standard AS 3745:2010 *Planning for emergencies in facilities*.
    - The Bush Fire Emergency Management and Evacuation Plan must consider a mechanism for the early relocation of occupants on days when adverse fire weather is notified or

adverse fire activity occurs in the local government area in which the development operates.

- A copy of the Bush Fire Emergency Management and Evacuation Plan should be provided to the Local Emergency Management Committee for its information prior to occupation of the development.

References

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- NSW Bushfire Prone Land data NSW Rural Fire Service 2021
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- NSW SIX imagery (2015) Department of Finance, Services and Innovation https://www.spatial.nsw.gov.au/
- Ocean Shores to Desert Dunes. DEC, Sydney. Keith D (2004).
- Planning for Bushfire Protection. NSW Rural Fire Service (2019).
- Rural Fires Act 1997. NSW Government.
- Rural Fires Act Regulation 2008. NSW Government.

Abbreviations

APZ	Asset Protection Zone
BAL	Bush Fire Attack Level
BAR	Bushfire Assessment Report
BCA	Building Code of Australia
BFPL	Bush fire prone land
BFDB	Bush Fire Design Brief
BPM	Bush fire protection measure
BFSA	Bush fire safety authority
DA	Development application
DCP	Development Control Plan
DPIE	NSW Department of Planning, Industry and Environment
EP&A Act	Environmental Planning and Assessment Act 1979
FDI	Fire Danger Index
FFDI	Forest Fire Danger Index
GFDI	Grassland Fire Danger Index
IPA	Inner Protection Area
kW/m2	Kilowatts per metre squared
LEP	Local Environmental Plan
NASH	National Association of Steel Framed Housing (2014) Steel Framed Construction in Bush Fire Areas
NCC	National Construction Code
OPA	Outer Protection Area
PBP	Planning for Bush Fire Protection 2019
RF Act	Rural Fires Act 1997
RF Reg	Rural Fires Regulation 2013
NSW RFS	NSW Rural Fire Service
SEPP	State Environmental Planning Policy
SFPP	Special fire protection purpose
SFR	Short fire run

APPENDIX I – SUBMISSION REQUIREMENTS

To demonstrate that this BAR is in accordance with clause 44 of the Rural Fires Regulation 2013 (RF Regulation) and satisfies the application requirements for a bush fire safety authority under Section 100B of the Rural Fires Act 1997 (RF Act). (p.95).

No	General		Response
1	A description (including the address) of the property on which the development the subject of the application is proposed to be carried out.		*Please refer to* *section of this report.*
2	A classification of the vegetation on and surrounding the property (out to a distance of 140 metres from the boundaries of the property) in accordance with the system of classification of vegetation contained within Planning for Bushfire Protection.		*Please refer to Vegetation Hazard Classes section of this report.*
3	An assessment of the slope of the land on and surrounding the property (out to a distance of 100 metres from the boundaries of the property).		*Please refer to Slope Assessment section of this report.*
4	Identification of any significant environmental features of the property.		*Please refer to* *section of this report.*
5	The details of any threatened species, population or ecological community identified under the Threatened Species Conservation Act 1995 that is known to the applicant to exist on the property.		*No threatened species, population or ecological community identified under the Threatened Species Conservation Act 1995 is known to exist on the property.*
6	The details and location of any Aboriginal object (within the meaning of the National Parks and Wildlife Act 1974) or Aboriginal place (within the meaning of that Act) that is known to the applicant to be situated on the property.		*Please refer to APPENDIX II – AHIMS* *No Aboriginal objects or place is known to be situated on the property.*
7	A bushfire assessment for the proposed development (including the methodology used in the assessment) that addresses the following matters:		
	a	The extent to which the development is to provide setbacks, including Assessment Protection Zones.	*Please refer to APZ section of this report.*

	b	The siting and adequacy of water supplies for firefighting.	*Please refer to Water Supply & Services section of this report.*
	c	The capacity of public roads in the vicinity to handle increased volumes of traffic in the event of a bush fire emergency.	*Please refer to* *section of this report. section of this report.*
	d	Whether or not public roads in the vicinity that link the fire trail network have two-way access.	*No fire trails are present within the site assessment area*
	e	The adequacy of arrangements for access to and egress from the development site for the purposes of emergency response.	*Please refer to* Access *section of this report.*
	f	The adequacy of bush fire maintenance plans and fire emergency procedures for the development site.	*A key recommendation of this report is to update emergency procedures for the site. The adequacy of bush fire maintenance plans is addressed under* Emergency Management *& APZ sections of this report.*
	g	The construction standards to be used for building elements in the development.	*Please refer to Construction Standards section of this report.*
	h	The adequacy of sprinkler systems and other fire protection measures to be incorporated into the development.	*No sprinkler systems are proposed as part of this development.*
	i	An assessment of the extent to which the proposed development conforms with or deviates from the standards, specific objectives, performance criteria and acceptable solutions set out in Chapters 5-8 of PBP.	*The proposed development largely conforms with the standards, specific objectives and acceptable solutions set out in Chapters 6-8 of PBP. The extent to which the proposed development deviates from the acceptable solutions of PBP 2019 is considered to be acceptable*
	j	Identify any fire trails that exist on the property that are on the Register of Certified Fire Trails under the RF Act s.620.	*No fire trails are on the property that are listed on the Register of Certified Fire Trails under the RF Act s.620.*

APPENDIX II – AHIMS BASIC SEARCH RESULTS

AHIMS Web Services (AWS)
Search Result

Your Ref/PO Number : the_steps

Client Service ID : 815409

Sam Ferguson

Date: 01 September 2023

Toronto New South Wales 2283

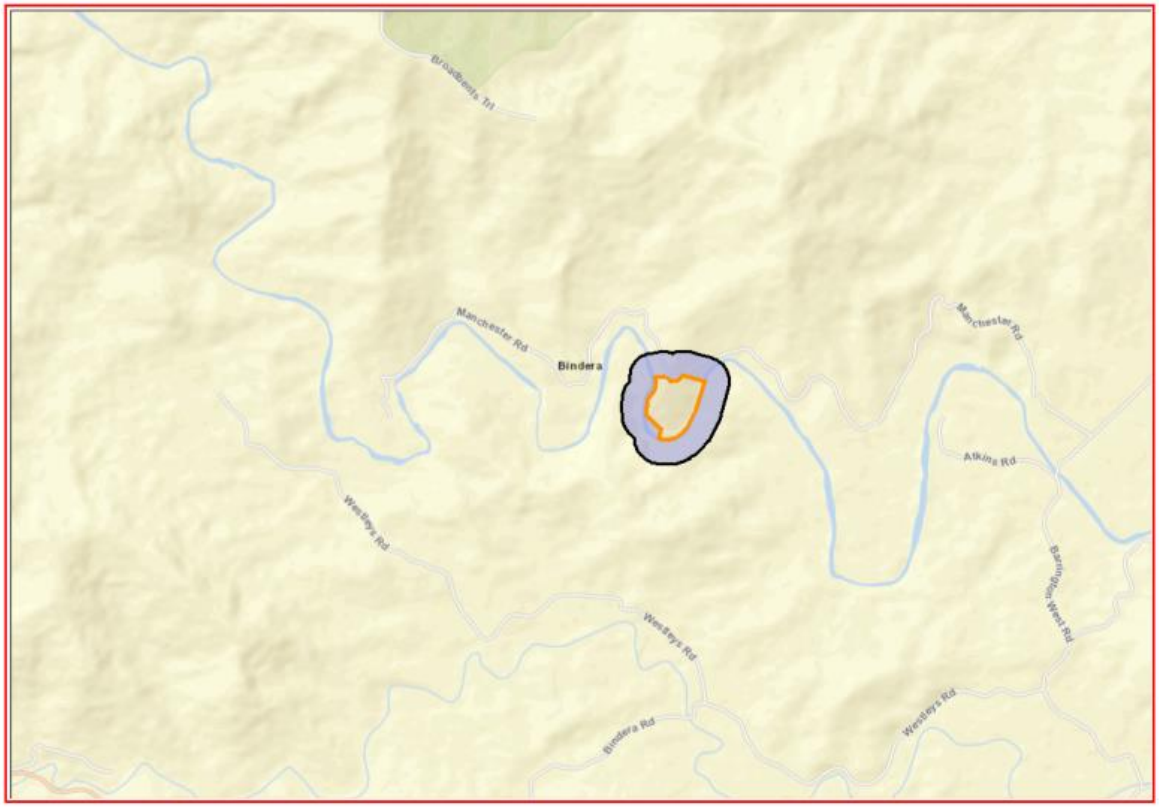
Attention: Sam Ferguson

Email

Dear Sir or Madam:

AHIMS Web Service search for the following area at Lot : 681, DP:DP786066, Section : - with a Buffer of 200 meters, conducted by Sam Ferguson on 01 September 2023.

The context area of your search is shown in the map below. Please note that the map does not accurately display the exact boundaries of the search as defined in the paragraph above. The map is to be used for general reference purposes only.



