Local Government Use:



Bushfire Management Plan Compliance Report

'Certification by Bushfire Consultant'

PROPERTY LOCATION DETAILS

Pt Lot 9010 Frasers Landing Stage 6 Swanson Loop

COODANUP WA 6210

City of Mandurah

BUSHFIRE MANAGEMENT PLAN DETAILS

Planning Stage: Subdivision - Clearances

BMP Date of

Issue:

17 November 2020

BMP

Reference Number: N/A BMP Version:

V1.0

BMP Description: Forrest Walk Precinct-Frasers Landing, Coodanup (Bushfire Safety Consulting)

REPORT DETAILS

Job Reference Number: 220028

Report Version: V1.0

Assessment Date: 9 August 2023

Report Date: 25 August 2023



BUSHFIRE PLANNING AND DESIGN (BPAD) ACCREDITED PRACTITIONER DETAILS

Name: Ian Macleod

Company Details:

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I hereby declare that I am a BPAD accredited bushfire practitioner.

Accreditation No. BPAD 39131 (Level 2)

Signature

Jon Macleod

Date 25 August 2023

Authorised Practitioner Stamp

This report has been prepared by an Accredited BPAD Practitioner.

Fire Protection Association Australia as the accrediting body for BPAD accreditation, makes no warranties as to the accuracy of the information provided in the report. All enquiries related to the information and conclusions presented in this report must be made to the practitioner who prepared this report.

Reliance on the assessment and determination of the Bushfire Attack Level contained in this report should not extend beyond a period of 12 months from the date of issue of the report. If this report was issued more than 12 months ago, it is recommended that the validity of the determination be confirmed with the Accredited Practitioner and where required an updated report and/or BAL Certificate issued.

Limitation of Liability: The measures contained in this Report, are considered to be minimum requirements and they do not guarantee that a building will not be damaged in a bushfire, persons injured, or fatalities occur either on the subject site or off the site while evacuating. This is substantially due to the unpredictable nature and behaviour of fire and fire weather conditions. Additionally, the correct implementation of the required bushfire protection measures will depend upon, among other things, the ongoing actions of the landowners and/or operators over which Bushfire Prone Planning has no control.

All surveys, forecasts, projections and recommendations made in this report associated with the proposed development are made in good faith based on information available to Bushfire Prone Planning at the time. All maps included herein are indicative in nature and are not to be used for accurate calculations.

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

BMP Compliance v1.0

LANDOWNER RESPONSIBILITIES

Construction Requirements: The bushfire construction standard to be applied to building works must be that which corresponds to the determined BAL and are established by AS 3959:2018 or the NASH Standard.

Comply with the Landowner Responsibilities Established by the Bushfire Management Plan (BMP): Where the property (lot) is subject to an approved BMP (refer to the land title), all responsibilities created must be complied with. This will include the management of vegetation within the lot to a minimal fuel, low threat state to create an asset protection zone (APZ). The required dimensions of the APZ are established by either those corresponding to the determined BAL or those established by the Firebreak and Fuel Load Notice, whichever is greater.

Comply with the Local Government Firebreak & Fuel Load Notice: The requirement exists to comply with the relevant local government's Firebreak & Fuel Load Notice created under Section 33 of the Bushfires Act 1954 and issued annually to landowners (and available on their website).



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BUSHFIRE MANAGEMENT PLAN COMPLIANCE

This report assesses compliance with the measures contained in Section 6 Responsibilities for Implementation and Management of the Bushfire Measures:

Bushfire Management Plan: Forrest Walk Precinct – Frasers Landing Coodanup (Bushfire Safety Consulting – 17th November 2020).

- An inspection was undertaken on 9 August 2023.
- Photographic evidence is included.

Management of the subdivisional area land will be in accordance with the approved **Bushfire Management Plan** and the **City of Mandurah Fire Compliance Notice**, as issued annually.



