Bushfire management plan/Statement addressing the Bushfire Protection Criteria coversheet

Site address: Lot 848 (#130) Truscott Crescent, EXMOUTH

Site visit: Yes ☑ No ☐

Date of site visit (if applicable): Day 24 Month June Year 2024

Report author or reviewer: Kathy Nastov

WA BPAD accreditation level (please circle):

Not accredited ☐ Level 1 BAL assessor ☐ Level 2 practitioner ☐ Level 3 practitioner ☑

If accredited please provide the following.

BPAD accreditation number: 27794 Accreditation expiry: Month August Year 2026

Bushfire management plan version number: #240534 v1.0

Bushfire management plan date: Day 24 Month November Year 2025

Client/business name: Proponent: Tony Arias

	Yes	No
Has the BAL been calculated by a method other than method 1 as outlined in AS3959 (tick no if AS3959 method 1 has been used to calculate the BAL)?		✔
Have any of the bushfire protection criteria elements been addressed through the use of a performance principle (tick no if only acceptable solutions have been used to address all of the bushfire protection criteria elements)?		✔

Is the proposal any of the following (see SPP 3.7 for definitions)?	Yes	No
Unavoidable development (in BAL-40 or BAL-FZ)		✔
Strategic planning proposal (including rezoning applications)		✔
High risk land-use		✔
Vulnerable land-use	✔	

None of the above ☐

Note: Only if one (or more) of the above answers in the tables is yes should the decision maker (e.g. local government or the WAPC) refer the proposal to DFES for comment.

Why has it been given one of the above listed classifications (E.g. Considered vulnerable land-use as the development is for accommodation of the elderly, etc.)?

The proposal is a tourist development, therefore considered a vulnerable land use.

The information provided within this bushfire management plan to the best of my knowledge is true and correct:

Signature of report author or reviewer 

Date 24/11/2025

BUSHFIRE PRONE PLANNING

Resort Development – Lot 848 Truscott Crescent Exmouth

Bushfire Management Plan

(PREPARED FOR PLANNING APPLICATION ASSESSMENT PURPOSES)

Compiled in accordance with State Planning Policy 3.7 Bushfire and the Planning for Bushfire Guidelines

Lot 848 (#130) Truscott Crescent, Exmouth

Shire of Exmouth

Development Application - Vulnerable Land Uses

24 November 2025

Job Reference No: **240534**

BPP GROUP PTY LTD T/A BUSHFIRE PRONE PLANNING

ACN: 166 551 784 | ABN: 139 166 551 784

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08 6477 1144 | admin@bushfireprone.com.au

DOCUMENT CONTROL

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Reviewed:	Kathy Nastov (BPAD Level 3 No. 27794)	

VERSION HISTORY		
Version	Status/Details	Date
1.0	Original	24 November 2025
-	-	

DISTRIBUTION					
Destination		Version	No. Copies	Hard Copy	Electronic Copy
Person	Email				
Tony Arias	tonyarias@iinet.net.au	1.0	-	☐	☒
		-		☐	☐
				☐	☐

LIMITATIONS AND DISCLAIMER

Management of Risks Associated with Bushfire

For the subject planning proposal, the protection measures to be implemented based on information presented in this Bushfire Management Plan, prepared for land-use planning purposes, are the minimum requirements for management of the relevant risks.

The applied protection measures do not guarantee that during a bushfire event, no buildings or infrastructure will be damaged, persons injured, or fatalities occur - either on the subject site or off the site when evacuating.

This is substantially due to the unpredictable nature of fire weather conditions, bushfire behaviour and the actions of landowners and/or operators – including the correct implementation and ongoing maintenance of required and recommended protection measures (including bushfire resistant construction) and complying with public bushfire warnings and directions from emergency services - over which Bushfire Prone Planning has no control.

Provision of Mapping Data

All maps included herein are indicative in nature and are not to be used for accurate calculations. This data has been prepared for bushfire risk management planning purposes only. All depicted areas, contours and any dimensions shown are subject to survey.

Bushfire Prone Planning does not guarantee that this data is without flaw of any kind and disclaims all liability for any errors, loss or other consequence arising from relying on any information depicted.

When the separate provision of Digital Geographic Data (GIS Files) is an agreed project deliverable, these should be used in conjunction with the relevant information presented in the associated report. Areas and/or Dimensions specified in the report will have priority over digital data transmitted and must correspond to the final 'as-built' location of the applicable buildings, other structures or boundaries.

Bushfire Prone Planning's Liability

All surveys, forecasts, projections and recommendations made in this report, associated with the subject planning proposal, are made in good faith based on information available to Bushfire Prone Planning at the time.

Notwithstanding anything contained therein, Bushfire Prone Planning will not, except as the law may require, be liable for any loss or other consequences whether or not due to the negligence of their consultants, their servants or agents, arising out of the services provided by their consultants.

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STATEMENT OF PURPOSE – THE 'PLANNING' BUSHFIRE MANAGEMENT PLAN

EXPLANATORY INFORMATION

SITE/USE PLANNING

This BMP is produced to present the information necessary for a planning proposal's assessment against the State's bushfire planning requirements. The developed information is to inform and assist decision-making authorities, planners, landowners/proponents and referral agencies in their implementation WA's State Planning Policy 3.7 Bushfire – and where relevant, any supplementary provisions of a local planning scheme or policy.

Policy Document Versions Applied in This BMP	State Planning Policy 3.7 Bushfire (SPP 3.7)	November 2024	Planning for Bushfire Guidelines (supporting SPP 3.7)	November 2024

> The Stated Intent of SPP 3.7 is to *implement effective, risk based land use planning and development which in the first instance avoids bushfire risk, but where unavoidable, manages and/or mitigates the risk to people, property and infrastructure to an acceptable level. The preservation of life and the management of bushfire impact are paramount.*

SITE OPERATIONS

This BMP is not an 'operational' BMP for property and operations management. Such a BMP would apply additional and more specific bushfire protection measures to more comprehensively reduce the level of risks associated with a bushfire event. These being the potential loss of life, injury, or destroyed or damaged assets which results in personal loss and economic loss.

However, this 'planning' BMP does establish certain responsibilities for the implementation and maintenance of the bushfire protection measures that are considered the minimum for bushfire planning decision making.

BUSHFIRE RESISTENT CONSTRUCTION

This 'planning' BMP is not required to consider the requirement to construct certain buildings, in designated bushfire prone areas, to the standard corresponding to the Bushfire Attack Level (BAL) they are subject to. This requirement is dealt with under the State Building Act 2011/Building Regulations 2012 and the referenced Building Code of Australia.

DETERMINED BUSHFIRE ATTACK LEVEL (BAL) RATINGS AND CONSTRUCTION – CAUTION!

For construction purposes a determined (not indicative) BAL rating is required to be known and a BAL Certificate produced for submission with a building application. This establishes the construction design and materials that are to be complied with in accordance with AS 3959 Construction in bushfire prone areas (as amended) and/or NS 300 NASH Standard Steel Framed Construction in Bushfire Areas (as amended).

This 'planning' BMP cannot necessarily determine a BAL rating that will apply to a future building. All variables required for that calculation may not be known at the assessed stage of planning. For example, actual location of a building footprint on a lot and/or any classified vegetation that will remain, at the time of construction, within the lot or on neighbouring lots.

This 'planning' BMP is only required to identify if a viable sized building can be located on a lot and be subject to a BAL rating not exceeding BAL-29, based on certain allowable assumptions. This is a planning requirement not a building requirement and a BAL contour map can be used to illustrate this information as an 'indicative' BAL rating.

Be aware that typically you cannot derive the determined BAL rating for a future building(s) on a specific lot from a BAL contour map (when presented in a BMP prepared for planning approval purposes). This is only possible in limited circumstances.

Planning assessment requirements are different to building assessment requirements. Refer to explanatory information above and Appendix B1 and B2 for additional information.

1 THE PLANNING PROPOSAL

1.1 Details, Plans and Maps

SUBJECT LAND AND PROPONENT (LANDOWNER)	
Address Details	Lot 848 (#130) Truscott Crescent, Exmouth
Applicable Local Government	Shire of Exmouth
Proponent	Tony Arias
Entity Commissioning Production of the BMP	Tony Arias

THE PLANNING PROPOSAL STAGE AND TYPE		
Development Application	☑	Construction of a habitable building and/or a vulnerable use that is subject to bushfire planning requirements.

DESCRIPTION

The development involves 25 self-contained accommodation units, an internal driveway network, and mixed landscaping. Future Stage 2 Development comprises additional units, internal driveways, and landscaping. The development is considered a Vulnerable Tourism Land Use for the purposes of this bushfire assessment.

There are expected to be 2 permanent occupants (Managers) and 40 guests onsite (maximum capacity).

All onsite landscaping is required to be maintained in a low threat state in perpetuity, for which a Landscape Management Plan must be prepared.

Compliance with Elements 1 to 4 (Location, Siting and Design, Vehicular Access, Water Supply) of the Guidelines are met through the application of the Acceptable Solutions. Required actions include establishing an Asset Protection Zone, installing firefighting water supply, signage, and internal driveways in accordance with the technical requirements stated in this Bushfire Management Plan.

Primary Proposed or Intended Construction

EXPLANATORY INFORMATION

Note: A habitable building is defined in the WA *Planning and Development (LPS) Regulations 2015* to mean:

A permanent or temporary structure on land that:

(a) Is fully or partially enclosed; and

(b) Has at least one wall of solid material and a roof of solid material; and

(c) Is used for a purpose that involves the use of the interior of the structure by people for living, working, studying or being entertained.

Primary Type(s)	New Building(s)
BCA Classification	Class 1a (house)

Vulnerable Land Use Determination	
Applying the definition established in SPP 3.7:	
• A land use which is designed to accommodate people who are less physically or mentally able and likely to present evacuation challenges; and/or	☐
• A land use which due to the building design or use, or the number of people accommodated, likely to present evacuation challenges; and/or	☐
• A land use which involves visitors who are unfamiliar with the surroundings.	☑
In applying the Guidelines, Appendix B5 and DPLH officer level advice, consideration is also given to:	
• The location and to the number of employees and visitors on-site at any one time; and	☑
• If the decision-maker considers that the preparation of a bushfire emergency plan is warranted, then the use should be considered vulnerable.	☐
• Grouped dwellings for older persons (e.g. Lifestyle / over 55's) where there is no nursing care component, may not need to be considered a vulnerable use (including when a Class 3 but not a Class 9c building).	☐
Assessment Supporting Details: None required.	

Development Type - Establishing the Applicable Bushfire Protection Criteria			
Vulnerable Tourism Land Use and Day Uses	For the construction, and/or use of, or additions to a habitable building for a vulnerable tourism land use. *[Guidelines s8]*	Tourist and visitor accommodation.	☑
		Day Uses (no overnight stay)	☐
		Outdoor Events (may include overnight camping).	☐
		Caravan Park, nature based park and/or camping ground, with or without a habitable building(s).	☐
Assessment Supporting Details: None required.			

Figure 1.1: Proposed development plan.

OVERALL SITE PLAN

SCALE 1 : 500

NOT FOR CONSTRUCTION

BAL 29 BUSHFIRE ATTACK LEVEL

PROPOSED RESORT DEVELOPMENT

LOT 848 TRUSCOTT CRESCENT EXMOUTH

TONY ARIAS

DRAWING No	A1.SK01
DRAWING NAME	OVERALL SITE PLAN
SCALE	1 : 500 @ A1
JOB NUMBER	240068
DATE	28/11/2024
DRAWN BY	SH

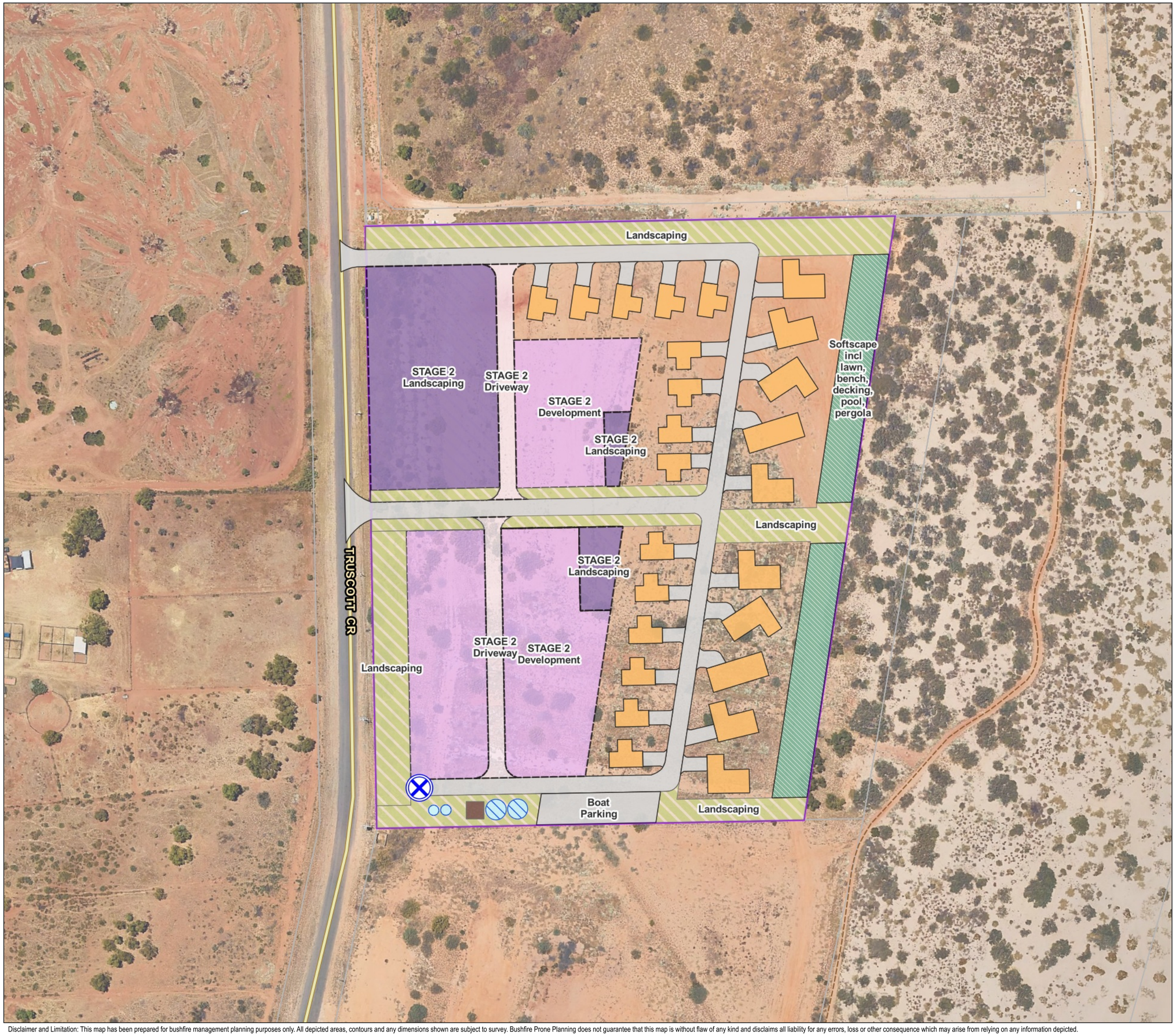
H+H architects
ALBANY 9842 5558
KALGOORLIE 9022 4015
BUNBURY 9778 9600

11/07/2025 11:27:13 AM

Figure 1.2

Proposed Development

Lot 848 on Plan P175175, Area: 3.5492 ha
130 Truscott Cr
EXMOUTH, 6707
SHIRE OF EXMOUTH



------ LEGEND ------

- Subject Site
- Cadastral
- Recommended Temporary Turnaround

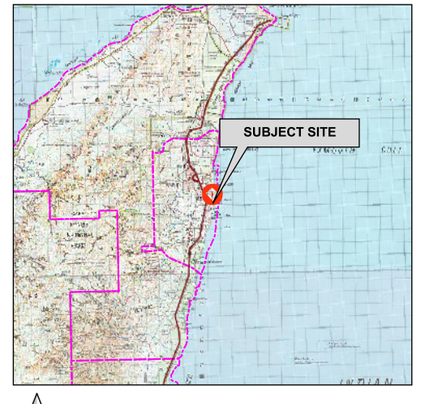
Proposed Development

- Accommodation
- Driveway
- Landscaping
- Softscape incl lawn, bench, decking, pool, pergola
- STAGE 2 Development
- STAGE 2 Driveway
- STAGE 2 Landscaping
- Firefighting Water Supply Tank
- Potable Water Tank
- Pump

0 20 40 60 80

Metres

------ LOCALITY ------



AERIAL IMAGERY: Landgate/SLIP

Coordinate System: GDA 1994 MGA Zone 50
Projection: Universal Transverse Merctaor Units: Metre
Map by: Elissa Edward 26-11-2025
SCALE (A3): 1 : 1250

BUSHFIRE PRONE PLANNING

Figure 1.3

Location Map

Lot 848 on Plan P175175, Area: 3.5492 ha
130 Truscott Cr
EXMOUTH, 6707
SHIRE OF EXMOUTH

------ LEGEND ------

- Subject Site
- Cadastral
- Reserves

DBCA Legislated Lands and Waters

- Section 5(1)(h) Reserve

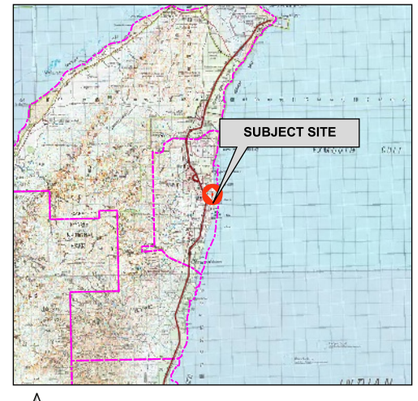
DFES Stations

- Bush Fire Brigade
- State Emergency Service Unit
- Volunteer Fire & Rescue Service

0 0.5 1 km

Kilometres

------ LOCALITY ------



AERIAL IMAGERY: Landgate/SLIP

Coordinate System: GDA 1994 MGA Zone 50
Projection: Universal Transverse Merctaor Units: Metre
Map by: Elissa Edward 07-10-2025
SCALE (A3): 1 : 17500

BUSHFIRE PRONE PLANNING

240534_FIG_1-3-LOC_Lot-848-Truscott-Cres-Exmouth.qgz

1.2 The Planning Proposal and its Requirement to Address Bushfire Risk

EXPLANATORY INFORMATION

For the subject planning proposal, the intent of this section is to:

- Identify the relevant statutory bushfire planning provisions that have established its requirement to address bushfire risk;
- Identify the relevant policy/guideline 'triggers' to apply SPP 3.7 Bushfire;
- Identify when a local government, as the decision maker, has established additional 'triggers' to apply defined bushfire planning assessments; and
- Identify the consideration of any relevant exemptions from application of SPP 3.7 Bushfire.

Relevant Terms

Development means the development or use of any land, including (a) any demolition, erection, construction, alteration of or addition to any building or structure on the land (b) the carrying out on the land of any excavation or other works (Planning and Development Act 2005, Part1, s.4; and

Habitable building means a permanent or temporary structure on land that:

(a) is fully or partially enclosed; and

(b) has at least one wall of solid material and a roof of solid material; and

(c) is used for a purpose that involves the use of the interior of the structure by people for living, working, studying or being entertained;

Specified building means a structure of a kind specified in this Scheme as a kind of structure to which this Part applies in addition to its application to habitable buildings.

Development site means that part of a lot on which a building that is the subject of development stands or is to be constructed - Planning and Development (LPS) Regulations 2015, s.78A.

Construction of a building includes the erection, assembly or placement of a building but does not include the renovation, alteration, extension, improvement or repair of a building;

1.2.1 Applied Statutory Bushfire Provisions Requiring a Planning Application

A PLANNING APPLICATION IS TO BE SUBMITTED TO THE LOCAL GOVERNMENT FOR DETERMINATION	
For the proposed development (construction and/or use) the local government is the decision maker. The local government determination will be made under: • The Planning and Development Act 2005, its relevant subsidiary legislation (e.g. Regulations) and associated policies that establish the objectives and high-level guidance; and/or • The local government's local planning scheme and associated policies that establishes objectives and guidance, specific to the jurisdiction, in addressing the requirements established by the above legislation and associated policy.	
A BUILDING OR PLANNING APPLICATION REQUIRES A BAL RATING AND PLANNING APPROVAL The proposed development is for building works subject to the Building Code of Australia and is located in a designated bushfire prone area (Map of Bushfire Prone Areas). One or more of the following applies.: • The local government requires submission of a building permit application under the Building Act 2011 / Building Regulations 2012) including a bushfire attack level (BAL) assessment (and certificate). Applicable when the proposed development is a class of building subject to bushfire construction requirements (i.e. Classes 1, 2, 3 buildings and associated Class 10a, and Class 9 vulnerable use buildings under the Building Code of Australia). • The local government has a responsibility under the Planning and Development (LPS) Regulations 2015 to ensure strategic planning proposals, structure plans and development applications address SPP 3.7 and the Guidelines. • The local government, in accordance with its local planning scheme, is responsible to administer the relevant development controls, with due regard to SPP 3.7 and the Guidelines.	✓
WHERE PRE-DEVELOPMENT BUSHFIRE ATTACK LEVEL (BAL) OF RELEVANT BUILDINGS IS BAL-40 OR BAL-FZ The Deemed Provisions in Schedule 2 of the Planning and Development (Local Planning Schemes) Regulations 2015, Part 10A – Bushfire risk management, establish: 1. If the proposed development is: (a) The construction or use, or construction and use, of a single house or ancillary dwelling on a lot or lots with a total area of 1,100 m^2 or more; or (b) The construction or use, or construction and use, of (i) a habitable building other than a single house or ancillary dwelling; or (ii) a specified building; and (c) Is not the use of a dwelling as hosted or unhosted short-term rental accommodation (STRA) which is specifically excluded; and 2. The development site is wholly or partly within a designated bushfire prone area (Map of Bushfire Prone Areas), requiring the developer to have prepared a BAL assessment for the development site: then 3. Where the pre-development (before the establishment of an APZ), calculated bushfire attack level of the development site is BAL-40 or BAL-FZ, then the developer must have development approval to commence any development on the development site.	✓
Assessment Supporting Details: None Required	

1.2.2 Applied Triggers to Apply State Planning Policy 3.7 Bushfire

EXPLANATORY INFORMATION

State Planning Policy 3.7 Bushfire (SPP 3.7) provides broad objectives and high-level guidance for how planning proposals and development applications within bushfire prone areas should be considered. Implementation is supported by more detailed instructions within the *Planning for Bushfire Guidelines*.

