DATE PLOTTED: 31 January 2023 9:34 AM BY : NEIL BROWNING

GENERAL

1. THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH ALL ARCHITECTURAL AND OTHER CONSULTANTS' DRAWINGS AND SPECIFICATIONS AND WITH SUCH OTHER WRITTEN INSTRUCTIONS AS MAY BE ISSUED DURING THE COURSE OF THE CONTRACT.
2. THE INFORMATION CONTAINED ON THESE DRAWINGS IS FOR STRUCTURAL ENGINEERING PURPOSES ONLY. IN ALL OTHER MATTERS, THE APPROVED ARCHITECTS' DRAWINGS SHALL TAKE PRECEDENCE. ALL DISCREPANCIES THAT COULD RESULT IN CHANGES TO THE STRUCTURAL DETAILS SHALL BE REFERRED TO THE ENGINEER PRIOR TO PROCEEDING WITH CONSTRUCTION.
   IF IN DOUBT - ASK.
3. CONSTRUCTION FROM THESE DRAWINGS AND ASSOCIATED CONSULTANTS' DRAWINGS SHALL NOT COMMENCE UNTIL APPROVED BY THE LOCAL AUTHORITIES.
4. ALL MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE RELEVANT AND CURRENT AUSTRALIAN STANDARDS AND WITH THE BY-LAWS AND ORDINANCES OF THE RELEVANT BUILDING AUTHORITIES AND THE NCC EXCEPT WHERE VARIED BY THE PROJECT SPECIFICATION.
5. ALL DIMENSIONS SHOWN SHALL BE VERIFIED BY THE CONTRACTOR ON SITE. ENGINEERS' DRAWINGS SHALL NOT BE SCALED FOR DIMENSIONS.
6. DURING CONSTRUCTION THE STRUCTURE SHALL BE MAINTAINED IN A STABLE CONDITION AND NO PART SHALL BE OVERSTRESSED. TEMPORARY BRACING SHALL BE PROVIDED BY THE CONTRACTOR TO KEEP WORKS AND EXCAVATIONS STABLE AT ALL TIMES.
7. THE CONTRACTOR SHALL GIVE 48 HOURS NOTICE FOR ALL ENGINEERING INSPECTIONS.
8. UNLESS NOTED OTHERWISE ALL LEVELS ARE IN METRES AND ALL DIMENSIONS ARE IN MILLIMETRES.

DESIGN CRITERIA

1. THE STRUCTURAL COMPONENTS DETAILED ON THESE DRAWINGS HAVE BEEN DESIGNED IN ACCORDANCE WITH THE RELEVANT AUSTRALIAN STANDARDS AND LOCAL GOVERNMENT ORDINANCES FOR THE FOLLOWING DESIGN CRITERIA :

DESIGN LOADS		
AREA	LIVE LOAD	SUPERIMPOSED DEAD LOAD
GENERAL	5 kPa	1 kPa
ROOF	0.25 kPa	NIL

2. WIND
   WIND LOADS ARE IN ACCORDANCE WITH AS1170.2 AS FOLLOWS:
   DESIGN WIND VELOCITY (V_{des}) ...... 74 m/s
   REGION C
   WIND CLASSIFICATION C3
   TERRAIN CATERGORY 2
   BCS STRUCTURE IMPORTANCE LEVEL 4
3. CONCRETE ELEMENTS HAVE BEEN DESIGNED FOR THE FOLLOWING DURABILITY EXPOSURE TO AS 3600 (B1 EXPOSURE U.N.O.)
   EXTERNAL B1
   FOOTINGS B1
4. FOOTINGS
   ASSUMED 100 kPa ALLOWABLE BEARING PRESSURE AND 25 kPa SKIN FRICTION. CONTRACTOR SHALL CONFIRM ON SITE.
5. VEHICLES
   VEHICLE LOAD ...... 10 TONNE AXLE
   REPETITIONS 20000
6. EARTHQUAKE LOADS
   EARTHQUAKE LOADS TO AS 1170.4, 2007
   BCS STRUCTURE IMPORTANVE LEVEL 2
   SITE SUBSOIL CLASS ...... D
   HAZARD FACTOR (Z) 0.06
   DESIGN CATERGORY EDC-1

FOOTING NOTES

1. THE BUILDER SHALL ALLOW TO ENGAGE AN APPROVED GEOTECHNICAL ENGINEER IN ACCORDANCE WITH THE EARTHWORKS AND THE BORED PIER SECTIONS OF THE SPECIFICATIONS TO CARRY OUT ALL INSPECTIONS AND TESTING TO CERTIFY THAT THE FOUNDING MATERIAL FOR HIGH LEVEL FOOTINGS AND OR THE CAPACITY OF BORED PIERS COMPLIES WITH THAT NOMINATED IN THE DOCUMENTATION. THE CERTIFICATION IS TO BE SIGNED BY A REGISTERED PROFESSIONAL ENGINEER OF QUEENSLAND.
2. AN ALLOWABLE BEARING PRESSURE FOR HIGH LEVEL FOOTINGS OF 100 KPa HAS BEEN ASSUMED IN THE DESIGN OF THE FOOTINGS. FOR BORED PIERS AN ULTIMATE END BEARING PRESSURE OF 100 kPa AND SKIN FRICTION OF 25 kPa HAS BEEN ASSUMED IN THE DESIGN OF THE FOOTINGS.
3. WHERE REQUIRED FOUNDING MATERIAL IS DEEPER THAN THE UNDERSIDE OF THE HIGH LEVEL FOOTINGS AS DETAILED ALLOW TO BACKFILL ADDITIONAL EXCAVATION WITH N20 CONCRETE.
4. WHERE EXCAVATION WORK IS TO BE CARRIED OUT ADJACENT TO EXISTING FOOTINGS THE EXACT LEVEL OF THE UNDERSIDE OF THE FOOTINGS SHALL BE DETERMINED BY TEST PITS PRIOR TO EXCAVATION. UNDERPINNING SHALL BE CARRIED OUT AS DETAILED OR REQUIRED BY THE STRUCTURAL ENGINEER
5. ALL FOOTING EXCAVATIONS SHALL BE FORMED AS NECESSARY WHEN EXCAVATED FACE IS NOT STABLE, DEWATERED AND CLEANED OF LOOSE AND SOFT MATERIAL PRIOR TO PLACING CONCRETE.
6. ALL WALLS AND COLUMNS SHALL BE CONCENTRIC WITH SUPPORTING FOOTINGS UNLESS NOTED OTHERWISE ON THE DRAWINGS.

SCREW PILES

1. REFER TO GEOTECHNICAL REPORT FOR PILE FOUNDING CONDITIONS.
2. ALL PILES SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH AS2159 - PILING, DESIGN AND INSTALLATION
3. REFER ARCHITECT DRAWINGS FOR GRID AND WALL SETOUT.
4. PILES SHALL BE AN APPROVED PROPRIETARY ANCHOR SYSTEM CAPABLE OF SUSTAINING A WORKING LOADS AS PER DRAWING ST-11, WITH SAFETY FACTORS TO AUSTRALIAN STANDARDS.
5. PILES ARE TO BE DESIGNED AND CERTIFIED BY THE CONTRACTOR. THE DESIGN SHALL BE CERTIFIED BY AN RPEQ ENGINEER.
6. PILE INSTALLATION TO BE CERTIFIED BY THE CONTRACTOR AND A FORM 12 FOR THE PILES, CONFIRMING DESIGN CAPACITIES HAVE BEEN ACHIEVED SHALL BE SUBMITTED TO THE SUPERINTENDENT.
7. PILE CAPACITY MUST EXCEED SPECIFIED DESIGN LOAD.
8. PILES MUST BE CAPABLE OF RESISTING ADDITIONAL RELEVANT TEMPORARY, CONSTRUCTION AND PERMANENT LOADS INCLUDING FORCES DUE TO ECCENTRICTY OF PILE, LATERAL SOIL LOADS AND DRAG FORCES.
9. ADVISE SUPERINTENDENT IF PILE IS DAMAGED BY DRIVING (OR OTHERWISE UNSOUND).
10. PILE SETTING OUT DIMENSIONS ARE TO BE CENTRE LINE OF PILE AT UNDERSIDE OF PILECAP. TOLERANCE ON POSITIONOF PILES ± 50mm. MAXIMUM DEVIATION OF PILE FROM SPECIFIED INCLINATION 1 in 50.

PILING DELIVERABLES

11. SUBMIT REPORT INCLUDING PILE DRIVING RECORDS AND LOAD TEST RESULTS.
12. SURVEY AS CONSTRUCTED PILE POSITIONS, GROUND LEVEL AT TIME OF PILE INSTALLATION AND PILE CUT-OFF LEVELS, AND SUBMIT RECORDS OF SUCH TO SUPERINTENDENT WITHIN ONE WEEK OF COMPLETION OF PILING.

CONCRETE

1. ALL MATERIALS AND WORKMANSHIP SHALL CONFORM WITH CURRENT EDITIONS OF AS 1379, AS 3600 AND AS3610 EXCEPT WHERE VARIED BY THE CONTRACT DOCUMENTS. REFER ALSO TO INSITU CONCRETE, FORMWORK AND REINFORCEMENT SECTION OF THE SPECIFICATIONS.
2. CONCRETE STRENGTH GRADE FOR PARTICULAR ELEMENTS SHALL BE AS NOTED ON THE DRAWINGS.
3. SIZE OF ELEMENTS IS EXCLUSIVE OF APPLIED FINISHES. BEAMS DEPTHS INCLUDE SLAB THICKNESS AND ARE THE FIRST DIMENSION SPECIFIED, FOLLOWED BY WIDTH. UNLESS NOTED OTHERWISE ALL FORMED EDGES AND CORNERS OF CONCRETE MEMBERS SHALL HAVE 20mm CHAMFERS.
4. CONSTRUCTION JOINTS SHALL BE MADE ONLY AT APPROVED LOCATIONS, AND, IN BEAMS AND SLABS SHALL BE CONSTRUCTED WITH A SHEAR KEY TO ENGINEER'S DETAIL U.N.O. SURFACES OF CONCRETE AT ALL JOINTS SHALL BE THOROUGHLY MECHANICALLY SCABBLED, FULLY EXPOSING THE AGGREGATE MIX, UNLESS OTHERWISE NOTED.
5. ALL REINFORCEMENT SHALL BE TO AS/NZS 4671 AND REINFORCEMENT GRADE IS DESIGNATED AS FOLLOWS:
   R: PLAIN ROUND BAR, GRADE 250
   N: DEFORMED BAR, GRADE 500
   SL/RL: WIRE REINFORCING FABRIC GRADE 500
6. REINFORCEMENT SHALL BE BENT COLD IN ACCORDANCE WITH AS3600 EXCEPT WHERE APPROVED BY THE STRUCTURAL ENGINEER. NO REBENDING SHALL BE PERMITTED.
7. DO NOT CUT REINFORCEMENT ON SITE TO CLEAR PENETRATIONS. DISPLACE REINFORCEMENT SLIGHTLY AS NECESSARY TO CLEAR BLOCKOUTS.
8. CONCRETE COVER AND LAPS TO REINFORCEMENT SHALL BE AS NOTED ON THE DRAWINGS.
9. APPLY EVAPORATION RETARDER AND CURE ALL CONCRETE IN ACCORDANCE WITH THE CONCRETE SPECIFICATIONS.
10. FORMWORK SHALL REMAIN UNDISTURBED FOR THE MINIMUM STRIPPING TIMES SPECIFIED IN AS3610, UNLESS OTHERWISE APPROVED.

TABLE 1 - CONCRETE QUALITY			
ELEMENT	STRENGTH GRADE	SLUMP (mm)	MAX. AGGREGATE SIZE (mm)
FOOTINGS	N32	80 ± 15	20
SLAB ON GROUND (NOT HARDSTAND)	N25	80 ± 15	20
SUSPENDED SLAB	N32	80 ± 15	20
HARDSTAND	N40	80 ± 15	20
BLINDING	N7	80 ± 15	

TABLE 2 - CLEAR COVER TO REINFORCEMENT. (UNO)			
ELEMENT	TOP (mm)	BOTTOM (mm)	SIDE (mm)
FOOTINGS	50	50	50
SLAB ON GROUND	50	50	50
INT SUSPENDED SLAB	30	30	50
HARDSTAND	50	-	50

REINFORCEMENT

1. ALL REINFORCING BARS SHALL BE GRADE D500N TO AS4671 UNLESS NOTED OTHERWISE. IT SHALL BE CUT AND BENT IN ACCORDANCE WITH AS3600. ACCEPTABLE MANUFACTURERS AND PROCESSORS OF STEEL REINFORCEMENT MUST HOLD A VALID CERTIFICATE OF APPROVAL, ISSUED BY THE AUSTRALIAN CERTIFICATION AUTHORITY FOR REINFORCING STEELS (ACRS), OR TO SUCH AN EQUIVALENT CERTIFICATION SYSTEM AS MAY BE APPROVED IN WRITING BY THE SPECIFIER. EVIDENCE OF COMPLIANCE WITH THIS CLAUSE MUST BE OBTAINED WHEN CONTRACT BIDS ARE RECEIVED. ALL MESH SHALL BE GRADE 500L TO AS4671 AND SHALL BE SUPPLIED IN FLAT SHEETS.
   THE FIGURES FOLLOWING THE FABRIC SYMBOLS RL, SL, L ,TM IS THE REFERENCE NUMBER FOR FABRIC TO AS4671.
2. REINFORCEMENT IS REPRESENTED DIAGRAMMATICALLY AND NOT NECESSARILY IN TRUE PROJECTION.
3. SPLICES IN REINFORCEMENT SHALL BE MADE ONLY IN POSITIONS SHOWN OR OTHERWISE APPROVED IN WRITING BY THE ENGINEER. LAPS SHALL BE IN ACCORDANCE WITH AS 3600 AND NOT LESS THAN THE DEVELOPMENT LENGTH FOR EACH BAR, AS SHOWN IN THE TABLE BELOW.

TABLE 6 - LAP SCHEDULE			
BAR DIA.	LENGTH (mm)	BAR DIA.	LENGTH (mm)
R6	300	N20	800
R10	400	N24	1000
N12	500	N28	1800
N16	600	N32	2200

4. WELDING OF REINFORCEMENT SHALL NOT BE PERMITTED UNLESS SHOWN ON THE STRUCTURAL DRAWINGS OR APPROVED BY THE ENGINEER. WHERE APPROVED, WELDING MUST COMPLY WITH AS1554.3 STANDARD STEEL WELDING, PART 3 : WELDING OF REINFORCING STEEL. NO WELDING IS ALLOWED WITHIN 120mm OF BENDS.
5. FABRIC SHALL BE LAPPED TWO TRANSVERSE WIRES PLUS 25mm. BUNDLED BARS SHALL BE TIED TOGETHER AT 30 BAR DIAMETER CENTRES WITH 3 WRAPS OF THE WIRE.
6. WHERE TRANSVERSE TIE BARS ARE NOT SHOWN PROVIDE N12-300 SPLICED WHERE NECESSARY AND LAP WITH MAIN BARS 400 mm UNLESS NOTED
7. JOGGLES TO BARS SHALL COMPRISE A LENGTH OF 12 BAR DIAMETERS BETWEEN BEGINNING AND END OF AN OFFSET OF 1 BAR DIAMETER.
8. ALL REINFORCEMENT SHALL BE FIRMLY SUPPORTED ON MILD STEEL PLASTIC TIPPED CHAIRS, PLASTIC CHAIRS OR CONCRETE CHAIRS AT NOT GREATER THAN 1 METRE CENTRES BOTH WAYS, AND 800 EACH WAY FOR FABRIC. WHEN POURED ON GROUND AS FORMWORK PROVIDE PLATES UNDER ALL BAR CHAIRS. PLASTIC TIPPED STEEL CHAIRS SHALL NOT BE USED ON EXPOSED FACES IN EXPOSURE CLASSIFICATION B1, B2 AND C ONLY PLASTIC OR CONCRETE CHAIRS.
9. SITE BENDING OF REINFORCEMENT SHALL BE AVOIDED IF POSSIBLE. WHERE SITE BENDING IS UNAVOIDABLE IT SHALL BE CARRIED OUT COLD, WITHOUT THE APPLICATION OF HEAT, AND IN ACCORDANCE WITH THE PRACTICE NOTE RPN1 OF THE STEEL REINFORCEMENT INSTITUTE OF AUSTRALIA. REINFORCEMENT SHALL NOT BE REBENT WITHOUT APPROVAL OF THE SUPERINTENDENT.
10. THE STRUCTURAL ENGINEER SHALL BE GIVEN 24 HOURS NOTICE FOR REINFORCEMENT INSPECTION AND CONCRETE SHALL NOT BE DELIVERED UNTIL FINAL APPROVAL HAS BEEN OBTAINED FROM THE STRUCTURAL ENGINEER.

