



Reference number 4222

Member of the Fire Protection Association of Australia

Lot 85, DP 14682, 5C Iluka Road, Palm Beach, NSW 2108.

Tuesday, 13 December 2022

Prepared and certified by:	Matthew Willis BPAD – Level3 Certified Practitioner Certification No: BPD-PA 09337	Matt historia	13/12/2022
Can this proposal comply with AS3959-2018 (inc section 7.5, 7.5.1,7.5.2, 7.5.3, 7.5.4 (where applicable) of the Rural Fire Services document Planning for Bushfire Protection 2019)?		Yes	
What is the recommended AS 3959-2018 level of compliance?		BAL-LOW	
Is referral to the RFS required?		No	
Can this development comply with the requirements of PBP?		Yes	
Plans		Attached	

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Bushfire Planning Services

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Bushfire Risk Assessment

Tuesday, 13 December 2022

Contact

Georgia Mansur 5C Iluka Road Palm Beach NSW 2108 0427 101 976

Subject Property

Lot 85, DP 14682 5C Iluka Road Palm Beach NSW 2108





BUSHFIRE RISK ASSESSMENT CERTIFICATE

THIS FORM IS TO BE COMPLETED BY A RECOGNISED CONSULTANT IN BUSHFIRE RISK ASSESSMENT IN ACCORDANCE WITH SECTION 4.14 1(b) OF THE ENVIRONMENTAL PLANNING AND ASSESSMENT ACT 1979 NO 203

Property Address	Lot 85, DP 14682, number 5C Iluka Road Palm Beach	
Description of the Proposal	Alterations and additions to an existing dwelling	
Plan Reference	Attached	
BAL Rating	BAL-LOW	
Does the Proposal Rely on Alternate Solutions?	No	

I, Matthew Willis of Bushfire Planning Services Pty Ltd have carried out a bushfire risk assessment on the above-mentioned proposal and property. A detailed Bushfire Assessment Report is attached which includes the submission requirements set out in Bushfire Protection 2019 together with recommendations as to how the relevant Specifications and requirements are to be achieved.

I hereby certify, in accordance with Section 4.14 of the Environmental Planning and Assessment Act 1979 No 203:

- 1. That I am a person recognised by the NSW Rural Fire Service as a qualified consultant in bushfire risk assessment; and
- 2. That subject to the recommendations contained in the attached Bushfire Risk Assessment Report the proposed development conforms to the relevant specifications and requirements*
- *The relevant specifications and requirements being specifications and requirements of the document entitled Planning for Bush Fire Protection prepared by the NSW Rural Fire Service in co-operation with the Department of Planning and any other document as prescribed by Section 4.14 of the Environmental Planning and Assessment Act 1979 No 203.

I am aware that the Bushfire Assessment Report, prepared for the above-mentioned site is to be submitted in support of a development application for this site and will be relied upon by Northern Beaches Council as the basis for ensuring that the bushfire risk management aspects of the proposed development have been addressed in accordance with Planning for Bushfire Protection 2019.

REPORT REFERENCE	Tuesday, 13 December 2022	
REPORT DATE	Tuesday, 13 December 2022	
CERTIFICATION NO/ACCREDITED SCHEME	FPAA BPAD A BPD-PA 09337	

Attachments:

- Bushfire Risk Assessment Report
- Recommendations

SIGNATURE: --- DATE: ----Tuesday, 13 December 2022





Contents.