The following table identifies the guidance that has resulted in the planning proposal being required to apply SPP 3.7.

Inconsistent Information (as of December 2024):

- There are inconsistences between the provisions of the applicable legislation (Planning and Development (LPS) Regulations 2015), the clauses of the associated policy (SPP 3.7 Bushfire) and its associated guidance (Planning for Bushfire Guidelines Nov. 2024).
- This has resulted in inconsistencies in the establishment of the 'triggers' to lodge proposals, plans and applications for planning approval sourced from these documents.

Until legislation/policy/guideline amendments are completed, the advice from WAPC/DPLH is that the decision maker should apply SPP 3.7 and the Guidelines as they deem necessary. *(Source: Explanatory Note SPP 3.7, DPLH, 25/11/24)*

Bushfire Prone Planning's Current Approach:

- To apply the 'triggers' for application of SPP 3.7/Guidelines in accordance with the current version of the Guidelines (Planning for Bushfire Guidelines, November 2024), in Sections 6, 7 and 8 - as this is best aligned with the current version (3 Nov 2024) of the LPS Regulations 2015; unless
- The relevant decision maker has determined, and confirmed in writing to the proponent, that SPP 3.7/Guidelines is to be applied.

	SPP 3.7 AND THE GUIDELINES - ESTABLISHING THE NEED TO GIVE DUE REGARD TO SPP 3.7	APPLICABLE
1	THE LAND SUBJECT TO THE PLANNING PROPOSAL IS:	
	Designated bushfire prone and 'Area 1 (Urban)' on the Map of Bushfire Prone Areas (refer to Figure 1.4); or	No
	Designated bushfire prone and 'Area 2' on the Map of Bushfire Prone Areas (refer to Figure 1.4).	Yes
	AND	
2	THE PLANNING PROPOSAL WILL:	
	Result in the intensification of development (or land use); or	Yes
	Result in an increase of visitors, residents or employees; or	Yes
	Adversely impact or increase the bushfire risk to the subject or surrounding site(s).	No
	AND	
3	THE PLANNING PROPOSAL IS A: (Source: Guidelines s.8) This section applies to <u>development applications</u> in areas designated as Area 1 (Urban) or Area 2 on the Map of BPA for the <u>construction and/or use of, or additions</u> to: o A habitable building for: - A vulnerable commercial or industrial land use; - A vulnerable Class 9 building identified within the 2022 edition of the Building Code of Australia (BCA); or - A vulnerable tourism land use.	

	o A caravan park, nature-based park and/or camping ground, with or without a habitable building(s). Note: A development application for additions to a vulnerable land use should address the bushfire protection criteria for the entire site. It should be noted that there are no requirements under SPP 3.7 or the Guidelines to retrofit existing buildings to the appropriate bushfire construction standard, or any requirement for these existing buildings to be located within an area with a radiant heat impact not exceeding 29 kW/m^2 (BAL-29).
Assessment Supporting Details: None Required	

1.2.3 Applied Triggers Established by the Local Government as the Decision Maker

EXPLANATORY INFORMATION

The applicable local government is required to give due regard to the following:

The Deemed Provisions in Schedule 2 of the Planning and Development (Local Planning Schemes) Regulations 2015, where:

- Part 2 cl. 3 provides for the local government to prepare a local planning policy; and
- Part 9 cl. 67(q & r) establishes the local government must give due regard to:
  - The suitability of the land for the development taking into account the possible risk of flooding, tidal inundation, subsidence, landslip, bush fire, soil erosion, land degradation or any other risk.
  - The suitability of the land for the development taking into account the possible risk to human health or safety.

Under these general provisions, in addition to the specific statutory bushfire provisions identified in Section 1.2.1, the local government may have bushfire planning policy/information (under the local planning scheme) which is to be addressed in this BMP. This is identified below as relevant.

ESTABLISHING THE NEED TO APPLY LOCAL GOVERNMENT DEFINED BUSHFIRE PLANNING REQUIREMENTS	
Identification of the Relevant Instrument	No indication of applicability from the local government authority.

1.2.4 Identified Exemptions

EXPLANATORY INFORMATION The following situations provide for an exemption from the application of SPP 3.7/Guidelines. They are established by the stated sources and are presented below as: • Evidence they have been considered when relevant; and • Justification for the application of SPP 3.7/Guidelines despite a relevant exemption applying to part or all of the planning proposal.	
EXEMPTION SCENARIOS	APPLICABLE
(Source: LPS Regulations 2015 Part 10A - Bushfire risk management) Does not apply to land where there is no existing local planning scheme or where a local planning scheme has ceased to have legal effect.	No
(Source: Guidelines s1.2.1) For a structure plan or subdivision application, for proposed lot(s) that: • Are not designated as bushfire prone; • Or where there is no increase in the development potential and therefore no intensification of land use or bushfire risk, such as a boundary realignment, that does not restrict the ability to establish or maintain an APZ; and • does not restrict vehicular access to any existing or future habitable building.	No
(Source: Guidelines s1.2.1) - For incidental non- habitable buildings or structures located not less than six metres from the habitable building, including but not limited to private garages, carports, patios, storage sheds, outbuildings, swimming pools, spa pools and fences.	No
(Source: Guidelines s1.2.1) - For a change of use, minor renovations, extensions, alterations, improvements or repair of an existing habitable building where: • The application does not result in an increase of occupants onsite; and/or • There is no increase in the bushfire risk, such as an extension being further away from the bushfire hazard, or the extension does not restrict vehicular access or the provision of water for the development.	No
Assessment Supporting Details: None Required.	

Figure 1.4

Bushfire Prone Area

Lot 848 on Plan P175175, Area: 3.5492 ha
130 Truscott Cr
EXMOUTH, 6707
SHIRE OF EXMOUTH

------ LEGEND ------

- Subject Site
- Cadastral

DFES Stations

- Bush Fire Brigade
- State Emergency Service Unit
- Volunteer Fire & Rescue Service

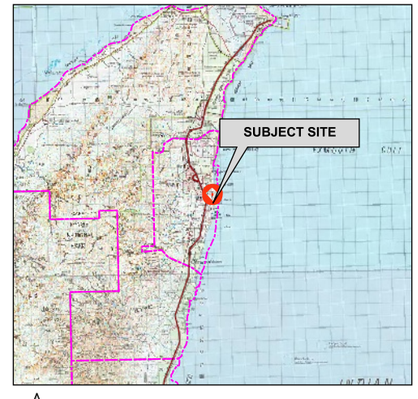
Bushfire Prone Area 2024

- Bushfire Prone Area 1
- Bushfire Prone Area 2

0 0.5 1 km

Kilometres

------ LOCALITY ------



N

AERIAL IMAGERY: Landgate/SLIP

BUSHFIRE PRONE PLANNING

Coordinate System: GDA 1994 MGA Zone 50
Projection: Universal Transverse Merctaor Units: Metre
Map by: Elissa Edward 07-10-2025
SCALE (A3): 1 : 17500

240534_FIG_1-4-BPA_Lot-848-Truscott-Cres-Exmouth.qgz

1.3 Required 'Bushfire Planning' Assessments and Documents

INFORMATION PRESENTED IN THIS 'PLANNING' BMP (OR THE BEP) - PROVIDED TO ACCOMPANY THE PROPONENT'S PLANNING SUBMISSION							
The requirements are established by SPP 3.7 Part 4, Guidelines Section 1.2, 4.4, 5.5, 6.4, 7.2, 8.3 and A1.2. The green highlighted column identifies the required information for the subject planning proposal.		Strategic Planning Document		Structure Plan / Subdivision Application		Development Application	
Required Information	Details	Map of Bushfire Prone Areas Designation					
		Area 1 (Urban)	Area 2	Area 1 (Urban)	Area 2	Areas 1 & 2	
Environment - Identification of environmental, biodiversity or conservation values on subject site(s)	Presented in the BMP. Identifies how proposal siting and design avoids and/or minimises clearing of native vegetation in applying required bushfire protection measures.	**BUSHFIRE PLANNING ASSESSMENTS ARE NOT REQUIRED**	✓	✓	✓	✓	
BLA - Broader Landscape Assessment (see note below)	Presented in the BMP. Considers subject site suitability based on exposure to bushfire hazards, potential for landscape scale bushfire, road network and suitable evacuation destinations.		✓	-	✓	-	
BHL - Bushfire Hazard Level Assessment (pre-development)	Presented in the BMP. Can include detail of treatments required to achieve BHL of moderate and/or low.		✓	-	-	-	
BAL - Bushfire Attack Level Assessment	Presented in the BMP in BAL contour map format as a requirement and in table format as an additional option.		-	✓	✓	-	
	Presented in the BMP in table format and/or BAL contour map format – dependant on which is more efficient and effective at presenting the results (e.g. BAL contour map for multiple buildings).		-	-	-	✓	
BPC - Assessment against the relevant Elements (E1 – E4) of the Bushfire Protection Criteria	Presented in the BMP. Strategic planning will necessarily focus on Element 1: Location. Can demonstrate compliance using acceptable solutions and/or an outcomes-based approach.		✓	✓ **Excluding E1**	✓	✓ **Excluding E1**	
BEP - Bushfire Emergency Plan	For vulnerable land uses only. Provided as a separate document or an addition / modification to an existing BEP or site Emergency Management Plan.		-	-	-	✓	
LMP – Landscape Management Plan	For vulnerable land uses only. Provided as a separate document or an addendum to the BMP.						
Note: Where a relevant planning proposal (e.g. subdivision) was previously assessed and approved under the SPP 3.7/Guidelines 2015, it is likely that a BLA will not be required. Also, if an application (e.g. subdivision) is compliant with a structure plan and/or a local planning scheme amendment, which were assessed and approved under the 2015 SPP/Guidelines, it is likely that a BLA will not be required. Confirmation from a relevant DPLH officer may be required (DPLH advice to BPP 20/2/2025).							

1.4 Other Documents Relevant to Preparing the BMP

EXPLANATORY INFORMATION
This section identifies any known assessments, reports or plans that have been conducted and prepared previously, or are being prepared concurrently, and are relevant to the subject planning proposal. They may have implications for the assessment of bushfire hazard threats and the identification and implementation of the bushfire protection measures that are established by this BMP.

RELEVANT DOCUMENTS					
Document	Relevant	Exists	To Be Concurrently Developed	Copy Provided by Proponent / Developer	Title
Structure Plan	No	N/A	N/A	N/A	-
Bushfire Management Plan	No	N/A	N/A	N/A	-
Implications for the BMP: No previous Bushfire Management Plans exist for the proposed development.					
Preliminary bushfire advice (may include a BAL contour map)	Yes	Yes	No	N/A	*240534 – Lot 848 Truscott Crescent Exmouth (BAB) v1.0, June 2024*
Implications for the BMP: Bushfire Advice Brief (BAB) prepared by Bushfire Prone Planning June 2024. This BMP supersedes the BAB in its entirety.					
Bushfire Emergency Plan	Yes	Yes	Yes	N/A	*240534 – Lot 848 Truscott Crescent Exmouth (BEP) v1.0, dated 24 November 2025*
Implications for the BMP: Developed concurrently by Bushfire Prone Planning.					
Bushfire Risk Report	No	N/A	No	N/A	-
Environmental Asset or Vegetation Survey	No	N/A	N/A	N/A	-
Refer to Section 2.1 for details.					
Landscape Management Plan	Yes	No	Yes	-	-
Refer to Section 2.3 for details.					
Revegetation Plan	No	No	No	N/A	-
Refer to Section 2.3 for details.					

2 ENVIRONMENTAL CONSIDERATIONS – NATIVE VEGETATION

EXPLANATORY INFORMATION

Some bushfire prone areas also have high biodiversity values. SPP3.7 objective 5.4 prioritises the retention of native vegetation for biodiversity conservation, environmental protection and landscape amenity.

Clearing or modification of native vegetation for the purpose of land use or development is assessed under **State Planning Policy 2: Environment (SPP 2), State Planning Policy 2.8: Bushland policy for the Perth Metropolitan Region (SPP 2.8)** and relevant environmental legislation. A key objective of these polices is to avoid development that may result in unacceptable environmental damage.

Any 'modification' or 'clearing' of vegetation to reduce bushfire risk is considered 'clearing' under the ***Environmental Protection Act 1986*** (EP Act) and requires a clearing permit under the ***Environmental Protection (Clearing of Native Vegetation) Regulations 2004*** (Clearing Regulations) – unless for an exempt purpose.

Clearing native vegetation is an offence, unless done under a clearing permit or the clearing is for an exempt purpose. Exemptions are contained in the EP Act or are prescribed in the Clearing Regulations (note: these exemptions do not apply in environmentally sensitive areas).

The ***Department of Water and Environmental Regulation*** (DWER) is responsible for issuing 'clearing' permits and the framework for the regulation of clearing. Approvals under other legislation, from other agencies, may also be required, dependent on the type of flora or fauna present.

Local Planning Policy or Local Biodiversity Strategy: Natural areas that are not protected by the above Act and Regulation (or any other National or State Acts) may be protected by a local planning policy or local biodiversity strategy. Permission from the local government will be required for any modification or removal of native vegetation in these Local Natural Areas (LNA's). Refer to the relevant local government for detail.

For further Information refer to Native vegetation clearing permits | Western Australian Government, the Planning for Bushfire Guidelines (as amended) and the Bushfire and Vegetation Factsheet - WAPC, Dec 2021.

2.1 Biodiversity or Conservation Values Identified

EXPLANATORY INFORMATION

The required information, relevant to bushfire planning and informing the production of this BMP, is sourced and presented as indicated below.

Note that where a 'desktop' assessment has been conducted, this should not be considered a replacement for a full Environmental Impact Assessment. It is a summary of potential biodiversity or conservation values at the subject site, inferred from information contained in public available datasets and/or reports, which are only current to the date of last modification.

The information provided in the BMP should be considered indicative where the subject site has not previously been subject to a site-specific environmental assessment by an appropriate professional.

The required information is sourced from the environmental/planning consultant report developed for the subject site and provided to the bushfire consultant (details below when applicable). The information it contains is not repeated in this BMP as it will accompany the planning submission. The implications for the subject planning proposal and this BMP are stated below when relevant.	No Report Available / Provided
The required information is sourced by the bushfire consultant as a 'desktop' assessment from publicly available data bases and/or a local government's local biodiversity strategy or local planning strategy. When applicable, this information is presented on the following pages of this BMP.	Yes - Fully

IDENTIFICATION OF RELEVANT BIODIVERSITY OR CONSERVATION VALUES							
Dataset	Relevant to Subject Planning Proposal	Influence on Bushfire Threat Levels and / or Application of Bushfire Protection Measures	Information Source(s) Applied				Further Action Required by Proponent
			WA Govt. Agency Dataset (ID)		Landowner or Developer Statements	Environmental Asset or Vegetation Survey Report	
Department of Biodiversity, Conservation and Attractions (DBCA) Datasets							
Conservation Category Wetlands and Buffer (geomorphic wetlands – relevant area)	Unlikely	No	☒	N/A	☐	☐	None
RAMSAR Sites (wetlands of international importance)	Unlikely	No	☒	DBCA-010	☐	☐	None
Threatened and Priority Flora	Unknown	Unknown	Restricted Scale of Data Available (security)	DBCA-036	☐	☐	Data not available - confirm with relevant agency
Threatened Ecological Communities	Unknown	Unknown		DBCA-038	☐	☐	Data not available - confirm with relevant agency
Legislated Lands and Waters (national/conservation parks, nature/crown reserves, state forest)	Unlikely	No	☒	DBCA-011	☐	☐	None
Department of Planning, Lands and Heritage (DPLH) Datasets							
Bush Forever Areas 2000	Unlikely	No	☒	DPLH-019, 022 and MRS Bush Forever	☐	☐	None
Department of Water and Environmental Resources (DWER) Datasets							
Clearing Regulations – Environmentally Sensitive Areas	Unlikely	No	☒	DWER-046	☐	☐	None
Swan Bioplan Regionally Significant Natural Areas 2010	Unlikely	No	☒	DWER-070	☐	☐	None

2.2 Response of the Planning Proposal to Protection of Native Vegetation

The protection of native vegetation is to be prioritised by avoiding areas that would require clearing or modification of native vegetation, specifically for the purpose of bushfire mitigation (BMP Manual, November 2024 DPLH).

SOLUTIONS APPLIED TO MINIMISE NATIVE VEGETATION REMOVAL / MODIFICATION	
Clearing and/or modification of native vegetation is proposed and necessary.	Yes
Proposed Clearing: The entire subject site is proposed to be cleared of native vegetation. Demonstration of why the planning proposal cannot be re-designed or re-located to avoid clearing and/or modifying native vegetation The Exmouth Townsite Structure Plan indicates that the proposed development is located on land that is designated for tourism development. Future landscaping is proposed as shown on Figure 1.1, for a which a Landscape Management Plan will need to be developed (refer to Section 2.3 below).	
Conservation Response	
The proposal reserves native vegetation for conservation, recreation or environmental protection purpose. These can include ecological linkage, local natural area, waterway, or foreshore area or wetland buffer.	No
No retention of native vegetation within the subject site is proposed.	
Siting / Design / Construction Responses	
The proposal has applied a reduction in the intensification of land use or development potential (e.g. reduced lot yield or smaller building footprints), to ensure the retention of greater areas of native vegetation while achieving the required vegetation separation distances to limit exposure to unacceptable levels of potential bushfire impact.	No
The proposal situates required non-vegetated elements (e.g. footpaths, paved areas, roads, parking, open drainage channels, and major services delivery installed in common corridors), between bushfire hazards and elements at risk – to effectively achieve required vegetation separation distances with less vegetation clearing and/or modification.	Yes
Assessment Supporting Details: Proposed habitable buildings have been sited based on the Preliminary Bushfire Advice provided by Bushfire Prone Planning in June 2024. Habitable buildings have been separated from offsite vegetation around the edge of the subject site, by placing softscape (lawns, decking, paving, pools, pergolas, BBQs), internal landscaping, parking bays, and driveways between the offsite vegetation and the habitable buildings.	
The proposal applies building envelopes, and these have located to minimise the requirement to clear and/or modify native vegetation.	N/A
The proposal utilises the clustering habitable buildings to reduce requirements for native vegetation clearing and/or modification.	N/A
The proposal aligns roads and pathways to work around trees and other vegetation, preserving their ecological values.	No

The proposal establishes requirements for the construction of building(s) to satisfy the requirements corresponding to higher BAL ratings to ensure a reduced vegetation separation distance requirement.	N/A

2.3 Vegetation Management Plans with Implications for the BMP

EXPLANATORY INFORMATION

This section identifies the area(s) of land (supporting vegetation), within or near the subject site (i.e. onsite or offsite) to which one or more of the following scenarios and their corresponding management actions applies.

If none of these scenarios is relevant to the subject planning proposal, this is stated.

1. Area(s) subject to a **LANDSCAPE PLAN THAT RESULTS IN RELEVANT ELEMENTS AT RISK BEING EXPOSED TO A LOW BUSHFIRE THREAT LEVEL** from existing or planned area(s) of vegetation and establishes the following management actions:

    (a) To apply landscaping design (including the modification and/or establishment of plants/shrubs/trees), that will enable the area(s) to be excluded from classification under AS 3959 BAL determination methodology;

    (b) To actively manage the area(s) to maintain the low bushfire threat level in perpetuity. Thereby ensuring the applicable bushfire protection measures, applied in accordance with the BMP, remain effective;

    (c) To achieve and maintain the low threat state through using a combination of mechanisms including:

        (i) Minimising vegetation fuel loads through design and ongoing management;

        (ii) Using low flammability and/or higher moisture content species;

        (iii) Incorporating non-vegetated elements; and

    (d) To identify the entity responsible for ensuring the landscape plan is complied with in perpetuity and when required, will contain written confirmation of their acceptance of the responsibility.

2. Area(s) subject to a **LANDSCAPE PLAN THAT RESULTS IN RELEVANT ELEMENTS AT RISK BEING EXPOSED TO A REDUCED BUSHFIRE THREAT LEVEL** from existing or planned area(s) of vegetation and establishes the following management actions:

    (a) To apply landscaping design involving the removal and/or modification of existing vegetation that will enable the area(s) to be classified as a lower threat class under AS 3959:2018 BAL determination methodology;

    (b) To actively manage the area(s) to maintain the reduced bushfire threat level in perpetuity. Thereby ensuring the applicable bushfire protection measures, applied in accordance with the BMP, remain effective;

    (c) To identify the entity responsible for ensuring the landscape plan is complied with in perpetuity and when required, will contain written confirmation of their acceptance of the responsibility.

