

AS 3959: 2018 Bushfire Attack Level (BAL) Assessment Report for Stage 6 Beenyup Grove Estate, Byford

Site Details

Address: Beenyup Grove Estate (Lots 317,318, 341-348, 372-381, 386-399, 471, 656, 657 and 699)

Suburb: Byford, 6122 **State:** Western Australia

Local Government Area: Shire of Serpentine Jarrahdale

Description of building works: Residential development, future buildings

Report details

Report/Job number:	21PER-18603	Report version:	v1
Assessment date:	19/03/2021	Report date:	30/03/2021
Author:	Maitland Ely	Review:	Daniel Panickar (BPAD Level 3-37802)



SITE ASSESSMENT AND SITE PLAN

The assessment of the subject lots was undertaken on 19 March 2021 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* (SA 2018) Simplified Procedure (Method 1). An overview of the site is presented in **Figure 1**.

VEGETATION CLASSIFICATION AND EFFECTIVE SLOPE

All vegetation and effective slope within 100 m of the 38 subject lots 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 below and presented in **Figure 1**.

It is currently assumed that areas of landscaped vegetation within the site and assessment area will be managed and maintained by Parcel Property (the developer) until replaced by residential dwellings and associated infrastructure or handed over to the Shire of Serpentine-Jarrahdale in the future.

Plot	1	Classification or Exclusion Clause	Excluded – clause 2.2.3.2 (f)
		Photo Point 1 This plot has been excluded under Clause 2.2.3.2 (f) of AS 3959: 2018. This is an area of low threat, maintained grass.	
Plot	1	Classification or Exclusion Clause	Excluded – clause 2.2.3.2 (e) & (f)
		Photo Point 2 This plot has been excluded under Clause 2.2.3.2 (e) and (f) of AS 3959: 2018. This is an area of low threat, maintained vegetation and buildings.	
Plot	1	Classification or Exclusion Clause	Excluded – clause 2.2.3.2 (f)
		Photo Point 3 This plot has been excluded under Clause 2.2.3.2 (f) of AS 3959: 2018. This is an area of low threat, maintained grass.	

Plot	1	Classification or Exclusion Clause	Excluded – clause 2.2.3.2 (e) & (f)
		Photo Point 4 <p>This plot has been excluded under Clause 2.2.3.2 (e) and (f) of AS 3959: 2018. This is an area that has been cleared for construction and will contain residential lots, roads, and low threat, maintained vegetation.</p>	 <p>19 Mar 2021, 12:23:16</p>
Plot	1	Classification or Exclusion Clause	Excluded – clause 2.2.3.2 (e) & (f)-
		Photo Point 5 <p>This plot has been excluded under Clause 2.2.3.2 (e) and (f) of AS 3959: 2018. This is an area of low threat, maintained vegetation and footpaths.</p>	 <p>19 Mar 2021, 12:24:21</p>
Plot	1	Classification or Exclusion Clause	Excluded – clause 2.2.3.2 (f)
		Photo Point 6 <p>This plot has been excluded under Clause 2.2.3.2 (f) of AS 3959: 2018. This is an area of low threat, managed vegetation as windbreaks.</p>	 <p>19 Mar 2021, 12:26:09</p>

Plot	1	Classification or Exclusion Clause	Excluded – clause 2.2.3.2 (e) & (f)
		Photo Point 7 This plot has been excluded under Clause 2.2.3.2 (e) and (f) of AS 3959: 2018. This is an area of low threat, maintained grass, managed vegetation and non-vegetated areas (i.e. firebreaks and roads).	
		Photo Point 8 This plot has been excluded under Clause 2.2.3.2 (e) and (f) of AS 3959: 2018. This is an area of low threat, maintained vegetation and buildings.	

RELEVANT FIRE DANGER INDEX

The fire danger index (FDI) for this site has been determined in accordance with Table 2.1 of AS 3959: 2018. The FDI for WA is FDI 80.

Relevant Fire Danger Index			
FDI 40 <input type="checkbox"/>	FDI 50 <input type="checkbox"/>	FDI 80 <input checked="" type="checkbox"/>	FDI 100 <input type="checkbox"/>
<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 site / proposed development from each of the identified vegetation plots are identified below, **Table 1** and Figure 1.

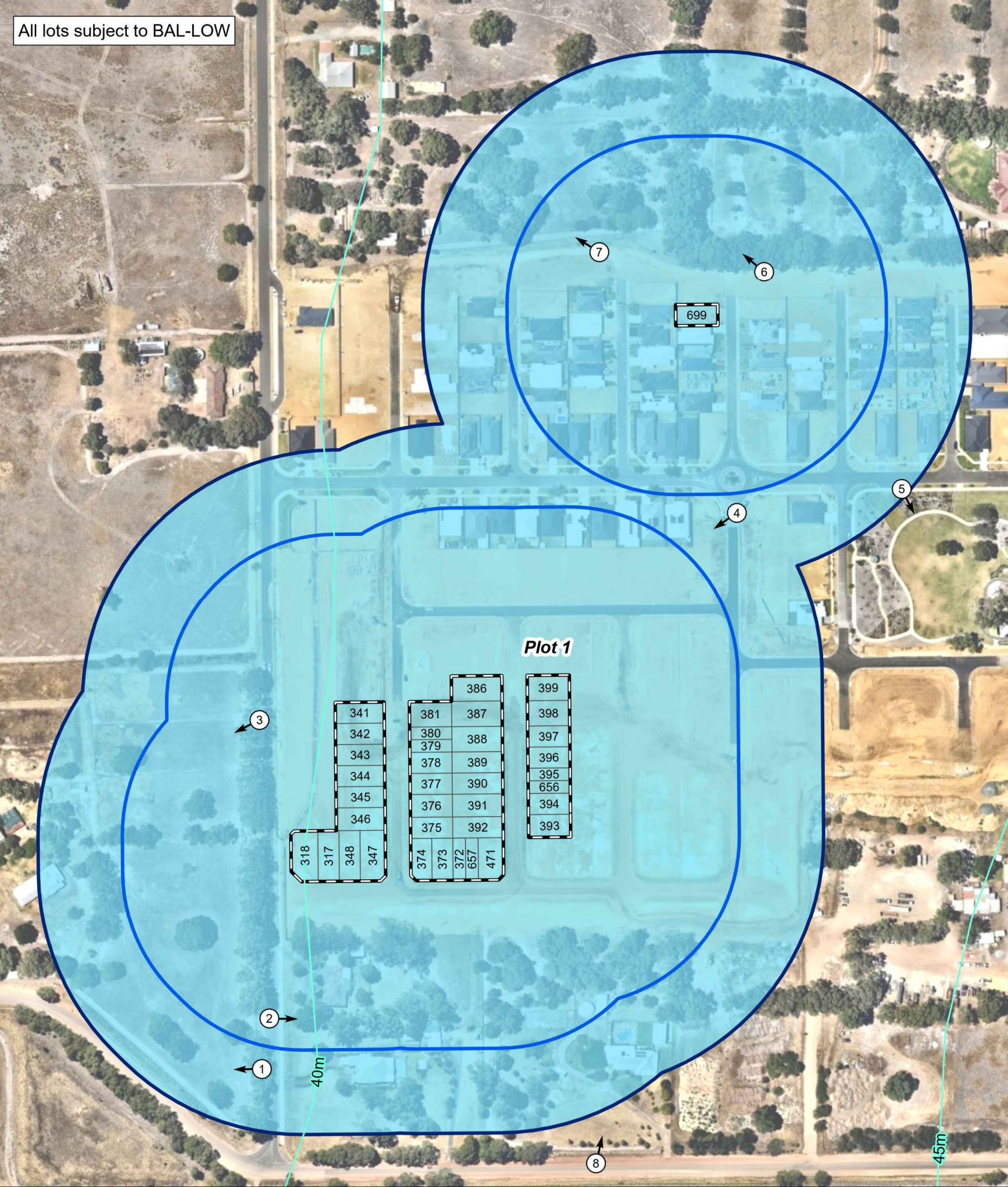
Table 1: BAL Analysis AS 3959: 2018

Plot	Vegetation Classification	Effective Slope	Separation distances required				
			BAL-FZ	BAL-40	BAL-29	BAL-19	BAL-12.5
1	Excluded under Clause 2.2.3.2 (e) & (f)	N/A	No separation distances required – BAL-LOW				

DETERMINED BUSHFIRE ATTACK LEVEL (BAL)

The determined Bushfire Attack Level (highest BAL) for the 38 subject lots has been determined in accordance with Clause 2.2.6 of AS 3959: 2018 relevant data from the site assessment shown in Figure 1 and Table 1. All lots within the site are subject to BAL ratings of **BAL -LOW**.

Figure 1: Vegetation classification and Bushfire Attack Level



Legend

Subject site

Lot boundary

100m site assessment

150m site assessment

Contour (5m)

Photo location

Vegetation classification

Excluded as per clause 2.2.3.2 (e) and (f)

0 25 50 100
Metres
Datum/Projection:
GDA 1994 MGA Zone 50

N

A TETRA TECH COMPANY
Project: 18603-SM Date: 30/03/2021

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 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

Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959: 2018

Site Details

Address:	Lot 317, Beenyup Grove Estate		
Suburb:	Byford, 6122	State:	WA
Local Government Area:	Shire of Serpentine-Jarrahdale		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	21PER-18603	Report Date:	30/03/2021

Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	N/A	N/A	N/A	BAL - LOW

Practitioner 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 AS 3959: 2018.

Name Daniel Panickar
Eco Logical Australia

Signature: 

Certificate Date: 30/03/2021



Accreditation No: BPAD 37802
Expiry: December 2021

Bushfire Attack Level (BAL) Contours - Lot 317 (BAL - LOW)

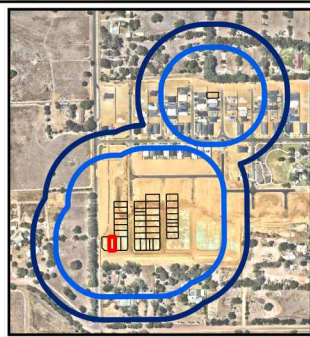


Legend

- 100m site assessment
- 150m site assessment
- Lot boundary
- Bushfire Hazard Interface

Bushfire Attack Level (BAL)

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



0 5 10 20
Metres

Datum/Projection:
GDA 1994 MGA Zone 50

eco logical
AUSTRALIA
A TETRA TECH COMPANY

Project: 18603-SM Date: 24/03/2021

Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959: 2018

Site Details

Address:	Lot 318, Beenyup Grove Estate		
Suburb:	Byford, 6122	State:	WA
Local Government Area:	Shire of Serpentine-Jarrahdale		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	21PER-18603	Report Date:	30/03/2021

Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	N/A	N/A	N/A	BAL - LOW

Practitioner 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 AS 3959: 2018.

Name Daniel Panickar
Eco Logical Australia

Signature: 

Certificate Date: 30/03/2021



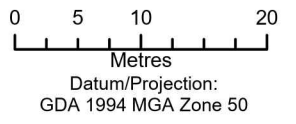
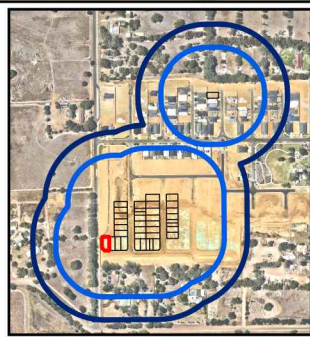
Accreditation No: BPAD 37802
Expiry: December 2021

Bushfire Attack Level (BAL) Contours - Lot 318 (BAL - LOW)



- Legend**
- 100m site assessment
 - 150m site assessment
 - Lot boundary
 - Bushfire Hazard Interface

Bushfire Attack Level (BAL)	
	BAL - FZ
	BAL - 40
	BAL - 29
	BAL - 19
	BAL - 12.5
	BAL - LOW



Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959: 2018

Site Details

Address:	Lot 341, Beenyup Grove Estate		
Suburb:	Byford, 6122	State:	WA
Local Government Area:	Shire of Serpentine-Jarrahdale		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	21PER-18603	Report Date:	30/03/2021

Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	N/A	N/A	N/A	BAL - LOW

Practitioner 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 AS 3959: 2018.

Name Daniel Panickar
Eco Logical Australia

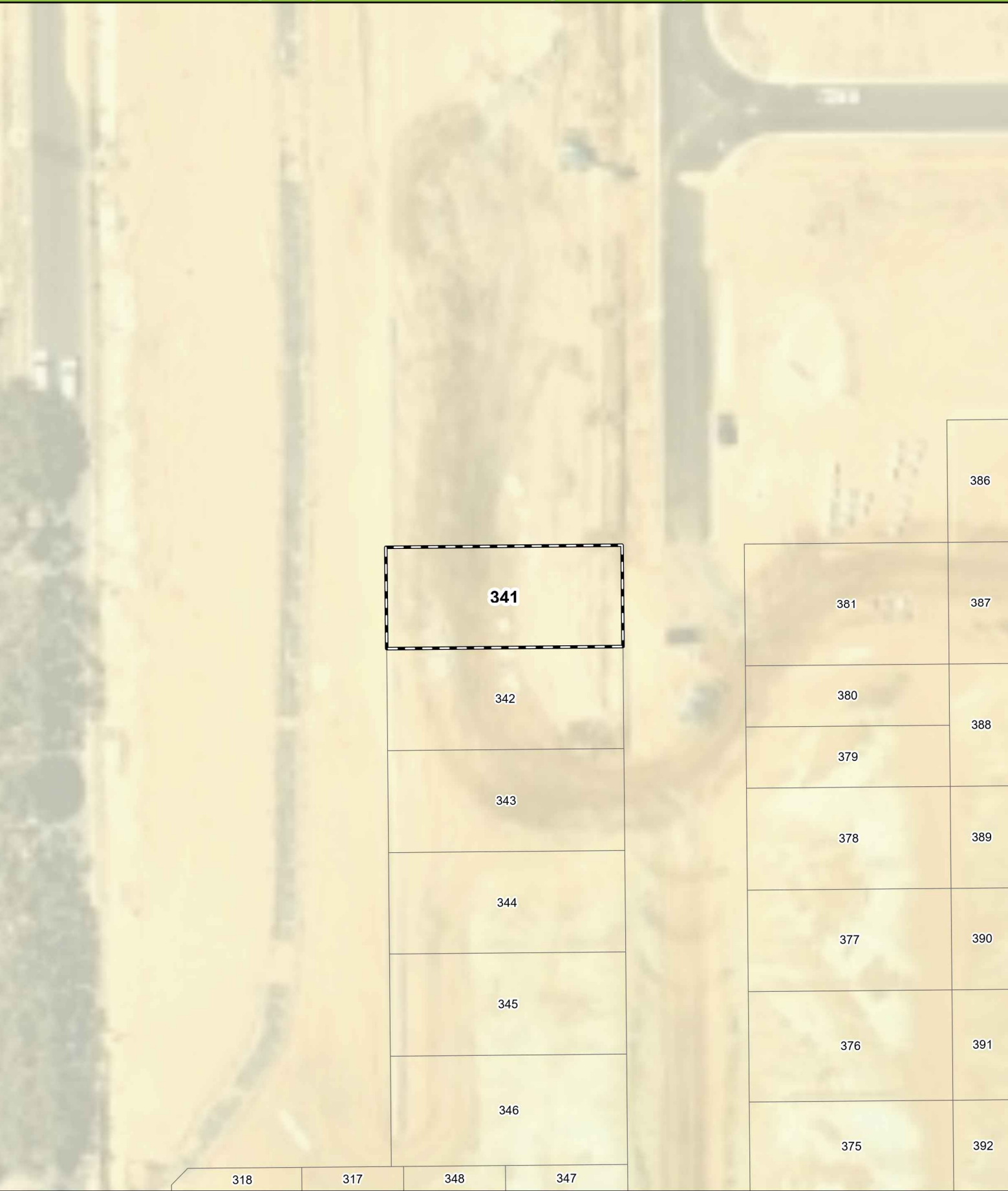
Signature: 

