

BUSHFIRE HAZARD ASSESSMENT REPORT



Department of Planning
and Environment

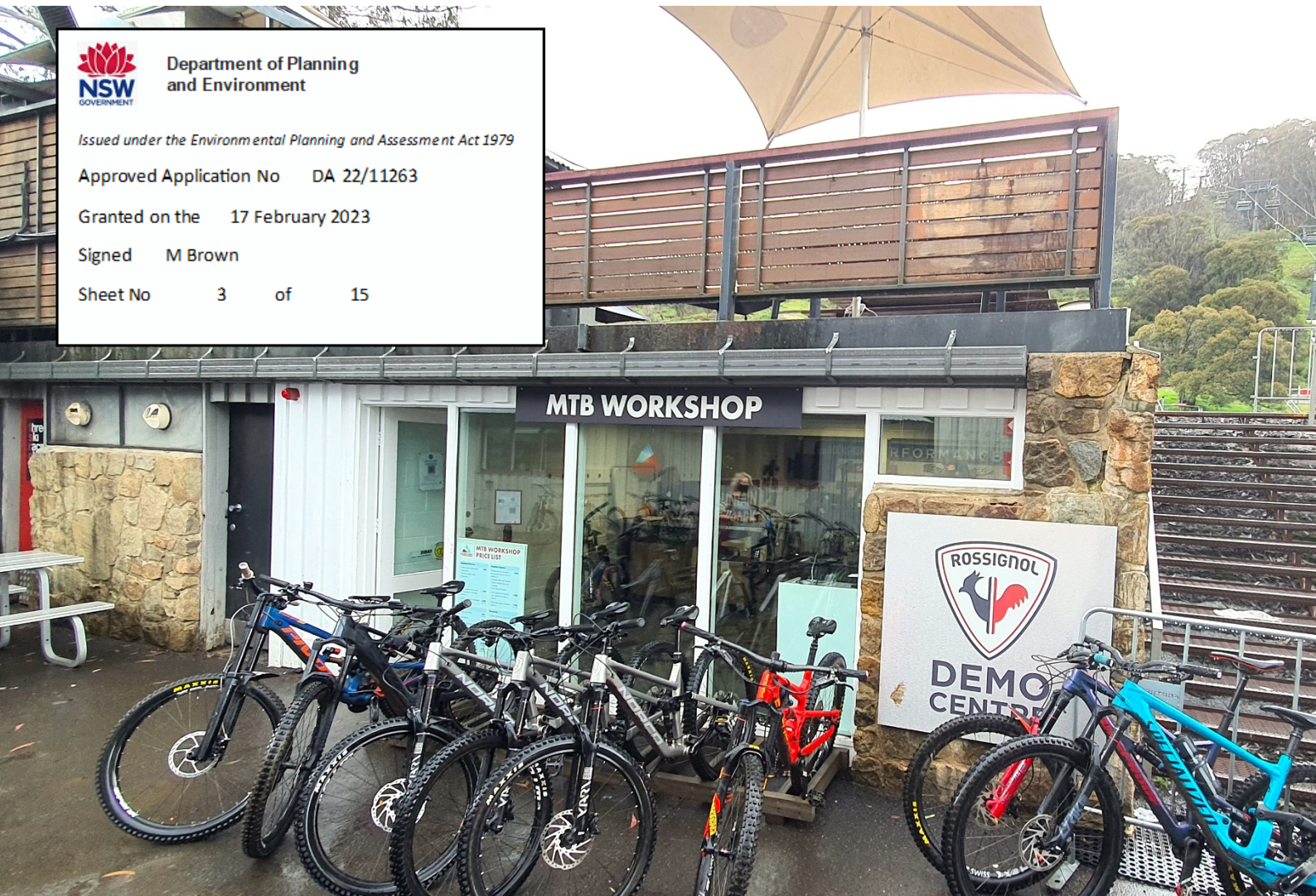
Issued under the Environmental Planning and Assessment Act 1979

Approved Application No DA 22/11263

Granted on the 17 February 2023

Signed M Brown

Sheet No 3 of 15



PROJECT: INSTALLATION OF SLIDING DOORS TO ROSSIGNOL DEMO STORE/MOUNTAIN BIKE WORKSHOP, THE CONSTRUCTION OF A NEW MOUNTAIN BIKE STORAGE FACILITY AND ASSOCIATED WORKS

FRIDAY DRIVE, THREDBO VILLAGE
KOSCIUSZKO NATIONAL PARK NSW 2625
LOT 862 DP1128686 & LOT 876 DP1243112

DATE: AUGUST 2022

REPORT NO: 22128

REVISION: 04

PREPARED FOR: KOSCIUSZKO THREDBO C/- ANDREW HARRIGAN

PREPARED BY: ACCENT TOWN PLANNING

BUSHFIRE HAZARD ASSESSMENT

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WRITTEN BY:

Katy Murphy
Town Planner



DISCLAIMER

The recommendations provided in the summary of this report are a result of the analysis of the proposal in relation to the requirements of Planning for Bushfire Protection 2019. Utmost care has been taken in the preparation of this report however there is no guarantee of human error. The intention of this report is to address the submission requirements for Development Applications on bushfire prone land. There is no implied assurance or guarantee the summary conditions will be accepted in the final consent and there is no way Accent Town Planning Pty Ltd is liable for any financial losses incurred should the recommendations in this report not be accepted in the final conditions of consent.

This bushfire assessment provides a risk assessment of the bushfire hazard as outlined in the PBP 2019 and AS3959 2018. It does not provide protection against any damages or losses resulting from a bushfire event.

EXECUTIVE SUMMARY

Accent Town Planning has been engaged by Kosciuszko Thredbo c/- Andrew Harrigan to prepare a Bushfire Hazard Assessment Report (BHAR) in accordance with the *Planning for Bushfire Protection 2019* (PBP 2019) for the installation of new glass sliding entry doors for the Rossignol Demo Store/Mountain Bike Workshop, the construction of a new Mountain Bike Storage Facility and associated works within the Valley Terminal area of Thredbo Resort.

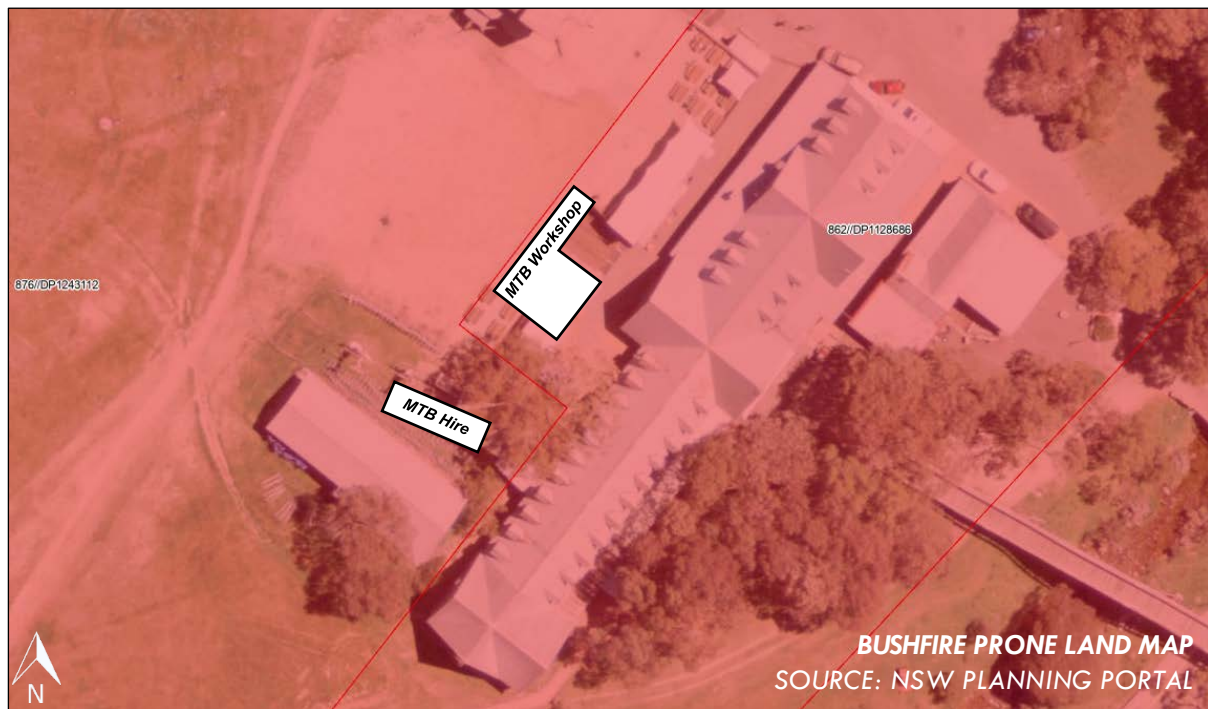
The existing Rossignol Demo Store/Mountain Bike Workshop is located at Lot 862 DP1128686, and the proposed new Bike Hire/Storage shop and associated works are located at Lot 876 DP1243112 Thredbo Village, NSW 2625.

