Officer: Senior Planner - Vanessa
Direct Telephone: 07 4189 9100
Our Reference: MCU24/0042

SOUTH BURNETT REGIONAL COUNCIL

South Burnett Regional Council
ABN 89 972 463 351
PO Box 336
Kingaroy QLD 4610
1300 789 279 or (07) 4189 9100
(07) 4162 4806
info@southburnett.qld.gov.au
www.southburnett.qld.gov.au

28 July 2025

Hans Nekeman
C/- Insite SJC
PO Box 1688
BUNDABERG QLD 4670

Dear Sir

Decision Notice
Planning Act 2016

I refer to your application and advise that on 24 July 2025, Council's delegated authority decided to approve the application in full subject to conditions.

Details of the decision are as follows:

APPLICATION DETAILS

Application No:	MCU24/0042
Street Address:	33 Mt Hope Road BOOIE QLD 4610
Real Property Description:	Lot 1 on RP99103
Planning Scheme:	South Burnett Regional Council

DECISION DETAILS

Type of Decision:	Approval
Type of Approval:	Development Permit for Material Change of Use (Dual Occupancy)
Date of Decision:	24 July 2025

CURRENCY PERIOD OF APPROVAL

The currency period for this development approval is six (6) years starting the day that this development approval takes effect. (Refer to Section 85 "Lapsing of approval at end of currency period" of the *Planning Act 2016*.)

INFRASTRUCTURE

Where conditions relate to the provision of infrastructure, these are non-trunk infrastructure conditions unless specifically nominated as a "***necessary infrastructure condition***" for the provision of trunk infrastructure as defined under Chapter 4 of the *Planning Act 2016*.

ASSESSMENT MANAGER CONDITIONS

GENERAL

GEN1. The development must be completed and maintained in accordance with the approved plans and documents and conditions to this development approval:

Approved Plans

Drawing No.	Drawing Title	Prepared By	Rev	Date
A001	Existing Site Plan	New Man Design & Draft	1C	05/03/2025
A002	Proposed Site Plan	New Man Design & Draft	1C	05/03/2025
A004	Elevations Plan	New Man Design & Draft	1C	05/03/2025
A005	Elevations Plan	New Man Design & Draft	1C	05/03/2025
A003	Proposed Floor Plan	New Man Design & Draft	1B	24/10/2024
–	Proposed New Dwelling For K. Lee At Lot 1 (RP 99105) Mount Hope Road	–	–	–

Approved Document

Drawing No.	Drawing Title	Prepared By	Rev	Date
J002438	Bushfire Management Report	Range Environmental Consultants	-	23/06/2025

GEN2. The development herein approved may not start until the following development permits have been issued and complied with as required:

- Development Permit for Building Works; and
- Permit for Plumbing and Drainage Works.

APPROVED USE

GEN3. The use of the premises is limited to a Dual occupancy (2 x 3-bedrooms) consistent with the definition of Dual occupancy in Schedule 1 of the South Burnett Regional Council Planning Scheme 2017 V2.0. This approval does not imply approval for other similar uses (e.g. Short term accommodation).

Timing: At all times.

DEVELOPMENT PERIOD – MCU

GEN4. The *relevant period* for this development approval for a Material change of use is six (6) years after the development approval starts to have affect. The development approval will lapse unless otherwise agreed.

COMPLIANCE

GEN5. All conditions of the approval shall be complied with before the change occurs (prior to commencement of the use) and while the use continues, unless otherwise noted within these conditions.

BUSHFIRE MANAGEMENT – GENERAL

MCU1. The development must be carried out in accordance with Section 5 of the Bushfire Management Report listed within this Development Approval.

BUSHFIRE MANAGEMENT – SUPPLY OF WATER

MCU2. Provide a minimum 10,000 litre static water tank designated solely for fire-fighting purposes

with firefighting fittings and a hardstand area for access within 6m of the water tank. This is to be located within 100m of the dwelling house and either below ground or made of non-combustible materials. Access to the water supply (i.e. road/track) must be readily identifiable for emergency services from the street frontage via a property ID number or street number signage.

DWELLING DEVELOPMENT

MCU3. Each dwelling unit is to be provided with external clothes drying facilities within the nominated open private space areas.

MCU4. A letter box shall be provided on the Booie Crawford Road's alignment for each habitable Dwelling unit. Each box shall be distinguished with a number corresponding with the dwelling unit number.

MCU5. Each dwelling unit is to be readily identified by number.

ENGINEERING WORKS

ENG1. Complete all works approved and works required by conditions of this development approval and/or any related approvals at no cost to Council, prior to commencement of the use unless stated otherwise.

ENG2. Be responsible for the full cost of any alterations necessary to electricity, telephone, water mains, sewer mains, stormwater drainage systems or easements and/or other public utility installations resulting from the development or from road and drainage works required in connection with the development.

LOCATION, PROTECTION AND REPAIR OF DAMAGE TO COUNCIL AND PUBLIC UTILITY SERVICES INFRASTRUCTURE AND ASSETS

ENG3. Be responsible for the location and protection of any Council and public utility services infrastructure and assets that may be impacted on during construction of the development.

ENG4. Repair all damages incurred to Council and public utility services infrastructure and assets, as a result of the proposed development immediately should hazards exist for public health and safety or vehicular safety. Otherwise, repair all damages immediately upon completion of works associated with the development.

STORMWATER MANAGEMENT

ENG5. Provide overland flow paths that do not adversely alter the characteristics of existing overland flows on other properties or that create an increase in flood damage on other properties.

ENG6. Ensure that adjoining properties and roadways are protected from ponding or nuisance from stormwater as a result of any site works undertaken as part of the proposed development.

VEHICLE ACCESS

ENG7. Construct a vehicle access onto the Booie-Crawford Road in accordance with Council's Standard Drawing No. 00049 Rev B, in the location shown on the approved plan.

ENG8. The existing access on Mount Hope Road shall be removed and the verge reinstated, the existing gate removed and permanently fenced.

ELECTRICITY AND TELECOMMUNICATION

ENG9. Connect the development to electricity and telecommunication services.

EROSION AND SEDIMENT CONTROL - GENERAL

ENG10. Ensure that all reasonable actions are taken to prevent sediment or sediment laden water from being transported to adjoining properties, roads and/or stormwater drainage systems.

REFERRAL AGENCIES

Not Applicable.

APPROVED PLANS

The following plans are Approved plans for the development:

Approved Plans

Plan No.	Rev.	Plan Name	Date
A001	1C	*Existing Site Plan*, prepared by Newman Design & Draft.	05/03/2025
A002	1C	*Proposed Site Plan*, prepared by Newman Design & Draft.	05/03/2025
A004	1C	*Elevations Plan,* prepared by Newman Design & Draft.	05/03/2025
A005	1C	*Elevations Plan,* prepared by Newman Design & Draft.	05/03/2025
A003	1B	*Proposed Floor Plan,* prepared by Newman Design & Draft.	24/10/2024
-	-	*Proposed New Dwelling For K. Lee at Lot 1 (RP 99103) Mount Hope Road.*	-

REFERENCED DOCUMENTS

The following documents are referenced in the assessment manager conditions:

Referenced Documents

Document No.	Rev.	Document Name	Date
J002438	-	*Bushfire Management Report*, prepared by Range Environmental Consultants.	23/06/2025

ADVISORY NOTES

The following notes are included for guidance and information purposes only and do not form part of the assessment manager conditions:

STANDARD ADVICE

ADV1. Infrastructure charges are now levied by way of an infrastructure charges notice, issued pursuant to section 119 of the *Planning Act 2016*.

ADV2. Council is offering a reduction in infrastructure charges payable through the development incentive scheme which is available between 1 December 2020 and 31

December 2027. Eligible development under this scheme is required to be completed by 31 December 2027.

For further information or application form please refer to the rules and procedures available on Council's website.

ADV3. Section 85 (1)(a) of the *Planning Act 2016* provides that, if this approval is not acted upon within the period of six (6) years the approval will lapse.

ADV4. This development approval does not authorise any activity that may harm Aboriginal Cultural Heritage. Under the *Aboriginal Cultural Heritage Act 2003* you have a duty of care in relation to such heritage. Section 23(1) provides that *"A person who carries out an activity must take all reasonable and practicable measures to ensure the activity does not harm Aboriginal Cultural Heritage."* Council does not warrant that the approved development avoids affecting Aboriginal Cultural Heritage. It may therefore, be prudent for you to carry out searches, consultation, or a Cultural Heritage assessment to ascertain the presence or otherwise of Aboriginal Cultural Heritage. The Act and the associated duty of care guidelines explain your obligations in more detail and should be consulted before proceeding. A search can be arranged by visiting https://www.datsip.qld.gov.au and filling out the Aboriginal and Torres Strait Islander Cultural Heritage Search Request Form.

ADV5. Attached for your information is a copy of Chapter 6 of the *Planning Act 2016* as regards Appeal Rights.

PROPERTY NOTES

Not Applicable.

VARIATION APPROVAL

Not Applicable.

FURTHER DEVELOPMENT PERMITS REQUIRED

- Development Permit for Building Work
- Development Permit for Plumbing & Drainage Works

SUBMISSIONS

Not Applicable.

RIGHTS OF APPEAL

You are entitled to appeal against this decision. A copy of the relevant appeal provisions from the *Planning Act 2016* is attached.

During the appeal period, you as the applicant may suspend your appeal period and make written representations to council about the conditions contained within the development approval. If council agrees or agrees in part with the representations, a "negotiated decision notice" will be issued. Only one "negotiated decision notice" may be given. Taking this step will defer your appeal period, which will commence again from the start the day after you receive a "negotiated decision notice".

OTHER DETAILS

If you wish to obtain more information about Council's decision, electronic copies are available on line at www.southburnett.qld.gov.au, or at Council Offices.

Yours faithfully

DAVID HURSTHOUSE
COORDINATOR DEVELOPMENT SERVICES

Enc: Adopted Infrastructure Charge Notice
Approved Plans/Documents
Appeal Rights

INFRASTRUCTURE CHARGES NOTICE

(Section 119 of the Planning Act 2016)

APPLICANT:	Hans Nekeman C/- Insite SJC PO Box 1688 BUNDABERG QLD 4670
APPLICATION:	Material Change of Use - Dwelling House (Secondary Dwelling) - Code Assessment Other Change made during the Assessment Process for Dual Occupancy
DATE:	28/07/2025
FILE REFERENCE:	MCU24/0042

AMOUNT OF THE LEVIED CHARGE: **$4,419.00** **Total**

(Details of how these charges were calculated are shown overleaf)

$0.00	Water Supply Network
$0.00	Sewerage Network
$2,410.00	Transport Network
$2,009.00	Parks and Land for Community Facilities Network
$0.00	Stormwater Network

AUTOMATIC INCREASE OF LEVIED CHARGE: The amount of the levied charge is subject to an automatic increase. Refer to the Information Notice attached to this notice for more information on how the increase is worked out.

LAND TO WHICH CHARGE APPLIES: Lot 1 on RP99103

SITE ADDRESS: 33 Mt Hope Rd, Booie

PAYABLE TO: **South Burnett Regional Council**

WHEN PAYABLE: Material Change of Use – When the change happens.

(In accordance with the timing stated in Section 122 of the Planning Act 2016)

OFFSET OR REFUND: Not Applicable.

This charge is made in accordance with South Burnett Regional Council's ***Charges Resolution (No. 3) 2019***

DETAILS OF CALCULATION

Water Supply

Adopted Charges

Development Description	Number of Units	Units of Measure	Charge Rate	Reference	Amount
Not Applicable	-	-	$0.00	-	$0.00

Discounts*

Description	Number of Units	Units of Measure	Discount Rate	Reference	Amount
Not Applicable	-	-	$0.00	-	$0.00

Sewerage

Adopted Charges

Development Description	Number of Units	Units of Measure	Charge Rate	Reference	Amount
Not Applicable	-	-	$0.00	-	$0.00

Discounts*

Description	Number of Units	Units of Measure	Discount Rate	Reference	Amount
Not Applicable	-	-	$0.00	-	$0.00

Transport

Adopted Charges

Development Description	Number of Units	Units of Measure	Charge Rate	Reference	Amount
Residential Use (3 or more bed)	1	Dwelling	$2,410.00	CR Table 2.1	$2,410.00

Discounts*

Description	Number of Units	Units of Measure	Discount Rate	Reference	Amount
Not Applicable	-	-	$0.00	-	$0.00

Parks and Land for Community Facilities

Adopted Charges

Development Description	Number of Units	Units of Measure	Charge Rate	Reference	Amount
Residential Use (3 or more bed)	1	Dwelling	$2,410.00	CR Table 2.1	$2,009.00

Discounts*

Description	Number of Units	Units of Measure	Discount Rate	Reference	Amount
Not Applicable	-	-	$0.00	-	$0.00

Stormwater

Adopted Charges

Development Description	Number of Units	Units of Measure	Charge Rate	Reference	Amount
Not Applicable	-	-	$0.00	-	$0.00

Discounts*

Description	Number of Units	Units of Measure	Discount Rate	Reference	Amount
Not Applicable	-	-	$0.00	-	$0.00

Levied Charges

Development Description	Water Supply	Sewerage	Transport	Parks & Land for Community Facilities	Stormwater	Total
Residential Use (3 or more bed)	$0.00	$0.00	$2,410.00	$2,009.00	$0.00	$4,419.00
Total	**$0.00**	**$0.00**	**$2,410.00**	**$2,009.00**	**$0.00**	**$4,419.00**

** In accordance with Section 3.3 of the Charges Resolution, the discount may not exceed the adopted charge. Any surplus discounts will not be refunded, except at South Burnett Regional Council's discretion.*

INFORMATION NOTICE

Authority and Reasons for Charge	This Infrastructure Charges Notice has been given in accordance with section 119 of the *Planning Act 2016* to support the Local government's long-term infrastructure planning and financial sustainability.
Appeals	Pursuant to section 229 and Schedule 1 of the *Planning Act 2016* a person may appeal an Infrastructure Charges Notice. Attached is an extract from the *Planning Act 2016* that details your appeal rights.
Automatic Increase Provision of charge rate ($)	An infrastructure charge levied by South Burnett Regional Council is to be increased by the difference between the Producer Price Index (PPI) applicable at the time the infrastructure charge was levied, and PPI applicable at the time of payment of the levied charge, adjusted by reference to the 3-yearly PPI average[1]. If the levied charge is increased using the method described above, the charge payable is the amount equal to the sum of the charge as levied and the amount of the increase. However, the sum of the charge as levied and the amount of the increase is not to exceed the maximum adopted charge the Authority could have levied for the development at the time the charge is paid.
GST	The Federal Government has determined that contributions made by developers to Government for infrastructure and services under the *Planning Act* 2016 are GST exempt.
Making a Payment	This Infrastructure Charges Notice cannot be used to pay your infrastructure charges. To pay the levied charge, you must request an Itemised Breakdown showing the total levied charge payable at the time of payment. An Itemised Breakdown must be presented at the time of payment. An Itemised Breakdown may be requested by emailing info@southburnett.qld.gov.au

[1] 3-yearly PPI average is defined in section 114 of the *Planning Act 2016* and means the PPI adjusted according to the 3-year moving average quarterly percentage change between financial quarters. PPI Index is the producer price index for construction 6427.0 (ABS PPI) index number 3101 – Road and Bridge construction index for Queensland published by the Australian Bureau of Statistics.