Figure 1: Site Plan







REVISED POTENTIAL BUSHFIRE IMPACTS – INDICATIVE BUSHFIRE ATTACK LEVELS FOR FUTURE BUILDINGS ON PROPOSED LOTS

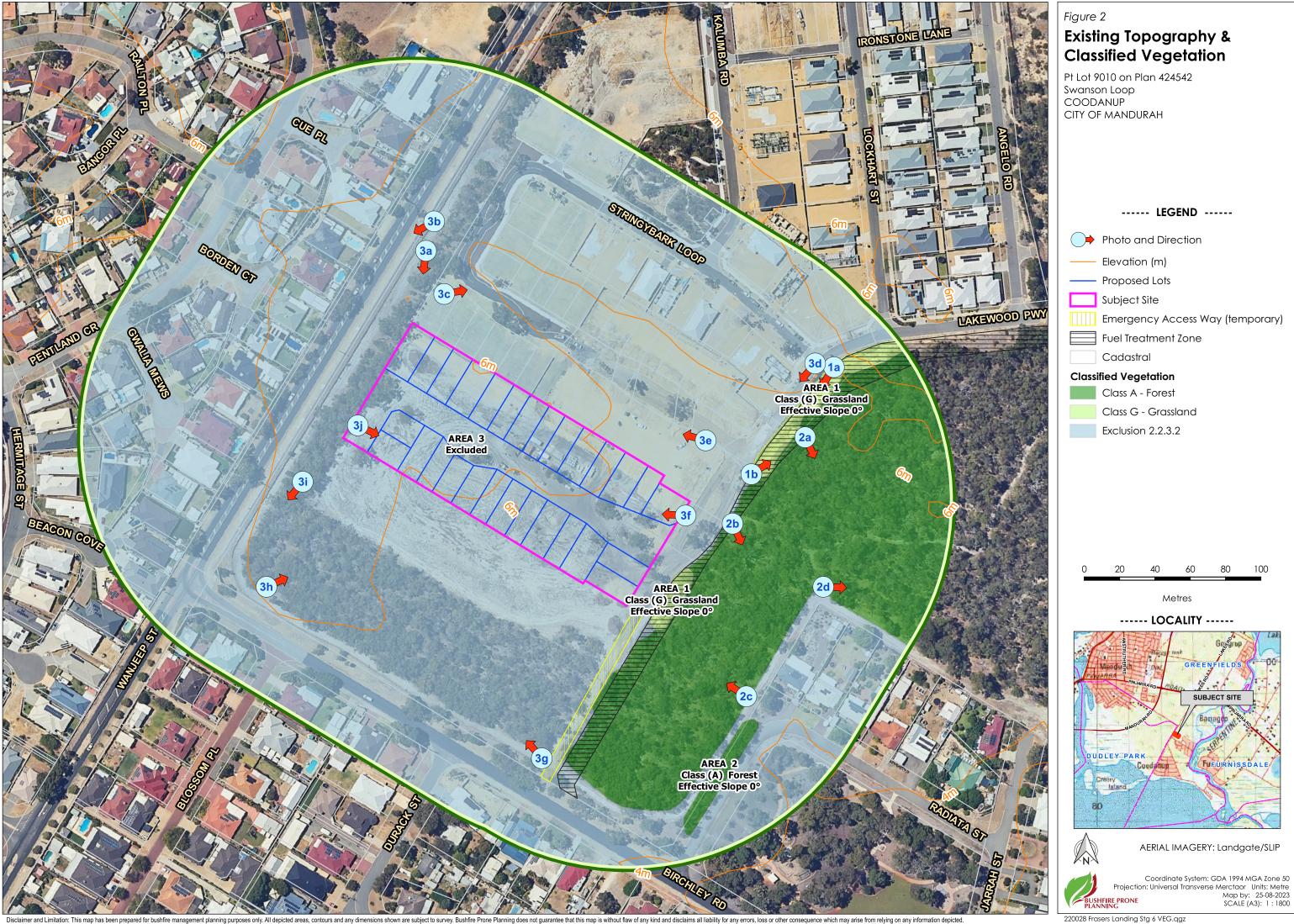
The distances that have been applied to illustrating the width of each BAL contour shown in Figure 3 are confirmed in Table 1.1 Potential Bushfire Impacts, below. These correspond to each Bushfire Attack Level (Table 1.2) and are specific to the proposed development site.

