

GENERAL NOTES

- G1. THESE STRUCTURAL DRAWINGS SHALL BE READ IN CONJUNCTION WITH ALL ARCHITECTURAL, GEOTECHNICAL AND OTHER CONSULTANT DRAWINGS, THE SPECIFICATIONS AND WITH SUCH OTHER WRITTEN INSTRUCTIONS AS MAY BE ISSUED DURING THE COURSE OF THE CONTRACT.
- G2. ANY DISCREPANCY ON THE DRAWINGS OR BETWEEN THE DRAWINGS AND/ OR THE SPECIFICATIONS SHALL BE REFERRED TO THE ENGINEER AND A WRITTEN INSTRUCTION RECEIVED PRIOR TO PROCEEDING WITH ANY WORKS.
- G3. ALL MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH CURRENT AUSTRALIAN STANDARDS, BUILDING CODE OF AUSTRALIA, LEGISLATION, BI-LAWS AND POLICIES, EXCEPT WHERE VARIED BY THE PROJECT SPECIFICATION AND ENGINEER.
- G4.ALL DIMENSIONS RELEVANT TO THE SETTING OUT SHALL BE VERIFIED ON SITE BY THE CONTRACTOR BEFORE CONSTRUCTION AND FABRICATION ARE COMMENCED.
- G5. THE ENGINEER'S DRAWINGS ARE NOT TO BE SCALED AND NO RESPONSIBILITY SHALL BE TAKEN BY THE ENGINEER FOR DIMENSIONS OBTAINED BY SCALING THE DRAWINGS.
- G6. ANY SUBSTITUTION MUST BE APPROVED BY THE ENGINEER PRIOR TO WORKS BEING UNDERTAKEN.
- G7. THROUGHOUT CONSTRUCTION THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE STRUCTURE IN A STABLE CONDITION, ENSURING NO PART SHALL BE OVERSTRESSED DURING CONSTRUCTION ACTIVITIES.
- G8. THE STRUCTURAL WORK SHOWN IN THE DRAWINGS HAS BEEN DESIGNED FOR THE FOLLOWING CRITERIA:
- WIND CLASSIFICATION : N2
- SITE CLASSIFICATION : M-D
- G9. ALL STRUCTURAL WORK MUST BE INSPECTED AND APPROVED BY THE ENGINEER IF AN INSPECTION CERTIFICATE IS REQUIRED FROM THE ENGINEER. FORTY-EIGHT (48 HOURS) NOTICE MUST BE GIVEN TO THE ENGINEER PRIOR TO AN INSPECTION.

CONCRETE NOTES

- C1. CARRY OUT ALL WORK IN ACCORDANCE WITH AS3600 & THE RELEVANT PROJECT SPECIFICATIONS.
- C2. VERIFY ALL DIMENSIONS WITH THE ARCHITECT. DO NOT SCALE THESE DRAWINGS.
- C3.IN CASE OF DOUBT – ASK!.
- C4.THE DRAWINGS ARE TO BE REGARDED AS PRELIMINARY UNLESS AUTHORISED.
- DESIGN LOADS
- a) Live Load
- | ELEMENT | LOAD |
|---------|------------|
| Roof | – 0.25 kPa |
- b) Wind Loads to AS4055–2021
- | | | |
|----------------------------|---|-------|
| Basic Wind Speeds Vu | = | 40m/s |
| Terrain Category | = | 2.5 |
| Shielding Classification | = | PS |
| Topographic Classification | = | 3 |
| Wind Region | = | A |
- C5. PLACE CONCRETE HAVING THE FOLLOWING F’c AS DEFINED IN AS3600.

LOCATION	F’c AT 28 DAYS	F’cf AT 56 DAYS
FOOTINGS	20	–

MAXIMUM AGGREGATE SIZE – 20
SLUMP – 80
MAXIMUM DRY SHRINKAGE – 600 USTRAIN IN SLABS
CURE ALL CONCRETE SURFACES IN ACCORDANCE WITH AS3600. CURING COMPOUNDS TO MEET WITH AS3799 REQUIREMENTS.

- C6. SAMPLE & TEST AS SPECIFIED IN AS1012 USING PROJECT ASSESSMENT OF STRENGTH GRADES AS PER AS3600 CL 20.3.
- C7. CONSOLIDATE BY VIBRATION.

REINFORCEMENT

- R1. SUPPLY & FIX REINFORCEMENT AS SHOWN ON THE DRAWINGS. THE TYPE & GRADE IS DENOTED BY THE FOLLOWING SYMBOLS FOLLOWED BY A NUMBER INDICATING THE DIAMETER OF THE BAR IN MILLIMETRES.
- N GRADE 500 HOT ROLLED DEFORMED BAR
R GRADE 250 HOT ROLLED ROUND BAR.
RF GRADE 500 DEFORMED WIRE FABRIC.
W GRADE 450 HARD DRAWN WIRE.

- R3.PROVIDE BAR SUPPORTS OR SPACERS TO GIVE THE FOLLOWING CONCRETE COVER TO ALL REINFORCEMENT UNLESS NOTED OTHERWISE ON THE DRAWINGS.

