# PROPOSED CAMP KITCHEN - MENINDEE CAMPING GROUNDS

R1.

R2.

R3

R4

R5.

R6

R7.

R8

### **GENERAL**:

- G1. THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH ALL ARCHITECTURAL AND OTHER CONSULTANT'S DRAWINGS AND SPECIFICATIONS AND 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
- ALL DIMENSIONS ARE TO BE OBTAINED FROM THE G2 ARCHITECT'S/SHED PROVIDER'S DRAWINGS OR FROM SITE. ENGINEERS DRAWINGS MUST NOT BE SCALED.
- DURING CONSTRUCTION THE CONTRACTOR SHALL BE G3 RESPONSIBLE FOR MAINTAINING THE STRUCTURE IN A STABLE CONDITION AND ENSURING NO PART SHALL BE OVERSTRESSED UNDER CONSTRUCTION ACTIVITIES.
- MATERIAL AND WORKMANSHIP ARE TO BE IN ACCORDANCE G4 WITH THE RELEVANT SA CODES EXCEPT WHERE VARIED BY THE PROJECT SPECIFICATIONS.
- G5 THE STRUCTURAL WORK SHOWN ON THESE DRAWINGS HAS BEEN DESIGNED FOR THE FOLLOWING:

AREA	LIVE LOAD/SITE CLASS
FLOOR	1.5 kPa
SITE CLASS	A - AS2870 - 2011

- ALL CARE SHALL BE TAKEN TO ENSURE ADEQUATE SITE G6. DRAINAGE IS PROVIDED TO ENSURE THAT WATER IS DIVERTED AWAY FROM THE BUILDING DURING AND AFTER CONSTRUCTION.
- ALL FORM WORK SHALL BE IN ACCORDANCE WITH G7 AS3610-1995.
- PREPOUR INSPECTIONS FOR ALL FOOTINGS AND SLABS G8 SHALL BE CARRIED OUT BY METALINE ENGINEERING GROUP PTY LTD OR THE CERTIFYING AUTHORITY.
- G9. FOR SLABS ON GROUND, FINISHED SLAB HEIGHTS ABOVE EXTERNAL FINISHED SURFACES MUST NOT BE LESS THAN:
  - a) 150mm ABOVE FINISHED GROUND LEVEL
  - b) 100mm ABOVE SANDY, WELL DRAINED AREAS
  - c) 50mm ABOVE EXTERNAL SEALED AREAS THAT HAVE A SLOPE OF NOT LESS THAN 50mm OVER THE FIRST 1m FROM THE BLUEDING
- G10. SLABS AND FOOTINGS HAVE BEEN DESIGNED IN ACCORDANCE WITH DESIGNS CONTAINED IN SECTION 3 AND ENGINEERING PRINCIPALS CONTAINED IN SECTION 4 OF AS2870 - 2011, AND ENGINEERING PRINCIPALS FROM AS3600-2009

G11. DIMENSIONS GIVEN FOR BEAMS AND STRIP FOOTINGS ARE THE MINIMUM REQUIRED AS PER DESIGN PRINCIPLES NOTED ABOVE. IF THERE ARE SITE SPECIFIC REQUIREMENTS TO WIDEN OR DEEPEN BEAMS OR STRIP FOOTINGS, IT SHALL BE PERFORMED AS FOLLOWS:

- a) WHERE STRIP FOOTINGS ARE WIDER THAN THAT SPECIFIED, AN EXTRA BOTTOM BAR OR EQUIVALENT OF THE SAME BAR SIZE REQUIRED FOR EACH 100mm ADDITIONAL WIDTH.
- b) WHERE STRIP FOOTINGS OR SLAB BEAM ARE DEEPER THAN THAT SPECIFIED. THE BOTTOM REINFORCEMENT SPECIFIED IN AS2870 FOR THE GREATER BEAM OR STRIP FOOTING DEPTH IS TO BE USED.
- c) WHERE ADJUSTMENTS IN WIDTH FOR WAFFLE POD SLAB BEAMS REINFORCED WITH BARS ARE REQUIRED, THIS SHALL BE PERFORMED IN ACCORDANCE WITH REINFORCEMENT NOTES HERE WITHIN

E	IFC	11.12.21	A.M
D	100% DESIGN FOR REVIEW	2.12.21	A.M
С	ISSUE FOR CONSTRUCTION	23.11.21	A.M
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А	75% DESIGN PHASE	10.11.21	A.M
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## 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	30mm	30mm	65mm
BEAMS	30mm	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 WHERE NOT SHOWN ON DRAWINGS.
- C5 CONSTRUCTION JOINTS WHERE NOT SHOWN SHALL BE PROPERLY FORMED AND LOCATED AS PER THE APPROVAL OF THE ENGINEER.
- C6 REINFORCEMENT IS SHOWN DIAGRAMMATICALLY AND NOT NECESSARILY IN THE TRUE PROJECTION. SPLICES IN REINFORCEMENT SHALL BE MADE ONLY IN
- C7. POSITIONS SHOWN. WELDING OF REINFORCEMENT WILL NOT BE PERMITTED UNLESS SHOWN ON THE STRUCTURAL DRAWINGS.
- С8 ALL CONCRETE SHALL BE GRADE 25MPa - 100mm SLUMP (U.N.O)
- С9 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 BATS N16 AT 1.0m MAX CRS
- C10. 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
- C11. WHERE SLABS AND BEAMS ARE TO SUPPORT BRICKWORK OVER, BRICKWORK AND PROPS MUST BE REMOVED BEFORE COMMENCEMENT OF BRICKWORK.
- C12. 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.
- C13. AS A GENERAL POLICY, METALINE ENGINEERING GROUP DO NOT RECOMMEND THE USE OF POLISHED CONCRETE. THE OWNER SHOULD BE MADE AWARE BY THE BUILDING DESIGNER AND BUILDER THAT CONCRETE IS A NATURAL MATERIAL AND THE POSSIBILITY OF SURFACE CRACK FORMATION MAY OCCUR AND CANNOT BE GUARANTEED EITHER IN THE SHORT OR LONG TERM, WE HIGHLY RECOMMEND CURING THE SLAB USING AN APPROVED SPRAYED MEMBRANE
- C14. ALL CONCRETE TO BE VIBRATED

# **REINFORCEMENT:**

ALL REINFORCEMENT SHALL BE IN ACCORDANCE WITH AS4671-2001.	B1.
REINFORCEMENT IS PRESENTED DIAGRAMMATICALLY ONLY, AND IS NOT NECESSARILY SHOWN IN TRUE PROJECTION. REINFORCEMENT DESIGNATION AS FOLLOWS:	B2.
A)N-GRADE 500N HS DEFORMED BARS B)R-GRADE 250R HOT ROLLED BAR	B3.
C) SL-GRADE 500L SQUARE MESH D) TM-GRADE 500L TRENCH MESH	B4.
TRENCH MESH SHALL BE SPLICED WHERE NECESSARY BY A LAP OF 500mm.	B5.
REINFORCEMENT BARS SHALL BE LAPPED AS FOLLOWS: A) MESH-2 OUTER BARS OVERLAPPED WITH 2-OUTER BARS	
<ul> <li>+ 20mm</li> <li>B) N12 BARS = 500mm MIN</li> </ul>	EX
C) N16 BARS = 700mm MIN ALL REINFORCEMENT TO BE ADEQUATELY SUPPORTED IN ITS REQUIRED POSITION, CHAIRS TO BE 800mm MAX CENTERS.	E1.
BOTH DIRECTIONS. SERVICE PENETRATIONS SHALL BE APPROVED BY METALINE	E2.
ENGINEERING GROUP PTY LTD PRIOR TO POURING. ALL SERVICES THAT PENETRATE CONCRETE MEMBERS SHALL BE LAGGED OR SI FEVED.	E3.
WHERE THERE ARE SITE SPECIFIC REQUIREMENTS TO WIDEN SLAB BEAMS OR STEM WIDTHS, ADDITIONAL REINFORCEMENT TO THAT SHOWN IN THE DETAILS SHALL BE	E4.
PROVIDED TOP AND BOTTOM, ACCORDING TO THE TABLE AND DIAGRAMS BELOW. BAR SIZES IS TO MATCH THE	
EXISTING SPECIFIED TOP AND BOTTOM BAR SIZE SHOWN IN THE DETAILS.	DA
ADDITIONAL WAFFLE POD BEAM WIDTH REINFORCEMENT	D1.

