



Suite 2, Level 1/90-100 Ovens St. Wangaratta, Vic. 3677
Ph: (03) 5721 8673 Fax: (03) 5721 8108 Email:
info@connexgroup.com.au Web:
www.connexgroup.com.au

"WE MAKE IT WORK"

Structural Engineering | Structural Steel Detailing | Precast Detailing



MG DEALERSHIP REFURBISHMENT
FOR T. REED
AT 56 – 58 HIGH STREET,
WODONGA, VIC

STRUCTURAL DRAWINGS

THIS SET OF DRAWINGS ARE STRUCTURAL ENGINEERING DRAWINGS ONLY.
REFER RELEVANT CONSULTANT FOR INFORMATION NOT CONTAINED WITHIN THESE DRAWINGS.

DRAWING SCHEDULE		
No.	TITLE	REV
S01	CONSTRUCTION NOTES	T2
S02	FOOTING PLAN	T2
S03	FOOTING DETAILS	T2
S04	FIRST FLOOR & ROOF FRAMING PLAN	T2
S05	FRAMING ELEVATIONS & SECTIONS	T2
S06	FRAMING DETAILS	T2
PROJECT No. E24133		

GENERAL NOTES:

- G1. THESE DRAWINGS ARE TO BE READ IN CONJUNCTION WITH THE LATEST ARCHITECTURAL AND OTHER CONSULTANTS DRAWINGS AND SPECIFICATIONS. ALL DISCREPANCIES ARE TO BE REFERRED TO THE ARCHITECT / SUPERINTENDENT FOR FURTHER ADVICE PRIOR TO PROCEEDING WITH WORK.
- G2. MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE LATEST AUSTRALIAN STANDARDS, RELEVANT BUILDING CODES AND STATUTORY REQUIREMENTS, INCLUDING ANY AMENDMENTS.
- G3. ALL DIMENSIONS SHALL BE VERIFIED ON SITE PRIOR TO COMMENCING ANY FABRICATION OR CONSTRUCTION. ALL DIMENSIONS SHALL BE TAKEN FROM ARCHITECTURAL DRAWINGS AND SPECIFICATIONS. THESE DRAWINGS MUST NOT BE SCALED FROM. ANY DISCREPANCIES WITH DIMENSIONS ARE TO BE REFERRED TO THE ARCHITECT. NOTIFY THE ARCHITECT / SUPERINTENDENT OF ANY VARIATIONS THAT MAY ARISE BEFORE PROCEEDING WITH THE WORKS.
- G4. UNLESS NOTED OTHERWISE, DIMENSIONS ARE IN MILLIMETRES AND LEVELS ARE IN METRES.
- G5. THIS OFFICE HAS NOT DESIGNED AND IS NOT RESPONSIBLE FOR ANY STRUCTURAL ITEMS OTHER THAN WHAT HAS BEEN INCLUDED IN THESE STRUCTURAL DRAWINGS.
- G6. THIS OFFICE HAS NOT BEEN ENGAGED TO CARRY OUT ONGOING SITE SUPERVISION. THIS IS THE RESPONSIBILITY OF THE BUILDER. THIS OFFICE MAY CARRY OUT MONITORING INSPECTIONS AS REQUIRED THROUGHOUT THE PROJECT. WHERE APPOINTED TO CARRY OUT SUCH INSPECTIONS, THE BUILDER MUST PROVIDE A MINIMUM OF 2 WORKING DAYS NOTICE PRIOR TO THE DATE OF THE INSPECTION.
- G7. SUBSTITUTION OF MATERIAL OR MEMBER TYPES MUST NOT BE MADE WITHOUT THE APPROVAL OF THE ENGINEER. ANY PROPOSED SUBSTITUTIONS DO NOT CONSTITUTE A CONTRACT VARIATION. THE ARCHITECT SHALL APPROVE ANY POTENTIAL SUBSTITUTIONS AND / OR CONTRACT VARIATIONS PRIOR TO ANY WORK COMMENCING.
- G8. THE APPOINTED BUILDING CONTRACTOR IS RESPONSIBLE FOR MAINTAINING A SAFE WORKING ENVIRONMENT AND ENSURING THAT THE PROPOSED STRUCTURE AND / OR EXISTING STRUCTURES ARE STABLE AT ALL STAGES THROUGHOUT THE PROJECT. NO PARTS OF THE STRUCTURE ARE TO BE OVERLOADED OR OVERSTRESSED DURING CONSTRUCTION ACTIVITIES.
- G9. ALL FIRE RATING REQUIREMENTS ARE TO BE IN STRICT ACCORDANCE WITH ARCHITECTURAL DRAWINGS AND MANUFACTURER'S SPECIFICATIONS.
- G10. ALL WATERPROOFING, FLASHING AND TERMITE PROTECTION REQUIREMENTS ARE TO BE IN STRICT ACCORDANCE WITH ARCHITECTURAL DRAWINGS AND MANUFACTURER'S SPECIFICATIONS. IN GENERAL, WATERPROOF / DAMP PROOF MEMBRANES ARE TO HAVE A MINIMUM THICKNESS OF 1.2mm - UNLESS NOTED OTHERWISE. MEMBRANES ARE TO HAVE A 300mm MINIMUM LAP AND TAPED AT ALL JOINS AND PIPES. THE MEMBRANE MUST HAVE THE REQUIRED IMPACT RESISTANCE IN ACCORDANCE WITH THE BUILDING CODE OF AUSTRALIA FOR THE RELEVANT STATE OR TERRITORY.
- G11. REFER TO ARCHITECTURAL DRAWINGS FOR ALL LOCATIONS OF FILLETS, GROOVES, HOBS, CHASES, PENETRATIONS OR SIMILAR. NO STRUCTURAL ELEMENTS ARE TO BE MODIFIED IN ANY WAY WITHOUT PRIOR APPROVAL OF THE ENGINEER.
- G12. ALL NON-LOAD BEARING WALLS SHALL BE TERMINATED 20mm TO THE UNDERSIDE OF SLAB AND BEAM SOFFITS - UNLESS NOTED OTHERWISE.
- G13. THE APPOINTED BUILDING CONTRACTOR IS RESPONSIBLE FOR PROVIDING ADEQUATE TEMPORARY BRACING OF THE STRUCTURE DURING ALL STAGES OF THE PROJECT. TEMPORARY BRACING IS ADDITIONAL TO THE DOCUMENTED IN-SERVICE BRACING SHOWN ON THE STRUCTURAL DRAWINGS. THE BUILDER SHALL OBTAIN FURTHER ADVICE FROM THE ENGINEER IF REQUIRED, OR IN DOUBT.
- G14. THE BUILDER MUST NOTIFY THE ARCHITECT AND / OR ENGINEER OF ANY ADVERSE CONDITIONS THAT MAY BE ENCOUNTERED ON SITE, THAT MAY IMPACT ON THE ARCHITECTURAL OR ENGINEERING INTENT OF THE BUILDING STRUCTURE.
- G15. SHOP DETAILED DRAWINGS WHERE REQUIRED ARE TO BE SUBMITTED TO THE ENGINEER FOR APPROVAL. PRIOR TO ANY FABRICATION, APPROVAL IS BASED ON CHECKING THE DRAWINGS FOR STRUCTURAL COMPLIANCE ONLY AND DOES NOT RELIEVE THE FABRICATOR OF ANY RESPONSIBILITY FOR DIMENSIONS, CLASHES OR COMPLIANCE WITH ARCHITECTURAL REQUIREMENTS. EVEN AFTER ENGINEERING APPROVAL HAS BEEN PROVIDED, NO FABRICATION WORKS SHALL COMMENCE UNTIL APPROVAL HAS BEEN PROVIDED BY THE ARCHITECT / SUPERINTENDENT.
- G16. FRAMING MEMBERS HAVE BEEN DESIGNED TO COMPLY WITH THE SERVICEABILITY CRITERIA FOR DEFLECTION AND FLOOR VIBRATION AS SPECIFIED IN AS1170.0 AND RELEVANT MATERIAL STANDARDS. THE PERCEPTION OF FLOOR VIBRATION VARIES GREATLY BETWEEN INDIVIDUALS. PLEASE INFORM THE ENGINEER IF THERE IS A PREFERENCE FOR FLOOR STIFFNESS IN EXCESS OF MINIMUM CODE REQUIREMENTS.
- G17. ADEQUATE ROOF, DECK AND FLOOR BRACING TO BE INSTALLED (WHETHER OR NOT SHOWN ON DRAWINGS) IN ACCORDANCE WITH RELEVANT BUILDING CODES AND STANDARDS AND AS SPECIFIED BY FRAMING MANUFACTURER.

DESIGN CRITERIA NOTES:

THE STRUCTURE DETAILED IN THESE DRAWINGS HAS BEEN DESIGNED BASED ON THE FOLLOWING CRITERIA:

STRUCTURE IMPORTANCE LEVEL: 2

LIVE LOAD CRITERIA:

AREA OF LOAD	UNIFORMLY DISTRIBUTED LIVE LOAD (kPa)	CONCENTRATED LIVE LOAD (kN)
ROOF	1.8 / A + 0.12 ≥ 0.25	1.4
OFFICES	3	2.7
CORRIDORS & STAIRS	4	4.5

WIND LOAD CRITERIA:

REGION / SUB-REGION :	A-0
TERRAIN CATEGORY :	2.5
TOPOGRAPHIC MULTIPLIER :	1.0
SHIELDING MULTIPLIER:	1.0
ULTIMATE REGIONAL WIND SPEED (V _u) :	45m/s
SERVICEABILITY REGIONAL WIND SPEED (V _s) :	37m/s

EARTHQUAKE CRITERIA:

ANNUAL PROBABILITY OF EXCEEDANCE (APE) :	1/500
PROBABILITY FACTOR (q _g) :	1.0
HAZARD FACTOR (Z) :	0.09
SUB SOIL CLASS :	Ce
EARTHQUAKE DESIGN CATEGORY (EDC) :	EDC II

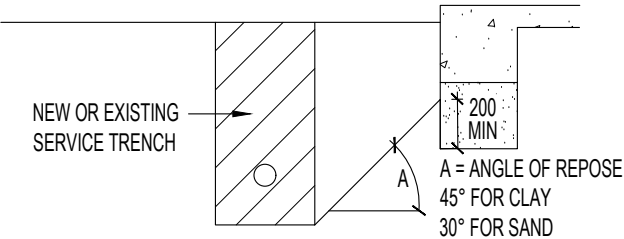
FOUNDATIONS NOTES:

- F1. THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH GEOTECHNICAL REPORT, UNO.
- F2. WORK AND MATERIAL SHALL COMPLY WITH AS2870, AS3600 & AS3798. DESIGN HAS BEEN CARRIED OUT IN ACCORDANCE WITH AS2870 AND AS3600.