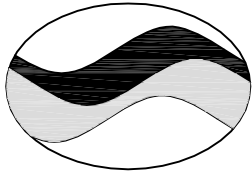
LOCATION	COVER	EXPOSURE CLASSIFICATION
FOOTINGS	75	B1

STRUCTURAL STEEL

1. ALL MATERIALS AND WORKMANSHIP SHALL CONFORM WITH CURRENT EDITIONS OF AS4100, AS1554 – 1 AND 2 AND AS4600 EXCEPT WHERE VARIED BY THE CONTRACT DOCUMENTS.
2. ALL STEEL SHALL COMPLY WITH THE FOLLOWING U.N.O. :-
- | | |
|----------------|----------------------------------|
| WELDED SECTION | – GRADE 300 TO AS 3679.2 |
| ROLLED SECTION | – GRADE 300 TO AS 3679.1 |
| SHS AND RHS | – GRADE 350/GRAGE 450 TO AS 1163 |
| CHS | – GRADE 250/GRAGE 350 TO AS 1163 |
| FLAT PLATE | – GRADE 300 TO AS 3679.1 |
| STANDARD PLATE | – GRADE 250 TO AS 3678 |
3. REFER TO ARCHITECT FOR FIRE RATING REQUIREMENTS.
4. THE CONTRACTOR SHALL UNLESS SPECIFIED ELSEWHERE:
- (A) PROVIDE AND EMPLOY ANY ADDITIONAL TEMPORARY BRACING ETC. NECESSARY TO ADEQUATELY HOLD STEELWORK IN POSITION DURING CONSTRUCTION.
- (B) PROVIDE ALL PACKS, CLEATS, BOLTS (INCL. H.D. BOLTS) ETC. REQUIRED FOR TEMPORARY AND PERMANENT ERECTION OF STEELWORK AND FOR ATTACHMENT OF TIMBER AND MISCELLANEOUS FRAMING.
5. FOR THE SURFACE TREATMENT REQUIREMENTS OF ALL STRUCTURAL STEELWORK REFER TO THE STRUCTURAL STEEL SPECIFICATION. MINIMUM TREATMENT SHALL BE AS FOLLOWS U.N.O. :-
- (A) INTERNAL STEELWORK (I.E. PROTECTED FROM CLIMATE)
ABRASIVE BLAST CLEAN TO GRADE Sa2.5 TO AS1627.9
APPLY ONE COAT OF GOOD QUALITY ALKYD PRIMER (ZINC PHOSPHATE) MINIMUM DRY FILM THICKNESS OF 50 MICRONS
- (B) EXTERNAL STEELWORK (I.E. EXPOSED TO CLIMATE)
HOT DIP GALVANIZE TO AS4680

STRUCTURAL TIMBER NOTES

- T1. ALL TIMBER FRAMED CONSTRUCTION AND ASSOCIATED JOINTS AND CONNECTIONS ARE TO BE IN ACCORDANCE WITH AS1684.2.
- T2. ALTERNATIVE MEMBER SIZES AND STRESS GRADES MAY BE USED IN ACCORDANCE WITH AS1684.2 - MEMBER SPAN TABLES.
- T3. THE ROOF TRUSS LAYOUT DETAILED DESIGN BY THE TRUSS MANUFACTURER SHALL PROVIDE TRUSS TIE DOWN CONNECTION DETAILS. A COPY OF THE TRUSS REACTION REPORT WILL BE MADE AVAILABLE TO THE ENGINEER.
- T4. IN ALL BOLTED TIMBER STRUCTURAL JOINTS, ALL STEEL BOLTS AS SPECIFIED IN AS1111 SHALL BE FITTED INTO PREBORED TIMBER WITH BOLT HOLE DIAMETERS 10% GREATER THAN BOLT DIAMETERS AND FITTED WITH CYCLONE WASHERS.
- T7. ALL NUTS, BOLTS AND WASHERS TO BE GALVANISED 8.8/S GRADE.
- T8. FOR TERMITE RESISTANCE IN TIMBERS IT IS RECOMMENDED THE USE OF AUSTRALIAN HARDWOOD OR ANY OTHER NATURAL TERMITE RESISTANT TIMBER LISTED IN AS 3660 PART 1, 1995 APPENDIX A5.JOINT GROUP SHALL BE JD4.



