

# Alterations and Additions for Sarah and Andrew Flarey

30 Balaclava Road, Berowra NSW 2081

Lot 235 DP825647

**Stage:** Development Application

7th March 2022

## Drawing Schedule

- A.00 SPECIFICATIONS
- A.01 EXISTING SITE PLAN
- A.02 PROPOSED SITE PLAN
- A.03 GROUND FLOOR PLAN
- A.04 PROPOSED FIRST FLOOR PLAN
- A.05 PROPOSED ELEVATIONS-SOUTH AND WEST
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- A.07 SHADOW DIAGRAM
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- A.09 EROSION AND SEDIMENT CONTROL PLAN
- A.10 ROOF PLAN

BASIX Certificate Alterations and Additions

Certificate number: A453932 - 29, March 2022

**Lighting**  
The applicant must ensure a minimum of 40% of new or altered light fixtures are fitted with fluorescent, compact fluorescent, or light-emitting-diode (LED) lamps.

**Fixtures**  
The applicant must ensure new or altered downlights have a flow rate no greater than 8 litres per minute or a 3 star water rating. The applicant must ensure new or altered taps have a flow rate no greater than 4 litres per average flush or a minimum 3 star water rating. The applicant must ensure new or altered taps have a flow rate no greater than 9 litres per minute or a minimum 3 star water rating.

**Insulation requirements**  
The applicant must construct the new or altered construction (floor(s), walls, and ceiling(s)) in accordance with the specifications listed in the table below, except that a) additional insulation is not required where the area of new construction is less than 2m<sup>2</sup>, b) insulation specified is not required for parts of altered construction where insulation already exists.

Construction	Additional insulation required (R-value)	Other specifications
Floor above existing dwelling or building	Nil	
external wall: framed (concrete/brick, block, masonry)	R1.50 for R1.50 including construction	
ceiling: ceiling, pitched/flat/curved roof frame	ceiling R2.0 (e.g., roof, battens)	Dark (interior/exterior) > 0.7

**Windows and glazed doors**  
The applicant must label the windows, glazed doors and shading devices, in accordance with the specifications listed in the table below. Relevant construction specifications must be specified for each window and glazed door. The following requirements must also be satisfied in relation to each window and glazed door: Each window or glazed door with standard aluminium or timber frames and single clear or tinted glass may otherwise be described as, have a U-value and a Solar Heat Gain Coefficient (SHGC) no greater than that listed in the table below. Total system U-values and SHGCs must be calculated in accordance with National Performance Rating Council (NPRC) conditions. Each window or glazed door with insulated frames, or specialty low-e glass, or double glazing, or double glazing, or insulating glazing must have a U-value and a Solar Heat Gain Coefficient (SHGC) no greater than that listed in the table below. Total system U-values and SHGCs must be calculated in accordance with National Performance Rating Council (NPRC) conditions. The description is provided for information only. Alternative systems with varying U-values and SHGC may be substituted. For projections described in columns, the leading edge of each wall, parapet, veranda, balcony or awning must be no more than 100 mm above the head of the window or glazed door and no more than 200 mm above the sill. For projections described as a ratio, the ratio of the projection from the wall to the height above the window or glazed door must be at least that shown in the table below. Projections with polycarbonate roof or similar translucent material must have a shading coefficient of less than 0.5. Projections with fixed louvers must have louvers parallel to the window or glazed door above which they are situated, unless the louvers also shade a perpendicular window. The spacing between louvers must not be more than 30 mm. Overhanging buildings or vegetation must be of the height and distance from the centre and the base of the window and glazed door, as specified in the 'overhanging' column in the table below.

Note: All details on this summary should be cross checked with the actual BASIX Certificate before ordering.

Window/door no.	Orientation	Area of glass inc. frame (m <sup>2</sup> )	Overhanging		Shading device	Frame and glass type
			Height (m)	Distance (m)		
W1	S	2.8	0.0	0.0	None	Standard aluminium, single clear, 6P (Double, 7.65, SHGC: 0.70)
W2	S	0.3	0.0	0.0	None	Standard aluminium, single clear, 6P (Double, 7.65, SHGC: 0.70)
W3	S	0.3	0.0	0.0	None	Standard aluminium, single clear, 6P (Double, 7.65, SHGC: 0.70)
W4	S	0.1	0.0	0.0	None	Standard aluminium, single clear, 6P (Double, 7.65, SHGC: 0.70)

BE ADVISED : SOME CLAUSES IN THIS SPECTIFICATION MAY NOT BE RELEVANT TO THIS PROJECT

- 1.0 GENERAL
- 1.1 ALL DIMENSIONS SHALL BE CHECKED ON SITE PRIOR TO COMMENCEMENT OF ANY WORK

1.2 ALL MATERIALS SHALL COMPLY WITH RELEVANT CURRENT AUSTRALIAN STANDARDS AND UNLESS OTHERWISE STATED ON THE PLANS SHALL BE NEW AND THE BEST OF THE THEIR RESPECTIVE KIND AND SUITABLE FOR THEIR INTENDED PURPOSES.

1.3 ALL WORKMANSHIP SHALL COMPLY WITH RELEVANT CURRENT AUSTRALIAN STANDARDS AND TO GOOD TRADE PRACTICES

1.4 ALL WORK SHALL BE IN ACCORDANCE WITH REQUIREMENTS OF THE RESPECTIVE AUTHORITY HAVING JURISDICTION OVER THE WORKS.

1.5 THE ARCHITECTURAL DRAWINGS SHOULD BE READ IN CONJUNCTION WITH THE SPECIFICATION, SCHEDULES AND CONSULTANTS DRAWINGS THAT FORM PART OF THE CONSTRUCTION DOCUMENTS REFERRED TO IN THE "BUILDING CONTRACT".

1.6 DO NOT SCALE FROM DRAWINGS. NOTIFY OF ANY ERRORS OR OMISSIONS BEFORE PROCEEDING WITH ANY WORKS

1.7 ENSURE THAT SUBSTRATES ARE SUITABLE FOR THE INTENDED SUBSEQUENT FINISHES. COMMENCEMENT OF WORK ON THE SUBSTRATES IMPLIES ACCEPTANCE BY THE SUBCONTRACTOR OF THE SUBSTRATES ON WHICH FINISHES ARE APPLIED.

1.8 CONTRACTOR IS TO SUPPLY ALL EQUIPMENT NECESSARY FOR THE COMPLETION OF THE RESPECTIVE WORKS.

1.9 CONTRACTOR IS RESPONSIBLE FOR THE PROGRESSIVE CLEAN UP DURING AND AFTER THE COMPLETION OF RESPECTIVE WORKS
- 2.0 EARTHWORKS
- 2.1 UNLESS OTHERWISE STATED, REMOVE TOPSOIL TO A MINIMUM DEPTH OF 200mm INCLUDING ALL ROOTS, AND OTHER MATTER, AND REQUIRED BY THE SOIL CONDITION AND/OR BUILDER. PROVIDE SUITABLE CLEAN FILL AND COMPACT IN LAYERS NOT GREATER THAN 300mm TO REDUCE LEVELS AS SHOWN.

2.2 DO NOT EXCAVATE SERVICES TRENCHES WITHIN AN ANGLE OF 45 DEGREES DOWN FROM THE BOTTOM EDGE OF THE FOOTING.

2.3 ALL RETAINING WALLS TO BE TREATED WITH "BITKOTE" WATERPROOFING AGENT
- 3.0 CONCRETE
- 3.1 ALL CONCRETE REINFORCEMENT AND FORMWORK SHALL BE TO STRUCTURAL ENGINEERS DETAILS, RELEVANT BUILDING CODES AND STANDARDS

3.2 THE FOOTING AND SLAB CONSTRUCTION IS TO COMPLY WITH AS 2870

3.3 PROVIDE A PROPRIETARY VAPOUR BARRIER WHICH CONSISTS OF HIGH IMPACT RESISTANT POLYTHENE FILM MIN 0.2mm THICK WHICH HAS BEEN PIGMENTED AND BRANDED BY THE MANUFACTURER.
- 4.0 TERMITE PROTECTION:
- 4.1 PROVIDE ANTI-TERMITE TREATMENT UNDER THE BUILDING AREAS IN ACCORDANCE WITH AS 2057, AS 3660.1 AND APPENDIX D, FOR RETICULATED SYSTEMS.

4.2 BUILDER SHALL PROVIDE "BIFLEX" OR SIMILAR APPROVED ANTI-TERMITE TREATMENT IN ACCORDANCE WITH RELEVANT AUSTRALIAN STANDARD CODES
- 5.0 BRICKWORK
- 5.1 BRICK WORK SHALL COMPLY WITH :

AS 3700 MASONRY CODE

AS A123 MASONRY CODE

5.2 BRICK GAUGE 7 STANDARD COURSES = 600mm. MORTAR FOR MASONRY CONSTRUCTION

5.3 TIES SHALL BE 3.5mm DIAMETER GALVANIZED WIRE KINKED FOR AND BUILT IN EVERY 5TH COURSE AT APPROXIMATELY 900mm CENTRES, WITH ADDITIONAL TIES AT THE RATE OF 1 TIE/300mm HEIGHT OF OPENINGS AND VERTICAL CONTROL JOINTS AND WITHIN 150mm OF OPENINGS. BUILD TIES INTO EACH LEAF AT LEAST 50mm.

5.4 VERTICAL CONTROL JOINTS SHALL BE 12mm WIDE FILLED AT COMPLETION WITH A CONTINUOUS FILLER STRIP.

5.5 CAVITIES TO BE KEPT CLEAR OF MORTAR. PROVIDE CAVITY BOARDS. TEMPORARILY OMIT BRICKS TO PERMIT RAKING OUT OF CAVITY BOTTOMS.

5.6 FORM WEEP HOLES EVERY FOURTH PERPEND ABOVE FLASHING AND CAVITY FILL KEEP CLEAR OF MORTAR. DO NOT LOCATE WEEPHOLES CLOSER THAN 500mm TO JOINTS IN DAMP PROOF COURSES OR FLASHING.

5.7 PROVIDE DAMP PROOF COURSES (DPC) IN THE BOTTOM 3 COURSES OF BRICK WORK AND SLAB AND/OR FOOTINGS. DPC ADDITIVE SHALL BE CLEAR IN ALL FACEWORK.

5.8 SETOUT BRICKWORK ACCURATELY, PLUMP, LEVEL AND PROPERLY BONDED. RISING WORK TO BE RAKED BACK, JAMBS, REVEALS, CORNERS, PERPENDS, ETC TO BE TRUE, PLUMB AND IN LINE WITH PERPENDS TRUE LINE. SETOUT DOOR FRAMES NEAR PERPENDICULAR WALL WITH A MERGIN OF 12mm OR GREATER THAN 50mm

5.9 PROVIDE 12mm PLASTERING MARGIN BETWEEN WINDOW FRAME AND INTERNAL BRICKWORK TO BE PLASTERED.

5.10 WHERE NECESSARY REINFORCE BELOW AND OVER OPENINGS WITH GALVANISED WOVEN WIRE FABRIC 75mm WIDE IN CENTRE OF EACH LEAF OPENING EXTENDING ALUMINIUM OF 600mm BEYOND THE OPENING.

- 5.11 BUILD IN ALCOR/PGI FLASHINGS AS FOLLOWS:

• WHEREVER SHOWN ON DRAWINGS

• CAVITY WALLS BUILT OF SLAB ON GROUND (WHERE NOT PARGED)

• OVER LINTELS TO EXPOSED OPENINGS – EXTEND THE FULL WIDTH OF OUTER LEAF CONTINUOUS ACROSS CAVITY 50mm INTO INNER LEAF 2c ABOVE

• OVER ROOF – EXTEND THE FULL WIDTH OF EXTERNAL LEAF, STEPPED TO ROOF SLOPE TURNED DOWN MIN. 50mm OVER BASE FLASHING. TURN UP IN CAVITY SLOPING INWARDS AND BUILT INTO INNER LEAF 1c ABOVE.

• DOOR/WINDOW STILES – EXTEND THE FULL HEIGHT 150mm WIDE FIXED TO FRAMES INTERLEAVED WITH SILL AND HEAD FLASHING AT EACH END.

• STRUCTURE OR SERVICES WITHIN 30mm OF OUTER BRICK LEAF IN CAVITY: VERTICAL FLASHING CONTINUOUS 1c BELOW FL TO ABOVE STRUCTURE OR FRAME. NOMINAL 300m WIDE.

• FOR HORIZONTAL STRUCTURES/SERVICES: CONTINUOUS FLASHING BUILT IN AS FOR OVER LINTELS

• AT CAVITY WALLS WITH GLASS BLOCK 300mm WIDE FIXED TO GLASS BLOCK FRAME AND TURNED AWAY IN CAVITY FROM INNER LEAF.
- 5.12 WHERE NECESSARY REINFORCE BELOW AND OVER OPENINGS WITH GALVANISED WOVEN WIRE FABRIC 75mm WIDE IN CENTRE OF EACH LEAF OPENING EXTENDING ALUMINIUM OF 600mm BEYOND THE OPENING.
- 5.13 UNLESS OTHERWISE SHOWN ON DRAWINGS  
EXTERNAL FACE WORK: 230x110x76mm  
WINDOW SILLS: 2c FACE BRICK SPLAYED SILLS  
WINDOW HEADS: SOLID FACEBRICK COURSE  
6.0 LINTELS
- | MAX SPAN (mm) | LINTELS SIZE (VERT x HORIZ x THICK) | BEARING EACH END (mm) |
|---------------|-------------------------------------|-----------------------|
| 900           | 75x10                               | 150                   |
| 1200          | 75x75x8                             | 150                   |
| 1500          | 90x90x8                             | 150                   |
| 1800          | 100x75x8                            | 230                   |
| 2100          | 125x75x8                            | 230                   |
| 2400          | 125x75x10                           | 230                   |
| 2500          | 100x100x8                           | 230                   |
| 3000          | 150x90x10                           | 230                   |
- 7.0 CARPENTRY WORK
- 7.1 ROOF AND CEILING FRAMING SHOULD COMPLY WITH AS 1684 LIGHT TIMBER FRAMING CODE. DRAW STRAP FIRMLY OVER WALL PLATES AND SECURELY FIX TO TOP OF PLATE BY 2x30mm GALV. CLOUTS/STRAP. REFER TO AS 1684 FOR ROOF FRAMING SIZES UNLESS SPECIFIED ON DRAWINGS.