Payment can be made at any of the following South Burnett Regional Council Offices:

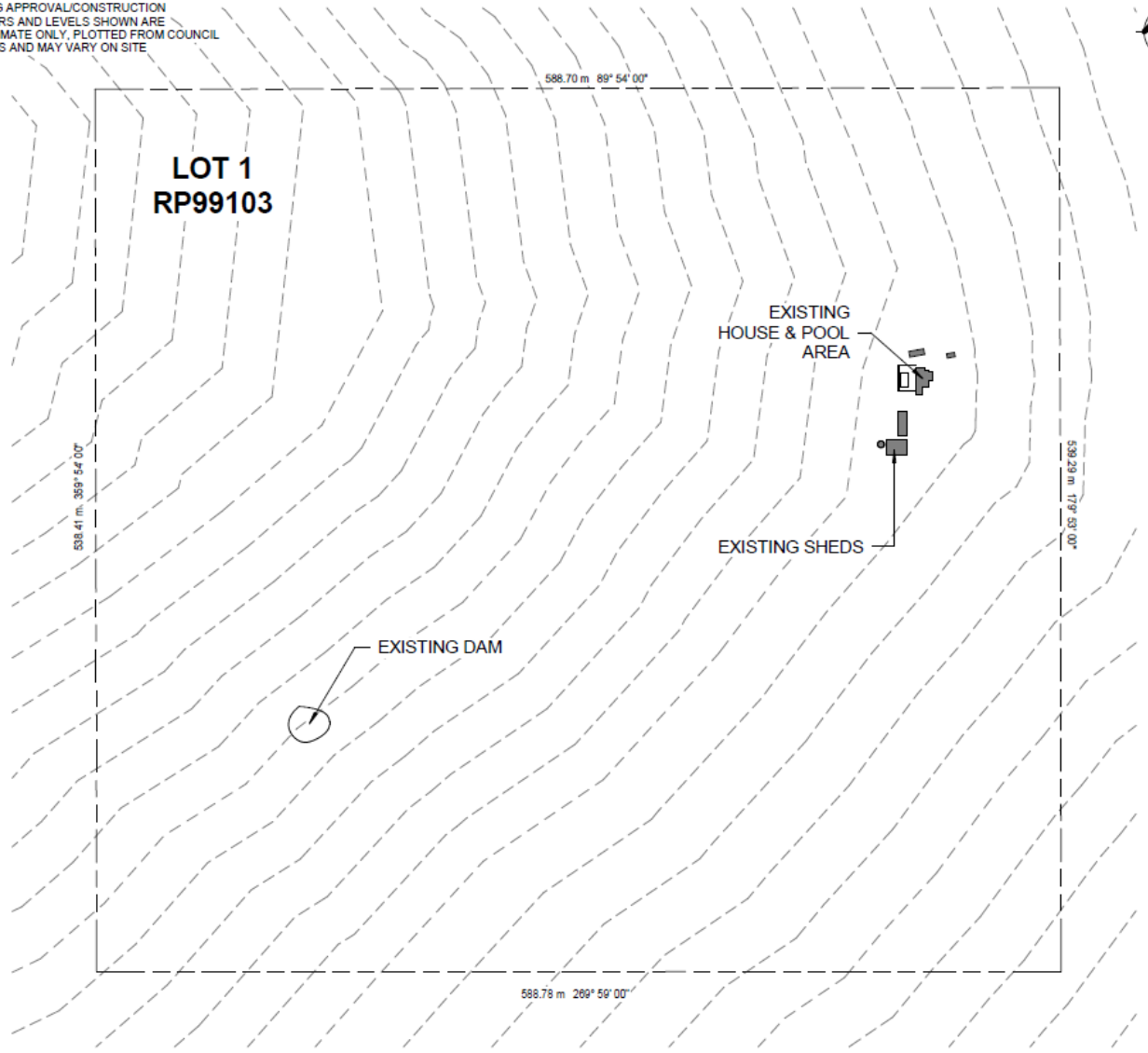
- 69 Hart Street, Blackbutt, 4314;
- 45 Glendon Street, Kingaroy, 4610;
- 42 Stephens Street West, Murgon, 4605;
- 48 Drayton Street, Nanango, 4615;
- McKenzie Street, Wondai, 4606; or
- via other methods identified on the Itemised Breakdown.

Enquiries

Enquiries regarding this Infrastructure Charges Notice should be directed to the SOUTH BURNETT REGIONAL COUNCIL, Department of Finance & Liveability, during office hours, Monday to Friday by phoning (07) 4189 9100 or email at info@sbrc.qld.gov.au

NOTES: GENERAL

1. BUILDING SETBACKS SHOWN ARE TO BE CONFIRMED ON SITE BY SURVEYOR PRIOR TO BUILDING APPROVAL/CONSTRUCTION
2. CONTOURS AND LEVELS SHOWN ARE APPROXIMATE ONLY, PLOTTED FROM COUNCIL RECORDS AND MAY VARY ON SITE



1 EXISTING SITE PLAN
1 : 2500

NEWMAN
DESIGN & DRAFTING

M: 0422 782 315
E: tom@newmandesignanddrafting.com.au
W: www.newmandesignanddrafting.com.au

ISSUE	DESCRIPTION	DATE
1C	CONCEPTUAL PLANS	05-03-2025

BUILDER:

PROJECT:
NEW RESIDENCE

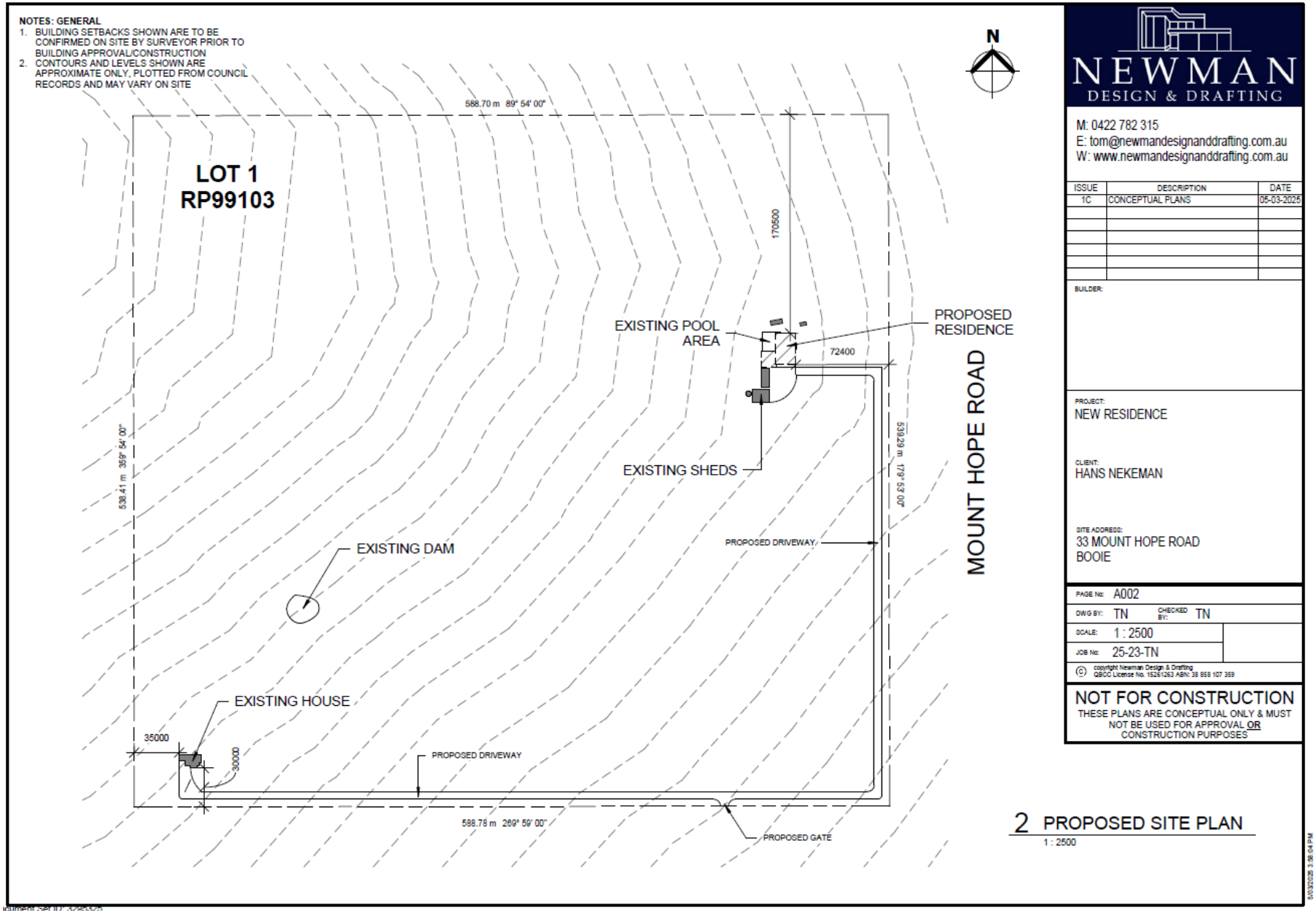
CLIENT:
HANS NEKEMAN

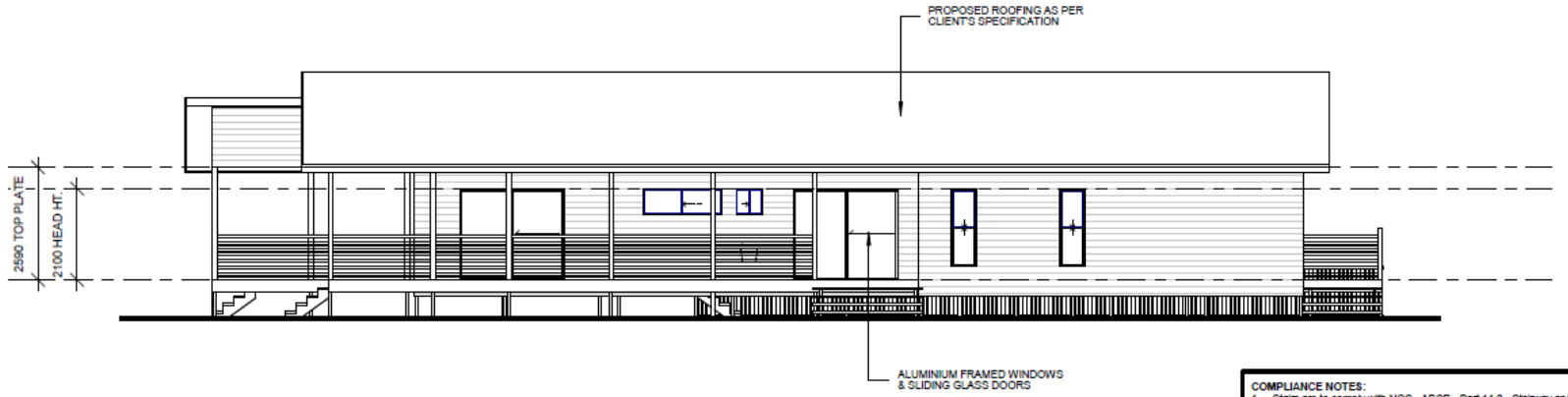
SITE ADDRESS:
33 MOUNT HOPE ROAD
BOOIE

PAGE No:	A001		
DWG BY:	TN	CHECKED BY:	TN
SCALE:	1 : 2500		
JOB No:	25-23-TN		

NOT FOR CONSTRUCTION
THESE PLANS ARE CONCEPTUAL ONLY & MUST NOT BE USED FOR APPROVAL OR CONSTRUCTION PURPOSES

5/03/2025 3:36:04 PM


NOTES: GENERAL
1. BUILDING SETBACKS SHOWN ARE TO BE CONFIRMED ON SITE BY SURVEYOR PRIOR TO BUILDING APPROVAL/CONSTRUCTION
2. CONTOURS AND LEVELS SHOWN ARE APPROXIMATE ONLY, PLOTTED FROM COUNCIL RECORDS AND MAY VARY ON SITE
N
588.70 m 89° 54' 00"
LOT 1
RP99103
170500
EXISTING POOL AREA
PROPOSED RESIDENCE
72400
MOUNT HOPE ROAD
538.41 m 359° 54' 00"
539.29 m 179° 53' 00"
EXISTING SHEDS
EXISTING DAM
PROPOSED DRIVEWAY
EXISTING HOUSE
35000
30000
PROPOSED DRIVEWAY
588.78 m 269° 59' 00"
PROPOSED GATE
NEWMAN
DESIGN & DRAFTING
M: 0422 782 315
E: tom@newmandesignanddrafting.com.au
W: www.newmandesignanddrafting.com.au
ISSUE | DESCRIPTION | DATE
1C | CONCEPTUAL PLANS | 05-03-2025
BUILDER:
PROJECT: NEW RESIDENCE
CLIENT: HANS NEKEMAN
SITE ADDRESS: 33 MOUNT HOPE ROAD BOOIE
PAGE No: A002
DWG BY: TN
CHECKED BY: TN
SCALE: 1 : 2500
JOB No: 25-23-TN
copyright Newman Design & Drafting QBCC License No. 15261263 ABN: 38 858 107 359
NOT FOR CONSTRUCTION
THESE PLANS ARE CONCEPTUAL ONLY & MUST NOT BE USED FOR APPROVAL OR CONSTRUCTION PURPOSES
2 PROPOSED SITE PLAN
1 : 2500

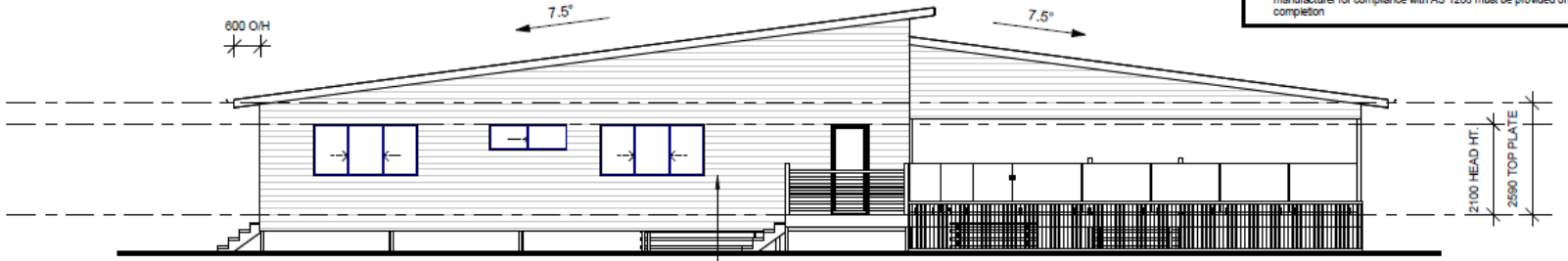


7 FRONT ELEVATION

1 : 100

COMPLIANCE NOTES:

1. Stairs are to comply with NCC - ABCB - Part 11.2 - Stairway and Ramp Construction
2. Handrails/Balustrades to comply with NCC - ABCB - Part 11.3 - Barriers and Handrails
3. WC Doors to comply with NCC - ABCB - Part 10.4 - Facilities
4. All wet areas to comply with NCC - ABCB - Part 10.2 - Wet area waterproofing
5. Lighting to comply with NCC - ABCB - Part 10.5 - Light
6. Ventilation to comply with NCC - ABCB - Part 10.6 - Ventilation
7. Termite protection to comply with NCC - ABCB - Part 3.4 - Termite risk management
8. Masonry Construction to comply with NCC - ABCB - Part 5 - Masonry
9. All workmanship and materials to comply with all relevant Australian Standards and the National Construction Code
10. All glazing in buildings to comply with the requirements of Part 8 NCC - ABCB and AS 1288/1994. A glazing certificate from the manufacturer for compliance with AS 1288 must be provided on completion



8 LEFT-SIDE ELEVATION

1 : 100

NOT FOR CONSTRUCTION

THESE PLANS ARE CONCEPTUAL ONLY & MUST NOT BE USED FOR APPROVAL OR CONSTRUCTION PURPOSES

NEWMAN DESIGN & DRAFTING

Newman Design & Drafting
M: 0422 782 315
E: tom@newmandesignanddrafting.com.au
W: www.newmandesignanddrafting.com.au