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Project:

Proposed New Residence

761A Old Grattai Road,
Mudgee, NSW, 2850

Client:

Stroud Homes Dubbo

Notes

Drawn: SMc
Checked: SMc

Signed:

Sam McKee BE(civil) MEng Sc
MIE,Aust
Date: 23 November 2023

Scale: NTS @ A3

Project No: 2549.761A

Dwg No: **2549.761A/0**

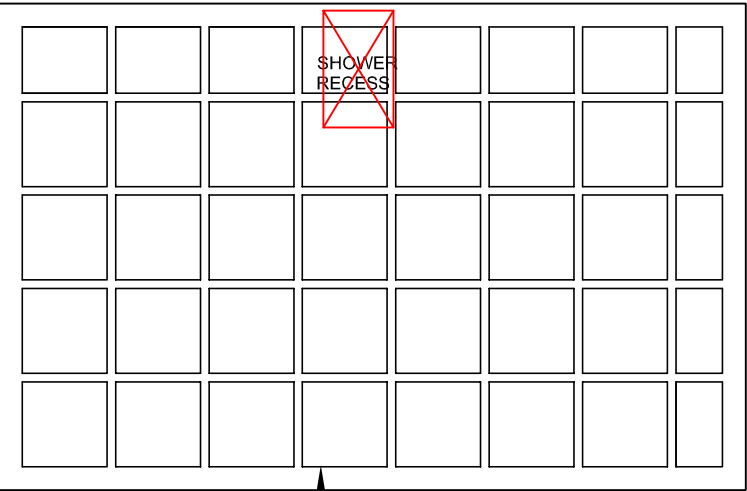
For Construction 23 November 2023

Amendments Date

Figured dimensions take precedence over scaling. DO NOT SCALE. Contractors to verify all levels, datums and dimensions on site. All materials and workmanship to be in accordance with current manufacturer's written instructions, Building Regulations, BCA and SAA codes. Conflicting information to be brought to the attention of the Engineer.

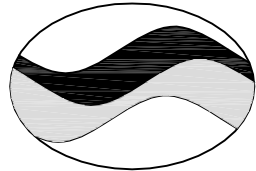
Footings and slabs have been designed for Class "M-D" site in accordance with AS2870 - 2011.

Design based on geotechnical report by Macquarie Geotech.



Refer to Edge
Beam Detail

SLAB ON GROUND
Slab to be 85mm minimum thick reinforced with SL82 mesh in top 30mm top cover



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Mudgee, NSW, 2850

Client:

Stroud Homes Dubbo

Slab Layout

Drawn: SMc
Checked: SMc

Signed: 

