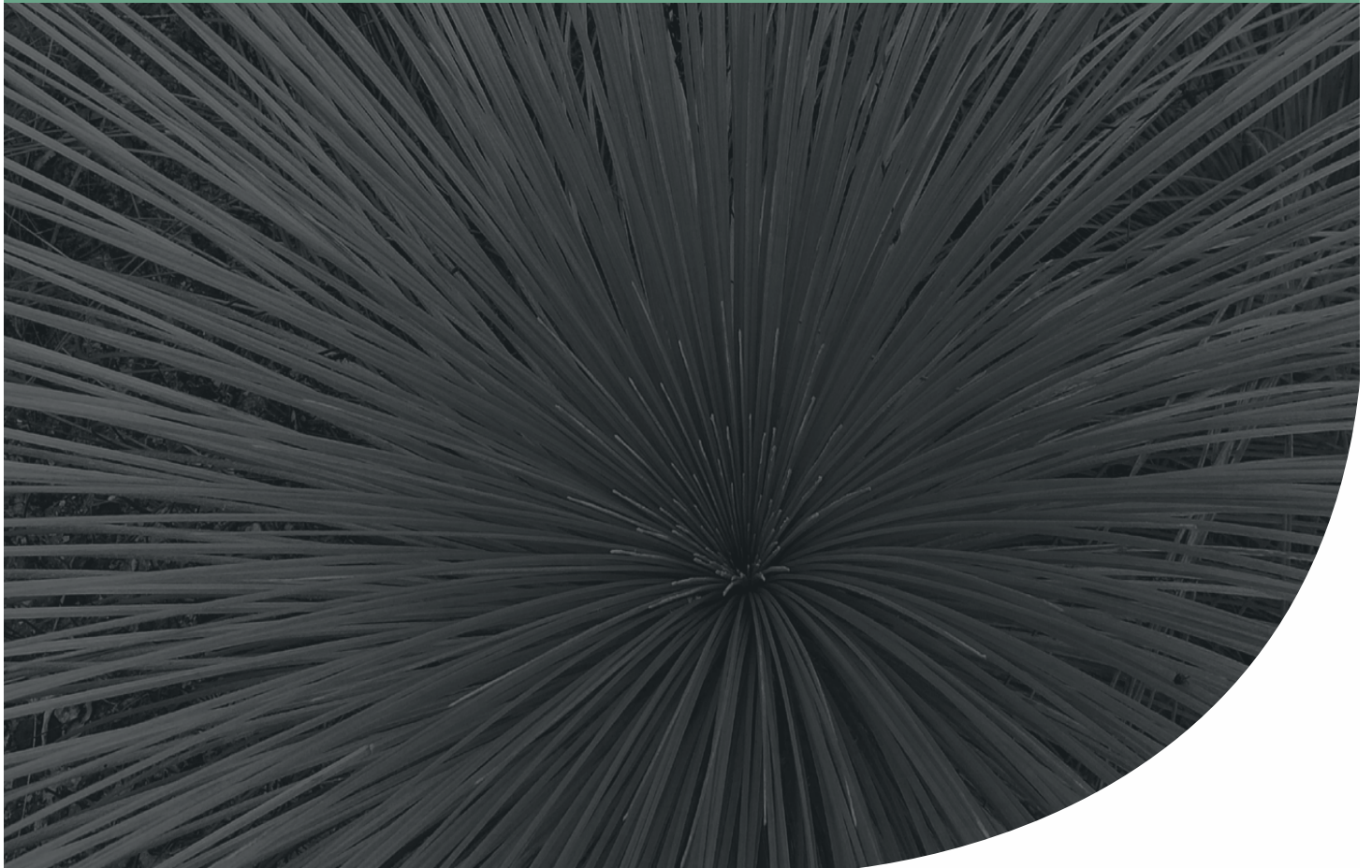


Bushfire Attack Level Assessment

Stage 7 – Ocean Hill Estate

Project No: EP15-019(35)

**Prepared for CP Land
March 2023**



Bushfire Attack Level Assessment

Stage 7 – Ocean Hill Estate



Document Control

Doc name: Bushfire Attack Level Assessment Stage 7 – Ocean Hill Estate					
Doc no.: EP15-019(35)--068 PPS					
Version	Date	Author		Reviewer	
1	March 2023	Pascal Scholz	PPS	Andreas Biddiscombe	ADB
				Anthony Rowe	AJR
	Report issued to the client.				

Disclaimer:

This document has been prepared in good faith and is derived from sources believed to be reliable and accurate at the time of publication. Nevertheless, this publication is distributed on the terms and understanding that the author is not responsible for the results of any actions taken based on information in this publication or for any error in or omission from this publication.

The content of this document has been prepared primarily to consider the layout of the development or the appropriate building construction standard, where relevant. The measures outlined are considered to be prudent minimum standards only based on the relevant experience of the author and the standards prescribed by the relevant authorities. The level of implementation of the fire precautions achieved will depend upon the actions of the landowner or occupiers of the land and is not the responsibility of the author. The relevant local government and fire authority (i.e. Department of Fire and Emergency Services or local bushfire brigade) should be approached for guidance on preparing for and responding to a bushfire.

Notwithstanding the precautions adopted in this report, it should always be remembered that bushfires burn under a wide range of conditions. An element of risk, no matter how small always remains. The objective of the Australian Standard AS 3959-2018 is to “prescribe particular construction details for buildings to reduce the risk of ignition from a bushfire while the front passes” (Standards Australia 2018). Building to the standards outlined in AS 3959 does not guarantee a building will survive a bushfire or that lives will not be lost.

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Appendices

Appendix A

BAL Assessment Certificate

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List of Abbreviations

Table A1: Abbreviations – General terms

General terms	
APZ	Asset Protection Zone
AS 3959	Australian Standard 3959-2018 Construction of buildings in bushfire prone areas
BAL	Bushfire Attack Level
BPAD	Bushfire Planning and Design

Table A2: Abbreviations – Organisations

Organisations	
DFES	Department of Fire and Emergency Services
OBRM	Office of Bushfire Risk Management
WAPC	Western Australian Planning Commission

Bushfire Attack Level Assessment

Stage 7 – Ocean Hill Estate



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Bushfire Attack Level Assessment

Stage 7 – Ocean Hill Estate

1 Introduction

1.1 Background

This Bushfire Attack Level (BAL) Assessment has been prepared on behalf of CP Land (the proponent) to support the future construction of residential dwellings within Stage 7 of the approved Ocean Hill Private Estate (herein referred to as the 'site'). The site is located along Everest Parkway, Jefferson Street, Belford Road and Badgerup Avenue, Lakelands within the City of Mandurah. The location of the site is shown in **Figure 1**. Stage 7 includes the development of 32 residential lots ranging from 315 m² to 600 m² in size.

