

Date: 8 December 2020

Our ref: 20PER-17493

Parcel Property

Level 5, 14 Walters Drive,

OSBORNE PARK WA 6017

AS 3959-2009 Bushfire Attack Level (BAL) Assessment Report for Stage 1 Natures Edge Estate, Southern River

Site Details

Address: Natures Edge Estate, Southern River: Lots 124-162.

Suburb:	Southern River, 6110	State	Western Australia
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Local Government Area:	City of Gosnells
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Description of building works:	Residential Development
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Report details

Report/Job number:	17493	Report version:	V1
Assessment date:	14 October 2020	Report date:	8 December 2020
Author:	Stephen Moore and Daniel Panickar	Review:	Daniel Panickar (BPAD Level 3 – 37802)



SITE ASSESSMENT AND SITE PLAN

The assessment of the 39 subject lots was undertaken on 14 October 2020 for the purpose of determining the Bushfire Attack Level (BAL) in accordance with *Australian Standard AS 3959-2009 Construction of Buildings in Bushfire Prone Areas* (SA 2009) Simplified Procedure (Method 1). An overview of the site is presented in Figure 1.


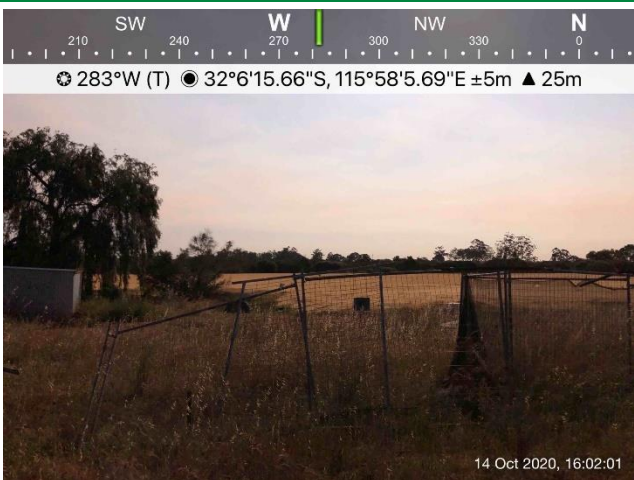

VEGETATION CLASSIFICATION

All vegetation within 150 m of the 39 subject lots was classified in accordance with Clause 2.2.3 of AS 3959-2009. 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 City of Gosnells in the future.

Plot	1	Classification or Exclusion Clause	Class B woodland
		<p>Photo Point 1</p> <p>This plot comprises wetland vegetation in a Resource Enhancement Wetland and associated buffer within Natures Edge Estate.</p> <p>This area will be revegetated to resemble a woodland structure. Classified vegetation within this plot will be comprised of trees between 10 to 30 m tall with approximately 20 to 30% foliage cover. Some sedges/reeds and shrubs will be present at the base of the trees.</p> <p>Slope under the vegetation has been assessed as upslope/ flat land.</p>	
Plot	1	Classification or Exclusion Clause	Class B woodland
		<p>Photo Point 2</p> <p>This plot comprises wetland vegetation in a Resource Enhancement Wetland and associated buffer within Natures Edge Estate.</p> <p>This area will be revegetated to resemble a woodland structure. Classified vegetation within this plot will be comprised of trees between 10 to 30 m tall with approximately 20 to 30% foliage cover. Some sedges/reeds and shrubs will be present at the base of the trees.</p> <p>Slope under the vegetation has been assessed as upslope/ flat land.</p>	
Plot	2	Classification or Exclusion Clause	Class B woodland
		<p>Photo Point 3</p> <p>This plot comprises wetland vegetation in a Resource Enhancement Wetland and associated buffer outside of Natures Edge Estate.</p> <p>This area will be revegetated to resemble a woodland structure. Classified vegetation within this plot will be comprised of trees between 10 to 30 m tall with approximately 20 to 30% foliage cover. Some sedges/reeds and shrubs will be present at the base of the trees.</p> <p>Slope under the vegetation has been assessed as upslope/ flat land.</p>	

Plot	3	Classification or Exclusion Clause	Class G grassland
Photo Point 4		<p>This plot comprises unmanaged grassland on land outside of Natures Edge Estate.</p> <p>Classified vegetation within this plot is comprised of exotic grasses with overstorey of less than 10%.</p> <p>Slope under the vegetation has been assessed as upslope/flat land.</p>	 <p>☀ 137°SE (T) ● 32°6'20.41"S, 115°58'8.21"E ±5m ▲ 21m</p> 
Plot	4	Classification or Exclusion Clause	Excluded under clause 2.2.3.2 (e) and (f)
Photo Point 5		<p>This plot has been excluded under Clause 2.2.3.2 (e) & (f) of AS 3959-2009. This area has been cleared for construction within Natures Edge Estate and is being maintained by the developer.</p>	 <p>☀ 311°NW (T) ● 32°6'14.94"S, 115°58'4.66"E ±183m ▲ 27m</p> 
Plot	4	Classification or Exclusion Clause	Excluded under clause 2.2.3.2 (e) and (f)
Photo Point 6		<p>This plot has been excluded under Clause 2.2.3.2 (e) & (f) of AS 3959-2009. This area has been cleared for construction within Natures Edge Estate and is being maintained by the developer.</p>	 <p>☀ 59°NE (T) ● 32°6'19.29"S, 115°58'13.41"E ±5m ▲ 22m</p> 

Plot	4	Classification or Exclusion Clause	Excluded under clause 2.2.3.2 (e) and (f)
Photo Point 7		<p>This plot comprises rural-residential properties outside of Natures Edge Estate.</p> <p>Vegetation is comprised of scattered trees over managed turf and appears to be well-maintained.</p>	
Photo Point 8		<p>This plot has been excluded under Clause 2.2.3.2 (e) & (f) of AS 3959-2009. This area has been cleared for construction outside of Natures Edge Estate and is being maintained by the developer.</p>	
Photo Point 9		<p>This plot has been excluded under Clause 2.2.3.2 (e) & (f) of AS 3959-2009. This area has been cleared for construction outside of Natures Edge Estate and is being maintained by the developer.</p>	

RELEVANT FIRE DANGER INDEX

A blanket rating of FDI 80 is adopted for Western Australia, as outlined in Australian Standard (AS) 3959-2009 and endorsed by Australasian Fire and Emergency Service Authorities Council (AFAC).

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 3959-2009

Plot	Vegetation Classification	Effective Slope	Separation distances required				
			BAL-FZ	BAL-40	BAL-29	BAL-19	BAL-12.5
1	Class B woodland	Upslope/ flat land	<10	10-<14	14-<20	20-<29	29-<100
2	Class B woodland	Upslope/ flat land	<10	10-<14	14-<20	20-<29	29-<100
2	Class G grassland	Upslope/ flat land	<6	6-<8	8-<12	12-<17	17-<50
3	Excluded under Clause 2.2.3.2 (e) & (f)	N/A	No separation distances required – BAL-LOW				

DETERMINED BUSHFIRE ATTACK LEVEL (BAL)

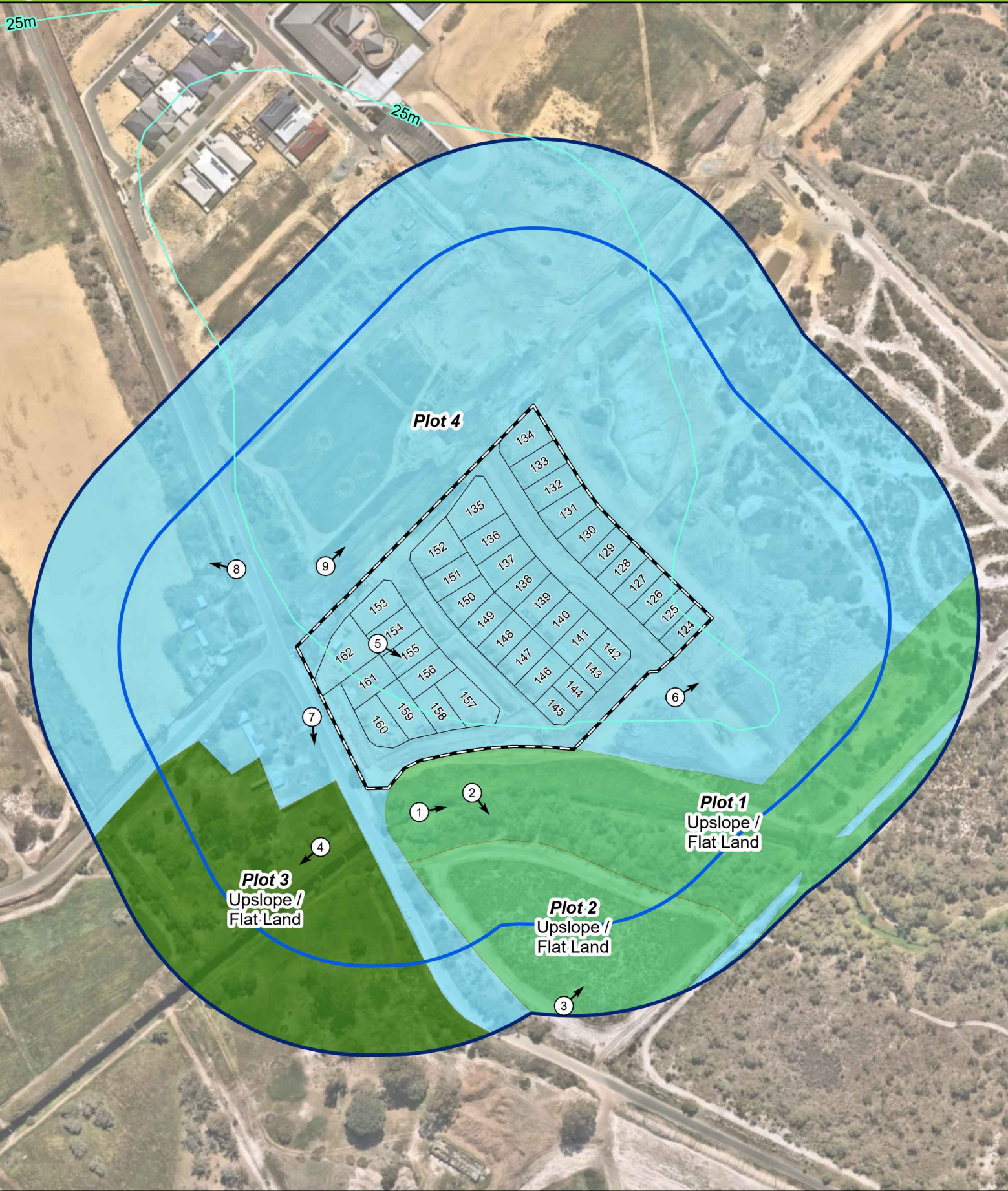
The determined Bushfire Attack Level (highest BAL) for the 39 subject lots has been determined in accordance with Clause 2.2.6 of AS 3959-2009 using the above analysis, Table 2 and Figure 2.

Table 2: BAL assessment summary

BAL	Affected lots	Construction sections to be consulted in AS 3959-2009
BAL-FZ	Nil	N/A
BAL-40	Nil	N/A
BAL-29	Determined Bushfire Attack Level for: Lots 145*, 157*, 158*, 159* and 160*.	N/A
BAL-19	Determined Bushfire Attack Level for: Lots 144* and 146*.	3 and 6
BAL-12.5	Determined Bushfire Attack Level for: Lots 124, 125*, 126*, 127*, 128*, 129*, 137*, 138*, 139, 140, 141, 142, 143, 147, 148, 149, 150, 151*, 152*, 153*, 154, 155, 156, 161 and 162.	3 and 5
BAL-LOW	Determined Bushfire Attack Level for: Lots 130, 131, 132, 133, 134, 135 and 136.	3 and 4

*INDICATES THAT A SETBACK MAY BE ABLE TO REDUCE THE BAL RATING FOR A FUTURE DWELLING

Figure 1: Vegetation Classification



Legend

- Subject site
- 100m site assessment
- 150m site assessment
- Lot boundary
- Contour (5m)

Photo location

Vegetation classification

- Class B woodland
- Class G grassland
- Excluded as per clause 2.2.3.2 (e) and (f)

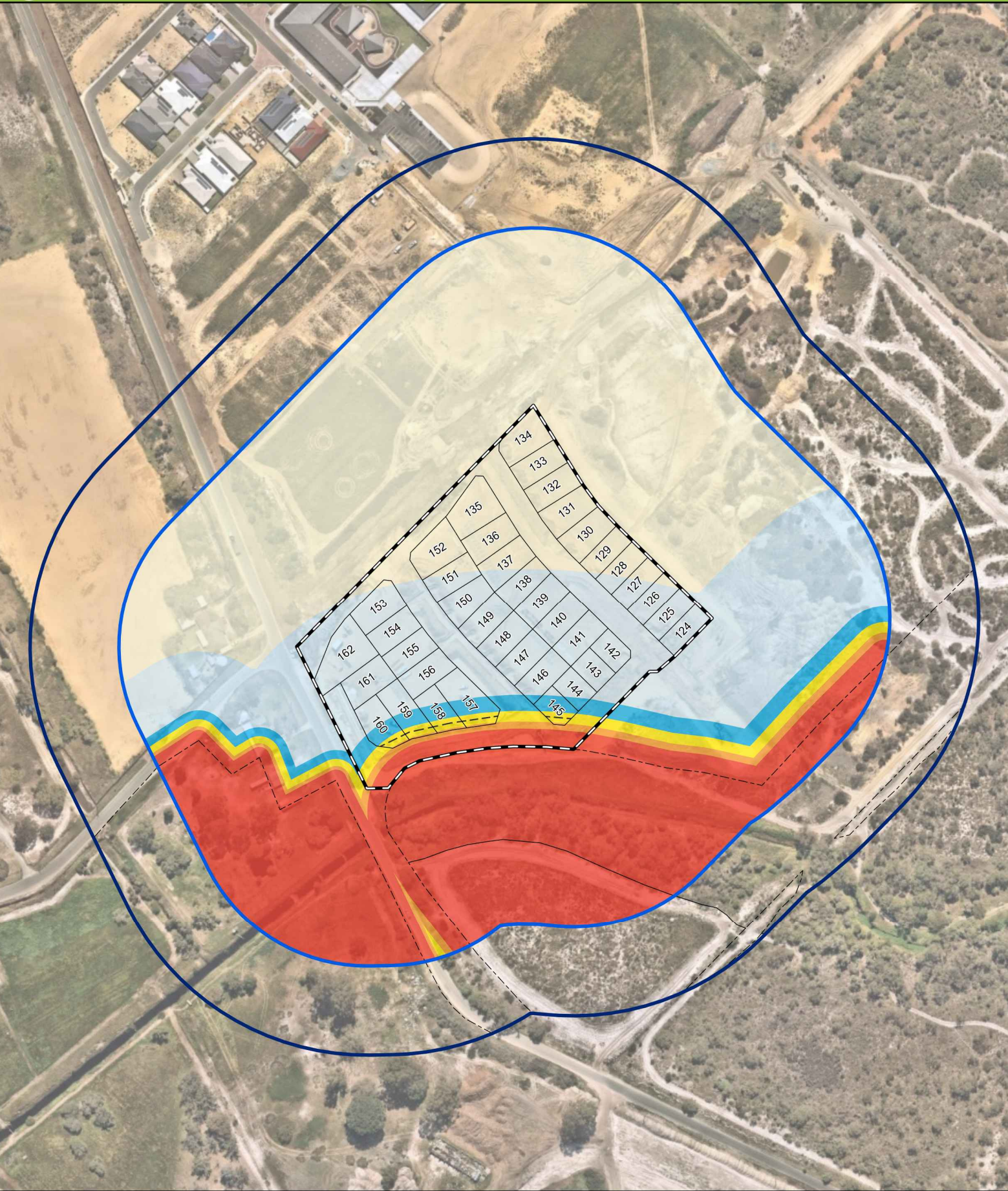
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Project: 17493-SM Date: 19/11/2020

Figure 2: Bushfire Attack Level (BAL) Contours



- Legend**
- Subject site
 - 100m site assessment
 - 150m site assessment
 - Lot boundary
 - Lot setback (4m)
 - Bushfire Hazard Interface

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

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Appendix A – Additional Information / Advisory Notes

This assessment was undertaken as per AS 3959-2009. 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	≤12.5 kW/m ²	Ember attack	3 and 5
BAL-19	>12.5 kW/m ² ≤19 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 kW/m ² ≤29 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 kW/m ² ≤40 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 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 - 2009 Construction of buildings in bushfire-prone areas” published by Standards Australia, Sydney

Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2009

Site Details

Address:	Lot 124, Natures Edge Estate		
Suburb:	Southern River, 6110	State:	WA
Local Government Area:	City of Gosnells		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	20PER-17493	Report Date:	08/12/2020

Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Class B woodland	Upslope / Flat Land	62 m	BAL - 12.5

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 3959-2009.

Name Daniel Panickar
Eco Logical Australia

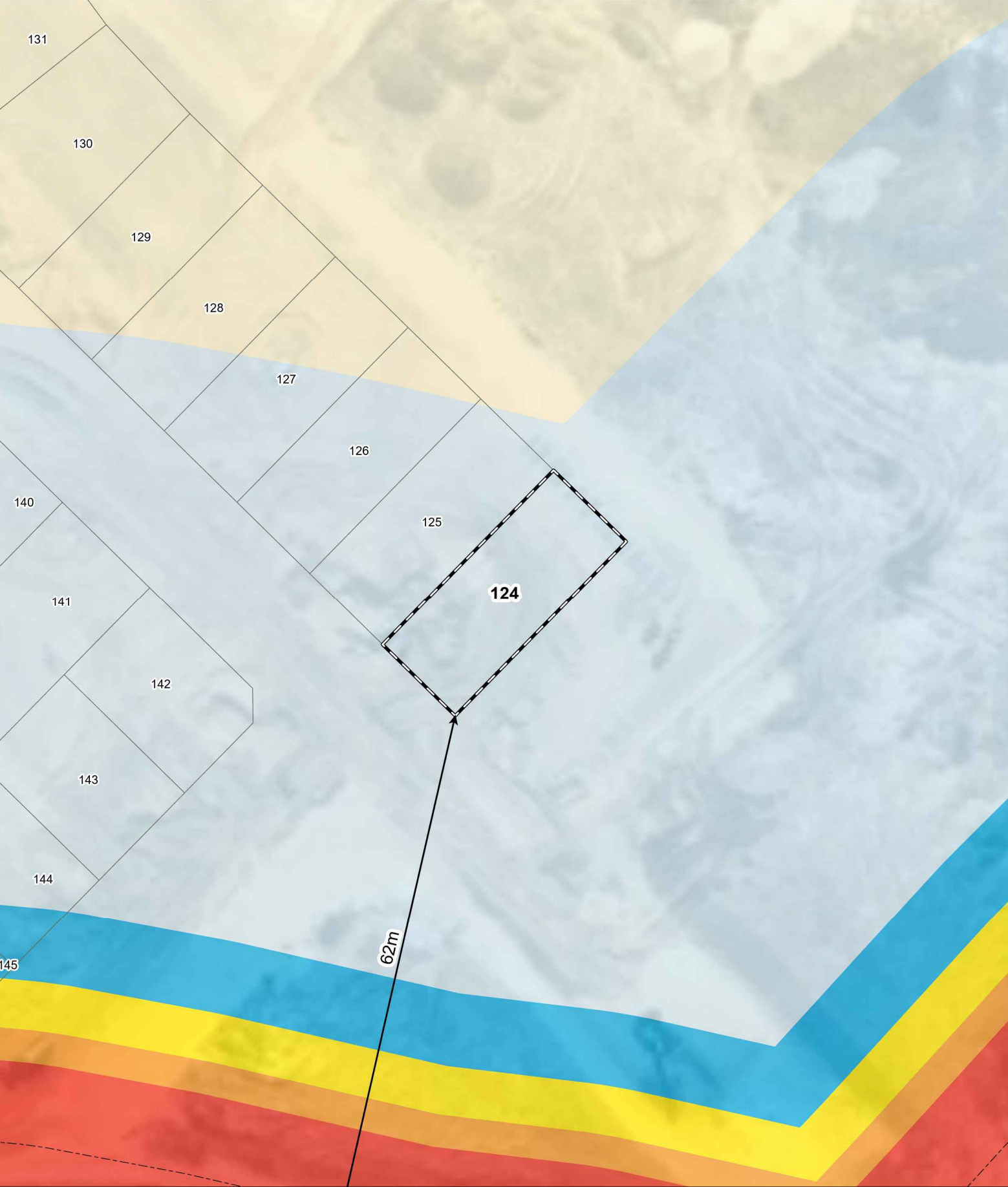
Signature: 

Certificate Date: 08/12/2020



Accreditation No: BPAD 37802
Expiry: December 2021

Bushfire Attack Level (BAL) Contours - Lot 124 (BAL - 12.5)



- Legend**
- 100m site assessment
 - 150m site assessment
 - Lot location
 - Bushfire Hazard Interface
 - Distance to bushfire hazard interface

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



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Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2009

Site Details

Address:	Lot 125, Natures Edge Estate		
Suburb:	Southern River, 6110	State:	WA
Local Government Area:	City of Gosnells		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	20PER-17493	Report Date:	08/12/2020

Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Class B woodland	Upslope / Flat Land	69 m	BAL - 12.5

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 3959-2009.

Name Daniel Panickar
Eco Logical Australia

Signature: 

Certificate Date: 08/12/2020



Accreditation No: BPAD 37802
Expiry: December 2021

Bushfire Attack Level (BAL) Contours - Lot 125 (*BAL - 12.5)



- Legend**
- 100m site assessment
 - 150m site assessment
 - Lot location *Intersects multiple BAL contours
 - Bushfire Hazard Interface
 - Distance to bushfire hazard interface

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



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Project: 17493-SM Date: 18/11/2020

Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2009

Site Details

Address:	Lot 126, Natures Edge Estate		
Suburb:	Southern River, 6110	State:	WA
Local Government Area:	City of Gosnells		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	20PER-17493	Report Date:	08/12/2020

Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Class B woodland	Upslope / Flat Land	75 m	BAL - 12.5

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 3959-2009.