BAKER BUILDING CERTIFICATION
RESIDENTIAL | COMMERCIAL | INDUSTRIAL | REMOTE
Private Building Certifiers
mob: 0448 377 172
phone: 07 4091 3267
web: www.bakerbuildingcert.com.au
address: 5/154 Robert Street, Atherton
postal: PO Box 1083, Tolga 4882
00005449
Clayton Baker
APPROVED in accordance with the Building Act 1975. Refer to the conditions of approval on the Certificate of Compliance. All endorsements made on the plan in RED ink are part of this approval

STRUCTURAL STEELWORK

1. ALL MATERIALS AND WORKMANSHIP SHALL CONFORM WITH CURRENT EDITIONS OF AS4100, AS/NZS 1554 - 1 AND 2 AND AS4600 EXCEPT WHERE VARIED BY THE CONTRACT DOCUMENTS. REFER ALSO TO THE STRUCTURAL STEELWORK SECTION OF THE SPECIFICATIONS.
2. ALL STEEL SHALL COMPLY WITH THE FOLLOWING U.N.O. :
   - WELDED SECTION - GRADE 300 TO AS/NZS 3678.2
   - ROLLED SECTION - GRADE 300 TO AS/NZS 3679.2
   - SHS AND RHS - GRADE 350/GRADE 450 TO AS 1163
   - CHS - GRADE 250/GRADE 350 TO AS 1163
   - FLAT PLATE - GRADE 300 TO AS/NZS 3679.2
   - STANDARD PLATE - GRADE 250 TO AS/NZS 367
3. THE CONTRACTOR SHALL UNLESS SPECIFIED ELSEWHERE:
   (a) PROVIDE AND EMPLOY ANY ADDITIONAL TEMPORARY BRACING ETC. NECESSARY TO ADEQUATELY HOLD STEELWORK IN POSITION DURING CONSTRUCTION. CARRY OUT ERECTION OF STEELWORK IN ACCORDANCE WITH AS3828 GUIDELINES FOR THE ERECTION OF BUILDING STEELWORK.
   (b) PROVIDE ALL PACKS, CLEATS, BOLTS (INCL. H.D. BOLTS) ETC. REQUIRED FOR TEMPORARY AND PERMANENT ERECTION OF STEELWORK AND FOR ATTACHMENT OF TIMBER AND MISCELLANEOUS FRAMING.
   (c) SUBMIT TWO (2) COPIES OF WORKSHOP DRAWINGS TO THE ENGINEER FOR PERUSAL. FABRICATION SHALL NOT COMMENCE WITHOUT A WRITTEN RESPONSE. THE CONTRACTOR IS TO ALLOW 14 BUISNESS DAYS FOR REVIEW AND APPROVAL OF SHOP DRAWINGS.
4. FOR THE SURFACE TREATMENT REQUIREMENTS OF ALL STRUCTURAL STEELWORK REFER TO THE ARCHITECTURAL DOCUMENTATION.
5. PROPRIETARY ITEMS (E.G. PURLINS, ROOF/WALL SHEETING, BOLTS ETC.) SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATION. FOR LAPPED PURLINS/GIRTS USE M12 4.6/S PURLIN BOLTS AND FOR UNLAPPED PURLINS/GIRTS USE M12 4.6/S SHOULDERED PURLIN BOLTS. SHOULDERED PURLIN BOLT HEAD TO BE AGAINST COLD FORMED SECTION. ALL PURLIN/GIRT BOLTS SHALL HAVE INTEGRAL WASHERS.
6. MINIMUM WELDING REQUIREMENTS IF NOT OTHERWISE SPECIFIED SHALL BE AS FOLLOWS:-
   - ALL WELDS CATEGORY S.P 6mm CONTINUOUS FILLET WELDS, OR WHERE NOTED, COMPLETE PENETRATION BUTT WELDS (C.P.B.W.) USING E48XX ELECTRODES WITH CATEGORY S.P. INSPECTION WITH ALL WELDS 100% VISUALLY SCANNED, ALL TO AS/NZS 1554.1 UNLESS NOTED OTHERWISE. ALL WELDING SHALL BE PERFORMED BY A QUALIFIED WELDER IN ACCORDANCE WITH AS/NZS 1554.1.
7. EXTENT OF WELD INSPECTION/TESTING TO BE:
   VISUAL SCANNING : 100% OF WELDS
   VISUAL EXAMINATION: 100% OF BUTT WELDS IN TENSION MEMBERS AND 50% OF OTHER WELDS.
   RADIOGRAPHIC OR ULTRASONIC: 10% OF BUTT WELDS IN TENSION MEMBERS AND 5% OF OTHER WELDS.
   GRIND WELDS SMOOTH AND FLUSH WITH PARENT METAL WHERE NOMIMATED ON DRAWINGS.
   GRIND ONLY IN LONGITUDINAL DIRECTION OF MEMBER. WELDS TO BE INSPECTED BY INDEPENDENT NATA ACCREDITED QUALIFIED WELDING INSPECTOR TO AS2214. PROVIDE WELDING INSPECTORS REPORT TO SUPERINTENDENT.
8. SITE WELDS WHERE NOTED IN THE DOCUMENTATION SHALL BE THOROUGHLY WIRE BRUSHED CLEANED AND PAINTED IN ACCORDANCE WITH THE SPECIFICATION.
9. THE ENGINEER MAY ORDER NON-DESTRUCTIVE TESTING OF SELECTED WELDS. WELDS PROVED TO BE BELOW THE SPECIFIED QUALITY SHALL BE CUT OUT, REWELDED AND RE- TESTED AT CONTRACTOR'S EXPENSE.
10. ALL BOLTS, NUTS AND WASHERS, INCLUDING HOLD DOWN BOLTS, CAST-IN FERRULES, CAST-IN PLATES AND MASONRY ANCHORS ARE TO BE HOT DIP GALVANIZED U.N.O. ALL GALVANIZED COMPONENTS TO BE CAST INTO CONCRETE MUST BE PASSIVATED. UNLESS NOTED OTHERWISE STEEL TO STEEL CONNECTIONS ARE M20 8.8/S AND HOLD DOWN BOLTS ARE M20 4.6/S.
11. BOLT TYPES SHALL BE AS FOLLOWS:-
    * 4.6/S -COMMERCIAL BOLTS TO AS1111 AND AS1112, SNUG TIGHTENED
    * 8.8/S -HIGH STRENGTH STRUCTURAL BOLTS TO AS/NZS 1252, SNUG TIGHTENED ONLY.
    USE BOLTS WITH THREADS IN COMPLIANCE WITH AS1275.
    USE BOLT LENGTHS SO THAT PROJECTION BEYOND NUT IS AT LEAST TWO (2) THREADS, AND NOT MORE THAN 10 mm. PROVIDE A COLOUR FLASH AT LOCATIONS OF TF AND TB BOLTS. SLIP FACTOR ASSUMED FOR FRICTION TYPE BOLTS = 0.35 TREAT CONTACT SURFACES BY WIRE BRUSHING OR BLASTING AS REQUIRED TO ACHIEVE ASSUMED SLIP FACTOR. DEGREASE AND LIGHTLY OIL TF AND TB BOLTS PRIOR TO INSTALLATION. TENSION TF AND TB BOLTS USING PART-TURN METHOD OR TAMPER PROOF LOAD INDICATING WASHERS TO AS4100. DO NOT USE CALIBRATED TORQUE WRENCHES. PROVIDE WITNESS MARKS ON BOLT AND NUT. PROVIDE A HARDENED WASHER UNDER BOLT HEAD OR NUT, WHICHEVER IS ROTATED. DO NOT REUSE TB OR TF BOLTS ONCE TENSIONED.
12. ALL STRUCTURAL STEEL FIXING DETAILS ARE TO BE BASED ON AISC STANDARDIZED STRUCTURAL CONNECTIONS U.N.O
13. ALL CLEAT PLATES ARE TO BE 10mm THICK UNO. ALL PLATES TO BE FROM STANDARD SQUARE EDGE FLATS U.N.O. ALL CAP PLATES TO HOLLOW SECTION SHALL BE 6mm THICK UNO.
14. THE FABRICATION AND ERECTION OF THE STRUCTURAL STEELWORK SHALL BE SUPERVISED BY A QUALIFIED PERSON EXPERIENCED IN SUCH SUPERVISION, IN ORDER TO ENSURE THAT ALL REQUIREMENTS OF THE DESIGNS ARE MET. ALL BEAMS AND RAFTERS SHALL BE FABRICATED AND ERECTED WITH NATURAL CAMBER UP. BEAMS AND TRUSSES OVER 6m SHALL BE PRECAMBERED 1 IN 500 UNLESS NOTED OTHERWISE. ALL MEMBERS SHALL BE SUPPLIED IN SINGLE LENGTHS. SPLICES SHALL ONLY BE PERMITTED IN LOCATIONS SHOWN ON THE STRUCTURAL DRAWINGS.
15. THE CONTACT SURFACES FOR HIGH STRENGTH FULLY TENSIONED BOLTED CONNECTIONS SHALL BE CLEAN "AS ROLLED" AND NOT PAINTED. FULLY TENSION BOLTS BY THE "PART TURN METHOD OF TIGHTENING", OR BY LOAD INDICATING WASHERS.
16. GROUT TO BASE PLATES: A SPACE FOR 40mm OF 2:1 SAND:CEMENT MORTAR OF DAMP EARTH CONSISTENCY RAMMED FOR COMPACTION. ALTERNATIVELY USE NON-SHRINK GROUT APPLIED TO MANUFACTURER'S SPECIFICATIONS.
17. COATING REPAIRS: REINSTATE COATING TO DAMAGED AREAS TO PROTECTIVE COATINGS SPECIFICATION. FIELD WELD REPAIRS: DO NOT WELD THROUGH EXISTING GALVANISING OR COATINGS. REMOVE WELD SPLATTER, RESIDUAL FLUX etc BY CHIPPING, GRINDING OR ABRASIVE BLAST CLEANING. GRIND FLUSH ROUGH WELD BEADS. PREPARE SURFACE FOR PAINTING AS PER COATING SPECIFICATION. REMOVE RUST, LOOSE AND BURNT PAINT AND SUFFICIENT SOUND COATING SO PAINT EDGE IS FEATHERED AND SMOOTH. STRIPE COAT ALL WELDS, EDGES AND ROUGH SURFACES USING A BRUSH. REINSTATE COATING AS PER PROTECTIVE COATINGS SPECIFICATION.
18. REPAIR DAMAGE TO GALVANIZED COATING TO AS/NZS 4680 SECTION 8 REPAIR AFTER GALVANIZING. USE ORGANIC TWO-PACK ZINC RICH EPOXY COATING COMPLYING WITH AS/NZS 3750.9 APPLIED IN TWO COATS EACH 50 MICRON, MINIMUM TOTAL DRY FILM THICKNESS 100 MICRONS. DO NOT USE SPRAY CANS OF 'COLD GALV' OR ZINC ALLOY SOLDER 'STICKS'. SURFACE PREPARATION OF EXPOSED BARE STEEL TO BE ABRASIVE BLAST CLEANED TO AS 1627.4, CLASS 2½ (PREFERRED) OR POWER TOOL CLEANED TO AS 1627.2 CLASS ST 3. LIGHTLY SWEEP BLAST GALVANIZED SURFACES.
19. PROTECTIVE COATINGS ARE TO BE SHOP APPLIED AND CURED IN WORKSHOP IN ACCORDANCE WITH MANUFACTURER S RECOMMENDATIONS UNLESS APPROVED OTHERWISE IN WRITING BY SUPERINTENDENT. PROTECTIVE COATINGS ARE TO BE SMOOTH, UNIFORM AND WITHOUT RUNS, BEADS, PINHOLES, SURFACE CRAZING OR OTHER IMPERFECTIONS.
20. UNLESS NOTED OTHERWISE ON THE DRAWINGS OR IN THE SPECIFICATION, SURFACE TREATMENT OF EXPOSED STEELWORK FOR ATMOSPHERIC CORROSION PROTECTION TO BE PUR5. APPLY PROTECTIVE COATINGS AS PER SYSTEM/SYSTEMS PUR5 OF AS/NZS2312 TABLE 6.3 IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. REPORT QA RECORDS IN A FORMAT SIMILAR TO AS3894 PARTS 10 TO 14. NON-SPECIFIED COLOURS WILL BE SELECTED BY THE SUPERINTENDENT.
21. DISSIMILAR METALS TO BE SEPARATED WITH INERT MATERIAL.
22. REFER SPECIFICATION AND ARCHITECTURAL DRAWINGS FOR DECORATIVE COATINGS.

REINFORCED CONCRETE MASONRY

1. ALL MATERIALS AND WORKMANSHIP SHALL CONFORM WITH THE CURRENT EDITION OF AS3700 EXCEPT WHERE VARIED BY THE CONTRACT DOCUMENTS AND SPECIFICATIONS.
2. CONCRETE MASONRY UNITS SHALL HAVE A MINIMUM CHARACTERISTIC UNCONFINED COMPRESSIVE STRENGTH OF 20 MPa IN ACCORDANCE WITH THE REQUIREMENTS OF AS/NZS 4455.1.
3. PROVIDE ADEQUATE TEMPORARY PROPPING TO WALLS DURING CONSTRUCTION IN ACCORDANCE WITH AS/NZS 4455.1 AND AS 4456.0.
4. PROVIDE VERTICAL CONTROL JOINTS IN WALLS AT MAXIMUM 8 METRE CENTRES OR WHERE INDICATED ON DRAWINGS.
5. ALL WALLS SHALL BE FULLY BONDED OR TIED AT THEIR INTERSECTIONS UNLESS DETAILED OTHERWISE.
6. MORTAR SHALL BE MECHANICALLY MIXED AND TYPE M3 U.N.O. CONSISTING OF 1 PART CEMENT, 1 PART HYDRATED LIME AND 6 PARTS OF WELL GRADED SAND, AND SHALL COMPLY WITH THE REQUIREMENTS OF AS 3700. MORTAR SHALL BE SAMPLED AND TESTED, IN ACCORDANCE WITH THE SPECIFICATION.
7. CORES OF ALL BLOCKS SHALL BE CLEAN AND FREE FROM PROJECTING MORTAR. PROVIDE CLEAN OUT OPENINGS AT BASE OF EACH LIFT. FORM THE FACE OF CLEAN OUT BLOCKS. INFILL BLOCK SHELLS SHALL NOT BE USED WITHOUT APPROVAL BY THE STRUCTURAL ENGINEER.
8. CORE FILLING CONCRETE SHALL BE MIXED USING MAX 10mm AGGREGATE, SHALL HAVE F'C 20 MPa AND MAXIMUM SLUMP OF 230mm. CONCRETE SHALL BE PLACED TO COMPLETELY FILL CORES WITHOUT SEGREGATION OR VOIDS. COMPACT BY INTERNAL VIBRATION OR RODDING AND STRENGTH TEST IN ACCORDANCE WITH THE MASONRY SPECIFICATION.
9. FILL CORES TO MAXIMUM 2.4 METRE HIGH FREE DROP IN ANY ONE POUR.
10. BACKFILL RETAINING WALLS, ON ENGINEER'S APPROVAL, WITH CLEAN 20mm GRAVEL FILLING FREE FROM CLAY OR OTHER ORGANIC MATTER.
11. RETAINING WALLS SHOULD NOT BE BACKFILLED UNTIL A MINIMUM OF 14 DAYS AFTER GROUT FILLING. PROPPED RETAINING WALLS SHALL NOT BE BACKFILLED UNTIL THE SLAB OVER HAS BEEN CAST A MINIMUM OF 7 DAYS AND THE WALL HAS BEEN GROUT FILLED A MINIMUM OF 14 DAYS.\
12. PROVIDE ALL AGRICULTURAL PIPES OR WEEPHOLES TO EARTH FACE OF ALL RETAINING WALLS AS NOTED IN THE DOCUMENTATION. ALL AGRICULTURAL PIPES OR WEEPHOLES TO BE PROTECTED FROM SILTATION BY THE USE OF GEOFABRIC. AGRICULTURAL DRAINS TO BE CONNECTED TO THE STORMWATER SYSTEM TO HYDRAULIC ENGINEERS DETAILS.
13. PROVIDE WATERPROOF MEMBRANE & D.P.C. AS REQUIRED BY THE ARCHITECTURAL SPECIFICATION.

ROOF TRUSS NOTES

1. GENERAL
   ALL WORKMANSHIP, MATERIALS AND CONSTRUCTION SHALL CONFORM WITH CURRENT EDITIONS OF AS1684, AS1720 & AS4600, THE AUSTRALIAN DOMESTIC CONSTRUCTION MANUAL AND THE PROJECT SPECIFICATIONS.
2. DESIGN:
   PREFABRICATED ROOF TRUSSES, THEIR BRACING & THE CONNECTIONS BETWEEN TRUSSES & TO SUPPORTING MEMBERS ARE TO BE DESIGNED & FABRICATED BY AN APPROVED FIRM OF TRUSS FABRICATORS. THE DESIGN OF THE TRUSS SYSTEM SHALL INCORPORATE ALLOWANCE FOR THE FOLLOWING:
   a. ALL TRUSSES SHOWN ON THE DRAWINGS TOGETHER WITH ANY OTHER TRUSSES AND OTHER FRAMING NEEDED TO COMPLETE THE ROOF PROFILE
   b. FASCIA BEAMS AS REQUIRED TO MINIMISE DIFFERENTIAL DEFLECTIONS BETWEEN TOES OF TRUSSES & TO PROVIDE SUPPORT AT CORNERS.
   c. TRUSS TO TRUSS, TRUSS TO FASCIA BEAM & TRUSS TO SUPPORT CONNECTIONS, ALL PERMANENT & TEMPORARY BRACING & BINDERS, STABILIZING STRUTS TO CANTILEVER TRUSSES.
   d. ALL TRUSSES SHALL BE SUPPORTED AT NODE POINTS ONLY, INCLUDING JACK TRUSSES
   e. PRECAMBER AS REQUIRED TO ENSURE THAT THE MAXIMUM LONG-TERM SAG IN ANY HORIZONTAL PLANE THROUGH THE ROOF DOES NOT EXCEED 10mm OR SPAN/400 WHICHEVER IS THE LESSER VALUE.
   f. ROOF TRUSS TIE DOWN TO SUPPORTING MEMBERS INCLUDING GUSSETS AND BOLTS TO STEEL COLUMNS & CONNECTION TO STRUCTURAL FASCIA TO BE DESIGNED AND DETAILED BY TRUSS FABRICATORS ENGINEER.
   g. TRUSS MANUFACTURER TO PROVIDE ADDITIONAL BRACING FOR ROOF TRUSSES IN ACCORDANCE WITH AS 4440.
   h. THE POSITIONING OF TRUSS WEB MEMBERS IS TO ALLOW FOR THE PASSAGE THROUGH THE CEILING SPACE OF ELECTRICAL, MECHANICAL & HYDRAULIC SERVICES & EQUIPMENT AS SHOWN ON THE SERVICES ENGINEERS DRAWINGS.
   i. ALLOW FOR TRUE WEIGHT OF CEILING LININGS - REFER ARCHITECTS DRAWINGS.
   j. SUPERIMPOSED LOADS FROM PLANT EQUIPMENT OR AS NOMINATED.
   k. MAXIMUM TRUSS SPACINGS U.N.O.
      900 FOR SHEET ROOF
3. BOTTOM CHORD BRACING:
   BOTTOM CHORD BRACING WHICH IS STRUCTURALLY ADEQUATE TO TRANSFER WIND LOADS FROM THE ROOF TRUSSES TO THE BRACING WALLS IS TO BE INSTALLED. THIS BRACING ACTION IS TO BE ACHIEVED BY EITHER:
   a. A PLASTERBOARD CEILING FIXED TO CEILING BATTENS OR FURRING CHANNELS WHICH ARE SCREW FIXED TO TRUSS BOTTOM CHORDS.
   b. A SYSTEM OF BRACING MEMBERS FIXED TO THE BOTTOM CHORDS OF THE TRUSSES.
4. DESIGN CERTIFICATION & SHOP DRAWINGS:
   MANUFACTURE OF ROOF TRUSSES SHALL NOT COMMENCE UNTIL:
   a. 3 SETS OF THE FABRICATORS ENGINEERS SHOP DRAWINGS INCLUDING MARKING & LAYOUT PLANS HAVE BEEN SUBMITTED TO & APPROVED BY THE ARCHITECT AND ENGINEER. 14 DAYS SHOULD BE ALLOWED FOR REVIEW.
   b. A CERTIFICATE STATING THAT THE TRUSSES, THE TOP & BTM. CHORD BRACING OF TRUSSES, THE CONNECTIONS BETWEEN TRUSSES, AND THE CONNECTIONS TO THE SUPPORT STRUCTURE HAVE BEEN DESIGNED TO SAFELY RESIST THE LOADS SET OUT IN "DESIGN CRITERIA" AND SIGNED BY A REGISTERED PROFESSIONAL ENGINEER IS TO BE SUBMITTED WITH THE SHOP DRAWINGS TO THE ARCHITECT.

