PROPOSED ALTERATIONS & ADDITIONS AT 68A ELIMATTA ROAD, MONA VALE NSW 2103

GENERAL NOTES

- 1. THESE ENGINEERING DRAWINGS ARE TO BE READ IN CONJUNCTION WITH PROJECT SPECIFICATIONS AND OTHER CONSULTANTS DRAWINGS ON THE PROJECT
- 2. THESE ENGINEERING DRAWINGS HAVE BEEN PREPARED FROM INFORMATION AVAILABLE AT THE TIME OF ISSUE. AS THIS INFORMATION MAY BE THE SUBJECT OF CHANGE PRIOR TO OR DURING CONSTRUCTION THE CONTRACTOR IS TO ADVISE THE ENGINEER WHERE DISCREPANCIES OCCUR.
- 3. THESE DRAWINGS SHALL NOT BE USED FOR FINAL SETOUT OF THE PROJECT UNLESS SPECIFICALLY STATED.
- 4. INSPECTIONS ARE REQUIRED TO BE PERFORMED BY A DULY APPOINTED INSPECTOR FROM 'GEMSTRUX CONSULTING ENGINEERS'. THESE INSPECTIONS ARE REQUIRED TO BE PERFORMED IN ACCORDANCE WITH THE SCOPE OF INSPECTIONS PREPARED BY 'GEMSTRUX CONSULTING ENGINEERS'. THE INSPECTOR IS TO BE GIVEN A MINIMUM OF 48 HOURS NOTICE.
- 5. PRIOR TO THE COMMENCEMENT OF WORKS THE CONTRACTOR IS TO IDENTIFY ALL EXISTING SERVICES. ANY DAMAGE TO EXISTING SERVICES IS TO BE RECTIFIED AT THE CONTRACTORS EXPENSE. SERVICES SHOWN ON 'GEMSTRUX CONSULTING ENGINEERS' DRAWINGS ARE INDICATIVE ONLY.
- 6. DURING CONSTRUCTION THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE STABILITY OF THE WORKS AND ENSURE NO PART IS OVERSTRESSED.
- 7. WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH THE CURRENT AUSTRALIAN STANDARDS AND BCA STATUTORY REQUIREMENTS, EXCEPT WHERE VARIED BY THE CONTRACT DOCUMENTS.
- 8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT SUFFICIENT TOLERANCES ARE PROVIDED AND INTEGRATED THROUGHOUT ALL THE ELEMENTS OF THE WORKS.
- 9. ALL NON-LOAD BEARING ELEMENTS SHALL BE KEPT CLEAR OF THE STRUCTURE SOFFIT BY AN ALLOWANCE DETERMINED FROM SPAN/250 OR CANTILEVER/125 BUT NOT LESS THAN 20mm, UNLESS NOTED OTHERWISE ON THE DRAWINGS
- 10. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS STATED OTHERWISE
- 11. ALL LEVELS ARE IN METRES (m) TO AUSTRALIAN HEIGHT DATUM AHD.

12. WIND AND EARTHQUAKE LOADS HAVE BEEN DETERMINED IN ACCORDANCE WITH AS1170.2 AND AS1170.4 RESPECTIVELY BASED ON THE FOLLOWING DESIGN CRITERIA :

WIND LOADS:	
REGION	A2
TERRAIN CATEGORY	2.5
GUST WIND SPEED V _{ZU} (m/s)	45
SHIELDING M _S	1.0
TOPGRAPHIC M _t	1.0
IMPORTANCE MI	1.0

13. SUPERIMPOSED DEAD LOADS AND LIVE LOADS HAVE BEEN DETERMINED IN ACCORDANCE WITH AS1170.1 AND ARE SHOWN ON THE GENERAL ARRANGEMENT DRAWINGS.

14. ALL ABBREVIATIONS ARE IN ACCORDANCE WITH AS 1100. ADDITIONAL ABBREVIATIONS USED ARE AS FOLLOWS:

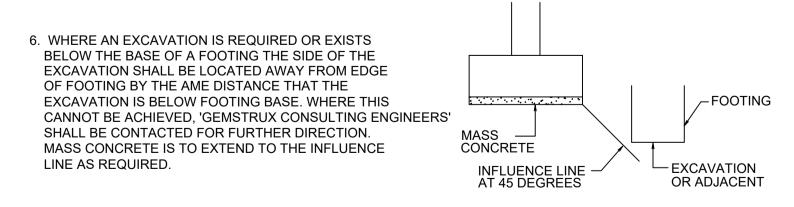
NSOP	NOT SHOWN ON PLAN
NSOE	NOT SHOWN ON ELEVATION
UNO	UNLESS NOTED OTHERWISE
U/S	UNDERSIDE
NGL	NATURAL GROUND LINE
FFL	FINISHED FLOOR LEVEL

FOUNDATION NOTES

1. REFER TO THE GEOTECHNICAL ENGINEERING REPORT SPECIFIED IN THE GENERAL NOTES FOR SITE SPECIFIC GEOTECHNICAL INFORMATION.