The site is currently identified as a 'bushfire prone area' under the state-wide *Map of Bush Fire Prone Areas* as prepared by the Office of Bushfire Risk Management (OBRM 2022), see **Plate 1**. Where a Class 1, Class 2, Class 3 or Class 10a building is proposed to be located in a designated 'bushfire prone area', a BAL assessment in accordance with *Australian Standard AS 3959 – 2018 Construction of buildings in bushfire prone areas* (Standards Australia 2018) is required to support the building permit application to determine any related construction requirements.

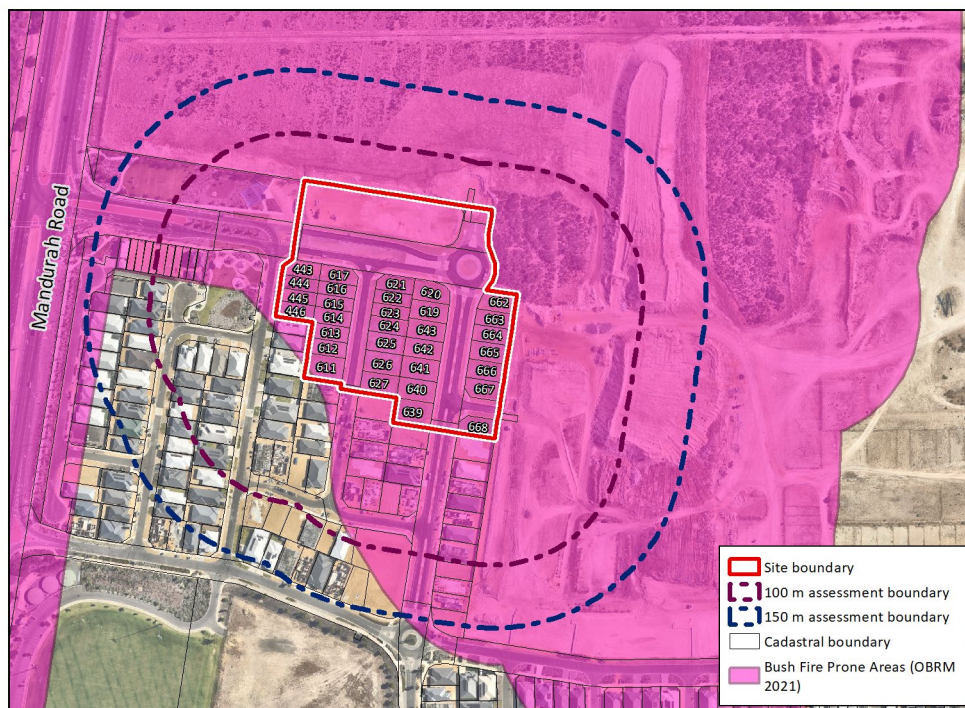


Plate 1: Areas within and surrounding the site are identified as 'bushfire prone areas' (as indicated in purple) under the state-wide *Map of Bush Fire Prone Areas* (OBRM 2021).

Bushfire Attack Level Assessment

Stage 7 – Ocean Hill Estate



1.2 Aim of this report

This BAL assessment aims to assess classified vegetation and effective slope in accordance with Method 1 of AS 3959 in order to determine the applicable BAL ratings for all lots within the site. The outcomes of this assessment will be used to support the building permit application process.

1.3 Statutory policy and framework

The following key legislation, policies and guidelines are relevant to the preparation of a BAL assessment:

- *Planning and Development (Local Planning Scheme Amendment) Regulations 2015*
- *Building Regulations 2012*
- *State Planning Policy 3.7 Planning in Bushfire Prone Areas (SPP 3.7) (WAPC 2015)*
- *Guidelines for Planning in Bushfire Prone Areas version 1.4 (the Guidelines) (DPLH & WAPC 2021)*
- *Australian Standard AS 3959 – 2018 Construction of buildings in bushfire prone areas (AS 3959) (Standards Australia 2018).*

Bushfire Attack Level Assessment

Stage 7 – Ocean Hill Estate



2 BAL Assessment

A Method 1 BAL assessment has been completed for the site in accordance with AS 3959. This assessment considers the vegetation classification and effective slope for the site and surrounding 150 m (from the nearest lot boundary) (**Figure 2**). A BAL contour plan has been prepared in accordance with the Guidelines to demonstrate the determined BAL ratings (**Figure 3**).

AS 3959 specifies the requirements for the construction of buildings in bushfire-prone areas in order to improve their resistance to bushfire attack from embers, burning debris, radiant heat, flame contact, and combinations of these attack forms. It provides six BAL ratings: BAL-LOW, BAL-12.5, BAL-19, BAL-29, BAL-40 and BAL-FZ, based on the radiant heat flux thresholds from vegetation within 100 m of a building. Each BAL rating is associated with specific national construction requirements, which have been summarised in **Table 1** below.

It is relevant to note that while buildings constructed to increased standards under AS 3959 are more likely to survive a bushfire than buildings that do not conform to these construction standards, building survival is not guaranteed.

Table 1: Summary of BAL ratings, heat flux thresholds and associated construction standards, as outlined within AS 3959

Bushfire Attack Level (BAL)	Classified vegetation within 100 m of the subject building and heat flux exposure thresholds	Description of the predicted bushfire attack and levels of exposure	Construction section (within AS 3959)
BAL-LOW	See Section 2.2.3.2 of AS 3959	There is insufficient risk to warrant specific construction requirements	4
BAL-12.5	$\leq 12.5 \text{ kW/m}^2$	Ember attack	3 & 5
BAL-19	$> 12.5 \text{ kW/m}^2$ to $\leq 19 \text{ kW/m}^2$	Increasing levels of ember attack and burning debris ignited by windborne embers blown together with increasing heat flux	3 & 6
BAL-29	$> 19 \text{ kW/m}^2$ to $\leq 29 \text{ kW/m}^2$	Increasing levels of ember attack and burning debris ignited by windborne embers blown together with increasing heat flux	3 & 7
BAL-40	$> 29 \text{ kW/m}^2$ to $\leq 40 \text{ kW/m}^2$	Increasing levels of ember attack and burning debris ignited by windborne embers blown together with the increased likelihood of exposure to flame	3 & 8
BAL-FZ	$> 40 \text{ kW/m}^2$	Direct exposure to flames from the fire front in addition to heat flux and ember attack	3 & 9

Not all vegetation is classified as a bushfire risk. Vegetation and ground surfaces that are exempt from classification as a potential hazard are identified as a low threat under Section 2.2.3.2 of AS 3959.

