STRUCTURAL DETAILING

OWNER: N.S.W EXTENSIONS PTY LTD & EDWARD J FITZPATRICK

SITE ADDRESS: LOT 113 (22) PYRAMID AVENUE, PADSTOW

CLIENT JOB NUMBER: 652354

CLIENT:

MOJO HOMES

STRUCTURAL ENGINEERING DESIGN CERTIFICATE

WE, RESIDENTIAL ENGINEERING, HEREBY CERTIFY THAT WE HAVE DESIGNED THE STRUCTURAL ELEMENTS FOR THE ABOVE PROJECT AND HAVE BEEN CARRIED OUT IN ACCORDANCE WITH THE FOLLOWING AUSTRALIAN STANDARDS AS APPLICABLE:

- AS/NZS 1170.0 STRUCTURAL DESIGN ACTIONS – GENERAL PRINCIPLES
- AS/NZS 1170.1 STRUCTURAL DESIGN ACTIONS – PERMANENT, IMPOSED AND OTHER ACTIONS
- AS/NZS 1170.2 STRUCTURAL DESIGN ACTIONS – WIND ACTIONS
- AS 1684.2 RESIDENTIAL TIMBER–FRAMED CONSTRUCTION
- AS 2870 RESIDENTIAL SLABS AND FOOTINGS
- AS 3600 CONCRETE STRUCTURES
- AS 3700 MASONRY STRUCTURES
- AS 4100 STEEL STRUCTURES
- AS 2159 PILING – DESIGN AND INSTALLATION
- AS 4678 EARTH–RETAINING STRUCTURES
- AS 3727.1 PAVEMENTS PART 1 RESIDENTIAL

WE ALSO CERTIFY THAT WE HAVE CURRENT PROFESSIONAL INDEMNITY INSURANCE APPROPRIATE FOR THE SIZE AND SCOPE OF THE PROJECT AND HAVE A GOOD WORKING KNOWLEDGE OF THE RELEVANT CODES AND STANDARDS REFERENCED ABOVE.

RESIDENTIAL ENGINEERING
GERVASE PURICH
FIE AUST. CPENG, NER, BRB, RBP, RPEQ

THESE DETAILS HAVE BEEN PREPARED IN ACCORDANCE WITH INFORMATION PROVIDED	
ARCHITECTURAL	
DESIGN NAME:	LIDO 25
PREPARED BY:	MOJO HOMES
DRAWING/JOB No.	652354
REVISION/ISSUE:	5
DATED:	09/04/2025
SOIL REPORT	
SITE CLASSIFICATION:	P/H1
CLASSIFIED BY:	STS GEOTECHNICS PTY LTD
REPORT No:	30060/1998 24/3670
DATED:	DECEMBER 16, 2024
SUBFLOOR LAYOUT	
PREPARED BY:	
DRAWING/JOB No.	
REVISION/ISSUE:	
DATED:	
FLOOD REPORT	
PREPARED BY:	
DRAWING/JOB No.	
REVISION/ISSUE:	
DATED:	
PT1 SITE HAZARD REPORT	
PREPARED BY:	MCDONALD JONES
DRAWING/JOB No.	862712
REVISION/ISSUE:	N/A
DATED:	16/10/2024
STEEL FRAME LAYOUT	
PREPARED BY:	MLEI RESIDENTIAL ENGINEERING
DRAWING/JOB No.	69541/A
REVISION/ISSUE:	A
DATED:	22/04/2025

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DRAWN	DATE	AMENDMENT	REV

JOB No: ME1344 ISSUE: -

SHEET No: 01 of 14

GENERAL NOTES

1. ENGINEERS STRUCTURAL DRAWINGS ARE SIGNED & ISSUED ON THE UNDERSTANDING THAT THE BUILDER MAINTAINS IN FORCE, PROPER & ADEQUATE CONTRACT WORKS INSURANCE & PUBLIC LIABILITY INSURANCE DURING THE COURSE OF THE CONSTRUCTION, &/OR ANY MAINTENANCE PERIOD. CLAIMS OF DAMAGE TO ANY ADJACENT PROPERTY OR BUILDING IS NOT THE RESPONSIBILITY OF THE ENGINEER.
2. THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH ALL ARCHITECTURAL & OTHER CONSULTANTS DRAWINGS & SPECIFICATIONS & WITH SUCH OTHER WRITTEN INSTRUCTIONS AS MAY BE ISSUED DURING THE COURSE OF THE CONTRACT. ALL DISCREPANCIES SHALL BE REFERRED TO THE BUILDER/ARCHITECT FOR DECISION BEFORE PROCEEDING WITH THE WORK.
3. ANY SUBSTITUTION IN THESE DOCUMENTS SHALL BE REFERRED TO RESIDENTIAL ENGINEERING FOR DECISION BEFORE PROCEEDING WITH THE WORK.
4. DIMENSIONS SHALL NOT BE OBTAINED BY SCALING THE STRUCTURAL DRAWINGS. REFER TO THE ARCHITECTURAL DRAWINGS FOR DIMENSIONS. ANY SET OUT DIMENSIONS SHOWN ON THESE DOCUMENTS SHALL BE VERIFIED BY THE BUILDER.
5. THE SECTIONS & DETAILS ON THESE DRAWINGS ARE INTENDED TO GIVE THE STRUCTURAL SPECIFICATIONS ONLY. ARCHITECTURAL SECTIONS & DETAILS ON THESE DRAWINGS ARE ILLUSTRATIVE ONLY.
6. THESE DOCUMENTS ARE SIGNED SUBJECT TO CERTIFICATE OF INSPECTION BEING ISSUED BY THIS FIRM. ALL PIERS, SLAB & FOOTING REINFORCEMENT SHALL BE INSPECTED BY THE ENGINEER PRIOR TO THE POURING OF CONCRETE. GIVE 24 HRS NOTICE TO THE ENGINEER.
7. SETTING OUT DIMENSIONS SHOWN ON THE DRAWINGS SHALL BE VERIFIED BY THE BUILDER.
8. DURING CONSTRUCTION THE STRUCTURE SHALL BE MAINTAINED IN A STABLE CONDITION AND NO PART SHALL BE OVERSTRESSED.
9. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CURRENT EDITIONS OF THE AS CODES AND THE BY-LAWS AND ORDINANCES OF THE RELEVANT BUILDING STATE AUTHORITY.
10. THESE STRUCTURAL DETAILS ARE IS BASED ON INFORMATION SUPPLIED BY THE CLIENT. IF ANY ASPECT OF THE SITE PREPARATION OR PROPOSED CONSTRUCTION CHANGES FROM THAT ORIGINALLY ADVISED, THE ENGINEER MUST BE NOTIFIED SO THAT ANY NECESSARY AMENDMENTS CAN BE MADE.
11. DEVELOPMENT APPLICATION DECISION NOTICE – FOR WORK REQUIRING BUILDING APPROVAL, THE DEVELOPMENT APPLICATION DECISION NOTICE, ISSUED BY THE COUNCIL OR BUILDING CERTIFIER MUST BE FORWARDED TO UP PRIOR TO ARRANGING ANY INSPECTIONS WITH THIS OFFICE.

SITE CLASSIFICATION

1. THE SITE HAS BEEN THE SUBJECT OF A GEOTECHNICAL INVESTIGATION REQUIRING ADHERENCE TO PARTICULAR CONSTRUCTION PROCEDURES &/OR TECHNIQUES. THEREFORE THESE DOCUMENTS HAVE BEEN PREPARED USING THE RECOMMENDATIONS OF THE GEOTECHNICAL ENGINEER.

SITE CLASSIFICATION:	P/H1
SLAB CLASSIFICATION:	H1
CLASSIFIED BY:	STS GEOTECHNICS PTY LTD
REPORT No:	30060/1998 24/3670
DATED:	DECEMBER 16, 2024

2. THESE STRUCTURAL DETAILS HAVE HAS BEEN BASED UPON INFORMATION PROVIDED TO OUR OFFICE AND/OR GATHERED BY OUR STAFF.
3. THESE STRUCTURAL DETAILS HAVE HAS BEEN PREPARED IN ACCORDANCE WITH AS 2870 AND RELEVANT STATE LEGISLATION.
4. SHOULD SOIL CONDITIONS ENCOUNTERED ON SITE DIFFER SIGNIFICANTLY FROM THOSE INDICATED IN THE SOIL TEST NOTED ABOVE, THE ENGINEER MUST BE NOTIFIED BEFORE PROCEEDING AS THE SITE CLASSIFICATION MAY NEED REVISING AND MODIFICATIONS TO THE DESIGN MAY BE REQUIRED.
5. THE SITE INVESTIGATION MAY BE RENDERED IRRELEVANT IF THE LOCATION OF PROPOSED STRUCTURES VARY FROM THAT SPECIFIED AT THE TIME OF THESE STRUCTURAL DETAILS. THESE STRUCTURAL DETAILS RELATE RELATES TO THE CONDITIONS EXISTING ON THE LAND AT THE TIME OF THE SITE INVESTIGATION. THESE STRUCTURAL DETAILS ARE BASED UPON THE PROPOSED CUT / FILL INFORMATION PROVIDED BY THE CLIENT. ANY UNADVISED EXTENSIVE CUTTING OR FILLING MAY RENDER THESES STRUCTURAL DETAILS IRRELEVANT.
6. WHILE A REASONABLE EFFORT IS MADE TO ASSESS THE SITE'S SUITABILITY FOR THE PROPOSED CONSTRUCTION, THESE STRUCTURAL DETAILS DO NOT TAKE INTO ACCOUNT SLOPE STABILITY. IF REQUIRED BY THE COUNCIL, A SUITABLY QUALIFIED PERSON SHOULD BE ENGAGED TO UNDERTAKE A SLOPE STABILITY ASSESSMENT.

FOUNDATION, FOOTINGS & FILLING

1. STRIP TOPSOIL & OTHER ORGANIC MATTER TO A DEPTH OF 100mm & STOCKPILE.
2. FILL USED TO SUPPORT THE SLAB SHALL BE ROLLED FILL OR CONTROLLED FILL AS FOLLOWS:

(a). ROLLED FILL CONSISTS OF MATERIAL COMPACTED IN LAYERS BY REPEATED ROLLING WITH AN EXCAVATOR OR SIMILAR EQUIPMENT. THE DEPTH SHALL NOT EXCEED 600mm COMPACTED IN LAYERS NOT MORE THAN 300mm THICK FOR SAND OR 300mm COMPACTED IN LAYERS NOT MORE THAN 150mm FOR OTHER MATERIAL.

(b). CONTROLLED FILL SHALL BE PLACED, TESTED & CERTIFIED BY A QUALIFIED GEOTECHNICAL ENGINEER AS DEFINED IN AS3798. THIS IS DEEMED TO BE ADEQUATE TO SUPPORT THE FOOTING.

3. WHERE FILL CONSISTS OF REACTIVE CLAY, THE FILL SHALL BE PLACED IN A MOIST CONDITION.
4. ANY FILL SHALL CONTINUE PAST THE EDGE OF THE BUILDING BY AT LEAST 1m & SHALL BE RETAINED OR BATTERED BEYOND THIS POINT BY A SLOPE NOT STEEPER THAN 1:2.
5. EXCEPT FOR SITES WITH AGGRESSIVE SOILS, A BLINDING LAYER OF SAND IS NOT REQ'D. WHERE USED, THE BLINDING LAYER OF SAND SHALL COMPLY WITH ROLLED FILL REQUIREMENTS.
6. FOOTINGS SHALL BE PLACED CENTRALLY UNDER WALLS AND COLUMNS UNLESS OTHERWISE NOTED.
7. ALL WORKMANSHIP & MATERIALS SHALL BE IN ACCORDANCE WITH AS 2870 & NATIONAL CONSTRUCTION CODE (N.C.C.)
8. THE FOOTING DETAILS SHOWN ARE FOR THE SITE CLASSIFICATION STIPULATED. WHILST EVERY CARE HAS BEEN TAKEN TO VERIFY THAT THE INFORMATION SHOWN IS CORRECT, RESIDENTIAL ENGINEERING TAKE NO RESPONSIBILITY FOR VARIATIONS WHICH MAY OCCUR DUE TO VARIATIONS IN SITE CONDITIONS.
9. FILL USED IN THE CONSTRUCTION OF A SLAB EXCEPT WHERE THE SLAB IS SUSPENDED SHALL CONSIST OF A CONTROLLED FILL OR ROLLED FILL IN ACCORDANCE WITH AS 2870:
10. CONTROLLED FILL CONSISTS OF WELL GRADED SAND FILL UP TO 800mm DEEP, WELL COMPACTED IN NOT MORE THAN 300mm LAYERS BY VIBRATING PLATE OR VIBRATING ROLLER. NO SAND FILL UP TO 300mm DEEP, WELL COMPACTED IN NOT MORE THAN 150mm LAYERS BY A MECHANICAL ROLLER, CLAY FILL SHOULD BE MOIST DURING COMPACTION. THE DEPTHS OF FILL GIVEN ABOVE ARE DEPTHS MEASURED AFTER COMPACTION. FOR COMPACTED DEPTHS GREATER THAN THAT GIVEN ABOVE THE FILL SHALL BE SUBJECT TO CONTROL AND TESTING. IF TEST FAILS THEN PIERS ARE REQUIRED. CONTACT THIS OFFICE PRIOR TO FURTHER CONSTRUCTION.
11. TOP SOIL CONTAINING GRASS ROOTS OR OTHER ORGANIC MATERIAL SHALL BE REMOVED FROM THE AREA ON WHICH THE SLAB IS TO REST.
12. IF ANY FOOTING IS LOCATED SUCH THAT A LINE DRAWN AT 45 DEGREES (FOR CLAY AND 30 DEGREES FOR SAND) FROM ITS BASE INTERSECTS A PRIVATE SERVICE TRENCH, THEN PIERS ARE REQUIRED. SEE FOOTING & SLAB DETAILS FOR EXAMPLE.
13. FOOTING & SLAB PIERS ARE REQUIRED WHERE UNCONTROLLED FILL UNDER THE EDGE BEAM/SLAB IS PRESENT.
14. FOR SATISFACTORY RESULTS, CONCRETE MUST BE CURED FOR AT LEAST 7 DAYS. CURING MAY BE ACHIEVED BY KEEPING THE CONCRETE MOIST, BY APPLYING A CURING COMPOUND, OR BY COVERING THE CONCRETE WITH A MOISTURE BARRIER. WHERE A CURING COMPOUND IS USED, IT MUST COMPLY WITH AS3799 & BE APPLIED TO THE MANUFACTURERS SPECIFICATIONS. MANY BUILDERS FIND THAT THE MOST SATISFACTORY WAY TO CURE A SLAB IS TO COVER IT WITH SHEETS OF POLYETHYLENE AS SOON AS POSSIBLE AFTER FINISHING. IF A SLAB IS MOIST WHEN COVERED AND THE POLYETHYLENE IS HELD SECURELY ONTO THE CONCRETE, THIS SYSTEM PROVIDES SATISFACTORY CURING OF THE CONCRETE.

DRAINAGE DESIGN REQUIREMENTS

1. SURFACE DRAINAGE SHALL BE DESIGNED & CONSTRUCTED TO AVOID WATER PONDING AGAINST OR NEAR THE FOOTING. DURING CONSTRUCTION, WATER RUN-OFF SHALL BE COLLECTED & CHANNELED AWAY FROM THE BUILDING.
2. THE MINIMUM HEIGHT OF THE SLAB ABOVE LANDSCAPING, PAVING OR F.G.L. SHALL BE 150mm. WHERE ADJOINING PAVED AREAS SLOPE AWAY FROM THE BUILDING, THIS HEIGHT MAY BE REDUCED TO 50mm.
3. THE BASE OF THE SERVICE TRENCH SHALL BE SLOPED AWAY FROM THE BUILDING & BACKFILLED IN ACCORDANCE WITH AS2870.
4. ALL WORKMANSHIP AND MATERIAL SHALL BE IN ACCORDANCE WITH AS2870.
5. DRAINAGE SHALL BE CONSTRUCTED TO AVOID WATER PONDING AGAINST OR NEAR THE FOOTING. THE GROUND IN THE IMMEDIATE VICINITY OF THE PERIMETER FOOTING, INCLUDING THE GROUND UPHILL FROM THE SLAB ON CUT-AND-FILL SITES, SHALL BE GRADED TO FALL 50mm MINIMUM AWAY FROM THE FOOTING OVER A DISTANCE OF 1.0m. SURFACE OR SUBSURFACE DRAINS SHALL BE USED TO CHANNEL WATER AWAY AND CONNECT TO STORMWATER SYSTEM. ANY PAVING SHALL ALSO BE SUITABLY SLOPED.
6. PLUMBING TRENCHES SHALL BE SLOPED AWAY FROM THE HOUSE AND SHALL BE BACKFILLED WITH CLAY IN THE TOP 300mm WITHIN 1.5m OF THE HOUSE. THE CLAY USED FOR BACKFILLING SHALL BE COMPACTED. WHERE PIPES PASS UNDER THE FOOTING SYSTEM, THE TRENCH SHALL BE BACKFILLED WITH CLAY OR CONCRETE TO RESTRICT THE INGRESS OF WATER BENEATH THE FOOTING SYSTEM.
7. EXCAVATIONS NEAR THE EDGE OF THE FOOTING SYSTEM SHALL BE BACKFILLED IN SUCH A WAY AS TO PREVENT ACCESS OF WATER TO THE FOUNDATION. FOR EXAMPLE, EXCAVATIONS SHOULD BE BACKFILLED ABOVE OR ADJACENT THE FOOTING WITH MOIST CLAY, COMPACTED BY HAND-RODDING/TAMPING. POROUS MATERIAL SUCH AS SAND, GRAVEL OR BUILDING RUBBLE SHOULD NOT BE USED.
8. WATER RUN-OFF SHALL BE COLLECTED AND CHANNELED AWAY FROM THE HOUSE DURING CONSTRUCTION.
9. PENETRATIONS OF THE EDGE BEAMS AND FOOTING BEAMS ARE TO BE AVOIDED, BUT WHERE NECESSARY SHALL BE SLEEVED TO ALLOW FOR MOVEMENT.
10. CONNECTION OF STORMWATER DRAINS AND WASTE DRAINS SHALL INCLUDE FLEXIBLE CONNECTIONS.
11. ADDITIONAL PLUMBING REQUIREMENTS ARE NEEDED FOR MODERATELY, HEAVILY & EXTREMELY REACTIVE SITES IN ACCORDANCE WITH CLAUSE 6.6 (F) FROM AS 2870.
12. PLUMBING & DRAINAGE UNDER THE SLAB SHOULD BE AVOIDED WHERE PRACTICAL (REFER AS/NZS 3500 CLAUSE 4.10)
13. ALL PIPEWORK INCLUDING STORMWATER FITTINGS & ADAPTERS SHOULD BE PROTECTED FROM MECHANICAL DAMAGE.
14. PROVISIONS SHOULD BE MADE FOR THE CONNECTION OF OVERFLOW OR WATER DISCHARGE FROM FIXTURES SUCH AS HOT WATER SYSTEMS & AIR CONDITIONERS TO A DRAIN AS REQUIRED BY THE RELEVANT LOCAL AUTHORITY.