3. Area(s) subject to a **REVEGETATION PLAN THAT MAY RESULT IN RELEVANT ELEMENTS AT RISK BEING EXPOSED TO AN ADDITIONAL BUSHFIRE HAZARD AND/OR AN INCREASED BUSHFIRE THREAT LEVEL** from an existing area(s) of vegetation and establishes the following information:

    (a) The location of the areas to be revegetated (as distinct from natural regeneration which is accounted for in the vegetation classification under AS 3959 BAL determination methodology); and

    (b) A description of the planned design regarding density and species of plants/shrubs/trees to inform the bushfire consultant's classification of the vegetation under AS 3959:2018 BAL determination methodology.

Relevance of the Stated Scenarios to the Subject Planning Proposal	Only Scenario 1 is relevant.

2.3.1 Landscape Management Plan – Low Bushfire Threat Level

<table>
<tr><th colspan="5">PLANNED LANDSCAPING – LOW BUSHFIRE THREAT LEVEL</th></tr>
<tr><td colspan="4">Assessment Details</td><td>Relevant</td></tr>
<tr><td colspan="4">The area of land that is to be subject to a Landscape Management Plan is within the subject site (onsite). This can include the balance lot of a staged subdivision.</td><td>Yes</td></tr>
<tr><td colspan="4">The area of land that is to be subject to a Landscape Management Plan is outside the subject site (offsite).</td><td>No</td></tr>
<tr><td colspan="4">The landscape management plan is a required bushfire protection measure established by the relevant acceptable solution of the bushfire protection criteria (Guidelines). [Development proposals for vulnerable land uses require a landscape management plan]</td><td>Yes</td></tr>
<tr><td colspan="4">The landscape plan is recommended as a bushfire protection measure by the bushfire consultant for the reasons identified in the ‘Additional Bushfire Protection Measures of this BMP.</td><td>N/A</td></tr>
<tr><td colspan="4">The area of land subject to the landscape management plan will be excluded from classification under AS 3959 (as amended) BAL determination methodology as it will achieve and maintain a low bushfire threat state in perpetuity.</td><td>Yes</td></tr>
<tr><td colspan="4">Responsibility for Ongoing Management of the Landscaped Area</td><td rowspan="8">Yes</td></tr>
<tr><td>Landscaped Area</td><td colspan="2">Persons / Agency</td><td>A Requirement Exists for Written Authority and/or Agreement to Remove/Modify/Manage Vegetation</td></tr>
<tr><td rowspan="2">Onsite</td><td>Landowner</td><td>Yes</td><td>No</td></tr>
<tr><td>Local Government</td><td>No</td><td>No</td></tr>
<tr><td rowspan="4">Offsite</td><td>Landowner</td><td rowspan="4">N/A</td><td rowspan="4">N/A</td></tr>
<tr><td>Local Government</td></tr>
<tr><td>DBCA</td></tr>
<tr><td>Main Roads WA</td></tr>
<tr><td colspan="4">An approved landscape management plan and/or written confirmation exists and is provided to demonstrate that agencies responsible for the ongoing management understand and support the vegetation classification assigned to the subject area and its resulting ongoing management implications on the agency.</td><td>Required – to be developed concurrently</td></tr>
<tr><td colspan="4">A written authority and management agreement exists and is provided to demonstrate an arrangement between adjoining landowners as to the responsibility for establishment and ongoing management of the defined area of land subject to a Landscape Management Plan.</td><td>N/A</td></tr>
<tr><td colspan="5">Identification of the Area(s) of Land Subject to a Landscape Management Plan</td></tr>
<tr><td colspan="5">The entire subject site, Lot 848, including proposed landscaping and ‘soft-scaping’ areas.</td></tr>
<tr><td colspan="5">Location of the Landscape Management Plan / Authority / Confirmation / Agreement for Reference</td></tr>
<tr><td colspan="5">The Bushfire Consultant understands that a Landscape Management Plan (LMP) has not currently been developed for this site. It may form a condition of approval of the development application. The Bushfire Consultant can provide the bushfire specific information for inclusion within the LMP.</td></tr>
<tr><td colspan="5">Implications for the BMP</td></tr>
<tr><td colspan="5">It is assumed that all future landscaping within the subject site will be established and maintained by the landowner in a low threat state in perpetuity, in accordance with AS 3959 cl.2.2.3.2 and Asset Protection Zone requirements outlined in the Guidelines (refer to Appendix B3 and B4).</td></tr>
</table>

3 THE BUSHFIRE HAZARD – POTENTIAL IMPACT - LANDSCAPE AND VEGETATION DATA

3.1 Bushfire Attack Level (BAL) Assessment Summary (Contour Map Format)

EXPLANATORY INFORMATION

Caution! Future building works require a 'determined' BAL rating for building permit applications. When a BAL contour map is being used for planning assessment purposes, (as opposed to a building assessment purpose), the required 'determined' BAL rating typically is not able to be derived from the map (there are only limited scenarios where this is possible).

The BAL ratings identified from the map will more likely be only 'indicative' of what can be achieved – with planning compliance for this factor being achieved when BAL-29 is indicated.

Otherwise, an additional assessment of the site data for building application purposes is required, and potentially approval will need to be obtained for native vegetation modification and/or removal from the relevant authority.

Refer to Appendix B2 for additional information and guidance regarding interpretation of the BAL Contour Map.

3.1.1 BAL Determination Methodology and Location of Data and Results

LOCATION OF DATA & RESULTS					
BAL Determination Methodology		Location of the Site Assessment Data			Location of the Results
AS 3959:2018	Applied to Assessment	Classified Vegetation and Topography Map(s)	Calculation Input Variables		Assessed Bushfire Attack Levels and/or Radiant Heat Levels
			Summary Data	Detailed Data with Explanatory and Supporting Information	
Method 1 (Simplified)	Yes	Figure 3.1a and Figure 3.1b	Table 3.2	Appendix A1	Table 3.1 Table 3.3 / BAL Contour Map
Method 2 (Detailed)	No	-	-	-	-

3.1.2 BAL Ratings Derived from the Contour Map

Table 3.1: Indicative and determined BAL(s) for proposed building works.

BUSHFIRE ATTACK LEVEL FOR EXISTING/PLANNED BUILDINGS/STRUCTURE [1]		
Building/Structure Description	**Determined BAL [2]** (Existing/Current Pre-Development)	**Indicative BAL [2]** (Post Development)
Accommodation Unit # 1, 3, 7, 10	BAL-FZ	BAL-29
Accommodation Unit # 2, 4, 5, 6, 8, 9, 21 to 25	BAL-FZ	BAL-19
Accommodation Unit # 11 to 20	BAL-FZ	BAL-12.5
[1] The assessment data used to derive the BAL ratings is sourced from Table 3.1 and Figure 3.2 'BAL Contour Map'. [2] Refer to the start of Section 3 for an explanation of indicative versus determined BAL ratings.		

3.1.3 Site Assessment Data Applied to Construction of the BAL Contour Map(s)

RELEVANT CLASSIFIED VEGETATION	
Identification of Classified Vegetation that is Relevant to the Production of the BAL Contour Map(s)	Relevant Vegetation Map
The relevant vegetation for the pre-development BAL contour map will be all areas of classified vegetation that exist at the time of the site assessment – both within the subject site (onsite) and external to the subject site (offsite).	Figure 3.1a
The relevant vegetation for the post-development BAL contour map will be any area of classified vegetation - both within the subject site (onsite) and external to the subject site (offsite) - that will remain at the intended end state of the subject development once earthworks, any clearing and/or landscaping and re-vegetation have been completed.	Figure 3.1b
Supporting Assessment Details: None Required.	

Table 3.2: Calculation inputs applied to deriving the vegetation separation distances corresponding to different levels of potential radiant heat transfer.

DATA APPLIED TO CALCULATE THE SITE SPECIFIC VEGETATION SEPARATION DISTANCES CORRESPONDING TO POTENTIAL RADIANT HEAT TRANSFER LEVELS [1]												
Applied BAL Determination Method		METHOD 1 - SIMPLIFIED PROCEDURE (AS 3959:2018 CLAUSE 2.2)										
The Calculation Input Variables - Corresponding to the Applied BAL Determination Method [2]												
Methods 1 and 2		Method 1			Method 2							
Vegetation Classification		FDI	Effective Slope		Site Slope	FFDI or GFDI	Flame Temp.	Elevation of Receiver	Flame Width	Fireline Intensity	Flame Length	Modified View Factor
			Applied Range	Measured								
Area	Class		degree range	degrees	degrees		K	metres	metres	kW/m	metres	% Reduction
1	(D) Scrub	80	Upslope or flat 0	flat 0	flat 0	80	1200	Default	Default	Default	Default	Default
2	(D) Scrub	80	Upslope or flat 0	flat 0	N/A							
3	(C) Shrubland	80	Upslope or flat 0	flat 0								
4	(G) Grassland	110	Upslope or flat 0	flat 0	flat 0	110	1200	Default	Default	Default	Default	Default
5	Excluded cl 2.2.3.2(e)	N/A	N/A	-	N/A							

Note 1: The values used to indicate levels of potential radiant heat transfer (from fire in bushfire prone vegetation to exposed elements at risk), will be stated in subsequent tables as either as a bushfire attack level (BAL) and/or as kilowatts per square metre (kW/m2), as relevant to the application of the value and the type and use of the element at risk.

Note 2: All data and information supporting the determination of the classifications and values stated in this table is presented in Appendix A. Where the values are stated as 'default' these are either the values stated in AS 3959:2018, Table B1 or the values calculated as intermediate or final outputs through application of the equations of the AS 3959:2018 BAL determination methodology. They are not values derived by the assessor.

Table 3.3: Vegetation separation distances corresponding to the stated levels of potential radiant heat transfer.

THE CALCULATED (SITE SPECIFIC) VEGETATION SEPARATION DISTANCES CORRESPONDING TO THE STATED LEVEL OF POTENTIAL RADIANT HEAT TRANSFER (METRES) [1]									
Vegetation Classification		Maximum Radiant Heat Transfer (Flux)							
		>40 kW/m²	40 kW/m²	29 kW/m²	19 kW/m²	12.5 kW/m²	N/A [2]	10 kW/m²	2 kW/m²
		Bushfire Attack Levels							
Area	Class	BAL-FZ	BAL-40	BAL-29	BAL-19	BAL12.5	BAL-LOW		
1	(D) Scrub	<10	10-<13	13-<19	19-<27	27-<100	>100	44.1	-
2	(D) Scrub	<10	10-<13	13-<19	19-<27	27-<100	>100	-	-
3	(C) Shrubland	<7	7-<9	9-<13	13-<19	19-<100	>100	-	-
4	(G) Grassland	<6	6-<8	8-<12	12-<17	17-<50	>50	29.5	-
5	Excluded cl 2.2.3.2(e)	-	-	-	-	-	-	-	-

Note 1: The calculated results are illustrated in Figure 3.2b as a BAL Contour Map. All applied calculation input variables are presented in Table 3.2. A copy of the radiant heat calculator output for each area of classified vegetation is presented in Appendix A3.

Note 2: The BAL-LOW rating does not represent a maximum level of radiant heat transfer. The rating is applied when the separation distance is at least 100m from all classified vegetation except Grassland, for which 50m applies.

Figure 3.1a

Classified Vegetation & Topography (Existing)

Lot 848 on Plan P175175, Area: 3.5492 ha
130 Truscott Cr
EXMOUTH, 6707
SHIRE OF EXMOUTH

AREA 2
Class (D) Scrub
Effective Slope 0°

AREA 2
Class (D) Scrub
Effective Slope 0°

AREA 4
Class (G) Grassland
Effective Slope 0°

AREA 5
Excluded

AREA 1
Class (D) Scrub
Effective Slope 0°

AREA 2
Class (D) Scrub
Effective Slope 0°

AREA 5
Excluded

AREA 3
Class (C) Shrubland
Effective Slope 0°

AREA 5
Excluded

AREA 2
Class (D) Scrub
Effective Slope 0°

AREA 4
Class (G) Grassland
Effective Slope 0°

AREA 2
Class (D) Scrub
Effective Slope 0°

TRUSCOTT CR

------ LEGEND ------

- Subject Site
- Cadastral
- Photo and Direction
- 150m Assessment Area
- 100m Assessment Area

Proposed Development

- Accommodation
- Driveway
- Landscaping
- Softscape incl lawn, bench, decking, pool, pergola
- STAGE 2 Development
- STAGE 2 Driveway
- STAGE 2 Landscaping
- Firefighting Water Supply Tank
- Potable Water Tank
- Pump
- Recommended Temporary Turnaround

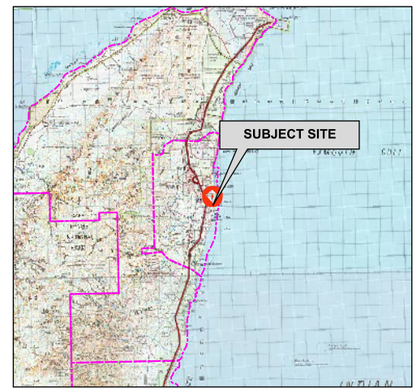
Classified Vegetation

- Class C - Shrubland
- Class D - Scrub
- Class G - Grassland
- Exclusion 2.2.3.2

0 20 40 60 80 100

Metres

------ LOCALITY ------



AERIAL IMAGERY: Landgate/SLIP

Coordinate System: GDA 1994 MGA Zone 50
Projection: Universal Transverse Merctaor Units: Metre
Map by: Elissa Edward 07-10-2025
SCALE (A3): 1 : 2000

BUSHFIRE PRONE PLANNING

Figure 3.1b

Classified Vegetation & Topography (Post Development)

Lot 848 on Plan P175175, Area: 3.5492 ha
130 Truscott Cr
EXMOUTH, 6707
SHIRE OF EXMOUTH

AREA 2
Class (D) Scrub
Effective Slope 0°

AREA 2
Class (D) Scrub
Effective Slope 0°

AREA 4
Class (G) Grassland
Effective Slope 0°

AREA 5
Excluded

AREA 2
Class (D) Scrub
Effective Slope 0°

AREA 5
Excluded

AREA 5
Excluded

AREA 3
Class (C) Shrubland
Effective Slope 0°

AREA 2
Class (D) Scrub
Effective Slope 0°

AREA 2
Class (D) Scrub
Effective Slope 0°

AREA 4
Class (G) Grassland
Effective Slope 0°

TRUSCOTT CR

------ LEGEND ------

- Subject Site
- Cadastral
- 150m Assessment Area
- 100m Assessment Area

Buildings

- Accommodation
- Driveway
- Landscaping
- Softscape incl lawn, bench, decking, pool, pergola
- STAGE 2 Development
- STAGE 2 Driveway
- STAGE 2 Landscaping
- Firefighting Water Supply Tank
- Potable Water Tank
- Pump
- Temporary Turnaround

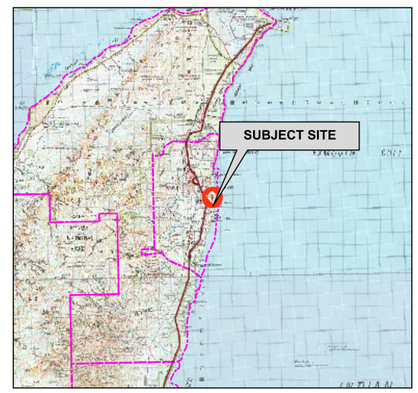
Classified Vegetation

- Class C - Shrubland
- Class D - Scrub
- Class G - Grassland
- Exclusion 2.2.3.2

0 20 40 60 80 100

Metres

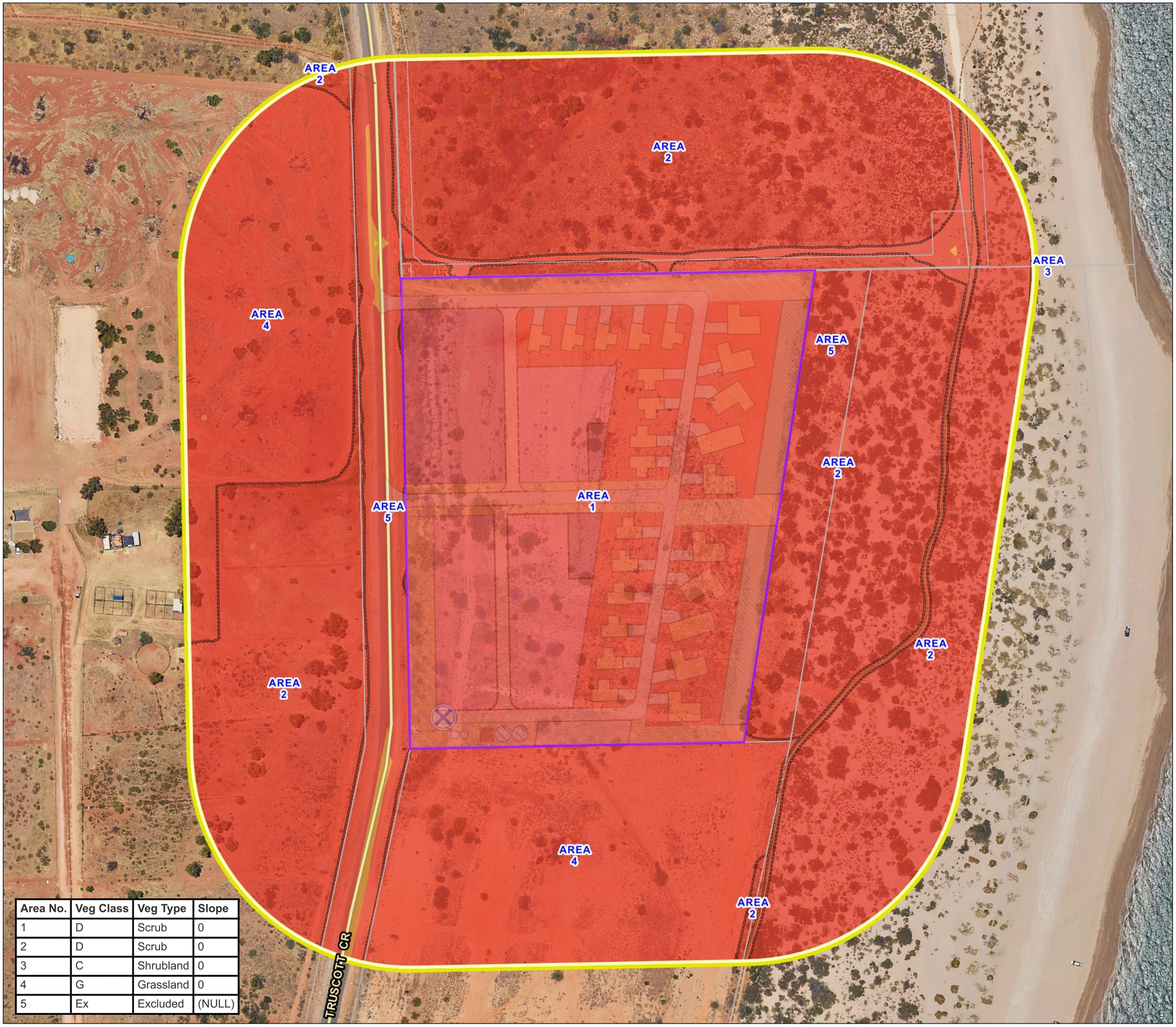
------ LOCALITY ------



AERIAL IMAGERY: Landgate/SLIP

Coordinate System: GDA 1994 MGA Zone 50
Projection: Universal Transverse Merctaor Units: Metre
Map by: Elissa Edward 07-10-2025
SCALE (A3): 1 : 2000

BUSHFIRE PRONE PLANNING



Area No.	Veg Class	Veg Type	Slope
1	D	Scrub	0
2	D	Scrub	0
3	C	Shrubland	0
4	G	Grassland	0
5	Ex	Excluded	(NULL)

Figure 3.2a

BAL Contour Map (Existing)

Lot 848 on Plan P175175, Area: 3.5492 ha
130 Truscott Cr
EXMOUTH, 6707
SHIRE OF EXMOUTH

------ LEGEND ------

- Subject Site
- Cadastral
- 100m Assessment Area

Proposed Development

- Accommodation
- Driveway
- Landscaping
- Softscape incl lawn, bench, decking, pool, pergola
- STAGE 2 Development
- STAGE 2 Driveway
- STAGE 2 Landscaping
- Firefighting Water Supply Tank
- Potable Water Tank
- Pump
- Recommended Temporary Turnaround

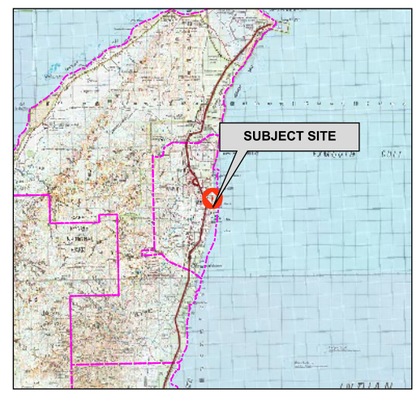
Bushfire Attack Levels

- BAL-FZ
- BAL-40
- BAL-29
- BAL-19
- BAL-12.5
- BAL-LOW

0 20 40 60 80 100

Metres

------ LOCALITY ------



AERIAL IMAGERY: Landgate/SLIP

Coordinate System: GDA 1994 MGA Zone 50
Projection: Universal Transverse Merctaor Units: Metre
Map by: Elissa Edward 07-10-2025
SCALE (A3): 1 : 1600

BUSHFIRE PRONE PLANNING

240534_FIG-3-2a_BAL_Lot-848-Truscott-Cres-Exmouth.qgz

Figure 3.2b

BAL Contour Map (Post Development)

Lot 848 on Plan P175175, Area: 3.5492 ha
130 Truscott Cr
EXMOUTH, 6707
SHIRE OF EXMOUTH

AREA 2
AREA 2
AREA 3
AREA 4
AREA 5
AREA 2
AREA 5
AREA 2
AREA 2
AREA 4
AREA 2
Unit 1
Unit 25
Unit 24
Unit 23
Unit 22
Unit 21
Unit 2
Unit 20
Unit 3
Unit 19
Unit 18
Unit 4
Unit 17
Unit 5
Unit 16
Unit 6
Unit 15
Unit 7
Unit 14
Unit 13
Unit 8
Unit 12
Unit 9
Unit 11
Unit 10
TRUSCOTT CR

Area No.	Veg Class	Veg Type	Slope
2	D	Scrub	0
3	C	Shrubland	0
4	G	Grassland	0
5	Ex	Excluded	0

------ LEGEND ------

- Subject Site
- Cadastral
- 100m Assessment Area
- ≤10 kW/m2 Radiant Heat Flux

Buildings

- Accommodation
- Driveway
- Landscaping
- Softscape incl lawn, bench, decking, pool, pergola
- STAGE 2 Development
- STAGE 2 Driveway
- STAGE 2 Landscaping
- Firefighting Water Supply Tank
- Potable Water Tank
- Pump
- Temporary Turnaround

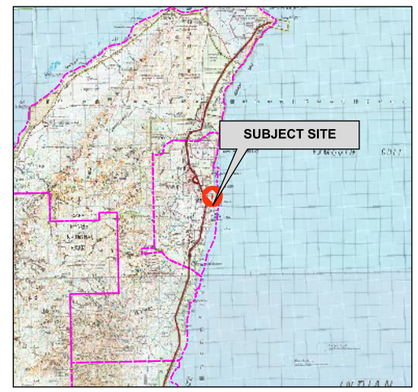
Bushfire Attack Levels

- BAL-FZ
- BAL-40
- BAL-29
- BAL-19
- BAL-12.5
- BAL-LOW

0 20 40 60 80 100

Metres

------ LOCALITY ------



AERIAL IMAGERY: Landgate/SLIP

Coordinate System: GDA 1994 MGA Zone 50
Projection: Universal Transverse Merctaor Units: Metre
Map by: Elissa Edward 07-10-2025
SCALE (A3): 1 : 1600

BUSHFIRE PRONE PLANNING

4 IDENTIFICATION OF BUSHFIRE HAZARD ISSUES

EXPLANATORY INFORMATION

Section Content Guidance (DPLH/WAPC)

'Bushfire Hazard Issues' is a section of the Bushfire Management Plan (BMP) in accordance with guidance presented in the BMP Manual (DPLH/WAPC, November 2024).