Bushfire Attack Level Assessment

Stage 7 – Ocean Hill Estate

2.1 Assessment inputs

The classification of vegetation within the site and the surrounding 150 m (from the nearest lot boundary) has been undertaken in accordance with AS 3959. The assignment of vegetation classifications is based on Section 2.2.3 and Table 2.3 of AS 3959 and generally considers the various fuel layers of different vegetation types. For example, fuel layers in a typical forest environment can be broken down into five segments as illustrated in **Plate 2** below.

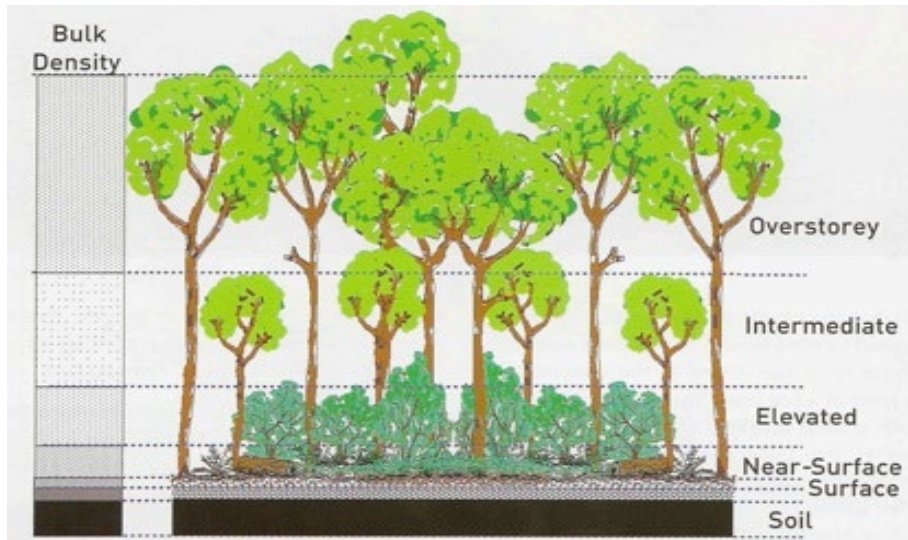


Plate 2: The fuel layers in a forest environment that could be associated with fire behaviour (Gould et al. 2007)

An assessment of existing vegetation within the site and surrounding 150 m from the lot boundaries was undertaken on 10 March 2023 in accordance with AS 3959. **Table 2** below outlines the determined vegetation classifications and associated effective slope, and where relevant outlines the existing management practices that have informed the vegetation classification. The plots referenced in **Table 2** are also shown in **Figure 2**.

2.1.1 Assumptions

The BAL assessment includes the following assumptions:

- **Designated FDI:** 80
- **Flame temperature:** 1090 K
- **Effective slope beneath classified vegetation:** flat/upslope (see **Figure 2**)
- Areas of low threat vegetation outside Stage 7 (the site) will continue to be managed and/or considered to achieve low threat (in accordance with Section 2.2.3.2 of AS 3959) based on the existing maintenance regimes, and/or as per the City of Mandurah fire compliance notice. This includes areas of existing parkland vegetation within public open space areas.
- Areas within 100 m of the site in a non-vegetated state will continue to be maintained as such by the proponent until future development of surrounding stages progresses.
- All areas within 100 m of the vegetation patch to be retained within the public open space area abutting the site to the north-east (patch of *Eucalyptus foecunda* trees) will either be maintained to a low threat standard, or maintain a non-vegetated state by the proponent

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(as per the existing conditions) in accordance with Section 2.2.3.2 of AS 3959 until such a time future staged development is progressed. This is to guarantee the unmanaged vegetation within the public open space area can be excluded in perpetuity in accordance with Section 2.2.3.2(b) of AS3959, which provides an exclusion for 'single areas of vegetation less than 1 ha in area and not within 100 m of other areas of vegetation being classified vegetation'.

- All classified vegetation surrounding the site and within 100 m, or 50 m where classified vegetation is grassland (Class G), will be managed to a low threat standard. Classified vegetation separated by greater than 100 m from residential lots, or 50 m where classified vegetation is grassland (Class G), is assumed to remain post-development of the site until such a time future development progresses (unless where otherwise specified).

2.1.2 Vegetation Classification

All vegetation within 150 m of the lot boundaries was classified in accordance with Clause 2.2.3 of AS 3959-2018. Each distinguishable vegetation plot with the potential to determine the BAL rating is identified in **Table 2** and shown in **Figure 2**.

Plot:	1	Photo ID:	1
Vegetation Classification or Exclusion Clause			
Shrubland (Class C) Flat/upslope			
Description / Justification for Classification			
Shrubland vegetation (Class C) has been identified to the north of the site growing to a height of less than 2 m, with a continuous vertical and horizontal fuel profile. This vegetation comprises native shrub species which will remain below 2 m in height at maturity and post-development of the site.			
			

Bushfire Attack Level Assessment

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Table 2: AS3959 Vegetation Classification (refer to **Figure 2**)




Plot:	2	Photo ID:	2
Vegetation Classification or Exclusion Clause			
Grassland (Class G) Flat/upslope			
Description / Justification for Classification			
<p>Unmanaged grassland vegetation has been identified to the north of the site comprising bare mineral earth with sparse weedy regrowth. Although this area has been previously managed by the proponent to a low threat condition, due to recent weed regrowth it does not currently meet a low threat standard. On this basis, it has been conservatively assumed that this area will remain unmanaged grassland (Class G) vegetation post-development of the site until such a time future development is progressed in this area and/or management is reapplied through slashing.</p>			
Plot:	3	Photo ID:	3
Vegetation Classification or Exclusion Clause			
Exclusion clause 2.2.3.2(b) – Single area of vegetation less than 1 ha in area and not within 100 m of other areas of classified vegetation			
Description / Justification for Classification			
<p>A patch of <i>Eucalyptus foecunda</i> trees has been identified to the north-east of the site, which will be retained within a future public open space area (to be constructed and landscaped as part of a future development stage). This patch of unmanaged vegetation is less than 1 ha in area and not within 100 m of other areas of classified vegetation and is therefore excluded in accordance with clause 2.2.3.2(b) of AS 3959.</p>			