ADDITIONAL WAFFLE POD BEAM WIDTH REINFORCEMENT		
STEM WIDTH OR BASE BEAM WIDTH (mm)	QTY TOP REINFORCEMENT BARS FOR STEM WIDTH	QTY BOTTOM REINFORCEMENT BARS FOR BASE BEAM WIDTH
110-150	0 STD, 1 OVER PIERS	1
151-220	1	2
221-330	2	3
331-440	3	4

# **BASE PREPARATION - FILL:**

F1. FILLING USED IN THE CONSTRUCTION OF A SLAB, EXCEPT WHERE THE SLAB IS SUSPENDED. SHALL CONSIST OF CONTROLLED FILL AS FOLLOWS: CONTROLLED FILL:

a) MINIMUM 100mm DEEP MAXIMUM 300mm DEEP UNDER PERIMETER OF FOOTINGS. IT SHALL BE WELL COMPACTED IN 150mm LAYERS BY A MECHANICAL ROLLER TO A MINIMUM 95% STANDARD COMPACTION FOR A SINGLE STORY DWELLING, AND 98% STANDARD COMPACTION FOR A DOUBLE STORY DWELLING. FILL SHALL BE OF LESS REACTIVITY THAN NATURAL SOIL.

- FILL WITH A GREATER DEPTH THAN THAT SPECIFIED ABOVE F2 SHALL BE TESTED AND BE CERTIFIED.
- F3 FILL SHALL BE EXTENDED PAST THE EDGE OF THE RESIDENCE AND SHALL BE RETAINED OR BATTERED BY AN APPROPRIATE SLOPE.

Drawing



331 Cummins Street, BROKEN HILL, NSW, 2880 MOB: 0484 770 945

A.C.N. 63 7312951 www.metaline-engineering.com CIVIL STRUCTURAL COMMERCIAL RESIDENTIAL GEOTECHNICAL BUILDING SERVICES PROJECT MANAGEMENT RAIL/ROLLINGSTOCK AUTOMOTIVE

Client: LAWRENCE ENGINEERING Project:

MENINDEE CAMP KITC

GENERAL NOTES

# **BASE PREPARATION - FOUNDATION:**

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	CAPA
B2.	THE
	BEEN
	ACC
B3.	INTE
	FOUI
B4.	ALL
	CON
B5.	BASE

D2.

B1. FOUNDATION MATERIALS, WHETHER NATURAL OR FILL, LL HAVE A MINIMUM UNIFORM ALLOWABLE BEARING ACITY OF 100kPa

ATTACHED PROJECT SPECIFIC FOOTING DESIGN, HAS N BASED ON A SITE CLASSIFICATION CARRIED OUT IN ORDANCE WITH AS2870-2011.

ERNAL BEAMS/RIBS AND SLAB PANELS SHALL BE INDED ON CONTROLLED OR ROLLED FILL.

EDGE BEAMS SHALL BE FOUNDED IN NATURAL SOIL OR

ITROLLED FILL, UNLESS SUPPORTED BY PIERS. BASE PREPARATION SHOULD ACCOUNT FOR WATER PONDING BY PROVIDING A NOMINAL GRADE OF 2%

# EXCAVATION:

TOPSOIL CONTAINING GRASS ROOTS OR VEGETATION SHALL BE REMOVED FROM FROM THE FOUNDATION AREA. IT SHALL THEN BE PROOF ROLLED PRIOR TO FILLING.

FOOTING EXCAVATION MUST BE FREE OF LOOSE EARTH, TREE ROOTS, MUD OR DEBRIS IMMEDIATELY BEFORE POURING CONCRETE.

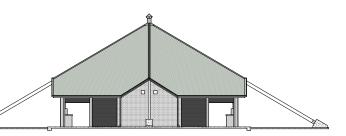
EXCAVATION FOR FOOTINGS. INCLUDING THICKENINGS FOR SLABS AND PADS MUST BE CLEAN CUT WITH VERTICAL SIDES, WHEREVER POSSIBLE.

METALINE ENGINEERING GROUP PTY LTD SHOULD BE CONSULTED BEFORE COMMENCING ANY EXCAVATION NEAR

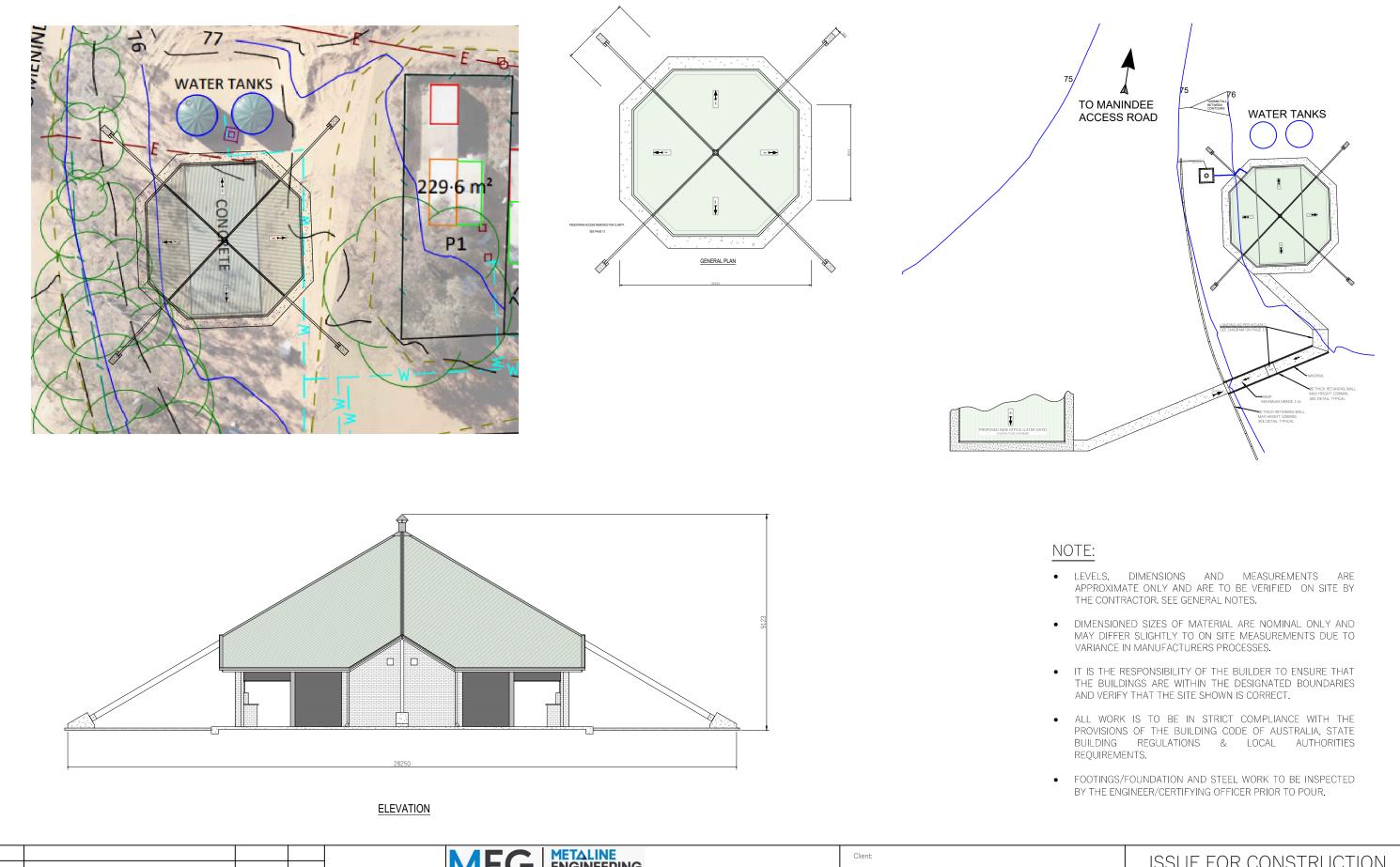
THE EDGE OF THE BUILDING.