The Manual indicates the intent of applying its guidance with the following statement:

> *"The standardisation of BMP's improves efficiencies in decision making at local and state government level by promoting the clear and succinct presentation of information required under SPP 3.7 and the Guidelines."*

Bushfire Prone Planning's Approach

In complying more broadly with the above efficiency intentions, Bushfire Prone Planning (BPP) will also seek to:

- Improve the efficiency of BMP development by its consultants; and
- Ensure the readability and understanding of the BMP by persons who will need to read the document.

Key to achieving these efficiency and comprehension outcomes is the design and quality of the explanatory and assessment content of the BMP. This includes the effective use of Section 4 by not repeating content and assessment summaries that are presented in other sections of the BMP.

Typically, bushfire hazard issues will be appropriately addressed in Sections 2 and 3 of the BMP which identify:

- The required environmental considerations; and
- The assessment of potential levels of bushfire impact and their justification.

Limitation on Section 4 Content

As a consequence of the above considerations, content in this section will be limited to raising decision maker awareness regarding additional site specific matters that otherwise may not be a component of the standard BMP bushfire hazard assessment.

Additional information is provided on an 'as necessary' basis for the following scenarios:

1. When local governments have provided jurisdiction specific bushfire hazard assessment and/or management guidance that needs to be addressed. How these have been considered by the bushfire consultant in conducting their bushfire hazard assessments will be discussed.
2. When, due to difficult site conditions, additional explanation and justification of the bushfire hazard assessment process undertaken by the bushfire consultant would assist decision making.
3. Matters are identified when they are either not considered or are only partially considered, under the bushfire hazard assessments conducted in accordance with SPP 3.7/Guidelines. These include matters that would potentially reflect poorly on the bushfire consultant's professional integrity if ignored.

For the subject planning proposal, has the bushfire practitioner determined (in accordance with the explanatory information above), that presenting additional information in this section is necessary?	No
Additional bushfire hazard information is provided below for the relevant scenarios.	N/A

5 ASSESSMENT AGAINST THE BUSHFIRE PROTECTION CRITERIA (BPC)

EXPLANATORY INFORMATION

State Planning Policy 3.7 Bushfire (SPP 3.7) establishes policy outcomes (cl. 6) that "specify the role of planning and development in contributing to the overall objectives" of the policy.

The policy outcomes are incorporated into the four elements of the bushfire protection criteria established in the Planning for Bushfire Guidelines (Guidelines).

CONSEQUENTLY, TO SATISFY THE OBJECTIVES AND POLICY OUTCOMES OF SPP 3.7, A PLANNING PROPOSAL IN A DESIGNATED BUSHFIRE PRONE AREA IS REQUIRED TO DEMONSTRATE THAT COMPLIANCE WITH THE BUSHFIRE PROTECTION CRITERIA CAN BE ACHIEVED.

The Guidelines in Section 2.2.1 establish two pathways to demonstrate compliance:

1. The deemed to comply pathway - in which compliance is able to be demonstrated with all relevant acceptable solutions associated with each Element, for a specific planning stage or use; or
2. An alternative pathway when all relevant acceptable solutions cannot be fully achieved, which utilises either:
   (a) The outcomes-based approach (established in SPP 3.7 cl. 6) alone; or
   (b) A combination of the outcomes-based approach and the acceptable solutions.

For the subject planning proposal:

- The assessment applying the deemed to comply pathway assessment is presented in Section 5.3.
- When an assessment applying the alternative pathway is necessary, the required additional information is presented in Section 5.4.

5.1 Local Government Variations to Apply

EXPLANATORY INFORMATION

1. Local governments may add to or modify the acceptable solutions contained within the Guidelines to recognise special local or regional circumstances that reinforce the SPP 3.7 objectives and outcomes. This is achieved through regional or local variations that form part of a local planning strategy and/or local planning scheme via a scheme amendment or special control area.

   This could include acceptable solutions that address topography, vegetation or climate to the satisfaction of the Western Australian Planning Commission (WAPC) that the modifications comply with the corresponding SPP 3.7 objectives and outcomes. (Planning for Bushfire Guidelines, s. 3.4, 2024).
2. Under the relevant state legislation (LPS Regulations 2015), SPP 3.7 does not apply to hosted or unhosted short-term rental accommodation. However, the local government under its Local Planning framework (i.e. Strategy / Scheme and Policy as applicable), may require that certain bushfire protection measures or variations to the measures (the bushfire protection criteria), established by SPP 3.7 and the Guidelines, are to be applied.

Endorsed regional or local variations to the acceptable solutions apply to the assessments against the Bushfire Protection Criteria for the planning proposal?	None known or identified
The proposed land use for hosted or unhosted short-term rental accommodation, and the local government requires certain bushfire protection measures, contained within the BPC, to be applied, that under the LPS Regulations 2015, would otherwise not be required?	N/A

5.2 Assessment Summary

PATHWAY APPLIED TO DEMONSTRATE ACHIEVING POLICY OUTCOMES OF SPP 3.7 BUSHFIRE [1] INCLUDES SUMMARY OF THE PROPOSAL'S ASSESSMENT AGAINST THE BPC ACCEPTABLE SOLUTIONS			
DEVELOPMENT – VULNERABLE TOURISM LAND USES AND DAY USES			
The Acceptable Solutions Corresponding to the Policy Outcomes of SPP 3.7 Bushfire as Incorporated into the Elements of the Bushfire Protection Criteria (Guidelines)	Acceptable Solutions Pathway	Alternative Pathway [2]	
	Compliance Status	Outcomes-Based Approach Only	Combination of Pathways
ELEMENT 2: SITING AND DESIGN:	Fully Compliant	-	-
A2.1a Siting and design	Fully Compliant		
A2.1b Asset Protection Zone (APZ)	Fully Compliant		
A2.2a Siting in an area with a radiant heat impact exceeding 29 kW/m² (BAL-40 or BAL-FZ)	Not Applicable		
A2.2b Asset Protection Zone (APZ)	Not Applicable		
A2.3 Clearing of native vegetation	Fully Compliant		
A2.4 Landscape management plan	Fully Compliant		
A2.5 Onsite shelter (safer building) - schools	Not Applicable		
ELEMENT 3: VEHICULAR ACCESS:	Fully Compliant	-	-
A3.1 Public roads	Fully Compliant		
A3.2a Access routes	Fully Compliant		
A3.2b Access routes for a day use with no overnight accommodation	Not Applicable		
A3.3a No-through roads	Not Applicable		
A3.3b No-through roads technical requirements	Not Applicable		
A3.4 Emergency access way	Not Applicable		
A3.5 Onsite shelter	Not Applicable		
A3.6 Fire service access route	Fully Compliant		
A3.7 Internal vehicular access & private driveways	Fully Compliant		
A3.8 Signage	Fully Compliant		
ELEMENT 4: WATER SUPPLY:	Fully Compliant	-	-
A4.1 Water supply	Fully Compliant		
Note 1: Achieving the objectives and policy outcomes of SPP 3.7 Bushfire can be demonstrated through either the acceptable solutions pathway, the outcomes- based approach only, or a combination of both pathways (refer to Guidelines s 2.2.1). Note 2: When applied, the required additional assessment details are provided in Section 5.4 of this BMP. The content and comprehensiveness of the assessment will vary dependant on the specific conditions of the broader landscape, the development site, its use and the degree to which any relevant acceptable solutions cannot be complied with.			

5.3 BPC 8.2: Development – Vulnerable Tourism Land Uses and Day Uses - Acceptable Solutions Assessment

5.3.1 Element 2: Siting and Design

ELEMENT 2: SITING AND DESIGN (DEVELOPMENT – VULNERABLE TOURISM LAND USES LAND USES AND DAY USES)

EXPLANATORY INFORMATION

Refer to Appendices B1 and B3 of this BMP for additional information and to *the bushfire protection measure implementation checklist in Section 6 for the APZ dimensions applicable to this planning proposal.*

The Planning Assessment and the APZ

This assessment is a 'planning assessment' being conducted for planning approval purposes only. All details of acceptable solution requirements are established in the Planning for Bushfire Guidelines (Guidelines) – WA Department of Planning, Lands and Heritage (DPLH, as amended).

> *Note the assessment is not conducted for building approval purposes. The derivation of 'determined' BAL ratings for building permit applications is not the intended outcome of this planning assessment. However, in limited situations, the presented indicative BAL rating might also be considered as 'determined' as an incidental outcome.*

To comply with the relevant acceptable solutions contained in the 'Bushfire Planning Guidelines', the subject planning proposal must demonstrate that the required minimum sized asset protection zone (APZ) - subject to location constraints and allowances established by the Guidelines - can be installed surrounding a habitable or specified building.

Approved BMP's and the APZ Dimensions to be Implemented

An approved BMP, unless stated otherwise, is only approving the installation of an APZ comprised of:

- The minimum dimensions that ensure the radiant heat impact of a bushfire (on building works) does not exceed 29 kW/m² (BAL-29); or
- For specific 'vulnerable' land uses, the minimum dimensions that ensures the radiant heat impact of a bushfire (on building works) does not exceed the level of radiant heat exposure stated in the applicable acceptable solution; or
- The specific minimum dimensions that may be applied through the application of an outcomes-based approach.

Consequently, the 'minimum' dimensions of the approved APZ are also the 'maximum' approved dimensions when installation of the APZ will require the modification/removal of native vegetation. Installing a larger dimensioned APZ, to lower the determined BAL rating of specific building works, will need additional approval from the relevant planning authority.

The following bushfire planning policy and guidance potentially limit installed APZ dimensions:

- SPP 3.7 Bushfire, Policy Objectives, cl. 5.5 states – "Prioritise the retention of native vegetation for biodiversity conservation, environmental protection and landscape amenity.
- SPP 3.7 Bushfire, Policy Outcomes, cl. 6.2 - establishes that clearing of native vegetation is to be avoided or minimised in managing or mitigating bushfire risk.
- The Guidelines, Appendix B2, B.2.1 states - "clearing or modification of native vegetation to reduce the radiant heat impact below 29 kW/m² is generally not supported."

	The Outcome of State Planning Policy 3.7 Bushfire (and the BPC) to be Achieved
O2	**Ensure siting and design solutions:** • **Manage or mitigate the bushfire risk to people, property and infrastructure; and** • **Avoid, or where unavoidable, minimises the clearing of native vegetation. (SPP 3.7, 6.2)**
E2	Acceptable Solutions Pathway - Compliance Statement
	The planning proposal is fully compliant with all applicable acceptable solutions and therefore achieves the required outcomes of this element.
	Alternative Pathway Applied to Demonstrate Ability to Achieve SPP 3.7 Outcomes
	N/A

ACCEPTABLE SOLUTIONS - ASSESSMENT STATEMENTS

Check Box Legend: ☑ Relevant & met ☒ Relevant & not met ⃠ Not relevant

A2.1a Siting and design	Applicable: Yes	Compliant: Yes

☑ ☐ ☐ Every habitable building achieves a radiant heat impact not exceeding 29 kW/m² (BAL-29).

☐ ☐ ⃠ A2.1a is not applicable to the subject planning proposal as it cannot be complied with and an alternative acceptable solution A2.2a (dealing with the same protection measure), is provided and establishes a higher level of radiant heat impact that will be considered for planning approval, if it can be satisfactorily demonstrated that the allowable constraints apply to the subject development site.

Assessment Supporting Details: All proposed accommodation units will be subject to BAL-29 or below once site works and vegetation clearing have been undertaken. Refer to *Figure 3.2b BAL Contour Map (Post Development)*. Development is expected to occur in two stages, refer to Figure 1.1. The landowner must ensure that a minimum BAL-29 APZ is installed surrounding the proposed habitable structures for all stages of development, noting that a Determined BAL must be obtained prior to construction. If the vegetation on the subject site is not all cleared at once, this may impact the future Determined BAL ratings for each habitable building, which may differ from those indicated in this report.

A2.1b Asset Protection Zone (APZ)	Applicable: Yes	Compliant: Yes

☐ ☐ ⃠ A2.1b is not applicable to the subject planning proposal because it is a requirement associated with the compliant application of A2.1a. Given A2.1a is not applicable to the subject planning proposal, A2.1b is also not applicable.

Where a habitable building(s) cannot be wholly within an area with a radiant heat impact not exceeding 29 kW/m² (BAL-29) in its pre-development state, an indicative APZ is to be provided and meet the following requirements for width, location and management:

☑ ☐ ☐ **APZ Width:** The APZ, when measured from the development site (or any external wall or supporting post or column), is of sufficient size to ensure the radiant heat impact of a bushfire does not exceed 29 kW/m² (BAL-29) to any part of the building, in all circumstances.

☑ ☐ ☐ **APZ Location – Option 1:** The indicative 'Planning BAL-29' APZ can be contained solely within the boundaries of the lot.

☐ ☐ ⊘	**APZ Location – Option 2:** The indicative 'Planning BAL-29' APZ cannot be contained solely within the boundaries of the lot. However, the relevant vegetation on the adjoining land / lot(s) is, and will continue to be, on an ongoing basis in perpetuity, low threat as per: • Clause 2.2.3.2 of AS 3959 (including non-vegetated land such as a sealed or unsealed road, or a water body); or • The requirements of the Guidelines Appendix B.2, Table 9 – APZ technical requirements; or • The alternative standard in the local planning scheme (when it exists).
☑ ☐ ☐	**APZ Management:** The APZ is (or can and will be) managed in accordance with the requirements established in the Guidelines, Appendix B.2 or the alternative standard in the gazetted local planning scheme (when it exists).
Assessment Supporting Details: The entire subject site is proposed to be cleared of all existing vegetation, and landscaping established post-development. Where the development occurs in stages, the landowner must ensure that all vegetation that remains prior to the completion of development, is either removed and/or maintained in a low threat state until development is completed. This is to ensure that the BAL ratings presented in *Figure 3.2b BAL Contour Map (Post Development)* remain correct.	

A2.2a Siting in an area with a radiant heat impact exceeding 29 kW/m² (BAL-40 or BAL-FZ)	Applicable:	No	Compliant:	-

☑ ☐ ☐	A2.2a is not applicable to the subject planning proposal because A2.1a can be complied with.
☐ ☐ ⊘	The habitable building(s) or structure(s) is sited with a radiant heat impact exceeding 29 kW/m² (i.e. BAL-40 or BAL-FZ) and is unable to establish an APZ in accordance with A2.1b. However, meeting **all** of the following established requirements allows consideration for approval:
☐ ☐ ⊘	• There are no bushfire construction standards required under the BCA; and
☐ ☐ ⊘	• There are demonstrated site characteristics and/or environmental values that prevent the achievement of a radiant heat impact not exceeding 29 kW/m2 (BAL-29); and
☐ ☐ ⊘	• It is acknowledged within the bushfire management plan that it is understood that in the event of a bushfire it is possible the building or structure will be damaged or destroyed; and
☐ ☐ ⊘	• The vegetation immediately surrounding the building(s) or structure(s) can and will be managed as defendable space in accordance with Appendix B.2, Table 9 – APZ technical requirements.
Assessment Supporting Details: None required.	

A2.2b Asset Protection Zone (APZ)	Applicable:	No	Compliant:	-

☑ ☐ ☐	A2.2b is not relevant to the subject planning proposal because A2.2a is not applicable.
☐ ☐ ⊘	The provision of an APZ with width and location requirements in accordance with acceptable solution A2.1b (to result in BAL-29 exposure), cannot be achieved for the subject planning proposal. Instead, the vegetation immediately surrounding the habitable building, to the extent possible within the lot, is to be managed as defendable space in accordance with Appendix B.2, Table 9 – APZ technical requirements.
Assessment Supporting Details: None required.	

A2.3 Clearing of native vegetation	Applicable:	Yes	Compliant:	Yes

☑ ☐ ☐	The development avoids, or where unavoidable, minimises the clearing of native vegetation.

Assessment Supporting Details: Clearing of native vegetation on the subject site is unavoidable. The Bushfire Consultant understands that there is no planned retention of shrubs or trees. However, there is planned future landscaping on the subject site.

The Bushfire Consultant recommends that consideration be given by the proponent to selectively retaining mature native trees and shrubs where possible, provided that they, and all future onsite vegetation, be maintained in a low threat state in perpetuity, in accordance with AS 3959 cl.2.2.3.2 ("exclusions"), and APZ standards established in the Guidelines.

A2.4 Landscape management plan	Applicable:	Yes	Compliant:	Yes

☑ ☐ ☐	A landscape management plan has been prepared to identify ongoing onsite vegetation management.

Assessment Supporting Details: Ideally, a Landscape Management Plan (LMP) should be created concurrently with this Bushfire Management Plan however, in this instance, the intention is to manage the entire site to a low threat level state in perpetuity. In relation to future landscaping treatment, the Bushfire Consultant can provide the bushfire specific information for inclusion within the LMP.

A2.5 Onsite shelter (if required)	Applicable:	No	Compliant:	-

☐ ☐ ⊘	An onsite shelter is proposed. It will comply with A3.5 Onsite shelter and can and will meet all the relevant following established requirements.
☐ ☐ ⊘	An onsite shelter building(s) is proposed for which there is sufficient separation distance from the bushfire prone vegetation to avoid exposure to a radiant heat flux exceeding 10 kW/m^2 (applying an assumed flame temperature of 1200 K).
☐ ☐ ⊘	The building(s) identified as suitable for onsite shelter is (or can and will be) designed in accordance with Building Code of Australia and the ABCB Design and Construction of Community Bushfire Refuges Handbook.
☐ ☐ ⊘	An open space area is proposed to function as an onsite shelter. There is sufficient separation distance between the open space area and the bushfire prone vegetation to avoid exposure to a radiant heat flux exceeding 2 kW/m^2 (applying an assumed flame temperature of 1200 K).
☐ ☐ ⊘	Pedestrian paths to any onsite shelter(s) are (or can and will be) provided and clearly signposted.

Assessment Supporting Details: None required.