Sam McKee BE(civil) MEng Sc
MIE,Aust
Date: 23 November 2023

Scale: 1:100 @ A3

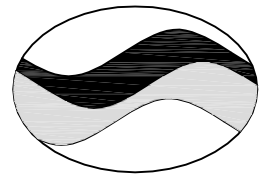
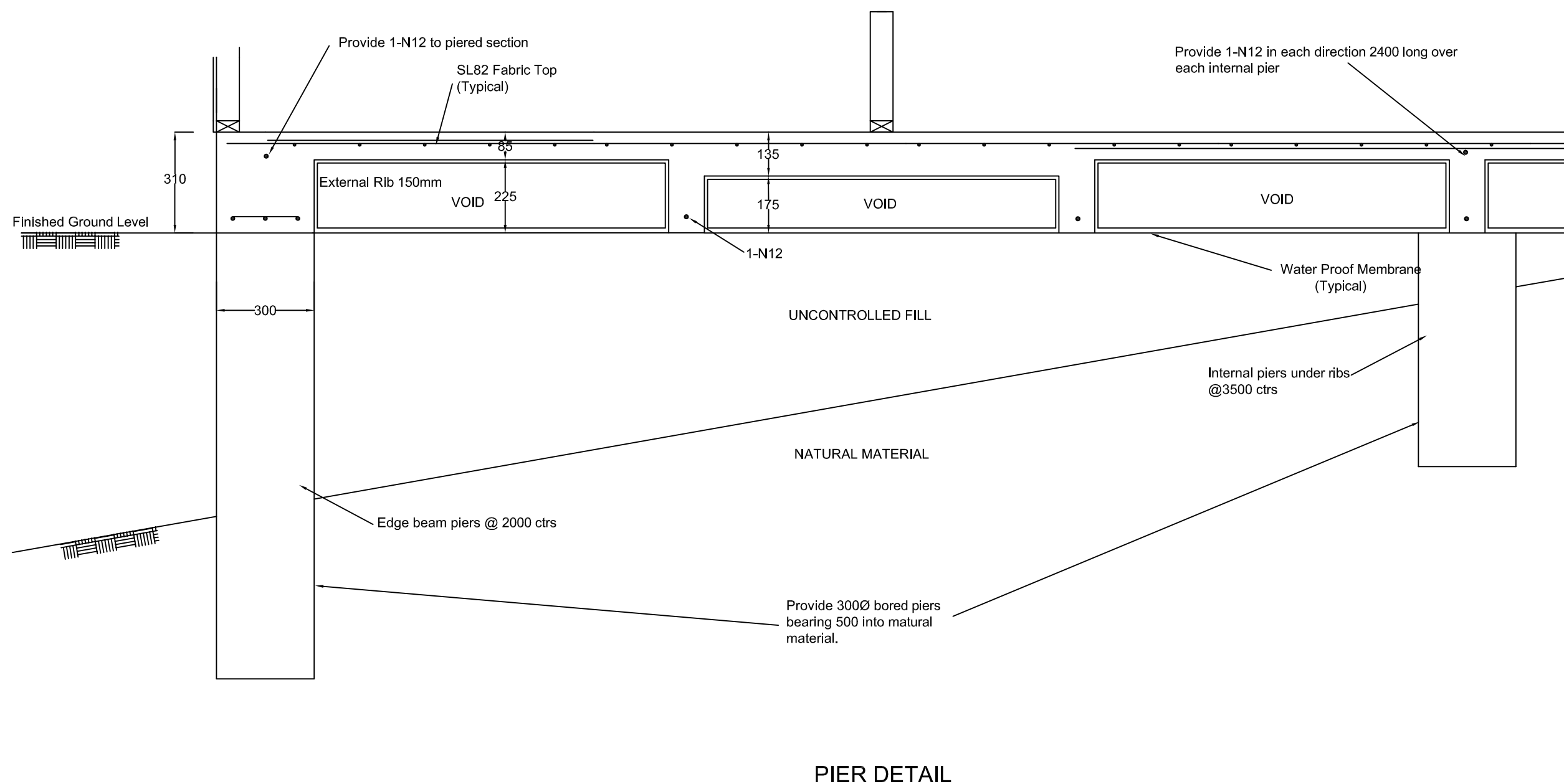
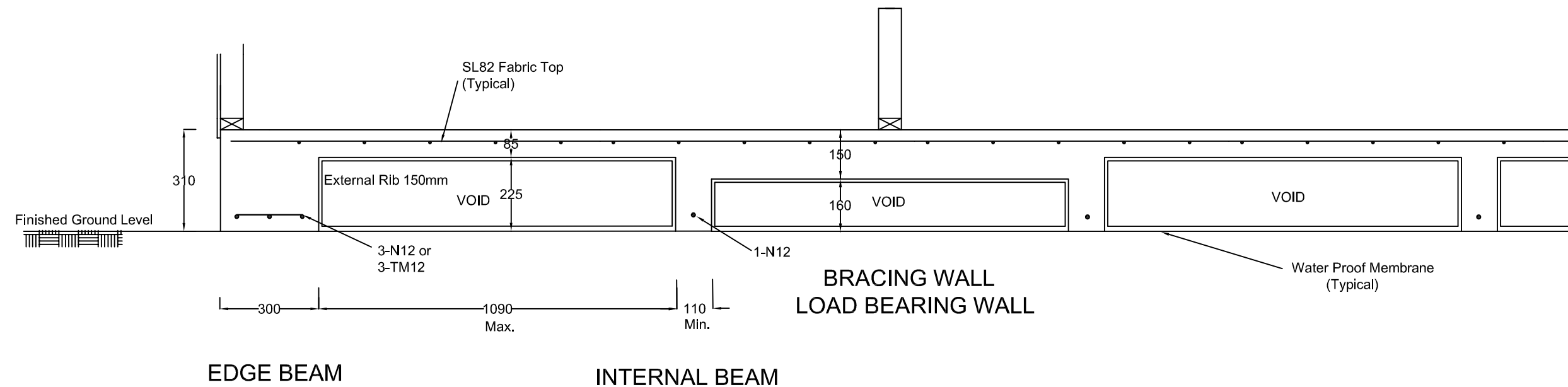
Project No: 2549.761A

Dwg No: **2549.761A/1**

For Construction	23 November 2023
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Amendments	Date
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Project:

Proposed New Residence

761A Old Grattai Road,
Mudgee, NSW, 2850

Client:

Stroud Homes Dubbo

Footing Details A

Drawn: SMC
Checked: SMC

Signed: 

Sam McKee BE(civil) MEng Sc
MIE,Aust
Date: 23 November 2023

Scale: 1:15 @ A3

Project No: 2549.761A

Dwg No: **2549.761A/2**

For Construction

23 November 2023

Amendments	Date
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Figured dimensions take precedence over scaling. **DO NOT SCALE.** Contractors to verify all levels, datums and dimensions on site. All materials and workmanship to be in accordance with current manufacturer's written instructions, Building Regulations, BCA and SAA codes. Conflicting information to be brought to the attention of the Engineer.

CONSTRUCTION NOTES

CN1.
Before placing any fill, all organic material and top soil are to be removed and the area proof rolled to identify any low strength areas. If nessesary low strength material is to be excavated to obtain a uniform strength base prior to placing of fill material.

CN2.
Filling under slab shall be approved material compacted to a density not less than 95% modified density in accordance with A.S 1289 Part E. Fill should extend at least 1000mm outside building line.

CN3.
Footings are generally to be founded on uniform naturally placed materials. Any fill used to support slabs shall be placed and compacted to 95% modified density in accordance with A.S 1289 Part E. Alternatively in uncompacted fill, piers at 1800mm cts may be adopted. Refer to table below.

BEARING STRATA	DESIGN BEARING CAP	PIERS FOR SINGLE STORY
SAND	100 kPa	800x300 Bucket Piers @1800 cts.
CONTROLLED CLAY FILL	100 kPa	800x300 Bucket Piers @ 1800 cts.
STIFF NATURAL FILL	250 kPa	300mm dia. Bored Piers @ 1800 cts.
SHALE/ROCK	450 kPa	300mm dia. Bored Piers @ 1800 cts.