Bushfire Attack Level Assessment

Stage 7 – Ocean Hill Estate




Table 2: AS3959 Vegetation Classification (refer to **Figure 2**)(continued)

Plot:	4	Photo ID:	4
Vegetation Classification or Exclusion Clause			
Exclusion clause 2.2.3.2(e) – Non-vegetated			
Description / Justification for Classification			
Extension of Everest Parkway within the northern portion of the site is excluded in accordance with clause 2.2.3.2(e) of AS 3959. This area is subject to ongoing management by the proponent until landscape treatments within road reserves are progressed.			
 <p>-32°27'38", 115°45'46", -16.1m, 87° 10 Mar 2023 9:11:40 am</p>			
Plot:	4	Photo ID:	5
Vegetation Classification or Exclusion Clause			
Exclusion clause 2.2.3.2(e) – Non-vegetated			
Description / Justification for Classification			
Non vegetated mineral earth for newly subdivided land and future public open space areas comprising the Stage 7 development and existing residential dwellings is excluded in accordance with clause 2.2.3.2(e) of AS 3959. This area is subject to ongoing management by the proponent until development in this area is progressed.			
 <p>-32°27'36", 115°45'49", -16.8m, 209° 10 Mar 2023 9:12:35 am</p>			
Plot:	4	Photo ID:	6
Vegetation Classification or Exclusion Clause			
Exclusion clause 2.2.3.2(e) – Non-vegetated			
Description / Justification for Classification			
Non vegetated area of mineral earth stripped of all vegetation to the north-east of the site is excluded in accordance with clause 2.2.3.2(e) of AS 3959. This area is subject to ongoing management by the proponent until development in this area is progressed.			
 <p>-32°27'37", 115°45'55", -22.5m, 25° 10 Mar 2023 9:28:51 am</p>			

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Table 2: AS3959 Vegetation Classification (refer to **Figure 2**)(continued)

Plot:	4	Photo ID:	7
Vegetation Classification or Exclusion Clause			
Exclusion clause 2.2.3.2(e) – Non-vegetated			
Description / Justification for Classification			
Non vegetated area of mineral earth stripped of all vegetation to the north-east of the site is excluded in accordance with clause 2.2.3.2(e) of AS 3959. This area is subject to ongoing management by the proponent until development in this area is progressed.			
			
Plot:	4	Photo ID:	8
Vegetation Classification or Exclusion Clause			
Exclusion clause 2.2.3.2(e) – Non-vegetated			
Description / Justification for Classification			
Non vegetated area of mineral earth stripped of all vegetation to the east of the site is excluded in accordance with clause 2.2.3.2(e) of AS 3959. This area is subject to ongoing management by the proponent until development in this area is progressed.			
			
Plot:	4	Photo ID:	9
Vegetation Classification or Exclusion Clause			
Exclusion clause 2.2.3.2(e) – Non-vegetated			
Description / Justification for Classification			
Non vegetated area of mineral earth to the east of the site is excluded in accordance with clause 2.2.3.2(e) of AS 3959. This area is subject to ongoing management by the proponent until development in this area is progressed.			
			

Bushfire Attack Level Assessment

Stage 7 – Ocean Hill Estate


Table 2: AS3959 Vegetation Classification (refer to **Figure 2**)(continued)


Plot:	4	Photo ID:	10
Vegetation Classification or Exclusion Clause			
Exclusion clause 2.2.3.2(e) – Non-vegetated			
Description / Justification for Classification			
Non vegetated mineral earth within the site for future Stage 7 development is excluded in accordance with clause 2.2.3.2(e) of AS 3959. This area is subject to ongoing management by the proponent until development in this area is progressed.			
			
Plot:	4	Photo ID:	11
Vegetation Classification or Exclusion Clause			
Exclusion clause 2.2.3.2(e) – Non-vegetated			
Description / Justification for Classification			
Non vegetated area of mineral earth stripped of all vegetation to the east of the site is excluded in accordance with clause 2.2.3.2(e) of AS 3959. This area is subject to ongoing management by the proponent until development in this area is progressed.			
			
Plot:	4	Photo ID:	12
Vegetation Classification or Exclusion Clause			
Exclusion clause 2.2.3.2(e) – Non-vegetated			
Description / Justification for Classification			
Corner of Jefferson Street and Nordend Road and existing residential dwellings to the west of the site is excluded in accordance with clause 2.2.3.2(e) of AS 3959.			
			


Bushfire Attack Level Assessment

Stage 7 – Ocean Hill Estate

Table 2: AS3959 Vegetation Classification (refer to **Figure 2**)(continued)

Plot:	4	Photo ID:	13
Vegetation Classification or Exclusion Clause			
Exclusion clause 2.2.3.2(e) – Non-vegetated			
Description / Justification for Classification			
Non vegetated mineral earth stripped of all vegetation to the east of the site is excluded in accordance with clause 2.2.3.2(e) of AS 3959. This area is subject to ongoing management by the proponent until development in this area is progressed.			
			
-32°27'41", 115°45'58", -16.9m, 215° 10 Mar 2023 9:34:29 am			

Plot:	5	Photo ID:	14
Vegetation Classification or Exclusion Clause			
Exclusion clause 2.2.3.2(f) – Low threat vegetation			
Description / Justification for Classification			
Low threat vegetation (parkland vegetation) within public open space areas to the west of the site is excluded in accordance with clause 2.2.3.2(f) of AS 3959 and will be maintained in perpetuity by the City of Mandurah.			
			
-32°27'40", 115°45'44", -20.7m, 271° 10 Mar 2023 10:01:01 am			


Plot:	5	Photo ID:	15
Vegetation Classification or Exclusion Clause			
Exclusion clause 2.2.3.2(f) – Low threat vegetation			
Description / Justification for Classification			
Low threat vegetation to the north of the site comprising sparse grassland vegetation slashed to a height of <100mm is excluded in accordance with clause 2.2.3.2(f) of AS 3959. This area is subject to ongoing management by the proponent until development in this area is progressed.			
			