5.3.2 Element 3: Vehicular Access

ELEMENT 3: VEHICULAR ACCESS (DEVELOPMENT – VULNERABLE TOURISM LAND USES AND DAY USES)					
All details of acceptable solution requirements are established in the Planning for Bushfire Guidelines (Guidelines) – WA Department of Planning, Lands and Heritage (DPLH, as amended). When relevant, the 'Bushfire Management Plan Guidance for the Dampier Peninsula' (DPLH, 2021 Rev B), is also referenced. The technical construction requirements for access types and components are established in the Guidelines Appendix B.3, Table 10 (certain information is copied and presented in Appendix C of this BMP). The local government will advise the proponent where different requirements are to apply and when any additional specifications such as those for signage and gates are to apply. These are included as an appendix if requested by the local government. ***Note:*** *The following understanding of what constitutes a 'road', and the stated definitions can be important considerations for assessments against an acceptable solution for Element 3.* • *Guidelines Appendix B3: Vehicular Access, identifies a 'road' as being either a public road (that includes a no-through road) or a perimeter road. All other access types (i.e. emergency access ways, fire service access routes, battle-axes and private driveways) are considered a different class of access i.e. they are not 'roads'.* • *SPP 3.7 defines 'no-through road' as "a cul-de-sac or dead end road".* • *SPP 3.7 defines 'two-way access' as "vehicular access from a site in two different directions to at least two different suitable destinations". This allows for required access to potentially be provided by an emergency access way.*				
O3	**The Outcome of State Planning Policy 3.7 Bushfire (and the BPC) to be Achieved**				
	Ensure the design and capacity of vehicular access and egress provide: • **For efficient and effective evacuation to a suitable destination(s); and/or** • **As a contingency measure for vulnerable land uses, an on-site shelter, where demonstrated appropriate, as a last resort option. (SPP 3.7, 6.3)**				
E3	Acceptable Solutions Pathway - Compliance Statement				
	The planning proposal is fully compliant with all applicable acceptable solutions and therefore achieves the required outcomes of this element.				
	Alternative Pathway Applied to Demonstrate Ability to Achieve SPP 3.7 Outcomes				
	N/A				
ACCEPTABLE SOLUTIONS - ASSESSMENT STATEMENTS					
Check Box Legend:	☑ Relevant & met	☒ Relevant & not met	⃠ Not relevant		
A3.1 Public roads		Applicable:	Yes	Compliant:	Yes
☑ ☐ ☐	Public roads meet (or can and will meet) the technical requirements for minimum vertical clearance (4.5 metres) and minimum weight capacity (15 tonnes - includes bridges, culverts).				
☑ ☐ ☐	Public roads meet (or can and will meet) the technical requirement recommended in the Guidelines in Appendix B3, B3.1 for a minimum horizontal clearance of 6 metres.				

☑ ☐ ☐ Public road technical requirements for minimum horizontal clearance, gradients and curves should be in accordance with the class of road as specified in the Public Works Engineering Australasia (IPWEA) subdivision guidelines, Liveable Neighbourhoods, Austroads Standards, any applicable or relevant Main Roads standards, supplements, policies and any applicable or relevant local government standards or policies.

The assessment conducted for the bushfire management plan indicates that it is likely that the proposed development can and will comply with the requirements.

However, the applicable class of road, the associated technical requirements and subsequent proposal compliance, will need to be confirmed with the relevant local government and/or Main Roads WA.

Assessment Supporting Details: Public road access to the subject site is via an existing public road, Truscott Crescent.

A3.2a Access routes	Applicable:	Yes	Compliant:	Yes

☐ ☐ ⊘ A3.2a is not applicable to the subject planning proposal because will not provide overnight accommodation and consequently is considered a day use. Therefore A3.2b is the applicable acceptable solution.

☐ ☐ ⊘ The subject site is in Area 1 (Urban) (Map of BPA). Public road access, with all-weather surfaces, is to be provided to at least one suitable destination.

☑ ☐ ☐ The subject site is in Area 2 (Map of BPA). Public road access, with all-weather surfaces, is provided in two different directions, to at least two different suitable destinations.

Assessment Supporting Details: Truscott Crescent provides access to the north, towards Exmouth town (Suitable Destination 1), and access south towards Exmouth Marina (Suitable Destination 2).

A3.2b Access routes for a day use with no overnight accommodation	Applicable:	No	Compliant:	-

☑ ☐ ☐ A3.2b is not applicable to the subject planning proposal as it intends to provide overnight accommodation and consequently not considered a day use. Therefore A3.2a is the applicable acceptable solution.

☐ ☐ ⊘ The subject site is in Area 1 (Map of BPA). Public road access, with all-weather surfaces, is (or can and will be) provided in one direction to a single suitable destination.

☐ ☐ ⊘ The subject site is in Area 2 (Map of BPA). Public road access, with all-weather surfaces, is (or can and will be) provided in two different directions, to at least two different suitable destinations.

☐ ☐ ⊘ The subject site is in Area 2 (Map of BPA). Public road access, with all-weather surfaces, is (or can and will be) only provided in one direction to a single suitable destination.

The Guidelines establish this as an acceptable solution when:

- It is demonstrated that secondary access (including an emergency access way), cannot be provided due to site constraints; and
- The proposed day use site is located within a residential built out area.

☐ ☐ ⊘ The subject site is in Area 2 (Map of BPA). Public road access, with all-weather surfaces, is (or can and will be) only provided in one direction to a single suitable destination.

The Guidelines establish this as an acceptable solution when:

	• It is demonstrated that secondary access (including an emergency access way), cannot be provided due to site constraints; and
	• The required Bushfire Emergency Plan (BEP) provides for:
	  o Closure during days forecasted to be an extreme or catastrophic fire danger rating and/or days a total fire ban is declared; and
	  o The early evacuation of patrons and staff.

☐ ☐ ⊘	The subject site is in Area 2 (Map of BPA). Public road access, with all-weather surfaces, is (or can and will be) only provided in one direction to a single suitable destination. The Guidelines establish this as an acceptable solution when: • It is demonstrated that secondary access (including an emergency access way), cannot be provided due to site constraints; and • The required Bushfire Emergency Plan (BEP) provides for non-operation during the bushfire season.
Assessment Supporting Details: None required.	

A3.3a No-Through Roads	Applicable:	No	Compliant:	-

☐ ☐ ⊘	A3.3a is not applicable to the subject planning proposal because the subject site is in Area 1 (Urban) (Map of BPA), for which there is no limitation on no-through road lengths.
☑ ☐ ☐	The subject site is in Area 2 (Map of BPA) but A3.3a is not applicable to the subject planning proposal because access to the subject site is via a private driveway from a public road providing two-way access. Consequently, vehicular access to the subject site does not have a no-through road component.
☐ ☐ ⊘	The subject site is in Area 2 (Map of BPA) but A3.3a is not applicable to the subject planning proposal as the proposal can satisfy the two-way access exception conditions established by A3.2b as the applicable acceptable solution for a day use that will not provide any overnight accommodation (refer to the A3.2b assessment). Compliant access applying acceptable solution A3.2b as the relevant and overriding solution, can be via a single public road, of any length, to a single suitable destination. Consequently, the requirement for consideration of the length of a no-through road and the availability of an "intersection within 200 metres of the subject lot boundary from which two-way access is available", cannot logically be relevant to the subject proposal.
	Note To Decision Makers *Regarding A3.2b potentially negating the requirement to apply 3.3a. DPLH officer level advice has been received by BPP stating their agreement with the above interpretation of the applicable acceptable solutions and that consideration of the relative level of risk for the different use scenarios is incorporated into those acceptable solutions.* *The intended risk outcome is to ensure that the residual level of risk to 'vulnerable' persons can be considered as equally acceptable or tolerable for both compliant overnight stay and day use only scenarios.* *The application of this approach is identified in the DPLH SPP 3.7 Explanatory Note (25/11/2024), Part 3 where it is identified risk levels are being considered "… specific bushfire protection criteria for day uses … have been introduced. This acknowledges the lesser risk and increased opportunities for businesses approved for development to close on days with an extreme or catastrophic fire danger rating."*

☐ ☐ ⊘	The subject site is in Area 2 (Map of BPA); Access to the subject site is via a no-through public road that does not exceed the established maximum of 200 metres in length from the subject site boundary to an intersection where two-way access is provided.
☐ ☐ ⊘	The subject site is in Area 2 (Map of BPA): Access to the subject site / lot(s) is via a no-through public road that exceeds the established maximum of 200 metres in length from the proposed lot(s) boundary to an intersection where two-way access is provided. It is demonstrated that there are site constraints and/or that there are no alternative design options to achieve the 200 metre maximum length. Compliant two-way access within 200 metres from the proposed lot(s) boundary will be established through the provision (or existence) of a compliant emergency access way through the application of acceptable solution A3.4: Emergency Access Way.
☐ ☐ ⊘	The subject site is in Area 2 (Map of BPA); Access to the subject site is via a no-through public road that exceeds the established maximum of 200 metres in length from the proposed lot(s) boundary to an intersection where two-way access is provided. However, the additional road length can be considered to satisfy the acceptable solution as the following three established requirements can be met:
☐ ☐ ⊘	1. It is demonstrated that that an alternative access, including an emergency access way, cannot be provided due to site constraints; and
☐ ☐ ⊘	2. The no-through road travels towards a suitable destination; and
☐ ☐ ⊘	3. The balance of the no-through road that is greater than 200 metres from the subject site is: • Wholly within a residential built-out area; or • Wholly within an area designated Area 1 (Urban) on Map of BPA; or • Potentially subject to radiant heat levels from adjacent bushfire prone vegetation not exceeding 12.5 kW/m^2 / BAL-LOW (Guidelines Figure 29).

Assessment Supporting Details: Public road access is provided to the site via a through-road (Truscott Crescent), therefore this Acceptable Solution is not applicable.

A3.3b No-through roads technical requirements	Applicable:	No	Compliant:	-

☑ ☐ ☐	A3.3b is not applicable to the subject planning proposal because the assessment against A3.3a has established that vehicular access to the site does not have a no-through road component.
☐ ☐ ⊘	The no-through road meets (or can and will meet) the public road technical requirements for minimum vertical clearance (4.5 metres) and minimum weight capacity (15 tonnes - includes bridges, culverts).
☐ ☐ ⊘	The no-through road meets (or can and will meet) the public road technical requirement recommended in the Guidelines in Appendix B3, B3.1 for a minimum horizontal clearance of 6 metres.
☐ ☐ ⊘	The no-through road (i.e. public road) technical requirements for minimum horizontal clearance (excluding perimeter road), gradients and curves should be in accordance with the class of road as specified in the Public Works Engineering Australasia (IPWEA) subdivision guidelines, Liveable Neighbourhoods, Austroads Standards, any applicable or relevant Main Roads standards, supplements, policies and any applicable or relevant local government standards or policies.

☐ ☐ ⊘	The turnaround area/head meets (or can and will meet) the design requirements established by the Guidelines, Figure 30.

Assessment Supporting Details: None required.

A3.4 Emergency access way	Applicable:	No	Compliant:	-

☑ ☐ ☐	A3.4 is not applicable to the subject planning proposal because it has been assessed as compliant with A3.2a and 3.2b (and A3.3a and A3.3b when applicable), and an emergency access way is not required.
☐ ☐ ⊘	A3.4 is applicable to the subject planning proposal because an emergency access way currently exists and has been part of the subject planning proposal's ability to comply with A3.2a. Consequently, it will apply with regard to meeting (or being able to meet), the specified technical requirements and ongoing management requirements, rather than its installation.
☐ ☐ ⊘	The requirements established for acceptable no-through road access to the subject site in A3.2 and A3.3 cannot be achieved. An emergency access way (EAW) is provided as the alternative access and can be considered as an acceptable solution, when the following established requirements are met:
☐ ☐ ⊘	• It is demonstrated that site constraints prevent the requirements of A3.2 and A3.3 being met; and
☐ ☐ ⊘	• The access way is no more than 500 metres in length, provides a through connection to a public road connecting to a public road network; and
☐ ☐ ⊘	• The access way meets the technical requirements (Guidelines Appendix B3, Table 10) for minimum horizontal clearance (Map of BPA Area 1 (Urban) = 6 metres and Area 2 = 10 metres), minimum vertical clearance (4.5 metres), minimum weight capacity (15 tonnes - includes bridges, culverts) and minimum inner radius of road curves (8.5 metres); and
☐ ☐ ⊘	• The access way meets the technical requirements (Guidelines Appendix B3, Table 10) for crossfalls and gradients for different surfaces and dips; and
☐ ☐ ⊘	• The access way will be signposted and, if gated, gates will open for the whole carriageway width and remain unlocked; and
☐ ☐ ⊘	• The proponent has obtained consent from the local government, that it will accept care, control and management responsibilities for the emergency access way.

Assessment Supporting Details: None required.

A3.5 Onsite shelter	Applicable:	No	Compliant:	-

☑ ☐ ☐	A3.5 is not applicable to the subject planning proposal because the proposal has been assessed as compliant with the relevant part of A3.2, A3.3 (if applicable) and A3.4 (if required), providing two-way access and an onsite shelter is not required.
☐ ☐ ⊘	The proposed development has a capacity of up to a maximum of 50 guests and employees at any one time and the requirement for compliant two-way access cannot be achieved. Consequently, an onsite shelter will be provided in accordance with A2.5.

☐ ☐ ⊘	The proposed development has a capacity of up to a maximum of 50 guests and employees at any one time and the requirement for compliant two-way access cannot be achieved and the bushfire practitioner considers an onsite shelter not necessary. An outcomes-based approach may be prepared to determine the level of relevant risks to persons and property and whether adequate protection measures can be implemented to result in an acceptable or tolerable level of residual risk.
☐ ☐ ⊘	The proposed development has a capacity greater than 50 guests and employees at any one time, the requirement for compliant two-way access cannot be achieved and/or the bushfire practitioner considers an onsite shelter not necessary. An outcomes-based approach may be prepared to determine the level of relevant risks to persons and property and whether adequate protection measures can be implemented to result in an acceptable or tolerable level of residual risk.

Assessment Supporting Details: None required.

A3.6 Fire service access route	Applicable:	Yes	Compliant:	Yes

Note To Decision Makers

DPLH officer level advice has been received by BPP (email 18 November 2024) stating that this acceptable solution is applicable to a development application planning proposal when "it is necessary and serves a purpose" i.e. contributes meaningfully to mitigating risks associated with a bushfire event.

The DPLH response indicates a flexibility with the application of this acceptable solution that typically does not exist with other acceptable solutions for development applications (other than access route signage).

Consequently, what should apply as suitable firefighter access, in the opinion of the bushfire consultant, is presented as part of this acceptable solution assessment and there is no need to apply an outcomes-based assessment.

Note the following that have also been considered in determining this approach:

- *The wording of this acceptable solution (Guidelines BPC 8 A3.6) includes "Where proposed lots adjoin classified vegetation". This is better aligned with application to subdivision proposals than a single existing lot and a development application;*
- *The Guidelines explanatory note B3.6 establishes that the fire service access route (FSAR) "can be provided as either an easement in gross over private or Crown land or ceded to the Crown as a reserve. In both approaches management of the FSAR is by the local government as the grantee of the easement or management body of the reserve".*

  This explanation indicates the application of this acceptable solution is better aligned with its application to subdivision proposals than a development application involving a single existing lot; and
- *The management and technical requirements for a FSAR are likely to be impractical and/or excessive for development on the majority of individual lots.*

Where the bushfire consultant's assessment establishes that suitable firefighter access to adjoining classified vegetation (excluding Class G Grassland) is "necessary and serves a purpose", this assessment will identify that the acceptable solution is applicable and the appropriate requirements. The following is considered:

- *If suitable firefighter access is required and currently exists or not;*
- *If suitable firefighter access is required and does not currently exist, the necessary physical requirements must give due regard to the use and scale of proposed development, the size of the lot and the identified bushfire hazard threat levels; and*
- *When is it appropriate to establish firefighter access that complies with the technical requirements for a FSAR (Guidelines Table 10).*

☐ ☐ ⊘	A3.6 is not applicable to the subject planning proposal because the subject lot(s) do not adjoin classified vegetation or only adjoin Class G Grassland (classified under AS 3959).

☐ ☐ ⊘	A3.6 is not applicable to the subject planning proposal because the provision of suitable firefighter access within or external to the subject lot(s) is not necessary and would serve no purpose. It is not a practical response to any identified bushfire hazard associated with the subject planning proposal.
☐ ☐ ⊘	The subject lot(s) adjoin classified vegetation that is not Class G Grassland (classified under AS 3959). Suitable firefighter access, in the opinion of the bushfire consultant, is considered 'necessary and serves a purpose'. Suitable firefighter access to the classified vegetation is currently available. This firefighter access achieves the intent of the acceptable solution but applies a more pragmatic design than that established by the FSAR technical requirements and is aligned with the specifics of the planning proposal's site and use. The requirements for maintenance of the defined firefighter access are referenced in the landowner responsibility checklists of this BMP.
☑ ☐ ☐	The subject lot(s) adjoin classified vegetation that is not Class G Grassland (classified under AS 3959). Suitable firefighter access, in the opinion of the bushfire consultant, is considered 'necessary and serves a purpose'. Suitable firefighter access to the classified vegetation is currently not available. The physical requirements of the suitable firefighter access are established by the bushfire consultant within the assessment supporting details below (these will align at a minimum with typical 'firebreak' requirements when installed for firefighter access). This firefighter access achieves the intent of the acceptable solution but applies a more pragmatic design than that established by the FSAR technical requirements and aligned with the specifics of the planning proposal's site and use. The requirements for maintenance of the defined firefighter access are referenced in the landowner responsibility checklists of this BMP.
☑ ☐ ☐	The subject lot(s) adjoin classified vegetation that is not Class G Grassland (classified under AS 3959). A fire service access route is to be provided for firefighter access to this vegetation. It can and will meet the following established requirements:
☑ ☐ ☐	• The fire service access route is a through-route with no dead-ends, no further than 500 metres from a public road and will be signposted; and
☑ ☐ ☐	• The fire service access route meets (or can and will meet) the technical requirements (Guidelines Appendix B3, Table 10) for minimum horizontal clearance (Map of BPA Area 1 (Urban) = 6 metres and Area 2 = 10 metres), minimum vertical clearance (4.5 metres), minimum weight capacity (15 tonnes - includes bridges, culverts) and minimum inner radius of road curves (8.5 metres); and
☑ ☐ ☐	• The fire service access route meets (or can and will meet) the technical requirements (Guidelines Appendix B3, Table 10) for crossfalls and gradients for different surfaces and dips; and
☑ ☐ ☐	• When gated, gates will open the whole carriageway width and can be locked by the local government and/or the emergency services, when keys are provided for each gate; and
☑ ☐ ☐	• The proponent has obtained consent from the local government, that it will accept care, control and management responsibilities for the fire service access route (unless it is a Crown reserve managed by another entity).

Assessment Supporting Details: Access to offsite surrounding vegetation is via the proposed internal driveways only, which are not sited directly adjacent to offsite vegetation (landscaping and buildings are located on the outer borders of the site).

Offsite access to Scrub vegetation east of the subject lot is currently via a gravel/sand access track (2-3 m width) that traverses through the dunes to the east of the development site, however is located approximately 70 metres from the eastern lot boundary. Access to Scrub vegetation to the north of the subject site is available via an existing sand track (2-3 m width) outside the subject site. Access to Grassland vegetation to the south of the subject site is variable – there are currently no fences blocking access to the lot to the south, however there are no designated tracks.

Recommendation

Given the small scale of the development, the Bushfire Consultant deems that a Fire Service Access Route surrounding the site is an excessive measure and is beyond the power of the landowner to reasonably implement and could undermine the nature-based tourism intent of the proposal. Noting that a FSAR must be a minimum 10 metres horizontal clearance, which would significantly impact native vegetation.

A3.7 Internal vehicular access and private driveways	Applicable:	Yes	Compliant:	Yes

☐ ☐ ⊘	A3.7 is not applicable to the subject planning proposal because the proposal does not contain internal vehicular access and private driveways longer than 70 metres.
☑ ☐ ☐	There are internal vehicular access and private driveways longer than 70 metres and the subject site meets (or can and will meet) all the following established requirements:
☑ ☐ ☐	• The private driveway meets (or can and will meet) the technical requirements (Guidelines Appendix B3, Table 10) for minimum horizontal clearance (6 metres) or where not required to comply with the Guidelines width, it meets the requirements of the Residential Design Codes and Development Control Policy 2.2 Residential Subdivision; and
☑ ☐ ☐	• The private driveway meets (or can and will meet) the technical requirements (Guidelines Appendix B3, Table 10) for minimum vertical clearance (4.5 metres), minimum weight capacity (15 tonnes - includes bridges, culverts) and minimum inner radius of road curves (8.5 metres); and
☑ ☐ ☐	• The private driveway meets (or can and will meet) the technical requirements (Guidelines Appendix B3, Table 10) for the gradients of different surfaces and dips; and
☑ ☐ ☐	• Passing bays are (or can and will be) installed every 200 metres with a minimum length of 20 metres and a minimum additional carriageway width of 2 metres i.e. the combined carriageway width of the passing bay and constructed private driveway will be a minimum 6 metres; and
☑ ☐ ☐	• The turnaround area/head meets (or can and will meet) the design and location (within 30m of main habitable building) requirements established by the Guidelines (refer to Figures 30 and 38).

Assessment Supporting Details: Proposed internal driveway layout is shown on *Figure 1.1* and *Figure 1.2*. Proposed driveways are all minimum 6 metres width and are in a connected looped layout.

There are multiple passing options and turnaround options available throughout the site, with the use of driveways for each accommodation unit, and boat parking area.

There is one 'dead-end' proposed at the south of the subject site, for which an appropriately dimensioned turnaround must be provided (refer Figure 1.2 "Recommended Temporary Turnaround"). A future driveway connecting the main entrance driveway with the dead-end driveway is proposed, however a turnaround is required to be installed in the meantime.