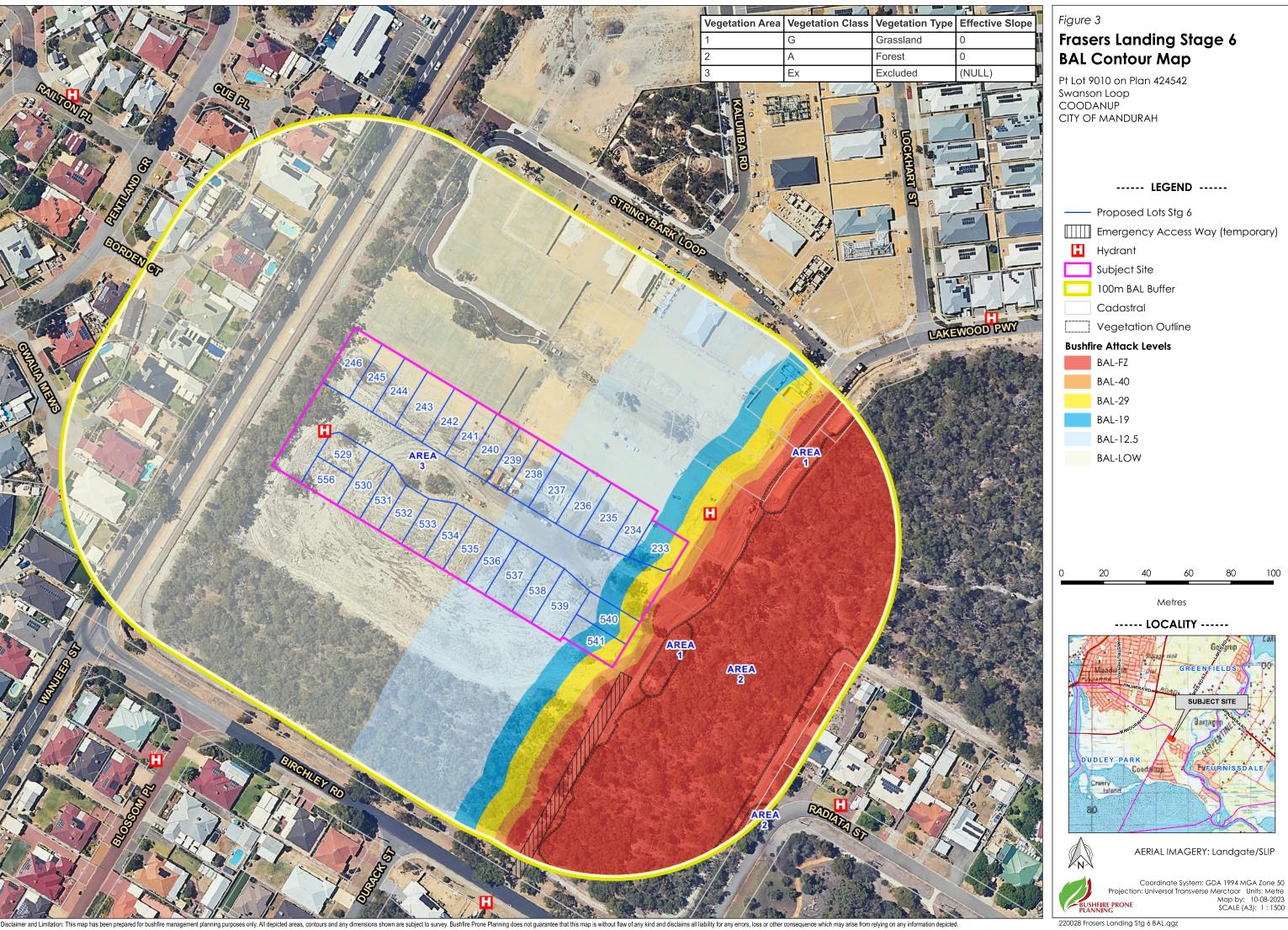
Table 1.1: Potential Bushfire Impacts

	BAL CONTOUR MAP – APPLIED VEGETATION SEPARATION DISTANCES							
Der	Derived from the Application of Method 1 BAL Determination Methodology (AS 3959:2009 Section 2, Table 2.4.3)							
getation Area	Vegetation	Effective Slope	BAL and Corresponding Separation Distance (m)					
Vegetation Area	Classification	(degree range)	BAL-FZ	BAL-40	BAL-29	BAL-19	BAL12.5	BAL- LOW
1	Class G Grassland	0 Upslope or flat	6	6-<8	8-<12	12-<17	17-<50	>50
2	Class A Forest	0 Upslope or flat	16	16-<21	21-<31	31-<42	42-<100	>100
3	Excluded 2.2.3.2 (f)	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Table 1.2: Determined BAL(s) for proposed lots.