AGGRESSIVE SOILS

1. BUILDINGS WITH MASONRY OR CONCRETE IDENTIFIED TO BE EXPOSED TO SALINE OR ACID SULFATE SOILS SHALL BE PROTECTED IN ACCORDANCE WITH THE MANAGEMENT PLANS FROM GEOTECHNICAL & LOCAL AUTHORITIES. ANY PROTECTION REQUIREMENTS SHALL BE PROVIDED TO THIS OFFICE BY THE BUILDER BEFORE COMMENCING DETAILING.

CONCRETE PIERS

1. U.N.O. MINIMUM PIER DEPTH IS 600mm BELOW FOOTINGS & WHEREVER NOMINATED SHOULD BE SOCKETED 300mm MIN INTO STIFF CLAY.
2. U.N.O ADJACENT PIERS SHALL BE NO CLOSER THAN 800mm APART.
3. ALL PIER HOLES SHALL BE CLEANED & DEWATERED PRIOR TO THE PLACEMENT OF CONCRETE.
4. ALL PIER HOLES SHALL BE SEPARATE TO SLAB & FOOTINGS.
5. PIERS & FOOTINGS ARE REQUIRED TO HAVE A UNIFORM BEARING. RESIDENTIAL ENGINEERING OR COUNCIL SHALL INSPECT THE BEARING OF PIERS &/OR FOOTINGS PRIOR TO THE POURING OF CONCRETE.
6. IF ANY OF THE PIERS &/OR FOOTINGS ENCOUNTER ROCK OR SHALE, THEN ALL PIERS &/OR FOOTINGS SHALL BEAR ON ROCK OR SHALE. IF PARTIALLY PIERED TO ROCK OR SHALE THEN ARTICULATION JOINTS SHALL BE PROVIDED AT THE ROCK/NON-ROCK INTERFACE.

SAFE BEARING TABLE

STRATA	STIFF CLAY	ROCK & SHALE	NATURAL SAND
MIN BEARING CAPACITY kPa	250	600	150

SCREW PIERS

1. REFER TO PLAN FOR STEEL SCREW PIER LOCATION, SWL CAPACITIES AND MINIMUM DEPTH INDICATED ONLY. SCREW PIER DESIGN IS NOT PART OF OUR DESIGN SCOPE AND SHALL BE THE RESPONSIBILITY OF PILING CONTRACTORS.
2. SCREW PIERS ARE TO BE DESIGNED IN ACCORDANCE WITH AS2159-2009.
3. U.N.O. ADJACENT SCREW PIER SHALL BE NO CLOSER THAN 800mm APART.
4. SCREW PIER CERTIFICATE AND DESIGN DETAILS TO BE PROVIDED TO CLIENT AND RESIDENTIAL ENGINEERING PRIOR TO INSTALLATION FOR REFERENCE.
5. SCREW PIERS TO BE INSTALLED IN ACCORDANCE WITH AS2159-2009 BY SUITABLY QUALIFIED CONTRACTORS.
6. CONSISTENCY OF SCREW PIER INSTALLATION BETWEEN SCREW PIERS IS TO BE MAINTAINED TO CONFIRM CONSISTENT FOUNDING MATERIAL. IF SCREW PIER READINGS ARE INCONSISTENT, SCREW PIERS ARE TO BE INSTALLED TO A GREATER DEPTH TO ARCHIVE CONSIST READINGS.
7. IF THIS CANT BE ACHIEVED OR SCREW PIERS BECOME EXCESSIVELY DEEP, RESIDENTIAL ENGINEERING IS TO BE CONTACTED FOR ADVICE.
8. ALL SCREW PIERS ARE TO BE STRENGTH GRADE 350.
9. RECYCLED STEEL TUBE NOT TO BE USED.
10. SCREW PIERS SHALL BE INSTALLED & CERTIFIED BY A SUITABLY QUALIFIED LICENSED CONTRACTOR.

(a). ALL SCREW PIERS SHALL BE FOUNDED BELOW 1.25 x Hs TO COMPLY WITH CLAUSE G6.3 OF AS2870-2011.

(b). SCREW PIERS ARE TO BE INSTALLED IN ACCORDANCE WITH AS2870 AND AS2159

11. U.N.O. MINIMUM CAPACITY SHALL BE 70kN SWL

EXCAVATIONS

1. TEMPORARY EXCAVATIONS IN THE AREA OF THE FOOTING SHALL BE CARRIED OUT ONLY WHERE ADEQUATE SUPPORT FOR THE FOOTING SYSTEM IS MAINTAINED SUCH AS PIERING BENEATH THE EXPECTED EXCAVATION LEVEL OR UNDERPINNING.
2. PERMANENT EXCAVATIONS OF ANY VERTICAL OR NEAR VERTICAL STRUCTURE WITHIN 2m OF THE BUILDING & DEEPER THAN 0.6m IN MATERIAL OTHER THAN ROCK SHALL BE ADEQUATELY RETAINED OR BATTERED.
3. EXCAVATIONS SHALL NOT EXTEND BELOW A LINE DRAWN AT 30° FOR SAND & 45° FOR CLAY TO THE HORIZONTAL FROM THE BOTTOM EDGE OF THE FOOTING/PIER WITHOUT PRIOR CONSENT.

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APPROVED BY:
GERVASE PURICH
FIEAust, C.P.Eng., NER, BPB, RPEQ

CLIENT REF: 652354
DATE: 11/05/2025
DRAWN: LTPH
SCALE:

CLIENT: MOJO HOMES

FOR: N.S.W EXTENSIONS PTY LTD & EDWARD J FITZPATRICK
SITE ADDRESS: LOT 113 (22) PYRAMID AVENUE, PADSTOW

DRAWN	DATE	AMENDMENT	REV

JOB No: ME1344
ISSUE: -
SHEET No: 02 of 14

5/13/2025 9:22:30 AM, linh.t.pham

A3

DAMP PROOFING MEMBRANE

1. A 0.2mm MIN POLYETHYLENE DAMP PROOFING HIGH IMPACT RESISTANT MEMBRANE SHALL BE PLACED BENEATH THE SLAB SO THAT THE BOTTOM SURFACE IS ENTIRELY UNDERLAID & TERMINATES AT GROUND LEVEL.
2. THE MEMBRANE SHALL BE BRANDED CONTINUOUSLY "AS2870 CONCRETE UNDERLAY, 0.2mm HIGH IMPACT RESISTANT" TOGETHER WITH MANUFACTURER OR DISTRIBUTORS NAME, TRADEMARK OR CODE.
3. LAPPING SHALL BE 200mm AT JOINTS & TAPED OR SEALED AT PLUMBING PENETRATIONS WITH CONTINUOUS CLOSE FITTING SLEAVE OR MADE CONTINUOUS WITH THE VAPOUR BARRIER BY TAPING & MADE WATERPROOF.

CONCRETE, REINFORCEMENT & FIXING

1. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH AS 3600 & AS 2870. U.N.O
2. CONCRETE QUALITY FOR CEMENT TYPE A & EXPOSURE CLASSIFICATION A1 SHALL BE AS TABULATED AND SHALL BE VERIFIED BY TESTS (REFER TABLE BELOW). U.N.O, SEE SLAB PLAN FOR A2, B & C CATEGORIES.

ELEMENT	SLUMP	AGG	CONCRETE GRADE	COVER U.N.O. (MIN.)
SLABS ON GROUND	100mm	20mm	N20 U.N.O.	20 TOP
				30 BTM. & SIDES
				40 TOP (EXTERNAL)
FOOTINGS & PIERS	100mm	20mm	N20 U.N.O.	50 TYPICAL
SUSPENDED SLAB	80mm	20mm	N32 U.N.O.	30 TOP & SIDES
				20 BTM.
BEAMS	80mm	20mm	N32 U.N.O.	45 TYPICAL
STAIRS	80mm	20mm	N32 U.N.O.	45 TOP
				35 BTM.
WALLS	80mm	20mm	N32 U.N.O.	30 SIDES (INTERNAL)
				40 SIDES (EXTERNAL)
COLUMNS	80mm	20mm	N32 U.N.O.	45 TYPICAL

3. MINIMUM CONCRETE COVER AS FOLLOWS:
   40mm TO UNPROTECTED GROUND.
   30mm TO A MEMBRANE IN CONTACT WITH THE GROUND.
   40mm TO A EXTERNAL SURFACE.
   20mm TO A INTERNAL SURFACE.
4. SLAB FABRIC SHALL BE SUPPLIED IN FLAT SHEETS & BE LAPPED ONE FULL SQUARE PLUS 25mm AT SPLICES & PLACED ON BAR CHAIRS AT 1m CTS EW.
5. REINFORCING BARS SHALL BE TIED BENEATH THE SLAB FABRIC IF USED OR OTHERWISE PLACED ON BAR CHAIRS.
6. REINFORCEMENT & VOID FORMERS SHALL BE FIXED INTO POSITION PRIOR TO POURING CONCRETE BY MEANS OF PROPRIETARY SPACERS, BAR CHAIRS & LIGATURES TO ACHIEVE THE REQUIRED REINFORCEMENT POSITION & COVER.
7. ALL FOOTING TRENCHES & BEAMS SHALL BE CLEANED & DEWATERED PRIOR TO THE PLACEMENT OF CONCRETE.
8. CONCRETE IN TRENCHES & BEAMS SHALL BE MECHANICALLY VIBRATED.
9. SAMPLE AND TEST IN ACCORDANCE WITH AS 3600.
10. ALL CONCRETE CONSTRUCTION TO BE COMPACTED WITH A MECHANICAL VIBRATOR.
11. THOROUGHLY SCABBLE CONCRETE ON WHICH NEW CONCRETE IS TO BE POURED.
12. ALL CONCRETE SHALL BE PLACED AND CURED IN ACCORDANCE WITH AS3600. WHERE CURING COMPOUNDS ARE USED, IT MUST COMPLY WITH AS3799 & BE APPLIED IN ACCORDANCE WITH THE MANUFACTURERS SPECIFICATIONS & AS FOLLOWS:

(a). ONTO SLAB WITHIN 2HRS OF FINISHING OPERATION.
(b). ONTO WALLS AND COLUMNS IMMEDIATELY AFTER REMOVAL OF FORMWORK.

13. SIZES OF CONCRETE ELEMENTS DO NOT INCLUDE THICKNESS OF APPLIED FINISHES.
14. CONSTRUCTION JOINTS WHERE NOT SHOWN SHALL BE TO THE APPROVAL OF THE ENGINEER.
15. BEAM DEPTHS ARE WRITTEN FIRST AND INCLUDE SLAB THICKNESS, IF ANY.
16. HORIZONTAL FORMWORK SHALL BE STRIPPED WHEN APPROVED BY THE ENGINEER.
17. U.N.O NO ALLOWANCE HAS BEEN MADE FOR STACKED MATERIALS OR MACHINERY ON THE CONCRETE STRUCTURE.
18. NO HOLES OR CHASES OTHER THAN THOSE SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE MADE IN CONCRETE ELEMENTS WITHOUT THE PRIOR APPROVAL OF THE ENGINEER.
19. REINFORCEMENT IS REPRESENTED DIAGRAMMATICALLY, IT IS NOT NECESSARILY SHOWN IN TRUE PROJECTION.
20. SPLICES IN REINFORCEMENT MADE IN POSITIONS OTHER THAN SHOWN SHALL BE TO THE APPROVAL OF THE ENGINEER. WHERE THE LAP LENGTH IS NOT SHOWN IT SHALL BE SUFFICIENT TO DEVELOP THE FULL STRENGTH OF THE REINFORCEMENT.
21. WELDING OF REINFORCEMENT SHALL NOT BE PERMITTED UNLESS SHOWN ON THE STRUCTURAL DRAWINGS.
22. PIPES OR CONDUITS SHALL NOT BE PLACED WITHIN THE CONCRETE COVER TO REINFORCEMENT WITHOUT THE APPROVAL OF THE ENGINEER.
23. ALL REINFORCING BARS SHALL COMPLY WITH AS 4671. ALL FABRIC SHALL COMPLY WITH AS 4671 AND SHALL BE SUPPLIED IN FLAT SHEETS.
24. REINFORCEMENT SYMBOLS:
    N – DENOTES GRADE D500 HIGH STRENGTH DEFORMED BARS TO AS4671.
    R – DENOTES GRADE R250 HOT ROLLED PLAIN BARS TO AS 4671.
    SL – DENOTES HARD–DRAWN WIRE SQUARE REINFORCING FABRIC TO AS4671.
    RL – DENOTES HARD–DRAWN WIRE RECTANGULAR REINFORCING FABRIC TO AS4671.
    L – DENOTES HARD–DRAWN WIRE TRENCH MESH TO AS 4671.
    THE NUMBER IMMEDIATELY FOLLOWING THESE SYMBOLS IS THE BAR DIAMETER IN MILLIMETERS.
25. FABRIC/MESH REINFORCEMENT TO BE LAPPED ONE MESH PLUS 25mm. LAPS IN POSITIONS OF MAXIMUM MOMENT ARE NOT PERMITTED.
26. ALL REINFORCEMENT SHALL BE FIRMLY SUPPORTED ON INSULATED STEEL, PLASTIC OR CONCRETE CHAIRS GENERALLY AT NOT GREATER THAN 800 CENTERS BOTH WAYS. RODS SHALL BE TIED AT ALTERNATE INTERSECTIONS.
27. REINFORCING BARS AT 'T' & 'L' INTERSECTIONS SHALL CONTINUE ACROSS THE FULL WIDTH OF THE INTERSECTIONS.
28. ALL TENSILE REINFORCEMENT TO BE LAPPED AS SHOWN IN TABLE BELOW:

REINFORCEMENT BAR	N12	N16	N20	N24
LAP LENGTH	500	700	800	1000

SHRINKAGE CRACKING CONTROL

29. AT RE–ENTRANT CORNERS, ONE STRIP OF 3–L11 T.M. OR 3–N12 BARS 2m LONG SHALL BE PLACED ACROSS THE DIRECTION OF POTENTIAL CRACKING.
30. WHERE BRITTLE FLOOR COVERINGS ARE TO BE USED OVER AN AREA GREATER THAN 16m² ONE OF THE FOLLOWING APPLIES: (a). SLAB REINFORCEMENT IN PART OF THE SLAB WHICH BRITTLE FINISHES ARE APPLIED SHALL NOT BE LESS THAN SL92 OR EQUIVALENT. (b). THE BEDDING SYSTEM FOR BRITTLE COVERINGS SHALL BE SELECTED ON THE BASIS OF THE EXPECTED SLAB MOVEMENT. (c). THE PLACEMENT OF FLOOR COVERINGS SHALL BE DELAYED BY A MINIMUM PERIOD OF 3 MONTHS.
31. WATER SHALL NOT BE ADDED TO THE CONCRETE ON SITE SO AS TO INCREASE THE SLUMP ABOVE THAT SPECIFIED.
32. CURING THE CONCRETE SHALL START IMMEDIATELY AFTER FINISHING BY CONTINUALLY WETTING FOR 7 DAYS MIN. PLASTIC OR WAX LIQUID SPRAYS MAY BE USED IN ACCORDANCE WITH THE MANUFACTURERS SPECIFICATIONS. EXTRA PRECAUTIONS SUCH AS THE METHOD OF EVAPORATIVE RETARDATION (THE USE OF ALPHATIC ALCOHOLS) IS RECOMMENDED DURING HOT WEATHER POURS TO HELP AVOID THERMAL RELATED CRACKING.

SUB–TERRANEAN TERMITE PROTECTION

1. WHERE TERMITE PROTECTION IS REQUIRED, INSTALL IN ACCORDANCE WITH AS3660. BUILDER SHALL CONFIRM WITH OWNER THE PREFERRED METHOD OF TERMITE MANAGEMENT. OWNER IS RESPONSIBLE FOR ONGOING INSPECTION OF STRUCTURAL TIMBER ELEMENTS AND ENSURING THAT TERMITE MANAGEMENT SYSTEMS ARE NOT BREACHED.
2. THIS DESIGN IS BASED UPON THE NORMAL FOOTING PERFORMANCE CRITERIA PROVIDED IN TABLE 2.2 OF AS2870–2011 WITH DAMAGE CATEGORIES DETAILED IN APPENDIX C. IF THESE PERFORMANCE CRITERIA IS UNSUITABLE FOR THIS DWELLING PLEASE CONSULT THIS OFFICE FOR ADDITIONAL ENGINEERING ADVISE AND DESIGN SERVICES.
3. THE OWNER'S ATTENTION IS DRAWN TO APPENDIX B 'PERFORMANCE CRITERIA AND FOUNDATION MAINTENANCE' AND APPENDIX C 'CLASSIFICATION OF DAMAGE DUE TO FOUNDATION MOVEMENTS' OF AS2870–2011.
4. WE ALSO DIRECT THE OWNER TO THE CSIRO PUBLICATION BTF 18 'FOUNDATION MAINTENANCE AND FOOTING PERFORMANCE: A HOMEOWNER'S GUIDE'. COPIES OF THIS PUBLICATION ARE AVAILABLE FROM CSIRO PUBLISHING ON PH: 1300–788–000 OR AT https://www.publish.csiro.au/book/7942.htm.
   THESE STRUCTURAL DETAILS MAY BE RENDERED INVALID IF THE PROPERTY IS NOT MAINTAINED AS RECOMMENDED IN THIS PUBLICATION.
5. THE LONG TERM PERFORMANCE OF DWELLING FOOTINGS IS DEPENDANT ON FACTORS SUCH AS SITE DRAINAGE, VEGETATION AND WATERING OF AREAS ADJACENT TO THE DWELLING.
6. WATERING OF LAWNS AND GARDENS SHOULD BE CONSISTENT. OVER WATERING CAN DAMAGE FOOTINGS. EQUALLY FOOTINGS MAY BE DAMAGED BY PROLONGED PERIODS OF NEGLECT AFTER YEARS OF CAREFUL WATERING. LEAKING TAPS AND PIPES AND BLOCKED DRAINS SHOULD BE REPAIRED PROMPTLY. PROLONGED NEGLECT CAN LEAD TO DAMAGED FOOTINGS.
7. ALL WORKS SHALL BE IN ACCORDANCE WITH AS3660.
8. ANY FUTURE CRACKING OCCURRING IN THE SLAB/FOOTING SYSTEM SHALL BE ASSESSED BY A QUALIFIED PEST EXPERT & WHERE DIRECTED BE SEALED BY AN EPOXY INJECTION.
9. INSPECTIONS OF THE RESIDENCE & IMMEDIATE SURROUNDS SHALL BE CARRIED OUT BY A QUALIFIED PEST EXPERT ON AN ANNUAL BASIS BY THE HOME OWNER.