1	Executive Summary.	5
2	General.	6
3	Block Description.	6
4	Vegetation.	8
5	Known constraints on subject block.	10
6	Slope.	10
7	Utilities.	11
7.1	Water.	11
7.2	Electricity	11
7.3	Gas	11
8	Access/Egress.	11
9	Compliance with Planning for Bushfire Protection setbacks.	12
10	Siting.	12
11	Construction and design.	13
12	Utilities.	13
12.1	Water.	13
12.2	Electricity and Gas.	13
13	Asset Protection Zone (APZ).	13
14	Landscaping.	14
15	Constraints on the subject block.	14
16	Access/Egress.	15
17	Compliance or non compliance with the specifications and requirement bushfire protection measures.	ts for 15
18	Conclusions.	16
19	References.	17
20	Annendix 1 - Plans	18





1 Executive Summary.

Bushfire Planning Services has been requested by Georgia Mansur to supply a bushfire compliance report on lot 85, DP 14682, 5C Iluka Road, Palm Beach.

The subject lot is marked as bushfire prone land in the council's bushfire prone land map (see page 7 of this assessment) however the 100m buffer does not extend to the area where the proposed work is to occur.

As the area on which the proposed new works are to take place is beyond 100m of any significant bushfire hazard the new works are considered to be at a BAL-LOW bushfire risk level and are therefore considered to be beyond the construction requirements of AS 3959 2018.

All the vegetation within the study area for this proposal is contained within the boundaries of established residential allotments and is considered to be managed land and of low threat to this proposal.

The calculations and assumptions outlined in this report show that the development, when assessed using the methodology of Planning for Bushfire Protection, is considered to be at an AS 3959-2018 BAL-LOW threat level and is therefore considered to be at a 'very low' risk of bush fire attack.

All vegetation within a 100m study area is contained within the boundaries of established residential allotments and is managed land and of low threat to this proposal..

Table 1 is a summary	of the relevan	it findings of this	assessment.

Aspect	North	East	South	West
Vegetation type	Managed land	Managed land/forest	Managed land	Managed land
Slope	N/A	All Upslope and Flat Land	N/A	N/A
Setback within lot 85	N/A	34.5m	N/A	N/A
Setback outside lot 85	N/A	68m	N/A	N/A
Total setback	N/A	105m	N/A	N/A
Bal level	N/A	LOW	N/A	N/A

Table 1 - Only the aspect/aspects considered to be at the greatest threat from bushfire are shown in the above table. This table is not construction advice. For specific building construction advice see section 11.





2 General.

This proposal relates to the alterations and additions to an existing dwelling on the subject lot and its ability to comply with the rules and regulations for building in a bushfire prone area.

The methodology used on this report is based on Planning for Bushfire Protection 2019 (PBP) as published by the New South Wales Rural Fire Service.

Any wording that appears in *blue italics* is quotes from Planning for Bushfire Protection 2019. Some of the measurements used in this report have been taken from aerial photographs and as such are approximate only.

3 Block Description.

The subject block is situated on the north-eastern side of Iluka Road in an established area of Palm Beach.

The lands surrounding the proposed site on the subject lot to a distance of at least 100m contain existing residential development and associated gardens or land that is otherwise not considered to be a significant bushfire hazard.

- Lot: 85
- DP: 14682.
- LGA; Northern Beaches.
- Area; 715.18m2.
- Address; 5C Iluka Road, Palm Beach.

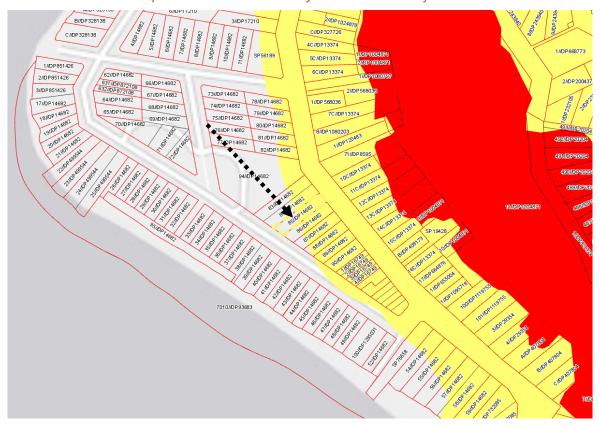
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Map 1 shows the cadastral layout around the subject lot.



