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# TOWN PLANNING REPORT

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Application under Section 4.55(1A) of the Environmental Planning and Assessment Act 1979 to modify Development Consent No. 10.2019.331.1

## Original Consent:

Relocated dwelling house including alterations and additions

## Proposed Modifications:

Reconfiguration of the approved dwelling including relocation of one of the bedrooms to the lower floor, adding a bathroom to the relocated bedroom and repositioning the kitchen and laundry areas

Lot 17 DP 1252223  
No. 9 Clover Hill Circuit, Bangalow

**JOE DAVIDSON**  
TOWN PLANNING

2 April 2020

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## Annexures

- A. Revised BASIX Certificate – Joe Davidson
- B. Revised Plans and Removability Report – Contract Design Staff P/L

## 1.0 Details of Modification of Development Consent

In accordance with Clause 115 of the Environmental Planning and Assessment Regulation 2000, the following information is provided to meet the 'requirements for an application for modification of a development consent':

**(1) An application for modification of a development consent under section 4.55 (1), (1A) or (2) or 4.56 (1) of the Act must contain the following information:**

**(a) the name and address of the applicant,**

Town Planning Studio Pty Ltd / Joe Davidson Town Planning  
PO Box 238, Brunswick Heads NSW 2483

**(b) a description of the development to be carried out under the consent (as previously modified),**

The original development consent described the proposal as:

*Relocated dwelling house including alterations and additions*

**(c) the address, and formal particulars of title, of the land on which the development is to be carried out,**

9 Clover Hill Circuit, Bangalow  
Lot 17 DP 1252223

**(d) a description of the proposed modification to the development consent,**

It is proposed to modify the approved plans of the dwelling development as described below:

1. Relocation of a bedroom from the upper floor to the lower floor.
2. Addition of an ensuite to the lower floor bedroom.
3. Repositioning of the laundry space within the lower floor to the western side of the building adjoining the bedroom and ensuite.
4. Repositioning of the kitchen space within the upper floor to the southern side of the open plan living area.

**(e) a statement that indicates either:**

- (i) that the modification is merely intended to correct a minor error, misdescription or miscalculation, or**

**(ii) that the modification is intended to have some other effect, as specified in the statement,**

The proposed application is intended to make minor changes to the approved development as described above.

**(f) a description of the expected impacts of the modification,**

It is not anticipated that the modifications will result in any significant adverse impacts on the natural or built environments. The proposal does not change the development footprint. No vegetation removal will result from the amended dwelling configuration. The additional bedroom at ground level will not create a significant change to the streetscape.

**(g) an undertaking to the effect that the development (as to be modified) will remain substantially the same as the development that was originally approved,**

The proposed modifications relate to an approved four bedroom dwelling. The main change is the relocation of one of the approved bedrooms from the upper floor to the lower floor. This will result in a small increase in the gross floor area of the development. However, the bedroom is located within a sub-floor space that has approval to be enclosed with batten screening. Accordingly, the external appearance of the development will not be significantly altered. The proposal remains substantially the same development as that already approved under Development Consent No. 10.2019.331.1.

**(g1) in the case of an application that is accompanied by a biodiversity development assessment report, the reasonable steps taken to obtain the like-for-like biodiversity credits required to be retired under the report to offset the residual impacts on biodiversity values if different biodiversity credits are proposed to be used as offsets in accordance with the variation rules under the Biodiversity Conservation Act 2016,**

Not applicable.

**(h) if the applicant is not the owner of the land, a statement signed by the owner of the land to the effect that the owner consents to the making of the application (except where the application for the consent the subject of the modification was made, or could have been made, without the consent of the owner),**

The land owner has provided consent to the lodgement of the Section 4.55 Application in this regard. See attachment documentation.

- (i) **a statement as to whether the application is being made to the Court (under section 4.55) or to the consent authority (under section 4.56), and, if the consent authority so requires, must be in the form approved by that authority.**

The application is not being made to the Court (under section 4.55) or to the consent authority (under section 4.56).

- (2) **The notification requirements of clause 49 apply in respect of an application if the consent of the owner of the land would not be required were the application an application for development consent rather than an application for the modification of such consent.**

Noted.

- (3) **In addition, if an application for the modification of a development consent under section 4.55 (2) or section 4.56 (1) of the Act relates to residential apartment development and the development application was required to be accompanied by a design verification from a qualified designer under clause 50 (1A), the application must be accompanied by a statement by a qualified designer.**

Not applicable.

- (3A) **The statement by the qualified designer must:**

- (a) **verify that he or she designed, or directed the design of, the modification of the development and, if applicable, the development for which the development consent was granted, and**
- (b) **provide an explanation of how:**
- (i) **the design quality principles are addressed in the development, and**
- (ii) **in terms of the Apartment Design Guide, the objectives of that guide have been achieved in the development, and**
- (c) **verify that the modifications do not diminish or detract from the design quality, or compromise the design intent, of the development for which the development consent was granted.**

Not applicable.

- (3B) **If the qualified designer who gives the design verification under subclause (3) for an application for the modification of**

**development consent (other than in relation to State significant development) does not verify that he or she also designed, or directed the design of, the development for which the consent was granted, the consent authority must refer the application to the relevant design review panel (if any) for advice as to whether the modifications diminish or detract from the design quality, or compromise the design intent, of the development for which the consent was granted.**

Not applicable.

**(4) If an application referred to in subclause (3) is also accompanied by a BASIX certificate with respect to any building, the design quality principles referred to in that subclause need not be verified to the extent to which they aim:**

**(a) to reduce consumption of mains-supplied potable water, or reduce emissions of greenhouse gases, in the use of the building or in the use of the land on which the building is situated, or**

**(b) to improve the thermal performance of the building.**

Not applicable.

**(5) The consent authority may refer the proposed modification to the relevant design review panel but not if the application is for modification of a development consent for State significant development.**

Not applicable.

**(6) An application for the modification of a development consent under section 4.55 (1A) or (2) of the Act, if it relates to development for which the development application was required to be accompanied by a BASIX certificate or BASIX certificates, or if it relates to BASIX optional development in relation to which a person has made a development application that has been accompanied by a BASIX certificate or BASIX certificates (despite there being no obligation under clause 2A of Schedule 1 for it to be so accompanied), must also be accompanied by the appropriate BASIX certificate or BASIX certificates.**

Not applicable.

**(7) The appropriate BASIX certificate for the purposes of subclause (6) is:**

**(a) if the current BASIX certificate remains consistent with the proposed development, the current BASIX certificate, and**

**(b) if the current BASIX certificate is no longer consistent with the proposed development, a new BASIX certificate to replace the current BASIX certificate.**

A revised BASIX Certificate has been prepared and is submitted as part of the Section 4.55 application.

**(8) An application for modification of a development consent under section 4.55 (1), (1A) or (2) or 4.56 (1) of the Act relating to land owned by a Local Aboriginal Land Council may be made only with the consent of the New South Wales Aboriginal Land Council.**

Not applicable.

**(9) The application must be accompanied by the relevant fee prescribed under Part 15.**

The relevant fee is to be paid at the time of lodgement.

**(10) A development consent may not be modified by the Land and Environment Court under section 4.55 of the Act if an application for modification of the consent has been made to the consent authority under section 4.56 of the Act and has not been withdrawn.**

Not applicable.

## 2.0 Reasons for Modification of Development Consent

In September 2019, Development Application No. 10.2019.331.1 was granted consent to relocate a dwelling to the subject property and to carry out alterations and additions to that dwelling. A Construction Certificate was obtained and construction works commenced in late 2019.

The landowners have reviewed the layout of the building during the construction project and have determined that a better use of the site would be to relocate one of the four bedrooms to the lower floor. This simple change to the dwelling design provides for the repositioning of the kitchen and a greater use of the open plan living room within the upper floor.

All modifications are of a minor nature that are not easily discernible when viewed from the street or adjoining properties. The approved setbacks to the side/rear boundaries and the street frontage remain unchanged. The overall height of the approved development does not increase as a result of the modified proposal.

The proposed modifications do not significantly alter the development's compliance with Byron Local Environmental Plan 2014 or Byron Development Control Plan 2014. It is unlikely that the proposal will require the modification to any conditions of consent other than Condition No. 1.

The following table confirms that the small change in the gross floor area of the dwelling will not exceed Byron Shire Council's maximum requirements for the zone:

Floor Space Ratio Calculations	
Site Area	500 m <sup>2</sup>
Proposed Gross Floor Area	181.3m <sup>2</sup>
Floor Space Ratio	0.36:1

The proposed lower floor bedroom is similar in configuration to an expanded house outbuilding as per Chapter D1.3.3 of Byron Development Control Plan 2014. It has a gross floor area of just 32.5 square metres, including the adjoining ensuite and laundry. The proposed lower floor is consistent with all requirements of the expanded house provisions of Byron Development Control Plan 2014, other than it being an attached structure. It is reasonable for Byron Shire Council to grant consent to the proposed dwelling configuration in this case.

### 3.0 Conclusion

This Town Planning Report summarises the proposed modifications to an approved development within the site. The proposed modifications result in a development that is substantially the same as that already approved within the property.

It is submitted that adequate information has been provided to assess the proposal as a modification to a development consent. However, please advise the Applicant should further information be required to address any issues that may arise during assessment.

. . . . .

Joe Davidson MPlA  
Director - Town Planning Studio Pty Ltd

# **ATTACHMENT A**

Revised BASIX Certificate

# **ATTACHMENT B**

Revised Development Plans

SHEET INDEX		
		DRAWING TITLE
		COVER SHEET
DRAWING NUMBER	REVISION	
PTN-01	B	SITE PLAN
PTN-02	B	PROPOSED FLOOR PLAN
PTN-03	B	ELEVATIONS
PTN-04	B	SECTION A-A'
PTN-05	A	EXISTING FLOOR PLAN
PTN-06	B	BRACING AND TIE DOWN
PTN-07	B	DETAILS

PROPOSED DWELLING  
FOR H TOON & M PRONGER  
AT 9 CLOVER HILL CIRCUIT  
BANGALOW NSW



**C o n t r a c t**  
**D e s i g n S t a f f P t y L t d**

PO Box 262, Moorooka, 4105

P | (07) 3892 4360 M | 0418 728 547  
F | (07) 3892 4775 E | admin@contractdesignstaff.com.au



WIND CATEGORY: N2

Q B C C Licence No. 42635

**NOTES**

**DESIGN**

- This dwelling is to comply with NCC 2019 BUILDING CODE OF AUSTRALIA.

**TERRAIN**

- The site is a sheltered block in a non cyclone area. N2 Wind Velocity 33m/s.