TREES

1. THE RECOMMENDED DISTANCE THAT A NEW TREE SHOULD BE LOCATED FROM A DWELLING WOULD BE EQUAL OR GREATER THAN 75% OF THE MATURE HEIGHT FOR CLASS M SITES, 100% OF THE MATURE HEIGHT FOR CLASS H1 & H2 SITES, 150% OF THE MATURE HEIGHT FOR CLASS E SITES.

SUMMARY OF AS2870–2011 – TABLE 2.2

CLASSIFICATION OF NORMAL SITE FOOTING PERFORMANCE FOR BRICK VENEER & FULL MASONRY CONSTRUCTION

SITE CLASS	EXPECTED DAMAGE CATEGORIES	DAMAGE CATEGORIES (C1 & C2 OF APPENDIX C)
A & S	CATEGORY 0 & 1	WALL CRACKS < 1mm SLAB CRACKS < 1mm LEVEL CHANGES < 8mm OVER 3m
M	OFTEN CATEGORY 1 & RARELY 2	OFTEN WALL CRACKS <1 mm. & RARELY 1 < 5mm SLAB CRACKS 1 < 2mm LEVEL CHANGES 10 < 15mm OVER 3m
H1/H2	OFTEN CATEGORY 1 & 2 RARELY 3	OFTEN WALL CRACKS < 5 mm & RARELY 5 < 15mm SLAB CRACKS 2 < 4mm LEVEL CHANGES OF 15 < 25mm OVER 3m
E	OFTEN CATEGORY 3 OR MORE	OFTEN WALLS CRACKS 15 < 25mm SLAB CRACKS 2 < 4mm OR MORE LEVEL CHANGES > 25mm OVER 3m

ARTICULATED MASONRY NOTES

1. MASONRY, MORTAR & BUILT IN MASONRY COMPONENTS SHALL COMPLY WITH AS3700 & AS4773.
2. THIS DESIGN ASSUMES THAT MASONRY ARTICULATION JOINTS WILL BE INSTALLED UNLESS NOTED OTHERWISE ON FOOTING & SLAB PLAN. ANY MASONRY ARTICULATION JOINTS SHALL BE POSITIONED IN ACCORDANCE WITH TECHNICAL NOTE 61 PRODUCED BY CEMENT CONCRETE & AGGREGATES AUSTRALIA AND AS 3700 SECTION 12.16.4. REFER TO TABLE BELOW FOR MAXIMUM SPACING AND MASONRY ARTICULATION PLAN (IF PROVIDED) FOR SPECIFIC LOCATIONS AND DETAILS FOR RENOVATIONS OR EXTENSIONS TO EXISTING STRUCTURES.
3. MASONRY ARTICULATION JOINTS SHALL BE POSITIONED WHERE EVER NEW BRICKWORK MEETS OLD BRICKWORK.
4. WHERE MASONRY ARTICULATION IS SHOWN BESIDE OPENINGS WITH BRICKWORK ABOVE THE OPENING, CARE SHOULD BE TAKEN TO PROVIDE A SLIP JOINT AROUND THE END OF THE LINTEL.
5. WHERE MASONRY ARTICULATION IS SHOWN BESIDE OPENINGS, THE JOINT IS TO CONTINUE BETWEEN THE WINDOW/DOOR FRAME AND THE BRICKWORK TO THE FULL HEIGHT OF THE WALL. AT THESE LOCATIONS, THE FRAMES ARE TO BE FIXED WITH FASTENERS THAT WILL ALLOW MOVEMENT OF THE JOINT.

MAXIMUM SPACING OR ARTICULATION JOINTS TO AS4773 (UNREINFORCED MASONRY) U.N.O

SITE CLASS	CONSTRUCTION & SURFACE FINISH	JOINT SPACING (m) FOR WALL HEIGHT ≤ 4m HIGH	4m–8.5m HIGH
A & S	NOT REQUIRED	–	–
M, M–D	EXTERNAL FACE FINISH	6.0	4.2
	EXTERNAL RENDERED/PAINTED	5.5	3.9
	INTERNAL FACE FINISH	6.0	4.2
	INTERNAL RENDERED/PAINTED	5.5	3.9
H1/H2, H1–D, H2–D	EXTERNAL FACE FINISH	5.0–5.5	3.5–3.9
	EXTERNAL RENDERED/PAINTED	4.5–5.5	3.2–3.5
	INTERNAL FACE FINISH	5.0–5.5	3.5–3.9
	INTERNAL RENDERED/PAINTED	4.5–5.0	3.2–3.5
P,E,E–D	REFER NOTE 4/LOCATIONS	–	–

NOTES:
1. AS DEFINED IN AS 2870
2. USE MAXIMUM SPACING FOR EXPANSION OR CONTRACTION JOINTS
3. FOR H–D SITES USE THE SHORTER SPACING
4. FOR LOCATION OF JOINTS ON CLASS E, E–D & P SITES, REFER TO ENGINEER FOR ADVICE

CLAY MASONRY NOTES:

1. DESIGN CONFORMS TO AS 3700 – MASONRY STRUCTURES. CONSTRUCT IN ACCORDANCE WITH THE PROVISIONS OF AS 3700. STRENGTH, f'uc = 15 MPa SALT RESISTANCE GRADE = TO AS 3700.
2. MORTAR TYPE = TO AS 3700 NOMINAL THICKNESS = 10mm.
3. CORE–FILLING GROUT TO BRICK PIERS = 20 MPa.
4. WALL TIES TYPE = MEDIUM DUTY
   DURABILITY CLASSIFICATION = TO AS 3700
   FIXING = MIN. EMBEDMENT IN MORTAR 50mm. FACE FIXED VENEER TIES TO BE SCREW FIXED.
5. JOINTS TO BE TOOLED. CONTROL JOINTS TO BE PROVIDED AS PER FOUNDATION DESIGN ENGINEERING DETAILS.

ROOF

1. THE SLAB HAS BEEN DESIGNED FOR ROOF LOADING TO BE SUPPORTED BY PROPRIETARY TRUSSES ONTO EXTERNAL WALLS ONLY.
2. PITCHED ROOF REQUIREMENTS SHALL BE PROVIDED BY THE BUILDER TO THIS OFFICE BEFORE COMMENCING DETAILING.
3. THE BASIS OF DESIGN SHALL BE LOADING CODE AS 1170.1; AS 1170.2 & TIMBER STRUCTURES CODE AS 1720.1.
4. DESIGN THE ROOF TRUSSES AS PER THE WIND CLASSIFICATION AS SPECIFIED.
5. IN ADDITION TO THE NOMINATED PERMANENT BRACING, PROVIDE ANY ADDITIONAL PERMANENT BRACING REQUIRED FOR STRUCTURAL SUFFICIENCY OF THE TRUSS SYSTEM.
6. PROVIDE ANY TEMPORARY BRACING REQUIRED TO MAINTAIN THE STABILITY OF THE TRUSSES AT ALL STAGES OF ERECTION.
7. MAKE ALLOWANCES FOR SIZE AND LOCATION OF MECHANICAL SERVICES/AIRCONDITIONING DUCTWORK IF APPLICABLE.

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CLIENT REF: 652354
DATE: 11/05/2025
DRAWN: LTPH
SCALE:

CLIENT: MOJO HOMES

FOR: N.S.W EXTENSIONS PTY LTD & EDWARD J FITZPATRICK
SITE ADDRESS: LOT 113 (22) PYRAMID AVENUE, PADSTOW

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A3

CONCRETE BLOCKWORK (EXCLUDES RETAINING WALLS):

1. REINFORCED CONCRETE (R.C.) BLOCKWORK TO CONFORM TO AS 3700 MASONRY STRUCTURES. BLOCKWORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE PROVISIONS OF AS3700. UNCONFINED CHARACTERISTIC COMPRESSIVE STRENGTH OF CONCRETE MASONRY UNIT, f'uc = 15 MPa.
2. MORTAR TYPE = M3.
3. DESIGN CHARACTERISTIC COMPRESSIVE STRENGTH OF GROUT, f'cg = 20 MPa.
4. YIELD STRENGTH OF REINFORCEMENT – fsy = 500 MPa.
5. CLEANOUT ALL CORES AFTER EACH DAYS LAYING. JOINTS TO BE TOOLED. CONTROL JOINTS TO BE PROVIDED AT 6.0 TO 8.0m CENTRES AND AS PER BLOCKWALL PLANS WHERE APPLICABLE.

STRUCTURAL STEELWORK NOTES:

1. DESIGN CONFORMS TO THE FOLLOWING STANDARDS:
   AS 4100 – STEEL STRUCTURES.
   AS/NZS 4600 – COLD–FORMED STEEL STRUCTURES.
   FABRICATION AND ERECTION SHALL BE IN ACCORDANCE WITH THE PROVISIONS OF AS 4100.
2. ALL STEELWORK SHALL BE TEMPORARILY BUT SECURELY BRACED UNTIL ALL FINAL BRACING, CLADDING AND STABILISING BRICK OR BLOCKWORK HAVE BEEN COMPLETED, TO MAINTAIN THE STRUCTURE IN A SAFE AND STABLE CONDITION DURING CONSTRUCTION.
3. BASE PLATES SHALL BE GROUTED BEFORE THE MEMBER IS SUBSTANTIALLY LOADED. GROUT SHALL HAVE A MINIMUM STRENGTH f'c OF 25 MPa AND SHALL BE DRY PACK MORTAR RAMMED IN, OR AN APPROVED NON–SHRINK GROUT.
4. U.N.O. ALL MATERIAL SHALL BE:
   GRADE 250 HOT–ROLLED PLATES COMPLYING WITH AS/NZS 3678.
   GRADE 300 UB, UC, PFC, EA, UA, FLATS & ROUNDS COMPLYING WITH AS/NZS 3679.1.
   GRADE 300 WB, WC COMPLYING WITH AS/NZS 3679.2.
   GRADE C350 CHS COMPLYING WITH AS 1163.
   GRADE C450 RHS, SHS COMPLYING WITH AS 1163.
5. WELDING SHALL BE IN ACCORDANCE WITH THE PROVISIONS OF AS/NZS 1554.1. WELDING CONSUMABLES SHALL BE GRADE E48XX OR W50X U.N.O. ALL WELDS SHALL BE 6mm CFW SP CATEGORY U.N.O. ALL BUTT WELDS SHALL BE SP CATEGORY U.N.O. INSPECTION IS REQUIRED IN ACCORDANCE WITH AS/NZS 1554.1. ALL GP / SP WELDS SHALL BE 100% VISUALLY SCANNED. SP FILLET WELDS SHALL HAVE 10% VISUAL EXAMINATION U.N.O SP BUTT WELDS SHALL HAVE 50% VISUAL EXAMINATION U.N.O. ALL GP WELDS SHALL HAVE 10% VISUAL EXAMINATION.
6. BOLTS SHALL BE M16 DIAMETER U.N.O.
   BOLT CATEGORY IS TO BE 8.8/S COMPLYING WITH AS 4100, AS/NZS 1252 & AS/NZS 4291.1. U.N.O. PROVIDE DESIGN ENGINEER WITH EVIDENCE OF COMPLIANCE WITH THESE CODES.
   HOLDING DOWN BOLTS SHALL BE CATEGORY 4.6/S U.N.O.
   THREADS MAY BE INCLUDED IN THE SHEAR PLANES U.N.O.
   ALL BOLTS, NUTS AND WASHERS SHALL BE HOT DIP GALVANISED.
   BOLTS DENOTED 4.6/S ARE COMMERCIAL BOLTS OF STRENGTH GRADE 4.6 TO AS 1111 SNUG TIGHT. BOLTS DENOTED 8.8/S, 8.8/TB AND 8.8/TF ARE HIGH STRENGTH STRUCTURAL BOLTS OF STRENGTH GRADE 8.8 TO AS/NZS 1252 & AS/NZS 4291.1.
   8.8/S DENOTES BOLTS SNUG TIGHT.
   8.8/TB DENOTES BOLTS FULLY TENSIONED IN BEARING, TO AS 4100.
   8.8/TF DENOTES BOLTS FULLY TENSIONED IN FRICTION, TO AS 4100 – MATING SURFACES MUST NOT BE PAINTED.
7. ALL DETAILS, GAUGE LINES ETC. (WHERE NOT SPECIFICALLY SHOWN) ARE TO BE IN ACCORDANCE WITH AISC PUBLICATIONS "DESIGN CAPACITY TABLES FOR STRUCTURAL STEEL" AND "STANDARDISED STRUCTURAL CONNECTIONS". PLATES ARE TO BE 10mm THICK, CUT FROM STANDARD FLAT BARS U.N.O. ENDS OF HOLLOW SECTIONS SHALL BE SEALED WITH NOMINAL THICKNESS PLATES AND CONTINUOUSLY WELDED TO SEAL ENDS, UNO.
8. THE STEEL FABRICATOR SHALL PROVIDE THE ENGINEER WITH 1 COPY OF WORKSHOP DRAWINGS FOR INSPECTION AT LEAST 7 DAYS BEFORE FABRICATION IS STARTED. STEELWORK IS NOT TO BE FABRICATED UNTIL WORKSHOP DRAWINGS ARE APPROVED.
9. ALL DIMENSIONS ARE MILLIMETERS U.N.O.
10. CORROSION PROTECTION:
    INTERNAL STEELWORK (ENCLOSED)
    a) THE STEELWORK SHALL BE CLEANED TO AS 1627 CLASS 1 AND GIVEN ONE COAT OF ALKYD PRIMER TO GIVE A DRY FILM THICKNESS OF 50 MICRONS BEFORE DISPATCH TO SITE, UNLESS THE STEEL IS TO BE ENCASED IN CONCRETE OR IS DETAILED OTHERWISE. APPLY ONE FINISH COAT OF ALL WEATHER GLOSS ACRYLIC PAINT.
    EXTERNAL STEELWORK (UNENCLOSED)
    a) ALL STRUCTURAL STEELWORK WHICH IS EXPOSED OR IN CONTACT WITH EXPOSED BRICKWORK, AND ALL LINTELS, SHALL BE HOT DIP GALVANISED AFTER FABRICATION. STEELWORK GALVANISED AFTER FABRICATION SHALL COMPLY WITH AS/NZS 4680.
    b) REPAIR OF GALVANISED COATING AFTER WELDING PREPARATION – REMOVE ALL WELDING SCALE, SLAG & SHARP EDGES. POWER TOOL CLEAN TO AS 1627.2, CLASS 3, USING ABRASIVE WHEEL ON A POLISHER AT 3500RPM. DEGREASE & REMOVE ALL SURFACE CONTAMINANTS TO AS 1627.1.
11. ALL WORKMANSHIP & MATERIALS SHALL BE IN ACCORDANCE WITH AS4100.
12. STEELWORK DESIGNED IN ACCORDANCE WITH AS4100 "STEEL STRUCTURES CODE" & AS1170 "DEAD & LIVE LOADS & WIND LOADS". STRUCTURAL STEEL SHALL BE GRADE (BHP 300 PLUS).
13. SURFACE PREPARATION & FINISH SHALL COMPLY WITH AS/NZS2312. THE BUILDER MUST CLARIFY HIS CONTRACTURAL OBLIGATIONS IN THIS REGARD.
14. THE INSTALLATION OF GALINTELS & 'T' BARS SHALL BE STRICTLY IN ACCORDANCE WITH THE MANUFACTURERS SPECIFICATIONS.
15. THE STABILITY OF THE STRUCTURE DURING CONSTRUCTION IS THE BUILDERS RESPONSIBILITY. ADEQUATE TEMPORARY BRACING SHALL BE PROVIDED AS IS NECESSARY TO STABALISE THE STRUCTURE DURING CONSTRUCTION.
16. WELDS:
    (a). ALL WELDS SHALL BE 6mm CONTINUOUS FILLET WELD U.N.O.
    (b). BUTT WELDS WHERE INDICATED IN THE DOCUMENTS SHALL BE COMPLETE PENETRATION BUTT WELDS AS DEFINED IN AS1554.
    (c). ALL SHOP WELDS SHALL BE FULLY WELDED U.N.O.
    (d). USE E41XX ELECTRODES FOR ALL WELDING U.N.O.
    (e). SITE WELDING OF HOT DIP GALVANISED STEEL IS PERMISSIBLE IF UPON COMPLETION THE WELDS ARE TREATED WITH THE APPROPRIATE COATING AS PER AS/NZS2312.
17. BOLTS:
    (a). 4.6/S – COMMERCIAL BOLT OF GRADE 4.6 TO AS1111 SNUG TIGHTENED.
    (b). 8.8/S – HIGH STRENGTH STRUCTURAL BOLTS OF GRADE 8.8 TO AS1252 SNUG TIGHTENED
    (c). BOLTS SHALL BE PROVIDED WITH THREADS CLEAR OF SHEAR PLANE.
    (d). ALL BOLTS & WASHERS SHALL BE GALVANISED.
    (e). NO CONNECTION SHALL HAVE LESS THAN 2 BOLTS.
18. BEAMS SUPPORTED ON BRICKWORK (BEARING NOTED ON PLAN) SHALL HAVE INCOMPRESSIBLE PACKING AS REQ'D UNDER THE ENDS OF THE BEAM TO ENSURE EVEN BEARING ON THE BRICKWORK.
19. FABRICATION:
    (a). THE BUILDER SHALL PROVIDE ALL CLEATS AND DRILL HOLES NECESSARY FOR FIXING STEEL TO STEEL & TIMBER TO STEEL.
    (b). ALL GUSSET PLATES SHALL BE 10mm THICK U.N.O.
20. COLUMNS:
    (a). TIMBER FRAMED BUILDINGS: SHALL BE LATERALLY RESTRAINED BY THE BUILDING FRAME AT EACH SUPPORT LOCATION THROUGH POSITIVE SCREW FIXING OF WALL STUDS TO THE COLUMNS & EITHER JOISTS OR NOGGINS TO THE BEAM.
    (b). FULL MASONRY BUILDINGS: SHALL BE LATERALLY RESTRAINED BY BRICKWORK AT EACH SUPPORT LOCATION THROUGH POSITIVE FIXING OF WALL TIES.
    (c). WHERE A BEAM DIRECTLY SUPPORTS A CONCRETE SLAB NO ADDITIONAL RESTRAINT IS REQ'D.
21. REFER TO THE MANUFACTURERS SPECIFICATIONS FOR INSTALLATION DETAILS OF JOISTS, TIMBER BEAMS & TRUSSES WHERE APPLICABLE.
22. SOLID TIMBER JOISTS SHALL NOT BE NOTCHED IN EXCESS OF THE RECOMMENDATIONS OF AS1684. WHERE NECESSARY PROVIDE A TIMBER PLATE OVER THE STEEL BEAM & PROVIDE TOP MOUNT JOIST HANGERS. ALTERNATIVELY USE TIMBER BLOCKING BETWEEN THE FLANGES OF THE STEEL BEAM SUPPORTING THE JOISTS & USE FACE MOUNTED HANGERS.