A search of Heritage NSW AHIMS Web Services (Aboriginal Heritage Information Management System) has shown that:

0	Aboriginal sites are recorded in or near the above location.
0	Aboriginal places have been declared in or near the above location. *

AHIMS Web Services (AWS)
Search Result

Your Ref/PO Number : barrington_bike
Client Service ID : 815418

Sam Ferguson

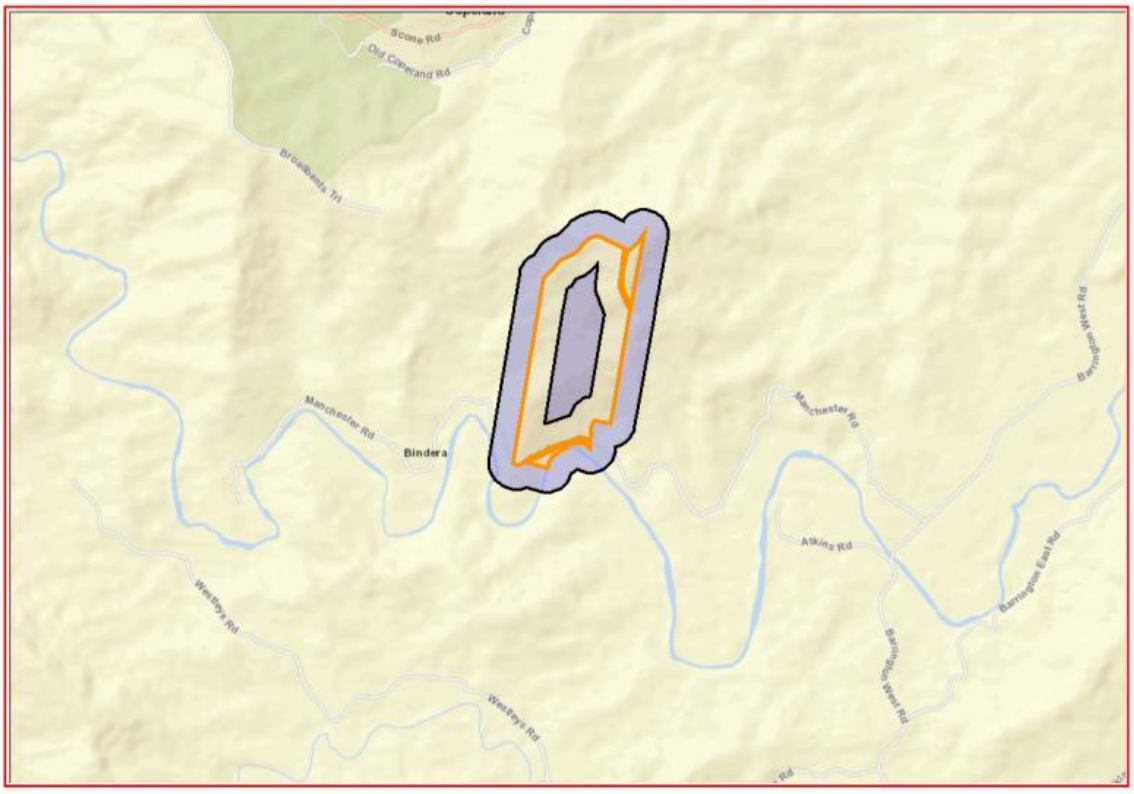
Date: 01 September 2023

Toronto New South Wales 2283
Attention: Sam Ferguson
Email: .

Dear Sir or Madam:

AHIMS Web Service search for the following area at Lot : 2, DP:DP811269, Section : - with a Buffer of 200 meters, conducted by Sam Ferguson on 01 September 2023.

The context area of your search is shown in the map below. Please note that the map does not accurately display the exact boundaries of the search as defined in the paragraph above. The map is to be used for general reference purposes only.



A search of Heritage NSW AHIMS Web Services (Aboriginal Heritage Information Management System) has shown that:

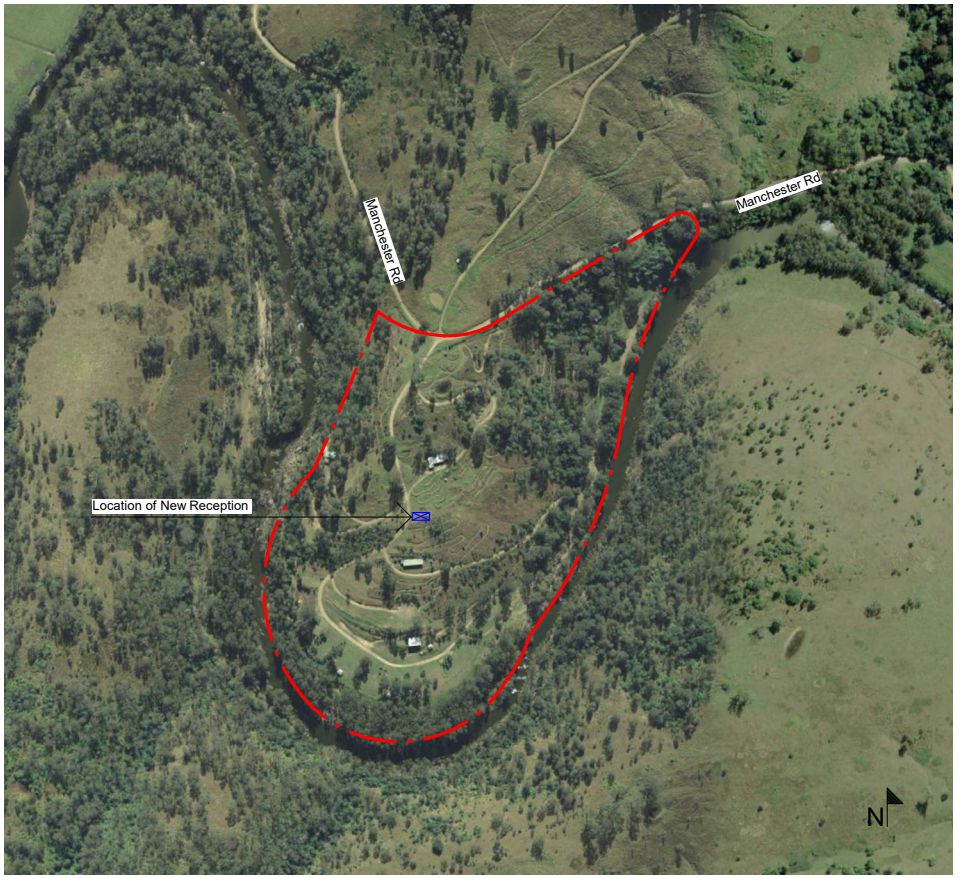
0	**Aboriginal sites are recorded in or near the above location.**
0	**Aboriginal places have been declared in or near the above location. ***

APPENDIX III – ADMIN BUILDING PLANS

55 MANCHESTER RD BINDERA

The Steps Barrington Reception

Num	Sheet name	Rev	Date
000	Cover Sheet & Property map	1	25/06/23
001	Site Plan	1	
002	Ground Floor	1	
003	Pickup Floor	1	
005	Elevations 01	1	
006	Elevations 02	1	



Property Map

Do not scale drawings. Verify all dimensions on site. Notify architect of all discrepancies

Rev	Date	Description		
1	25/06/23	For Client Review	BOA C	JCR

Project
The Steps Barrington
Barrington Outdoor Adventure Centre Pty Ltd

535 Manchester Rd Bindera NSW 2422

Drawn
JCR

Job No.	Sheet	Scale
000	A3	

Drawing Title
COVER SHEET

Drawing No.

Revision
1

BANOOL STUDIO



Do not scale drawings. Verify all dimensions on site. Notify architect of all discrepancies