7.2 SUPPLY AND FIX ALL BULKHEADS & FALSE CEILINGS AS SHOWN ON THE DRAWINGS.

7.3 8.0 ROOFING

8.1 SELECTED ROOFING MATERIAL SHALL BE INSTALLED AND FIXED IN ACCORDANCE WITH MANUFACTURERS SPECIFICATION AND RELEVANT BUILDING CODES

8.2 GUTTER, FASCIA, DOWNPIPES, FLASHING SHALL BE IN LONGEST POSSIBLE LENGTHS

8.3 ALLOW FOR ALL JOINTS AND JOINING MATERIALS, COLLARS, STRAPS & FASTENINGS NECESSARY TO COMPLETE WORK.

8.4 ALLOW FOR ALL ROOF PENETRATIONS, ROOF COWLS, FLASHING, FLUMES THROUGH ROOF

8.5 FIX GUTTERS & FLASHING TO PERMIT THERMAL MOVEMENT IN THEIR FULL LENGTH

8.6 SEAL BETWEEN OVERLAPPING FLASHING; FLASHING TURNED DOWN OVER BASE OR APRON FLASHING; FLASHING OVER METAL ROOF; FLASHING OVER SECRET GUTTERS; AROUND ROOF PENETRATIONS ETC.
- 9.0 WINDOWS/GLAZING
- 9.1 UNLESS OTHERWISE STATED ON THE DRAWINGS WINDOW FRAMES SHALL BE ALUMINIUM RESIDENTIAL OR COMMERCIAL IN SECTION WITH POWDERCOAT FINISH AS SELECTED BY OWNER.

9.2 ALLOW FOR FLYSCREENS TO BE FITTED TO ALL WINDOWS.

9.3 ANGLED WINDOW UNITS SHALL BE FACTORY MADE AND FIXED AND DELIVERED ON SITE AS A COMPLETE UNIT.

9.4 WHERE RELEVANT WINDOWS ARE TO COMPLY WITH THE SPECIFICATIONS PROVIDED BY THE THERMAL PERFORMANCE ASSESSOR.

9.5 CLEAR GLASS GENERALLY: OBSCURE GLASS TO BATHROOMS, REFER TO DRAWINGS.

9.6 WHERE GLASS BLOCKS HAVE BEEN NOMINATED, THEY SHALL BE IN FRAMES AND INSTALLED TO MANUFACTURERS SPECIFICATIONS
- 10.0 JOINERY
- 10.1 ALL JOINERY SHALL BE OF HIGHEST QUALITY MATERIALS TO BEST TRADE PRACTICES AND HIGH QUALITY FINISH.

10.2 EXTERNAL DOOR FRAMES SHALL BE: 110x40 DOUBLE REBATED FRAME WITH 130x40 WEATHERED THRESHOLD U.N.O.

10.3 SUPPLY AND BUILD IN TIMBER DOOR FRAMES TO EXTERNAL LOCATIONS AS SHOWN ON ARCHITECTURAL DRAWINGS.

- 11.0 CEILINGS
- 11.1 CEILINGS SHALL BE RECESSED EDGE, MINIMUM 8.0mm PLASTERGLASS OR GYPROCK.

11.2 FLUSH JOINTS, SCREW HEADS, AND OTHER BLEMISHES IN THE SHEETS USING APPROVED SYSTEMS TO PROVIDE FLUSH SMOOTH CONTINUOUS SURFACE

11.3 PROVIDE AND FIX ALL FLUSH STOP BEADS & CASING BEADS TO ALL CORNERS & EDGES

11.4 PROVIDE ALL SELECTED MOLDINGS AND CORNICES TO ALL CEILINGS AS SHOWN ON THE DRAWINGS.
- 12.0 PLASTERING
- 12.1 INTERNAL WALL FINISHES INCLUDING CUPBOARD, BIN & FRIDGE RECESSES ETC SHALL BE (OTHER THAN FACE FINISHES OR WHERE COVERED BY FEATURE MATERIALS) FLOAT AND SET IN HARDWALL PLASTER U.N.O.

12.2 PLASTERED WALLS SHALL BE NOMINAL 12mm THICK CONSISTING OF 1:1:9, CEMENT:LIME:SAND RENDER, AND FINISHED WITH NOMINALLY 3mm HARDWALL PLASTER

12.3 SUPPLY AND FIX EXTERNAL CORNER BEADS TO ALL EXTERNAL CORNERS.

12.4 PROVIDE STOP BEADS WHERE PLASTER WORK ABUTS TIMBER FRAMES, OR FACEWORK

12.5 EXTERNAL RENDER WHEN APPLICABLE SHALL BE 2 COAT SAND FINISH. (FOR PAINTING).

12.6 NIBS IN INTERNAL CORNERS ADJACENT TO DOOR FRAMES GREATER THAN 40mm SHALL NOT BE FLUSHED UP WITH FRAMES.

12.7 PROVIDE V-JOINTS IN RENDER & FINISHING PLASTER WHERE BRICK WORK ABUTS OR JOINS ONTO CONCRETE WORK.
- 13.0 FLOORING FINISHES
- 13.1 CARPET FLOOR COVERINGS TO NOMINATED AREAS COMPLETE WITH SELECTED UNDERLAY SMOOTH EDGE, DIMINISHING STRIPS ETC, TO COMPLETE THE WORKS: REFER TO DRAWINGS AND FINISHES SCHEDULE

13.2 PROVIDE TILED FLOOR FINISHES TO NOMINATED AREAS COMPLETE WITH ALL MATERIALS, ANGLE TRIMS ETC. TO COMPLETE THE WORKS: REFER TO DRAWINGS AND FINISHES SCHEDULE

13.3 PROVIDE TIMBER FLOOR FINISHES TO NOMINATED AREAS COMPLETE WITH ALL MATERIALS, DIMINISHING BOARDS ETC TO COMPLETE THE WORKS: FLOOR BOARDS TO BE SANDED AND POLISHED TO HIGH STANDARD WITH PREMIUM QUALITY SEALER (2 COATS). REFER TO DRAWINGS AND FINISHES SCHEDULE.
- 14.0 SIGNAGE
- 14.1 WHERE NECESSARY SUPPLY & FIX SELECTED UNIT AND HOUSE NUMBERS TO EACH UNIT AND TO LETTERBOXES AS SCHEDULED.

14.2 "SUPERDRAFT" RESERVES THE RIGHT TO ERECT A BUILDERS SIGN ON THE PROPERTY FACING THE STREET FRONTAGE IN COMPLIANCE WITH AUTHORITY REQUIREMENTS.
- 15.0 PAVING
- 15.1 GENERALLY: WHEN PAVING IS INCLUDED IN THE BUILDING CONTRACT THE FOLLOWING SHALL APPLY AS A MINIMUM STANDARD

• SUPPLY AND LAY ALL PAVING TO EXTERNAL AREAS AS SHOWN ON WORKING DRAWINGS.

• CUT, FILL & COMPACT SAND TO REQUIRED LEVELS. SCREED TO UNIFORM THINNESS AND LEVELS

• PROVIDE BRICK EDGE RETAINING FOOTING EMBEDDED IN MORTAR BENEATH THE PAVING BRICK

• TO DRIVEWAY AREAS, PROVIDE NOMINAL 300x150mm CONCRETE FOOTING ALONG PERIMETER OF DRIVEWAY AND BED EDGE BRICK IN MORTAR.

15.2 PROVIDE 100mm COMPACTED LIMESTONE BASE TO DRIVEWAY TOPPED WITH 50mm CLEAN SAND AND GRADE TO FALLS.

15.3 UNLESS NOTED PAVING PATTERN IS TO CLIENTS DETAIL

15.4 BRICK PAVERS SHALL BE:

TRAFFICABLE AREAS: MIN. 65mm SOLID CLAY OR CONCRETE

PEDESTRIAN AREAS: MIN. 43mm SOLID CLAY OR CONCRETE
- 16.0 ENERGY EFFICIENCY
- 16.1 INSULATION MUST FORM A CONTINUOUS BARRIER WITH CEILINGS, WALLS AND FLOORS BY ABUTTING OR OVERLAPPING ADJOINING INSULATION

16.2 INSULATION MUST NOT ADVERSELY AFFECT DOMESTIC SERVICES OR FITTINGS

16.3 REFLECTIVE INSULATION IS TO BE PROVIDED WITH A MINIMUM 25mm AIRSPACE AND IS FITTED CLOSE TO OPENINGS SUCH AS WINDOWS/DOORS ETC. AND IS PROVIDED WITH ADEQUATE SUPPORT.

16.4 BULK INSULATION MUST MAINTAIN ITS POSITION, THICKNESS. ENSURE THAT CEILING INSULATION OVERLAPS UN-INSULATED WALLS

16.5 CONSTRUCTION JOINTS, SUCH AS BETWEEN WALL AND FLOOR, ARE TO BE TIGHT FITTING OR SEALED USING CAULKING OR JOINERY ITEMS SUCH AS SKIRTING OR CORNICES

16.6 EXHAUST FANS ARE TO BE FITTED WITH A SELF CLOSING DAMPER

16.7 ROOF LIGHTS MUST BE SEALED WITH WEATHERPROOF SEALS

16.8 HEATED WATER PIPING MUST BE THERMALLY INSULATED AND PROTECTED AGAINST THE WEATHER AND SUN

16.9 INTERNAL HEATED WATER PIPING TO HAVE AN R VALUE OF 0.2

16.10 ENCLOSED SUB-FLOOR AND ROOF SPACE TO HAVE AN R VALUE OF 0.45

SITE INFORMATION

Lot 235 D.P. 825647	
LOT SIZE	813.5 m <sup>2</sup>
FLOOR AREA OF EXISTING RESIDENCE	204.3m <sup>2</sup>
TOTAL EXISTING SITE COVERAGE	254.6m <sup>2</sup>
PROPOSED FLOOR AREA OF RESIDENCE	204.3m <sup>2</sup>
TOTAL PROPOSED SITE COVERAGE	254.6m <sup>2</sup>
PROPOSED LANDSCAPED AREA PERCENTAGE	68.8%
PROPOSED SITE COVERAGE PERCENTAGE	31.2%

SITE NOTES

- CONFIRM ALL DIMENSIONS ON SITE TO EXISTING RESIDENCE PRIOR TO COMMENCEMENT OF ANY WORK.
- EXISTING PLUMBING AND ELECTRICAL WORKS TO BE REMOVED AND MADE GOOD AS NECESSARY.
- THIS PLAN IS TO BE READ IN CONJUNCTION WITH LANDSCAPING DETAIL PLANS FOR SPECIFIC PLANTING LOCATIONS.
- THE EXACT LOCATION OF UNDERGROUND AND ABOVEGROUND SERVICES SHALL BE PROVEN ON SITE. NO GUARANTEE IS GIVEN THAT ALL EXISTING SERVICES ARE SHOWN.
- THIS DRAWING SET TO BE READ IN CONJUNCTION WITH THE SPECIFICATION PROVIDED.
- BEWARE OF EXISTING SERVICES. CONFIRM LOCATIONS PRIOR TO EXCAVATION. TAKE EXTREME CARE.
- REFER ALL MAJOR WORKS TO RAMPS, WALKWAYS, DRIVEWAYS ETC (INCLUDING CARPARK WORKS, LEVELS & DATUMS) REFER TO CIVIL ENGINEERS DOCUMENTATION.

DEMOLITION NOTES

- CAP OFF EXISTING PLUMBING AND ELECTRICAL WORKS AS NECESSARY BY CERTIFIED TRADESPERSON.
- MODIFIED BRICKWORK TO BE TOOTHED INTO EXISTING WHERE APPLICABLE AND CAVITY TO REMAIN CONTINUOUS AT ALL TIMES.
- EXISTING MATERIALS TO BE REUSED TO OWNERS DETAIL.
- MATERIALS REMOVED FROM SITE MUST BE DISPOSED OF AS PER COUNCIL REGULATIONS.
- INVESTIGATION SHOULD BE UNDERTAKEN BEFORE ALL WORKS THAT REQUIRES EXCAVATION.

BAL ASSESSMENT

FZ

BASIX REQUIREMENTS

**BASIX Certificate Alterations and Additions**

**Lighting**

The applicant must ensure a minimum of 40% of new or altered light fixtures are fitted with fluorescent, compact fluorescent, or light-emitting diode (LED) lamps.

**Water**

The applicant must ensure new or altered showerheads have a flow rate no greater than 9 litres per minute or a 3 star water rating. The applicant must ensure new or altered toilets have a flow rate no greater than 6 litres per minute or a minimum 3 star water rating. The applicant must ensure new or altered taps have a flow rate no greater than 5 litres per minute or minimum 3 star water rating.

**Insulation requirements**

The applicant must construct the new or altered construction (Roofs), walls, and ceiling/ceiling in accordance with the specifications listed in the table below, except that a) additional insulation is not required where the area of new construction is less than 200 sqm, b) insulation specified is not required for precast concrete construction where insulation already exists.