SOIL CLASSIFICATION:	
REFER GEOTECHNICAL PREPARED BY:	N/A
REPORT No:	N/A
DATED:	N/A
SITE CLASSIFICATION:	N/A

- F3. THE BUILDING OWNER IS RESPONSIBLE FOR ADHERING TO RECOMMENDATIONS AS OUTLINED IN CSIRO BUILDING TECHNOLOGY FILE - BTF18, AS2870 AND GEOTECHNICAL REPORT.
- F4. PRIOR TO ANY CONCRETE BEING PLACED, A GEOTECHNICAL ENGINEER OR BUILDING SURVEYOR SHALL VERIFY THAT THE CORRECT FOUNDING MATERIAL WITH ADEQUATE BEARING CAPACITY HAS BEEN ACHIEVED. THE REQUIRED BEARING CAPACITIES ARE AS FOLLOWS:
- i) EDGE BEAMS, STRIP AND PAD FOOTINGS AND LOAD BEARING INTERNAL BEAMS:100kPa
- ii) BORED PIERS:200kPa
- F5. UNLESS NOTED OTHERWISE, ALL FOOTINGS ARE TO BE FOUNDIED 100mm MINIMUM INTO THE SPECIFIED FOUNDING MATERIAL - DEEPEEN AS REQUIRED. ALTERNATIVELY, PROVIDE 10MPa BLINDING CONCRETE TO ACHIEVE THE SPECIFIED FOUNDING MATERIAL AND BEARING CAPACITY.
- F6. THE BUILDING SITE MUST BE STRIPPED A MINIMUM OF 100mm TO REMOVE ALL VEGETATION OR ORGANIC MATTER.
- F7. THE COST OF FILLING ANY OVER-EXCAVATED FOOTING TRENCHES WITH CONTROLLED FILL OR CONCRETE SHALL BE BORNE BY THE BUILDER.
- F8. ANY WATER, SOFTENED OR LOOSE MATERIAL SHALL BE REMOVED FROM EXCAVATIONS PRIOR TO POURING CONCRETE.
- F9. PROVIDE ADEQUATE CROSS FALL ACROSS THE BUILDING ENVELOPE TO ENSURE PONDING OF WATER IS MINIMISED. PROVIDE A TEMPORARY RELIEF TRENCH ON THE LOW SIDE OF THE SITE TO ALLOW FOR DRAINAGE OF STORM WATER WITHIN FOOTING TRENCHES.
- F10. UNLESS NOTED OTHERWISE, ANY FILLING SHALL BE PLACED AND TESTED IN STRICT ACCORDANCE WITH AS2870 AND AS3798. THE FILL BENCH SHALL EXTEND 2.0m BEYOND THE BUILDING FOOTPRINT.
- F11. IT IS RECOMMENDED THAT IMPERVIOUS EXTERNAL PAVEMENT BE PROVIDED AROUND THE BUILDING AND GRADE AWAY FROM THE STRUCTURE AT 1:50 MINIMUM, PARTICULARLY FOR HIGHLY REACTIVE SITES OF "H" CLASSIFICATION OR WORSE, WHERE POTENTIAL GROUND MOVEMENT IS SEVERE.
- F12. AS CONCRETE IS SUBJECT TO SHRINKAGE CRACKING, PLACEMENT OF BRITTLE FLOOR COVERINGS SUCH AS TILES, SHOULD BE DELAYED AS LONG AS POSSIBLE AND IN ACCORDANCE WITH AS2870.
- F13. THE BUILDER AND THE BUILDING OWNER NEED TO BE AWARE THAT BUILDINGS ON REACTIVE CLAY SITES ARE SUBJECT TO A CERTAIN DEGREE OF CRACKING OR BUILDING DISTRESS AS A RESULT OF GROUND MOVEMENT. THE AMOUNT OF MOVEMENT CAN BE MINIMISED BY ADHERING TO RECOMMENDATIONS AS OUTLINED IN CSIRO BUILDING TECHNOLOGY FILE - BTF18, AS2870 AND THE GEOTECHNICAL REPORT.
- F14. NEW FOOTINGS LOCATED ADJACENT TO SERVICE TRENCHES OR STEEP BATTERS ARE TO BE DEEPEEN AS REQUIRED TO EXTEND THE BASE OF THE FOOTING 200mm MINIMUM BELOW THE ANGLE OF REPOSE OF THE TRENCH OR BATTER - REFER TO TYPICAL DETAIL BELOW. THIS ALSO APPLIES TO EXISTING FOOTINGS WHERE UNDERPINNING MAY BE REQUIRED.

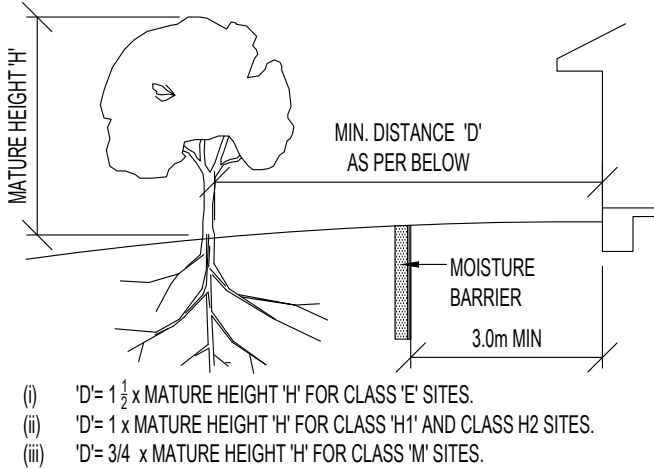
NOTE: THIS OFFICE IS TO BE PROVIDED WITH INFORMATION REGARDING ALL SERVICE TRENCHES AND EASEMENTS AFFECTING THE BUILDING SITE.



- F15. REFER TO CLAUSE 6.6 FROM AS2870 FOR ADDITIONAL REQUIREMENTS FOR MODERATELY, HIGHLY AND EXTREMELY REACTIVE CLAY SITES.

VEGETATION NOTES:

- V1. RESTRICTIONS ON TREE LOCATIONS CLOSE TO BUILDINGS: TREES AND SHRUBS THAT ARE ALLOWED TO GROW IN THE VICINITY OF FOOTINGS CAN CAUSE FOUNDATION MOVEMENT. TO REDUCE THE RISK OF DAMAGE, THE MINIMUM DISTANCES SHOWN BELOW MUST BE ACHIEVED UNLESS A VERTICAL ROOT BARRIER IS PROVIDED. PLEASE REFER TO THE CSIRO DOCUMENT (FOUNDATIONS MAINTENANCE AND FOOTING PERFORMANCE A HOME OWNERS GUIDE) FOR FURTHER DETAILS.



BORED PIER NOTES:

- B1. PIERED FOOTINGS TO BE IN ACCORDANCE WITH AS2159 SAA PILING CODE.
- B2. DRILL BORED PIER HOLES TO BE THE MINIMUM DIAMETER AND DEPTH SHOWN ON STRUCTURAL DRAWINGS. DEEPEEN AS REQUIRED TO FOUND 200mm MINIMUM INTO THE SPECIFIED FOUNDING MATERIAL, U.N.O.
- B3. ANY WATER, SOFTENED OR LOOSE MATERIAL SHALL BE REMOVED FROM BORED PIER EXCAVATIONS PRIOR TO POURING CONCRETE.
- B4. BORED PIERS TO BE POSITIONED AS SHOWN ON DRAWINGS. ANY VARIATION TO PIER LAYOUT THAT MAY BE REQUIRED DUE TO SITE CONDITIONS ARE TO BE APPROVED BY THE ENGINEER PRIOR TO EXCAVATION.
- B5. TOP OF PIERS ARE NOT TO BE POURED HIGHER THAN SPECIFIED AS THAT WOULD RESULT IN REDUCED DEPTHS OF CONCRETE MEMBERS OVER PIER CUTOFF LEVEL TO BE AS FOLLOWS: -0mm, -50mm, U.N.O.

STRUCTURAL STEEL NOTES:

- S1. ALL MATERIALS AND WORKMANSHIP SHALL BE CARRIED OUT IN ACCORDANCE WITH AS4100.
- S2. UNLESS NOTED OTHERWISE, THE FOLLOWING STEEL MATERIAL GRADES SHALL BE ADOPTED:

MEMBER TYPES	MINIMUM STEEL GRADE
UB, UC, PFC AND ANGLES	GRADE 300 PLUS
WB, WC	GRADE 300
PLATES & FLATS	GRADE 250
RHS & SHS	GRADE 350
PURLIN & GIRT	GRADE 450
BRACING RODS	GRADE 300 PLUS