Certificate Date: 30/03/2021



Accreditation No: BPAD 37802
Expiry: December 2021

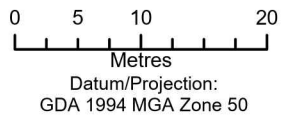
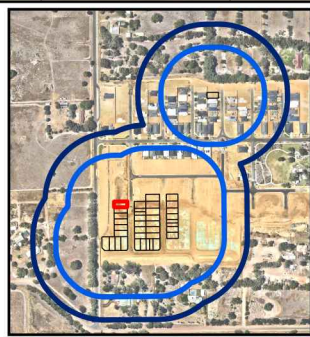
Bushfire Attack Level (BAL) Contours - Lot 341 (BAL - LOW)



- Legend**
- 100m site assessment
 - 150m site assessment
 - Lot boundary
 - Bushfire Hazard Interface

Bushfire Attack Level (BAL)

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



N

eco logical
AUSTRALIA
A TETRA TECH COMPANY

Project: 18603-SM Date: 24/03/2021

Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959: 2018

Site Details

Address:	Lot 342, Beenyup Grove Estate		
Suburb:	Byford, 6122	State:	WA
Local Government Area:	Shire of Serpentine-Jarrahdale		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	21PER-18603	Report Date:	30/03/2021

Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	N/A	N/A	N/A	BAL - LOW

Practitioner 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 AS 3959: 2018.

Name Daniel Panickar
Eco Logical Australia

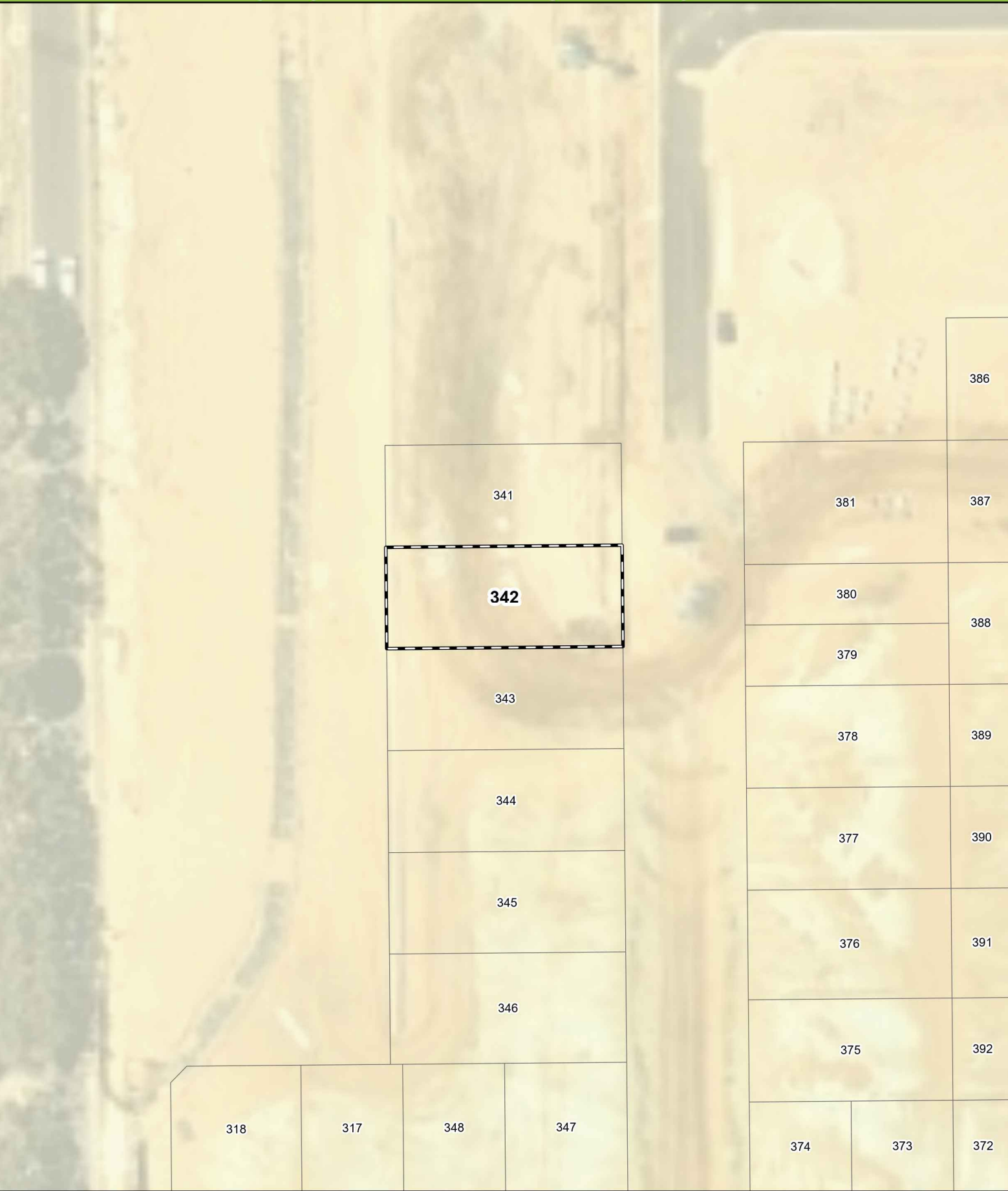
Signature: 

Certificate Date: 30/03/2021



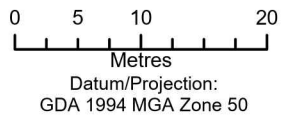
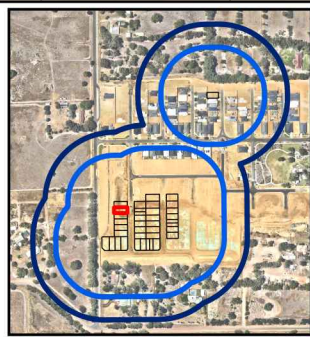
Accreditation No: BPAD 37802
Expiry: December 2021

Bushfire Attack Level (BAL) Contours - Lot 342 (BAL - LOW)



- Legend**
- 100m site assessment
 - 150m site assessment
 - Lot boundary
 - Bushfire Hazard Interface

- Bushfire Attack Level (BAL)**
- BAL - FZ
 - BAL - 40
 - BAL - 29
 - BAL - 19
 - BAL - 12.5
 - BAL - LOW



Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959: 2018

Site Details

Address:	Lot 343, Beenyup Grove Estate		
Suburb:	Byford, 6122	State:	WA
Local Government Area:	Shire of Serpentine-Jarrahdale		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	21PER-18603	Report Date:	30/03/2021

Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	N/A	N/A	N/A	BAL - LOW

Practitioner 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 AS 3959: 2018.

Name Daniel Panickar
Eco Logical Australia

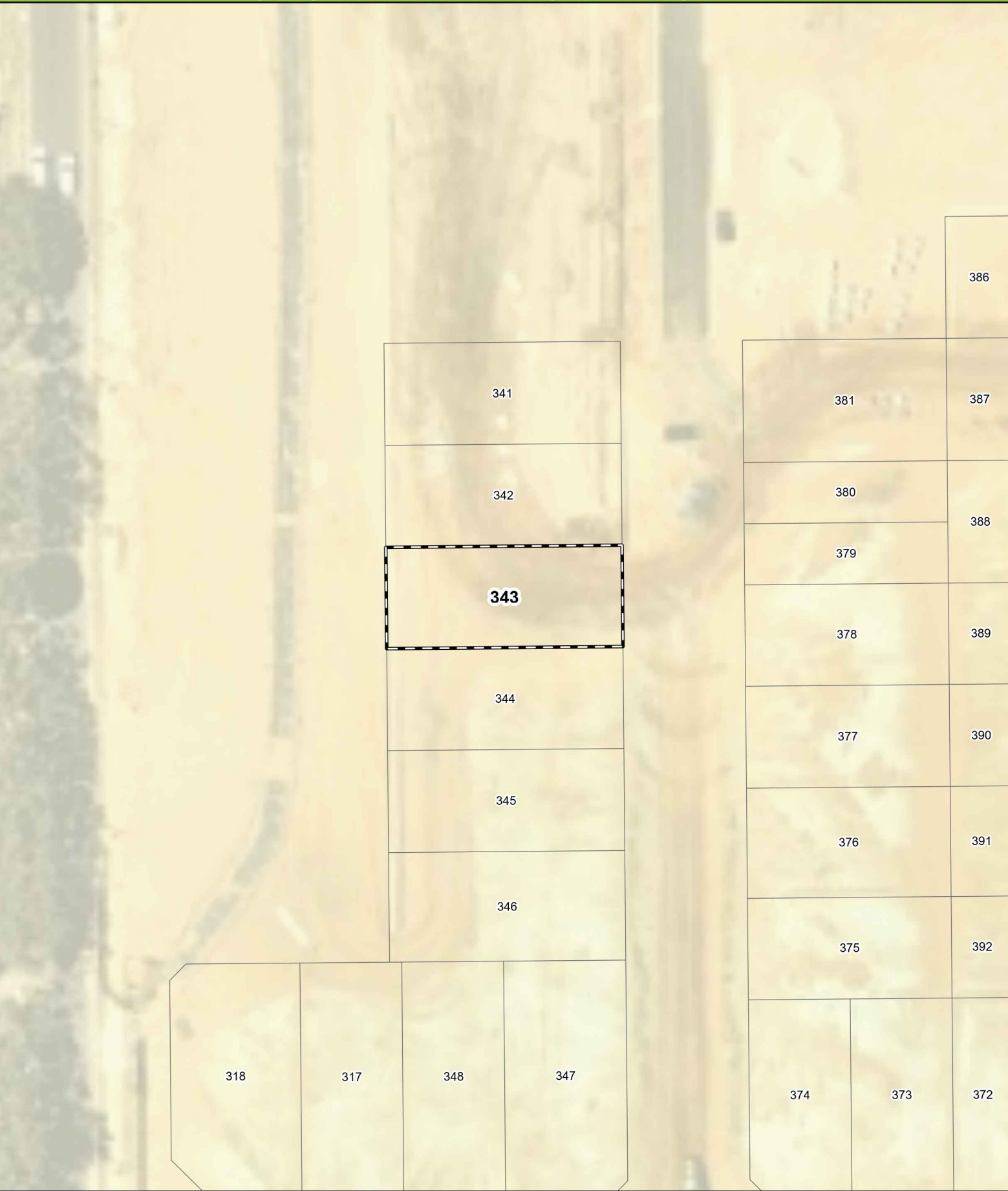
Signature: 

Certificate Date: 30/03/2021



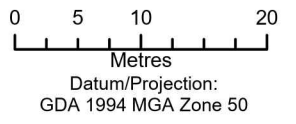
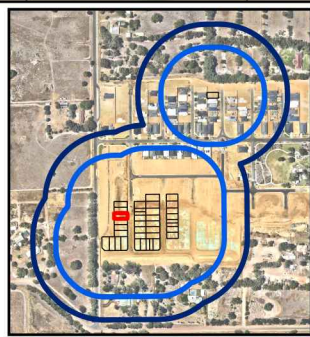
Accreditation No: BPAD 37802
Expiry: December 2021

Bushfire Attack Level (BAL) Contours - Lot 343 (BAL - LOW)



- Legend**
- 100m site assessment
 - 150m site assessment
 - Lot boundary
 - Bushfire Hazard Interface

- Bushfire Attack Level (BAL)**
- BAL - FZ
 - BAL - 40
 - BAL - 29
 - BAL - 19
 - BAL - 12.5
 - BAL - LOW



Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959: 2018

Site Details

Address:	Lot 344, Beenyup Grove Estate		
Suburb:	Byford, 6122	State:	WA
Local Government Area:	Shire of Serpentine-Jarrahdale		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	21PER-18603	Report Date:	30/03/2021

Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	N/A	N/A	N/A	BAL - LOW

Practitioner 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 AS 3959: 2018.