# DAMP-PROOF MEMBRANE:

D1. A DAMP PROOF MEMBRANE CONSISTING OF 0.2mm NOMINAL THICKNESS POLYETHYLENE FILM, SHALL BE PLACED UNDER ALL SLABS AND BEAMS AND EXTENDED TO A FINISH GROUND LEVEL TO THE SLAB PERIMETER U.N.O. IT SHALL BE HIGH IMPACT RESISTANT IN ACCORDANCE WITH CLAUSES 5.3.3.2 AND 5.3.3.3 OF "AS2870-2011 CONCRETE UNDERLAY, 0.2mm HIGH IMPACT RESISTANCE". IT SHALL BE INSTALLED WITH MIN 200mm LAPS AT ALL JOINTS, TAPED OR SEALED WITH A CLOSE FITTING SLEEVE AROUND SERVICES PENETRATIONS.



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C ISSUE FOR CONSTRUCTION 23.11.21 A	Μ
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B ISSUE FOR CONSTRUCTION SS 17.11.21 A.	M
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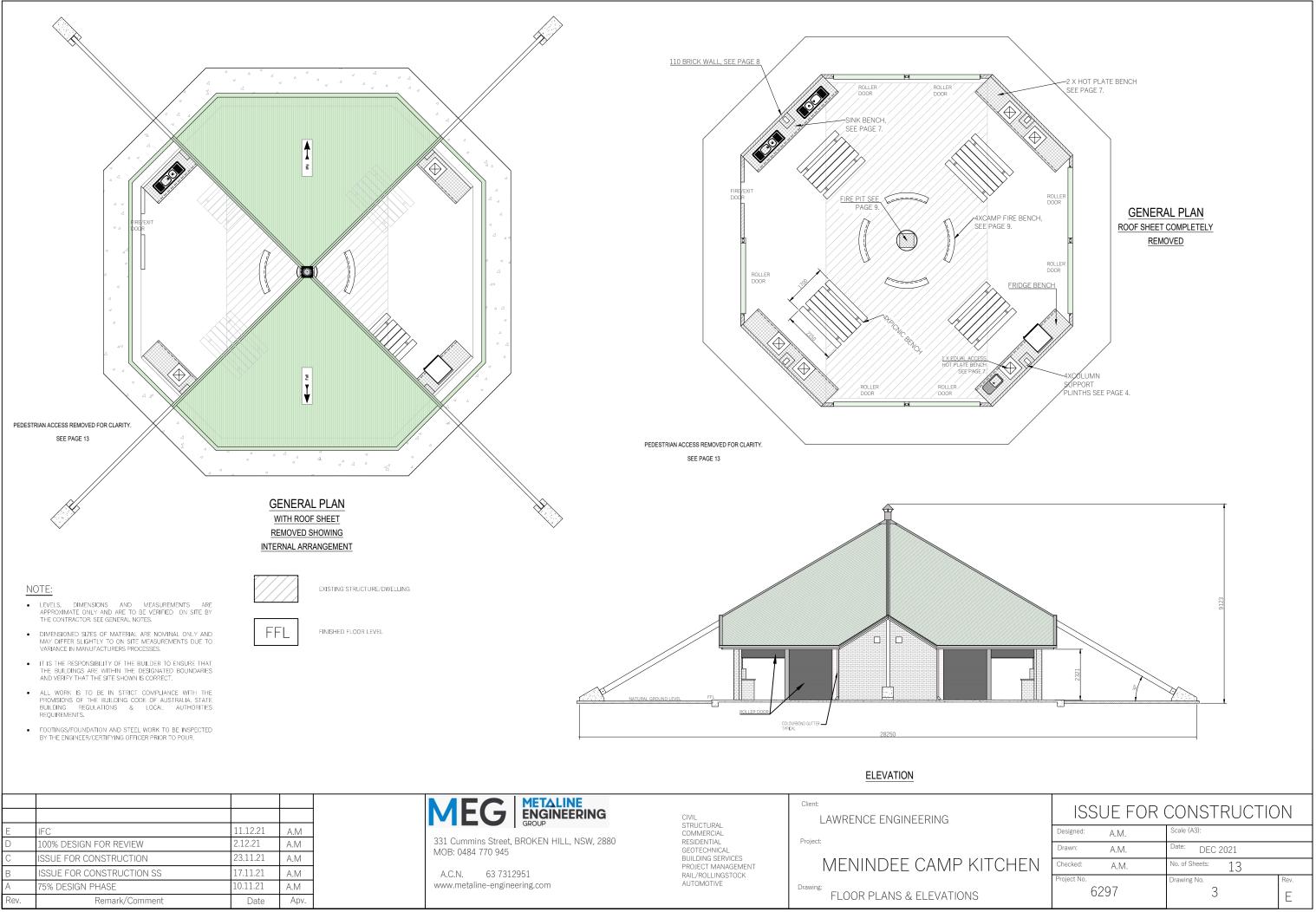
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Drawing: SITE PLAN