Map 2 is an extract from the councils' bushfire prone land map. The map shows lot 85 to be partially within the buffer zone of category 1 bushfire vegetation.





4 Vegetation.

The study area for the vegetation is 140m surrounding the subject block.

The vegetation within the study area for this development is considered to be largely managed land.

The major potential hazard to this development is the vegetation within an area of undeveloped land to the east.

For the purpose of this assessment and compliance with AS3959 this area of undeveloped land is considered to be Forest and is the hazard to this proposal,



Photo 1 - An overview of the vegetation within the general area.

This area has been left intentionally blank.







Photo 2 is a closer view of the vegetation in the area.

Table 2 outlines the vegetation orientation and distance from the development area.

Aspect	North	East	South	West
Vegetation type	Managed land	Managed land/forest	Managed land	Managed land
Setback within lot 85	N/A	34.5m	N/A	N/A
Off-site setback	N/A	68m	N/A	N/A
Total setback	N/A	105m	N/A	N/A

Table 2 - Any aspect marked with "N/A" in the table above indicates that it is considered there is none or only a secondary hazard in that direction.

This area has been left intentionally blank.





5 Known constraints on subject block.

I have not been informed or know of any places of cultural or environmental significance within the boundaries of the subject block. Given the nature of the surrounding land it is considered highly unlikely that anything of significance will be affected by this development.

6 Slope.

In this particular instance the slope beneath the hazard is irrelevant to the outcome of this assessment as any remaining hazard is at a distance of greater than 100m from the area on the lot where the work is to be undertaken. The topographical map below is included for information and audit purposes only.

An extract of the topographical map for the area is shown below and the relevant slope analysis is shown in Table 3.



Table 3 shows the slope beneath the hazard.

Aspect	North	East	South	West
Slope	N/A	All Upslope and Flat Land	N/A	N/A

Table 3 - Any aspect marked with "N/A" in the table above indicates that it is considered there is no hazard in that direction.





7 Utilities.

7.1 Water.

The subject block will be serviced by a reticulated water supply.

The following map is an extract from Sydney waters hydrant map. Hydrants are indicated by a blue dot on a blue line. As can be seen there is at least one hydrant point indicated within close proximity of the property.



7.2 Electricity

Mains electricity is available to the block.

7.3 Gas

It is unknown if either bottled or mains gas is to be altered or installed in this proposal.

8 Access/Egress.

Vehicle access to the development site will be via a short private driveway from Barrenjoey Road.





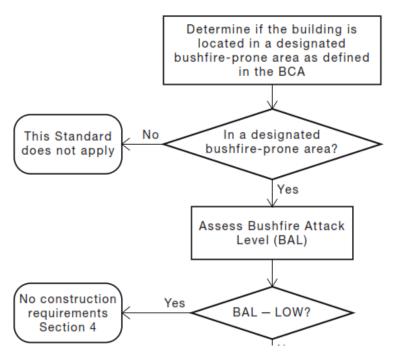
All roads in the vicinity are considered to be capable of carrying emergency services vehicles and pedestrian access onto the lot is also considered to be adequate.

Analysis of development and recommendation.

9 Compliance with Planning for Bushfire Protection setbacks.

Based on the development design, vegetation classification, effective slope estimate and setback distance already outlined in this report the subject development has been assessed as AS 3959-2018 BAL-LOW

The following picture is a section of the assessment flowchart from AS 3959 that covers the requirements for an assessment of BAL-LOW.



Section 4 of AS 3959 2018 states "The bushfire attack level Bal low is based on insufficient risk to warrant specific bushfire construction requirements. It is predicated on low threat vegetation and non-vegetated areas."

10 Siting.

The current site provides adequate separation between the proposed building and surrounding vegetation for a compliant structure to be built.

Recommendation;

Nil





11 Construction and design.

Although the construction requirements of AS 3959 are not considered to apply to this proposal the proposal is still required to comply with the "measures in combination" of the RFS document Planning for Bushfire Protection.