The land is zoned tourist accommodation and has been identified as being in bushfire prone land, and hence as outlined in *Planning for Bushfire Protection – PBP 2019* (NSW RFS 2019) is considered Special Fire Protection Purpose (SFPP) and is required to obtain a BFSa from the RFS under section 100B of the RF Act.

It is recommended that:

- ***The works to Rossignol Demo Store/Mountain Bike Workshop and the proposed new Mountain Bike Storage Facility + associated works are surrounded by Managed Land and therefore do not require an APZ. The proposed works should meet the requirements of BAL Low.***

Pending compliance with the recommendations outlined in this report. The performance criteria and deemed to satisfy provisions of infill development within the Alpine Resorts outlined in Section 6.4 and 6.6 of PBP 2019 are found to be satisfied.



The assessment confirms the lot is located on Bushfire Prone Land and identifies the following:

- The subject site is surrounded by *Managed Land*.
- Clearing will not exceed the clearing threshold permissible above which the Biodiversity Assessment Method (BAM) and offsets scheme to apply.
- The areas where development is proposed to occur do not contain areas High Biodiversity Value.
- No changes to existing road access are proposed as part of this application.
- Thredbo is serviced by reticulated water and hydrant system with nearest hydrant system located on the Southern elevation of the Valley Terminal Building.

ASSET PROTECTION ZONES



The subject land surrounding the proposed development consists of *Managed Land*. As defined within the *PBP 2019* Managed Land is “Land that has vegetation removed or maintained to a level that limits the spread and impact of bush fire. These areas are managed to meet the requirements of an APZ.”

There is an existing appropriate defensible space surrounding the proposed development. The Valley Terminal area in Thredbo has substantial separation from the nearest bushfire threat, this allows emergency service personnel and staff to undertake property protection activities in the area to limit the potential spread and impact of bushfire. For this reason, an APZ is not required for the proposed development, as *Managed Land* meets the requirements of an APZ.

CONSTRUCTION

The proposed works include:

- Renovation to Rossignol Demo Store/Mountain Bike Workshop for the installation of sliding glass doors.
- Construction of new 3 x 12m Mountain Bike Storage Facility.
- Proposed addition to concrete concourse – approximately 105 sqm.
- Proposed 23 sqm addition to bike wash area.
- Proposed new drainage line to connect to existing oil separator/sewer.

The proposed new Mountain Bike Storage Facility + associated works and, the proposed works to the Rossignol Demo Store/Mountain Bike Workshop will be required to meet the requirements of **BAL Low** as per AS3959-2018, with the exception that the construction requirements shall be varied to comply with the requirements of Section 7.5 of the NSW Rural Fire Service *Planning for Bushfire Protection 2019*.

UTILITIES

The intent of measures is to minimise the risk of bush fire attack and provide protection for emergency services personnel, residents and others assisting firefighting activities. To achieve this, the following conditions shall apply:

WATER

All above ground water pipes external to the building are to be metal.

GAS

If gas is connected to the building on the subject land, the following criteria must be met:

- Bottled gas is installed and maintained in accordance with AS 1596 and the requirements of relevant authorities. Metal piping is to be used.
- All fixed gas cylinders are kept clear of all flammable materials to a distance of 10 metres and shielded on the hazard side of the installation.
- If gas cylinders need to be kept close to the building, the release valves are directed away from the building and at least 2 metres away from any combustible material, so that they do not act as a catalyst to combustion. Connections to and from gas cylinders are metal.
- Polymer sheathed flexible gas supply lines to gas meters adjacent to buildings are not to be used.

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.

To achieve this, the following conditions shall apply:

A building evacuation diagram, site layout diagram and Statement of Action are to be provided in each building in accordance with the NSW Rural Fire Service Guidelines for the Preparation of Emergency/Evacuation Plan and with Australian Standard AS 3745 2010 'Planning for Emergencies in Facilities'.

1. PROPOSAL

This Bush Fire Assessment Report has been compiled for submission to the Department of Planning and Environment (DoPE) for the purpose of assessment under Section 100B of the RF Act and is also considered “integrated development” under Section 4.46 of *Environmental Planning and Assessment Act 1979* (EP&A Act).

The report has been prepared in accordance with the submission requirements of Appendix 4 of *Planning for Bush Fire Protection* (NSW RFS 2019) and identifies the proposal can meet the appropriate objectives and performance criteria of Section 6.4 and 6.6 *Planning for Bush Fire Protection* (NSW RFS 2019).

The proposed location of the new Mountain Bike Storage Facility adjoins managed land towards each elevation and is shielded from direct radiant heat arising from bushfire attack as outlined in A1.8 *Shielding* in the PBP 2019. Adjoining managed land and shielding allows for **BAL Low** on all elevations for the proposed new building.

The Rossignol Demo Store/Mountain Bike Workshop is primarily underground, other than the Southern elevation. The southern elevation is shielded from direct radiant heat by the Valley Terminal building, for this reason, the proposed works to the Rossignol Demo Store/Mountain Bike Workshop will be required to meet **BAL Low** on the southern elevation.

The works associated with the construction of the new Mountain Bike Storage Facility are also located within shielded areas and will be required to meet the requirements of **BAL Low**.

The assessment confirms the subject lot is mapped as bushfire prone.

Accent Town Planning was commissioned to provide this bushfire assessment. Accredited bushfire assessor, Matthew Stewart inspected the site on 07 June 2022.

- **FIGURE 1** – Shows the subject lot location.
- **FIGURE 2** – Provides a broad scale aerial view of the subject site.
- **FIGURE 3** – Shows the proposed plans.
- **FIGURE 4** – Shows the plans for the proposed changes to the Rossignol Demo Store/Mountain Bike Workshop.
- **FIGURE 5** – Shows the proposed plans for the New Hire/Storage building and associated works.