Rev	Date	Description		
1	25/06/23	For Client Review	BOA C	JCR

Project
The Steps Barrington
Barrington Outdoor Adventure Centre Pty Ltd

535 Manchester Rd Bindera NSW 2422

Drawn
JCR

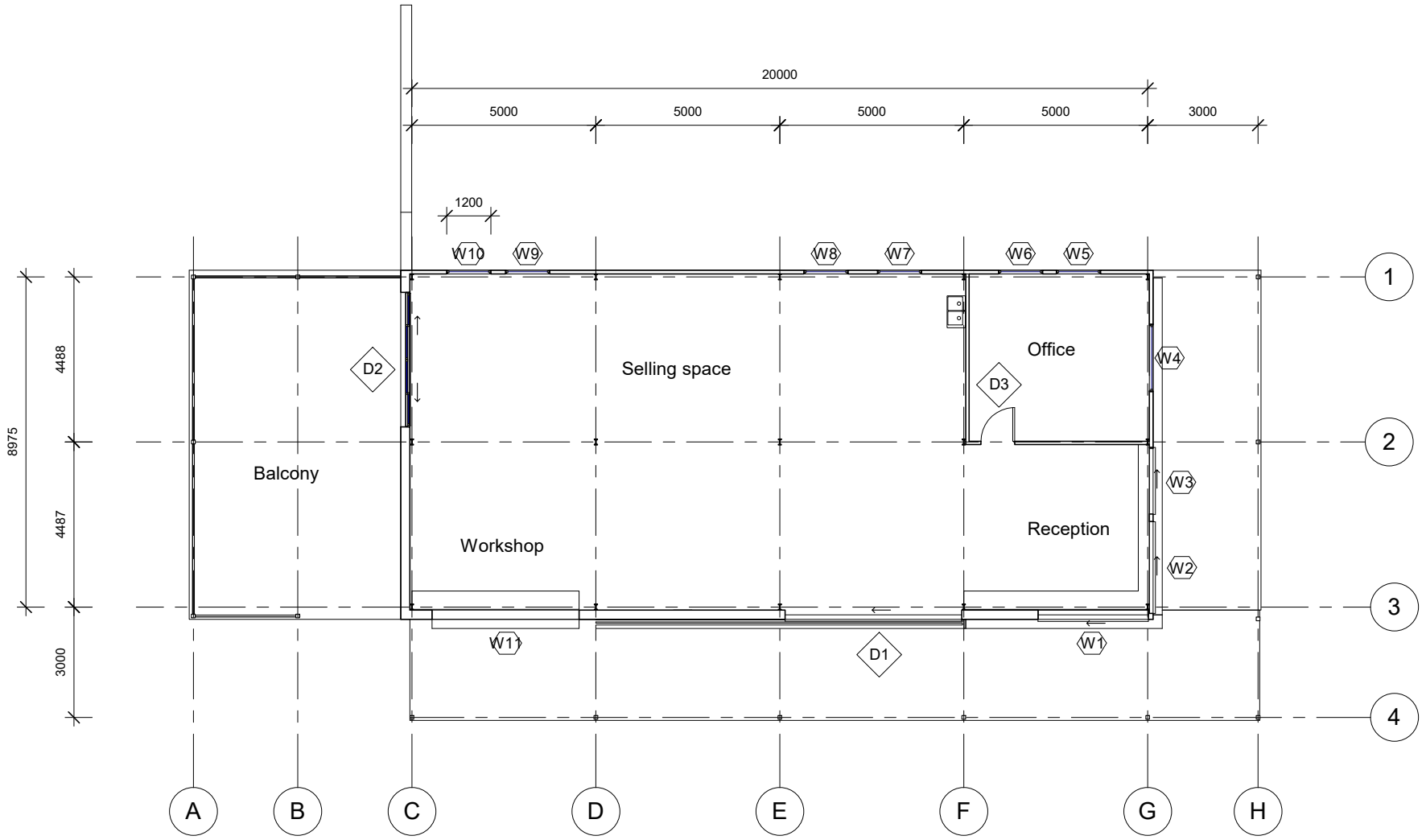
Job No.	Sheet	Scale
000	A3	

Drawing Title
SITE PLAN

Drawing No.

Revision
1

BANOOL STUDIO



Do not scale drawings. Verify all dimensions on site. Notify architect of all discrepancies

Rev	Date	Description		
1	25/06/23	For Client Review	BOA C	JCR

Project
The Steps Barrington
Barrington Outdoor Adventure Centre Pty Ltd

535 Manchester Rd Bindera NSW 2422

Drawn
JCR

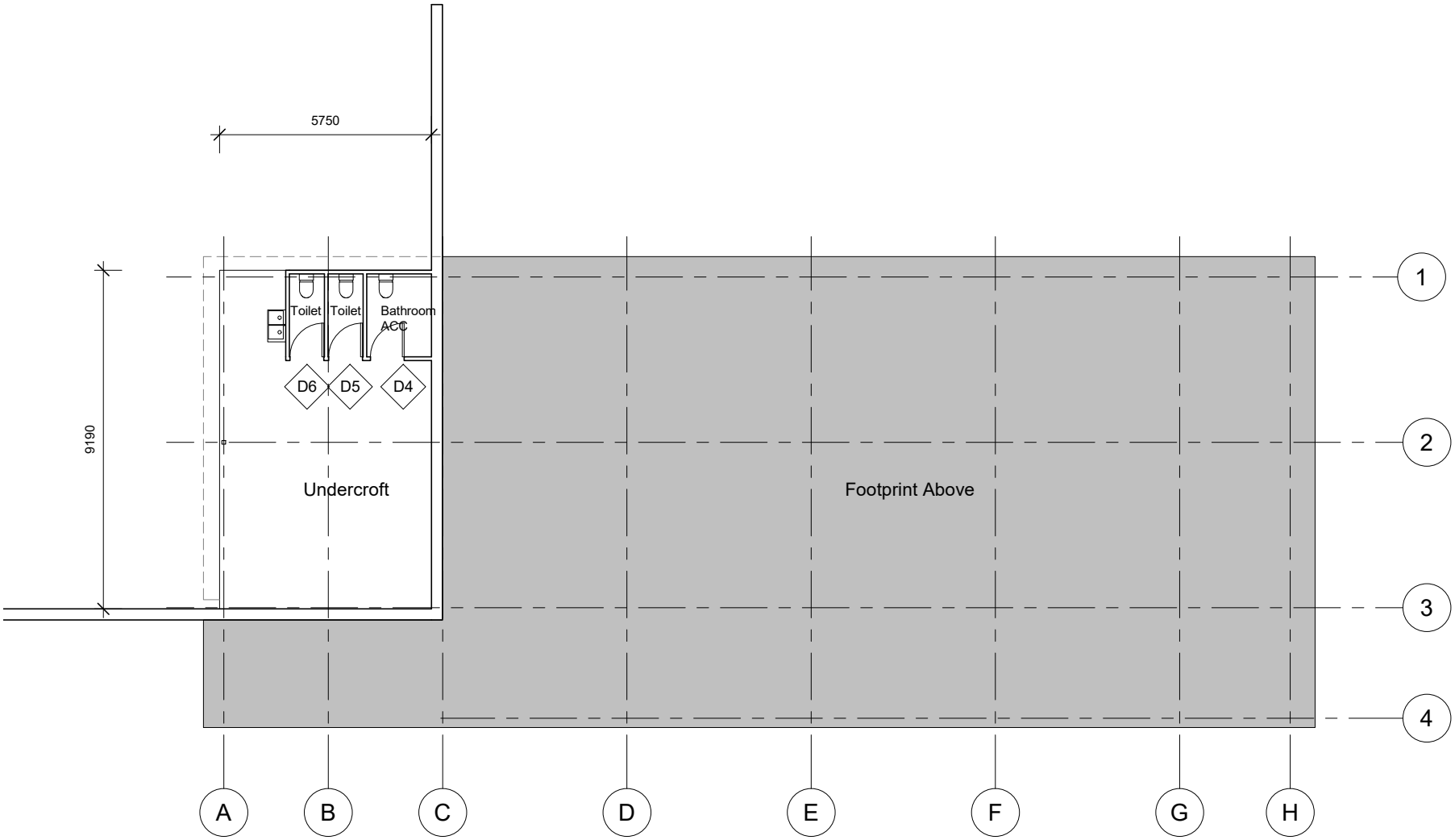
Job No.	Sheet	Scale
000	A3	1 : 100

Drawing Title
GROUND FLOOR

Drawing No.

Revision
1

BANOOL STUDIO



Do not scale drawings. Verify all dimensions on site. Notify architect of all discrepancies

Rev	Date	Description		
1	25/06/23	For Client Review	BOA C	JCR

Project
The Steps Barrington
Barrington Outdoor Adventure Centre Pty Ltd

535 Manchester Rd Bindera NSW 2422

Drawn
JCR

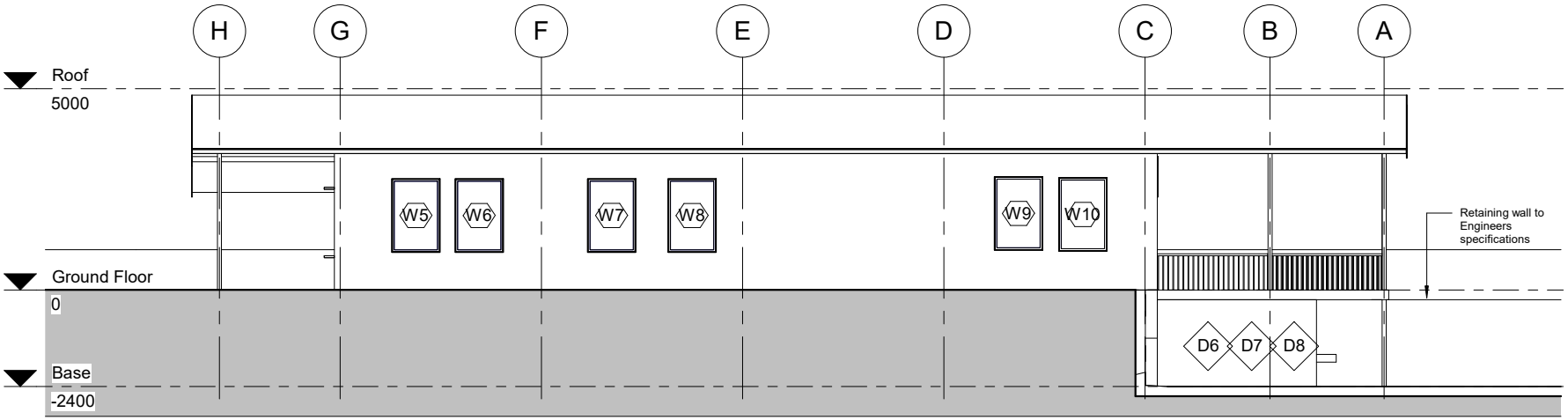
Job No.	Sheet	Scale
000	A3	1 : 100

Drawing Title
PICKUP FLOOR

Drawing No.