**TIMBERWORK**

- This building is an existing timber framed building clad with chamferboards.

**DWELLING**

- The proposed dwelling has been removed from another site and extended. It is to be sited as shown.

**STUMPS**

- Stump positions are indicative only. Actual stump positions should be determined when on site. All dimensions to be checked and verified on site. Figured dimensions take precedence over scaled.

**BRACING AND TIE DOWN**

- Refer to sheet 6.

**TIMBER SCHEDULE**

- Refer to supplier's specifications.

**Fixtures and Systems**

**Hot water**

The applicant must install the following hot water system in the development: solar (gas-boosted) system that is eligible to create Renewable Energy Certificates under the (Commonwealth) Renewable Energy (Electricity) Regulations 2001 (incorporating Amendment Regulations 2005 (No. 2)).

**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 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.

**Construction**

**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
suspended floor with open subfloor: framed (R0.7).	nil	
external wall: framed (weatherboard, fibro, metal clad)	R1.00 (or R1.40 including construction)	
flat ceiling, pitched roof	ceiling: R0.60 (down), roof: foil backed blanket (55 mm)	light (solar absorptance < 0.475)

**Glazing requirements**

**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 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 toned 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-values and SHGCs must be calculated in accordance with National Fenestration Rating Council (NFRC) conditions.

For projections described in millimetres, the leading edge of each eave, pergola, verandah, balcony or awning must be no more than 500 mm above the head of the window or glazed door and no more than 2400 mm above the sill.

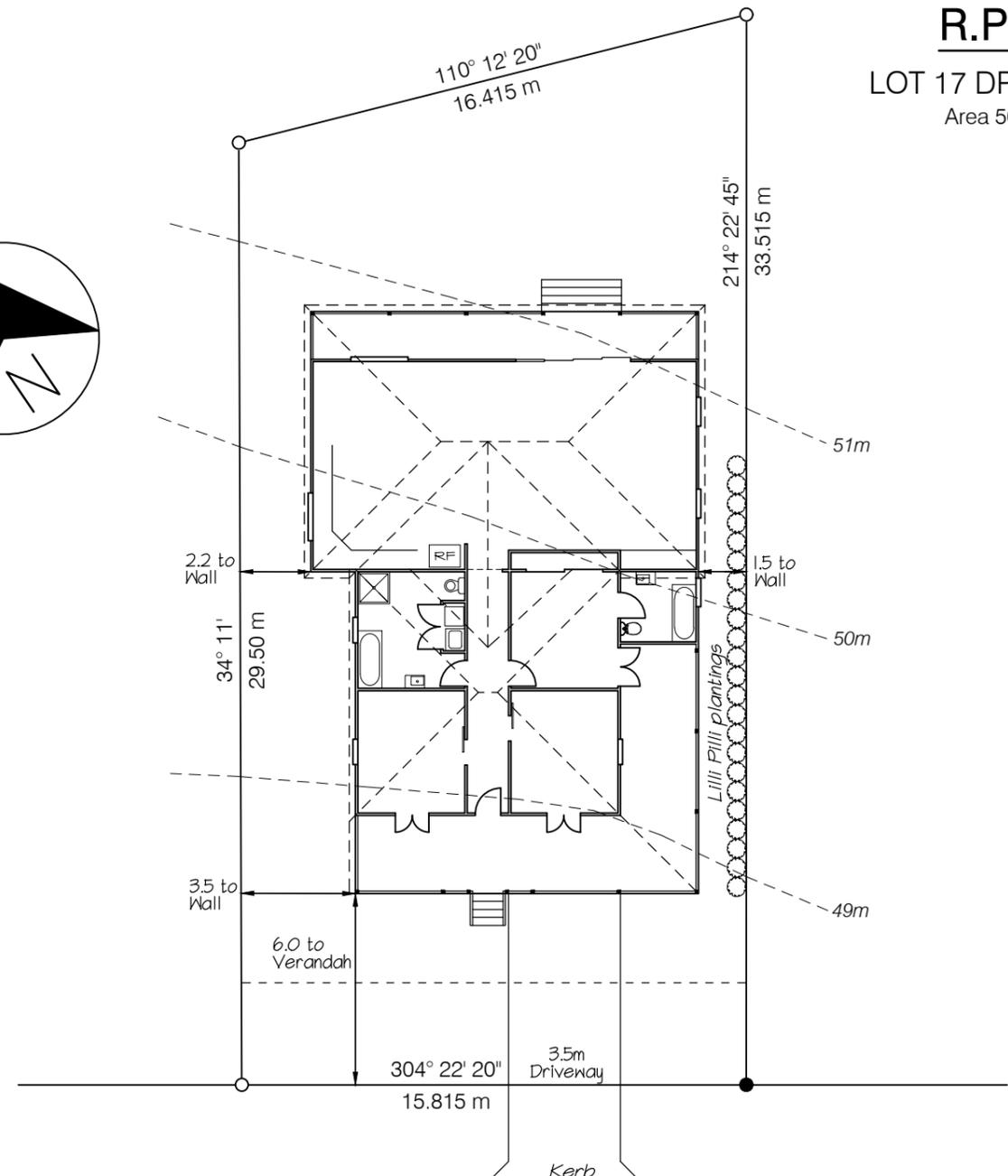
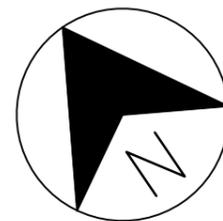
Overshadowing buildings or vegetation must be of the height and distance from the centre and the base of the window and glazed door, as specified in the 'overshadowing' column in the table below.

**Windows and glazed doors glazing requirements**

Window / door no.	Orientation	Area of glass inc. frame (m <sup>2</sup> )	Overshadowing		Shading device	Frame and glass type
			Height (m)	Distance (m)		
W5	NW	1.8	0	0	awning (adjustable) >=900 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)
W6	NE	2.16	5	6	awning (adjustable) >=900 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)
Stacker	NE	7.2	5	6	awning (adjustable) >=900 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)

**BUILDING COMPLIANCE**

- Stairs and Landing to comply with Part 3.9.1 - v2 of the BCA.
- Handrails / Balustrades to comply with Part 3.9.2 - v2 of the BCA.
- WC doors to comply with Part 3.8.3.3 - v2 of the BCA.
- All wet areas to comply with Part 3.8.1 - v2 of the BCA .
- Lighting to comply with Part 3.8.4 - v2 of the BCA.
- Ventilation to comply with Part 3.8.5 - v2 of the BCA.
- Smoke alarms to be provided in accordance with Part 3.7.2 - v2 of the BCA and AS 3786 of the Australian Standards.
- Termite protection to comply with Part 3.1.3 - v2 of the BCA.



**R.P.D.**  
**LOT 17 DP1252223**  
 Area 500m<sup>2</sup>

*CLOVER HILL CIRCUIT*

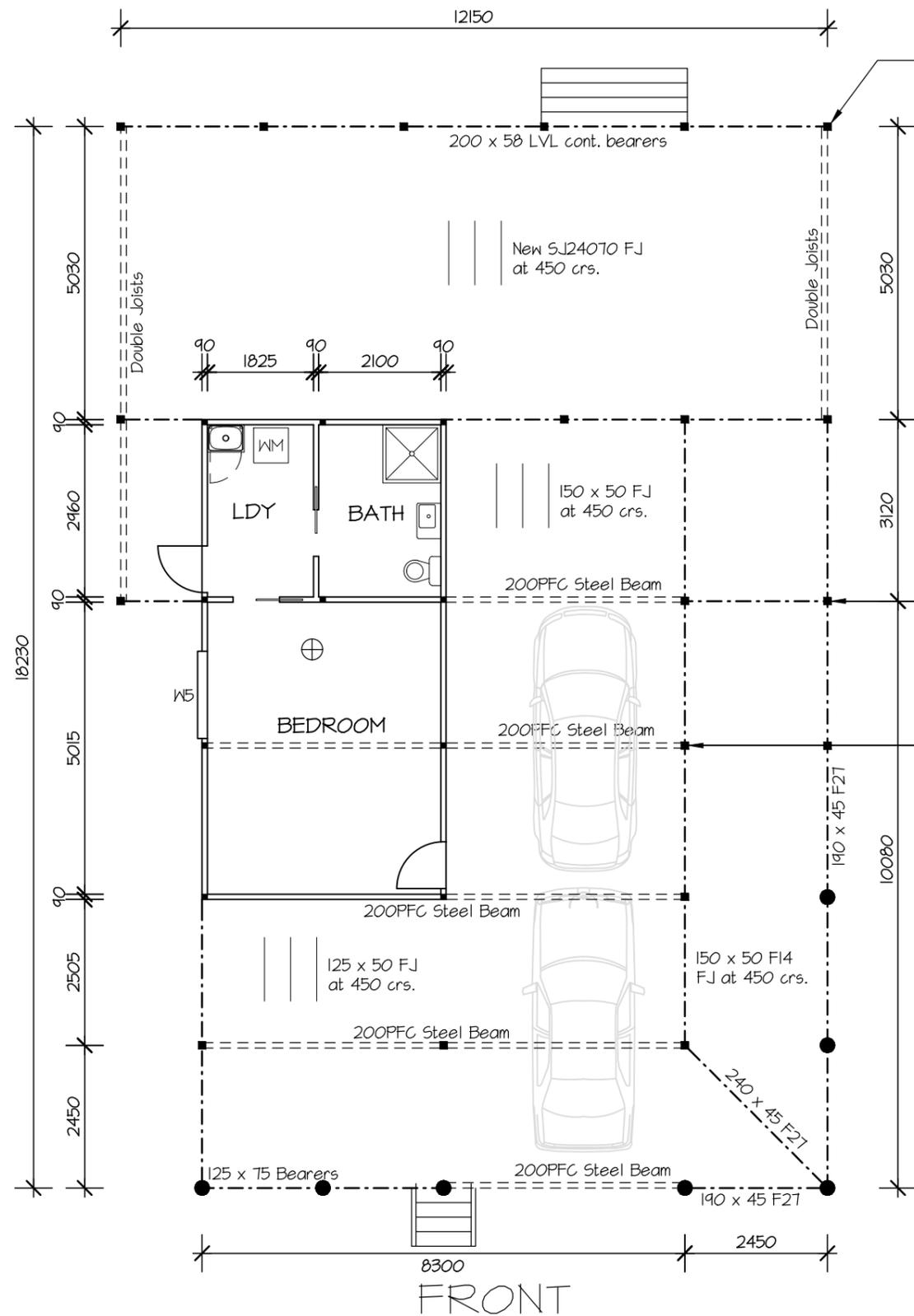
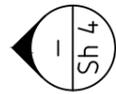
**Contract Design Staff** Pty Ltd  
 PO Box 262, Mooroooka, 4105  
 (07) 3892 4360 FAX (07) 3892 4775  
 QBCC Lic: 42635