SAFETY IN DESIGN

1. CONSTRUCTION WORK UNDERTAKEN BY THE BUILDER/CONTRACTOR IS TO COMPLY WITH THE REQUIREMENTS OF THE WORK PLACE HEALTH AND SAFETY ACT.
2. CONSTRUCTION ACTIVITY CAN BE HAZARDOUS. POTENTIAL SAFETY HAZARDS CONSIDERED BY THE DESIGNERS TO HAVE A HIGHER RISK THAN NORMAL CONSTRUCTION ACTIVITY ARE IDENTIFIED WITH APPROPRIATE NOTES ON THESE DRAWINGS. IT SHOULD BE NOTED THAT DESIGNERS HAVE A LOWER LEVEL OF UNDERSTANDING OF THE RISKS INVOLVED IN CONSTRUCTION COMPARED TO THAT OF A COMPETENT CONTRACTOR. IT IS THEREFORE ESSENTIAL THAT AN ADEQUATE SAFETY PLAN IS PREPARED BY THE CONTRACTOR FOR THE WORKS. SAFETY PLANS ARE TO BE PREPARED IN COMPLIANCE WITH THE STATUTORY REQUIREMENTS. THE DESIGNERS MAY NOT BE AWARE OF ALL SAFETY RISKS AND HAZARDS INVOLVED IN THIS PROJECT AND THE ABSENCE OF COMMENT DOES NOT IMPLY THAT THERE ARE ONLY LOW LEVEL RISKS OR HAZARDS INVOLVED IN THIS PROJECT. APPROPRIATE WORK METHOD STATEMENTS ARE TO BE PREPARED FOR ANY HIGH RISK ACTIVITY BY THE CONTRACTOR. THE DESIGNERS ARE AVAILABLE TO BE CONSULTED WHEN REQUIRED CONCERNING THEIR AREA OF CONTROL WITH REGARD TO SAFETY PLANS.
3. PRIOR TO FABRICATION OF STEELWORK THE CONTRACTOR SHALL AGREE WITH THE ENGINEER ON AREAS OF RISK WHICH HAVE BEEN ADDRESSED BY THE DESIGN WHERE POSSIBLE AND AGREE ON SUITABLE CONSTRUCTION PROCEDURES WHERE AREAS OF RISK STILL EXIST.
4. PRIOR TO ANY FABRICATION THE CONTRACTOR SHALL HAVE COMPLETED A RISK ASSESSMENT OF ALL CONSTRUCTION PROCEDURES AND ENSURED THAT WHERE POSSIBLE, ALL RISKS HAVE BEEN ELIMINATED AND WHERE NOT POSSIBLE THEIR SAFETY PLAN HAS ADDRESSED THOSE ISSUES AND IT HAS BEEN FORMULATED AND DOCUMENTED FOR STRICT ADHERENCE DURING THE CONSTRUCTION WORKS.
5. PRIOR TO THE USE OF THE PROJECT AS DESIGNED, THE OWNER SHALL HAVE COMPLETED A RISK ASSESSMENT OF ALL WORK PRACTICES AND ENSURED THAT WHERE POSSIBLE ALL RISKS HAVE BEEN ELIMINATED AND WHERE NOT POSSIBLE THEIR SAFETY PLAN HAS ADDRESSED THOSE ISSUES AND IT HAS BEEN FORMULATED AND DOCUMENTED FOR STRICT ADHERENCE AFTER COMMISSIONING.

CAD File: C:\Users\neilb\OneDrive - MAL Engineers\OneDrive - MAL Engineers\Documents\Documents\Projects\Jobs\Cairns\2022\Q22270 - Cairns OTHF Facility_CAD & Models\Acad\Q22270-ST-OTHF.dwg

Rev.	Date	Description	Des.	Verif.	Appd.
A	31.1.23	ISSUED FOR CONSTRUCTION	ML	ML	ML

clarke and prince | ARCHITECTS

CERTIFICATION
M. LANCINI RPEQ 18786

		Date
Drawn	NB	5.9.22
Checked	ML	5.9.22
Designed	ML	5.9.22
Verified	ML	5.9.22
Approved	M. LANCINI	31.1.23

Client: ERGON QUEENSLAND LIMTED
Project: CAIRNS CITY OTHF
LOT 3 ON RP738082
Title: GENERAL CONSTRUCTION NOTES
Status: FOR CONSTRUCTION
Datum: AHD
Scale: AS SHOWN
Size: A1
Drawing Number: Q22270-ST-01
Revision: A

TABLE 1 - SCREW PILE LOADS			
PILE REF.	COMPRESSIVE LOAD (ALLOWABLE kN)	SHEAR FORCE (ALLOWABLE kN)	TENSION FORCE (ALLOWABLE kN)
SCP1	200	20	50
SCP2	200	20	50
SCP3	200	20	50
SCP4	200	20	50
SCP5	200	20	50
SCP6	200	20	50
SCP7	200	20	50
SCP8	200	20	50
SCP9	200	20	50
SCP10	200	20	50
SCP11	200	20	50
SCP12	200	20	50
SCP13	200	20	50
SCP14	200	20	50
SCP15	200	20	50
SCP16	200	20	50
SCP17	200	20	50
SCP18	200	20	50
SCP19	200	20	50
SCP20	200	20	50
SCP21	200	20	50
SCP22	200	20	50
SCP23	200	20	50
SCP24	200	20	50
SCP25	200	20	50
SCP26	200	20	50
SCP27	200	20	50
SCP28	200	20	50
SCP29	200	20	50
SCP30	200	20	50
SCP31	200	20	50
SCP32	200	20	50
SCP33	200	20	50
SCP34	200	20	50
SCP35	200	20	50
SCP36	200	20	50
SCP37	200	20	50
SCP38	200	20	50
SCP39	200	20	50
SCP40	200	20	50
SCP41	200	20	50
SCP42	200	20	50
SCP43	200	20	50
SCP44	200	20	50
SCP45	200	20	50
SCP46	200	20	50
SCP47	200	20	50
SCP48	200	20	50
SCP49	200	20	50
SCP50	200	20	50
SCP51	200	20	50

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phone: 07 4091 3267
web: www.bakerbuildingcert.com.au
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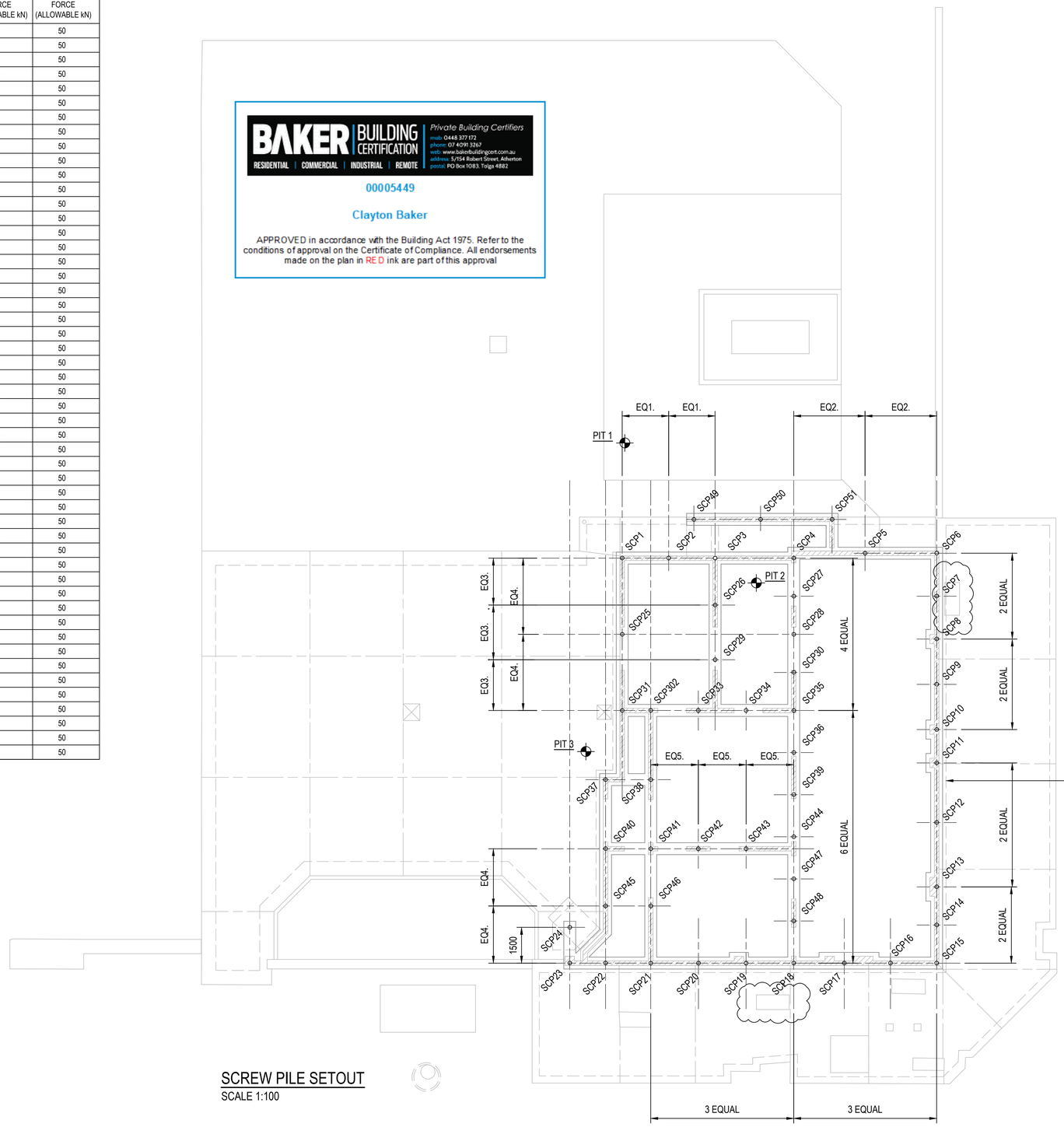
00005449

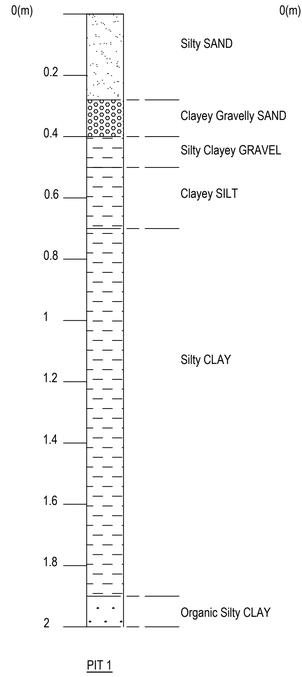
Clayton Baker

APPROVED in accordance with the Building Act 1975. Refer to the conditions of approval on the Certificate of Compliance. All endorsements made on the plan in RED ink are part of this approval

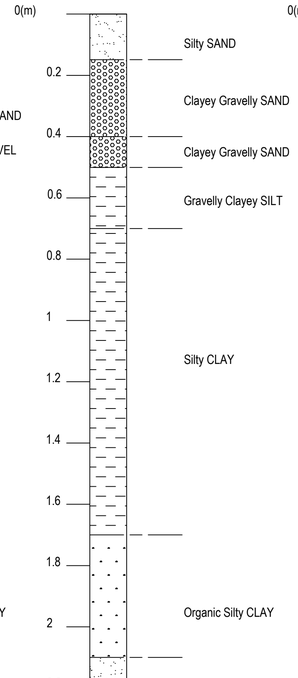


CONTRACTOR TO POT HOLE EXISTING SERVICES TO ENSURE THAT PILES ARE CLEAR OF ALL SERVICES. ALL PILING TO BE INSIDE LOT BOUNDARY.

SCREW PILE SETOUT
SCALE 1:100



PIT 1



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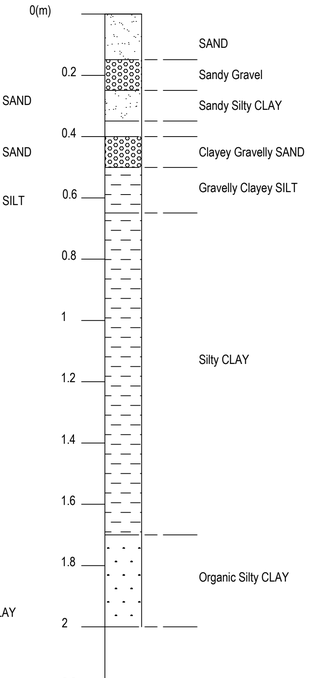

PIT 3

TEST PIT INFORMATION

EXTRACTED FROM DOUGLAS PARTNERS REPORT, PROJECT 216856.00 DATED AUG 2022. REFER TO GEPTECHNICAL REPORT FOR CPT LOG WHICH SHALL BE USED FOR PILE DESIGN.

LEGEND

PIT 1 ..... DENOTES APPROXIMATE TEST PIT LOCATION. REFER GEOTECHNICAL REPORT BY DOUGLAS PARTNERS.

SCP# ..... DENOTES SCREW PILE REFERENCE MARK. SCREW PILES LOCATED ON WALL CENTRELINES.(UNO) REFER ARCHITECT DRAWINGS FOR ALL BUILDING GRID AND SETOUT FOR WALLS.

SETOUT POINT.

PILE SETOUT REFERENCE

0 1000 2000 4000 6000 8000 10000mm
SCALE 1:100 @A1

Rev.	Date	Description	Des.	Verif.	Appd.
A	31.1.23	ISSUED FOR CONSTRUCTION	ML	ML	ML

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CERTIFICATION

M. LANCINI RPEQ 18786

MAL Engineers

		Date
Drawn	NB	5.9.22
Checked	ML	5.9.22
Designed	ML	5.9.22
Verified	ML	5.9.22
Approved	M. LANCINI	31.1.23

Client: ERGON QUEENSLAND LIMTED

Project: CAIRNS CITY OTHF
LOT 3 ON RP738082

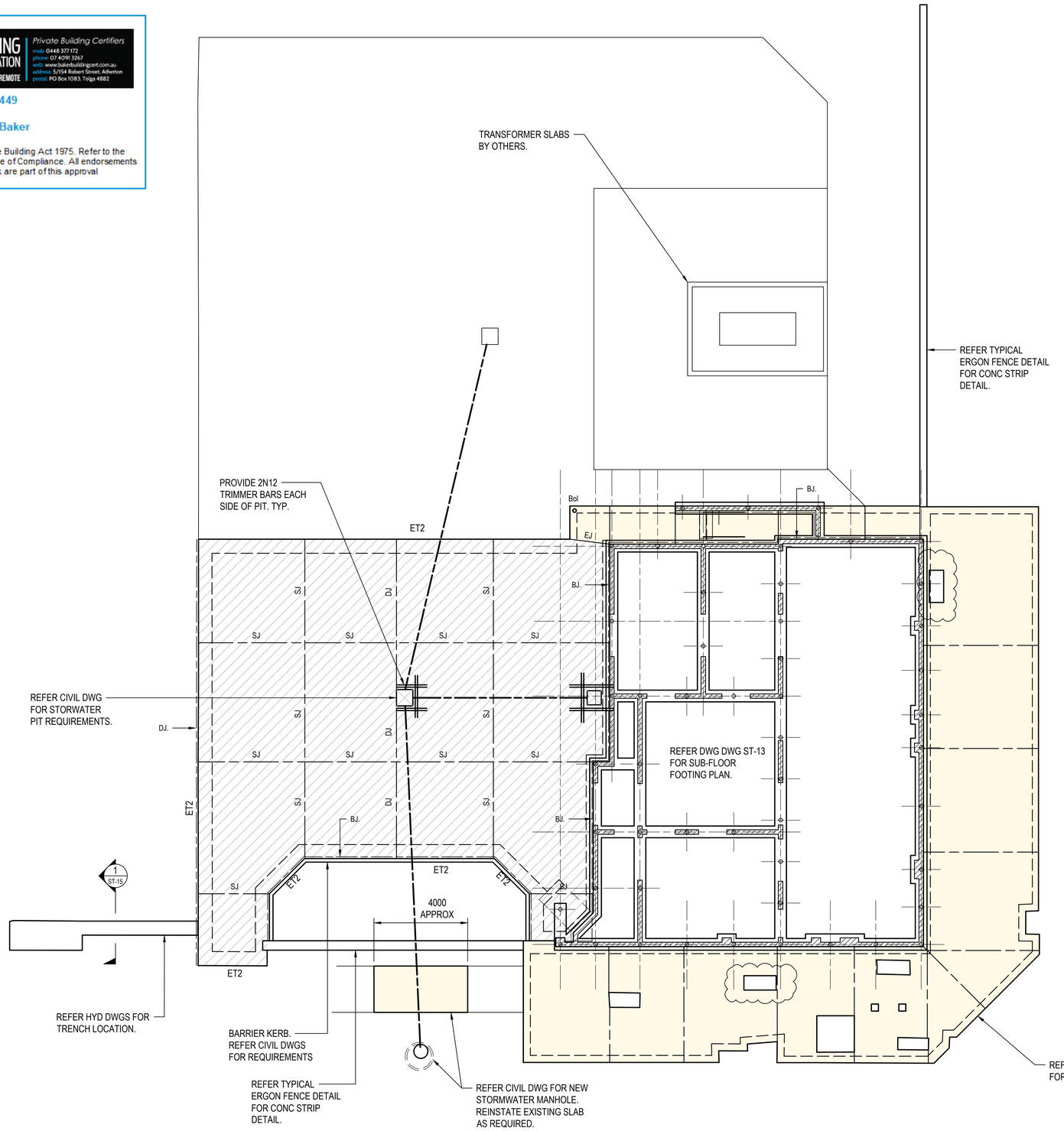
Title: SCREW PILE PLAN AND DETAILS

Status: FOR CONSTRUCTION

Datum	Scale	Size
AHD	AS SHOWN	A1

Drawing Number: Q22270-ST-11

Revision: A



HARDSTAND PLAN

SCALE 1:100

..... HARDSTAND DESIGNED ON AN ASSUMED CBR OF 3% . REFER TO ST-01 FOR AXLE DESIGN LOAD AND TOTAL REPETITIONS.