- S3. UNLESS NOTED OTHERWISE, ALL STRUCTURAL BOLTS TO BE GALVANISED HIGH STRENGTH, GRADE 8.8/S BOLTS - SNUG TIGHTENED TO AS1252. BOLTS SPECIFIED AS GRADE 8.8/TB OR 8.8/TF (BEARING AND FRICTION GRIP RESPECTIVELY) ARE TO BE TENSIONED IN ACCORDANCE WITH AS4100. HIGH STRENGTH BOLTS ARE NOT TO BE WELDED UNDER ANY CIRCUMSTANCES.
- S4. UNLESS NOTED OTHERWISE, ALL HOLD DOWN BOLTS ARE TO BE GALVANISED GRADE 4.6/S - SNUG TIGHTENED. PROVIDE MINIMUM 20mm HIGH STRENGTH NON-SHRINK GROUT UNDER BASE PLATES.
- S5. UNLESS NOTED OTHERWISE, PROVIDE 10mm CLEATS, STIFFENERS OR CAP PLATES AND 2M20 8.8/S BOLTS.
- S6. UNLESS NOTED OTHERWISE, HOLES FOR STRUCTURAL GRADE BOLTS TO BE 2mm LARGER THAN BOLT DIAMETER. HOLES FOR HOLD DOWN BOLTS TO BE 6mm LARGER THAN BOLT DIAMETER.
- S7. ALL WELDING TO BE CARRIED OUT IN ACCORDANCE WITH AS1554.
- S8. UNLESS NOTED OTHERWISE, MINIMUM WELDS ARE TO BE 6mm CONTINUOUS FILLET WELDS (CFW) OR FULL PENETRATION BUTT WELDS (FSBW) AND "GP" CATEGORY WELDS. WELD METAL NOMINAL TENSILE STRENGTH (f_u) TO BE 490 MPa
- S9. TUBULAR SECTIONS TO BE SEALED WITH 5mm PLATES, UNLESS NOTED OTHERWISE. PROVIDE ADEQUATE VENT HOLES IF MEMBERS ARE TO BE GALVANISED.
- S10. STEELWORK SHALL NOT BE PROPPED UNLESS NOTED ON PLANS.
- S11. UNLESS NOTED OTHERWISE, ALL STRUCTURAL STEEL EXPOSED TO THE WEATHER SHALL BE HOT DIP GALVANISED OR CLASS 2.5 BLAST AND 75 MICRONS INORGANIC ZINC SILICATE. MEMBERS BELOW GROUND SHALL ALSO BE ENCASED IN 100mm MINIMUM CONCRETE REINFORCED WITH SL41 MESH WITH 60mm COVER TO EARTH FACE. INTERNAL STEEL - CLASS 1 BLAST AND 50 MICRONS RED OXIDE ZINC PHOSPHATE. ANY COATINGS DAMAGED DURING TRANSPORT OR ERECTION TO BE MADE GOOD.
- S12. ALL STRUCTURAL STEEL TO HAVE NATURAL CAMBER IN UPWARD DIRECTION.
- S13. UNLESS NOTED OTHERWISE, STRUCTURAL STEEL TO BE TIED TO MASONRY AND TIMBER WALLS AT 400mm MAXIMUM CENTRES WITH APPROVED FRAMING TIES.
- S14. PROVIDE LIFT GAUGE ANGLE OR PURLIN TRIMMERS AS REQUIRED AT HIPs, VALLEYS ETC. WHERE MITRED ROOF SHEET CUTS OCCUR.

REINFORCED CONCRETE NOTES:

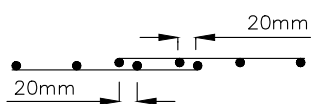
- C1. ALL MATERIALS AND WORKMANSHIP SHALL BE CARRIED OUT IN ACCORDANCE WITH AS3600.
- C2. CONCRETE SHALL BE READY MIXED AND HAVE A MINIMUM CHARACTERISTIC COMPRESSIVE STRENGTH OF f_c ≥ 25MPa U.N.O. THE FOLLOWING CONCRETE PARAMETERS ARE TO BE FOLLOWED:

CONCRETE ELEMENT	SLUMP (mm)	COVER (mm)	MAXIMUM COARSE AGGREGATE (mm)	f _c (MPa) @ 28 DAYS
FOOTINGS AGAINST GROUND WITHOUT WATERPROOF MEMBRANE	100	60	20	25
FOOTINGS AGAINST GROUND WITH WATERPROOF MEMBRANE	100	40	20	25
INTERNAL SLAB ON GROUND WITH FLOOR COVERINGS	100	25	20	25
EXTERNAL SLAB ON GROUND INCLUDING GARAGE	100	30	20	25
POLISHED / HONED OR BURNISHED CONCRETE SLAB (INTERNAL EXPOSURE)	100	25	20	32
INTERNAL SUSPENDED SLAB	100	25	20	25
EXTERNAL SUSPENDED SLAB	100	30	20	25
CAVITY FILLED BLOCKWORK	200	40	10	20

- C3. CALCIUM CHLORIDE IS NOT PERMITTED.
- C4. CONCRETE TO BE KEPT CONTINUOUSLY MOIST BY CURING FOR A MINIMUM OF 7 DAYS AFTER INITIAL POUR. CURING TO BE CARRIED OUT BY WATER PONDING OR OTHER APPROVED METHODS.
- C5. CONCRETE TO BE COMPACTED BY MECHANICAL VIBRATION. CONCRETE MUST NOT BE MOVED WITH THE VIBRATORS. CORE FILLED BLOCKS TO BE COMPACTED BY RODDING.
- C6. ADMIXTURES ARE NOT TO BE USED WITHOUT APPROVAL BY THE ENGINEER. WATER IS NOT TO BE ADDED TO THE MIX AT ANY STAGE AFTER THE TRUCK LEAVES THE BATCHING PLANT.
- C7. DIMENSIONS FOR CONCRETE MEMBERS ARE MINIMUM DIMENSIONS. NO HOLES, CHASES OR RECESSES SHALL BE MADE INTO CONCRETE MEMBERS WITHOUT THE APPROVAL OF THE ENGINEER.
- C8. CONCRETE FINISHES TO BE AS PER ARCHITECTURAL DRAWINGS AND COMPLY WITH AS1510.
- C9. CONCRETE SLABS OR BEAMS THAT ARE SUPPORTED ONTO MASONRY WALLS ARE TO BE SEPARATED BY A SUITABLE SLIP JOINT SUCH AS 'ALCOR' OR SIMILAR. NON-LOAD BEARING MASONRY WALLS ARE TO STOP A MINIMUM OF 20mm SHORT OF CONCRETE SLAB AND BEAM SOFFITS. PROVIDE COMPRESSIBLE FILLER THAT IS NOT CAPABLE OF TRANSFERRING ANY LOADS.
- C10. CONCRETE SHALL NOT BE POURED WHEN AMBIENT TEMPERATURES EXCEED 30 DEGREES CELSIUS.
- C11. PRIOR TO PLACEMENT OF ANY MASONRY WALLS ON TOP OF SUSPENDED SLABS, ALL TEMPORARY PROPS SHALL BE REMOVED.
- C12. ALL REINFORCEMENT SHALL BE SECURELY TIED INTO POSITION AND SUPPORTED OFF APPROVED BAR CHAIRS OR SUPPORT BARS. REINFORCEMENT BARS FOR SLABS TO BE SUPPORTED AT 1.0m MAXIMUM CENTRES AND MESH TO BE SUPPORTED AT 600mm MAXIMUM CENTRES.
- C13. REINFORCEMENT SHALL BE EVENLY SPACED AS SPECIFIED.
- C14. WELDING OF REINFORCEMENT IS NOT PERMITTED UNLESS APPROVED BY ENGINEER.
- C15. REINFORCEMENT NOTATION (REINFORCEMENT TO CONFORM TO AS4701)

N	HOT ROLLED DEFORMED BARS - GRADE 500N
R	STRUCTURAL GRADE ROUND BARS - GRADE 250N
RL	HARD DRAWN LOW DUCTILITY RECTANGULAR WIRE MESH - GRADE 500L
S	STRUCTURAL GRADE DEFORMED BARS - GRADE 250N
SL	HARD DRAWN LOW DUCTILITY SQUARE WIRE MESH - GRADE 500L

- C16. PROVIDE THE FOLLOWING MINIMUM BAR AND MESH LAP LENGTHS: BARS TO BE LAPPED 40 x BAR DIAMETER. MESH TO HAVE OUTERMOST 2 TRANSVERSE BARS LAPPED.



- C17. REINFORCEMENT IS SHOWN DIAGRAMMATICALLY ONLY AND NOT NECESSARILY IN THE TRUE POSITION.
- C18. SPLICES IN REINFORCEMENT SHALL BE MADE IN THE POSITIONS SHOWN ON STRUCTURAL DRAWINGS, OR AS APPROVED BY ENGINEER. UNLESS NOTED OTHERWISE, TOP REINFORCEMENT TO BE LAPPED MIDSPAN BETWEEN SUPPORTS AND BOTTOM REINFORCEMENT LAPPED AT SUPPORTS.
- C19. UNLESS NOTED OTHERWISE, PROVIDE AN UPWARD POSITIVE CAMBER AT MIDSPAN OF 3mm PER 1000mm SPAN. NEGATIVE CAMBER IS NOT PERMITTED.

FORMWORK NOTES:

- FW1. ALL MATERIALS AND WORKMANSHIP SHALL BE CARRIED OUT IN ACCORDANCE WITH AS3610.
- FW2. THIS OFFICE HAS NOT DESIGNED ANY TEMPORARY FORMWORK. FORMWORK DESIGN AND INSTALLATION IS THE RESPONSIBILITY OF THE BUILDER.
- FW3. ENSURE THE SITE GROUND CONDITIONS ARE MAINTAINED AT ALL TIMES, TO ENSURE ANY FORMWORK PROPPING IS LOCATED ON A SOLID STABLE BASE AWAY FROM TRENCHES AND OTHER POTENTIAL UNSTABLE LOCATIONS.
- FW4. REFER TO ARCHITECTURAL DRAWINGS FOR ALL LOCATIONS THAT WILL IMPACT ON THE LAYOUT OF FORMWORK - SUCH AS SET DOWNS, PENETRATIONS, DRIP GROOVES OR SIMILAR.
- FW5. STRUCTURAL FORMWORK SUCH AS BONDEK, CONDECK OR SIMILAR TO BE 1.0mm BASE METAL THICKNESS UNLESS NOTED OTHERWISE. INSTALLATION AND PROPPING TO BE IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.
- FW6. STRUCTURAL FORMWORK IS TO BE CLEANED OF ALL DEBRIS. ENSURE THAT GREASE OR SIMILAR MATERIALS ARE FULLY REMOVED PRIOR TO POURING CONCRETE.
- FW7. PROPS UNDER STRUCTURAL FORMWORK ARE TO REMAIN IN PLACE UNTIL THE SUSPENDED CONCRETE STRENGTH HAS REACHED ITS REQUIRED STRENGTH.