PROPOSED DWELLING  
 FOR H TOON & M PRONGER  
 AT 9 CLOVER HILL CIRCUIT  
 BANGALOW NSW

**SITE PLAN**

Sh 1 of 7

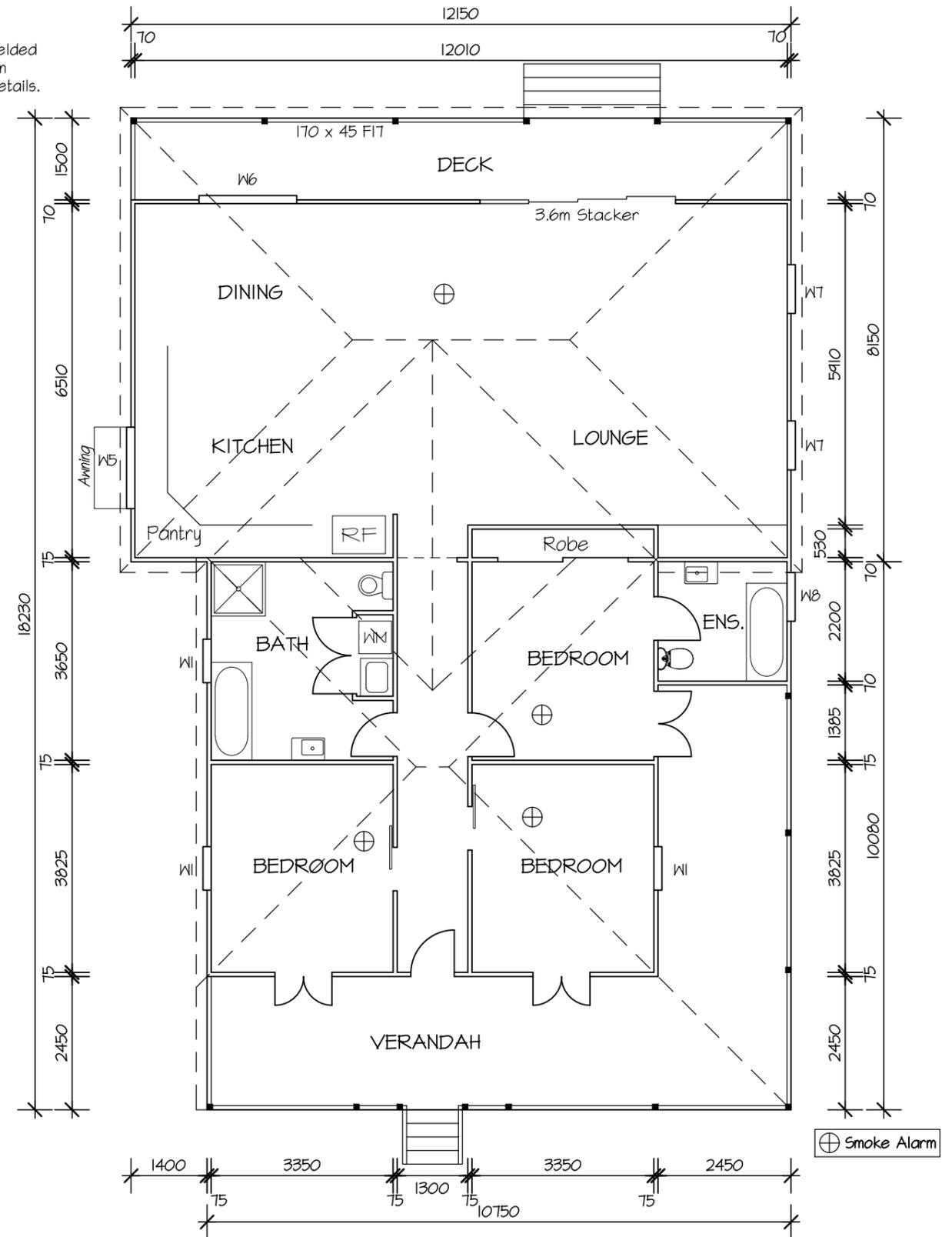
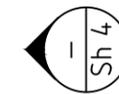
Scale 1:200 Date March 2020 PTN-01



75 x 75 x 4 SHS posts with 8mm thick M5 plate welded to base. Posts to be set in conc. footings. Refer to details.

Location of new posts to match location of existing posts.

All PFC Steel Beams M12 bolts to existing bearer at 600crs.



**General Notes**

1. Confirm details of setbacks, levels, setbacks and critical dimensions on site prior to and during the works. Notify designer of any discrepancies discovered before proceeding.
2. All construction to comply with the Building Code of Australia and applicable Australian Standards.
3. Use dimensions over scaling off the drawing.
4. These drawings and the Copyright thereof are the property of CONTRACT DESIGN STAFF P/L and shall not be used, retained or copied without the written authority of CONTRACT DESIGN STAFF P/L.

PLANS TO BE READ IN CONJUNCTION WITH ENGINEERS AND MANUFACTURERS DESIGN AND SPECIFICATIONS

**WINDOW SCHEDULE**

W1	1500 x 800
W2	500 x 1200
W3	1300 x 2000
W4	1200 x 600
W5	1200 x 1500
W6	1200 x 1800
W7	1500 x 900 DH
W8	900 x 900

**Contract Design Staff** Pty Ltd  
 PO Box 262, Moorooka, 4105  
 (07) 3892 4360 FAX (07) 3892 4775  
 QBCC Lic: 42635

PROPOSED DWELLING  
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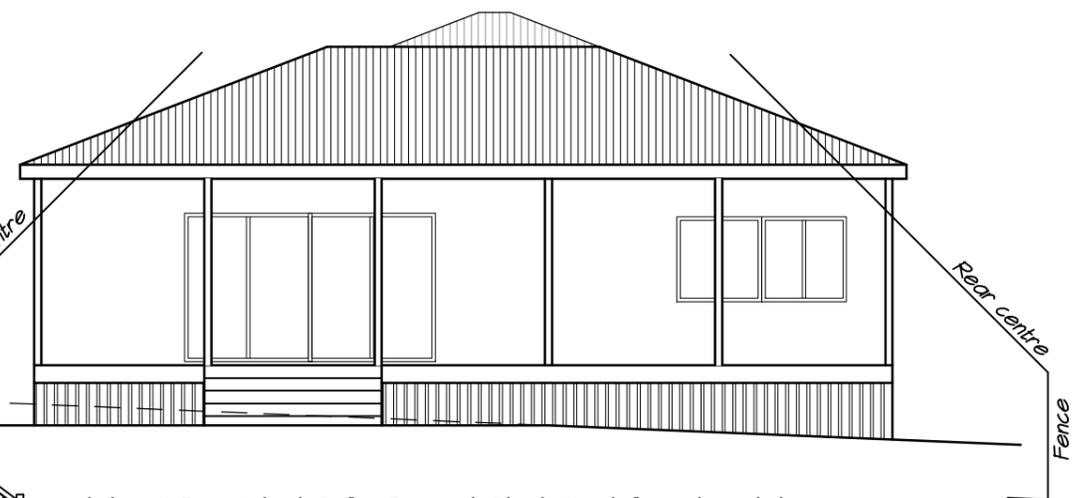
**FLOOR PLAN**

Sh 2 of 7

Scale 1:100 Date March 2020 PTN-02



NORTH WEST ELEVATION



NORTH EAST ELEVATION  
[Rear]

CHAMFERBOARD CLADDING

EXISTING BUILDING

PROPOSED EXTENSION



SOUTH WEST ELEVATION  
[Front]

ZINCALUM ROOF



SOUTH EAST ELEVATION

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**Contract Design Staff** Pty Ltd  
 PO Box 262, Moorooka, 4105  
 (07) 3892 4360 FAX (07) 3892 4775  
 QBCC Lic: 42635

PROPOSED DWELLING  
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ELEVATIONS

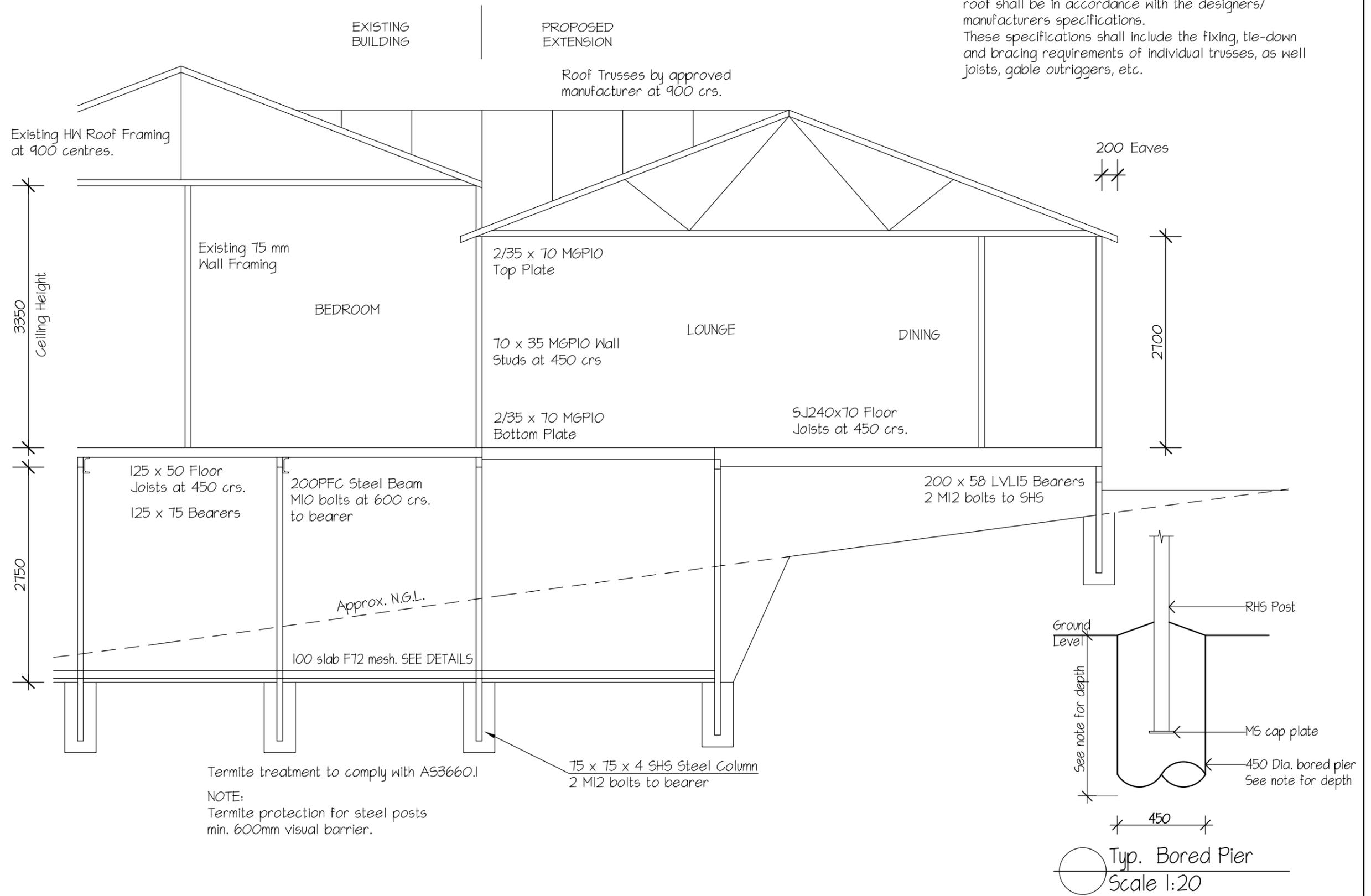
Sh 3 of 7

Scale 1:100 Date March 2020 PTN-03

**NOTES**

A trussed timber roof system shall be engineer designed and certified in accordance with relevant Australian Standards. Fabrication and installation of the trussed roof shall be in accordance with the designers/ manufacturers specifications.