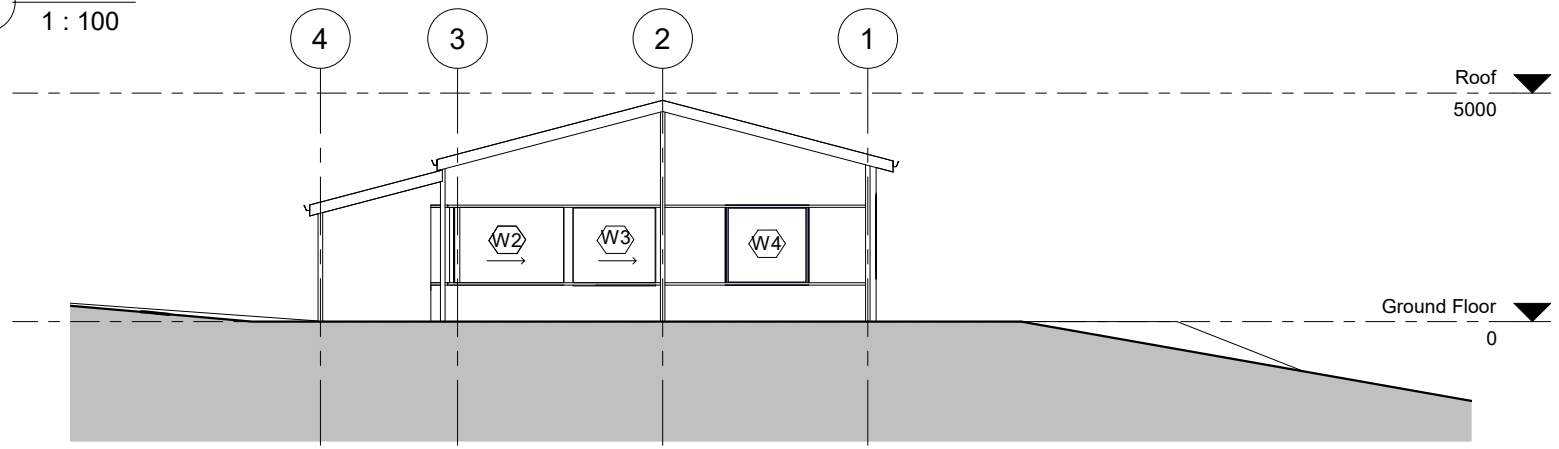
Revision
1

BANOOL STUDIO



1 SOUTH

1 : 100



2 WEST

1 : 100

Do not scale drawings. Verify all dimensions on site. Notify architect of all discrepancies

Rev	Date	Description		
1	25/06/23	For Client Review	BOA C	JCR

Project
The Steps Barrington
Barrington Outdoor Adventure Centre Pty Ltd

535 Manchester Rd Bindera NSW 2422

Drawn
JCR

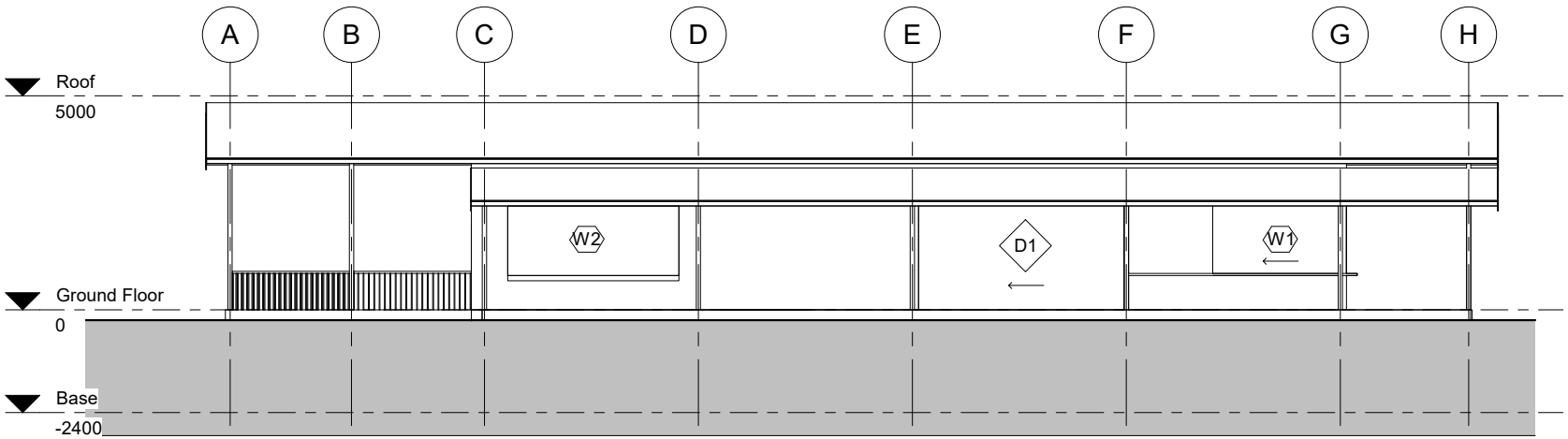
Job No.	Sheet	Scale
000	A3	1 : 100

Drawing Title
ELEVATION 01

Drawing No.

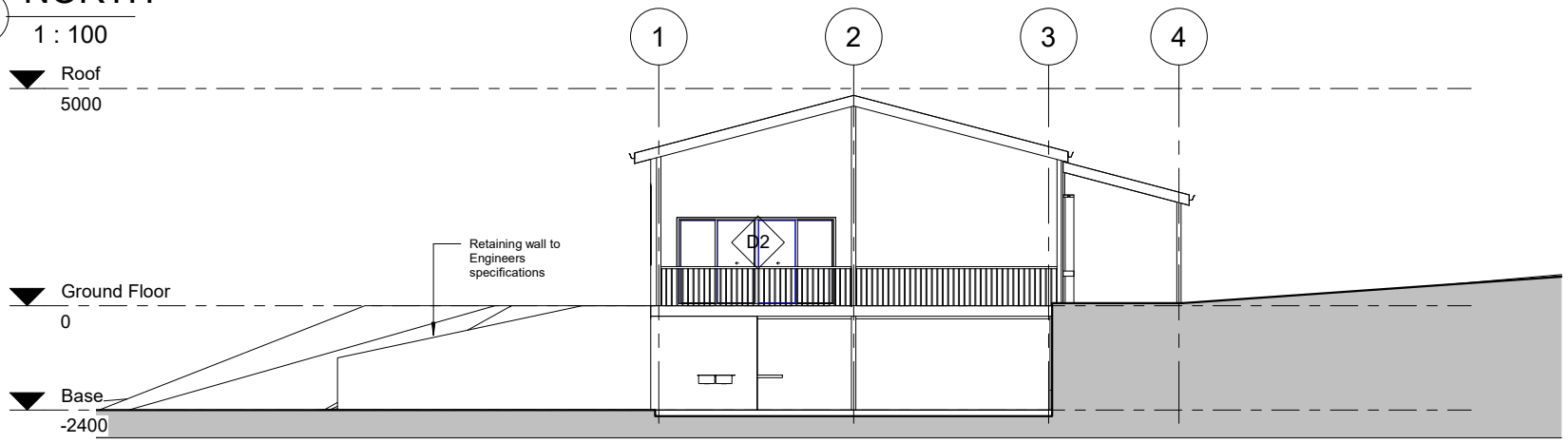
Revision
1

BANOOL STUDIO



1 NORTH

1 : 100



2 EAST

1 : 100

Do not scale drawings. Verify all dimensions on site. Notify architect of all discrepancies

