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DOUBLE STOREY DWELLING
31 CRANBROOK STREET, STRATHTULLOH

CIVIL / STRUCTURAL ENGINEER - PRIYAN WIJEYERATNE - PE0004228

MOBILE: 04010/16328

CLIENT:
CASSISSI ARCHITECTS

JOB NO: MF/1DSD - 2025

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PROJECT:
D/S DWELLING

PROJECT ADDRESS:
31 CRANBROOK STREET, STRATHTULLOH VIC 3338

SHEET NO: 1/16

SCALE: AS SHOWN

DATE: 28/11/2025

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WARNING
ALL SERVICES SHOWN ON THESE DRAWINGS ARE APPROXIMATE ONLY AND EXACT LOCATION IS TO BE CONFIRMED ON SITE BY CONTRACTOR PRIOR TO COMMENCEMENT OF ANY WORKS.

REV.	REMARKS/COMMENTS	DATE	APRV.
	ISSUED FOR REVIEW ONLY	11/11/2025	PW

GENERAL SPECIFICATIONS

GENERAL

G1. THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH ALL ARCHITECTURAL AND OTHER CONSULTANT'S DRAWINGS AND SPECIFICATIONS AND WITH SUCH OTHER WRITTEN INSTRUCTIONS AS MAY BE ISSUED DURING THE COURSE OF THE CONTRACT. ANY DISCREPANCY SHALL BE REFERRED TO THE ENGINEER OR ARCHITECT BEFORE PROCEEDING WITH THE WORK.
G2. ALL DIMENSIONS ARE TO BE OBTAINED FROM THE ARCHITECT'S DRAWINGS OR FROM SITE. ENGINEER'S DRAWINGS MUST NOT BE SCALED.
G3. DURING CONSTRUCTION THE BUILDER SHALL BE RESPONSIBLE FOR MAINTAINING THE STRUCTURE IN A STABLE CONDITION AND ENSURING NO PART SHALL BE OVERSTRESSED UNDER CONSTRUCTION ACTIVITIES.
G4. MATERIAL AND WORKMANSHIP ARE TO BE IN ACCORDANCE WITH THE RELEVANT SAA CODES, BCA/NCC REQUIREMENTS UNLESS OTHERWISE NOTED IN THE PROJECT SPECIFICATION.
G5. THE APPROVAL OF A SUBSTITUTION BY THE ENGINEER IS NOT AN AUTHORIZATION FOR AN EXTRA. ANY EXTRA INVOLVED MUST BE TAKEN UP WITH THE ARCHITECT BEFORE WORK COMMENCES.
G6. THE STRUCTURAL WORK SHOWN ON THESE DRAWINGS HAS BEEN DESIGNED FOR THE FOLLOWING LIVE LOADS:-

AREA	LIVE LOAD
FLOOR	1.5 kPa
ROOF	0.25 kPa 'OR' (1.8/A + 0.12) WHICHEVER IS GREATER
BALCONY (IF APPLICABLE)	2.0 kPa

G7. FOUNDATION MATERIAL TO BE APPROVED BEFORE POURING CONCRETE FOR A SAFE BEARING CAPACITY OF: 100 kPa RAFT SLAB

G8. ALL DETAILS SHOWN IN WBCSE DRAWING SETS ARE FOR STRUCTURAL PURPOSES ONLY. THE ARCHITECT AND BUILDER MUST ENSURE ALL CONSTRUCTION REQUIREMENTS SET BY THE BCA/NCC ARE MET.
THIS OFFICE SHOULD BE CONTACTED IF ANY CLARIFICATION IS REQUIRED.

STRUCTURAL STEELWORK

S1. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH AS 1250 AND/OR AS4100.
S2. WELDING SHALL BE PERFORMED BY AN EXPERIENCED OPERATOR IN ACCORDANCE WITH AS 1554.
S3. HIGH STRENGTH BOLTING SHALL BE IN ACCORDANCE WITH AS 1511.
S4. TWO COPIES OF THE SHOP DETAIL DRAWINGS ARE TO BE SUBMITTED TO THE ENGINEERS AND APPROVAL OF SAME OBTAINED BEFORE COMMENCING FABRICATION. APPROVAL WILL NOT COVER DIMENSIONS OR LAYOUT.
S5. THE BUILDER SHALL PROVIDE AND LEAVE IN PLACE UNTIL PERMANENT BRACING ELEMENTS ARE CONSTRUCTED SUCH TEMPORARY BRACING AS IS NECESSARY TO STABILIZE THE STRUCTURE DURING ERECTION.
S6. CAMBER TO STRUCTURAL STEEL ROOF BEAMS, TRUSSES, PORTALS, ETC.,TO BE 2mm FOR EVERY 1M OR SPAN UNLESS OTHERWISE NOTED.
S7. ALL CLEAT AND DRILLING FOR FIXING OF TIMBER MEMBERS, ETC., TO BE PROVIDED BY FABRICATOR.
S8. EXCEPT WHERE OTHERWISE SHOWN CONNECTIONS SHALL HAVE 6mm CONTINUOUS FILLET WELDS, 2-M16 8.8/S BOLTS IN 1.5mm CLEARANCE HOLES AND 10mm THICK CLEAT PLATE.
S9. CONCRETE ENCASED STEELWORK SHALL BE WRAPPED WITH SLAB FABRIC, UNLESS OTHERWISE SHOWN.
S10.STEELWORK SHALL BE THOROUGHLY WIRE BRUSHED AND GIVEN ONE SHOP COAT OF APPROVED PRIMER EXCEPT THAT NONE SHALL BE APPLIED AT CONTACT SURFACES WHERE H.S. BOLTS USED.
S11.ALL STEEL BEAMS AND LINTELS ARE TO HAVE 100mm MIN. END BEARING UP TO 1.0m & 150mm MIN. END BEARING OVER 1.0m, UNLESS OTHERWISE NOTED.
S12.STEEL FRAMING MUST BE PROTECTED FROM CORROSION WHERE REQUIRED IN ACCORDANCE WITH BCA 2016 3.4.2.2

CONCRETE

C1. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH AS 3600.
C2. CONCRETE COVER TO ALL REINFORCEMENT (FINISHES NOT INCLUDED).

ELEMENT	FORMED AND SHELTERED	FORMED AND EXPOSED	NO FORM WORK
SLABS AND WALLS	20mm	30mm	65mm
BEAMS	25mm	40mm	65mm
COLUMNS	40mm	50mm	75mm
FOOTINGS		65mm	75mm

C3.CONCRETE SIZES SHOWN DO NOT INCLUDE FINISH AND MUST NOT BE REDUCED OR HOLED IN ANY WAY WITHOUT THE ENGINEER APPROVAL.
C4. DEPTHS OF BEAMS ARE GIVEN FIRST AND INCLUDE SLAB THICKNESS.
C5. CONSTRUCTION JOINTS WHERE NOT SHOWN SHALL BE PROPERLY FORMED AND LOCATED TO THE APPROVAL OF THE ENGINEER.
C6. REINFORCEMENT IS SHOWN DIAGRAMMATICALLY AND NOT NECESSARILY IN TRUE PROJECTION.
C7. SPLICES IN REINFORCEMENT SHALL BE MADE ONLY IN POSITIONS SHOWN. WELDING OF REINFORCEMENT WILL NOT BE PERMITTED UNLESS SHOWN ON THE STRUCTURAL DRAWINGS.
C8. REINFORCEMENT SYMBOLS:-
L LOW DUCTILITY BARS TO AS 4671 : 2001
N NORMAL DUCTILITY BARS TO AS 4671 : 2001
E SEISMIC (EARTHQUAKE) DUCTILITY BAR TO AS 4671 : 2001
THE NUMBER FOLLOWING THE BAR SYMBOL IS THE NOMINAL BAR DIAMETER IN MILLIMETRES.
C9. ALL CONCRETE SHALL BE GRADE 20MPa - 100mm SLUMP (U.N.O.)
C10. ALL REINFORCEMENT SHALL BE SUPPORTED IN ITS CORRECT POSITION SO AS NOT TO BE DISPLACED DURING CONCRETING ON APPROVED BAR CHAIRS AT 1.0m MAX CRS BOTH WAYS. WHERE REQUIRED PROVIDE SUPPORT BARS
C11.CONCRETE TO BE KEPT FREE OF SUPPORTING BRICKWORK BY TWO LAYERS OF A SUITABLE MEMBRANE (MALTHOID, ETC.), OR AS DIRECTED BY THE ENGINEER. VERTICAL FACES OF CONCRETE TO BE KEPT FREE BY 10mm
C12.WHERE WALLS ARE NON-LOAD BEARING AT EITHER HORIZONTAL OR VERTICAL FACES THEY SHALL BE SEPARATED FROM CONCRETE OR BRICKWORK BY 10mm THICK CANITE.
C13.ALL REINFORCEMENT FOR ANY ONE POUR SHALL BE COMPLETELY PLACED AND TIED PRIOR TO INSPECTION BY THE ENGINEER OR ARCHITECT. NO CONCRETE SHALL BE POURED UNTIL REINFORCEMENT HAS BEEN INSPECTED AND APPROVED.
C14.WHERE SLABS AND BEAMS ARE TO SUPPORT BRICKWORK OVER, FORMWORK AND PROPS MUST BE REMOVED BEFORE COMMENCEMENT OF BRICKWORK.
C15.TRENCH MESH IN BEAMS TO BE LAID CONTINUOUSLY WITH EACH LAYER BEING LAPPED FOR ITS FULL WIDTH AT INTERSECTIONS AND FOR A MINIMUM OF 500mm AT SPLICES. THE TRENCH MESH SHALL BE OVERLAPPED BY THE WIDTH OF THE FABRIC AT T & L JUNCTIONS.
C16.WHEN NEW FOOTING IS ABUTTED TO THE ADJACENT STRUCTURES OF NEIGHBOURING BUILDING AT BOUNDARY, A MINIMUM OF 10mm THICK "ABLEFLEX" (OR APPROVED EQUIVALENT) MUST BE PLACED BETWEEN STRUCTURES (UNLESS OTHERWISE NOTED ON ENGINEERING DRAWINGS TYPICAL)

BRICKWORK

B1. THE UNCONFINED COMPRESSIVE STRENGTH OF A BRICK UNIT TO BE MIN. OF 15MPa AND COMPRESSIVE STRENGTH OF MASONRY TO BE A MIN. OF 5.4 MPa
B2. THE MORTAR MIX FOR BRICKWORK SHALL BE 1:1:6
B3. FOR NON-LOAD BEARING WALLS SEE NOTE C13.
B4. ARTICULATION (OR EXPANSION) JOINT SPACING MUST BE IN ACCORDANCE WITH AS4773.1 - 2015, AS4773.2 - 2015 & TECHNICAL NOTE 61 (AUG 2008) FOR ARTICULATED WALLING UNLESS NOTED OTHERWISE.
B5. ALL WALL TIES MUST BE GALVANISED.

STRUCTURAL TIMBER

T1. ALL TIMBER FRAMING IS TO BE IN ACCORDANCE WITH AS 1684-2010 RESIDENTIAL TIMBER FRAMED CONSTRUCTION.
T2. ALL TIMBER STRESS GRADES NOMINATED SHALL BE IN ACCORDANCE WITH THE RELEVANT CODES AND MEANS THE STRUCTURAL QUALITY OF A TIMBER SECTION (REFER TO AS 1720).
T3. TIMBER SHALL BE STORED AND HANDLED SO AS NOT TO BE DETRIMENTAL TO THEIR PERFORMANCE OR DAMAGE THEM. REFER APPENDIX H AS 1684-2:2010
T4. ALL TIMBER SHALL BE DRY, IE: LESS THAN 15% MOISTURE CONTENT AT THE TIME OF CONSTRUCTION AND SHALL BE PROTECTED AND/OR TREATED AS NOTED.
T5. ALL TIMBER BEAMS AND LINTELS ARE TO BEAR ON DOUBLE STUDS (ONE JAMB AND ONE BEARING STUD), UNLESS OTHERWISE NOTED.
T6. BEAMS/STUDS HAVING MORE THAN 1 MEMBER TO BE NAIL LAMINATED TOGETHER IN ACCORDANCE WITH AS 1684-2010.
T7. ALL EXPOSED TIMBER TREATMENT MUST BE IN ACCORDANCE WITH EXPOSURE CLASSIFICATION AS1684.2 TABLE B1, MINIMUM H3 TREATED OR DURABLE SPECIES TO BE ADOPTED TYPICAL U.N.O.

FRAMING

F1. PROVIDE SOLID BLOCKING (45 WIDE x D-25 DEEP) SECURELY NAILED TO JOISTS/RAFTERS (D=DEPTH OF JOIST/RAFTER) AT 1800 MAX. CRS.
F2. ALL EXTERNAL OR EXPOSED STEELWORK TO BE HOT DIP GALVANISED.
F3. WATERPROOFING TO ARCHITECTS DETAILS.
F4. ALL TIMBER FRAMING & BRACING NOT SHOWN TO COMPLY WITH AS1684 TIMBER FRAMING MANUAL.
F5. ALL BRICKWORK LINTELS TO ARCHITECTS DETAILS. ALL BRICKWORK LINTELS TO COMPLY WITH F.3.3.3.5 OF B.C.A 2012 VOLUME 2.
F6. ALL BEAMS/GIRDER & HIP TRUSSES TO BE SUPPORTED ON DOUBLE STUDS EACH END U.N.O.
F7. ALL LINTELS TO BE SUPPORTED ON SINGLE STUD AND JAMB STUD U.N.O.
F8. ALL TRUSSES & WALL FRAMES TO MANUFACTURER'S DESIGN & DETAILS.
F9. TRUSS DIRECTION ASSUMED AS SHOWN (IF APPLICABLE). CONTACT THIS OFFICE IF DIFFERENT TRUSS LAYOUT IS USED SO LINTELS ETC CAN BE REDESIGNED (IF REQUIRED).
F10.ALL TIMBER LINTELS TO BE DESIGNED BY THE TRUSS MANUFACTURER. TYPICAL U.N.O
F11. BUILDER TO SUPPLY MANUFACTURERS TRUSS LAYOUT TO THIS OFFICE FOR APPROVAL PRIOR TO CONSTRUCTION. TRUSS DESIGN MUST BE IN ACCORDANCE WITH AS1720 AND AS1684. TRUSS FABRICATOR/BUILDER IS RESPONSIBLE FOR PROVIDING ADEQUATE ROOF/WALL BRACING TO ENSURE STABILITY OF THE STRUCTURE IN ACCORDANCE TO AS1684.
F12.ALL INTERNAL WALLS TO BE NON-LOAD BEARING (TYPICAL) UNLESS HATCHED OTHERWISE ON PLANS.