TIMBER NOTES

1. ALL TIMBER FRAMED CONSTRUCTION AND BRACING TO BE CARRIED OUT IN ACCORDANCE WITH AS 1684.2 AND SHALL ALSO COMPLY WITH AS 1720.1
2. ALL TIMBER FRAMING TO BE POSITIVELY CONNECTED TO STEEL BEAMS USING M10 BOLTS AT 900MM NOMINAL CENTERS OR EQUIVALENT.
3. SOLID TIMBER JOISTS SHALL NOT TO BE NOTCHED IN EXCESS OF THE RECOMMENDATIONS OF AS 1684.1. WHERE NECESSARY PROVIDE TIMBER PLATE OVER STEEL BEAM AND PROVIDE TOP MOUNT JOIST HANGERS. ALTERNATIVELY USE TIMBER BLOCKING BETWEEN FLANGES OF STEEL BEAM SUPPORTING JOISTS AND USE FACE MOUNTED JOIST HANGERS. FOR ENGINEERED TIMBER JOISTS/TRUSSES, FIXING TO SUPPORT BEAMS IS TO BE STRICTLY IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATION.
4. REFER TO MANUFACTURER'S SPECIFICATIONS FOR INSTALLATION OF I–JOISTS WHERE APPLICABLE.
5. ALL LVL (LAMINATED VENEER LUMBER) USED SHALL COMPLY WITH AS 4357 (STRUCTURAL LAMINATED VENEER LUMBER CODE) AND MUST BE INSTALLED AS PER MANUFACTURER'S SPECIFICATION.
6. TIMBER FLOORS IN WET AREAS (E.G. BATHROOMS AND LAUNDRIES) SHALL BE PROTECTED FROM MOISTURE IN ACCORDANCE WITH THE BUILDING CODE OF AUSTRALIA
7. ALL EXPOSED TIMBER SHALL COMPLY WITH THE REQUIREMENTS OF APPENDIX C OF AS 1684.3 (I.E. PROVIDE PRESERVATIVE TREATMENT).
8. HOLES FOR BOLTS, SHALL BE SNUG FIT
9. SHANK AND THREAD OF BOLTS SHALL BE THOROUGHLY COATED WITH A HEAVY WATERPROOF GREASE BEFORE INSERTING INTO THE TIMBER.
10. EDGE DISTANCES FOR FASTENERS IN TIMBER (FROM ENDS AND SIDES) SHALL BE IN ACCORDANCE WITH AS 1720.1 U.N.O.
11. U.N.O THE ROOF STRUCTURE HAS BEEN DESIGNED FOR NORMAL ROOF LOADS ONLY AND DOES NOT ALLOW ANY EXTRANEOUS LOADS SUCH AS HOISTS, MONORAILS ETC.
12. TRUSSED ROOFS SHALL HAVE VERTICAL PLANE RIDGE BRACING AND 45° DIAGONAL RAFTER BRACING FROM THE RIDGE TO THE WALL PLATES ON EACH SIDE OF THE RIDGE TERMINATING AT BUILDING CORNERS OR CROSS WALLS.
13. INTERNAL STUD WALLING SHALL BE BRACED USING "GANGNAIL SPEED BRACE" BRACING OR SIMILAR APPROVED BY THE ENGINEER. BRACES SHALL BE TRIPPLE NAILED AT EACH END AND SINGLE NAILED TO EACH STUD USING 2.5MM ø NAILS.
14. ANCHOR RODS AND TIE DOWN STRAPS TO THE ROOF SHALL BE INSTALLED THAT ENSURE UPLIFT FORCES FROM WIND ARE TRANSMITTED TO THE FOUNDATIONS UNLESS SPECIAL FIXINGS ARE NOMINATED.
15. MAJOR STRUCTURAL CONNECTIONS SHALL BE BOLTED. THE BUILDER SHALL OBTAIN DETAILS FROM THE ENGINEER IF NOT SHOWN ON THE DRAWINGS.
16. ALL TIMBER SHALL BE MINIMUM F7 STRESS GRADE U.N.O., HARDWOOD SHALL BE F11 STRESS GRADE OR BETTER U.N.O.
17. TERMITE PROTECTION: ALL CONSTRUCTION WORK SHOULD BE IN ACCORDANCE WITH AS 3660.1 PROTECTION OF BUILDINGS FROM SUBTERRANEAN TERMITES PART 1: NEW BUILDINGS. IF THE REQUIREMENTS IN THIS CODE ARE UNABLE TO BE MET, RESIDENTIAL ENGINEERING RECOMMENDS THE USE OF TERMITE RESISTANT STRUCTURAL TIMBER IN ACCORDANCE WITH AS 1604.
18. MANUFACTURED TIMBER ELEMENTS (e.g. LVL) EXPOSED TO WEATHERING SHALL BE L.O.S.P. TREATED TO H3 LEVEL. WHERE EXPOSED TO DIRECT SUN, FURTHER PROTECTION WITH A GOOD QUALITY PAINT SYSTEM IS REQUIRED.
19. ALL WORK IN STRUCTURAL TIMBER TO BE IN ACCORDANCE WITH THE CURRENT EDITION OF AS 1684, TIMBER STRUCTURES CODE AS 1720, TIMBER ENGINEERING CODE AS 1328 – GLUED LAMINATED STRUCTURAL TIMBER.
20. BOLTS: ALL NUTS & BOLTS TO BE PROVIDED WITH WASHERS. ALL BOLTS TO BE TIGHTENED FINALLY BEFORE HANDOVER. BOLT HOLES TO BE 2mm OVERSIZE IN UNSEASONED TIMBER.
21. UNLESS DETAILED OTHERWISE TIMBER MEMBERS TO BE FIXED WITH NOMINAL NAILING AS SPECIFIED IN AS 1684
22. SIZES AND DETAILS NOT SHOWN SHALL COMPLY WITH AS 1684 ALL OPENINGS TO BE FULLY FLASHED WITH STD GALVANISED SHEET STEEL FLASHING.
23. ALL BOLTS TO HAVE MILD STEEL GALVANISED WASHERS :
    BOLTS UP TO 12mm DIA – 50x50x3 WASHERS
    BOLTS UP TO 20mm DIA – 65x65x5 WASHERS

PROPERTY MAINTENANCE NOTES:

1. THIS DESIGN IS BASED UPON THE NORMAL FOOTING PERFORMANCE CRITERIA PROVIDED IN TABLE 2.2 OF AS2870–2011 WITH DAMAGE CATEGORIES DETAILED IN APPENDIX C. IF THESE PERFORMANCE CRITERIA IS UNSUITABLE FOR THIS DWELLING PLEASE CONSULT THIS OFFICE FOR ADDITIONAL ENGINEERING ADVISE AND DESIGN SERVICES.
2. THE OWNER'S ATTENTION IS DRAWN TO APPENDIX B 'PERFORMANCE CRITERIA AND FOUNDATION MAINTENANCE' AND APPENDIX C 'CLASSIFICATION OF DAMAGE DUE TO FOUNDATION MOVEMENTS' OF AS2870–2011.
3. WE ALSO DIRECT THE OWNER TO THE CSIRO PUBLICATION BTF 18 'FOUNDATION MAINTENANCE AND FOOTING PERFORMANCE: A HOMEOWNER'S GUIDE'. COPIES OF THIS PUBLICATION ARE AVAILABLE FROM CSIRO PUBLISHING ON PH: 1300–788–000 OR AT https://www.publish.csiro.au/book/7942.htm. THESE STRUCTURAL DETAILS MAY BE RENDERED INVALID IF THE PROPERTY IS NOT MAINTAINED AS RECOMMENDED IN THIS PUBLICATION.
4. THE LONG TERM PERFORMANCE OF DWELLING FOOTINGS IS DEPENDANT ON FACTORS SUCH AS SITE DRAINAGE, VEGETATION AND WATERING OF AREAS ADJACENT TO THE DWELLING.
5. WATERING OF LAWNS AND GARDENS SHOULD BE CONSISTENT. OVER WATERING CAN DAMAGE FOOTINGS. EQUALLY FOOTINGS MAY BE DAMAGED BY PROLONGED PERIODS OF NEGLECT AFTER YEARS OF CAREFUL WATERING. LEAKING TAPS AND PIPES AND BLOCKED DRAINS SHOULD BE REPAIRED PROMPTLY. PROLONGED NEGLECT CAN LEAD TO DAMAGED FOOTINGS.

BIAX SYSTEM CONSTRUCTION NOTES:

1. PREPARE THE FORMWORK IN ACCORDANCE WITH THE FOOTING PLAN AND DETAILS. BIAX VOID FORM TO BE CONSTRUCTED WITH THE START LOCATION SHOWN ON THE SLAB LAYOUT PLAN;
   AT PLUMBING PIPES LOCATIONS, BIAX ADJUSTABLE VOID FORM MAY BE REQUIRED.
2. ALL SLAB REINFORCEMENT TO BE PLACED CORRECTLY AS INDICATED ON THE SLAB LAYOUT PLAN.
3. ALL EXTERNAL & INTERNAL RIBS WIDER THAN 300mm SHALL BE REINFORCED WITH AN ADDITIONAL N12 BAR TOP & BOTTOM FOR EVERY 110mm IN ADDITIONAL WIDTH (TYPICAL).

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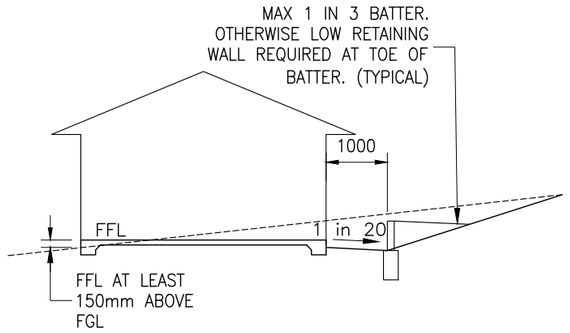
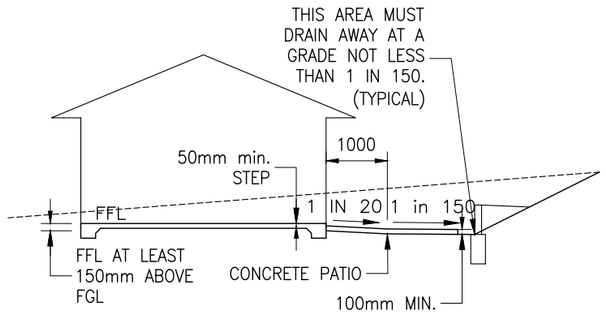
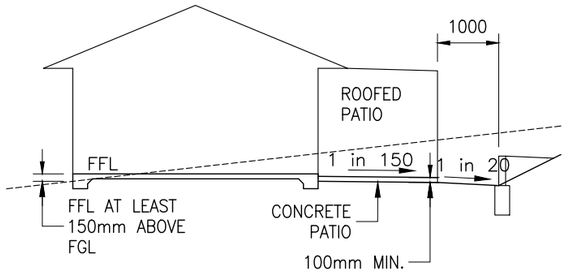
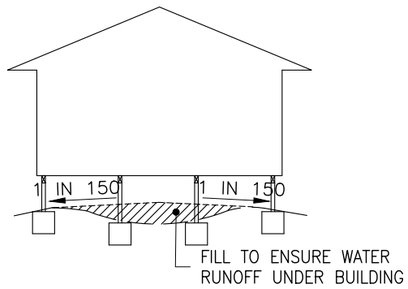
SHEET No: 04 of 14



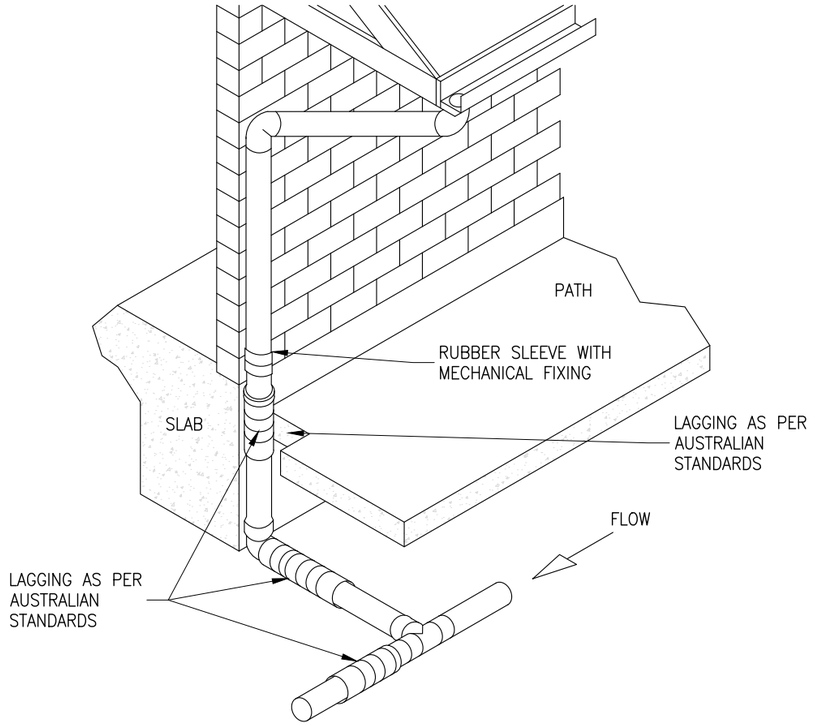






TYP. SURFACE DRAINAGE DETAILS

FFL – FINISHED FLOOR LEVEL
FGL – FINISHED GROUND LEVEL



TYPICAL STORMWATER DETAIL

(ELEVATION VIEW)

SURFACE DRAINAGE NOTES:

S.D.1. CLAUSE 3.3.3 OF THE AUSTRALIA BUILDING CODES BOARD (ABCB) HOUSING PROVISIONS REQUIRES THAT THE FINISHED HEIGHT OF ANY SLAB BE A MINIMUM OF 150mm, GENERALLY, ABOVE THE FINISHED GROUND LEVEL AFTER LANDSCAPING, AND THAT THE EXTERNAL SURFACE DRAINS AWAY WITH A MINIMUM OF 50mm FALL OVER THE FIRST METRE. IT SHOULD ALSO BE NOTED THAT CLAUSES 4.6.6.7 OF AS/NZS 3500.2–2021 REQUIRES THAT THE TOP OF THE OVERFLOW RELIEF GULLY BE A MINIMUM OF 150mm BELOW THE LOWEST GRATE IN THE SLAB AND 75mm ABOVE THE FINISHED GROUND LEVEL.

S.D.2. FINISHED GROUND AND FLOOR LEVELS SHALL BE AS SHOWN IN THE TYPICAL SURFACE DRAINAGE DETAILS ON THIS PAGE AND THE FOLLOWING REQUIREMENTS:

S.D.2.1. DURING CONSTRUCTION, SURFACE WATER SHALL BE DIVERTED AWAY FROM FOOTINGS TO A LAWFUL POINT OF DISCHARGE.

S.D.2.2. THE FINISHED SURFACE OF ANY GROUND, INCLUDING PATHWAYS AND DRIVEWAYS, SHALL BE GRADED AWAY FROM ANY FOOTING, SLAB OR BASEMENT RETAINING WALL A MINIMUM OF 50mm OVER THE FIRST METRE.

S.D.2.3. THE GROUND SHALL THEN BE GRADED AROUND THE BUILDING SUCH THAT SURFACE WATER WILL DRAIN AWAY FROM THE BUILDING TO A LAWFUL POINT OF DISCHARGE.

S.D.2.4. THE GROUND SHALL ALSO BE SHAPED SUCH THAT NO PONDING OF SURFACE WATER CAN OCCUR.