These specifications shall include the fixing, tie-down and bracing requirements of individual trusses, as well joists, gable outriggers, etc.



**General Notes**

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**Note:**  
 Bored piers 450mm dia and minimum depth 900mm or determined on site.  
 Minimum 400mm into natural ground and 300 mm through any fill material.  
**M SITE:** refer to soil test by Douglas Partners P/L ref 90567 dated 10/12/2018

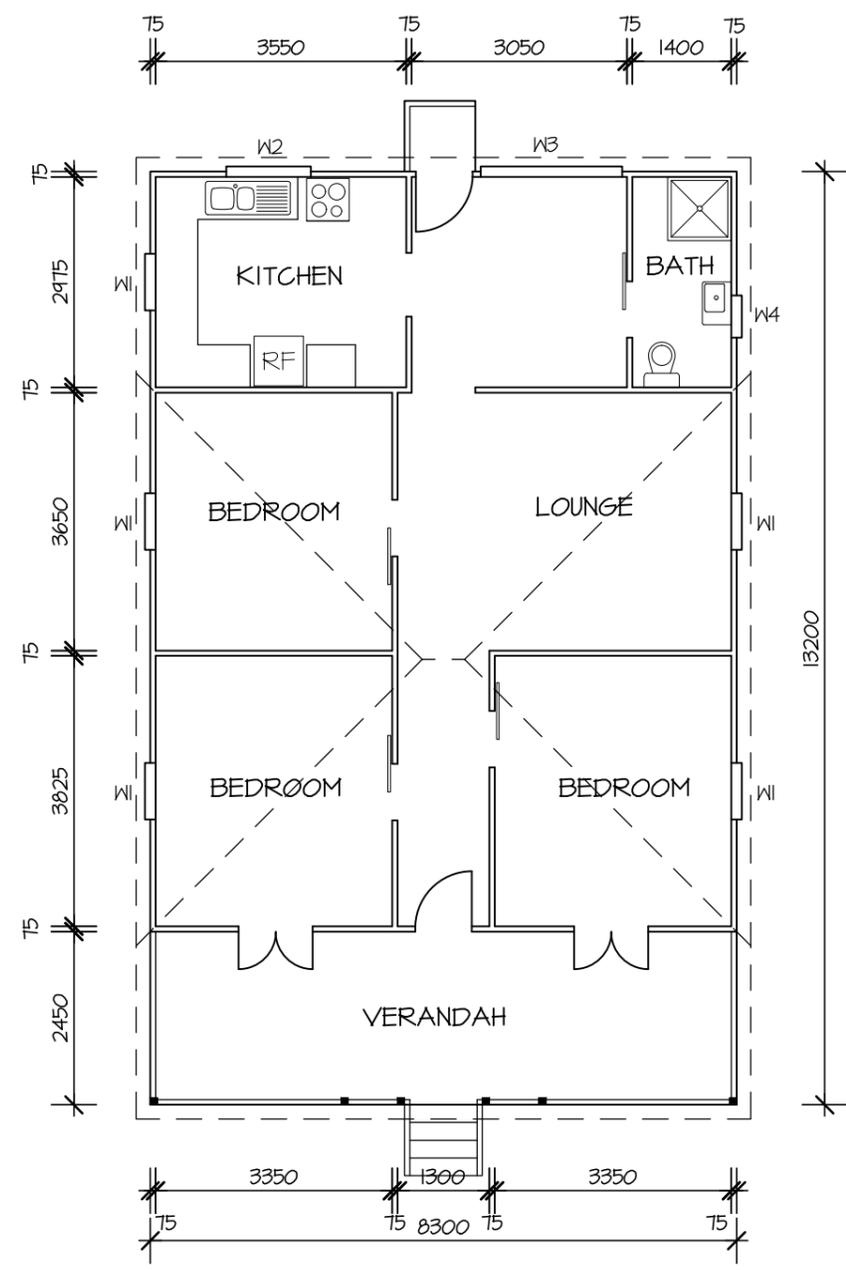
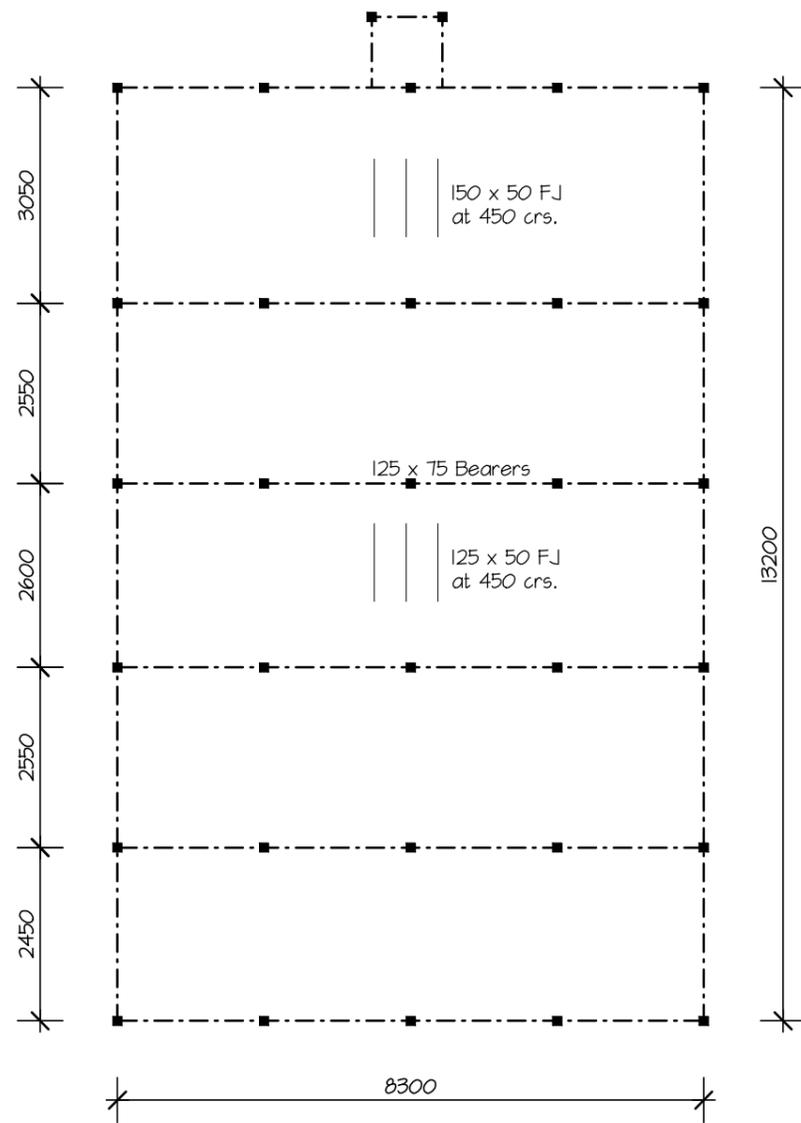
**Contract Design Staff** Pty Ltd  
 PO Box 262, Moorooka, 4105  
 (07) 3892 4360 FAX (07) 3892 4775  
 QBCC Lic: 42635

PROPOSED DWELLING  
 FOR H TOON & M PRONGER  
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 BANGALOW NSW

**SECTION A-A**

Sh 4 of 7

Scale 1:50 Date March 2020 PTN-04



**General Notes**

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WINDOW SCHEDULE	
W1	1500 x 800
W2	500 x 1200
W3	1300 x 2000
W4	1200 x 600

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 PO Box 262, Moorooka, 4105  
 (07) 3892 4360 FAX (07) 3892 4775  
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PROPOSED DWELLING  
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**EXISTING FLOOR PLAN**  
 Sh 5 of 7  
 Scale 1:100 Date Aug 2018 PTN-05

**NOTES**

- Bracing walls to be fixed to floor and roof framing in accordance with section 8 of AS1684.
- Bracing sets to be S16 rods fully welded to RHS posts if applicable.
- Lining to be closely nailed onto framework with 30 x 2.8mm dia. flat head nails.
- Nails to be at max 50mm crs. at top and bottom plates, 100mm crs. at sheet edges and max 150mm crs. elsewhere.
- Roof trusses and wall framing to be JD4 min.