FIGURE 1 SITE LOCATION



FIGURE 2 BROAD SCALE AERIAL VIEW OF THE SUBJECT SITES



FIGURE 3 **CLOSE UP AERIAL VIEW OF SUBJECT LOTS**

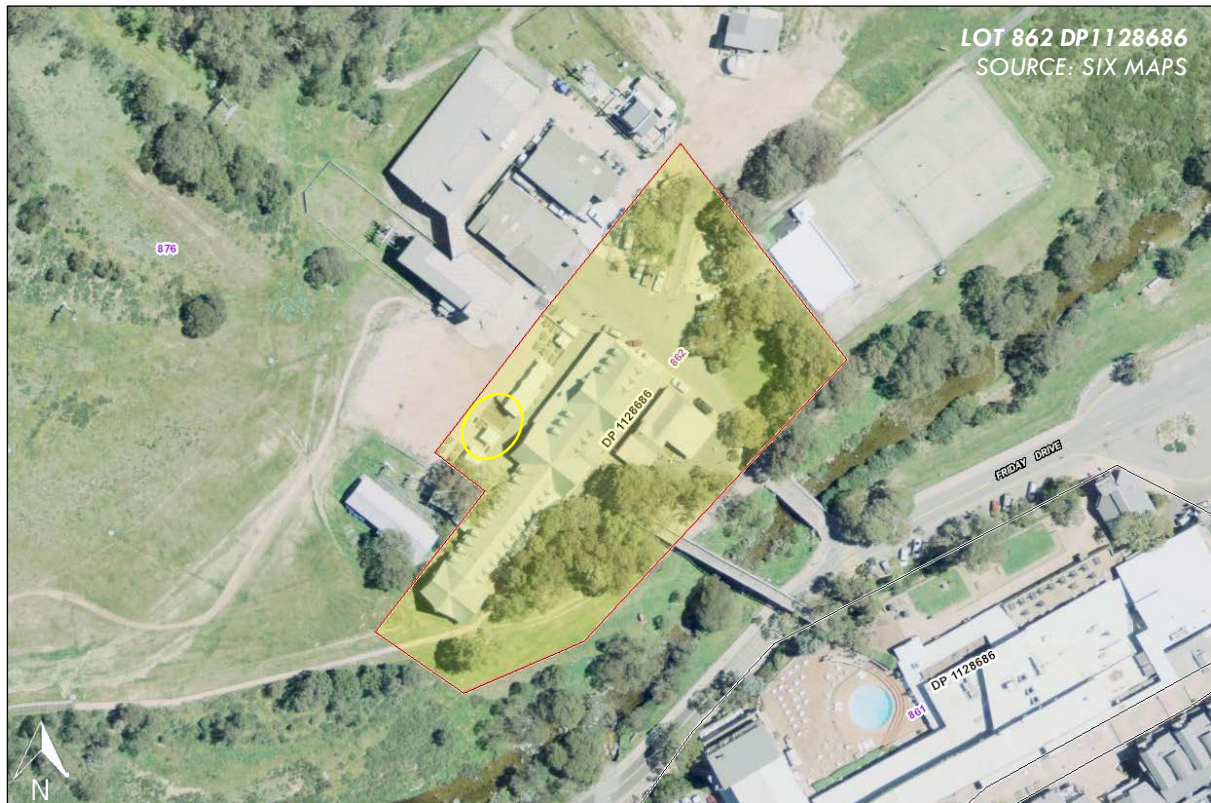
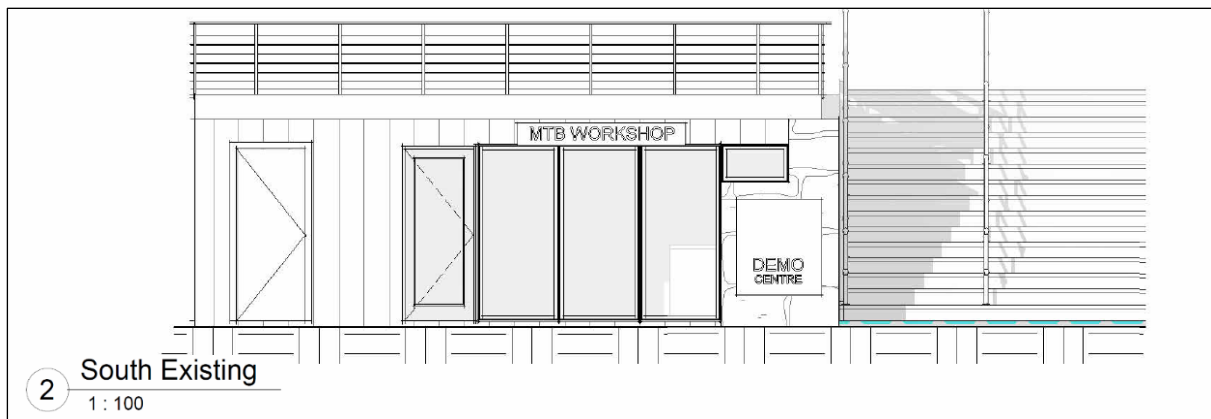