S.D.2.5. WHERE DRAINAGE PITS ARE INSTALLED TO DRAIN SURFACE WATER AWAY, GRATED INLET PITS SHALL BE INSTALLED WITH PIPES DRAINING TO A LAWFUL POINT OF DISCHARGE. PITS AND PIPES SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH AS/NZS 3500.3–2021. DRAINAGE PITS MAY NEED TO BE INSTALLED TO ALLOW SURFACE WATER TO DRAIN AWAY IN AREAS WHERE THE DISTANCE FROM A FOOTING TO A BOUNDARY OR ADJACENT STRUCTURE, EG FENCE, IS LESS THAN 1.0m.

S.D.2.6. THE FINISHED FLOOR LEVEL OF ANY GARAGE OR CARPORT SHALL ALSO BE SET SUCH THAT DRIVEWAY SLOPES COMPLY WITH AS/NZS 2890.1–2004. REFER TO THE TYPICAL DRIVEWAY DETAILS ON THIS PAGE.

S.D.3. RETAINING WALLS SHALL BE INSTALLED AT THE BASE OF CUT AND FILL BATTERS WHERE BATTER SLOPES EXCEED 1:3. RETAINING WALLS ARE ALSO REQUIRED WHERE CUTTING BELOW THE BASE OF AN EXISTING RETAINING WALL AND WHERE AN ADDITIONAL SURCHARGE IS PLACED ABOVE AN EXISTING RETAINING WALL.

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APPROVED BY:
GERVASE PURICH
FIEAust, C.P.Eng., NER, BPB, RPEQ

CLIENT REF: 652354
DATE: 11/05/2025
DRAWN: LTPH
SCALE:

CLIENT: MOJO HOMES

FOR: N.S.W EXTENSIONS PTY LTD & EDWARD J FITZPATRICK
SITE ADDRESS: LOT 113 (22) PYRAMID AVENUE, PADSTOW

DRAWN	DATE	AMENDMENT	REV

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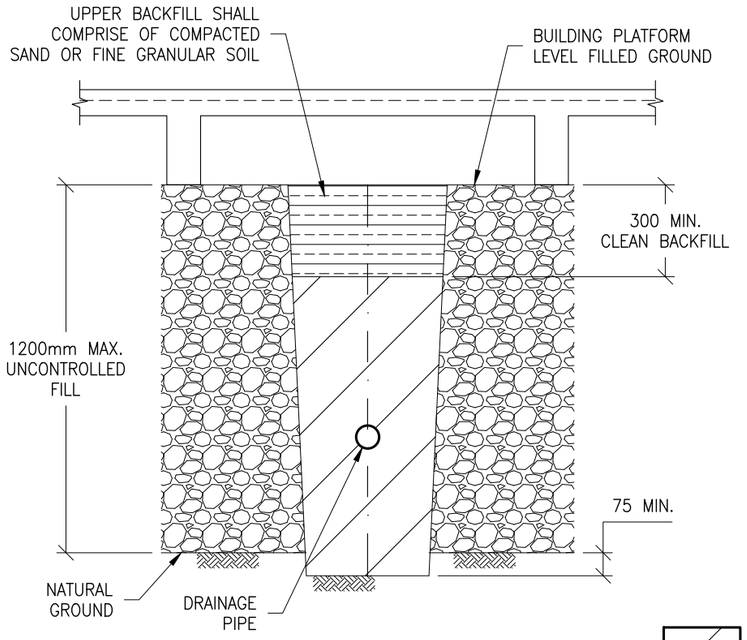
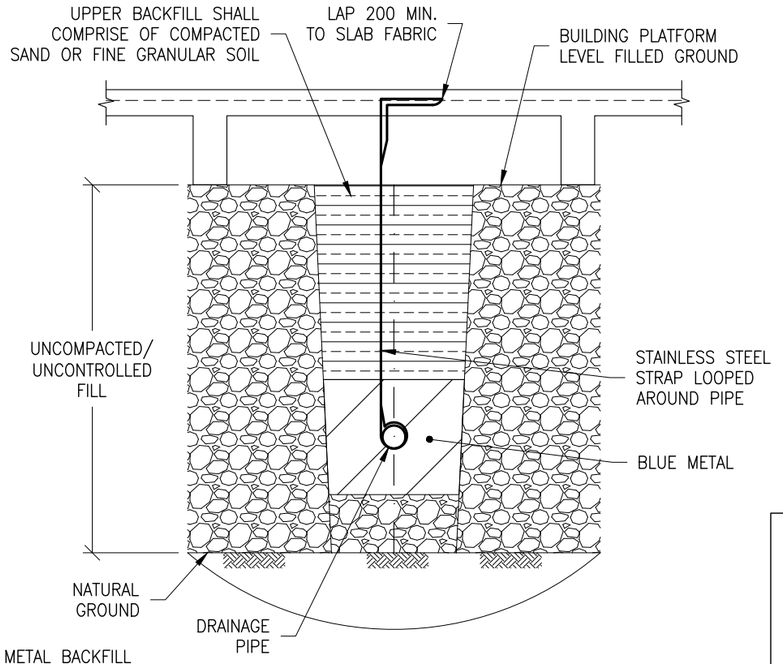


NOTE: WHERE DRAINAGE TRENCH EXCEEDS 1200MM SPECIFIC ENGINEERING DESIGN IS REQUIRED COMPRISING OF SUSPENDED PIPES ON PIER AND BEAM SYSTEM. ALTERNATIVELY REFER TO ALTERNATE DRAIN SUPPORT IN FILL DETAIL

TYPICAL BEDDING OF DRAINS IN FILL DETAIL

TRENCH SHALL BE EXCAVATED 75mm INTO NATURAL GROUND



BLUE METAL BACKFILL (MAX. 10mm AGGREGATE)

TYPICAL ALTERNATE DRAIN SUPPORT IN FILL DETAIL – STEEL STRAP OPTION

ALTERNATE SANITARY UNDER SLAB STRAPPING NOTES:

PIPEWORK UNDER SLAB WILL REQUIRE STRAPPING WHERE:

- UNCOMPACTED/UNCONTROLLED FILL ≥ 500mm.
- AFTER ANY CUT/FILL WORKS IN THE CONSTRUCTION BUILDING PAD ≥ 500mm.

WHEN THE ABOVE MENTIONED POINTS ARE APPLICABLE, STRAPPING IS TO BE PLACED.

NOTE: UNCOMPACTED FILL REFERS TO MATERIAL THAT IS NOT ADEQUATELY COMPACTED TO A LEVEL ONE SUPERVISION IN ACCORDANCE WITH AS 3798.

1. STRAP FOR PIPEWORK IS TO BE INSTALLED IN ACCORDANCE WITH THE TABLE BELOW.
2. INSTALL STRAPPING AS CLOSE AS POSSIBLE TO THE INSIDE EDGE OF THE FOOTING WHERE PIPES ARE PASSING UNDER THE FOOTING.
3. INSTALL STRAPPING AT 1200mm MAX. CENTRES FOR PIPEWORK PENETRATING THROUGH THE FOOTING.

STRAP SPACING FOR PIPES	
PIPE ø (mm)	SPACING (mm)
≤100	1000 MAX.
>100	1200 MAX.

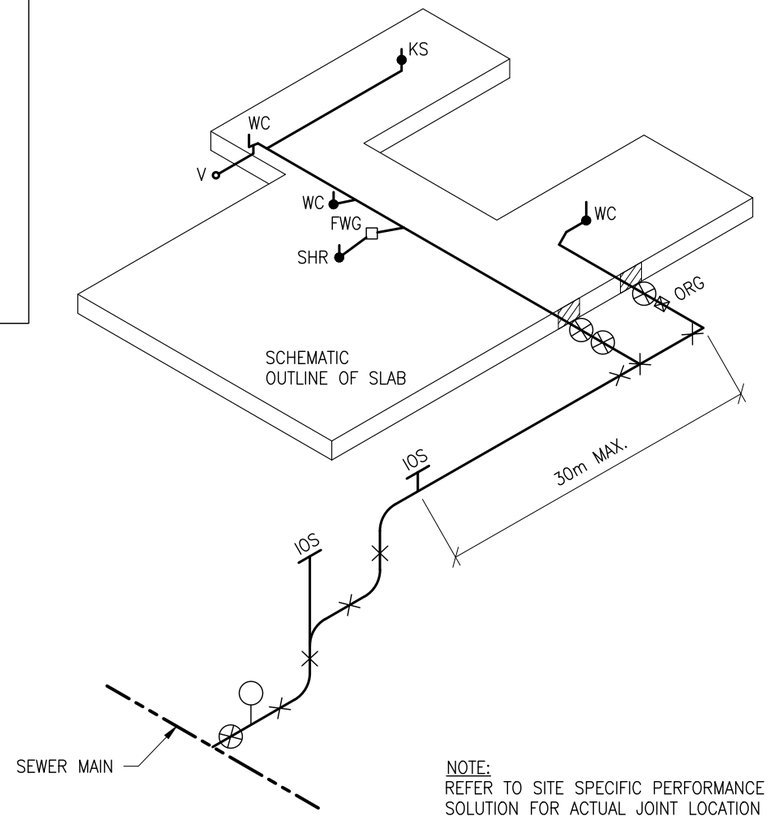
STRAPS REQ'D IF UNCONTROLLED FILL IS IN EXCESS OF 500mm. ALTERNATIVELY REFER TO TYPICAL BEDDING OF DRAINS IN FILL DETAIL.

PLUMBING & DRAINAGE STRAPS

FFL – FINISHED FLOOR LEVEL

MASTER LEGEND

⊗	SWIVEL / EXPANSIN JOINT
×	EXPANSION JOINT
⊀	EXPANSION JOINT BEND
○	INSPECTION OPENING
⊠ ORG	OVERFLOW RELIEF GULLY
IOS	INSPECTIONS OPENING TO SURFACE
V	VENT
B	BASIN
BTH	BATH
SHR	SHOWER
FWG	FLOOR WASTE GULLY
WC	WATER CLOSET
S	SINK
KS	KITCHEN SINK
L	LAUNDRY
FW	FLOOR WASTE
▨	CLAY PLUG



NOTE:
REFER TO SITE SPECIFIC PERFORMANCE SOLUTION FOR ACTUAL JOINT LOCATION AND TYPE.

TYPICAL GUIDELINES FOR PFC–U DRAINAGE SYSTEM WITH EXPANSION & SWIVEL JOINT LOCATIONS FOR REACTIVE SOILS

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FOR: N.S.W EXTENSIONS PTY LTD & EDWARD J FITZPATRICK

SITE ADDRESS: LOT 113 (22) PYRAMID AVENUE, PADSTOW

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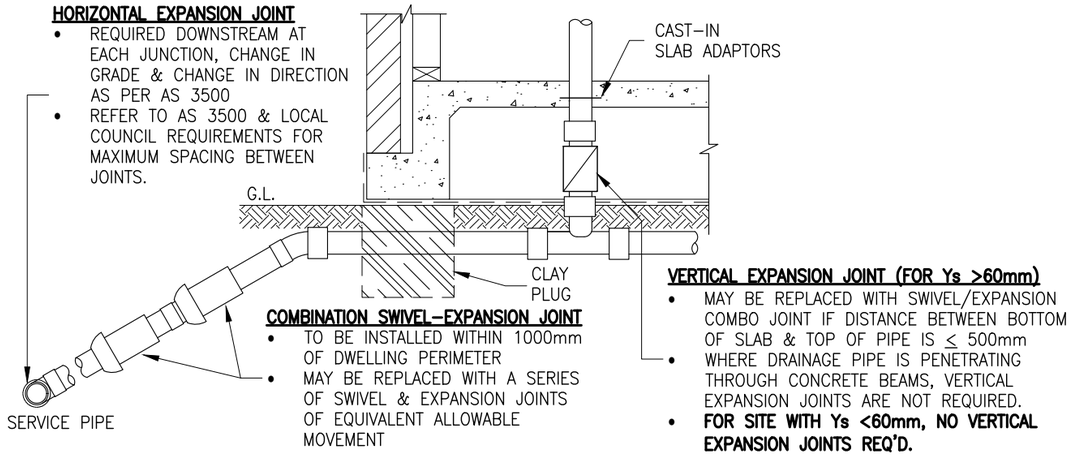


HORIZONTAL EXPANSION JOINT

- REQUIRED DOWNSTREAM AT EACH JUNCTION, CHANGE IN GRADE & CHANGE IN DIRECTION AS PER AS 3500
- REFER TO AS 3500 & LOCAL COUNCIL REQUIREMENTS FOR MAXIMUM SPACING BETWEEN JOINTS.

COMBINATION SWIVEL–EXPANSION JOINT

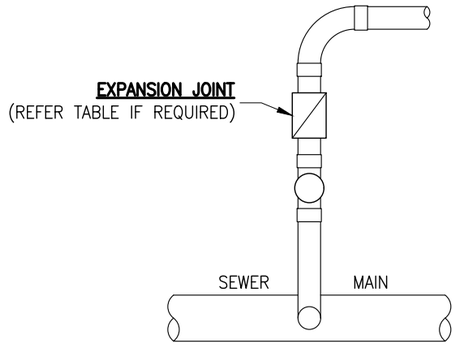
- TO BE INSTALLED WITHIN 1000mm OF DWELLING PERIMETER
- MAY BE REPLACED WITH A SERIES OF SWIVEL & EXPANSION JOINTS OF EQUIVALENT ALLOWABLE MOVEMENT

VERTICAL EXPANSION JOINT (FOR Ys >60mm)

- MAY BE REPLACED WITH SWIVEL/EXPANSION COMBO JOINT IF DISTANCE BETWEEN BOTTOM OF SLAB & TOP OF PIPE IS ≤ 500mm
- WHERE DRAINAGE PIPE IS PENETRATING THROUGH CONCRETE BEAMS, VERTICAL EXPANSION JOINTS ARE NOT REQUIRED.
- **FOR SITE WITH Ys <60mm, NO VERTICAL EXPANSION JOINTS REQ'D.**

TYPICAL UNDER SLAB EDGE DETAIL

(ELEVATION VIEW)



TYPICAL SEWER JUNCTION CONNECTION DETAIL

(PLAN VIEW)

IMPORTANT NOTE:
THESE RECOMMENDATIONS ARE A GUIDE ONLY. FINAL PLUMBING REQUIREMENTS TO BE DETERMINED BY LOCAL PLUMBING AUTHORITY IN CONJUNCTION WITH AS/NZS 3500

PLUMBING CONNECTION NOTES:

P.1. THE FOLLOWING NOTES & DETAILS PROVIDED ARE A GUIDE ONLY FOR ARTICULATION FOR SANITARY PLUMBING, DRAINAGE & SHOULD BE READ IN CONJUNCTION WITH AS/NZS 3500, AS 2870 & ANY OTHER RELEVANT STANDARD & OTHER REQUIREMENTS OF THE NCC.

P.2. ALL SEWER & STORMWATER TO BE CONSTRUCTED IN ACCORDANCE WITH AS/NZS 3500 & THE REQUIREMENTS OF AS 2870 SECTION 5: CLAUSE 5.6 & SECTION 6: CLAUSE 6.6: FOR SLAB OR STRIP FOOTINGS ON HIGHLY AND EXTREMELY REACTIVE SITES, THE FOLLOWING REQUIREMENTS APPLY: DRAINS ATTACHED TO OR EMERGING FROM UNDERNEATH THE BUILDING SHALL INCORPORATE FLEXIBLE JOINTS IMMEDIATELY OUTSIDE THE FOOTING AND COMMENCING WITHIN 1m OF THE BUILDING PERIMETER TO ACCOMMODATE A TOTAL RANGE OF DIFFERENTIAL MOVEMENT IN ANY DIRECTION EQUAL TO THE ESTIMATED CHARACTERISTIC SURFACE MOVEMENT OF THE SITE (Ys). IN THE ABSENCE OF SPECIFIC DESIGN REQUIREMENTS, THE FITTINGS OR OTHER DEVICES THAT ARE PROVIDED TO ALLOW FOR THE MOVEMENT SHALL BE SET AT THE MID POSITION OF THEIR RANGE OF POSSIBLE MOVEMENT AT THE TIME OF INSTALLATION, SO AS TO ALLOW FOR MOVEMENT EQUAL TO 0.5YS IN ANY DIRECTION FROM THE INITIAL SETTING. THIS REQUIREMENT APPLIES TO ALL STORMWATER AND SANITARY PLUMBING DRAINS AND DISCHARGE PIPES.

P.3. PLUMBING & DRAINAGE UNDER THE SLAB SHOULD BE AVOIDED WHERE PRACTICAL (REFER AS/NZS 3500 CLAUSE 4.10)

P.4. GRADES IN PIPEWORK ON 'M', 'H', 'E' & 'P' SITES SHOULD HAVE A MINIMUM GRADE OF 1:30 WITHIN 1.5 METRES OF THE BUILDING & 1:60 ELSEWHERE. GRADES IN FLEXIBLE FITTINGS TO BE SET AT THE MINIMUM GRADE.

P.5. ALL EXPANSION & ARTICULATION JOINTS TO BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. ALL JOINTS TO BE SET MID POINT SO AS TO ALLOW FOR MAXIMUM MOVEMENT IN EITHER DIRECTION.

P.6. STORMPLASTICS (SA) PTY LTD "SWIVEL JOINTS" SHOULD NOT BE USED AS A BEND TO ACHIEVE CORRECT FALLS. THE JOINTS SHOULD BE SET IN A STRAIGHT LINE OF THE DRAIN TO ALLOW MAXIMUM (+) OR (–) MOVEMENT. A MINIMUM 15° BEND TO BE INSTALLED BEFORE SWIVEL JOINTS TO ACHIEVE MINIMUM GRADES FROM THE FACE OF THE FOOTINGS.

P.7. DETAIL & SUPPORT OF TRAPS AT THE O.R.G. TO BE CONSIDERED ON SITE, TO ALLOW FOR POTENTIAL MOVEMENTS INCLUDING ISOLATION AND ARTICULATION ASSOCIATED WITH PATHS & PAVEMENTS. THE O.R.G. SHOULD BE CAST IN CONCRETE MONOLITHICALLY WITH THE FOOTING SYSTEM ON CLASS 'H' & 'E' SITES.

P.8. STORMWATER SYSTEMS THAT COLLECT ROOFWATER & SURFACE WATER ARE REQUIRED TO BE DESIGNED & CONSTRUCTED IN ACCORDANCE WITH AS/NZS 3500 PART 5.