FOOTING LEGEND

ET1 ..... 200 DEEP x 300 WIDE SLAB EDGE THICKENING.
ET2 ..... 250 DEEP x 600 WIDE SLAB EDGE THICKENING.
SF1 ..... 500 DEEP x 500 WIDE STRIP FOOTING.
SF2 ..... 500 DEEP x 500 WIDE STRIP FOOTING.
BW1 ..... 200 SERIES MASONRY BLOCKWORK WALL.
CMP ..... BLOCK /CONC PIER. SEE DWG ST-25
Bol ..... BOLLARD.

SLAB JOINT LEGEND

DJ ..... SLAB DOWEL JOINT TYPE.
SJ ..... SLAB SAWCUT JOINT.
BJ ..... SLAB BUTT JOINT.
EJ ..... SLAB EXPANSION JOINT.

SLAB LEGEND

..... 100 THK EXTERNAL SLAB IN ACCORDANCE WITH FNQROC. PROVIDE SL82 MESH TOP AND N12 SLAB EDGE TRIMMER BARS. REFER ARCHITECT DWGS FOR FINISHES.

..... 160 THK HARDSTAND SLAB WITH 150mm TYPE 2.3 SUBBASE. PROVIDE SL82 MESH TOP AND N12 SLAB EDGE TRIMMER BARS.

..... 200-220 THK SLAB.

..... 250 THK SLAB.

..... MASONRY WALL OVER.

..... LOAD BEARING ELEMENT UNDER.

0 1000 2000 4000 6000 8000 10000mm
SCALE 1:100 @A1

Rev.	Date	Description	Des.	Verif.	Appd.
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MAL Engineers

Drawn	NB	Date 5.9.22
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Approved	M. LANCINI	31.1.23

Client: ERGON QUEENSLAND LIMTED
Project: CAIRNS CITY OTHF
LOT 3 ON RP738082
Title: HARDSTAND PLAN

Status: FOR CONSTRUCTION
Datum: AHD | Scale: AS SHOWN | Size: A1
Drawing Number: Q22270-ST-12 | Revision: A

DATE PLOTTED: 1 February 2023 4:27 PM BY : NEIL BROWNING

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Clayton Baker

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FOOTING LEGEND

ET1 ..... 200 DEEP x 300 WIDE SLAB EDGE THICKENING.
ET2 ..... 250 DEEP x 600 WIDE SLAB EDGE THICKENING.
SF1 ..... 500 DEEP x 500 WIDE STRIP FOOTING.
SF2 ..... 500 DEEP x 500 WIDE STRIP FOOTING.
BW1 ..... 200 SERIES MASONRY BLOCKWORK WALL.
CMP ..... BLOCK /CONC PIER. SEE DWG ST-25
Bol ..... BOLLARD.

SLAB JOINT LEGEND

DJ ..... SLAB DOWEL JOINT TYPE.
SJ ..... SLAB SAWCUT JOINT.
BJ ..... SLAB BUTT JOINT.
EJ ..... SLAB EXPANSION JOINT.

SLAB LEGEND

..... 100 THK EXTERNAL SLAB IN ACCORDANCE WITH FNQROC. PROVIDE SL72 MESH TOP AND N12 SLAB EDGE TRIMMER BARS. REFER ARCHITECT DWGS FOR FINISHES.

..... 160 THK HARDSTAND SLAB WITH 150mm TYPE 2.3 SUBBASE. PROVIDE SL82 MESH TOP AND N12 SLAB EDGE TRIMMER BARS.

..... 200-220 THK SLAB.

..... 250 THK SLAB.

..... MASONRY WALL OVER.

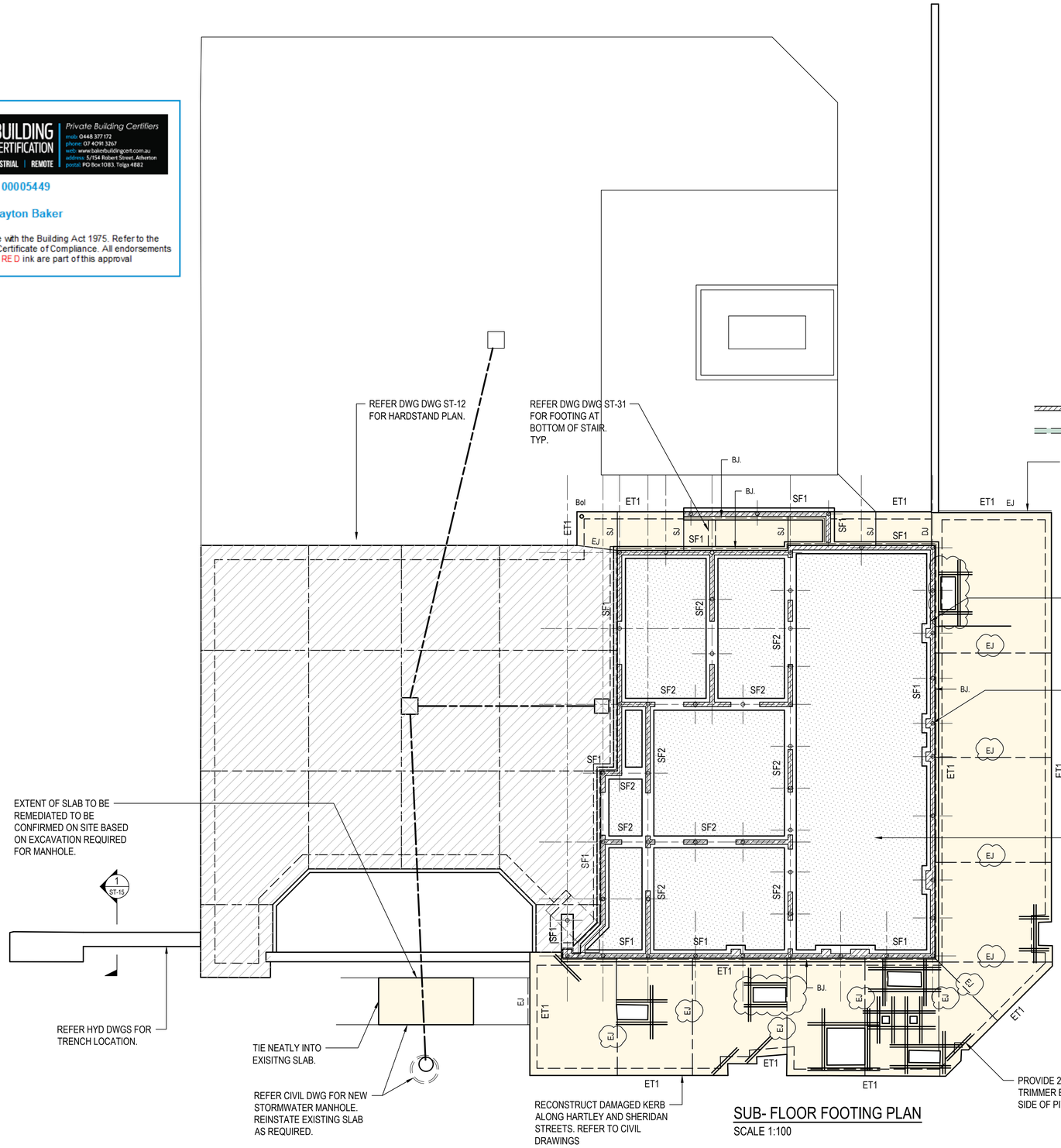
..... LOAD BEARING ELEMENT UNDER.

BLOCKWORK REINFORCEMENT NOTES:

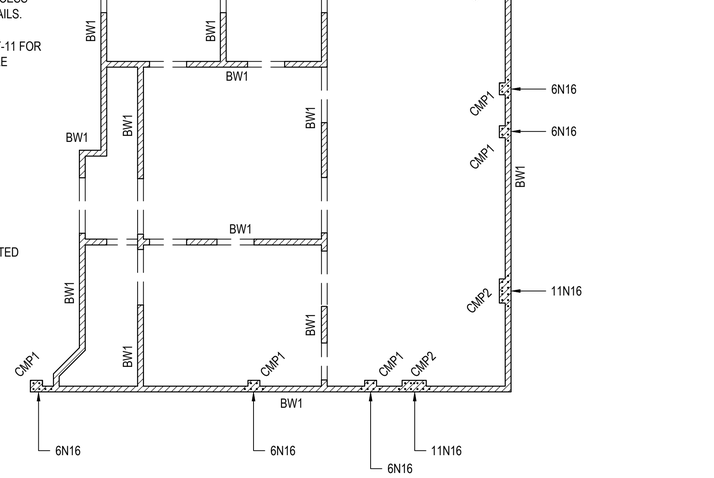
1. GENERALLY ALL WALLS TO BE 190 SERIES MASONRY BLOCK. UNO.
2. BW1 TO BE REINFORCED VERTICALLY WITH N12-400 CTS. CENTRAL, EACH END OF WALL AND AT CORNERS (UNO). STARTER BARS TO MATCH. LAP 500. FULLY CORE FILL.
3. 1-N12 IN EACH CORE EACH SIDE OF BLOCK WALL CONTROL JOINT.
4. 2-N12 IN EACH CORE EACH SIDE OF OPENING UP TO 1200mm WIDE.
5. 2-N16 IN EACH CORE EACH SIDE OF OPENING GREATER THAN 1201mm AND UP TO 5400mm WIDE.
6. PROVIDE 400 DEEP DOUBLE BOND BEAM TOP OF WALL WITH 1-N16 EACH COURSE. (UNO)
7. PROVIDE 400 DEEP DOUBLE BOND BEAM AT CEILING LEVEL WITH 1-N16 EACH COURSE. (UNO)
8. PROVIDE 400 DEEP DOUBLE BOND BEAM TO UNDERSIDE OF SUSPENDED SLAB WITH 1-N16 EACH COURSE.
9. PROVIDE N12 BAR TO ALL SILL BEAMS. EXTEND 100 PAST OPENING.
10. PROVIDE BLOCK WALL CONTROL JOINTS AT 8m MAXIMUM CTS.
11. PROVIDE CLEAN-OUT BLOCK AT BTM. OF EACH REINFORCED CORE.

BLOCKWORK LINTEL SCHEDULE		
OPENING	LINTEL REINFORCEMENT TOP AND BTM	MINIMUM DEPTH OF BLOCK LINTEL
0 - 3000	1-N16	490
3001 - 5600	2-N16	490

SCHEDULE IS APPLICABLE TO 200 SERIES BLOCKWORK.
PROVIDE R8 LIGS AT 200 CTS. FOR LINTELS WITH N16 HORIZONTAL REINFORCEMENT.
REFER DWG ST.25 FOR TYPICAL BLOCKWORK DETAILS.



SUB- FLOOR FOOTING PLAN
SCALE 1:100



SUB- FLOOR WALL PLAN
SCALE 1:100

0 1000 2000 4000 6000 8000 10000mm
SCALE 1:100 @A1

Rev.	Date	Description	Des.	Verif.	Appd.
A	31.1.23	ISSUED FOR CONSTRUCTION	ML	ML	ML

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CERTIFICATION

M. LANCINI RPEQ 18786

MAL Engineers

Drawn	NB	Date 5.9.22
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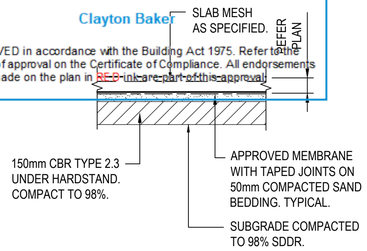
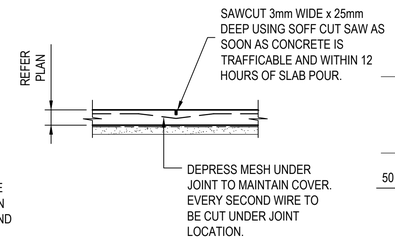
Approved	M. LANCINI	31.1.23

Client: ERGON QUEENSLAND LIMTED
Project: CAIRNS CITY OTHF
LOT 3 ON RP738082
Title: SUB-FLOOR FOOTING AND WALL PLAN
Status: FOR CONSTRUCTION
Datum: AHD | Scale: AS SHOWN | Size: A1
Drawing Number: Q22270-ST-13 | Revision: A

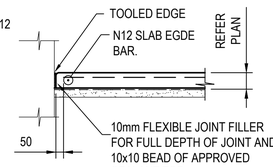
CAD File: C:\Users\neilb\OneDrive - MAL Engineers\Documents\OneDrive - MAL Engineers\Documents\Projects\Jobs\Cairns\2022\Q22270 - Cairns OTHF Facility_CAD & Models\Acad\Plot\20230131 IFC\Q22270-ST-13-A.dwg



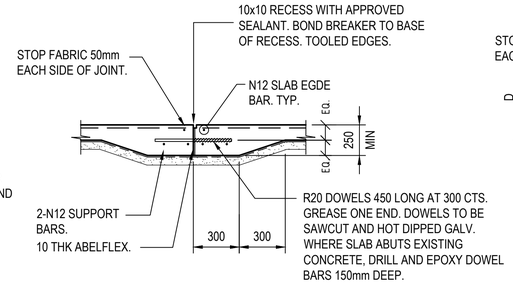
TYPICAL SLAB ON GRADE DETAIL
1:20



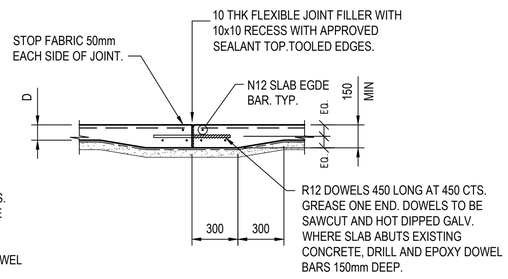
SAWN JOINT DETAIL (SJ)
1:20



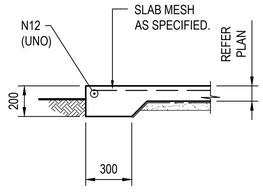
BUTT JOINT (BJ)
1:20



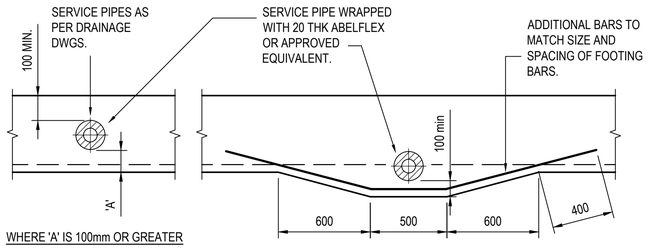
TYPICAL DOWELLED JOINT (DJ)
1:20



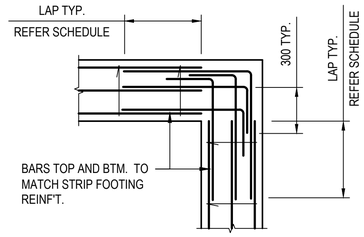
TYPICAL EXPANSION JOINT (EJ)
1:20



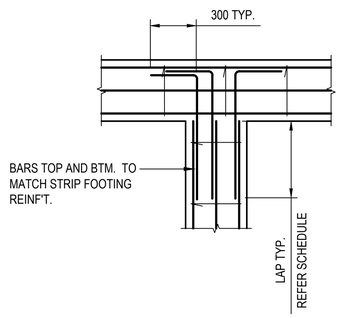
TYPICAL EDGE THICKENING (ET1)
1:20



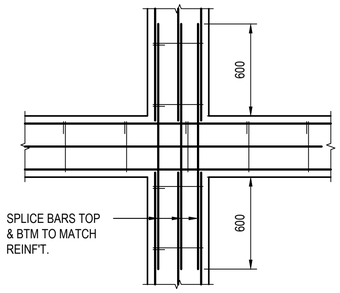
PENETRATION DETAIL FOR PIPE PASSING THROUGH LOWER THIRD OF STRIP FOOTING OR SLAB RIB
FOR PIPES RELEVANT TO THIS DETAIL REFER TO CIVIL & HYDRAULIC ENGINEERS DRAWINGS



TYPICAL CORNER

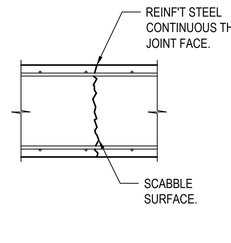


TYPICAL 'T' INTERSECTION

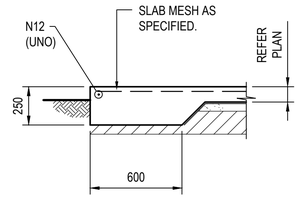


TYPICAL INTERSECTION DETAIL

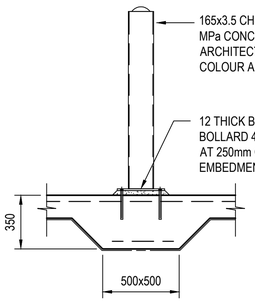
TYPICAL FOOTING BEAM INTERSECTION DETAILS



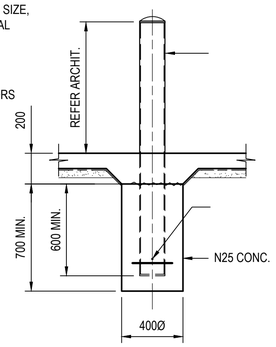
TYPICAL FOOTING BEAM CONSTRUCTION JOINT
1:20



TYPICAL EDGE THICKENING (ET2)
1:20

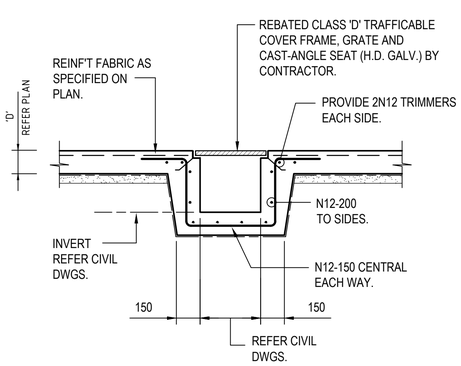


BOLTED TO SLAB



CAST INTO FOOTING

TYPICAL BOLLARD DETAILS
1:20



TYPICAL FORMED SUMP DETAIL
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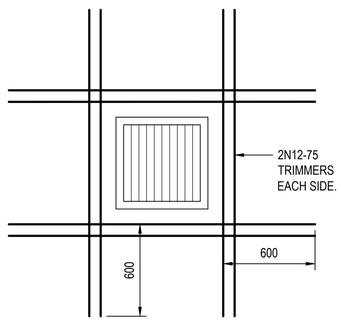
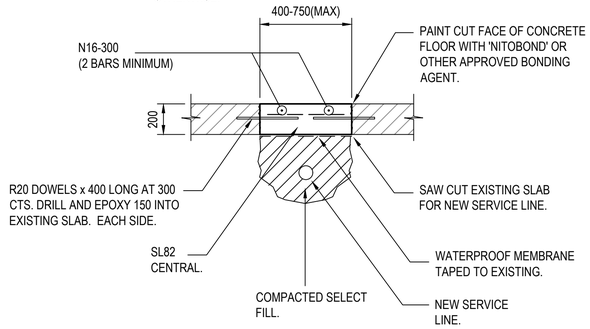


TRIMMERS AT SUMP/PENETRATION

TYPICAL SLAB TRIMMER BAR DETAILS
1:20

TRENCH NOTES
..... REFER OTHER CONSULTANTS DWGS FOR LOCATION OF TRENCHES.
..... CONCRETE STRENGTH AS PER NOTES.
..... BACKFILL EXISTING DUCT/TRENCH WITH STABLE GRANULAR MATERIAL. (eg. DECO, CRUSHED DUST OR ROAD BASE GRAVEL)
..... SLAB INFILL TO CARRY NO LOAD BEARING STRUCTURE. ENGINEER TO BE CONTACTED IF OTHERWISE.