ISSUE	DESCRIPTION	DATE	AUTHOR
1C	CONCEPTUAL PLANS	05-03-2025	TN

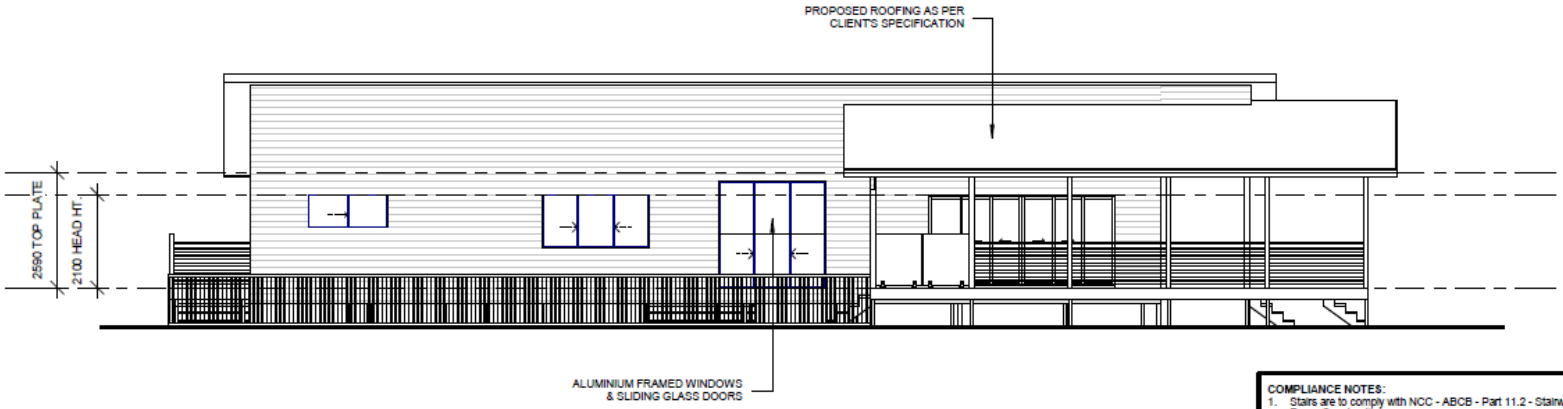
PROJECT: NEW RESIDENCE

CLIENT: HANS NEKEMAN

SITE ADDRESS: 33 MOUNT HOPE ROAD BOOIE

PAGE No:	A004
DWG BY:	TN
CHECKED BY:	TN
SCALE:	1 : 100
JOB No:	25-23-TN

BUILDER:

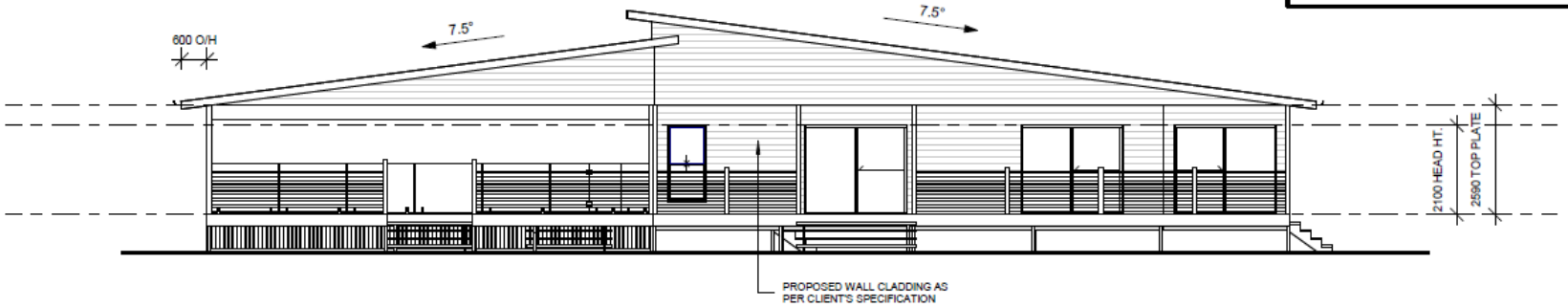


9 REAR ELEVATION

1 : 100

COMPLIANCE NOTES:

1. Stairs are to comply with NCC - ABCB - Part 11.2 - Stairway and Ramp Construction
2. Handrails/Balustrades to comply with NCC - ABCB - Part 11.3 - Barriers and Handrails
3. WC Doors to comply with NCC - ABCB - Part 10.4 - Facilities
4. All wet areas to comply with NCC - ABCB - Part 10.2 - Wet area waterproofing
5. Lighting to comply with NCC - ABCB - Part 10.5 - Light
6. Ventilation to comply with NCC - ABCB - Part 10.6 - Ventilation
7. Termite protection to comply with NCC - ABCB - Part 3.4 - Termite risk management
8. Masonry Construction to comply with NCC - ABCB - Part 5 - Masonry
9. All workmanship and materials to comply with all relevant Australian Standards and the National Construction Code
10. All glazing in buildings to comply with the requirements of Part 8 NCC - ABCB and AS 1288/1994. A glazing certificate from the manufacturer for compliance with AS 1288 must be provided on completion



10 RIGHT-SIDE ELEVATION

1 : 100

NOT FOR CONSTRUCTION

THESE PLANS ARE CONCEPTUAL ONLY & MUST NOT BE USED FOR APPROVAL OR CONSTRUCTION PURPOSES

NEWMAN DESIGN & DRAFTING

Newman Design & Drafting
M: 0422 782 315
E: tom@newmandesignanddrafting.com.au
W: www.newmandesignanddrafting.com.au

ISSUE	DESCRIPTION	DATE	AUTHOR
1C	CONCEPTUAL PLANS	05-03-2025	TN

PROJECT: NEW RESIDENCE

CLIENT: HANS NEKEMAN

SITE ADDRESS: 33 MOUNT HOPE ROAD BOOIE

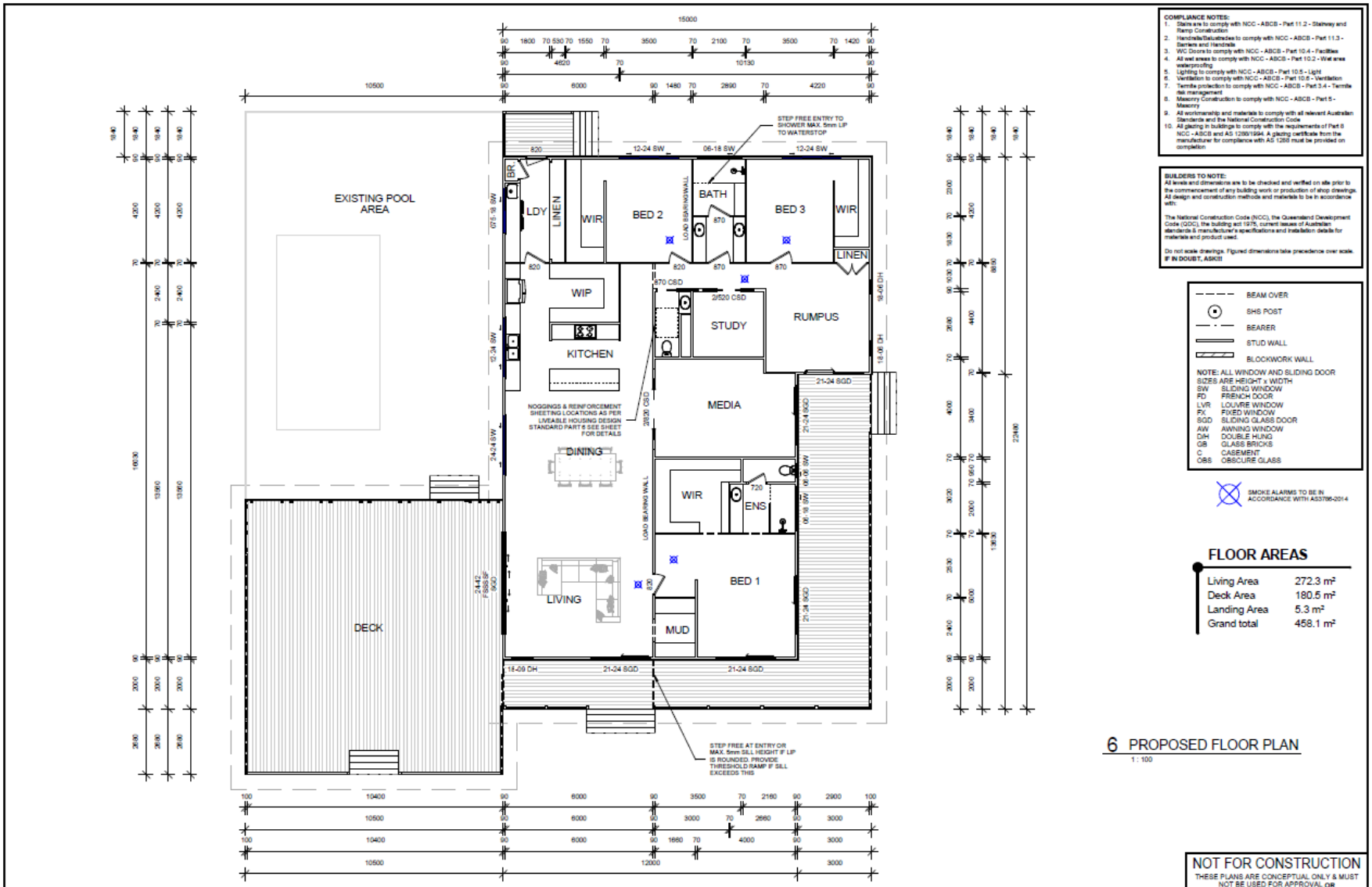
PAGE No: A005

DWG BY: TN | CHECKED BY: TN

SCALE: 1 : 100

JOB No: 25-23-TN

BUILDER:



COMPLIANCE NOTES:

1. Stairs are to comply with NCC - ABCB - Part 11.2 - Stairway and Ramp Construction
2. Handrails/Balustrades to comply with NCC - ABCB - Part 11.3 - Barriers and Handrails
3. WC Doors to comply with NCC - ABCB - Part 10.4 - Facilities
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6. Ventilation to comply with NCC - ABCB - Part 10.5 - Ventilation
7. Termite protection to comply with NCC - ABCB - Part 3.4 - Termite risk management
8. Masonry Construction to comply with NCC - ABCB - Part 5 - Masonry
9. All workmanship and materials to comply with all relevant Australian Standards and the National Construction Code
10. All glazing in buildings to comply with the requirements of Part 8 NCC - ABCB and AS 1288/1994. A glazing certificate from the manufacturer for compliance with AS 1288 must be provided on completion

BUILDERS TO NOTE:

All levels and dimensions are to be checked and verified on site prior to the commencement of any building work or production of shop drawings. All design and construction methods and materials to be in accordance with:

The National Construction Code (NCC), the Queensland Development Code (QDC), the building act 1975, current issues of Australian standards & manufacturer's specifications and installation details for materials and product used.

Do not scale drawings. Figured dimensions take precedence over scale. **IF IN DOUBT, ASK!!!**

BEAM OVER
SHS POST
BEARER
STUD WALL
BLOCKWORK WALL

NOTE: ALL WINDOW AND SLIDING DOOR SIZES ARE HEIGHT x WIDTH

SW	SLIDING WINDOW
FD	FRENCH DOOR
LVR	LOUVRE WINDOW
FX	FIXED WINDOW
SGD	SLIDING GLASS DOOR
AW	AWNING WINDOW
DH	DOUBLE HUNG
GB	GLASS BRICKS
C	CASEMENT
OBS	OBSCURE GLASS

SMOKE ALARMS TO BE IN ACCORDANCE WITH AS3786-2014

FLOOR AREAS

Living Area	272.3 m²
Deck Area	180.5 m²
Landing Area	5.3 m²
Grand total	458.1 m²

6 PROPOSED FLOOR PLAN

1 : 100

NOT FOR CONSTRUCTION

THESE PLANS ARE CONCEPTUAL ONLY & MUST NOT BE USED FOR APPROVAL OR CONSTRUCTION PURPOSES

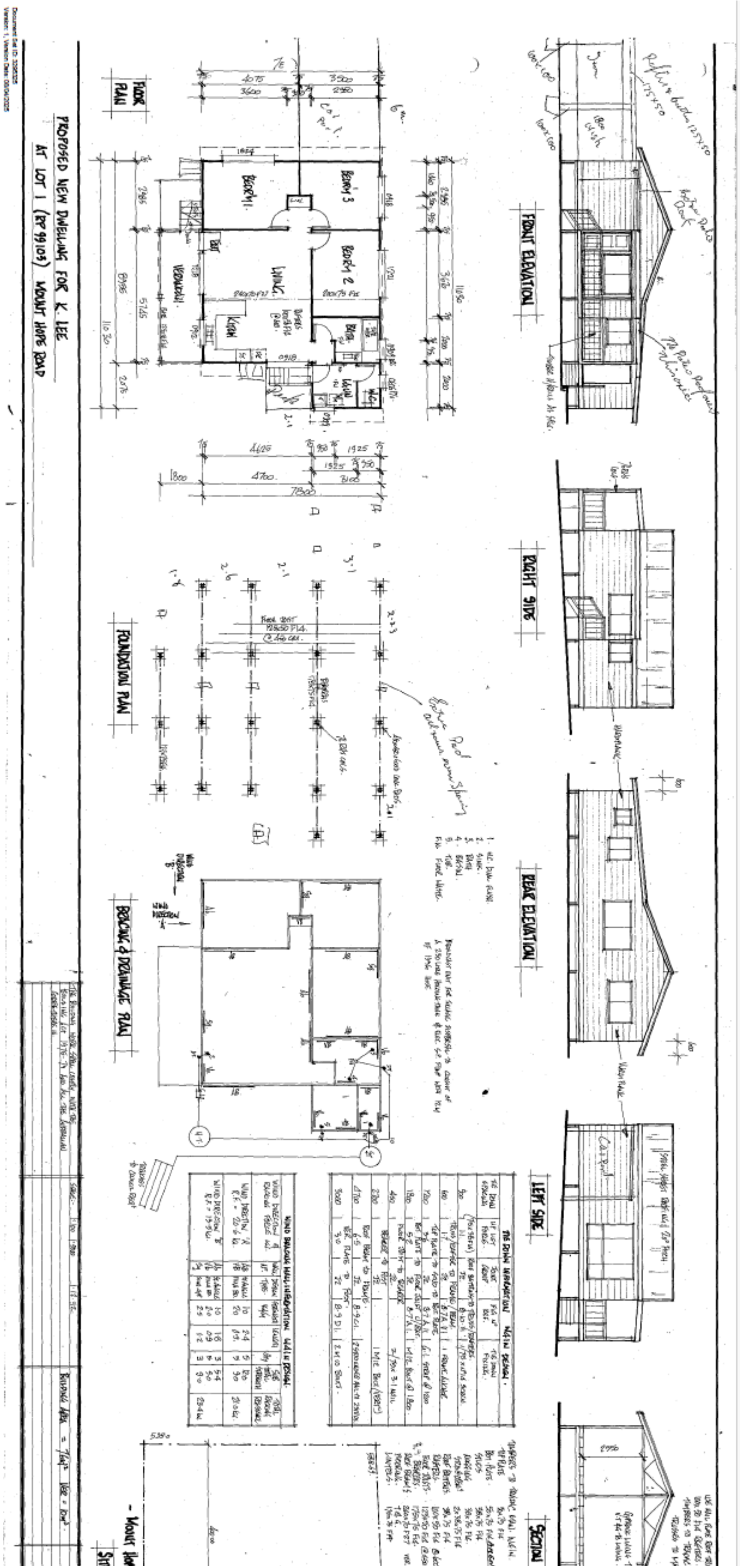
NEWMAN DESIGN & DRAFTING
Newman Design & Drafting
M: 0422 782 315
E: tom@newmandesignanddrafting.com.au
W: www.newmandesignanddrafting.com.au