Bushfire Attack Level Assessment

Stage 7 – Ocean Hill Estate

Table 2: AS3959 Vegetation Classification (refer to **Figure 2**)(continued)

Plot:	5	Photo ID:	16
Vegetation Classification or Exclusion Clause			
Exclusion clause 2.2.3.2(f) – Low threat vegetation			
Description / Justification for Classification			
Low threat vegetation to the north of the site comprising sparse grassland vegetation slashed to a height of <100mm is excluded in accordance with clause 2.2.3.2(f) of AS 3959. This area is subject to ongoing management by the proponent until development in this area is progressed.			



2.2 Assessment outputs

A BAL Contour Plan (see **Figure 3**) has been prepared to outline the BAL ratings applicable to the lots within the site. It is based on the determined vegetation classifications and associated effective slopes and using the BAL distances detailed in Table 2.5 of AS 3959.

Based on the outcomes of the BAL assessment all 32 lots are exposed to a BAL rating of BAL-LOW.

Individual BAL ratings for each lot are shown on **Figure 4**.

2.3 Construction of buildings and ongoing management

2.3.1 Construction of buildings

Appendix A specifies the BAL rating applicable to each building in the form of a BAL certificate and can be used to support the building permit process. Construction requirements for each BAL rating are specified in AS 3959 and summarised in **Table 1**. It is noted that for buildings with a BAL-LOW rating, there is an insufficient risk from bushfire to warrant specific construction requirements, as outlined in Section 4 of AS 3959.

2.3.2 Ongoing management

All lot owners will be responsible for maintaining their own property to a low threat standard in accordance with the asset protection zone (APZ) standards detailed in the Guidelines, and as per the requirements of the City of Mandurah Fire Compliance Notice (as published). Advice to lot owners on maintaining their property to a low threat standard can be provided by the City of Mandurah.

Bushfire Attack Level Assessment

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The proponent will be responsible for the maintenance of their landholdings surrounding the site to a low-threat standard or to a non-vegetated state in accordance with Section 2.2.3.2 of AS 3959 (as indicated by **Figure 2**), and in line with the City of Mandurah Fire Compliance Notice until such a time future staged residential development is progressed. Management of these areas may include:

- Install and maintain an asset protection zone.
- Clearing of vegetation.
- Regular maintenance including removal of weeds and dead material.
- Low pruning of trees (branches below 2 m in height removed where appropriate).
- Application of ground covers such as mulch or non-flammable materials.
- Regularly mowing/slashing of grass to less than 100 mm in height.

Bushfire Attack Level Assessment

Stage 7 – Ocean Hill Estate



3 Certification by Bushfire Consultant

3.1 Accreditation

This BAL assessment has been prepared by Emerge Associates who have been providing bushfire risk management advice for more than eight years, undertaking detailed bushfire assessments (and associated approvals) to support the land use development industry.

3.2 Declaration

I declare that the information provided is true and correct to the best of my knowledge.

Signature:

A handwritten signature in black ink, appearing to read "Anthony Rowe".

Name: Anthony Rowe

Company: Envision Bushfire Protection/Emerge Associates

Date: 28/03/2023

BPAD Accreditation: Level 3 BPAD no. 36690

Bushfire Attack Level Assessment

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4 References

4.1 General references

Department of Planning, Lands and Heritage, and Western Australian Planning Commission, (DPLH & WAPC) 2021, *Guidelines for Planning in Bushfire Prone Areas Version 1.4*, Perth, Western Australia.

Standards Australia 2018, *AS 3959:2018 Construction of buildings in bushfire-prone areas*, Sydney.

Western Australian Planning Commission (WAPC) 2015, *State Planning Policy 3.7 Planning in Bushfire Prone Areas*, Perth.

4.2 Online references

Department of Water 2008, *LIDAR derived 1 m elevation contours* dataset, Government of Western Australia.

Office of Bushfire Risk Management (OBRM) 2022, Map of Bush Fire Prone Areas, viewed March 2023, <https://maps.slip.wa.gov.au/landgate/bushfireprone/>

