

16 September 2026

Our Ref: A24.012-RPT-BAL-STG8B_0_FINAL



Bushfire Attack Level (BAL) Assessment Report

Site details

Address: Stage 8B Indi Estate

Suburb: Yanchep

State: Western Australia

Local Government Area: City of Wanneroo

Description of Building Works: Class 1a dwellings

Report details

Project number A24.012 **Report version** 0 FINAL

Assessment date 8/09/2026 **Report date** 16/09/2026

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Review

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Purpose of this BAL Assessment Report

The purpose of this BAL assessment report is to provide the methodology and justification in support of the individual lot BAL certificates for lots within Stage 8B of Indi Estate, Yanchep (the subject site). The BAL certificates have been prepared to support building licenses on lots within Stage 8B and are valid for approximately 12 months.

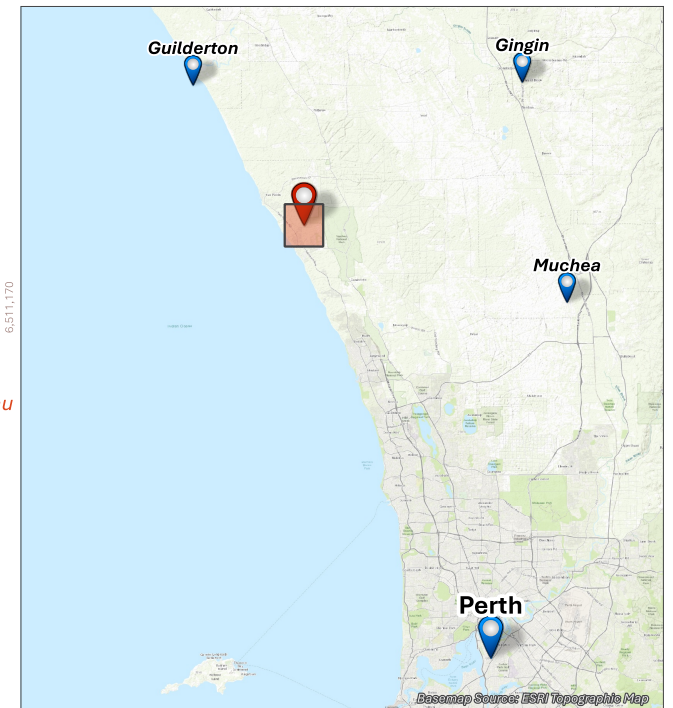
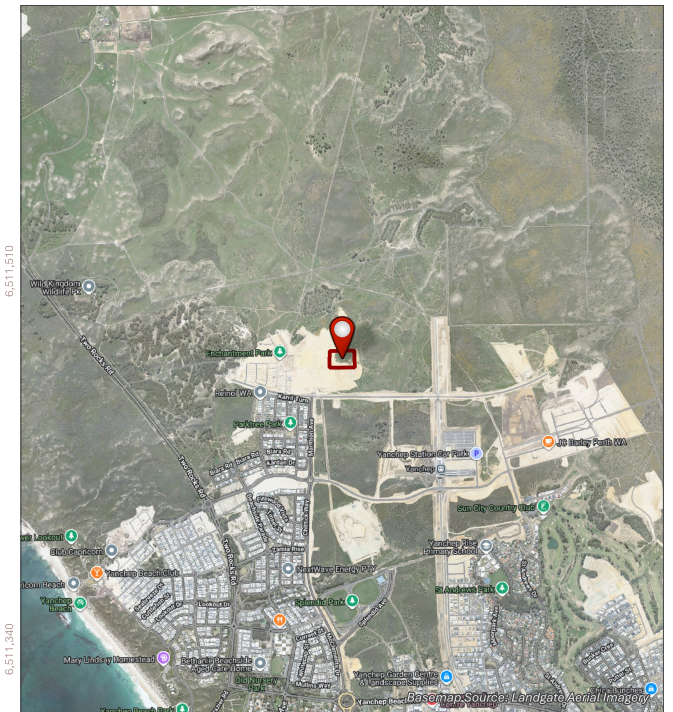
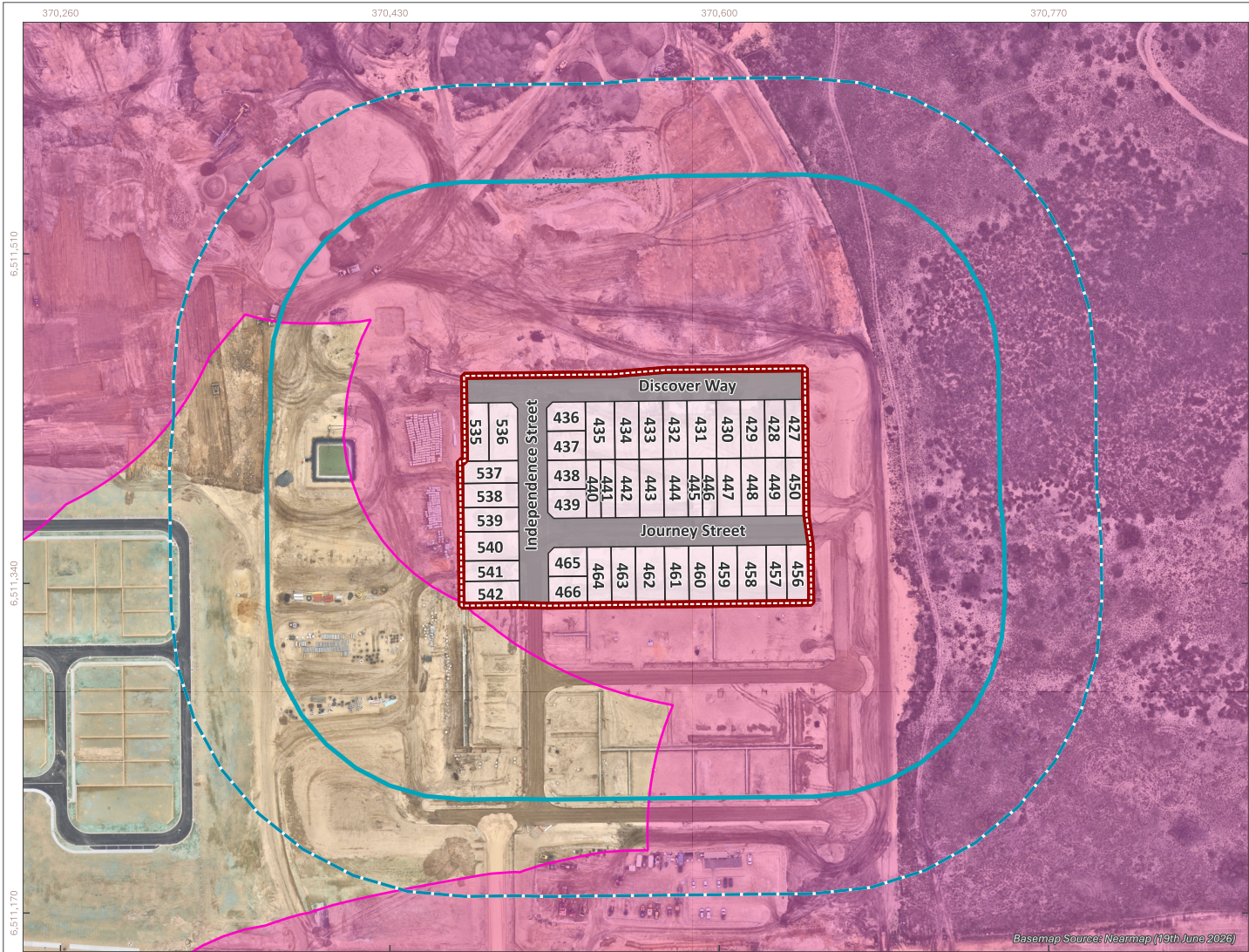
Site Assessment and Site Plan

The assessment of 43 bushfire prone lots within Stage 8B was undertaken on 8/09/2026 for the purpose of determining the Bushfire Attack Level (BAL) in accordance with *Australian Standard AS 3959: 2018 Construction of Buildings in Bushfire Prone Areas* (AS 3959: 2018; SA, 2018) Simplified Procedure (Method 1). An overview of the subject site is presented in Figure 1.