Rev	Date	Description		
1	25/06/23	For Client Review	BOA C	JCR

Project
The Steps Barrington
Barrington Outdoor Adventure Centre Pty Ltd

535 Manchester Rd Bindera NSW 2422

Drawn
JCR

Job No.	Sheet	Scale
000	A3	1 : 100

Drawing Title
ELEVATION 02

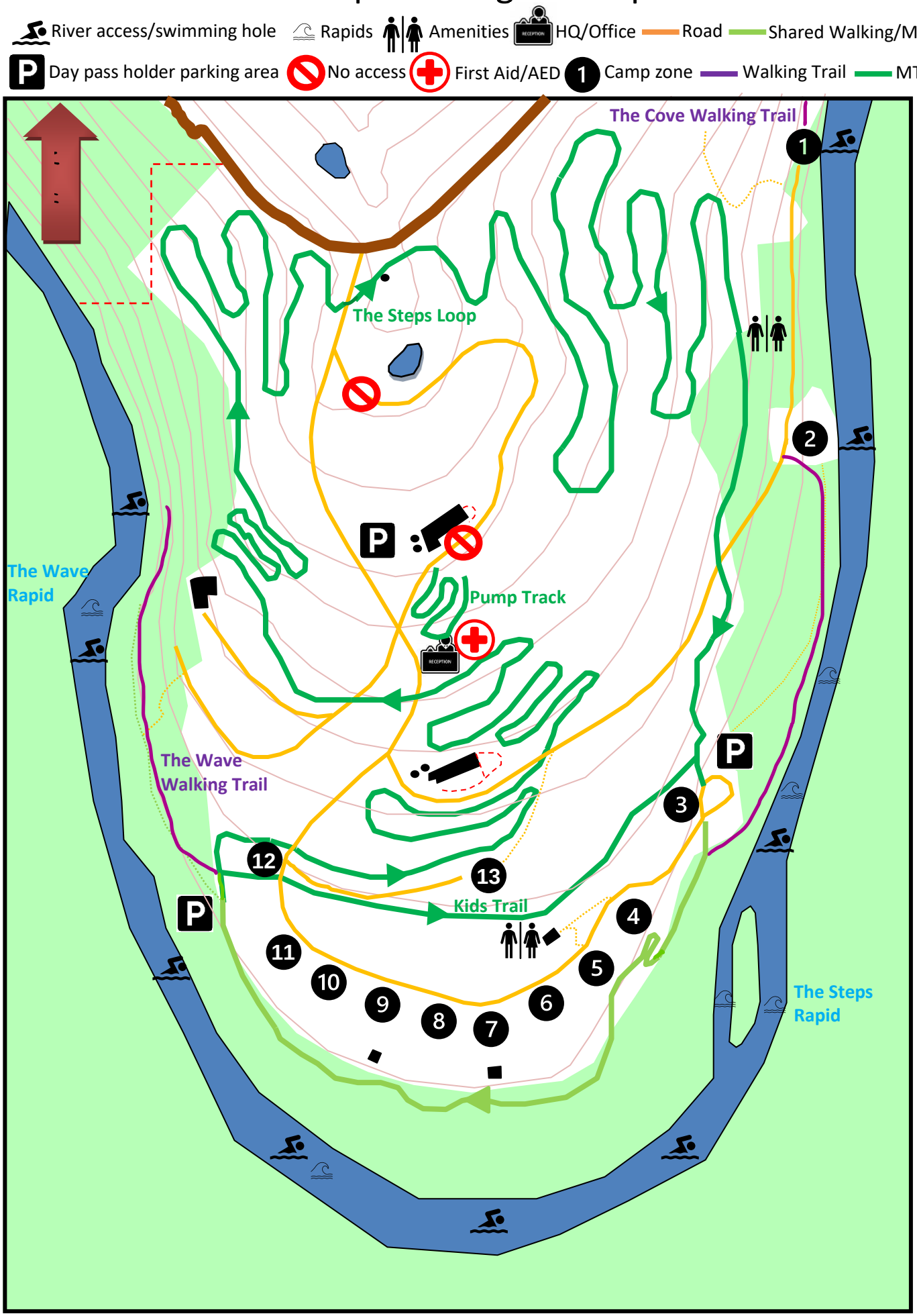
Drawing No.

Revision
1

BANOOL STUDIO

APPENDIX IV – The Steps Barrington Map

The Steps Barrington Map



APPENDIX V – 2010 NOD & GTAs

GLOUCESTER SHIRE COUNCIL

Notice of Determination of a Development Application

This notice is issued to an applicant, and any person who made a submission about the applicant's proposal, once the application has been assessed by the consent authority.

1. Details of the applicant

For privacy reasons, the applicant's details only appear in the notice given to the applicant.

Mr ✓ Ms ☐ Mrs ☐ Dr ☐ Other ☐

First name: B

Family name: KILBY

Flat/street no.: 126

Street name: THUNDERBOLTS WAY

Suburb or town: GLOUCESTER

State: NSW

Postcode: 2422

Daytime telephone:

Fax:

Mobile:

Email:

2. Details of the land to be developed

Lot no.: LOT 681

DP Street No and name: DP 786066 No 535 MANCHESTER ROAD

Suburb or town: BINDERA

Postcode: 2422

Development application no.: 2010/1934

Description of the development:

TOURIST DEVELOPMENT INCORPORATING PRIMITIVE CAMPGROUND, EDUCATIONAL FACILITY & SELF-CONTAINED ACCOMMODATION

If the development involves a building, the class of the building under the Building Code of Australia:

10A

3. Decision of the consent authority

☐ Consent is granted without any conditions.

Date from which the consent operates:

Date the consent expires:

3. continued

✓ Consent is granted subject to the conditions listed in **Attachment A.**

Conditions have been placed on the consent for the following reasons:

Reasons for Conditions

Following an assessment of the application and consideration of the relevant matters for consideration listed in section 79C(1) of the Act, Council has determined that conditions should be imposed for the following reasons:

- To ensure that the proposal satisfies relevant statutory requirements.
- To further the planning objectives specified in Gloucester Local Environmental Plan 2000 in relation to the subject land.
- To ensure that the development is constructed and operated in a manner that will minimise any potential environmental impacts.
- To ensure that the cost of meeting the additional demands on community infrastructure, created as a result of the development, are met in accordance with Council's adopted Section 94 Contributions Plan.

Date from which the consent operates	Date the consent expires
23/6/2010	23/6/2015

☐ Consent is granted to erect a temporary building.

Date from which the consent operates	Date the consent expires

☐ The application is refused.

The application is refused for the following reasons:

4. Date of this decision

23/6/2010

5. Information attached to this decision

☐ A fire safety schedule, for a change of building use where no building work will be carried out.

✓ Conditions of the consent listed in **Attachment A**.

6. Other approvals

The following approvals will be granted, consistent with this consent, if the applicant applies to the state agencies listed within 3 years of the date of this decision:

The following approvals have been granted under the *Local Government Act 1993*:

A Commission of Inquiry has been held

Yes ☐

No ✓

7. Signature

For this notice to be valid, it must be signed by the consent authority.

Signature



Name

A J Y0UNG

Position

General Manager

Date of this notice

23/6/2010

8. Rights of appeal

If you are the applicant:

You can appeal against this decision in the Land and Environment Court within 12 months of the date of this notice. You cannot appeal, however, if a Commission of Inquiry was held and the development is designated development or state significant development.

If you objected to the proposal in writing and the application was for designated Development:

- you can appeal against this decision to the Land and Environment Court within 28 days of the date of this notice. You cannot appeal if a Commission of Inquiry was held.

- if the applicant appeals against this decision, you will be given a notice of the appeal and you can apply to the Land and Environment Court within 28 days of the date of this notice to attend the appeal and make submissions at the appeal.

Attachment A Conditions of the development consent

This consent is subject to the following conditions:

As Per Attached Schedule of Conditions Numbered 1 to 57

COMPLIANCE

Reason: **The following condition(s) have been applied to confirm and clarify the terms of Council's Approval.**

1. The applicant shall comply with all conditions within this schedule prior to occupancy of the proposed development. On completion of the development an appointment should be made with the Council for an inspection to ensure that all conditions have been satisfactorily complied with.

2. Detail plans and specifications showing full compliance with the Building Code of Australia shall accompany the Construction Certificate Application. A Construction Certificate shall be issued by Council prior to the commencement of construction.

3. Prior to commencement of construction, the applicant shall appoint a Principal Certifying Authority, notify Council of the appointment and provide Council with at least 2 days notice of intention to commence.

4. The issue of Compliance Certificates for the following matters or stages of construction (where applicable):
   (i) when steel is in place and before concrete is poured (footings, slabs, beams, etc);

(ii) when pier holes have been excavated and before pouring concrete or the positioning of timber or steel poles/piles;
(iii) when framework is completed prior to covering;
(iv) when all plumbing has been installed prior to covering;
(v) when sewer drainage lines have been laid and prior to covering;
(vi) when all wet area flashing has been installed prior to covering;
(vii) when the building has been completed and before occupation.

5. The issue of an Occupation Certificate prior to occupation of the building or buildings.

DESIGN

Reason: The following condition(s) have been applied to ensure that:

(i) Buildings are constructed in a manner which has regard for the constraints affecting the subject land.

(ii) Buildings are constructed of suitable materials with respect to their function and location and that colour schemes and restoration works are appropriate and retain the integrity of existing structures.

6. Provision is to be made within the design of the proposed buildings for a safe and clear means of evacuation in time of flood. The point of evacuation is to be detailed on the construction certificate application for the proposed building.

7. All buildings erected on the subject land are to be of earth toned/coloured materials having a low reflective quality.

8. Details of materials and colour selections are to be provided to Council for approval prior to issue of a Construction Certificate.

HEALTH AND AMENITY

Reason: The following condition(s) have been applied to ensure that the proposed development is designed, constructed and managed in a manner to minimise its impact on the amenity of the area.

9. There is to be no interference with the residential amenity of the area by reason of the emission of any noise, smell, smoke, vapour, fume or otherwise.

SITE CONSIDERATIONS

Reason: The following condition(s) have been applied to ensure that the development is carried out having due regard to the suitability of the site and to minimise the impact caused to, or by, any off-site land uses.