WAFFLE SLAB NOTES:

- W1. THE BUILDING SITE MUST BE STRIPPED A MINIMUM OF 100mm TO REMOVE ALL VEGETATION OR ORGANIC MATTER. PROVIDE ADEQUATE SLOPE ACROSS THE BUILDING PLATFORM TO AVOID PONDING OF WATER.
- W2. UNLESS NOTED OTHERWISE, ALL EXISTING FILL SHALL BE REMOVED FROM THE BUILDING SITE.
- W3. A LEVEL BENCH IS TO BE FORMED WITH CUT / FILL AS REQUIRED. A MAXIMUM OF 300mm CLAY FILL OR 600mm GRANULAR FILL CAN BE PLACED IN 150mm LAYERS AS ROLLED FILL AS OUTLINED IN AS2870. ALL LOAD BEARING ELEMENTS TO EXTEND THROUGH ANY FILL AND INTO NATURAL UNDISTURBED GROUND AS SPECIFIED.
- W4. WHERE FILL DEPTHS GREATER THAN INDICATED ABOVE OCCUR, THE FILL EITHER NEEDS TO BE PLACED AND TESTED BY GEOTECHNICAL ENGINEER AS BEING COMPACTED FILL, OR CERTIFIED CONTROLLED FILL AS OUTLINED IN AS2870 AND AS3798. REFER ALSO TO GEOTECHNICAL REPORT FOR FILL RECOMMENDATIONS.
- W5. FOR COMPACTED FILL BENCH, ALL LOAD BEARING ELEMENTS TO EXTEND THROUGH ANY FILL AND INTO NATURAL UNDISTURBED GROUND AS SPECIFIED.
- W6. FOR CERTIFIED CONTROLLED FILL, LOAD BEARING ELEMENTS CAN BE FOUNDIED INTO THE FILLED MATERIAL. THIS CONDITION IS STRICTLY BASED ON RECEIVING CERTIFICATION FROM THE APPOINTED GEOTECHNICAL ENGINEER THAT FILL HAS BEEN PLACED AND TESTED ACCORDINGLY.
- W7. THE MINIMUM WIDTH OF WAFFLE SLAB RIBS IS 110mm. WHERE SERVICES CLASH, THE RIBS MUST BE WIDENED ACCORDINGLY TO MAINTAIN THE 110mm WIDTH.
- W8. WAFFLE PODS TO BE AN APPROVED PROPRIETARY PRODUCT. SIZE OF WAFFLE PODS TO BE MAX 1000mm x 1000mm, I.E REINFORCED RIBS ARE REQUIRED AT MAXIMUM 1200mm CENTRES. MINIMUM RIB WIDTH TO BE 110mm

WIDENED EDGE BEAMS:

ADDITIONAL REINFORCEMENT TO WIDENED EDGE BEAMS		
EDGE BEAM WIDTH (mm)	ADDITIONAL TOP BARS	ADDITIONAL BOTTOM BARS
UP TO 350	0	0
350 TO 450	1	1
450 TO 550	2	2
550 TO 650	3	3

PRECAST PANEL NOTES:

- PC1. ALL PRECAST CONCRETE WORK SHALL COMPLY WITH AS3850, AS3600 AND AS3610 AS APPROPRIATE. ALL WORK SHALL BE UNDERTAKEN IN ACCORDANCE WITH RELEVANT OCCUPATIONAL HEALTH AND SAFETY REQUIREMENTS.
- PC2. THE CONCRETE IN THE PANELS TO HAVE A CHARACTERISTIC STRENGTH f_c OF 40MPa AT 28 DAYS U.N.O. MINIMUM STRENGTH AT LIFTING TO BE AS PER ERECTION ENGINEERS SPECIFICATIONS. ALL CONCRETE TO BE NORMAL WEIGHT U.N.O.
- PC3. ALL CONNECTION MEMBERS AND FIXINGS ARE TO BE HOT DIP GALVANISED.
- PC4. ALL ANCHORS TO BE REBARB THREADED INSERTS OR REID ELEPHANT FOOT FERRULES (MIN. 95mm LONG) WITH A MINIMUM EDGE DISTANCE 135mm, U.N.O. EXPANSION ANCHORS (E.G. TRU-BOLTS) ARE NOT PERMITTED IN CONCRETE PANELS.
- PC5. FERRULES THAT WOULD BE LEFT EXPOSED ARE THE BE RECESSED 25mm BELOW FINISHED SURFACE, AND THE RECESS GROUTED UPON COMPLETION.
- PC6. PANELS BELOW GROUND LEVEL ARE TO BE PROTECTED WITH BITUMEN COATING.
- PC7. THE PANELS MUST BE STACKED IN SUCH A WAY THAT CRACKING AND WARPING IN EXCESS OF ALLOWANCE IN RELEVANT CODES DOES NOT OCCUR.
- PC8. GROUT SHALL PROVIDE CONTINUOUS BEARING UNDER THE FULL WIDTH OF THE PANELS. THE GROUT SHALL BE NON-SHRINK AND HAVE A 28 DAY CHARACTERISTIC STRENGTH OF MIN. 50MPa U.N.O.
- PC9. LEVELLING SHIMS SHALL BE NON-METALLIC AND LOCATED MIN. 300mm FROM THE EDGE OF PANELS, U.N.O.
- PC10. ALL BRACING ELEMENTS SHALL BE FIXED TO PANELS WITH CAST-IN INSERTS OR CAST-IN PLATES.
- PC11. THE CONTRACTOR IS TO PROVIDE TEMPORARY SUPPORT OF PANELS AS REQUIRED DURING ERECTION. THE PROPS ARE TO REMAIN IN PLACE UNTIL THE PANELS ARE FULLY CONNECTED AND THE BRACING SYSTEM OF THE STRUCTURE HAS BEEN COMPLETED.
- PC12. THESE DRAWINGS INDICATE STRUCTURAL CONTENT ONLY. POSITIONS OF FASTENERS AND CAST-IN ITEMS ARE INDICATIVE ONLY. PANELS CALLED UP AS SIMILAR ARE ONLY STRUCTURALLY SIMILAR. REFER TO ARCHITECTS DRAWINGS FOR NON-STRUCTURAL ITEMS SUCH AS DIMENSIONS, REBATES AND SURFACE FINISHES.
- PC13. NO GROOVES ARE PERMITTED WITHIN THE NOMINATED THICKNESS OF THE PANELS, UNLESS INDICATED ON STRUCTURAL DRAWINGS. DETAILS OF ANY ARCHITECTURAL FEATURES AND SURFACE TREATMENTS ARE TO BE SUPPLIED TO THIS COMPANY FOR APPROVAL PRIOR TO CONSTRUCTION.
- PC14. FOR DETAILS ON FIRE PROTECTION AND WEATHERPROOFING OF JOINTS AND GAPS REFER TO ARCHITECTS DRAWINGS.
- PC15. PROVIDE 20mm CHAMFER TO ALL CORNERS, UNLESS SPECIFIED OTHERWISE BY ARCHITECT.
- PC16. PANEL SHOP DRAWINGS ARE TO BE SUPPLIED TO THIS OFFICE FOR REVIEW OF STRUCTURAL INTENT PRIOR TO FABRICATION.

REINFORCEMENT:

- PC17. CONCRETE COVER TO BE 40mm TO EXTERNAL FACE AND 30mm TO INTERNAL FACE, U.N.O. TOLERANCE: +5mm, -0mm, U.N.O.
- PC18. PROVIDE 1N16 TRIMMER BAR TO PERIMETER OF ALL PANELS AND AROUND ALL OPENINGS U.N.O. LAPS AND EXTENSIONS TO BE MINIMUM 600mm. 1N16 TRIMMER BAR TO BE REPLACED WITH 1N12 BAR EACH SIDE ACROSS BOTTOM OF PANELS IF CLASHES WITH DOWELS OCCUR.
- PC19. REINFORCEMENT TO BE CENTRALLY LOCATED IN PANELS LESS THAN 180mm THICK, U.N.O. LAP FABRIC AS PER MANUFACTURER'S SPECIFICATIONS.
- PC20. THE PANELS HAVE BEEN DESIGNED FOR 'IN SERVICE' LOADS ONLY. THE PRECAST MANUFACTURER IS RESPONSIBLE FOR ANY ADDITIONAL REINFORCEMENT REQUIRED DUE TO STRESSES INDUCED DURING REMOVAL FROM MOULDS, HANDLING, LIFTING, TRANSPORTATION, ERECTION AND PROPPING.

MASONRY NOTES:

- M1. ALL MATERIALS AND WORKMANSHIP SHALL BE CONFORM WITH AS3700 & AS4773.
- M2. UNLESS NOTED OTHERWISE, THE MINIMUM CHARACTERISTIC UNCONFINED COMPRESSIVE STRENGTH OF CONCRETE BLOCKS TO BE 15MPa AND 20MPa FOR BRICKWORK.
- M3. MINIMUM MORTAR MIXING RATIOS ARE AS FOLLOWS:
- | MASONRY TYPE | CEMENT | HYDRATED LIME | SAND |
|-----------------|--------|---------------|------|
| LOADBEARING | 1 | 0.5 | 4.5 |
| NON-LOADBEARING | 1 | 1 | 6 |
| REINFORCED | 1 | 0.25 | 3 |
- M4. GROUT SHALL HAVE A MINIMUM STRENGTH f_c OF 20MPa. MAXIMUM AGGREGATE SIZE IN GROUT SHALL BE 10mm.
- M5. UNLESS NOTED OTHERWISE, ALL LOAD BEARING MASONRY SHALL HAVE FULL BED JOINTS.
- M6. THE OUTER NON-LOAD BEARING MASONRY LEAF OF MASONRY VENEER CONSTRUCTION IS TO BE TIED TO THE LOAD BEARING STUD FRAME AT 600mm MAXIMUM CENTRES WITH APPROVED MEDIUM DUTY WALL TIES - UNLESS NOTED OTHERWISE.
- M7. UNLESS NOTED OTHERWISE, MASONRY TO BE TIED TO STRUCTURAL STEEL / CONCRETE MEMBERS AT 400mm MAXIMUM CENTRES.
- M8. DIMENSIONS SHOWN FOR MASONRY MEMBERS ARE MINIMUM DIMENSIONS. NO HOLES, CHASES OR RECESSES SHALL BE MADE INTO MASONRY MEMBERS WITHOUT THE APPROVAL OF THE ENGINEER.
- M9. ALL NON-LOAD BEARING WALLS SHALL BE TERMINATED 20mm TO THE UNDERSIDE OF SLAB AND BEAM SOFFITS. PROVIDE COMPRESSIBLE FILLER BETWEEN.
- M10. UNLESS NOTED OTHERWISE, CONCRETE MEMBERS SUPPORTED ONTO LOAD BEARING MASONRY WALLS SHALL BE SEPARATED BY A SLIP JOINT - 'ALCOR' OR SIMILAR.
- M11. ALL SLAB PROPS ARE TO BE REMOVED PRIOR TO CONSTRUCTING ANY MASONRY WALLS ABOVE.
- M12. UNLESS NOTED OTHERWISE, ALL MASONRY WALLS ARE TO BE ARTICULATED IN ACCORDANCE WITH C&CA T&N1 RECOMMENDATIONS.
- M13. ALL CAVITIES BELOW GROUND LEVEL TO BE GROUT OR MORTAR FILLED.
- M14. WHERE GALVANISED FLAT PLATE FABRICATED "T" BAR GARAGE LINTELS ARE USED TO SUPPORT MASONRY, PROVIDE AN ARTICULATION JOINT EACH SIDE OF THE OPENING. THESE TYPES OF LINTELS ARE NOT TO BE PROPPED.
- M15. WHERE PROPRIETARY GALVANISED 'RIBBED COMPOSITE' LINTELS ARE USED, THE LOCATION OF ARTICULATION JOINTS CAN DRAMATICALLY REDUCE THE LOAD BEARING CAPACITY. THE LOCATION OF ARTICULATION JOINTS FOR THESE TYPE OF LINTELS, MUST BE IN STRICT ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS. THESE TYPE OF LINTELS MUST BE PROPPED TO ACHIEVE THE REQUIRED COMPOSITE ACTION BETWEEN THE STEEL LINTEL AND THE MASONRY. REFER TO MANUFACTURER'S SPECIFICATIONS.