INSPECTIONS

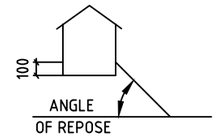
I1. ALL STRUCTURAL WORK MUST BE INSPECTED AND APPROVED IN WRITING PRIOR TO ANY WORK PROCEEDING. 48 HOUR MIN. NOTICE IS REQUIRED FOR ALL INSPECTIONS.

SITE DRAINAGE

D1. AT THE TIME OF THE PREPARATION OF THIS DOCUMENT, IF THE DRAINAGE DESIGN WAS NOT PREPARED OR CERTIFIED BY THIS OFFICE THEN THE DRAINAGE SYSTEM MAY NEED TO BE DOCUMENTED BY A SUITABLY QUALIFIED PERSON TO COMPLY WITH AS2870-2011. THE DRAINAGE DESIGNER SHOULD ENSURE THAT THE ELEMENTS OF THE DRAINAGE SYSTEM DESIGN ARE CONSIDERED WITH RESPECT TO THE PROPOSED FOOTING SYSTEM.WE RECOMMEND THAT WBCSE OR AN EQUIVALENT CERTIFIED PRACTITIONER, REVIEW ALL THE DOCUMENTATION TO ENSURE COMPLIANCE.
D2. SITES SHOULD BE DRAINED SO THAT WATER CANNOT POND AGAINST OR NEAR THE HOUSE. THE GROUND IMMEDIATELY ADJACENT TO THE HOUSE SHOULD BE GRADED TO FALL 50mm OVER THE FIRST METRE.WHERE THIS IS IMPRACTICABLE (IE: ON SEVERAL SLOPING SITES) USE A.G. DRAINS ADJACENT TO FOOTINGS WHERE THE GROUND FALLS TOWARDS THE BUILDING.

FOOTING: ANGLE OF REPOSE

A1. FOOTING MUST NOT UNDERMINE EXISTING FOOTING OR BE UNDERMINED BY PROPOSED EXCAVATION.
A2. ENSURE ADEQUATE ANGLE OF REPOSE AT ALL TIMES (REFER DETAILS BELOW).
A3. NOTIFY THIS OFFICE IF FOOTING UNDERMINE OCCURS.
A4. PIPE DEPTH & LOCATION MUST BE CONFIRMED PRIOR TO CONSTRUCTION.



ANGLE OF REPOSE
30° MAX IN SAND/SILT
45° MAX IN CLAY
60° MAX IN ROCK

OH & SAFETY

O1. FOR ALL WORKS CONDUCTED ON THIS PROJECT, THE BUILDER SHALL HAVE ALL APPROPRIATE AND SUFFICIENT SAFETY MEASURES AND PROCEDURES IN PLACE.
O2. DEEP TRENCHES MAY EXIST ON THIS SITE. BUILDER TO ENSURE NECESSARY SAFETY MEASURES ARE TAKEN TO PREVENT FALL AND TRIPPING HAZARDS ARE ELIMINATED.
O3. FOR LARGE SPAN BEAMS (SAY6000mm), BUILDER TO ENSURE SEAT PLATES/ANGLES TO STEEL COLUMNS FOR MAJOR BEAMS AND LINTELS ARE INSTALLED FOR SAFER CONNECTION, BOLTING AND SITE WELDING.
O4. ADEQUATE PROPPING MAY BE REQUIRED FOR ANY RETAINING/LOAD BEARING WALLS ON BOUNDARIES. TEMPORARY SHORING MAY BE REQUIRED.
O5. PROVISIONS SHALL BE MADE FOR APPROPRIATE DISTANCE FOR ROOF BATTENS/RAFTERS TO PROVIDE A SAFE WORKING PLATFORM DURING ROOF INSTALLATION AND WORKING AT HEIGHTS.
O6. BUILDER MAY NEED TO BE AWARE OF APPROPRIATE MEASURES TO DEAL WITH HAZARDOUS MATERIALS SUCH AS ASBESTOS THAT MAY BE FOUND IN SERVICE PITS.
O7. IF A CRANE IS REQUIRED, THE BUILDER IS TO PROVIDE ADEQUATE SAFETY MEASURES FOR CRANE USAGE AROUND POWER LINES.
O8. IF ANY DIGGING IS REQUIRED OUTSIDE OF SITE BOUNDARIES, INFORMATION REGARDING EXISTING COUNCIL ASSETS NEED TO BE SOUGHT FROM "DIAL BEFORE YOU DIG".
O9. THE SAFETY CONCERNS AND HAZARDS IDENTIFIED ABOVE REPRESENT COMMONLY OCCURRING RISKS. THE LIST DOES NOT COVER THE FULL RANGE OF RISK AVOIDANCE MEASURES REQUIRED.

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PROJECT:
D/S DWELLING

PROJECT ADDRESS:
31 CRANBROOK STREET, STRATHTULLOH VIC 3338

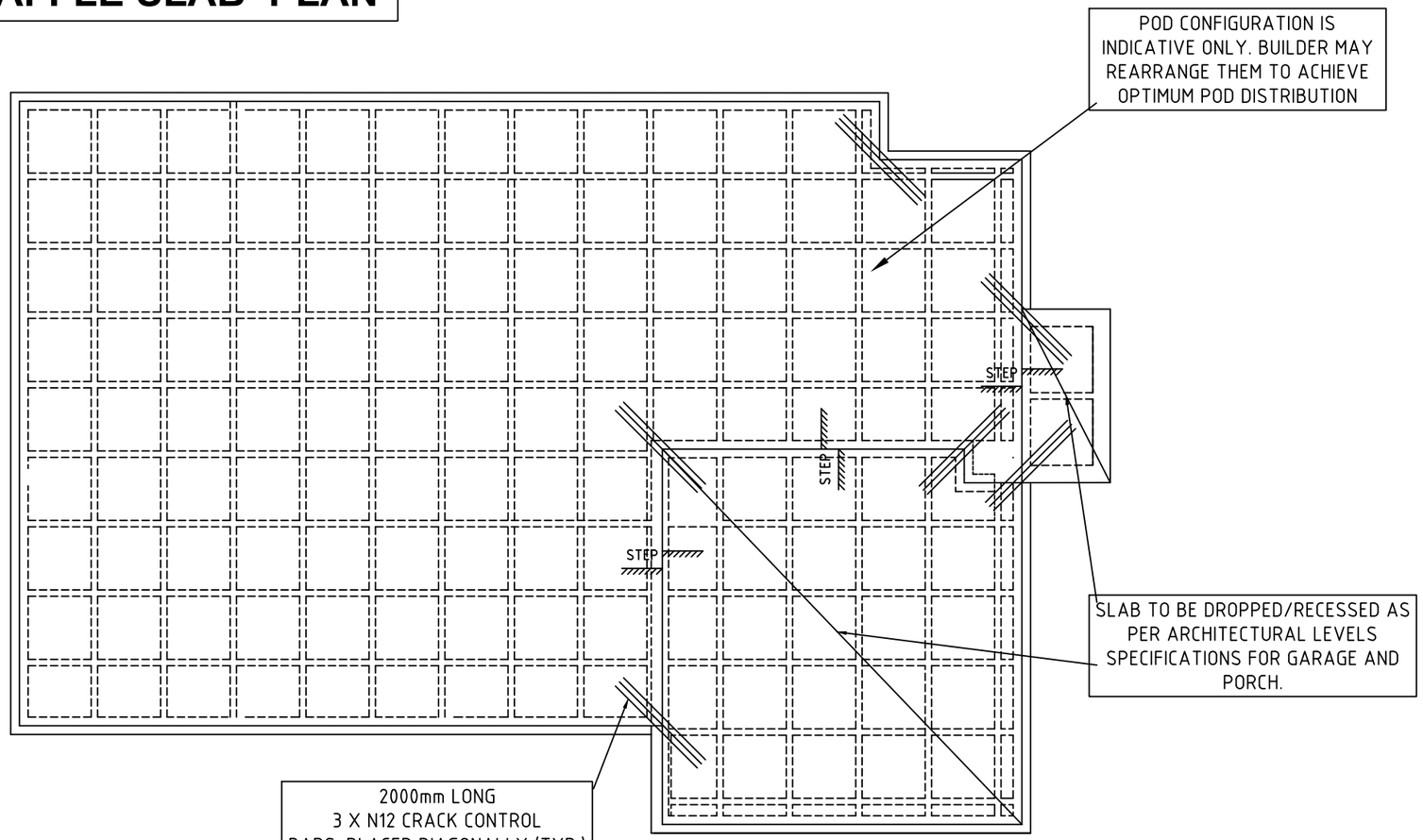
SHEET NO: 2/16

SCALE: AS SHOWN

DATE: 28/11/2025

WB CIVIL STRUCTURAL ENGINEERS

WAFFLE SLAB PLAN



WAFFLE SLAB SCHEDULE

SLAB DETAILS

OVERALL SLAB DEPTH	310 mm	U.N.O.
VOID FORM HEIGHT	225 mm	U.N.O.
SLAB THICKNESS	100 mm	U.N.O.
INTERNAL RIB WIDTH	110 mm	U.N.O.
EXTERNAL RIB WIDTH	300 mm	U.N.O.
STEM WIDTH	150 mm	U.N.O.

- PROVIDE MEMBRANE IN ACCORDANCE WITH BCA (LAPPED 200 MIN. AND TAPED AT JOINTS) ON MAXIMUM 50mm COMPACTED QUARRY PRODUCT.
- MEMBRANE MINOR PENETRATIONS MUST BE TAPED, IN ACCORDANCE WITH AS2870;
- CONCRETE STRENGTH = 20 MPa AT 28 DAYS. SLUMP = 100mm

SLAB REINFORCEMENT

TOP

SLAB FABRIC	SL92	U.N.O.
EXTERNAL BEAM	3-L11TM	U.N.O.
RIB	1-N12 BAR	U.N.O.

BOTTOM

INTERNAL RIB	1-N12 BAR	U.N.O.
EXTERNAL RIB	3-L11TM	U.N.O.

NOTE
BUILDER TO ENSURE SETTING FINISHED WAFFLE SLAB LEVEL INCLUDING PORCH AS PER ARCHITECTURAL PLANS OR MIN. 150mm - 300mm ABOVE SURROUNDING FINISHED GROUND LEVEL. ALSO, GRADE FINISHED SURROUNDING GROUND AWAY FROM SLAB PERIMETER.

GROUND FLOOR WAFFLE SLAB, RIBS & PIERS

SCALE 1: 100

SLAB NOTES:

- REFER TO SHEET NO: 3/? FOR SLAB & BEAMS REINFORCEMENT SPECIFICATION.
- SLAB REINFORCEMENT TO BE LAPPED NOT LESS THAN 225mm OR 2 CROSS WIRES. SUPPORT MESH ON BAR CHAIRS AT 1000mm MAXIMUM SPACING IN BOTH DIRECTION.
- BEAM/RIB REINFORCEMENT TO BE LAPPED AND TIED A MINIMUM OF 500mm AT SPLICES. LAP FULL BEAM WIDTH AT RIB INTERSECTIONS.
- REINFORCEMENT SHALL BE FIXED IN POSITION BY BAR CHAIRS OR APPROVED SIMILAR.
- CONCRETE SHALL BE TRANSPORTED, PLACED, VIBRATED AND CURED IN ACCORDANCE WITH AS 2870 & GOOD BUILDING PRACTICE.
- SET DOWN SLAB SURFACE RECESSES AS SPECIFIED IN ARCHITECTURAL DRAWINGS.
- FINISHED FLOOR LEVELS AS PER ARCHITECTURAL DRAWINGS.
- IT IS BUILDER'S RESPONSIBILITY TO CARRYOUT SETTING OUT ACCURATELY AS PER ARCHITECTURAL DRAWINGS AND DOUBLE CHECK BEFORE POURING CONCRETE INCLUDING SETTING DOWN OF BATHROOM RECESS AND ANY OTHER RECESS.
- SOIL REPORT NO:???? DATED: ?/??/???? BY ??????? SOIL TESTING.
- SITE SOIL CLASSIFICATION: CLASS ???
- SUBGRADE TO BE FREE OF VEGETATION & ROOTS AND WELL COMPACTED BEFORE FILLING AND SPREADING WITH QUARRY PRODUCT.