A3.8 Signage	Applicable:	Yes	Compliant:	Yes

Note To Decision Makers

DPLH officer level advice has been received by BPP (email 18 November 2024) stating that this acceptable solution is applicable to a development application planning proposal when "it is necessary and serves a purpose" i.e. contributes meaningfully to mitigating risks associated with a bushfire event. *The DPLH response indicates a flexibility with the application of this acceptable solution that typically does not exist with other acceptable solutions for development applications (other than a fire service access route).* *There are development application situations where this acceptable solution is unlikely to serve a purpose and would not contribute meaningfully to the reduction of bushfire risk.* *This is likely to be the case for situations which have attributes such as; relatively small lot size, no or limited length no-through roads, good public road access network (surfaces, widths, gradients, visibility, connectivity etc), multiple suitable destinations easily, good road signage or in a built out areas or situations where persons are likely to be familiar with their surrounds.* *Consequently, should the described signage requirements of the acceptable solution, in the opinion of the bushfire consultant, serve no purpose – justification for this position is presented as part of this acceptable solution assessment and there is no need to apply an outcomes-based assessment.*
☐ ☐ ⊘ A3.8 is not applicable to the subject planning proposal because the provision of signage is, in the opinion of the bushfire consultant, not necessary and would serve no purpose. Signage would not meaningfully contribute to mitigating risks associated with a bushfire event, for the subject proposal.
☑ ☐ ☐ Signage can and will be provided within the subject site, advising of where each access route travels to and the distance and general information on what to do in the event of a bushfire.
Assessment Supporting Details: A Bushfire Emergency Plan (BEP) has been developed concurrently with this document. The BEP contains a Site Information Map and an Evacuation Map, which should be displayed inside accommodation units, advising where evacuation destinations are in the event of a bushfire. These shall be displayed in common visible areas such as on the back of main entrance doors.

5.3.3 Element 4: Water Supply

ELEMENT 4: WATER SUPPLY (DEVELOPMENT –VULNERABLE TOURISM LAND USES AND DAY USES)	
All details of acceptable solution requirements are established in the Planning for Bushfire Guidelines (Guidelines) – WA Department of Planning, Lands and Heritage (DPLH, as amended). When relevant, the 'Bushfire Management Plan Guidance for the Dampier Peninsula' (DPLH, 2021 Rev B), is also referenced.	
O4	**The Outcome of State Planning Policy 3.7 Bushfire (and the BPC) to be Achieved**
	Ensure that sufficient water is available and accessible for emergency services, to enable people, property and infrastructure to be defended from bushfire. (SPP 3.7, 6.4)
E4	Acceptable Solutions Pathway - Compliance Statement
	The planning proposal is fully compliant with all applicable acceptable solutions and therefore achieves the required outcomes of this element.
	Alternative Pathway Applied to Demonstrate Ability to Achieve SPP 3.7 Outcomes
	N/A

ACCEPTABLE SOLUTIONS - ASSESSMENT STATEMENTS				
Check Box Legend:	☑ Relevant & met	☒ Relevant & not met	⃠ Not relevant	
A4.1 Water supply	Applicable:	Yes	Compliant:	Yes

☐ ☐ ⃠	Evidence is provided that a reticulated water supply, available for firefighting purposes, exists or can be provided. Hydrant connection(s) will be provided in accordance with the specifications established by the relevant water supply authority (refer also to hydrant location information in Appendix D of this BMP).
☑ ☐ ☐	The provision of or the specifications of a reticulated water supply cannot be met. Evidence is provided that a sufficient, sustainable and accessible non-reticulated water supply, dedicated to firefighting purposes, can and will be provided in accordance with the specifications established in the Guidelines, Appendix B4: Water Supply:
☑ ☐ ☐	• The planning proposal is for a vulnerable land use development (not camping ground). For each habitable building a water supply, dedicated to firefighting purposes, will be stored in tanks at 10,000 litres of water per 500 m^2 of floor area up to 50,000 litres in total; and
☐ ☐ ⃠	• The planning proposal is for a 'camping ground' vulnerable land use development. The required water supply dedicated to firefighting purposes is to be determined at the discretion of the local government and this will be complied with. Evidence is provided of the determined requirements and is presented as an Addendum in this BMP; and
☑ ☐ ☐	• The above ground water supply tank(s), dedicated to firefighting purposes (and tank stand(s) when applicable), will be constructed of non-combustible material and as necessary, will comply with AS/NZS 3500.1(as amended). This includes not using the same water supply for both domestic use and firefighting purposes. If a combined use tank(s) is to be used, it will separate the storage compartments in accordance with the provisions of the standard (i.e. internal installation of double partition walls); and
☑ ☐ ☐	• The outlet connection fitting for the water supply tank(s), dedicated to firefighting purposes, will have a full flow valve and a 50 mm male camlock coupling; and

☑ ☐ ☐	• All above-ground, exposed water supply pipes and fittings will be metal and positioned facing away from the source of bushfire hazard and/or shielded against potential bushfire impact – to allow access by emergency services; and
☑ ☐ ☐	• The planned provision of the water supply tank(s) will consider locations relative to the bushfire hazard. Location of the tank(s) and management of vegetation will ensure vegetation will not exist over or against the tank(s) and that sufficient separation exists to limit the potential bushfire impact. Due consideration will also be given to the provision of sufficient separation from vegetation and/or shielding for the protection of firefighters accessing the water supply; and
☑ ☐ ☐	• An unobstructed, hardened ground surface, for emergency services vehicle access, can and will be installed within 4 metres of the water supply outlet (refer to Figure 39, Guidelines); and
☐ ☐ ⊘	• It is proposed for a water supply tank outlet(s) is to be remote from the tank, the local government and DFES will have been consulted regarding the application and location. The determined requirements are presented as an Addendum in this BMP.
☐ ☐ ⊘	Planned below ground water supply tank(s), dedicated to firefighting purposes, will have at least a 200 mm diameter access hole – or a suitable inspection opening - to allow tankers or emergency services vehicles to refill direct from the tank, with the outlet location clearly marked on the surface. As necessary, the tanks(s) will comply with AS/NZS 3500.1 (as amended).
☐ ☐ ⊘	The planning proposal intends that a suitable static water supply is to be provided by a dam or river that complies with the DFES guidelines for acceptable sources of water for firefighting purposes. Evidence is provided that: • Demonstrates that the water level will be maintained above the top of the highest fire brigade suction point; and • Approval has been obtained from the decision maker in consultation with the emergency services and is presented as an Addendum in this BMP.
☑ ☐ ☐	The BPC Explanatory Notes in Appendix B.4: Water Supply introduce additional measures as best practice but voluntary. The following measure is adopted by the planning proposal: The subject site is in a non-reticulated area. Pumping equipment is installed and will be powered by means other than the electricity network such as an appropriately powered and capacity petrol/diesel or onsite generator/electricity, driven pump, and be shielded against potential bushfire impact.
☐ ☐ ⊘	The BPC Explanatory Notes in Appendix B.4: Water Supply introduce additional measure as best practice but voluntary. The following measure is adopted by the planning proposal: The subject site will have a reticulated water supply but is in an area designated as Area 2 on the Map of BPA and/or the local government area has known issues with water supply or pressure. Water supply tank(s) and fittings dedicated to firefighting purposes (noting that combining drinking and firefighting uses of water is not recommended and may be contrary to relevant provisions), that satisfy the construction and design requirements established in the Guidelines, Appendix B4: Water Supply, will be provided.
☐ ☐ ⊘	The BPC Explanatory Notes in Appendix B.4: Water Supply introduce additional measure as best practice but voluntary. The following measure is adopted by the planning proposal: The subject site is serviced by reticulated water. However, the distance from the public road (along which the fire hydrant is located) to the farthest part of the habitable building is greater than 70 metres, exceeding the reach of a hose reel. A water supply tank will be installed within the lot.

Assessment Supporting Details: 50,000L of firefighting water supply is required to be provided via non-combustible tanks, to meet all technical requirements stated above. The proposed tank location is shown on Figure 1.2; tanks are sited within 4 metres of the proposed driveway, and adjacent to existing offsite Grassland vegetation. It is anticipated that this offsite vegetation will be removed for future tourism development and therefore be adequately shielded from the classified vegetation posing the bushfire threat. A turnaround area must be installed as discussed in A3.7 above.

[Refer to additional technical requirement information contained in Appendix D].

6 RESPONSIBILITY CHECKLISTS

EXPLANATORY INFORMATION

This section of the BMP sets out the responsibilities of the relevant entity or person for:

- The initial implementation of the required bushfire protection measures and their timing; and
- The ongoing maintenance of the required bushfire protection measures to ensure their continued effectiveness.

Note: Protection measures that may be recommended by the bushfire consultant in the BMP section titled "Additional Recommended Bushfire Protection Measures' are not included in the Responsibility Checklists (at least initially).

The reason for this is the additional measure(s) are either:

- Provided as additional risk management advice to the proponent and it is up to them to choose to apply; or
- Part of an outcomes-based approach being applied to satisfy the required outcomes of SPP 3.7. Consequently, the need for their application (which would create a responsibility) is currently subject to assessment and approval by the decision maker.

  When their application is established by planning approval, the responsibility checklists in this BMP will be required to be updated.

6.1 Protection Measure Implementation Checklist

TABLE 6.1 PROPONENT/LANDOWNER RESPONSIBILITIES PRIOR TO SALE/OCCUPANCY/OPERATION	
No.	IMPLEMENTATION OF BUSHFIRE PROTECTION MEASURES Measures Established Under SPP 3.7 / Guidelines
1	Install an Asset Protection Zone (APZ) surrounding habitable buildings. All land within the subject lot will be the required APZ. It must: 1. Consist of non-vegetated areas and low bushfire threat vegetation, able to be maintained in perpetuity in a low threat state, by complying with the established APZ technical requirements (refer to the Guidelines Appendix B2 and Appendix B3 of this BMP); and 2. Be located within the boundaries of the lot except for any allowable variances allowed and discussed in the assessment against the bushfire protection criteria in Section 5, Element 2: Siting and design, and the relevant APZ acceptable solution. (Refer also to the illustrated APZ on the Property Bushfire Management Statement in Section 6.3); and *Note 1: If a BAL rating lower than BAL-29 can be achieved by the proposed building works but native vegetation is required to be modified or removed to establish the associated larger APZ, ensure prior approval has been received from the relevant authority before installing.*
2	Ensure the construction of the private driveways / internal vehicular access complies with the technical requirements stated and/or referenced in Section 5.3 of the BMP at Element 3: Vehicular access, A3.7 Internal vehicular access and private driveways.
3	The development is a 'vulnerable land use'. Ensure the required signage is provided within the subject site, advising of where each access route travels to and the distance and general information on what to do in the event of a bushfire. Comply with the site specific requirements established in the BMP at Element 3: Vehicular access, A3.8 Signage.
4	Install the required volume firefighting water supply tank (minimum 10,000 litres and up to 50,000 litres when applicable), including fittings and the required hardstand/access, to comply with the technical requirements stated and/or referenced in Section 5.3 of the BMP at Element 4: Water supply.
5	A purchaser, occupier and/or operator of the site must be made aware of the existence of this approved BMP and provided with access to a copy and be informed of their ongoing responsibilities it contains.
6	The development is a 'vulnerable land use', and a Bushfire Emergency Plan (BEP) has been produced for site operations. Complete all relevant actions contained within the 'Site Preparation Procedure'.
7	The development is a 'vulnerable land use', and a Landscape Management Plan (LMP) must be prepared for site operations. Ensure the purchaser, occupier and/or operator of the site is made aware of the existence of the LMP and provided with access to a copy.
IMPLEMENTATION OF BUSHFIRE PROTECTION MEASURES Measures Established by this BMP as a Required Additional Measure	

-	This BMP has not established any 'Required Additional Bushfire Protection Measures', that are additional to and/or a variation to those established by the applicable acceptable solutions of the bushfire protection criteria and that must be implemented.
	IMPLEMENTATION OF BUSHFIRE PROTECTION MEASURES Measures Established by a Local Government's Section 33 Notice Under the Bush Fires Act 1954
8	Install the required firebreaks, providing emergency access within the lot, to the stated specifications established by the Shire of Exmouth Firebreak Notice. *Note: This is not a requirement under the land use planning requirements established by SPP 3.7 Bushfire or the associated Guidelines. However, for informative purposes, the existence of this responsibility is noted in this checklist and must be given due regard.*
	IMPLEMENTATION OF BUSHFIRE PROTECTION MEASURES Measures Established by the Building Code of Australia (Vol. 1 and 2 of the National Construction Code)
9	Inform builders engaged to construct dwellings/additions and/or other relevant structures on a lot, of the existence of this approved Bushfire Management Plan (BMP). The existence of the BMP identifies that the development site is within a designated bushfire prone area. It indicates that bushfire construction standards (corresponding to an assessed bushfire attack level (BAL) for the building), may need to be applied to satisfy the bushfire performance requirements of the BCA. The BMP typically will only provide indicative BAL ratings. A separate assessment will likely be required to determine the applicable BAL rating (and produce a BAL Certificate), once site plans and conditions are established as the post development state. This BMP may also establish, as a 'Required Additional Bushfire Protection Measure', that bushfire construction requirements to be applied must be those corresponding to a specified higher BAL rating. Compliance with the current Building Code of Australia (Volumes 1 and 2 of the National Construction Code), will require certain bushfire resistant construction requirements be applied to residential buildings in bushfire prone areas (i.e., Class 1, 2 and 3 and associated Class 10a buildings and decks) and Class 9 vulnerable use buildings. Other classes of buildings may also be required to comply with these construction when established by the relevant authority or if identified as a 'Required Additional Bushfire Protection Measure' bushfire protection measure within the BMP. The deemed to satisfy solutions that will meet the relevant bushfire performance requirements are found in AS 3959 – Construction of Building in Bushfire Prone Areas (as amended) and for Class 1 and associated Class 10a buildings only, the NASH Standard - Steel Framed Construction in Bushfire Areas (as amended). *Note: This is not a requirement under the land use planning requirements established by SPP 3.7 Bushfire or the associated Guidelines. However, for informative purposes, the existence of this responsibility is noted in this and must be given due regard.*

6.2 Protection Measure Maintenance Checklist

TABLE 6.2 LANDOWNER/OCCUPIER – MAINTENANCE OF BUSHFIRE PROTECTION MEASURES	
No.	MAINTENANCE OF BUSHFIRE PROTECTION MEASURES Measures Established Under SPP 3.7 / Guidelines
1	Annually review and enact the following maintenance responsibilities established in this approved BMP for the development site prior to the bushfire season.
2	The site's use is a 'vulnerable use', and a Bushfire Emergency Plan (BEP) has been produced for site operations. Complete all relevant actions contained within the 'Site Preparation Procedure' annually prior to the bushfire season.
3	Maintain the Asset Protection Zone (APZ) surrounding all habitable buildings by applying: 1. The Established APZ Technical Requirements: The APZ must consist of non-vegetated areas and low bushfire threat vegetation maintained in perpetuity in the low threat state by complying with the established APZ technical requirements (refer to the Guidelines Appendix B2 and Appendix B3 of this BMP); and 2. The Established APZ Dimensions: Refer to the first item of the protection measure implementation checklist in the preceding Table 6.1 in which the required dimensions have been established. Where these include the authority to maintain offsite land as part of the APZ this is identified below. The required dimensions will be either: (a) The dimensions corresponding to the determined BAL rating(s) applicable to each habitable building. This ensures the building's constructed bushfire resistance continues to align with its calculated potential exposure to flame contact and radiant heat; or (b) In the absence of an applicable determined BAL rating for a building/structure, the dimensions should be no greater than the minimum distances corresponding to the BAL-29 rating. *Note 1: Where greater APZ dimensions than those derived from the above information are established by a Local Government's Section 33 Notice Under the Bush Fires Act 1954 these must be given due regard when maintaining the APZ. When this requirement is relevant to the subject development it is identified in the implementation checklist in the preceding Table 6.1 and below in this table.*
4	Maintain the private driveways / internal vehicular access to comply with the technical requirements stated and/or referenced in Section 5.3 of the BMP at Element 3: Vehicular access, A3.7 Internal vehicular access and private driveways.
5	The development is a 'vulnerable land use'. Maintain the required signage within the subject site, advising of where each access route travels to and the distance and general information on what to do in the event of a bushfire. Comply with the site specific requirements established in the BMP at Element 3: Vehicular access, A3.8 Signage.
6	Maintain the fighting water supply tank(s), including fittings and the required hardstand/access, in good working condition. Ensure the tanks are maintained at full capacity.

7	When the property changes ownership or occupancy, to assist with the ongoing maintenance of the implemented bushfire protection measures, ensure that the relevant person(s) is aware of the BMP, and the responsibilities it contains. Provide access to a copy of the BMP and the Bushfire Emergency Plan (BEP).
	MAINTENANCE OF BUSHFIRE PROTECTION MEASURES Measures Established by a Local Government's Section 33 Notice Under the Bush Fires Act 1954
8	Maintain the required firebreaks, providing emergency access within the lot, to the stated specifications established by the Shire of Exmouth Firebreak Notice. *Note: This is not a requirement under the land use planning requirements established by SPP 3.7 Bushfire or the associated Guidelines. However, for informative purposes, the existence of this responsibility is noted in this checklist and must be given due regard.*
	MAINTENANCE OF BUSHFIRE PROTECTION MEASURES Measures Established by the Building Code of Australia (Vol. 1 and 2 of the National Construction Code)
9	Prior to any future building work, inform the builder of the existence of this approved Bushfire Management Plan (BMP). The BMP identifies that the development site is within a designated bushfire prone area and states the indicative (or determined) BAL rating(s) that may (or will) be applied to buildings/structures. A BAL assessment report may be required to confirm determined ratings and will be required when stated ratings are only indicative. BAL certificates will need to be produced to accompany building applications. The BMP may also establish, as a 'Required Additional Bushfire Protection Measure', that bushfire construction requirements to be applied must be those corresponding to a specified higher BAL rating. Compliance with the current Building Code of Australia (Volumes 1 and 2 of the National Construction Code), will require certain bushfire resistant construction requirements be applied to residential buildings in bushfire prone areas (i.e., Class 1, 2 and 3 and associated Class 10a buildings and decks) and Class 9 vulnerable use buildings. Other classes of buildings may also be required to comply with these construction requirements when established by the relevant authority or if identified as a 'Required Additional Bushfire Protection Measure' bushfire protection measure within the BMP. The deemed to satisfy solutions that will meet the relevant bushfire performance requirements are found in AS 3959 – Construction of Building in Bushfire Prone Areas (as amended) and for Class 1 and associated Class 10a buildings only, the NASH Standard - Steel Framed Construction in Bushfire Areas (as amended). *Note: This is not a requirement under the land use planning requirements established by SPP 3.7 Bushfire or the associated Guidelines. However, for informative purposes, the existence of this responsibility is noted in this checklist and must be given due regard.*

APPENDIX A: DETAILED BAL ASSESSMENT DATA AND SUPPORTING INFORMATION

A1: BAL Assessment Inputs Common to the Method 1 and Method 2 Procedures

A1.1: FIRE DANGER INDICES (FDI/FDI/GFDI)

When using Method 1 the relevant FDI value required to be applied for each state and region is established by AS 3959:2018, Table 2.1. Each FDI value applied in Tables 2.4 – 2.7 represents both the Forest Fire Danger Index (FFDI) and a deemed equivalent for the Grassland Fire Danger Index (GFDI), as per Table B2 in Appendix B. When using Method 2, the relevant FFDI and GFDI are applied.

The values may be able to be refined within a jurisdiction, where sufficient climatological data is available and in consultation with the relevant authority.

Relevant Jurisdiction:	WA	Region:	Whole State	Method 1	Applied FDI:	80
				Method 2	Applied FFDI:	N/A
					Applied GFDI:	N/A

A1.2: VEGETATION ASSESSMENT AND CLASSIFICATION

Vegetation Types and Classification

In accordance with AS 3959:2018 Clauses 2.2.3 and C2.2.3.1, all vegetation types within 100 metres of the 'site' (defined as "the part of the allotment of land on which a building stands or is to be erected"), are identified and classified. Any vegetation more than 100 metres from the site that has influenced the classification of vegetation within 100 metres of the site, is identified and noted. The maximum excess distance is established by AS 3959: 2018 Clause 2.2.3.2 and is an additional 100 metres.

Classification is also guided by the Visual Guide for Bushfire Risk Assessment in WA (WA Department of Planning February 2016) and any relevant FPA Australia practice notes.

Modified Vegetation

The vegetation types have been assessed as they will be in their natural mature states, rather than what might be observed on the day. Vegetation destroyed or damaged by a bushfire or other natural disaster has been assessed on its expected re-generated mature state. Modified areas of vegetation can be excluded from classification if they consist of low threat vegetation (refer to Appendix B) and that any required active management can be expected to continue in perpetuity, and this can be adequately justified.

The Influence of Ground Slope

Where significant variation in effective slope exists under a consistent vegetation type, these will be delineated as separate vegetation areas to account for the difference in potential bushfire behaviour, in accordance with AS 3959:2018 Clauses 2.2.5 and C2.2.5.

THE INFLUENCE OF VEGETATION GREATER THAN 100 METRES FROM THE SUBJECT SITE	
Vegetation area(s) within 100m of the site whose classification has been influenced by the existence of bushfire prone vegetation from 100m – 200m from the site:	None
Assessment Statement:	No vegetation types exist close enough, or to a sufficient extent, within the relevant area to influence classification of vegetation within 100 metres of the subject site.