TIMBER NOTES:


- T1. ALL TIMBER MEMBERS AND WORKMANSHIP SHALL BE CARRIED OUT IN ACCORDANCE WITH AS1720, AS1684, THE BUILDING CODE OF AUSTRALIA AND MANUFACTURER'S SPECIFICATIONS.
- T2. ALL TIMBER MEMBERS SHALL BE FREE OF ALL DEFECTS.
- T3. TIMBER STRESS GRADES AND SIZES TO BE THE MINIMUM SPECIFIED ON STRUCTURAL DRAWINGS.
- T4. TIMBER FRAMING AND MEMBERS SHALL BE INSTALLED TO RESIST UPLIFT AND RACKING FORCES IN ACCORDANCE WITH AS1684.
- T5. NO NOTCHES OR PENETRATIONS ARE TO BE MADE INTO TIMBER MEMBERS WITHOUT THE APPROVAL OF THE ENGINEER.
- T6. UNLESS NOTED OTHERWISE, PROVIDE DOUBLE STUD MINIMUM SUPPORT FOR ALL LINTELS, FLOOR AND ROOF BEAMS AND TIMBER GIRDER TRUSSES. DOUBLE STUDS TO BE NAIL LAMINATED.
- T7. PROVIDE DOUBLE JOISTS UNDER ALL WALLS RUNNING PARALLEL WITH JOISTS, U.N.O.
- T8. UNLESS NOTED OTHERWISE, STEEL COLUMNS SHALL BE FIXED TO ADJACENT TIMBER STUD FRAMEWORK AT TOP, BOTTOM AND MID HEIGHT WITH M10 BOLTS OR SUITABLE FASTENERS.
- T9. ALL BUILT UP MEMBER SIZES TO BE NAIL LAMINATED IN ACCORDANCE WITH AS1684.
- T10. TIMBER MEMBERS SUPPORTED ON BRICKWORK SHALL BE SEPARATED BY AN 'ALCOR' SLIP JOINT MEMBRANE OR SIMILAR. PROVIDE AN AIRSPACE OF 10mm TO THE SIDES OF THE TIMBER MEMBER.
- T11. REFER TO ARCHITECTURAL DRAWINGS FOR ANY TIMBER MEMBERS NOT SPECIFIED ON STRUCTURAL DRAWINGS. ENSURE THAT MEMBERS SELECTED ARE IN ACCORDANCE WITH THE ABOVE STANDARDS.
- T12. EXTERNAL TIMBER MEMBERS SHALL BE WEATHER PROTECTED / TREATED AS REQUIRED TO SUIT THE EXPOSURE CONDITIONS.
- T13. DEEP JOISTS (DEPTH > 4 x WIDTH) SHALL RESTRAINED WITH TRIMMER JOISTS OR BLOCKING IN ACCORDANCE WITH AS1684.
- T14. ALL PROPRIETARY PREFABRICATED TIMBER FRAMING MEMBERS ARE TO BE DESIGNED BY MANUFACTURER AND INSTALLED IN STRICT ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
- T15. ALL BOLTED CONNECTIONS LOCATED EXTERNALLY ARE TO BE GALVANISED. ALL BOLTED CONNECTIONS TO HAVE WASHERS UNDER BOLT HEAD AND NUT. UNLESS NOTED OTHERWISE, ADOPT 50x50x3mm WASHER FOR BOLTS UP TO M12 AND 65x65x5mm FOR M16 AND M20 BOLTS. WHERE POSSIBLE, IT IS RECOMMENDED TO RE-TIGHTENED BOLTS AFTER 6 MONTHS.
- T16. METAL FIXINGS SHALL BE COMPATIBLE WITH ANY TIMBER GLUES OR TREATMENTS.
- T17. ALL PROPRIETARY FIXINGS TO BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.

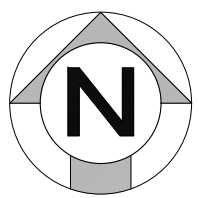
BULK EXCAVATION NOTES:

- BE1. THE CONTRACTOR SHALL ENSURE ANY WORKS CARRIED OUT IN AND AROUND ANY BULK EXCAVATIONS ARE EXECUTED IN ACCORDANCE WITH THE RELEVANT O & S REGULATIONS.
- BE2. TEMPORARY BATTERS SHALL BE WITHIN THE ALLOWABLE LIMITS PROVIDED IN THE GEOTECHNICAL REPORT. WHERE LIMITS ARE NOT PROVIDED IN THE GEOTECHNICAL REPORT, THE CONTRACTOR IS RESPONSIBLE FOR ENGAGING A GEOTECHNICAL ENGINEER FOR FURTHER ADVICE.
- BE3. THE CONTRACTOR SHALL PROVIDE ADEQUATE BRACING OR SHORING TO RETAIN TEMPORARY BATTERS AND EXCAVATIONS AS REQUIRED.
- BE4. THE CONTRACTOR SHALL ENSURE ANY ADJACENT / NEIGHBORING ASSETS OR SERVICES REMAIN UNDAMAGED AND GIVEN ALL NECESSARY PROTECTION MEASURES.
- BE5. THE CONTRACTOR SHALL NOTIFY THE RELEVANT SERVICE AUTHORITIES OR PROPERTY OWNERS OF THE PROPOSED WORKS AS REQUIRED PRIOR TO COMMENCEMENT ON SITE. ANY DAMAGES CAUSED BY THE WORKS TO THE ADJACENT PROPERTY ASSETS / SERVICES SHALL BE REPAIRED BY THE CONTRACTOR AT THEIR EXPENSE.
- BE6. THE CONTRACTOR SHALL PROVIDE CUTOFF DRAINS AS REQUIRED TO DIVERT SURFACE WATER AWAY FROM BULK EXCAVATIONS. THE CONTRACTOR SHALL PROVIDE PUMPS, TEMPORARY SUMPS, AND DRAINS AS REQUIRED TO ENSURE THERE IS NO WATER PONDING WITHIN THE EXCAVATION.

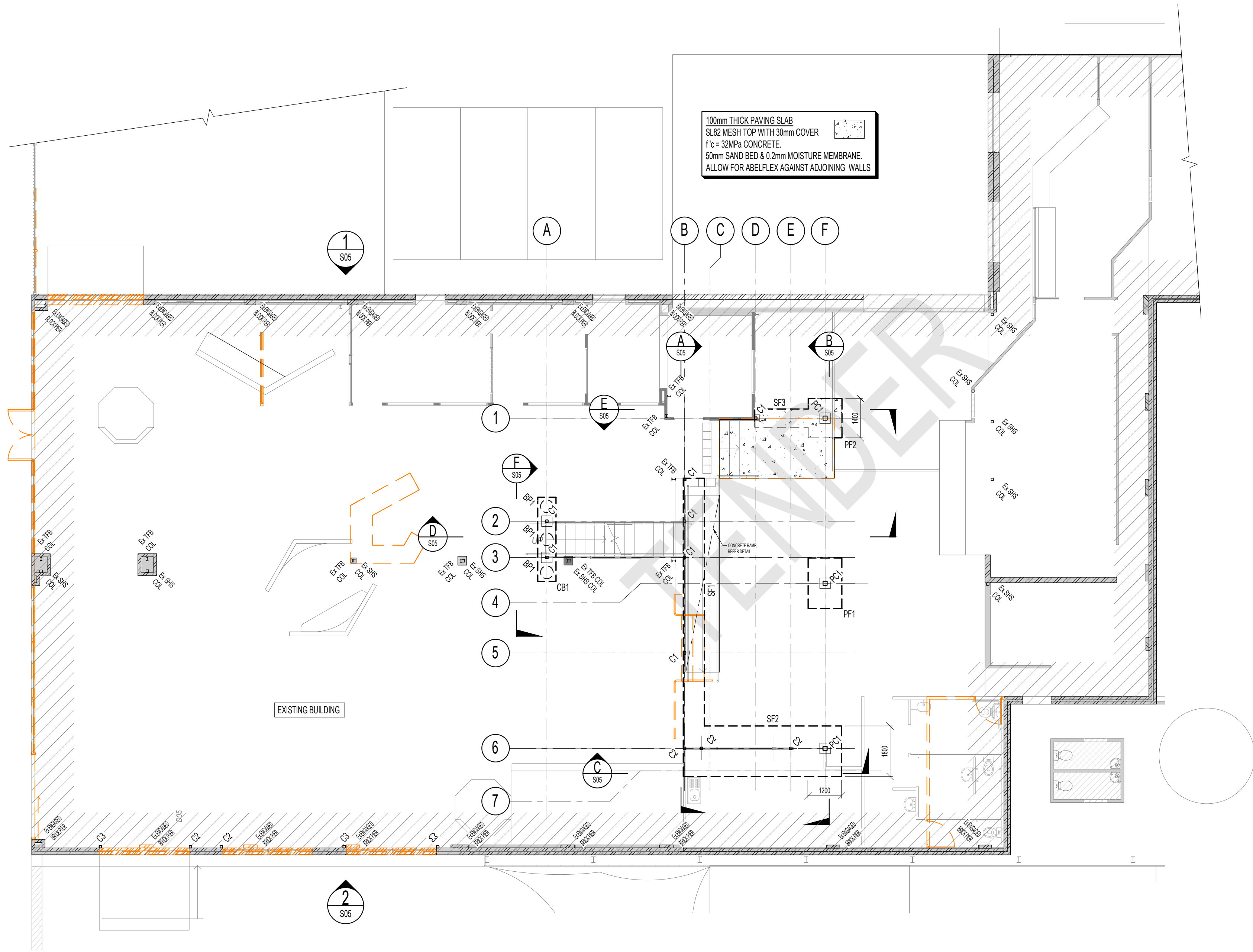
T2 T1 P2 P1	REVISION AS CLOUDED TENDER PRELIMINARY PRELIMINARY	30.06.2025 30.05.2025 05.02.2025 02.10.2024	C.S. SW L.R. L.R.
REV.	AMENDMENTS	DATE	INT.