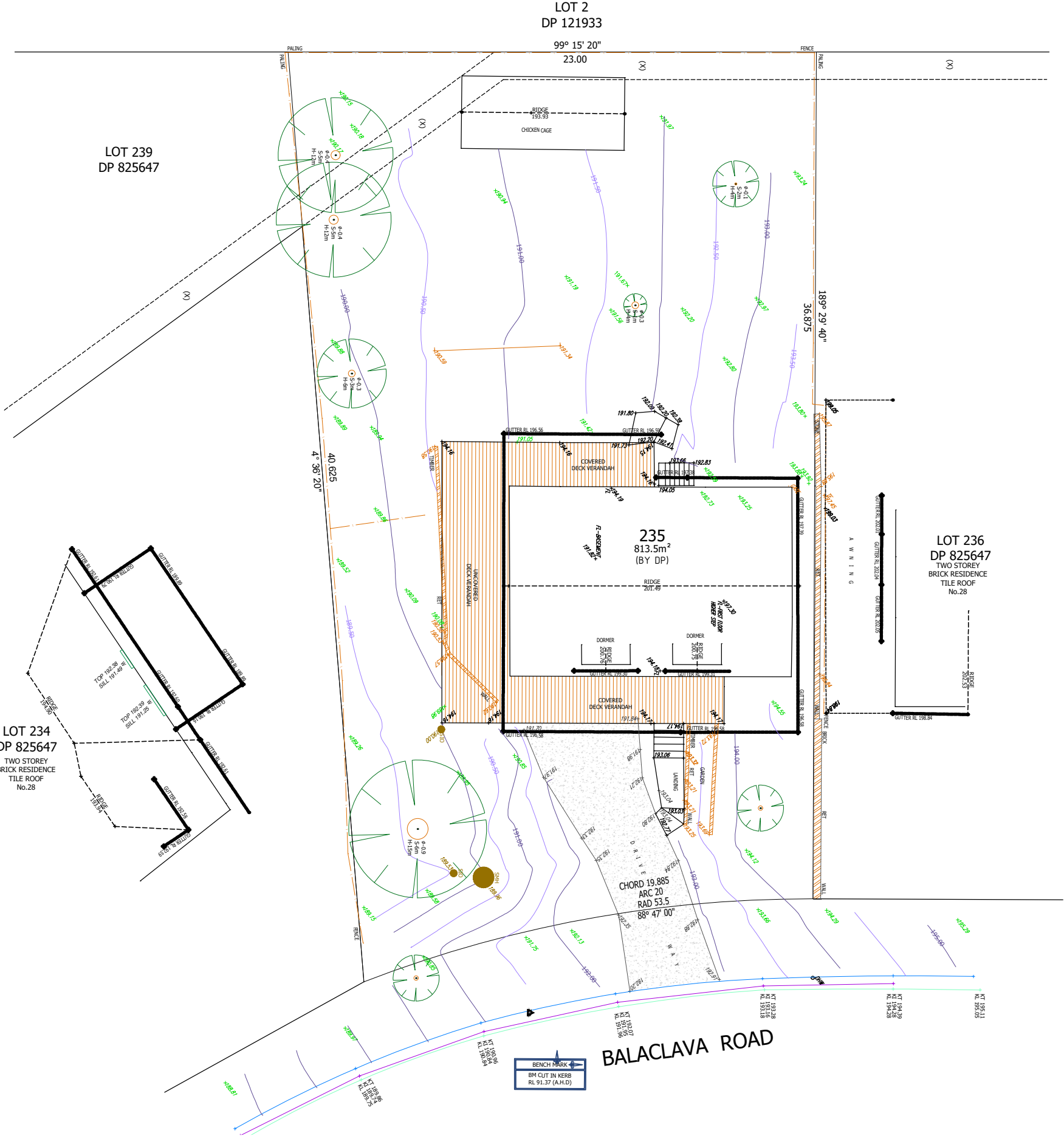
Construction	Additional insulation required (R-value)	Other Specifications
Floor above existing dwelling or building	Nil	
External wall (concrete, brick, masonry, etc)	R1.90 per 100 sqm (including construction)	
Roof ceiling, pitched/flat/roof flat/flat	ceiling R2.0 (typ), roof R2.0 (typ)	Dark (solar absorptance < 0.7)

**Windows and glazed doors**

The applicant must treat the windows, glazed doors and shading devices, in accordance with the specifications listed in the table below. Relevant overshadowing specifications must be satisfied for each window and glazed door. The following requirements must also be satisfied in relation to each window and glazed door. Each window or glazed door with standard aluminium or timber frames and single clear or multi glass may otherwise be described as, low u-value and a Solar Heat Gain Coefficient (SHGC) no greater than that listed in the table below. Total system U-values and SHGCs must be calculated in accordance with National Energy Rating Council (NERC) conditions. Each window or glazed door with insulated frames, or polyurethane foam, or insulator glazing, or insulator glazing must have a U-value and a Solar Heat Gain Coefficient (SHGC) no greater than that listed in the table below. Total system U-values and SHGCs must be calculated in accordance with National Energy Rating Council (NERC) conditions. The description is provided for information only. Alternative systems with complying U-value and SHGC may be substituted. For projections described in millimetres, the leading edge of the projection from the wall to the height above the window or glazed door sill must be at least that shown in the table below. Pergolas with polycarbonate roof or similar translucent material must have a shading coefficient of more than 0.20. Pergolas with fixed louvers must have louvers parallel to the window or glazed door above which they are situated, unless the pergola also shades a perpendicular window. The spacing between louvers must not be more than 50 mm. Overhanging buildings or vegetation must be of the height and distance from the centre and the base of the window and glazed door, as specified in the 'overshadowing' column in the table below.

Note: All details on this summary should be cross checked with the actual BASIX Certificate before ordering.

Window/door no.	Orientation	Area of glass inc. frame (m <sup>2</sup> )	Overshadowing		Shading device	Frame and glass type
			Height (m)	Distance (m)		
W1	S	2.8	0.0	0.0	None	Standard aluminium, single clear, 6p U-value: 7.85, SHGC: 0.75
W2	S	3.3	0.0	0.0	None	Standard aluminium, single clear, 6p U-value: 7.85, SHGC: 0.75
W3	S	3.3	0.0	0.0	None	Standard aluminium, single clear, 6p U-value: 7.85, SHGC: 0.75
W4	S	2.1	0.0	0.0	None	Standard aluminium, single clear, 6p U-value: 7.85, SHGC: 0.75





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PROPOSED LANDSCAPED AREA PERCENTAGE	68.8%
PROPOSED SITE COVERAGE PERCENTAGE	31.2%

SITE NOTES

- CONFIRM ALL DIMENSIONS ON SITE TO EXISTING RESIDENCE PRIOR TO COMMENCEMENT OF ANY WORK.
- EXISTING PLUMBING AND ELECTRICAL WORKS TO BE REMOVED AND MADE GOOD AS NECESSARY.
- THIS PLAN IS TO BE READ IN CONJUNCTION WITH LANDSCAPING DETAIL PLANS FOR SPECIFIC PLANTING LOCATIONS.
- THE EXACT LOCATION OF UNDERGROUND AND ABOVEGROUND SERVICES SHALL BE PROVEN ON SITE. NO GUARANTEE IS GIVEN THAT ALL EXISTING SERVICES ARE SHOWN.
- THIS DRAWING SET TO BE READ IN CONJUNCTION WITH THE SPECIFICATION PROVIDED.
- BEWARE OF EXISTING SERVICES. CONFIRM LOCATIONS PRIOR TO EXCAVATION. TAKE EXTREME CARE.
- REFER ALL MAJOR WORKS TO RAMPS, WALKWAYS, DRIVEWAYS ETC (INCLUDING CARPARK WORKS, LEVELS & DATUMS) REFER TO CIVIL ENGINEERS DOCUMENTATION.

DEMOLITION NOTES

- CAP OFF EXISTING PLUMBING AND ELECTRICAL WORKS AS NECESSARY BY CERTIFIED TRADESPERSON.
- MODIFIED BRICKWORK TO BE TOOTHED INTO EXISTING WHERE APPLICABLE AND CAVITY TO REMAIN CONTINUOUS AT ALL TIMES.
- EXISTING MATERIALS TO BE REUSED TO OWNERS DETAIL.
- MATERIALS REMOVED FROM SITE MUST BE DISPOSED OF AS PER COUNCIL REGULATIONS.
- INVESTIGATION SHOULD BE UNDERTAKEN BEFORE ALL WORKS THAT REQUIRES EXCAVATION.

BAL ASSESSMENT

FZ

BASIX REQUIREMENTS

**BASIX Certificate Alterations and Additions**

Certificate number: A453932 - 29, March 2022

**Lighting**

The applicant must ensure a minimum of 40% of new or altered light fixtures are fitted with fluorescent, compact fluorescent, or light-emitting diode (LED) lamps.

**Water**

The applicant must ensure new or altered showerheads have a flow rate no greater than 9 litres per minute or a 5 star water rating. The applicant must ensure new or altered toilets have a flow rate no greater than 6 litres per minute or a minimum 5 star water rating. The applicant must ensure new or altered taps have a flow rate no greater than 8 litres per minute or minimum 5 star water rating.

**Insulation requirements**

The applicant must construct the new or altered construction (Roofs), walls, and ceiling(s) in accordance with the specifications listed in the table below, except that a) additional insulation is not required where the use of new construction is less than 200, b) insulation is not required for glass or glazed construction where insulation already exists.

Construction	Additional insulation required (R-value)	Other Specifications
Floor above existing dwelling or building	all	
external wall (concrete, brick, masonry etc)	R1.50 per R1.50 (including construction)	
external ceiling, pitched/flat/roof (insulated)	ceiling R2.0 (typ), roof (following)	Dark (solar absorptance < 0.7)

**Windows and glazed doors**

The applicant must treat the windows, glazed doors and shading devices, in accordance with the specifications listed in the table below. Relevant overshadowing specifications must be satisfied for each window and glazed door. The following requirements must also be satisfied in relation to each window and glazed door. Each window or glazed door with standard aluminium or timber frames and single clear or multi glass may either retain the description, or have a U-value and a Solar Heat Gain Coefficient (SHGC) no greater than that listed in the table below. Total system U-values and SHGCs must be calculated in accordance with National Energy Rating Council (NERC) conditions. Each window or glazed door with improved frames, or polymeric frame glass, or multiple glazing, or multiple glazing, or multiple glazing must have a U-value and a Solar Heat Gain Coefficient (SHGC) no greater than that listed in the table below. Total system U-values and SHGCs must be calculated in accordance with National Energy Rating Council (NERC) conditions. The description is provided for information only. Alternative systems with complying U-value and SHGC may be substituted. For projections described in millimetres, the leading edge of the projection must be no more than 50mm above the top of the window or glazed door and the bottom of the projection must be no more than 50mm below the bottom of the window or glazed door. The spacing between bottom must not be more than 50mm. Overhead buildings or vegetation must be of the height and distance from the centre and the base of the window and glazed door, as specified in the 'overshadowing' column in the table below.

Note: All details on this summary should be cross checked with the actual BASIX Certificate before ordering.

Window/door no.	Orientation	Area of glass inc. frame (m <sup>2</sup> )	Overshadowing Distance (m)	Height (m)	Shading device	Frame and glass type
W1	S	2.8	0.0	0.0	None	Standard aluminium, single clear, 6p U-value: 7.8, SHGC: 0.75
W2	S	3.3	0.0	0.0	None	Standard aluminium, single clear, 6p U-value: 7.8, SHGC: 0.75
W3	S	3.3	0.0	0.0	None	Standard aluminium, single clear, 6p U-value: 7.8, SHGC: 0.75
W4	S	2.1	0.0	0.0	None	Standard aluminium, single clear, 6p U-value: 7.8, SHGC: 0.75

draftedup

E melf@netspace.net.au

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Proposed Site Plan

30 Balaclava Road,  
Berowra NSW 2081

Development Application

Sarah and Andrew Flarey

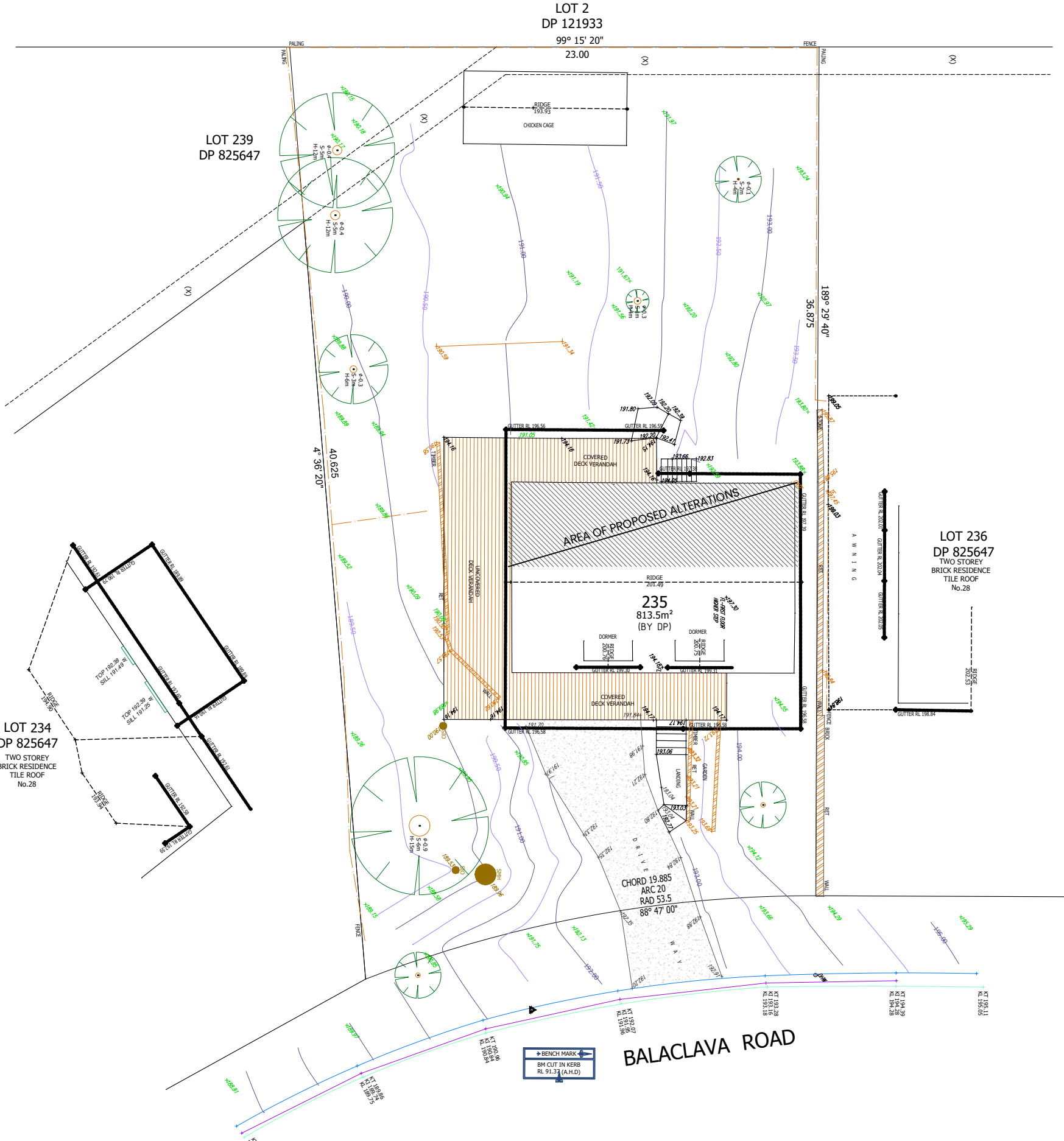
Designed By Melanie Farquhar

Page No: A.02

Scale @ A3 1:200

Rev  
Date  
Drawn By

2  
07/03/22  
Melanie Farquhar



SITE INFORMATION

Lot 235 D.P. 825647	
LOT SIZE	813.5 m <sup>2</sup>
FLOOR AREA OF EXISTING RESIDENCE	204.3m <sup>2</sup>
TOTAL EXISTING SITE COVERAGE	254.6m <sup>2</sup>
PROPOSED FLOOR AREA OF RESIDENCE	204.3m <sup>2</sup>
TOTAL PROPOSED SITE COVERAGE	254.6m <sup>2</sup>
PROPOSED LANDSCAPED AREA PERCENTAGE	68.8%
PROPOSED SITE COVERAGE PERCENTAGE	31.2%