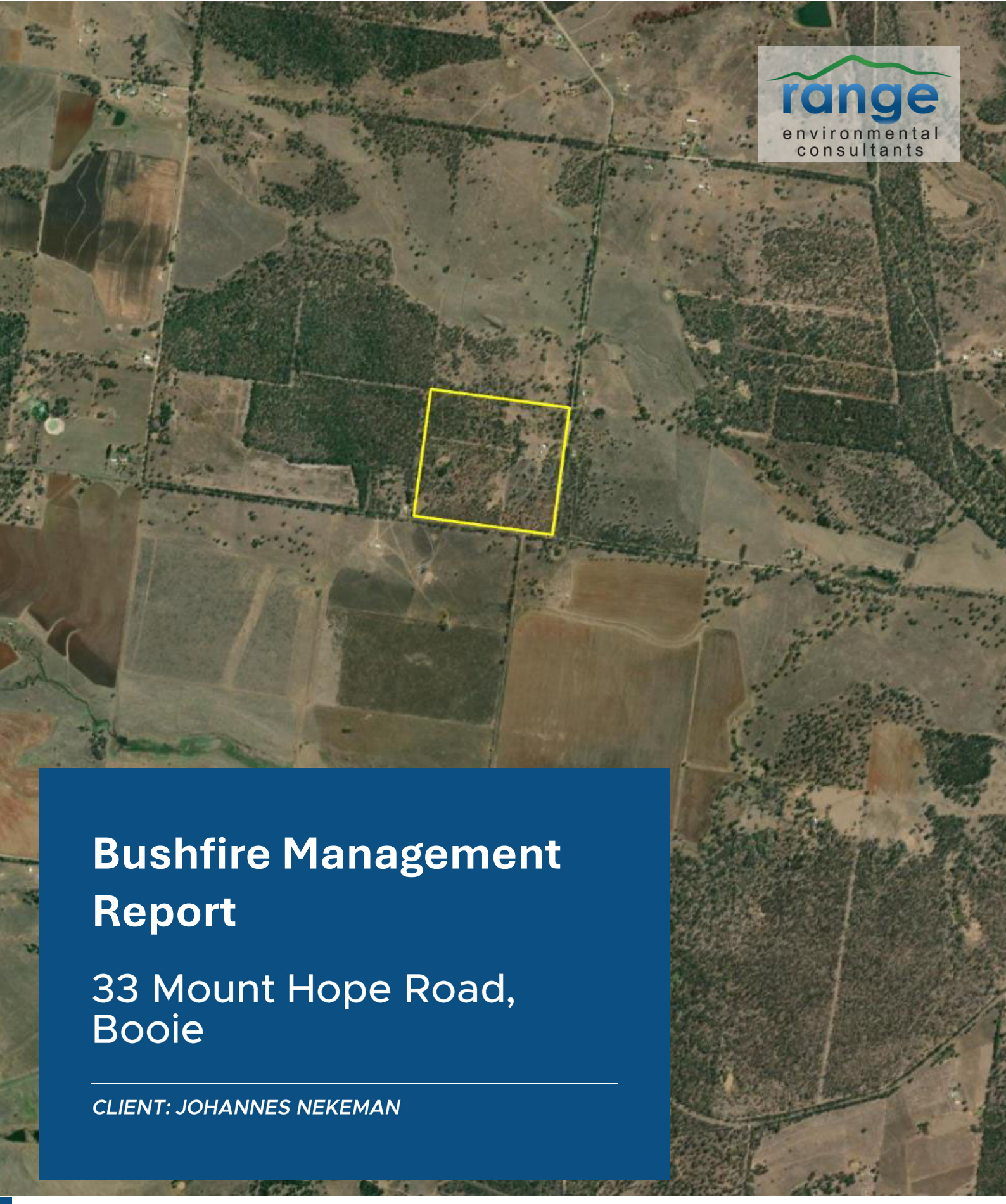
ISSUE	DESCRIPTION	DATE	AUTHOR
1B	CONCEPTUAL PLANS	24-10-2024	TN

PROJECT: NEW RESIDENCE
CLIENT: HANS NEKEMAN
SITE ADDRESS: 33 MOUNT HOPE ROAD BOOIE

PAGE No: A003
DWG BY: TN
CHECKED BY: TN
SCALE: As indicated
JOB No: 25-23-TN

BUILDER:


PROPOSED NEW DWELLING FOR K. LEE
FLOOR PLAN
FRONT ELEVATION
RIGHT SIDE
REAR ELEVATION
LEFT SIDE
SECTION
FOUNDATION PLAN
BRACING & DRAINAGE PLAN
SITE PLAN



Bushfire Management Report

33 Mount Hope Road, Booie

CLIENT: JOHANNES NEKEMAN

PROJECT NO.	**J002438**
STATUS	**FINAL – BAL-12.5**
DATE	**23/06/2025**
VERSION	**1**

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It must be borne in mind that the measures dealt with in this report cannot guarantee that a building will survive a bushfire event. This is due mainly to the unpredictable nature and behaviour of fire and the difficulties associated with extreme weather conditions.

It must also be stated that this report is based on site conditions prevailing at the time the inspection was undertaken. These conditions can and will change dependent on both weather conditions and the maintenance undertaken by property owners.

This report has been prepared on the basis that bushfire mitigation measures identified are implemented and maintained into the future. Failure to maintain these measures may contribute to the development being exposed to a higher level of bushfire threat and attack.

As site conditions can and will change over time this report is valid for a period of 2 years. Where a development application is lodged greater than 2 years following the version date of this report Range Environmental Consultants are to be contacted to ensure accuracy of this report.

Document Control

Version	Purpose	Lead Author	Reviewer	Approved by	Date
1.	Final Report	GL	RG	LMT	23/06/2025

Executive Summary

As assessment of the site and its surrounds was undertaken to assist in the development of a fire plan for the purpose of ensuring that a dwelling to be relocated on the site meets the requirement of the Australian Standard, “Construction of buildings in bushfire-prone areas” (AS 3959-2018).

The dwelling has been identified as being exposed to a Bushfire Attack Level (BAL) of 12.5. This fire report has been prepared on the basis that a minimum separation distance of greater than 35 metres can be achieved and maintained between the dwelling and hazardous understorey vegetation. This report provides recommendations for a number of measures that will assist in ensuring the safety of life and property and mitigating the impacts of bushfire.

The dwelling is located within an area of Potential Impact Buffer as identified by the South Burnett Regional Council Planning Scheme (2017 Version 2.0) mapping. The potential bushfire risk is due to the presence of native vegetation on the site and in the surrounding landscape.

Site characteristics are described in Table 1, with the attributes used to determine the Bushfire Attack Level (BAL) presented in Table 2.

Table 1 Site Characteristics

Details	Site Specific Details
Lot on Plan (lot on Plan)	Lot 1 RP99103
Address	33 Mount Hope Road, Booie QLD
Land area	31.69 hectares
Local Government Area	South Burnett Regional Council
Bushfire Hazard Mapping	Potential Impact Buffer
Water Supply	10,000 Litres

The implementation of the following measures will assist in mitigating the bushfire threat to an acceptable level for future residents and assets on the site.

Table 2 Determination of Bushfire Attack Level (BAL)

Step	Procedure	Value (southwest)	Value (northeast)
	AS3959 2018 Method	Method 2	Method 2
1	Fire Danger Index (FDI)	54	54
2	Vegetation Hazard Class (VHC)	10.2	10.2
3	Overall fuel load (t/ha)	18	18
4	Minimum Separation Distance (m)	>35m	>35m
5	Location of hazardous vegetation	Downslope	Level and Upslope
6	Effective slope of land under classified vegetation	2 degrees	0 degrees
7	Radiant heat flux	12.12 kW/m^2	10.90 kW/m^2
8	Bushfire Attack Level (BAL)	12.5	12.5
9	Appropriate construction methods	Appendix B	Appendix B

Minimisation of risk – Building

A number of construction measures are required to minimise the risk of bushfire impact on the dwelling. Key areas include:

- Roof to be fully sarked, or
- Foil-backed insulation blankets (anticon) be installed over battens under roof sheeting,
- Vents and weepholes in external walls and eve linings to be screened with corrosion resistant steel mesh,
- Cladding to be of bushfire resisting material for walls that are less than 400mm from the ground, decks, awnings, and other horizontal surfaces,
- Openable parts of windows to be screened with corrosion resistant steel mesh with a maximum aperture of 2mm,
- Garage doors (roller and panel lift) have a maximum permissible gap of 2mm, and
- Decking to be of bushfire-resistant timber or a non-combustible material.

Water supply

The South Burnett Regional Council Planning Scheme (2017 Version 2.0) requires that an adequate water supply suitable for fire-fighting purposes should be available at all times. This can be achieved by provision of a dedicated static water supply that is available solely for fire-fighting purposes and can be accessed by fire fighting vehicles. The SBRC Planning Scheme refers to the *QFES Bushfire Resilient Communities* document to provide guidance regarding preferred solutions to achieve an appropriate static water supply for fire-fighting purposes.

The SPP (2017 version 6) state interest guidance material recommends a reticulated water supply or a dedicated static water supply that is available solely for fire-fighting purposes and can be accessed by fire-fighting vehicles. It refers to QFES Bushfire Resilient Communities, which recommends 10,000 litres for residential buildings.

At the time of relocating a dwelling on the site, a dedicated on-site water storage system that permanently holds a minimum of 10,000 litres (e.g. water tank) for firefighting purposes must be provided.

Adjacent structures

Where a garage, carport, or similar structure is not attached to the building covered by this report and it is located closer than 6 metres, it will be required to comply with the construction requirements of this report.

Property access

Adequate access is constructed and maintained to enable efficient, practical access to buildings and water supply for emergency services appliances. The site contains additional access trails which may be utilised for bushfire mitigation purposes.

Prepare, Act, Survive

The property is located within an identified bushfire hazard area. It is critically important that residents are well prepared during times of high fire danger and have well made plans that can be readily enacted in a time of bushfire emergency.

Maintenance of bushfire mitigation measures

This fire report has been prepared on the basis that bushfire mitigation measures identified are implemented and maintained into the foreseeable future. Failure to maintain these measures may contribute to the dwelling being exposed to a higher level of bushfire threat and attack.

The following photographs were taken from the dwelling site and show the nature of vegetation present in the vicinity of the proposed dwelling.

Photograph 1 View to the north over the house site from Booie Crawford Road.

Photograph 2 View to the northeast from the house site.

Photograph 3 View to the east from the house site.

Photograph 4 View to the west from the house site.

Photograph 5 View to the southwest from the house site.

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1 General site details

The property is located in a rural area in the locality of Booie approximately 13 kilometres by road northeast of Kingaroy. Mount Hope Road is located on the eastern boundary of the property and Booie Crawford Road is located on the southern boundary. Rural residential areas surround the site, with extensive areas of native bushland to the west and northwest of the site, and grasslands and agricultural fields to the south and east. The dwelling is located on gently sloping site, with the land falling from the northwest to the southeast with underlying slopes in the order of 3% or 2 degrees.

Figure 1 provides an aerial view of the property (accessed from ArcGIS Pro on 29 May 2025) and its context within the surrounding landscape. Figure 2 illustrates the topography. Figure 3 provides an aerial view of the property, the location of the proposed house and presence of native vegetation (accessed from QLD Globe 28 May 2025). The Bushfire Attack Level (BAL) that is likely to be experienced by a building in the event of a bushfire is determined by the type of vegetation present, its distance from the building and the slope of the land.

A Material Change of Use (MCU) development application (DA) has been lodged with South Burnett Regional Council for a dual occupancy. The existing dwelling to be relocated is proposed to be relocated to an area that is a mapped bushfire hazard area. This bushfire hazard assessment is provided as an attached supporting document for lodgement of the DA for the site and allows for assessment against the SBRC Planning Scheme (2017 Version 2.0) Bushfire Hazard Overlay Code and the SPP (2017) Natural hazards, risk and resilience (Bushfire) assessment requirements.

Figure 1
Site Locality

Project: BMR, 33 Mount Hope Road Booie

Client: Johannes Nekeman

Project No.: J002438

Compiled by: GabiLevay Date: 29/05/2025
Approved by: RG Date: 29/05/2025

Metres
0 500 1,000

Legend

- Cadastre
- Site Boundary

The content of this document includes third party data. Range Environmental Consultants does not guarantee the accuracy of such data.

Source: Cadastral data sourced from DNRME (2025). Aerial imagery sourced from NearMap (2025).

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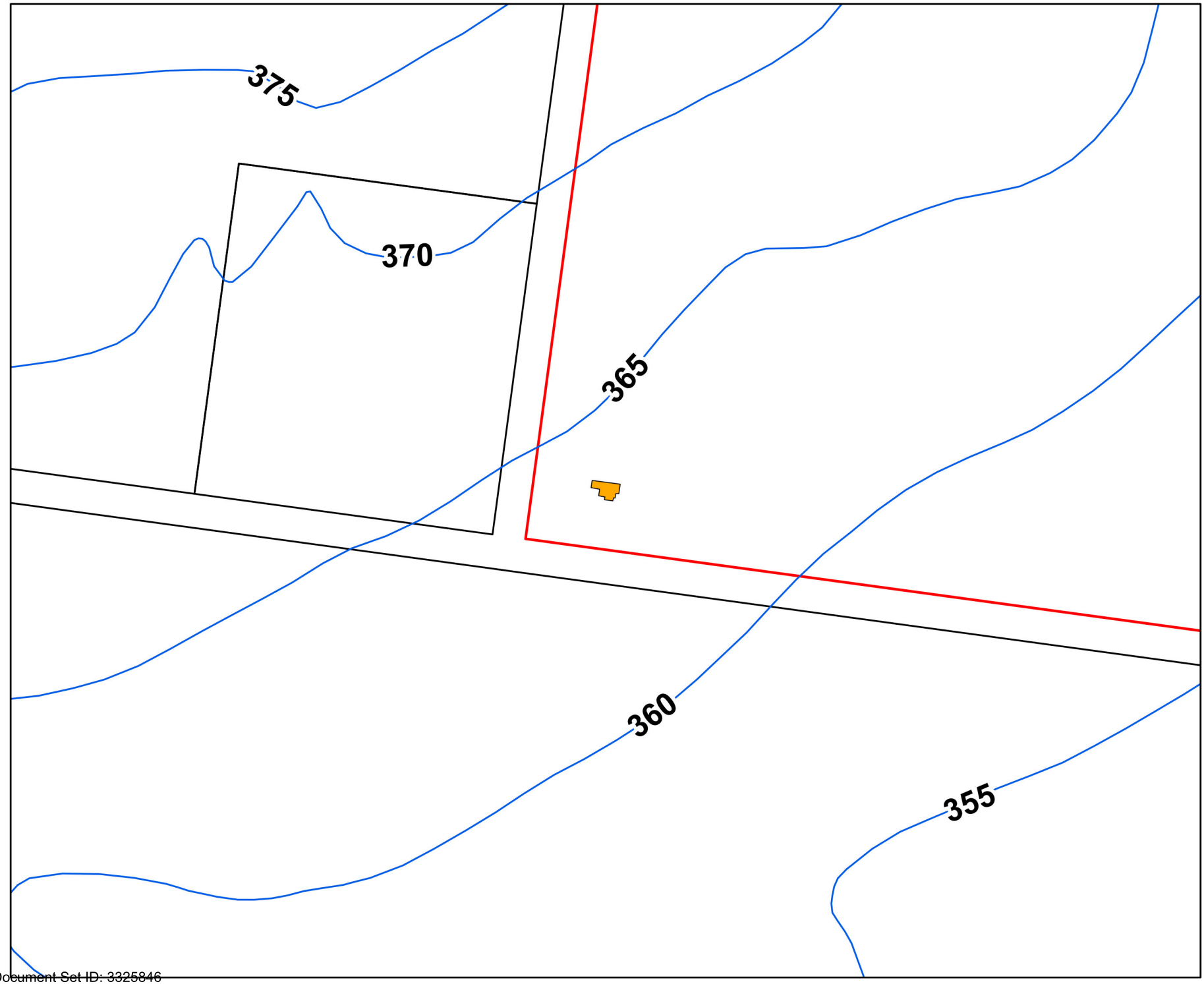

Figure 2 Topography of the Site

Project: BMR, 33 Mount Hope Road Booie

Client: Johannes Nekeman

Project No.: J002438

Compiled by: GabiLevay Date: 29/05/2025
Approved by: RG Date: 29/05/2025

Metres
0 30 60

Legend

- Cadastre
- Site Boundary
- Proposed Dwelling
- Contours (5m)

The content of this document includes third party data. Range Environmental Consultants does not guarantee the accuracy of such data.

Source: Cadastral data sourced from DNRME (2025). Aerial imagery sourced from NearMap (2025).

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Figure 3 Minimum Separation Distance

Project: BMR, 33 Mount Hope Road Booie

Client: Johannes Nekeman

Project No.: J002438

Compiled by: GabiLevay Date: 17/06/2025
Approved by: RG Date: 17/06/2025

Metres
0 20 40

Legend

- Cadastre
- Roads
- Site Boundary
- Proposed Dwelling
- 150m buffer
- Minimum Separation Distance

Source: Cadastral data sourced from DNRME (2025). Aerial imagery sourced from NearMap (2025).

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2 Bushfire and vegetation

2.1 Bushfire

The South Burnett Regional Council Planning Scheme (2017 Version 2.0) mapping identified that the dwelling is wholly located within an area of Potential Impact Buffer. The mapped bushfire risk is due to the presence of native vegetation on the site and in the surrounding landscape. The bushfire risk category for the property and surrounding area is shown in Figure 4. Under adverse conditions, a bushfire could potentially approach from any direction. Severe fire weather conditions are typically associated with strong westerly to northerly winds. Bushfires in the area have the potential to generate quantities of embers that could impact on the building even though the fire does not necessarily reach it.