2. FOOTINGS TO BE FOUNDED ON MATERIAL HAVING AN ALLOWABLE BEARING CAPACITY OF 250 kPa IN STIFF CLAY. WHERE DIFFICULTY IN REACHING THE REQUIRED CAPACITY IS EXPERIENCED, 'GEMSTRUX CONSULTING ENGINEERS' IS TO BE CONTACTED TO RE-ASSESS THE FOOTING DESIGN.

- 3. THE CONTRACTOR IS TO ENGAGE AND PAY A GEOTECHNICAL ENGINEER TO VERIFY THE BEARING CAPACITY OF THE FOUNDATIONS PRIOR TO PLACEMENT OF THE BLINDING LAYER.
- 4. ALL LOOSE MATERIAL AND WATER TO BE CLEANED OUT OF THE FOUNDATION. FORMWORK TO BE USED WHERE THE SIDES OF THE FOUNDATION ARE NOT STABLE.
- 5. A 50mm MINIMUM BLINDING LAYER SHOULD BE APPLIED TO THE BASE OF ALL FOUNDATIONS IMMEDIATELY AFTER VERIFICATION OF THE BEARING CAPACITY BY THE GEOTECHNICAL ENGINEER. WHERE THE FOUNDING MATERIAL IS DEEPER THAN REQUIRED FOR THE FOOTING THE EXCAVATION IS TO BE BACKFILLED WITH A WEAK MIX CONCRETE (N10) TO THE UNDERSIDE OF THE FOOTING.



FOUNDATION NOTES (CONT.)

7. ALL WALLS AND COLUMNS SHALL BE CONCENTRIC WITH THE SUPPORTING FOOTINGS UNLESS NOTED OTHERWISE ON THE DRAWINGS.

CONCRETE NOTES

- SPECIFICATIONS.
- CONSULTING ENGINEERS'.
- FOR ALL SLAB FALLS AND CONFIRMATION OF SLAB STEPS.
- TO 'GEMSTRUX CONSULTING ENGINEERS' FOR APPROVAL.
- ENGINEERS'.
- SPACED AT A MAXIMUM DISTANCE POSSIBLE AND UNDER NO CIRCUMSTANCES CLOSER REINFORCEMENT OR ANY OTHER CONDUIT.
- SHALL BE AS NOTED ON THE DRAWINGS.
- 9. MAXIMUM AGGREGATE SIZE 20mm
- 10. SLUMP. .80mm
- 11. ALL CONCRETE SHALL BE VIBRATED.
- THE PROJECT SPECIFICATION.

14. ALL FORMWORK SHALL COMPLY WITH AS3610 15. EACH FLOOR SHALL BE FULLY PROPPED TO THE FLOOR BELOW IN ACCORDANCE WITH AS3610 (FORMWORK CODE).

16. THE FLOOR BELOW SHALL BE BACKPROPPED THROUGH A MINIMUM OF TWO STOREYS BELOW. THIS RESULTS IN A MINIMUM OF THREE STOREYS PROPPED AT ALL TIMES

17. PROPS MAY BE REMOVED AFTER 28 DAYS OF CURING OR AFTER 14 DAYS IF THE CONCRETE HAS REACHED ITS CHARACTERISTIC STRENGTH (AS PROVED BY CYLINDER TEST RESULTS).

REINFORCEMENT FIXED AS SHOWN ON DRAWINGS.

- 2. MATERIAL IS INDICATED BY THE FOLLOWING SYMBOLS:-Y DEFORMED BAR GRADE 400 N DEFORMED BAR GRADE 500 (NORMAL DUCTILITY) R PLAIN ROUND BAR GRADE 250 W PLAIN WIRE GRADE 450
 - F FABRICS GRADE 450
- DIAMETER IN MILLIMETERS.
- TO BE CUT ON SITE PROIR TO CONTINUING.

- 7. COVER SHALL BE AS NOTED ON THE RELEVANT DRAWINGS.
- PLASTIC TIPPED METAL CHAIRS.

OUTSIDE OF TIES OR LIGATURES.