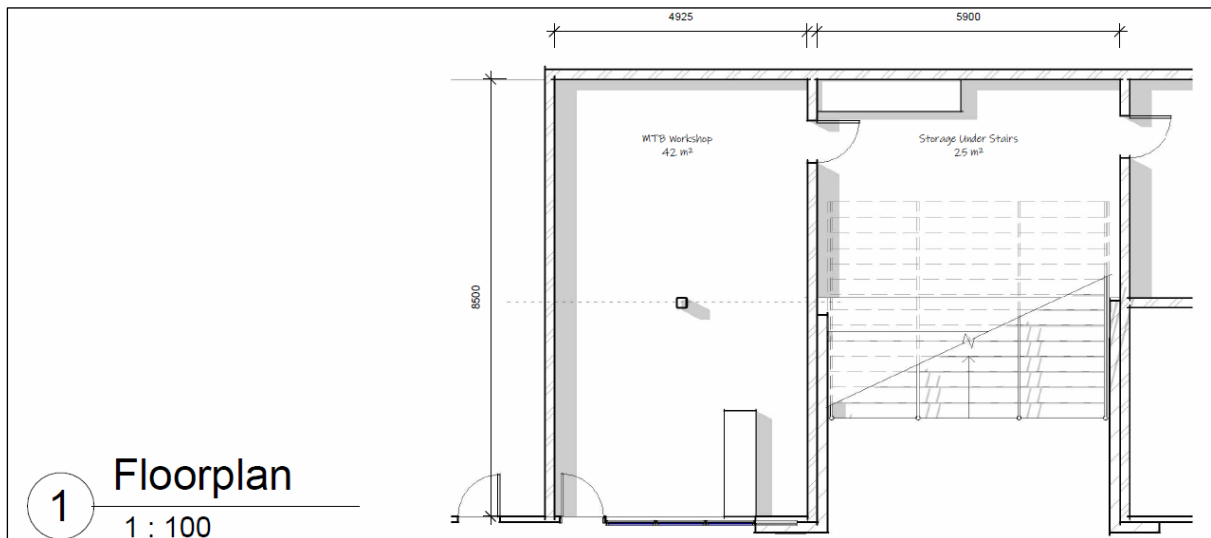
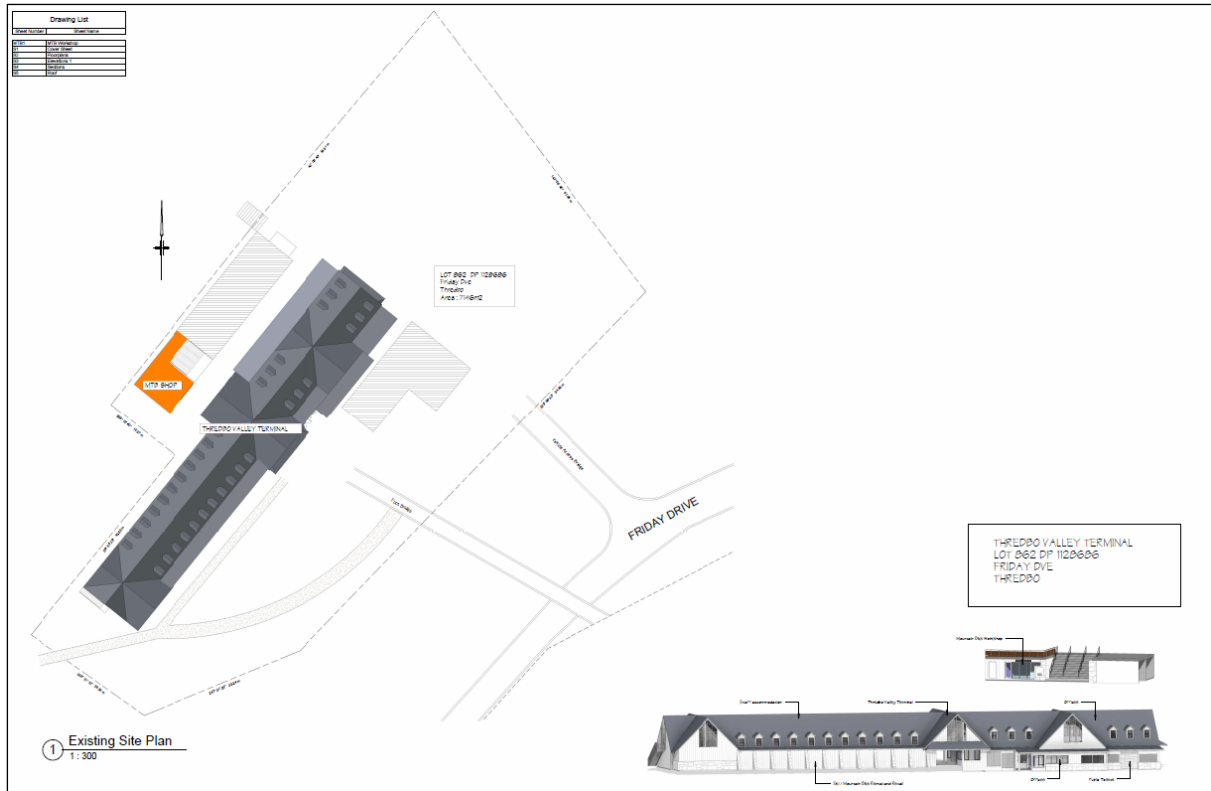
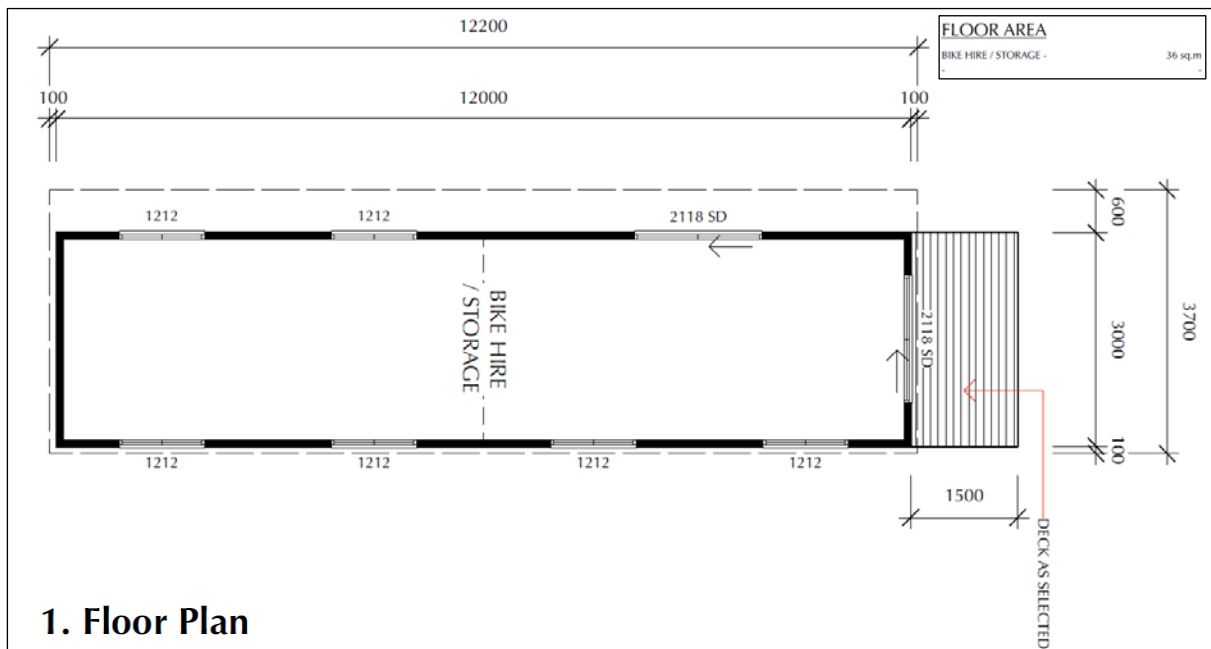
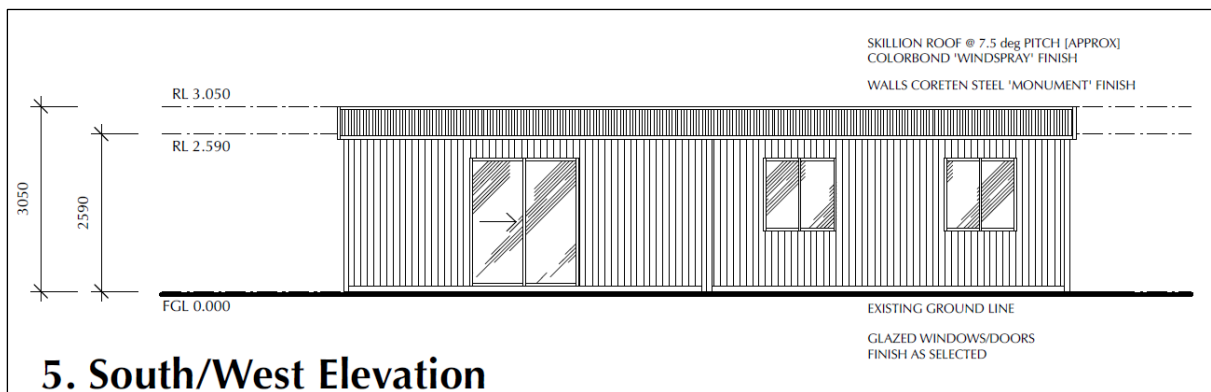
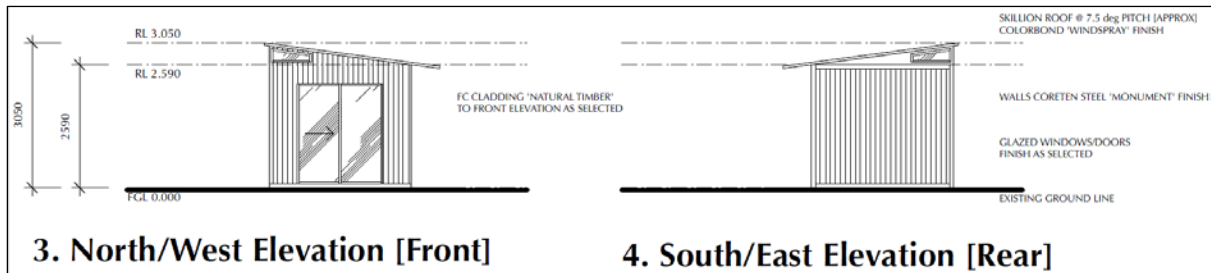
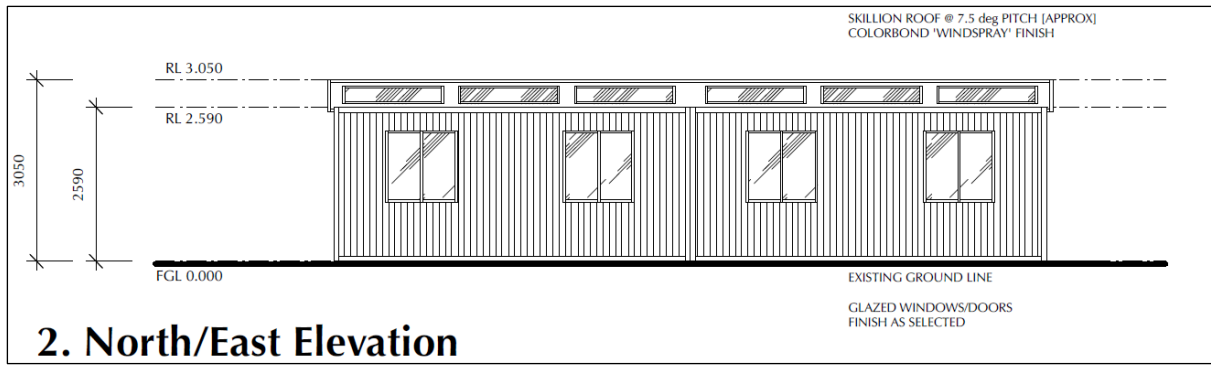