SITE NOTES

- CONFIRM ALL DIMENSIONS ON SITE TO EXISTING RESIDENCE PRIOR TO COMMENCEMENT OF ANY WORK.
- EXISTING PLUMBING AND ELECTRICAL WORKS TO BE REMOVED AND MADE GOOD AS NECESSARY.
- THIS PLAN IS TO BE READ IN CONJUNCTION WITH LANDSCAPING DETAIL PLANS FOR SPECIFIC PLANTING LOCATIONS.
- THE EXACT LOCATION OF UNDERGROUND AND ABOVEGROUND SERVICES SHALL BE PROVEN ON SITE. NO GUARANTEE IS GIVEN THAT ALL EXISTING SERVICES ARE SHOWN.
- THIS DRAWING SET TO BE READ IN CONJUNCTION WITH THE SPECIFICATION PROVIDED.
- BEWARE OF EXISTING SERVICES. CONFIRM LOCATIONS PRIOR TO EXCAVATION. TAKE EXTREME CARE.
- REFER ALL MAJOR WORKS TO RAMPS, WALKWAYS, DRIVEWAYS ETC (INCLUDING CARPARK WORKS, LEVELS & DATUMS) REFER TO CIVIL ENGINEERS DOCUMENTATION.

DEMOLITION NOTES

- CAP OFF EXISTING PLUMBING AND ELECTRICAL WORKS AS NECESSARY BY CERTIFIED TRADESPERSON.
- MODIFIED BRICKWORK TO BE TOOTHED INTO EXISTING WHERE APPLICABLE AND CAVITY TO REMAIN CONTINUOUS AT ALL TIMES.
- EXISTING MATERIALS TO BE REUSED TO OWNERS DETAIL.
- MATERIALS REMOVED FROM SITE MUST BE DISPOSED OF AS PER COUNCIL REGULATIONS.
- INVESTIGATION SHOULD BE UNDERTAKEN BEFORE ALL WORKS THAT REQUIRES EXCAVATION.

BAL ASSESSMENT

FZ

BASIX REQUIREMENTS

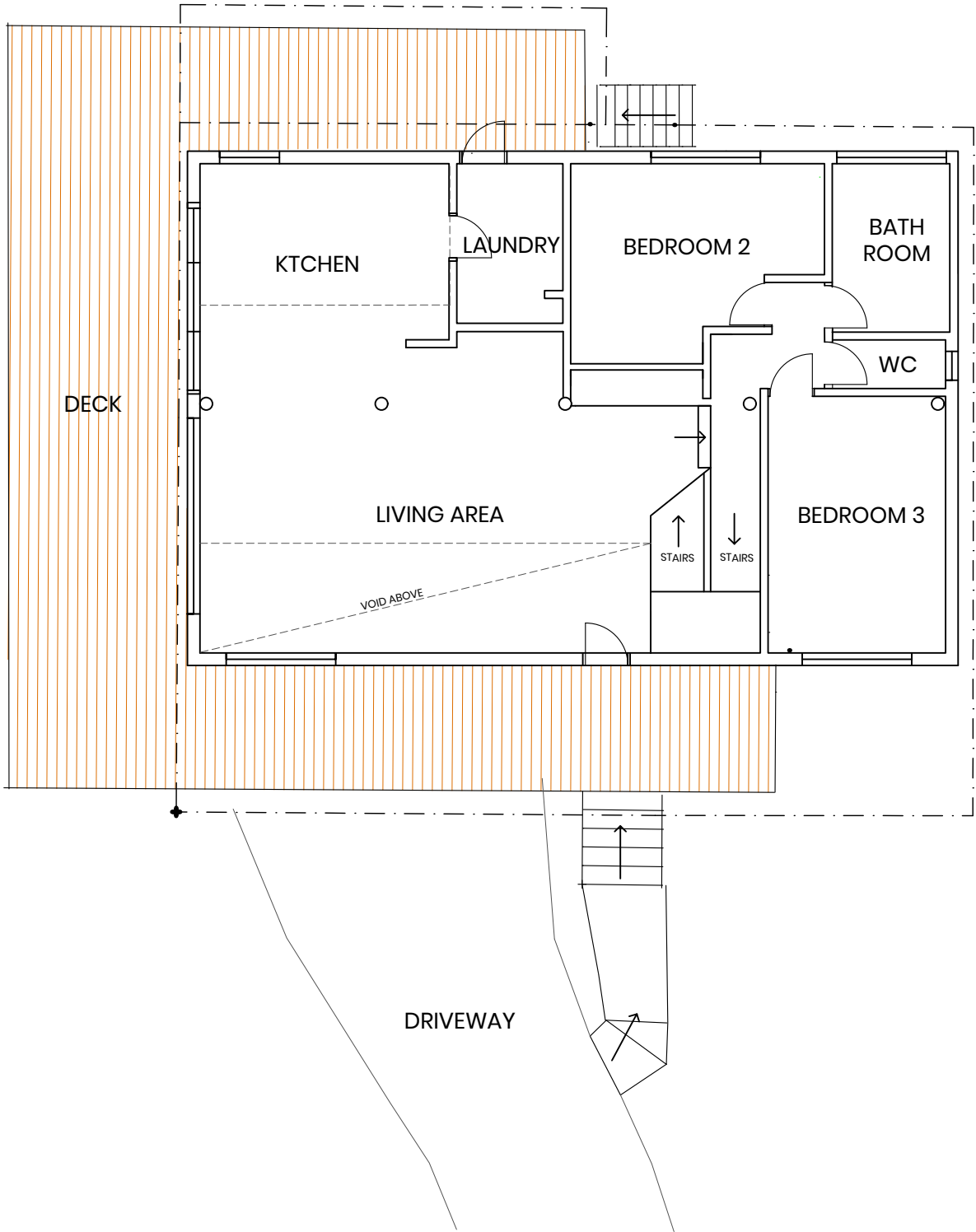
**BASIX Certificate Alterations and Additions** Certificate number: A453932 - 29, March 2022

<b>Lighting</b> The applicant must ensure a minimum of 40% of new or altered light fixtures are fitted with fluorescent, compact fluorescent, or light-emitting diode (LED) lamps.			
<b>Plumbing</b> The applicant must ensure new or altered showerheads have a flow rate no greater than 9 litres per minute or a 3 star water rating. The applicant must ensure new or altered toilets have a flow rate no greater than 6 litres per average flush or a minimum 3 star water rating. The applicant must ensure new or altered taps have a flow rate no greater than 8 litres per minute or minimum 3 star water rating.			
<b>Insulation requirements</b> The applicant must construct the new or altered construction (thermally walls, roof, and ceiling/floor) in accordance with the specifications listed in the table below, except that if additional insulation is not required where the area of new construction is less than 25m <sup>2</sup> , no insulation specified is not required for parts of altered construction where insulation already exists.			
Construction	Additional insulation required (R-value)	Other Specifications	
Floor above existing dwelling or building	Nil		
external wall (concrete, brick, masonry, stone, render clad)	R1.30 per 90.3m <sup>2</sup> (including construction)		
insulated ceiling, pitched/flat/low roof (timber)	ceiling R2.0 (opt), roof following	Dark (solar absorptance < 0.7)	

**Windows and glazed doors**  
The applicant must install the windows, glazed doors and shading devices, in accordance with the specifications listed in the table below. Relevant overarching specifications must be satisfied for each window and glazed door. The following requirements must also be satisfied in relation to each window and glazed door: Each window or glazed door with standard aluminium or timber frames and single clear or double glazing may not be replaced with a double glazing unit, or a triple glazing unit, or a window or glazed door with a greater frame that is not in the table below. Each window or glazed door must be installed in accordance with National Performance Rating Council (NPRC) conditions. Each window or glazed door with standard timber, or composite frame glass, or double glazing, or triple glazing, or monolithic glazing must be installed in accordance with NPRC conditions. Each window or glazed door must be installed in accordance with National Performance Rating Council (NPRC) conditions. The description is provided for information only. Alternative systems with complying U-value and SHGC may be substituted. For projections described in millimetres, the leading edge of each wall, parapet, overhang, balcony or window frame must be at least 50mm above the head of the window or glazed door and no more than 200mm above the sill. For projections described as a ratio, the ratio of the projection from the wall to the height above the window or glazed door sill must be at least that shown in the table below. Parapets with polycarbonate roof or similar translucent material must have a sloping coefficient of less than 0.25. Parapets with flat roofs must have balustrade suitable for the window or glazed door above which they are situated, unless the parapet also includes a perpendicular window. The spacing between balustrade must not be more than 100mm. Overhanging buildings or vegetation must be of the height and distance from the centre and the base of the window and glazed door, as specified in the 'balustrading' column in the table below.

Note: All details on this summary should be cross checked with the actual BASIX Certificate before ordering.

Window/door no.	Orientation	Area of glass inc. frame (m <sup>2</sup> )	Overshading		Shading device	Frame and glass type
			Height (m)	Distance (m)		
W1	S	2.8	0.0	0.0	None	Standard aluminium, single clear, 6mm U-value: 7.85, SHGC: 0.75
W2	S	0.3	0.0	0.0	None	Standard aluminium, single clear, 6mm U-value: 7.85, SHGC: 0.75
W3	S	0.3	0.0	0.0	None	Standard aluminium, single clear, 6mm U-value: 7.85, SHGC: 0.75
W4	S	0.1	0.0	0.0	None	Standard aluminium, single clear, 6mm U-value: 7.85, SHGC: 0.75



Lot 235 D.P. 825647	
LOT SIZE	813.5 m <sup>2</sup>
FLOOR AREA OF EXISTING RESIDENCE	204.3m <sup>2</sup>
TOTAL EXISTING SITE COVERAGE	254.6m <sup>2</sup>
PROPOSED FLOOR AREA OF RESIDENCE	204.3m <sup>2</sup>
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PROPOSED LANDSCAPED AREA PERCENTAGE	68.8%
PROPOSED SITE COVERAGE PERCENTAGE	31.2%

- CONFIRM ALL DIMENSIONS ON SITE TO EXISTING RESIDENCE PRIOR TO COMMENCEMENT OF ANY WORK.
- EXISTING PLUMBING AND ELECTRICAL WORKS TO BE REMOVED AND MADE GOOD AS NECESSARY.
- THIS PLAN IS TO BE READ IN CONJUNCTION WITH LANDSCAPING DETAIL PLANS FOR SPECIFIC PLANTING LOCATIONS.
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- THIS DRAWING SET TO BE READ IN CONJUNCTION WITH THE SPECIFICATION PROVIDED.
- BEWARE OF EXISTING SERVICES. CONFIRM LOCATIONS PRIOR TO EXCAVATION. TAKE EXTREME CARE.
- REFER ALL MAJOR WORKS TO RAMPS, WALKWAYS, DRIVEWAYS ETC (INCLUDING CARPARK WORKS, LEVELS & DATUMS) REFER TO CIVIL ENGINEERS DOCUMENTATION.

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- MODIFIED BRICKWORK TO BE TOOTHED INTO EXISTING WHERE APPLICABLE AND CAVITY TO REMAIN CONTINUOUS AT ALL TIMES.
- EXISTING MATERIALS TO BE REUSED TO OWNERS DETAIL.
- MATERIALS REMOVED FROM SITE MUST BE DISPOSED OF AS PER COUNCIL REGULATIONS.
- INVESTIGATION SHOULD BE UNDERTAKEN BEFORE ALL WORKS THAT REQUIRES EXCAVATION.

## F2

**BASIX Certificate Alterations and Additions** Certificate number: A453932 - 29, March 2022

Lighting  
Theatre

**Fixtures**  
The applicant must ensure new or altered showerheads have a flow rate no greater than 9 litres per minute or a 3 star water rating. The applicant must ensure new or altered toilets have a flow rate no greater than 4 litres per average flush or a minimum 3 star water rating. The applicant must ensure new or altered taps have a flow rate no greater than 9 litres per minute or minimum 3 star water rating.