SCALE AT A1 0 10 20 30 40 50	60 70 80 90 100 110 120 130 140 150		
DRAWN: J.M. DESIGNED: J.M.		REVISION	DESCRIPTION
APPROVED: J.M.		REV A	ISSUED FOR DA APPROVAL
B.E CONSTRUCTION MIEAust	ENGINEERS	REV B	ISSUED FOR DA APPROVAL
MEMB. NO: 4468815	AUSTRALIA	REV C	ISSUED FOR DA APPROVAL
M/ 02 7205 7960 E/ INFO@GEMSTRUX.COM.AU W/ WWW.GEMSTRUX.COM.AU			

1. CONCRETE WORK SHALL BE IN ACCORDANCE WITH AS3600 AND WITH THE PROJECT

2. CONSTRUCTION JOINTS SHALL BE PROPERLY FORMED AND USED ONLY WHERE SHOWN ON 'GEMSTRUX CONSULTING ENGINEERS' DRAWINGS OR SPECIFICALLY APPROVED BY 'GEMSTRUX

3. ALL THICKNESSES SHOWN ARE MINIMUM STRUCTURAL REQUIREMENTS, NO REDUCTION IN THICKNESS DUE TO FALLS OR TOPPING IS PERMITTED. REFER ARCHITECT DRAWINGS

4. UNLESS A GROOVE LINE ALLOWANCE HAS BEEN NOTED ON THE DRAWINGS, NO GROOVE LINES ARE PERMITTED, EXCEPT AT SLAB LINES, ALL GROOVE LINES ARE TO BE SUBMITTED

5. THE FACE OF ALL CONCRETE AGAINST WHICH NEW CONCRETE IS TO BE CAST IS TO BE THOROUGHLY MECHANICALLY SCABBLED, FULLY EXPOSING THE AGGREGATE MATRIX. 6. NO PENETRATIONS GREATER THAN 150mm DIAMETER, OR EMBEDMENT OF PIPES GREATER THAN 40mm DIAMETER OTHER THAN THOSE SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE MADE IN CONCRETE SLABS. FOR ALL OTHER CONCRETE MEMBERS NO PENETRATIONS,

CHASES OR EMBEDMENTS SHALL BE MADE WITHOUT PRIOR APPROVAL BY 'GEMSTRUX CONSULTING 7. CONDUITS GREATER THAN 25mm DIAMETER CAST INTO CONCRETE MEMBERS SHALL BE

THAN A CLEAR SPACING OF TWICE THE LARGER CONDUIT DIAMETER FROM PARALLEL

8. THE CHARACTERISTIC COMPRESSIVE STRENGTH (fc) AT 28 DAYS OF IN PLACE CONCRETE

12. ALL CONCRETE SHALL BE CURED IN ACCORDANCE WITH THE SPECIFICATION

13. ALL CONCRETE SHALL BE SAMPLED AND TESTED IN ACCORDANCE WITH AS1012 AND

1. REINFORCEMENT IS TO BE MANUFACTURED IN ACCORDANCE WITH AS1302 AND SHALL BE

3. THE BAR SIZE IS INDICATED BY A NUMBER AFTER THE SYMBOL, WHICH INDICATES THE BAR

4. REINFORCEMENT SPACING NOMINATED ON DRAWINGS IS TO ASSIST SCHEDULER AND STEELFIXER TO ASSESS TOTAL NUMBER OF BARS REQUIRED. WHERE BARS PLACED IN ACCORDANCE WITH SPACING NOMINATED FOUL WITH OTHER STRUCTURAL REQUIREMENTS, PREFERANCE IS TO BE GIVEN TO RELOCATING BARS BY LOCALLY ADJUSTING SPACING TO ENABLE ASSEMBLY OF REINFORCEMENT TO BE COMPLETED. ENGINEER IS TO BE CONTACTED IN THE EVENT THAT REINFORCEMENT IS NEEDED

5. LAP LENGTHS TO REINFORCEMENT BARS TO BE AS NOTED ON THE RELEVANT DRAWINGS.

6. WELDING OF REINFORCEMENT BARS IS NOT PERMITTED UNLESS APPROVED

8. CONCRETE COVERS NOTED ARE MEASURED FROM THE FORMWORK OR GROUND FACE TO THE OUTERMOST REINFORCEMENT COMPONENT. ie. IN COLUMNS AND BEAMS TO THE

9. COVER TO BE MAINTAINED DURING POURING BY THE USE OF PLASTIC CHAIRS OR

10. WHERE NO REINFORCEMENT IS SHOWN ON THE DRAWING AT RIGHT ANGLES TO THE MAIN REINFORCEMENT DISTRIBUTION REINFORCMENT IS TO BE PROVIDED.