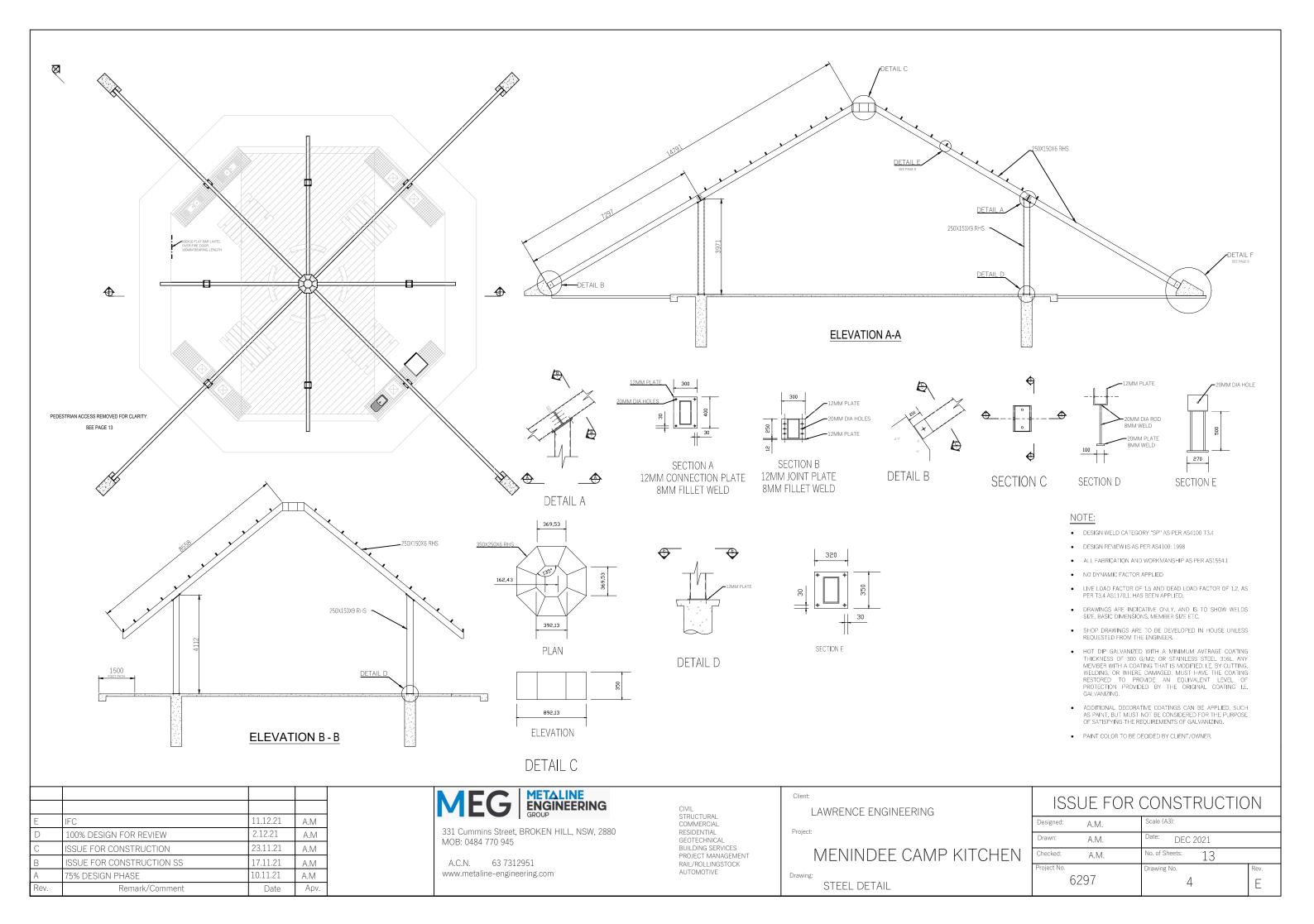
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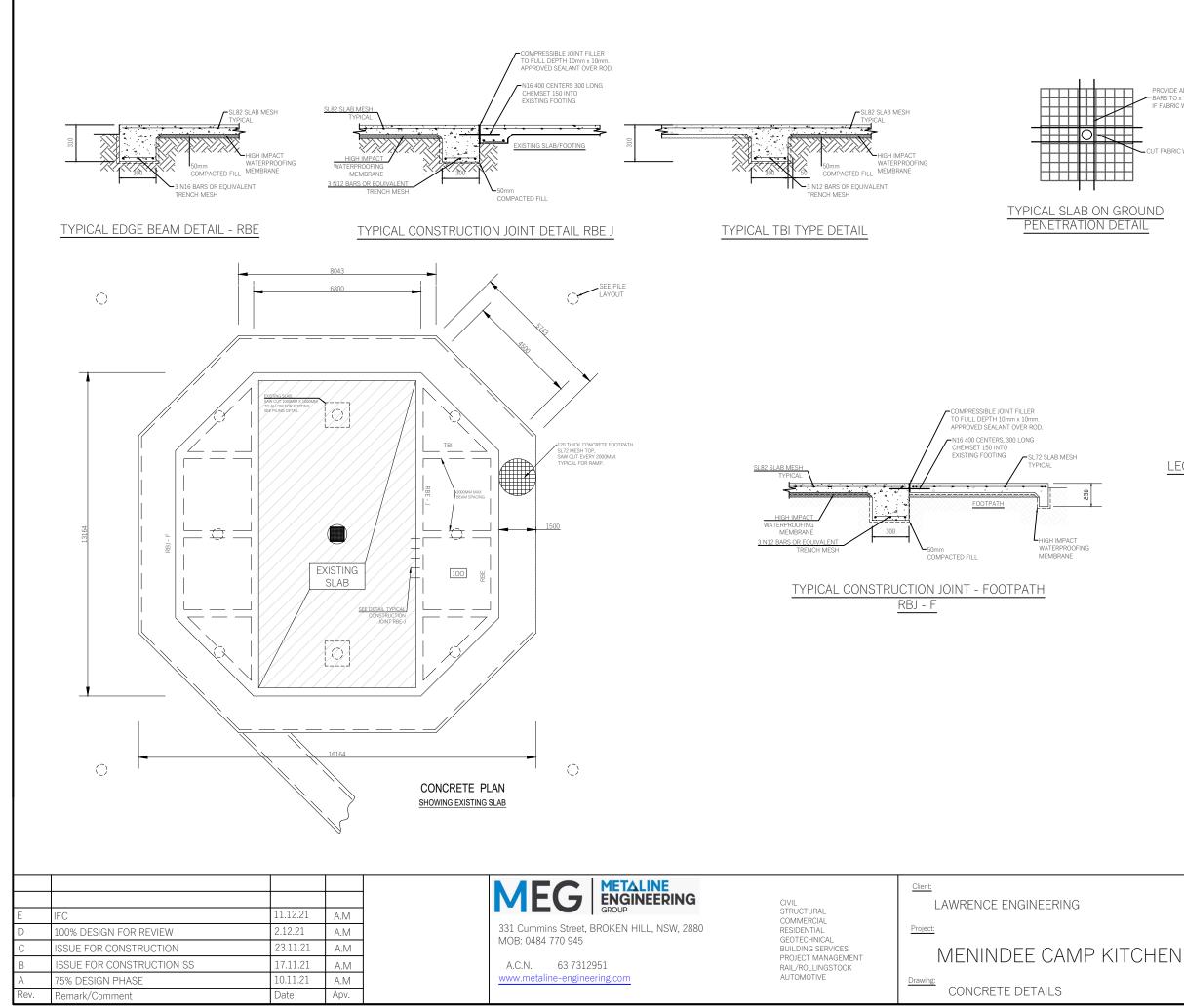
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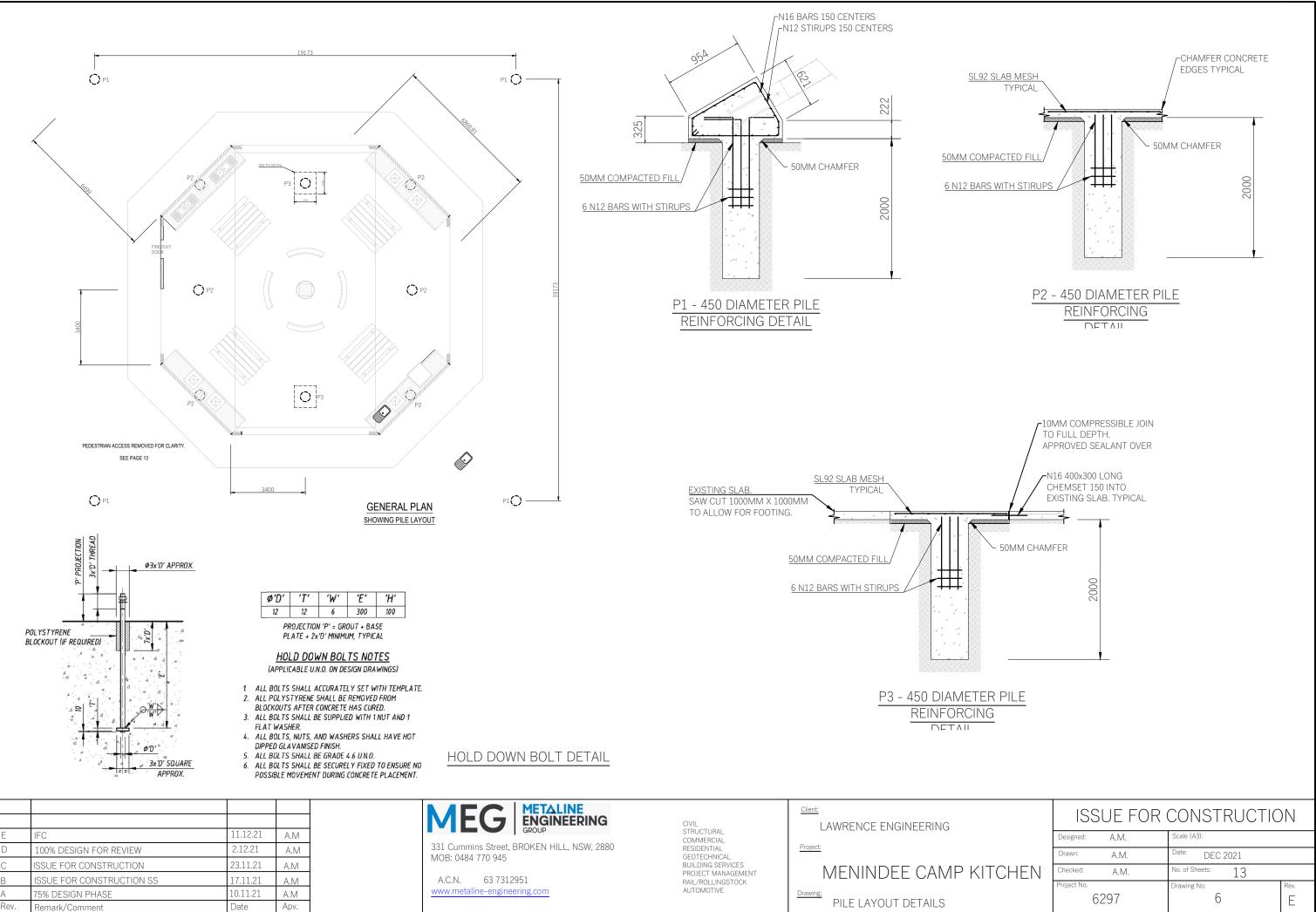
PROVIDE ADDITIONAL 4-N12 BARS TO x 1200mm LONG ONLY IF FABRIC WIRES ARE CUT.