TYPICAL SLAB TRENCH INFILL

SECTION 1 / ST-12
SCALE 1:20

0 500 1000 1500 2000mm
SCALE 1:20 @A1

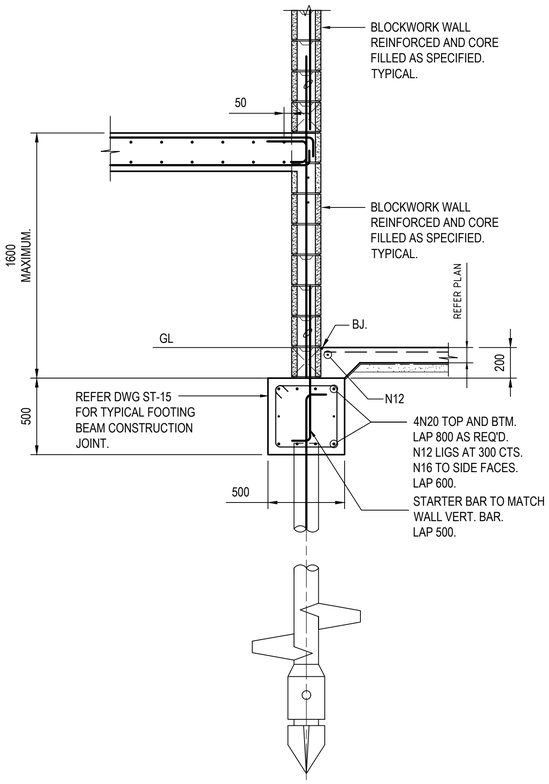
Rev.	Date	Description	Des.	Verif.	Appd.
A	31.1.23	ISSUED FOR CONSTRUCTION	ML	ML	ML

CERTIFICATION
M. LANCINI RPEQ 18786

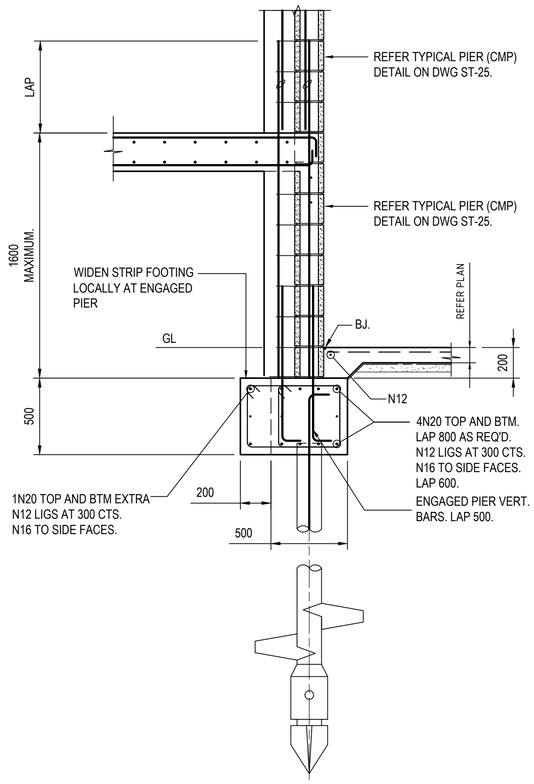
		Date
Drawn	NB	5.9.22
Checked	ML	5.9.22
Designed	ML	5.9.22
Verified	ML	5.9.22
Approved	M. LANCINI	31.1.23

Client: ERGON QUEENSLAND LIMTED
Project: CAIRNS CITY OTHF
LOT 3 ON RP738082
Title: TYPICAL SLAB AND FOOTING DETAILS
Status: FOR CONSTRUCTION
Datum: AHD | Scale: AS SHOWN | Size: A1
Drawing Number: Q22270-ST-15 | Revision: A

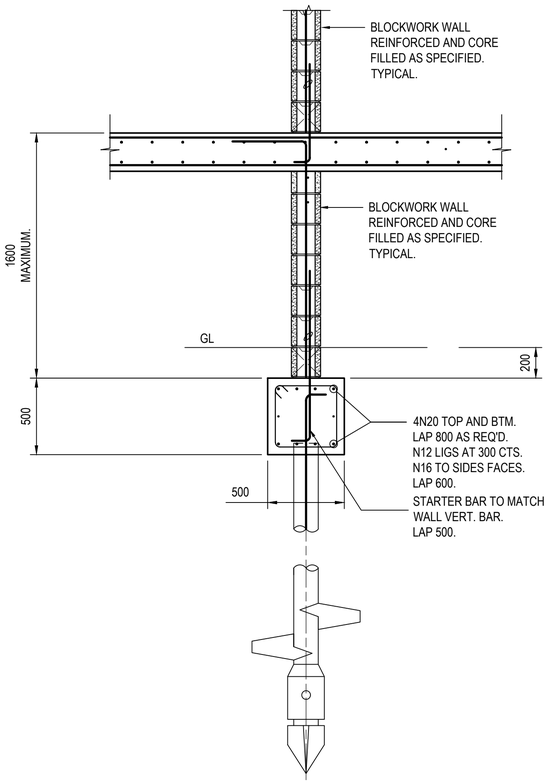
CAD File: C:\Users\neilb\OneDrive - MAL Engineers\Documents\OneDrive - MAL Engineers\Documents\Projects\Jobs\Cairns\2022\Q22270 - Cairns OTHF Facility_CAD & Models\Acad\Q22270-ST-OTHF.dwg



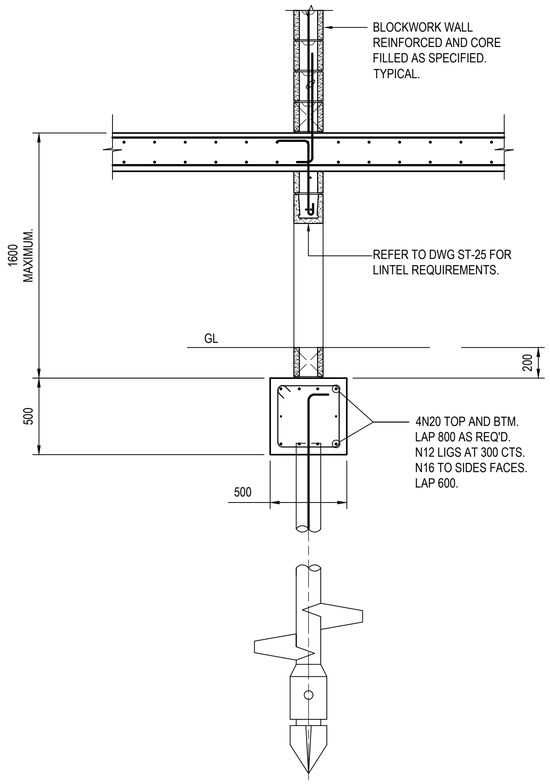
TYPICAL STRIP FOOTING (SF1)
1:20



TYPICAL STRIP FOOTING (SF1)
AT ENGAGED PIER
1:20



TYPICAL STRIP FOOTING (SF2)
1:20



TYPICAL STRIP FOOTING
AT ACCESS OPENING
1:20

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00005449

Clayton Baker

APPROVED in accordance with the Building Act 1975. Refer to the conditions of approval on the Certificate of Compliance. All endorsements made on the plan in RED ink are part of this approval

0 1000 2000 4000 6000 8000 10000mm
SCALE 1:100 @A1

Rev.	Date	Description	Des.	Verif.	Appd.
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Energy Queensland | ERGON ENERGY | clarke and prince | ARCHITECTS

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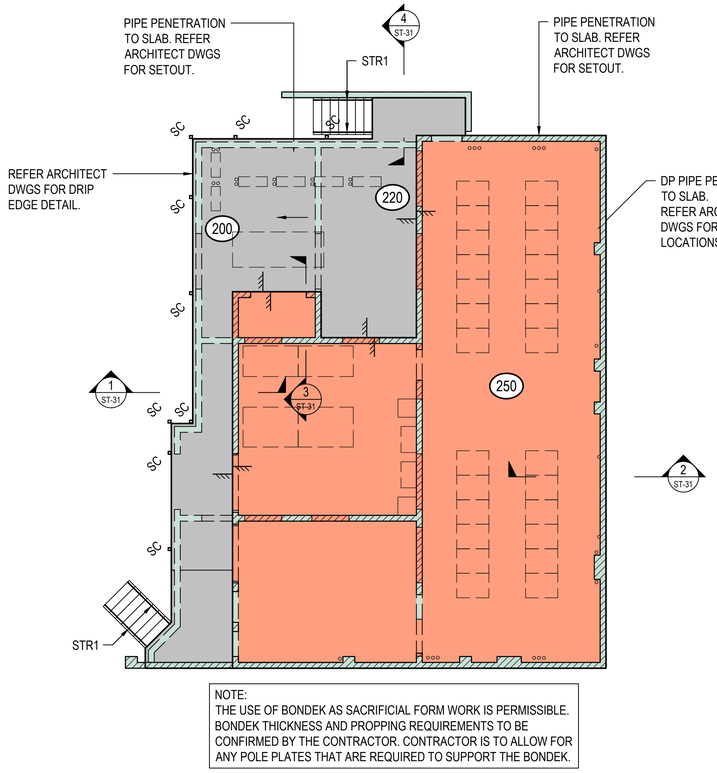
Client: ERGON QUEENSLAND LIMTED
Project: CAIRNS CITY OTHF
LOT 3 ON RP738082
Status: FOR CONSTRUCTION
Title: SLAB AND FOOTING DETAILS
Datum: AHD | Scale: AS SHOWN | Size: A1
Drawing Number: Q22270-ST-16 | Revision: A



NOTE:
THE USE OF BONDEK AS SACRIFICIAL FORM WORK IS PERMISSIBLE. BONDEK THICKNESS AND PROPPING REQUIREMENTS TO BE CONFIRMED BY THE CONTRACTOR. CONTRACTOR IS TO ALLOW FOR ANY POLE PLATES THAT ARE REQUIRED TO SUPPORT THE BONDEK.

GROUND FLOOR SLAB PLAN
SCALE 1:100

..... REFER ARCHITECTS DRAWINGS FOR ALL SETOUT, FINISHES, STEPS AND FALLS TO SLAB.

LEGEND

SC ..... STEEL COLUMN. REFER DWG ST-41
BW1 ..... 200 SERIES MASONRY BLOCKWORK WALL.
STR1 ..... 125 x75 x 4 RHS STRINGER.

SLAB LEGEND

..... 100 THK EXTERNAL SLAB IN ACCORDANCE WITH FNQROC. PROVIDE SL82 MESH TOP AND N12 SLAB EDGE TRIMMER BARS.

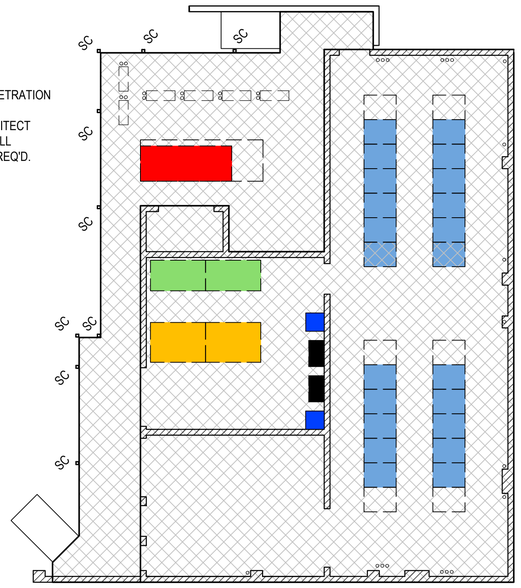
..... 160 THK HARDSTAND SLAB WITH 150mm TYPE 2.3 SUBBASE. PROVIDE SL82 MESH TOP AND N12 SLAB EDGE TRIMMER BARS.

..... 200-220 THK SLAB.

..... 250 THK SLAB.

..... MASONRY WALL OVER.

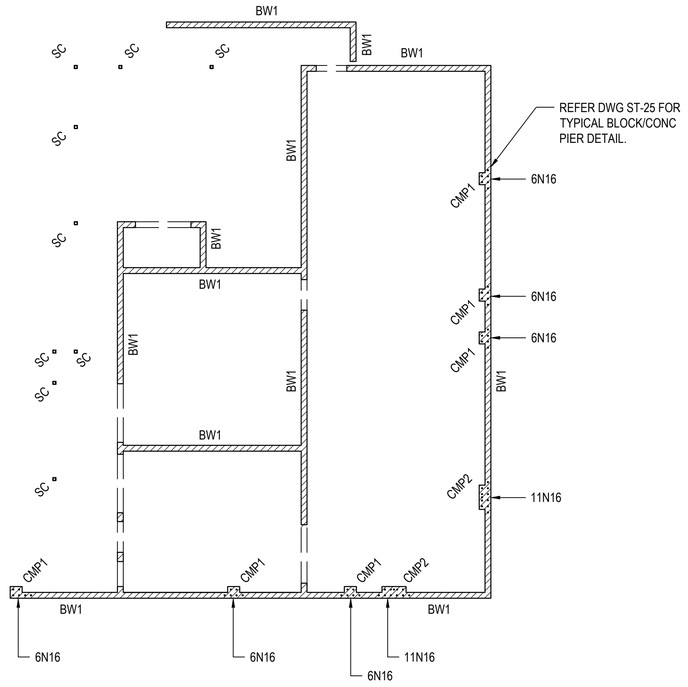
..... LOAD BEARING ELEMENT UNDER.



GROUND FLOOR LOADING PLAN
SCALE 1:100

LOAD LEGEND

..... GROUND FLOOR LIVE LOAD - 5kPa
..... GENERATOR. 2750 kg
..... BATTERY UNIT - 1050kg /UNIT
..... UPS UNIT - 400kg / UNIT
..... COMMS RACKS - 675kg / RACK (EQL TO CONFIRM)
..... BATTERY - 1075 kg / UNIT
..... RECTIFIERS - 200 kg / UNIT



GROUND FLOOR WALL PLAN
SCALE 1:100

BLOCKWORK REINFORCEMENT NOTES:

1. GENERALLY ALL WALLS TO BE 190 SERIES MASONRY BLOCK. UNO.
2. BW1 TO BE REINFORCED VERTICALLY WITH N12-400 CTS. CENTRAL, EACH END OF WALL AND AT CORNERS (UNO). STARTER BARS TO MATCH. LAP 500. FULLY CORE FILL.
3. 1-N12 IN EACH CORE EACH SIDE OF BLOCK WALL CONTROL JOINT.
4. 2-N12 IN EACH CORE EACH SIDE OF OPENING UP TO 1200mm WIDE.
5. 2-N16 IN EACH CORE EACH SIDE OF OPENING GREATER THAN 1201mm AND UP TO 5400mm WIDE.
6. PROVIDE 400 DEEP DOUBLE BOND BEAM TOP OF WALL WITH 1-N16 EACH COURSE. (UNO)
7. PROVIDE 400 DEEP DOUBLE BOND BEAM AT CEILING LEVEL WITH 1-N16 EACH COURSE. (UNO)
8. PROVIDE 400 DEEP DOUBLE BOND BEAM TO UNDERSIDE OF SUSPENDED SLAB WITH 1-N16 EACH COURSE.
9. PROVIDE N12 BAR TO ALL SILL BEAMS. EXTEND 100 PAST OPENING.
10. PROVIDE BLOCK WALL CONTROL JOINTS AT 8m MAXIMUM CTS.
11. PROVIDE CLEAN-OUT BLOCK AT BTM. OF EACH REINFORCED CORE.

BLOCKWORK LINTEL SCHEDULE		
OPENING	LINTEL REINFORCEMENT TOP AND BTM	MINIMUM DEPTH OF BLOCK LINTEL
0 - 3000	1-N16	490
3001 - 5600	2-N16	490

SCHEDULE IS APPLICABLE TO 200 SERIES BLOCKWORK.
PROVIDE R8 LIGS AT 200 CTS. FOR LINTELS WITH N16 HORIZONTAL REINFORCEMENT.
REFER DWG ST.25 FOR TYPICAL BLOCKWORK DETAILS.