Note; Although AS3959 considers that no specific construction requirements need to be applied to this proposal some risk from bushfire still exists. The subject lot is in an area that may be affected by a fire in the larger, surrounding area which could be expected to cause smoke and burning embers to affect this new building.

It would be prudent to consider constructing the building to at least an AS3959 2018 BAL-12.5 construction standard which will give an enhanced level of protection from Ember attack. The additional cost of BAL-12.5 construction is not significantly onerous and is recommended however not strictly required.

The application of this additional construction level should be at the discretion of the owner.

12 Utilities.

12.1 Water.

The proposed development will have access to a reticulated water supply. There is at least one hydrant indicated within the required distance from the dwelling.

Recommendation;

Nil

12.2 Electricity and Gas.

Recommendation:

1. Any new electricity or gas connections are to comply with the requirements of section 6.8.3 of Planning for Bushfire Protection.

13 Asset Protection Zone (APZ).

The Asset Protection Zone is "An area surrounding a development managed to reduce the bushfire hazard to an acceptable level. The width of an APZ will vary with slope, vegetation and construction level".

Recommendation;

 At the commencement of building works and in perpetuity the entire property shall be managed as an Asset Protection Zone in accordance with the requirements of Planning for Bushfire Protection, the RFS document Standards for Asset Protection Zones and in a manner that does not create a bushfire hazard to the property.





14 Landscaping.

No specific landscaping plan has been provided as part of this assessment.

Recommendation:

- 3. Any new fencing is to be constructed in accordance with section 7.6 of Planning for Bushfire Protection 2019.
- 4. Any new landscaping to the site is to comply with the principles of Appendix 4 and section 3.7 of Planning for Bush Fire Protection 2019. In this regard the following landscaping principles are, where applicable, to be incorporated into the development¹:
 - Suitable impervious areas being provided immediately surrounding the building such as courtyards, paths and driveways;
 - Grassed areas/mowed lawns/ or ground cover plantings being provided in close proximity to the building;
 - Restrict planting in the immediate vicinity of the building which may over time and if not properly maintained come in contact with the building;
 - Maximum tree cover should be less than 30%, and maximum shrub cover less than 20%;
 - Planting should not provide a continuous canopy to the building (i.e. trees or shrubs should be isolated or located in small clusters);
 - When considering landscape species consideration needs to be given to estimated size of the plant at maturity;
 - Avoid species with rough fibrous bark, or which retain/shed bark in long strips or retain dead material in their canopies;
 - Use smooth bark species of trees species which generally do not carry a fire up the bark into the crown;
 - Avoid planting of deciduous species that may increase fuel at surface/ ground level (i.e. leaf litter);
 - Avoid climbing species to walls and pergolas;
 - Locate combustible materials such as woodchips/mulch, flammable fuel stores away from the building;
 - Locate combustible structures such as garden sheds, pergolas and materials such timber garden furniture way from the building; and
 - Use of low flammability vegetation species.

15 Constraints on the subject block.

¹Refer to referenced documents for a complete description.





None known.

Recommendation;

Nil

16 Access/Egress.

All roads in the area are considered to be capable of handling emergency service vehicles. Access from the roadway onto the property is also considered to be adequate for firefighting purposes.