MASONRY NOTES

1. ALL MASONRY SHALL COMPLY WITH AS3700 AND THE PROJECT SPECIFICATION.

- 2. CONCRETE MASONRY UNITS TO HAVE A MINIMUM CHARACTERISTIC UNCONFINED STRENGTH OF 20 MPa IN ACCORDANCE WITH AS2733.
- 3. MASONRY TO BE BEDDED IN FRESHLY PREPARED MORTAR (a) CONCRETE BLOCKS :-

MORTAR MIX TO BE UNIFORMLY MIXED IN A RATIO OF ONE PART CEMENT. ONE PART LIME AND SIX PARTS SAND CONFORMING TO AS2701. 'BRICKIES LOAM' SHALL NOT BE USED. (b) CLAY BRICKS :

- MORTAR MIX TO BE UNIFORMLY MIXED IN THE RATIO OF ONE PART CEMENT, THREE PARTS SAND AND ONE FOURTH PART LIME CONFORMING TO AS2701. 'BRICKIES LOAM' SHALL NOT BE USED. 4. GROUT SHALL HAVE A COMPRESSIVE STRENGTH (fc) OF 20 MPa AT 28 DAYS, A SLUMP OF 125mm IN A 150mm SLUMP CONE, A MAXIMUM AGGREGATE SIZE OF 10mm AND BE IN
- ACCORDANCE WITH AS3700. 5. BEDDING OF MASONRY SHALL BE FULL FACE WITH CROSS JOINTS COMPLETELY FILLED. JOINT
- THICKNESS SHALL NOT EXCEED 12mm. 6. PROVIDE WALL TIES AT 600mm MAXIMUM CENTRES VERTICALLY AND HORIZONTALLY. REFER TO
- MASONRY DETAILS FOR WALL TIE SETOUT AT OPENINGS. 7. THE CAVITY SHALL NOT EXCEED 100mm AND SHALL NOT BE SMALLER THAN 40mm UNLESS NOTED OTHERWISE, KEEP CAVITY CLEAN AND CLEAR OF OBSTRUCTIONS.
- 8. RAKING OF JOINTS IS NOT PERMITTED WITHOUT PRIOR APPROVAL FROM 'GEMSTRUX CONSULTING
- **ENGINEERS** 9. ALL WALLS TO BE KEPT STABLE AT ALL STAGES OF CONSTRUCTION AND NOT BE OVER STRESSED AT ANY TIME.
- 10. UNLESS NOTED OR SHOWN OTHERWISE ON DRAWINGS THERE ARE TO BE NO CHASES OR RECESSES PERMITTED IN MASONRY WALLS WITHOUT THE PRIOR APPROVAL OF 'GEMSTRUX CONSULTING ENGINEERS'.

TIMBER NOTES

- T1 AS 1684 IS RELEVANT TO DOMESTIC CONSTRUCTION IN SHELTERED LOCATIONS.
- T2 SOFTWOOD MINIMUM GRADE F7 U.N.O.
- HARDWOOD MINIMUM GRADE F11 U.N.O. T3 EXTERNAL TIMBER TO BE EITHER HARDWOOD DURABILITY CLASS I OR II OR IMPREGNATED GRADE F7. PRESSURE TREATED TO AS1684 AND RE-DRILLED PRIOR TO USE. SUPPLEMENTARY TREATMENT SHALL BE APPLIED TO ALL CUT SURFACES. PROVIDE DOCUMENTATION.
- T4 ALL BOLTS IN TIMBER CONSTRUCTION TO BE MIN. M16 U.N.O. BOLT HOLES TO BE DRILLED EXACT SIZE. WASHERS UNDER HEADS AND NUTS TO BE AT LEAST 2.5 TIMES BOLT DIAMETER.
- T5 FINISHED TIMBER SIZES.
- SEASONED SOFTWOOD +5,-0mm UNSEASONED SOFTWOOD F7+3,-3mm F7+2,-4mm +2,-0mm

SEASONED HARDWOOD UNSEASONED HARDWOOD -3,-3mm

- (SEE ALSO CLAUSE 1.6.2 IN AS 2082)
- T6 ALL TIMBER JOINTS AND NOTCHES TO BE 100mm MINIMUM FROM LOOSE KNOTS. SEVERE SLOPING GRAIN, GUM VEINS OR OTHER MINOR DEFECTS.
- FOR JOISTS SPANNING GREATER THAN 3m AND LESS THAN 4.2m
- PROVIDE ONE ROW OF BLOCKING MID-SPAN.
- FOR JOISTS SPANNING GREATER THAN 4.2m AND UP TO 6.0m PROVIDE TWO ROWS OF BLOCKING AT 1/3 POINTS.
- FOR DEEP JOISTED FLOORS WHERE A CONTINUOUS TRIMMING JOIST IS NOT PROVIDED AT END OF JOISTS. BLOCKING IS REQUIRED AT 1800 MAXIMUM CENTERS. (REFER TO AS 1684)
- T7 BLOCKING IS NOT REQUIRED FOR JOISTS SPANNING LESS THAN 3m.