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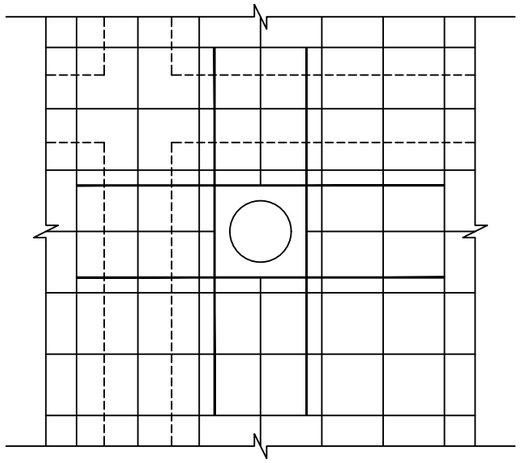
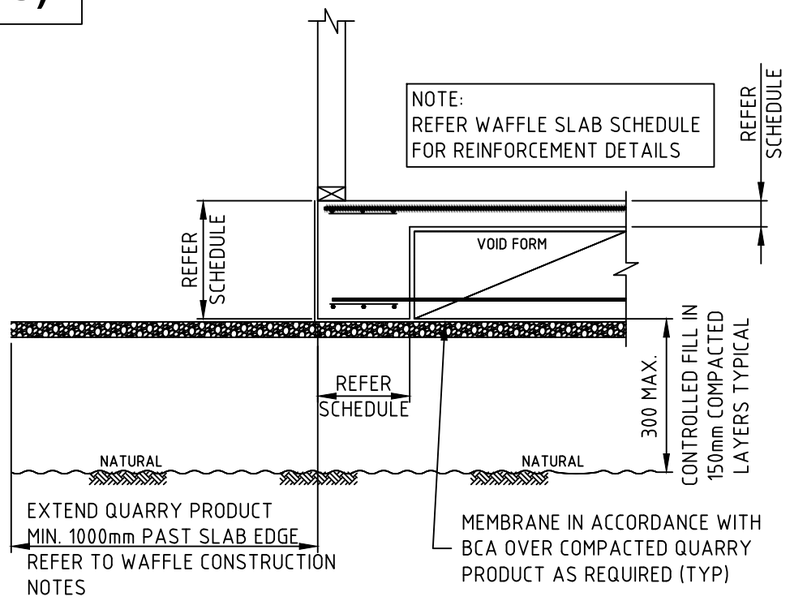
WB CIVIL STRUCTURAL ENGINEERS

WAFFLE DETAIL 1 (TYPICAL) (NTS)

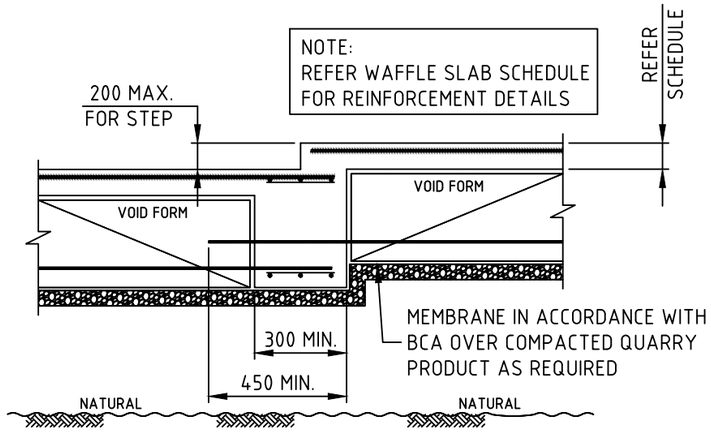


TYPICAL SLAB PENETRATION DETAIL

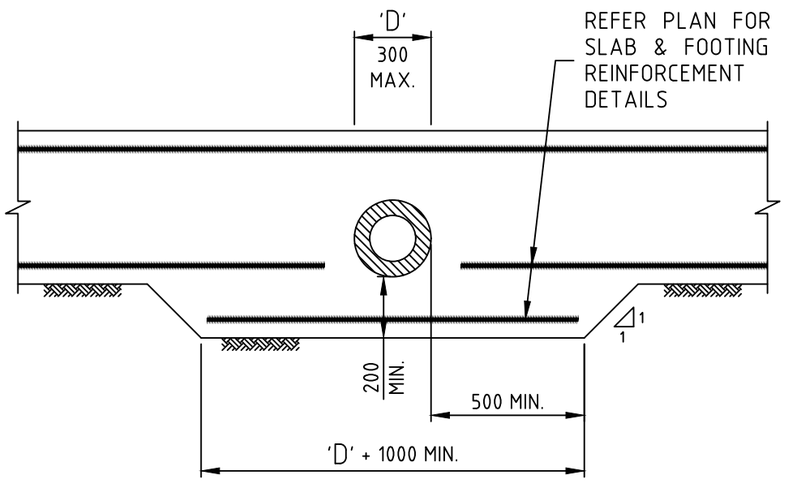
NOTE:
ADDITIONAL BARS MUST BE PLACED AROUND PIPE OPENING IF SLAB FABRIC WIRES ARE CUT, DAMAGED OR BENT (TYPICAL)



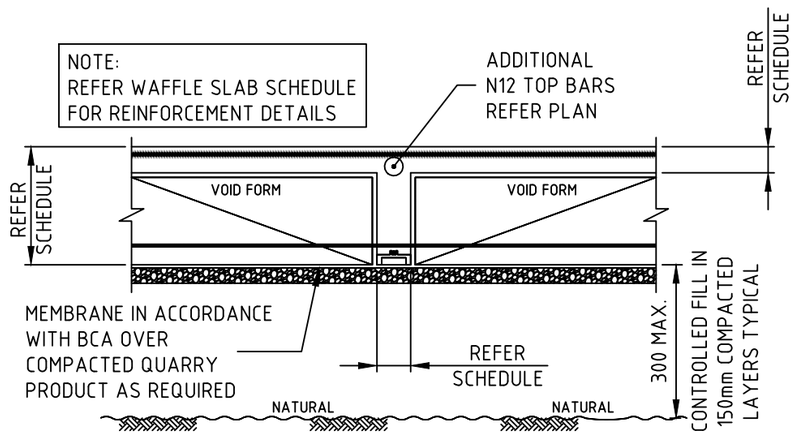
TYPICAL EXTERNAL RIB DETAIL



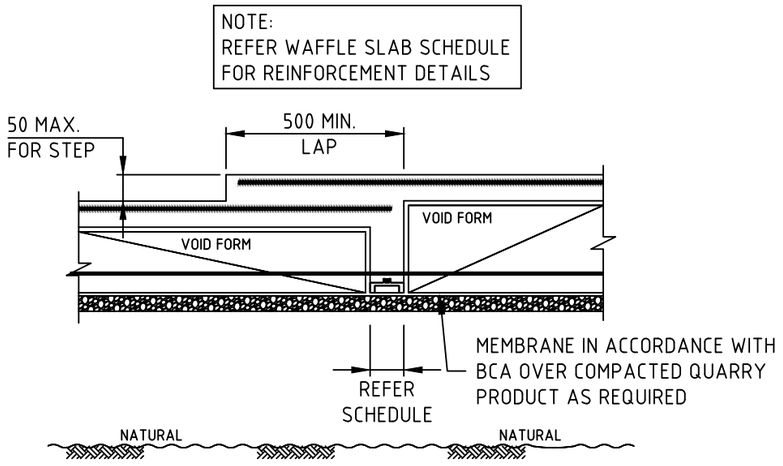
TYPICAL STEPDOWN DETAIL AT GARAGE/PORCH



TYPICAL PENETRATION THROUGH FOOTING DETAIL



TYPICAL INTERNAL RIB DETAIL



TYPICAL SLAB RECESS (SHOWER) DETAIL

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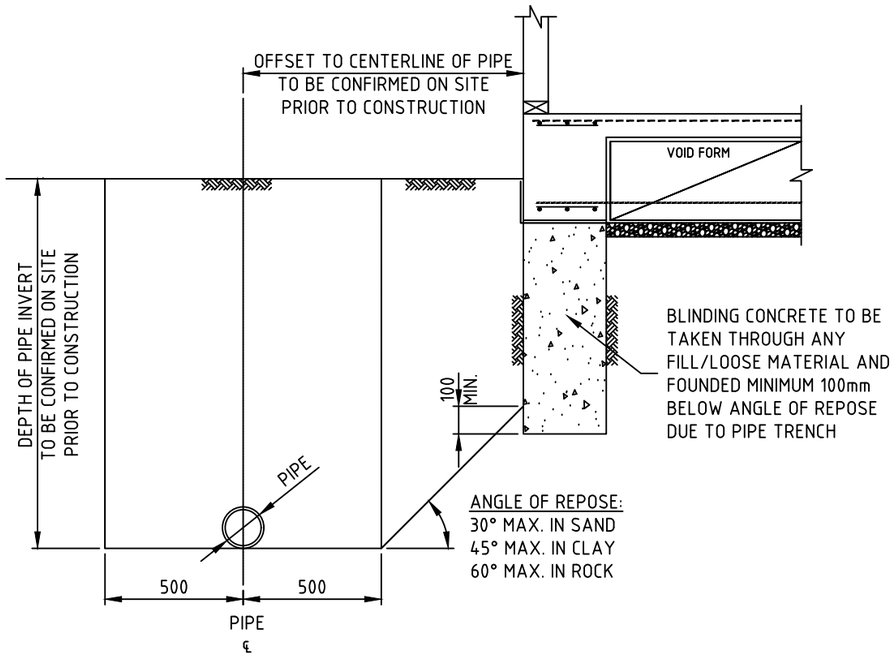
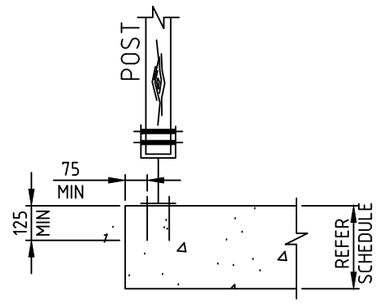
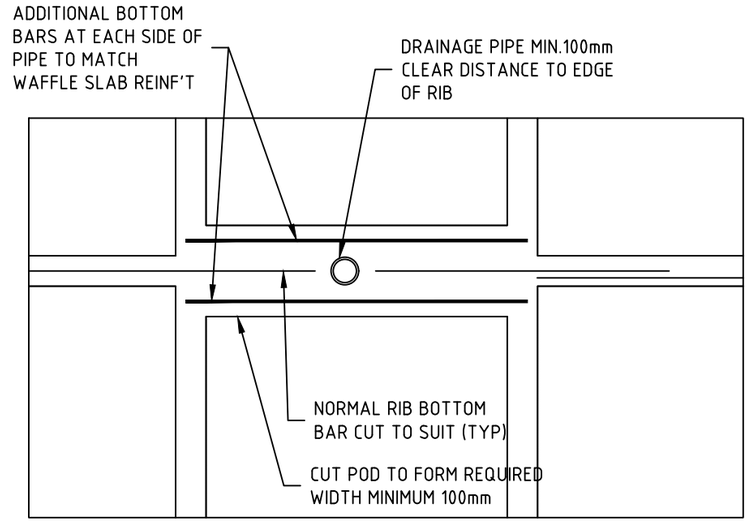
WAFFLE DETAIL 2 (TYPICAL) (NTS)



TYPICAL ANGLE OF REPOSE DETAIL
(IF REQUIRED)



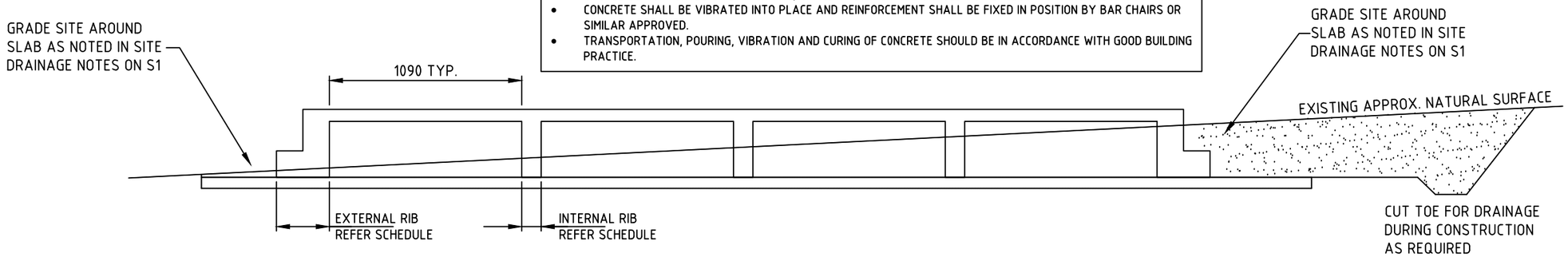
TYPICAL TIMBER FULL STIRRUP POST
ON CONCRETE SLAB/FOOTING DETAIL



TYPICAL PIPE THROUGH WAFFLE RIB
PLAN VIEW

NOTES:

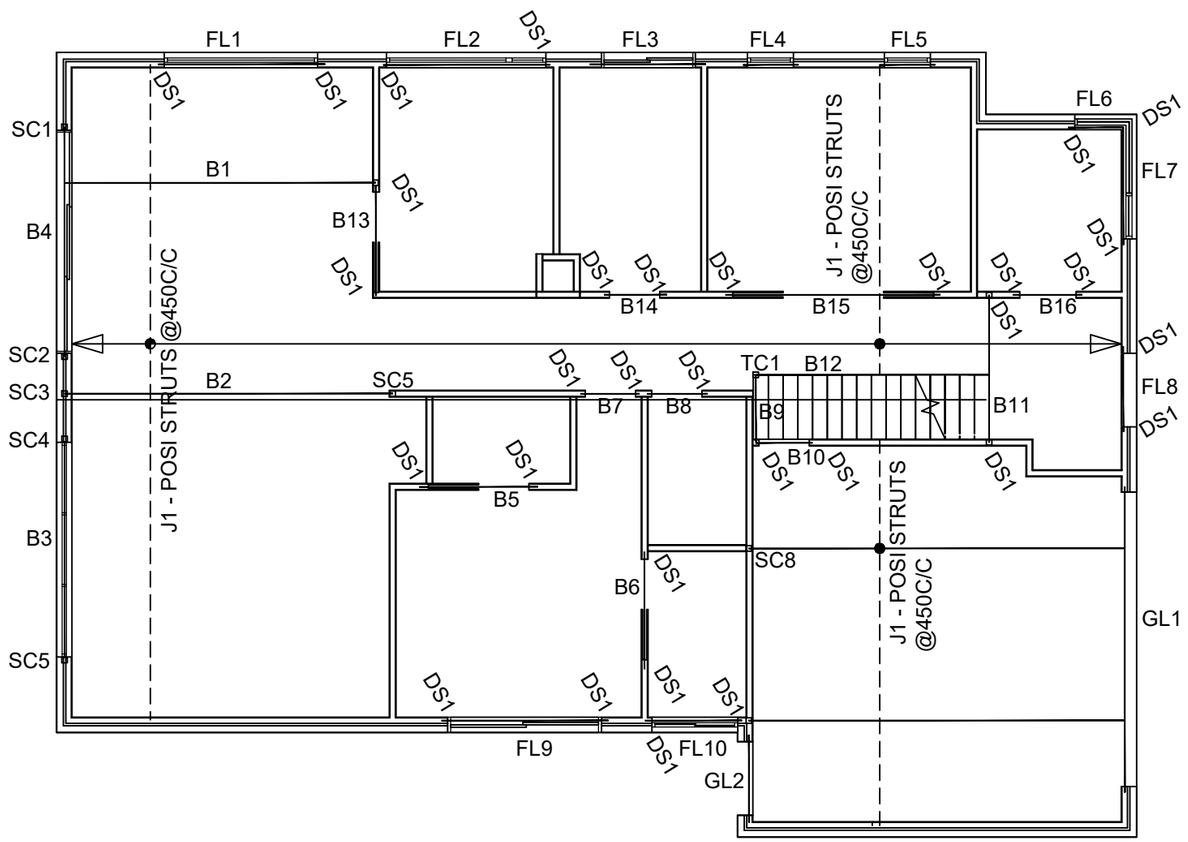
- 0.2mm THICK POLYETHYLENE MEMBRANE TO BE APPROVED, TAPED AROUND PIPES AND LAPPED A MINIMUM OF 200mm.
- MINOR PENETRATION IS ACCEPTABLE AS PER AS2870 C5.3.3.
- 30mm COVER FOR BEAM REINFORCEMENT, AT SPLICES (500mm LAP FOR N12 BARS, 700mm LAP FOR N16 BARS) AND FULL BEAM WIDTH AT INTERSECTIONS.
- SLAB REINFORCEMENT COVER TO HAVE 20mm MINIMUM, LAP LENGTH TO BE MINIMUM 225mm OR 2 CROSS WIRES AND SHOULD BE SUPPORTED ON BAR CHAIRS, SPACE OF BAR CHAIRS SHOULD NOT EXCESS 1000mm CRS BOTH WAYS.
- CONCRETE SHALL BE VIBRATED INTO PLACE AND REINFORCEMENT SHALL BE FIXED IN POSITION BY BAR CHAIRS OR SIMILAR APPROVED.
- TRANSPORTATION, POURING, VIBRATION AND CURING OF CONCRETE SHOULD BE IN ACCORDANCE WITH GOOD BUILDING PRACTICE.