PRINTED: 30/06/2025 BY: CODY SCHUTT

		CONNEX GROUP PTY LTD	
Suite 2, Level 1/90-100 Owens St. Wangaratta, Vic. 3677 Ph. (03) 5721 9673 Fax: (03) 5721 8108 Email: info@connexgroup.com.au Web: www.connexgroup.com.au			
CLIENT: T. REED			
DRAWING TITLE: CONSTRUCTION NOTES			
TITLE: MG DEALERSHIP REFURBISHMENT FOR T. REED AT 56 - 58 HIGH STREET, WODONGA, VIC			
ISSUE STAMP:		<div>TENDER</div>	
<small>IF THESE DRAWINGS ARE THE INTELLECTUAL PROPERTY OF CONNEX GROUP PTY LTD OR OTHERWISE PREPARED BY A MEMBER OF THAT GROUP WRITTEN PERMISSION BY CONNEX GROUP PTY LTD IS REQUIRED FOR REPRODUCTION</small>			
DESIGN: D. BEGE		DRAWN: L. RICHARDSON	
CHECKED:		SCALE: AS INDICATED	
PROJECT NO: E24133		DRAWINGS NO: S01	
		A1 REVISION T2	



FOOTING SCHEDULE			
MARK	SIZE	REINFORCEMENT	COMMENTS
BP1	450 DIA x 1650 DEEP	5-N12 VERTICAL BARS, COG AT ENDS	BORED PIERS
CB1	400(D) x 650(W) x 3000(L)	6-N12 BARS TOP AND BTM, COG AT ENDS N12-250 BARS TOP AND BTM SHORT DIRECTION, COG AT ENDS	CAPPING BEAM
SF1	650 (D) x 750 (W)	7-N12 BARS TOP AND BTM, COG AT ENDS	STRIP FOOTING
SF2	650 (D) x 1800 (W)	N16-200 BARS TOP AND BTM LONG DIRECTION, COG AT ENDS N12-250 BARS TOP AND BTM SHORT DIRECTION, COG AT ENDS	STRIP FOOTING
SF3	650 (D) x 650 (W)	6-L12TM BTM, 6-N12 BARS TOP COG AT ENDS	STRIP FOOTING
PF1	650(D) x 1200(W) x 1800(L)	N16-200 BARS TOP AND BTM EACH WAY, COG AT ENDS	PAD FOOTING
PF2	650(D) x 1200(W) x 1400(L)	N16-200 BARS TOP AND BTM EACH WAY, COG AT ENDS	PAD FOOTING