P.9. THE USE OF CORRUGATED FLEXIBLE PVC PIPE PRODUCTS SHOULD BE AVOIDED ON CLASS H & E SITES AS THEY ARE NOT ABLE TO EXPAND LONGITUDINALLY TO ACCOMMODATE POTENTIAL VERTICAL & LATERAL MOVEMENTS AT THE SLAB OR FOOTING EDGE UNLESS SPECIFICALLY DETAILED BY THE MANUFACTURER.

P.10. SEPTIC TANKS & ASSOCIATED SOAKAGE AREAS SHOULD BE LOCATED TO MINIMISE SOIL MOISTURE INCREASES WITHIN THE FOUNDATION.

P.11. ALL PIPEWORK INCLUDING STORMWATER FITTINGS & ADAPTERS SHOULD BE PROTECTED FROM MECHANICAL DAMAGE.

P.12. TERMITE PROTECTION NOT SHOWN ON THESE DRAWINGS AS THERE ARE VARIOUS OPTIONS. REFER TO THE BUILDING DESIGNER.

P.13. ALL DETAILS ARE INDICATIVE ONLY. DESIGN OF PATHS FOOTINGS ETC. & LOCATION OF PENETRATIONS TO BE SPECIFIED BY AN ENGINEER.

P.14. PROVISIONS SHOULD BE MADE FOR THE CONNECTION OF OVERFLOW OR WATER DISCHARGE FROM FIXTURES SUCH AS HOT WATER SYSTEMS & AIR CONDITIONERS TO A DRAIN AS REQUIRED BY THE RELEVANT LOCAL AUTHORITY.

P.15. EXPANDABLE JOINT & SWIVEL SPECIFICATIONS:

P.15.1. TO BE MANUFACTURED AND COMPLY WITH AS 1280 AND AS 1415.

P.15.2. TO BE INSTALLED AS PER MANUFACTURES SPECIFICATIONS AND INSPECTED BY THE LOCAL AUTHORITY.

P.15.3. SEWER PIPES FOUNDED WITHIN THE FILLED SECTION OF THE BUILDING PAD UNDER THE SLAB ARE TO BE HUNG FROM SLAB REINFORCEMENT WITH METAL STRAPS.

P.15.4. TO ENSURE CORRECT PLUMBING CONNECTIONS ARE INSTALLED IT IS ESSENTIAL THAT A COPY OF THESE ENGINEERING DETAILS AND ANY RELEVANT ADDITIONS (WHERE APPLICABLE) ARE SUPPLIED TO THE PLUMBER PRIOR TO THEIR PREPARATION.

P.15.5. IT IS ALSO ADVISABLE THAT SLAB DOCUMENTATION IS AVAILABLE ON–SITE FOR REFERENCE BY THE PLUMBERS AND NOMINATED INSPECTORS.

P.15.6. THE BELOW TABLE SHOULD BE READ IN CONJUNCTION WITH THE SITE SPECIFIC PERFORMANCE SOLUTION IF CARRIED OUT.

MINIMUM REQUIREMENTS FOR EXPANSION & ALLOWABLE ROTATION IN FITTINGS

SITE CLASS	MINIMUM REQUIRED EXPANSION JOINT CAPACITY	ALLOWABLE ROTATION
"H1" & "H2"	100mm	15°
"E"	150mm	15°
"P/H1 OR H2"	100mm	15°
"P/E"	150mm	15°

MINIMUM REQUIREMENTS FOR LAGGING THICKNESS

SITE CLASS	MINIMUM LAGGING THICKNESS (mm)
"M"	20
"H1"	20
"H2"	40
"E"	40
"P"	40

MINIMUM PLUMBING RECOMMENDATIONS

COMPONENT	SITE/DESIGN CLASSIFICATION						
	A & S	M	H1	H2	P *	M–D	H–D
HORIZONTAL PENETRATION LAGGING (mm) THROUGH FOOTINGS AND UNDERSLAB WATER TANK INLET AND OUTLET VERTICAL LAGGING TO ALL EXTERNAL PIPES ENCLOSED IN PAVEMENT SLAB	×	20	20	40	40	40	40
JOINT EXPANSION SIZE (mm)	×	×	100	100	150	100	150
VERTICAL EXPANSION JOINTS (UNDER SLAB)	×	×	×	✓	✓	×	×
EXTERNAL SWIVEL JOINTS (± 15° MIN. SWIVEL)	×	×	✓	✓	✓	✓	✓
DOWNPIPE EXPANSION JOINTS	×	×	✓	✓	✓	✓	✓
GULLY PITS FOR HOSE COCKS & AC UNITS	×	×	✓	✓	✓	✓	✓
* 'P' CLASSIFICATION PLUMBING REQUIREMENTS ARE SPECIFIC TO UNCONTROLLED FILL ONLY							
'E' CUSTOM DESIGN							

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FOR: N.S.W EXTENSIONS PTY LTD & EDWARD J FITZPATRICK
SITE ADDRESS: LOT 113 (22) PYRAMID AVENUE, PADSTOW

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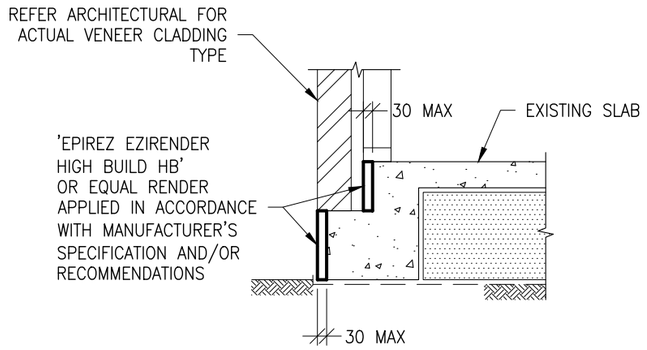
EXISTING WORKS NOTES:

W1. SURFACES OF EXISTING MATERIAL, WHICH ARE TO BE STRENGTHENED OR REPAIRED SHALL BE CLEANED OF DIRT, RUST, AND OTHER FOREIGN MATTER EXCEPT ADHERENT SURFACE PROTECTION.

W2. DETAILS SHOWN IN REGARD TO EXISTING BUILDING STRUCTURE SHALL BE CONFIRMED ON SITE PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCY DURING CONSTRUCTION FROM DETAILS OUTLINED HEREON SHALL BE REFERRED TO RESIDENTIAL ENGINEERING PRIOR TO PROCEEDING WITH THE WORK.



TYPICAL SLAB RECTIFICATION DETAIL 30mm MAX. FRAME/BRICKWORK OVERHANG

SCALE 1:20

NB: THIS DETAIL IS NOT APPLICABLE BELOW BRACING WALLS UNLESS APPROVED BY ENGINEER.

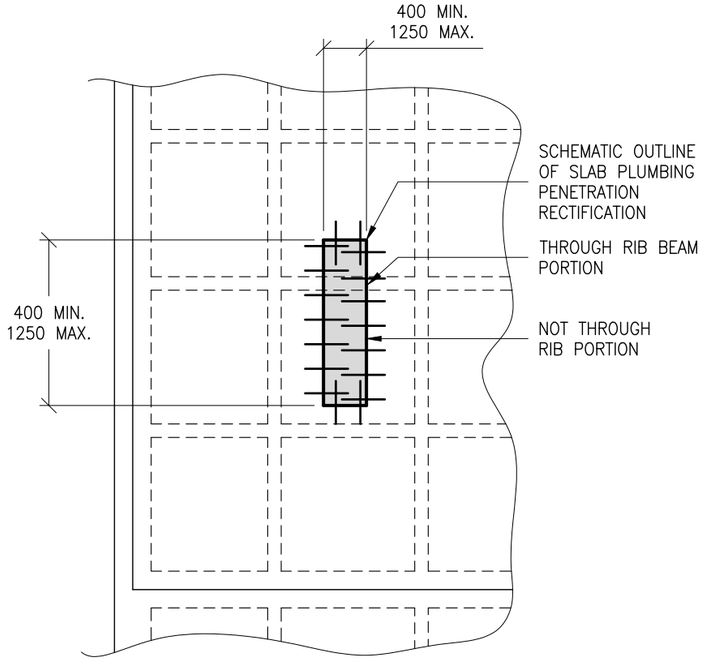
BRICKWORK OVERHANG UP TO 25mm IS PERMISSIBLE WITHOUT RECTIFICATION.

TIMBER FRAME OVERHANG PERMISSIBLE AS FOLLOWS;

- 70mm FRAME – NO OVERHANG PERMISSIBLE
- 90mm FRAME – 10mm OVERHANG PERMISSIBLE
- PROVIDE TERMITE PROOFING AS REQUIRED

NOTE:
THESE DETAILS HAVE BEEN PREPARED SUBJECT TO A SITE INSPECTION DURING THE RECTIFICATION PROCESS IMMEDIATELY PRIOR TO PLACEMENT OF REPAIR MATERIAL.

ANYTHING OUTSIDE THESE SPECIFICATIONS, RESIDENTIAL ENGINEERING IS TO BE CONTACTED TO PROVIDE SITE SPECIFIC DETAILS.

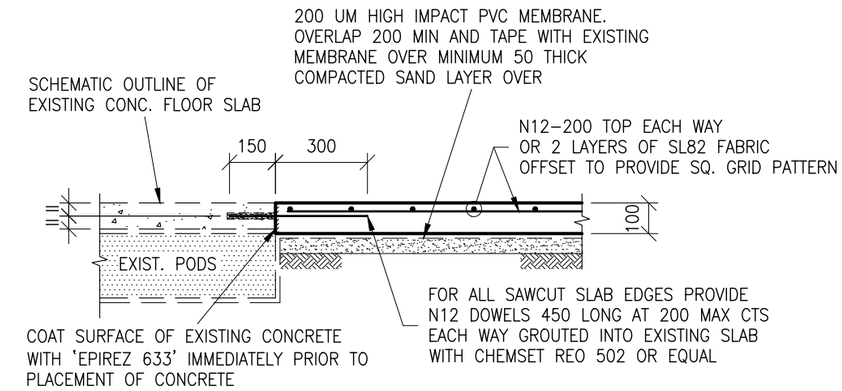


SCHEMATIC PART SLAB PLAN

SCALE 1:50

NOTE:
SLAB CUT THROUGH EDGE/STEP/INTERNAL BEAMS ARE NOT PERMISSIBLE WITHOUT SITE SPECIFIC DESIGN DETAIL BY ENGINEER

NOTE:
NO CERTIFICATE WILL BE ISSUED UNLESS AN INSPECTION IS CARRIED OUT BY RESIDENTIAL ENGINEERING PRIOR TO PLACING CONCRETE OR MORTAR



TYPICAL SLAB RECTIFICATION DETAIL NOT THROUGH RIB

SCALE 1:20

REFER TO SLAB PLAN FOR CONCRETE STRENGTH
20 MAX AGGREGATE
100 SLUMP

NOTE
PROVIDE ADDITIONAL TERMITE PROTECTION AS REQUIRED

TYPICAL SLAB RECTIFICATION DETAIL THROUGH RIB BEAM

SCALE 1:20

REFER TO SLAB PLAN FOR CONCRETE STRENGTH
20 MAX AGGREGATE
100 SLUMP

NOTE

- PROVIDE ADDITIONAL TERMITE PROTECTION AS REQUIRED.
- 50mm MIN. OF EXPOSED CONCRETE IS REQUIRED FOR BOND OF NEW CONCRETE.

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WET AREA NOTE

STEPDOWN WET AREA FLOORS TO BUILDERS SPECIFICATIONS (50mm MAX.)

RAINWATER TANK/ HWS/ACU & LPG SLABS

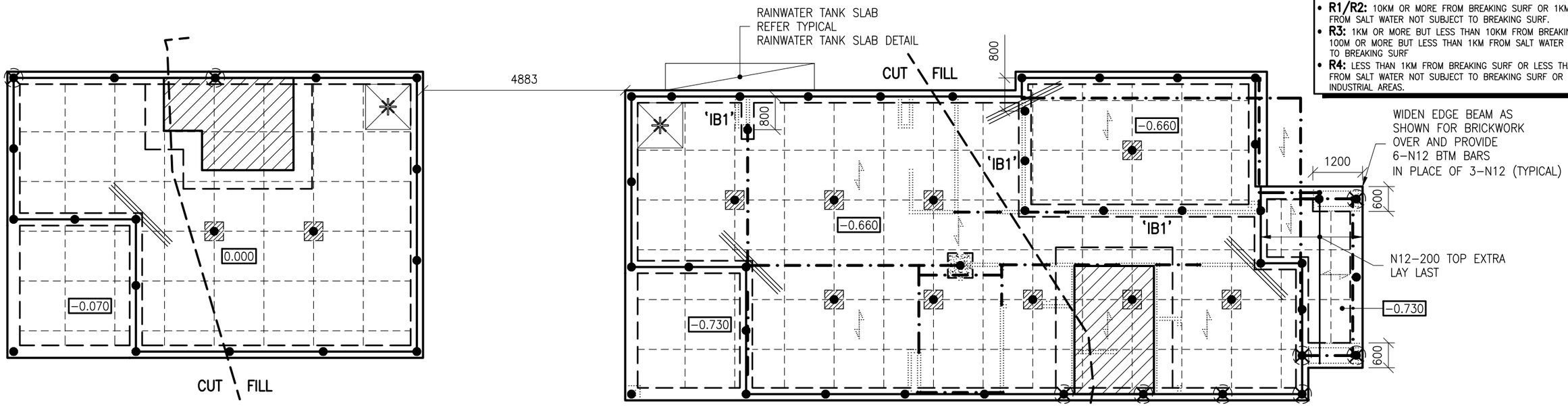
REFER TO TYPICAL STRUCTURAL DETAILS.
REFER TO ARCHITECTURAL FOR SPECIFICATIONS AND LOCATIONS.

THESE DETAILS HAVE BEEN PREPARED IN ACCORDANCE WITH ARCHITECTURAL	
DESIGN NAME:	LIDO 25
PREPARED BY:	MOJO HOMES
DRAWING/JOB No.	652354
REVISION/ISSUE:	5
DATED:	09/04/2025

SITE CLASSIFICATION	P/H1
SLAB CLASSIFICATION	H1
WIND CLASSIFICATION	N2
DURABILITY CLASSIFICATION	R2

DURABILITY CLASSIFICATION TO BE READ IN CONJUNCTION WITH AS4773, AS3700 AND NCC 2022 VOLUME TWO – BUILDING CODE OF AUSTRALIA.

- **R1/R2:** 10KM OR MORE FROM BREAKING SURF OR 1KM OR MORE FROM SALT WATER NOT SUBJECT TO BREAKING SURF.
- **R3:** 1KM OR MORE BUT LESS THAN 10KM FROM BREAKING SURF OR 100M OR MORE BUT LESS THAN 1KM FROM SALT WATER NOT SUBJECT TO BREAKING SURF
- **R4:** LESS THAN 1KM FROM BREAKING SURF OR LESS THAN 100M FROM SALT WATER NOT SUBJECT TO BREAKING SURF OR WITHIN HEAVY INDUSTRIAL AREAS.



WAFFLE RAFT DESIGN LAYOUT DRAWING

REFER TO ARCHITECTURAL FOR:
THE FULL EXTENT OF ANY DEEPENED EDGE AND INTERNAL STEP BEAMS.
LOCATION OF ANY SLAB RECESSES FOR DOORS, WINDOWS AND WET AREAS.

LEGEND (NTS)

- SCREW PIERS. REFER PIER SPECIFICATION
- START POD LOCATION
- 1090 SQ STANDARD POD
- CENTRE LINE OF RIB
- 3-N12 TRIMMERS 2000 LONG
- 0.000 DENOTES TOP OF MAIN SLAB
- -X.XXX DENOTES STEPDOWN FROM TOP OF MAIN SLAB
- DENOTES WET AREA STEPDOWN TO BUILDERS SPECIFICATION (50 STEPDOWN MAX.)
- 600 SQ MASS CONCRETE POD CUT OUT
- STEEL/TIMBER BEAMS OVER BY OTHERS
- FLOOR JOIST DIRECTION OVER PROVIDED BY BUILDER
- WALLS OVER

⚠ LOCATION OF BEAMS BY OTHERS HAVE BEEN PROVIDED BY BUILDER.
BUILDER TO CONTACT RESIDENTIAL ENGINEERING IF STRUCTURAL BEAM LOCATIONS DIFFER TO PLAN.

WAFFLE RAFT SPECIFICATION

MAIN RESIDENCE		GARAGE		PATIO/ALFRESCO	
SLAB THICKNESS:	85	SLAB THICKNESS:	85	SLAB THICKNESS:	90
SLAB FABRIC:	SL82	SLAB FABRIC:	SL92	SLAB FABRIC:	SL92
POD DEPTH:	300	POD DEPTH:	300	POD DEPTH:	225
CONCRETE STRENGTH:	N20	CONCRETE STRENGTH:	N25	CONCRETE STRENGTH:	N25

100mm MAX SLUMP, 20mm MAXIMUM SIZE AGGREGATE

RETAINING WALL NOTE:

INSTALL PIERS 450 BELOW ZONE OF INFLUENCE FROM BASE OF ADJACENT RETAINING WALL. SIMILAR TO HOUSE SERVICES DETAIL

PIER SPECIFICATION

SCREW PIERS SHALL BE FOUNDED A MINIMUM OF 450 BELOW BASE OF SERVICE TRENCH SHOULD SCREW PIER CAPACITY BE ACHIEVED AT A HIGHER LEVEL.
REFER TEMPORARY EXCAVATION DETAIL

300 SQ POD CUT OUT OVER SCREW PIERS WHERE APPLICABLE.
REFER TO TYPICAL RIB BEAM DETAIL

MINIMUM kN CAPACITY	70 SWL

PIERS AFFECTED BY TREES

DENOTES PIERS AFFECTED BY TREES
REFER TO TREE INFLUENCE NOTE

⚠ ALL PIERS AFFECTED BY TREES TO BE MIN 2.5m + FILL DEEP ⚠

EXPOSURE CLASSIFICATION

EXPOSURE CLASSIFICATION (EC)	A1
EXPOSURE CLASSIFICATION (SO_4)	

THE SLAB SHOWN ON THIS DRAWING HAS BEEN DESIGNED TO COMPLY WITH THE EXPOSURE CLASSIFICATION OF THE GEOTECHNICAL ASSESSMENT OF THE SITE AS IN REPORT

BY: STS GEOTECHNICS PTY LTD
REF: 30060/1998 24/3670
DATE: DECEMBER 16, 2024

TREE INFLUENCE NOTE:

IN ORDER TO MAINTAIN 'NORMAL' MOISTURE CONDITIONS FOR THE LONG TERM SUSTAINABILITY OF THE DWELLING, WE SUGGEST THAT ANY TREES/ROOT SYSTEMS BE REMOVED FROM THE SITE IF THEY ARE WITHIN THE ZONE OF INFLUENCE OR IN CLOSE PROXIMITY TO PROPOSED DWELLING, BACKFILL AND COMPACT ROOT SYSTEM AREAS TO COMPLY WITH 'GENERAL NOTES – FOUNDATION FOOTINGS & FILLING – POINTS 1-14' DURING THE REMOVAL PROCESS. IF THIS CANNOT BE ACHIEVED CONTACT THIS OFFICE PRIOR TO COMMENCING WORK ON SITE AS FURTHER ENGINEERING MAY BE REQUIRED. THIS MAY INCLUDE BUT IS NOT LIMITED TO ADDITIONAL PIERING AND/OR ISOLATION TRENCHES TO ACT AS ROOT BARRIERS.