Vegetation Classification

All vegetation within 100 m of Stage 8B was classified in accordance with Clause 2.2.3 of AS 3959: 2018. Each distinguishable vegetation class with the potential to determine the BAL is identified in Table 1 and presented in Figure 2.






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0 25 50 75 100 m

COORDINATE REFERENCE SYSTEM:
GDA2020 / MGA Zone 50

SCALE: 1:3,400 PROJECT NUMBER: A24.012

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Figure 1: Site Overview

-  Subject Site
-  Buffer 100m
-  Buffer 150m
-  Lot boundary
-  Road Reserve

Bush Fire Prone Area Planning (OBRM-023)

-  Bushfire Prone Area 2

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Table 1: Vegetation Classification

Plot 1 Due to site access constraints, no photo is available of this plot. The vegetation structure, however, is irrelevant to this assessment, as the plot has been excluded on the basis of its distance from the subject site being greater than 100 m.	Excluded - clause 2.2.3.2 (a) NO PHOTO AVAILABLE
Plot 2 Photo 1 Areas to the north of the subject site which have been cleared for future development within Indi Estate. This area is devoid of vegetation.	Excluded - clause 2.2.3.2 (e)  8 Sept 2026 11:54:08 am 31°31'24.05178"S 115°38'13.88533"E ±3.00m 274° W
Plot 2 Photo 2 Areas to the west of the subject site which have been cleared for future development within Indi Estate. This area is devoid of vegetation.	Excluded - clause 2.2.3.2 (e)  8 Sept 2026 11:55:23 am 31°31'26.99639"S 115°38'6.48736"E ±2.00m 252° W
Plot 2 Photo 3 Areas to the south of the subject site which have been cleared for previous stages of development within Indi Estate. This area is devoid of vegetation and contains vacant lots, roads and other infrastructure.	Excluded - clause 2.2.3.2 (e)  8 Sept 2026 11:58:36 am 31°31'35.91955"S 115°38'9.86242"E ±2.50m 10° N



Plot 3	Excluded - clause 2.2.3.2 (f)
Photo 4 Areas to the east of the subject site which are under the Developer's ownership, have been slashed and are being maintained to a low-threat state.	 8 Sept 2026 11:59:58 am 31°31'34.80489"S 115°38'16.81803"E ±2.50m 44° NE
Plot 3	Excluded - clause 2.2.3.2 (f)
Photo 5 Areas to the east of the subject site which are under the Developer's ownership, have been slashed and are being maintained to a low-threat state.	 8 Sept 2026 11:47:42 am 31°31'30.58554"S 115°38'16.83734"E ±2.50m 50° NE