FIGURE 4 PLANS FOR ROSSIGNOL DEMO STORE/MOUNTAIN BIKE WORKSHOP







2. PLANNING LAYERS

The following planning layers are described in Table 1 and shown in the Figures below:

TABLE 1 PLANNING LAYERS

MAP	FIGURE	DESCRIPTION
BUSHFIRE PRONE LAND MAP	6	The subject lots are mapped as “Vegetation Category 1”.
LEP ZONE MAP	7	The subject lots are zoned as “C1 – National Parks and Nature Reserves”.
VEGETATION MAPPING	8	<p>The vegetation surrounding the proposed Bike Hire/Storage and the Rossignol Demo Store/Mountain Bike Workshop has been mapped as:</p> <ul style="list-style-type: none"> - SUB-ALPINE SHRUB-GRASS WOODLAND <p>According to Keith (2004) this formation is classified as both “Woodland” and “Forest” depending on the density of the vegetation. Thredbo Valley primarily consists of <i>Sub Alpine Woodland</i> vegetation formations. However, the area has developed quite significantly. The subject area is surrounded by <i>Managed Land</i>. For this reason, the main threat no longer applies, and the vegetation type can be classified as <i>Managed Land</i>.</p>

FIGURE 6 BUSHFIRE PRONE MAP

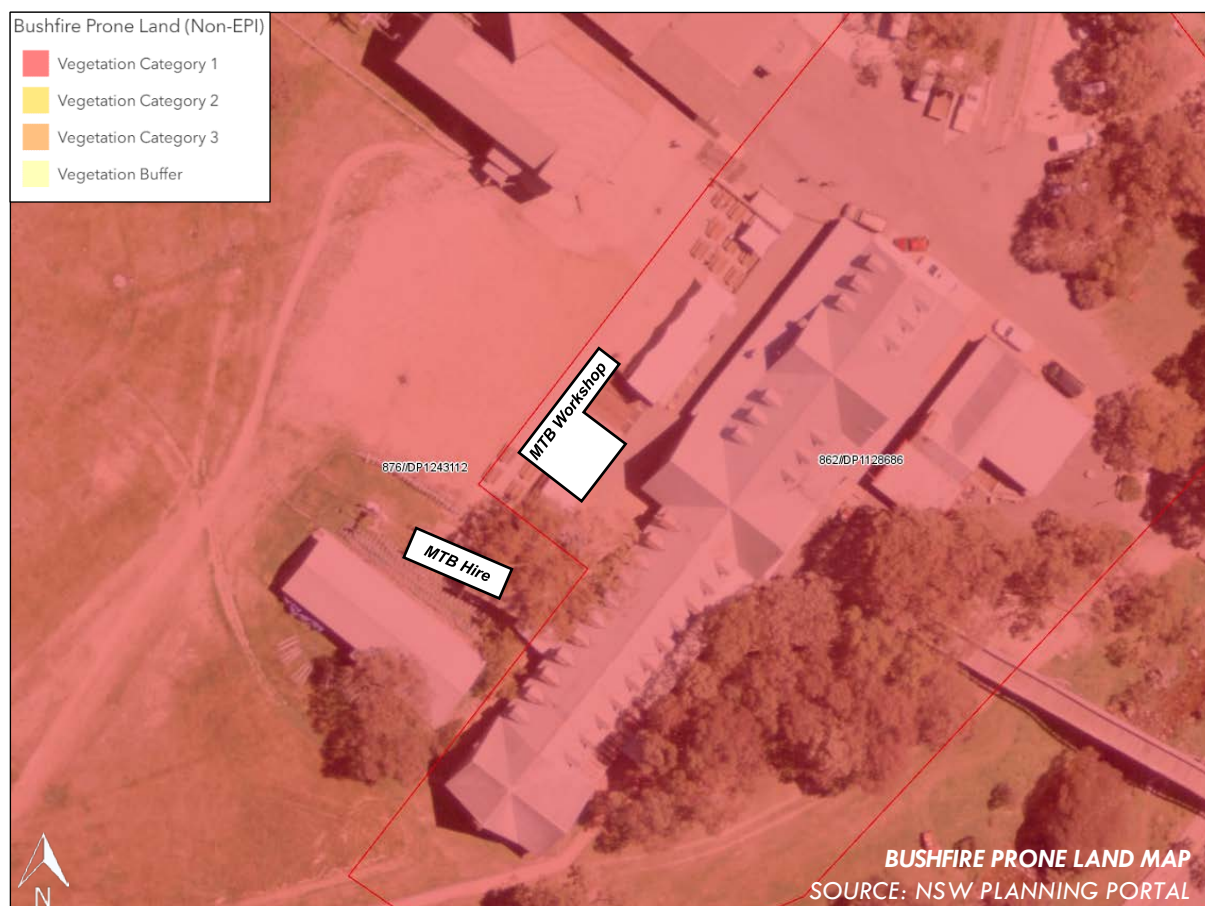


FIGURE 7 LEP MAP

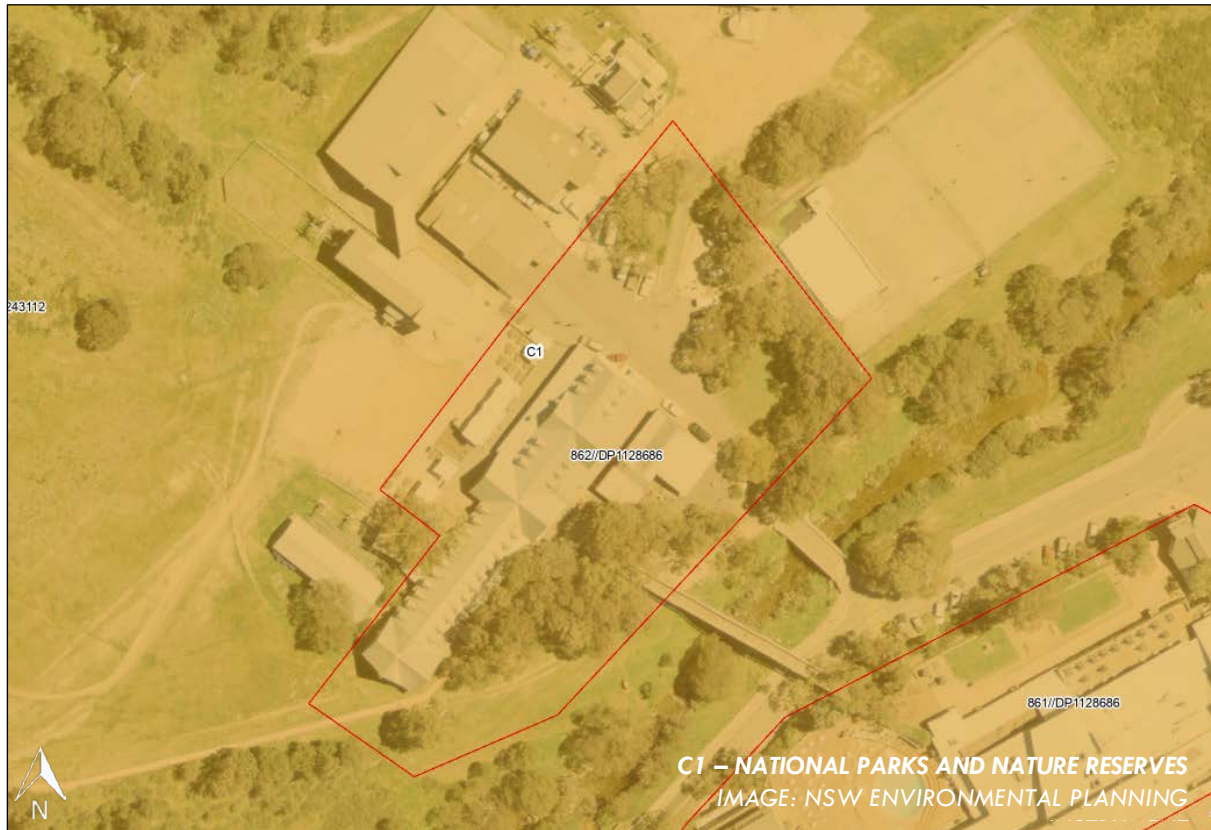
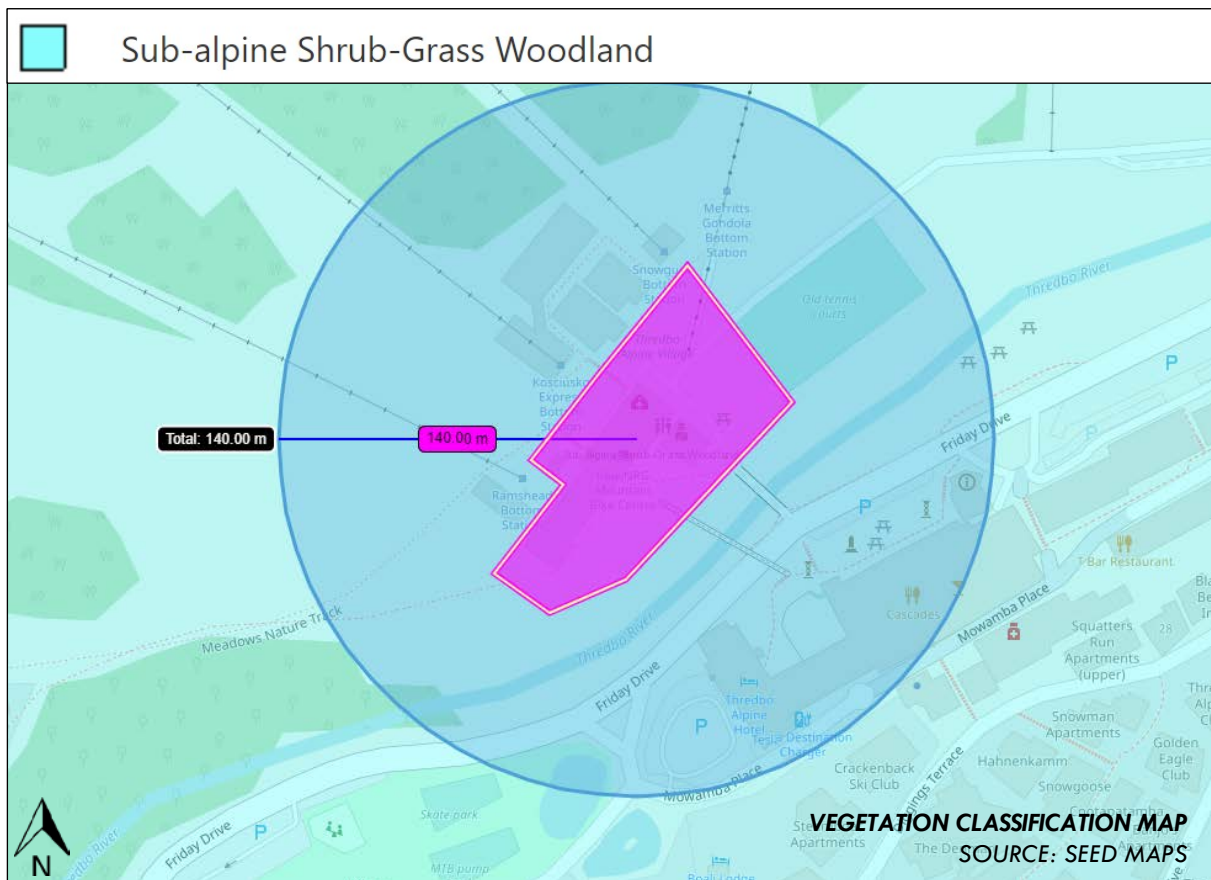


FIGURE 8 VEGETATION MAPPING



3. SITE DESCRIPTION

3.1. SLOPE AND ASPECT OF THE SITE WITHIN 100 M OF THE SITE

The Australian Standard AS3959-2018 identifies that the slope of the land under the classified vegetation is much more important than the slope between the site and the edge of the classified vegetation.