FAMELI RESIDENCE

CLIENT:

68A ELIMATTA ROAD MONA VALE NSW 2103

STRUCTURAL STEELWORK NOTES

S1 ALL MATERIALS, WORKMANSHIP, FABRICATION AND ERECTION SHALL COMPLY WITH THE REQUIREMENTS OF AS4100, AS1538, AS1554 AND THE SPECIFICATION.

S2 UNLESS SHOWN OTHERWISE, ALL STEEL SHALL BE IN ACCORDANCE WITH AS1204 GRADE 300. ALL STEEL HOLLOW SECTIONS SHALL BE GRADE 350 U.N.O. AND SHALL BE IN ACCORDANCE WITH AS1163. ALL PRESSED METAL PURLINS AND GIRTS SHALL BE GRADE 450 STEEL IN ACCORDANCE WITH AS1538

- S3 UNLESS SHOWN OTHERWISE ON THE DRAWINGS, ALL CONNECTIONS SHALL BE IN ACCORDANCE WITH THE FOLLOWING MINIMUM REQUIREMENTS:
 - (i) ALL WELDS SHALL BE 6MM CONTINUOUS FILLET WELDS ALL ROUND. (ii) ALL BOLTS SHALL BE M20 - 8.8/S, WITH A MINIMUM OF 2 BOLTS PER CONNECTION.
 - PURLIN BOLTS TO BE M12 4.6/S WITH A MINIMUM OF 2 BOLTS PER PURLIN END.
 - (iii) ALL GUSSET AND CLEAT PLATES SHALL BE 10mm THICK. (U.N.O.) (iv) ALL CAP PLATES SHALL BE 10 mm THICK. (U.N.O.)
 - (v) ALL BASE PLATES SHALL BE 10 mm THICK. (U.N.O.)
- S4 BOLT DESIGNATION: 4.6/S REFERS TO COMMERCIAL BOLTS OF STRENGTH GRADE 4.6 TO AS1111 TIGHTENED TO A SNUG TIGHT CONDITION.

8.8/S REFERS TO HIGH STRENGTH STRUCTURAL BOLTS OF GRADE 8.8 TO AS1252 TIGHTENED TO A SNUG TIGHT CONDITION.

8.8/TB REFERS TO HIGH STRENGTH STRUCTURAL BOLTS OF GRADE 8.8 TO AS1252 FULLY TENSIONED TO AS4100 AS A BEARING JOINT.

8.8/TF REFERS TO HIGH STRENGTH STRUCTURAL BOLTS OF GRADE 8.8 TO AS1252 FULLY TENSIONED TO AS4100 AS A FRICTION JOINT.

- HIGH STRENGTH BOLTED JOINTS SHALL BE IN ACCORDANCE WITH AS1511. S5 THE SPECIFIED BOLT TENSION SHALL BE OBTAINED BY USE OF THE "PART TURN" METHOD OF TIGHTENING.
- S6 ALL WELDS SHALL BE SP (SPECIAL PURPOSE) IN ACCORDANCE WITH AS1554. ALL ELECTRODES SHALL BE CLASS E48. ALL BUTT WELDS SHALL BE FULL STRENGTH COMPLETE PENETRATION WELDS.
- S7 SUBSTITUTIONS FOR STEEL SECTIONS SHOWN ON DRAWINGS SHALL NOT BE MADE WITHOUT THE APPROVAL OF THE ENGINEER.
- S8 ALL STEELWORK BELOW GROUND OR FINISHED SURFACE LEVEL IS TO BE HOT-DIPPED GALVANIZED.