DETERMINED BUSHFIRE	ATTACK LEVEL FOR PROPOSED LOTS			
BAL Determination Me	thodology Applied ¹	Method 1 as per AS 3959:2018 s2.2.6 and Table 2.5.		
Lot Number	Determined BAL (BAL Contour Map Post Subdivisional Works)	Lot Number	Determined BAL (BAL Contour Map Post Subdivisional Works)	
233	BAL-29	529	BAL-LOW	
234	BAL-19	530	BAL-LOW	
235	BAL-12.5	531	BAL-LOW	
236	BAL-12.5	532	BAL-LOW	
237	BAL-12.5	533	BAL-LOW	
238	BAL-12.5	534	BAL-LOW	
239	BAL-LOW	535	BAL-12.5	
240	BAL-LOW	536	BAL-12.5	
241	BAL-LOW	537	BAL-12.5	
242	BAL-LOW	538	BAL-12.5	
243	BAL-LOW	539	BAL-12.5	
244	BAL-LOW	540	BAL-29	
245	BAL-LOW	541	BAL-29	
246	BAL-LOW	556	BAL-LOW	
Note: Final BAL's to be determined at building stage subject to survey of building location within the Lot.				







CERTIFICATION FOR IMPLEMENTATION OF THE BUSHFIRE PROTECTION MEASURES (BMP)

	LANDOWNER / PROPONENT RESPONS	IBILITIES PRIOR TO ISSUE OF TITLES
Item.	Implementation Actions	Subdivision Clearance
1	Re-assess BAL ratings on lots prior to the creation of titles in stages after clearing of the site and develop a BAL report and certificates for the building license process.	Complies. See BAL assessment above.
2	Establish Fuel Treatment Zones as outlined in Figure 6 (of the BMP) to the satisfaction of the City of Mandurah.	Does not comply. Fuel treatment zone on the south-east side of Lakewood Parkway is not fully established. See Figure 2.
3	Install the public roads to standards outlined in BMP.	Complies. Roads are constructed in accordance with local government requirements per the approved engineering plans. Note: A temporary emergency access way is established as an extension of Lakewood Parkway to Birchley Road. This will become a public road in a future stage of the subdivision.
4	Install hydrants to the Water Corporation's No.63 Water Reticulation Standard.	Complies. Hydrant(s) are installed to the requirements of the relevant authorities.
5	A notification, pursuant to Section 70A of the Transfer of Land Act 1893 is to be placed on the certificate(s) of title of the lots within the Bushfire Prone Area. Notice of this notification is to be included on the diagram or plan of survey (deposited plan). The notification is to state as follows 'The lot(s) is/are subject to a Bushfire Management Plan. (Local Government)'.	9 9

	LANDOWNER / PROPONENT RESPONSIBILITIES AT SALE OF LOTS					
No.	Implementation Actions	Subdivision Clearance				
6	Make a copy of the BMP available to each lot along with the Homeowners Bush Fire Survival Manual, Prepare, Act, Survive (or similar suitable documentation), and the City of Mandurah's Fire Compliance Notice.	Ongoing.				



PHOTOGRAPHIC EVIDENCE OF IMPLEMENTATION OF THE BUSHFIRE PROTECTION MEASURES

POST SUBDIVISIONAL WORKS - FRASERS LANDING STAGE 6

Description: Items 1 and 2: Vegetation Classification and Management. See Figure 2

Photos 1a and 1b: Drainage swales mulched and revegetated with sedges. **Photos 2a to 2d:** Remnant forest type vegetation to the east of the subject site.