Recommendation

Nil

17 Compliance or non compliance with the specifications and requirements for bushfire protection measures.

APZ A defendable space is provided onsite. An APZ is provided and maintained for the life of the development.	Achievable with the implementation of the recommendations in section 13	
SITING AND DESIGN: Buildings are sited and designed to minimise the risk of bush fire attack.	Achievable with the implementation of the recommendations in section 10	
CONSTRUCTION STANDARDS: It is demonstrated that the proposed building can withstand bush fire attack in the form of wind, smoke, embers, radiant heat and flame contact.	Achievable with the implementation of the recommendations in section 11	
ACCESS Safe, operational access is provided (and maintained) for emergency services personnel in suppressing a bush fire while residents are seeking to relocate, in advance of a bush fire, (satisfying the intent and performance criteria for access roads in sections 4.1.3 and 4.2.7).	Achievable with the implementation of the recommendations in section 16	
WATER AND UTILITY SERVICES: • adequate water and electricity services are provided for firefighting operations • Gas and electricity services are located so as not to contribute to the risk of fire to a building. Achievable wit implementation recommendations in		





LANDSCAPING:

• it is designed and managed to minimise flame contact and radiant heat to buildings, and the potential for wind driven embers to cause Ignitions. Achievable with the implementation of the recommendations in section 14

18 Conclusions.

Based on the above report and with the implementation of the recommendation contained within this report the consent authority should determine that this development can comply with the requirements of AS 3959-2018 and 'Planning for Bushfire Protection' guidelines.

The recommendations contained within this report are to be implemented in their entirety. Changing one aspect may have an adverse effect on the rest of the recommendations.

Bushfires are affected by many external influences such as climactic conditions, vegetation type, moisture content of the fuel, slope of the land and human intervention to name a few and are difficult to predict.

This report does not intend to provide a guarantee that the subject property will survive if a bushfire should impact the surrounding area. The purpose of this report is to show the developments level of compliance or in some cases non-compliance with the New South Wales legislation regarding building in bushfire prone areas.

Where non-compliance is found measures will be suggested that should make the building less susceptible to the various attack mechanisms of a bushfire and comply with the performance requirements of the Building Code of Australia.

The opinions expressed in this report are based on the writers' experience and interpretation of the relevant guidelines and standards. Notwithstanding the above, these guidelines and standards are open to interpretation. All care has been taken to ensure that the opinions expressed in this report are consistent with past successful outcomes.

Some of the information used in the compilation of this assessment has been provided by the proponent or the proponent's representatives. While we believe this information to be true and have accepted the information in good faith however this company or its representatives will not accept any responsibility if the provided information is determined to be incorrect.

This document is to assist the consenting authorities with their assessment of this proposal. The recommendations contained in this assessment reflect the normal conditions that are typically applied by the consent authority for a proposal such as this however the conditions of consent for the proposal will be supplied by the certifying authority on approval of the development and may not necessarily be the same as the recommendations of this assessment.

The recommendations in this assessment are for planning guidance only, construction details and compliance with all building requirements are the responsibility of the Architect/Designer, Builder and Certifier.





To avoid confusion, unless specifically referenced by the consenting authority, it is strongly recommended that once this proposal has been approved that this document is no longer referenced and that only the official conditions of consent as reflected in documentation by the certifying body are used for construction guidance.

If any further clarification is required for this report, please do not hesitate to contact me using the details above.

Yours Sincerely

Nothing.

Matthew Willis

Grad Dip Planning for Bushfire Prone Areas

Bushfire Planning Services Pty Limited

19 References.

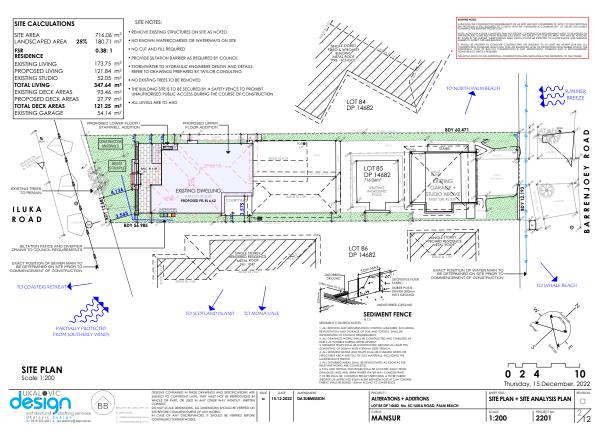
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- Rural Fire Service NSW (2005) "Standards for Asset Protection Zones"
- Standards Australia (2018). "AS 3959, Construction of buildings in bush fire prone areas".
- Standards Australia (2018). "AS/NZS 1530.8.1 Methods for fire tests on building materials, components and structures - Tests on elements of construction for buildings exposed to simulated bush fire attack - Radiant heat and small flaming sources".
- Standards Australia (2018). "AS/NZS 1530.8.2 Methods for fire tests on building materials, components and structures - Tests on elements of construction for buildings exposed to simulated bush fire attack - Large flaming sources".
- Standards Australia (2014). "AS/NZS 1596 The storage and handling of LP Gas".