VEGETATION AREA 1						
Classification	**D. SCRUB**					
Types Identified	Open scrub D-14					
Effective Slope	Measured	flat 0 degrees	Applied Range (Method 1)	Upslope or flat 0 degrees		
Foliage Cover (all layers)	10-30%	Shrub/Heath Height	>2m	Tree Height	N/A	
Justification Comments:	Mixed scrub vegetation ranging from <1 metre to 4 metres in height. Some areas very sparse. Overall foliage cover up to 30%. Yellow height staff in images is 1 metre.					
Post Development Assumptions:	It is assumed for the purpose of this assessment that all onsite vegetation will be removed during development works (refer to Figure 3.1b showing assumed Post-Development vegetation). All future vegetation within the subject site must be maintained in a low threat state, in accordance with AS 3959 exclusion cl. 2.2.3.2, and as per the Guidelines APZ standards (refer to Appendix B3 and B4). Additionally, a Landscape Management Plan must be prepared for the site, which must incorporate the abovementioned standards. Native vegetation cannot be altered or removed without relevant prior authority (i.e. local government).					

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PHOTO ID: 5	PHOTO ID: 6

VEGETATION AREA 2						
Classification	**D. SCRUB**					
Types Identified	Open scrub D-14					
Effective Slope	Measured	flat 0 degrees	Applied Range (Method 1)	Upslope or flat 0 degrees		
Foliage Cover (all layers)	10-30%	Shrub/Heath Height	>2m	Tree Height	N/A	
Justification Comments:	Mixed scrub vegetation ranging from 1 metre to 4 metres in height, forming up to 30% overall foliage cover. Grasses form remainder of vegetation. Scattered gum trees are present throughout the area, and form less than 5% overall foliage cover. Yellow height staff in images is 1 metre.					
Post Development Assumptions:	Offsite vegetation cannot be altered or removed by the subject site landowner.					

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VEGETATION AREA 3						
Classification	**C. SHRUBLAND**					
Types Identified	Low shrubland C-12					
Effective Slope	Measured	flat 0 degrees	Applied Range (Method 1)	Upslope or flat 0 degrees		
Foliage Cover (all layers)	>30%	Shrub/Heath Height	<2m	Tree Height	N/A	
Justification Comments:	Low coastal shrubland, greater than 30% foliage cover with bare earth sand forming remainder of area. Shrubs typically 1-2 metres in height. The vegetation is sited on a sand dune with discontinuous fuels. It is highly unlikely to ignite or support a running fire; therefore, the effective slope has been determined as 0°.					
Post Development Assumptions:	Offsite vegetation cannot be altered or removed by the subject site landowner.					

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VEGETATION AREA 4						
Classification	**G. GRASSLAND**					
Types Identified	Sparse open tussock G-24 Open tussock G-23					
Effective Slope	Measured	flat 0 degrees	Applied Range (Method 1)	Upslope or flat 0 degrees		
Foliage Cover (all layers)	N/A	Shrub/Heath Height	N/A	Tree Height	N/A	
Justification Comments:	Mixed grasses forming patchy coverage, up to 1 metre in height. Scattered trees and shrubs throughout form less than 10% total foliage cover.					
Post Development Assumptions:	Offsite vegetation cannot be altered or removed by the subject site landowner.					

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VEGETATION AREA 5	
Exclusion Clause	2.2.3.2 (e) Non-vegetated area
Justification Comments:	Non-vegetated area includes sealed public road, gravel and sand tracks, and beach.
Post Development Assumptions:	It is reasonably expected that Area 5 non-vegetated areas will remain non-vegetated in perpetuity.

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A1.3: EFFECTIVE SLOPE

EXPLAINING THE ASSESSMENT METHODOLOGY APPLIED BY BUSHFIRE PRONE PLANNING

DEFINITION: Effective slope is "the slope under that classified vegetation which most influences the bushfire attack" (AS 3959:2018, Clause 1.5.11).

"The effective slope under the classified vegetation is not the same as the average slope for the land surrounding the site of the proposed building. The effective slope is that slope which most significantly influences bushfire behaviour" (AS 3959:2018, Clause CB4).

The slope is described as upslope, flat or downslope when viewed from an exposed element (e.g., building) and looking towards the vegetation. It is measured in degrees.

[Note: Additional relevant guidance provided by AS 3959:2018 and NSW RFS, Planning for Bushfire Protection (2019) is incorporated into the applied assessment methodology and is presented at the end of this explanation.]

COMPOUND SLOPES UNDER VEGETATION AND DETERMINING SLOPE SIGNIFICANCE

Non-Linear Slopes: When the slope of ground under the vegetation out to the distance to be assessed (100 m or further if necessary), is not a straight line or nearly straight line slope, then it is made up of several different slopes i.e., it is a compound slope. The different slope angles and lengths must be factored into the determination of the effective slope value to be applied. Different slopes will potentially influence the bushfire rate of spread and intensity, both increasing and decreasing it.

Significant Slope: The AS 3959:2018 bushfire attack level determination methodology, with default inputs, models a fully developed bushfire. Therefore, a 'significant' slope is one that will significantly influence bushfire behaviour. To be 'significant' the length of the slope must be 'sufficient' to support a fully developed fire on that slope. The angle of a significant slope could be the determined effective slope for the area of classified vegetation if it is the one that 'most influences the bushfire attack'.

Sufficient Slope Length: Is a slope that will, as a minimum, allow the entire flame depth (flaming zone) of a fully developed fire (100m flame width) to exist on that slope.

The expected flame depth of a fully developed bushfire is a function of the length of time the flaming phase will exist on a section of the fuel bed (the 'residence time') and the bushfire's 'rate of spread'. For a given rate of spread, longer residence times result in greater flame depths. Greater flame depths are correlated with greater flame temperatures and greater flows of radiant heat.

The primary factors that will increase the residence time are:

- Heavier fine fuel loads of grass, leaf litter, twigs, bark etc less than 6mm in width and existing within the surface and near surface layers (and elevated fuel layers when contiguous with the base layers); and
- A greater percentage of larger fine fuels within the fuel load.

The primary factors that increase the rate of spread (apart from fire weather factors), include finer fuels, drier fuels, horizonal continuity of fuel and steeper upward ground slope in the direction of fire travel.

Example values:

- Residence Time: Grassfire 5 – 15 seconds, Forest fire 25 -50 seconds.
- Rate of Spread: Grassfires of a few km/hr are considered fast moving, 5-10 km/hr is common and fastest in the order of 25km/hr. Forest fire typically recorded in metres/hour with 1-1.5 km/hr being considered fast moving and fastest in the order of 3–4 km/hr.
- Flame Depth: More typically, a few metres for grasses to tens of metres for forest fires.

An Isolated Slope: For scenarios where there is a single significant slope (based on the above criteria) additional consideration would need to be given to the time and distance consumed by a bushfire still in its 'developing' phase. This will require due consideration be given to how it is potentially ignited i.e., from a single or multiple points, as this will influence the time and distance required to fully develop. For such scenarios, a normally significant slope may not be sufficiently long. It may be necessary to determine the potential bushfire impact more accurately by

justifying the application of a lesser effective slope, or a lower threat vegetation classification, or calculating a reduced head fire width (using short fire run modelling).

Determined Effective Slope: Only a 'significant' slope can potentially be the effective slope by itself. In which case, for a defined area of classified vegetation area, the worst significant slope under that vegetation is to apply.

The table below presents Bushfire Prone Planning's considerations applied to assessing short and/or compound slopes in determining the effective slope.

Slope Length (m)	Considered a Significant Slope	Considerations in Determining the Effective Slope
< 5	No	Where these short slopes exist as part of a compound slope under an area of classified vegetation, they can be ignored as they will not influence the fire behaviour in that vegetation.
5-20	Will Vary	These slopes will have a range of influence on fire behaviour from very little to a degree of influence that must be accounted for to some extent by the effective slope value that is applied (i.e., with a greater length - apply to a greater extent). But the actual slope of these shorter slopes is less likely to be applied as it is not a 'significant' length.
20-30	Possibly - Likely	The same considerations applied to the 5-20m slope lengths should be applied here. However, more justification would need to be presented to support an assessment of not 'significant'. For these slope lengths, consideration must be given more broadly to the potential level of risks associated with a bushfire event in this location. The risk level will be a function of the bushfire hazard threat levels (direct attack mechanisms) within the immediate and broader assessment area as influenced by local topography, vegetation extents and types and the exposure and vulnerability of persons and/or buildings/structures to these threats. Higher consequent risk levels require greater precaution meaning these length slopes should be considered 'significant', and vice versa. Consider the potential for a bushfire on adjoining or nearby land be a source of ignition and/or pre-heating to vegetation on the subject slope. Consider if vegetation on the slope is likely be ignited by a single ignition point or is multipoint ignition possible from bushfire an adjoining slopes or the surrounding area. Single point ignition will require a fire to travel further before being fully developed (DFES considers less than 100m fire runs may be considered a short fire run for forest, woodland and scrub vegetation classifications, RFS NSW applies 150m). Isolated slopes of this length are less likely to be considered significant as compared to when part of a compound slope.
>30	Yes	Likely to always be a significant slope unless isolated (i.e., exists alone) – in which case, justifying the application of a lesser effective slope, or a lower threat vegetation classification, or calculating a reduced head fire width, are approaches that may justifiably be applied.

BPP Approach - Slope Variation Within Areas of Vegetation

When multiple 'significant' slope lengths with large differences in degrees of effective slope (or different applicable slope ranges when AS 3959:2018 Method 1 is applied), exists under a single vegetation classification, these will be delineated as separate vegetation areas of classified vegetation to account for the difference in potential bushfire behaviour and impact, in accordance with AS 3959:2018 clauses 2.2.5 and C2.2.5.

Effective Slope Variation Due to Multiple Development Sites

When the effective slope, under a single area of bushfire prone vegetation, will vary significantly relative to multiple proposed development sites (exposed elements), then the effective slopes corresponding to each of the different locations, are separately identified. The relevant (worst case) effective slope is determined in the direction corresponding to the potential directions of fire spread towards the subject building(s).

AS 3959:2018 EFFECTIVE SLOPE DETERMINATION - GUIDANCE

The Standard presents a broad set of guidance statements that indicate the intent of deriving an effective slope value for use in calculations, rather than detailing the 'in the field' determination process. These include:

- Highlighting the importance of the value by stating "The slope of the land under the classified vegetation has a direct influence on the rate of fire spread, the severity of the fire and the ultimate level of radiant heat flux" (Clause C2.2.5). [Note: A common rule of thumb is that for every 10 degrees of upslope, a fire will double its rate of spread if moving in the direction of the prevailing wind].
- "It may be necessary to consider the slope under the classified vegetation for distances greater than 100 m in order to determine the effective slope for that vegetation classification) … (i.e. the vegetation within 100 m) (Clause C2.2.5).

- "Where there is more than one slope within the classified vegetation, each slope shall be individually assessed, and the worst case Bushfire Attack Level shall apply" (Clause 2.2.5).

NSW RFS 2019, PLANNING FOR BUSHFIRE PROTECTION - APPENDIX A1.5 - ADDITIONAL DETERMINATION GUIDANCE

- "In identifying the effective slope - it may be found that there are a variety of slopes covering different distances within the vegetation. The effective slope is considered to be the slope under the vegetation which will most significantly influence the bushfire behaviour for each aspect. This is usually the steepest slope. In situations where this is not the case, the proposed approach must be justified".
- "Vegetation located closest to an asset may not necessarily be located on the effective slope".

SITE ASSESSMENT DETAILS - EXPLANATION & JUSTIFICATION

The effective slopes determined from the site assessment are recorded in Table 3.2 of this Bushfire Management Plan.

A1.4: SEPARATION DISTANCE

Measuring

The separation distance is the distance in the horizontal plane between the receiver (building/structure or area of land being considered) and the edge of the classified vegetation (AS 3959:2018, clause 2.2.4)

The relevant parts of a building/structure from which the measurement is taken is the nearest part of an external wall or where a wall does not exist, the supporting posts or columns. Certain parts of buildings are excluded including eaves and roof overhangs.

The edge of the vegetation, for forests and woodlands, will be determined by the unmanaged understorey rather than either the canopy (drip line) or the trunk (AS 3959:2018, clause C2.2.5).

Measured Separation Distance as a Calculation Input

If a separation distance can be measured because the location of the building/structure relative to the edge of the relevant classified vegetation is known, this figure can be entered into the BAL calculation. The result is a determined BAL rating.

Assumed Separation Distance as a Calculation Input

When the building/structure location within the lot is not known, an assumed building location may be applied that would establish the closest positioning of the building/structure relative to the relevant area of vegetation.

The assumed location would be based on a factor that puts a restriction on a building location such as:

- An established setback from the boundary of a lot, such as a residential design code setback or a restrictive covenant; or
- Within an established building envelope.

The resultant BAL rating would be indicative and require later confirmation (via a Compliance Report) of the building/structure actual location relative to the vegetation to establish the determined BAL rating.

Separation Distance as a Calculation Output

With the necessary site specific assessment inputs and using the AS 3959:2018 bushfire modelling equations, the range of separation distances that will correspond to each BAL rating (each of which represents a range of radiant heat flux), can be calculated. This has application for bushfire planning scenarios such as:

- When the separation distance cannot be measured because the exact location of the exposed element (i.e., the building, structure or area), relative to classified vegetation, is yet to be determined.

  In this scenario, the required information is the identification of building locations onsite that will correspond to each BAL rating. That is, indicative BAL ratings can be derived for a variety of potential building/structure locations; or

- The separation distance is known for a given building, structure or area (and a determined BAL rating can be derived), but additional information is required regarding the exposure levels (to the transfer of radiant heat from a bushfire), of buildings or persons, that will exist at different points within the subject site.

The calculated range of separation distances corresponding to each BAL rating can be presented in a table and/or illustrated as a BAL Contour Map – whichever is determined to best fit the purpose of the assessment.

For additional information refer to the information boxes in Section 3 'Bushfire Attack Levels (BAL) - Understanding the Results and Section 3.2. 'Interpretation of the BAL Contour Map'.

SITE ASSESSMENT DETAILS - EXPLANATION & JUSTIFICATION

For the subject development/use the applicable separation distances values are derived from calculations applying the assessed site data. They are an output value, not an input value and therefore are not presented or justified in this appendix.

The derived values are presented in Section 3, Table 3.2 and illustrated as a BAL contour map in Figure 3.2a and Figure 3.2b.

APPENDIX B: GUIDANCE – BUSHFIRE ATTACK LEVELS AND ASSET PROTECTION ZONES

B1: Understanding Bushfire Attack Level (BAL) Ratings

BUSHFIRE ATTACK LEVEL

IMPORTANT

It is not the purpose of this 'planning' BMP to derive a 'determined' BAL rating (and associated minimum APZ dimensions), that will apply to an existing or future habitable or specified building, for the purpose of establishing its bushfire resistant construction requirements in accordance with the Building Code of Australia (contained in the NCC).

However, in limited situations a 'determined' BAL can be an incidental outcome of the planning assessment.

BUSHFIRE ATTACK LEVEL (BAL)

The potential transfer (flux/flow) of radiant heat from a bushfire to a receiving object is measured in kW/m^2. The AS 3959:2018 Bushfire Attack Level (BAL) determination methodology establishes the ranges of radiant heat flux that correspond to each bushfire attack level.

These ranges of radiant heat transfer are titled BAL-LOW, BAL-12.5, BAL-19, BAL-29, BAL-40 and BAL-FZ.

For certain classes of building/structure the bushfire performance requirements and the associated deemed to satisfy solutions are established by the Building Code of Australia (Vol. 1 & 2 of the NCC). For most jurisdictions the relevant building classes are 1, 2, 3, 9 and associated 10a.

The assessed BAL rating that applies to a specific building/structure determines the bushfire resistant construction requirements for those works in accordance with AS 3959:2018 - *Construction of buildings in bushfire prone areas,* or for Class 1 buildings, the NASH Standard – *Steel framed construction in bushfire areas (NS 300 2021),* as the recognised deemed to satisfy solutions.

DETERMINED BAL RATINGS

A BAL can only be classed as 'determined' and therefore apply to an existing or future building/structure when:

1. The building/structure final design and position on the lot are known and the stated separation distance from classified bushfire prone vegetation exists and can justifiably be expected to remain in perpetuity; or

2. The building/structure will always remain subject to the same BAL regardless of:
    (a) The retention of all existing classified vegetation either onsite or offsite; and
    (b) Its design or position on the lot - including, as relevant and necessary, accounting for any regulatory or enforceable building setbacks from lot boundaries (i.e. R-codes, restrictive covenants and defined building envelopes).

Consequently, a BAL Certificate may be able to be issued for a BAL stated in the BMP when it can be considered 'determined'. However, this is not the typical outcome but an incidental one.

If the BMP can derive determined BAL(s), the BAL Certificate(s) required for submission with building applications could potentially be provided, using the BMP as the supporting assessment data.

INDICATIVE AND CONDITIONAL BAL RATINGS

An 'Indicative BAL' indicates the highest BAL rating that exists for the applied set of parameters that have been applied to the site's assessment. Because the potential remains for these parameters to be varied, they are unable to be considered a 'determined' BAL.

A 'Conditional BAL' establishes the BAL rating that will be considered as a 'Determined BAL' once the stated requirements (i.e. the conditions), which may require approval by the relevant authority, are implemented and subsequently confirmed as being met.

Relevant conditions that may need to be met include:

- The location of future development sites being identified accurately and/or modified; and/or
- Classified vegetation being modified or removed (after obtaining any required approvals from the relevant authority), to establish the required vegetation separation distances.

A BAL Certificate cannot be issued for an indicative or conditional BAL rating – only for a 'Determined BAL'.

BAL RATINGS FOR BUILDING VERSUS PLANNING PURPOSES – ASSESSMENT & REPORTING REQUIREMENTS ARE DIFFERENT

Building Permit Applications

The relevant requirements are established in accordance with the WA Building Act 2011 and Building Regulations 2012 which reference the application of the Building Code of Australia (within the National Construction Code).

The required BAL rating is a 'determined' BAL rating (stated on a BAL Certificate) and supported by the requisite assessment details. Typically, this will be a Bushfire Attack Level (BAL) Report produced specifically for this purpose.

The required supporting assessment information may be derived from a Bushfire Management Plan (BMP) when a 'determined' BAL can be derived for a planning proposal. This is possible when the specific conditions discussed under 'Determined BAL Ratings' above, can be met, as an incidental outcome.

Planning Proposal Applications

The relevant requirements are established in accordance with the Planning and Development Act 2005, LPS Regulations 2015, SPP 3.7 Bushfire and the associated Guidelines.

To comply with the relevant acceptable solutions contained in the Guidelines, the subject planning proposal must demonstrate that the required minimum sized asset protection zone (APZ) - subject to location constraints and allowances established by the Guidelines - can be installed surrounding a habitable or specified building.

The minimum dimensions are those that ensure the potential radiant heat impact on the relevant buildings does not exceed 29 kW/m^2 from fire in any surrounding types of classified vegetation. This is the upper limit of the range of radiant heat flux corresponding to the BAL-29 rating.

Consequently, the BAL ratings identified in a Bushfire Management Plan (BMP) only need to be 'indicative' - although 'determined' ratings may be derived as an incidental outcome when relevant conditions are met (discussed under 'Determined BAL Ratings' above).

The indicative BAL-29 dimensioned APZ is not necessarily the APZ that will be required to be implemented and maintained surrounding any subject building/structure that exists as per an approved planning proposal. Refer to Appendix B3 in this BMP for additional information.

B2: BAL Contour Map Interpretation

THE BAL CONTOUR MAP

The Bushfire Attack Level (BAL) contour map is a diagrammatic representation of the outcome of the bushfire attack level assessment that has been conducted.

The map presents six shaded radiant heat contours extending out from each area of classified vegetation. Each coloured contour represents a different BAL rating (BAL-LOW, BAL-12.5, BAL-19, BAL-29, BAL-40 and BAL-FZ) and corresponds to a set range of potential radiant heat transfer (kW/m^2), in accordance with AS 3959:2018 BAL determination methodology.

The highest BAL rating contour that an exposed element (building, person or other defined element), is partly or fully located within, is the BAL rating that will apply to that element.

The width of each BAL contour:

- Will vary dependent on the BAL rating it represents; and
- The assessed potential bushfire behaviour that considers site specific vegetation types, fuel loads, ground slopes and fire weather; and
- Represents the minimum and maximum vegetation separation distances corresponding to the BAL rating it represents.

For 'post development' BAL contour maps, the areas of classified vegetation applied to the production of the BAL contours, are those that will remain at the intended end state of the subject development once earthworks, clearing and/or landscaping and/or re-vegetation have been completed.

IMPORTANT

A BAL contour map is typically constructed for planning assessment and application purposes rather than building permit application purposes.

The BAL ratings identified from a BAL contour map will likely only be 'indicative' of what can be achieved – with planning compliance for this factor being satisfied when BAL-29 is indicated.

However, future building works require a 'determined' BAL rating for building permit applications and a BAL Certificate. The required 'determined' BAL rating is not necessarily able to be derived from the BAL contour map. There are only limited scenarios where this is possible. Refer to Appendix B1 and B3 for additional information.

Consequently, a subsequent assessment of the site data and associated report for building application purposes may be required to determine the BAL rating that is to apply for building purposes. Note: If approval from the relevant authority needs to be obtained for native vegetation modification and/or removal this also establishes that a subsequent assessment and report will be required.

B3: The Asset Protection Zone (APZ)

THE APZ – DESCRIPTION, TECHNICAL REQUIREMENTS AND DIMENSIONS

DESCRIPTION AND PURPOSE

An asset protection zone (APZ) is an area surrounding a habitable or specified building that is:

- Not vegetated; and/or
- Supports retained or planted vegetation that can be considered to present a low bushfire threat as a result of;
    - Low flammability and/or higher moisture content characteristics; and/or
    - Minimal fuel loads (either naturally or as a result of continual maintenance).