CN4.
The base of footings and edge beams may be stepped or may be sloped not more than 1:10.

CN5.
Minimum safe bearing capacity, including edge beam is 100kPa.

CN6.
In areas of potential termite risk, foundations shall be treated in accordance with AS 3660.1-1995. Provide for termite protection as required at slab joints.

CN7.
Clear cover to reinforcement shall be 40mm to unprotected ground, 30mm to membrane and 30mm to internal surfaces.

CN8.
In beam depths greater than 500mm, service penetrations shall be permitted in the midle third of the edge beam and footing beam depth. All horizontal runs shall be located below slab reinforcement. Pipes greater than 20mm dia. shall not be used in horizontal runs unless the slab is thickened.

CN9.
Trench mesh shall be lapped by the width of the mesh at T and L junctions. Trench mesh shall be spliced where necessary by a lap of 500mm. N12 corner bars shall be provided around the outside of corners. Slab fabric will be lapped by the 2 outmost wires plus 25mm.

CN10.
Workmanship and materials shall be in accordance with AS 2870-1996.

CN11.
Concrete 28 day design strength to be F'c = 20MPa for footings and F'c = 20MPa for slabs with a maximum slump of 80mm, 20mm max. agregate size.

CN12.
Concrete shall be cured (kept continuously wet) for a minimum of 7 days after placement or an approved curing compound applied.

CN13.
Ensure that water does not pond around the building. On cut and fill sites, grade ground away from the building a minimum of 1 in 20 slope for 1.0m. On level sites the minimum height of slab above finished external levels shall be 225mm. This may be reduced locally to 50mm near paved areas that slope away from the building.

CN14.
Slab design does not allow for shrinkage crack control. Refer to Engineer. Extensive areas of brittle floor coverings should not be placed for a minimum period of 3 months.

CN15.
If engineering inspection of site preparations prior to concreting is required, provide a minimum of 24 hours provisional notice.

CN16.
Where depth of fill below slabs exceeds 600mm the fill shall be deemed to be uncontrolled unless site density testing is carried out.

CN17.
The details shown on this drawing assume controlled, compacted fill. Refer to Engineer for changes to construction requirements to allow for uncontrolled fill below slab or edge beams. Piers will be provided through uncomtrlled fill bearing 300 min. into natural material.

ARCHITECTURAL RECOMMENDATIONS

The following aspects of superstructure design and layout should be used to reduce the effects of movement. Masonry detailing should consider the following:-

AR1.
Masonry over doors and windows should preferably be avoided. Where practical articulated masonry should be used in accordance with the recommendations given in Technical Note TN61 published by the Cement and Concrete Association (Australia).
AR2.
Wing walls and arches should be avoided or detailed in accordance with TN61.
AR3.
Generally high strength motar should be avoided.
AR4.
Brickwork reinforced with galvanised bed joint reinforcement may be used to help control crack widths. Refer to Engineer for details.
AR5.
Internal and external walls should be straight where convenient.
AR6.
Isolate extensions from the original structure to allow differential movement.
AR7.
Introduce articulation joints at abrupt changes in construction such as large openings or corners.

FOOTING EXCAVATIONS

After footings have been constructed, excavations in Class M,H,E sites should be backfilled with moist clay compacted by hand tamping. Porous material such as sand or gravel should not be used.

SITE DRAINAGE

Allotments containing reactive sites shall be provided with an adequate system of drainage designed in accordance with the following recommendation;

1. Surface drainage of allotments for reactive sites for both footings & slabs should be considered in the design of the footing system, & care taken with the surface drainage of the allotment from the start of construction. The drainage system should be completed by the finish of construction of the house.

2. The drainage should be designed and constructed to avoid any possibility of water ponding against or near the house. The ground in the immediate vicinity of the house should be graded to slope 50mm away from the house over a distance of 1m from the house. Any paving should also be suitably graded.

3. Particular attention should be given to ensuring that plumbing trenches do not introduce water to the foundation if they become blocked. In some circumstances subsurface drains will be essential for drainage of steps in slabs & subsurface flows & care should be taken to ensure that they are free draining & able to be inspected & maintained. Subsurface drains should be protected by filters and geotextiles. Where possible the base of the the subsurface trench should be capable pf providing some drainage in the event of the main drain becoming blocked.

PLUMBING DRAINAGE DETAILING

On reactive clay sites additional care is needed to reduce the risk of leaks near the footings & the following is recommended;

PD1. Penetrations of the slab & beams should be avoided, but where nessesary shall be sleeved to allow for movement with 10mm thick closed cell polyethylene or similar material.

PD2. Connection to stormwater drains and waste drains should include flexible connections, particularly on reactive sites.

PD3. Septic tanks and associated soakage areas should be located to minimise their effects on the foundation.