Name Daniel Panickar
Eco Logical Australia

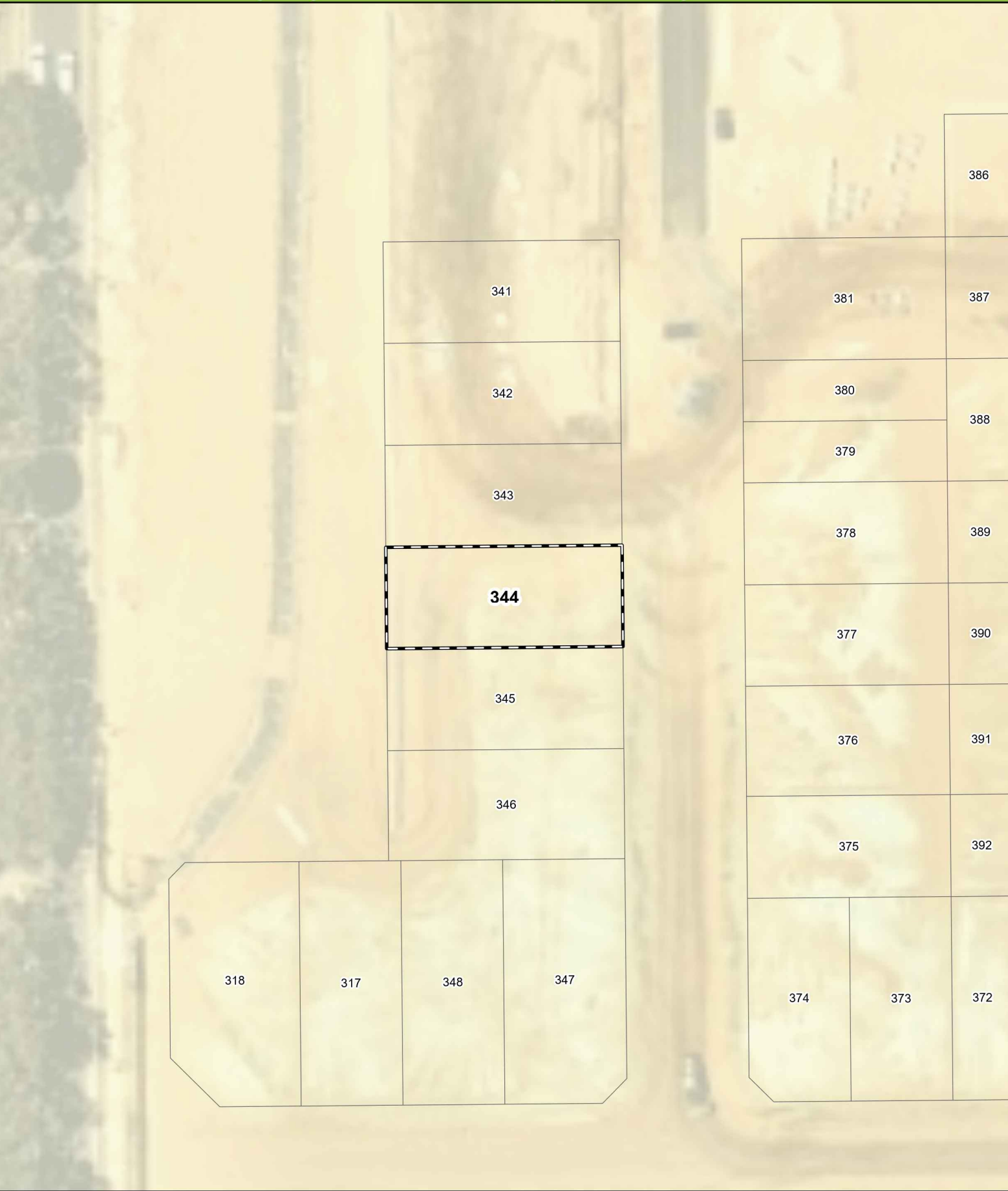
Signature: 

Certificate Date: 30/03/2021



Accreditation No: BPAD 37802
Expiry: December 2021

Bushfire Attack Level (BAL) Contours - Lot 344 (BAL - LOW)



Legend

- 100m site assessment
- 150m site assessment
- Lot boundary
- Bushfire Hazard Interface

Bushfire Attack Level (BAL)

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

0 5 10 20
Metres
Datum/Projection:
GDA 1994 MGA Zone 50

eco logical
AUSTRALIA
A TETRA TECH COMPANY

Project: 18603-SM Date: 24/03/2021

Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959: 2018

Site Details

Address:	Lot 345, Beenyup Grove Estate		
Suburb:	Byford, 6122	State:	WA
Local Government Area:	Shire of Serpentine-Jarrahdale		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	21PER-18603	Report Date:	30/03/2021

Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	N/A	N/A	N/A	BAL - LOW

Practitioner 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 AS 3959: 2018.

Name Daniel Panickar
Eco Logical Australia

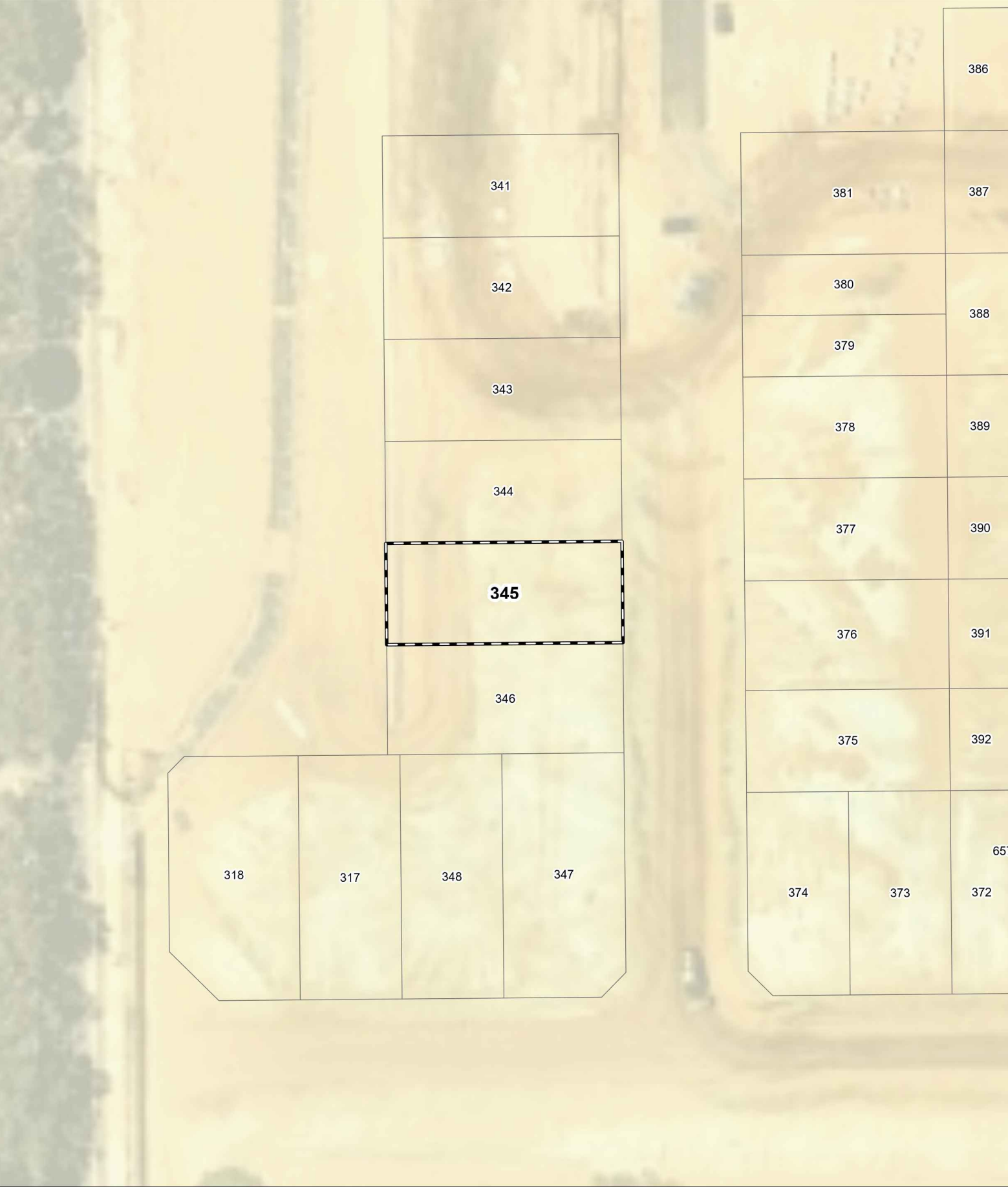
Signature: 

Certificate Date: 30/03/2021



Accreditation No: BPAD 37802
Expiry: December 2021

Bushfire Attack Level (BAL) Contours - Lot 345 (BAL - LOW)

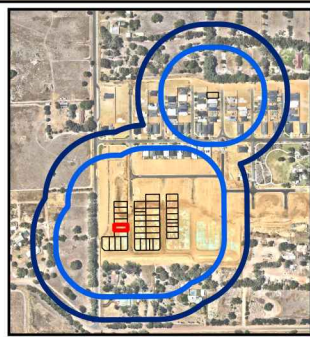


Legend

- 100m site assessment
- 150m site assessment
- Lot boundary
- Bushfire Hazard Interface

Bushfire Attack Level (BAL)

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



0 5 10 20
Metres

Datum/Projection:
GDA 1994 MGA Zone 50

N

eco logical AUSTRALIA
A TETRA TECH COMPANY

Project: 18603-SM Date: 24/03/2021

Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959: 2018

Site Details

Address:	Lot 346, Beenyup Grove Estate		
Suburb:	Byford, 6122	State:	WA
Local Government Area:	Shire of Serpentine-Jarrahdale		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	21PER-18603	Report Date:	30/03/2021

Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	N/A	N/A	N/A	BAL - LOW

Practitioner 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 AS 3959: 2018.

Name Daniel Panickar
Eco Logical Australia

Signature: 

Certificate Date: 30/03/2021



Accreditation No: BPAD 37802
Expiry: December 2021

Bushfire Attack Level (BAL) Contours - Lot 346 (BAL - LOW)

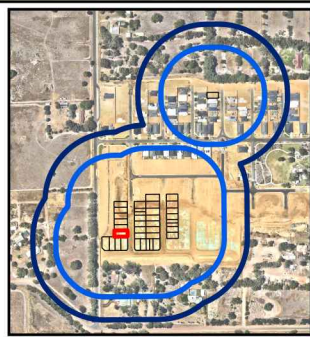


Legend

- 100m site assessment
- 150m site assessment
- Lot boundary
- Bushfire Hazard Interface

Bushfire Attack Level (BAL)

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



0 5 10 20
Metres

Datum/Projection:
GDA 1994 MGA Zone 50

eco logical
AUSTRALIA
A TETRA TECH COMPANY

Project: 18603-SM Date: 24/03/2021

Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959: 2018

Site Details

Address:	Lot 347, Beenyup Grove Estate		
Suburb:	Byford, 6122	State:	WA
Local Government Area:	Shire of Serpentine-Jarrahdale		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	21PER-18603	Report Date:	30/03/2021

Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	N/A	N/A	N/A	BAL - LOW

Practitioner 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 AS 3959: 2018.

Name Daniel Panickar
Eco Logical Australia

Signature: 

Certificate Date: 30/03/2021



Accreditation No: BPAD 37802
Expiry: December 2021

Bushfire Attack Level (BAL) Contours - Lot 347 (BAL - LOW)

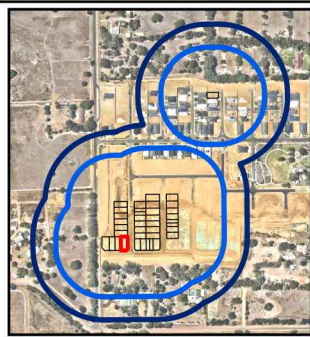


Legend

- 100m site assessment
- 150m site assessment
- Lot boundary
- Bushfire Hazard Interface

Bushfire Attack Level (BAL)

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



0 5 10 20
Metres

Datum/Projection:
GDA 1994 MGA Zone 50

N

eco logical
AUSTRALIA
A TETRA TECH COMPANY

Project: 18603-SM Date: 24/03/2021

Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959: 2018

Site Details

Address:	Lot 348, Beenyup Grove Estate		
Suburb:	Byford, 6122	State:	WA
Local Government Area:	Shire of Serpentine-Jarrahdale		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	21PER-18603	Report Date:	30/03/2021

Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	N/A	N/A	N/A	BAL - LOW

Practitioner 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 AS 3959: 2018.

Name Daniel Panickar
Eco Logical Australia

Signature: 

Certificate Date: 30/03/2021



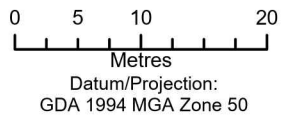
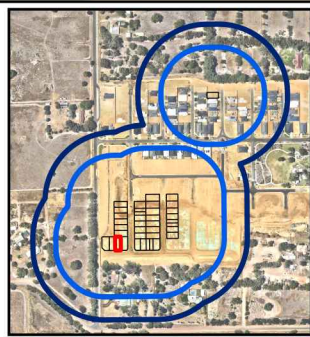
Accreditation No: BPAD 37802
Expiry: December 2021

Bushfire Attack Level (BAL) Contours - Lot 348 (BAL - LOW)



- Legend**
- 100m site assessment
 - 150m site assessment
 - Lot boundary
 - Bushfire Hazard Interface

Bushfire Attack Level (BAL)	
	BAL - FZ
	BAL - 40
	BAL - 29
	BAL - 19
	BAL - 12.5
	BAL - LOW



Project: 18603-SM Date: 24/03/2021

Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959: 2018

Site Details

Address:	Lot 372, Beenyup Grove Estate		
Suburb:	Byford, 6122	State:	WA
Local Government Area:	Shire of Serpentine-Jarrahdale		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	21PER-18603	Report Date:	30/03/2021

Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	N/A	N/A	N/A	BAL - LOW

Practitioner 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 AS 3959: 2018.

Name Daniel Panickar
Eco Logical Australia

Signature: 

Certificate Date: 30/03/2021



Accreditation No: BPAD 37802
Expiry: December 2021

Bushfire Attack Level (BAL) Contours - Lot 372 (BAL - LOW)



Legend

- 100m site assessment
- 150m site assessment
- Lot boundary
- Bushfire Hazard Interface

Bushfire Attack Level (BAL)

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

0 5 10 20
Metres
Datum/Projection:
GDA 1994 MGA Zone 50

eco logical
AUSTRALIA
A TETRA TECH COMPANY

Project: 18603-SM Date: 24/03/2021

Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959: 2018

Site Details

Address:	Lot 373, Beenyup Grove Estate		
Suburb:	Byford, 6122	State:	WA
Local Government Area:	Shire of Serpentine-Jarrahdale		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	21PER-18603	Report Date:	30/03/2021

Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	N/A	N/A	N/A	BAL - LOW

Practitioner 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 AS 3959: 2018.