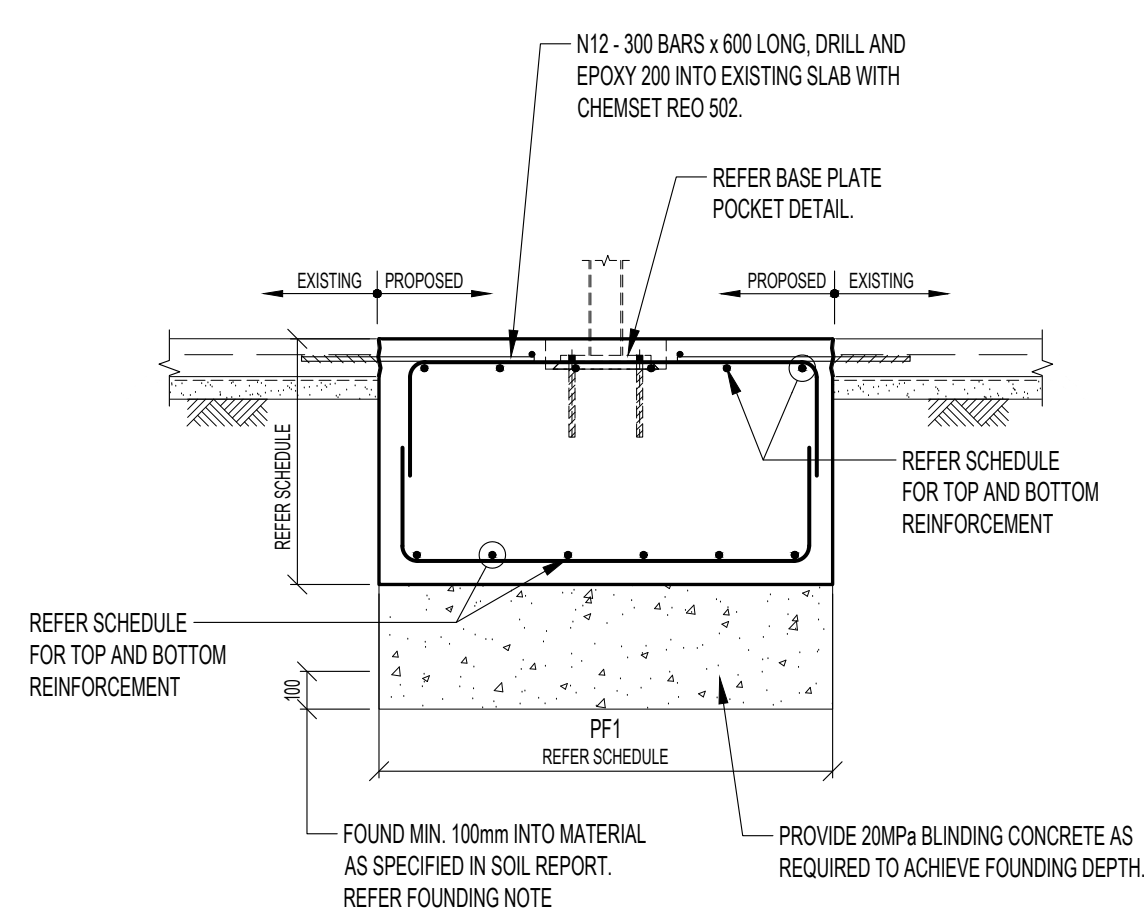


SLAB & FOOTING PLAN
SCALE 1:100

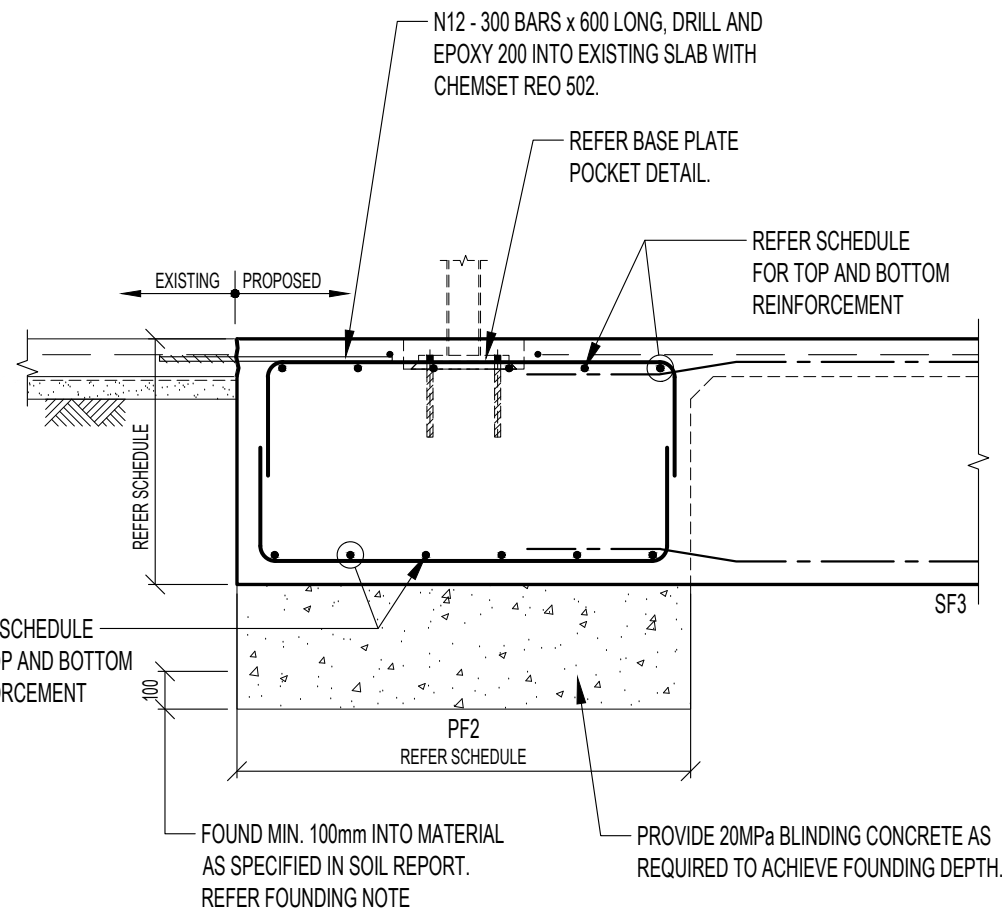
LEGEND

WALL TO BE DEMOLISHED,
REFER ARCHITECT'S DRAWINGS

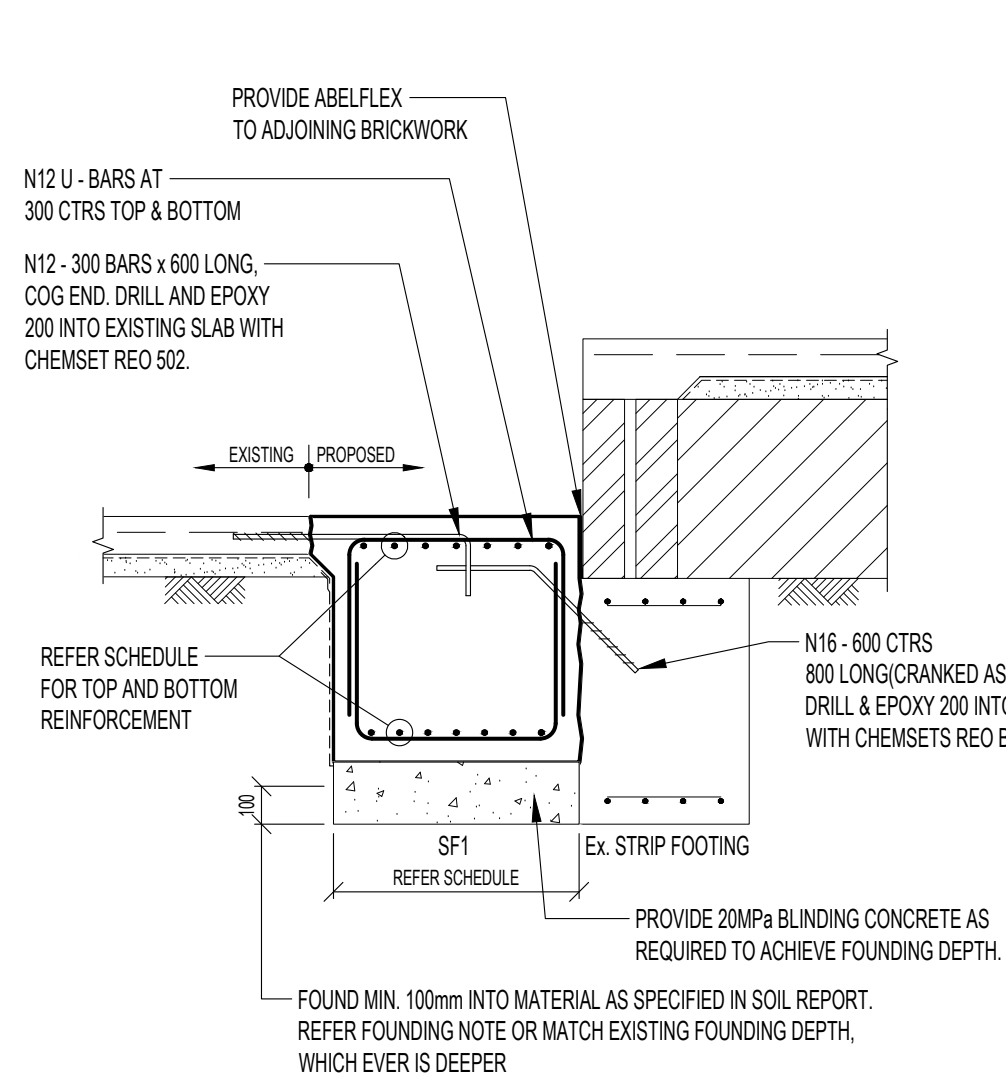
T2	REVISION AS CLOUDED	30.06.2025	C.S.
T1	TENDER	30.05.2025	SW
P2	PRELIMINARY	05.02.2025	L.R.
P1	PRELIMINARY	02.10.2024	L.R.
REV.	AMENDMENTS	DATE	INIT.
PRINTED: 30/06/2025 BY: CODY SCHUTT			
Suite 2, Level 1 150-100 Owens St, Wangaratta, Vic. 3677 Ph: (03) 5721 9673 Fax: (03) 5721 8108 Email: info@connexgroup.com.au Web: www.connexgroup.com.au			
CLIENT: T. REED			
DRAWING TITLE: FOOTING PLAN			
TITLE: MG DEALERSHIP REFURBISHMENT FOR T. REED AT 56 - 58 HIGH STREET, WODONGA, VIC			
ISSUE STAMP: TENDER			
DESIGN: D. BEGE			
DRAWN: L. RICHARDSON			
CHECKED:			
SCALE: AS INDICATED			
PROJECT NO. E24133			
DRAWING NO. S02			
REVISION			
T2			



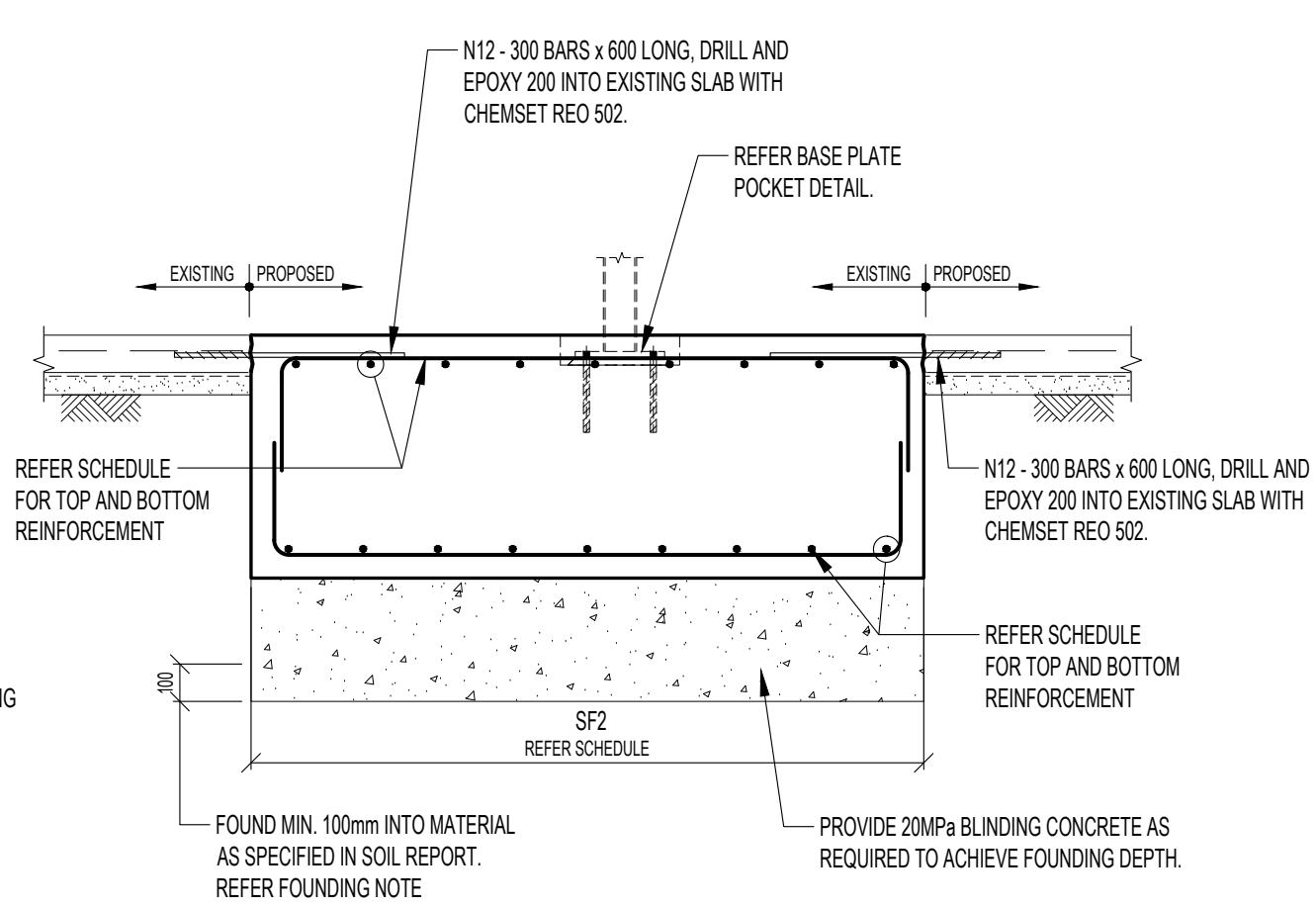
TYPICAL PAD FOOTING (PF1)
SCALE N.T.S.



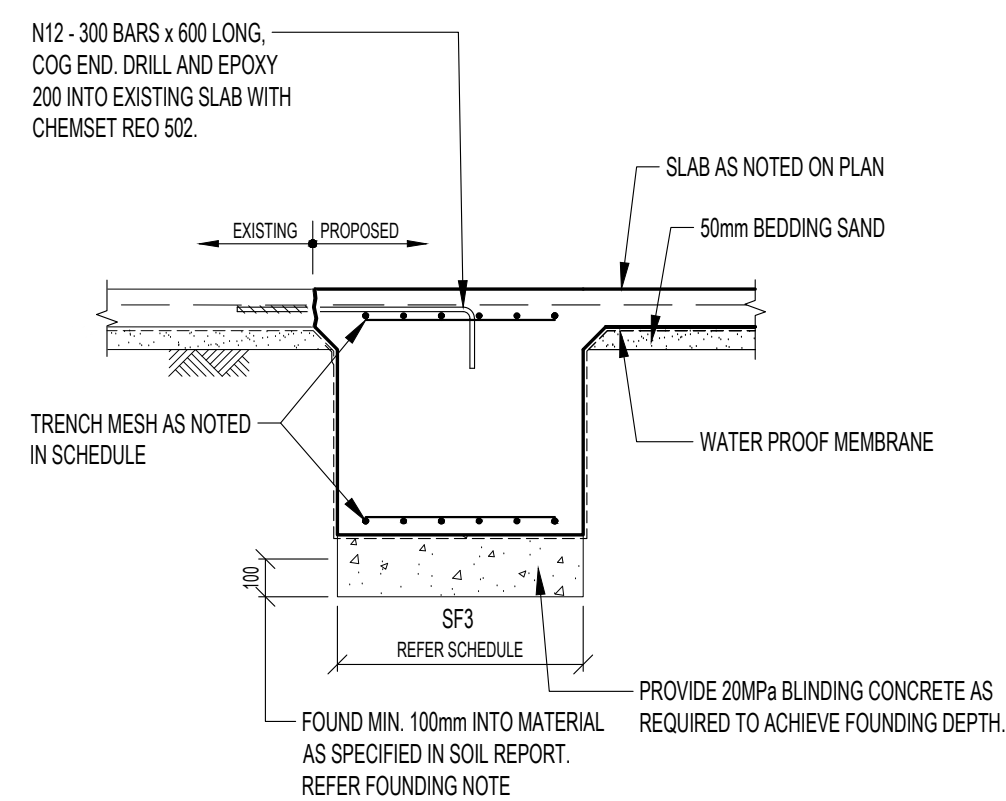
TYPICAL PAD FOOTING (PF2)
SCALE N.T.S.