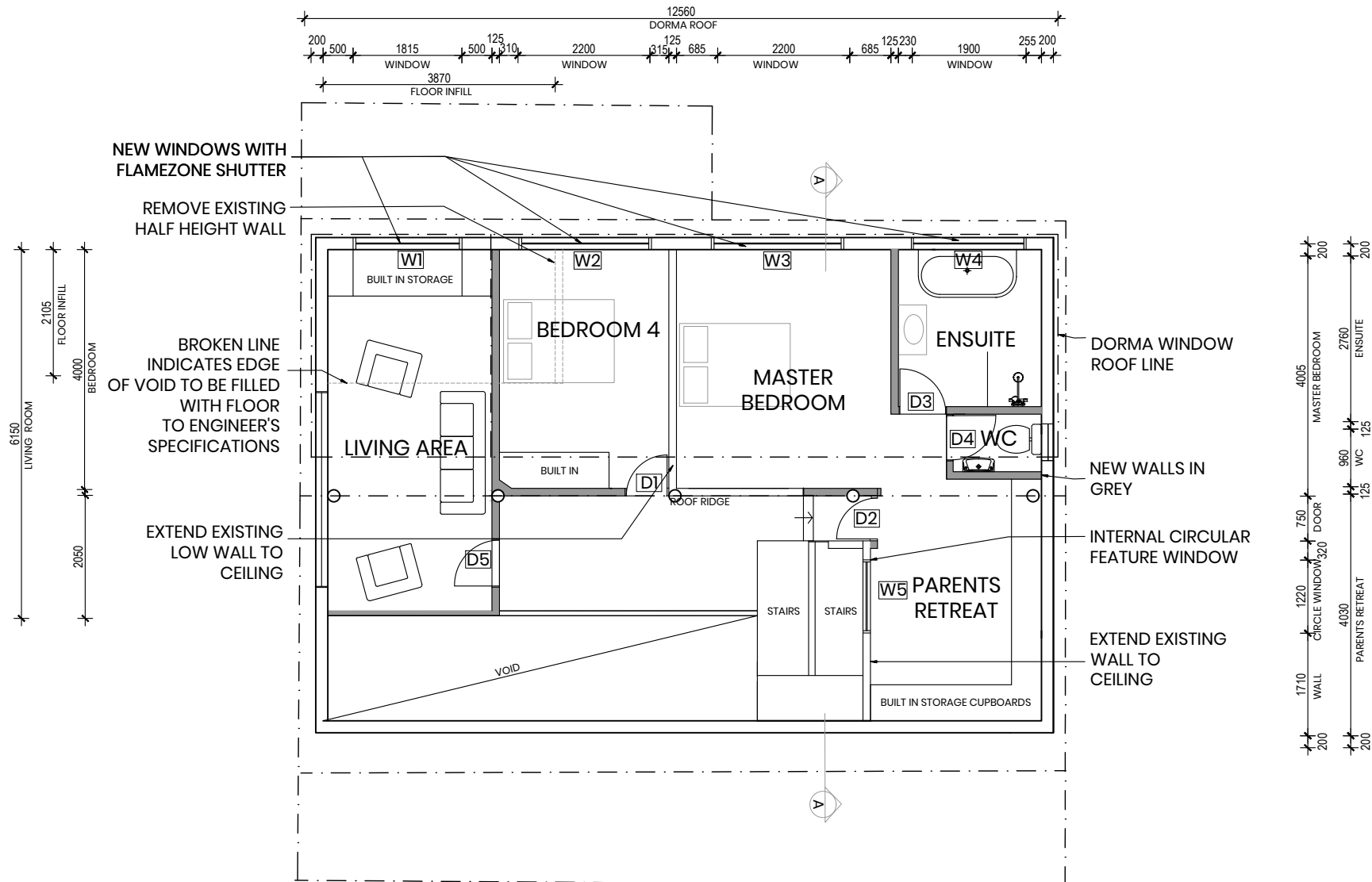
**Insulation requirements**  
The applicant must construct the new or altered construction (floor(s), walls, and ceilings/roofs) in accordance with the specifications listed in the table below, except that a) additional insulation is not required where the area of new construction is less than 2m<sup>2</sup>, b) insulation specified is not required for parts of altered construction where insulation already exists.

Construction	Additional insulation required (R-value)	Other Specifications
Floor above existing dwelling or building	n/a	
external wall: framed (weatherboard, fibro, metal clad)	R1.30 (or R1.70 including construction)	
naked ceiling, pitched/brickline roof: framed	ceiling: R2.5 (up), roof: foil/sarking	Dark (solar absorptance > 0.7)

[illegible]

Note: All details on this summary should be cross checked with the actual BASIX Certificate before ordering.

Window/door no.	Orientation	Area of glass inc. frame (m <sup>2</sup> )	Overshadowing		Shading device	Frame and glass type
			Height (m)	Distance (m)		
W1	S	2.8	0.0	0.0	None	Standard aluminium, single clear, for U-value: 7.65, gHGC: 0.75
W2	S	3.3	0.0	0.0	None	Standard aluminium, single clear, for U-value: 7.65, gHGC: 0.75
W3	S	3.5	0.0	0.0	None	Standard aluminium, single clear, for U-value: 7.65, gHGC: 0.75
W4	S	2.1	0.0	0.0	None	Standard aluminium, single clear, for U-value: 7.65, gHGC: 0.75



**E** [melf@netspace.net.au](mailto:melf@netspace.net.au)

# **Proposed First Floor Plan**

30 Balaclava Road,  
Berowra NSW 2081

## Development Application

**Designed By** Melanie Farquhar  
**Page No:** A.04  
**Scale @ A3** 1:100

Rev  
Date  
Drawn By

////

2

07/03/22

Melanie Farquhar

Hatching denotes  
proposed addition



SITE INFORMATION

Lot 235 D.P. 825647	
LOT SIZE	813.5 m <sup>2</sup>
FLOOR AREA OF EXISTING RESIDENCE	204.3m <sup>2</sup>
TOTAL EXISTING SITE COVERAGE	254.6m <sup>2</sup>
PROPOSED FLOOR AREA OF RESIDENCE	204.3m <sup>2</sup>
TOTAL PROPOSED SITE COVERAGE	254.6m <sup>2</sup>
PROPOSED LANDSCAPED AREA PERCENTAGE	68.8%
PROPOSED SITE COVERAGE PERCENTAGE	31.2%

SITE NOTES

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- INVESTIGATION SHOULD BE UNDERTAKEN BEFORE ALL WORKS THAT REQUIRES EXCAVATION.

BAL ASSESSMENT

FZ

BASIX REQUIREMENTS

**BASIX Certificate Alterations and Additions**  
Lighting  
The applicant must ensure a minimum of 40% of new or altered light fixtures are fitted with fluorescent, compact fluorescent, or light-emitting-diode (LED) lamps.  
Parties  
The applicant must ensure new or altered windows have a flow rate no greater than 9 litres per minute or a 5 star water rating. The applicant must ensure new or altered toilets have a flow rate no greater than 6 litres per minute flush on a minimum 5 star water rating. The applicant must ensure new or altered taps have a flow rate no greater than 8 litres per minute or minimum 5 star water rating.  
Insulation requirements  
The applicant must construct the new or altered construction (Roof(s), walls, and ceiling(s)) in accordance with the specifications listed in the table below, except that (a) additional insulation is not required where the area of new construction is less than 10m<sup>2</sup>, (b) insulation specified is not required for parts of altered construction where insulation already exists.

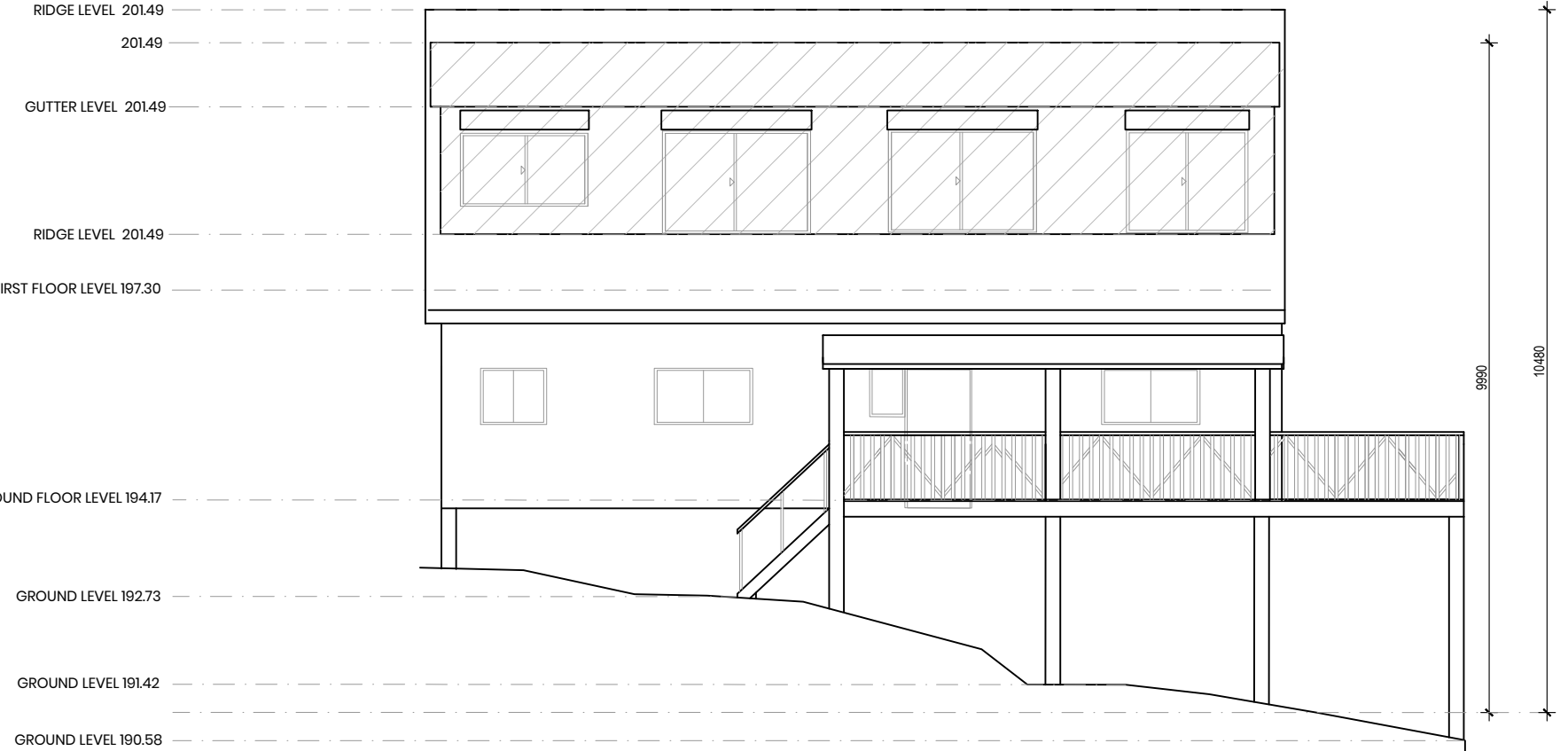
Construction	Additional insulation required (R-value)	Other Specifications
Floor above existing dwelling or building	all	
external wall (basement, storey, semi-detached)	R1.50 (or R1.70 including construction)	
external ceiling, above/below roof space	ceiling: R2.0 (up), roof: following	Dark (inter aluminex = 0.7)

Windows and glazed doors  
The applicant must install the windows, glazed doors and shading devices, in accordance with the specifications listed in the table below. Relevant overarching specifications must be satisfied for each window and glazed door. The following requirements must also be satisfied in relation to each window and glazed door: Each window or glazed door with standard aluminium or timber frames and single glass or must glass may either match the description, or, have a U-value and a Solar Heat Gain Coefficient (SHGC) no greater than that listed in the table below. Total system U-value and SHGCs must be calculated in accordance with National Performance Rating Council (NPRC) conditions. Each window or glazed door with improved frames, or panels, low glass, or multiple glazing, or multiple glazing, or multiple glazing must have a U-value and a Solar Heat Gain Coefficient (SHGC) no greater than that listed in the table below. Total system U-value and SHGC must be calculated in accordance with National Performance Rating Council (NPRC) conditions. The description is provided for information only. Alternative systems with varying U-value and SHGC may be substituted. For projections described in millimetres, the leading edge of the projection must be no more than 100mm above the face of the glass or glazed door and no more than 100mm above the sill. For projections described in a ratio, the ratio of the projection from the wall to the height above the window or glazed door sill must be at least that shown in the table below. Projections with polycarbonate roof or similar translucent material must have a shading coefficient of less than 0.20. Projections with fixed louvers must have louvers parallel to the window or glazed door above which they are situated, unless the panels are parallel to the window. The spacing between louvers must not be more than 50mm. Overhanging buildings or vegetation must be of the height and distance from the corner and the base of the window and glazed door, as specified in the 'Vegetation' column in the table below.  
Note: All details on this summary should be cross checked with the actual BASIX Certificate before ordering.