Name Daniel Panickar
Eco Logical Australia

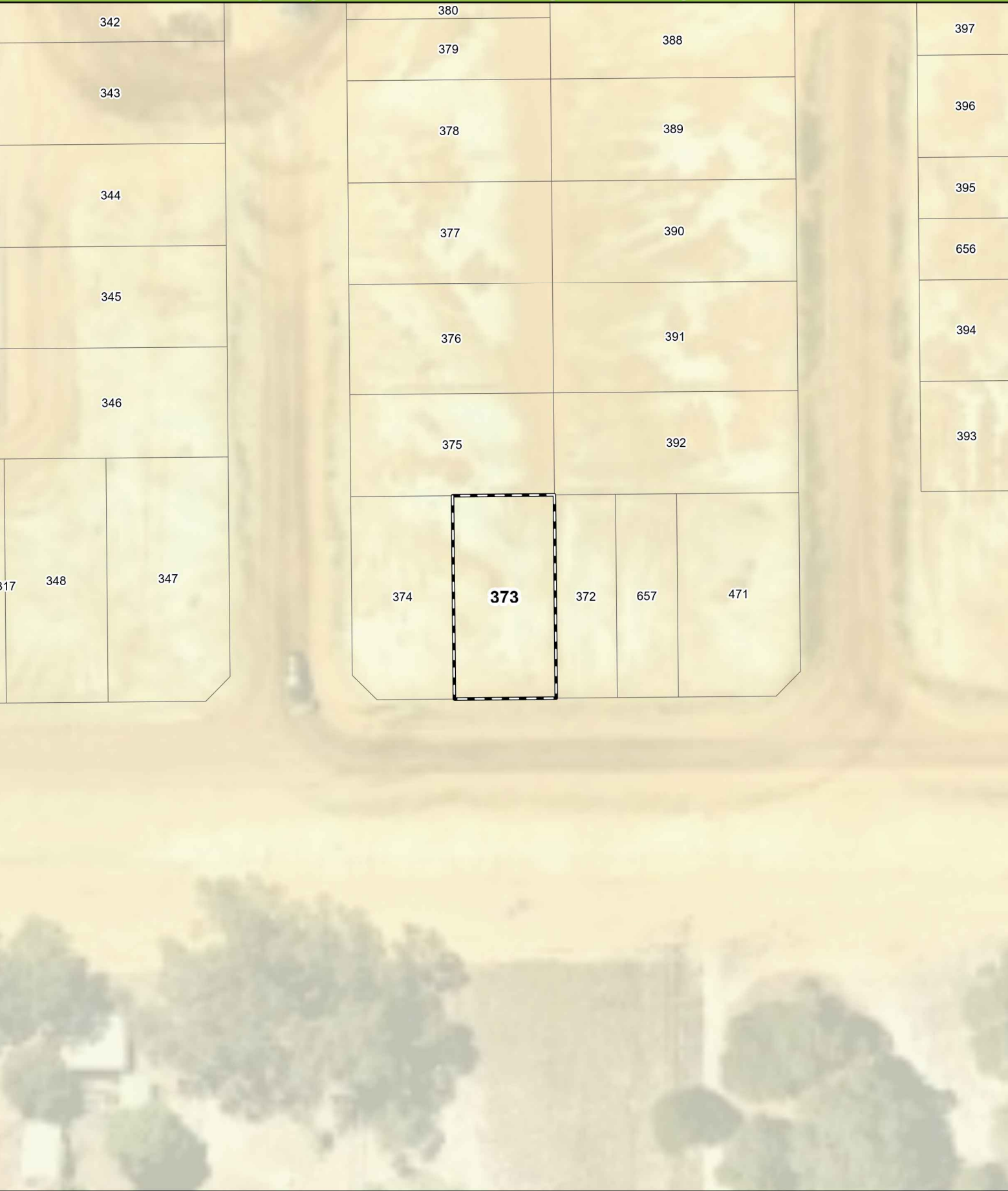
Signature: 

Certificate Date: 30/03/2021



Accreditation No: BPAD 37802
Expiry: December 2021

Bushfire Attack Level (BAL) Contours - Lot 373 (BAL - LOW)

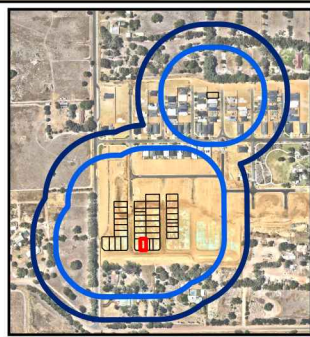


Legend

- 100m site assessment
- 150m site assessment
- Lot boundary
- Bushfire Hazard Interface

Bushfire Attack Level (BAL)

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



0 5 10 20
Metres

Datum/Projection:
GDA 1994 MGA Zone 50

N

eco logical
AUSTRALIA
A TETRA TECH COMPANY

Project: 18603-SM Date: 24/03/2021

Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959: 2018

Site Details

Address:	Lot 374, Beenyup Grove Estate		
Suburb:	Byford, 6122	State:	WA
Local Government Area:	Shire of Serpentine-Jarrahdale		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	21PER-18603	Report Date:	30/03/2021

Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	N/A	N/A	N/A	BAL - LOW

Practitioner 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 AS 3959: 2018.

Name Daniel Panickar
Eco Logical Australia

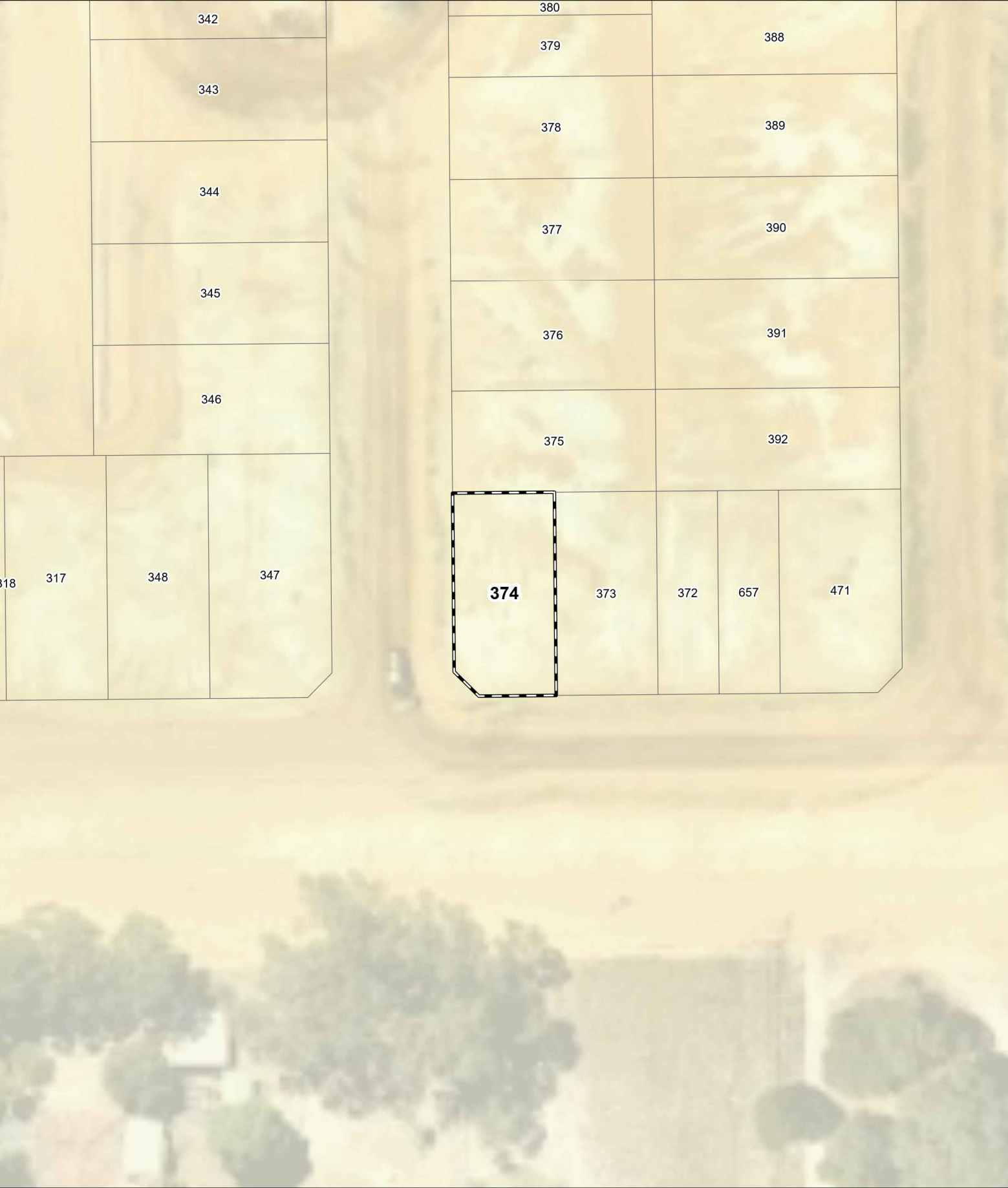
Signature: 

Certificate Date: 30/03/2021



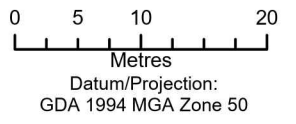
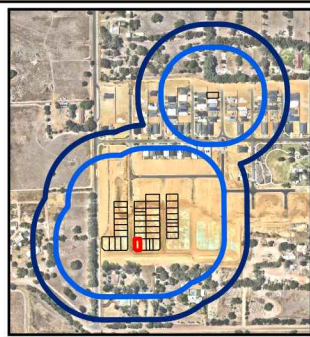
Accreditation No: BPAD 37802
Expiry: December 2021

Bushfire Attack Level (BAL) Contours - Lot 374 (BAL - LOW)



- Legend**
- 100m site assessment
 - 150m site assessment
 - Lot boundary
 - Bushfire Hazard Interface

Bushfire Attack Level (BAL)	
<div></div>	BAL - FZ
<div></div>	BAL - 40
<div></div>	BAL - 29
<div></div>	BAL - 19
<div></div>	BAL - 12.5
<div></div>	BAL - LOW



Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959: 2018

Site Details

Address:	Lot 375, Beenyup Grove Estate		
Suburb:	Byford, 6122	State:	WA
Local Government Area:	Shire of Serpentine-Jarrahdale		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	21PER-18603	Report Date:	30/03/2021

Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	N/A	N/A	N/A	BAL - LOW

Practitioner 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 AS 3959: 2018.

Name Daniel Panickar
Eco Logical Australia

Signature: 

Certificate Date: 30/03/2021



Accreditation No: BPAD 37802
Expiry: December 2021

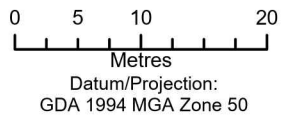
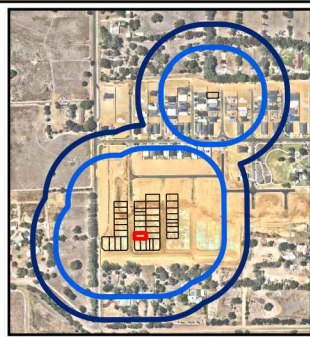
Bushfire Attack Level (BAL) Contours - Lot 375 (BAL - LOW)



- Legend**
- 100m site assessment
 - 150m site assessment
 - Lot boundary
 - Bushfire Hazard Interface

Bushfire Attack Level (BAL)

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



eco logical AUSTRALIA
A TETRA TECH COMPANY

Project: 18603-SM Date: 24/03/2021

Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959: 2018

Site Details

Address:	Lot 376, Beenyup Grove Estate		
Suburb:	Byford, 6122	State:	WA
Local Government Area:	Shire of Serpentine-Jarrahdale		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	21PER-18603	Report Date:	30/03/2021

Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	N/A	N/A	N/A	BAL - LOW

Practitioner 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 AS 3959: 2018.

Name Daniel Panickar
Eco Logical Australia

Signature: 

Certificate Date: 30/03/2021



Accreditation No: BPAD 37802
Expiry: December 2021

Bushfire Attack Level (BAL) Contours - Lot 376 (BAL - LOW)



Legend

- 100m site assessment
- 150m site assessment
- Lot boundary
- Bushfire Hazard Interface

Bushfire Attack Level (BAL)

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

0 5 10 20
Metres
Datum/Projection:
GDA 1994 MGA Zone 50

N

eco logical
AUSTRALIA
A TETRA TECH COMPANY

Project: 18603-SM Date: 24/03/2021

Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959: 2018

Site Details

Address:	Lot 377, Beenyup Grove Estate		
Suburb:	Byford, 6122	State:	WA
Local Government Area:	Shire of Serpentine-Jarrahdale		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	21PER-18603	Report Date:	30/03/2021

Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	N/A	N/A	N/A	BAL - LOW

Practitioner 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 AS 3959: 2018.