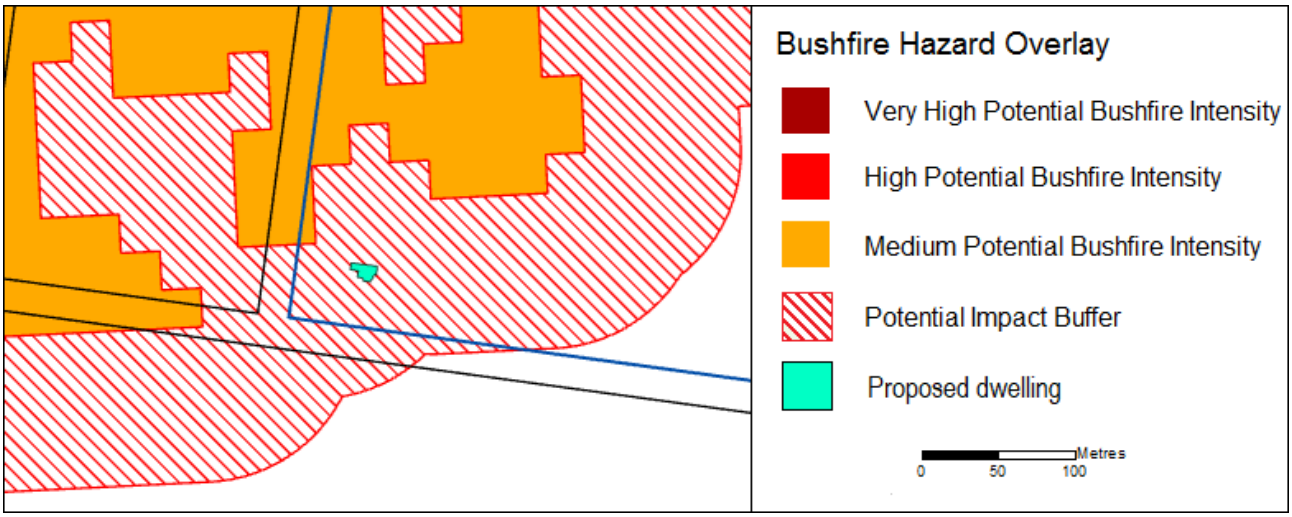


Figure 4 Bushfire Hazard for Lot 1 RP99103 as identified by the South Burnett Regional Council Bushfire Hazard Mapping.

2.2 Vegetation details

An assessment of the vegetation on Lot 1 RP99103 was undertaken to assist in the development of a fire plan for the purpose of ensuring that a dwelling to be relocated on the site meets the requirements of the Australian Standard, AS 3959-2018. The current Vegetation Management Supporting Map indicates that areas of regulated vegetation are present onsite. The proposed dwelling is located outside areas of regulated vegetation in areas of non-remnant vegetation. The extent of mapped regulated vegetation in the area and its conservation status is shown in Figure 5 with Table 3 providing a description of the Regional Ecosystems present in the surrounding area. The dwelling is located within an area of non-remnant vegetation.

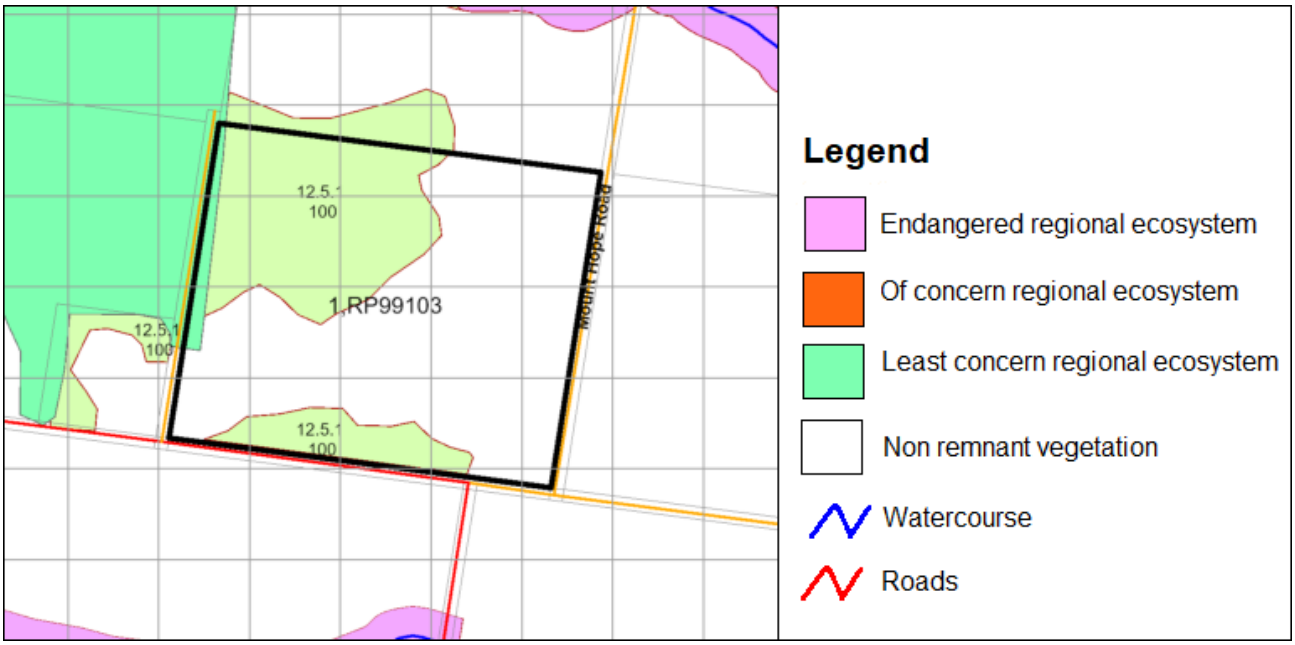


Figure 5 Extent of mapped remnant vegetation within the vicinity of Lot 1 RP99103 as identified on the Vegetation Management Supporting Map accessed from the Department of Resources website.

Table 3 Regional Ecosystem vegetation description

Regional Ecosystem:	12.5.1	**Conservation status:**	Least Concern
Description	Woodland to open forest complex generally with *Corymbia trachyphloia, C. citriodora subsp. variegata +/- Eucalyptus crebra, E. longirostrata, C. intermedia, E. major, E. fibrosa subsp. fibrosa* (can be locally common) and *E. acmenoides*. Localised occurrences of *Eucalyptus 17aurine, E. decorticans, E. dura, E. cloeziana* and *E. melanoleuca*. Understorey grassy or shrubby. Occurs on remnant Tertiary surfaces, usually with deep red soils. Not a Wetland. (BVG1M: 10b).		

The information above was sourced from the Queensland Herbarium (2024) Regional Ecosystem Description Database (REDD). Version 13.1 (May 2024) (DESI: Brisbane).

Vegetation in the vicinity of the dwelling comprises open grassy to shrubby open woodland with trees having a mature height in the order of 15 to 20 metres.

A component of assessing potential bushfire attack is to determine the vegetation type, its distance from the proposed dwelling and whether vegetation is upslope or downslope of the building. In this situation, most of the vegetation is upslope and downslope of the dwelling site as illustrated in Figure 6.

‘In assessing vegetation classes for forests, woodlands and rainforests, the classified vegetation will be determined by the unmanaged understorey rather than either the canopy (drip line) or trunk of any trees’. (AS3959-2018)

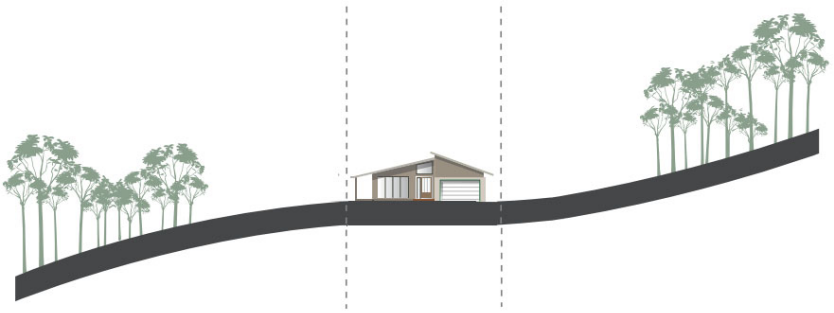
	Effective underlying slope of land	**2 degrees** downslope & **0 degrees** upslope
	Separation distance between building and hazardous vegetation	**>35 meters** upslope and downslope
	Bushfire Attack Level (BAL)	**12.5**

Figure 6 Determination of distance from classified vegetation and effective slope of land.

3 Determination of Bushfire Attack Level (BAL)

The following details summarise the steps that were carried out using information collected from the relevant site and apply this information to the conditions required and set out in Australian Standard '*Construction of Buildings in Bushfire-prone areas*' (AS 3959-2018) to identify the relevant BAL for the dwelling. The calculation methodology is provided in Appendix C.

Table 4 Summary of attributes to determine BAL rating

Step	Procedure	Value (southwest)	Value (northeast)
	AS3959 2018 Method	Method 2	Method 2
1	Fire Danger Index (FDI)	54	54
2	Vegetation Hazard Class (VHC)	10.2	10.2
3	Overall fuel load (t/ha)	18	18
4	Minimum Separation Distance (m)	>35m	>35m
5	Location of hazardous vegetation	Downslope	Level and Upslope
6	Effective slope of land under classified vegetation	2 degrees	0 degrees
7	Radiant heat flux	12.12 kW/m^2	10.90 kW/m^2
8	Bushfire Attack Level (BAL)	12.5	12.5
9	Appropriate construction methods	Appendix B	Appendix B

*__Note:__ This fire report has been prepared on the basis that a minimum separation distance of greater than **35 metres** can be achieved and maintained between the dwelling and the edge of hazardous understorey vegetation.

An explanation of Bushfire Attack Levels is provided in Appendix D of this report.

4 Planning requirements

4.1 South Burnett Planning Scheme - Bushfire

The South Burnett Regional Council Planning Scheme (2017 Version 2.0) contains a Bushfire hazard overlay code.

The purpose of the Bushfire hazard overlay code is to ensure that risk to life, property, and the environment as a result of bushfire is mitigated to an acceptable or tolerable level, through development and activities that achieve the following outcomes:

a. Development is laid out and located to minimise the exposure and vulnerability of people and property at risk from bushfires.

b. Development contributes to effective and efficient emergency response and recovery capabilities.

c. Rehabilitation, revegetation and landscaping does not increase the risk to people or property.

d. Development only establishes or intensifies vulnerable uses within the bushfire prone area where no other option exists to provide the necessary level of service.

e. Development only establishes or intensifies community infrastructure providing essential services within the bushfire prone area where necessary to provide an adequate level of service to the existing and projected population.

f. Development avoids or mitigates the risk from the manufacture or storage of materials that are hazardous in the context of bushfire.

This code identifies performance outcomes and acceptable outcomes. Where appropriate, this Code has been applied to the development and outcomes proposed to comply with the accepted development and assessment benchmarks. Table 5 provides responses to the Bushfire hazard overlay code.

4.2 State Planning Policy - Bushfire

The State Planning Policy (July 2017) provides a comprehensive set of principles which underpin Queensland's planning system to guide local government and the state government in land use planning and development assessment. The State's interest in relation to natural hazards is: "The risks associated with natural hazards are avoided or mitigated to protect people and property and enhance the community's resilience to natural hazards". The State Planning Policy (July 2017) development assessment requirements have been addressed in Table 6.

Table 5 South Burnett Regional Council Bushfire Hazard Overlay Code

Performance outcomes	Acceptable outcomes	Proposed solutions
Section E **Material Change of Use**		
PO10 Site layout achieve an acceptable or tolerable risk to people. Landscape or open space provided as part of the development: (a) acts as a buffer between hazardous vegetation and development; and (b) does not create additional bushfire prone areas. Note–An applicant may seek to undertake a site-level verification of the location and nature of hazardous vegetation and resulting potential bushfire intensity levels, for example where changes in foliage have occurred (e.g. as a consequence of adjoining permanent urban development) or where an applicant seeks to verify the regional ecosystem map inputs. This verification should form part of a bushfire hazard assessment in accordance with the methodology in the QFES Bushfire resilient communities document. The outcomes of this assessment can demonstrate how an alternate solution to the acceptable outcome can deliver an acceptable or tolerable level of risk.	AO10.1 Site layout places the landscape and open spaces within the site between premises and adjacent mapped medium, high or very high potential bushfire intensity areas. Refer Figure 3. AO10.2 This landscaping and open space comprises protective landscape treatments that: (a) comprise only low threat vegetation, including grassland managed in a minimal fuel condition, maintained lawns, golf courses and cultivated gardens; or (b) are designed to ensure a potential available fuel load is maintained at less than 8 tonnes/hectare in aggregate and that fuel structure remains discontinuous. Note–Minimal fuel condition means there is insufficient fuel available to significantly increase the severity of the bushfire attack, for example short-cropped grass to a nominal height of 10 centimetres.	PS10.1 An asset protection zone (APZ) of 35m has been identified for the dwelling which allows a BAL of no greater than BAL-12.5 to be achieved. PS10.2 Landscaping within an APZ will comply with the requirements of AO10.2 as discussed in Appendix E and Appendix F of this report.
PO11 The development establishes evacuation areas, to achieve an acceptable or tolerable risk to people.	AO11 If in an isolated location, development establishes direct access to a safe assembly/ evacuation area. Note–Guidance on identifying safe evacuation areas is contained in the QFES Bushfire resilient communities document.	PS11 In the event of a bushfire event in the local area early evacuation by the proposed internal driveways which connect to public roadways is to be undertaken. The development application does not propose any essential services or vulnerable uses and residents are expected to be able-bodied, facilitating timely evacuation.
PO12 If on a lot of over 2000m2, where involving a new premises or an existing	No acceptable outcome is prescribed.	PS12 The proposed dwelling is safely located with ready access to Booie Crawford Road. While the proposed driveway shown in Appendix A is approximately 430m long, the dwelling is located

premises with an increase in development footprint, development: (a) locates occupied areas as close as possible to property entrances to facilitate safe evacuation during a bushfire event; and (b) ensures vehicular access is located and designed to allow safe evacuation of the site by occupants and maintain access by emergency services under critical event conditions.		within 40m of Booie Crawford Road, providing additional safe access and egress in the event of an emergency.
PO13 Development is located within a reticulated water supply area or includes a dedicated static water supply that is available solely for fire-fighting purposes and can be accessed by fire-fighting vehicles. Note–Swimming pools, farm ponds and dams are not considered reliable sources of static water supply in Queensland due to regular drought events.	No acceptable outcome is prescribed.	PS13 The site is not connected to a reticulated water supply. A dedicated on-site water storage system that permanently holds a minimum of 10,000 litres for fire fighting purposes is to be provided at the time of relocating the dwelling on the lot.
PO14 Vulnerable uses listed in Table 2 are not established or intensified within a bushfire prone area unless: (a) there is an overriding need in the public interest for the new or expanded service the development provides; and (b) there are no other suitable alternative locations within the required catchment; and (c) site planning can appropriately mitigate the risk (for example, siting ovals for an educational establishment between the hazardous vegetation and structures.	No acceptable outcome is prescribed.	Not applicable. The development does not propose vulnerable uses within a bushfire hazard area.