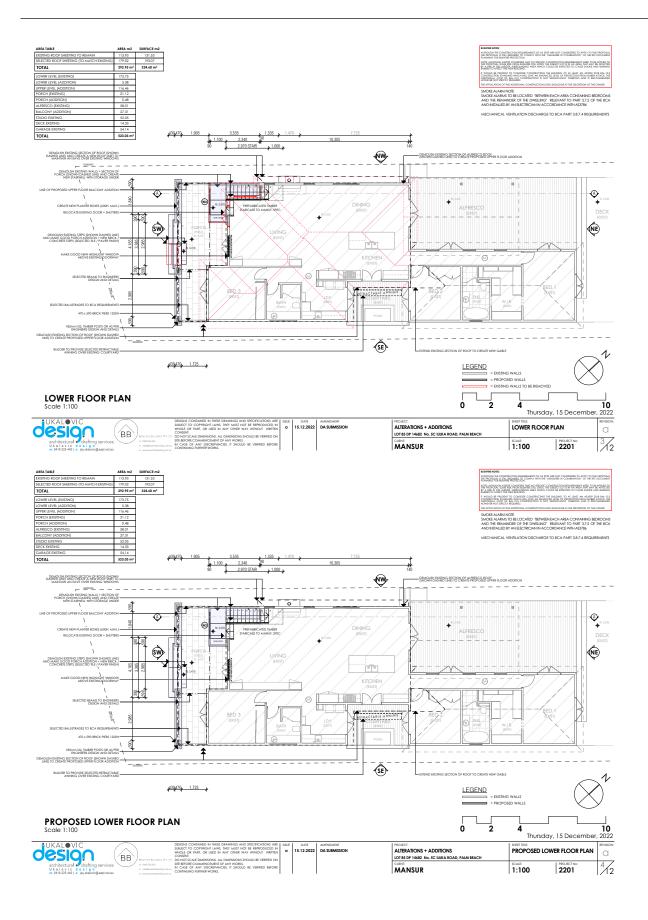
20 Appendix 1 - Plans.