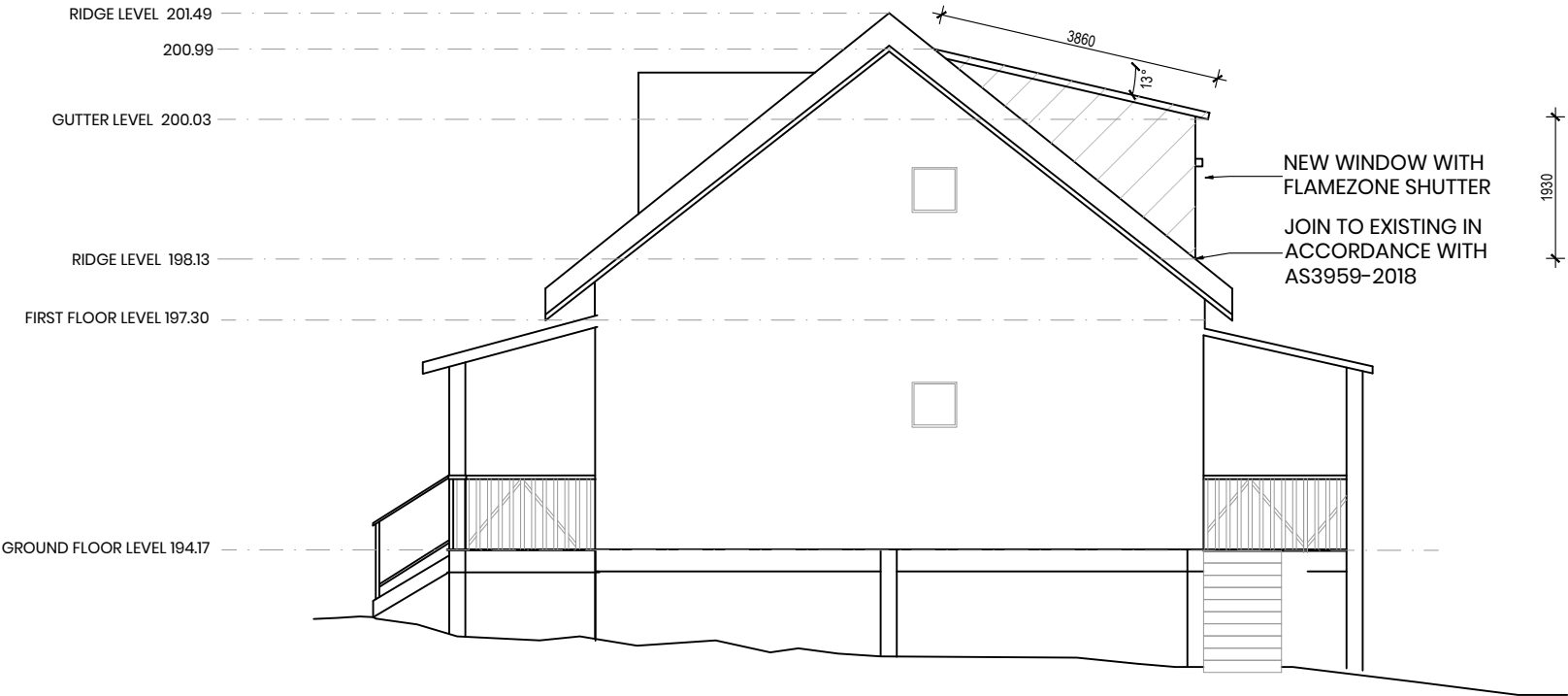
Window/door no.	Orientation	Area of glass inc. frame (m <sup>2</sup> )	Overshading		Shading device	Frame and glass type
			Height (m)	Distance (m)		
W1	S	2.5	0.0	0.0	None	Standard aluminium, single glass, (6+ U-value: 7.0, SHGC: 0.75)
W2	S	3.3	0.0	0.0	None	Standard aluminium, single glass, (6+ U-value: 7.0, SHGC: 0.75)
W3	S	3.3	0.0	0.0	None	Standard aluminium, single glass, (6+ U-value: 7.0, SHGC: 0.75)
W4	S	2.1	0.0	0.0	None	Standard aluminium, single glass, (6+ U-value: 7.0, SHGC: 0.75)

Certificate number: A453932 - 29, March 2022

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SOUTH ELEVATION



WEST ELEVATION



SITE INFORMATION

Lot 235 D.P. 825647	
LOT SIZE	813.5 m <sup>2</sup>
FLOOR AREA OF EXISTING RESIDENCE	204.3m <sup>2</sup>
TOTAL EXISTING SITE COVERAGE	254.6m <sup>2</sup>
PROPOSED FLOOR AREA OF RESIDENCE	204.3m <sup>2</sup>
TOTAL PROPOSED SITE COVERAGE	254.6m <sup>2</sup>
PROPOSED LANDSCAPED AREA PERCENTAGE	68.8%
PROPOSED SITE COVERAGE PERCENTAGE	31.2%

SITE NOTES

- CONFIRM ALL DIMENSIONS ON SITE TO EXISTING RESIDENCE PRIOR TO COMMENCEMENT OF ANY WORK.
- EXISTING PLUMBING AND ELECTRICAL WORKS TO BE REMOVED AND MADE GOOD AS NECESSARY.
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- THIS DRAWING SET TO BE READ IN CONJUNCTION WITH THE SPECIFICATION PROVIDED.
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DEMOLITION NOTES

- CAP OFF EXISTING PLUMBING AND ELECTRICAL WORKS AS NECESSARY BY CERTIFIED TRADESPERSON.
- MODIFIED BRICKWORK TO BE TOOTHED INTO EXISTING WHERE APPLICABLE AND CAVITY TO REMAIN CONTINUOUS AT ALL TIMES.
- EXISTING MATERIALS TO BE REUSED TO OWNERS DETAIL.
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BAL ASSESSMENT

FZ

BASIX REQUIREMENTS

**BASIX Certificate Alterations and Additions** Certificate number: A453932 - 29, March 2022

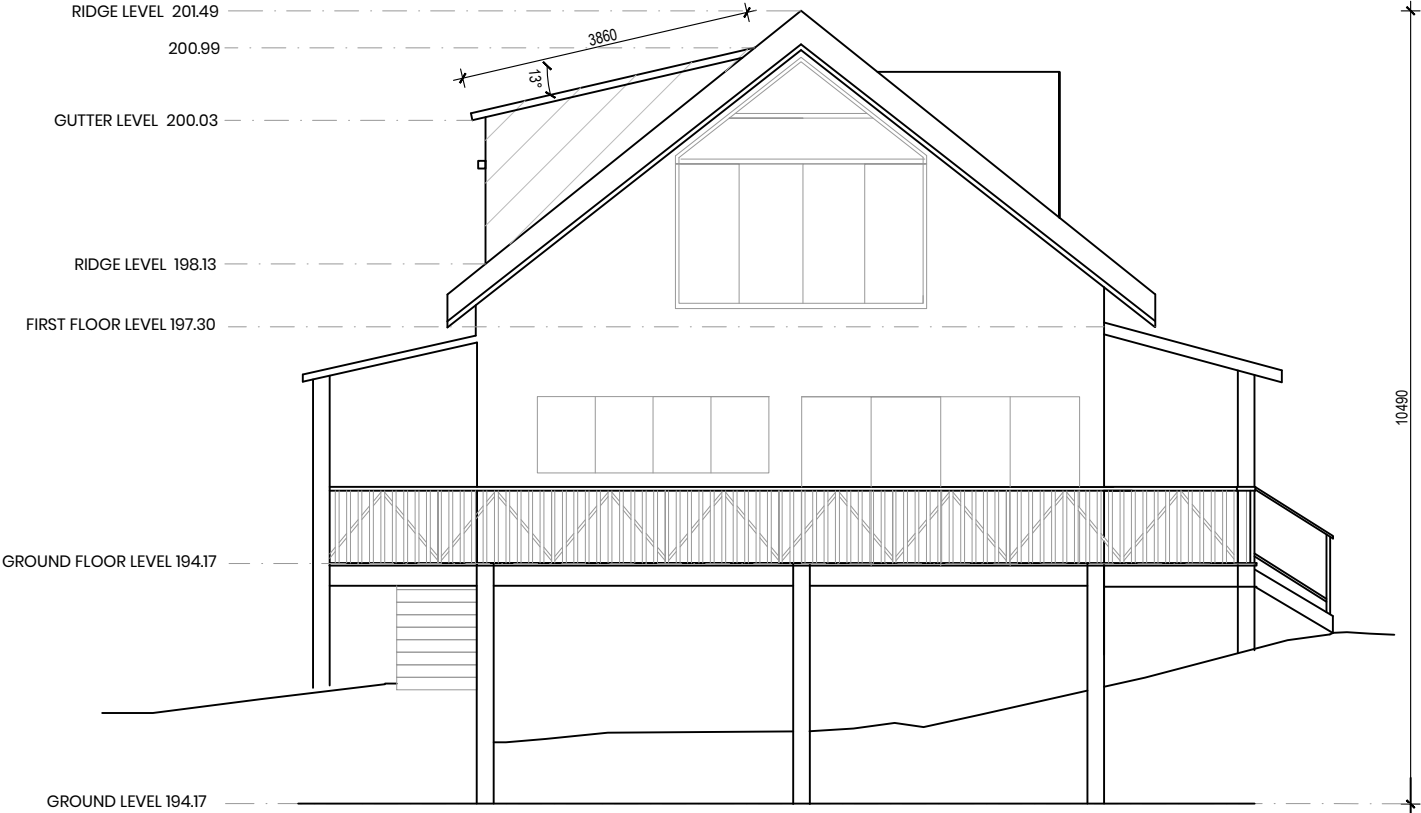
<b>Lighting</b> The applicant must ensure a minimum of 40% of new or altered light fixtures are fitted with fluorescent, compact fluorescent, or light-emitting diode (LED) lamps.		
<b>Fitures</b> The applicant must ensure new or altered showstalls have a flow rate no greater than 9 litres per minute or a 3 star water rating. The applicant must ensure new or altered toilets have a flow rate no greater than 6 litres per minute or a minimum 3 star water rating. The applicant must ensure new or altered taps have a flow rate no greater than 9 litres per minute or minimum 3 star water rating.		
<b>Insulation requirements</b> The applicant must construct the new or altered construction (thermally, walls, and ceiling/ceiling) in accordance with the specifications listed in the table below, except that (a) additional insulation is not required where the area of new construction is less than 25m <sup>2</sup> , (b) insulation specified is not required for parts of altered construction where insulation already exists.		

Construction	Additional insulation required (R-value)	Other Specifications
Floor above existing dwelling or building	Nil	
external wall (concrete/brick, block, render, etc)	R1.50 (or R1.35 including construction)	
external ceiling (aluminium/steel roof, framed)	ceiling R2.0 (up), roof (following)	Dark (solar absorptance < 0.7)

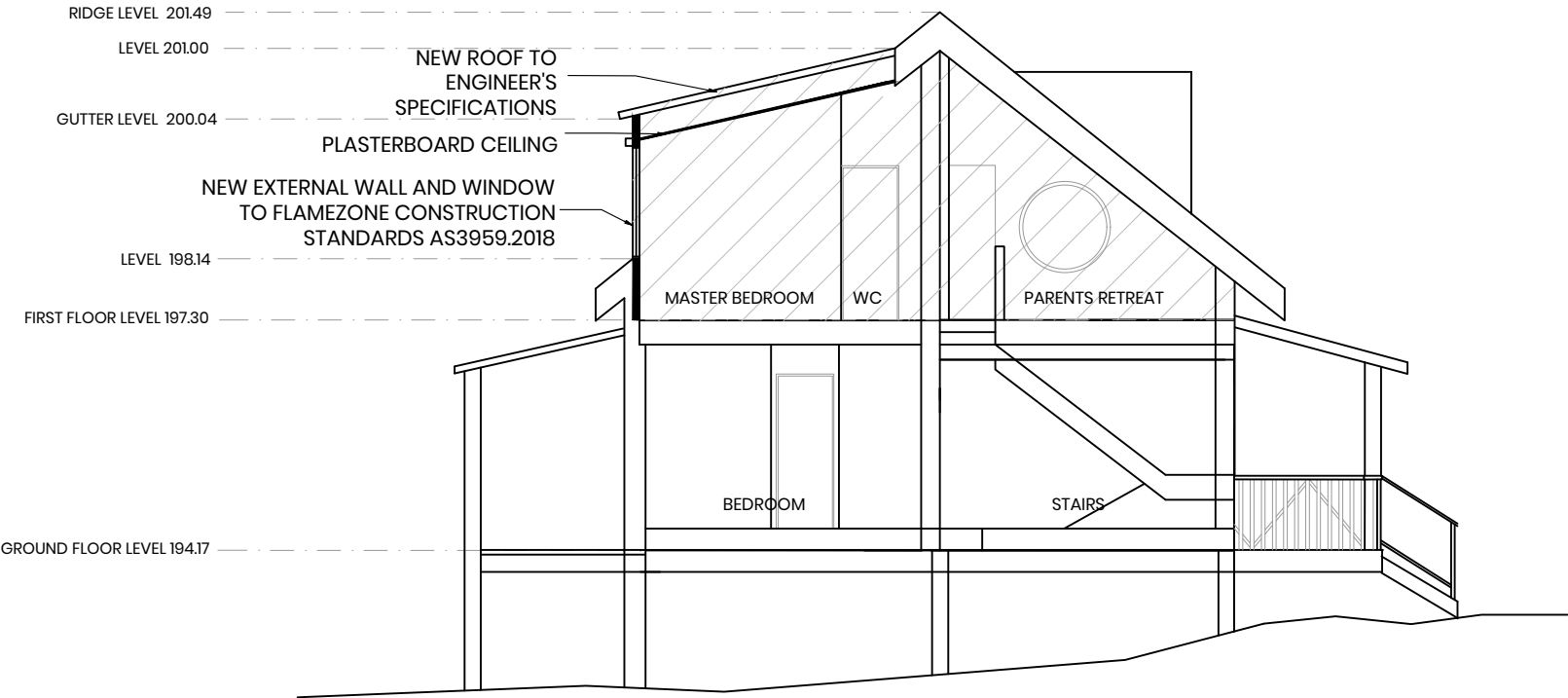
**Windows and glazed doors**  
The applicant must install the windows, glazed doors and shading devices, in accordance with the specifications listed in the table below. Relevant overarching specifications must be specified for each window and glazed door. The following requirements must also be satisfied in relation to each window and glazed door. Each window or glazed door with standard aluminium or timber frames and single clear or tinted glass may either match the description, or, have a U-value and a Solar Heat Gain Coefficient (SHGC) no greater than that listed in the table below. Tinted system U-values and SHGCs must be calculated in accordance with National Performance Rating Council (NPRC) conditions. Each window or glazed door with insulated frames, or double or triple glazing, or double or triple glazing, or multiple glazing must have a U-value and a Solar Heat Gain Coefficient (SHGC) no greater than that listed in the table below. Tinted system U-values and SHGCs must be calculated in accordance with National Performance Rating Council (NPRC) conditions. This description is provided for information only. Alternative systems with complying U-values and SHGC may be substituted. For projections described in millimetres, the leading edge of each blind, awning, venetian blind or shading device must be at least 50 mm above the head of the window or glazed door and no more than 200 mm above the sill. For projections described as a valance, the valance of the projection from the wall to the height above the window or glazed door sill must be at least that shown in the table below. Projections with polycarbonate roof or similar translucent material must have a shading coefficient of less than 0.20. Projections with fixed louvers must have louvers parallel to the window or glazed door above which they are situated, unless the projection also creates a perpendicular window. The spacing between louvers must not be more than 50 mm. Overhead buildings or vegetation must be of the height and distance from the centre and the base of the window and glazed door, as specified in the 'Vegetation/shading' column in the table below.