Note–The preparation of a bushfire management plan in accordance with the methodology in the QFES Bushfire resilient communities document may assist in demonstrating compliance with this outcome.		
Community infrastructure providing essential services listed in Table 2 are not established within a bushfire prone area unless: (a) there is an overriding need in the public interest for the new or expanded service the development provides (for example, there are no other suitable alternative locations that can deliver the required level of service or meet emergency service response times during and immediately after a bushfire event); and (b) the infrastructure can function effectively during and immediately after a bushfire event. Note–The preparation of a bushfire management plan in accordance with the methodology in the QFES Bushfire resilient communities document may assist in demonstrating compliance with this outcome.	No acceptable outcome is prescribed.	Not applicable. The development does not propose community infrastructure.
PO16 Development avoids or mitigates the risks to public safety and the environment from the manufacture or storage of materials listed in Table 2 that are hazardous in the context of bushfire to an acceptable or tolerable level. Note–The preparation of a bushfire management plan in accordance with the methodology in the QFES Bushfire resilient communities document may assist in demonstrating compliance with this outcome.	No acceptable outcome is prescribed.	Not applicable. The development will not involve the manufacturing, storage, distribution or disposal of hazardous chemicals.
Section F **Where involving an asset protection zone**		

PO17 Asset protection zones are designed and managed to ensure they do not increase the potential for bushfire hazard. Note – The preparation of a landscape management plan undertaken in accordance with the methodology in the QFES Bushfire resilient communities document may assist in demonstrating compliance with this performance outcome.	AO17.1 Landscaping treatments within any asset protection zone comprise only low threat vegetation, including grassland managed in a minimal fuel condition, maintained lawns, golf courses, maintained public reserves and parklands, vineyards, orchards, cultivated gardens, commercial nurseries, nature strips and windbreaks. Note – Minimal fuel condition means there is insufficient fuel available to significantly increase the severity of the bushfire attack, for example short-cropped grass to a nominal height of 10 centimetres. OR AO17.2 Landscaping management within any asset protection zone maintains a: (a) potential available fuel load which is less than eight tonnes/hectare in aggregate; and (b) fuel structure which is discontinuous. Note – The preparation of a landscape management plan undertaken in accordance with the methodology in the QFES Bushfire resilient communities document may assist in demonstrating compliance with this acceptable outcome.	PS17.2 Landscaping within an asset protection zone will comply with the requirements of AO17.2 as discussed in Appendix E and Appendix F of this report.

Table 6 State Planning Policy development assessment requirements (Natural hazards, risk and resilience - Bushfire)

Assessment Benchmark	Development Assessment Requirement	Proposed Solution
Applicable development	A development application for a material change of use, reconfiguration of a lot or operational works on premises in any of the following: 1. bushfire prone areas 2. flood hazard areas 3. landslide hazard areas 4. storm tide inundation areas 5. erosion prone area.	Development is a Material Change of Use for a dual occupancy on an existing lot. Development is proposed in an area identified as bushfire prone.
3	Bushfire, flood, landslide, storm tide inundation, and erosion prone areas outside the coastal management district: Development other than that assessed against (1) above, avoids natural hazard areas, or where it is not possible to avoid the natural hazard area, development mitigates the risks to people and property to an acceptable or tolerable level.	PS1. The dwelling to be relocated is located in an area of mapped Potential Impact Buffer by the Queensland Government Development Assessment Mapping System Natural Hazards Risk and Resilience mapping (Bushfire). An assessment was conducted to confirm the presence of mapped VHC classes and the level of potential bushfire hazard present. A Bushfire Management Plan was prepared that identifies measures to mitigate the risks to people and property to an acceptable level. Included in the hazard assessment were identification of vegetation hazard class (VHC) present and the calculation of Bushfire Attack Levels. Mitigation measures identified include: 1. Establishment of an Asset Protection Zone of 35m at the time of relocating the dwelling; 2. Buildings to comply with relevant standards of building construction including the BCA and AS3959-2018. The dwelling has been identified as achieving a BAL-12.5. A 'worst case scenario' was adopted with an FDI of 54 used in BAL calculations; 3. Provision of an adequate water supply that can be readily accessed for fire-fighting purposes; and

		4. Adequate ingress and egress to the site. Provided the measures identified in the bushfire management plan are implemented and maintained, the bushfire risk to people, property and infrastructure can be kept to an acceptable level.
4	All natural hazard areas: Development supports and does not hinder disaster management response or recovery capacity and of capabilities.	PS2. A development comprising the relocation of a dwelling on an existing lot is proposed to occur at the site in an area mapped by the Queensland Government Development Assessment Mapping System as comprising Potential Impact Buffer. The development actively assists and supports disaster management capacity and capabilities by: 1. Providing ready access to a water supply suitable for fire-fighting purposes. This can be achieved by provision of a dedicated on-site water storage system that permanently holds a minimum of 10,000 litres for fire fighting purposes at the time of relocating dwelling; 2. Managing potentially hazardous fuel loads within the identified APZ and construction of the dwelling to a BAL-12.5 standard.
5	All natural hazard areas: Development directly, indirectly and cumulatively avoids an increase in the severity of the natural hazard and the potential for damage on the site or to other properties	PS3. The development takes into consideration topography, location of existing vegetation and potential natural hazards. The site comprises open woodland. Mitigation measures identified include: 1. Establishment of an APZ for a radius of 35m around the dwelling; 2. Maintenance of vegetation (including understorey) within the APZ to prevent the accumulation of hazardous fuel loads; 3. Ongoing management of woody environmental and highly flammable weeds on the site such as lantana in the vicinity of infrastructure;

		4. Landscaping near buildings to consist of plants that have low flammability.
6	All natural hazard areas: Risks to public safety and the environment from the location of hazardous materials and the release of these materials as a result of a natural hazard are avoided.	PS4. Development is a dual occupancy including the relocation of a dwelling on an existing lot. It does not involve the location or use of hazardous materials on the site. In this situation there is no potential for the release of these materials as a result of a natural hazard event.
7	All natural hazard areas: The natural processes and the protective function of landforms and the vegetation that can mitigate risks associated with the natural hazard are maintained or enhanced.	PS5 The development seeks to maintain and enhance the protective function of landforms and vegetation present on the site by: 1. Ongoing and effective management of environmental weeds on the site; 2. Retaining the natural landform by minimising the extent of major earthworks required; and 3. Ensuring that any landscape plantings are compatible with the natural environment and do not contribute to an elevated bushfire hazard. Incorporation of these measures in the development will enable natural processes and functions to continue and aid in the mitigation of risks associated with potential natural hazards.

5 Mitigating the bushfire risk

5.1 Vegetation management

Maintenance of vegetation near the dwelling will assist in managing fuel loads and associated bushfire risks. An asset protection zone of 35 metres should be maintained as a 'low fuel load' state around the dwelling. **Contrary to common belief, the area around the building does not need to be totally devoid of vegetation, and in fact some trees in this area can serve a valuable role in trapping embers before they impact on the asset.** It is important however that:

- There are substantial gaps (of at least 2 - 5m) between the canopies of any trees in this area.
- There are no continuous fuels linked horizontally or vertically. (Smooth barked trees provide a lesser fuel ladder to the canopy than rough barked or ribbon barked species).
- Tree canopies do not overhang the roof.
- Surface and near surface fuels are kept to a minimum. This includes lawns to be kept short (less than 10 cm in height) and removal of accumulated leaf and bark litter.
- Avoidance of flammable mulches on garden beds such as woodchip or straw within 10 metres of the dwelling.
- Use of non-flammable mulches such as river pebbles or stones on garden beds near dwellings and buildings.

If these steps are followed it should be possible for fuel loads to be maintained at 5 tonnes per hectare or less. Failure to maintain the property in a low fuel load state could significantly elevate the intensity of a bushfire should one occur. Appendix E contains additional details on creating and maintaining an Asset Protection Zone and guidelines for landscaping in fire prone areas are provided in Appendix F.

It is worth noting that findings from the major bushfires in southern states identified that one of the most important factors in building survival was effective vegetation management (e.g. maintenance of low fuel loads and shrubby understorey) for a minimum radius of 40 metres around the house site.

5.2 Water supply

The South Burnett Regional Council Planning Scheme (2017 Version 2.0) requires that an adequate water supply suitable for fire-fighting purposes should be available at all times. This can be achieved by provision of a dedicated static water supply that is available solely for fire-fighting purposes and can be accessed by fire fighting vehicles. The SBRC Planning Scheme refers to the QFES Bushfire Resilient Communities document to provide guidance regarding preferred solutions to achieve an appropriate static water supply for fire-fighting purposes.

The SPP (2017 version 6) state interest guidance material recommends a reticulated water supply or a dedicated static water supply that is available solely for fire-fighting purposes and can be accessed by fire-fighting vehicles. It refers to QFES Bushfire Resilient Communities, which recommends 10,000 litres for residential buildings.

At the time of relocating the dwelling on the site, a dedicated on-site water storage system that permanently holds a minimum of 10,000 litres (e.g. water tank) for firefighting purposes must be provided.

5.3 Property access

Adequate access is constructed and maintained to enable efficient, practical access to buildings and water supply for emergency services appliances. The site contains additional access trails which may be utilised for bushfire mitigation purposes. These measures will provide unhindered ingress and egress to the site.

5.4 Adjacent structures

Where any garage, carport, or similar structure is not attached to the dwelling covered by this report, the entire garage, carport, or similar roofed structure on the subject allotment shall comply with the construction requirements of this report, alternatively the building shall be at least 6m from the dwelling covered in this report or it shall be separated by a fire wall with an FRL -/60/60.

5.5 Prepare, Act, Survive

The property is located within an identified bushfire hazard area. It is critically important that residents are well prepared during times of high fire danger and have well made plans that can be readily enacted in a time of bushfire emergency.

5.6 Maintenance of bushfire mitigation measures

It is the landholders' responsibility to ensure that the bushfire mitigation measures identified in this report are implemented and maintained into the future. Failure to maintain these measures may contribute to the dwelling being exposed to a higher level of bushfire threat and attack should one occur in the area.

6 Minimisation of risk - building

A number of construction measures are required to minimise the risk of bushfire impact on the dwelling. The key areas are summarised below and include:

- Roof to be fully sarked, or
- Foil-backed insulation blankets (anticon) be installed over battens under roof sheeting,
- Vents and weepholes in external walls and eve linings to be screened with corrosion resistant steel mesh,
- Cladding to be of bushfire resisting material for walls that are less than 400mm from the ground, decks, awnings, and other horizontal surfaces,
- Openable parts of windows to be screened with corrosion resistant steel mesh with a maximum aperture of 2mm,
- Garage doors (roller and panel lift) have a maximum permissible gap of 2mm, and
- Decking to be of bushfire-resistant timber or a non-combustible material.

7 Safety of people

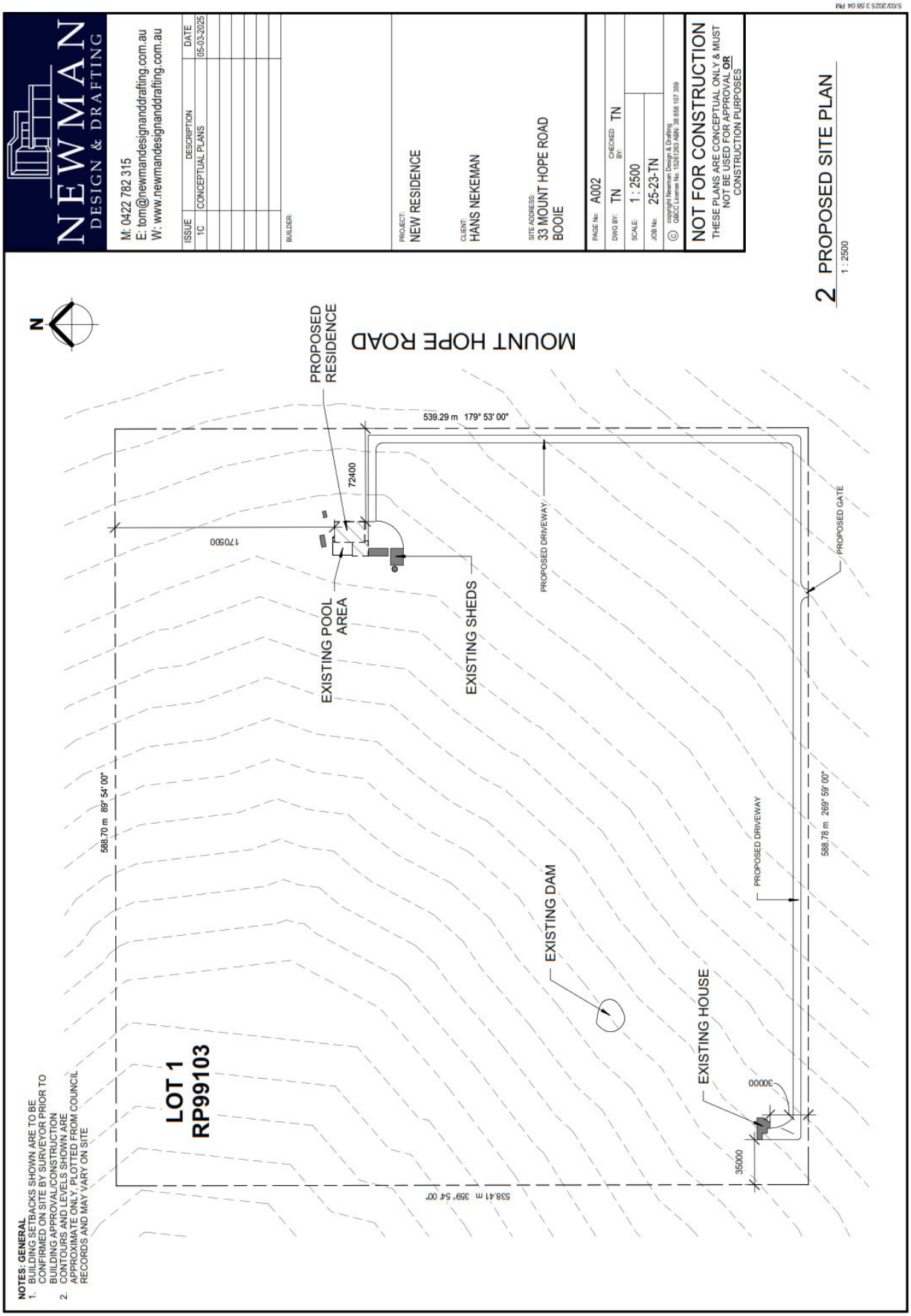
Any residential property located in a Bushfire prone area should have its own smoke alarms and basic fire-fighting equipment, and a fire fighting, and evacuation procedure should be in place and well-rehearsed.

8 Conclusions

As noted at the beginning of the report, the proposed dwelling is exposed to a BAL of 12.5. The contents of this report should be implemented, and the attached appendices heeded in order to ensure that the highest level of protection can be achieved for the residents and their property.

Appendices

Appendix A Site Plans



Appendix B Summary of AS3959-2018 BAL 12.5 construction requirements

Note: this is a summary of some portions of the standard - the building designer, builder and subcontractors should refer to AS3959-2018 in full prior to construction.

Subfloor supports

The Standard does not provide construction requirements for sub-floor supports where the sub-floor is enclosed in accordance with wall that conforms to the requirements for walls listed below or is enclosed with corrosion resistant steel, bronze or aluminium mesh with a maximum aperture of 2 mm.

Floors

The Standard does not provide construction requirements for concrete slabs on the ground.

Unenclosed subfloor space

The standard does not provide construction requirements for bearers, joists and floors that are greater than 400mm above finished ground level

External walls

External walls that are less than 400mm from the ground, decks, carport roofs and similar elements should be:

a. made of non-combustible materials (e.g. full masonry, brick veneer etc.) with a minimum thickness of 90 mm,

b. timber logs with a density of 680 kg/m^3 and a minimum nominal thickness of 90mm; or

c. cladding that is fixed externally to a timber or metal frame and is:

   i. non-combustible; or
   ii. fibre cement a minimum of 6mm thick; or
   iii. bushfire-resisting timber.

Joints

All joints in the external surface material of walls shall be covered, sealed, overlapped, backed or butt-jointed.

Vents and weepholes

Vents and weepholes in external walls are to be screened with corrosion-resistant steel, bronze or aluminium mesh with a maximum aperture of 2 mm.

External glazed elements, assemblies and doors

Screens for windows and doors

Where fitted, screens for windows and doors shall have mesh or perforated sheet made of corrosion-resistant steel, bronze or aluminium with a maximum aperture of 2 mm.

Windows

Frame material for windows less than 400 mm from the ground, decks, carport roofs and awnings, window frames are to be made from bushfire-resisting timber, metal or metal-reinforced uPVC.

Where glazing is less than 400mm from the ground, decks, carport roofs and awnings, glazing shall be Grade A safety glass with a minimum 4 mm thickness.

The openable portions of windows shall be screened with a mesh with a max aperture of 2 mm made of corrosion resistant steel, bronze or aluminium.