10. The applicant is advised that the proposed building area is subject to flooding. Council advises that you should seek your own independent advice as to the effects of flooding taking into account the depth and velocity at your site.

11. The applicant shall comply with all conditions of consent issued for a primitive camping ground under S68 Local Government Act 1993. A Draft Approval has

been attached at Appendix A and will be issued once compliance with the conditions of development consent are fully complied with.

FIRE CONTROL

Reason: **The following condition(s) have been applied to ensure that the building is constructed, the area surrounding the building adequately prepared and adequate support facilities provided, to afford the development and its occupants all reasonable means of protection against damage/harm by fire.**

12. Approval issued by the NSW Rural Fire Service form has been attached at Annexure B. The applicant must comply with the conditions of consent in full prior to Council issuing approval to operate the tourist facility.

WASTE DISPOSAL

Reason: **The following condition(s) have been applied to ensure that waste water/effluent disposal meets the requirements of both the Council and the Department of Health and that the necessary approvals for the installation of disposal systems is obtained.**

13. Provision shall be made for the satisfactory disposal of waste in accordance with the requirements of Council.

14. A Draft onsite sewerage management system approval has been attached at Annexure C and will be issued once compliance with the conditions of development consent are fully complied with.

GOVERNMENT AUTHORITIES

Reason: **The following condition(s) have been applied to satisfy the requirements of government authorities.**

15. The applicant shall ensure that all statutory requirements of all relevant legislation, Regulations, Australian Standards, Codes, Guidelines and Notices as well as the requirements of the Environment Protection Authority, Department of Land and Water Conservation, National Parks and Wildlife Service and other relevant authorities are fully met.

16. The applicant cannot provide for camping or erect structures on the Crown road reserve without the prior approval of NSW Lands. The applicant shall submit to Council a copy of an approval from NSW Lands for this activity on the crown road reserve.

CONTRIBUTIONS/FEES

Reason: **The following condition(s) have been applied to ensure that:**

(i) Where the proposed development results in an increased demand for community facilities/services, payment

towards the cost of providing these facilities/services is to be made in accordance with Gloucester Shire Council Section 94 Contributions Plan. A copy of the Plan is available for inspection at Council's Administration Office, 89 King Street, Gloucester.

(ii) Council's administration expenses are met with respect to the processing of the application.

17. The payment of a monetary contribution in accordance with Council's Section 94 Contributions Plan towards the provision of community infrastructure within the Gloucester Local Government Area as follows:

Bush fire Services	(4x$1604)	$6,404
Regional Roads	(4x343)	$1,372
All Other Roads	(10x$1,166)	$11,660
Recreational Facilities	($511x4)	$2,044
Community Facilities	($732x4)	$2,928
Preparing Plans		$35
Administrative Building		$913
	TOTAL	**$25,356**

Note: The above rates are in accordance with the CPI revised annually to account for inflation and the contribution lodged with Council shall be as calculated at the date of payment.

The above payment is to be made prior to release of the (For Subdivision - Final Plan of Survey). (For Buildings - Building Permit/Construction Certificate).

ADVERTISING

Reason: The following condition(s) have been applied to ensure the provision of signage which is complimentary in scale and form with the built environment and the streetscape as a whole and is effective in promoting various land uses within the town.

18. Advertising signs are subject to a separate sign application which is to be submitted to Council for approval prior to erection or replacement.

COMPLIANCE WITH CONDITIONS OF APPROVAL AND THE BUILDING CODE OF AUSTRALIA (BCA)

Reason: The following conditions are to ensure compliance with the approval and the BCA.

19. All building work must be carried out in accordance with the provisions of the Building Code of Australia.

20. Inspections

Gloucester Shire Council as the Principal Certifying Authority requires the following inspections and fees in respect to this approval:

i. **Commencement of building works;
ii. Erosion/Siltation control measures.
iii. Termite protection
iv. **The pier holes have been excavated and before pouring concrete or the positioning of timber or steel poles/piles;
v. Internal drainage lines before the floor is laid, or poured.
vi. External sewer drainage lines before backfilling of the trenches.
vii. **The placement of any footings and steelwork when in position and before concrete is poured (footings, lintels, beams, columns, floors, walls, or the like);
viii. Sub-floor construction, bearers and joists prior to laying of any flooring;
ix. **The framework of walls including roof members, installation of electrical wiring and plumbing when completed and prior to the fixing of any internal sheets;
NB: This not only includes structural components, but also refers to a schedule of works to be assessed prior to further construction proceedings.
Any certification for concrete construction or termite controls must be submitted to Council prior to this inspection. The inspection of waterproofing of wet areas can be incorporated within the frame inspection.
x. **Waterproofing in wet areas prior to covering,
xi. Upper floor beams and joists before the fixing of any flooring material;
xii. **Stormwater drainage connection points prior to covering,
xiii. When the building has been completed and before occupation.
xiv. The swimming pool safety fence prior to filling the pool with water.
xv. **Final.
xvi. **Occupation certificate

** These inspections are **MANDATORY**. Where Council has determined that these inspections are required for the proposed building works an Occupation Certificate will not be issued unless these have been undertaken.

NB A minimum of 48 hours notice is required to be given for all inspections.

21. The premises not being occupied until an **Occupation Certificate** has been determined by approval in accordance with the procedure specified within Part 8 Division 3 of the Environmental Planning and Assessment Regulations 2000.

22. Detail plans and specifications showing full compliance with the Building Code of Australia shall accompany the Construction Certificate Application. A Construction Certificate shall be issued by Council prior to the commencement of construction.

SAFETY & AMENITY – CONDITION IN RESPECT TO THE PROTECTION OF ADJOINING PROPERTIES, PREVENTION OF ACCIDENTS TO THOSE ON THE SITE OR MEMBERS OF THE PUBLIC OFF THE SITE, AND THE CONTROL OF ENVIRONMENTAL IMPACTS (NOISE, DUST, WASTE AND VIBRATION).

Reason: **Protection of health, safety and amenity during construction of the building.**

23. **Signs to be erected on building and demolition sites**

(1) A sign must be erected in a prominent position on any work site on which work involved in the erection or demolition of a building is being carried out:
(a) stating that unauthorised entry to the work site is prohibited, and
(b) showing the name of the person in charge of the work site and a telephone number at which that person may be contacted outside working hours.

(2) Any such sign is to be removed when the work has been completed.

(3) This clause does not apply to:
(a) building work carried out inside an existing building, or
(b) building work carried out on premises that are to be occupied continuously (both during and outside working hours) while the work is being carried out.

24. **Toilet facilities**

(1) Toilet facilities are to be provided, at or in the vicinity of the work site on which work involved in the erection or demolition of a building is being carried out, at the rate of one toilet for every 20 persons or part of 20 persons employed at the site.

(2) Each toilet provided:
(a) must be a standard flushing toilet, and
(b) must be connected:
(i) to a public sewer, or
(ii) if connection to a public sewer is not practicable, to an accredited sewerage management facility approved by the council, or
(iii) if connection to a public sewer or an accredited sewage management facility is not practicable, to some other sewage management facility approved by the council.

(3) The provision of toilet facilities in accordance with this clause must be completed before any other work is commenced.

STRUCTURE

Reason: **To safeguard people from injury and loss of amenity and to protect other property from damage caused by structural failure.**

25. Where the site is subject to filling all footings shall be taken, or piered, through the filling to natural even bearings.

26. Buildings being demolished in a safe and systematic manner in accordance with the requirements of Australian Standard AS 2601-1991 "The Demolition of Structures", with all waste being removed from the site. Hazardous waste such as asbestos cement sheeting etc., being handled, conveyed and disposed of in accordance with guidelines and requirements of the NSW Workcover Authority. Disposal of asbestos material at Council's Waste Depot requires prior arrangement for immediate landfilling.

TERMITE RISK MANGEMENT

Reason: **To protect the "primary building element" from possible attack by subterranean termites.**

Note: 1. "Primary building element" means a member of a building designed specially to take part of the building load and includes roof, ceiling, floor and wall framing members including any bracing members designed for the specific purpose of acting as a brace to those member.

2. This condition does not apply to buildings that have their primary building elements constructed of one, or a combination of, the following materials:

* **steel**
* **concrete**
* **masonry**
* **fabric reinforced cement**
* **naturally termite resistant timber in accordance with Appendix A of AS 37660.1**
* **preservative treated timber in accordance with Appendix B of AS 3660.1.**

27. Except where Note 2 above applies, a termite barrier shall be installed in the building to protect the primary building elements in accordance with AS3660.1 - Protection of Buildings from Subterranean Termites.

28. Where a termite barrier is installed a durable notice must be permanently be fixed to the building in a prominent location (such as the metre box or the like) indicating the method of protection, the date of the installation of the system, the installer's recommendations for the scope and frequency of future inspections and, where a chemical barrier is used, its like expectancy as listed on the National Registration Authority label.

DAMP & WEATHERPROOFING

Reason: **To safeguard occupants from illness and injury and protect the building from damage caused by surface water, external moisture and the accumulation of internal moisture; and to protect other property from damage caused by redirected surface water.**

29. A dish drain shall be provided at the base of the battered excavations and connected to a roof water drainage system.