Name Daniel Panickar
Eco Logical Australia

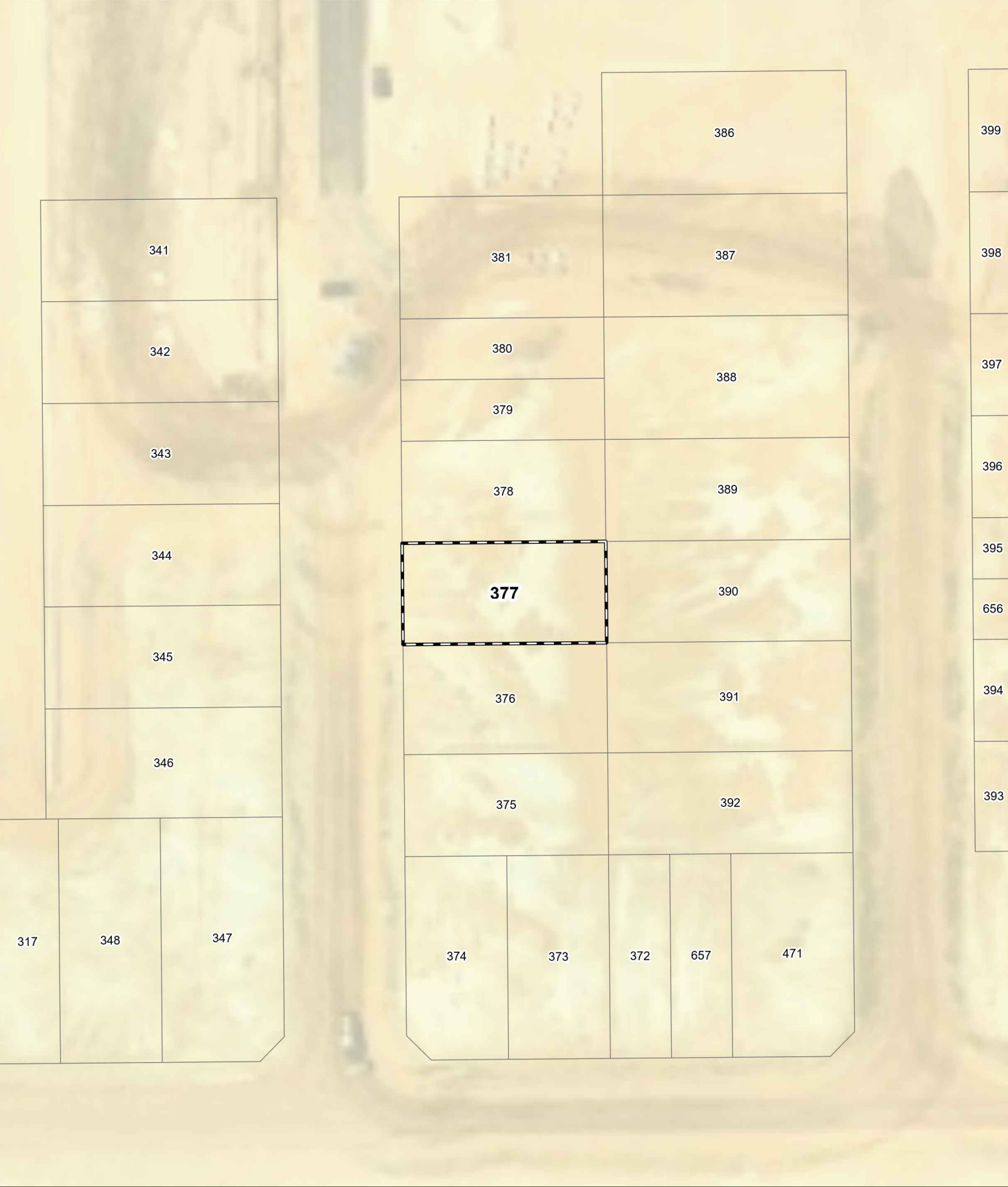
Signature: 

Certificate Date: 30/03/2021



Accreditation No: BPAD 37802
Expiry: December 2021

Bushfire Attack Level (BAL) Contours - Lot 377 (BAL - LOW)



Legend

- 100m site assessment
- 150m site assessment
- Lot boundary
- Bushfire Hazard Interface

Bushfire Attack Level (BAL)

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

0 5 10 20
Metres
Datum/Projection:
GDA 1994 MGA Zone 50

eco logical
AUSTRALIA
A TETRA TECH COMPANY

Project: 18603-SM Date: 24/03/2021

Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959: 2018

Site Details

Address:	Lot 378, Beenyup Grove Estate		
Suburb:	Byford, 6122	State:	WA
Local Government Area:	Shire of Serpentine-Jarrahdale		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	21PER-18603	Report Date:	30/03/2021

Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	N/A	N/A	N/A	BAL - LOW

Practitioner 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 AS 3959: 2018.

Name Daniel Panickar
Eco Logical Australia

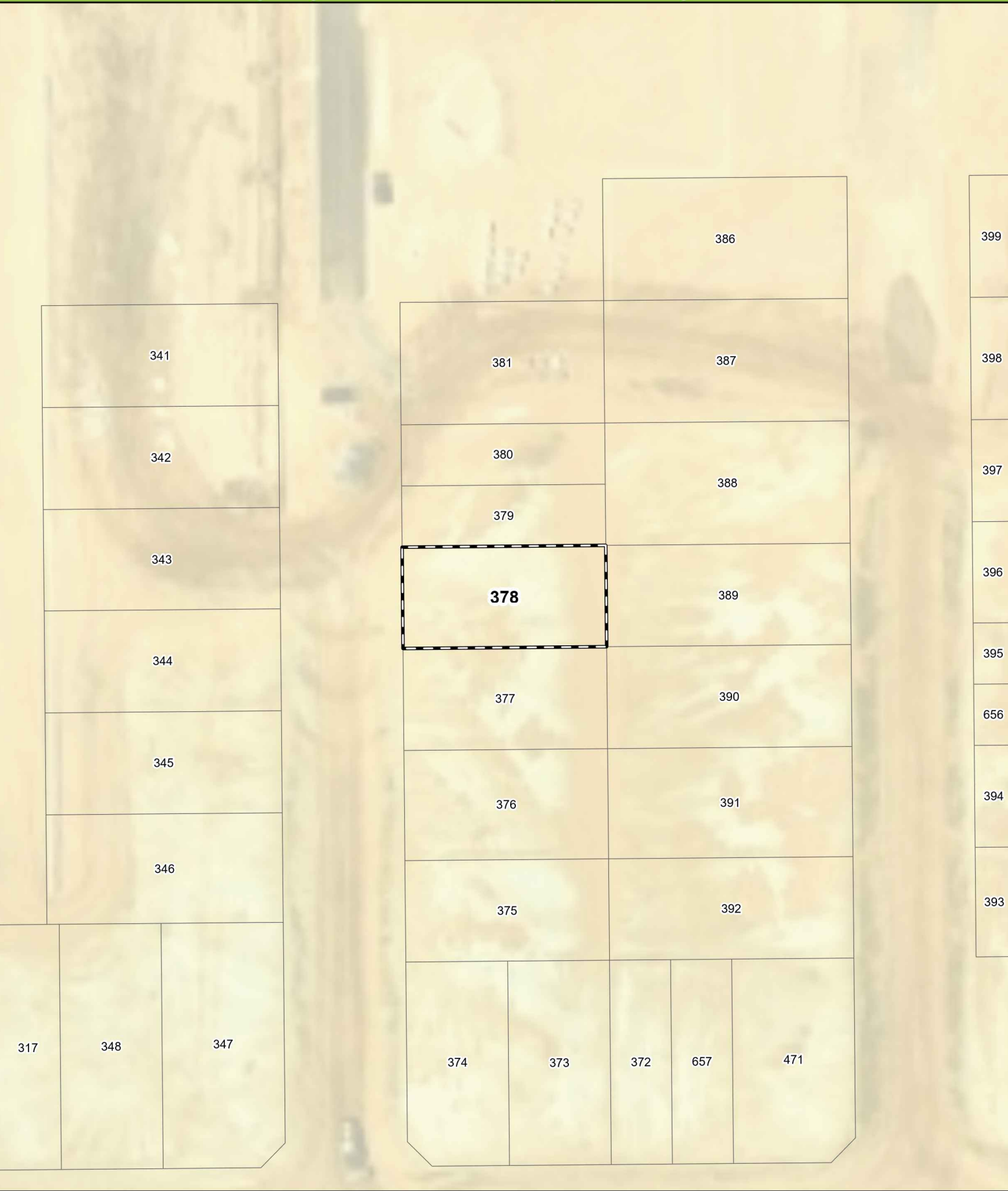
Signature: 

Certificate Date: 30/03/2021



Accreditation No: BPAD 37802
Expiry: December 2021

Bushfire Attack Level (BAL) Contours - Lot 378 (BAL - LOW)



Legend

- 100m site assessment
- 150m site assessment
- Lot boundary
- Bushfire Hazard Interface

Bushfire Attack Level (BAL)

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

0 5 10 20
Metres
Datum/Projection:
GDA 1994 MGA Zone 50

eco logical AUSTRALIA
A TETRA TECH COMPANY

Project: 18603-SM Date: 24/03/2021

Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959: 2018

Site Details

Address:	Lot 379, Beenyup Grove Estate		
Suburb:	Byford, 6122	State:	WA
Local Government Area:	Shire of Serpentine-Jarrahdale		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	21PER-18603	Report Date:	30/03/2021

Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	N/A	N/A	N/A	BAL - LOW

Practitioner 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 AS 3959: 2018.

Name Daniel Panickar
Eco Logical Australia

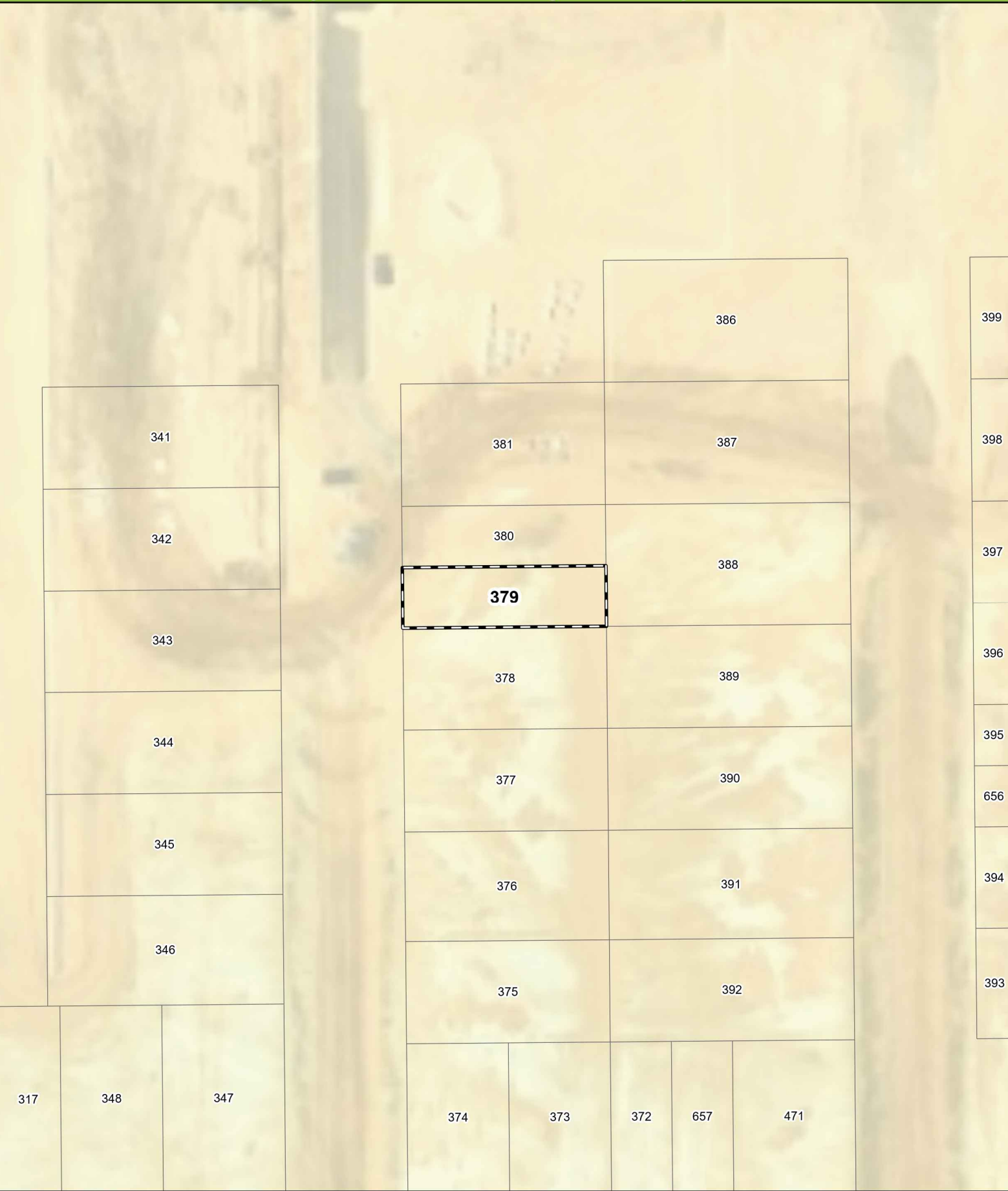
Signature: 

Certificate Date: 30/03/2021



Accreditation No: BPAD 37802
Expiry: December 2021

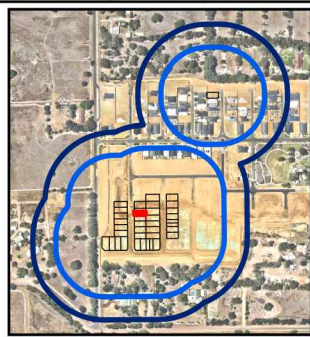
Bushfire Attack Level (BAL) Contours - Lot 379 (BAL - LOW)



- Legend**
- 100m site assessment
 - 150m site assessment
 - Lot boundary
 - Bushfire Hazard Interface

Bushfire Attack Level (BAL)

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



0 5 10 20
Metres
Datum/Projection:
GDA 1994 MGA Zone 50

N

eco logical
AUSTRALIA
A TETRA TECH COMPANY

Project: 18603-SM Date: 24/03/2021

Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959: 2018

Site Details

Address:	Lot 380, Beenyup Grove Estate		
Suburb:	Byford, 6122	State:	WA
Local Government Area:	Shire of Serpentine-Jarrahdale		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	21PER-18603	Report Date:	30/03/2021

Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	N/A	N/A	N/A	BAL - LOW

Practitioner 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 AS 3959: 2018.