Doors - side hung external doors, panel fold & sliding doors

Doors- shall be completely protected externally by a screen with a mesh with a max aperture of 2mm made of corrosion resistant steel, bronze or aluminium, **OR**

Door panel material shall be:

a. non-combustible; or

b. solid timber, laminated timber or reconstituted timber, having a minimum thickness of 35 mm for the first 400 mm above the threshold;

c. hollow core, solid timber, laminated timber or reconstituted timber with a non-combustible kickplate on the outside for the first 400 mm above the threshold; or

d. protected externally by a metal screen with a maximum aperture of 2 mm; or

e. fully framed glazed door panels with framing made from metal or bushfire resisting timber.

There is no requirement to screen the openable part of a door at this level.

Garage doors

The lower portion (within 400 mm of the ground) of vehicle access doors shall be made from:

i. non-combustible material; or
ii. bushfire-resisting timber; or
iii. fibre-cement sheet, a minimum of 6 mm in thickness; or
iv. a combination of any of items (i), (ii) or (iii) above.

All vehicle access doors to be protected with suitable weather strips, draught excluders, draught seals or brushes.

Roofs

The following apply to all types of roofs and roofing systems:

a. roof tiles, roof sheets and roof covering accessories shall be non-combustible,

b. the roof/wall and roof/roof junction shall be sealed, or otherwise protected to prevent openings greater than 2mm,

c. roof ventilation openings, such as gable and roof vents, shall be fitted with ember guards made of non-combustible material or a mesh or perforated sheet with a max aperture of 2mm made of corrosion resistant steel, bronze or aluminium.

Tiled roofs shall be fully sarked.

Sheet roofs shall:

a. be fully sarked with sarking, except that foil backed insulation blankets may be installed over battens; **OR**

b. have any gaps sealed at the fascia, or wall line, hips and ridges by:

i. a mesh or perforated sheet with a maximum aperture of 2 mm, made of corrosion-resistant steel, bronze or aluminium (this may include gutter guard), or
ii. mineral wool, or
iii. other non-combustible material, or
iv. a combination of any of the above.

Roof penetrations

The following apply to roof penetrations:

a. roof penetrations, including roof lights, roof ventilators, roof-mounted evaporative cooling units, aerials, vent pipes and supports for solar collectors, shall be adequately sealed at the roof to prevent gaps greater than 3 mm.

b. openings in vented roof lights, roof ventilators or vent pipes shall be fitted with ember guards made from a mesh or perforated sheet with a maximum aperture of 2 mm, made of corrosion-resistant steel, bronze or aluminium.

c. glazed elements in roof lights and skylights may be of polymer provided a grade safety glass diffuser, complying with AS 1288, is installed under the glazing.

Eaves linings, fascias and gables

The following apply to eaves linings, fascias and gables:

a. gables shall comply with requirements for walls.

b. eaves ventilation openings are to be fitted with ember guards and be made of corrosion resistant steel, bronze or aluminium.

The Standard does not provide construction requirements for fascias, bargeboards and eaves linings.

Gutters and downpipes

The Standard does not provide material requirements for gutters and downpipes, with the exception of box gutters.

Box gutters are to be non-combustible and flashed at the roof junction with non-combustible material.

If installed, gutter and valley leaf guards are to be non-combustible.

Verandahs, decks, steps, ramps and landings

Decking may be spaced. There is no requirement to enclose the subfloor spaces of verandas, decks, steps, ramps or landings.

Decking, stair treads and trafficable surfaces of ramps and landings less than 300 mm (measured horizontally at deck level) from glazed elements that are less than 400 mm (measured vertically) from the surface of the deck are to be made from:

a. of non-combustible material; or

b. of bushfire-resisting timber; or

c. a combination of items (a) and (b) above.

Water and gas supply pipes

Above ground, exposed water and gas supply pipes shall be metal.

Appendix C Calculation of Bushfire Attack Level

AS3959-2018 Method 2 was used to determine the Bushfire Attack Levels that the dwelling is exposed to. The SPP Asset Protection Zone Width Calculator was used to determine the potential Bushfire Attack Level (BAL).

Vegetation Hazard Class

The new methodology for State-wide mapping of bushfire prone areas in Queensland identifies Potential Fuel Loads that are assigned to vegetation categories (Vegetation Hazard Classes) formed by amalgamating land use and vegetation types with a moderately consistent fuel load and structure. The Potential Fuel Load assigned to each Vegetation Hazard Class (VHC) is generally representative of the higher fuel load expected for the typical vegetation types, landscape and site conditions within each Vegetation Hazard Class. This Potential Fuel Load of each Vegetation Hazard Class would approximate the 80th percentile fuel load of the "long unburnt condition" for the class (generally greater than 10 years without burning). The Vegetation Hazard Classes (VHC) applicable for the site were identified to be VHC 10.2 Spotted gum dominated woodlands, VHC 40.4 Continuous low grass or tree cover and VHC 42.6 Nil to very low vegetation cover. Table 7 provides a brief description of VHCs and their potential fuel load characteristics.

Table 7 Vegetation hazard class description and 80th percentile potential fuel load

Vegetation Hazard Class (VHC)	Surface (t/ha)	Near surface (t/ha)	Elevated	Bark	Total
10.2 Spotted gum dominated woodlands	14	3	1	0	18
40.4 Continuous low grass or tree cover	0.5	4	0.5	0	5
42.6 Nil to very low vegetation cover	1	1	0	0	2

Fuel load data sources from Bushfire Resilient Communities Technical Reference Guide October 2019

Table 8 and Table 9 provide details of the BAL calculations for vegetation upslope and downslope of the proposed dwelling. Figure 7 shows the mapped VHCs for the dwelling and surrounds.

Table 8 SPP APZ Width Calculations for downslope vegetation (VHC 10.2)

SPP Bushfire Asset Protection Zone Width Calculator			
VARIABLE DESCRIPTION	**VARIABLE**	**UNITS**	**VALUE**
Input Values			
FIRE WEATHER SEVERITY	**FDI**		54.00
VEGETATION HAZARD CLASS	**VHC**	-	10.2 Spotted gum dominated woodlands
REMNANT STATUS	**-**	-	Non-Remnant
SLOPE TYPE (UPSLOPE OR DOWNSLOPE)	**ST**	-	Downslope
EFFECTIVE SLOPE UNDER THE HAZARDOUS VEGETATION	**eSlope**	degrees	2.00
SLOPE BETWEEN SITE AND HAZARDOUS VEGETATION	**θ**	degrees	2.00
DISTANCE OF THE SITE FROM HAZARDOUS VEGETATION	**d**	m	35.00
Output Values			
SURFACE FUEL LOAD	**-**	t/ha	14.00
NEAR SURFACE FUEL LOAD	**-**	t/ha	3.00
BARK FUEL LOAD	**-**	t/ha	1.00
ELEVATED FUEL LOAD	**-**	t/ha	0.00
TOTAL OVERALL FUEL LOAD	**W**	t/ha	18.00
TOTAL SURFACE FUEL LOAD	**w**	t/ha	17.00
POTENTIAL FIRE LINE INTENSITY	**I**	kW/m	11761
RADIANT HEAT FLUX	**q**	kW/m2	12.12
BUSHFIRE ATTACK LEVEL (AS 3959-2018)	**BAL**	-	BAL 12.5
DISCLAIMER: Fire-line intensity and radiant heat calculations where effective slope exceeds 20 degrees (downslope) or 15 degrees (upslope) may be unreliable. In these locations, specialist assessment is warranted.			

Table 9 SPP APZ Width Calculations for upslope vegetation (VHC 10.2)

SPP Bushfire Asset Protection Zone Width Calculator			
VARIABLE DESCRIPTION	**VARIABLE**	**UNITS**	**VALUE**
Input Values			
FIRE WEATHER SEVERITY	**FDI**		54.00
VEGETATION HAZARD CLASS	**VHC**	-	10.2 Spotted gum dominated woodlands
REMNANT STATUS	**-**	-	Non-Remnant
SLOPE TYPE (UPSLOPE OR DOWNSLOPE)	**ST**	-	Upslope
EFFECTIVE SLOPE UNDER THE HAZARDOUS VEGETATION	**eSlope**	degrees	1.00
SLOPE BETWEEN SITE AND HAZARDOUS VEGETATION	**θ**	degrees	1.00
DISTANCE OF THE SITE FROM HAZARDOUS VEGETATION	**d**	m	35.00
Output Values			
SURFACE FUEL LOAD	**-**	t/ha	14.00
NEAR SURFACE FUEL LOAD	**-**	t/ha	3.00
BARK FUEL LOAD	**-**	t/ha	1.00
ELEVATED FUEL LOAD	**-**	t/ha	0.00
TOTAL OVERALL FUEL LOAD	**W**	t/ha	18.00
TOTAL SURFACE FUEL LOAD	**w**	t/ha	17.00
POTENTIAL FIRE LINE INTENSITY	**I**	kW/m	10245
RADIANT HEAT FLUX	**q**	kW/m2	10.90
BUSHFIRE ATTACK LEVEL (AS 3959-2018)	**BAL**	-	BAL 12.5
DISCLAIMER: Fire-line intensity and radiant heat calculations where effective slope exceeds 20 degrees (downslope) or 15 degrees (upslope) may be unreliable. In these locations, specialist assessment is warranted.			

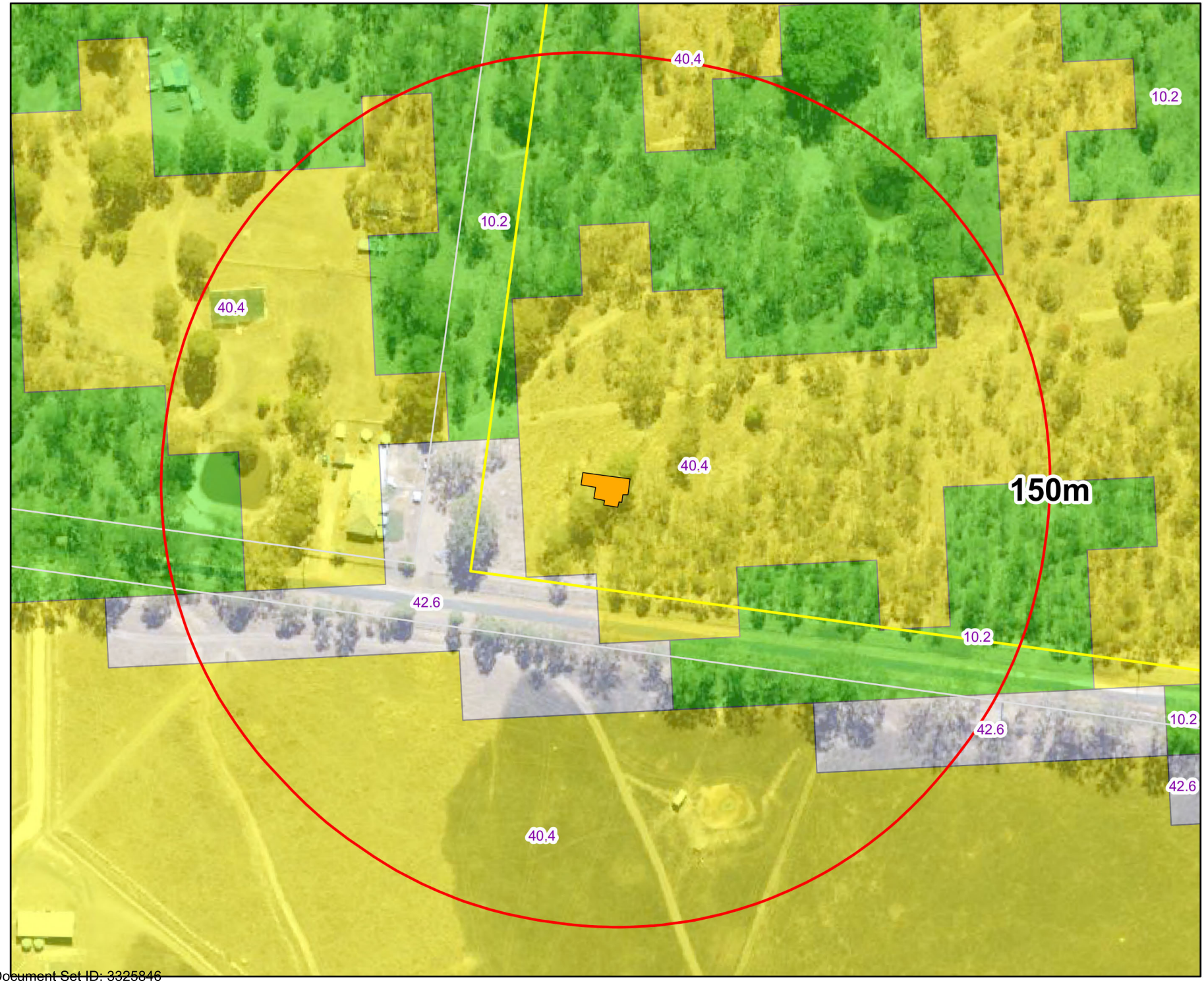


Figure 7 Vegetation Hazard Class Mapping

Project: BMR, 33 Mount Hope Road Booie

Client: Johannes Nekeman

Project No.: J002438

Compiled by: GabiLevay Date: 29/05/2025
Approved by: RG Date: 29/05/2025

Metres
0 20 40

Legend

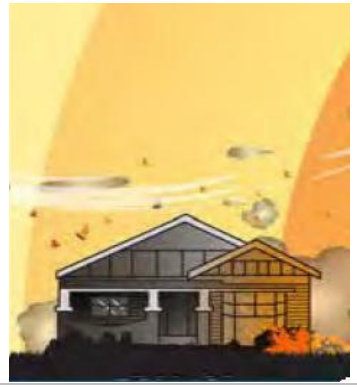
- Cadastre
- Site Boundary
- Proposed Dwelling
- 150m buffer
- 10.2 Spotted gum dominated woodlands
- 40.4 Continuous low grass or tree cover
- 42.6 Nil to very low vegetation cover

Source: Cadastral data sourced from DNRME (2025). Aerial imagery sourced from NearMap (2025).

N

range environmental consultants

Appendix D Bushfire Attack Levels explained

				
BAL-12.5	**BAL-19**	**BAL-29**	**BAL-40**	**BAL-FZ**
The risk is considered to be **LOW**	The risk is considered to be **MODERATE**	The risk is considered to be **HIGH**.	The risk is considered to be **VERY HIGH**.	The risk is considered to be **EXTREME**.
There is a risk of ember attack. The construction elements are expected to be exposed to a heat flux not greater than 12.5 kW/m^2.	There is a risk of ember attack and burning debris ignited by wind borne embers and a likelihood of exposure to radiant heat. The construction elements are expected to be exposed to a heat flux not greater than 19 kW/m^2.	There is an increased risk of ember attack and burning debris ignited by windborne embers and a likelihood of exposure to an increased level of radiant heat. The construction elements are expected to be exposed to a heat flux not greater than 29 kW/m^2.	There is a much increased risk of ember attack and burning debris ignited by windborne embers, a likelihood of exposure to a high level of radiant heat and some likelihood of direct exposure to flames from the fire front. The construction elements are expected to be exposed to a heat flux not greater than 40 kW/m^2.	There is an extremely high risk of ember attack and burning debris ignited by windborne embers, and a likelihood of exposure to an extreme level of radiant heat and direct exposure to flames from the fire front. The construction elements are expected to be exposed to a heat flux greater than 40 kW/m^2.

Images sourced from Planning Practice Note 65 September 2014 Victoria State Government

Appendix E Living in a Bushfire Prone area

A bushfire can ignite fuel and spread in three ways:

- Embers and burning debris carried by wind,
- Heat radiation from fire, and
- Direct flame contact

	Ignition of buildings by burning embers carried by the wind
	Ignition of buildings by heat radiation from the fire
	Ignition of buildings by direct flame contact

Figure 8 The three main elements of bushfire, which threaten life and property. (Ramsay & Rudolf 2003)

Overall, the intention of bush fire protection measures should be to prevent flame contact to a structure, reduce radiant heat to below the ignition thresholds for various elements of a building, to minimise the potential for wind driven embers to cause ignition and reduce the effects of smoke on residents and fire-fighters.