TYPICAL SECTION THROUGH WAFFLE SLAB

CLIENT: **CASSISSI ARCHITECTS** **JOB NO: MF/1DSD - 2025**	**WB CIVIL STRUCTURAL ENGINEERS** **ABN: 84119322436** **OFFICE:** NO: 6 TENDULKAR DRIVE, ROCKBANK VIC 3335 Mobile: 04010/16328 / Ph: 03 9746 0089 Email: priyan@wbcse.com.au	**REGISTERED ENGINEER** **BUSINESS LICENSING AUTHORITY, VICTORIA** **PRIYAN WIJEYERATNE** PE 2448, F.I.E.(AUST)., C.P.ENG. M.Eng(Struct)., M.Tech.(Mgt.), BSc(Civil)	**PROJECT:** **D/S DWELLING** **PROJECT ADDRESS:** **31 CRANBROOK STREET, STRATHTULLOH VIC 3338**	**SHEET NO: 5/16** **SCALE: AS SHOWN** **DATE: 28/11/2025**	WB CIVIL STRUCTURAL ENGINEERS

FLOOR TIMBER FRAMING PLAN (NTS)



MEMBER SCHEDULE - FLOOR		
MARK	SECTION	REMARKS/CONNECTIONS
B1	200UB22.3	G300
B2	200UB22.3	G300
B3	200UB22.3	G300
B4	200UB22.3	G300
B5	190mmX45mm	MGP12
B6	190mmX45mm	MGP12
B7	2/190mmX45mm	MGP12 - LAMINATED
B8	2/190mmX45mm	MGP12 - LAMINATED
B9	2/190mmX45mm	MGP12 - LAMINATED
B10	190mmX45mm	MGP12
B11	2/240mmX45mm	MGP12 - LAMINATED
B12	2/240mmX45mm	MGP12
B13	190mmx45mm	MGP12
B14	190mmx45mm	MGP12
B15	2/240mmX45mm	MGP12 - LAMINATED
B16	190mmx45mm	MGP12
FL1	2/240mmX45mm	MGP12 - LAMINATED
FL2	2/240mmX45mm	MGP12 - LAMINATED
FL3	2/190mmX45mm	MGP12 - LAMINATED
FL4	140mmX45mm	MGP12
FL5	140mmX45mm	MGP12
FL6	190mmX45mm	MGP12
FL7	190mmx45mm	MGP12
FL8	190mmx45mm	MGP12
FL9	2/190mmX45mm	MGP12 - LAMINATED
FL10	190mmx45mm	MGP12

TC1	200mmX200mm	F7 - OREGON COLUMN
J1	300mm @ 450 C/C	POSI -STRUT - AS PER MANUFACTURER'S SPECIFICATION
BJ1	300mm @ 450 C/C	POSI -STRUT - AS PER MANUFACTURER'S SPECIFICATION
GL1	VER: 12mmX250mm HOR: 12mmX200mm	MIN. YIELD ST: 250MPa
GL2	VER: 10mmX250mm HOR: 10mmX200mm	MIN. YIELD ST: 250MPa
SC1 TO SC5	SHS 89mmX3.5mm th.	G350
DSX	WHERE DOUBLE STUDS MARKED, REFER TO TABLE ON SHT. NO: ?/?	
TIMBER STUD WALLS TO BE LOAD BEARING - 2/90X45 F7 - TOP PLATES & 1/90X45 F7 - BOTTOM PLATE - STUD SPACING 450mm C/C - BOTH STOREYS		
BEAMS WHERE POSSIBLE AND ECONOMICAL MAY BE CONTINUOUS OVER SUPPORTS		
LINTEL SIZES TO BE PICKED FROM TABLE IN SHEET NO: ?/?		

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PROJECT:
D/S DWELLING

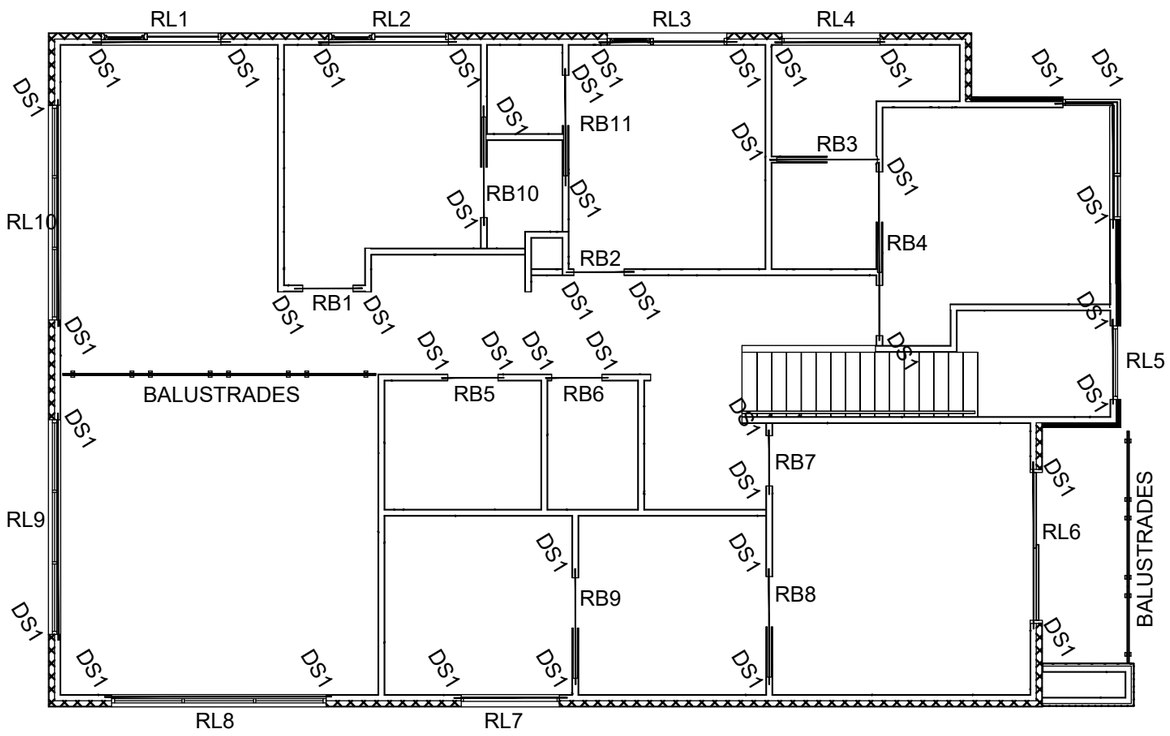
PROJECT ADDRESS:
31 CRANBROOK STREET, STRATHTULLOH VIC 3338

SHEET NO: 6/16

SCALE: AS SHOWN

DATE: 28/11/2025

ROOF TIMBER FRAMING PLAN



MEMBER SCHEDULE - ROOF		
MARK	SECTION	REMARKS/CONNECTIONS
RB1	140mmx35mm	MGP12
RB2	140mmx35mm	MGP12
RB3	140mmx35mm	MGP12
RB4	140mmx35mm	MGP12
RB5	140mmx35mm	MGP12
RB6	140mmx35mm	MGP12
RB7	140mmx35mm	MGP12
RB8	140mmx35mm	MGP12
RB9	140mmx35mm	MGP12
RB10	140mmx35mm	MGP12
RB11	140mmx35mm	MGP12
RL1	240mmx45mm	MGP12
RL2	240mmx45mm	MGP12
RL3	240mmx45mm	MGP12
RL4	240mmx45mm	MGP12
RL5	240mmx45mm	MGP12
RL6	240mmx45mm	MGP12
RL7	240mmx45mm	MGP12
RL8	2/240mmx45mm	MGP12 - LAMINATED
RL9	2/240mmx45mm	MGP12 - LAMINATED
RL10	2/240mmx45mm	MGP12 - LAMINATED
DSX	WHERE DOUBLE STUDS MARKED, REFER TO TABLE ON SHT. NO: ?/?	
TIMBER STUD WALLS TO BE LOAD BEARING - 2/90X45 F7 - TOP PLATES & 1/90X45 F7 - BOTTOM PLATE - STUD SPACING 450mm C/C - BOTH STOREYS		
BEAMS WHERE POSSIBLE AND ECONOMICAL MAY BE CONTINUOUS OVER SUPPORTS		

CLIENT:
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PROJECT:
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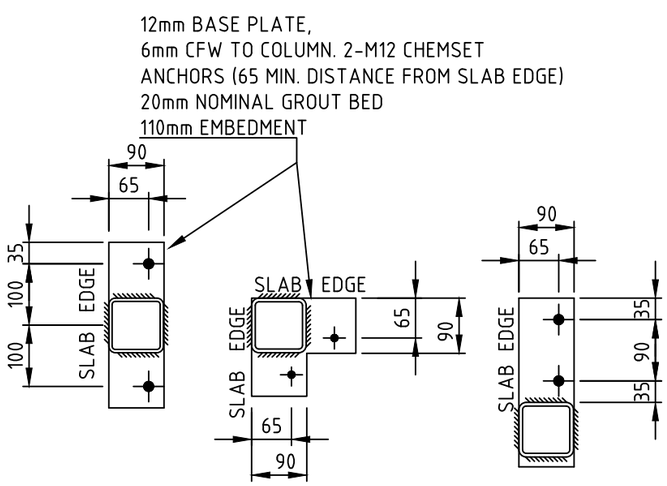
31 CRANBROOK STREET, STRATHTULLOH VIC 3338

SHEET NO: 7/16

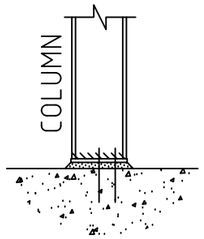
SCALE: AS SHOWN

DATE: 28/11/2025

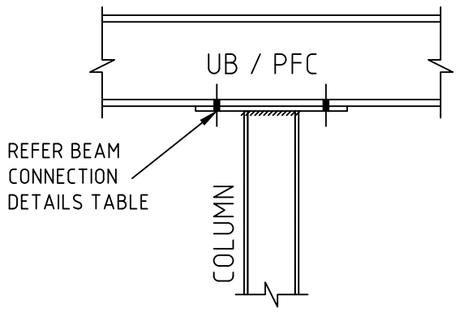
TIMBER FRAMING DETAIL 1 - TYPICAL (NTS)



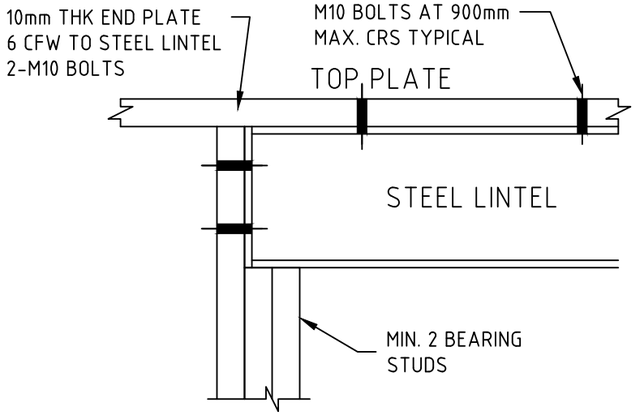
BASE PLATE PLAN



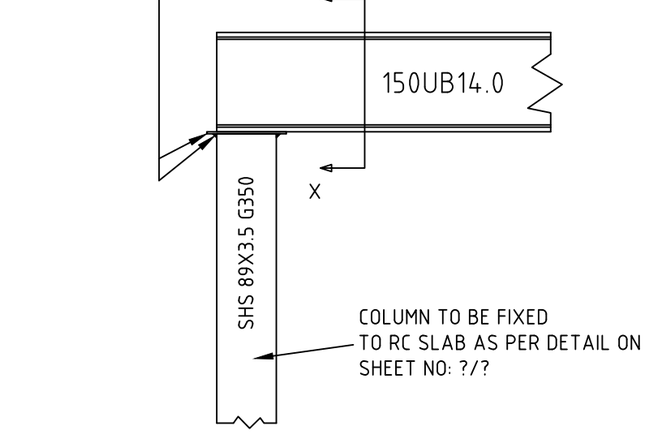
TYPICAL COLUMN BASE CONNECTION DETAILS



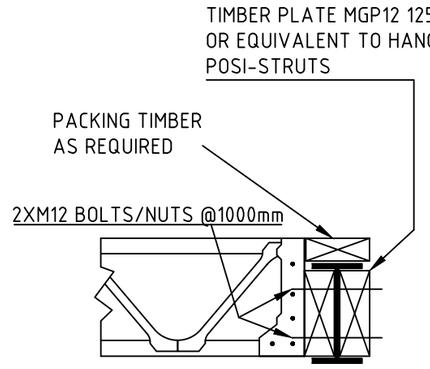
TYPICAL STEEL BEAM TO STEEL COLUMN DETAIL



TYPICAL STEEL LINTEL TO DOUBLE STUD DETAIL



STEEL COLUMN TO STEEL BEAM CONNECTION DETAIL



SECTION X-X
STEEL BEAM TO POSI STRUT CONNECTION DETAIL

NOTE
UBs MAY BE SUBSTITUTED WITH EQUIVALENT PFCs.