Name Daniel Panickar
Eco Logical Australia

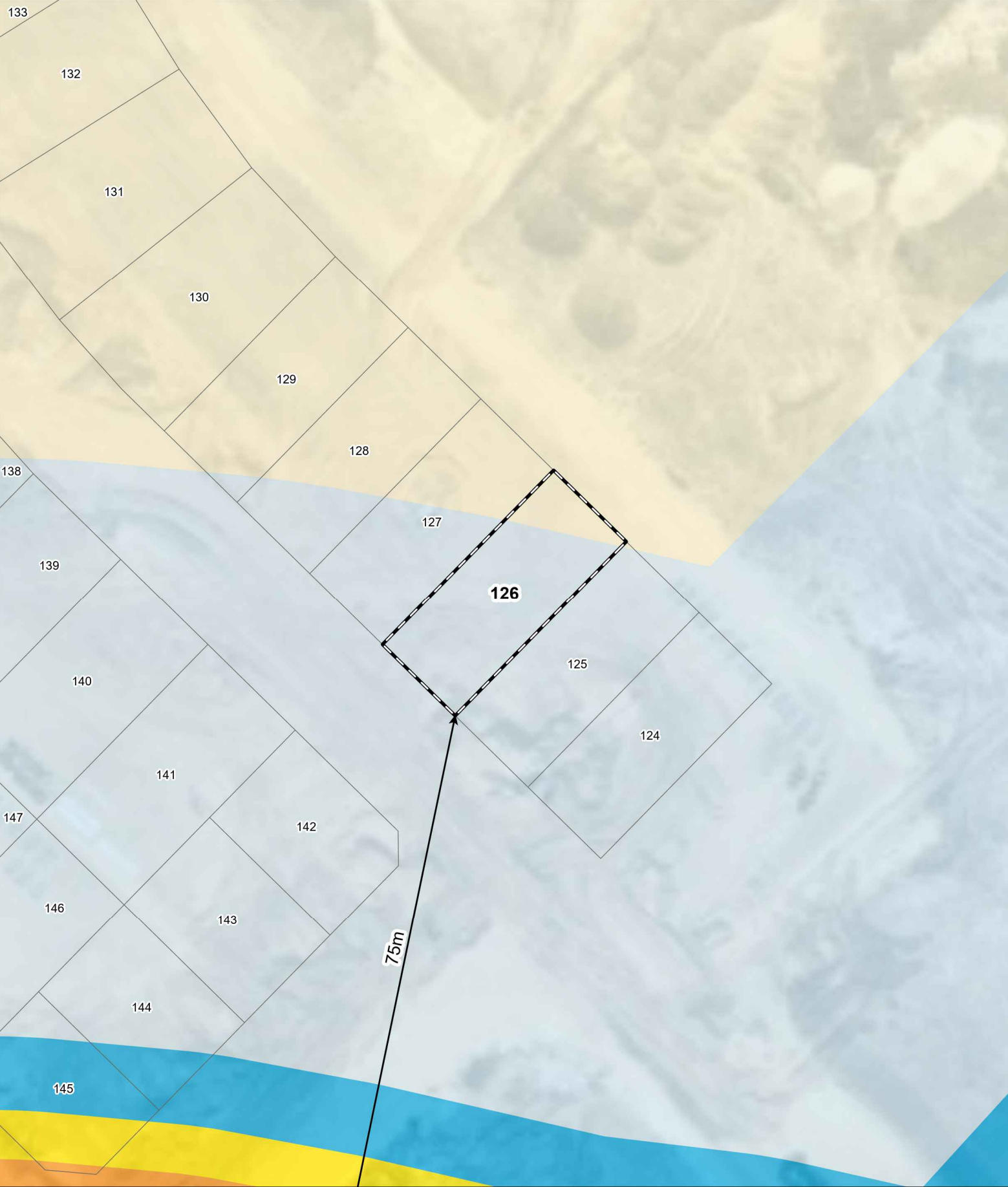
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Certificate Date: 08/12/2020



Accreditation No: BPAD 37802
Expiry: December 2021

Bushfire Attack Level (BAL) Contours - Lot 126 (*BAL - 12.5)



- Legend**
- 100m site assessment
 - 150m site assessment
 - Lot location *Intersects multiple BAL contours
 - Bushfire Hazard Interface
 - Distance to bushfire hazard interface

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



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Project: 17493-SM Date: 18/11/2020

Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2009

Site Details

Address:	Lot 127, Natures Edge Estate		
Suburb:	Southern River, 6110	State:	WA
Local Government Area:	City of Gosnells		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	20PER-17493	Report Date:	08/12/2020

Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Class B woodland	Upslope / Flat Land	82 m	BAL - 12.5

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 3959-2009.

Name Daniel Panickar
Eco Logical Australia

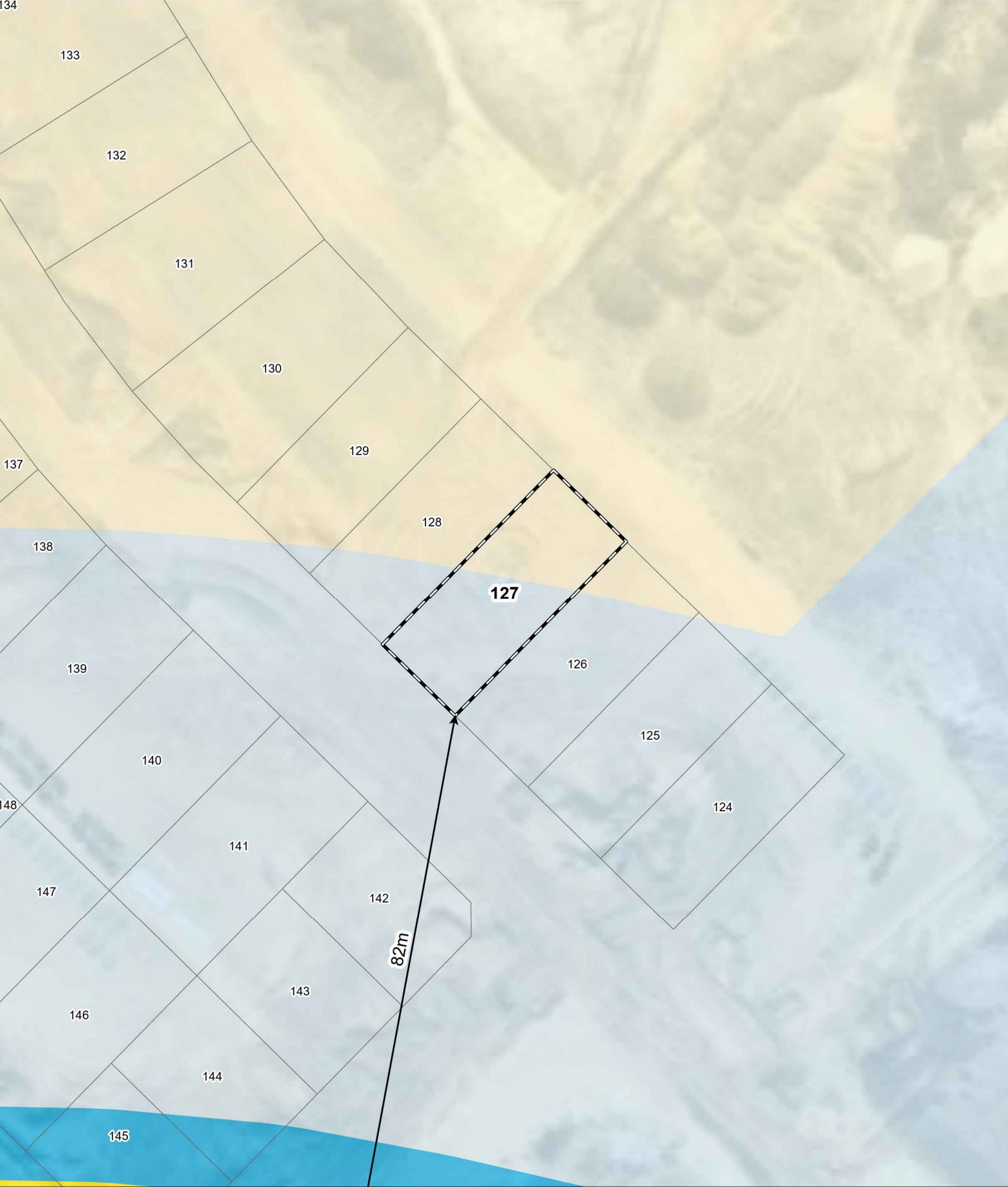
Signature: 

Certificate Date: 08/12/2020



Accreditation No: BPAD 37802
Expiry: December 2021

Bushfire Attack Level (BAL) Contours - Lot 127 (*BAL - 12.5)



Legend

- 100m site assessment
- 150m site assessment
- Lot location *Intersects multiple BAL contours
- Bushfire Hazard Interface
- Distance to bushfire hazard interface

Bushfire Attack Level (BAL)

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



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Datum/Projection:
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Project: 17493-SM Date: 18/11/2020

Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2009

Site Details

Address:	Lot 128, Natures Edge Estate		
Suburb:	Southern River, 6110	State:	WA
Local Government Area:	City of Gosnells		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	20PER-17493	Report Date:	08/12/2020

Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Class B woodland	Upslope / Flat Land	89 m	BAL - 12.5

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 3959-2009.

Name Daniel Panickar
Eco Logical Australia

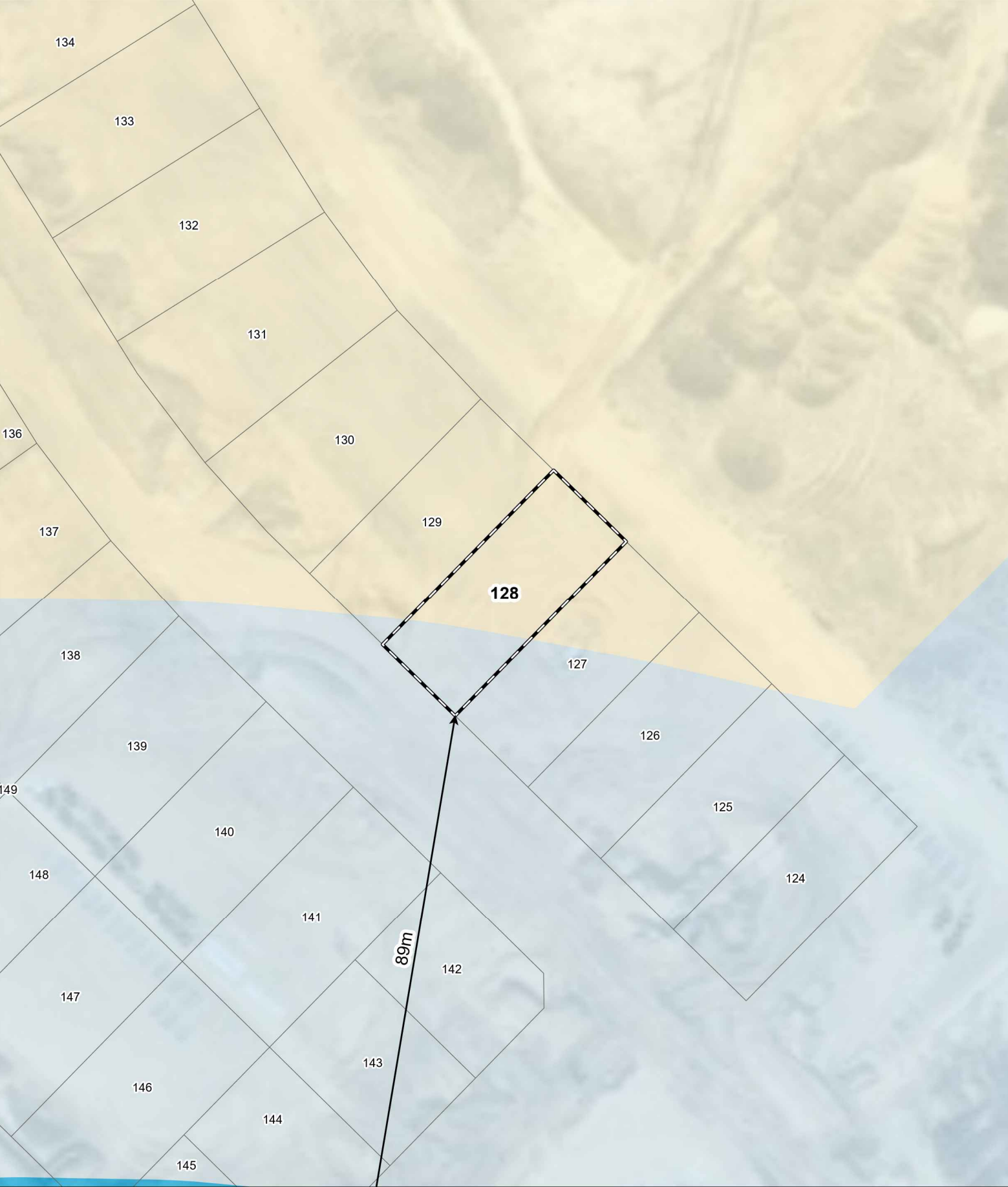
Signature: 

Certificate Date: 08/12/2020



Accreditation No: BPAD 37802
Expiry: December 2021

Bushfire Attack Level (BAL) Contours - Lot 128 (*BAL - 12.5)

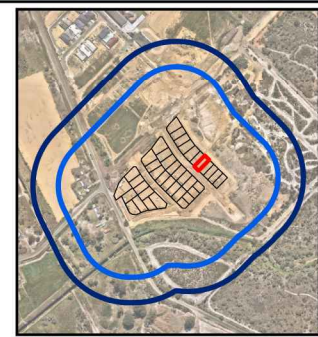


Legend

- 100m site assessment
- 150m site assessment
- Lot location *Intersects multiple BAL contours
- Bushfire Hazard Interface
- Distance to bushfire hazard interface

Bushfire Attack Level (BAL)

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



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Metres
Datum/Projection:
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Project: 17493-SM Date: 18/11/2020

Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2009

Site Details

Address:	Lot 129, Natures Edge Estate		
Suburb:	Southern River, 6110	State:	WA
Local Government Area:	City of Gosnells		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	20PER-17493	Report Date:	08/12/2020

Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Class B woodland	Upslope / Flat Land	97 m	BAL - 12.5

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 3959-2009.

Name Daniel Panickar
Eco Logical Australia

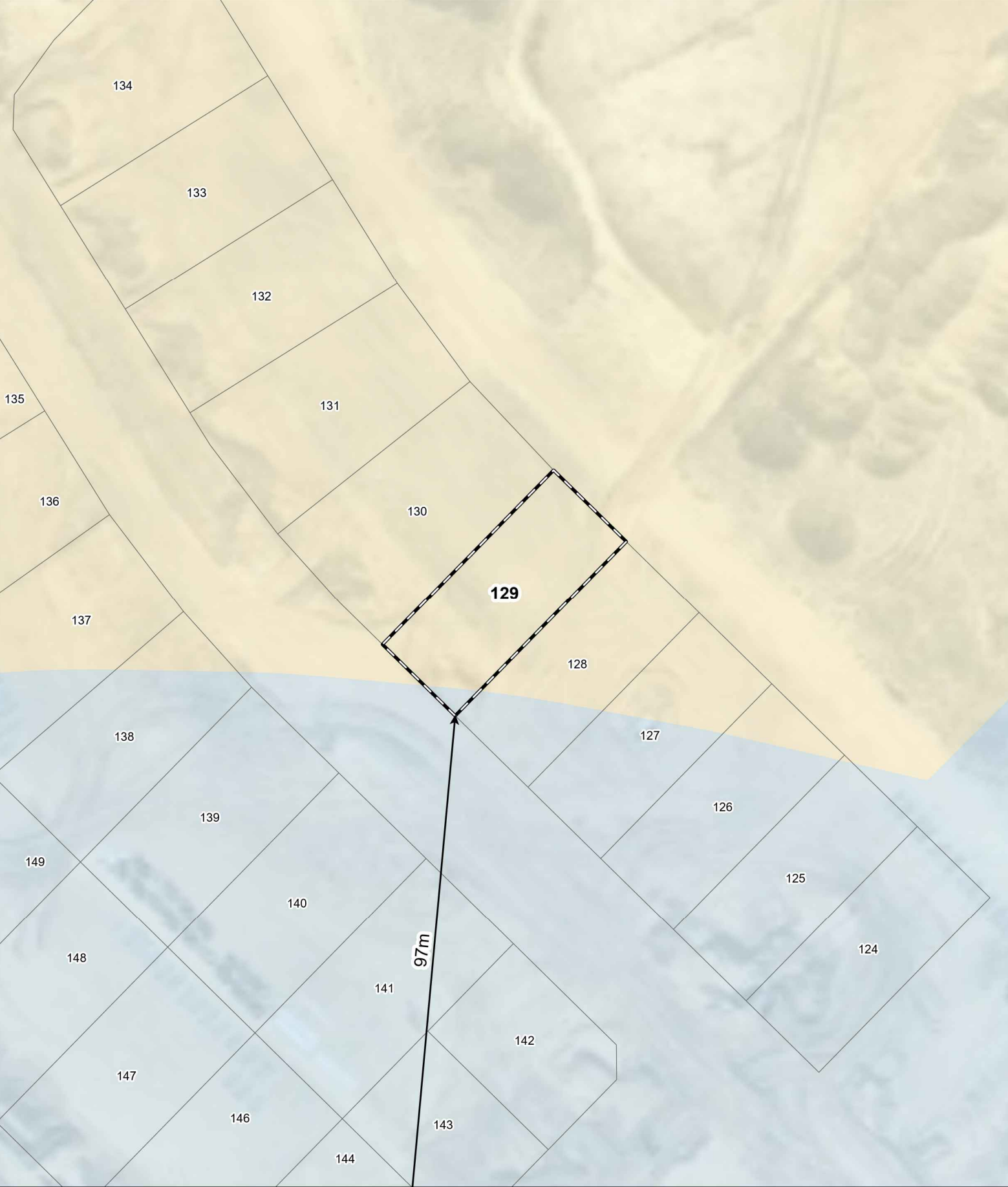
Signature: 

Certificate Date: 08/12/2020



Accreditation No: BPAD 37802
Expiry: December 2021

Bushfire Attack Level (BAL) Contours - Lot 129 (*BAL - 12.5)



Legend

- 100m site assessment
- 150m site assessment
- Lot location *Intersects multiple BAL contours
- Bushfire Hazard Interface
- Distance to bushfire hazard interface

Bushfire Attack Level (BAL)

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



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Metres
Datum/Projection:
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Project: 17493-SM Date: 18/11/2020

Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2009

Site Details

Address:	Lot 130, Natures Edge Estate		
Suburb:	Southern River, 6110	State:	WA
Local Government Area:	City of Gosnells		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	20PER-17493	Report Date:	08/12/2020

Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Class B woodland	Upslope / Flat Land	105 m	BAL - LOW

Practitioner Details

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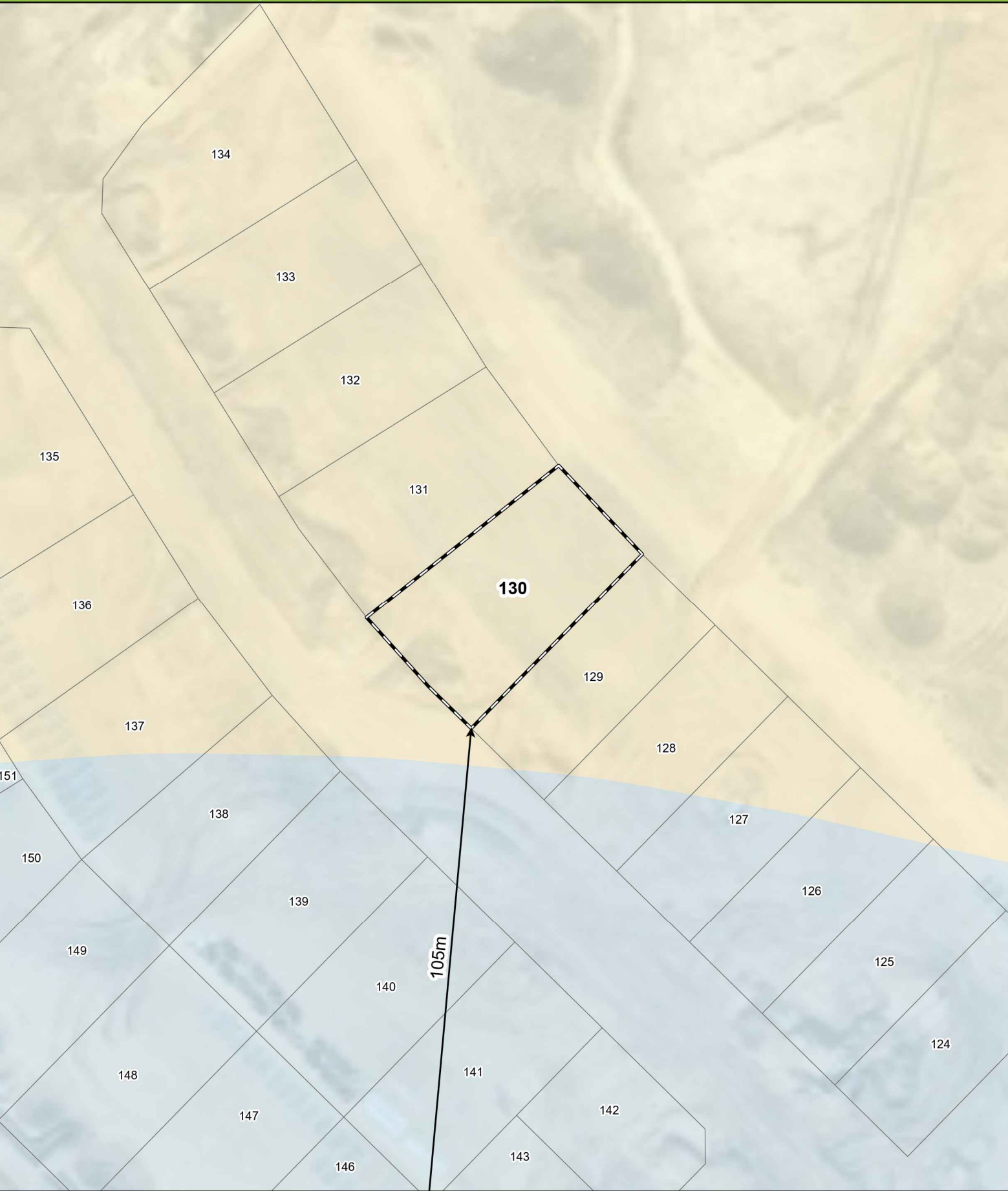
Signature: 

Certificate Date: 08/12/2020



Accreditation No: BPAD 37802
Expiry: December 2021

Bushfire Attack Level (BAL) Contours - Lot 130 (BAL - LOW)



Legend

- 100m site assessment
- 150m site assessment
- Lot location
- Bushfire Hazard Interface
- Distance to 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:
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Project: 17493-SM Date: 18/11/2020

Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2009

Site Details

Address:	Lot 131, Natures Edge Estate		
Suburb:	Southern River, 6110	State:	WA
Local Government Area:	City of Gosnells		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	20PER-17493	Report Date:	08/12/2020

Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Class B woodland	Upslope / Flat Land	117 m	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 3959-2009.