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0 1000 2000 4000 6000 8000 10000mm
SCALE 1:100 @A1

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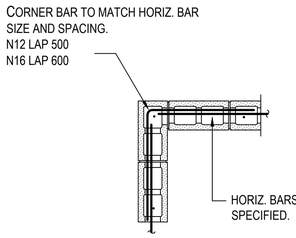
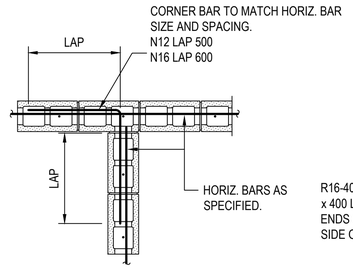
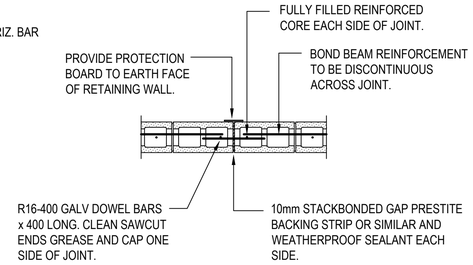
Client: ERGON QUEENSLAND LIMTED
Project: CAIRNS CITY OTHF
LOT 3 ON RP738082
Title: GROUND FLOOR SLAB AND WALL PLAN
Status:
Datum: AHD
Scale: AS SHOWN
Size: A1
Drawing Number: Q22270-ST-21
Revision: A



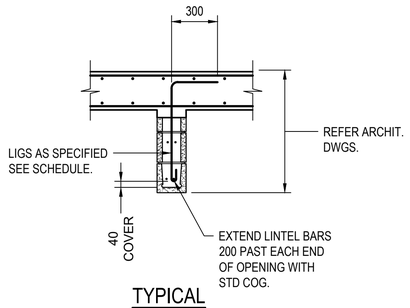
HORIZONTAL 1-BAR CORNER DETAIL



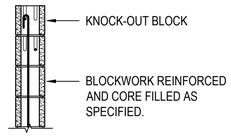
BLOCKWORK 'T' INTERSECTION PLAN DETAIL



BLOCKWORK CONTROL JOINT BCJ - TYPICAL DETAIL



TYPICAL 190 BLOCKWORK LINTEL

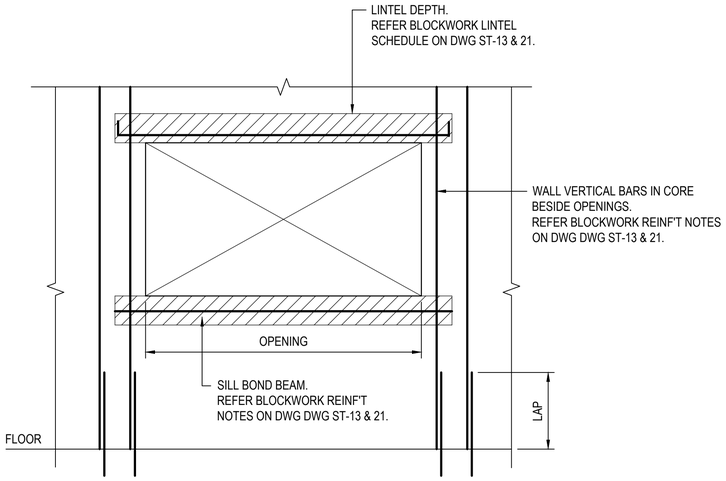


TYPICAL TOP OF BLOCKWORK WALL

NOTES

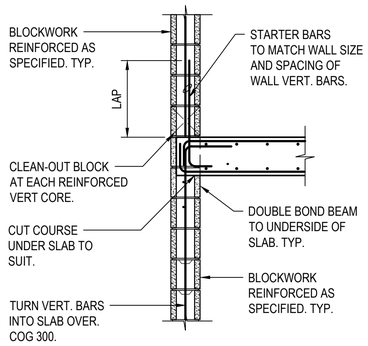
1. FOR ALL RELEVANT CONSTRUCTION NOTES REFER DRAWING ST-01 CONCRETE CORE FILLING ALL WORKMANSHIP, MATERIALS & TESTING SHALL BE IN ACCORDANCE WITH AS 3600 EXCEPT AS VARIED BY THE CONTRACT DOCUMENTS AND SPECIFICATION. CONCRETE CORE FILLING SHALL HAVE 28 DAY COMPRESSIVE STRENGTH 20MPa WITH 10mm MAXIMUM AGGREGATE SIZE AND MAXIMUM SLUMP OF 230mm.
2. REINFORCEMENT COVER REINFORCEMENT SHALL BE PLACED CENTRALLY IN WALL. U.N.O.
3. REINFORCEMENT LAPS BAR LAPS SHALL BE AS FOLLOWS U.N.O. :-

BAR LAPS FOR MASONRY WALLS	
BAR SIZE	LAP (mm)
N12	500
N16	600
N20	800

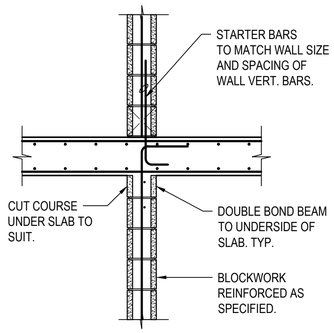


TYPICAL BLOCKWORK WALL OPENING ELEVATION

FULLY GROUT FILL ALL REINFORCED CORES.

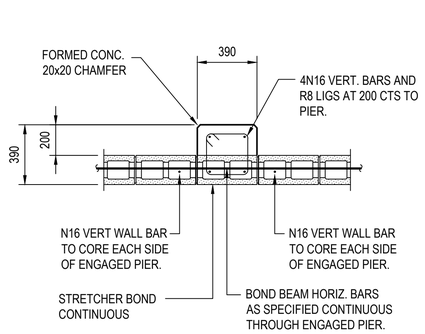


TYPICAL EXTERNAL BLOCKWORK TO SLAB DETAIL

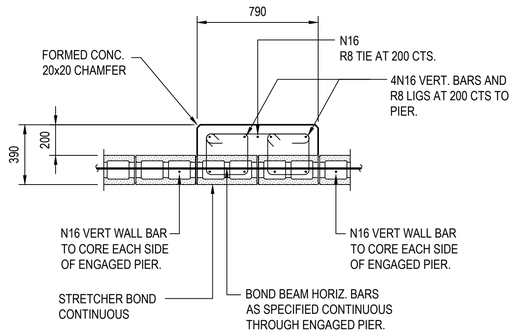


TYPICAL INTERNAL BLOCKWORK TO SLAB DETAIL

TYPICAL LOAD BEARING BLOCKWORK WALL DETAILS



TYPICAL PIER (CMP1) DETAIL



TYPICAL PIER (CMP2) DETAIL

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RESIDENTIAL | COMMERCIAL | INDUSTRIAL | REMOTE
mob: 0448 377 172
phone: 07 4091 3267
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0 1000 2000 4000 6000 8000 10000mm

SCALE 1:100 @A1

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Approved	M. LANCINI	31.1.23

Client: ERGON QUEENSLAND LIMTED

Project: CAIRNS CITY OTHF
LOT 3 ON RP738082

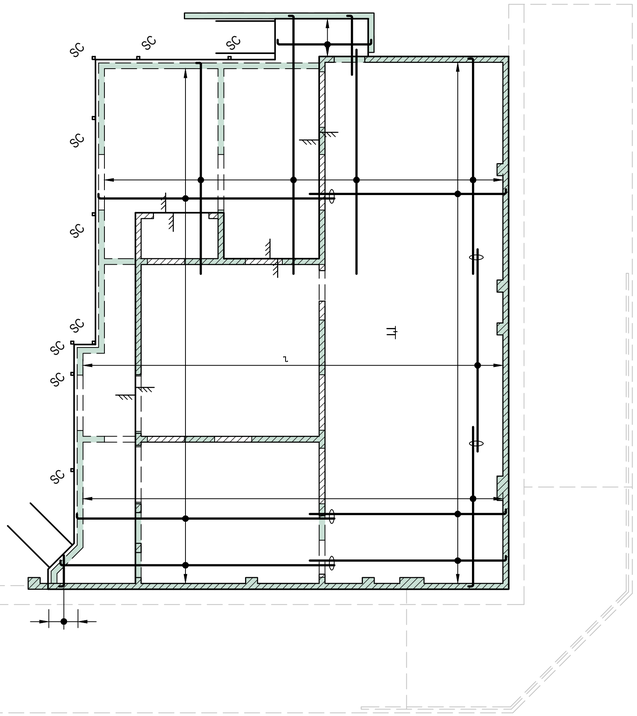
Title: TYPICAL MASONRY BLOCKWORK DETAILS

Status: FOR CONSTRUCTION

Datum		Scale	Size
AHD		AS SHOWN	A1

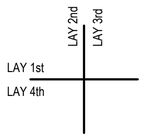
Drawing Number: Q22270-ST-25

Revision: A

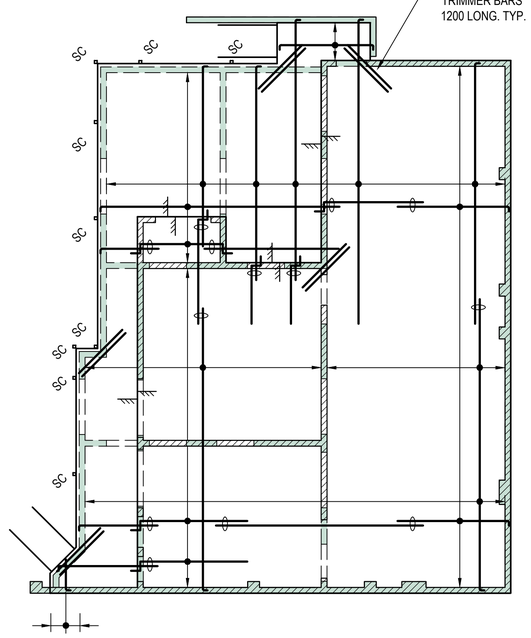


BOTTOM REINFORCEMENT PLAN

1. FOR ALL RELEVANT CONSTRUCTION NOTES REFER DWG ST-01.
2. ALL BARS TO BE N16 AT 200 CTS UNLESS NOTED OTHERWISE.
3. BOTTOM COVER TO SLAB REINFORCEMENT :
   ..... 30mm INTERNAL SLAB.
   ..... 40mm EXTERNAL SLAB.
4. ⟊ INDICATES BARS TO BE IN CONTACT AND TIED.
5. WHERE DIFFERENT BAR SIZES ARE SHOWN LAPPING, LAP LENGTH SHALL SUIT SMALLER BAR SIZE.

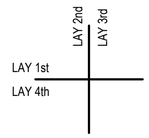


BAR LAYING SEQUENCE
UNLESS NOTED OTHERWISE

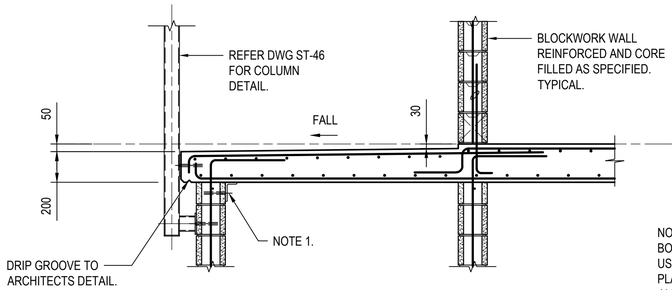


TOP REINFORCEMENT PLAN

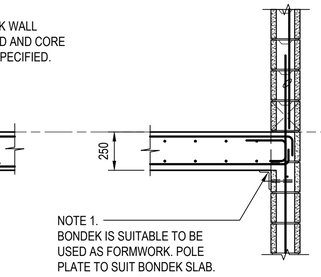
1. FOR ALL RELEVANT CONSTRUCTION NOTES REFER DWG ST-01.
2. REFER ARCHITECT DWGS FOR ALL STEPS AND FALLS TO SLAB.
3. ALL BARS TO BE N16 AT 200 CTS UNLESS NOTED OTHERWISE.
4. (E) INDICATES 3N16 BARS EXTRA
5. TOP COVER TO SLAB REINFORCEMENT :
   ..... 30mm INTERNAL SLAB.
   ..... 40mm EXTERNAL SLAB.
6. ⟊ INDICATES BARS TO BE IN CONTACT AND TIED.
7. WHERE DIFFERENT BAR SIZES ARE SHOWN LAPPING, LAP LENGTH SHALL SUIT SMALLER BAR SIZE.



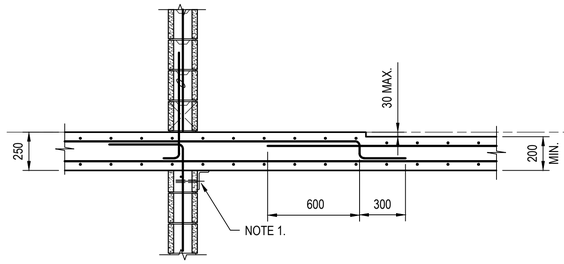
BAR LAYING SEQUENCE
UNLESS NOTED OTHERWISE



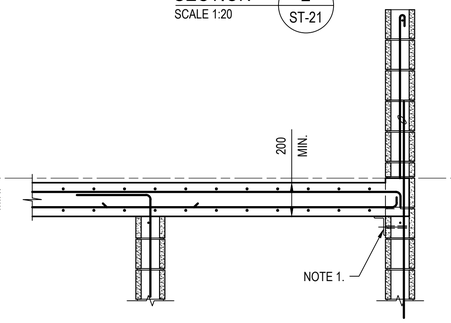
SECTION 1 / ST-21
SCALE 1:20



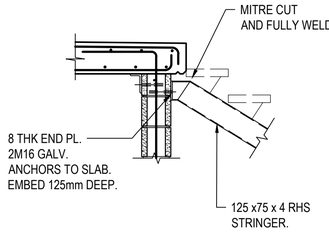
SECTION 2 / ST-21
SCALE 1:20

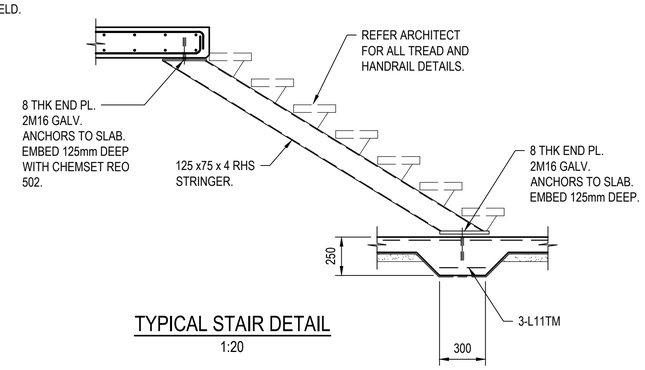


SECTION 3 / ST-21
SCALE 1:20



SECTION 4 / ST-21
SCALE 1:20





TYPICAL STAIR DETAIL
1:20

0 1000 2000 4000 6000 8000 10000mm
SCALE 1:100 @A1

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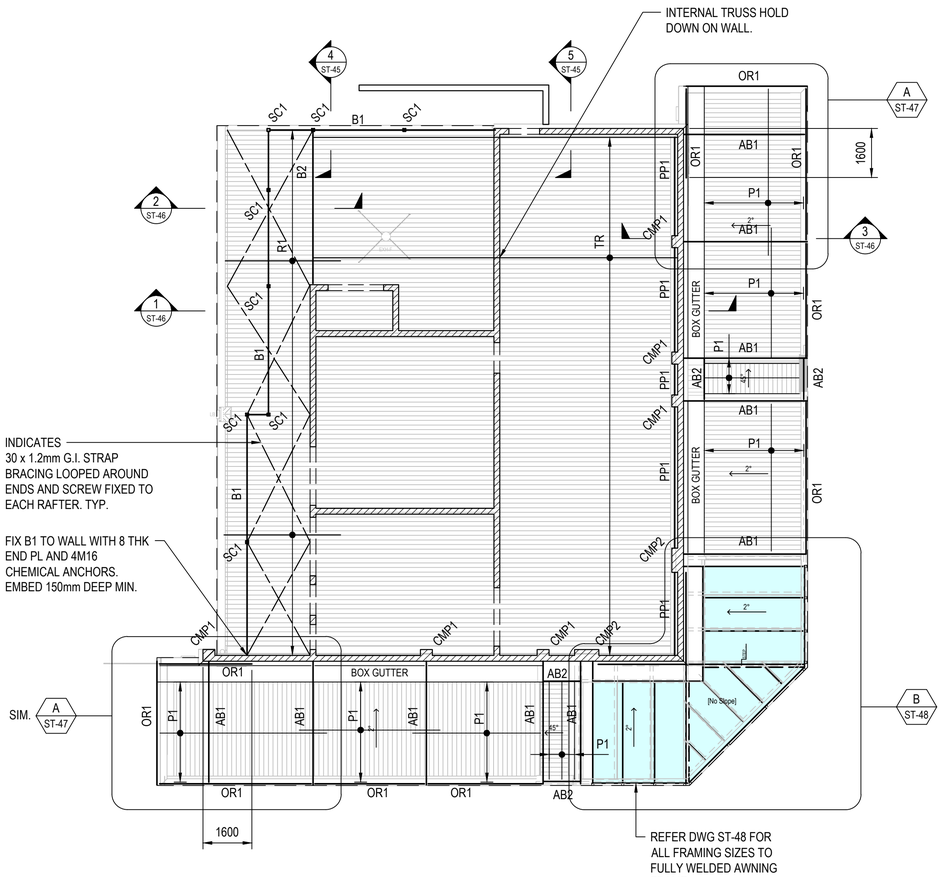
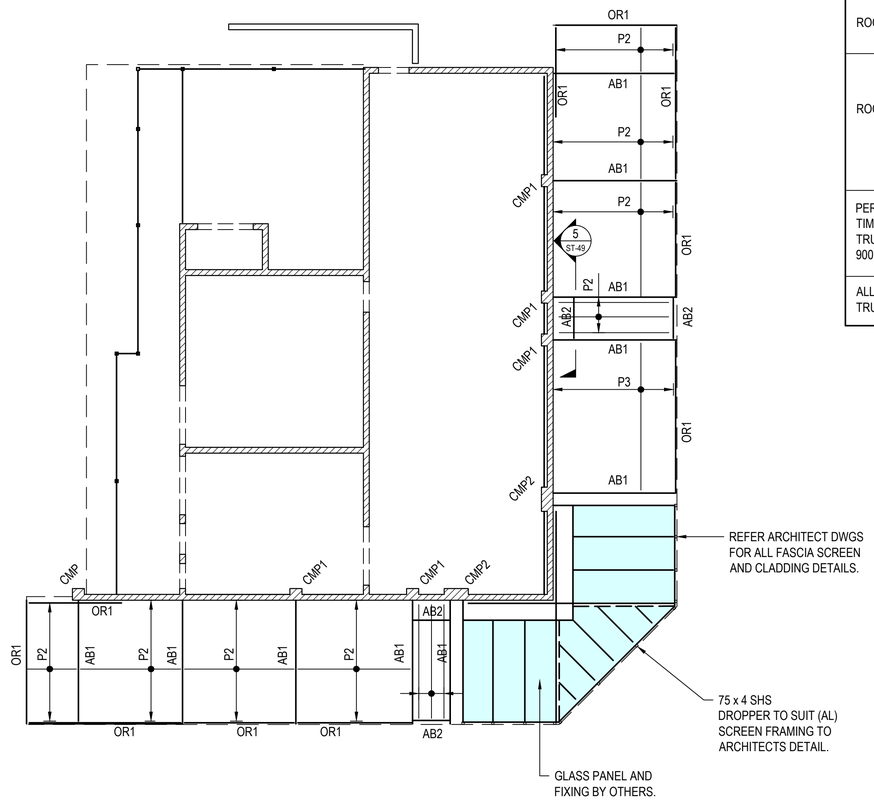
Client: ERGON QUEENSLAND LIMTED
Project: CAIRNS CITY OTHF
LOT 3 ON RP738082
Title: GROUND FLOOR SLAB REINFORCEMENT PLANS

Status: FOR CONSTRUCTION
Datum: AHD | Scale: AS SHOWN | Size: A1
Drawing Number: Q22270-ST-31 | Revision: A



ROOF FRAMING PLAN

SCALE 1:100



AWNING SOFFIT PURLIN PLAN

SCALE 1:100

TIE DOWN SCHEDULE		
MEMBER	SIZE (D x B)	TIE-DOWN / COMMENT
ROOF SHEETING	REFER ARCHITECT DWGS.	SCREW FIX TO BATTENS AS PER MANUFACTURER REQUIREMENTS FOR A DESIGN WIND SPEED V(des) OF 74 m/s.
ROOF BATTENS	MINIMUM SIZE: STEEL CYCLONIC BATTENS OR 35 x 70 MPG12 AT 750 CTS. GENERALLY AND 450 CTS WITHIN 2600 CTS OF EDGE AND RIDGE. ALL BATTENS 3 SPAN MIN. CONTINUOUS.	STEEL BATTEN FIXING 2-50mm No.10 TYPE 17 SCREWS FIXED TO EACH ROOF TRUSS OR ROOF BEAM AND INSTALL AS PER MANUF. REQUIREMENT AND SPECIFICATIONS. TIMBER BATTEN FIXING 1/90mm No.14 TYPE 17 BATTEN SCREW EACH TRUSS
PERFORMANCE TIMBER ROOF TRUSSES AT 900 CTS MAX.	STD TRUSS (TR)	SEE DWG ST-45 FOR MINIMUM REQUIREMENTS.
ALL TRUSS TIE-DOWN AND TRUSS TO TRUSS CONNECTIONS TO BE DESIGNED AND CERTIFIED BY TRUSS ENGINEER AS ENGAGED BY THE CONTRACTOR.		