CUT FABRIC WIRES IF REQUIRED

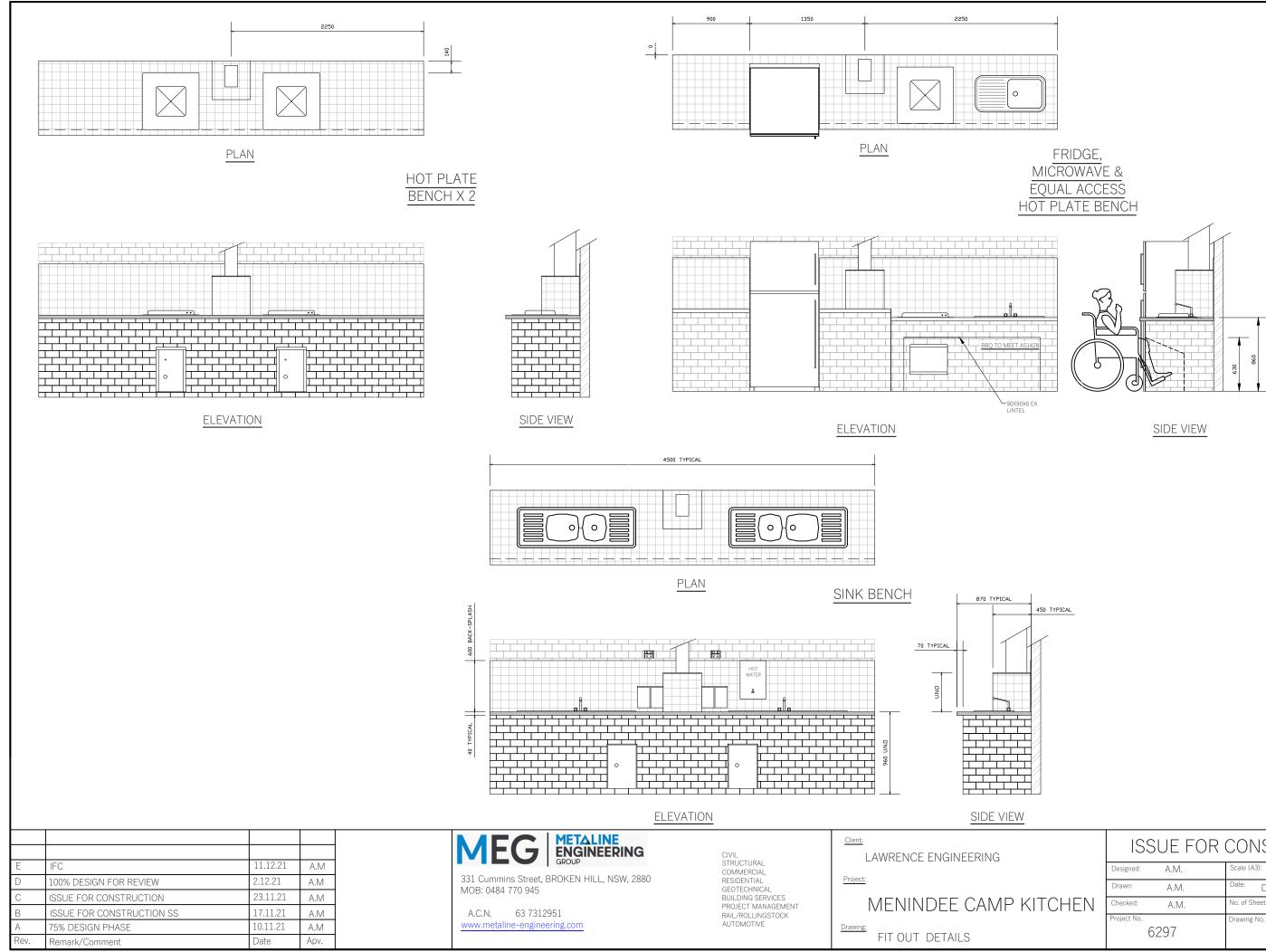


### LEGEND AND SLAB NOTES:

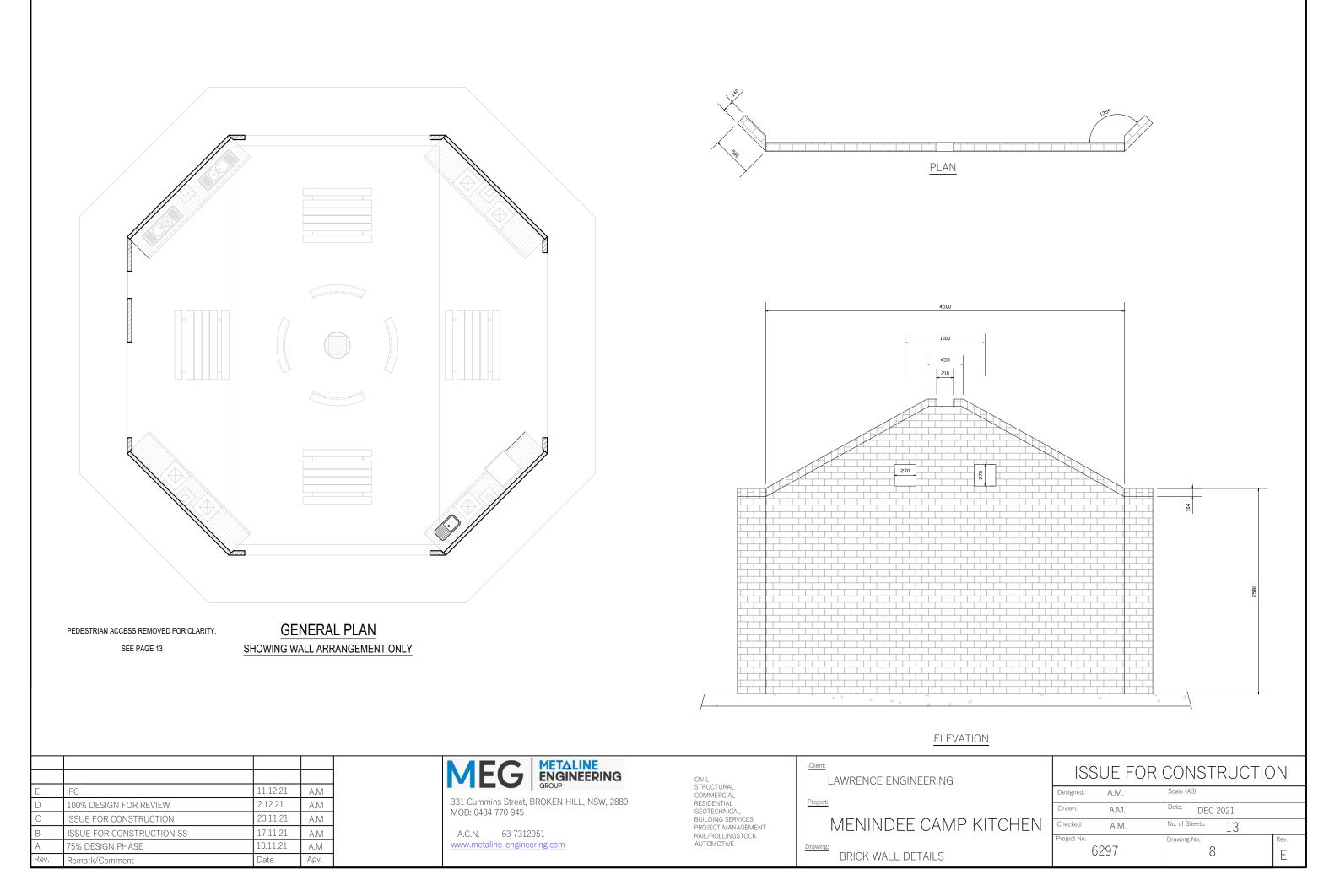
_		INTERNAL LOAD BE STRUCTURAL MEM	IBER	
RBE 300 WIDE × 310 DEEF WITH 3N12 BARS BO				
-	ГВΙ	300 WIDE BY 310 DE BEAM WITH 3N11 B	EEP THICKENED INTERNAL	
			TE RAFT SLAB. SL82 MESH T	OP
-	100	WITH 30mm COVER	ON 0.2mm POLYTHENE	
			D 200 AND TAPED AT JOINTS CTED PACKING SAND.	)
			ARING BEAMS MUST BE FOU	
			ATURAL GROUND, PROVIDE DNCRETE IF REQUIRED TO AC	