As can be seen in Figure 9 the land surrounding the proposed development exhibits an upslope to the North through *Grassland* vegetation, and a 0 – 5° downslope to the South and East through *Managed Land* and an upslope to the West through *Managed Land*.

FIGURE 9 SLOPE



3.2. VEGETATION FORMATION WITHIN 140 M OF PROPOSED DEVELOPMENT

Thredbo Village is primarily comprised of *Sub Alpine Woodland* and *Managed Land* at the base of the valley. Within 140m of the site, the area is a combination of *Sub Alpine Woodland*, *Open to Sparse Grassland* and *Managed Land* vegetation.

As seen in Figure 8, within 140m of the proposed development there is one vegetation type:

- **SUB-ALPINE SHRUB-GRASS WOODLAND**

Areas of Sub-alpine Shrub-Grass Woodland to the North and West are dominated by *Managed Land* that primarily consists of Grassland at the base of the ski slope nearest to Kosciuszko Express chairlift. The land located within 140m to the South, East and West of the lodge is dominated almost entirely by *Managed Land*.

Managed land does not require an APZ, for this reason the proposed development will be required to meet the requirements of **BAL Low**.

The vegetation formations are described below and summarised in Table 2.

TABLE 2 PREDOMINATE VEGETATION CLASSIFICATION

	VEGETATION FORMATION	EFFECTIVE SLOPE	APZ PROPOSED	PHOTO
NORTH	Managed Land	Upslope	-	1
EAST	Managed Land	Downslope 0 – 5°	-	2
SOUTH	Managed Land	Downslope 0 – 5°	-	3
WEST	Managed Land	Upslope	-	4

SITE PHOTOS

PHOTO 1 VIEW TO THE NORTH



PHOTO 2 VIEW TO THE EAST



PHOTO 3 **VIEW TO THE SOUTH**



PHOTO 4 **VIEW TO THE WEST**



4.0 BIODIVERSITY ASSESSMENT

4.1 BIODIVERSITY OFFSETS SCHEME ASSESSMENT

It is vital that all development and clearing follows the Biodiversity Offsets Scheme which has been created to avoid, minimise and offset impacts on biodiversity.

There are two key elements to the Biodiversity Offsets Scheme, as follows:

- A. Developers and landholders who undertake development or clearing, generating a credit obligation which must be retired to offset their activity.
- B. Landholders who establish a biodiversity stewardship site on their land, generating credits to sell to developers or landholders who require those credits, to securely offset activities at other sites.

This report will address and assess the proposed development under element A. To complete this assessment, we will evaluate the four triggers and demonstrate that the proposed works should not trigger the Biodiversity Offsets Scheme and therefore the owner will not be required to offset their proposed activities.

4.1.1 CLEARING THRESHOLD

FIGURE 10 CLEARING THRESHOLD

Minimum lot size associated with the property	Threshold for clearing, above which the BAM and offsets scheme apply	
Less than 1 ha	0.25 ha or more	- LOT 862 DP1128686
1 ha to less than 40 ha	0.5 ha or more	
40 ha to less than 1000 ha	1 ha or more	- LOT 876 DP1243112
1000 ha or more	2 ha or more	

The proposed works do not require any tree removal or land clearing. As a result, no offsets are required.

4.1.2 BIODIVERSITY VALUES MAP

In order to assess if the development is located within an area identified with Biodiversity Values, we have completed a search using the Biodiversity Values Map. As shown in Figure 9, the subject allotments do contain areas with high biodiversity values. However, no building works are proposed within these areas and the proposed works will not negatively impact these areas and hence does not trigger the Biodiversity Offsets Scheme.

FIGURE 11 BIODIVERSITY VALUES MAP



4.1.3 TEST OF SIGNIFICANCE

To assess the impact of the proposed works on threatened species we have completed a test of significance to determine if the proposed works are likely to significantly affect threatened species, ecological communities or their habitats.

We have considered the level of impact to the biodiversity of the area and to do this we have assessed the significance of any of the proposed activities at the site and surrounding alpine ecosystem.

Our assessment of the impact on threatened species and habitats finds:

- No predicted impacts to threatened species habitat at all.
- No endangered ecological communities or critically endangered ecological communities in the subject land.
- No predicted impacts to threatened species habitat at all.
- No removal of breeding habitats or fragmentation of habitats as a result of clearing below the permissible clearing threshold so will unlikely impact the long-term survival of any species or community.
- The lot does contain areas with High Biodiversity Values. However, no building works are proposed in these areas.
- Vegetation removal is a key threatening process, and no vegetation removal is proposed.

Similarly, the test shows that the proposed works are not likely to have a significant impact on threatened species or their habitat and will not be carried out in a declared area of outstanding biodiversity value. Therefore, the applicant will not be required to apply the Biodiversity Offsets Scheme or prepare a species impact statement (SIS) as a result of this trigger.

4.1.4 AREAS OF OUTSTANDING BIODIVERSITY VALUES

Protecting the habitats of endangered species is vital to the conservation and recovery of these species. Areas of declared critical habitat under the Threatened Species Conservation Act 1995, have become the first Areas of Outstanding Biodiversity Value (AOBV) in NSW with the commencement of the Biodiversity Conservation Act 2016.

The Biodiversity Conservation Regulation 2017 establishes the criteria for declaring AOBVs. The criteria have been designed to identify the most valuable sites for biodiversity conservation in NSW.

Kosciuszko National Park is not listed as an Area of Outstanding Biodiversity under the Biodiversity Conservation Act 2016. Therefore, due to the subject site being located within Kosciuszko National Park the proposed asset protection zone and works will not be within an area of outstanding biodiversity values and hence not trigger the BOS.

4.1.5 BIODIVERSITY OFFSET SCHEME CONCLUSION

As a result, you can see that the proposed works are not within BVM mapped areas, which demonstrates that the development will not trigger the biodiversity offset scheme. Therefore, a biodiversity assessment report by a certified biodiversity assessor is not necessary.

4. BUSHFIRE THREAT ASSESSMENT

5.1 ASSET PROTECTION ZONES (APZ)

The proposed works are surrounded by *Managed Land*, which is “Land that has vegetation removed or maintained to a level that limits the spread and impact of bush fire, these areas are managed to meet the requirements of an APZ (Planning for Bushfire Protection 2019). For this reason, areas identified as *Managed Land* do not require the establishment of an APZ.

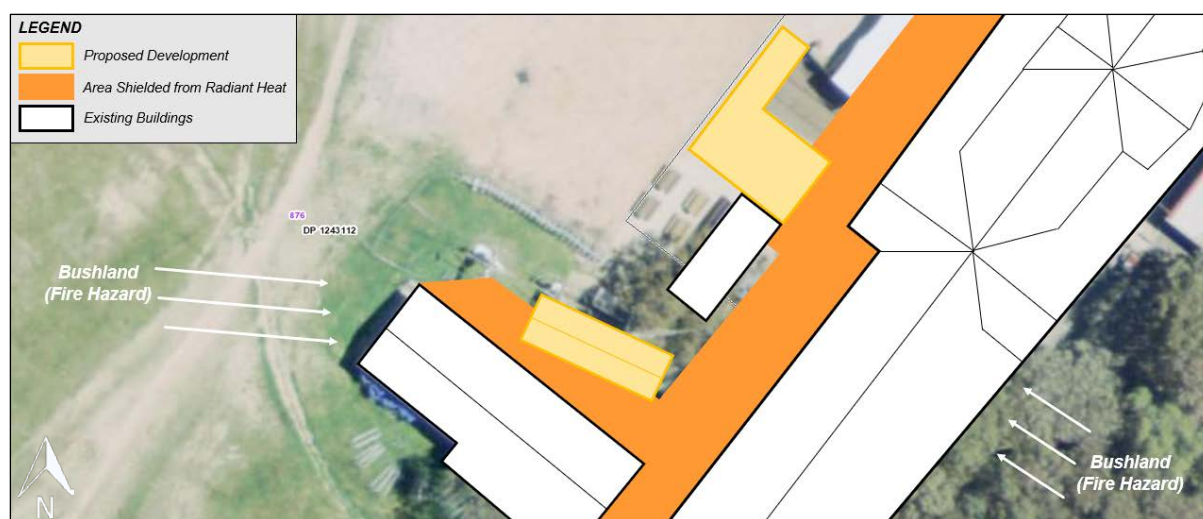
Table 3 below shows the APZ and BAL Determination.