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Figures



Figure 1: Site Location

Figure 2: AS 3959 Vegetation Classification and Effective Slope

Figure 3: Bushfire Attack Level Contour Plan

Figure 4: Bushfire Attack Level Ratings for Individual Lots

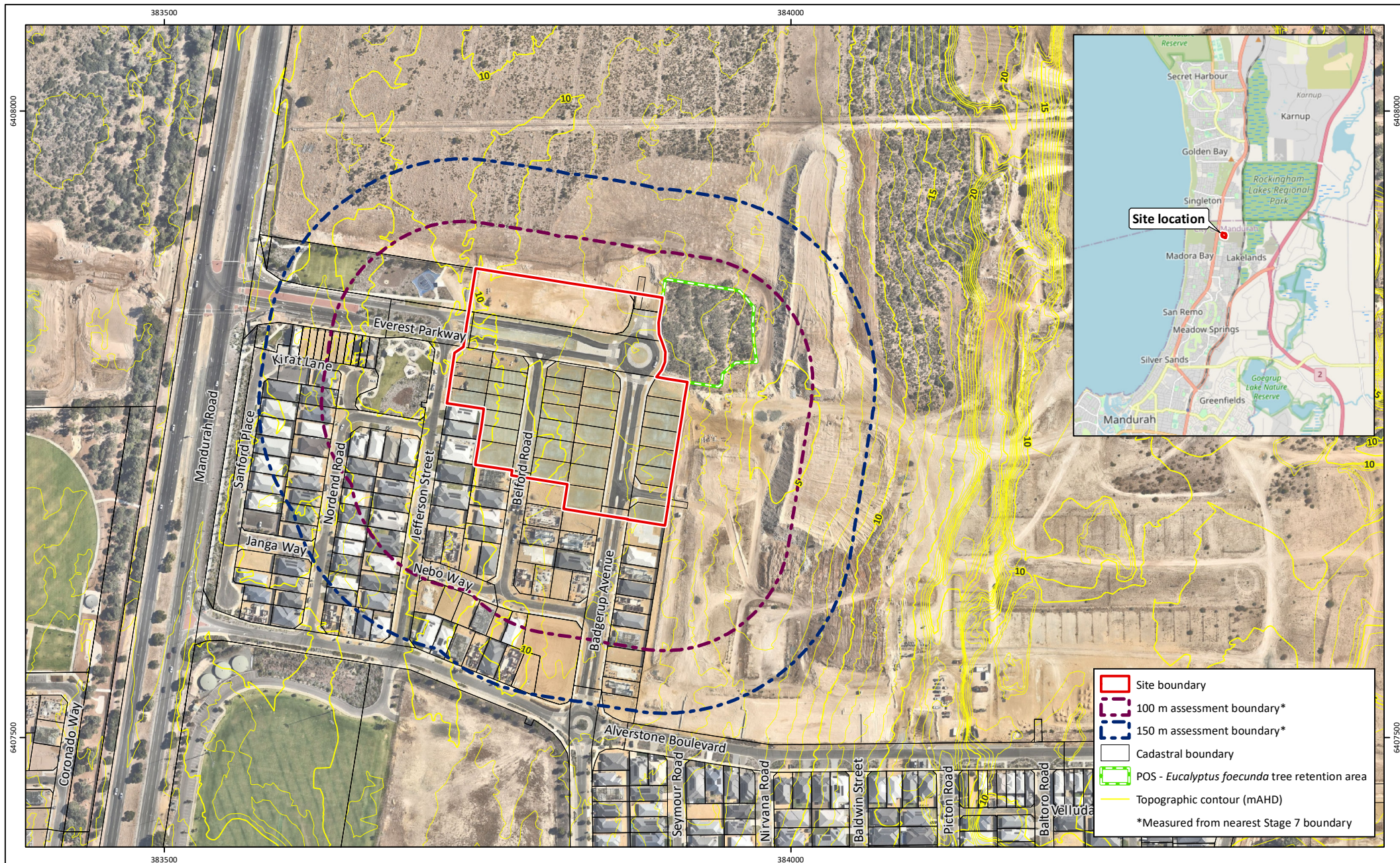


Figure 1: Site Location and Topographic Contours

Project: Ocean Hill
Stage 7 BAL Certification

Client: CP Land

Plan Number:
EP15-019(35)--F143

Drawn: WJC

Date: 20/03/2023

Checked: PPS

Approved: ADB

Date: 21/03/2023



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Metres

Scale: 1:4,000@A4

GDA 1994 MGA Zone 50

emerge
ASSOCIATES

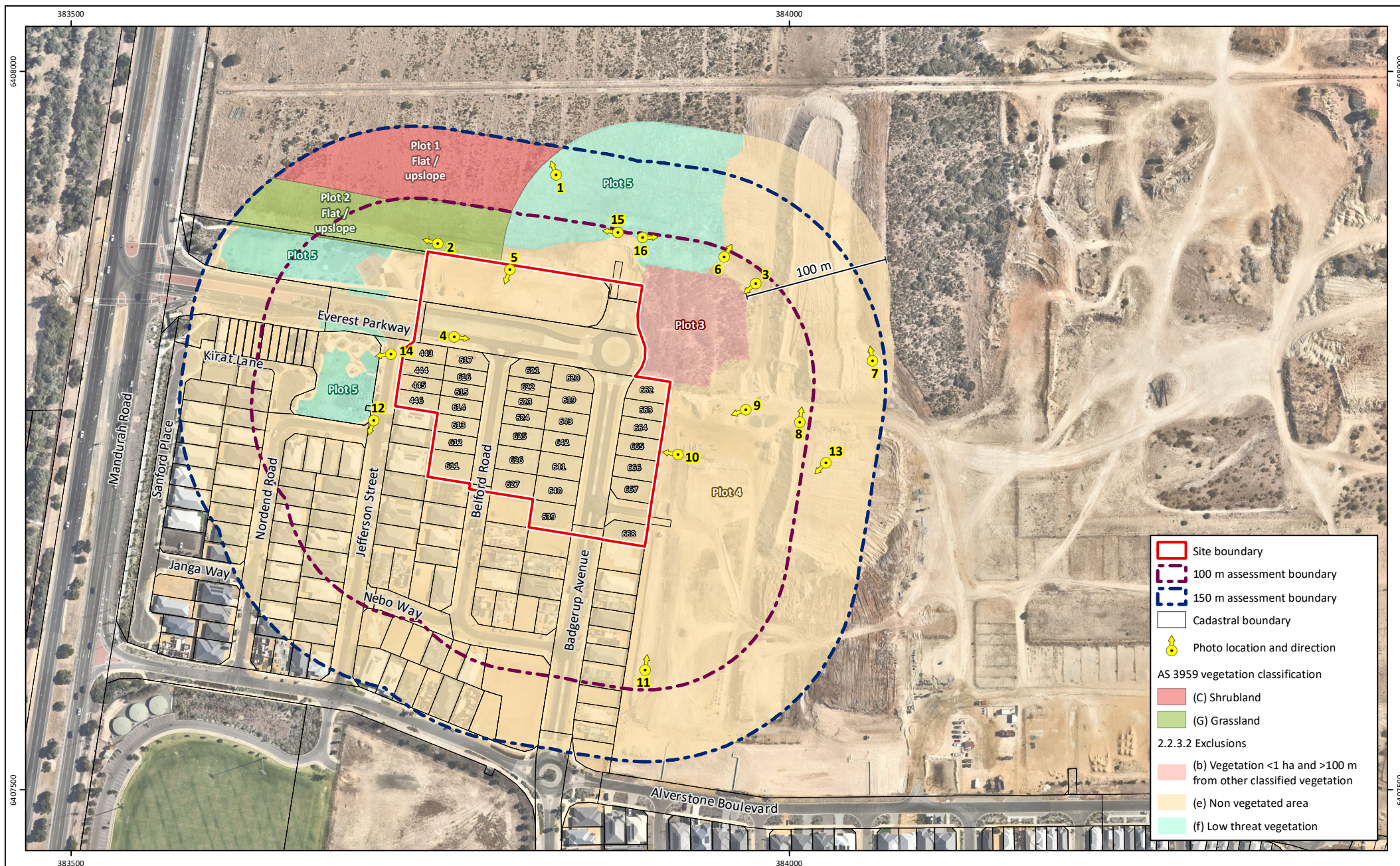


Figure 2: AS 3959 Vegetation Classification and Effective Slope

Project: Ocean Hill
Stage 7 BAL Certification
Client: CP Land

Plan Number:
EP15-019(35)--F144
Drawn: WJC
Date: 20/03/2023
Checked: PPS
Approved: ADB
Date: 21/03/2023