FIRE SAFETY

Reason: **To safeguard the occupants by alerting them of a fire in the building, to prevent a fire being caused from a heating appliance from within the building and to avoid the spread of fire.**

30. Smoke alarms must be installed on or near a ceiling in every bedroom, corridor or hallway associated with a bedroom, and on each other storey in a guest house.

A system of lighting must be installed to assist evacuation of occupants in the event of fire and must be activated by the smoke alarm.

The light can be incorporated within the smoke alarm or located in the corridor, hallway or area served by the smoke alarm.

The smoke alarm must comply with AS3786 and the Building Code of Australia (Volume 2)

31. **Discharge from exits** complying with provisions of Clause D1.10 of the Building Code of Australia (Volume 1).

32. **Swinging doors** in required exits or forming part of required exists shall comply with Clause D2.20 of the Building Code of Australia (Volume 1).

33. All exit doors and doors in a **path of travel to an exit** shall have latching complying with Clause D2.21 of the Building Code of Australia (Volume 1) including a door handle having a single hand downward action or pushing action.

34. The attached **Fire Safety Schedule** forms part of this consent/certificate and each essential fire safety measure identified therein shall be specified in the Final Fire Safety Certificate (Form 15).

35. Portable Fire Extinguishers shall be installed in accordance with AS2444 and E1.6 Building Code of Australia. N.B. Water type extinguishers are not required where a fire hose reel is required to be installed.
(Reason: To comply with BCA requirements).

36. In accordance with Clause 175, 176 and 177 EP&A Act 2000 on the completion of the building, the owner shall furnish Council with a completed Final Fire Safety Certificate, with respect to each essential service installed in the building (refer schedule enclosed). A copy of the certificate is enclosed. At least once in each period of 12 months, after the certificate referred to above has been furnished to Council, the owner of the building shall furnish Council with a further certificate with
respect to each essential service installed in the building. (Reason: To comply with EP&A Act)

HEALTH AND AMENITY

Reason: **The following condition(s) have been applied to ensure that the proposed development is designed, constructed and managed in a manner to minimize its impact on the amenity of the area. To safeguard**

the occupants of a building from illness or injury due to unhealthy conditions arising from internal moisture, inadequate room space, lack of hygiene facilities, lighting, air freshness and the means of removing an unconscious occupant from a fully enclosed sanitary compartment.

37. Floors of bathrooms, laundry and WC compartments to be impervious, properly graded and drained to suitable floor wastes.

38. All 'wet area' floors shall be flashed to walls with approved material so as to effectively prevent moisture reaching any wall contained in the structure. Particular attention as to be paid to the flashing of the shower recess.

39. Where mechanical ventilation is provided in a sanitary compartment or bathroom, the contaminated air must exhaust directly to the outside of the building by way of a duct.

40. Windows to comply with AS 2047 and other glazing to comply with AS 1288.

41. The door to a fully enclosed sanitary compartment must:
a. open outwards; OR
b. slide; OR
c. be readily removable from the outside of the compartment, unless there is a clear space of at least 1.2m between the closet pan within the sanitary compartment and the nearest part of the doorway.

42. **Adequate sanitary and other facilities** shall be provided in accordance with the requirements of Part F2 of the Building Code of Australia (Volume 1).

43. The development shall be constructed in accordance with the Work Cover authority requirements including Occupational Health and Safety Dangerous Goods Act.

44. The applicant is advised that the proposed building area is subject to flooding. Council advises that you should seek your own independent advice as to the effects of flooding taking into account the depth and velocity at your site.

SAFE MOVEMENT AND ACCESS

Reason: **To provide people with safe access to and within a building.**

45. The construction of exits including the stairways, balustrades, landing and handrails shall comply with Part D2 of the Building Code of Australia (Volume 1).

Reason: **To provide safe access and facilities for the disabled.**

46. **Facilities for access to and within the building** for people with disabilities shall be provided in accordance with Clause D3.2 of the Building Code of Australia (Volume 1).

47. Access for people with disabilities shall be provided through the **principal public entrance**.

48. **Identification of access facility** for people with disabilities shall be provided in accordance with Clause D3.6 of the Building Code of Australia (Volume 1)

49. The building must comply with the requirements of the **Disability Discrimination Act (DDA)**. It should be noted that this approval does not guarantee compliance with the DDA and the applicant/owner should investigate their liability under this Act.

50. **Sanitary facilities** for people with disabilities shall be constructed in accordance with the provisions of the Building of Australia and AS1428.1.

51. **Door to disabled toilet** shall be fitted with a retractable stop or similar device in accordance with Clause 10.2.10 of the relevant edition of AS1428.1.

PLUMBING AND DRAINAGE

Reason: **To ensure that all plumbing connections to Council's Water Supply and all drainage connections to Council's Sewerage System comply with accepted trade practices; and to ensure that these practices are also carried out in non-reticulated water supply and unsewered areas.**

52. All plumbing and drainage shall be carried out by an appropriately licensed tradesperson in accordance with AS3500 - National Plumbing and Drainage Code and the NSW Code of Practice Plumbing and Drainage.

ON SITE SEWERAGE MANGEMENT

Reason: **To ensure that an on-site sewage management system is installed and operated to ensure that environmental and health performance objections will be met - these objectives being the prevention of public health risk, protection of lands, protection of surface and ground waters and protection of community amenity.**

On-site sewage management systems include the following:

* **septic tank system;**
* **aerated water treatment systems;**
* **composting toilets;**
* **chemical toilets;**
* **pit toilets;**
* **sanitary pans; and**
* **any other system which is not directly connected to a Council reticulated sewage system.**

53. An application for the installation of an On-Site Waste Management System shall be submitted and approved by Council prior to the installation of the system. Such application must include two (2) copies of the Manufacturer's specifications of the system and two (2) copies of a site plan showing the position of the system and associated waste disposal area in relation to the building and boundaries of the allotment.

54. An Approval to Operate the system must be issued by Council prior to the system being used.

DRAINAGE & EROSION CONTROL

Reason: **The following condition(s) have been applied to ensure that:**

(i) Adequate sediment/erosion control structures are provided to prevent siltation of existing drainage systems and waterways;

(ii) Stormwater internal and external to the proposed development site is controlled to minimise the risk of flooding to upstream and downstream properties; and

(iii) due regard is given to the development of flood liable land or land in the vicinity of flood liable land.

55. The submission and approval, prior to commencement of works, of an Erosion and Sediment Control Plan for construction works relating to the development, in accordance with Councils "Standard Conditions for Engineering Works" and any requirements of the Department of Land and Water Conservation. The plan should address, but not be limited to, the following matters:

- control and management of extraneous runoff to the development area;
- the stripping of topsoil and respreading on batters and site drains;
- minimum batter grades for site batters;
- the seeding and fertilising of batters and site drains with a suitable pasture / fertiliser mixture when construction is completed;
- temporary sediment control measures until revegetation is established.

COUNCIL CONDITIONS

Reason: **To facilitate the approval of the application submitted, to preserve the amenity of the neighbourhood and to protect Council's property and services.**

56. No portion of the building shall encroach upon any drainage, road, electricity or other easement.

57. This approval is for a maximum occupancy rate at any period of 120 persons only. The applicant shall maintain a record of occupancy available to Council upon request to establish the occupancy rate at any given period.

Appendix A Draft conditions of consent issued for a primitive camping ground under S68 Local Government Act 1993 (AS ATTACHED)

Appendix B Rural Fire Service Requirements

Appendix C Draft onsite sewerage management system approval (AS ATTACHED)

All communications to be addressed to:

Headquarters
15 Carter Street
Lidcombe NSW 2141

Headquarters
Locked Bag 17
Granville NSW 2142

Telephone: 8741 5175
Facsimile: 8741 5433
e-mail: development.assessment@rfs.nsw.gov.au

The General Manager
Gloucester Shire Council
PO Box 11
Gloucester NSW 2422

GLOUCESTER SHIRE COUNCIL
RECORDS RECEIVED
30 JUN 2010
FILE..... FOLIO.....
ACTION..... DAYS.....

Your Ref: 2010.1934
Our Ref: D10/0895
DA10053169719 JH

ATTENTION: Glenn Wilcox

30 June 2010

Dear Mr Wilcox

Integrated Development for 681//786066 535 Manchester Road Bindera NSW 2422

I refer to your letter dated 24 May 2010 seeking general terms of approval for the above Integrated Development in accordance with Section 91 of the 'Environmental Planning and Assessment Act 1979'.

This response is to be deemed a bush fire safety authority as required under section 100B of the 'Rural Fires Act 1997' and is issued subject to the following numbered conditions:

Asset Protection Zones

The intent of measures is to provide sufficient space and maintain reduced fuel loads so as to ensure radiant heat levels of buildings are below critical limits and to prevent direct flame contact with a building.

1. At the commencement of building works and in perpetuity the property around the proposed and existing structures to a distance of 20 metres, shall be maintained as an inner protection area (IPA) as outlined within section 4.1.3 and Appendix 5 of 'Planning for Bush Fire Protection 2006' and the NSW Rural Fire Service's document 'Standards for asset protection zones'.