DEVELOPMENT APPLICATION

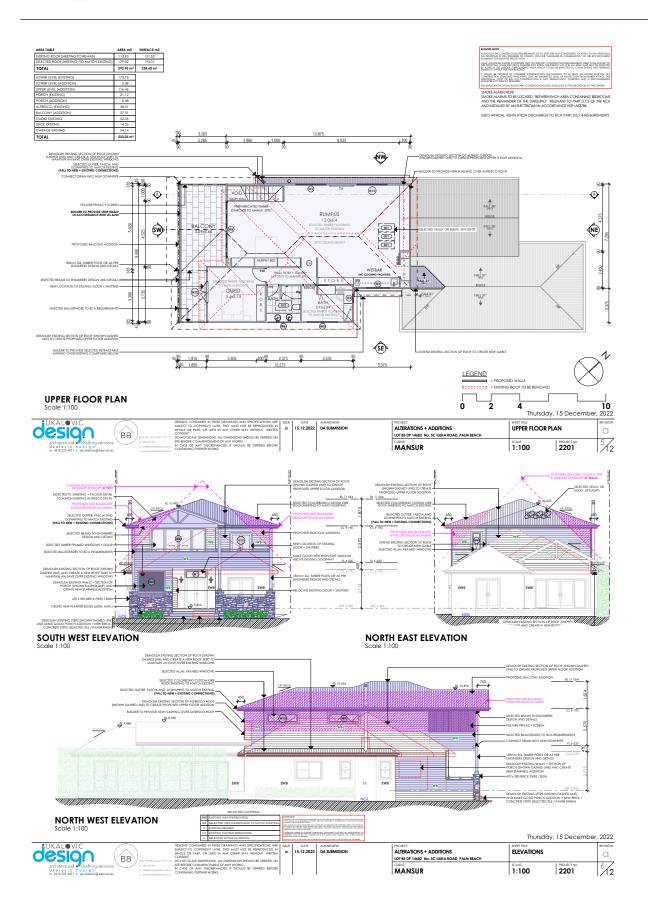




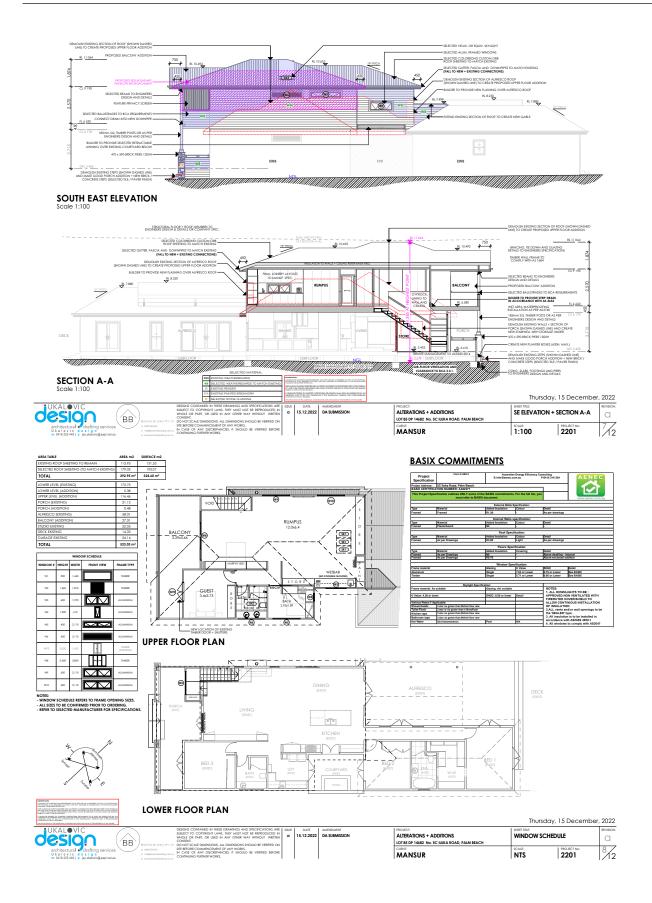




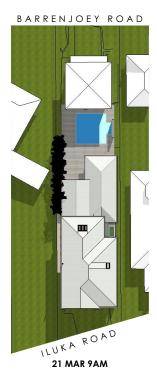


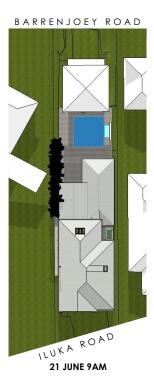
















design

(BB),

PROJECT:
ALTERATIONS + ADDITIONS
LOT 85 DP 14682 No. 5C ILUKA ROAD, PALM BEACH MANSUR

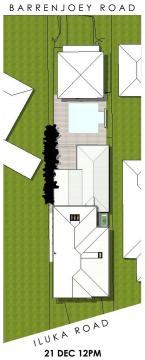
SHADOW DIAGRAMS AT 9AM

Thursday, 15 December, 2022

BARRENJOEY ROAD







Thursday, 15 December, 2022



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