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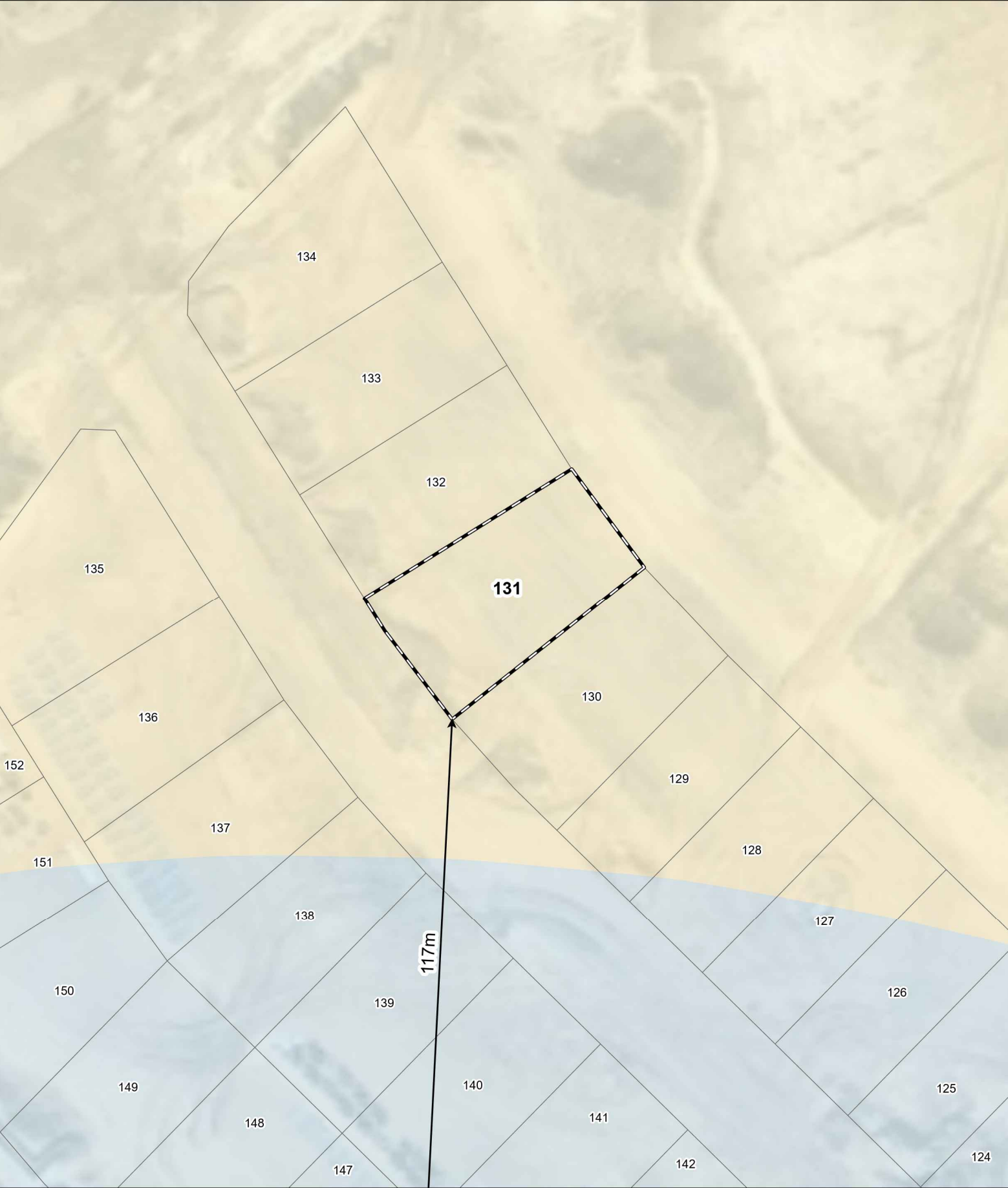
Signature: 

Certificate Date: 08/12/2020



Accreditation No: BPAD 37802
Expiry: December 2021

Bushfire Attack Level (BAL) Contours - Lot 131 (BAL - LOW)



Legend

- 100m site assessment
- 150m site assessment
- Lot location
- Bushfire Hazard Interface
- Distance to 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:
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A TETRA TECH COMPANY

Project: 17493-SM Date: 18/11/2020

Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2009

Site Details

Address:	Lot 132, Natures Edge Estate		
Suburb:	Southern River, 6110	State:	WA
Local Government Area:	City of Gosnells		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	20PER-17493	Report Date:	08/12/2020

Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Class B woodland	Upslope / Flat Land	132 m	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 3959-2009.

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Eco Logical Australia

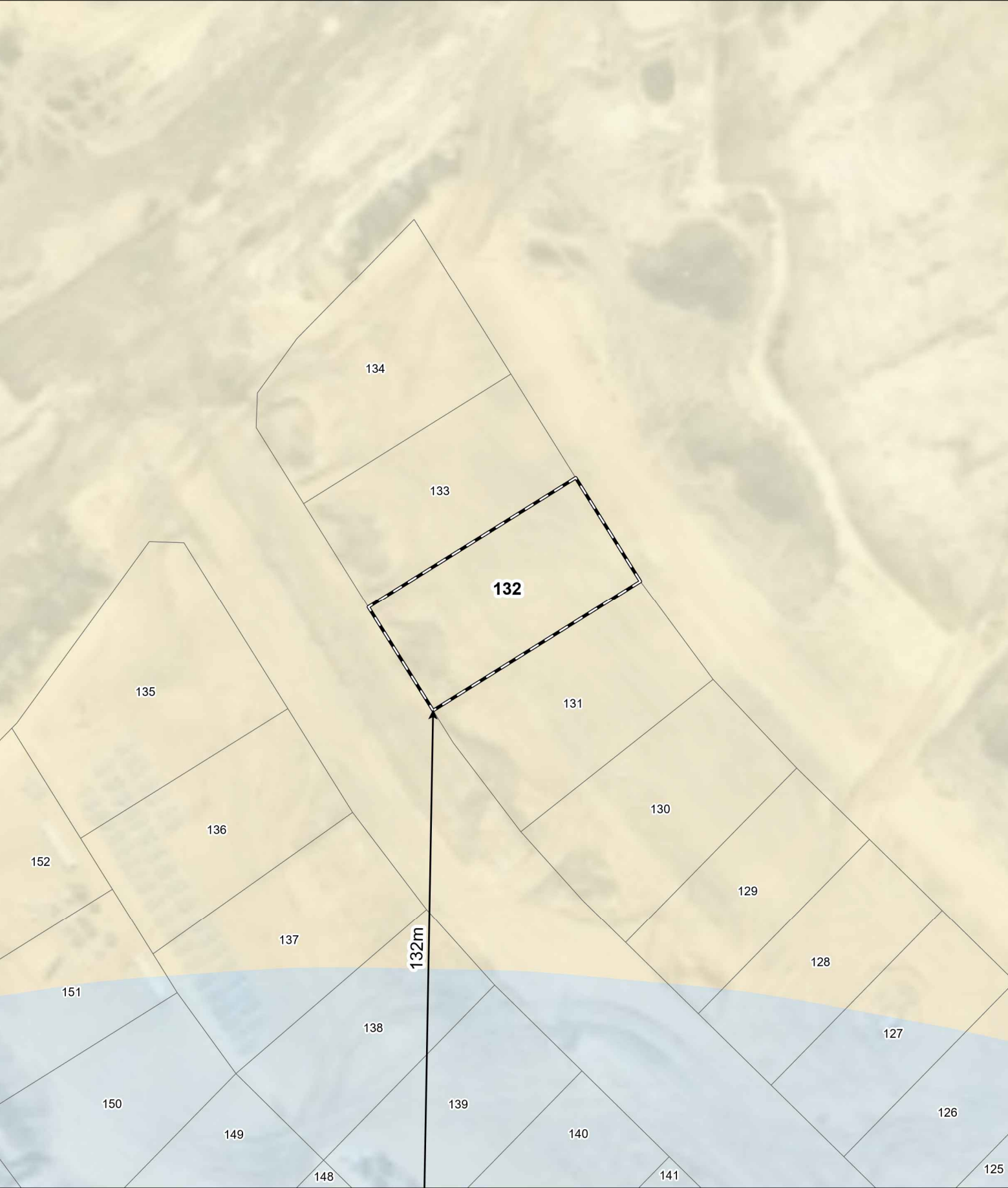
Signature: 

Certificate Date: 08/12/2020



Accreditation No: BPAD 37802
Expiry: December 2021

Bushfire Attack Level (BAL) Contours - Lot 132 (BAL - LOW)



Legend

- 100m site assessment
- 150m site assessment
- Lot location
- Bushfire Hazard Interface
- Distance to bushfire hazard interface

Bushfire Attack Level (BAL)

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



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Metres
Datum/Projection:
GDA 1994 MGA Zone 50

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A TETRA TECH COMPANY

Project: 17493-SM Date: 18/11/2020

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Determined in accordance with AS 3959-2009

Site Details

Address:	Lot 133, Natures Edge Estate		
Suburb:	Southern River, 6110	State:	WA
Local Government Area:	City of Gosnells		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	20PER-17493	Report Date:	08/12/2020

Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Class B woodland	Upslope / Flat Land	144 m	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 3959-2009.

Name Daniel Panickar
Eco Logical Australia

Signature: 

Certificate Date: 08/12/2020



Accreditation No: BPAD 37802
Expiry: December 2021

Bushfire Attack Level (BAL) Contours - Lot 133 (BAL - LOW)



- Legend**
- 100m site assessment
 - 150m site assessment
 - Lot location
 - Bushfire Hazard Interface
 - Distance to bushfire hazard interface

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



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Metres

Datum/Projection:
GDA 1994 MGA Zone 50

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Project: 17493-SM Date: 18/11/2020

Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2009

Site Details

Address:	Lot 134, Natures Edge Estate		
Suburb:	Southern River, 6110	State:	WA
Local Government Area:	City of Gosnells		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	20PER-17493	Report Date:	08/12/2020

Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Class B woodland	Upslope / Flat Land	157 m	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 3959-2009.

Name Daniel Panickar
Eco Logical Australia

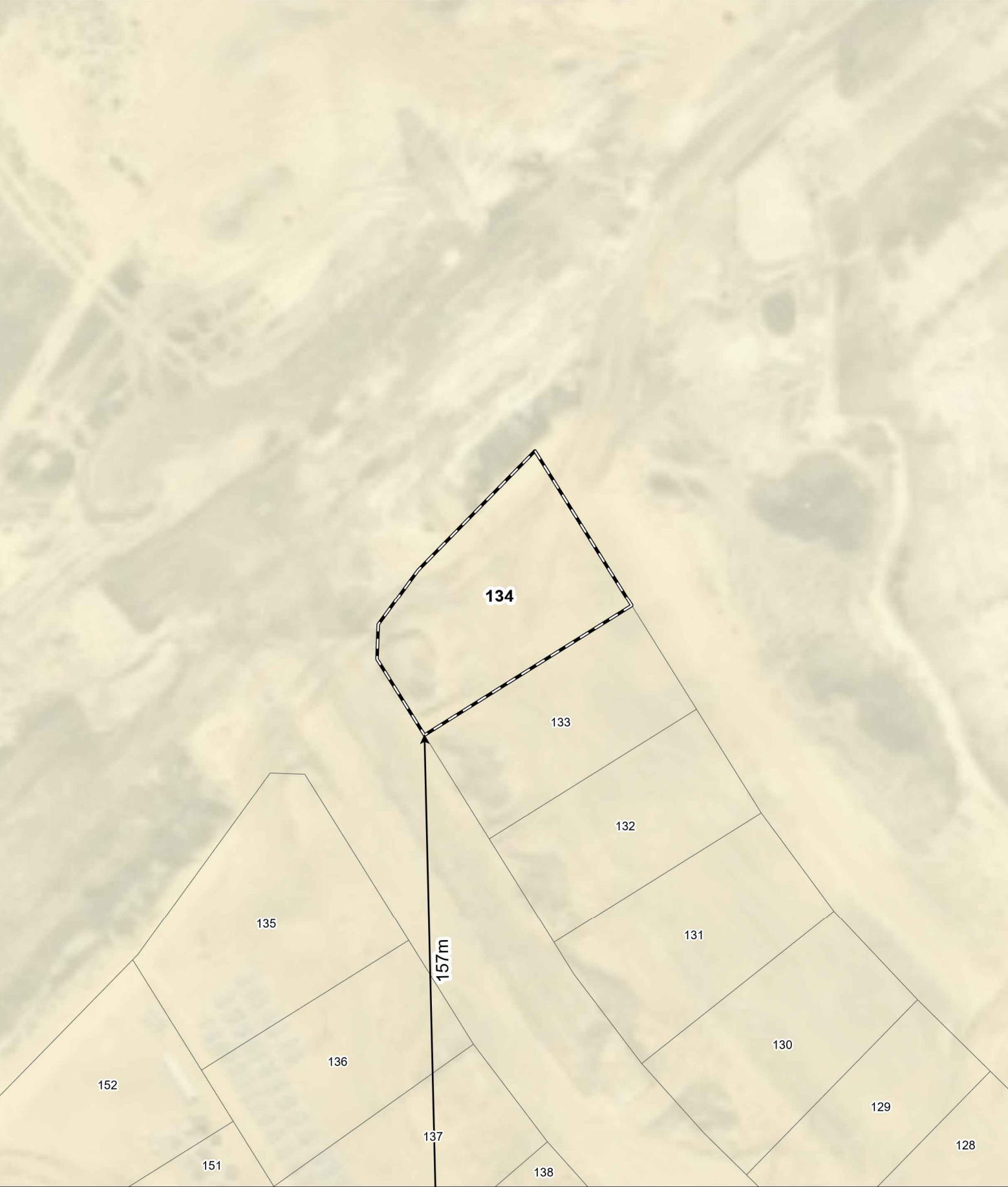
Signature: 

Certificate Date: 08/12/2020



Accreditation No: BPAD 37802
Expiry: December 2021

Bushfire Attack Level (BAL) Contours - Lot 134 (BAL - LOW)



Legend

- 100m site assessment
- 150m site assessment
- Lot location
- Bushfire Hazard Interface
- Distance to 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

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A TETRA TECH COMPANY

Project: 17493-SM Date: 18/11/2020

Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2009

Site Details

Address:	Lot 135, Natures Edge Estate		
Suburb:	Southern River, 6110	State:	WA
Local Government Area:	City of Gosnells		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	20PER-17493	Report Date:	08/12/2020

Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Class B woodland	Upslope / Flat Land	118 m	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 3959-2009.

Name Daniel Panickar
Eco Logical Australia

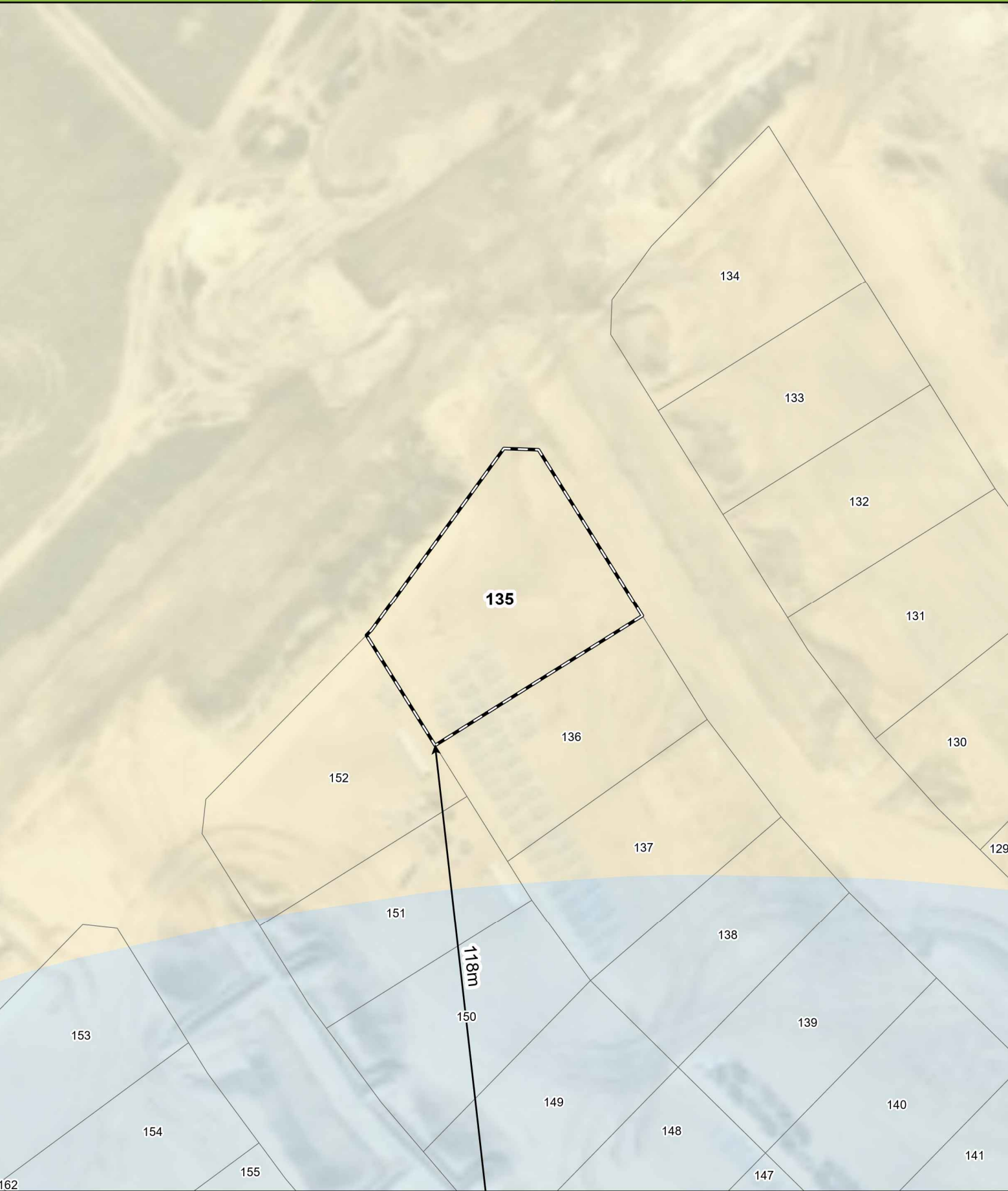
Signature: 

Certificate Date: 08/12/2020



Accreditation No: BPAD 37802
Expiry: December 2021

Bushfire Attack Level (BAL) Contours - Lot 135 (BAL - LOW)



- Legend**
- 100m site assessment
 - 150m site assessment
 - Lot location
 - Bushfire Hazard Interface
 - Distance to bushfire hazard interface

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



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Metres

Datum/Projection:
GDA 1994 MGA Zone 50

N

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A TETRA TECH COMPANY

Project: 17493-SM Date: 18/11/2020

Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2009

Site Details

Address:	Lot 136, Natures Edge Estate		
Suburb:	Southern River, 6110	State:	WA
Local Government Area:	City of Gosnells		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	20PER-17493	Report Date:	08/12/2020

Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Class B woodland	Upslope / Flat Land	103 m	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 3959-2009.

Name Daniel Panickar
Eco Logical Australia

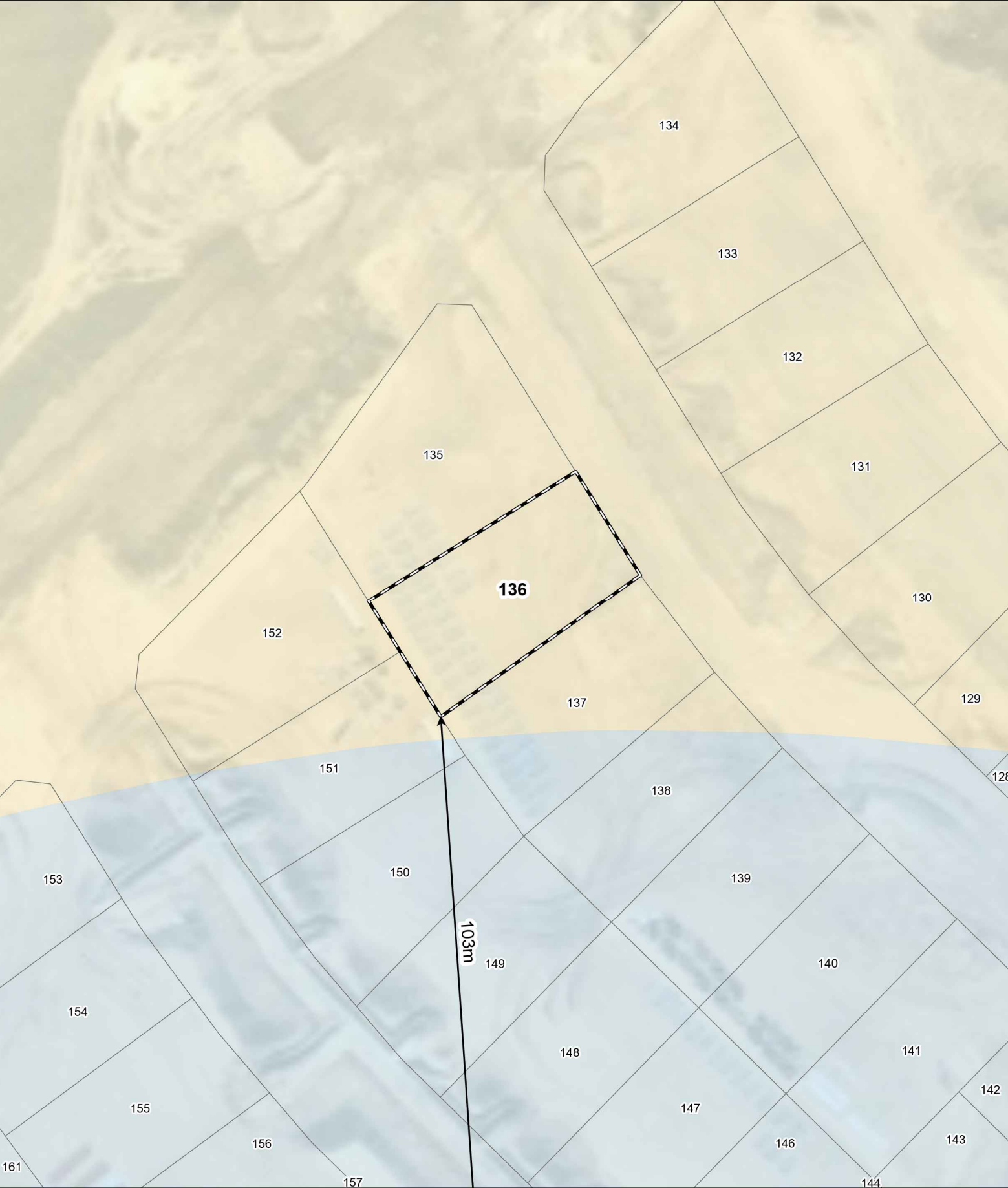
Signature: 

Certificate Date: 08/12/2020



Accreditation No: BPAD 37802
Expiry: December 2021

Bushfire Attack Level (BAL) Contours - Lot 136 (BAL - LOW)



Legend

- 100m site assessment
- 150m site assessment
- Lot location
- Bushfire Hazard Interface
- Distance to 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

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A TETRA TECH COMPANY

Project: 17493-SM Date: 18/11/2020

Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2009

Site Details

Address:	Lot 137, Natures Edge Estate		
Suburb:	Southern River, 6110	State:	WA
Local Government Area:	City of Gosnells		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	20PER-17493	Report Date:	08/12/2020

Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Class B woodland	Upslope / Flat Land	87 m	BAL - 12.5

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 3959-2009.