1	. Slae		O BE LAPPED NOT LESS THA	٩N
225mm OR 2 CROSS WIRES. SUPPORT MESH ON BAR CHAIRS AT 800mm MAXIMUM SPACING IN BOTH				
DIRECTIONS.				A
MINIMUM OF 500mm AT SPLICES. LAP FULL BEAM WIDTH AT RIB INTERSECTION.				DTH
3		FORCEMENT SHALL I	BE FIXED IN POSITION BY BA	\R
4. THE CONCRETE SHALL BE TRANSPORTED, PLACE VIBRATED AND CURED IN ACCORDANCE WITH GO				
		DING PRACTICE.		
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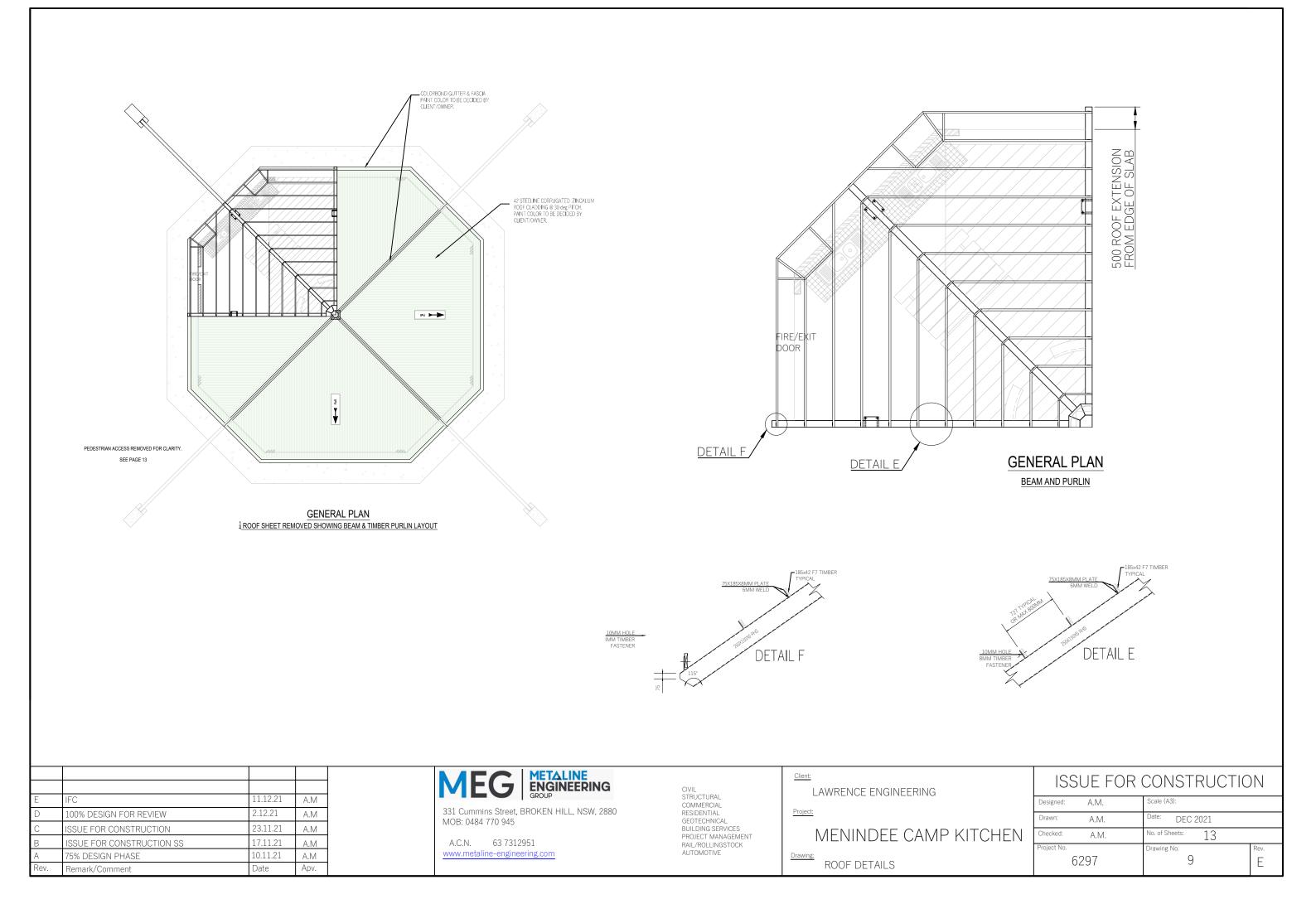