PD4. Plumbing and drainage under a slab should be avoided where practical. Pipes sleeved with polyethylene may be encased in concrete or in a recess in the slab & provided with flexible joints at the exterior of the slab.

PD5. NOTE: Methods used should comply with local plumbing and drainage regulations.

RECOMMENDED SITE MANAGMENT TECHNIQUES

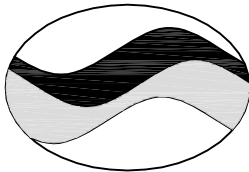
It is important to realise that engineering design on reactive clays is a compromise solution between costs and building performance. Engineering design aims at accommodating differential movements caused by extreme seasonal moisture changes and does not allow for uncontrolled localised moisture changes which are controllable by adequate site management techniques. It is virtually impossible to design an economic foundation that will totally prevent differential movement. It is therefore expected that some degree of non-structural aesthetic cracking and movement will occur. Slight cracking (crack width less than 5mm) usually have no structural influence on the function of the wall. Rectification of movement problems to be designed by a registered Engineer experienced with reactive site conditions for reactive sites. The following Owner/Tenant recommendations are suggested as a means of minimising differential movement problems with the finished construction.

SM1. Leaking plumbing and blocked drains should be promptly attended to. Garden watering should be carefully controlled to prevent excessive moisture variations around the building. Measures aimed at producing a uniform ground moisture content year round are beneficial.

SM2. Trees and large shrubs, when planted close to the building can cause significant moisture changes under the construction in times of drought. Problems from this cause can be significantly reduced by planting trees some distance away from buidings.75% of the mature tree height is a recommended minimum, however recommended distance varies depending on site conditions and tree species.

SM3. In times of drought, water demand of trees can be substantially reduced by extensive pruning. Alternatively provision of adequate water will reduce the degree of building damage that trees cause. Watering is probably best achieved by providing bore holes or trenches between the tree and the building. Care should be taken not to destabilise the building by excavating trenches too close to the building. Filling any trenches with compacted granular material is recommended.

Construction Notes




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Project:	Drawn: SMC Checked: SMC	For Construction	23 November 2023
Proposed New Residence	Signed: 		
761A Old Grattai Road, Mudgee, NSW, 2850	Sam McKee BE(civil) MEng Sc MIE,Aust	Amendments	Date
Client:	Date: 23 November 2023 Scale: NTS @ A3 Project No: 2549.761A	Figured dimensions take precedence over scaling. DO NOT SCALE. Contractors to verify all levels, datums and dimensions on site. All materials and workmanship to be in accordance with current manufacturer's written instructions, Building Regulations, BCA and SAA codes. Conflicting information to be brought to the attention of the Engineer.	
Stroud Homes Dubbo	Dwg No: 2549.761A/3		

GENERAL

VERIFY ALL DIMENSIONS ON SITE BEFORE STARTING WORK ALL DIMENSIONS ARE IN MILLIMETRES AND WRITTEN DIMENSIONS TO HAVE PREFERENCE OVER SCALED DIMENSIONS.
CONSTRUCTION METHODS AND MATERIALS ARE TO BE IN ACCORDANCE WITH THE 'BUILDING CODE OF AUSTRALIA' , AND 'STANDARD BUILDING REGULATIONS' .

TIMBER FRAMING TO BE AS PER 'THE TIMBER FRAMING CODE' AS1684.
ROOF SHEETING IS TO BE FIXED IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS.
REFER TO PREVIOUS DETAILS FOR FOOTING AND SLAB DESIGN.
ALL WC DOORS THAT OPEN INWARDS ARE TO HAVE LIFT OFF HINGES.
TIE DOWN FIXINGS ARE IN ADDITION TO NOMINAL NAILING.
SITE PLAN BOUNDARY CLEARANCES SHOWN ARE TO BE OUTSIDE FACES OF FASCIA OR BARGE.

TERMITE RISK MANAGEMENT

PROVIDE TERMITE TREATMENT IN ACCORDANCE WITH AS3660.1 "PROTECTION OF BUILDINGS FROM SUBTERRANEAN TERMITES" AND 'THE BUILDING CODE OF AUSTRALIA'. THE BUILDER AND THE OWNER SHALL NEGOTIATE AN OPTION FOR TERMITE CONTROL WITHIN THE CODE AND RECORD IN WRITING THE SELECTED OPTION AND EACH RETAIN A COPY SIGNED BY BOTH PARTIES.

THE HOME OWNER AND SUBSEQUENT OWNERS SHALL BE RESPONSIBLE FOR ARRANGING INSPECTIONS BY AN APPROPRIATELY QUALIFIED PERSON IN ACCORDANCE WITH AS3660 AND 'THE BUILDING CODE OF AUSTRALIA'.
SHOULD THE CURRENT OWNER SELL THE PROPERTY IT SHALL BE HIS/HER RESPONSIBILITY TO PROVIDE THE NEW OWNER WITH A COPY OF THE TERMITE PROTECTION RECORD.