Name Daniel Panickar
Eco Logical Australia

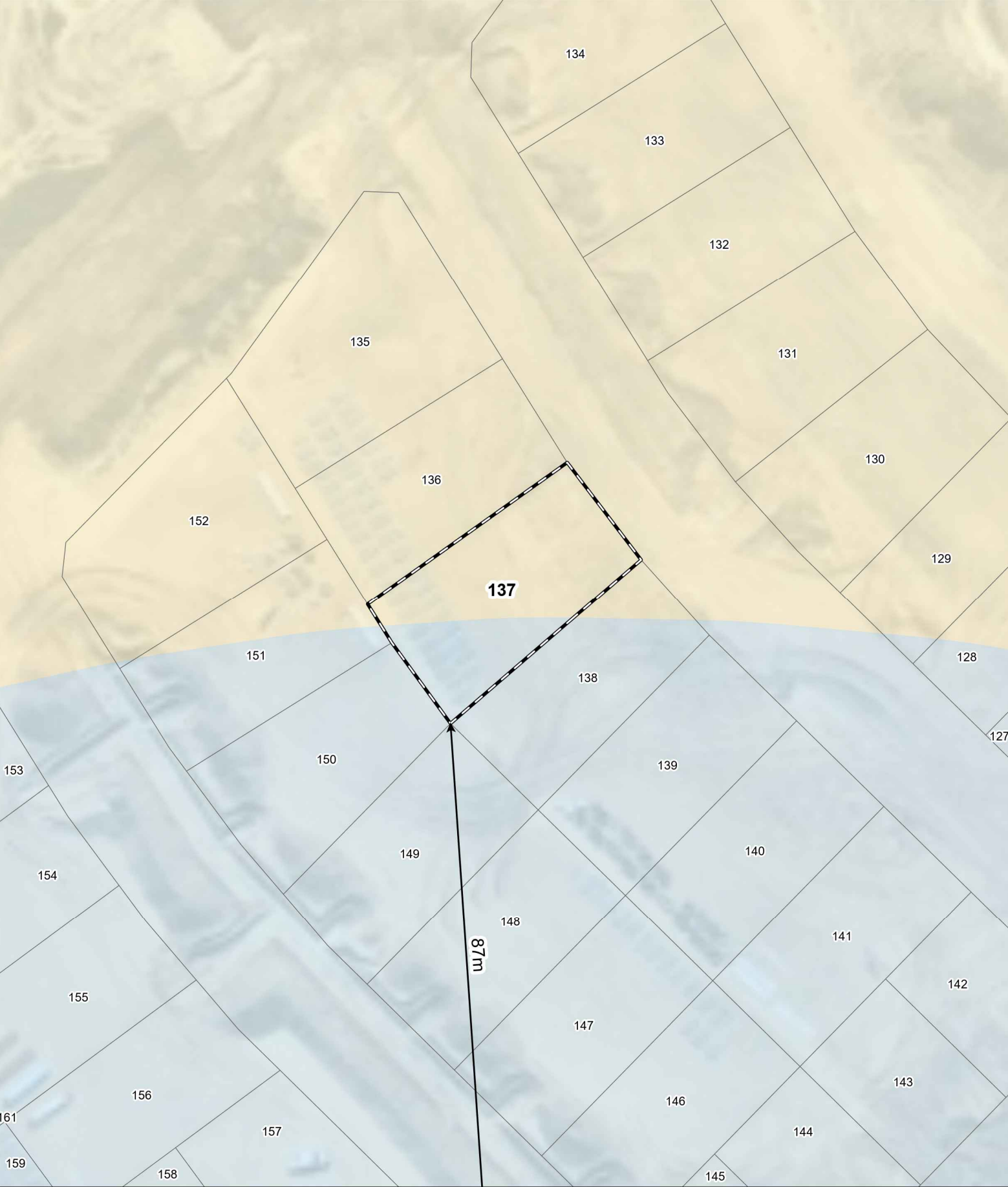
Signature: 

Certificate Date: 08/12/2020



Accreditation No: BPAD 37802
Expiry: December 2021

Bushfire Attack Level (BAL) Contours - Lot 137 (*BAL - 12.5)



Legend

- 100m site assessment
- 150m site assessment
- Lot location *Intersects multiple BAL contours
- Bushfire Hazard Interface
- Distance to 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

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A TETRA TECH COMPANY

Project: 17493-SM Date: 18/11/2020

Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2009

Site Details

Address:	Lot 138, Natures Edge Estate		
Suburb:	Southern River, 6110	State:	WA
Local Government Area:	City of Gosnells		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	20PER-17493	Report Date:	08/12/2020

Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Class B woodland	Upslope / Flat Land	76 m	BAL - 12.5

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 3959-2009.

Name Daniel Panickar
Eco Logical Australia

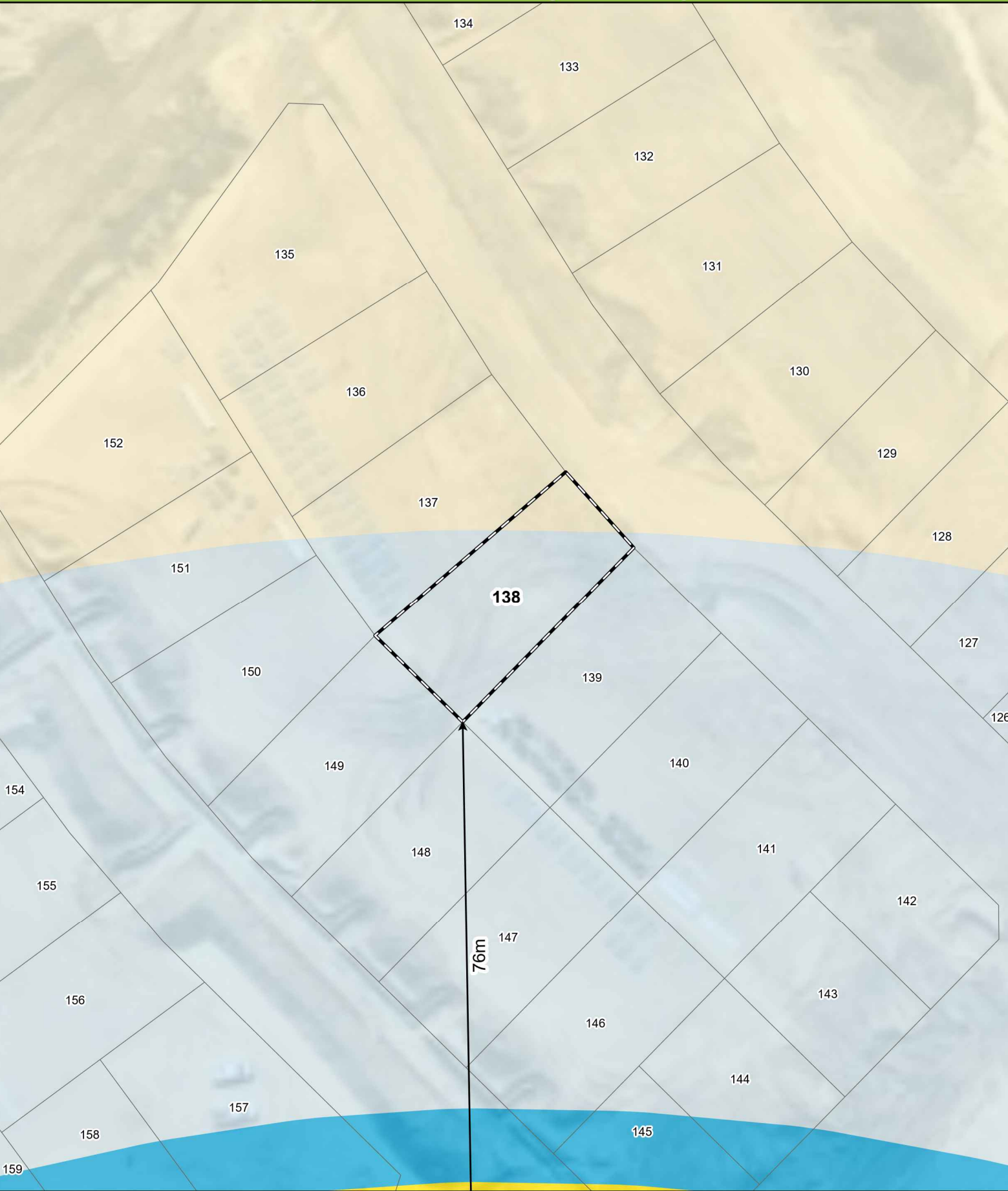
Signature: 

Certificate Date: 08/12/2020



Accreditation No: BPAD 37802
Expiry: December 2021

Bushfire Attack Level (BAL) Contours - Lot 138 (*BAL - 12.5)



- Legend**
- 100m site assessment
 - 150m site assessment
 - Lot location *Intersects multiple BAL contours
 - Bushfire Hazard Interface
 - Distance to bushfire hazard interface

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



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Metres

Datum/Projection:
GDA 1994 MGA Zone 50

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A TETRA TECH COMPANY

Project: 17493-SM Date: 18/11/2020

Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2009

Site Details

Address:	Lot 139, Natures Edge Estate		
Suburb:	Southern River, 6110	State:	WA
Local Government Area:	City of Gosnells		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	20PER-17493	Report Date:	08/12/2020

Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Class B woodland	Upslope / Flat Land	66 m	BAL - 12.5

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 3959-2009.

Name Daniel Panickar
Eco Logical Australia

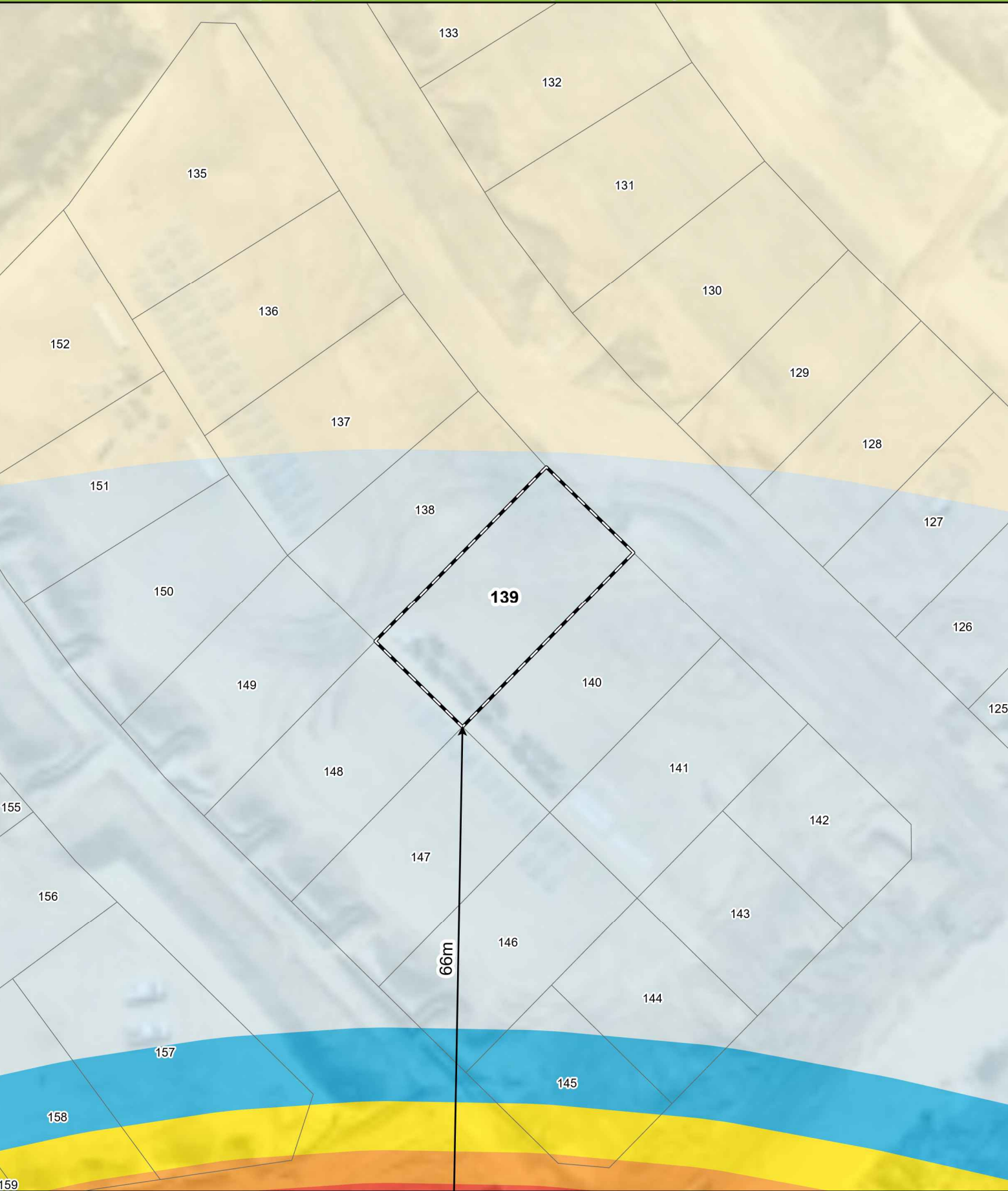
Signature: 

Certificate Date: 08/12/2020



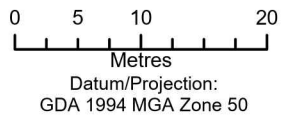
Accreditation No: BPAD 37802
Expiry: December 2021

Bushfire Attack Level (BAL) Contours - Lot 139 (BAL - 12.5)



- Legend**
- 100m site assessment
 - 150m site assessment
 - Lot location
 - Bushfire Hazard Interface
 - Distance to 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 3959-2009

Site Details

Address:	Lot 140, Natures Edge Estate		
Suburb:	Southern River, 6110	State:	WA
Local Government Area:	City of Gosnells		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	20PER-17493	Report Date:	08/12/2020

Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Class B woodland	Upslope / Flat Land	56 m	BAL - 12.5

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 3959-2009.

Name Daniel Panickar
Eco Logical Australia

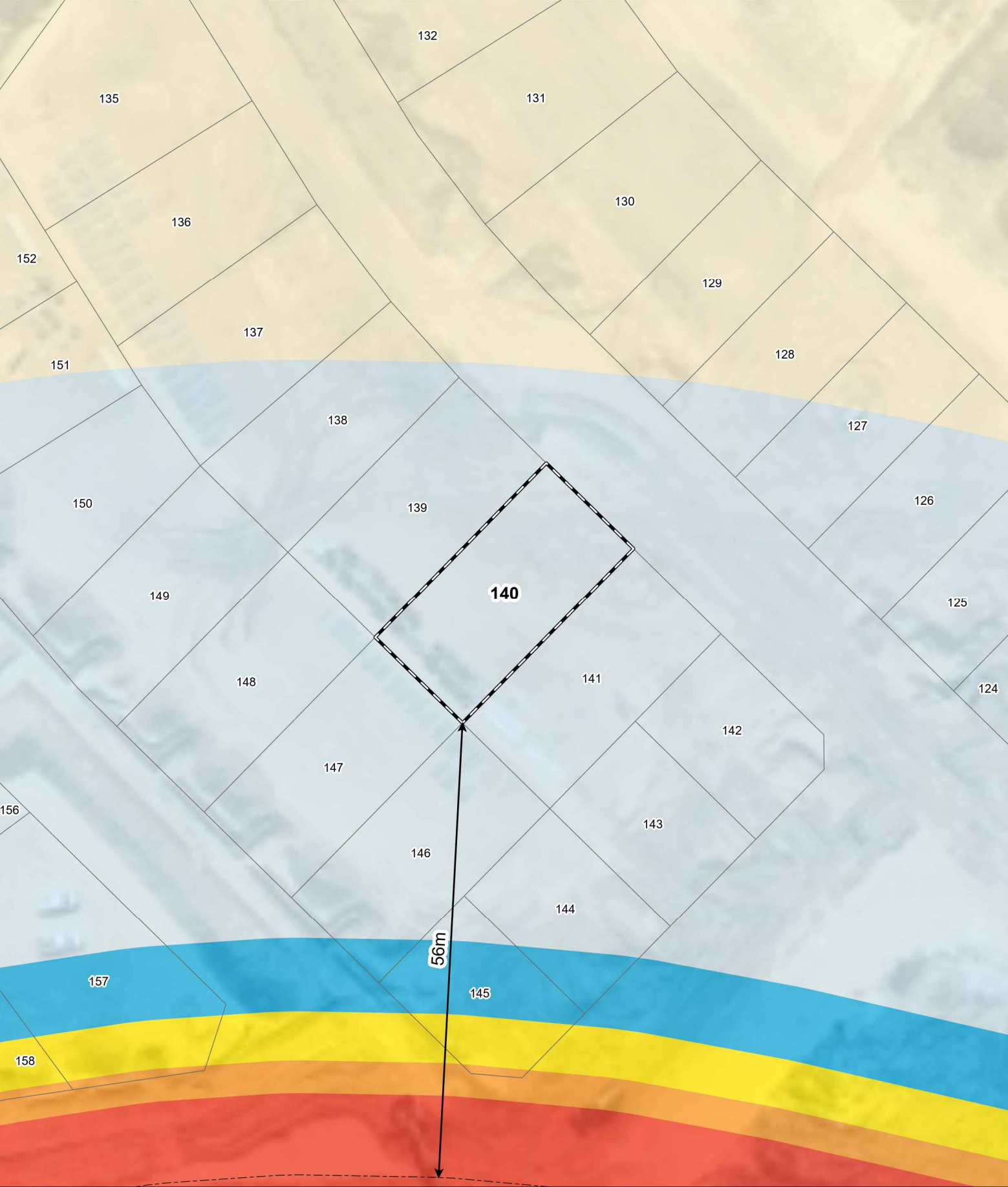
Signature: 

Certificate Date: 08/12/2020



Accreditation No: BPAD 37802
Expiry: December 2021

Bushfire Attack Level (BAL) Contours - Lot 140 (BAL - 12.5)



- Legend**
- 100m site assessment
 - 150m site assessment
 - Lot location
 - Bushfire Hazard Interface
 - Distance to 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

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AUSTRALIA
A TETRA TECH COMPANY

Project: 17493-SM Date: 18/11/2020

Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2009

Site Details

Address:	Lot 141, Natures Edge Estate		
Suburb:	Southern River, 6110	State:	WA
Local Government Area:	City of Gosnells		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	20PER-17493	Report Date:	08/12/2020

Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Class B woodland	Upslope / Flat Land	46 m	BAL - 12.5

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 3959-2009.

Name Daniel Panickar
Eco Logical Australia

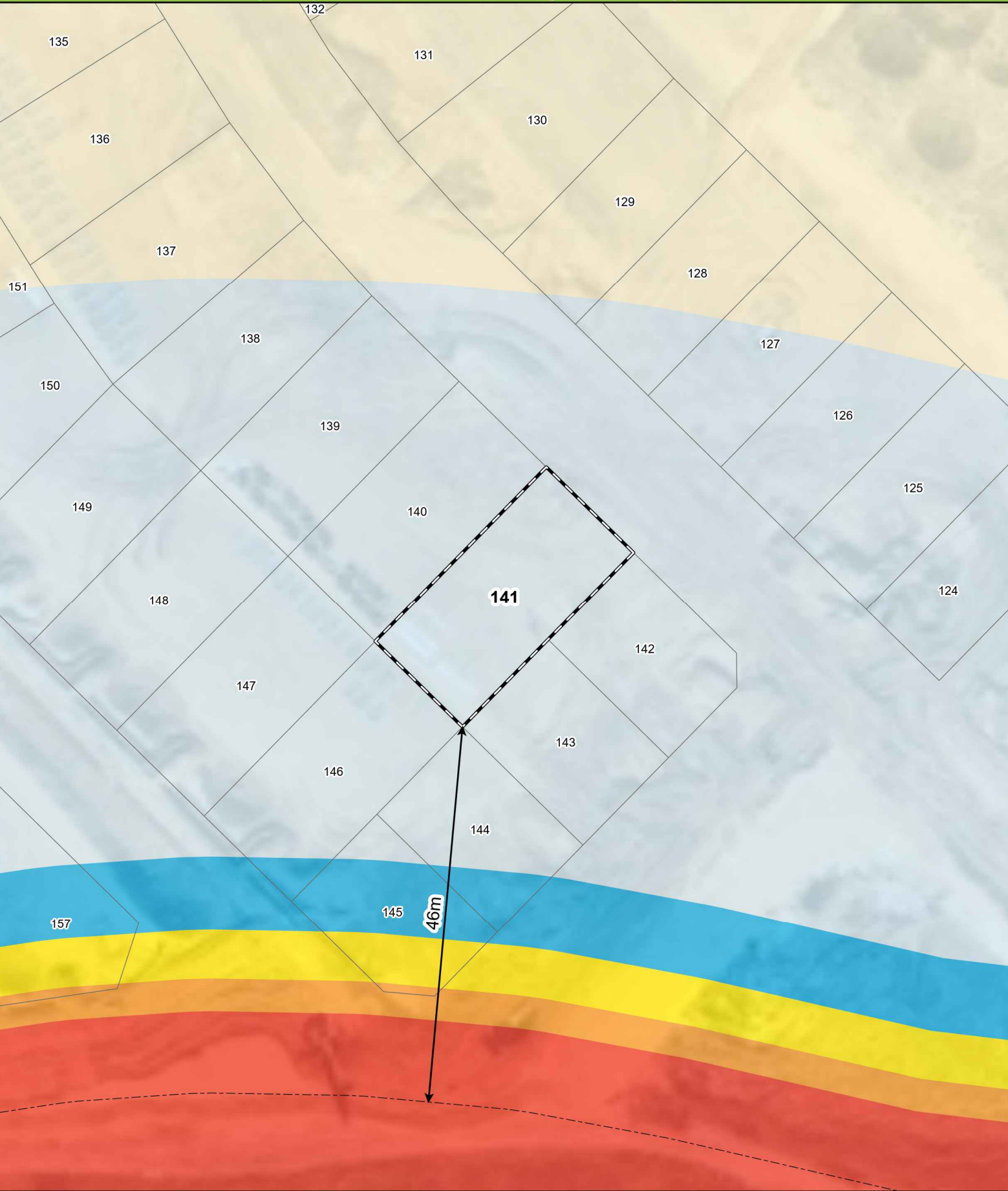
Signature: 

Certificate Date: 08/12/2020



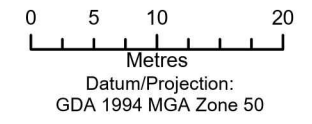
Accreditation No: BPAD 37802
Expiry: December 2021

Bushfire Attack Level (BAL) Contours - Lot 141 (BAL - 12.5)



- Legend**
- 100m site assessment
 - 150m site assessment
 - Lot location
 - Bushfire Hazard Interface
 - Distance to 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 3959-2009

Site Details

Address:	Lot 142, Natures Edge Estate		
Suburb:	Southern River, 6110	State:	WA
Local Government Area:	City of Gosnells		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	20PER-17493	Report Date:	08/12/2020

Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Class B woodland	Upslope / Flat Land	46 m	BAL - 12.5

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 3959-2009.