Name Daniel Panickar
Eco Logical Australia

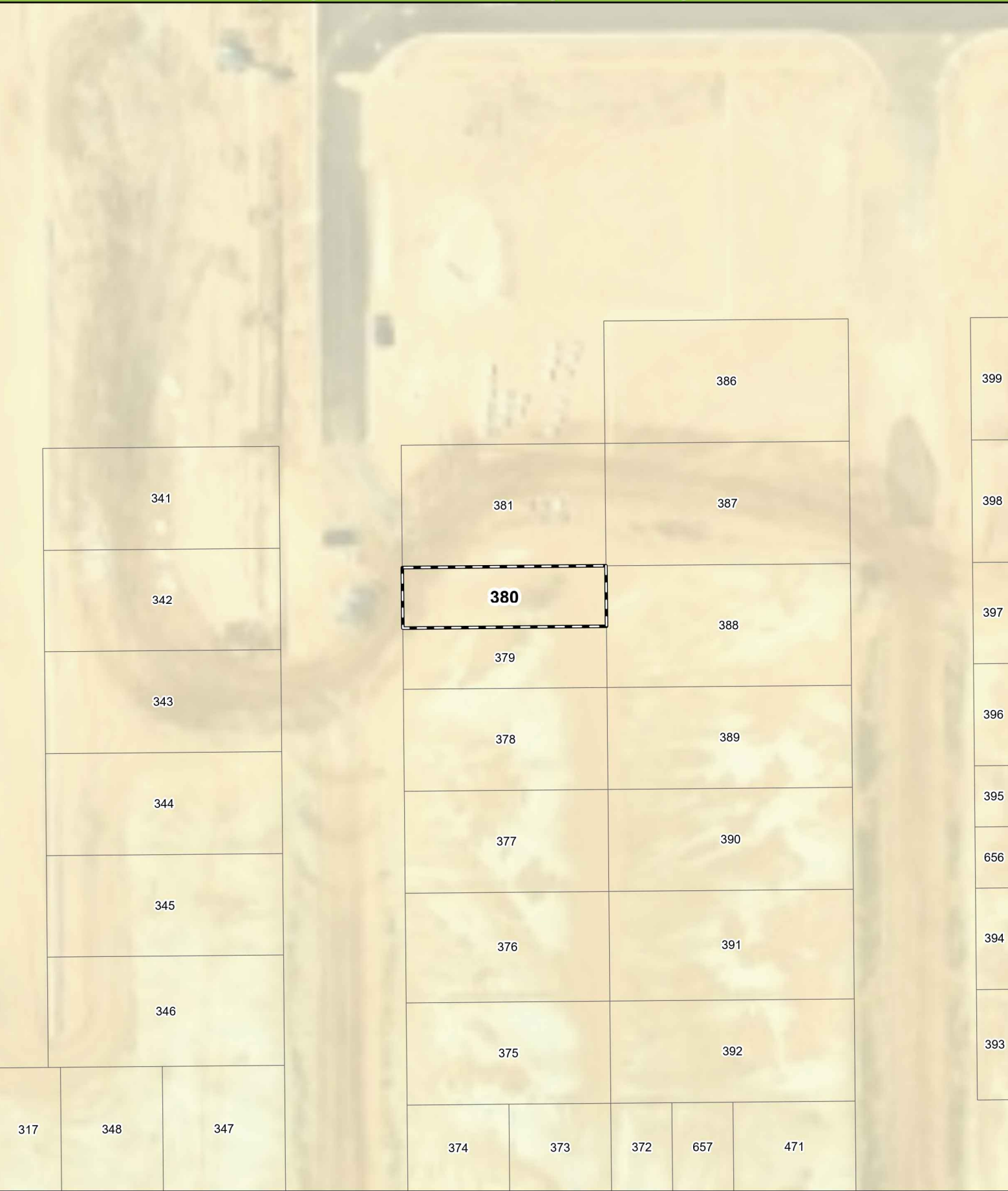
Signature: 

Certificate Date: 30/03/2021





Accreditation No: BPAD 37802
Expiry: December 2021


Bushfire Attack Level (BAL) Contours - Lot 380 (BAL - LOW)




Legend


 100m site assessment


 150m site assessment


 Lot boundary


 Bushfire Hazard Interface


Bushfire Attack Level (BAL)


 BAL - FZ

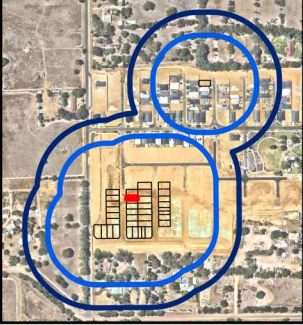
 BAL - 40

 BAL - 29


 BAL - 19

 BAL - 12.5

 BAL - LOW



0 5 10 20
Metres
Datum/Projection:
GDA 1994 MGA Zone 50



eco logical
AUSTRALIA
A TETRA TECH COMPANY

Project: 18603-SM Date: 24/03/2021

Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959: 2018

Site Details

Address:	Lot 381, Beenyup Grove Estate		
Suburb:	Byford, 6122	State:	WA
Local Government Area:	Shire of Serpentine-Jarrahdale		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	21PER-18603	Report Date:	30/03/2021

Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	N/A	N/A	N/A	BAL - LOW

Practitioner 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 AS 3959: 2018.

Name Daniel Panickar
Eco Logical Australia

Signature: 

Certificate Date: 30/03/2021



Accreditation No: BPAD 37802
Expiry: December 2021

Bushfire Attack Level (BAL) Contours - Lot 381 (BAL - LOW)



Legend

- 100m site assessment
- 150m site assessment
- Lot boundary
- Bushfire Hazard Interface

Bushfire Attack Level (BAL)

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

0 5 10 20
Metres
Datum/Projection:
GDA 1994 MGA Zone 50

eco logical
AUSTRALIA
A TETRA TECH COMPANY

Project: 18603-SM Date: 24/03/2021

Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959: 2018

Site Details

Address:	Lot 386, Beenyup Grove Estate		
Suburb:	Byford, 6122	State:	WA
Local Government Area:	Shire of Serpentine-Jarrahdale		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	21PER-18603	Report Date:	30/03/2021

Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	N/A	N/A	N/A	BAL - LOW

Practitioner 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 AS 3959: 2018.

Name Daniel Panickar
Eco Logical Australia

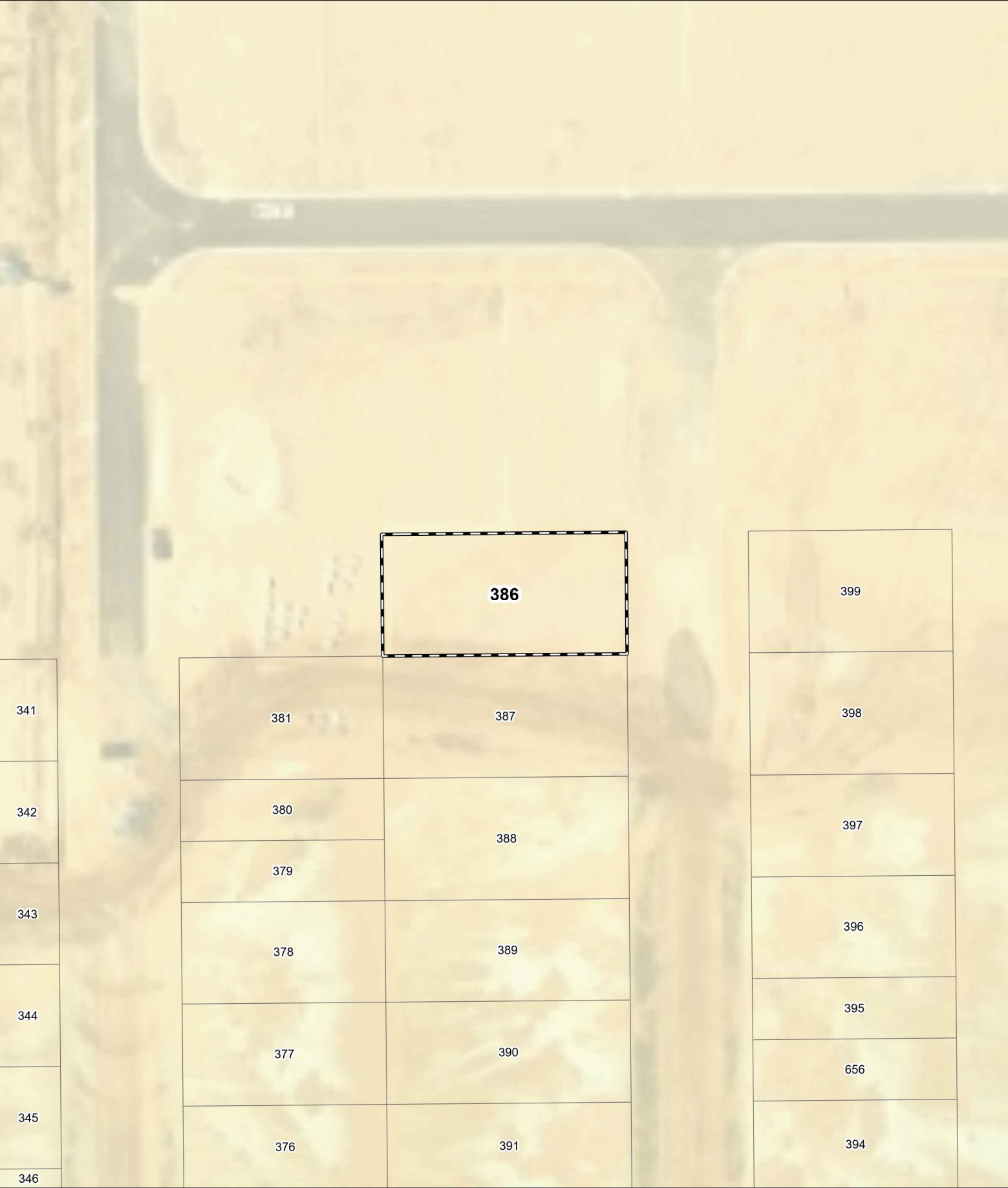
Signature: 

Certificate Date: 30/03/2021



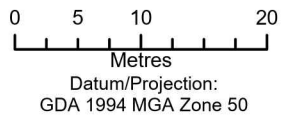
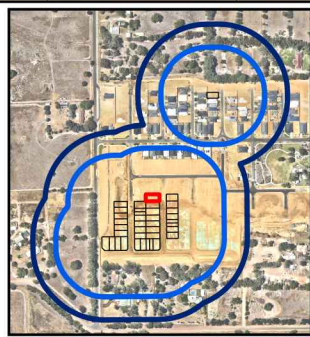
Accreditation No: BPAD 37802
Expiry: December 2021

Bushfire Attack Level (BAL) Contours - Lot 386 (BAL - LOW)



- Legend**
- 100m site assessment
 - 150m site assessment
 - Lot boundary
 - Bushfire Hazard Interface

- Bushfire Attack Level (BAL)**
- BAL - FZ
 - BAL - 40
 - BAL - 29
 - BAL - 19
 - BAL - 12.5
 - BAL - LOW



N

eco logical
AUSTRALIA
A TETRA TECH COMPANY

Project: 18603-SM Date: 24/03/2021

Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959: 2018

Site Details

Address:	Lot 387, Beenyup Grove Estate		
Suburb:	Byford, 6122	State:	WA
Local Government Area:	Shire of Serpentine-Jarrahdale		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	21PER-18603	Report Date:	30/03/2021

Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	N/A	N/A	N/A	BAL - LOW

Practitioner 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 AS 3959: 2018.

Name Daniel Panickar
Eco Logical Australia

Signature: 

Certificate Date: 30/03/2021





Accreditation No: BPAD 37802
Expiry: December 2021


Bushfire Attack Level (BAL) Contours - Lot 387 (BAL - LOW)




Legend


 100m site assessment


 150m site assessment


 Lot boundary


 Bushfire Hazard Interface


Bushfire Attack Level (BAL)


 BAL - FZ

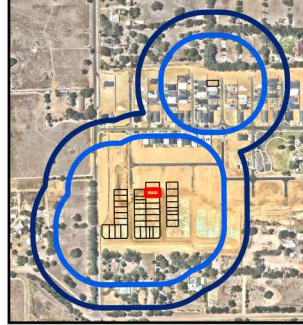
 BAL - 40

 BAL - 29

 BAL - 19



 BAL - 12.5

 BAL - LOW



0 5 10 20
Metres

Datum/Projection:
GDA 1994 MGA Zone 50



A TETRA TECH COMPANY

Project: 18603-SM Date: 24/03/2021

Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959: 2018

Site Details

Address:	Lot 388, Beenyup Grove Estate		
Suburb:	Byford, 6122	State:	WA
Local Government Area:	Shire of Serpentine-Jarrahdale		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	21PER-18603	Report Date:	30/03/2021

Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	N/A	N/A	N/A	BAL - LOW

Practitioner 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 AS 3959: 2018.

Name Daniel Panickar
Eco Logical Australia

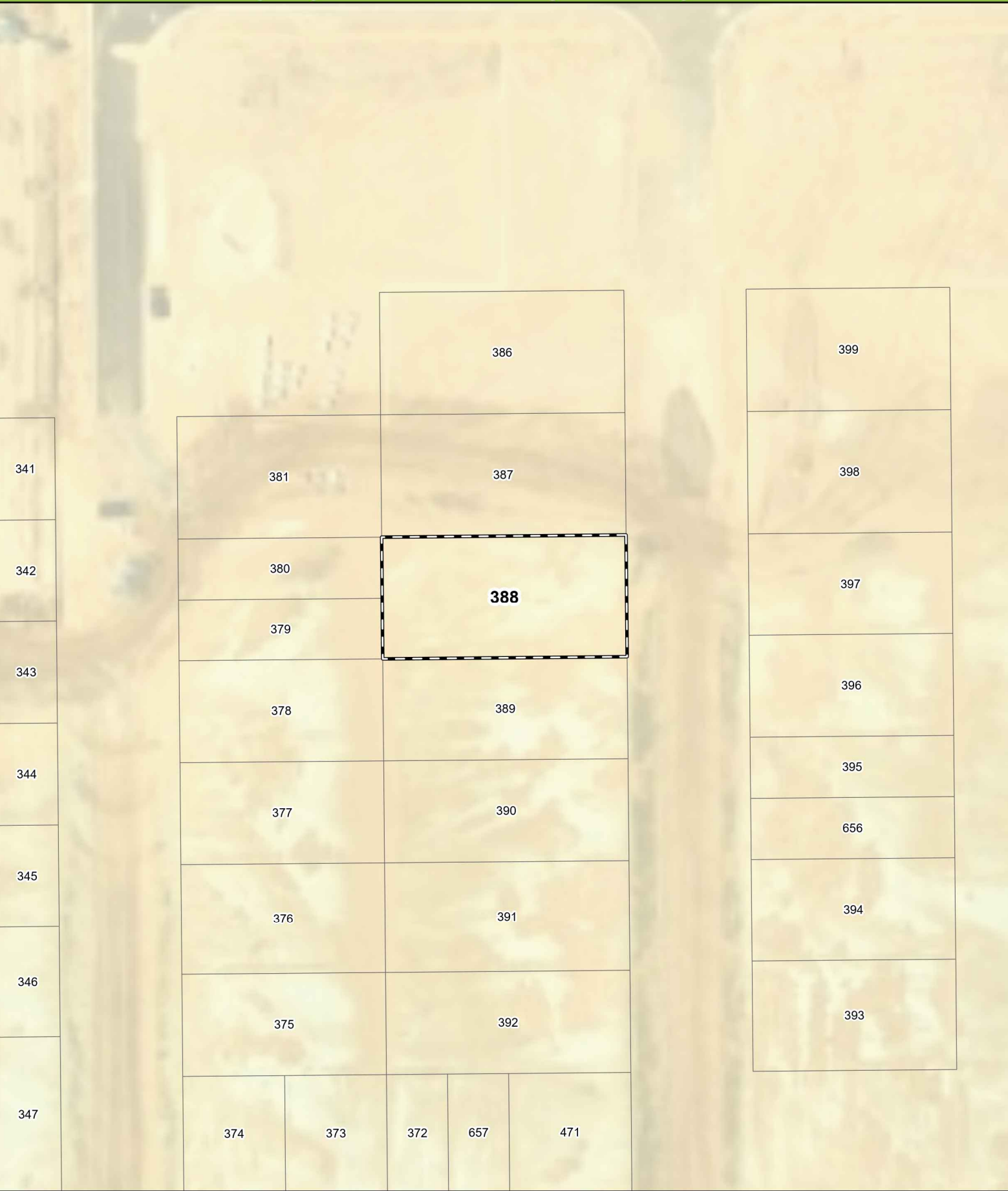
Signature: 