TABLE 3 APZ AND BAL DETERMINATION

	NORTH	EAST	SOUTH	WEST
GRADIENT	Upslope	Downslope 0 – 5°	Downslope 0 – 5°	Upslope
VEGETATION	Managed Land	Managed Land	Managed Land	Managed Land
BAL PROPOSED	BAL Low	BAL Low	BAL Low	BAL Low

The land surrounding the proposed works is comprised of *Managed Land*. The Southern, Eastern and Western elevations are shielded from direct radiant heat arising from bushfire attack (from the South and West), this allows the construction requirements for the development to be reduced to the next lower BAL (BAL Low), as outlined in A1.8 *Shielding* in the PBP 2019. Please refer to *Appendix II* for A1.8 Shielding Figures.

FIGURE 12 SHIELDING



5.2. RELEVANT CONSTRUCTION STANDARD

The Australian Standard AS 3939 – 2018 is the enabling standard that addresses the performance requirements of both parts 2.3.4 and Part GF5.1 of the Building Code of Australia for the construction of the Class 1, 2 and Class 3 buildings within a designated Bushfire Prone Area.

The following was determined for this site:

Relevant fire danger index..... FFDI 50

The proposed new Mountain Bike Storage Facility + associated works and, the proposed works to the Rossignol Demo Store/Mountain Bike Workshop will be required to meet the requirements of **BAL Low** as per AS3959-2018.

5.3. SAFE OPERATIONAL ACCESS

The Planning for Bushfire Protection requires the provision of safe operational access to structures and water supply for emergency services, while residents are seeking to evacuate from an area.

The PBP (2019) requires the provision of safe operational access to structures and water supply for emergency services, while residents are seeking to evacuate from an area.

- Friday Drive is a two-wheel drive, all weather road. The widths and design would allow safe access for firefighters while residents are evacuating an area. The capacity of road surfaces is sufficient to carry fully loaded firefighting vehicles.

5.4. EMERGENCY MANAGEMENT

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

To achieve this, the following conditions shall apply:

A building evacuation diagram, site layout diagram and Statement of Action are to be provided for the proposed development in accordance with Building Emergency Procedures and Bush Fire Evacuation Plan, the NSW Rural Fire Service Guidelines for the Preparation of Emergency/Evacuation Plan and with Australian Standard AS 3745 2010 'Planning for Emergencies in Facilities'.

The owners are advised to obtain the NSW Rural Fire Service – “Guidelines for the Preparation of Bush Fire Evacuation Plans” & ‘Bush Fire Survival Plan’ In the event of emergency, the owners should ensure they are familiar with the RFS Bush Fire Alert Levels and use their Bush Fire Survival Plan.

5.5. ADEQUATE WATER AND UTILITY SERVICES

Thredbo is serviced by reticulated water. A hydrant system is located on the Southern elevation of the Valley Terminal Building. The location and distance to the hydrants will be consistent with the requirements of the PBP 2019.



Any bottled gas will be installed and maintained in accordance with AS1596 and the requirements of the relevant authority. If gas cylinders need to be kept close to the buildings, the release valves must be directed away from the building and away from any combustible material. Polymer sheathed flexible gas supply lines to gas meters adjacent to buildings are not to be used.

6. HOW THIS PROPOSAL MEETS DEEMED TO SATISFY SOLUTION

DEMONSTRATION COMPLIANCE UNDER SECTION 6.4 – SPECIFIC OBJECTIVES PLANNING FOR BUSHFIRE PROTECTION (2019)

PERFORMANCE CRITERIA	COMPLIES	ACCEPTABLE SOLUTIONS
THE INTENT MAY BE ACHIEVED WHERE:		
<ul style="list-style-type: none"> provide an appropriate defensible space 	<input checked="" type="checkbox"/>	The subject sites are surrounded by <i>Managed Land</i> hence an APZ is not required. The land surrounding the proposed works is managed to a level that limits the spread and impact of bush fire.
<ul style="list-style-type: none"> site the building in a location which ensures appropriate separation from the hazard to minimise potential for material ignition 	<input checked="" type="checkbox"/>	The proposed Bike Hire/Storage building has been sited to ensure adequate separation between any potential hazard/s.
<ul style="list-style-type: none"> provide a better bush fire protection outcome for existing buildings 	<input checked="" type="checkbox"/>	The subject sites are surrounded by <i>Managed Land</i> which provides a large area of separation between the existing and proposed buildings and the potential bushfire threat. The proposed works will need to meet the requirements of BAL Low. This will provide an appropriate construction level for the new works, whilst ensuring the bushfire protection of the surrounding buildings are maintained.
<ul style="list-style-type: none"> 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); 	<input checked="" type="checkbox"/>	The proposed Bike Hire/Storage is located a significant distance from any potential bushfire hazard. Existing buildings provide additional shielding from potential bushfire hazards.
<ul style="list-style-type: none"> ensure there is no increase in bush fire management and maintenance responsibility on adjoining landowners without their written confirmation 	<input checked="" type="checkbox"/>	The proposed development will not increase the bush fire management and maintenance responsibility for adjoining landowners.
<ul style="list-style-type: none"> ensure building design and construction enhances the chances of occupant and building survival 	<input checked="" type="checkbox"/>	The subject sites are surrounded by <i>Managed Land</i> which provides a large area of separation between the existing and proposed buildings and the potential bushfire threat. The proposed works will need to meet the requirements of BAL Low. This will provide an appropriate construction level for the new works, whilst ensuring the bushfire protection of the surrounding buildings are maintained.
<ul style="list-style-type: none"> provide for safe emergency evacuation procedures including capacity of existing infrastructure (such as roads) 	<input checked="" type="checkbox"/>	Emergency Evacuation plan will be provided in accordance with Thredbo Resort evacuation management plan. An individual evacuation plan will be prepared as described in section 4.4. of this report.

**DEMONSTRATION COMPLIANCE UNDER SECTION 6.6 – SPECIFIC OBJECTIVES
PLANNING FOR BUSHFIRE PROTECTION (2019)**

PERFORMANCE CRITERIA	COMPLIES	ACCEPTABLE SOLUTIONS
THE INTENT MAY BE ACHIEVED WHERE:		
<ul style="list-style-type: none"> provide an appropriate defensible space 	☑	The subject sites are surrounded by <i>Managed Land</i> hence an APZ is not required. The land surrounding the proposed works is managed to a level that limits the spread and impact of bush fire.
<ul style="list-style-type: none"> provide a better bush fire protection outcome for existing structures (e.g. via ember protection measures) 	☑	The subject sites are surrounded by <i>Managed Land</i> which provides a large area of separation between the existing and proposed buildings and the potential bushfire threat. The proposed works will need to meet the requirements of BAL Low. This will provide an appropriate construction level for the new works, whilst ensuring the bushfire protection of the surrounding buildings are maintained.
<ul style="list-style-type: none"> ensure new building work complies with the construction standards set out in AS 3959; 	☑	Proposed works to comply with the requirements of AS 3959.
<ul style="list-style-type: none"> to ensure ongoing management and maintenance responsibilities are in place where APZs are proposed outside of the sub lease or leasehold area 	☑	No APZ required for the proposed works.
<ul style="list-style-type: none"> written consent from the land managers is provided for all proposed works outside of the sub lease or leasehold area 	☑	No works are proposed outside of the leasehold area.
<ul style="list-style-type: none"> proposed APZs outside of the sub lease or leasehold area are supported by a suitable legal mechanism to ensure APZs are managed under a binding legal agreement in perpetuity 	☑	Defendable space for APZ to be established and maintained in perpetuity.
<ul style="list-style-type: none"> ensure building design and construction standards enhance the chances of occupant and building survival; 	☑	The subject sites are surrounded by <i>Managed Land</i> which provides a large area of separation between the existing and proposed buildings and the potential bushfire threat. The proposed works will need to meet the requirements of BAL Low. This will provide an appropriate construction level for the new works, whilst ensuring the bushfire protection of the surrounding buildings are maintained.
<ul style="list-style-type: none"> provide safe emergency evacuation procedures. 	☑	Emergency Evacuation plan will be provided in accordance with Thredbo Resort evacuation management plan. An individual evacuation plan will be prepared as described in section 4.4. of this report.
<ul style="list-style-type: none"> Any additional construction requirements should be 	N/A	Not applicable.

commensurate with the following: <ul style="list-style-type: none">– the scope of the proposed works, including any increase in size and footprint of the building– any additional capacity for the accommodation of guests and/or staff on site– the cost associated with the proposed upgrade of any building.		
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7. CONCLUSION

Pending the satisfaction of recommendations outlined in this report, the level of bushfire hazard risk identified in relation to the subject land and the proposed work is not considered to be such that the proposal should be denied due to bushfire considerations.