Name Daniel Panickar
Eco Logical Australia

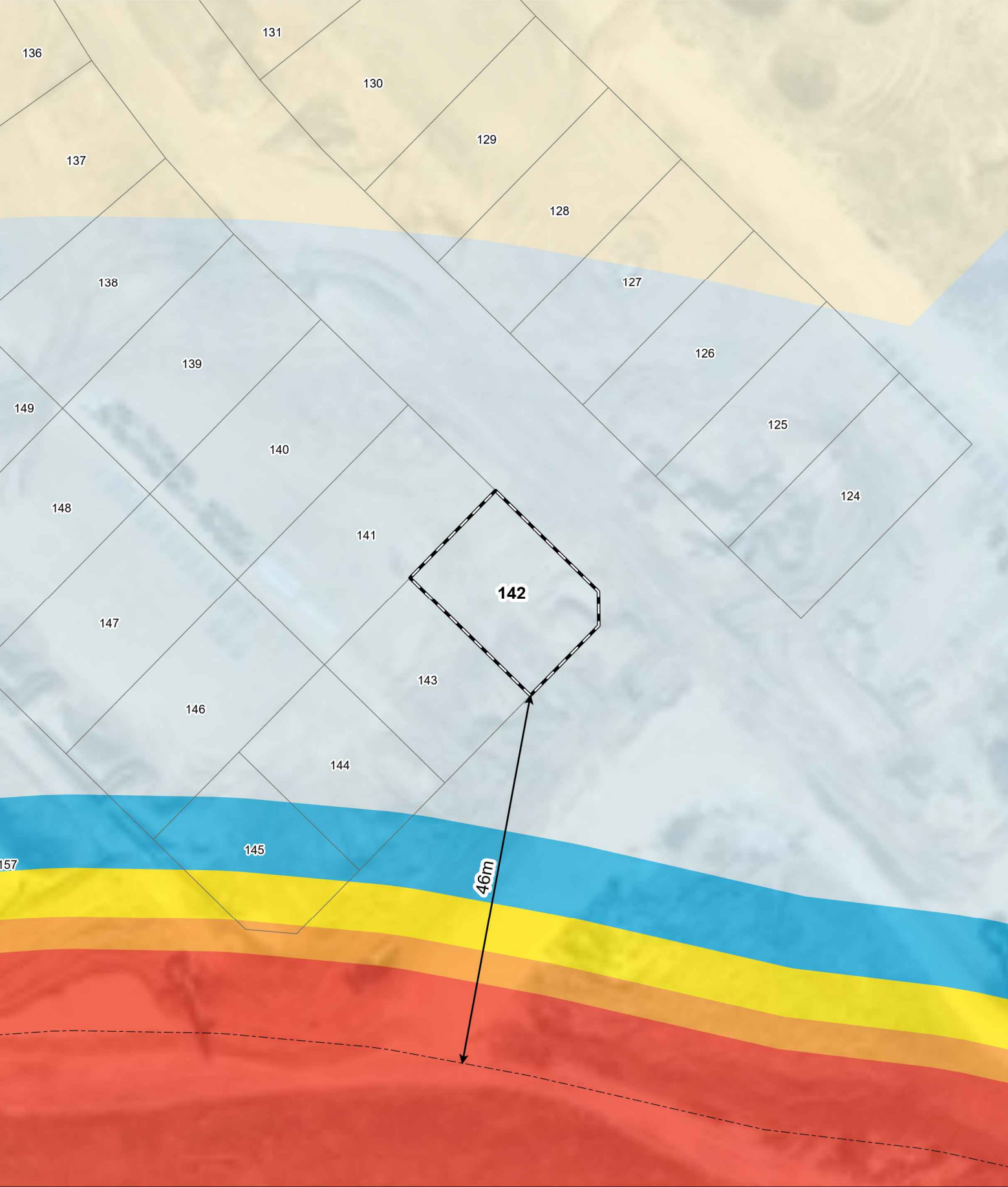
Signature: 

Certificate Date: 08/12/2020



Accreditation No: BPAD 37802
Expiry: December 2021

Bushfire Attack Level (BAL) Contours - Lot 142 (BAL - 12.5)



Legend

- 100m site assessment
- 150m site assessment
- Lot location
- Bushfire Hazard Interface
- Distance to bushfire hazard interface

Bushfire Attack Level (BAL)

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



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Metres
Datum/Projection:
GDA 1994 MGA Zone 50

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A TETRA TECH COMPANY

Project: 17493-SM Date: 18/11/2020

Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2009

Site Details

Address:	Lot 143, Natures Edge Estate		
Suburb:	Southern River, 6110	State:	WA
Local Government Area:	City of Gosnells		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	20PER-17493	Report Date:	08/12/2020

Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Class B woodland	Upslope / Flat Land	33 m	BAL - 12.5

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 3959-2009.

Name Daniel Panickar
Eco Logical Australia

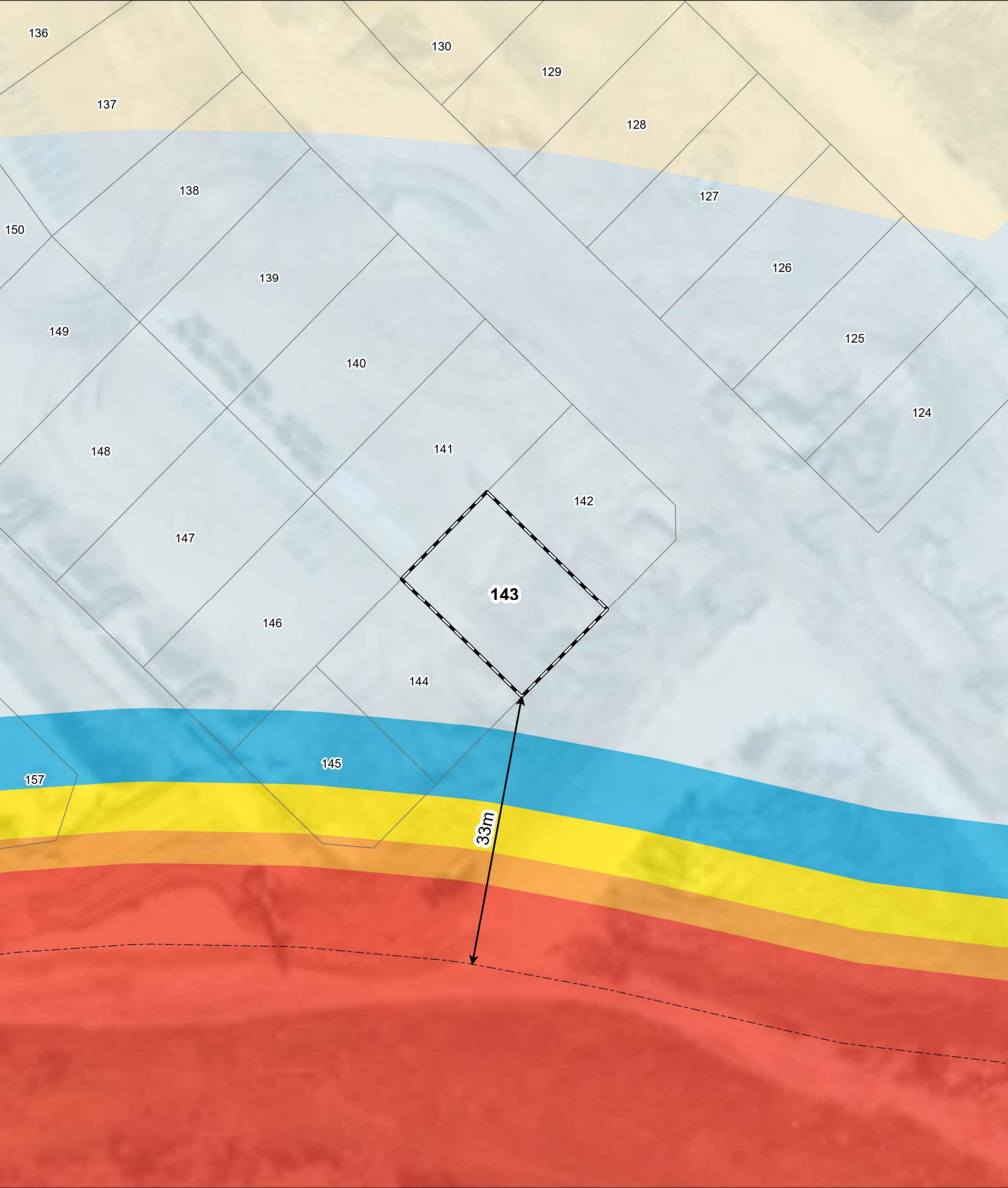
Signature: 

Certificate Date: 08/12/2020



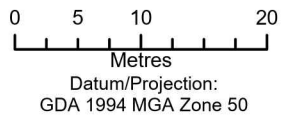
Accreditation No: BPAD 37802
Expiry: December 2021

Bushfire Attack Level (BAL) Contours - Lot 143 (BAL - 12.5)



- Legend**
- 100m site assessment
 - 150m site assessment
 - Lot location
 - Bushfire Hazard Interface
 - Distance to 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 3959-2009

Site Details

Address:	Lot 144, Natures Edge Estate		
Suburb:	Southern River, 6110	State:	WA
Local Government Area:	City of Gosnells		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	20PER-17493	Report Date:	08/12/2020

Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Class B woodland	Upslope / Flat Land	21 m	BAL - 19

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 3959-2009.

Name Daniel Panickar
Eco Logical Australia

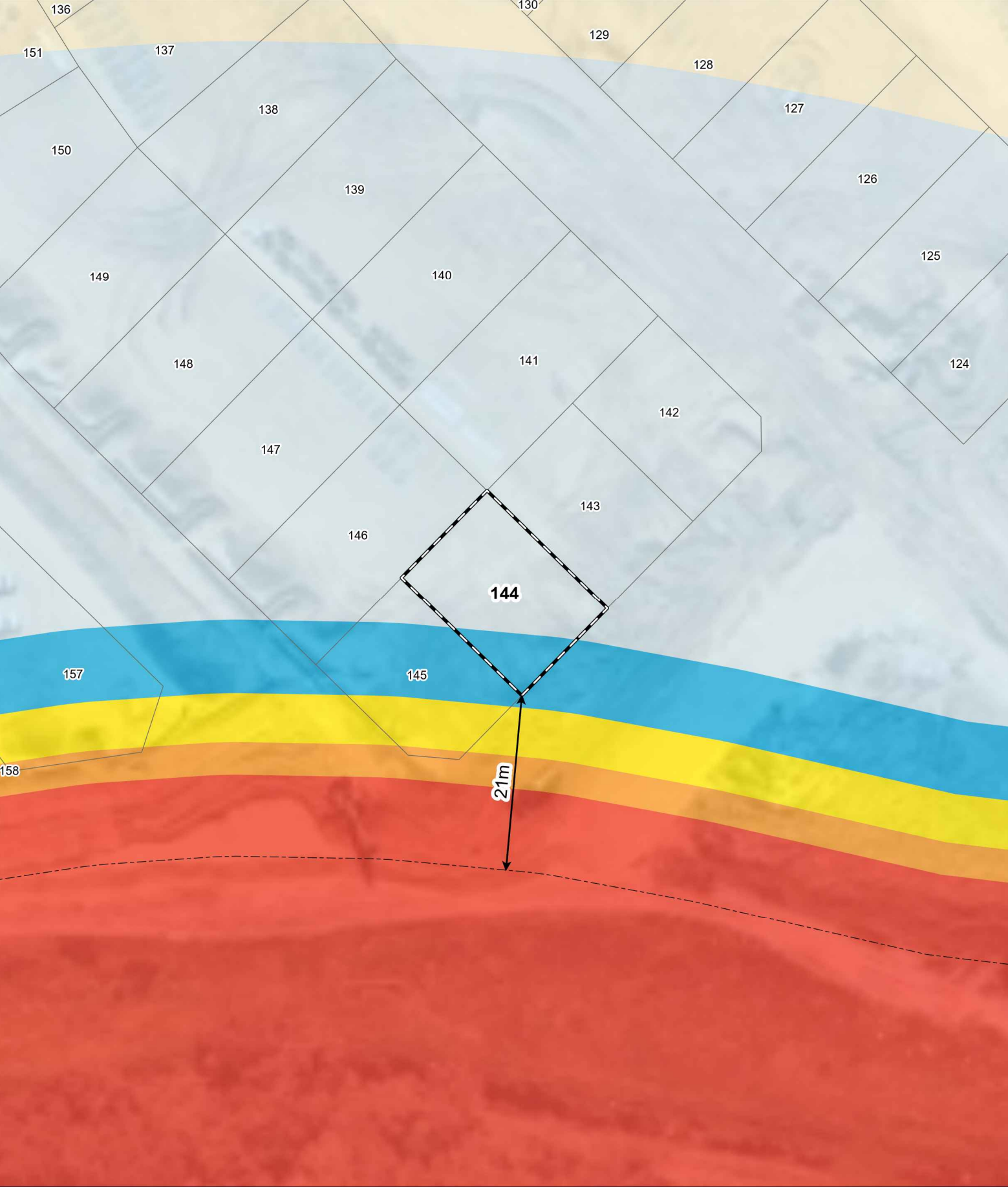
Signature: 

Certificate Date: 08/12/2020



Accreditation No: BPAD 37802
Expiry: December 2021

Bushfire Attack Level (BAL) Contours - Lot 144 (*BAL - 19)



- Legend**
- 100m site assessment
 - 150m site assessment
 - Lot location *Intersects multiple BAL contours
 - Bushfire Hazard Interface
 - Distance to 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

A TETRA TECH COMPANY

Project: 17493-SM Date: 18/11/2020

Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2009

Site Details

Address:	Lot 145, Natures Edge Estate		
Suburb:	Southern River, 6110	State:	WA
Local Government Area:	City of Gosnells		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	20PER-17493	Report Date:	08/12/2020

Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Class B woodland	Upslope / Flat Land	17 m	BAL - 29

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 3959-2009.

Name Daniel Panickar
Eco Logical Australia

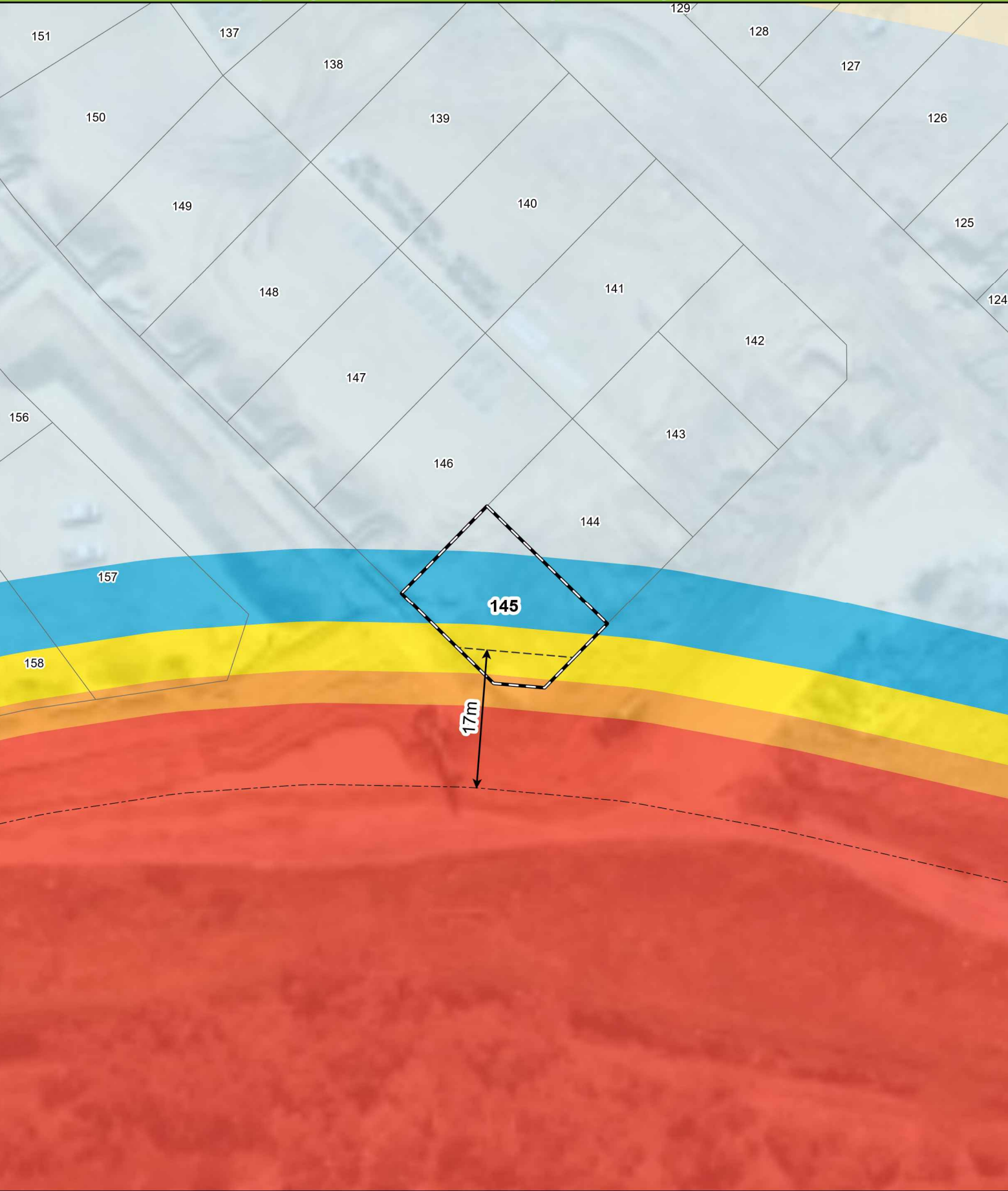
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Certificate Date: 08/12/2020



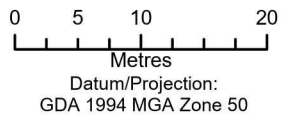
Accreditation No: BPAD 37802
Expiry: December 2021

Bushfire Attack Level (BAL) Contours - Lot 145 (*BAL - 29)



- Legend**
- 100m site assessment
 - 150m site assessment
 - Lot location *Intersects multiple BAL contours
 - Lot setback (4m)
 - Bushfire Hazard Interface
 - Distance to 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 3959-2009

Site Details

Address:	Lot 146, Natures Edge Estate		
Suburb:	Southern River, 6110	State:	WA
Local Government Area:	City of Gosnells		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	20PER-17493	Report Date:	08/12/2020

Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Class B woodland	Upslope / Flat Land	24 m	BAL - 19

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 3959-2009.

Name Daniel Panickar
Eco Logical Australia

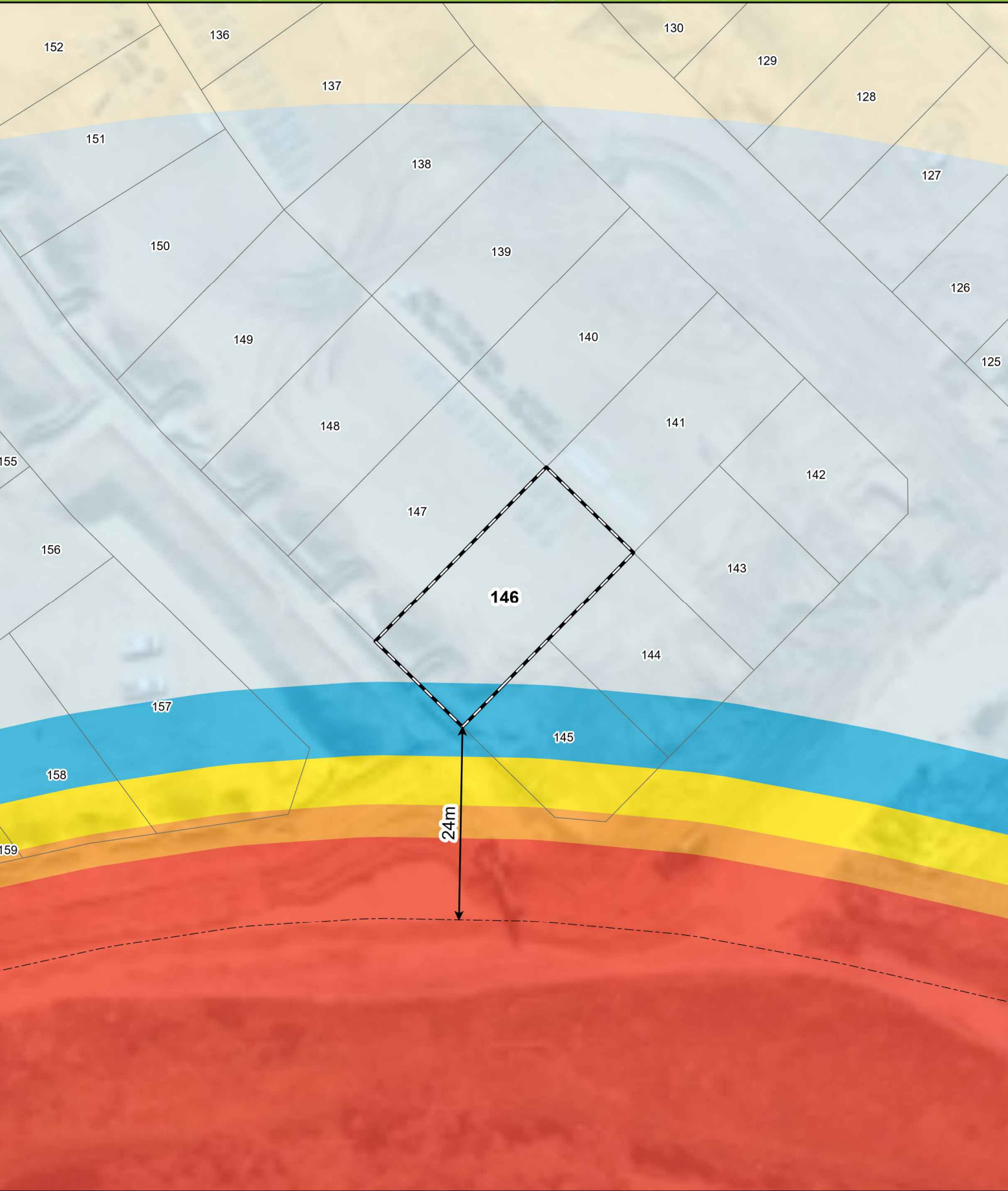
Signature: 

Certificate Date: 08/12/2020



Accreditation No: BPAD 37802
Expiry: December 2021

Bushfire Attack Level (BAL) Contours - Lot 146 (*BAL - 19)



- Legend**
- 100m site assessment
 - 150m site assessment
 - Lot location *Intersects multiple BAL contours
 - Bushfire Hazard Interface
 - Distance to 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

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A TETRA TECH COMPANY

Project: 17493-SM Date: 18/11/2020

Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2009

Site Details

Address:	Lot 147, Natures Edge Estate		
Suburb:	Southern River, 6110	State:	WA
Local Government Area:	City of Gosnells		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	20PER-17493	Report Date:	08/12/2020

Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Class B woodland	Upslope / Flat Land	34 m	BAL - 12.5

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 3959-2009.

Name
Daniel Panickar
Eco Logical Australia

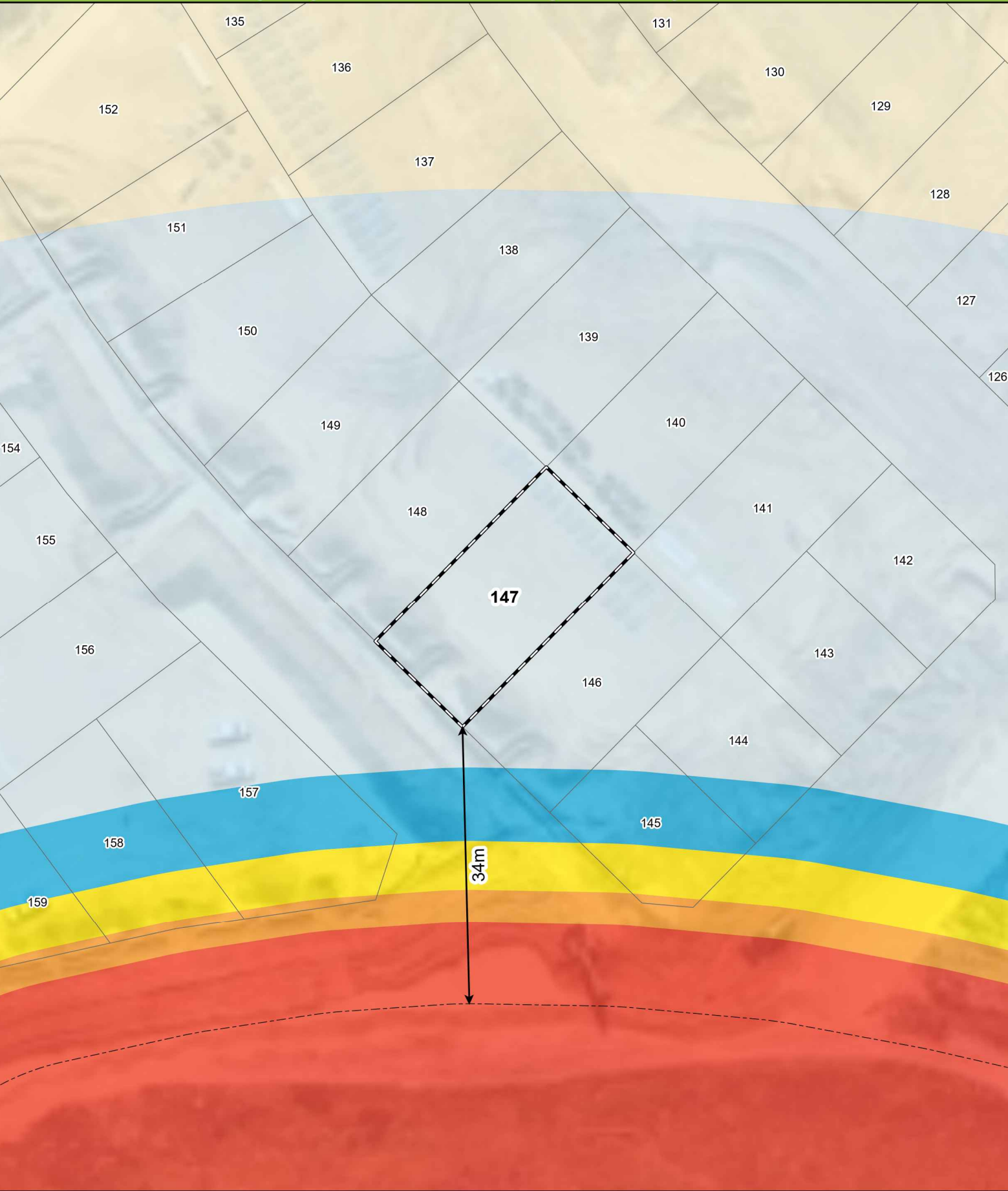
Signature:


Certificate Date: 08/12/2020



Accreditation No: BPAD 37802
Expiry: December 2021

Bushfire Attack Level (BAL) Contours - Lot 147 (BAL - 12.5)



- Legend**
- 100m site assessment
 - 150m site assessment
 - Lot location
 - Bushfire Hazard Interface
 - Distance to 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



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AUSTRALIA
A TETRA TECH COMPANY

Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2009

Site Details

Address:	Lot 148, Natures Edge Estate		
Suburb:	Southern River, 6110	State:	WA
Local Government Area:	City of Gosnells		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	20PER-17493	Report Date:	08/12/2020

Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Class B woodland	Upslope / Flat Land	45 m	BAL - 12.5

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 3959-2009.