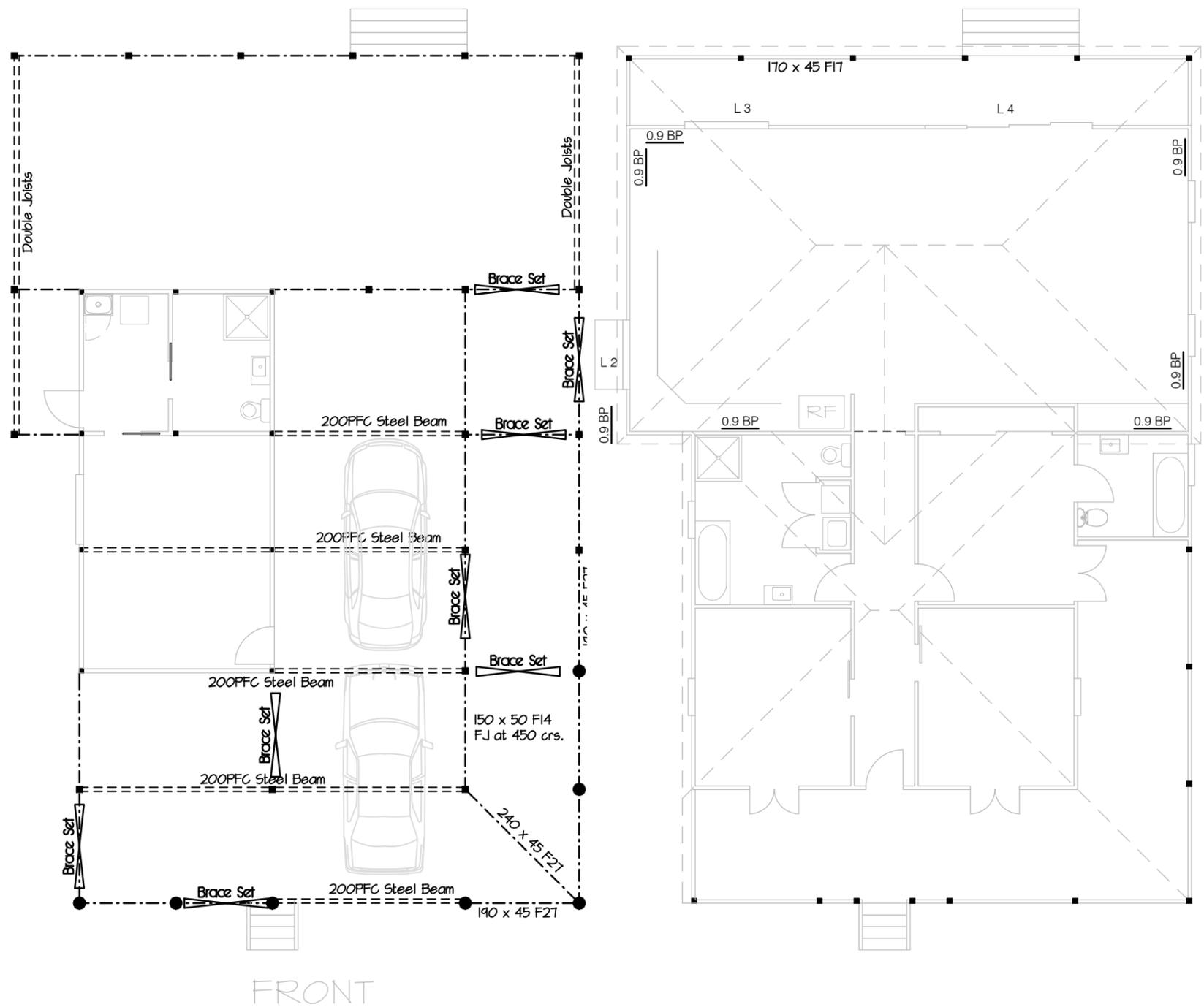
**WALL FRAMING**

- Wall studs 70 x 35mm MGPI0 at 450crs, provide 2/70 x 35 mm MGPI0 studs under all girder trusses and beside openings.
- Top and bottom plates 2/35 x 70mm MGPI0.
- Provide 70 x 35 MGPI0 noggings at max 1350mm crs.

LINTEL	LINTEL SIZE	No. OF JAMB STUDS
L 1	90 x 35	1
L 2	140 x 35	2
L 3	190 x 35	2
L 4	240 x 45 LVL15	3

- LINTELS SHALL BE SEASONED MGPI2 UNLESS SHOWN OTHERWISE.
- LINTELS CANNOT CARRY POINT LOADS FROM GIRDER TRUSSES.

CONFIRM STRUCTURAL CERTIFICATION BY ENGINEER PRIOR TO CONSTRUCTION.



N2 SHEET ROOF, 7650 ULW, RAFTERS @ 900 crs. REFER TO AS1684.2 RESIDENTIAL TIMBER FRAMED CONSTRUCTION FOR DETAILS & NOMINAL FIXINGS

TIE DOWN	TYPE OF FIXING
BATTEN TO TRUSS OR RAFTER.	1 / 90mm LONG No.14 TYPE I7 SCREW.
TRUSS OR RAFTER TO TOP PLATE.	1 FRAMING ANCHOR WITH MIN. 4x2.8mm DIA. NAILS TO EACH END.
TRUSS OR RAFTER TO LINTEL.	1 FRAMING ANCHOR WITH MIN. 4x2.8mm DIA. NAILS TO EACH END LEG.
TOP PLATE TO STUD TO BOTTOM PLATE.	30x0.8mm G.I. STRAP, MIN. 3x2.8mm DIA. NAILS EACH END @ MAX. 900mm CRS.
BOTTOM PLATE TO BEARER OR SLAB.	M12 BOLT BOTTOM PLATE TO BEARER OR UNDERBATTEN WITHIN 100mm FROM JOIST @ MAX. 1200 CRS. M12 BOLT CAST INTO SLAB 180mm DEEP MIN. @ MAX. 1200 CRS.
JOIST TO BEARER.	2 / 75x3.05mm DIA. NAILS.
BEARER TO RHS POST.	MIN. 2xM12 BOLT EACH POST THROUGH 75x100mm M.S. PLATE WELDED TO TOP OF RHS.
TOP PLATE TO FLOOR / SUB FLOOR.	AT EACH SIDE OF OPENINGS M12 ANCHOR ROD.

BRACING UPPER LEVEL: Existing timber framed building clad with weatherboards.

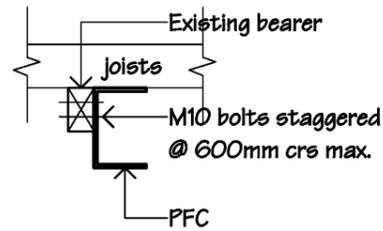
BRACING SET	0.9 BP = 900 mm Bracing Ply (AS1684.2 clause 8.3.6.3 type H method B, 6 kN/m) [3000mm wall 5.4kN/m], [3200mm wall 4.8kN/m]
PLYWOOD WALL BRACING	NOTE: NOMINAL BRACING AS DEFINED IN AS1684, MAY PROVIDE UP TO A MAXIMUM OF 50% OF THE TOTAL BRACING REQUIRED.

BRACING X-DIRECTION LOWER		BRACING Y-DIRECTION LOWER		BRACING X-DIRECTION UPPER		BRACING Y-DIRECTION UPPER	
LENGTH x TYPE	kN						
4 Steel Bracing Sets	60.0	4 Steel Bracing Sets	60.0	2.7m Bracing ply	16.2	3.6m Bracing ply	21.6
4 PFC Portal frames	20.0			Existing House	14.8	Nominal	4.4
TOTAL	80.0	REQUIRED	52.0	TOTAL	31.0	TOTAL	26.0
REQUIRED	68.0			REQUIRED	29.0	REQUIRED	22.0

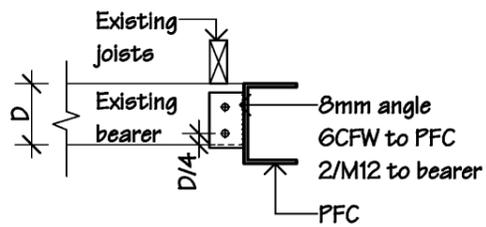
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 (07) 3892 4360 FAX (07) 3892 4775  
 QBCC Lic: 42635

PROPOSED DWELLING FOR H TOON & M PRONGER AT 9 CLOVER HILL CIRCUIT BANGALOW NSW

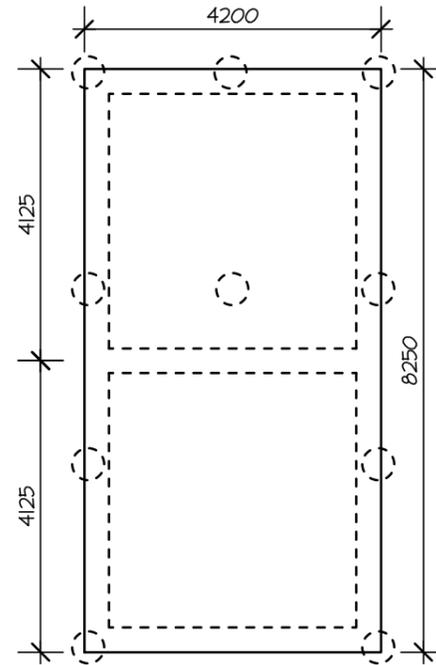
**BRACING & TIEDOWN**  
 Sh 6 of 7  
 Scale 1:100 Date March 2020 LEE-06