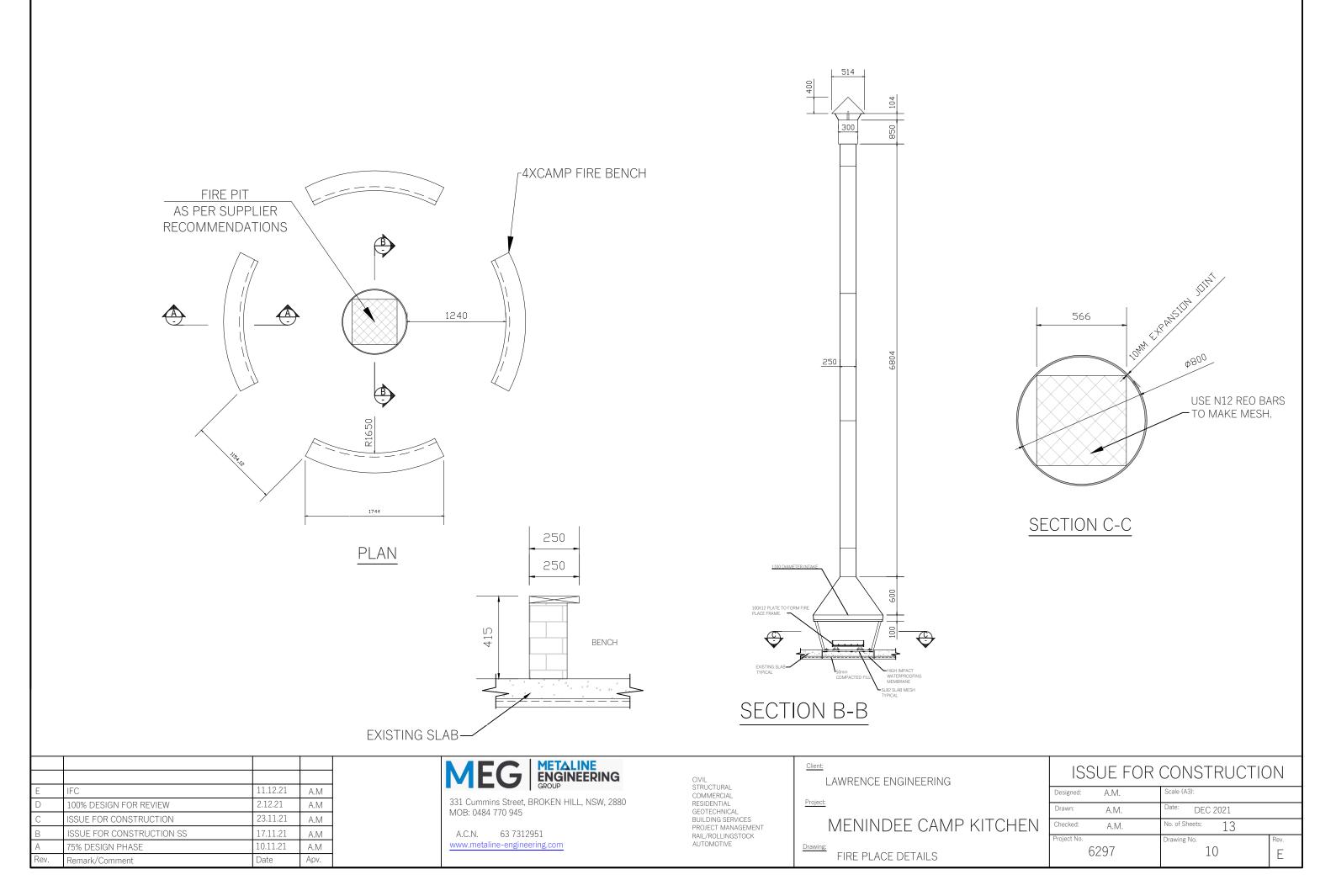
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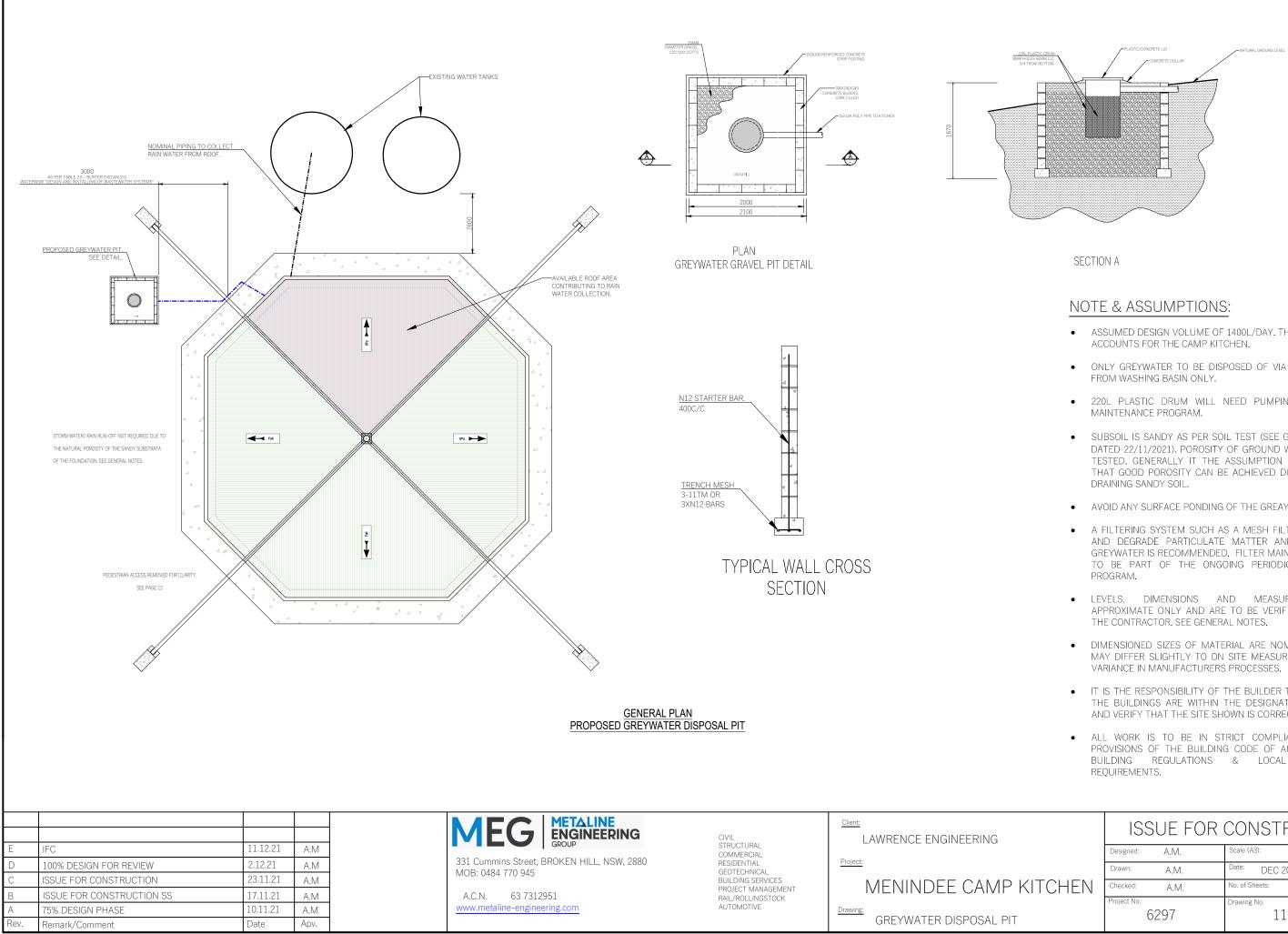