It is recommended that:

- ***The proposed works to Rossignol Demo Store/Mountain Bike Workshop and the proposed new Mountain Bike Storage Facility + associated works are surrounded by Managed Land and therefore do not require an APZ. The proposed works should meet the requirements of BAL Low.***

This proposal meets a “deemed to satisfy” outcome for Bushfire Protection.

This report does not find that the proposal should be rejected due to bushfire considerations provided the recommendations are undertaken as proposed.



Katy Murphy
Town Planner

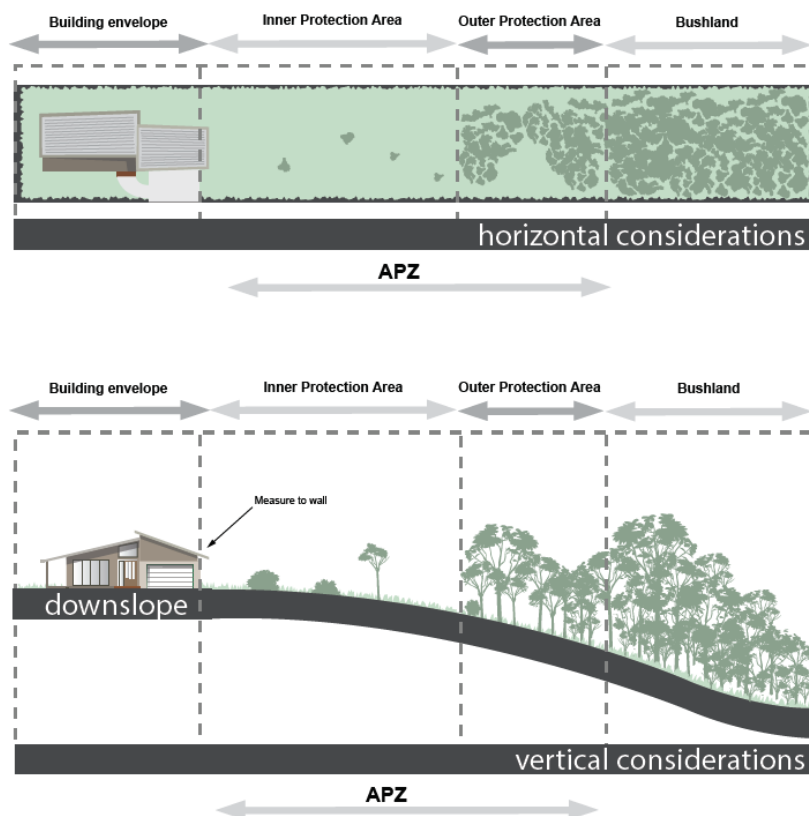
09 August 2022

APPENDIX I DEFINITION OF ASSET PROTECTION ZONES

Vegetation within the APZ should be managed in accordance with APZ specifications for the purposes of limiting the travel of a fire, reducing the likelihood of direct flame contact and removing additional hazards or ignition sources. The following outlines some general vegetation management principles for APZs:

1. Discontinuous shrub layer (clumps or islands of shrubs not rows)
2. Vertical separation between vegetation stratum
3. Tree canopies not overhanging structures
4. Management and trimming of trees and other vegetation in the vicinity of power lines and tower lines in accordance with the specifications in "Vegetation Safety Clearances" issued by Energy Australia (NS179, April 2002)
5. Maintain low ground covers by mowing / whipper snipper / slashing; and
6. Non-combustible mulch e.g. stones and removing stores of combustible materials
7. Vegetation to be planted should consist of fire retardant/ less flammable species strategically located to reduce attack from embers (i.e. as ember traps when in small clumps and short wind breaks).

Typical Inner and Outer Protection Areas.



APPENDIX II A1.8 SHIELDING PBP 2019

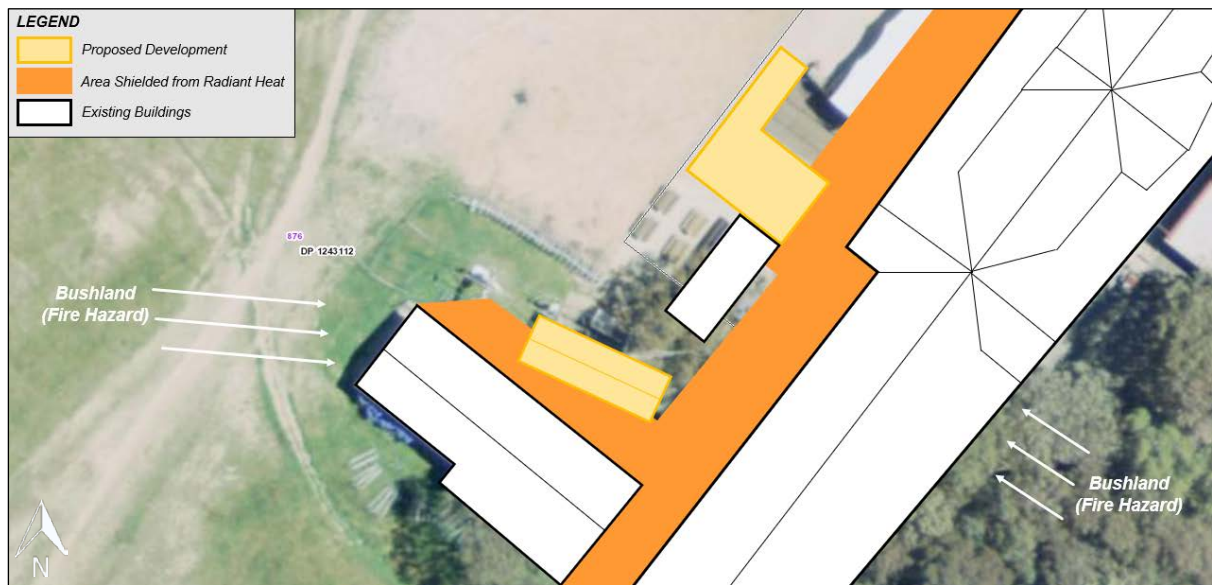


Figure A1.8a

Radiant heat impact and shielding.

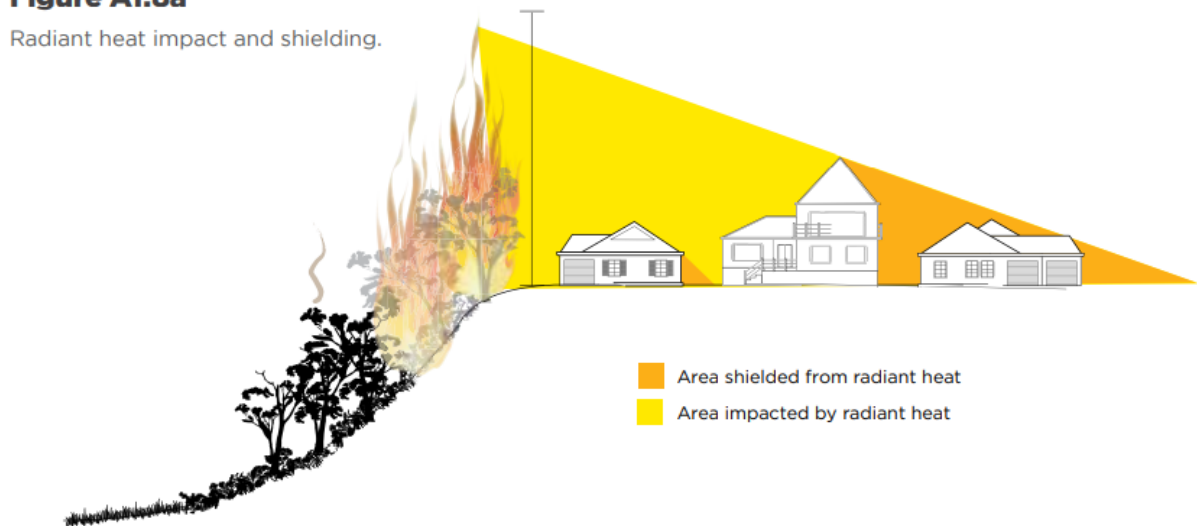


Figure A1.8b

Plan view of radiant heat impact and shielding.