Photo ID: 1a

Photo ID: 1b





Photo ID: 2a

Photo ID: 2b





Photo ID: 2c

Photo ID: 2d



Description: Items 1 and 2: Vegetation Classification and Management. See Figure 2

Photos 3a and 3k: Treatment Zone along Wanjeep Road. trees underpruned to 2 metres, understorey removed, ground mulched. **Photos 3b to 3e**: Managed vacant lots and road verges.





Photo ID: 3a







Photo ID: 3b

Photo ID: 3c





Photo ID: 3d

Photo ID: 3e



Description: Items 1 and 2: Vegetation Classification and Management. See Figure 2

Photos 3f and 3l: Stage 6 development. Photos 3i and 3j: Recently cleared vegetation.





Photo ID: 3j

Photo ID: 3f







Photo ID: 3g

Photo ID: 3h



Description: Items 3: Public Roads

Photos 1 to 4: Roads compliant with local government requirements.

Photo 5: Temporary turnaround area (19metres diameter).

Photo 6: Temporary emergency access way 6 metre wide limestone.





Example Photo: 1







Example Photo: 3

Example Photo: 4





Example Photo: 5

Example Photo: 6



Description: Item 4: Hydrants

Photo 7: New hydrant installed.

Photo 8: Existing hydrant at southern end of emergency access way.





Example Photo: 7

Example Photo: 8





REQUIREMENTS

- 1. The subdivision is separated from bushfire hazard by a road reserve which functions as an Asst Protection Zone and fuel reduced area in the adjacent reserve. This combined area of management results in no lots exceeding BAL-29.
- 2. The site is connected to the existing public road network in multiple locations providing multiple access options to multiple destinations.
- 3. The area is provided with a reticulated water supply. The provision of scheme water together with fire hydrants will meet the specifications of Water Corporation Design Standard DS63 and DFES requirements. The Water Corporation is responsible for all hydrant repairs.
- 4. Treatment Zone 1 is immediately adjacent to lots and to ensure BAL-29 compliance the following works are required:
- Trees to be protected and under-pruned include (overstorey eucalypts, casuarina and banksia genus.

Management Clearing approved includes:

- a remove shrubs including Kunzea, Geraldton Wax, Acacia Jacksonia species using forestry mulcher to not disturb the soil.
- b- remove all dead woody material and fine elevated fuels,
- 5. Treatment Zone 2 red areas separated from lots by road. Trees to be protected and under-pruned include (overstorey eucalypts, casuarina and banksia genus.

Management Clearing approved includes:

- a hand removal using hand tools of all dead fine fuels ensuring to not disturb the soil.
- 6. Permanent classified vegetation occurs south-east of the site in the Conservation Reserve and is separated from the site by a public road.
- 7. Some remnant trees will be retained in the road reserve but will have managed understoreys to ensure bushfire threat is mitigated

bushfire
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0 20 40 60 80 100mi

SCALE 1:2500 @ A3

DATE: NOVEMBER 2020

Acc Acc

Location details:

Forrest Walk Precinct Frasers Landing, Coodanup

Assessment date: October 2020
Prepared by: Bushfire Safety Consulting

Accreditation level: Level 3 BPAD Practioner
Accreditation number: BPAD 23160
Accredidation expiry date: 31st January 2021
Date aerial photo: August 2020

FIGURE 6 - SPATIAL REPRESENTATION OF BUSHFIRE MITIGATION STRATEGIES

220028 Frasers Landing Stage 6 - BMP Compliance v1.0





Fire Compliance Notice



Burning during the prohibited and restricted burning period

This section relates specifically to fuel hazard reduction burns or running burns. Fuel hazard reduction burns or running burns are generally not permitted within the district of Mandurah. Any exemption is based on a full assessment of the hazard by a City authorised Bush Fire Control Officer in consultation with City's Chief Bush Fire Control Officer. Full demonstration of appropriate risk mitigation planning is required and a Permit to Burn must be issued by an authorised Bushfire Control Officer prior to commencing of any fuel hazard reduction or running burn.

The following sets out the Prohibited and Restricted Burning Periods.