OPTION SELECTED: _____

DRAINAGE AND STORMWATER

DOWNPIPES - 100 x 75 OR 90mm DIAMETER.
STORM WATER PIPES - 90mm DIAMETER. AT MIN 1:100 GRADIENT
EAVES GUTTERS ARE TO BE FIXED WITH A 1:500 MIN. GRADIENT AND TO BE SUPPORTED BY BRACKETS SECURELY FIXED AT STOP ENDS AND AT NOT MORE THAN 1200 CRS.

ROOF CATCHMENT AREA per 90mm DOWNPIPE - 40 sq.m
12m max. SPACING FOR DOWNPIPES

THE FINISHED SURFACE SURROUNDING THE BUILDING IS TO BE DRAINED TO MOVE SURFACE WATER AWAY FROM THE BUILDING AND GRADED TO GIVE A SLOPE OF NOT LESS THAN 50mm OVER THE FIRST 1m FROM THE BUILDING.

WET AREAS

WATER PROOFING OF WET AREAS IS TO BE IN ACCORDANCE WITH THE BCA AND AS3740
SPLASH BACKS TO BATHS, BASINS AND SINKS TO BE 150mm MIN.
SPLASH BACKS TO SHOWERS TO BE 1800mm MIN.

BRICKWORK

BRICKWORK FOR VENEER CONSTRUCTION IS TO BE IN ACCORDANCE WITH THE BCA AND AS3700 MASONRY STRUCTURES.

BLOCKWORK

REINFORCED CONCRETE BLOCK MASONRY IS TO BE IN ACCORDANCE WITH THE BCA AND AS3700 MASONRY STRUCTURES. REFER TO THE CONCRETE MASONRY ASSOCIATION OF AUST. HANDBOOK FOR DETAILS.

CLADDING

ROOF AND WALL CLADDING IS TO BE INSTALLED IN ACCORDANCE WITH THE BCA AND THE RELEVANT MANUFACTURERS SPECIFICATION.

WALL FRAMING

WALL FRAMING, LINTELS ETC. ARE TO BE IN ACCORDANCE WITH AS1684 AND APPROVED FRAME MANUFACTURERS DETAILS AND ARE TO BE CERTIFIED FOR STRUCTURAL ADEQUACY BY THE MANUFACTURER FOR THE APPROPRIATE WIND CLASS.

TIMBER FLOOR/ROOF FRAMING

MEMBER SIZES ARE MINIMUM SIZES ONLY & MAY BE INCREASED FOR AESTHETIC REASONS OR EASE OF CONSTRUCTION.
BUILDER IS TO VERIFY MEMBER SIZES BEFORE COMMENCEMENT OF ANY CONSTRUCTION.

ALTERNATIVE MEMBER SIZES & STRESS GRADES MAY BE USED IN ACCORDANCE WITH AS 1684

ALL FIXING, TIE DOWN AND FINISHING IS TO BE IN ACCORDANCE WITH AS 1684 AND MANUFACTURERS DETAILS.

BRACING

BRACING TO RESIST WIND LOADS HAS BEEN DESIGNED IN ACCORDANCE WITH AS1684.
TEMPORARY BRACING DURING CONSTRUCTION SHALL BE AT LEAST 60% OF PERMANENT BRACING REQUIRED AND MAY FORM PART OF THE INSTALLED PERMANENT BRACING.

PLY BRACING - 6.0 kN/m

PLYWOOD - 4.0mm F14 MIN. OR EQUIVALENT . STUDS @ 450CRS. MAX.

BOTTOM PLATE TO BE FIXED WITH M10 BOLTS OR EQUIVALENT @ 900CRS. MAX.

BRACING PANELS TO BE A MIN. OF 600mm LONG AND MAX. 3000 HIGH.

PLYWOOD IS TO BE NAILED AT A MIN. OF 150mm CRS. ON TOP AND BOTTOM PLATES AND VERTICAL EDGES AND AT 300mm CRS. MAX. ON INTERMEDIATE STUDS.

DOUBLE METAL STRAP CROSS BRACING - 5.4 PER SET

30 x 0.8 mm OR EQUIVALENT TENSIONED GAL. METAL STRAPS
FIXED TO STUDS WITH 3/30 x 2.8 mm DIA. GAL. FLAT HEAD NAILS AND PLATES WITH 3/30 x 2.8 mm DIA. GAL. FLAT HEAD NAILS OR
ALTERNATIVELY EQUIVALENT ANCHORS OR FASTENERS.

BRACING SECTIONS 1800 mm MIN. TO 2700 mm MAX. LENGTH.

ROOF BRACING

30 x 0.8 mm OR EQUIVALENT TENSIONED DIAGONAL GAL. METAL STRAPS NAILED TO PLATES WITH 4/30 x 2.8 mm DIA. GAL. FLAT HEAD NAILS TO EACH END.
ROOF BRACING TO RESIST WIND LOADS INSTALLED TO TRUSS/FRAME
MANUFACTURERS DETAILS OR DESIGNED IN ACCORDANCE WITH AS1684.