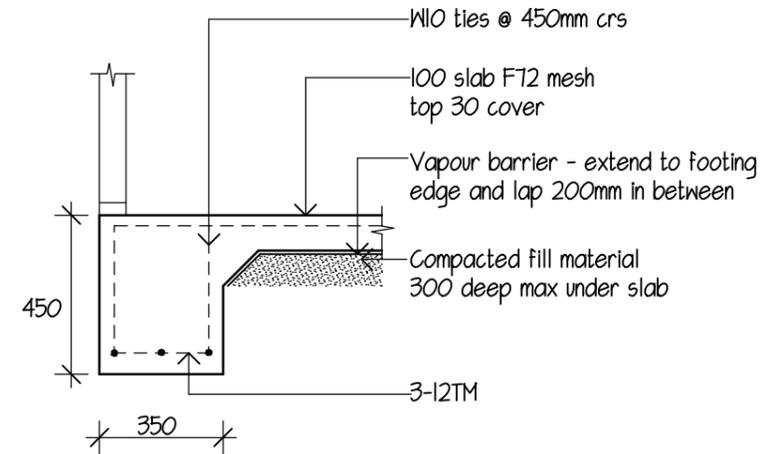
**PFC to Extg. Bearer**  
Scale 1:20



**PFC to Extg. Bearer**  
Scale 1:20

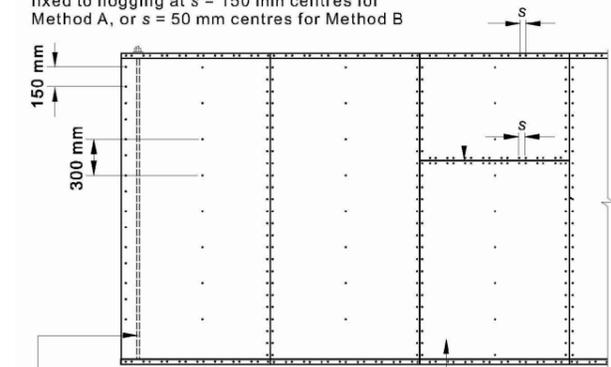


LOWER FLOOR SLAB



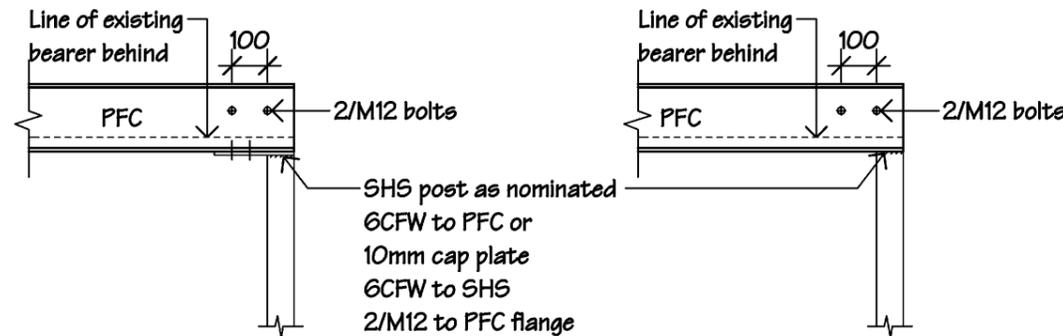
**Typical Edge Beam**  
Scale 1:20

Type of bracing	Bracing capacity (kN/m)																		
(g) <b>Plywood</b> Plywood shall be nailed to frame using 30 x 2.8 Ø galvanized flat-head nails or equivalent. For Method A, M12 rods shall be used at each end of sheathed section top plate to bottom plate/floor frame. Method B has no rods but sheathing shall be nailed to top and bottom plates and any horizontal joints at 50 mm centres. Horizontal butt joints permitted, provided nail fixed to nogging at s = 150 mm centres for Method A, or s = 50 mm centres for Method B.	<table border="1"> <thead> <tr> <th>Stress grade</th> <th colspan="2">Stud spacing (mm)</th> </tr> <tr> <td></td> <th>450</th> <th>600</th> </tr> </thead> <tbody> <tr> <td>F8</td> <td>7</td> <td>9</td> </tr> <tr> <td>F11</td> <td>6</td> <td>7</td> </tr> <tr> <td>F14</td> <td>4</td> <td>6</td> </tr> <tr> <td>F27</td> <td>4</td> <td>4.5</td> </tr> </tbody> </table>	Stress grade	Stud spacing (mm)			450	600	F8	7	9	F11	6	7	F14	4	6	F27	4	4.5
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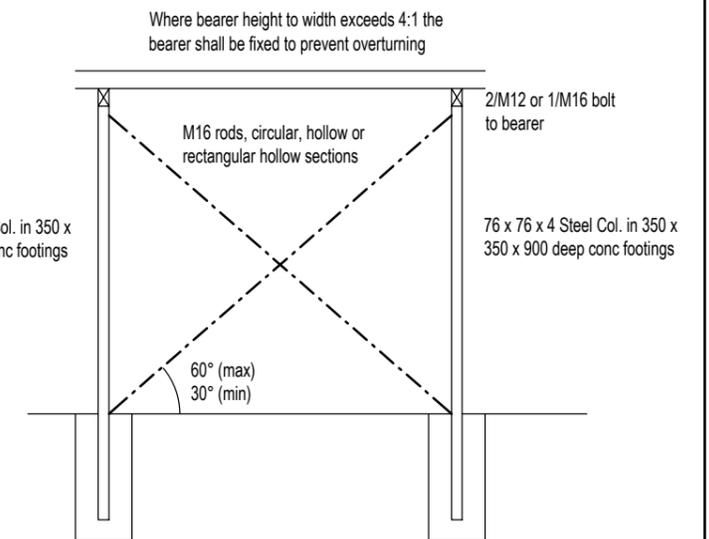


For Method A only: M12 rod top to bottom plate each end of sheathed section  
Sheathed panels shall be connected to subfloor  
NOTE: For plywood fixed to both sides of the wall, see Clauses 8.3.6.5 and 8.3.6.10.

**Typical Ply Bracing**



**Typ. RHS Post PFC**  
Scale 1:20



**General Notes**  
1. Confirm details of setbacks, levels, setbacks and critical dimensions on site prior to and during the works. Notify designer of any discrepancies discovered before proceeding.  
2. All construction to comply with the Building Code of Australia and applicable Australian Standards.  
3. Use dimensions over scaling off the drawing.  
4. These drawings and the Copyright thereof are the property of CONTRACT DESIGN STAFF P/L and shall not be used, related or copied without the written authority of CONTRACT DESIGN STAFF P/L.

**Contract Design Staff Pty Ltd**  
PO Box 262, Moorooka, 4105  
(07) 3892 4360 FAX (07) 3892 4775  
QBCC Lic: 42635

PROPOSED DWELLING  
FOR H TOON & M PRONGER  
AT 9 CLOVER HILL CIRCUIT  
BANGALOW NSW

**DETAILS**

Sh 7 of 7

Date March 2020 PTN-07

**GENERAL NOTES:**

1. DEAD AND LIVE LOADS ARE IN ACCORDANCE WITH AS1170
2. CONCRETE DESIGN IN ACCORDANCE WITH AS3600.
3. WIND BRACING DESIGN IN ACCORDANCE WITH AS1684.2-2010
4. CONCRETE FOOTING STRENGTH F'C = 25MPa SLUMP = 75MM AND AGGREGATE SIZE = 20MM.
5. DESIGN OF SLAB AND FOOTINGS IS IN ACCORDANCE WITH AS2870-2011, RESIDENTIAL SLABS & FOOTINGS.
6. ALL FOOTINGS ARE TO BE FOUNDED ON NATURAL GROUND OF AT LEAST 100 KPA BEARING CAPACITY. IF OTHER CONDITIONS ARE MET, ENGINEER IS TO BE NOTIFIED AND DESIGN CONFIRMED.
7. NO HOLES OR CHASES OTHER THAN THOSE SHOWN ON THE STRUCTURAL DRAWING SHALL BE MADE IN THE CONCRETE MEMBERS WITHOUT PRIOR APPROVAL OF THE ENGINEER.
8. CORRECT SUBTERRANEAN TERMITE CONTROL PROCEDURES ARE TO BE CARRIED OUT IN ACCORDANCE WITH AS3660.1.
9. ROOF AND OTHER SURFACE WATER SHALL BE DIRECTED AWAY FROM THE FOOTINGS AND TO A DISPOSAL POINT NOMINATED BY LOCAL COUNCIL.
10. MAINTENANCE OF FOUNDATIONS IN ACCORDANCE WITH CSIRO GUIDELINES.
11. IF ANY SITE CONDITIONS ARE ENCOUNTERED THAT ARE CONTRARY TO THE ENGINEERS REPORT OR ANY DETAILS THAT ARE NOT UNDERSTOOD, PLEASE CONTACT THIS OFFICE FOR CLARIFICATION.
12. DIMENSIONS SHALL BE USED IN PREFERENCE TO SCALING FROM DRAWINGS.
13. ALL WORKS ARE TO BE SET OUT AND CONFIRMED PRIOR TO CONSTRUCTION. IT IS THE BUILDERS RESPONSIBILITY TO ENSURE ALL SETDOWNS, FLOOR LEVELS AND DIMENSIONING ARE IN ACCORDANCE WITH THE ARCHITECTURALS.
14. THESE DRAWINGS ARE TO BE READ IN CONJUNCTION WITH ALL ARCHITECTURALS AND OTHER CONSULTANTS DRAWINGS AND SPECIFICATIONS GIVEN BOTH BEFORE AND DURING CONSTRUCTION. ALL DESCREPANCIES SHALL BE REFERRED TO THE ENGINEER BEFORE UNDERTAKING THE WORK.
15. DESIGN LOADS ARE AS FOLLOWS
  - 15.1. DEAD LOADS - DOMESTIC
16. ALL MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE RELEVANT AND CURRENT SAA CODES AND WITH THE BY-LAWS AND ORDINANCES OF THE RELEVANT BUILDING AUTHORITY EXCEPT WHERE VARIED BY THE PROJECT SPECIFICATIONS.
17. THE STRUCTURE SHALL BE MAINTAINED IN A STABLE CONDITION THROUGHOUT CONSTRUCTION AND NO PART SHALL BE OVERSTRESSED. TEMPORARY BRACING SHALL BE IMPLEMENTED BY THE BUILDER TO THE KEEP THE WORKS AND EXCAVATION STABLE AT ALL TIMES.
18. ALL SERVICES ARE TO BE LOCATED IN THE FIELD IN CONJUNCTION WITH AN OFFICER OF THE RELEVANT AUTHORITY PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
19. ALL DIMENSIONS IN MILLIMETRES UNLESS NOTED OTHERWISE.
20. DETAILS CONTAINED WITHIN THESE PLANS INDICATE THE MINIMUM STRUCTURAL REQUIREMENTS AS SPECIFIED BY THIS OFFICE AND MAY NOT REPRESENT CODE AND STANDARD REQUIREMENTS OUTSIDE OF STRUCTURAL CONSIDERATION. BUILDER IS TO ENSURE FULL COMPLIANCE WITH ALL APPLICABLE CODES AND PRACTICES FOR THE PROPOSED DEVELOPMENT.