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GERVASE PURICH
FIEAust, C.P.Eng., NER, BPB, RPEQ

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DATE: 11/05/2025
DRAWN: LTPH
SCALE: 1:100

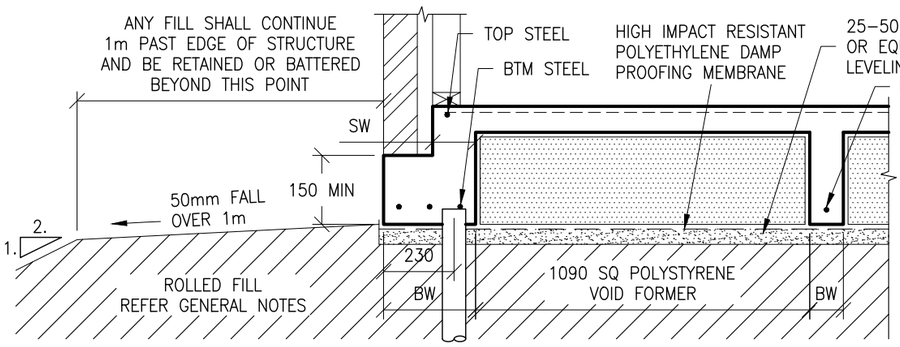
CLIENT: MOJO HOMES

FOR: N.S.W EXTENSIONS PTY LTD & EDWARD J FITZPATRICK

SITE ADDRESS: LOT 113 (22) PYRAMID AVENUE, PADSTOW

DRAWN	DATE	AMENDMENT	REV

JOB No: ME1344
ISSUE: -
SHEET No: 09 of 14



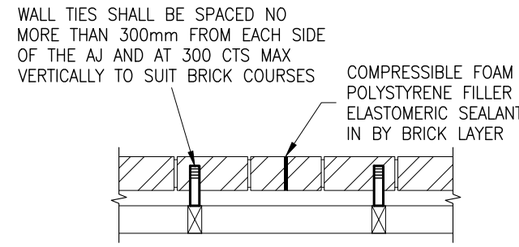
BEAM WIDTH (BW)	BTM STEEL
110 TO 150	1–N12
151 TO 250	2–N12
251 TO 350	3–N12
351 TO 450	4–N12

STEM WIDTH (SW)	TOP STEEL
110 TO 150	*NIL
151 TO 250	*1–N12
251 TO 350	*2–N12
351 TO 450	*3–N12

DENOTES TOP STEEL IN ADDITION TO
* SLAB FABRIC AND 1–N12 TOP FOR PIERED CONDITION

TYPICAL WAFFLE RAFT DETAIL

PIERS MAY BE OMITTED WHERE THE SLAB IS ON CONTROLLED FILL: PLACED, TESTED & CERTIFIED BY A QUALIFIED GEOTECHNICAL ENGINEER.

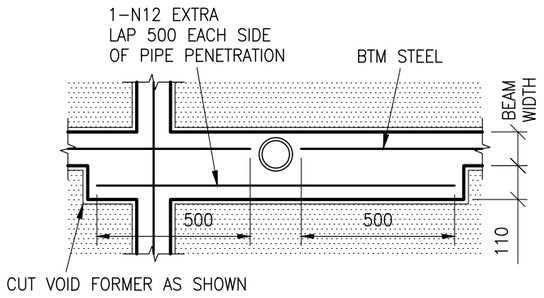


ARTICULATION JOINT DETAIL

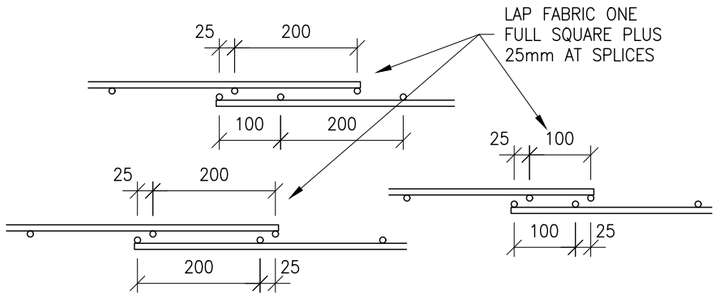
WALL TIE SPACING TABLE				
WIND		DUTY	HORIZONTAL	VERTICAL
CLASS	(Vp)			
N1	W28N1	LIGHT	600	600
N2	W33N2	MEDIUM	600	600
N3	W41N3	MEDIUM	600	430 (5 CRS)

NOTES:

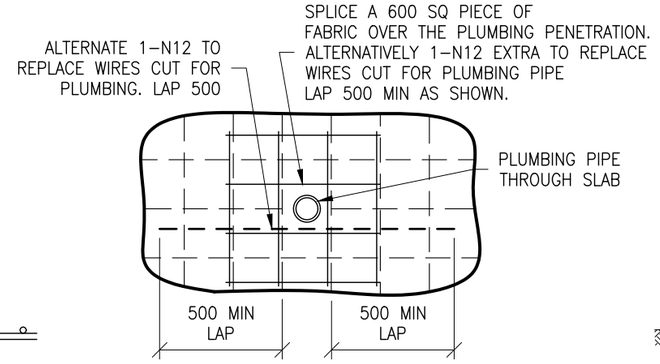
1. ALL WALL TIES SHALL BE BUILT IN AND FIXED TO THE FRAME PROGRESSIVELY AS CONSTRUCTION PROCEEDS.
2. ALL OTHER TIES SHALL BE DESCRIBED IN AS4773.
3. ALL WALL TIE SPACINGS AROUND OPENINGS 300 CTS EW.
4. POLYMER WALL TIES RATED "LIGHT DUTY ONLY" (W28N1).
5. (Vp = PERMISSABLE STRESS METHOD).



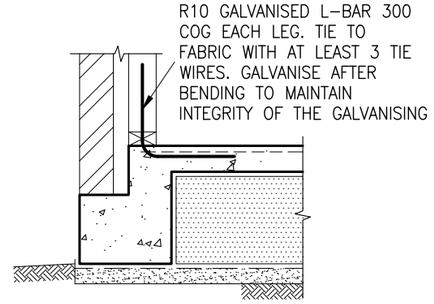
VERTICAL PIPE PENETRATION DETAIL THROUGH RIB BEAM EDGE, INTERNAL & STEP BEAMS SIMILAR



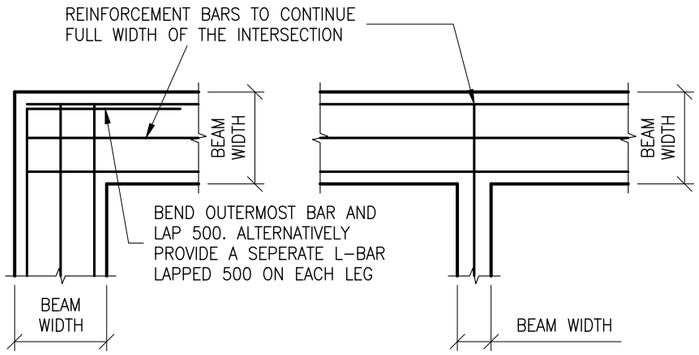
ALTERNATIVE METHODS OF LAPPING FABRIC



VERTICAL PIPE PENETRATION THROUGH SLAB

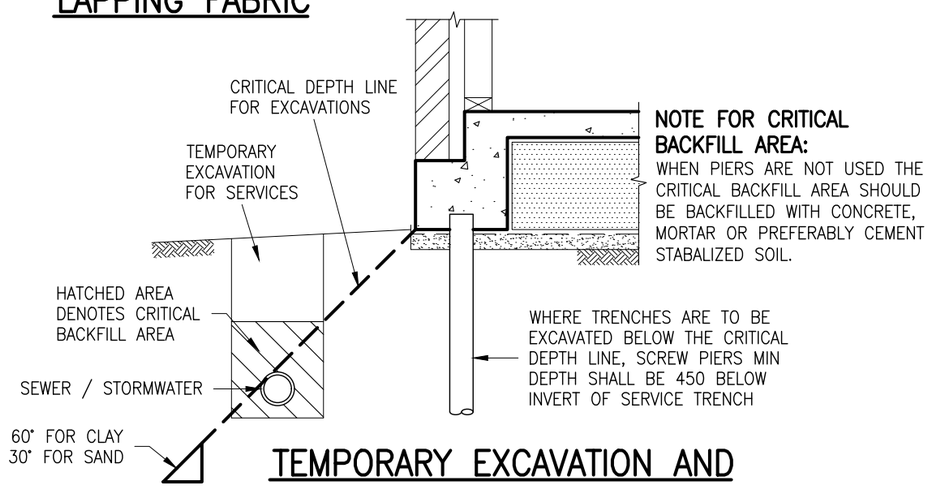


WET AREA EARTHING DETAIL



PLAN VIEW DETAIL ON LAPPING OF REINFORCEMENT AT 'T' AND 'L' INTERSECTIONS

REINFORCEMENT	MIN LAP AT 'T' INTERSECTIONS	MIN LAP AT 'L' INTERSECTIONS
STEEL REINFORCING BARS	FULL WIDTH ACROSS THE JUNCTION	OUTERMOST BAR BENT AND LAPPED 500
TRENCH MESH	FULL WIDTH ACROSS THE JUNCTION	FULL WIDTH ACROSS THE JUNCTION



TEMPORARY EXCAVATION AND HOUSE SERVICES DETAIL

THE BUILDER SHALL ENSURE THE DRAINAGE CONTRACTOR COMPLIES WITH THIS DETAIL IN FULL

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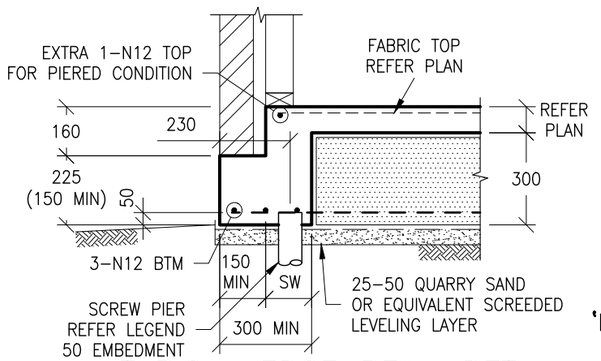
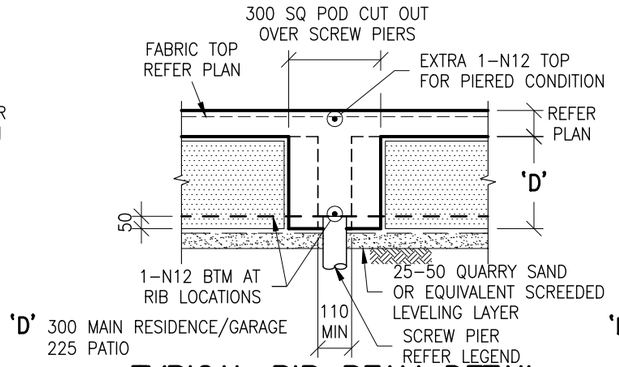
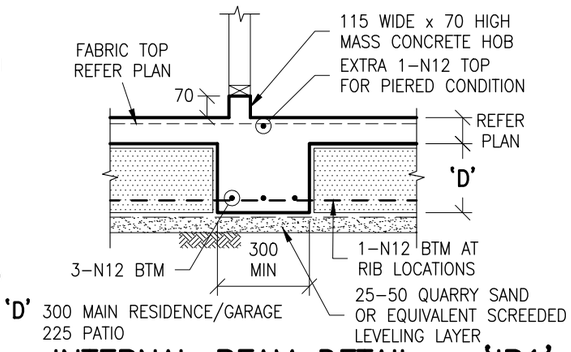


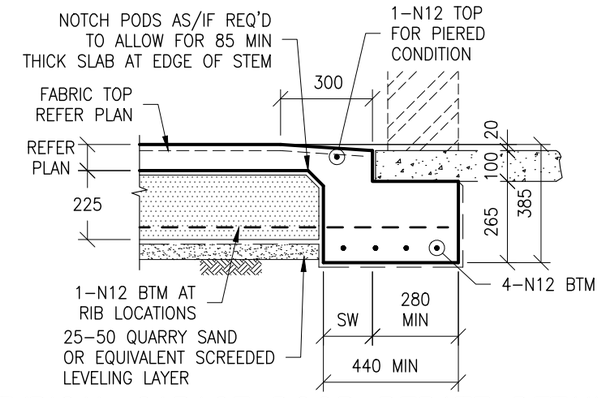
TYPICAL EDGE BEAM DETAIL



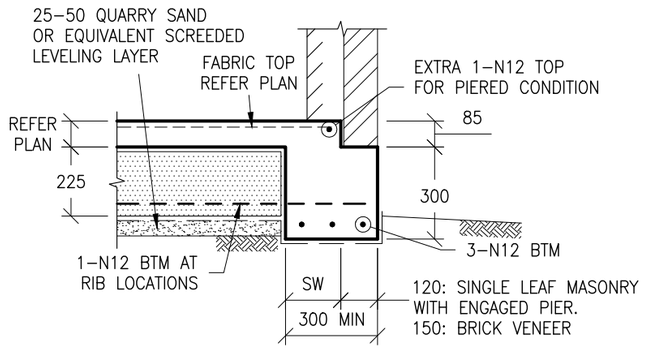
TYPICAL RIB BEAM DETAIL



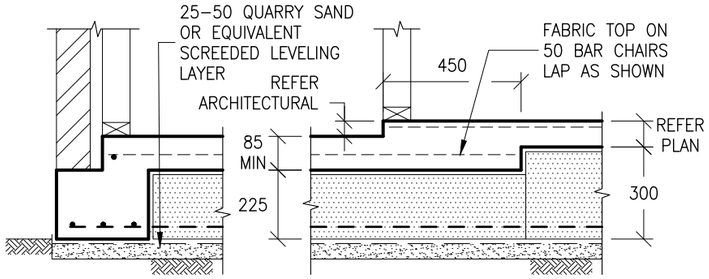
INTERNAL BEAM DETAIL – 'IB1'



TYPICAL GARAGE DOOR REBATE DETAIL

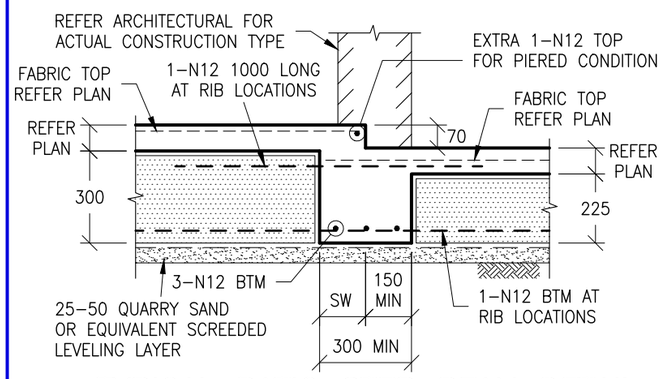


TYPICAL GARAGE EDGE BEAM DETAIL

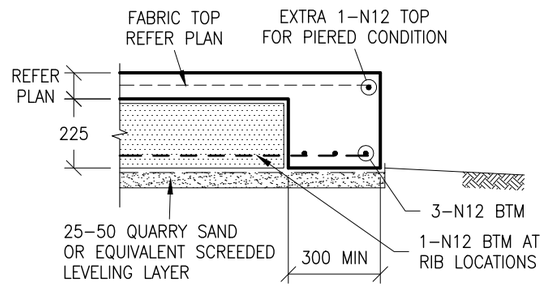


TYPICAL WET AREA RECESS DETAIL

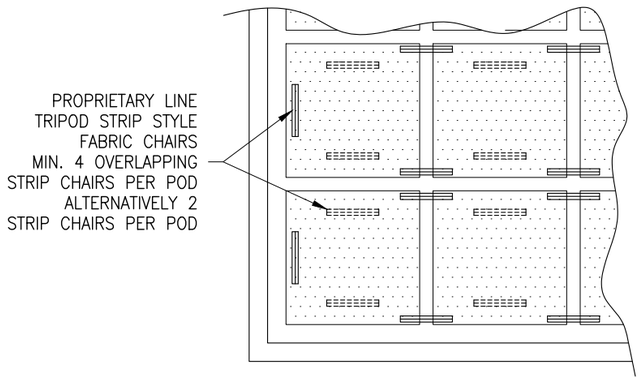
TO BE USED IN ACCORDANCE WITH THE ARCHITECTURAL



TYPICAL PATIO STEP BEAM DETAIL



TYPICAL PATIO EDGE BEAM DETAIL

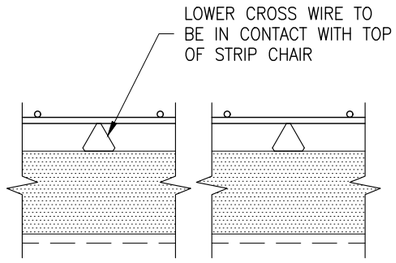


PLAN VIEW OF FABRIC CHAIR ORIENTATION

WHERE EXCESSIVE LAPPING OCCURS IT IS PERMISSIBLE TO USE 25–40 CHAIRS

(NOT TO SCALE)