RESTRICTED PERIOD 1/4/2022 – 30/11/2022 PERMIT REQUIRED

PROHIBITED BURNING 1/12/2022 – 31/3/2023

RESTRICTED PERIOD 1/4/2023 – 30/11/2023 PERMIT REQUIRED

Burning garden refuse

In accordance with the requirements of Section 24G of the Bush Fires Act 1954 the City notifies that it prohibits the burning of garden refuse or rubbish at all times within the district of Mandurah with the following exemptions:

- properties zoned rural residential, or rural small holding under the City of Mandurah Local Planning Scheme 12; or
- on all land 4000m² and greater

For these properties a Permit to Burn is required and **permits will only be issued between 1 May and 31 October inclusive**. Conditions of an issued permit must be fully complied with.

NOTE: Only those properties that are <u>4000m</u>² or greater are able to obtain permits to burn, all other sized properties are unable to have a fire to burn garden waste.

Fire Compliance Notice

Preparing for fire is a shared responsibility

The City of Mandurah has a role in setting the requirements for fire preparation on properties within its boundaries.

Owners are encouraged to contact Ranger Services to discuss fire management measures in the lead up to fire season, or seek further information from the City's website.

What is required?

According to Section 33 of the Bush Fires Act 1954 you are required to carry out fire prevention work on land you own. Work must be carried out by 17 November 2022 or within 14 days of becoming the owner, and maintained until 31 May 2023.

Who can enter my property?

An appointed Bush Fire Control officer is authorised under Section 39 of the Bush Fires Act 1954 and can enter your property to inspect firebreaks and/or anything they consider to be a fire hazard.

Firebreak variations

If it is impractical to clear firebreaks or if natural features make firebreaks unnecessary, you may apply to the City by 1 November 2022 for an alternate solution.

Fire Management Plans

Where an approved Fire Management Plan relates to a property, owners must fully comply with the requirements of that approved plan.

It can happen to you...

All properties within Mandurah may be subject to ember attacks from nearby fires. Preparing your property can help prevent damage and loss.

If you do not meet your fire prevention responsibilities as a property owner, you could be liable for a **maximum penalty of \$5,000** plus costs.

The City may access a property and undertake required work at the expense of the owner.



Property preparation requirements

Larger Blocks





Occupied or unoccupied land 4000m² and over

When the area of land is 4000m² and over, provide a trafficable mineral earth firebreak of 4m wide, with a height clearance of 4.2m:

- Inside all external boundaries on the property.
- · Surrounding all outbuildings erected on the property.
- Surrounding haystacks, fuel storage or other flammable materials
- A vertical height clearance of 4.2m must be maintained on driveway access.
- On all land 4000m² and greater a minimum 2m gap between trees shrubs and any dwelling must be maintained.
- In addition no part of any tree should overhang any dwelling.

NOTE: Properties with dense vegetation will also need to be thinned out to reduce any significant fire risk, to the satisfaction of the City.



Urban Areas





Occupied or unoccupied land less than 4000m²

- Have the entire property clear of all flammable material, this does not include green standing trees, growing bushes and plants in gardens, and/or lawns.
- Mowing or slashing down to 40mm or other approved method by an authorised Bush Fire Control Officer for this purpose.
- If mowing or slashing is carried out, then the height of the vegetation must not exceed, as far as is reasonably practicable, 40mm over the entire area of land.
- A four metre firebreak is not adequate on land less than 4000m².

Asset Protection Zones (APZ)

Properties zoned rural residential, or rural small holding under the City of Mandurah Local Planning Scheme 12, or on all land $4000 \, \mathrm{m}^2$ and greater are required to:

- Maintain a minimum 2 metre gap between trees, shrubs and any dwelling
- · Ensure that no trees overhang any dwelling.

An authorised Bush Fire Control Officer may issue a variation from Asset Protection Zone requirements where it is considered that adequate risk mitigation measures have been implemented, such as the reduction of fuel loads and appropriate management of understorey vegetation.

Property owners are encouraged to contact the City to discuss the installation of an APZ.

Applications must be made to the City to remove trees or vegetation in order to create an Asset Protection Zone within a tree preservation area as designated in the City of Mandurah Local Planning Scheme No 12.