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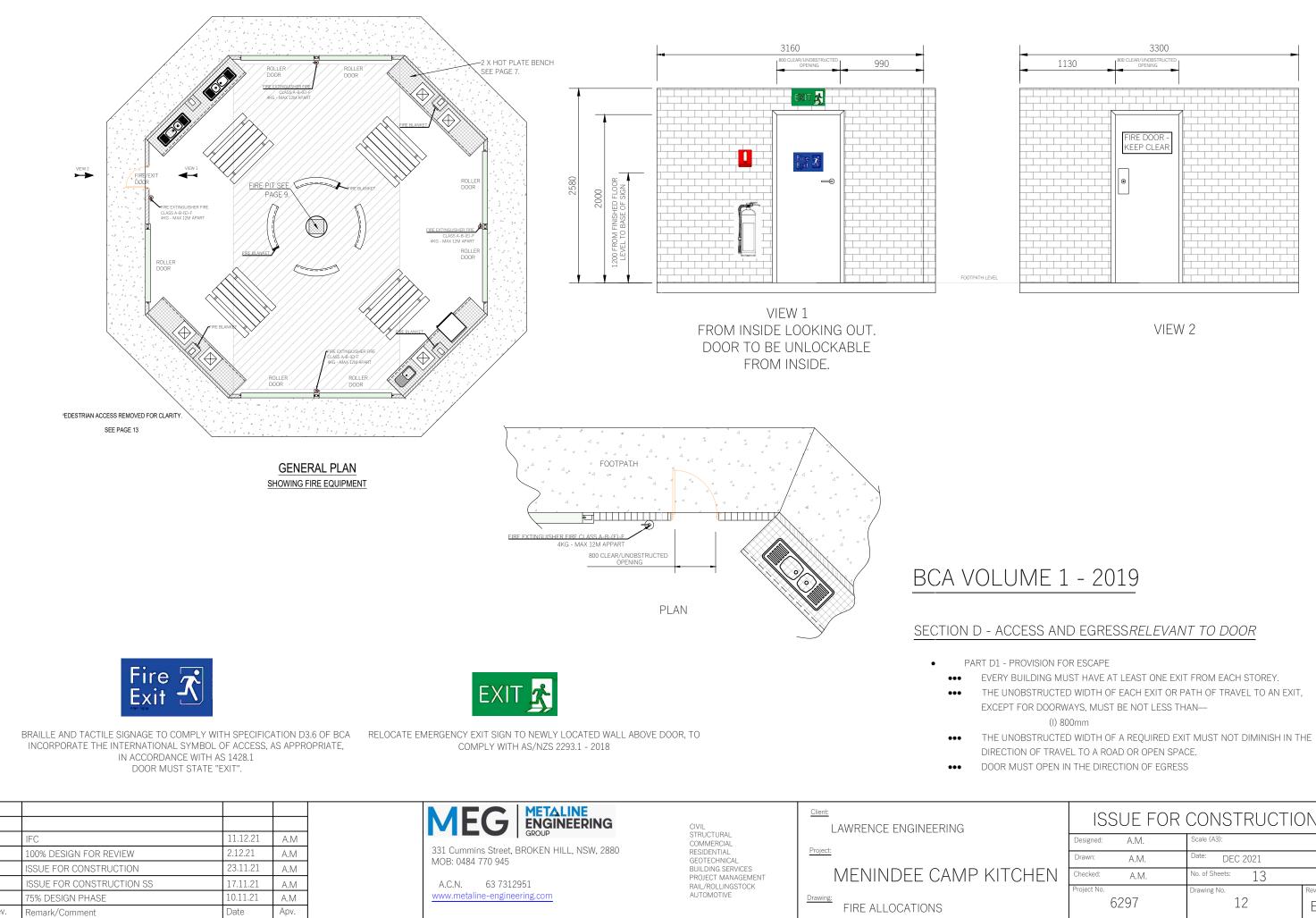






- ASSUMED DESIGN VOLUME OF 1400L/DAY. THIS SYSTEM ONLY
- ONLY GREYWATER TO BE DISPOSED OF VIA SYSTEM. WATER
- 220L PLASTIC DRUM WILL NEED PUMPING AS PART OF
- SUBSOIL IS SANDY AS PER SOIL TEST (SEE GEOTECH REPORT DATED 22/11/2021). POROSITY OF GROUND WILL NEED TO BE TESTED. GENERALLY IT THE ASSUMPTION OF THIS DESIGN THAT GOOD POROSITY CAN BE ACHIEVED DUE TO THE DREE
- AVOID ANY SURFACE PONDING OF THE GREAYWATER.
- A FILTERING SYSTEM SUCH AS A MESH FILTER TO CAPTURE AND DEGRADE PARTICULATE MATTER AND FATS IN THE GREYWATER IS RECOMMENDED. FILTER MAINTENANCE NEEDS TO BE PART OF THE ONGOING PERIODIC MAINTENANCE
- LEVELS, DIMENSIONS AND MEASUREMENTS ARE APPROXIMATE ONLY AND ARE TO BE VERIFIED ON SITE BY
- DIMENSIONED SIZES OF MATERIAL ARE NOMINAL ONLY AND MAY DIFFER SLIGHTLY TO ON SITE MEASUREMENTS DUE TO
- IT IS THE RESPONSIBILITY OF THE BUILDER TO ENSURE THAT THE BUILDINGS ARE WITHIN THE DESIGNATED BOUNDARIES AND VERIFY THAT THE SITE SHOWN IS CORRECT.
- ALL WORK IS TO BE IN STRICT COMPLIANCE WITH THE PROVISIONS OF THE BUILDING CODE OF AUSTRALIA, STATE BUILDING REGULATIONS & LOCAL AUTHORITIES

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