Certificate Date: 30/03/2021



Accreditation No: BPAD 37802
Expiry: December 2021

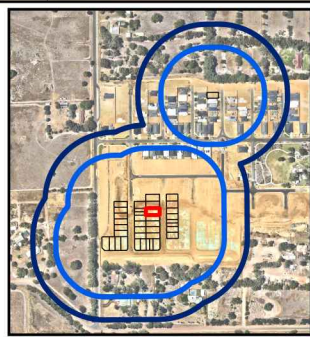
Bushfire Attack Level (BAL) Contours - Lot 388 (BAL - LOW)



- Legend**
- 100m site assessment
 - 150m site assessment
 - Lot boundary
 - Bushfire Hazard Interface

Bushfire Attack Level (BAL)

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



0 5 10 20
Metres
Datum/Projection:
GDA 1994 MGA Zone 50

Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959: 2018

Site Details

Address:	Lot 389, Beenyup Grove Estate		
Suburb:	Byford, 6122	State:	WA
Local Government Area:	Shire of Serpentine-Jarrahdale		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	21PER-18603	Report Date:	30/03/2021

Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	N/A	N/A	N/A	BAL - LOW

Practitioner 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 AS 3959: 2018.

Name Daniel Panickar
Eco Logical Australia

Signature: 

Certificate Date: 30/03/2021



Accreditation No: BPAD 37802
Expiry: December 2021

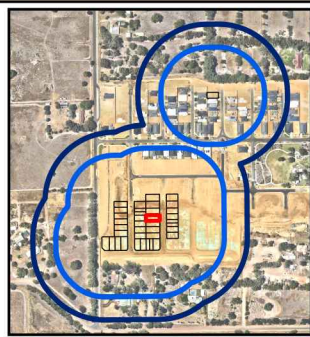
Bushfire Attack Level (BAL) Contours - Lot 389 (BAL - LOW)



- Legend**
- 100m site assessment
 - 150m site assessment
 - Lot boundary
 - Bushfire Hazard Interface

Bushfire Attack Level (BAL)

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



0 5 10 20
Metres
Datum/Projection:
GDA 1994 MGA Zone 50

Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959: 2018

Site Details

Address:	Lot 390, Beenyup Grove Estate		
Suburb:	Byford, 6122	State:	WA
Local Government Area:	Shire of Serpentine-Jarrahdale		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	21PER-18603	Report Date:	30/03/2021

Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	N/A	N/A	N/A	BAL - LOW

Practitioner 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 AS 3959: 2018.

Name Daniel Panickar
Eco Logical Australia

Signature: 

Certificate Date: 30/03/2021



Accreditation No: BPAD 37802
Expiry: December 2021

Bushfire Attack Level (BAL) Contours - Lot 390 (BAL - LOW)



Legend

- 100m site assessment
- 150m site assessment
- Lot boundary
- Bushfire Hazard Interface

Bushfire Attack Level (BAL)

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

0 5 10 20
Metres

Datum/Projection:
GDA 1994 MGA Zone 50

N

eco logical
AUSTRALIA
A TETRA TECH COMPANY

Project: 18603-SM Date: 24/03/2021

Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959: 2018

Site Details

Address:	Lot 391, Beenyup Grove Estate		
Suburb:	Byford, 6122	State:	WA
Local Government Area:	Shire of Serpentine-Jarrahdale		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	21PER-18603	Report Date:	30/03/2021

Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	N/A	N/A	N/A	BAL - LOW

Practitioner 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 AS 3959: 2018.

Name Daniel Panickar
Eco Logical Australia

Signature: 

Certificate Date: 30/03/2021



Accreditation No: BPAD 37802
Expiry: December 2021

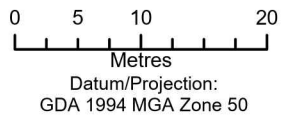
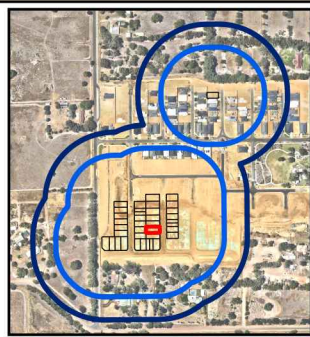
Bushfire Attack Level (BAL) Contours - Lot 391 (BAL - LOW)



- Legend**
- 100m site assessment
 - 150m site assessment
 - Lot boundary
 - Bushfire Hazard Interface

Bushfire Attack Level (BAL)

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



eco logical AUSTRALIA
A TETRA TECH COMPANY

Project: 18603-SM Date: 24/03/2021

Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959: 2018

Site Details

Address:	Lot 392, Beenyup Grove Estate		
Suburb:	Byford, 6122	State:	WA
Local Government Area:	Shire of Serpentine-Jarrahdale		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	21PER-18603	Report Date:	30/03/2021

Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	N/A	N/A	N/A	BAL - LOW

Practitioner 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 AS 3959: 2018.

Name Daniel Panickar
Eco Logical Australia

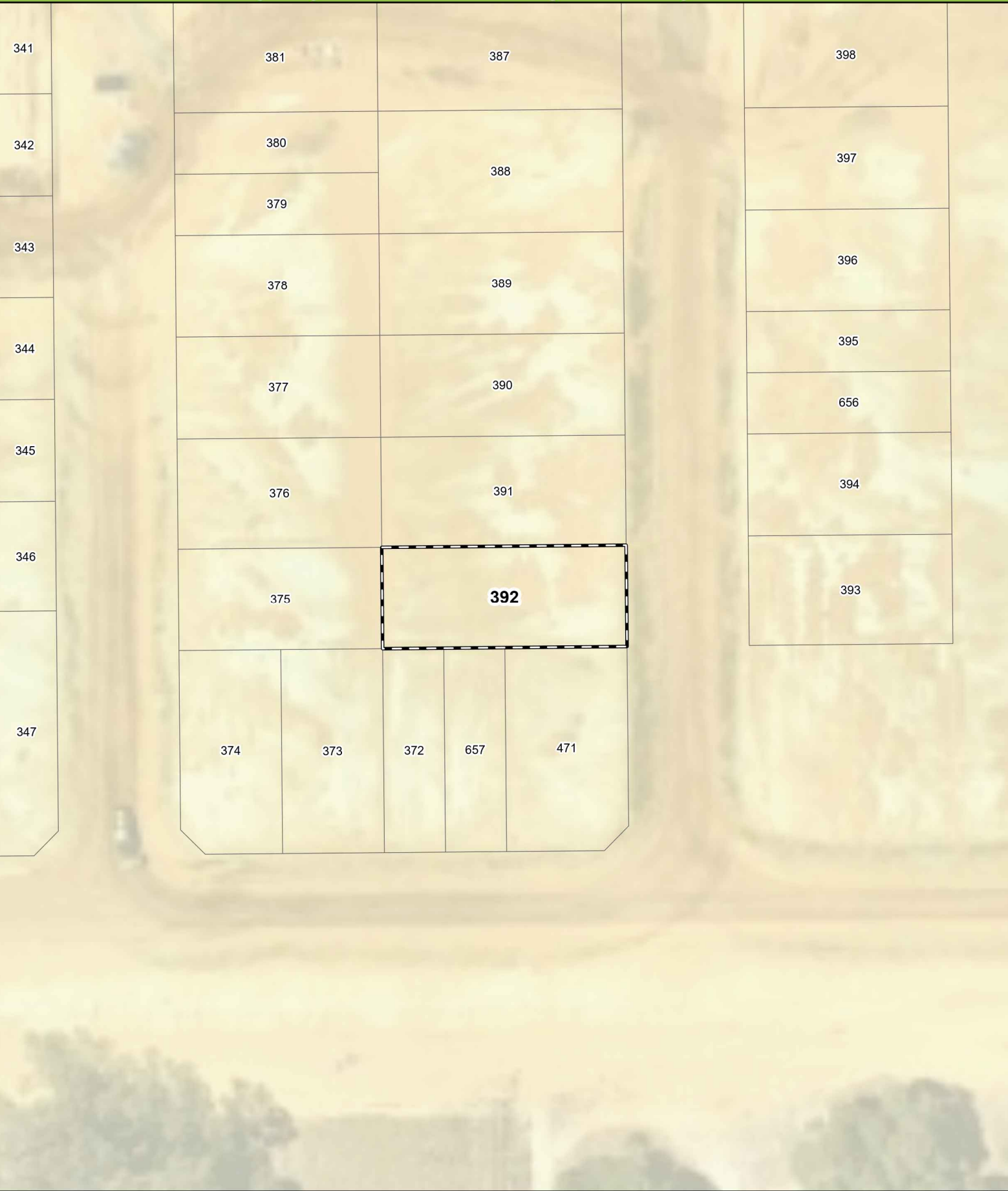
Signature: 

Certificate Date: 30/03/2021



Accreditation No: BPAD 37802
Expiry: December 2021

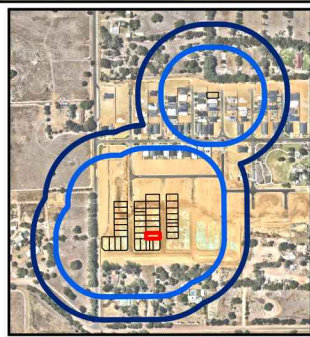
Bushfire Attack Level (BAL) Contours - Lot 392 (BAL - LOW)



- Legend**
- 100m site assessment
 - 150m site assessment
 - Lot boundary
 - Bushfire Hazard Interface

Bushfire Attack Level (BAL)

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



0 5 10 20
Metres
Datum/Projection:
GDA 1994 MGA Zone 50

Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959: 2018

Site Details

Address:	Lot 393, Beenyup Grove Estate		
Suburb:	Byford, 6122	State:	WA
Local Government Area:	Shire of Serpentine-Jarrahdale		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	21PER-18603	Report Date:	30/03/2021

Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	N/A	N/A	N/A	BAL - LOW

Practitioner 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 AS 3959: 2018.

Name Daniel Panickar
Eco Logical Australia

Signature: 

Certificate Date: 30/03/2021



Accreditation No: BPAD 37802
Expiry: December 2021

Bushfire Attack Level (BAL) Contours - Lot 393 (BAL - LOW)



Legend

- 100m site assessment
- 150m site assessment
- Lot boundary
- Bushfire Hazard Interface

Bushfire Attack Level (BAL)

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

0 5 10 20
Metres
Datum/Projection:
GDA 1994 MGA Zone 50

N

eco logical AUSTRALIA
A TETRA TECH COMPANY

Project: 18603-SM Date: 24/03/2021

Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959: 2018

Site Details

Address:	Lot 394, Beenyup Grove Estate		
Suburb:	Byford, 6122	State:	WA
Local Government Area:	Shire of Serpentine-Jarrahdale		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	21PER-18603	Report Date:	30/03/2021

Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	N/A	N/A	N/A	BAL - LOW

Practitioner 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 AS 3959: 2018.

Name Daniel Panickar
Eco Logical Australia

Signature: 

Certificate Date: 30/03/2021



Accreditation No: BPAD 37802
Expiry: December 2021

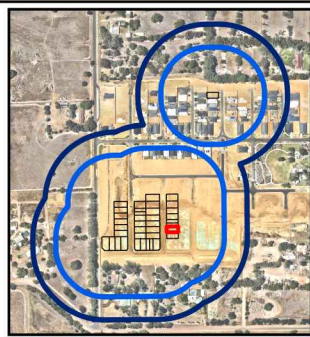
Bushfire Attack Level (BAL) Contours - Lot 394 (BAL - LOW)



- Legend**
- 100m site assessment
 - 150m site assessment
 - Lot boundary
 - Bushfire Hazard Interface

Bushfire Attack Level (BAL)

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



0 5 10 20
Metres
Datum/Projection:
GDA 1994 MGA Zone 50

Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959: 2018

Site Details

Address:	Lot 395, Beenyup Grove Estate		
Suburb:	Byford, 6122	State:	WA
Local Government Area:	Shire of Serpentine-Jarrahdale		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	21PER-18603	Report Date:	30/03/2021

Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	N/A	N/A	N/A	BAL - LOW

Practitioner 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 AS 3959: 2018.

Name Daniel Panickar
Eco Logical Australia

Signature: 

Certificate Date: 30/03/2021



Accreditation No: BPAD 37802
Expiry: December 2021

Bushfire Attack Level (BAL) Contours - Lot 395 (BAL - LOW)

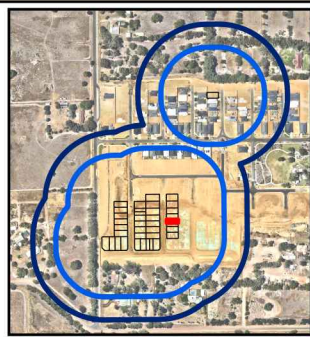


Legend

- 100m site assessment
- 150m site assessment
- Lot boundary
- Bushfire Hazard Interface

Bushfire Attack Level (BAL)

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



0 5 10 20
Metres
Datum/Projection:
GDA 1994 MGA Zone 50

N

eco logical
AUSTRALIA
A TETRA TECH COMPANY

Project: 18603-SM Date: 24/03/2021

Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959: 2018

Site Details

Address:	Lot 396, Beenyup Grove Estate		
Suburb:	Byford, 6122	State:	WA
Local Government Area:	Shire of Serpentine-Jarrahdale		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	21PER-18603	Report Date:	30/03/2021

Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	N/A	N/A	N/A	BAL - LOW

Practitioner 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 AS 3959: 2018.