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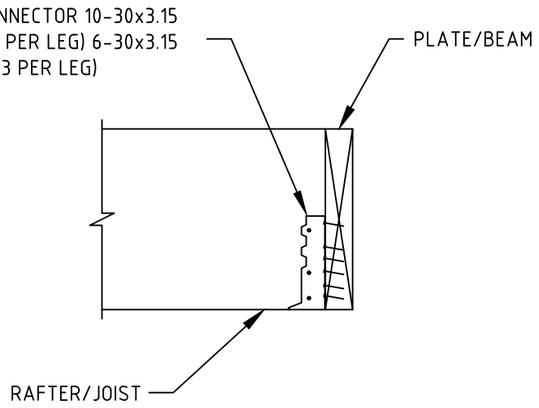
TIMBER FRAMING DETAIL 2 - TYPICAL (NTS)

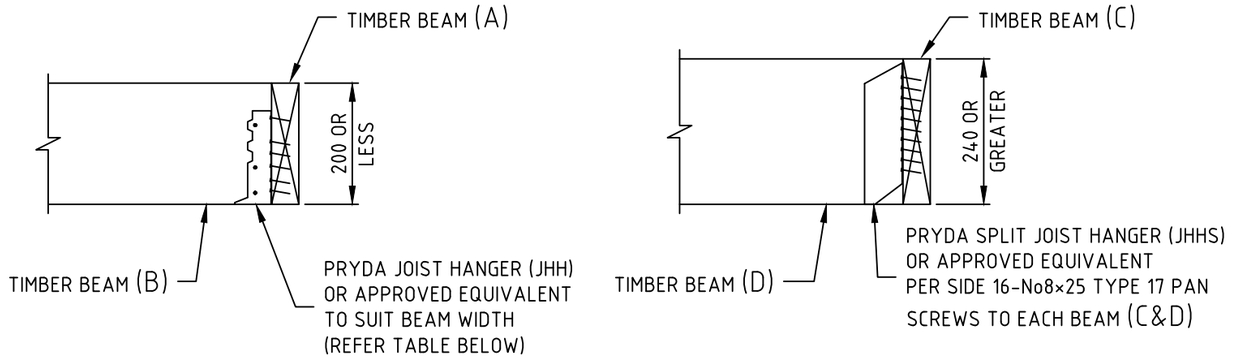


NOTE:

1. AT DOUBLE JOIST TO DOUBLE JOIST USE JOIST HANGER TO ONE JOIST AND TRIP L GRIP FIXING TO SECOND JOIST WITH 5 NAILS/LEG. (15 NAILS)

2. AT DOUBLE JOIST TO WALL PLATE USE JOIST HANGER TO ONE JOIST AND TRIP L GRIP FIXING TO SECOND JOIST WITH 5 NAILS/LEG. (15 NAILS)
2-16ø DYNABOLTS TO WALL
SPACE DYNABOLTS AT 80mm CRS AND 80mm EDGE DISTANCE

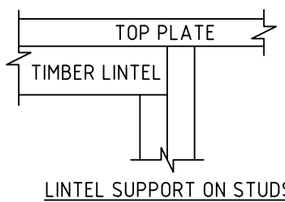
TYPICAL TIMBER TO TIMBER RAFTER/JOIST CONNECTION



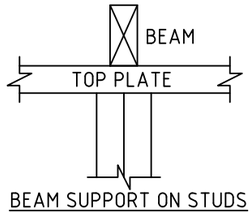
BEAM WIDTH (B)	BRACKET	FIXING
63	JHH65	20-No12×35 TYPE 17 HEX HEAD SCREWS TO BEAM (A) 16-No12x35 TYPE 17 HEX HEAD SCREWS TO BEAM (B)
70	JHH75	20-No12×35 TYPE 17 HEX HEAD SCREWS TO BEAM (A) 16-No12x35 TYPE 17 HEX HEAD SCREWS TO BEAM (B)
90	JHH100	24-No12×35 TYPE 12 HEX HEAD SCREWS TO BEAM (A) 18-No12x35 TYPE 12 HEX HEAD SCREWS TO BEAM (B)

ALTERNATIVE TIMBER BEAM TO TIMBER BEAM CONNECTIONS (FOR PORCH AND/OR ALFRESCO AREAS ONLY)

ALL STUDS SHALL BE NAIL LAMINATED IN ACCORDANCE WITH AS1684.2		DS1	DS2	DS3	DS4	TS1	TS2	TS3	QS1	QS2	FS1	FS2
		90x45	90x45	70x45	120x45	90x45	90x45	70x45	90x45	90x45	90x45	90x45
		MGP10	F17 KD HW	F17 KD HW	MGP10	MGP10	F17 KD HW	F17 KD HW	MGP10	F17 KD HW	MGP10	F17 KD HW
LINTEL	NO. OF BEARING STUD	1	1	1	1	1	1	1	2	2	2	2
LINTEL	NO. OF JAMB STUD	1	1	1	1	2	2	2	2	2	3	3
BEAM	NO. OF BEARING STUD	2	2	2	2	3	3	3	4	4	5	5

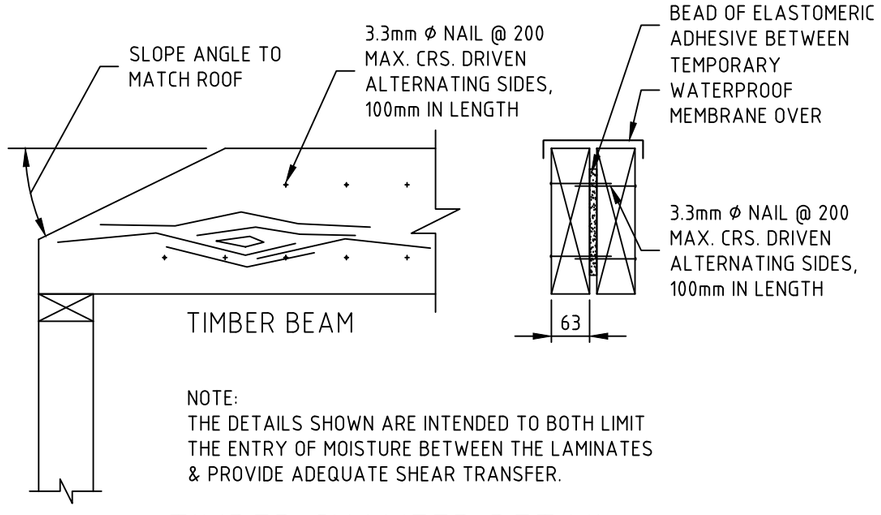


LINTEL SUPPORT ON STUDS



BEAM SUPPORT ON STUDS

TIMBER STUDS SCHEDULE



NOTE:
THE DETAILS SHOWN ARE INTENDED TO BOTH LIMIT THE ENTRY OF MOISTURE BETWEEN THE LAMINATES & PROVIDE ADEQUATE SHEAR TRANSFER.

TIMBER CHAMFER DETAIL

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PROJECT:
D/S DWELLING

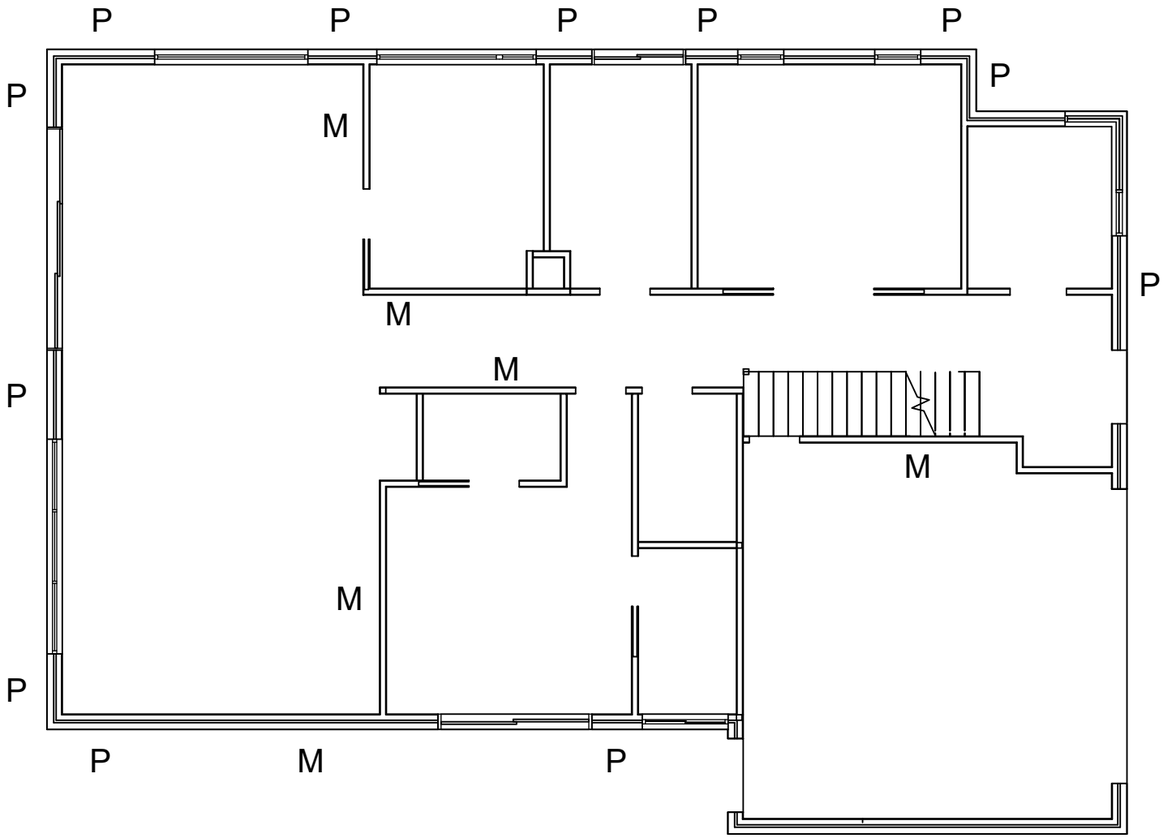
PROJECT ADDRESS:
31 CRANBROOK STREET, STRATHTULLOH VIC 3338

SHEET NO: 9/16

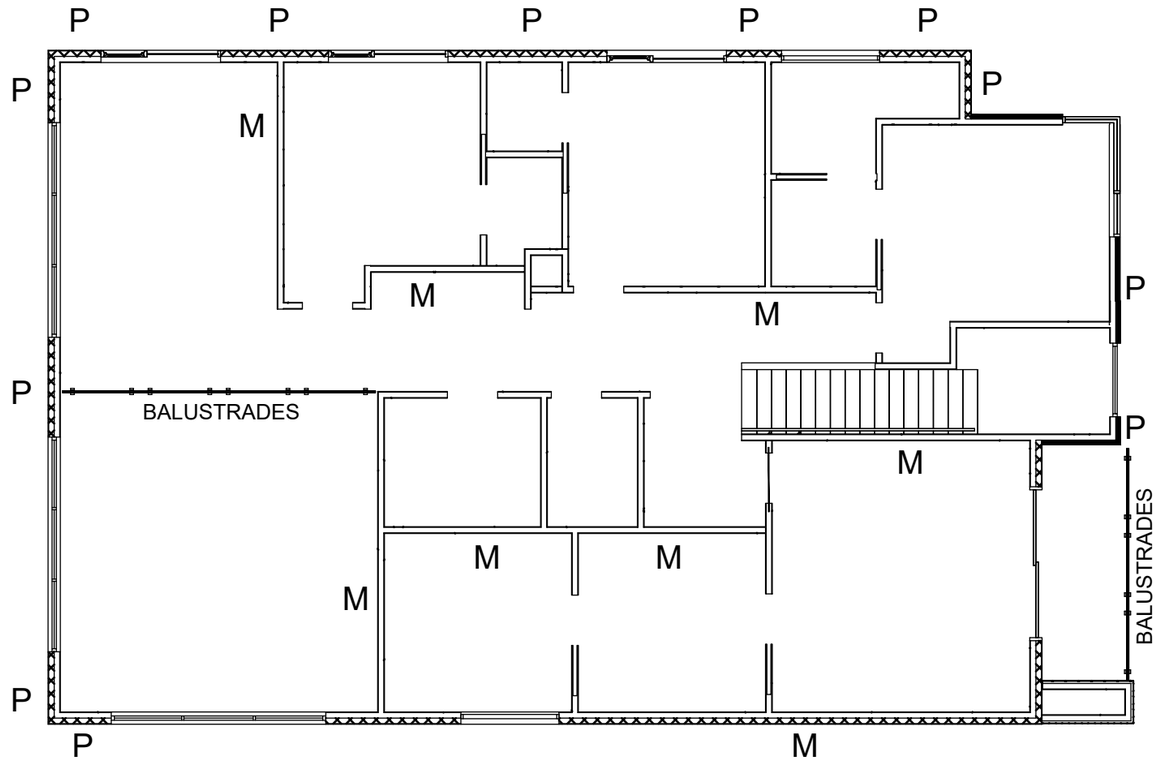
SCALE: AS SHOWN

DATE: 28/11/2025

BRACING PLAN (NTS)



GROUND FLOOR



UPPER FLOOR

NOTE
USE TYPE "O" PLYWOOD BRACING OVER ALL WALL AREA, AROUND OPENINGS - AS PER AS1684.

BRACING LEGEND

M - 1.5kN/m CAPACITY METAL BRACING - REFER TO TYPICAL DETAILS
P - 3.4kN/m CAPACITY PLYWOOD BRACING - REFER TO TYPICAL DETAILS
O - PLYWOOD BRACING OVER ALL WALL AREA, AROUND OPENINGS - AS PER AS1684

WIND RATING - N2

- MAXIMUM DESIGN GUST WIND SPEED FOR THIS SITE IS 40 M/S;
- WIND SPEED CALCULATION (VH) FOR USE IN ULTIMATE LIMIT STATE DESIGN ONLY, CALCULATED IN ACCORDANCE WITH THE LIMITATIONS AS IN AS 4055, SECTION 2.1.