TRUSS NOTES

1. TRUSS LAYOUT SHOWN IS INDICATIVE ONLY. TRUSS LAYOUT AND DESIGN BY TRUSS MANUFACTURER.
2. ALL TRUSSES ARE TO BE PRE-FABRICATED TIMBER ROOF TRUSSES DESIGNED AND CERTIFIED BY A CERTIFIED ENGINEER ENGAGED BY THE CONTRACTOR.
3. ALL TRUSS CONNECTIONS ARE TO BE DESIGNED BY THE TRUSS MANUFACTURER WITH DRAWING ST-45 SHOWING THE MINIMUM REQUIREMENTS.

FRAMING LEGEND

SC1 ..... 75 x 4 SHS COLUMN.
AB1 ..... 250 UB 25 AWNING BEAM.
AB2 ..... 150 RAKING PFC AWNING BEAM.
AB3 ..... 200 x100 x 8 RHS AWNING BEAM.
AB4 ..... 200 x100 x 4 RHS AWNING BEAM.
OR1 ..... 250 PFC OUTRIGGER.
PP1 ..... 75 x 8 EA. POLE PLATE.
B1 ..... 125 x 75 x 5 RHS BEAM.
B2 ..... 200 x 100 x 5 RHS BEAM.
TR ..... TRUSSES AT 900 CTS MAX.
R1 ..... C10019 RAFTERS AT 900 CTS MAX.
P1 ..... Z150 PURLINS AT 900 CTS MAX. LAP 900. 1 ROW BRIDGING MIDDLE.
P2 ..... C10019 SOFFIT PURLINS AT 900 CTS MAX. WITH 1 ROW OF BRIDGING MIDDLE.
P3 ..... C10019 SOFFIT PURLINS AT 600 CTS MAX. WITH 2 ROWS OF BRIDGING MIDDLE.

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Clayton Baker

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0 1000 2000 4000 6000 8000 10000mm
SCALE 1:100 @A1

Rev.	Date	Description	Des.	Verif.	Appd.
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CERTIFICATION

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MAL Engineers

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Verified	ML	Date 5.9.22
Approved	M. LANCINI	31.1.23

Client: ERGON QUEENSLAND LIMTED

Project: CAIRNS CITY OTHF
LOT 3 ON RP738082

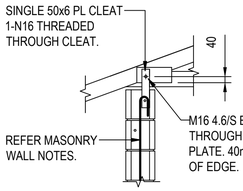
Title: ROOF FRAMING PLAN

Status: FOR CONSTRUCTION

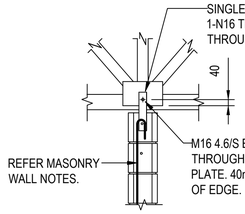
Datum		Scale	Size
AHD		AS SHOWN	A1

Drawing Number: Q22270-ST-41

Revision: A



TD1



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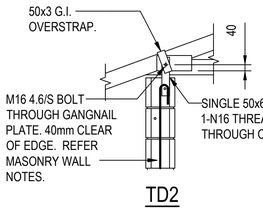

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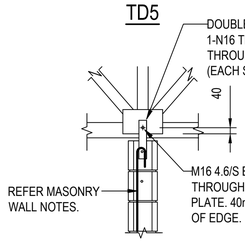

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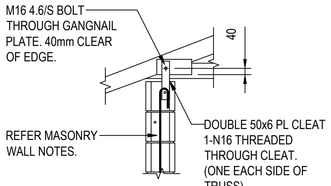
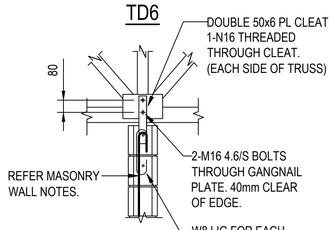
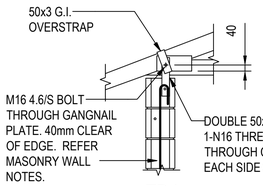


TD3



TD7



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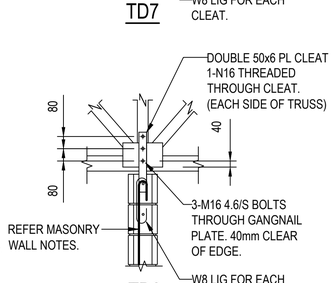
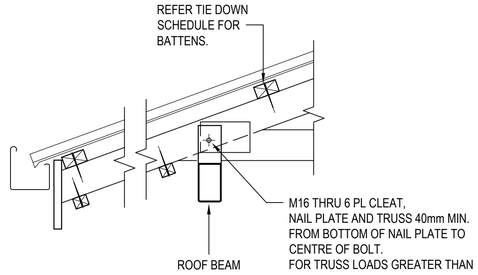


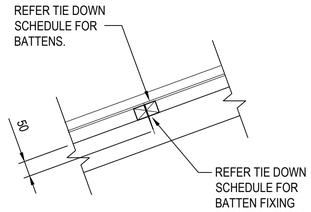
TD8

UPLIFT RESISTANCE kN
ULTIMATE LIMIT STATE

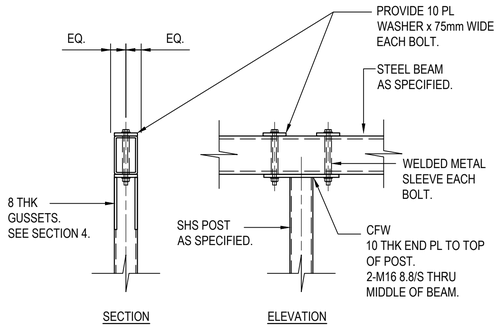
TRUSS JOINT GROUP							
TYPE	J2	J3	J4	JD4	JD5	JD6	NOTE: PROVIDE 2-N12 (MIN) VERTICAL REINFORCING BARS ADJACENT TO CLEATS WHERE TIE DOWN LOADS GREATER THAN 80kN.
TD1	20	15	10	16	11	8	
TD2	35	25	16	23	18	15	
TD3	49	44	28	44	36	28	
TD4	76	54	34	54	43	34	
TD5	20	15	10	16	11	8	
TD6	49	44	28	44	36	28	
TD7	93	84	53	84	68	53	
TD8	128	115	73	115	94	73	
REFER TRUSS MANUFACTURER LAYOUT AND UPLIFT LOADINGS.							



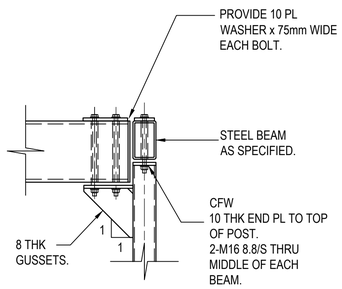
TRUSS TO ROOF BEAM
SCALE 1:10



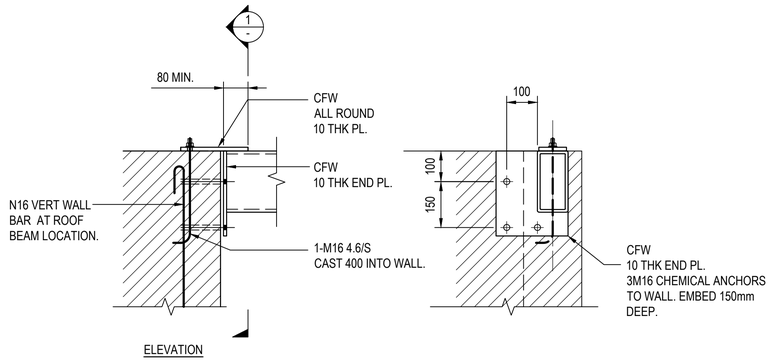
TYPICAL BATTEN FIXING DETAIL
SCALE 1:10



TYPICAL STEEL ROOF BEAM TO
STEELCOLUMN DETAIL
1:10

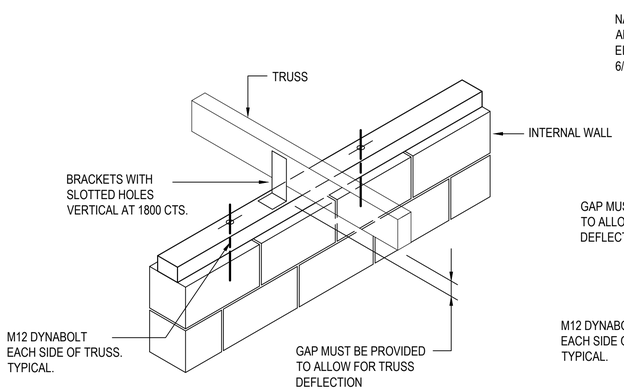


SECTION 4 / ST-41
SCALE 1:10

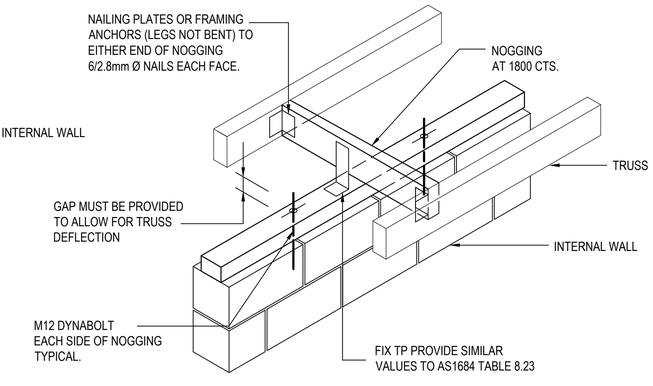


STEEL ROOF BEAM TO BLOCKWORK
TYPICAL DETAIL
1:10

SECTION 1 / -
SCALE 1:10

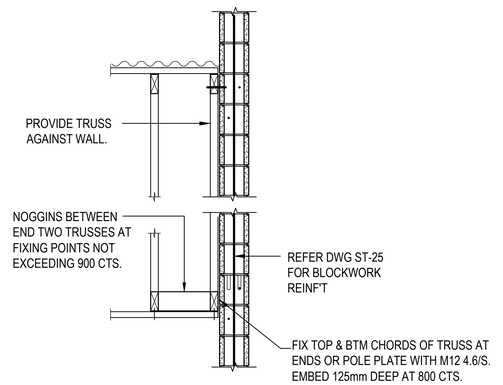


TYPICAL BLOCKWORK BRACING WALL TO
TRUSS CONNECTION
WALL PERPENDICULAR TO TRUSS



TYPICAL BLOCKWORK BRACING WALL TO
TRUSS CONNECTION
WALL PARALLEL TO TRUSS

NOTE:
BRACING CONNECTIONS TO BE DESIGNED AND DOCUMENTED BY LIGHT GAUGE STEEL/TRUSS DESIGNER.



TRUSS PARALLEL TO BLOCKWORK WALL
NTS

SECTION 5 / ST-41
SCALE 1:20

0 200 400 600 800 1000mm
SCALE 1:10 @A1

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MAL Engineers

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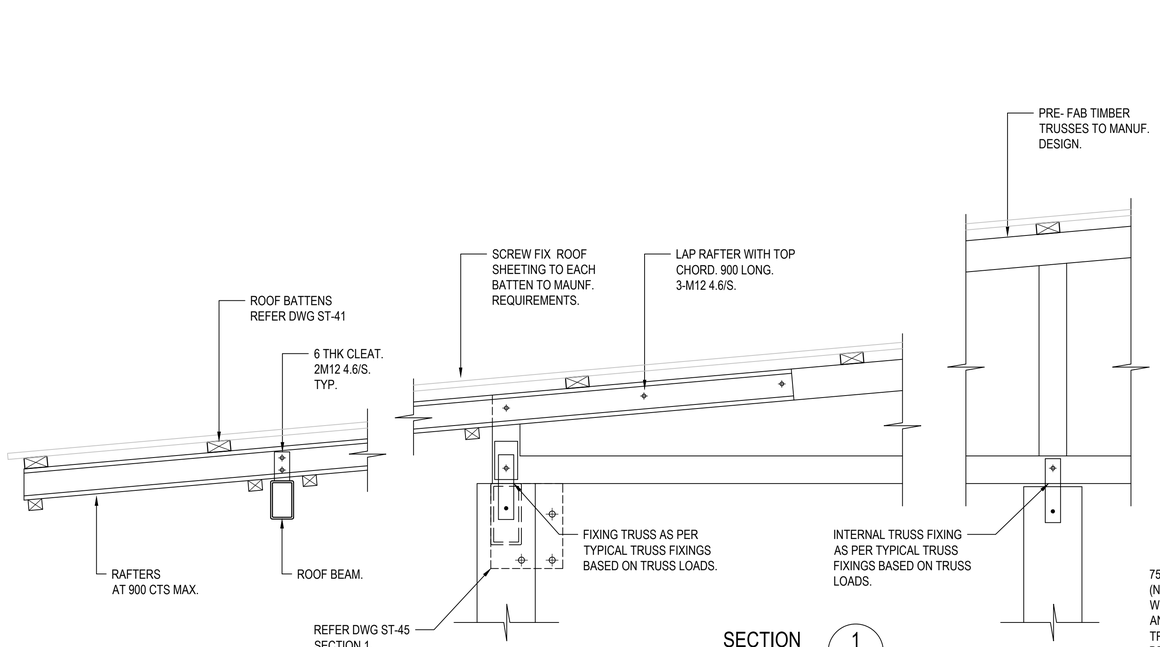
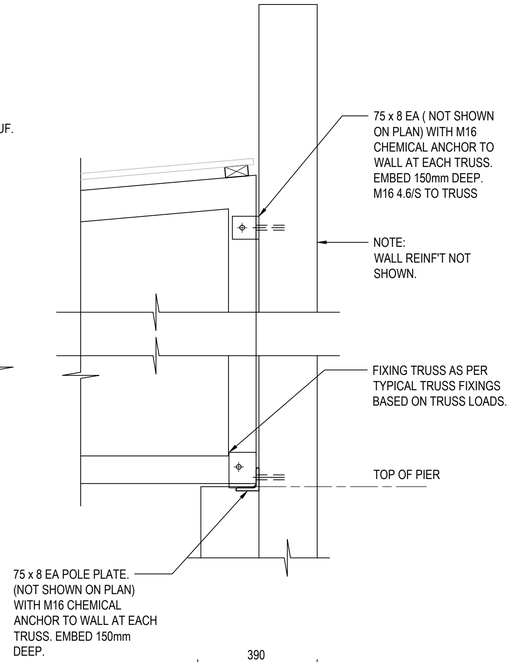
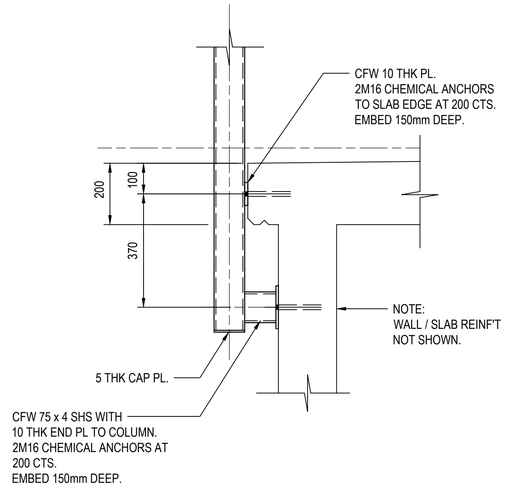
Approved	M. LANCINI	31.1.23

Client: ERGON QUEENSLAND LIMTED
Project: CAIRNS CITY OTHF
LOT 3 ON RP738082
Title: TYPICAL TRUSS DETAILS
Status: FOR CONSTRUCTION
Datum: AHD | Scale: AS SHOWN | Size: A1
Drawing Number: Q22270-ST-45 | Revision: A