The primary objectives of establishing an APZ are:

1. To ensure a reduction in the exposure of the building/structure to the bushfire direct attack mechanisms (threats) of flame contact, radiant heat transfer and ember attack, by establishing appropriate separation distances from each identified area of classified vegetation.

   These distances are measured from the nearest part of an external wall and/or the supporting posts of building parts without external walls; and
2. To ensure a reduction in the exposure of the building/structure to bushfire indirect attack mechanisms (threats) by:
    - Preventing surface fire spreading to the building/structure;
    - Minimising the potential for tree strike that can decrease building/structure resilience to bushfire direct attack mechanisms; and
    - Limiting the potential for consequential fires to impact the building/structure by eliminating, reducing, moving away and/or shielding consequential fire fuels.

      These fuels include accumulated debris, stored combustible/flammable items and constructed combustible items. Note that consequential fire, typically ignited by embers, is the primary cause of building loss in a bushfire event; and
3. To provide a defendable space for firefighting activities.

TECHNICAL REQUIREMENTS

Established by the Guidelines

The relevant technical requirements for an APZ are established in the Planning for Bushfire Guidelines (DPLH/WAPC) (as amended), Appendix B2: Siting and design and available online at Planning WA - SPP 3.7 Bushfire

Established by the Relevant Local Government

Certain LGA may state technical requirements to be complied with that vary from and/or are additional to those established by the Guidelines.

Refer to the notice issued annually by the relevant local government under s33 of the Bushfires Act 1954 (e.g. Bushfire Risk Reduction Notice or Firebreak and Hazard Reduction Notice etc). These technical requirements may also be established by their gazetted local planning scheme. Refer to the ratepayer notice and/or the local government's website for the current version.

Information Published by the Bushfire Centre of Excellence (DFES)

The book titled Firewise Gardening in Western Australia (2024), is a good source of relevant information and is available online at https://dfes.wa.gov.au/hazard-information/bushfire/bcoe#bushfire-resources.

DIMENSIONS

The dimensions of the APZ that will be the responsibility of a landowner to implement and/or maintain around a habitable or specified building/structure, are stated as the separation distances between these buildings and each identified area of classified vegetation. These distances will be site specific and dependant on variables which include:

- The potential bushfire behaviour in the identified vegetation which is dependent on factors including vegetation types, fuel loads, ground slopes and fire weather;
- The intended use of the site, with vulnerable uses requiring greater safety margins; and
- The constructed bushfire resistance of the subject building/structure (typically corresponding to a BAL rating or kW/m^2 level of radiant heat exposure).

Dimensions Established by the BAL Rating of the Subject Building/Structure

These minimum separation distances, to be installed and maintained, correspond to a 'determined' BAL rating and align the building's applied level of bushfire resistant construction to its potential level of exposure to flames, radiant heat and embers from the bushfire (note: this will not account for any exposure from significant consequential fires closer to the building).

The dimensions should be stated within a Bushfire Attack Level Report (BAL Report) produced for building application purposes. They may also be identified in an associated Bushfire Management Plan (BMP) produced for planning application purposes.

Dimensions Established by the Guidelines, DPLH/WAPC for an On-site Shelter for a Vulnerable Tourism Land Use

For the stated specific use, the Guidelines specify the maximum level of radiant heat exposure allowed. Consequently, the BMP produced for planning application purposes will state the minimum distances that are to be installed and maintained.

> *Note: Other than for the above use, the Guidelines do not establish the dimensions of the APZ for other buildings/structures that must be installed. They only establish that at least a BAL-29 dimensioned APZ should be the minimum that is installed and ensures that this is possible for the subject planning proposal. Consequently, the BMP can only indicate the separation distances corresponding to different levels of radiant heat exposure. Refer also to Appendix B1 in this BMP.*

Dimensions Established by this BMP

The required dimensions may be identified in this BMP when specific increased separation distances have been applied through the application of an outcomes-based assessment that requires this as an additional protection measure.

Dimensions Established by the BCA (NCC 2022) for Certain Class 9 Vulnerable Use Buildings

These separation distances are stated in the BCA in Specification 43 as either:

- Not less than the minimum distances specified in Table S43C2; or
- Those corresponding to radiant heat flux on exposed building elements not exceeding 10kW/m^2 from a justified design bushfire analysis; or
- Those justified as an outcome of a building performance solution.

The separation distances may be included in the BMP by the bushfire practitioner as additional information to inform proponents and decision makers. They are not addressed by the Guidelines and therefore not a required part of the bushfire assessments presented within a BMP for planning application purposes.

Dimensions Established by a Local Government

To satisfy certain local government requirements, required APZ dimensions may be stated in the notice issued annually by the relevant local government under s.33 of the Bushfires Act 1954. These may be greater than the dimensions applied by the above mechanisms. A maximum APZ dimension could also be applied by the LGA.

These separation distances may be included in the BMP for informative purposes, but they are not a requirement for a BMP submitted for planning application purposes in accordance with the Guidelines.

B4: Vegetation Excluded from Classification – Ensure Continued Low Threat Status

MAINTAINING THE LOW THREAT STATUS OF EXCLUDED VEGETATION

When applying AS 3959:2018 BAL determination methodology, vegetation adjoining or adjacent to the subject site can be excluded from classification based on being a 'low bushfire threat'. To maintain this status, certain requirements must continue to be met in accordance with the below extract from AS3959:2018. Refer to the 'Classified Vegetation and Topography Map' for the relevant low threat areas associated with the subject site.

Determination of 'low threat' vegetation is based on factors such as - proximity to the subject site / small areas of vegetation / low flammability / higher moisture content / low fuel load.

Aside from a naturally occurring low fuel load, vegetation maintained in a minimal fuel condition through active management can be excluded. The associated key requisite is that the active management can be expected to continue in perpetuity, and this can be adequately justified.

Acceptable forms of justification typically involve supportable evidence or the existence of an enforceable mechanism. Examples of enforceable mechanisms include:

- Requirements established by a Section 33 (Bush Fires Act 1954) notice issued by a local government;
- An appropriate and enforceable agreement between relevant parties (which may involve additions to land titles); and
- For public open space or crown land, written evidence that the land manager e.g. local government or a State Government department, agrees to maintain the designated area of land in a low threat state in perpetuity.

2.2.3.2 *Exclusions—Low threat vegetation and non-vegetated areas*

The following vegetation shall be excluded from a BAL assessment:

(a) Vegetation of any type that is more than 100 m from the site.

(b) Single areas of vegetation less than 1 ha in area and not within 100 m of other areas of vegetation being classified vegetation.

(c) Multiple areas of vegetation less than 0.25 ha in area and not within 20 m of the site, or each other or of other areas of vegetation being classified vegetation.

(d) Strips of vegetation less than 20 m in width (measured perpendicular to the elevation exposed to the strip of vegetation) regardless of length and not within 20 m of the site or each other, or other areas of vegetation being classified vegetation.

(e) Non-vegetated areas, that is, areas permanently cleared of vegetation, including waterways, exposed beaches, roads, footpaths, buildings and rocky outcrops.

(f) Vegetation regarded as low threat due to factors such as flammability, moisture content or fuel load. This includes grassland managed in a minimal fuel condition, mangroves and other saline wetlands, maintained lawns, golf courses (such as playing areas and fairways), maintained public reserves and parklands, sporting fields, vineyards, orchards, banana plantations, market gardens (and other non-curing crops), cultivated gardens, commercial nurseries, nature strips and windbreaks.

NOTES:

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

2 A windbreak is considered a single row of trees used as a screen or to reduce the effect of wind on the leeward side of the trees.

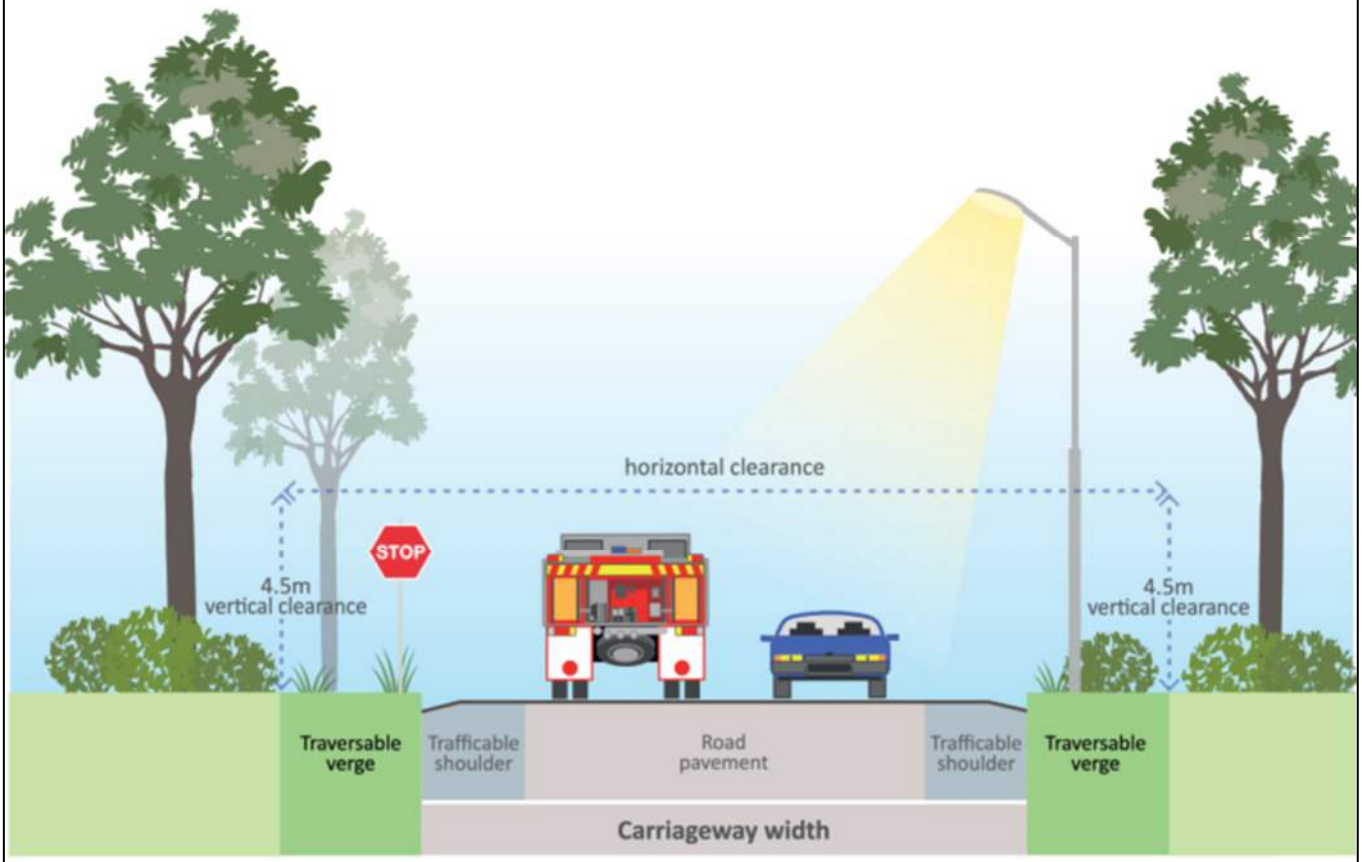
APPENDIX C: GUIDANCE - TECHNICAL REQUIREMENTS FOR VEHICULAR ACCESS

The relevant technical requirements are established in the Planning for Bushfire Guidelines (DPLH/WAPC) (as amended), Appendix B3: Vehicular access and available online at Planning WA - SPP 3.7 Bushfire

The following excerpts are presented here as a quick reference to applicable terminology and design requirements applied in the assessment against the bushfire protection criteria, Element 3: Vehicular access in this BMP.

C1: Road Component Terminology

Figure 26: Area encompassing horizontal clearance and vertical clearance



Horizontal clearance: The carriageway width (including the road pavement and trafficable shoulder) and traversable verge that provides for the movement and parking of vehicles and area required by emergency services to operate. Infrastructure and vegetation within the traversable verge should be frangible, however, non-frangible items can occur providing they do not restrict vehicular movement in the event of an emergency.

C2: Vehicular Access Technical Requirements

Table 10: Vehicular access technical requirements

	1		2		3		4		5	
TECHNICAL REQUIREMENTS	**PERIMETER ROADS**		**PUBLIC ROADS**		**EMERGENCY ACCESS WAY[3]**		**FIRE SERVICE ACCESS ROUTE[3]**		**BATTLE-AXE & PRIVATE DRIVEWAYS[1]**	
MAP OF BUSH FIRE PRONE AREAS DESIGNATION	**Area 2**	**Area 1**	**Area 2**	**Area 1**	**Area 2**	**Area 1**	**Area 2**	**Area 1**	**Area 2**	**Area 1**
Minimum horizontal clearance (metres)	12	8	See note 5		10	6	10	6	6	
Minimum vertical clearance (metres)	4.5									
Minimum weight capacity (tonnes)	15									
Maximum grade unsealed road[2]	See note 5		See note 5		1:10 (10% or 6°)					
Maximum grade sealed road[2,4]					1:7 (14.3% or 8°)					
Maximum average grade sealed road					1:10 (10% or 6°)					
Minimum inner radius of road curves (metres)					8.5					

Notes:

[1] Driveways and battle-axe legs to comply with the Residential Design Codes and Development Control Policy 2.2 Residential Subdivision where not required to comply with the widths in this Appendix or the Guidelines.

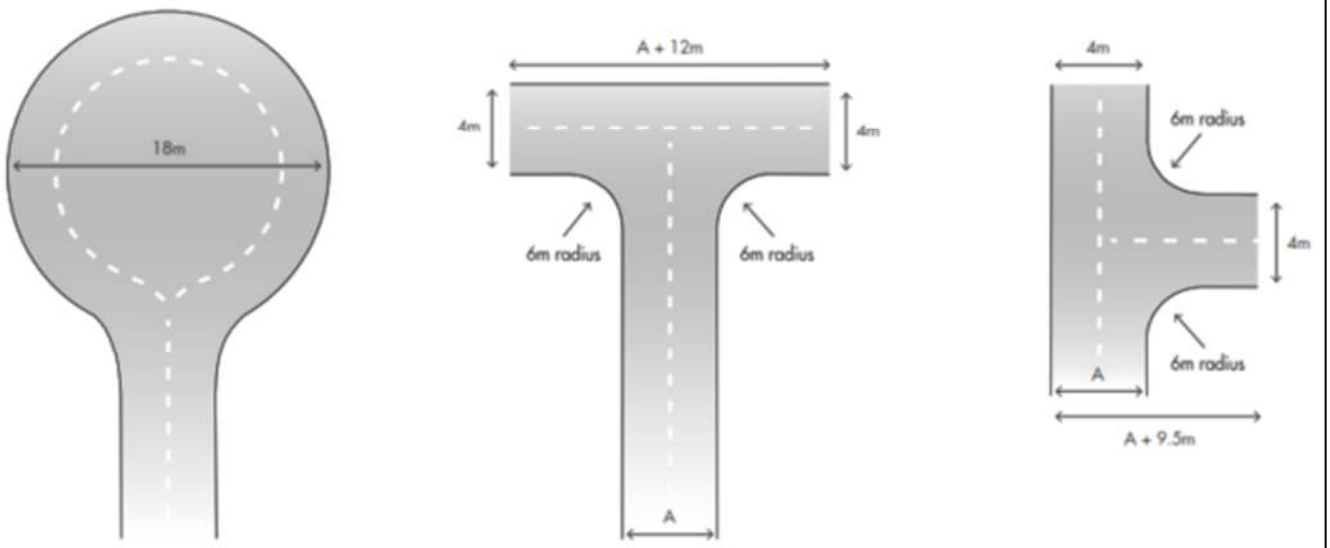
[2] Dips must have no more than a 1 in 8 (12.5% - 7.1 degrees) entry and exit angle.

[3] To have crossfalls between 3 per cent and 6 per cent.

[4] For sealed roads only the maximum grade of no more than 1 in 5 (20 per cent) (11.3 degrees) for no more than 50 metres is permissible, except for short constrictions to 3.5 metres for no more than 30 metres in length where an obstruction cannot be reasonably avoided or removed.

[5] As outlined in the Institute of **Public Works Engineering Australasia (IPWEA) subdivision guidelines, Liveable Neighbourhoods, Austroads Standards** Main Roads standard, supplement, policy or guideline and/or any applicable or relevant local government standard or policy.

Figure 30: Design requirements for a turn-around area



APPENDIX D: GUIDANCE - TECHNICAL REQUIREMENTS FOR FIREFIGHTING WATER SUPPLY

The relevant technical requirements are established in the Planning for Bushfire Guidelines (DPLH/WAPC) (as amended), Appendix B4: Water supply and available online at Planning WA - SPP 3.7 Bushfire

The information provided in this appendix is additional to that provided in the Guidelines. It includes:

- For reticulated water supply, the hydrant location specifications established by the WA Water Corporation (Design Standard DS 63), as dependant on land use type and relevant to bushfire planning assessments (highlighted). Note: the maximum distance from a hydrant to the rear of a lot/building is generally interpreted as not applicable to large lot sizes where the maximum distance becomes an impractical limitation i.e., typically rural residential areas; and
- Images of example installations of acceptable water supply tanks and outlet fittings.

D1: Firefighting Water Supply - Tank and Fittings

Bushfire Centre of Excellence
TRAINING / KNOWLEDGE / ENGAGEMENT

Water tank connections for bushfire-prone areas (domestic and commercial)

Information Sheet, January 2025

This fact sheet provides information on how to best set up water supplies to assist firefighters on properties in bushfire-prone areas. It includes information on the siting, capacity, access and appropriate fittings needed for firefighters to access and use water supplies during an emergency.

Please note: if you are establishing water supplies to comply with planning requirements, you should read this fact sheet in conjunction with the *Planning for Bushfire Guidelines*, as well as relevant planning schemes or policies from your local government.

What fittings should I fit the water tank with?

All tanks for firefighting should be fitted with a 50 millimetres or 100 millimetres male camlock fitting. This fitting is readily available from most hardware and rural supply shops. DFES recommends a male camlock fitting, as it means there are no perishable washers or working parts to maintain.

The fitting should be controlled by a butterfly, ball or gate valve, as these can easily control flow.

Why do I need a water tank for bushfires on my property?

You may have a water tank dedicated to bushfires to make your property as resilient as possible, or it may be a formal requirement under relevant planning or building regulations.

A water tank dedicated to firefighting supports firefighters attempting to protect your property and other assets from bushfires. You should consider a dedicated water tank alongside other bushfire prevention and preparedness activities, such as managing bushfire fuels and having a bushfire plan.

Water tank connections for bushfire-prone areas (domestic and commercial) - Information Sheet Page 1 of 2

Where should I site a water tank?

You should site water tanks on clear, level ground compacted to take the maximum weight of the tank when full.

The tank should also be in a low-fuel area with at least 3 metres cleared around it to prevent direct contact with flames.

The water tank must be accessible to firefighting appliances and include a suitable area for these to turn around. You can find more information on recommended minimum standards for access in the *firebreak construction guidelines*.

What capacity should the tank be?

The recommended minimum capacity for a firefighting water supply is 10,000 litres.

You may be using the tank for other purposes besides bushfire fighting, such as water for livestock or other rural purposes. However, it is recommended that a minimum of 10,000 litres is always available for firefighting.

Example Strategic 47,000 Litre Concrete Tank & Protected Fittings

Example 10,000 Litre Concrete Tank

Example Storz and Camlock Couplings

ADDENDUM 1: LOCAL GOVERNMENT FIREBREAK NOTICE CORRESPONDENCE

The proposed driveway layout for the subject site is considered an acceptable variation to the Shire of Exmouth Firebreak Notice, as per the correspondence provided below. The Bushfire Consultant sought input from the local government to provide confidence that the proponent will not need to alter the driveway or site layout to accommodate additional internal firebreaks.

From: Kerry Forsyth <kforsyth@exmouth.wa.gov.au>
Sent: Thursday, 13 November 2025 10:34 AM
To: Ryley Cladingboel <rcladingboel@exmouth.wa.gov.au>;
Subject: Re: Lot 848 Truscott Cr Exmouth - Bushfire Planning Query

Dear Ryley and Ben,

Please see email correspondence below between myself and Elissa Edward from Bushfire Prone Planning.

Elissa reached out to the Shire on behalf of her client as she is preparing a Bushfire Management Plan (DA) for a tourist development on Lot 848 Truscott Crescent. Elissa is trying to determine whether the proposed internal driveway layout would be an acceptable variation to the Shire's Firebreak Notice.

Following review of the site layout for Lot 848 Truscott Crescent, I recommend approval of a Firebreak Variation under Section 33 of the Bush Fires Act 1954 (WA) if access is maintained at all times.

Although the proposal does not include firebreaks along the lot boundaries, internal driveways provide suitable vehicle access to all outbuildings, satisfying the intent of the Shire's Firebreak Notice in terms of bushfire mitigation and emergency access.

Access would need to be maintained at all times to ensure compliance and operational readiness for emergency services allowing unhindered access for a standard four-wheel drive fire appliance.

Please let me know if Planning has any concerns and provide comment.

I will be on shift again from Saturday and in the office Monday if further information is needed. I'll pop the site plan through shortly.

Kind Regards
Kez

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Shire of Exmouth