ALTERNATIVE BRACING METHOD NOTE:

- OTHER EQUIVALENT CAPACITY BRACING METHOD IS PERMITTED IN LIEU OF SPECIFIED BRACING METHOD SHOWN ON DRAWINGS;
- INSTALLATION OF ALL BRACING UNITS MUST BE IN ACCORDANCE WITH THE RESIDENTIAL TIMBER FRAMED CONSTRUCTION MANUALS AS 1684.2-2010

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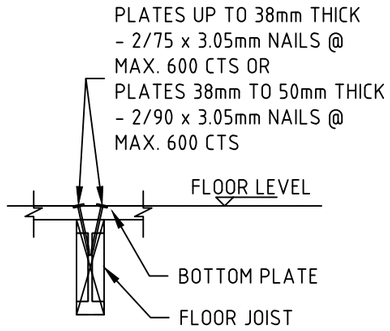
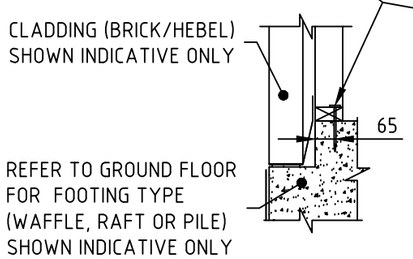
BRACING DETAIL 1 - TYPICAL (NTS)

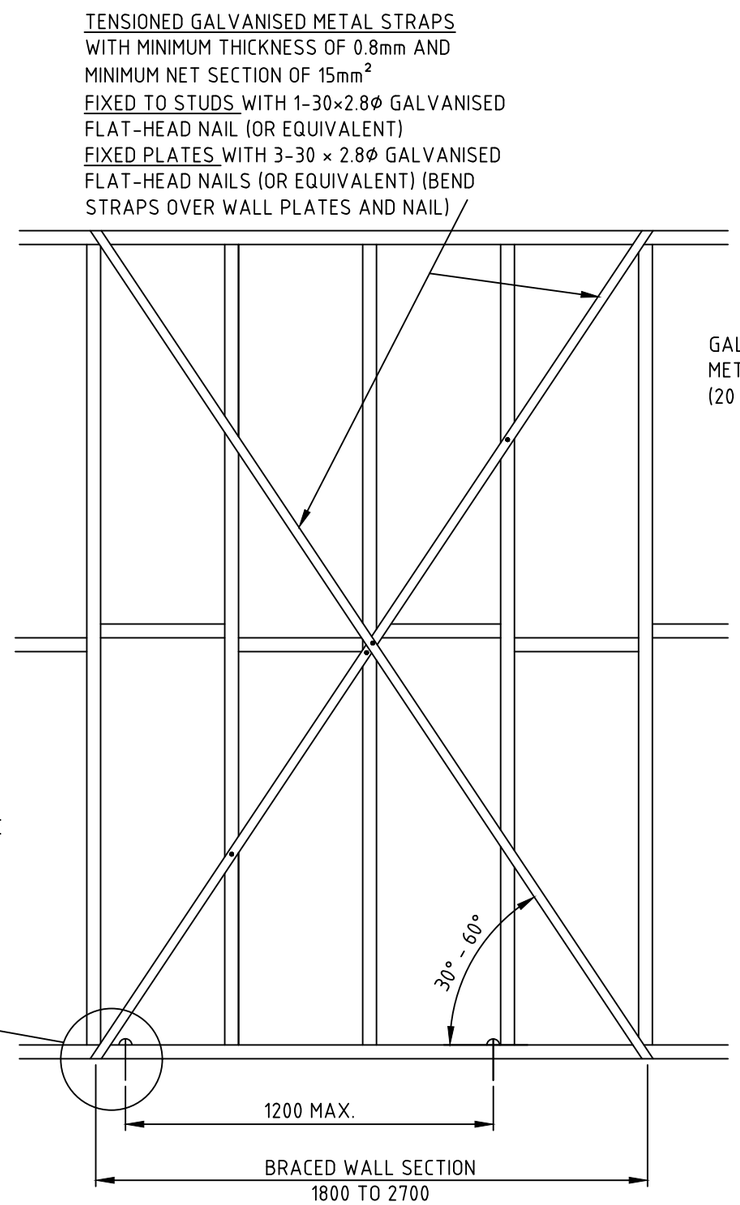


BOTTOM WALL PLATE
TO FLOOR JOIST DETAIL

FIX ONE 75MM MASONRY NAIL
(HAND-DRIVEN AT SLAB EDGE) OR
SCREW OR BOLT TO THE BOTTOM PLATE
AT MAXIMUM 1200mm CRS.
(IF PANEL WIDTH IS LESS THAN 1200mm,
NAIL TO BE AT EACH END OF PANEL)



BOTTOM WALL PLATE TO
CONCRETE SLAB FIXING DETAIL
DETAIL A-A

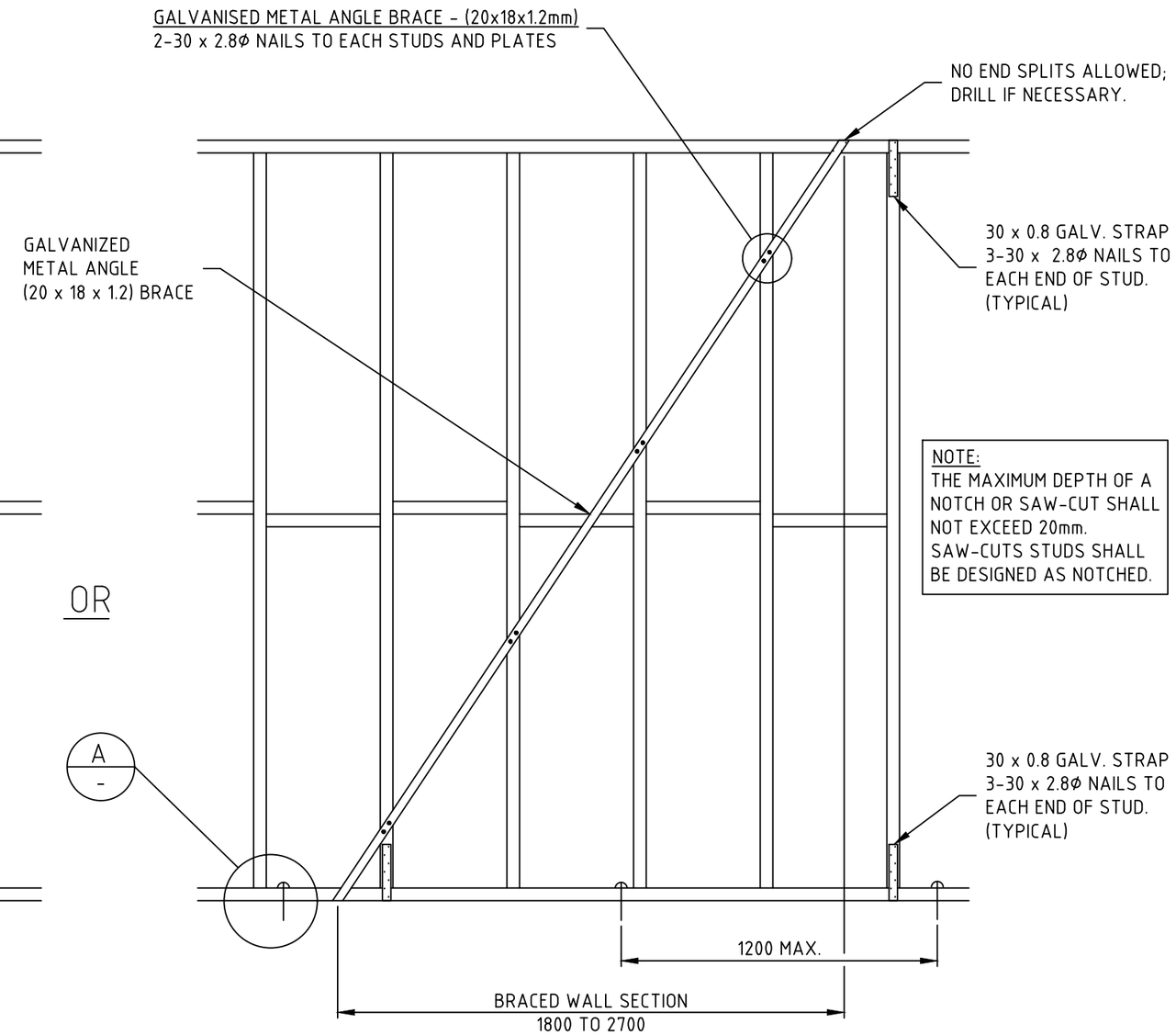


DOUBLE DIAGONAL METAL TENSION STRAPS
(BRACING CAPACITY -1.5 kN/m)

SCALE: NTS DENOTED AS M1 ON PLAN

EQUIVALENT SPEEDBRACE CAN BE ADOPTED

OR



DIAGONAL METAL ANGLE BRACES
(BRACING CAPACITY - 1.5 kN/m)

SCALE: NTS DENOTED AS M1 ON PLAN

NOTE:
THE MAXIMUM DEPTH OF A
NOTCH OR SAW-CUT SHALL
NOT EXCEED 20mm.
SAW-CUTS STUDS SHALL
BE DESIGNED AS NOTCHED.

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SHEET NO: 11/16

SCALE: AS SHOWN

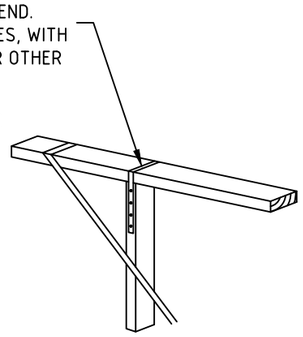
DATE: 28/11/2025

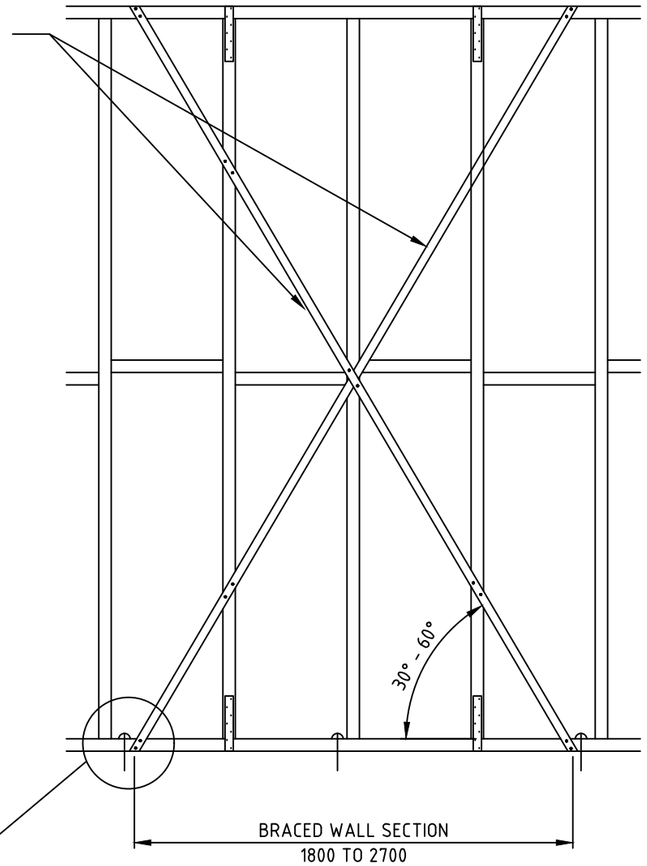
WB CIVIL STRUCTURAL ENGINEERS

BRACING DETAIL 2 - TYPICAL (NTS)

TENSION GALVANISED METAL STRAPS
NOMINAL 30 x 0.8mm GALV. STRAP (OR EQUIVALENT)
NAILED TO PLATES WITH 4-30x2.8ø GALVANISED FLATHEAD NAILS TO EACH END
2 NAILS TO EACH STUD AND 4 NAILS TO THE STRAP RETURN OVER TOP OF PLATE & UNDER BOTTOM PLATE, STRAPS MUST BE PROPERLY TENSIONED.

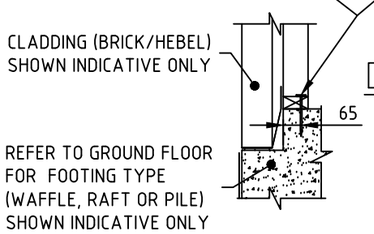
METAL STRAPS TO PLATE FIXING
30 x 0.8mm METAL STRAP LOOPED OVER PLATE AND FIXED TO STUD WITH 4-30 x 2.8ømm FLATHEAD NAILS TO EACH END. ALTERNATIVELY PROVIDE SINGLE STRAP TO BOTH SIDES, WITH 4 NAILS PER STRAP END, OR EQUIVALENT ANCHORS OR OTHER FASTENERS.



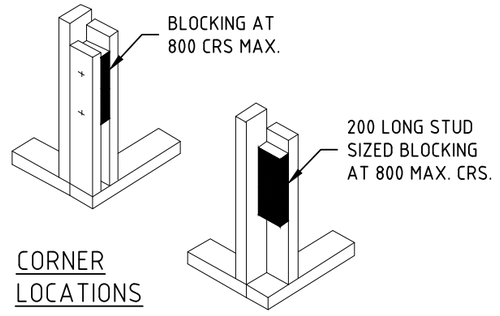


DOUBLE DIAGONAL METAL TENSION STRAPS
(BRACING CAPACITY - 3.0 kN/m)
SCALE: 1:20
DENOTED AS M2 ON PLAN.
EQUIVALENT SPEEDBRACE CAN BE ADOPTED

FIX ONE 75MM MASONRY NAIL (HAND-DRIVEN AT SLAB EDGE) OR SCREW OR BOLT TO THE BOTTOM PLATE AT MAXIMUM 1200mm CRS.
(IF PANEL WIDTH IS LESS THAN 1200mm, NAIL TO BE AT EACH END OF PANEL)