Note: All details on this summary should be cross checked with the actual BASIX Certificate before ordering.

Window/door no.	Orientation	Area of glass inc. frame (m <sup>2</sup> )	Overlashing Height (m)	Distance (m)	Shading device	Frame and glass type
W1	S	2.8	0.0	0.0	None	Standard aluminium, single clear, 6P U-value: 7.85, SHGC: 0.76
W2	S	0.3	0.0	0.0	None	Standard aluminium, single clear, 6P U-value: 7.85, SHGC: 0.76
W3	S	0.3	0.0	0.0	None	Standard aluminium, single clear, 6P U-value: 7.85, SHGC: 0.76
W4	S	0.1	0.0	0.0	None	Standard aluminium, single clear, 6P U-value: 7.85, SHGC: 0.76



EAST ELEVATION



SECTION A-A

draftedup

E melf@netspace.net.au

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**Proposed Elevation – East, and Section A-A**  
30 Balaclava Road,  
Berowra NSW 2081

Development Application

**Designed By** Melanie Farquhar  
**Page No:** A.05  
**Scale @ A3** 1:100

**Rev Date Drawn By**

2  
07/03/22  
Melanie Farquhar  
Hatching denotes proposed addition

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SITE INFORMATION

Lot 235 D.P. 825647	
LOT SIZE	813.5 m <sup>2</sup>
FLOOR AREA OF EXISTING RESIDENCE	204.3m <sup>2</sup>
TOTAL EXISTING SITE COVERAGE	254.6m <sup>2</sup>
PROPOSED FLOOR AREA OF RESIDENCE	204.3m <sup>2</sup>
TOTAL PROPOSED SITE COVERAGE	254.6m <sup>2</sup>
PROPOSED LANDSCAPED AREA PERCENTAGE	68.8%
PROPOSED SITE COVERAGE PERCENTAGE	31.2%

SITE NOTES

- CONFIRM ALL DIMENSIONS ON SITE TO EXISTING RESIDENCE PRIOR TO COMMENCEMENT OF ANY WORK.
- EXISTING PLUMBING AND ELECTRICAL WORKS TO BE REMOVED AND MADE GOOD AS NECESSARY.
- THIS PLAN IS TO BE READ IN CONJUNCTION WITH LANDSCAPING DETAIL PLANS FOR SPECIFIC PLANTING LOCATIONS.
- THE EXACT LOCATION OF UNDERGROUND AND ABOVEGROUND SERVICES SHALL BE PROVEN ON SITE. NO GUARANTEE IS GIVEN THAT ALL EXISTING SERVICES ARE SHOWN.
- THIS DRAWING SET TO BE READ IN CONJUNCTION WITH THE SPECIFICATION PROVIDED.
- BEWARE OF EXISTING SERVICES. CONFIRM LOCATIONS PRIOR TO EXCAVATION. TAKE EXTREME CARE.
- REFER ALL MAJOR WORKS TO RAMPS, WALKWAYS, DRIVEWAYS ETC (INCLUDING CARPARK WORKS, LEVELS & DATUMS) REFER TO CIVIL ENGINEERS DOCUMENTATION.

DEMOLITION NOTES

- CAP OFF EXISTING PLUMBING AND ELECTRICAL WORKS AS NECESSARY BY CERTIFIED TRADESPERSON.
- MODIFIED BRICKWORK TO BE TOOTHED INTO EXISTING WHERE APPLICABLE AND CAVITY TO REMAIN CONTINUOUS AT ALL TIMES.
- EXISTING MATERIALS TO BE REUSED TO OWNERS DETAIL.
- MATERIALS REMOVED FROM SITE MUST BE DISPOSED OF AS PER COUNCIL REGULATIONS.
- INVESTIGATION SHOULD BE UNDERTAKEN BEFORE ALL WORKS THAT REQUIRES EXCAVATION.

BAL ASSESSMENT

FZ

21st June 9am

21st June 12am

21st June 3pm

BASIX REQUIREMENTS

BASIX Certificate Alterations and Additions Certificate number: A453932 - 29, March 2022

<b>Lighting</b> The applicant must ensure a minimum of 40% of new or altered light fixtures are fitted with fluorescent, compact fluorescent, or light-emitting-diode (LED) lamps.						
<b>Paints</b> The applicant must ensure new or altered external walls have a flow rate no greater than 0 litres per square metre in a 5 litre water rating. The applicant must ensure new or altered roofs have a flow rate no greater than 0.5 litres per square metre in a minimum 5 litre water rating. The applicant must ensure new or altered roofs have a flow rate no greater than 0.5 litres per square metre in a minimum 5 litre water rating.						
<b>Insulation requirements</b> The applicant must construct the new or altered construction (Roofs, walls, and ceiling) in accordance with the specifications listed in the table below, except that (a) additional insulation is not required where the area of new construction is less than 200, (b) insulation specified is not required for parts of altered construction where insulation already exists.						
Construction	Additional insulation required (R-value)	Other Specifications				
Floor above existing dwelling or building	all					
external wall: framed (concrete, brick, masonry etc)	R1.30 (or R1.70 including construction)					
external ceiling, pitched/flat/roof (flat)	ceiling R2.0 (typ), roof (balustrade)	Dark solar absorbance < 0.7				
<b>Windows and glazed doors</b> The applicant must treat the windows, glazed doors and shading devices, in accordance with the specifications listed in the table below. Relevant overarching specifications must be satisfied for each window and glazed door. The following requirements must also be satisfied in relation to each window and glazed door. Each window or glazed door with standard aluminium or timber frames and single clear or tinted glass may either meet the description, or have a U-value and a Solar Heat Gain Coefficient (SHGC) no greater than that listed in the table below. Total system U-values and SHGCs must be calculated in accordance with National Performance Rating Council (NPRC) conditions. Each window or glazed door with improved frames, or polymeric frame glass, or double glazing, or double glazing must have a U-value and a Solar Heat Gain Coefficient (SHGC) no greater than that listed in the table below. Total system U-values and SHGCs must be calculated in accordance with National Performance Rating Council (NPRC) conditions. The description is provided for information only. Alternative systems with complying U-values and SHGCs may be substituted. For proportions described in millimetres, the leading edge of the frame, profile, or fin must be no more than 50 mm above the head of the window or glazed door and their 200 mm above the sill. For proportions described in a ratio, the ratio of the projection from the wall to the height above the window or glazed door still must be at least that shown in the table below. Pergolas with polycarbonate roof or similar translucent material must have a shading coefficient of less than 0.30. Pergolas with fixed louvers must have louvers parallel to the window or glazed door above which they are situated, unless the pergola also creates a perpendicular window. The spacing between louvers must not be more than 50 mm. Overhead buildings or vegetation must be of the height and distance from the canopy and the base of the window and glazed door, as specified in the 'overhead building' column in the table below.						
Note: All details on this summary should be cross checked with the actual BASIX Certificate before ordering.						
Window/door no.	Orientation	Area of glass inc. frame (m <sup>2</sup> )	Overhead building	Shading device	Frame and glass type	
			Height (m)	Distance (m)		
W1	S	2.8	0.0	0.0	None	Standard aluminium, single clear, 6x U-value: 2.8, SHGC: 0.75
W2	S	3.3	0.0	0.0	None	Standard aluminium, single clear, 6x U-value: 2.8, SHGC: 0.75
W3	S	3.3	0.0	0.0	None	Standard aluminium, single clear, 6x U-value: 2.8, SHGC: 0.75
W4	S	2.1	0.0	0.0	None	Standard aluminium, single clear, 6x U-value: 2.8, SHGC: 0.75



SITE INFORMATION

Lot 235 D.P. 825647	
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PROPOSED FLOOR AREA OF RESIDENCE	204.3m <sup>2</sup>
TOTAL PROPOSED SITE COVERAGE	254.6m <sup>2</sup>
PROPOSED LANDSCAPED AREA PERCENTAGE	68.8%
PROPOSED SITE COVERAGE PERCENTAGE	31.2%

SITE NOTES

- CONFIRM ALL DIMENSIONS ON SITE TO EXISTING RESIDENCE PRIOR TO COMMENCEMENT OF ANY WORK.
- EXISTING PLUMBING AND ELECTRICAL WORKS TO BE REMOVED AND MADE GOOD AS NECESSARY.
- THIS PLAN IS TO BE READ IN CONJUNCTION WITH LANDSCAPING DETAIL PLANS FOR SPECIFIC PLANTING LOCATIONS.
- THE EXACT LOCATION OF UNDERGROUND AND ABOVEGROUND SERVICES SHALL BE PROVEN ON SITE. NO GUARANTEE IS GIVEN THAT ALL EXISTING SERVICES ARE SHOWN.
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- BEWARE OF EXISTING SERVICES. CONFIRM LOCATIONS PRIOR TO EXCAVATION. TAKE EXTREME CARE.
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DEMOLITION NOTES

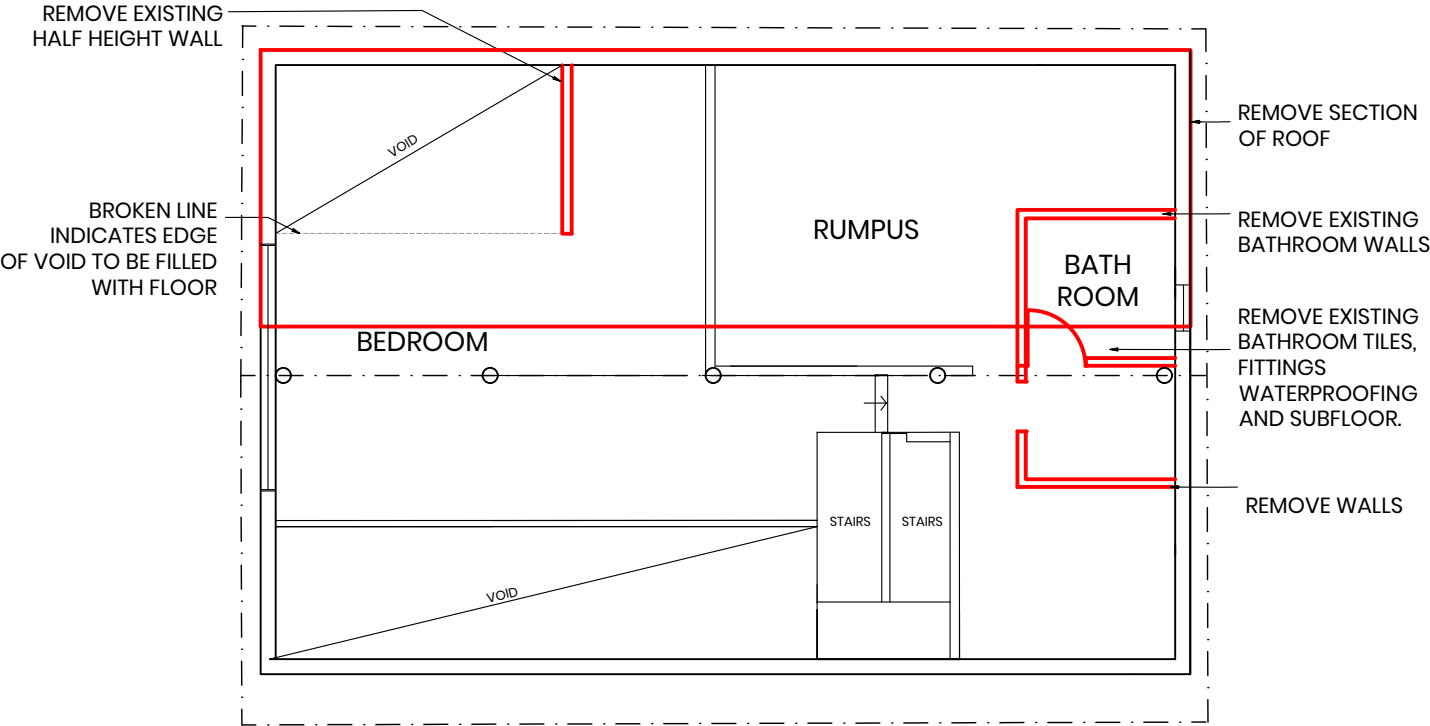
- CAP OFF EXISTING PLUMBING AND ELECTRICAL WORKS AS NECESSARY BY CERTIFIED TRADESPERSON.
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BAL ASSESSMENT