Name Daniel Panickar
Eco Logical Australia

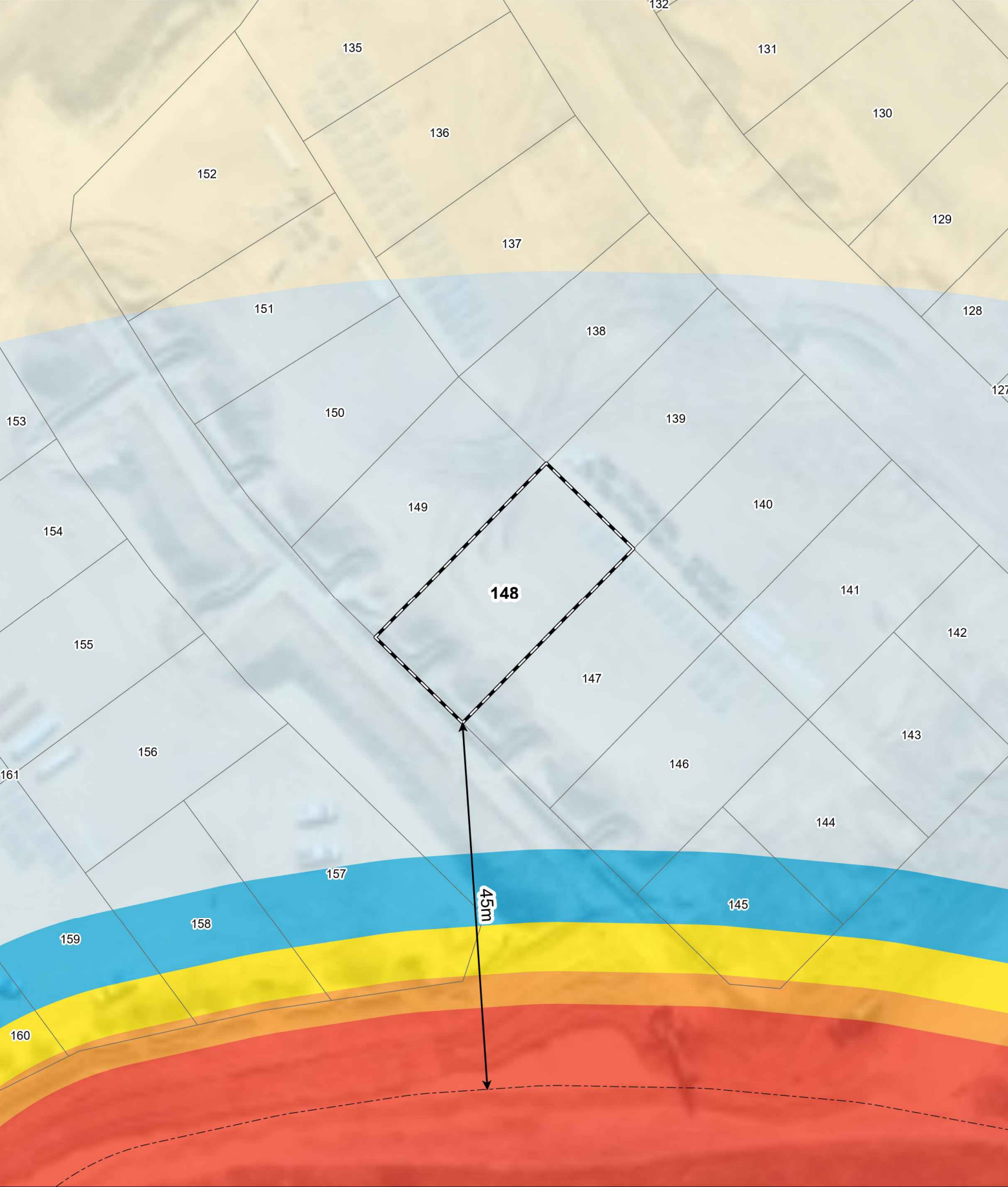
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Certificate Date: 08/12/2020



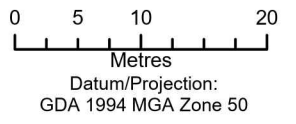
Accreditation No: BPAD 37802
Expiry: December 2021

Bushfire Attack Level (BAL) Contours - Lot 148 (BAL - 12.5)



- Legend**
- 100m site assessment
 - 150m site assessment
 - Lot location
 - Bushfire Hazard Interface
 - Distance to 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 3959-2009

Site Details

Address:	Lot 149, Natures Edge Estate		
Suburb:	Southern River, 6110	State:	WA
Local Government Area:	City of Gosnells		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	20PER-17493	Report Date:	08/12/2020

Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Class B woodland	Upslope / Flat Land	56 m	BAL - 12.5

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 3959-2009.

Name Daniel Panickar
Eco Logical Australia

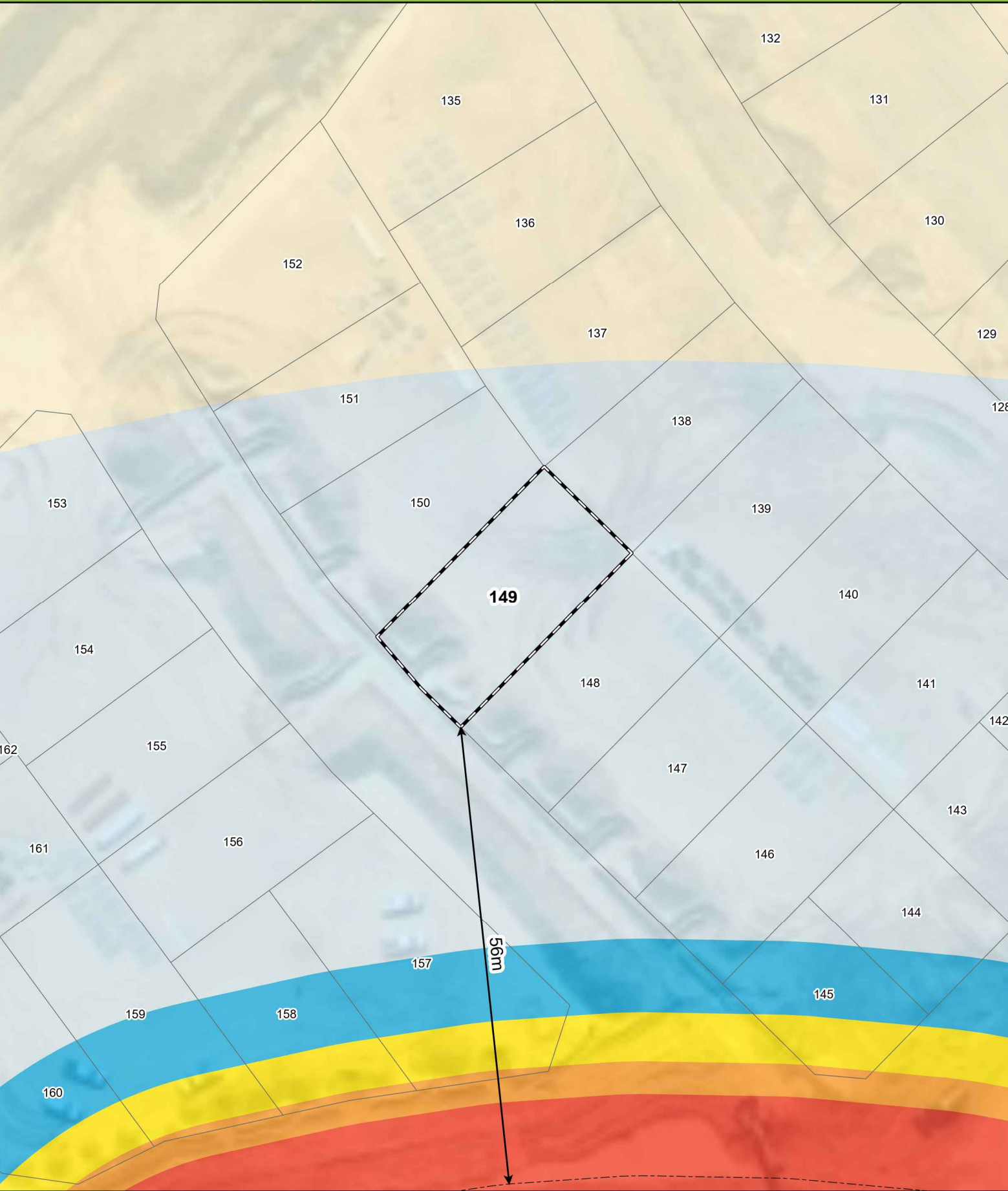
Signature: 

Certificate Date: 08/12/2020



Accreditation No: BPAD 37802
Expiry: December 2021

Bushfire Attack Level (BAL) Contours - Lot 149 (BAL - 12.5)



- Legend**
- 100m site assessment
 - 150m site assessment
 - Lot location
 - Bushfire Hazard Interface
 - Distance to 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

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AUSTRALIA
A TETRA TECH COMPANY

Project: 17493-SM Date: 18/11/2020

Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2009

Site Details

Address:	Lot 150, Natures Edge Estate		
Suburb:	Southern River, 6110	State:	WA
Local Government Area:	City of Gosnells		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	20PER-17493	Report Date:	08/12/2020

Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Class B woodland	Upslope / Flat Land	69 m	BAL - 12.5

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 3959-2009.

Name Daniel Panickar
Eco Logical Australia

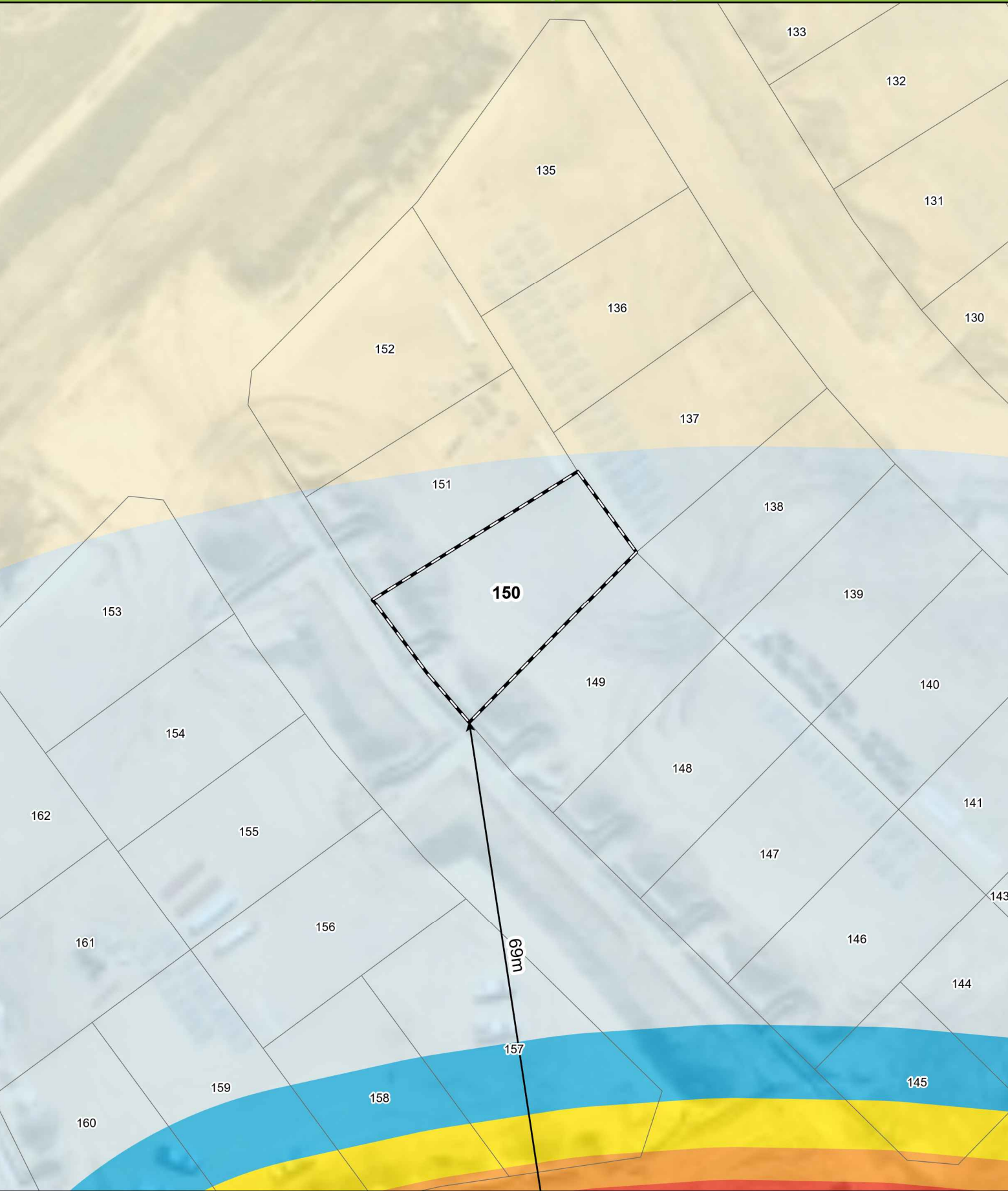
Signature: 

Certificate Date: 08/12/2020



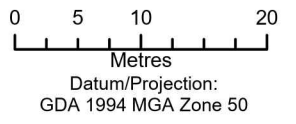
Accreditation No: BPAD 37802
Expiry: December 2021

Bushfire Attack Level (BAL) Contours - Lot 150 (BAL - 12.5)



- Legend**
- 100m site assessment
 - 150m site assessment
 - Lot location
 - Bushfire Hazard Interface
 - Distance to 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 3959-2009

Site Details

Address:	Lot 151, Natures Edge Estate		
Suburb:	Southern River, 6110	State:	WA
Local Government Area:	City of Gosnells		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	20PER-17493	Report Date:	08/12/2020

Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Class B woodland	Upslope / Flat Land	85 m	BAL - 12.5

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 3959-2009.

Name
Daniel Panickar
Eco Logical Australia

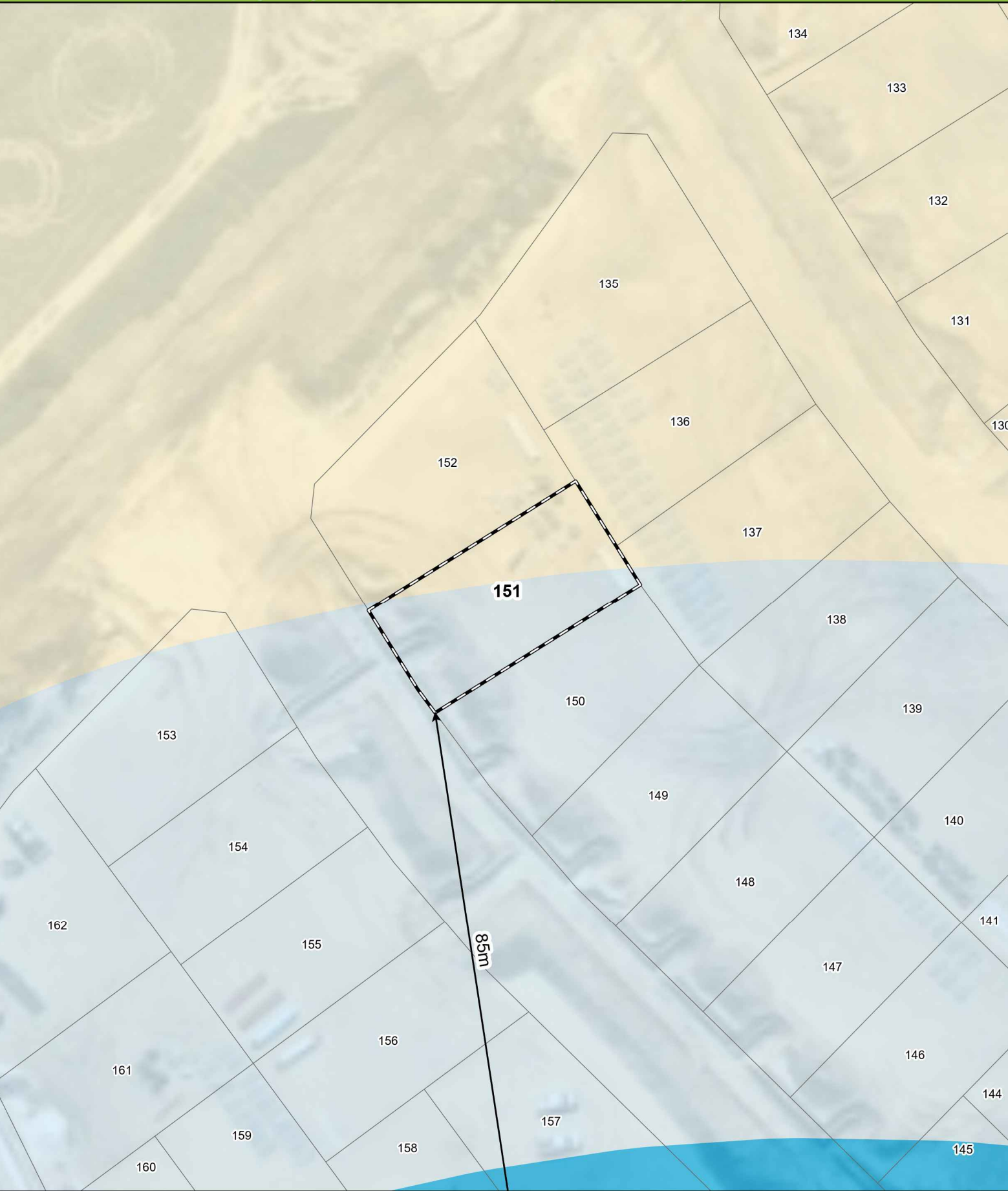
Signature:


Certificate Date:
08/12/2020



Accreditation No: BPAD 37802
Expiry: December 2021

Bushfire Attack Level (BAL) Contours - Lot 151 (*BAL - 12.5)



Legend

- 100m site assessment
- 150m site assessment
- Lot location *Intersects multiple BAL contours
- Bushfire Hazard Interface
- Distance to 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

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A TETRA TECH COMPANY

Project: 17493-SM Date: 18/11/2020

Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2009

Site Details

Address:	Lot 152, Natures Edge Estate		
Suburb:	Southern River, 6110	State:	WA
Local Government Area:	City of Gosnells		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	20PER-17493	Report Date:	08/12/2020

Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Class B woodland	Upslope / Flat Land	99 m	BAL - 12.5

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 3959-2009.

Name Daniel Panickar
Eco Logical Australia

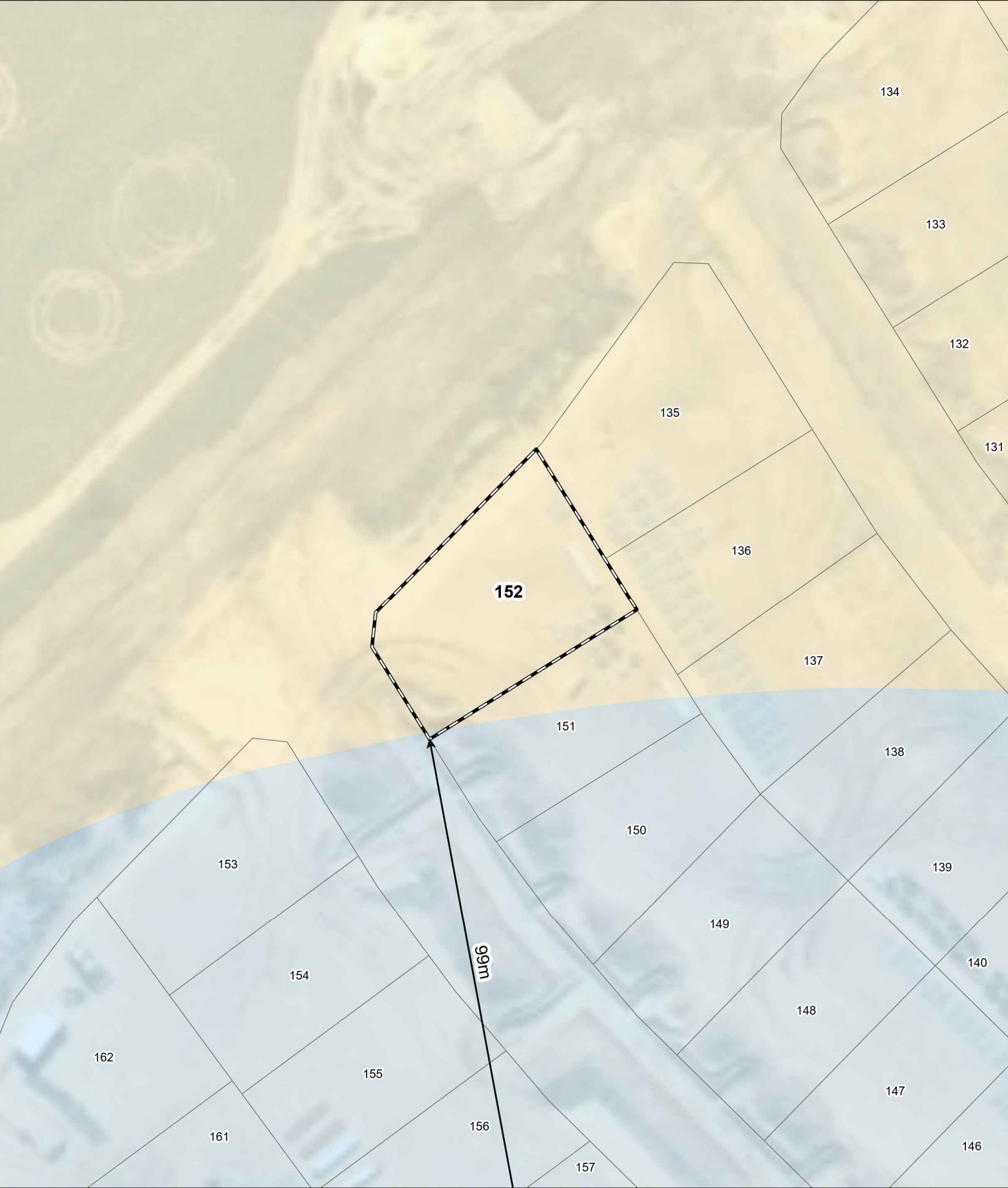
Signature: 

Certificate Date: 08/12/2020



Accreditation No: BPAD 37802
Expiry: December 2021

Bushfire Attack Level (BAL) Contours - Lot 152 (*BAL - 12.5)



Legend

- 100m site assessment
- 150m site assessment
- Lot location *Intersects multiple BAL contours
- Bushfire Hazard Interface
- Distance to 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

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AUSTRALIA
A TETRA TECH COMPANY

Project: 17493-SM Date: 18/11/2020

Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2009

Site Details

Address:	Lot 153, Natures Edge Estate		
Suburb:	Southern River, 6110	State:	WA
Local Government Area:	City of Gosnells		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	20PER-17493	Report Date:	08/12/2020

Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Class B woodland	Upslope / Flat Land	77 m	BAL - 12.5

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 3959-2009.