BRICK LINTEL SCHEDULE

	INTERNAL SKIN	EXTERNAL SKIN	END BEARING
OPENING SIZE (mm)			
UP TO 900mm	100 x 8mm FLAT BAR	100 x 6mm FLAT BAR	100 mm
1200	100 x 10mm FLAT BAR	100 x 8mm FLAT BAR	100 mm
1500	100 x 100 x 8mm ANGLE	100 x 100 x 6mm ANGLE	150 mm
2100	150 x 100 x 8mm ANGLE	150 x 100 x 6mm ANGLE	150 mm
2400	150 x 100 x 8mm ANGLE	150 x 100 x 8mm ANGLE	150 mm
2700	150 x 100 x 10mm ANGLE	150 x 100 x 10mm ANGLE	150 mm
3000	150 x 100 x 12mm ANGLE	150 x 100 x 12mm ANGLE	150 mm

*ALL STEEL LINTELS TO BE HOT DIPPED GALVANIZED

TITLE:	PROJECT NO:
COVER PAGE	G23231
COPYRIGHT THIS DRAWING AND THE INFORMATION SHOWN HEREON IS THE PROPERTY OF GEMSTRUX CONSULTING ENGINEERS P/L AND MAY NOT BE USED FOR ANY OTHER PURPOSE THAN FOR WHICH SUPPLIED.	
DO NOT SCALE FROM STRUCTURAL DRAWINGS, REFER TO ARCHITECTURAL DRAWINGS ONLY ALL DIMENSIONS IN 'mm' UNLESS OTHERWISE STATED	S1

GROUND FLOOR PLAN SCALE: 1:100 NOTES:

- SITE IN ACCORDANCE WITH AS2870 CLASS A AS PER GEOTECH PREPARED BY ASCENTGEO REF: AG23136 (19/05/2023)
- SAFE BEARING CAPACITY HAS BEEN TAKEN TO BE A MIN. OF 400 kPa TO BE BEARING ON LOW STRENGTH BEDROCK.
- PROVIDE SL82 MESH TOP THROUGHOUT FOR ALL 125mm THICK SLAB ON GROUND U.N.O. REFER TO STORMWATER DRAINAGE DRAWINGS FOR LOCATION OF PUMP WELL AND SUMP PITS.
- ALL EXPOSED SLABS TO BE WATERPROOFED WITH APPROVED SYSTEMS.
- ALL BRICKS WALLS TO BE ARTICULATED, EXPANSION JOINT SPACING TO BE 6000 mm.
- DRAWING TO BE READ IN CONJUNCTION WITH ARCHITECTURALS. REFER TO ARCHITECTURAL DRAWINGS FOR ALL SETOUT, LEVELS, FALLS ETC.
- 9. RAIN WATER TANK SLAB TO BE A THICKNESS OF 150mm WITH SL82 MESH TOP & BOTTOM AND , MIN. COVER 40mm.

LEGEND			
	200 SERIES CORE-FILLED BLOCK WALL		
	BRICKWORK ABOVE		
STUD WALL			
	EXISTING WALLS TO REMAIN		
c===>	EXISTING WALL TO BE DEMOLISHED		
125	REINFORCED CONCRETE SLAB THICKNESS		
75 7 777777	STEP DOWN IN SLAB		
I.J.	ISOLATION JOINT		
SPIP.	89 x 89 x 6mm SHS STEEL POST ABOVE (GALVANIZED)		
-RIA	90 x 90 HARDWOOD TIMBER POST ABOVE		
D.J.	DOWEL JOINTS (REFER TO DETAIL)		
R/	450 DIAM. MASS CONCRETE BORED PIER TO BE FOUND 300mm IN BEDROCK		
82	300 DIAM. MASS CONCRETE BORED PIER TO BE FOUND 300mm IN BEDROCK		
<i>থ</i> ঙ ●	300 DIAM. REINFORCED CONCRETE BORED PIER TO BE FOUND 300mm IN BEDROCK		
	2N12 TRIMMERS TOP - 1200 LONG		
A.J.	ARTICULATION JOINT - REFER TO DETAIL		