FABRIC CHAIR NOTE:
TOP FABRIC TO BE CHAIRED USING TRIPOD STYLE STRIP CHAIRS



TYPICAL CHAIR DETAIL

(NOT TO SCALE)

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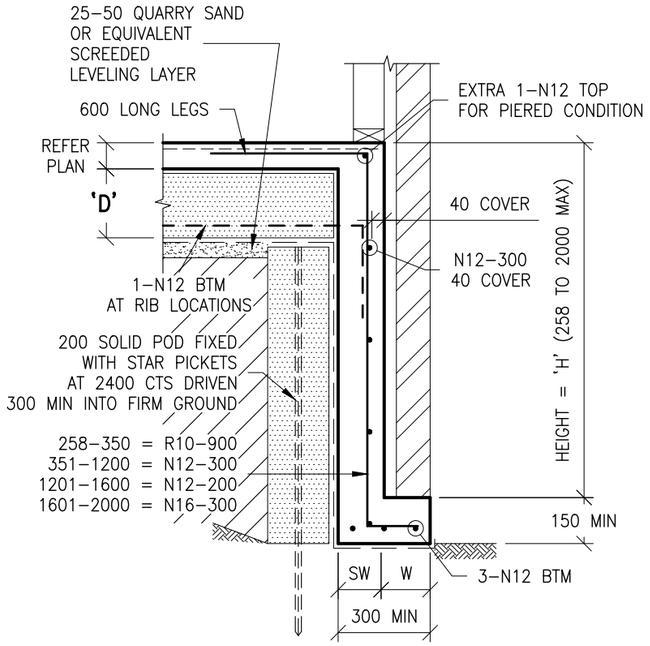
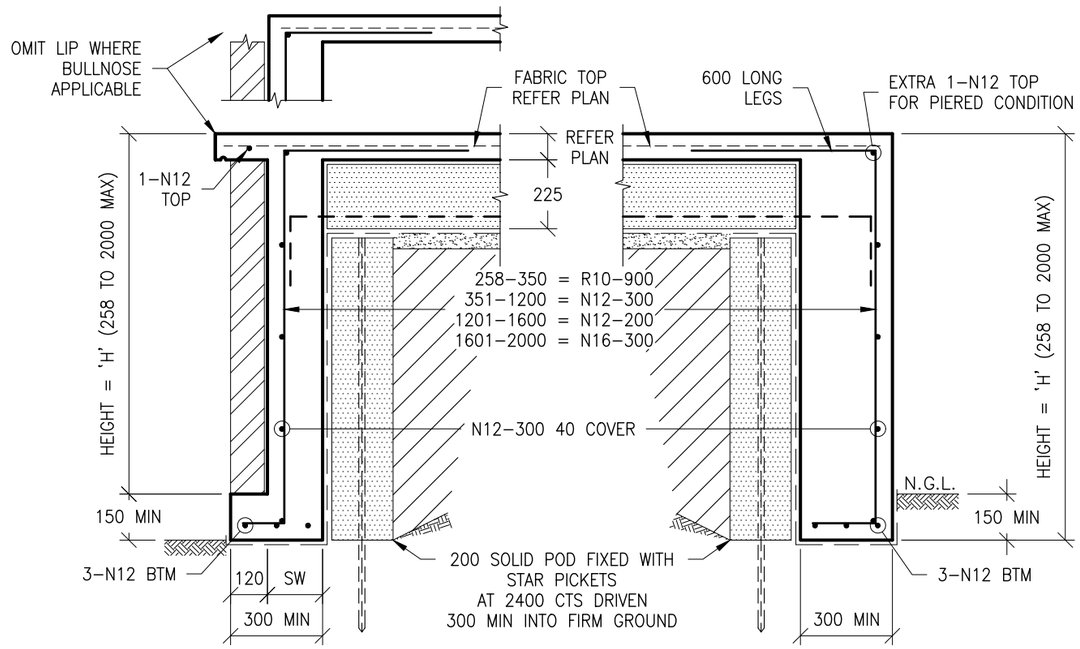


TYPICAL DEEPENED EDGE BEAM DETAIL

'D' = 300 MAIN RESIDENCE/GARAGE
225 PATIO

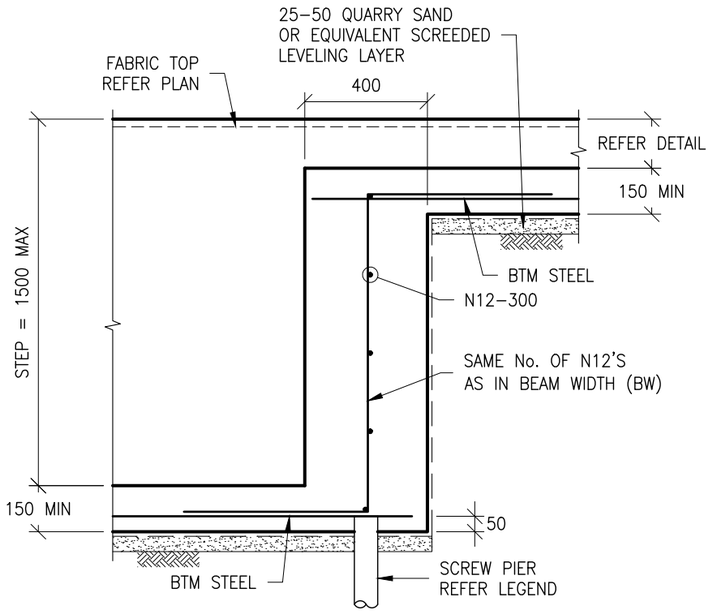
'W' = 120 MIN FOR SINGLE LEAF MASONRY WITH ENGAGED PIER.
150 MIN FOR BRICK VENEER



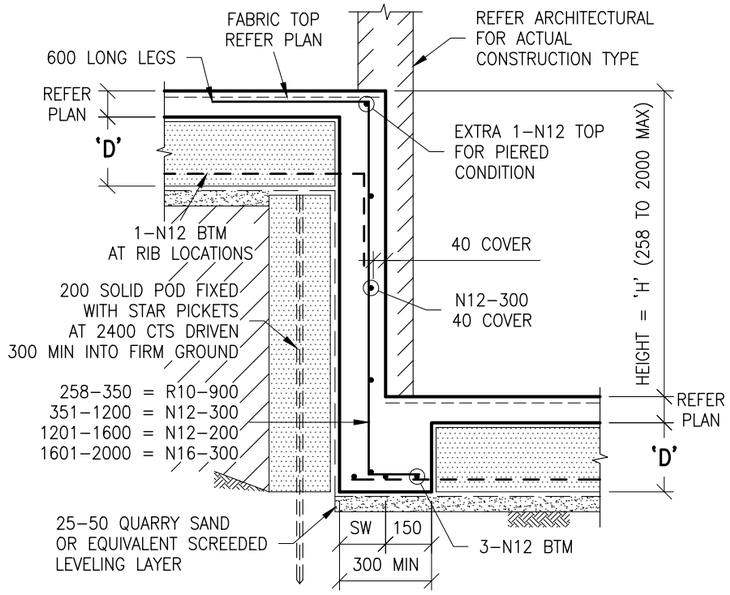
TYPICAL ALTERNATE DEEPENED PATIO EDGE BEAM DETAILS

DEEPENED BEAM STEM WIDTH TABLE

HEIGHT (H)	(SW) STEM WIDTH
UP TO 1200	150
1201 TO 1600	200
1601 TO 2000	250

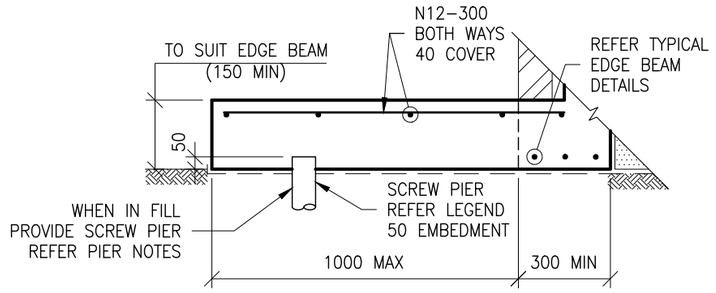


TYPICAL DEEPENED EDGE BEAM TRANSITION DETAIL



TYPICAL DEEPENED STEP BEAM DETAIL

'D' = 300 MAIN RESIDENCE/GARAGE
225 PATIO



TYPICAL ACU/HWS/GBS SLAB DETAIL

THIS DETAIL IS APPLICABLE AT ALL TYPICAL EDGE BEAMS. CONSTRUCTION TYPE MAY VARY FROM SHOWN

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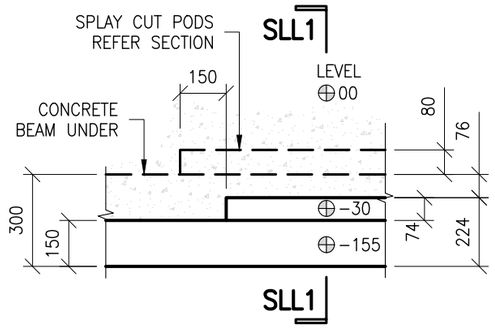
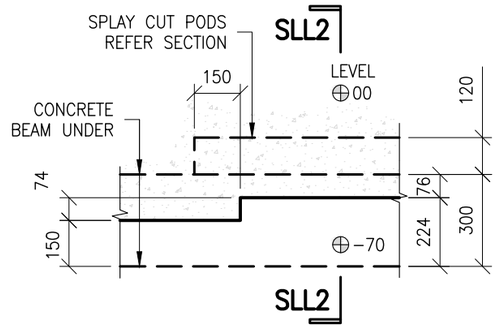


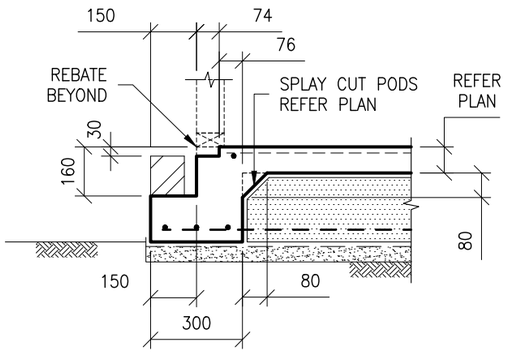
EDGE BEAM



STEP BEAM

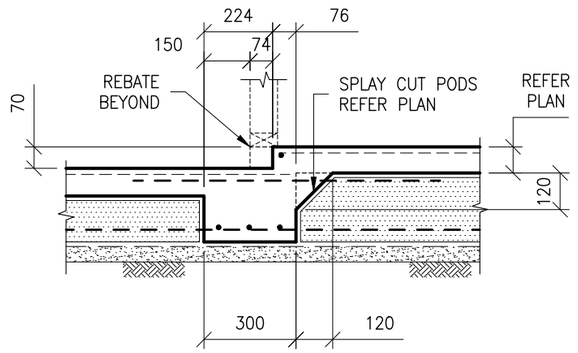
TYPICAL RECESSED DOOR SILL PART PLANS

NOTE: THIS DETAIL TO BE USED AT ALL SLIDING/STACKER DOORS LEADING TO AN EXTERNAL AREA (EXCLUDING LAUNDRY)



EDGE BEAM

SECTION SLL1–SLL1



STEP BEAM

SECTION SLL2–SLL2

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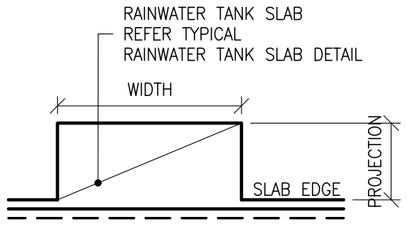
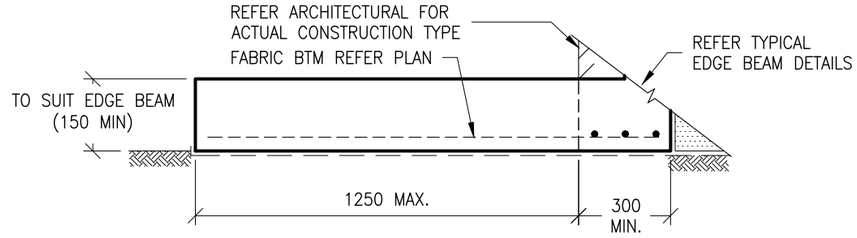


ONLY APPLICABLE WHEN MAIN HOUSE SLAB IS UNPIERED IN CUT SIDE. WHERE A SLAB IS FULLY PIERED, REFER TYPICAL RAINWATER TANK SLAB DETAIL – PIERED

NOT PIERED (I.E. ALL IN CUT)

PART PLAN ON RAINWATER TANK SLAB

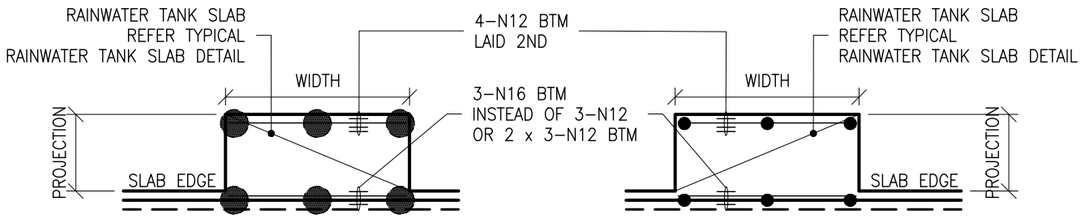
SCALE 1:100



TYPICAL RAINWATER TANK SLAB DETAIL – NOT PIERED

THIS DETAIL IS APPLICABLE AT ALL TYPICAL EDGE BEAMS.
CONSTRUCTION TYPE MAY VARY FROM SHOWN

SCALE 1:20

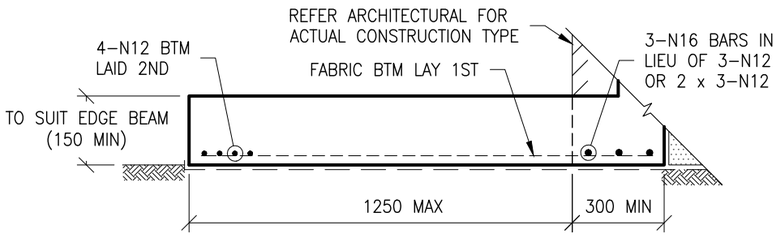


BORED PIERS

SCREW PIERS

PART PLAN ON RAINWATER TANK SLAB

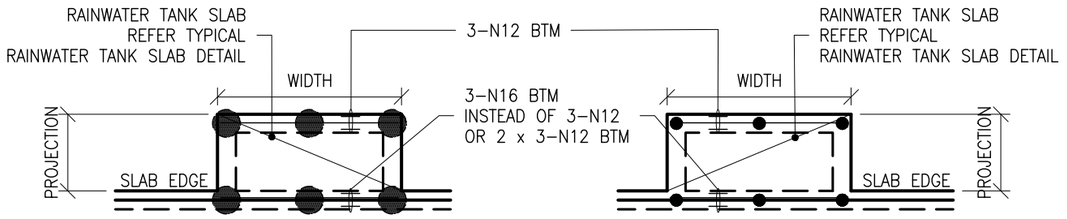
SCALE 1:100



TYPICAL RAINWATER TANK SLAB DETAIL – PIERED

THIS DETAIL IS APPLICABLE AT ALL TYPICAL EDGE BEAMS.
CONSTRUCTION TYPE MAY VARY FROM SHOWN

SCALE 1:20

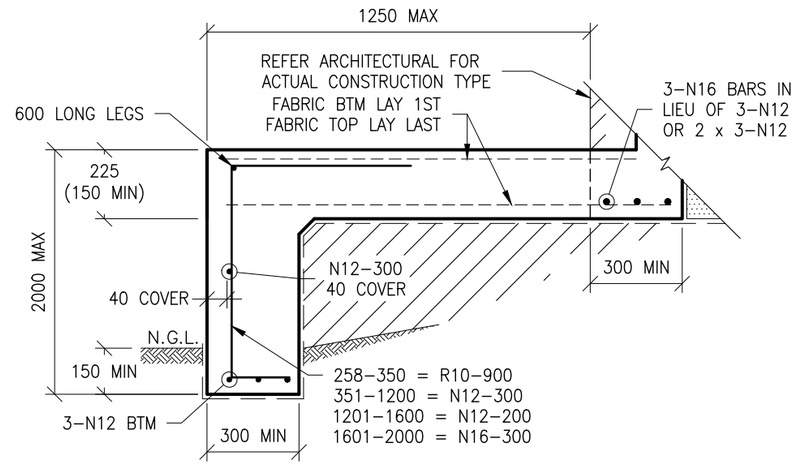


BORED PIERS (DROPPED EDGE)

SCREW PIERS (DROPPED EDGE)

PART PLAN ON RAINWATER TANK SLAB

SCALE 1:100



TYPICAL RAINWATER TANK SLAB DETAIL DROPPED EDGE – PIERED

THIS DETAIL IS APPLICABLE AT ALL TYPICAL EDGE BEAMS.
CONSTRUCTION TYPE MAY VARY FROM SHOWN

SCALE 1:20

INTEGRATED RAINWATER TANK SLAB OPTIONS 1250 MAX. PROJECTION (3600 MAX. WIDTH)

RESIDENTIAL ENGINEERING
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APPROVED BY:

GERVASE PURICH
FIEAust, C.P.Eng., NER, BPB, RPEQ

CLIENT REF: 652354
DATE: 11/05/2025
DRAWN: LTPH
SCALE: AS SHOWN

CLIENT: MOJO HOMES

FOR: N.S.W EXTENSIONS PTY LTD & EDWARD J FITZPATRICK

SITE ADDRESS: LOT 113 (22) PYRAMID AVENUE, PADSTOW

DRAWN	DATE	AMENDMENT	REV

JOB No: ME1344
ISSUE: -
SHEET No: 14 of 14

5/13/2025 9:23:09 AM, linh.t.pham

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