Whilst research shows that ember attack ultimately claims more vacant houses than radiant heat or flames, if a house is occupied, ember attack can be relatively easily dealt with. The consequence of leaving a house unattended is that there will probably be nobody there to prevent the small fires which initially start, from gradually taking hold of various parts of the structure. This process can occur over a significant period of time, usually simply with embers which fly about and settle, and start smouldering. The hot windy conditions associated with the fire help fan the smouldering clumps of fuel, and bring many small fires to life. These are

usually easy fires to extinguish if there is someone there with the equipment and water to put them out. In their absence, often some time, even hours after the initial fire front, the house succumbs to small fires which have grown to larger ones.

Over 90% of houses burnt down in bushfires are attributable to ember attack, and the vast majority of these are unattended at the time. In the 1984 study of the Ash Wednesday Fires around Mt Macedon, the survival rate amongst the 450 houses was 82% where they were occupied and 90% where the occupants were active, able bodied defenders, while only 30% of houses survived without someone to patrol them (Wilson & Ferguson, 1984).

Asset Protection Zones

The most immediate form of defense for an asset is a well-designed Asset Protection Zone (APZ). An APZ is a fuel reduced area surrounding a built asset or structure. This can include any residential building or major building such as farm and machinery sheds, or industrial, or commercial buildings.

Various amenities can contribute to the Asset Protection Zone, provided they are not combustible or otherwise they will add to radiant heat levels. Such amenities include driveways, tennis courts, swimming pools or fire trails, each adding to the distance from the hazard.

Radiant heat barriers such as non-combustible walls or water tanks can help shield assets from radiant heat, thereby complementing the APZ, and in some cases reducing the requirement for distance from the hazard to a degree.

An APZ provides:

- a buffer zone between a bush fire hazard and an asset;
- an area of reduced bush fire fuel that allows suppression of fire;
- an area from which backburning may be conducted; and
- an area which allows emergency services access and provides a relatively safe area for firefighters and home owners to defend their property

Potential bush fire fuels should be minimised within an APZ. This is so that the vegetation within the planned zone does not provide a path for the transfer of fire to the asset either from the ground level or through the tree canopy.

An APZ, if designed correctly and maintained regularly, will reduce the risk of:

- direct flame contact on the asset;
- damage to the built asset from intense radiant heat; and
- ember attack on the asset.

The APZ can be made up of an Inner Protection Area (IPA) and an Outer Protection Area (OPA).

Inner Protection Area (IPA)

The IPA is the area closest to the building and creates a fuel-managed area which can minimise the impact of direct flame contact and radiant heat on the development and act as a defendable space. Vegetation within the IPA should be kept to a minimum level. Litter fuels within the IPA should be kept below 1cm in height and be discontinuous.

In practical terms the IPA is typically the area around the building, consisting of a mown lawn and well-maintained gardens. When establishing and maintaining an IPA the following requirements apply:

Trees

- Tree canopy cover should be less than 15% at maturity;

- trees at maturity should not touch or overhang the building (preferably, there should be no trees within 10 metres of a dwelling);
- lower limbs should be removed up to a height of 2m above the ground; and
- tree canopies should be separated by 2 to 5m.

Shrubs

- Create large discontinuities or gaps in the vegetation to slow down or break the progress of fire towards buildings should be provided;
- shrubs should not be located under trees;
- shrubs should not form more than 10% ground cover; and
- clumps of shrubs should be separated from exposed windows and doors by a distance of at least twice the height of the vegetation.

Grass

- Grass should be kept mown (as a guide grass should be kept to no more than 100mm in height); and
- leaves and vegetation debris should be removed.

Outer Protection Area (OPA)

An OPA is located between the IPA and unmanaged vegetation. It is an area where there is maintenance of the understorey and some separation in the canopy. The reduction of fuel in this area aims to decrease the intensity of an approaching fire and restricts the potential for fire spread from crowns; reducing the level of direct flame, radiant heat and ember attack on the IPA.

When establishing and maintaining an OPA the following requirements apply:

Trees

- Tree canopy cover should be less than 30%; and
- canopies should be separated by 2 to 5metres

Shrubs

- Shrubs should not form a continuous canopy; and
- shrubs should form no more than 20% of ground cover.

Grass

- Grass should be kept mown to a height of less than 100mm; and
- leaf and other debris should be removed.

An APZ should be maintained in perpetuity to ensure ongoing protection from the impact of bushfires. Maintenance of the IPA and OPA as described above should be undertaken regularly, particularly in advance of the bush fire season.

The required distances for Asset Protection Zones are dependent on the vegetation type (hazard), the slope of the site and whether the hazard is upslope or downslope from the asset. In this situation, it is recommended that an APZ be established as illustrated in Figure 9.

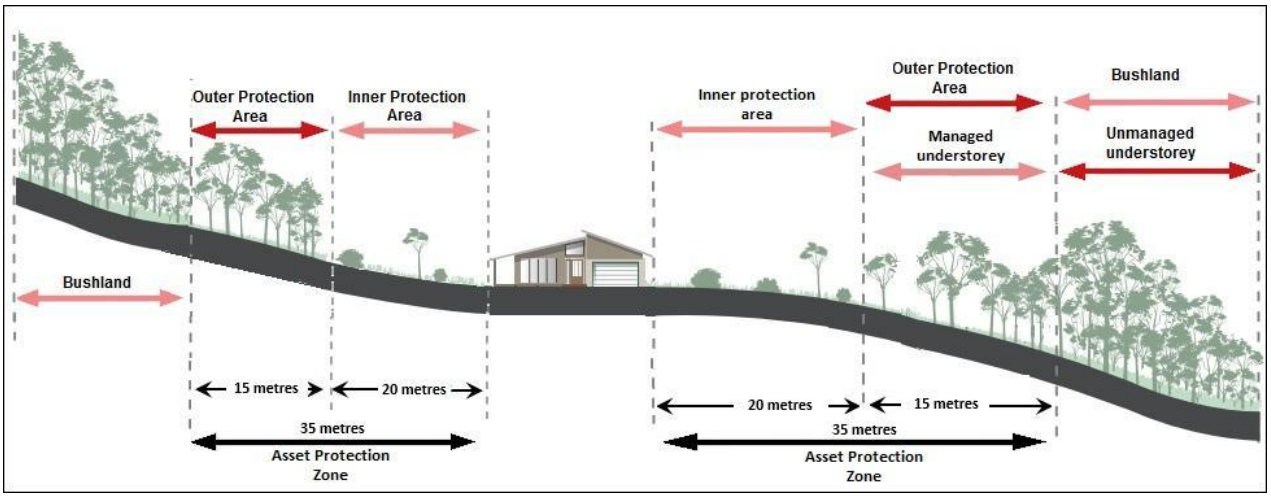


Figure 9 Recommended asset protection zone (Adapted from Planning for Bushfire Protection 2017)

Information presented in this Appendix was drawn from Planning for Bushfire Protection, A guide for councils, planners, fire authorities and developers (NSW Rural Fire Service November 2019) and Standards for Asset Protection Zones (NSW Rural Fire Service undated).

Appendix F Landscaping in Fire Prone Areas

The design, management and maintenance of the landscape in the immediate vicinity of buildings are fundamental to the chances of survival of both people and buildings in a bushfire event. Vegetation provides the major fuel element in a bushfire. All vegetation, regardless of how succulent or green it is will eventually burn, provided the fire has sufficient intensity. When landscaping in bushfire prone areas, it is important to use or retain plants of low flammability that have the relevant characteristics as identified in Table 10.

Table 10 Characteristics of low flammability species and effect on performance in bushfire situations

Plant attribute	Effect	Design measure
Foliage moisture content	Leaves with higher moisture content retard ignition and slow the rate of combustion	Select species with high leaf moisture content (e.g. rainforest species, succulents and semi-succulents)
Foliage volatile oil content	Foliage with higher volatile oil content ignite more readily and enhance ignition of surrounding vegetation, even though volatile oils themselves do not contribute significantly to total radiant heat	Select species with lower volatile oil content
Foliage mineral content	Foliage with higher mineral content tend to be less flammable (e.g. Amyema spp mistletoes)	Species selection should favour species with higher leaf mineral content
Leaf fineness	The ratio of area-to-volume of leaves is one of the main factors affecting ease of ignition and intensity of burning. Finer leaves (greater area to volume ratio) tend to ignite and burn more easily than broader leaves	Species selection should favour broad-leafed species
Density of foliage and continuity of plant form	Species with continuous, denser foliage can act as a barrier to wind-borne embers and radiant heat; however, increased density can increase flammability. Species with open branching and low foliage density are less effective as a barrier, though can be less flammable	Select species on a case-by-case basis
Height of lowest foliage	Shrub and tree species with persistent low height foliage are more likely to be ignited by surface fires, allowing the spread of fires into the canopy above	Species selection should favour species which can be maintained or pruned to reduce persistent, near-ground foliage
Size of plant (volume and spread)	The effect of plant size varies according to volume or spread. Species with a greater spread tend to be more effective as a barrier to the diffusion of radiant heat than narrower trees with the same volume. Species with a greater volume can result in increased ember attack, radiation and flame if ignited. For example, narrow columnar trees are less effective as a	Species selection should ensure plant size (volume and spread) does not increase ignition likelihood

Plant attribute	Effect	Design measure
	barrier than wider trees with the same overall volume	
Dead foliage on plant	Persistent dead leaves and woody twigs increase flammability	Species selection should favour species which have a low volume of persistent dead leaves and woody material or can be maintained or pruned to reduce persistent, dead leaves and woody material
Bark texture	Loose, flaky, stringy, papery or ribbon-like bark contribute to ladder fuels which: • can contribute to destructive crown fires • act as a potential source of flame, radiant heat and ember attack	Avoid species with persistent loose, flaky, stringy, papery or ribbon-like bark. Species selection should favour smoothbarked and tightly-held bark species
Potential available surface fuel	The availability of surface fuel is a function of volume (quantity) and fineness. The fireline intensity increases in proportion to available fine fuel quantity. Fine fuel includes dead fallen material such as leaves, bark, twigs and branches up to 6mm in diameter (forest) and grass greater than 5cm in height (grasslands). Coarse fuel ignites less readily but may burn for longer	Species selection should favour species which do not contribute significantly to persistent, fine ground fuel

The characteristics of low flammability species and effect on performance in bushfire situations was sourced from the publication *Bushfire Resilient Communities, Technical Reference Guide for the State Planning Policy State Interest 'Natural Hazards, Risk and Resilience - Bushfire'*.

To assist building survival in a bushfire event, it is important that a fuel-reduced zone is maintained around it. This can be achieved by keeping all vegetation away from the building or by using low flammability plantings to help shield the building from radiant heat. Trees and shrubs that drop litter should not be planted or retained close to buildings where they can contribute to the accumulation of flammable material.

Ongoing maintenance of vegetation should be undertaken in the area surrounding the site to prevent hazardous fuel loads from occurring. These actions include:

- Pruning lower branches of trees to provide a minimum vertical 2 metre high fire break;
- Removal of loose bark, dead twigs, leaves;
- Regular mowing of lawns;
- Keeping other grassed areas to less than 100mm in height;
- Use of non-flammable mulches such as river pebbles or stones on garden beds near buildings; and
- Avoidance of flammable mulches on garden beds such as woodchip or straw.

www.rangeenviro.com.au

BRISBANE
Unit 1/7 Birubi Street
Coorparoo Qld 4151

TOOWOOMBA
Office A, 189 Hume St
Toowoomba QLD 4350

T 07 4588 6711
E admin@rangeenviro.com.au

Appeal Rights

PLANNING ACT 2016 & THE PLANNING REGULATION 2017

Chapter 6 Dispute resolution

Part 1 Appeal rights

229 Appeals to tribunal or P&E Court

(1) Schedule 1 of the *Planning Act 2016* states –
  (a) Matters that may be appealed to –
    (i) either a tribunal or the P&E Court; or
    (ii) only a tribunal; or
    (iii) only the P&E Court; and
  (b) The person-
    (i) who may appeal a matter (**the *appellant***); and
    (ii) who is a respondent in an appeal of the matter; and
    (iii) who is a co-respondent in an appeal of the matter; and
    (iv) who may elect to be a co-respondent in an appeal of the matter.

(Refer to Schedule 1 of the Planning Act 2016)

(2) An appellant may start an appeal within the appeal period.
(3) The ***appeal period*** is –
  (a) for an appeal by a building advisory agency – 10 business days after a decision notice for the decision is given to the agency; or
  (b) for an appeal against a deemed refusal – at any time after the deemed refusal happens; or
  (c) for an appeal against a decision of the Minister, under chapter 7, part 4, to register premises or to renew the registration of premises – 20 business days after a notice us published under section 269(3)(a) or (4); or
  (d) for an appeal against an infrastructure charges notice – 20 business days after the infrastructure charges notice is given to the person; or
  (e) for an appeal about a deemed approval of a development application for which a decision notice has not been given – 30 business days after the applicant gives the deemed approval notice to the assessment manager; or
  (f) for any other appeal – 20 business days after a notice of the decision for the matter, including an enforcement notice, is given to the person.

  Note –
  See the P&E Court Act for the court's power to extend the appeal period.

(4) Each respondent and co-respondent for an appeal may be heard in the appeal.
(5) If an appeal is only about a referral agency's response, the assessment manager may apply to the tribunal or P&E Court to withdraw from the appeal.
(6) To remove any doubt. It is declared that an appeal against an infrastructure charges notice must not be about-
  (a) the adopted charge itself; or
  (b) for a decision about an offset or refund-
    (i) the establishment cost of trunk infrastructure identified in a LGIP; or
    (ii) the cost of infrastructure decided using the method included in the local government's charges resolution.

230 Notice of appeal

(1) An appellant starts an appeal by lodging, with the registrar of the tribunal or P&E Court, a notice of appeal that-
  (a) is in the approved form; and
  (b) succinctly states the grounds of the appeal.
(2) The notice of appeal must be accompanied by the required fee.
(3) The appellant or, for an appeal to a tribunal, the registrar must, within the service period, give a copy of the notice of appeal to –
  (a) the respondent for the appeal ; and
  (b) each co-respondent for the appeal; and
  (c) for an appeal about a development application under schedule 1, table 1, item 1 – each principal submitter for the development application; and
  (d) for and appeal about a change application under schedule 1, table 1, item 2 – each principal submitter for the change application; and
  (e) each person who may elect to become a co-respondent for the appeal, other than an eligible submitter who is not a principal submitter in an appeal under paragraph (c) or (d); and
  (f) for an appeal to the P&E Court – the chief executive; and
  (g) for an appeal to a tribunal under another Act – any other person who the registrar considers appropriate.
(4) The *service period* is –
  (a) if a submitter or advice agency started the appeal in the P&E Court – 2 business days after the appeal has started; or
  (b) otherwise – 10 business days after the appeal is started.
(5) A notice of appeal given to a person who may elect to be a co-respondent must state the effect of subsection (6).
(6) A person elects to be a co-respondent by filing a notice of election, in the approved form, within 10 business days after the notice of appeal is given to the person.

231 Other appeals

(1) Subject to this chapter, schedule 1 and the P&E Court Act, unless the Supreme Court decides a decision or other matter under this Act is affected by jurisdictional error, the decision or matter is non-appealable.
(2) The *Judicial Review Act 1991*, part 5 applies to the decision or matter to the extent it is affected by jurisdictional error.
(3) A person who, but for subsection (1) could have made an application under the Judicial Review Act 1991 in relation to the decision or matter, may apply under part 4 of that Act for a statement of reasons in relation to the decision or matter.
(4) In this section –
  decision includes-
  (a) conduct engaged in for the purpose of making a decision; and
  (b) other conduct that relates to the making of a decision; and
  (c) the making of a decision or failure to make a decision; and
  (d) a purported decision ; and
  (e) a deemed refusal.
  non-appealable, for a decision or matter, means the decision or matter-
  (a) is final and conclusive; and
  (b) may not be challenged, appealed against, reviewed, quashed, set aside or called into question in any other way under the Judicial Review Act 1991 or otherwise, whether by the Supreme Court, another court, a tribunal or another entity; and
  (c) is not subject to any declaratory, injunctive or other order of the Supreme Court, another court, a tribunal or another entity on any ground.

232 Rules of the P&E Court

(1) A person who is appealing to the P&E Court must comply with the rules of the court that apply to the appeal.
  However, the P&E Court may hear and decide an appeal even if the person has not complied with the rules of the P&E Court.