BAL FZ

BASIX REQUIREMENTS

BASIX Certificate Alterations and Additions			Certificate number: A453932 - 29, March 2022		
<b>Lighting</b> The applicant must ensure a minimum of 40% of new or altered light fixtures are fitted with fluorescent, compact fluorescent, or light-emitting diode (LED) lamps.					
<b>Fittings</b> The applicant must ensure new or altered showerheads have a flow rate no greater than 9 litres per minute or a 3 star water rating. The applicant must ensure new or altered toilets have a flow rate no greater than 6 litres per minute or a minimum 3 star water rating. The applicant must ensure new or altered taps have a flow rate no greater than 3 litres per minute or a 3 star water rating.					
<b>Insulation requirements</b> The applicant must consent to the new or altered construction (thermally, walls, and ceiling/roofs) in accordance with the specifications listed in the table below, except that if additional insulation is not required where the area of new construction is less than 20m <sup>2</sup> , no insulation specified is not required for parts of altered construction where insulation already exists.					
Construction	Additional insulation required (R-value)			Other Specifications	
Floor above existing dwelling or building	Nil				
external wall (non-tilerated, fibre, mineral wool)	R1.30 (per R1.30 including construction)				
external ceiling, gable/ceiling/roof, framed	ceiling: R2.0 (opt), roof: full-sloping			Dark (solar absorptance < 0.7)	
<b>Windows and glazed doors</b> The applicant must treat the windows, glazed doors and shading devices, in accordance with the specifications listed in the table below. Relevant overarching specifications must be satisfied for each window and glazed door. The following requirements must also be satisfied in relation to each window and glazed door. Each window or glazed door with standard aluminium or timber frames and single clear or tinted glass may not require the description, ie, none is a value and is better than glass Coefficient (SHGC) is greater than that listed in the table below. Tinted objects to reduce and SHGC must be calculated in accordance with National Performance Rating Council (NPRC) conditions. Each window or glazed door with improved frames, or energy/low glass, or double glazing, or triple glazing, or low-e glass, or Low-e glass, or better than glass Coefficient (SHGC) is greater than that listed in the table below. Tinted objects to reduce and SHGC must be calculated in accordance with National Performance Rating Council (NPRC) conditions. The description is provided for information only. Alternative systems with complying U-value and SHGC may be substituted. For projections described in millimetres, the leading edge of each pane, panel, or window frame or window frame must not be more than 200 mm above the sill. For projections described as a table, the ratio of the projection from the wall to the height above the window or glazed door sill must be at least that shown in the table below. Projections with polycarbonate roof or similar translucent material must have a shading coefficient of less than 0.25. Projections with fixed balustrade must have balustrade parallel to the window or glazed door above which they are attached, unless the projection also creates a perpendicular window. The spacing between balustrade must not be more than 50 mm. Overhead shading buildings or vegetation must be of the height and distance from the centre and the base of the window and glazed door, as specified in the 'overhead shading' column in the table below.  Note: All details on this summary should be cross checked with the actual BASIX Certificate before ordering.					
Window/door no.	Orientation	Area of glass inc. frame (m <sup>2</sup> )	Overhead shading Height (m) Distance (m)	Shading device	Frame and glass type
W1	S	2.8	0.0 0.0	None	Standard aluminium, single clear, 60 U-value: 7.85, SHGC: 0.75
W2	S	0.3	0.0 0.0	None	Standard aluminium, single clear, 60 U-value: 7.85, SHGC: 0.75
W3	S	0.3	0.0 0.0	None	Standard aluminium, single clear, 60 U-value: 7.85, SHGC: 0.75
W4	S	0.1	0.0 0.0	None	Standard aluminium, single clear, 60 U-value: 7.85, SHGC: 0.75



SITE INFORMATION

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PROPOSED SITE COVERAGE PERCENTAGE	31.2%

SITE NOTES

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BAL ASSESSMENT

BAL FZ

BASIX REQUIREMENTS

**BASIX Certificate Alterations and Additions**

**Lighting**  
The applicant must ensure a minimum of 40% of new or altered light fixtures are fitted with fluorescent, compact fluorescent, or light-emitting-diode (LED) lamps.

**Water**  
The applicant must ensure new or altered showerheads have a flow rate no greater than 9 litres per minute or a 5 star water rating. The applicant must ensure new or altered toilets have a flow rate no greater than 6 litres per average flush or a minimum 5 star water rating. The applicant must ensure new or altered taps have a flow rate no greater than 5 litres per minute or minimum 5 star water rating.

**Insulation requirements**  
The applicant must construct the new or altered construction (Roofs), walls, and ceiling/ceiling in accordance with the specifications listed in the table below, except that a) additional insulation is not required where the area of new construction is less than 250, b) insulation specifications are not required for areas of new construction where insulation already exists.

Certificate number: A453932 - 29, March 2022

Construction	Additional insulation required (R-value)	Other Specifications
Floor above existing dwelling or building	all	
external wall (concrete, brick, masonry, etc)	R1.30 per R1.30 (including construction)	
external ceiling, pre-insulated roof (timber)	ceiling R2.0 (typ), roof (balustrade)	Dark solar absorbance < 0.7

**Windows and glazed doors**  
The applicant must install the windows, glazed doors and shading devices, in accordance with the specifications listed in the table below. Relevant overarching specifications must be satisfied for each window and glazed door. The following requirements must also be satisfied in relation to each window and glazed door. Each window or glazed door with standard aluminium or timber frames and single clear or tinted glass may otherwise meet the description, or have a U-value and a Solar Heat Gain Coefficient (SHGC) no greater than that listed in the table below. Tinted glass U-values and SHGCs must be calculated in accordance with National Performance Rating Council (NPRC) conditions. The description is provided for information only. Alternative systems with complying U-values and SHGCs may be substituted. For projections described in millimetres, the leading edge of the frame, angle, vertical bar or fin must be no more than 10mm above the head of the window or glazed door and must be no more than 10mm above the sill. For projections described as a rail, the rails of the projection from the wall to the height above the window or glazed door must be at least that shown in the table below. Pergolas with polycarbonate roof or similar translucent material must have a shading coefficient of more than 0.20. Pergolas with fixed louvers must have louvers parallel to the window or glazed door above which they are situated, unless the pergola also creates a perpendicular window. The spacing between louvers must not be more than 50 mm. Overhead buildings or vegetation must be of the height and distance from the canopy and the base of the window and glazed door, as specified in the 'Vegetation/shading' column in the table below.

Note: All details on this summary should be cross checked with the actual BASIX Certificate before ordering.

Window/door no.	Orientation	Area of glass inc. frame (m <sup>2</sup> )	Overshading		Shading device	Frame and glass type
			Height (mm)	Distance (mm)		
W1	S	2.8	0.0	0.0	None	Standard aluminium, single clear, 6x U-value: 7.8, SHGC: 0.76
W2	S	3.3	0.0	0.0	None	Standard aluminium, single clear, 6x U-value: 7.8, SHGC: 0.76
W3	S	3.3	0.0	0.0	None	Standard aluminium, single clear, 6x U-value: 7.8, SHGC: 0.76
W4	S	2.1	0.0	0.0	None	Standard aluminium, single clear, 6x U-value: 7.8, SHGC: 0.76

draftedup

E melf@netspace.net.au

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Erosion and Sediment Control Plan

30 Balaclava Road,  
Berowra NSW 2081

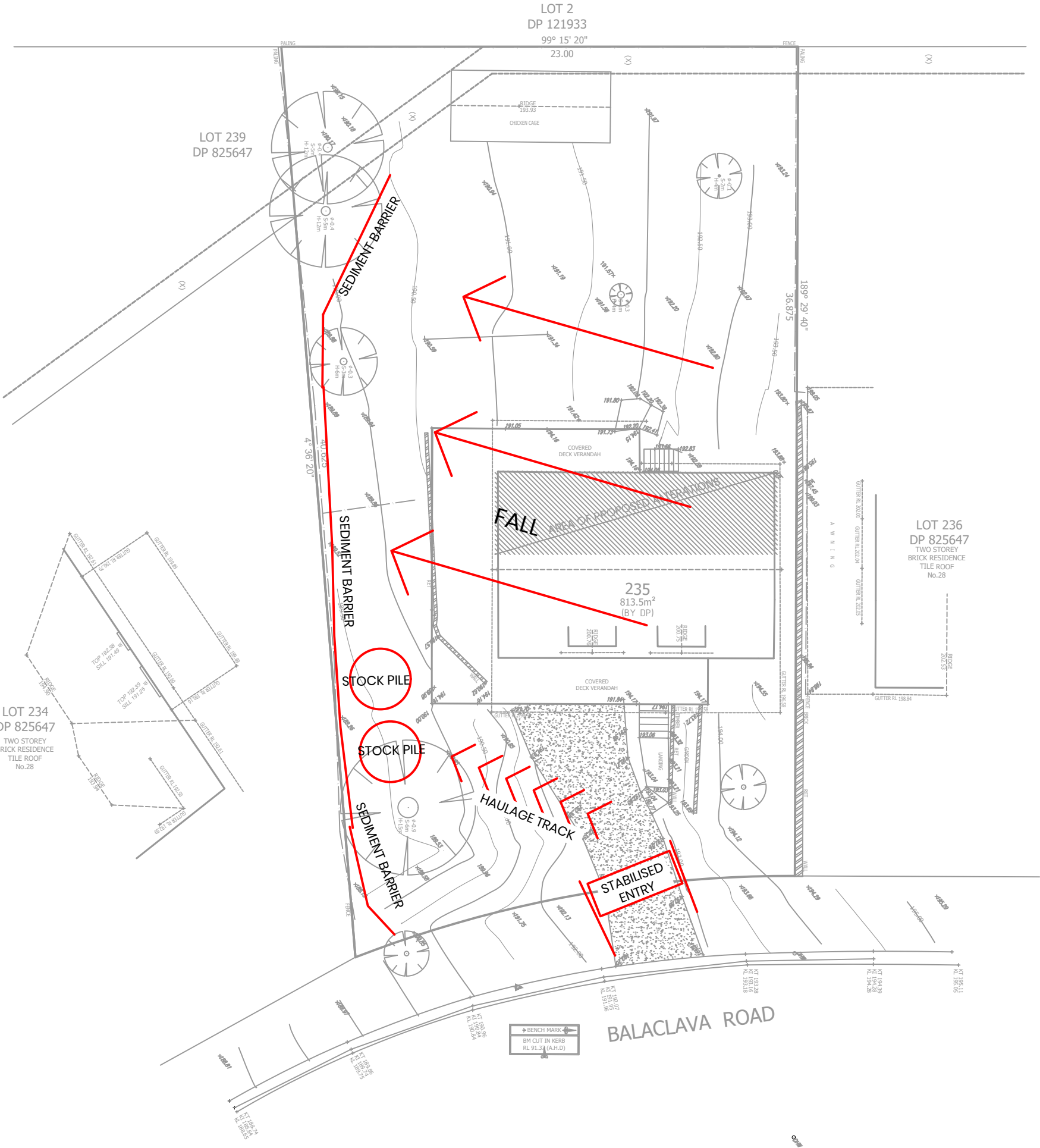
Development Application

Sarah and Andrew Flarey

Designed By Melanie Farquhar  
Page No: A.09  
Scale @ A3 1:100

Rev  
Date  
Drawn By

2  
07/03/22  
Melanie Farquhar



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SITE NOTES

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BAL ASSESSMENT

BAL FZ

BASIX REQUIREMENTS

BASIX Certificate Alterations and Additions			Certificate number: A453932 - 29, March 2022			
<b>Lighting</b> The applicant must ensure a minimum of 40% of new or altered light fixtures are fitted with fluorescent, compact fluorescent, or light-emitting-diode (LED) lamps.						
<b>Fixtures</b> The applicant must ensure new or altered showerheads have a flow rate no greater than 9 litres per minute or a 3 star water rating. The applicant must ensure new or altered toilets have a flow rate no greater than 9 litres per average flush or a minimum 3 star water rating. The applicant must ensure new or altered taps have a flow rate no greater than 9 litres per minute or minimum 3 star water rating.						
<b>Insulation requirements</b> The applicant must construct the new or altered construction (Roofs), walls, and ceiling(s) in accordance with the specifications listed in the table below, except that a) additional insulation is not required where the area of new construction is less than 250, b) insulation is not required for parts of altered construction where insulation already exists.						
Construction	Additional insulation required (R-value)		Other Specifications			
Floor above existing dwelling or building	nil					
external wall (concrete/brick, stone, render etc)	R1.50 per R1.50 (including construction)					
external ceiling, pitched/skillion roof (timber)	ceiling: R2.0 (typ), roof: full-sloping		Dark (polar albedo) = 0.7)			
<b>Windows and glazed doors</b> The applicant must treat the windows, glazed doors and shading devices, in accordance with the specifications listed in the table below. Relevant overarching specifications must be satisfied for each window and glazed door. The following requirements must also be satisfied in relation to each window and glazed door. Each window or glazed door with standard aluminium or timber frames and single clear or tinted glass may either match the description, or have a U-value and a Solar Heat Gain Coefficient (SHGC) no greater than that listed in the table below. Tinted system U-values and SHGCs must be calculated in accordance with National Performance Rating Council (NPRC) conditions. Each window or glazed door with improved frames, or polyurethane glass, or double glazing, or transfer glazing must have a U-value and a Solar Heat Gain Coefficient (SHGC) no greater than that listed in the table below. Tinted system U-values and SHGCs must be calculated in accordance with National Performance Rating Council (NPRC) conditions. The description is provided for information only. Alternative systems with complying U-values and SHGC may be substituted. For projections described in millimetres, the leading edge of the glass, panels, louvers or louvers must be no more than 10mm above the level of the window or glazed door and must be no more than 10mm above the sill. For projections described as a rafter, the rafter of the projection from the wall to the height above the window or glazed door sill must be at least that shown in the table below. Pergolas with polycarbonate roof or similar translucent material must have a shading coefficient of less than 0.20. Pergolas with fixed louvers must have louvers parallel to the window or glazed door above which they are situated, unless the pergola also creates a perpendicular window. The spacing between louvers must not be more than 50 mm. Overhanging buildings or vegetation must be of the height and distance from the canopy and the base of the window and glazed door, as specified in the 'Vegetation/shading' column in the table below.						
Note: All details on this summary should be cross checked with the actual BASIX Certificate before ordering.						
Window/door no.	Orientation	Area of glass inc. frame (m <sup>2</sup> )	Overshading	Shading device	Frame and glass type	
			Height (m)	Distance (m)		
W1	S	2.8	0.0	0.0	None	Standard aluminium, single clear, 6P U-value: 7.88, SHGC: 0.76
W2	S	3.3	0.0	0.0	None	Standard aluminium, single clear, 6P U-value: 7.88, SHGC: 0.76
W3	S	3.3	0.0	0.0	None	Standard aluminium, single clear, 6P U-value: 7.88, SHGC: 0.76
W4	S	2.1	0.0	0.0	None	Standard aluminium, single clear, 6P U-value: 7.88, SHGC: 0.76