Name Daniel Panickar
Eco Logical Australia

Signature: 

Certificate Date: 30/03/2021



Accreditation No: BPAD 37802
Expiry: December 2021

Bushfire Attack Level (BAL) Contours - Lot 396 (BAL - LOW)

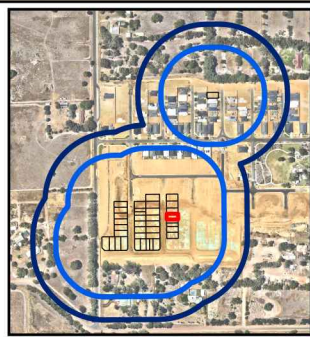


Legend

- 100m site assessment
- 150m site assessment
- Lot boundary
- Bushfire Hazard Interface

Bushfire Attack Level (BAL)

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



0 5 10 20
Metres

Datum/Projection:
GDA 1994 MGA Zone 50

N

eco logical
AUSTRALIA
A TETRA TECH COMPANY

Project: 18603-SM Date: 24/03/2021

Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959: 2018

Site Details

Address:	Lot 397, Beenyup Grove Estate		
Suburb:	Byford, 6122	State:	WA
Local Government Area:	Shire of Serpentine-Jarrahdale		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	21PER-18603	Report Date:	30/03/2021

Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	N/A	N/A	N/A	BAL - LOW

Practitioner 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 AS 3959: 2018.

Name Daniel Panickar
Eco Logical Australia

Signature: 

Certificate Date: 30/03/2021



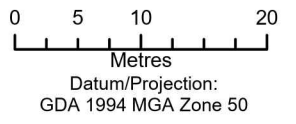
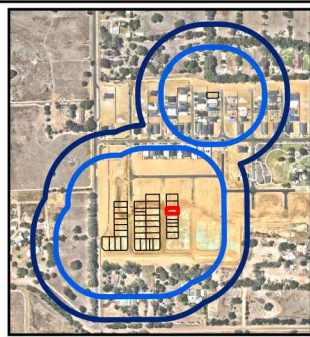
Accreditation No: BPAD 37802
Expiry: December 2021

Bushfire Attack Level (BAL) Contours - Lot 397 (BAL - LOW)



- Legend**
- 100m site assessment
 - 150m site assessment
 - Lot boundary
 - Bushfire Hazard Interface

Bushfire Attack Level (BAL)	
	BAL - FZ
	BAL - 40
	BAL - 29
	BAL - 19
	BAL - 12.5
	BAL - LOW



Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959: 2018

Site Details

Address:	Lot 398, Beenyup Grove Estate		
Suburb:	Byford, 6122	State:	WA
Local Government Area:	Shire of Serpentine-Jarrahdale		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	21PER-18603	Report Date:	30/03/2021

Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	N/A	N/A	N/A	BAL - LOW

Practitioner 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 AS 3959: 2018.

Name Daniel Panickar
Eco Logical Australia

Signature: 

Certificate Date: 30/03/2021



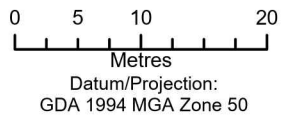
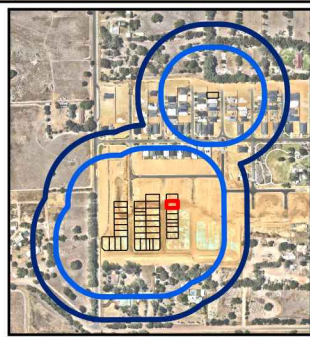
Accreditation No: BPAD 37802
Expiry: December 2021

Bushfire Attack Level (BAL) Contours - Lot 398 (BAL - LOW)



- Legend**
- 100m site assessment
 - 150m site assessment
 - Lot boundary
 - Bushfire Hazard Interface

Bushfire Attack Level (BAL)	
<div></div>	BAL - FZ
<div></div>	BAL - 40
<div></div>	BAL - 29
<div></div>	BAL - 19
<div></div>	BAL - 12.5
<div></div>	BAL - LOW



Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959: 2018

Site Details

Address:	Lot 399, Beenyup Grove Estate		
Suburb:	Byford, 6122	State:	WA
Local Government Area:	Shire of Serpentine-Jarrahdale		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	21PER-18603	Report Date:	30/03/2021

Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	N/A	N/A	N/A	BAL - LOW

Practitioner 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 AS 3959: 2018.

Name Daniel Panickar
Eco Logical Australia

Signature: 

Certificate Date: 30/03/2021



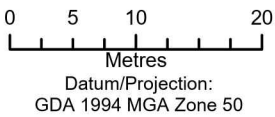
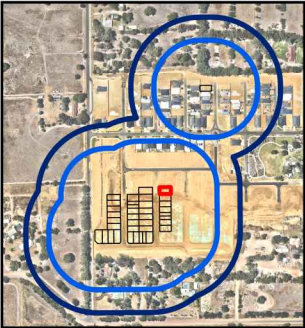
Accreditation No: BPAD 37802
Expiry: December 2021

Bushfire Attack Level (BAL) Contours - Lot 399 (BAL - LOW)



- Legend**
- 100m site assessment
 - 150m site assessment
 - Lot boundary
 - Bushfire Hazard Interface

Bushfire Attack Level (BAL)	
<div></div>	BAL - FZ
<div></div>	BAL - 40
<div></div>	BAL - 29
<div></div>	BAL - 19
<div></div>	BAL - 12.5
<div></div>	BAL - LOW



Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959: 2018

Site Details

Address:	Lot 471, Beenyup Grove Estate		
Suburb:	Byford, 6122	State:	WA
Local Government Area:	Shire of Serpentine-Jarrahdale		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	21PER-18603	Report Date:	30/03/2021

Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	N/A	N/A	N/A	BAL - LOW

Practitioner 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 AS 3959: 2018.

Name Daniel Panickar
Eco Logical Australia

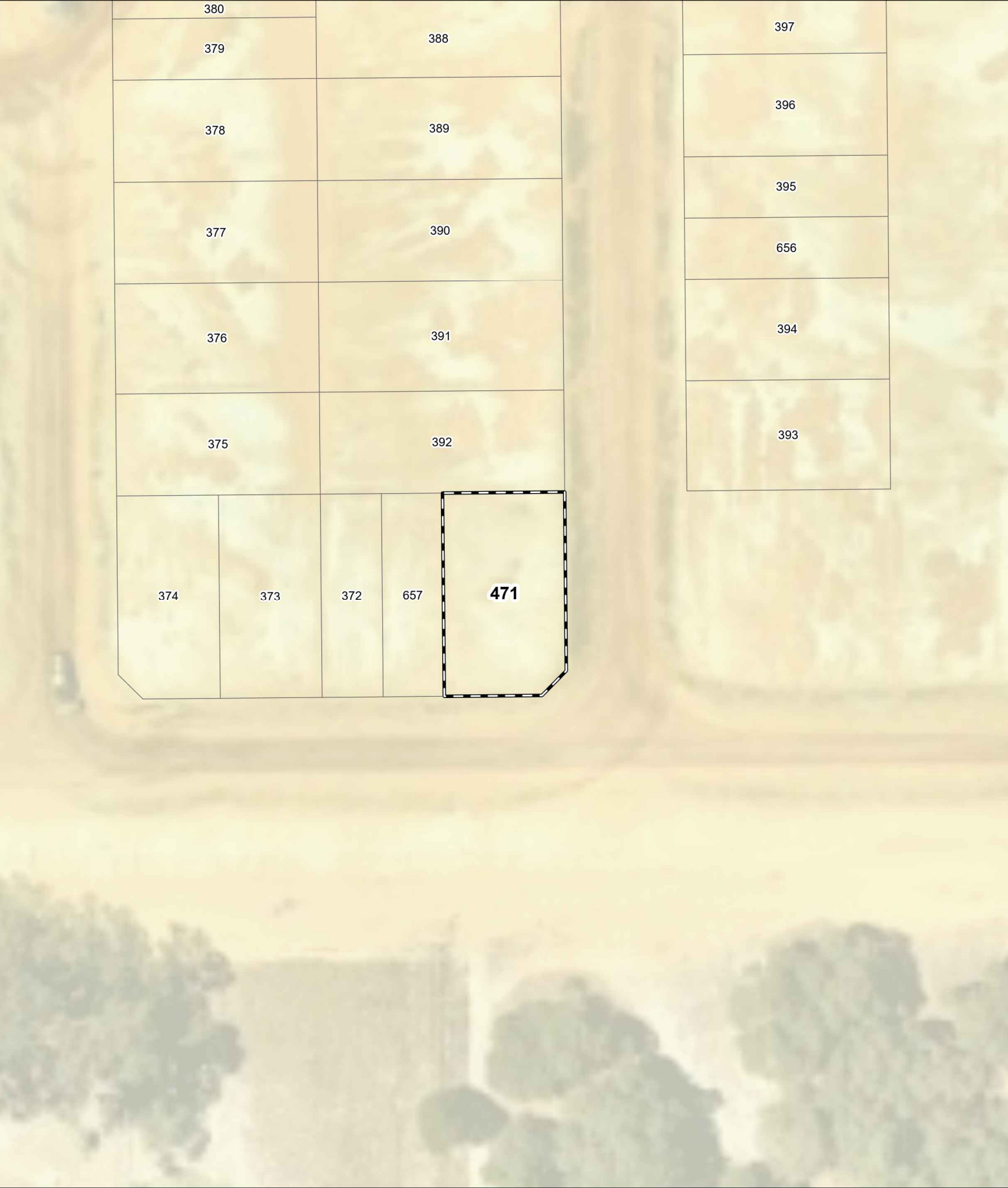
Signature: 

Certificate Date: 30/03/2021



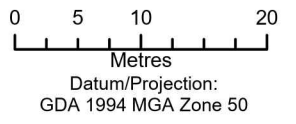
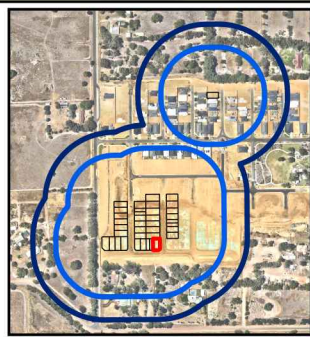
Accreditation No: BPAD 37802
Expiry: December 2021

Bushfire Attack Level (BAL) Contours - Lot 471 (BAL - LOW)



- Legend**
- 100m site assessment
 - 150m site assessment
 - Lot boundary
 - Bushfire Hazard Interface

Bushfire Attack Level (BAL)	
	BAL - FZ
	BAL - 40
	BAL - 29
	BAL - 19
	BAL - 12.5
	BAL - LOW



Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959: 2018

Site Details

Address:	Lot 656, Beenyup Grove Estate		
Suburb:	Byford, 6122	State:	WA
Local Government Area:	Shire of Serpentine-Jarrahdale		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	21PER-18603	Report Date:	30/03/2021

Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	N/A	N/A	N/A	BAL - LOW

Practitioner 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 AS 3959: 2018.

Name Daniel Panickar
Eco Logical Australia

Signature: 

Certificate Date: 30/03/2021



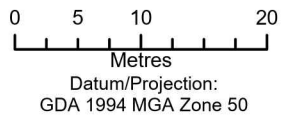
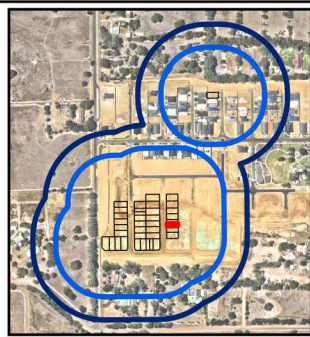
Accreditation No: BPAD 37802
Expiry: December 2021

Bushfire Attack Level (BAL) Contours - Lot 656 (BAL - LOW)



- Legend**
- 100m site assessment
 - 150m site assessment
 - Lot boundary
 - Bushfire Hazard Interface

Bushfire Attack Level (BAL)	
	BAL - FZ
	BAL - 40
	BAL - 29
	BAL - 19
	BAL - 12.5
	BAL - LOW



Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959: 2018

Site Details

Address:	Lot 657, Beenyup Grove Estate		
Suburb:	Byford, 6122	State:	WA
Local Government Area:	Shire of Serpentine-Jarrahdale		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	21PER-18603	Report Date:	30/03/2021

Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	N/A	N/A	N/A	BAL - LOW

Practitioner 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 AS 3959: 2018.

Name Daniel Panickar
Eco Logical Australia

Signature: 

Certificate Date: 30/03/2021



Accreditation No: BPAD 37802
Expiry: December 2021

Bushfire Attack Level (BAL) Contours - Lot 657 (BAL - LOW)



Legend

- 100m site assessment
- 150m site assessment
- Lot boundary
- Bushfire Hazard Interface

Bushfire Attack Level (BAL)

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

0 5 10 20
Metres
Datum/Projection:
GDA 1994 MGA Zone 50

eco logical AUSTRALIA
A TETRA TECH COMPANY

Project: 18603-SM Date: 24/03/2021

Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959: 2018

Site Details

Address:	Lot 699, Beenyup Grove Estate		
Suburb:	Byford, 6122	State:	WA
Local Government Area:	Shire of Serpentine-Jarrahdale		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	21PER-18603	Report Date:	30/03/2021

Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	N/A	N/A	N/A	BAL - LOW

Practitioner 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 AS 3959: 2018.

Name Daniel Panickar
Eco Logical Australia

Signature: 

Certificate Date: 30/03/2021



Accreditation No: BPAD 37802
Expiry: December 2021

Bushfire Attack Level (BAL) Contours - Lot 699 (BAL - LOW)

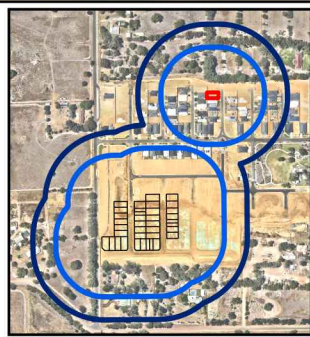


Legend

- 100m site assessment
- 150m site assessment
- Lot boundary
- Bushfire Hazard Interface

Bushfire Attack Level (BAL)

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



0 5 10 20
Metres

Datum/Projection:
GDA 1994 MGA Zone 50

N

eco logical
AUSTRALIA
A TETRA TECH COMPANY

Project: 18603-SM Date: 24/03/2021