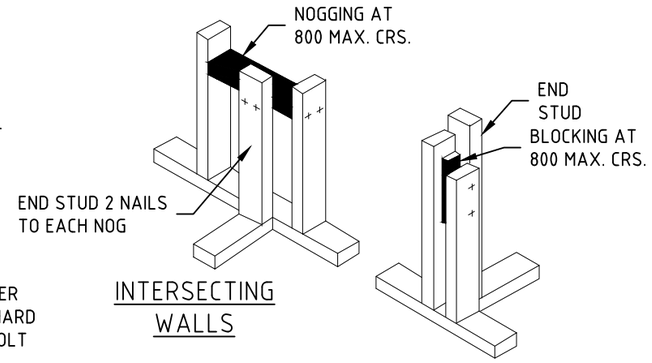


BOTTOM WALL PLATE TO CONCRETE SLAB FIXING DETAIL

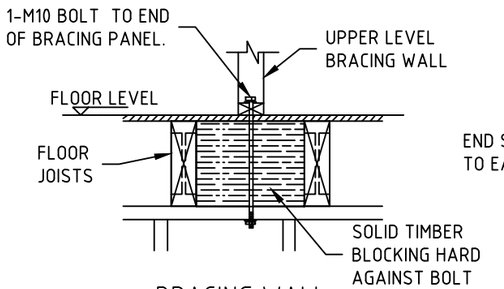


CORNER LOCATIONS

2 NAILS THOUGH EACH STUD TO BLOCKING OR NOGGING.

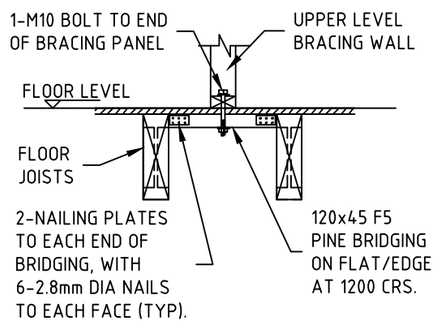


INTERSECTING WALLS

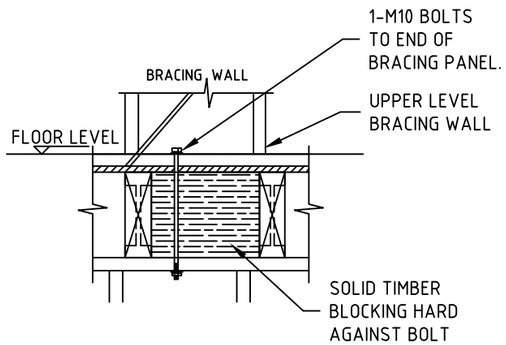


BRACING WALL PARALLEL TO JOISTS
(INTERNAL BRACING WALL SHOWN)

WALL JUNCTION DETAIL
(APPLIES TO ALL BRACING TYPES)



BRACING WALL PARALLEL TO JOISTS
(NO STUD WALL UNDER)



BRACING WALL AT PERPENDICULAR TO JOISTS

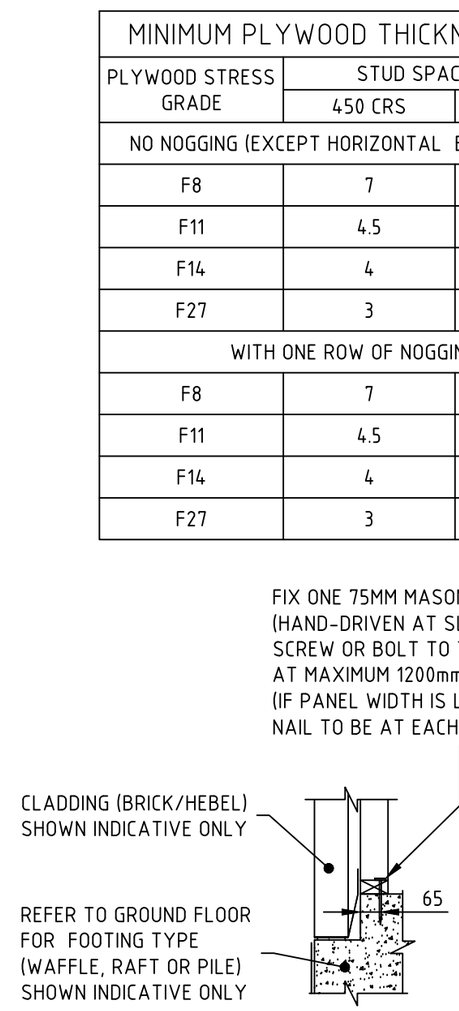
CLIENT: CASSISSI ARCHITECTS **JOB NO: MF/1DSD - 2025**	**WB CIVIL STRUCTURAL ENGINEERS** ABN: 84119322436 **OFFICE:** NO: 6 TENDULKAR DRIVE, ROCKBANK VIC 3335 Mobile: 04010/16328 / Ph: 03 9746 0089 Email: priyan@wbcse.com.au	**REGISTERED ENGINEER** **BUSINESS LICENSING AUTHORITY, VICTORIA** **PRIYAN WIJEYERATNE** PE 2448, F.I.E.(AUST)., C.P.ENG. M.Eng(Struct)., M.Tech.(Mgt.), BSc(Civil)	**PROJECT:** D/S DWELLING **PROJECT ADDRESS:** **31 CRANBROOK STREET, STRATHTULLOH VIC 3338**	**SHEET NO: 12/16** **SCALE: AS SHOWN** **DATE: 28/11/2025**	WB CIVIL STRUCTURAL ENGINEERS

BRACING DETAIL 3 - TYPICAL (NTS)

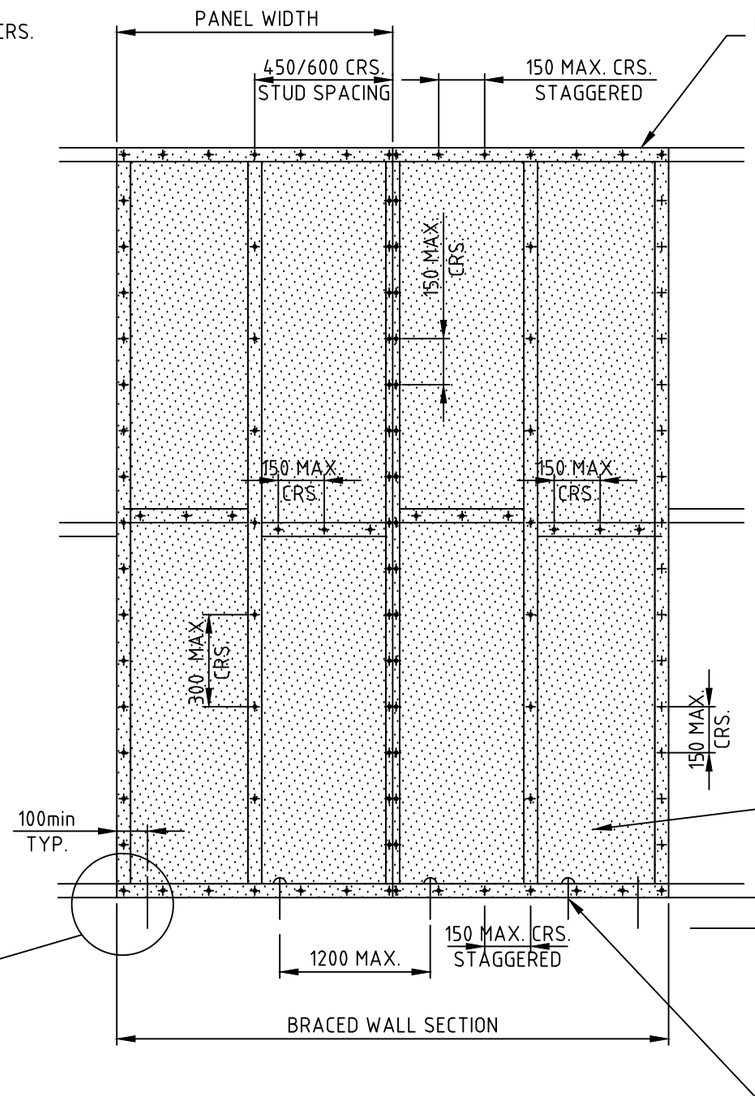
NOTES:

1. PLYWOOD BUTT JOINTS SHALL BE AT A COMMON STUD WITH CLOUTS AT CRS. SHOWN.
2. HORIZONTAL BUTT JOINTS TO BE FIXED TO NOGGING AT 150 CRS.
3. ALLOW TO PACK OUT ADJACENT STUDS WITH CONTINUOUS STRIPS OF PLY TO RECEIVE WALL LINING.
4. POWER FIX TOP PLATE AND END STUDS TO ADJACENT STEELWORK AT 600 CRS.

MINIMUM PLYWOOD THICKNESS (mm)		
PLYWOOD STRESS GRADE	STUD SPACING (mm)	
	450 CRS	600 CRS
NO NOGGING (EXCEPT HORIZONTAL BUTT JOINTS)		
F8	7	9
F11	4.5	7
F14	4	6
F27	3	4.5
WITH ONE ROW OF NOGGING		
F8	7	7
F11	4.5	4.5
F14	4	4
F27	3	3



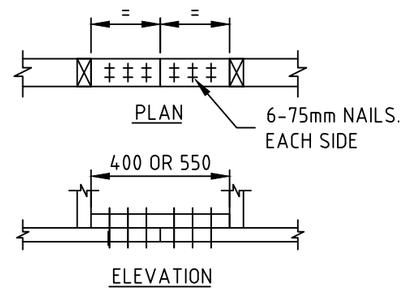
BOTTOM WALL PLATE TO CONCRETE SLAB FIXING DETAIL (END FIXING)



PLYWOOD WALL BRACING (BRACING CAPACITY - 3.4 kN/m)

DENOTED AS P1 ON PLAN

WHERE TOP AND BOTTOM PLATES IN BRACED SECTIONS ARE NOT CONTINUOUS THEY MUST BE SPLICED AS PER DETAIL BELOW:



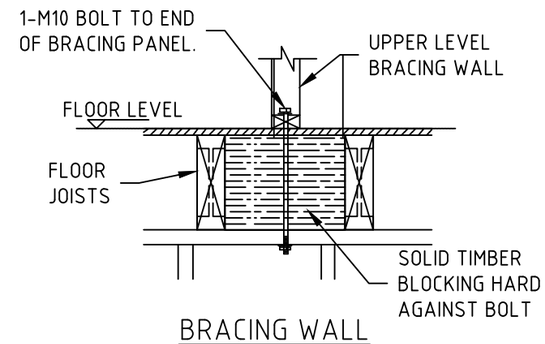
NOTES:

- SPLICE PLATE MUST BE SAME SIZE & STRESS GRADE AS TOP & BOTTOM PLATES
- WHERE TOP & BOTTOM PLATES IN BRACED SECTIONS ARE DISCONTINUED, THEY MUST BE SPLICED AS SHOWN IN THIS DETAIL

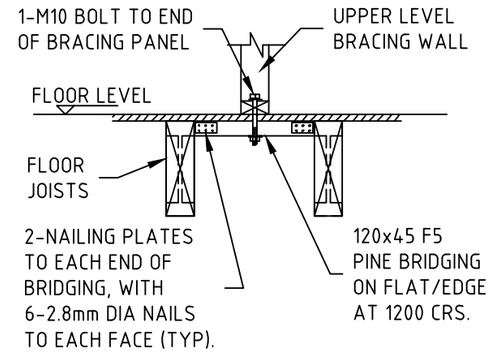
TYPICAL TOP & BOTTOM PLATE SPLICE DETAIL

FIXING TO TIMBER FRAME:
PAA APPROVED STRUCTURAL PLYWOOD FIXED WITH 2.8ϕ x 30 GALV. FLATHEAD NAILS AT 150 CRS. TO TOP AND BTM. WALL PLATES. & NOGGINGS
150 CRS. TO STUDS AT VERT. EDGES.
300 CRS. TO INTERNAL STUDS.

INTERMEDIATE FIXING
FIX ONE 75MM MASONRY NAIL (HAND-DRIVEN AT SLAB EDGE) OR SCREW OR BOLT TO THE BOTTOM PLATE AT MAXIMUM 1200mm CRS.



BRACING WALL PARALLEL TO JOISTS
(INTERNAL BRACING WALL SHOWN)



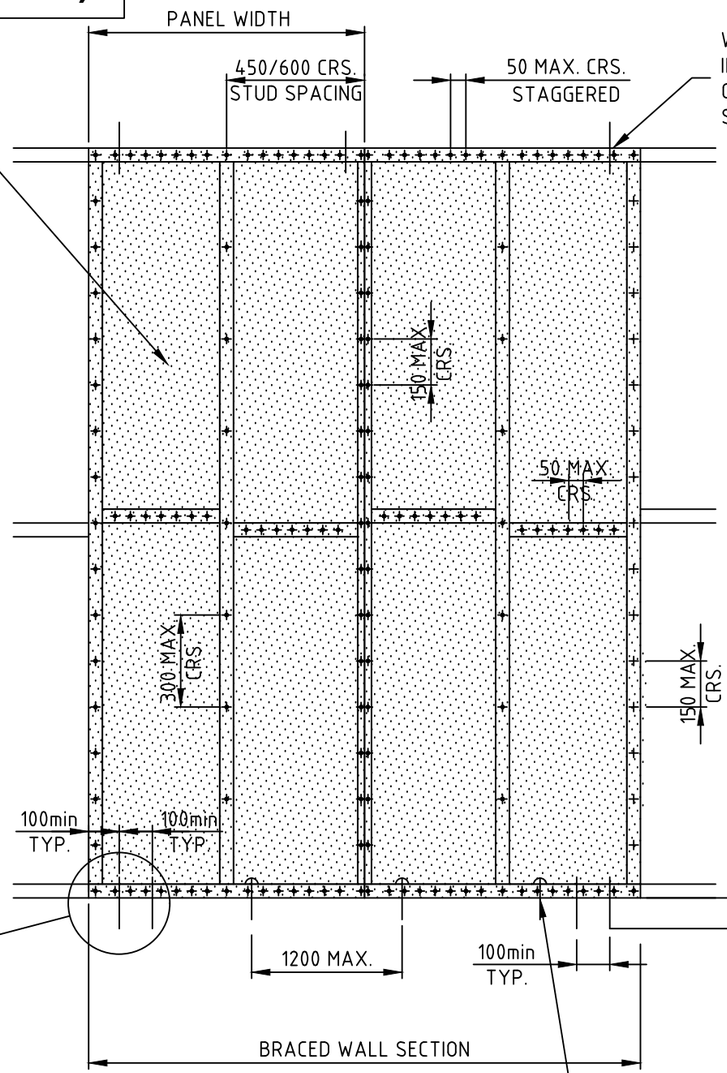
BRACING WALL PARALLEL TO JOISTS
(NO STUD WALL UNDER)

CLIENT: CASSISSI ARCHITECTS JOB NO: MF/1DSD - 2025	**WB CIVIL STRUCTURAL ENGINEERS** ABN: 84119322436 OFFICE: NO: 6 TENDULKAR DRIVE, ROCKBANK VIC 3335 Mobile: 04010/16328 / Ph: 03 9746 0089 Email: priyan@wbcse.com.au	REGISTERED ENGINEER BUSINESS LICENSING AUTHORITY, VICTORIA PRIYAN WIJEYERATNE PE 2448, F.I.E.(AUST)., C.P.ENG. M.Eng(Struct)., M.Tech.(Mgt.), BSc(Civil)	**PROJECT:** D/S DWELLING PROJECT ADDRESS: 31 CRANBROOK STREET, STRATHTULLOH VIC 3338	SHEET NO: 13/16 SCALE: AS SHOWN DATE: 28/11/2025	WB CIVIL STRUCTURAL ENGINEERS

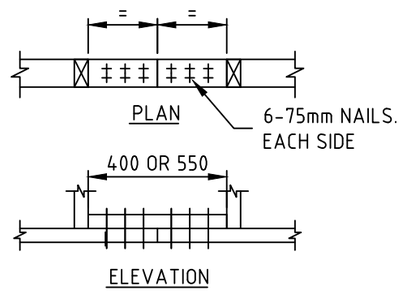
BRACING DETAIL 4 TYPICAL (NTS)

FIXING TO TIMBER FRAME:
PAA APPROVED STRUCTURAL PLYWOOD FIXED WITH 3.15ø x 30 GALV. FLATHEAD NAILS AT 50 CRS. TO TOP AND BTM. WALL PLATES. & NOGGINGS
150 CRS. TO STUDS AT VERT. EDGES.
300 CRS. TO INTERNAL STUDS.