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Scale: 1:3,500@A4
GDA 1994 MGA Zone 50

emerge
ASSOCIATES

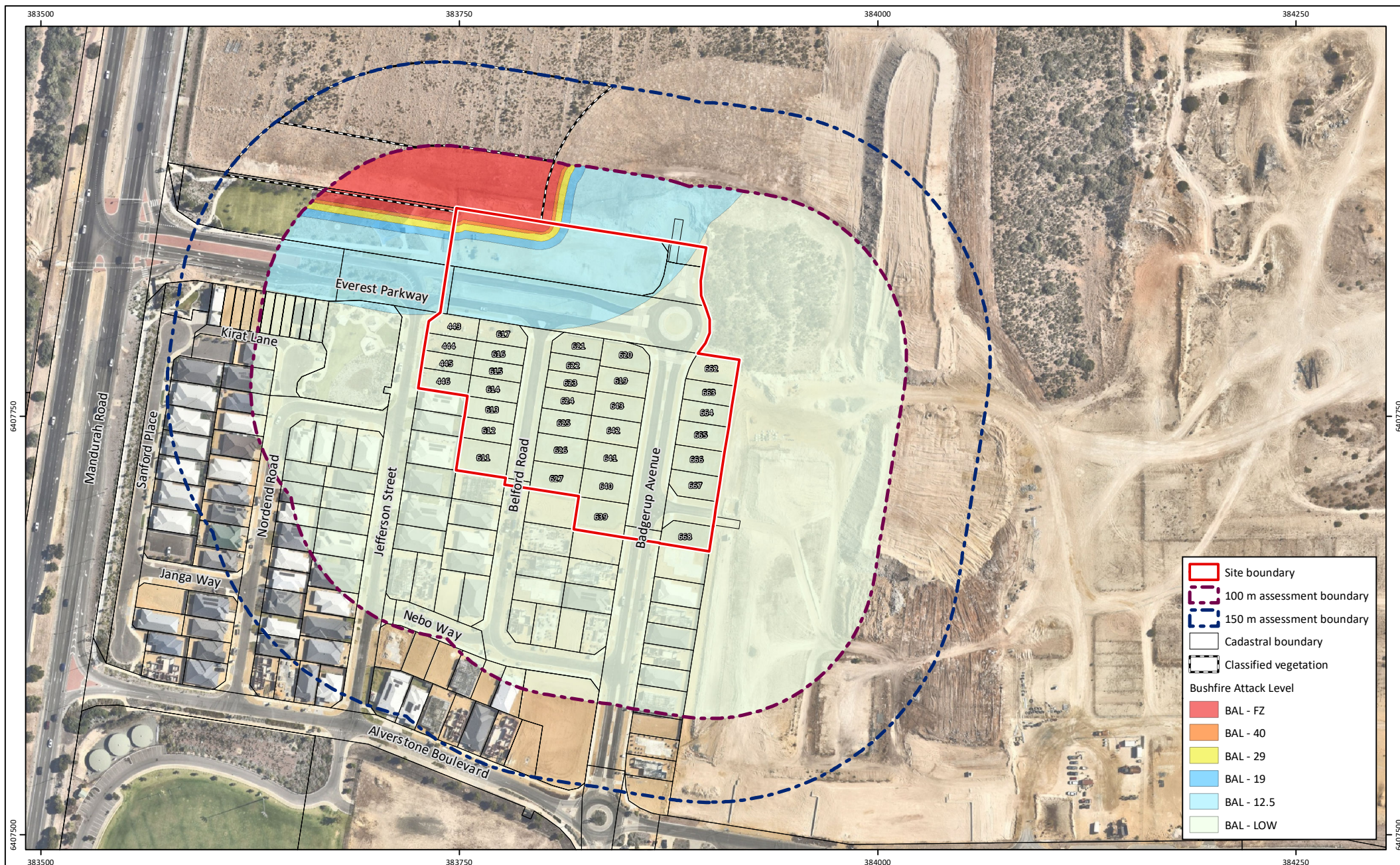


Figure 3: BAL Contour Plan

Project: Ocean Hill
Stage 7 BAL Certification
Client: CP Land

Plan Number:
EP15-019(35)--F145
Drawn: WJC
Date: 20/03/2023
Checked: PPS
Approved: ADB
Date: 21/03/2023



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Metres
Scale: 1:3,000@A4
GDA 1994 MGA Zone 50