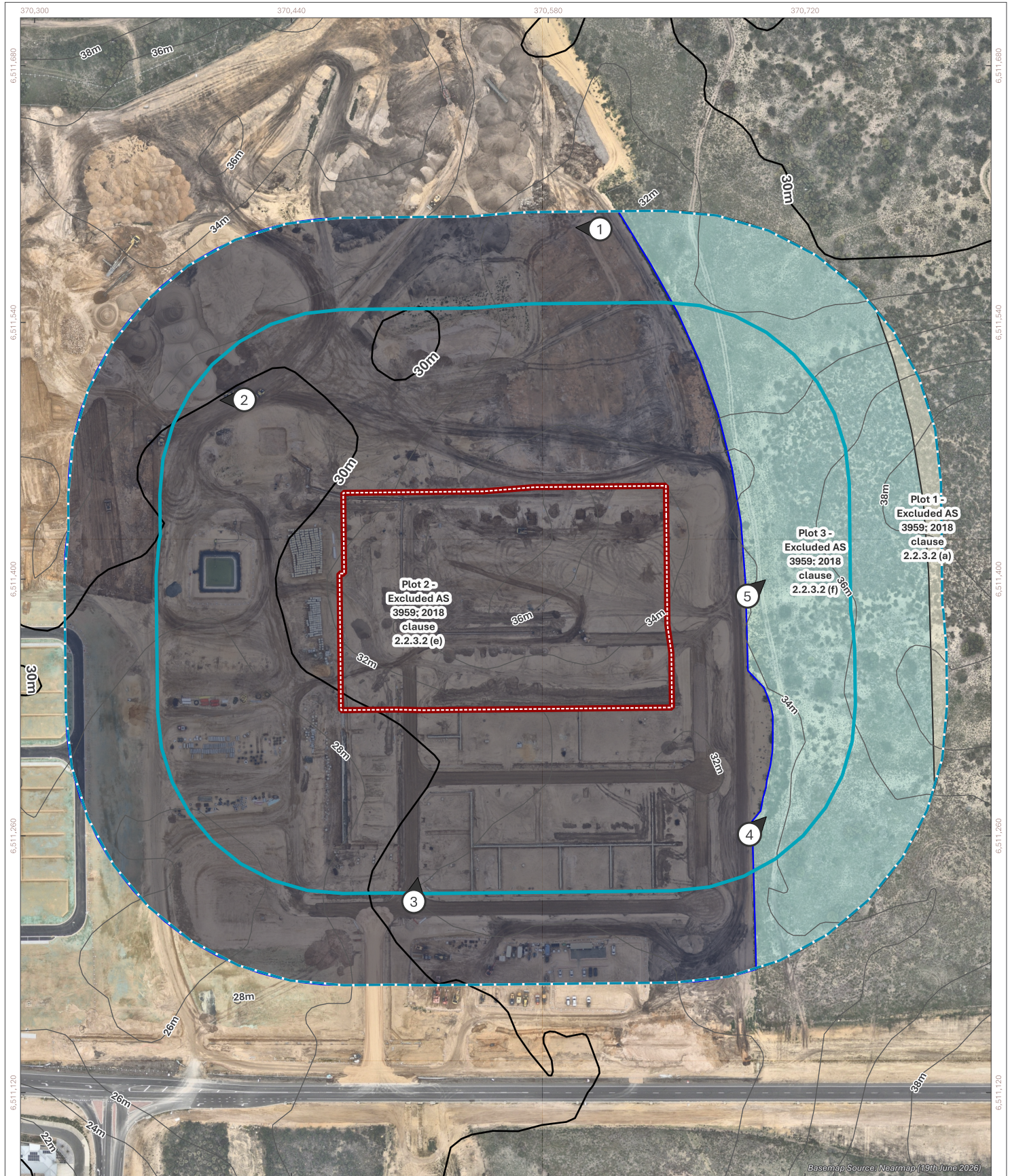


Figure 2: Vegetation Classification

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- Subject Site
- Buffer 100m
- Buffer 150m

- Photo Location
- Contours (DPIRD-072)**
- 2m
- 10m

Vegetation Classification

- Excluded AS 3959: 2018 2.2.3.2 (a)
- Excluded AS 3959: 2018 2.2.3.2 (e)
- Excluded AS 3959: 2018 2.2.3.2 (f)



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0 20 40 60 80 m

COORDINATE REFERENCE SYSTEM:
GDA2020 / MGA Zone 50

SCALE: PROJECT NUMBER:
1:2,800 A24.012

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Relevant Fire Danger Index

The Fire Danger Index for this site has been determined in accordance with Table 2.1 of AS 3959: 2018 and is presented in Table 2.

Table 2: Fire Danger Index (FDI)

Relevant Fire Danger Index			
FDI 40 ☐	FDI 50 ☐	FDI 80 ✓	FDI 100 ☐
<i>Table 2.4.5</i>	<i>Table 2.4.4</i>	<i>Table 2.4.3</i>	<i>Table 2.4.2</i>

Potential Bushfire Impacts

The potential bushfire impact to the subject site / proposed development from each of the identified vegetation plots are identified below in Table 3.