   This asset protection zone does not include the asset that was captured under our previous bush fire safety authority dated 9 January 2007.

Water and Utilities

The intent of measures is to provide adequate services of water for the protection of buildings during and after the passage of a bush fire, and to locate gas and electricity so as not to contribute to the risk of fire to a building.

2. Water, electricity and gas are to comply with the following requirements of section 4.1.3 of 'Planning for Bush Fire Protection 2006'.

SECTION 96

- In recognition that no reticulated water supply exists, a 5000 litre water supply shall be provided for fire fighting purposes to each camping area.
- A 65mm metal Storz outlet with a gate or ball valve shall be provided
- An 'SWS' marker shall be obtained from the local NSW Rural Fire Service and positioned for ease of identification by brigade personnel and other users of the SWS. In this regard:

  a) Markers must be fixed in a suitable location so as to be highly visible; and

  b) Markers should be positioned adjacent to the most appropriate access for the static water supply.

Access

The intent of measures for property access is to provide safe access to/from the public road system for fire fighters providing property protection during a bush fire and for occupants faced with evacuation.

3. Property access roads shall comply with the following requirements of section 4.1.3 (2) of "Planning for Bush Fire Protection 2006".

- A minimum carriageway width of 4 metres.
- In forest, woodland and heath situations, rural property access roads have passing bays every 200 metres that are 20 metres long by 2 metres wide, making a minimum trafficable width of 6 metres at the passing bay.
- A minimum vertical clearance of 4 metres to any overhanging obstruction, including tree branches.

Evacuation and Emergency Management

The intent of measures is to provide suitable emergency and evacuation (and relocation) arrangements for occupants of special fire protection purpose developments.

4. Arrangements for emergency and evacuation are to comply with section 4.2.7 of 'Planning for Bush Fire Protection 2006'.

Design and Construction

The intent of measures is that buildings are designed and constructed to withstand the potential impacts of bush fire attack.

5. New construction shall comply with Australian Standard AS3959-2009 "Construction of buildings in bush fire-prone areas" BAL-12.5 and Section A3.7 of "Planning for Bush Fire Protection 2006 - Addendum Appendix 3".

For any queries regarding this correspondence please contact Jason Hulston on 8741 5175.

Yours sincerely

Corey Shackleton
A/Team Leader, Development Assessment & Planning

The RFS has made getting information easier. For general information on 'Planning for Bush Fire Protection, 2006' , visit the RFS web page at www.rfs.nsw.gov.au and search under 'Planning for Bush Fire Protection, 2006'.

APPENDIX VI – Bushfire Assessment Report of Riverview Cottage

Building in Bush Fire Prone Areas: Single Dwellings

Bushfire Assessment Report

Part A: Property Details

Applicant's Name	Barrington Outdoor Adventure Centre
Contact Phone no.	02 6558 2093
Council	MidCoast
Development Application No.	2016/2478
Lot	681
DP	786066
Address	535 Manchester Rd, Bindera
My property is on Bush Fire Prone Land	Yes

Part B: Type of Proposal

Addition of roof to deck on existing building

Part C: Bush Fire Attack and Level of Construction

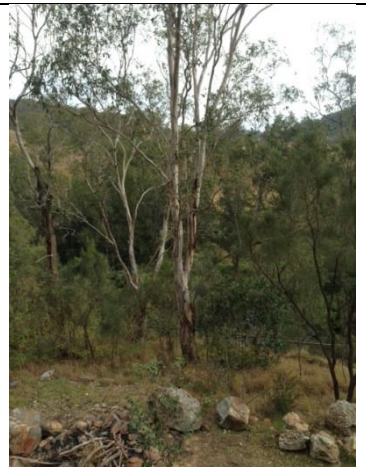
See next page

Bush fire attack level: BAL-19

Attack by burning debris is significant with radiant heat levels threatening some building elements (screened glass). Specific construction requirements for embers and radiant heat are warranted.

Building requirements: see Appendix A

Part C: Bush Fire Attack and Level of Construction

Category	North	East	South	West
Vegetation Type	Woodlands	Grasslands	Shrubland	Shrubland
Photo				
Distance from asset to boundary line	140 m	340 m	200 m	36 m
Distance from building to vegetation	20 m	30 m	20 m	20 m
Effective slope	Upslope/flat	Upslope/flat	>10 to 15	>10 to 15
Comments	A 20 m perimeter of managed land has been established in this direction.	Managed land extends for approx. 30 m in this direction, before joining grasslands.	A 20 m perimeter of managed land has been established in this direction.	The terrain in this direction follows the effective slop of >10 to 15 degrees for 20 m as managed land and then falls away to a rocky cliff to meet the river. The riparian zone (including cliff face) supports a sparse vegetation of lantana, lamandra, river gums and some small rainforest trees.
Fire danger index	80	80	80	80
Bushfire attack level	BAL-19	BAL-12.5	BAL-19	BAL-19

Part E: Water Supplies

Reticulated (piped) water supply	No
Dedicated water supply	5000L dedicated water supply, approx. 100 m from the house

Part F: Gas Supplies

Reticulated gas	No
Bottled gas	Yes, for hot water boost

Appendix A: Building requirements (extract from AS3959 as relevant to a BAL-19veranda roof)

6.6 ROOFS (INCLUDING VERANDA AND ATTACHED CARPORT ROOFS, PENETRATIONS, EAVES, FASCIAS, GABLES, GUTTERS AND DOWNPIPES)

6.6.1 General

The following apply to all types of roofs and roofing systems:

a. Roof tiles, roof sheets and roof-covering accessories shall be non-combustible.

b. The roof/wall junction shall be sealed, to prevent openings greater than 3 mm, either by the use of fascia and eaves linings or by sealing between the top of the wall and the underside of the roof and between the rafters at the line of the wall.

c. Roof ventilation openings, such as gable and roof vents, shall be fitted with ember guards made of non-combustible material or a mesh or perforated sheet with a maximum aperture of 2 mm, made of corrosion-resistant steel, bronze or aluminium.

6.6.3 Sheet roofs

Sheet roofs shall—

a. be fully sarked in accordance with Clause 6.6.2, except that foil-backed insulation blankets may be installed over the battens;

or

b. have any gaps greater than 3 mm under corrugations or ribs of sheet roofing and between roof components sealed at the fascia or wall line and at valleys, hips and ridges by—

i. a mesh or perforated sheet with a maximum aperture of 2 mm, made of corrosion-resistant steel, bronze or aluminium; *or*

ii. mineral wool; *or*

iii. other non-combustible material; *or*

iv. a combination of any of Items (i), (ii), or (iii) above.

6.6.4 Veranda, carport and awning roofs

The following apply to veranda, carport and awning roofs:

a. A veranda, carport or awning roof forming part of the main roof space [see Figure D1(a), Appendix D] shall meet all the requirements for the main roof, as specified in Clauses 6.6.1, 6.6.2, 6.6.3, 6.6.5 and 6.6.6.

b. A veranda, carport or awning roof separated from the main roof space by an external wall [see Figures Dl(b) and Dl(c), Appendix D] complying with Clause 6.4 shall have a non-combustible roof covering.

NOTE: There is no requirement to line the underside of a veranda, carport or awning roof that is separate from the main roof space.

6.6.5 Roof penetrations

The following apply to roof penetrations:

a. Roof penetrations, including roof lights, roof ventilators, roof-mounted evaporative cooling units, aerials, vent pipes and supports for solar collectors shall be adequately sealed at the roof to prevent gaps greater than 3 mm. The material used to seal the penetration shall be non-combustible.

b. Openings in vented roof lights, roof ventilators or vent pipes shall be fitted with ember guards made from a mesh or perforated sheet with a maximum aperture of 2 mm, made of corrosion-resistant steel, bronze or aluminium.

c. All overhead glazing shall be Grade A laminated safety glass complying with AS 1288.

d. Glazed elements in roof lights and skylights may be of polymer provided a Grade A safety glass diffuser, complying with AS 1288, is installed under the glazing. Where glazing is an insulating glazing unit (IGU), Grade A toughened safety glass of minimum 4 mm shall be used in the outer pane of the IGU.

e. Flashing elements of tubular skylights may be of a fire-retardant material, provided the roof integrity is maintained by an under-flashing of a material having a flammability index no greater than 5.

f. Evaporative cooling units shall be fitted with butterfly closers at or near the ceiling level, or the unit shall be fitted with non-combustible covers with a mesh or perforated sheet with a maximum aperture of 2 mm, made of corrosion-resistant steel, bronze or aluminium.

6.6.6 Eaves linings, fascias and gables

The following apply to eaves linings, fascias and gables:

a. Gables shall comply with Clause 6.4.

b. Eaves penetrations shall be protected the same as for roof penetrations, as specified in Clause 6.6.5.

c. Eaves ventilation openings greater than 3 mm shall be fitted with ember guards made of non-combustible material or a mesh or perforated sheet with a maximum aperture of 2 mm, made of corrosion-resistant steel, bronze or aluminium.

Joints in eaves linings, fascias and gables may be sealed with plastic joining strips or timber storm moulds.

This Standard does not provide construction requirements for fascias, bargeboards and eaves linings.