Name Daniel Panickar
Eco Logical Australia

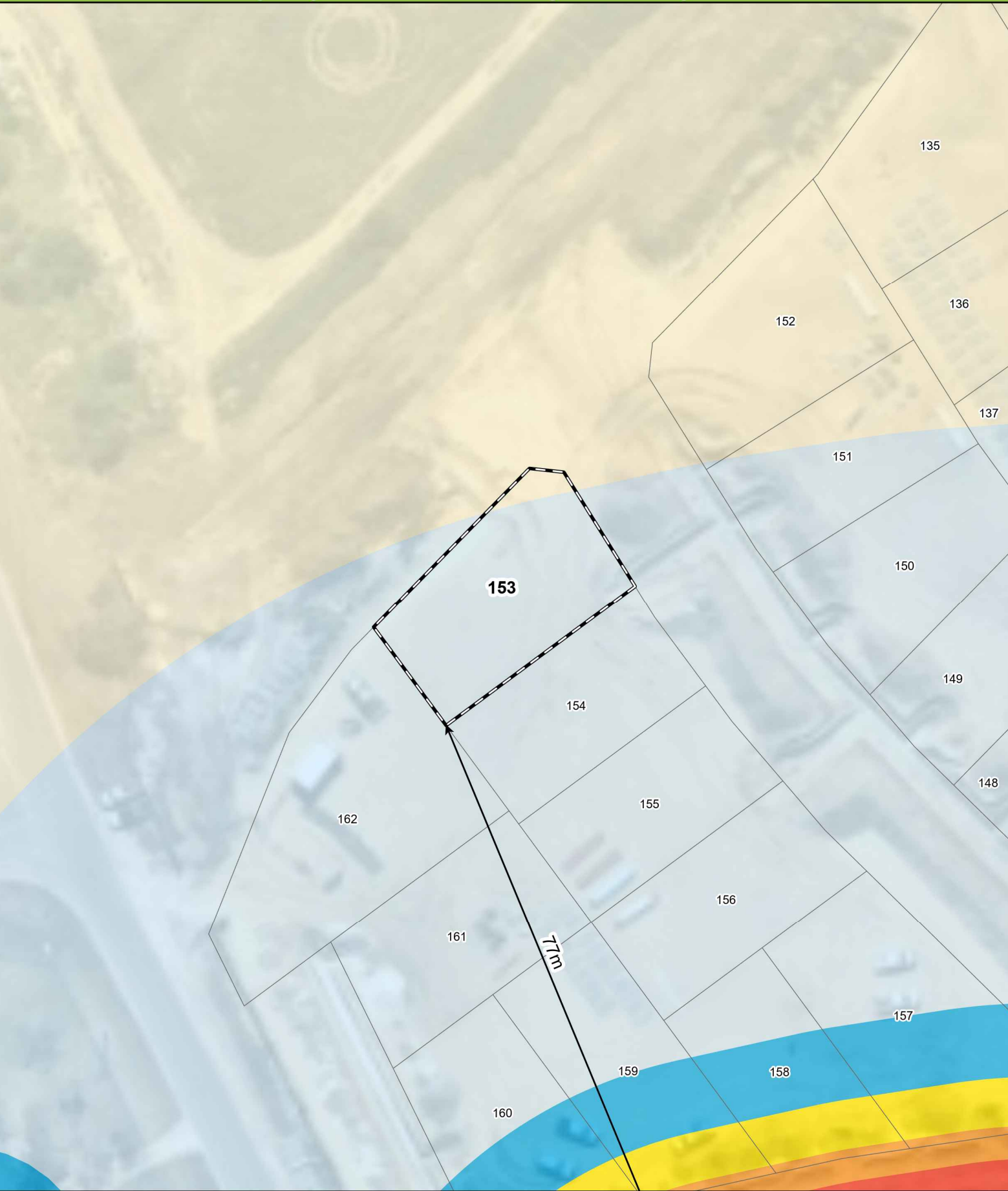
Signature: 

Certificate Date: 08/12/2020



Accreditation No: BPAD 37802
Expiry: December 2021

Bushfire Attack Level (BAL) Contours - Lot 153 (*BAL - 12.5)



Legend

- 100m site assessment
- 150m site assessment
- Lot location *Intersects multiple BAL contours
- Bushfire Hazard Interface
- Distance to 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

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AUSTRALIA
A TETRA TECH COMPANY

Project: 17493-SM Date: 18/11/2020

Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2009

Site Details

Address:	Lot 154, Natures Edge Estate		
Suburb:	Southern River, 6110	State:	WA
Local Government Area:	City of Gosnells		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	20PER-17493	Report Date:	08/12/2020

Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Class B woodland	Upslope / Flat Land	62 m	BAL - 12.5

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 3959-2009.

Name Daniel Panickar
Eco Logical Australia

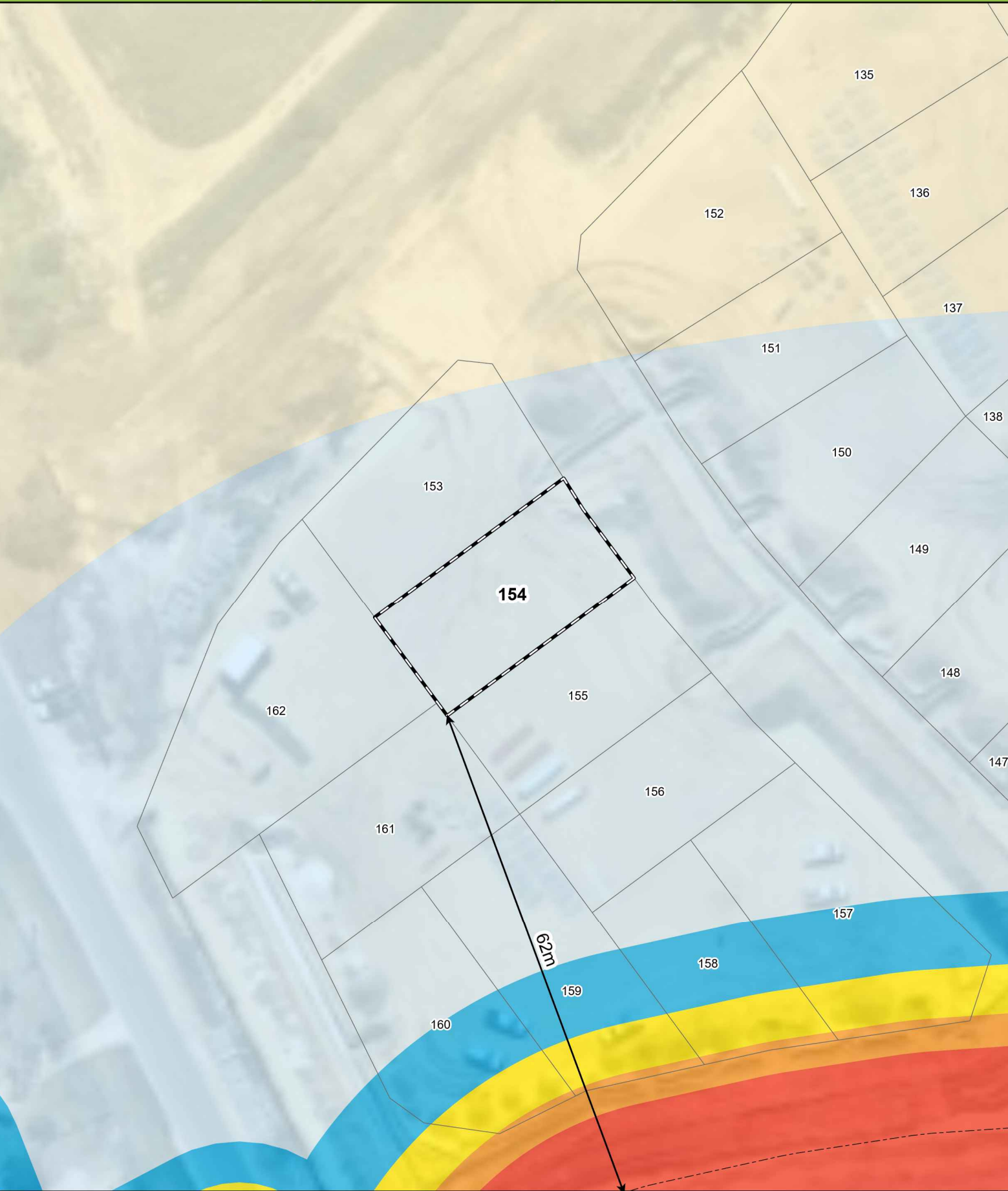
Signature: 

Certificate Date: 08/12/2020



Accreditation No: BPAD 37802
Expiry: December 2021

Bushfire Attack Level (BAL) Contours - Lot 154 (BAL - 12.5)



Legend

- 100m site assessment
- 150m site assessment
- Lot location
- Bushfire Hazard Interface
- Distance to bushfire hazard interface

Bushfire Attack Level (BAL)

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

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Metres
Datum/Projection:
GDA 1994 MGA Zone 50

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A TETRA TECH COMPANY

Project: 17493-SM Date: 18/11/2020

Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2009

Site Details

Address:	Lot 155, Natures Edge Estate		
Suburb:	Southern River, 6110	State:	WA
Local Government Area:	City of Gosnells		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	20PER-17493	Report Date:	08/12/2020

Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Class B woodland	Upslope / Flat Land	48 m	BAL - 12.5

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 3959-2009.

Name Daniel Panickar
Eco Logical Australia

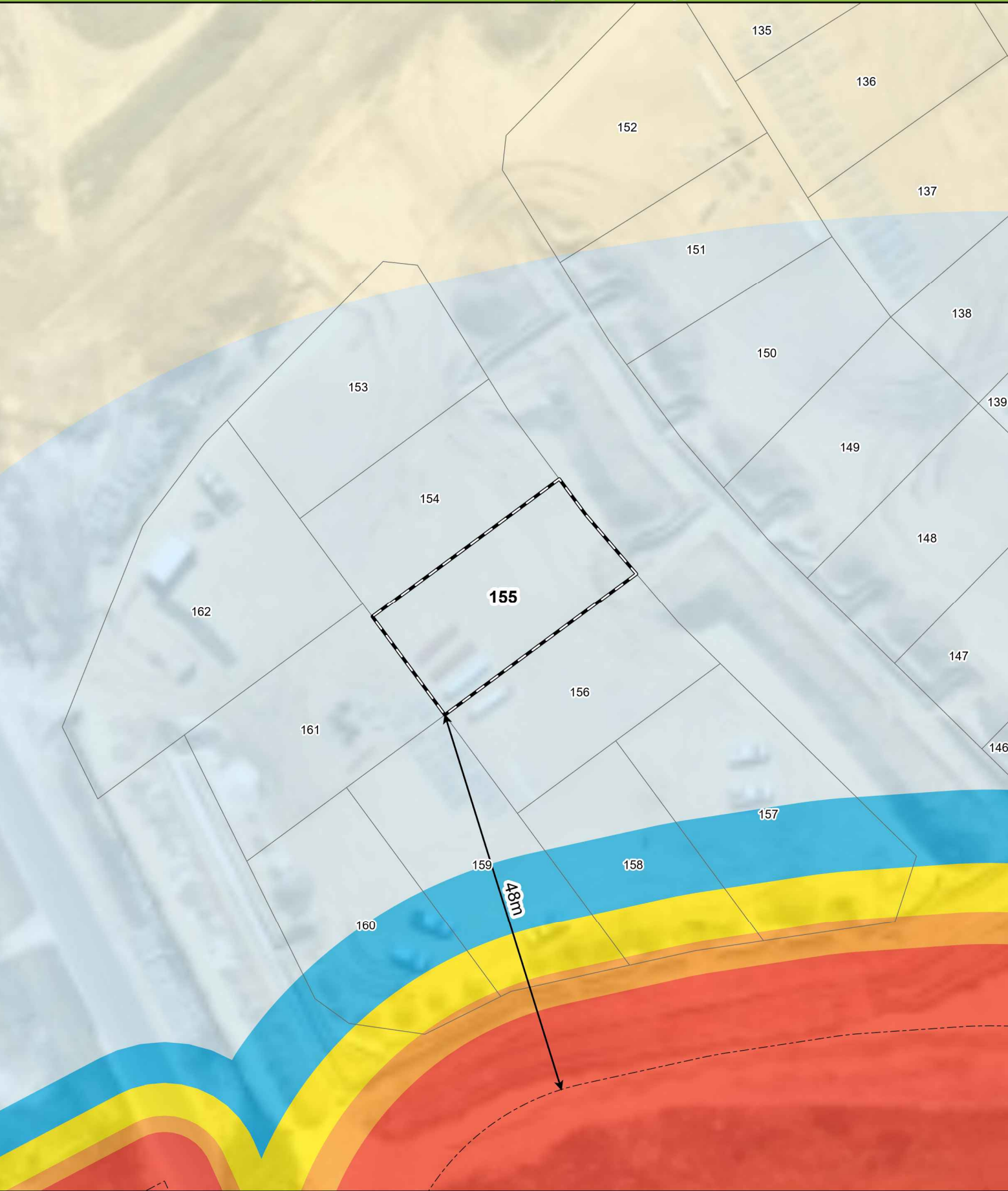
Signature: 

Certificate Date: 08/12/2020



Accreditation No: BPAD 37802
Expiry: December 2021

Bushfire Attack Level (BAL) Contours - Lot 155 (BAL - 12.5)



- Legend**
- 100m site assessment
 - 150m site assessment
 - Lot location
 - Bushfire Hazard Interface
 - Distance to bushfire hazard interface

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



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Metres

Datum/Projection:
GDA 1994 MGA Zone 50

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A TETRA TECH COMPANY

Project: 17493-SM Date: 18/11/2020

Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2009

Site Details

Address:	Lot 156, Natures Edge Estate		
Suburb:	Southern River, 6110	State:	WA
Local Government Area:	City of Gosnells		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	20PER-17493	Report Date:	08/12/2020

Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Class B woodland	Upslope / Flat Land	34 m	BAL - 12.5

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 3959-2009.

Name
Daniel Panickar
Eco Logical Australia

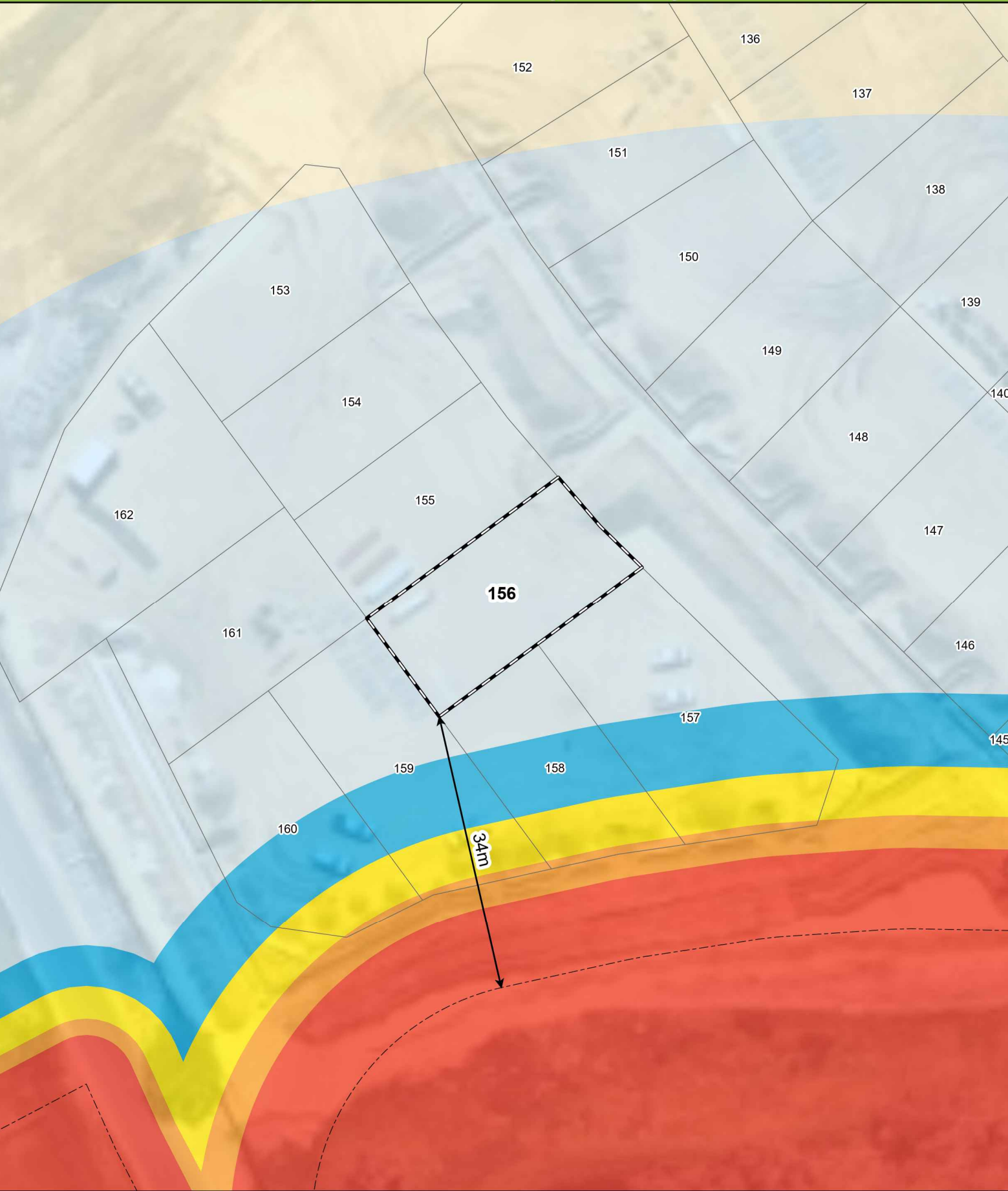
Signature:


Certificate Date:
08/12/2020



Accreditation No: BPAD 37802
Expiry: December 2021

Bushfire Attack Level (BAL) Contours - Lot 156 (BAL - 12.5)



Legend

- 100m site assessment
- 150m site assessment
- Lot location
- Bushfire Hazard Interface
- Distance to 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

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AUSTRALIA
A TETRA TECH COMPANY

Project: 17493-SM Date: 18/11/2020

Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2009

Site Details

Address:	Lot 157, Natures Edge Estate		
Suburb:	Southern River, 6110	State:	WA
Local Government Area:	City of Gosnells		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	20PER-17493	Report Date:	08/12/2020

Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Class B woodland	Upslope / Flat Land	17 m	BAL - 29

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 3959-2009.

Name Daniel Panickar
Eco Logical Australia

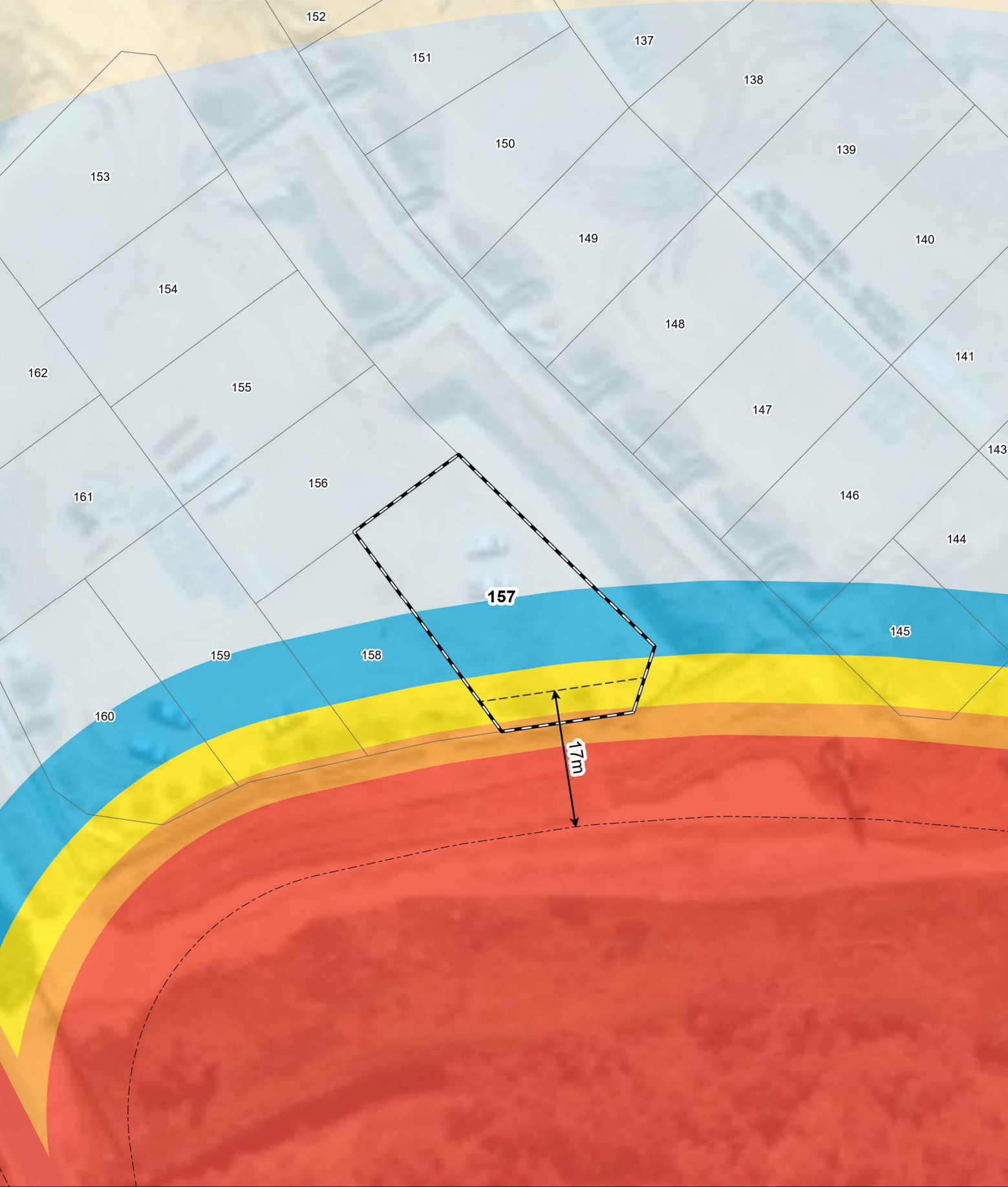
Signature: 

Certificate Date: 08/12/2020



Accreditation No: BPAD 37802
Expiry: December 2021

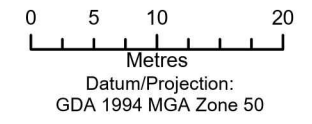
Bushfire Attack Level (BAL) Contours - Lot 157 (*BAL - 29)



- Legend**
- 100m site assessment
 - 150m site assessment
 - Lot location *Intersects multiple BAL contours
 - Lot setback (4m)
 - Bushfire Hazard Interface
 - Distance to 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 3959-2009

Site Details

Address:	Lot 158, Natures Edge Estate		
Suburb:	Southern River, 6110	State:	WA
Local Government Area:	City of Gosnells		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	20PER-17493	Report Date:	08/12/2020

Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Class B woodland	Upslope / Flat Land	17 m	BAL - 29

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 3959-2009.