Table 3: Method 1 BAL Calculation (BAL Contours)

Plot	Vegetation classification	Effective slope	Separation distances required (m)				
			BAL-FZ	BAL-40	BAL-29	BAL-19	BAL-12.5
1	Excluded - clause 2.2.3.2 (a)	-	No separation distances required - BAL-LOW				
2	Excluded - clause 2.2.3.2 (e)	-	No separation distances required - BAL-LOW				
3	Excluded - clause 2.2.3.2 (f)	-	No separation distances required - BAL-LOW				

Determined Bushfire Attack Level (BAL)

The determined Bushfire Attack Level (highest BAL) for the proposed works has been determined in accordance with Clause 2.2.6 of AS 3959: 2018. An explanation of the construction implications for each of these BAL ratings is contained in Appendix A. Relevant data from the subject site assessment is shown in Figure 3 and Table 4.



Table 4: BAL Assessment Summary

Affected Lot	BAL Rating	Construction sections to be consulted in AS 3959: 2018
427	BAL-LOW	4
428	BAL-LOW	4
429	BAL-LOW	4
430	BAL-LOW	4
431	BAL-LOW	4
432	BAL-LOW	4
433	BAL-LOW	4
434	BAL-LOW	4
435	BAL-LOW	4
436	BAL-LOW	4
437	BAL-LOW	4
438	BAL-LOW	4
439	BAL-LOW	4
440	BAL-LOW	4
441	BAL-LOW	4
442	BAL-LOW	4
443	BAL-LOW	4
444	BAL-LOW	4
445	BAL-LOW	4
446	BAL-LOW	4
447	BAL-LOW	4
448	BAL-LOW	4
449	BAL-LOW	4
450	BAL-LOW	4
456	BAL-LOW	4
457	BAL-LOW	4
458	BAL-LOW	4
459	BAL-LOW	4
460	BAL-LOW	4
461	BAL-LOW	4
462	BAL-LOW	4
463	BAL-LOW	4
464	BAL-LOW	4
465	BAL-LOW	4
466	BAL-LOW	4
535	BAL-LOW	4



Affected Lot	BAL Rating	Construction sections to be consulted in AS 3959: 2018
536	BAL-LOW	4
537	BAL-LOW	4
538	BAL-LOW	4
539	BAL-LOW	4
540	BAL-LOW	4
541	BAL-LOW	4
542	BAL-LOW	4

Note: This BAL rating is based on the information current at the date of this document and is valid for 12 months.