DRIVEWAY- 120mm SLAB WITH SL82 MESH TOP U.N.O NOTE :1. MAX 6m SAWN CONTROL JOINT

- 2. MAX 15m KEYED CONSTRUCTION JOINT
- 3. MAX 30m EXPANSION JOINT

MESH SCHEDULE			
	BOTTOM REINFORCEMENT	TOP REINFORCEMENT	
125	-	SL82 MESH	
150	SL82 MESH	SL82 MESH	
	-	•	

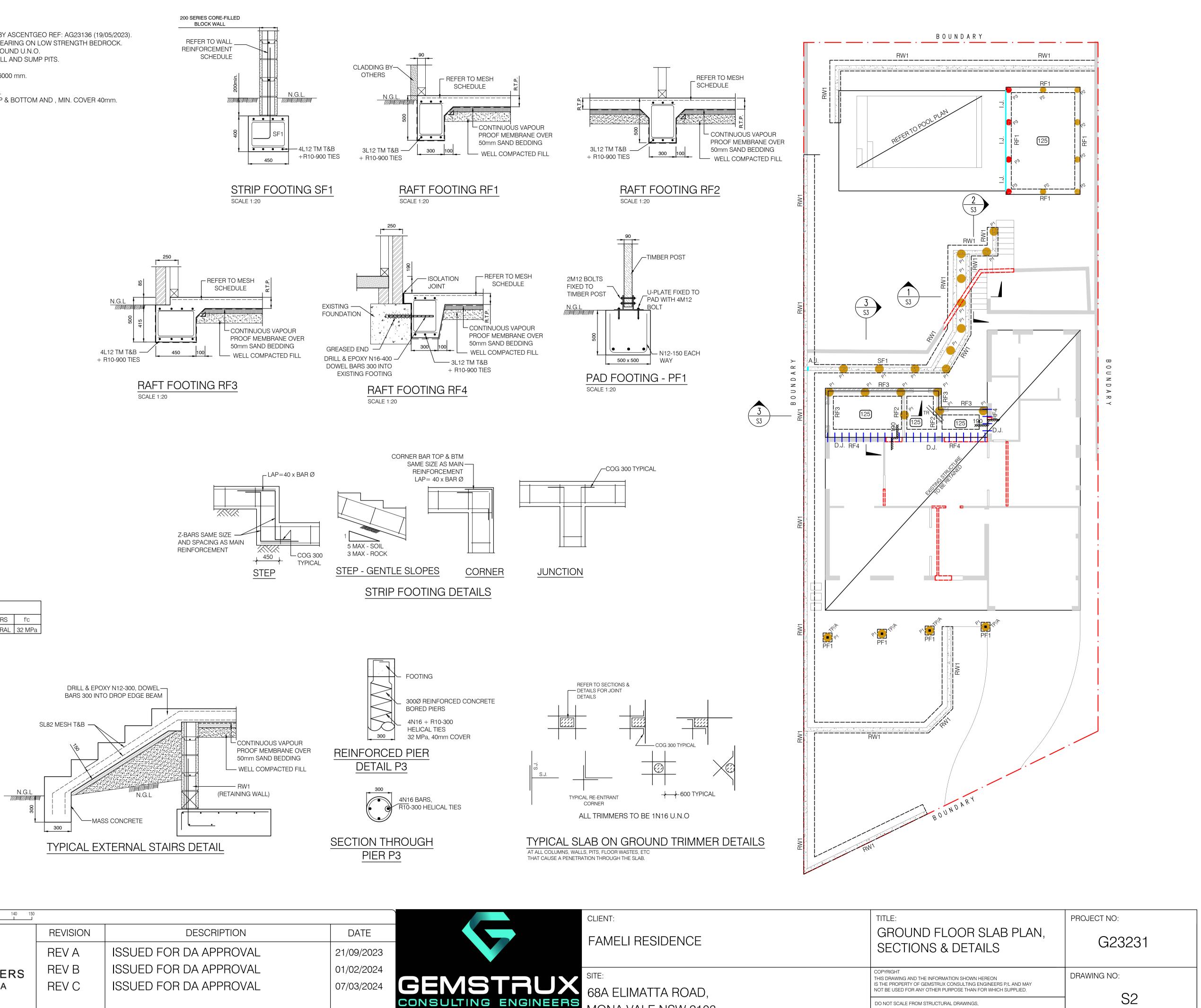
PATHWAY- 100mm SLAB WITH SL72 MESH TOP U.N.O NOTE :1. MAX 4m SAWN CONTROL JOINT 2. MAX 10m KEYED CONSTRUCTION JOINT 3. MAX 20m EXPANSION JOINT

WALL REINFORCEMENT SCHEDULE TYPE VERT. REINF. HORZ. REINF. STARTER BARS f'c WALL 200 BLOCK WALL N16-400 CENTRAL N12-400 CENTRAL N16-400 CENTRAL 32 MPa

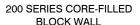
ENGINEER TO CONFIRM ADEQUACY OF EXISTING STRUCTURE DURING CONSTRUCTION

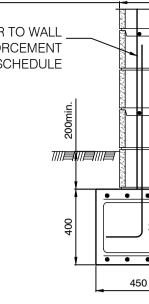
150mm THICK SLAB WITH SL82 MESH TOP & BTM TO BE USED FOR ALL SLABS 700mm ABOVE N.G.L