MINIMUM PLYWOOD THICKNESS (mm)		
PLYWOOD STRESS GRADE	STUD SPACING (mm)	
	450 CRS	600 CRS
F8	7	9
F11	6	7
F14	4	6
F27	4	4.5

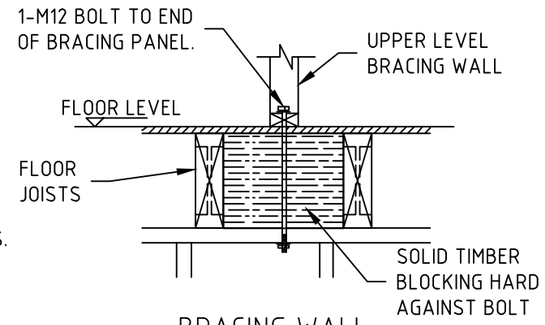


WHERE TOP AND BOTTOM PLATES IN BRACED SECTIONS ARE NOT CONTINUOUS THEY MUST BE SPLICED AS PER DETAIL BELOW:

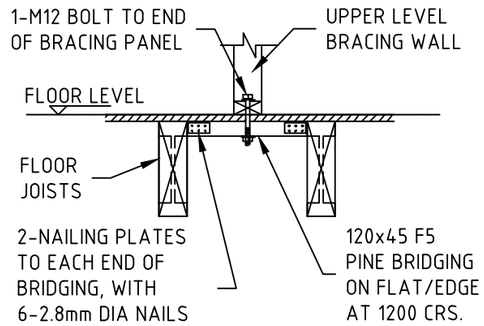


NOTES:
- SPLICE PLATE MUST BE SAME SIZE & STRESS GRADE AS TOP & BOTTOM PLATES
- WHERE TOP & BOTTOM PLATES IN BRACED SECTIONS ARE DISCONTINUED, THEY MUST BE SPLICED AS SHOWN IN THIS DETAIL

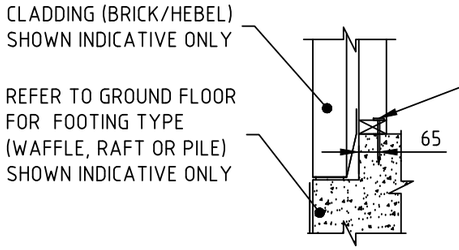
TYPICAL TOP & BOTTOM PLATE SPLICE DETAIL



BRACING WALL PARALLEL TO JOISTS
(INTERNAL BRACING WALL SHOWN)



BRACING WALL PARALLEL TO JOISTS
(NO STUD WALL UNDER)

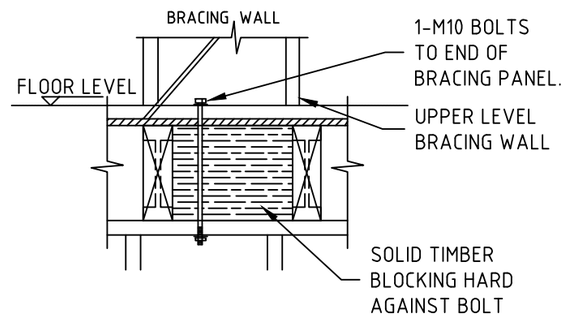


BOTTOM WALL PLATE END FIXINGS:
2-M8 CHEMSET (ALTERNATIVELY EXCALIBUR SCREWBOLT OR APPROVED EQUIVALENT) TO EACH END OF BRACED SECTION.

BOTTOM WALL PLATE TO CONCRETE SLAB FIXING DETAIL (END FIXING)

INTERMEDIATE FIXING
FIX ONE 75MM MASONRY NAIL (HAND-DRIVEN AT SLAB EDGE) OR SCREW OR BOLT TO THE BOTTOM PLATE AT MAXIMUM 1200mm CRS.

PLYWOOD WALL BRACING
(BRACING CAPACITY - 6.0 kN/m)
SCALE: NTS
DENOTED AS P2 ON PLAN.



BRACING WALL AT PERPENDICULAR TO JOISTS

CLIENT: CASSISSI ARCHITECTS JOB NO: MF/1DSD - 2025	**WB CIVIL STRUCTURAL ENGINEERS** ABN: 84119322436 OFFICE: NO: 6 TENDULKAR DRIVE, ROCKBANK VIC 3335 Mobile: 04010/16328 / Ph: 03 9746 0089 Email: priyan@wbcse.com.au	REGISTERED ENGINEER BUSINESS LICENSING AUTHORITY, VICTORIA PRIYAN WIJEYERATNE PE 2448, F.I.E.(AUST)., C.P.ENG. M.Eng(Struct)., M.Tech.(Mgt.), BSc(Civil)	**PROJECT:** D/S DWELLING PROJECT ADDRESS: 31 CRANBROOK STREET, STRATHTULLOH VIC 3338	SHEET NO: 14/16 SCALE: AS SHOWN DATE: 28/11/2025	WB CIVIL STRUCTURAL ENGINEERS

STEEL ANGLE & TIMBER LINTEL TABLES

TIMBER ROOF LINTEL SCHEDULE (RL)	
SPAN (mm)	SECTION
0 - 1200	190 x 45 F7 KD PINE
1201 - 1800	190 x 45 F17 KD HW
1801 - 2400	240 x 45 F17 KD HW
2401 - 3000	2 - 240 x 45 F17 KD HW OR 2 - 240 x 45 HYSPAN
3001 - 3600	2 - 290 x 45 F17 KD HW OR 2 - 300 x 45 HYSPAN

METAL ROOF-FOR MAXIMUM LOAD WIDTH OF 6.0m
EQUIVALENT TIMBER GRADES & SECTIONS MAY BE USED

1st FLOOR TIMBER LINTEL SCHEDULE (FL)	
SPAN (mm)	SECTION
900	90 x 45 F7 KD PINE
1200	120 x 35 F7 KD PINE
1800	190 x 45 F7 KD PINE
2400	240 x 45 F7 KD PINE
3000	240 x 45 F17 KD HW OR 240 x 45 HYSPAN

SUPPORTING METAL ROOF-LOAD WIDTH OF 2.5m MAX
AND FIRST FLOOR LOAD WITH OF 3.0m MAX
EQUIVALENT TIMBER GRADES & SECTIONS MAY BE USED

ANGLE LINTEL TABLE (L)		
ANGLE LINTEL SPAN (mm)	BRICK HEIGHT	
	800mm MAX.	3200mm MAX.
0 - 900	100 x 100 x 6 EA	100 x 100 x 8 EA
901 - 1600	100 x 100 x 6 EA	100 x 100 x 10 EA
1601 -2100	100 x 100 x 6 EA	150 x 100 x 10 UA
2101 - 2600	150 x 100 x 10 UA	150 x 100 x 10 UA + 50 x 10 EXT. PL
2601 - 3100	150 x 100 x 10 UA	150 x 100 x 12 UA + 75 x 12 EXT. PL
3101 - 3600	150 x 100 x 12 UA	N/A

NOTES:
1. ANGLE LINTEL TO EACH MASONRY SKIN TYPICAL
2. SET ANGLES WITH LONG LEG VERTICAL TYPICAL U.N.O.
3. HOT DIP GALVANISED TO ALL EXPOSED ANGLE LINTELS TYPICAL

CLIENT:
CASSISSI ARCHITECTS

JOB NO: MF/1DSD - 2025

WB CIVIL STRUCTURAL ENGINEERS
ABN: 84119322436

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NO: 6 TENDULKAR DRIVE, ROCKBANK VIC 3335
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REGISTERED ENGINEER
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PROJECT:
D/S DWELLING

PROJECT ADDRESS:
31 CRANBROOK STREET, STRATHTULLOH VIC 3338

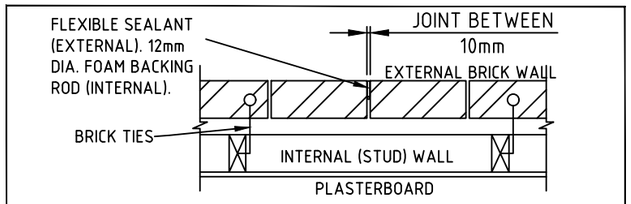
SHEET NO: 15/16

SCALE: AS SHOWN

DATE: 28/11/2025

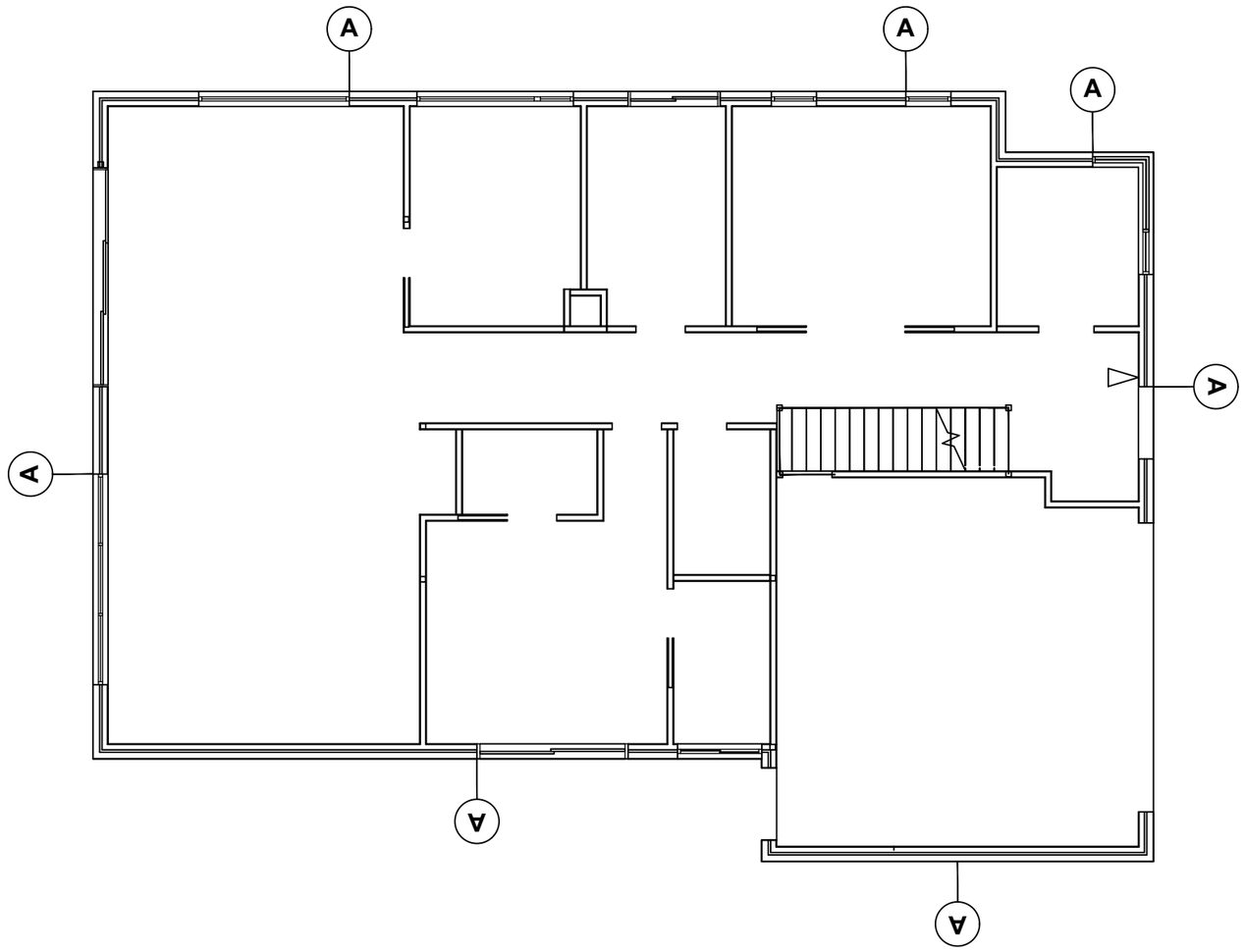
WB CIVIL STRUCTURAL ENGINEERS

ARTUCULATION JOINTS & DETAIL (NTS)



BRICK VENEER WALL ARTICULATION JOINT DETAILS

NOTE
FOLLOW SAME VERTICAL LINE OF "AJs" TO BOTH STOREY EXTERNAL WALLS, WHERE POSSIBLE.



CLIENT: **CASSISSI ARCHITECTS** **JOB NO: MF/1DSD - 2025**	**WB CIVIL STRUCTURAL ENGINEERS** **ABN: 84119322436** **OFFICE:** NO: 6 TENDULKAR DRIVE, ROCKBANK VIC 3335 Mobile: 04010/16328 / Ph: 03 9746 0089 Email: priyan@wbcse.com.au	**REGISTERED ENGINEER** **BUSINESS LICENSING AUTHORITY, VICTORIA** **PRIYAN WIJEYERATNE** PE 2448, F.I.E.(AUST)., C.P.ENG. M.Eng(Struct)., M.Tech.(Mgt.), BSc(Civil)	**PROJECT:** **D/S DWELLING** **PROJECT ADDRESS:** **31 CRANBROOK STREET, STRATHTULLOH VIC 3338**	**SHEET NO: 16/16** **SCALE: AS SHOWN** **DATE: 28/11/2025**	WB CIVIL STRUCTURAL ENGINEERS