**CONCRETE NOTES:**

1. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH AS3600
2. NO ADMIXTURES SHALL BE USED IN CONCRETE UNLESS APPROVED IN WRITING
3. ALL REINFORCING SHALL BE FIRMLY SUPPORTED ON CHAIRS AT NO GREATER THAN 800 CRS BOTH WAYS. BARS SHALL BE TIED AT ALTERNATE INTERSECTIONS
4. THE FINISHED CONCRETE SHALL BE A DENSE HOMOGENEOUS MASS, COMPLETELY FILLING THE FORMWORK, THOROUGHLY EMBEDDING REINFORCING, AND FREE OF AIR POCKETS. ALL CONCRETE INCLUDING SLABS ON GROUND AND FOOTINGS SHALL BE COMPACTED WITH MECHANICAL VIBRATORS BY SUITABLY EXPERIENCED CONTRACTORS
5. CURING OF ALL CONCRETE IS TO BE ACHIEVED BY KEEPING SURFACES CONTINUOUSLY MOIST FOR A PERIOD OF THREE DAYS AND PREVENTION OF LOSS OF MOISTURE FOR A TOTAL OF 7 DAYS FOLLOWED BY GRADUAL DRYING. ALTERNATIVELY CURING COMPOUNDS COMPLYING WITH AS3799-1998 MAY BE USED.
6. ALL FOOTINGS SHALL BE INSPECTED BY SUPERVISING ENGINEER OR RELEVANT CERTIFIER PRIOR TO POURING OF CONCRETE. CONCRETE SHALL NOT BE DELIVERED TO THE SITE UNTIL FINAL APPROVAL IS OBTAINED.
7. ALL BARS SHALL BE LAPPED BY 500MM MINIMUM.
8. FOR CLASS M, H1, H2 AND E SITES ALL DRAINS ATTACHED TO OR EMERGING FROM UNDERNEATH THE BUILDING SHALL INCORPORATE FLEXIBLE JOINTS IMMEDIATELY OUTSIDE THE FOOTING AND COMMENCING WITHIN 1 M OF THE BUILDING PERIMETER TO ACCOMMODATE A TOTAL RANGE OF DIFFERENTIAL MOVEMENT IN ANY DIRECTION EQUAL TO THE BELOW VALUES. THIS REQUIREMENT APPLIES TO ALL STORMWATER AND SANITARY PLUMBING DRAINS AND DISCHARGE PIPES.
  - 8.1. M - 40MM
  - 8.2. H1 - 60MM
  - 8.3. H2 - 75MM
  - 8.4. E - REFER TO GEOTECHNICAL ENGINEER

**STRUCTURAL NOTES:**

1. ALL STEELWORK SHALL BE IN ACCORDANCE WITH AS4100 AND AS1554
2. UNLESS OTHERWISE NOTED, FILLET WELDS SHALL BE 7MM MIN THROAT THICKNESS EXECUTED IN ACCORDANCE WITH AS1554.1
3. ALL BOLTS SHALL BE GALVANISED M16 GRADE 8.8/S TO AS1252 UNLESS OTHERWISE NOTED
4. ALL BASE PLATES AND GUSSET PLATES SHALL BE 10MM UNLESS OTHERWISE STATED.
5. THE BUILDER SHALL BE RESPONSIBLE FOR THE DIMENSION CONTROL OF ALL STEELWORK. CHECK BEFORE PROCEEDING.
6. SPLICES IN MEMBERS SHALL NOT BE MADE UNLESS APPROVAL IS OBTAINED BEFOREHAND.
7. SURFACE PRERPARATION IN ACCORDANCE WITH AS1627.
8. PROTECTIVE COATING FOR STEEL EXPOSED TO ATMOSPHERIC CORROSION IS TO COMPLY WITH AS2312 AND GALVANIZED STRUCTURAL SECTIONS ARE TO COMPLY WITH AS4680 WITH A MINIMUM COATING OF 600G/SQ.M.
9. ALL EXTERNAL STEEL TO BE HOT DIP GALVANISED OR PAINTED TO AN EQUIVILANT STANDARD.
10. SITE WELDING SHALL BE KEPT TO A MINIMUM AND SHALL BE CARRIED OUT IN SUCH A FASHION AS TO MAINTAIN THE INTEGRITY OF THE STRUCTURE.
11. ALL WASHERS, NUTS ETC SHALL BE GALVANISED.
12. IT IS OUR UNDERSTANDING THAT THE MAJORITY OF STEELWORK SHALL BE FABRICATED IN A SHOP AND TRANSPORTED TO SITE FOR ERECTION. FINAL DIMENSIONS ARE TO BE OBTAINED FROM ARCHITECTURALS IN COMBINATION WITH SITE MEASUREMENTS. DO NOT SCALE FROM THESE PLANS, USE GIVEN DIMENSIONS.
13. IF IN DOUBT SEEK ADVICE OF SUPERVISING ENGINEER PRIOR TO COMMENCEMENT OF WORK

**SAFETY IN DESIGN ASSESSMENT**

POTENTIAL HAZARD	DETAIL OF HAZARD	INITIAL RISK	RISK REDUCTION MEASURES	FINAL RISK
NA	NA	NA	NA	NA

- STRUCTURE A-TYPICAL, NO DESIGN HAZARDS IDENTIFIED

WIND CATEGORY = N3 (VH,U = 50 M/S)
SITE CLASSIFICATION SOIL TEST BY DOUGLAS PARTNERS DATED 10/12/18
CLASS "M" SITE MODERATELY REACTIVE SITE, WHICH CAN EXPERIENCE MODERATE GROUND MOVEMENT FROM MOISTURE CHANGES BETWEEN 20 AND 40MM.

DURABILITY REQUIREMENTS	INTERNAL OR BELOW GROUND	EXTERNAL & ABOVE GROUND
	A1	B1
CONCRETE GRADE	25MPa	32MPa
POLISHED CONCRETE	S32MPa	
COVER CAST AGAINST GROUND	40mm	50mm
COVER CAST IN FORMS	30mm	40mm



**Greg Alderson Associates**

(02) 6629 1552 | OFFICE@ALDERSONASSOCIATES.COM.AU  
43 MAIN STREET CLUNES NSW 2480 | ABN 58 594 160 789

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DO NOT SCALE DRAWINGS, USE FIGURED DIMENSIONS

**CLIENT:**

TOON & PRONGER

**SITE ADDRESS:**

LOT 17 DP1252223  
9 CLOVER HILL CIRCUIT  
BANGALOW NSW

**PROJECT:**

PROPOSED ADDITIONS

**TITLE:**

GENERAL NOTES

**SIZE:**

A3

**JOB NUMBER:**

20176

**NO. IN SET:**

01 of 03

**DRAWING NUMBER:**

20176ST01

**CHECKED:**

*Anthony Mallam*  
ANTHONY MALLAM, BE(CIVIL) ENGS,  
MIEAust, CPEng, RPEQ 6987

**REV**

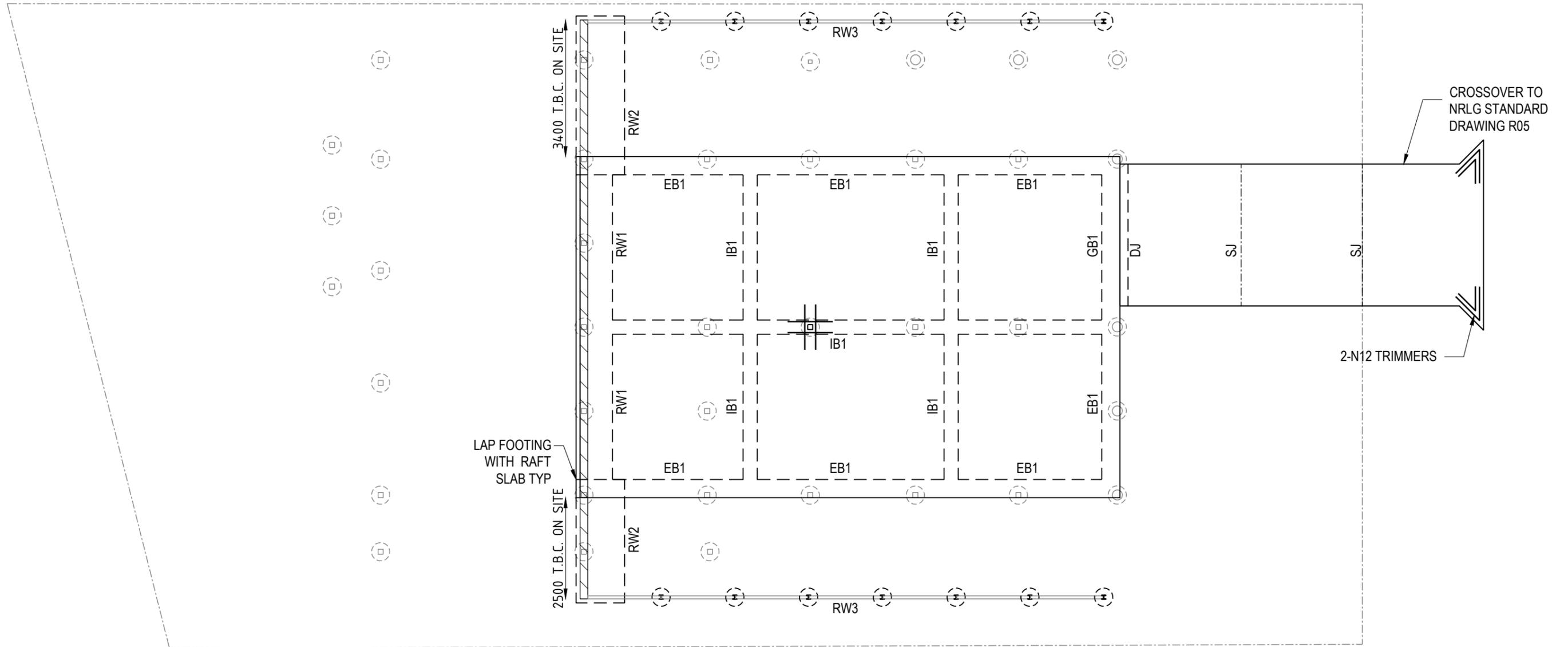
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**DESCRIPTION**

CONSTRUCTION ISSUE

**BY DATE**

AM 11/03/20



**FOUNDATIONS & RETAINING WALL PLAN**

1:100

ALL FOOTINGS TO BE FOUNDED IN STIFF NATURAL GROUND WITH A MINIMUM BEARING CAPACITY OF 100kPa.