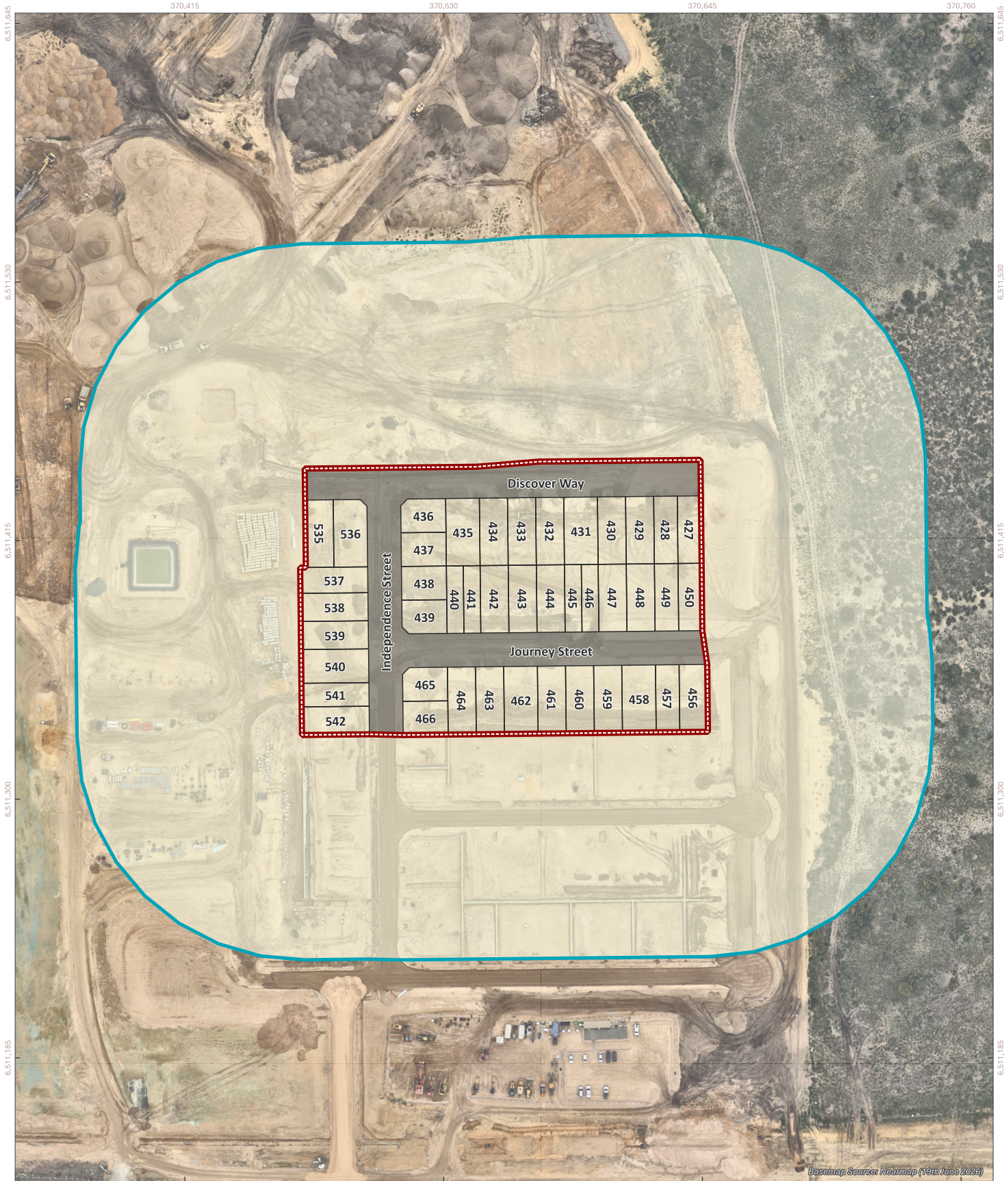


Figure 3: Bushfire Attack Level (BAL) Contours

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0 20 40 60 80 m

COORDINATE REFERENCE SYSTEM:
GDA2020 / MGA Zone 50

SCALE: 1:2,300 PROJECT NUMBER: A24.012

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-  Subject Site
-  Buffer 100m
-  Lot boundary
-  Road Reserve
-  Bushfire Hazard Interface

Bushfire Attack Level (BAL)

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

References

Standards Australia (SA). (2018). *Construction of buildings in bushfire-prone areas (AS 3959: 2018)*.

Datasets Used

Department of Fire and Emergency Services (DFES). (2025). *Bush Fire Prone Area Planning (OBRM-023)*. Retrieved on 11/09/26 from: <http://www.dfes.wa.gov.au/regulationandcompliance/bushfireproneareas/Pages/default.aspx>.

Department of Primary Industries and Regional Development (DPIRD). (2019). *2 metre contours (DPIRD-072)*. Retrieved on 11/09/26 from <https://catalogue.data.wa.gov.au/dataset/dpird-2-metre-contours>.



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Appendix A: Additional Information / Advisory Notes

This assessment was undertaken as per AS 3959: 2018. It is important that the current version of AS 3959, is consulted for construction purposes.

This BAL rating is based on the information current at the date of this letter and is valid for 12 months from the date of this letter.

Bushfire Attack Level (BAL) as set out in the *Australian Standard 3959 Construction of Buildings in Bushfire-Prone Areas* (AS 3959), as referenced in the Building Code of Australia.

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

Source: "AS 3959: 2018 Construction of buildings in bushfire-prone areas" published by Standards Australia, Sydney.