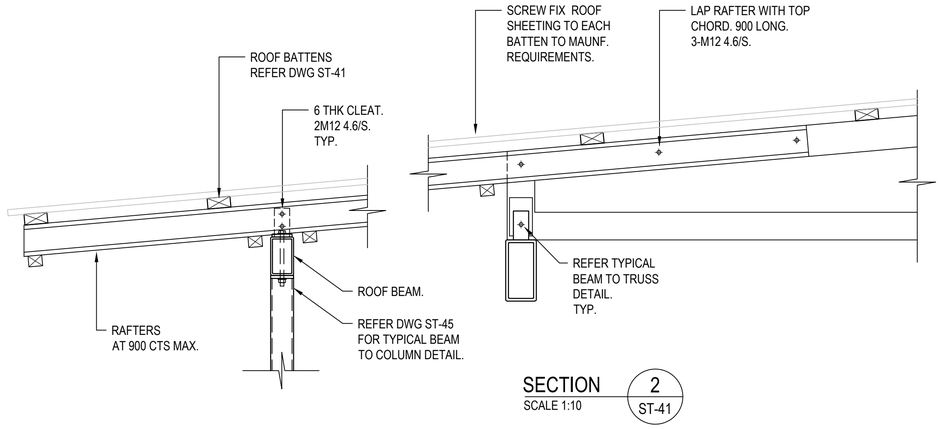


SECTION 1 / ST-41
SCALE 1:10

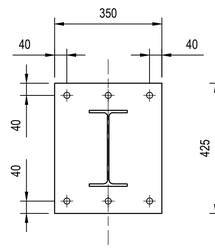




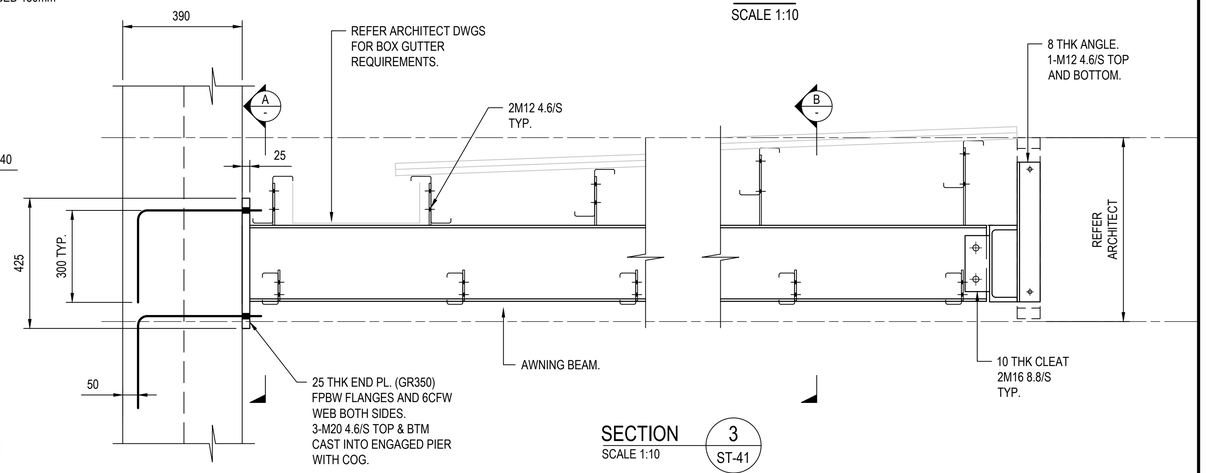
TYPICAL COLUMN TO SLAB EDGE DETAIL
SCALE 1:10



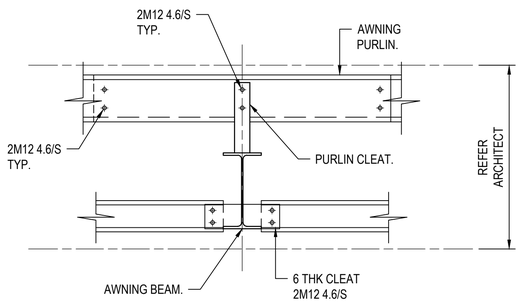
SECTION 2 / ST-41
SCALE 1:10



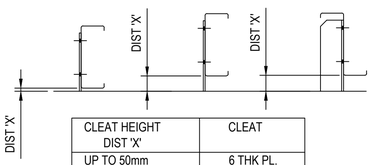
SECTION A / -
SCALE 1:10



SECTION 3 / ST-41
SCALE 1:10



SECTION B / -
SCALE 1:10



CLEAT HEIGHT DIST 'X'	CLEAT
UP TO 50mm	6 THK PL.
50mm TO 100mm	8 THK PL.
100mm TO 150mm	10 THK PL.
150mm TO 250mm	75 x 8 EA.

PURLIN CLEAT DETAIL
NTS

0 200 400 600 800 1000mm
SCALE 1:10 @A1

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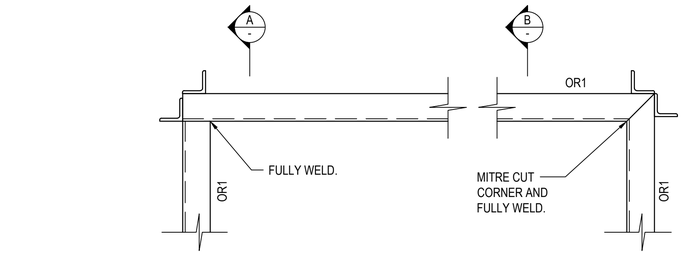
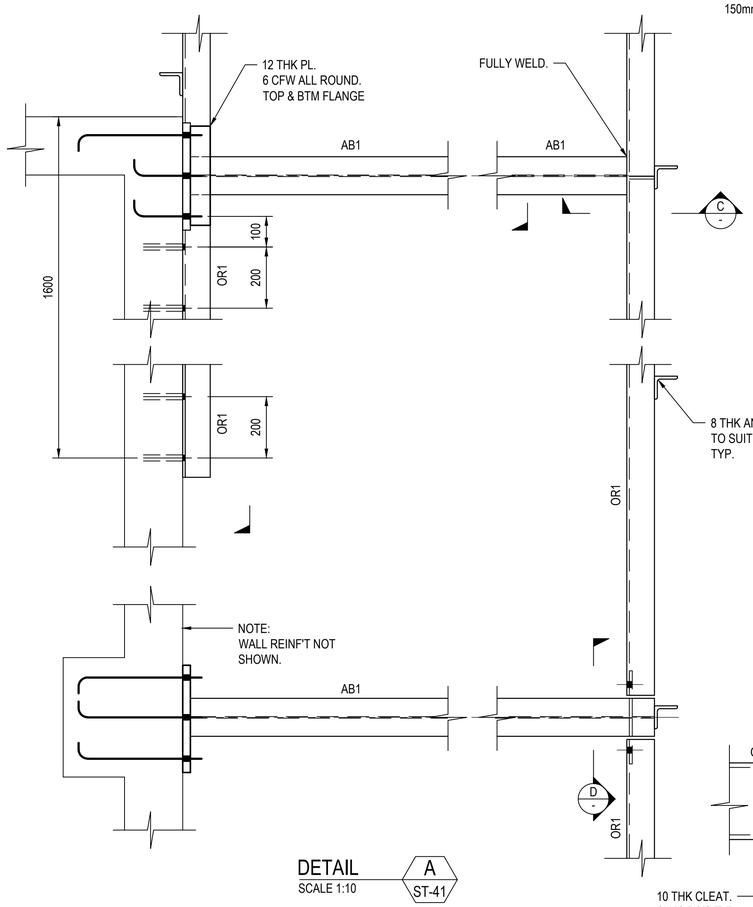
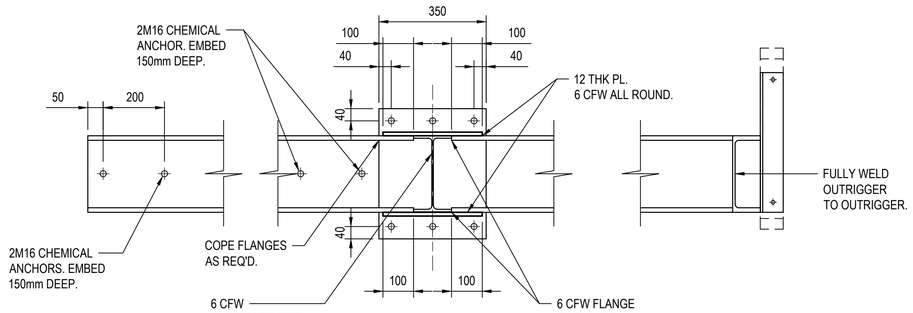
Approved	M. LANCINI	31.1.23

Client: ERGON QUEENSLAND LIMTED
Project: CAIRNS CITY OTHF
LOT 3 ON RP738082
Title: ROOF FRAMING DETAILS
Status: FOR CONSTRUCTION
Datum: AHD | Scale: AS SHOWN | Size: A1
Drawing Number: Q22270-ST-46 | Revision: A

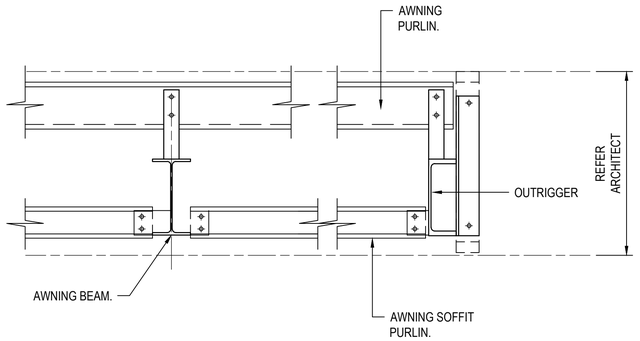




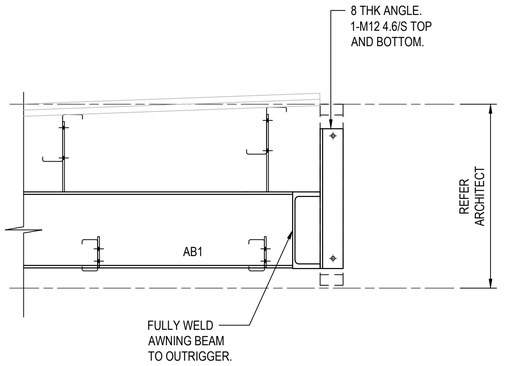
DETAIL A / ST-41
SCALE 1:10



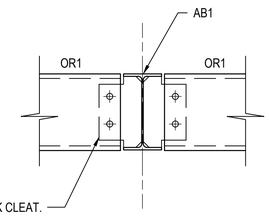
SECTION A / - SCALE 1:10



SECTION B / - SCALE 1:10



SECTION C / - SCALE 1:10



SECTION D / - SCALE 1:10

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SCALE 1:10 @A1

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Client: ERGON QUEENSLAND LIMTED
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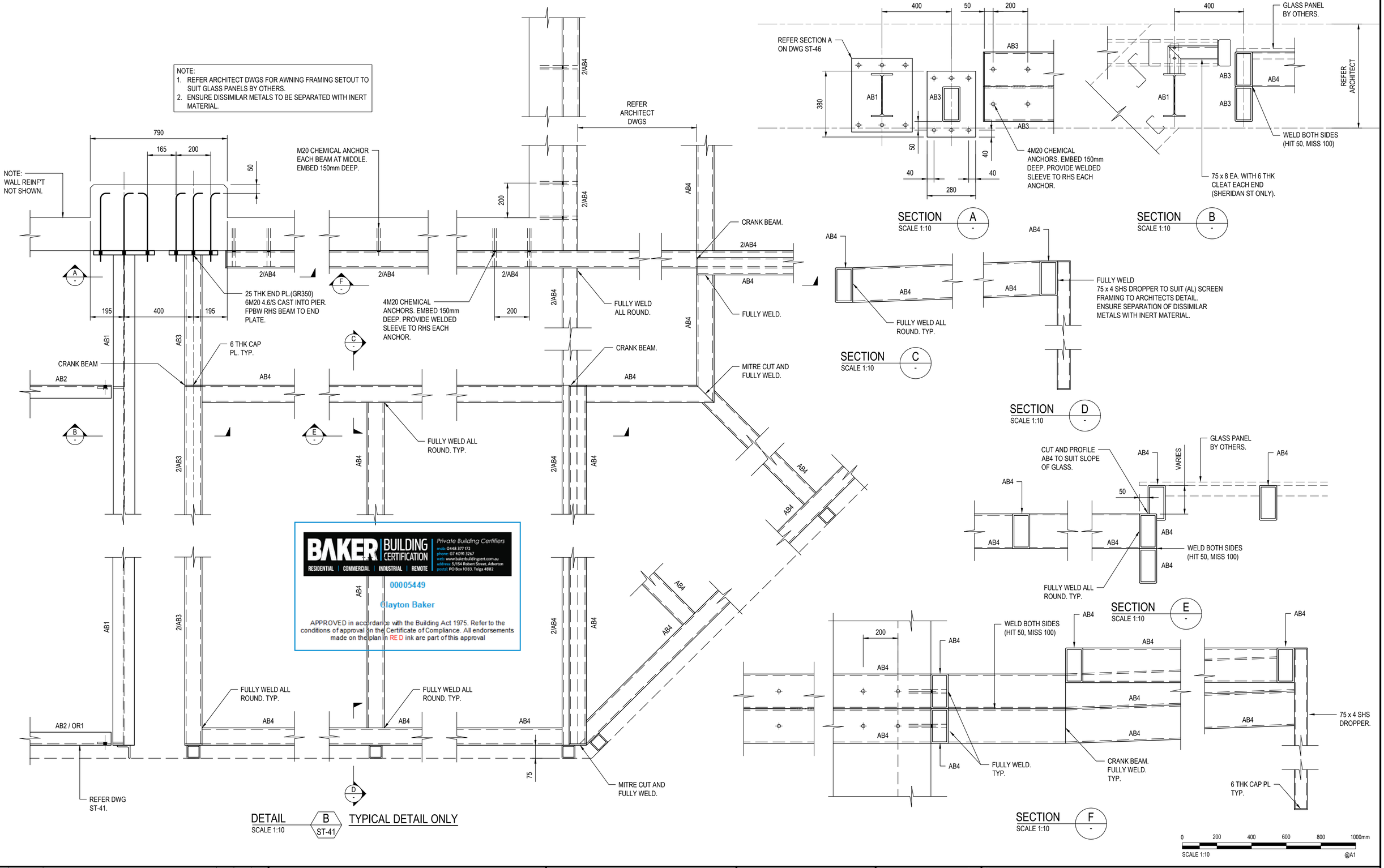
LOT 3 ON RP738082
Title: ROOF FRAMING DETAILS
Status: FOR CONSTRUCTION
Datum: AHD | Scale: AS SHOWN | Size: A1
Drawing Number: Q22270-ST-47 | Revision: A

NOTE:
1. REFER ARCHITECT DWGS FOR AWNING FRAMING SETOUT TO SUIT GLASS PANELS BY OTHERS.
2. ENSURE DISSIMILAR METALS TO BE SEPARATED WITH INERT MATERIAL.



DETAIL B ST-41 SCALE 1:10 — TYPICAL DETAIL ONLY

SECTION A SCALE 1:10 — SECTION B SCALE 1:10

SECTION C SCALE 1:10 — SECTION D SCALE 1:10

SECTION E SCALE 1:10 — SECTION F SCALE 1:10

0 200 400 600 800 1000mm
SCALE 1:10 @A1

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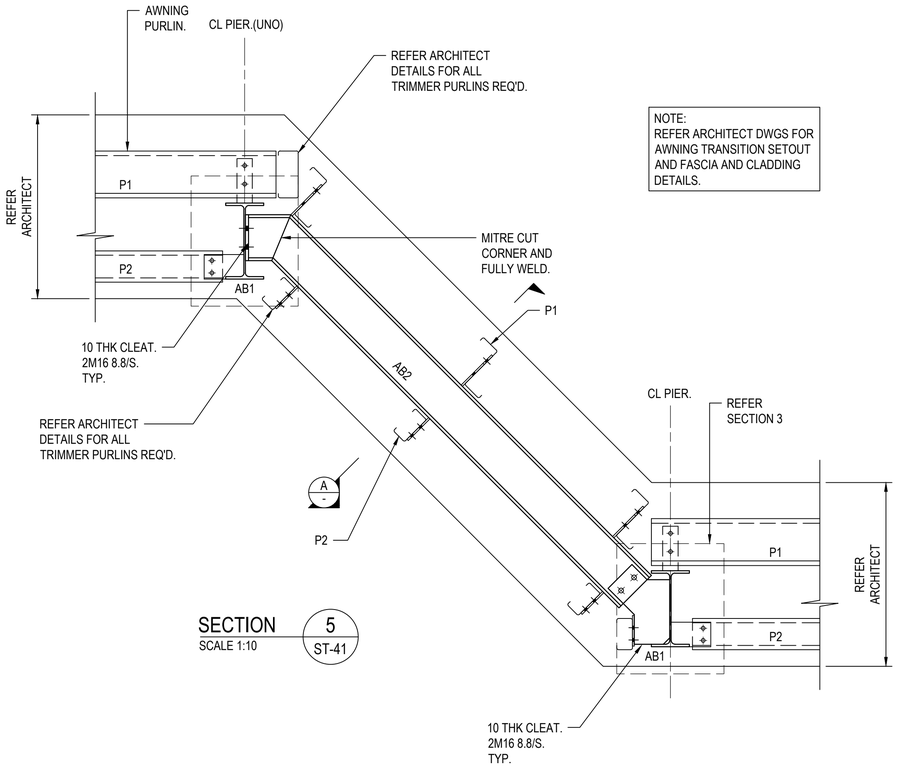
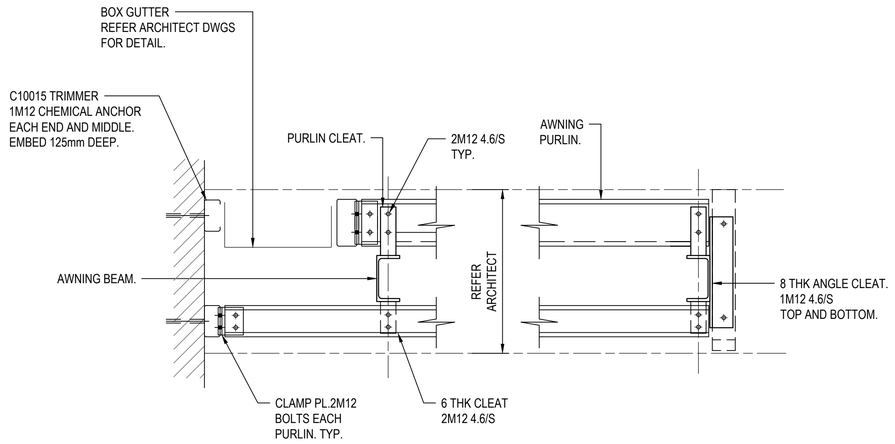
Title: ROOF FRAMING DETAILS
Status: FOR CONSTRUCTION
Datum: AHD | Scale: AS SHOWN | Size: A1
Drawing Number: Q22270-ST-48
Revision: A



NOTE:
REFER ARCHITECT DWGS FOR AWNING TRANSITION SETOUT AND FASCIA AND CLADDING DETAILS.

SECTION 5 / ST-41
SCALE 1:10



SECTION A / -
SCALE 1:10

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0 200 400 600 800 1000mm
SCALE 1:10 @A1

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Datum: AHD
Scale: AS SHOWN
Size: A1
Drawing Number: Q22270-ST-49
Revision: A