Name Daniel Panickar
Eco Logical Australia

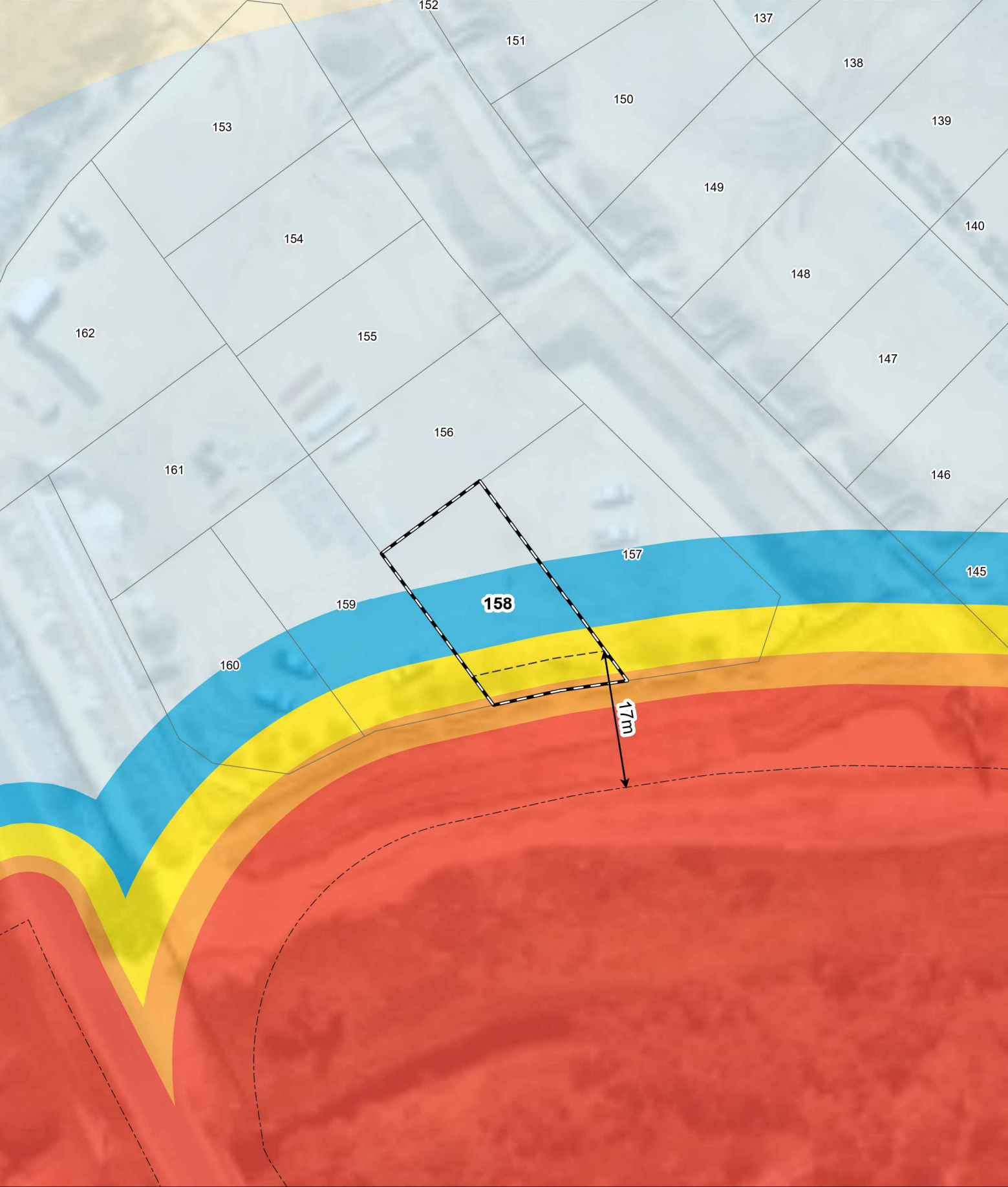
Signature: 

Certificate Date: 08/12/2020



Accreditation No: BPAD 37802
Expiry: December 2021

Bushfire Attack Level (BAL) Contours - Lot 158 (*BAL - 29)



- Legend**
- 100m site assessment
 - 150m site assessment
 - Lot location *Intersects multiple BAL contours
 - Lot setback (4m)
 - Bushfire Hazard Interface
 - Distance to bushfire hazard interface

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



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Metres

Datum/Projection:
GDA 1994 MGA Zone 50

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A TETRA TECH COMPANY

Project: 17493-SM Date: 18/11/2020

Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2009

Site Details

Address:	Lot 159, Natures Edge Estate		
Suburb:	Southern River, 6110	State:	WA
Local Government Area:	City of Gosnells		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	20PER-17493	Report Date:	08/12/2020

Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Class B woodland	Upslope / Flat Land	17 m	BAL - 29

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 3959-2009.

Name
Daniel Panickar
Eco Logical Australia

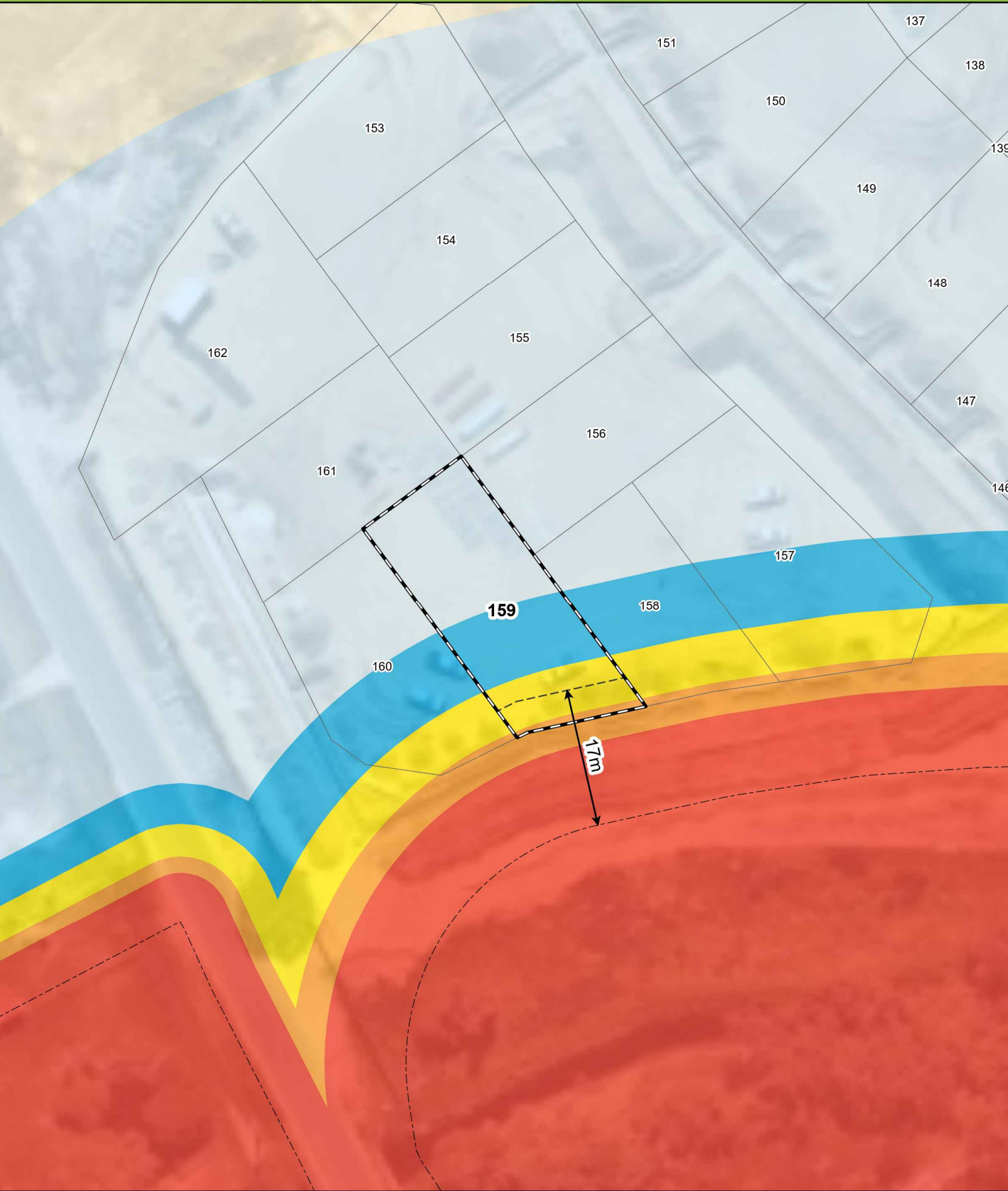
Signature:


Certificate Date:
08/12/2020



Accreditation No: BPAD 37802
Expiry: December 2021

Bushfire Attack Level (BAL) Contours - Lot 159 (*BAL - 29)



- Legend**
- 100m site assessment
 - 150m site assessment
 - Lot location *Intersects multiple BAL contours
 - Lot setback (4m)
 - Bushfire Hazard Interface
 - Distance to bushfire hazard interface

Bushfire Attack Level (BAL)

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



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Metres
Datum/Projection:
GDA 1994 MGA Zone 50

Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2009

Site Details

Address:	Lot 160, Natures Edge Estate		
Suburb:	Southern River, 6110	State:	WA
Local Government Area:	City of Gosnells		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	20PER-17493	Report Date:	08/12/2020

Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Class B woodland	Upslope / Flat Land	17 m	BAL - 29

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 3959-2009.

Name Daniel Panickar
Eco Logical Australia

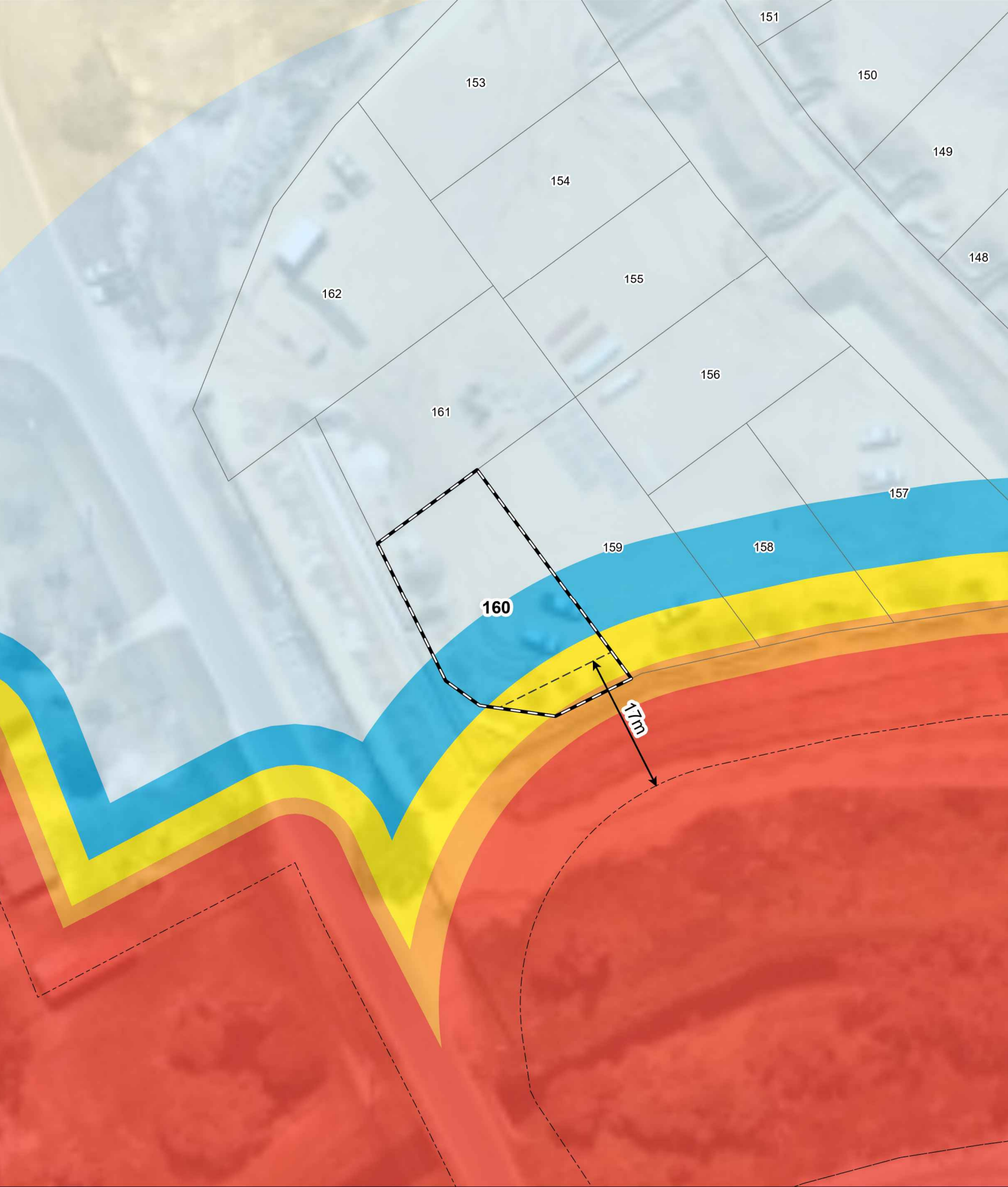
Signature: 

Certificate Date: 08/12/2020



Accreditation No: BPAD 37802
Expiry: December 2021

Bushfire Attack Level (BAL) Contours - Lot 160 (*BAL - 29)



- Legend**
- 100m site assessment
 - 150m site assessment
 - Lot location *Intersects multiple BAL contours
 - Lot setback (4m)
 - Bushfire Hazard Interface
 - Distance to 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

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AUSTRALIA
A TETRA TECH COMPANY

Project: 17493-SM Date: 18/11/2020

Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2009

Site Details

Address:	Lot 161, Natures Edge Estate		
Suburb:	Southern River, 6110	State:	WA
Local Government Area:	City of Gosnells		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	20PER-17493	Report Date:	08/12/2020

Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Class G grassland	Upslope / Flat Land	40 m	BAL - 12.5

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 3959-2009.

Name
Daniel Panickar
Eco Logical Australia

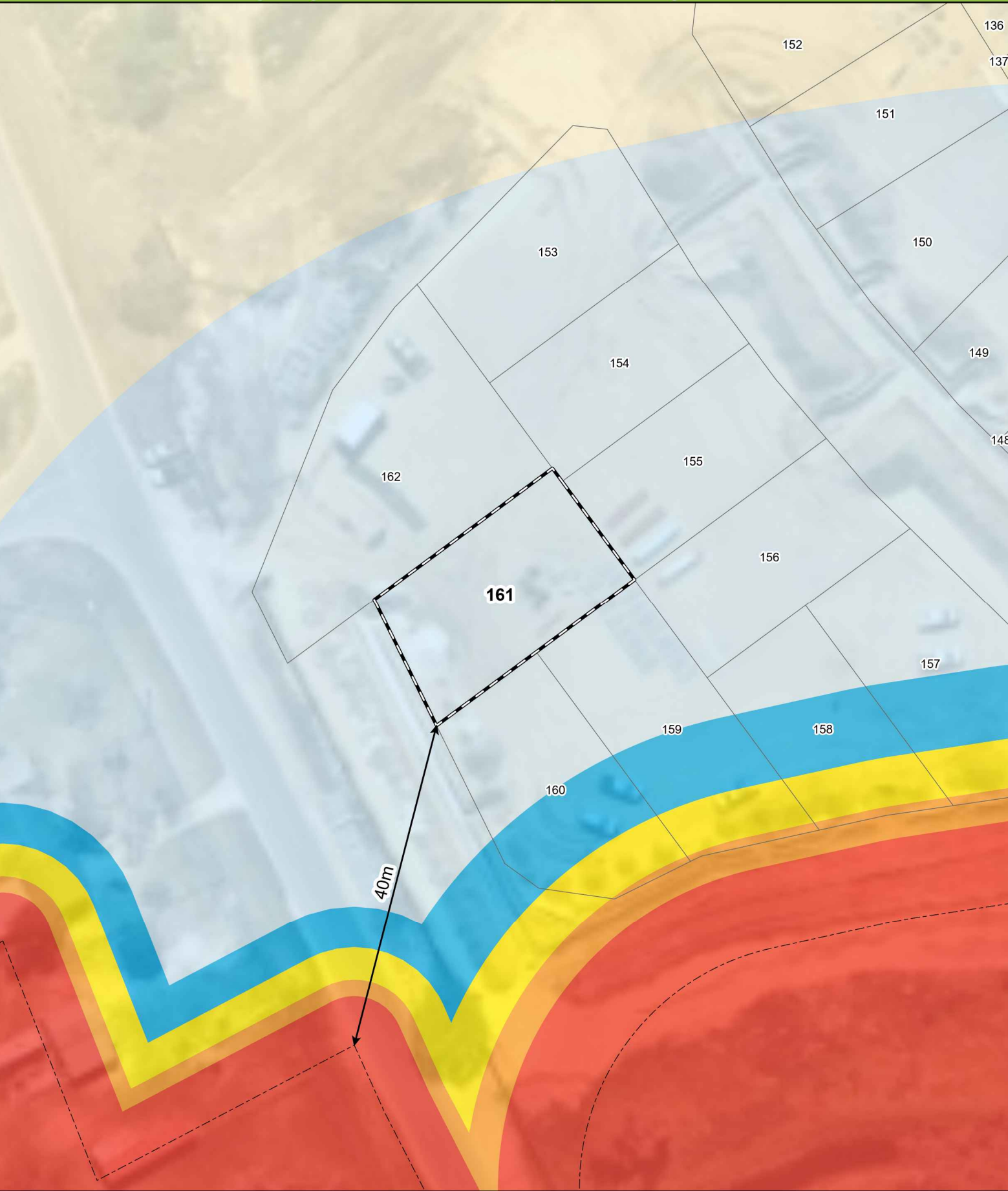
Signature:


Certificate Date:
08/12/2020



Accreditation No: BPAD 37802
Expiry: December 2021

Bushfire Attack Level (BAL) Contours - Lot 161 (BAL - 12.5)



- Legend**
- 100m site assessment
 - 150m site assessment
 - Lot location
 - Bushfire Hazard Interface
 - Distance to 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

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AUSTRALIA
A TETRA TECH COMPANY

Project: 17493-SM Date: 18/11/2020

Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2009

Site Details

Address:	Lot 162, Natures Edge Estate		
Suburb:	Southern River, 6110	State:	WA
Local Government Area:	City of Gosnells		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	20PER-17493	Report Date:	08/12/2020

Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Class G grassland	Upslope / Flat Land	48 m	BAL - 12.5

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 3959-2009.

Name Daniel Panickar
Eco Logical Australia

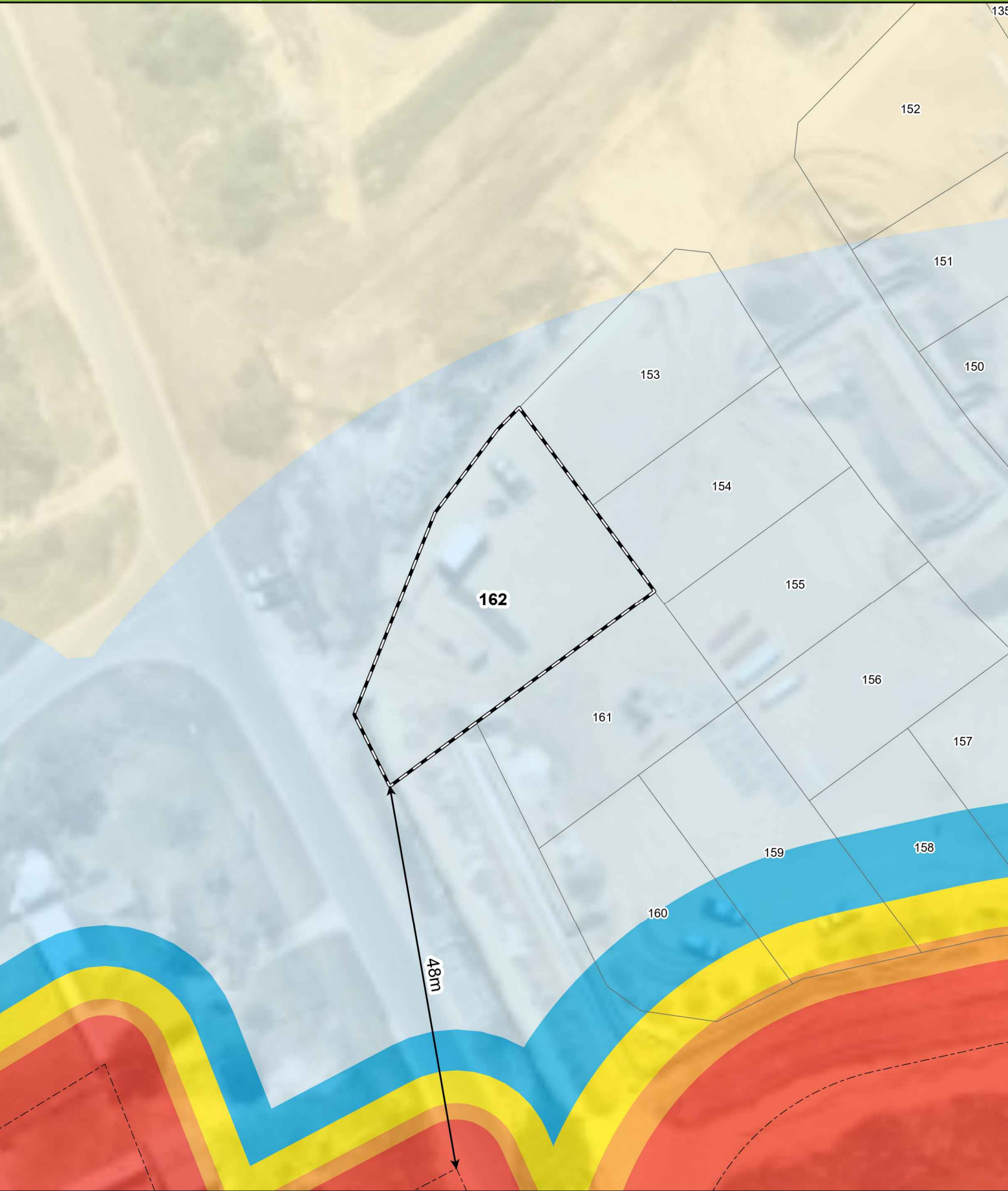
Signature: 

Certificate Date: 08/12/2020



Accreditation No: BPAD 37802
Expiry: December 2021

Bushfire Attack Level (BAL) Contours - Lot 162 (BAL - 12.5)



Legend

- 100m site assessment
- 150m site assessment
- Lot location
- Bushfire Hazard Interface
- Distance to 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

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AUSTRALIA
A TETRA TECH COMPANY

Project: 17493-SM Date: 18/11/2020