PIERING MAYBE REMOVED -ENGINEER TO CONFIRM DURING CONSTRUCTION

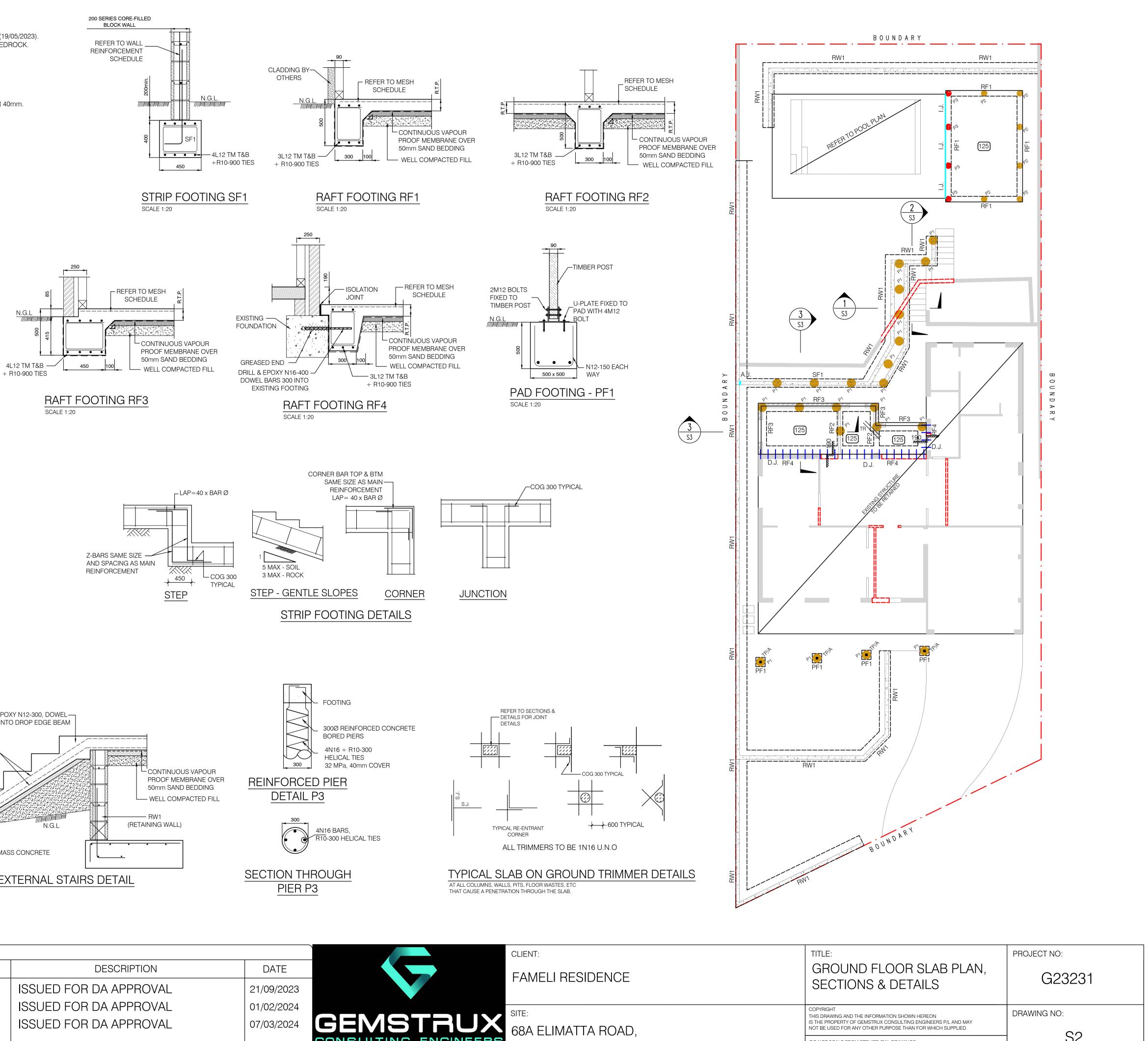


SCALE AT A1 0 10 20 30 40 50 60) 70 80 90 100 110 120 130 140 150		
DRAWN: J.M. DESIGNED: J.M.		REVISION	DESCRIPTION
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B.E CONSTRUCTION MIEAust	ENGINEERS	REV B	ISSUED FOR DA APPROVAL
MEMB. NO: 4468815	AUSTRALIA	REV C	ISSUED FOR DA APPROVAL
M/ 02 7205 7960 E/ INFO@GEMSTRUX.COM.AU W/ WWW.GEMSTRUX.COM.AU			

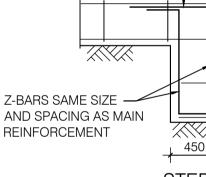












MONA VALE NSW 2103

REFER TO ARCHITECTURAL DRAWINGS ONLY ALL DIMENSIONS IN 'mm' UNLESS OTHERWISE STATED