**Greg Alderson  
Associates**

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**TOON & PRONGER**

SITE ADDRESS:  
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9 CLOVER HILL CIRCUIT  
BANGALOW NSW**

PROJECT:  
**PROPOSED ADDITIONS**

TITLE:  
**FOUNDATIONS & RETAINING WALL  
PLAN**

SIZE:  
**A3**

NO. IN SET:  
**02 of 03**

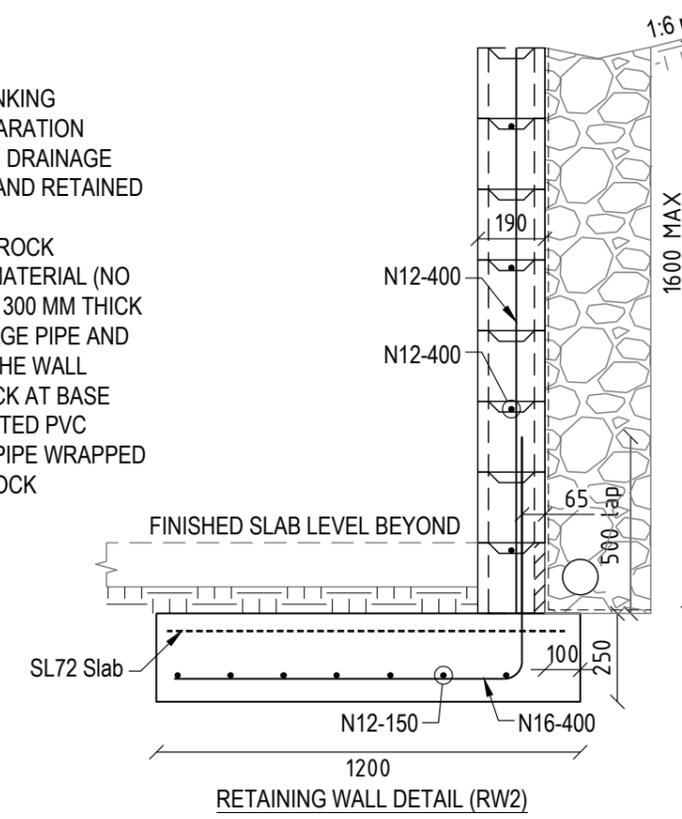
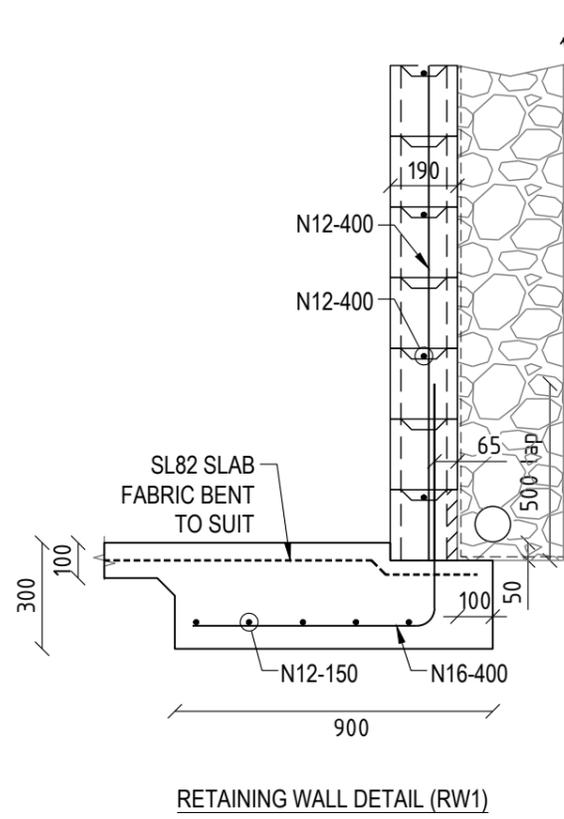
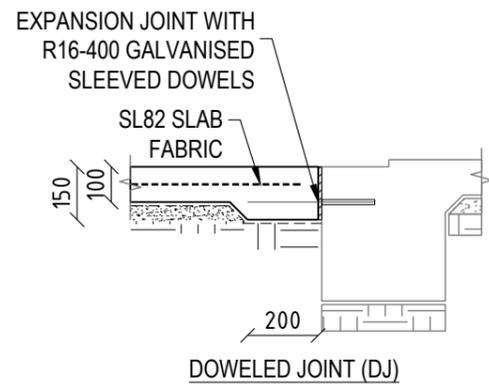
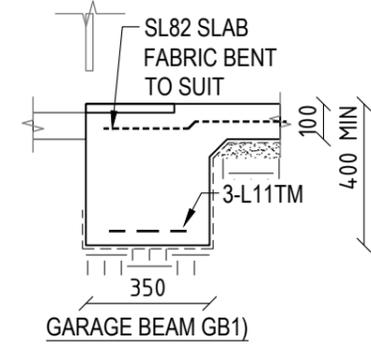
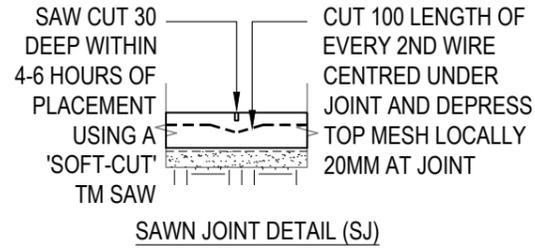
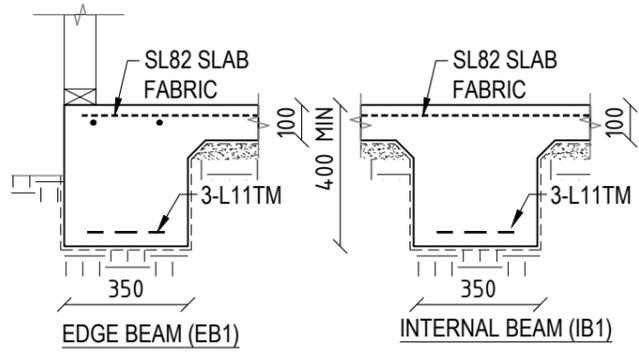
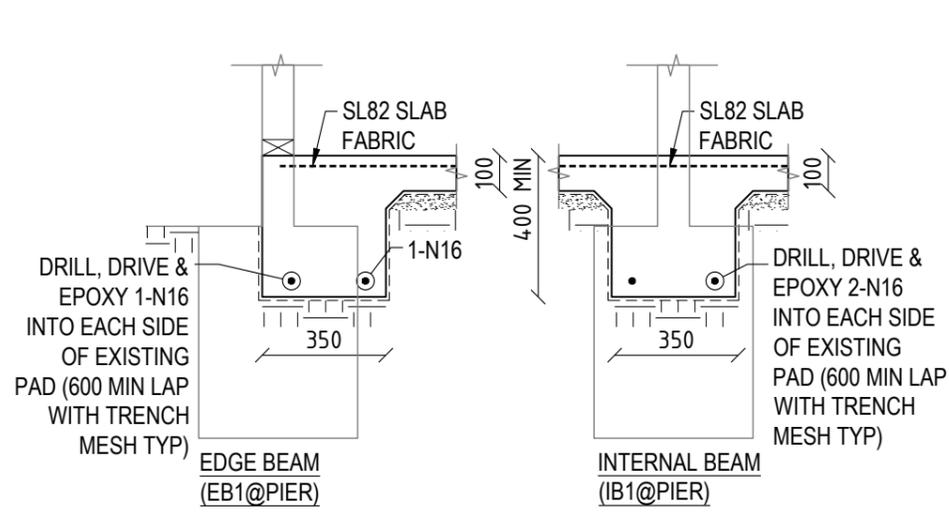
JOB NUMBER:  
**20176**

DRAWING NUMBER:  
**20176ST02**

CHECKED:

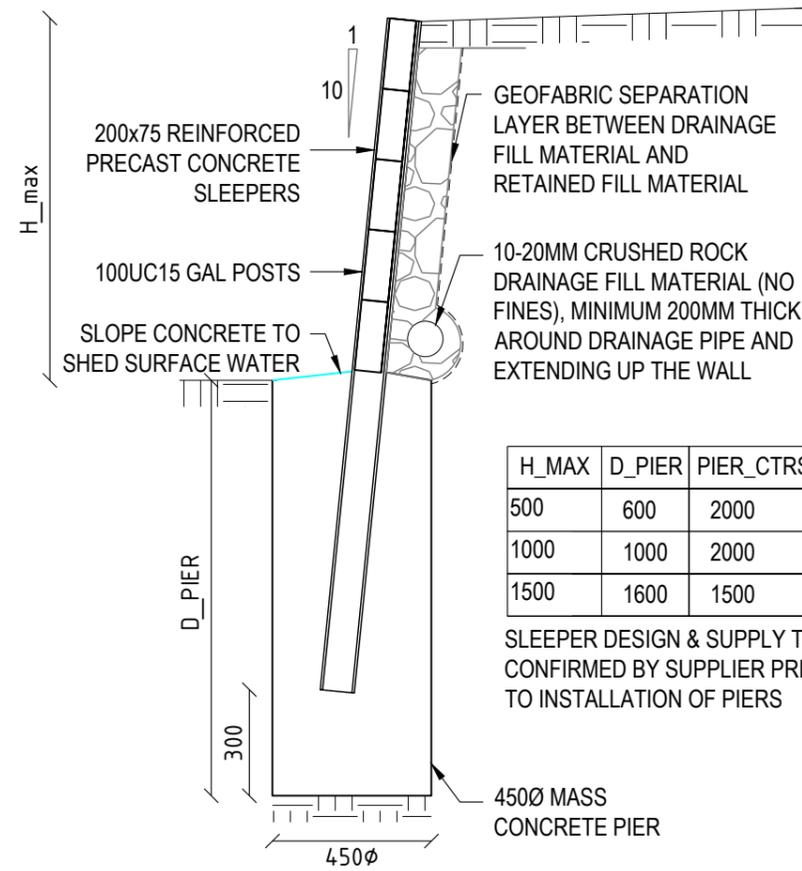
*Anthony Mallam*  
ANTHONY MALLAM, BE(CIVIL) ENGS,  
MIEAust, CPEng, RPEQ 6987

REV	DESCRIPTION	BY	DATE
0	CONSTRUCTION ISSUE	AM	11/03/20
1	REVISED	AM	31/03/20



- FULL HEIGHT TANKING
- GEOFABRIC SEPARATION LAYER BETWEEN DRAINAGE FILL MATERIAL AND RETAINED FILL MATERIAL
- 10MM CRUSHED ROCK DRAINAGE FILL MATERIAL (NO FINES), MINIMUM 300 MM THICK AROUND DRAINAGE PIPE AND EXTENDING UP THE WALL
- CLEAN OUT BLOCK AT BASE
- 100MM DIA. SLOTTED PVC AGRICULTURAL PIPE WRAPPED IN GEOFABRIC SOCK

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H_MAX	D_PIER	PIER_CTRS
500	600	2000
1000	1000	2000
1500	1600	1500

SLEEPER DESIGN & SUPPLY TO BE CONFIRMED BY SUPPLIER PRIOR TO INSTALLATION OF PIERS



Greg Alderson Associates

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43 MAIN STREET CLUNES NSW 2480 | ABN 58 594 160 789

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TOON & PRONGER

SITE ADDRESS:  
LOT 17 DP1252223  
9 CLOVER HILL CIRCUIT  
BANGALOW NSW

PROJECT:  
PROPOSED ADDITIONS

TITLE:  
FOUNDATIONS & RETAINING WALL  
DETAILS

SIZE:  
A3

NO. IN SET:  
03 of 03

JOB NUMBER:  
20176

DRAWING NUMBER:  
20176ST03

CHECKED:

*Anthony Mallam*  
ANTHONY MALLAM, BE(CIVIL) ENGR,  
MIEAust, CPEng, RPEQ 6987

REV 0 DESCRIPTION CONSTRUCTION ISSUE BY AM DATE 11/03/20