TIMBER BATTENS (METAL ROOF)

J2 HARDWOOD AND JD4 SOFTWOOD ROOF TRUSSES

GENERAL AREA

75 x 38 F14 HWD @ 900 CRS. MAX. FIXED TO RAFTER OR TRUSS WITH 1/75mm No.14 TYPE17 SCREW.

OR 70 x 35 MGP12 @ 900 CRS. MAX. FIXED TO RAFTER OR TRUSS WITH 1/100mm No.14 TYPE17 SCREW.

WITHIN 1200 OF EDGES

75 x 38 F14 HWD @ 600 CRS. MAX. FIXED TO RAFTER OR TRUSS WITH 1/75mm No.14 TYPE17 SCREW.

OR 70 x 35 MGP12 @ 600 CRS. MAX. FIXED TO RAFTER OR TRUSS WITH 1/100mm No.14 TYPE17 SCREW.

METAL BATTENS (METAL ROOF)

0.75 BMT CYCLONIC ROOF BATTENS
- REFER TO MANUFACTURERS SPECIFICATIONS FOR DETAILS

BATTENS (STEEL ROOF)

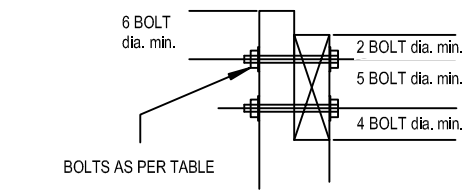
REFER TO MANUFACTURERS SPECIFICATIONS

TRUSS/RAFTER TIE DOWN

TIE DOWN DESCRIPTION		JOINT GROUP					
		UPLIFT CAPACITY (kN)					
ALL NAILS TO BE 2.8mm DIA.		J2	J3	J4	JD4	JD5	JD6
1	1/LOOPED STRAP	13	13	13	13	13	13
	2/LOOPED STRAPS	25	25	25	25	25	25
	NAILS EACH END	3	4	5	4	5	5
2	1/FRAMING ANCHOR	4.9	3.5	2.5	3.5	2.9	2.2
	2/FRAMING ANCHORS (4 NAILS EACH SIDE)	8.3	5.9	4.2	5.9	4.9	3.7
3	M10 CUPHEAD BOLT	16	14	10	10	7	5
	M10 BOLT	18	18	18	15	12	9
	M12 BOLT	27	27	26	20	16	12
4	1 STRAP WITH 3 NAILS EACH END	6.5	4.7	3.3	4.7	3.8	2.9

THE BUILDER IS TO SELECT THE APPROPRIATE CONNECTION BASED ON UPLIFTS SHOWN ON TRUSS MANUFACTURERS DETAILS. FOR ALTERNATIVE CONNECTIONS AND GIRDER TRUSS TIEDOWN REFER TO AS1684.

TYPICAL COLUMN BOLTING DETAIL



NO. OF BOLTS	JOINT GROUP					
	UPLIFT CAPACITY (kN)					
	J2	J3	J4	JD4	JD5	JD6
2/M10	13	10	7.3	12	11	8.3
2/M12	17	14	9.4	17	14	10
2/M16	26	20	14	27	20	13

BALUSTRADES (if required)

BALUSTRADE REQUIREMENTS ARE TO BE IN ACCORDANCE WITH THE BCA.

THE HEIGHT SHALL NOT BE LESS THAN 1000mm ABOVE THE LEVEL OF ANY PATH, BALCONY OR LANDING AND 865mm ABOVE THE FINISHED LEVEL OF NOSINGS OF STAIR TREADS OR THE FLOOR OF A RAMP.

FOR FLOORS MORE THAN 4m ABOVE THE GROUND ANY HORIZONTAL ELEMENTS BETWEEN 150mm & 760mm ABOVE THE FLOOR MUST NOT FACILITATE CLIMBING.

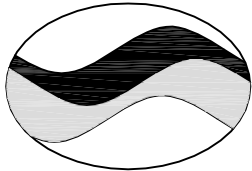
OPENINGS IN BALUSTRADES SHALL NOT PERMIT A 125mm SPHERE TO PASS THROUGH.

WIND CLASSIFICATION

CLASSIFIED IN ACCORDANCE WITH AS4055

REGION:	"A"
TERRAIN CATEGORY:	3
SHIELDING:	PS
TOPOGRAPHY:	T1

N2



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Project:

Proposed New Residence

761A Old Grattai Road,
Mudgee, NSW, 2850

Client:

Stroud Homes Dubbo

Framing & Other Notes

Drawn: SMc
Checked: SMc

Signed:

Sam McKee BE(civil) MEng Sc
MIE,Aust
Date: 23 November 2023

Scale: NTS @ A3

Project No: 2549.761A

Dwg No: 2549.761A/4

For Construction	23 November 2023
Amendments	Date
Figured dimensions take precedence over scaling. DO NOT SCALE. Contractors to verify all levels, datums and dimensions on site. All materials and workmanship to be in accordance with current manufacturer's written instructions, Building Regulations, BCA and SAA codes. Conflicting information to be brought to the attention of the Engineer.	