emerge
ASSOCIATES

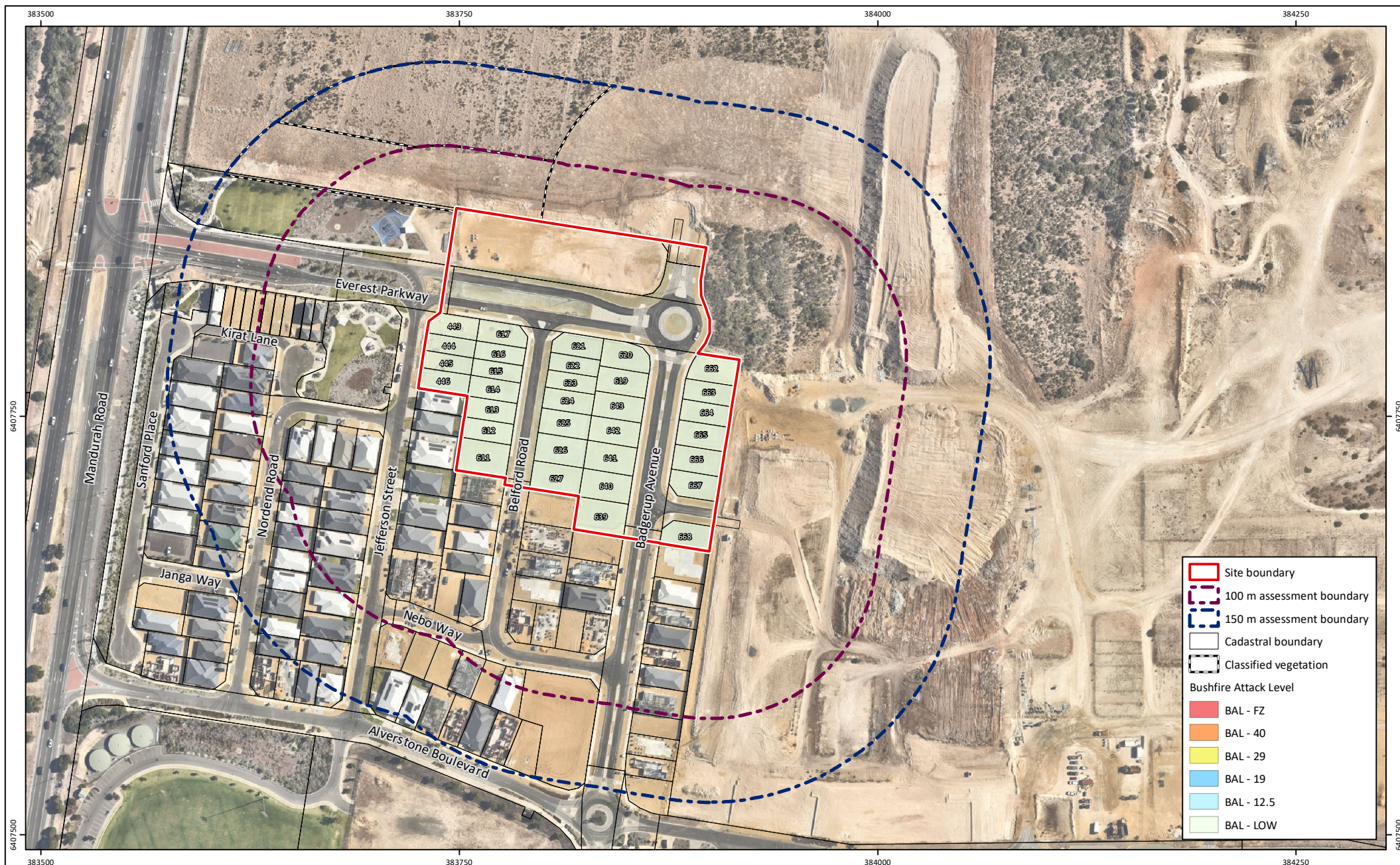


Figure 4: Bushfire Attack Level Rating for Individual Lots

Project: Ocean Hill
Stage 7 BAL Certification

Client: CP Land

Plan Number:
EP15-019(35)--F146

Drawn: WJC

Date: 20/03/2023

Checked: PPS

Approved: ADB

Date: 21/03/2023



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Metres

Scale: 1:3,000@A4

GDA 1994 MGA Zone 50

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Appendix A

BAL Assessment Certificate



Bushfire Attack Level Assessment

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BUSHFIRE ATTACK LEVEL (BAL) CERTIFICATE

Determined in accordance with Australian Standard (AS) 3959-2018 Construction of buildings in bushfire prone areas

Site details

Address	Lots 443 – 446, 611 – 617, 619 – 627, 639 – 643, 662 - 668 (Stage 7)		
Suburb	Lakelands	State	WA
Local government area	City of Mandurah		
Date of assessment	10 March 2023	Date of report	20 March 2023
Project no.	EP15-019(03)	Document no.	EP15-019(03)--068

Determination of highest Bushfire Attack Level (BAL)

Lot number	Classified vegetation and plot number	Distance of lot boundary from vegetation	Effective slope	Building BAL rating (see Figure 4)	Exceptions/notes for building BAL rating
443	No classified vegetation identified within 100 m	> 100 m	Not applicable	BAL-LOW	N/A
444	No classified vegetation identified within 100 m	> 100 m	Not applicable	BAL-LOW	N/A
445	No classified vegetation identified within 100 m	> 100 m	Not applicable	BAL-LOW	N/A
446	No classified vegetation identified within 100 m	> 100 m	Not applicable	BAL-LOW	N/A
611	No classified vegetation identified within 100 m	> 100 m	Not applicable	BAL-LOW	N/A
612	No classified vegetation identified within 100 m	> 100 m	Not applicable	BAL-LOW	N/A
613	No classified vegetation identified within 100 m	> 100 m	Not applicable	BAL-LOW	N/A
614	No classified vegetation identified within 100 m	> 100 m	Not applicable	BAL-LOW	N/A
615	No classified vegetation identified within 100 m	> 100 m	Not applicable	BAL-LOW	N/A
616	No classified vegetation identified within 100 m	> 100 m	Not applicable	BAL-LOW	N/A
617	No classified vegetation identified within 100 m	> 100 m	Not applicable	BAL-LOW	N/A
619	No classified vegetation identified within 100 m	> 100 m	Not applicable	BAL-LOW	N/A
620	No classified vegetation identified within 100 m	> 100 m	Not applicable	BAL-LOW	N/A
621	No classified vegetation identified within 100 m	> 100 m	Not applicable	BAL-LOW	N/A

Bushfire Attack Level Assessment

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Determination of highest Bushfire Attack Level (BAL)

Lot number	Classified vegetation and plot number	Distance of lot boundary from vegetation	Effective slope	Building BAL rating (see Figure 4)	Exceptions/notes for building BAL rating
622	No classified vegetation identified within 100 m	> 100 m	Not applicable	BAL-LOW	N/A
623	No classified vegetation identified within 100 m	> 100 m	Not applicable	BAL-LOW	N/A
624	No classified vegetation identified within 100 m	> 100 m	Not applicable	BAL-LOW	N/A
625	No classified vegetation identified within 100 m	> 100 m	Not applicable	BAL-LOW	N/A
626	No classified vegetation identified within 100 m	> 100 m	Not applicable	BAL-LOW	N/A
627	No classified vegetation identified within 100 m	> 100 m	Not applicable	BAL-LOW	N/A
639	No classified vegetation identified within 100 m	> 100 m	Not applicable	BAL-LOW	N/A
640	No classified vegetation identified within 100 m	> 100 m	Not applicable	BAL-LOW	N/A
641	No classified vegetation identified within 100 m	> 100 m	Not applicable	BAL-LOW	N/A
642	No classified vegetation identified within 100 m	> 100 m	Not applicable	BAL-LOW	N/A
643	No classified vegetation identified within 100 m	> 100 m	Not applicable	BAL-LOW	N/A
662	No classified vegetation identified within 100 m	> 100 m	Not applicable	BAL-LOW	N/A
663	No classified vegetation identified within 100 m	> 100 m	Not applicable	BAL-LOW	N/A
664	No classified vegetation identified within 100 m	> 100 m	Not applicable	BAL-LOW	N/A
665	No classified vegetation identified within 100 m	> 100 m	Not applicable	BAL-LOW	N/A
666	No classified vegetation identified within 100 m	> 100 m	Not applicable	BAL-LOW	N/A
667	No classified vegetation identified within 100 m	> 100 m	Not applicable	BAL-LOW	N/A
668	No classified vegetation identified within 100 m	> 100 m	Not applicable	BAL-LOW	N/A

Bushfire Attack Level Assessment

Stage 7 – Ocean Hill Estate



Accreditation details

I hereby certify that I have undertaken the assessment of the above site and determined the Bushfire Attack Level stated above in accordance with the requirements of the National Construction Code and AS 3959-2018.

Signature:		Certificate date:	28/03/2023
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