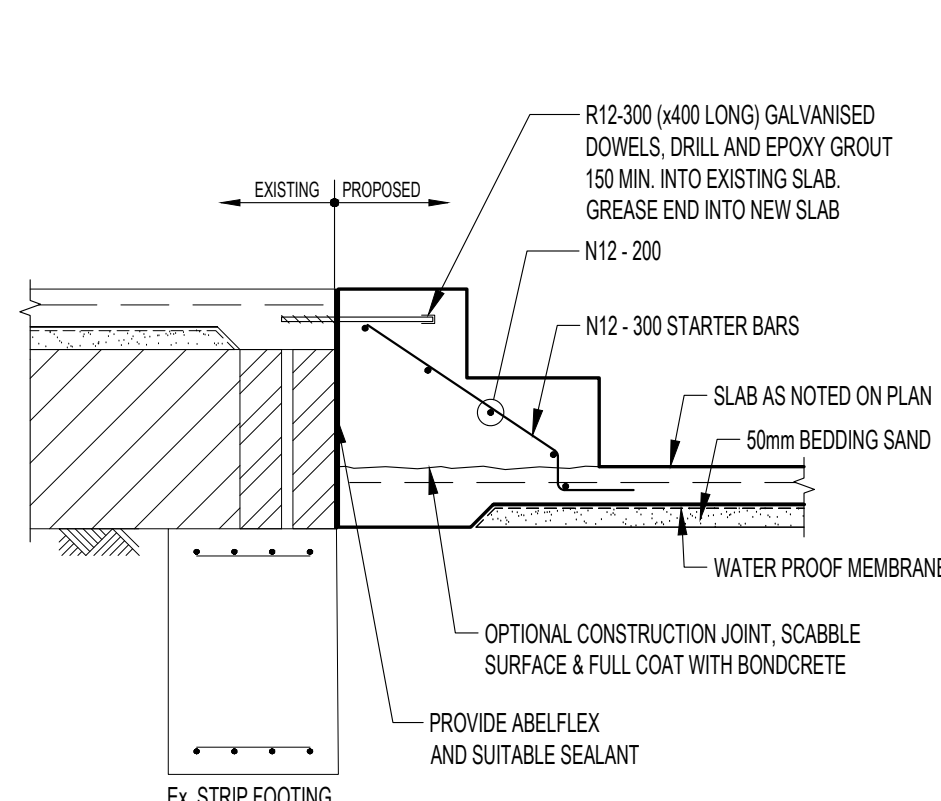
TYPICAL STRIP FOOTING (SF1) DETAIL
SCALE N.T.S.



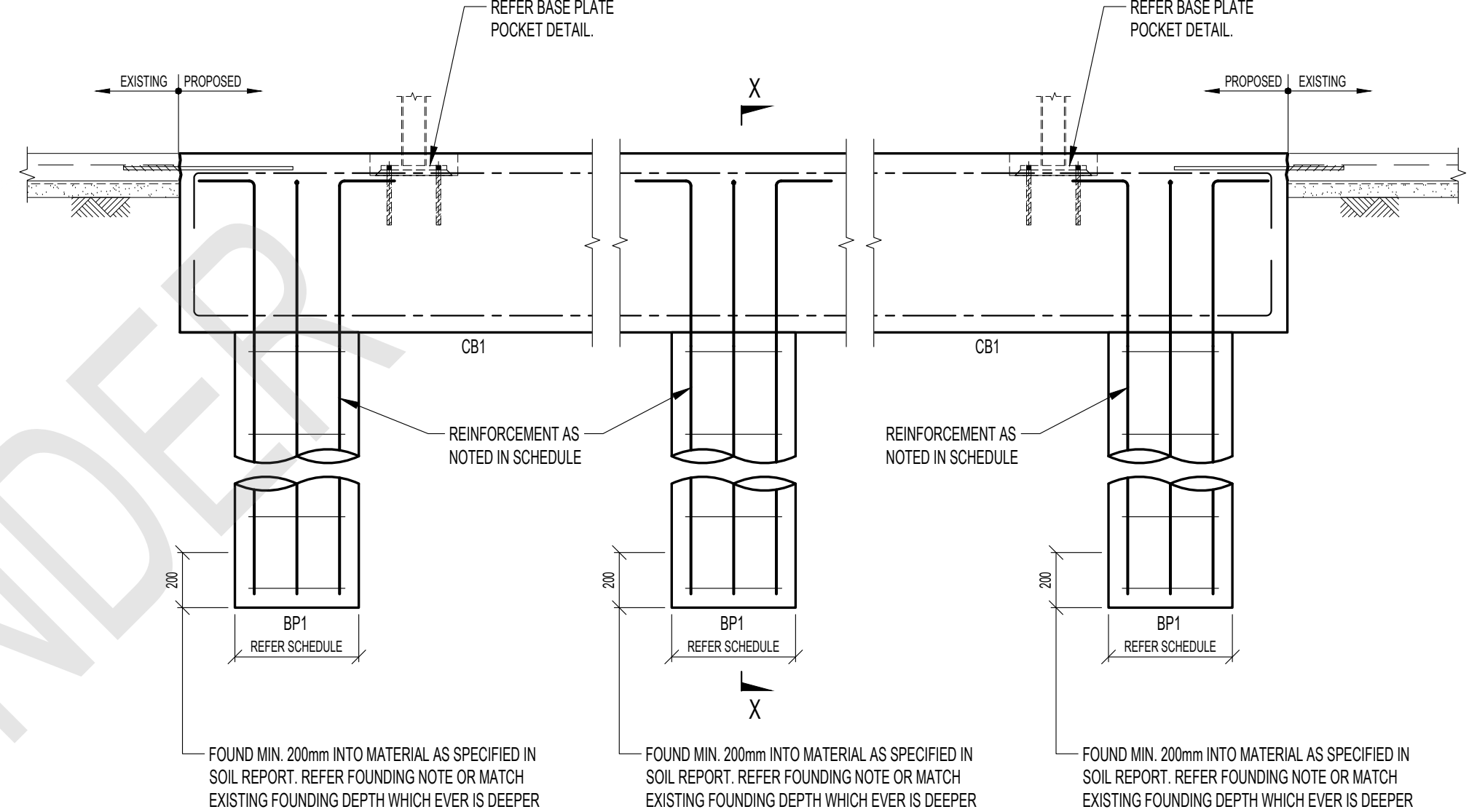
TYPICAL STRIP FOOTING (SF2) DETAIL
SCALE N.T.S.



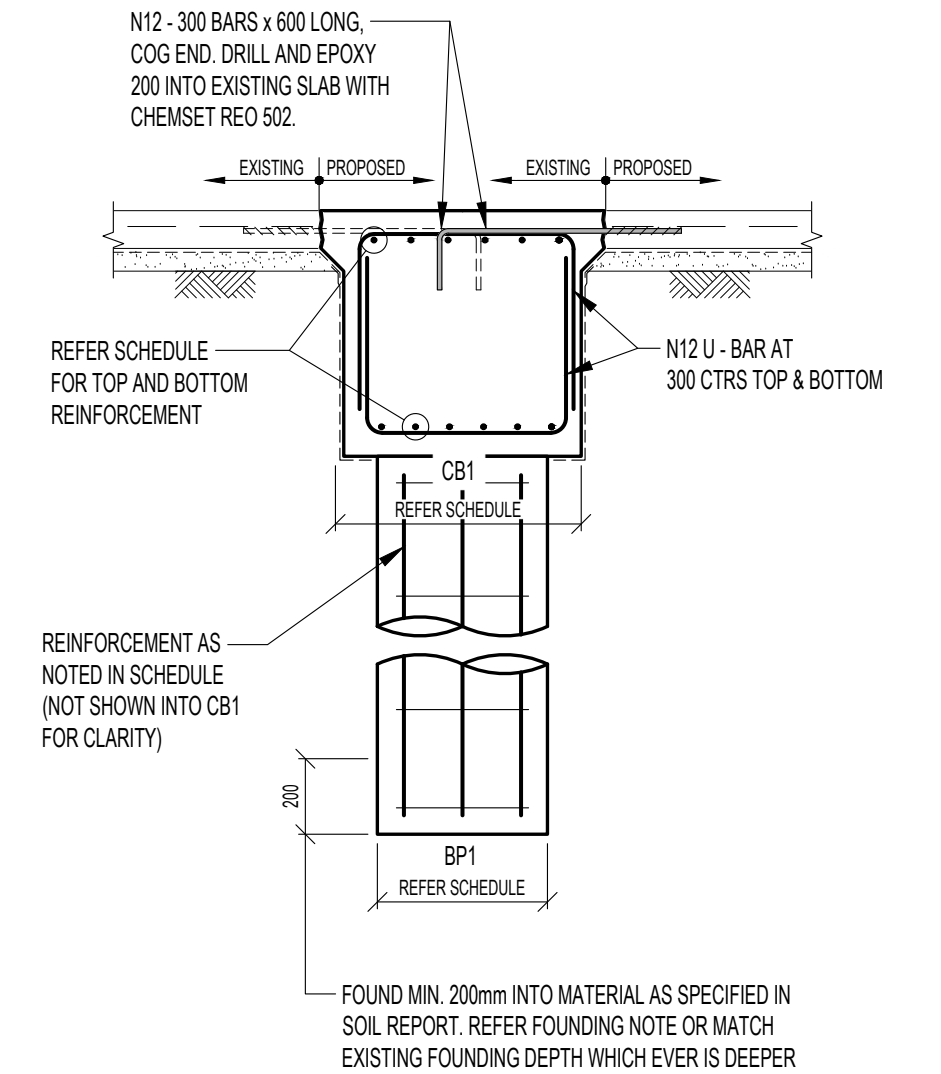
TYPICAL STRIP FOOTING (SF3) DETAIL
SCALE N.T.S.



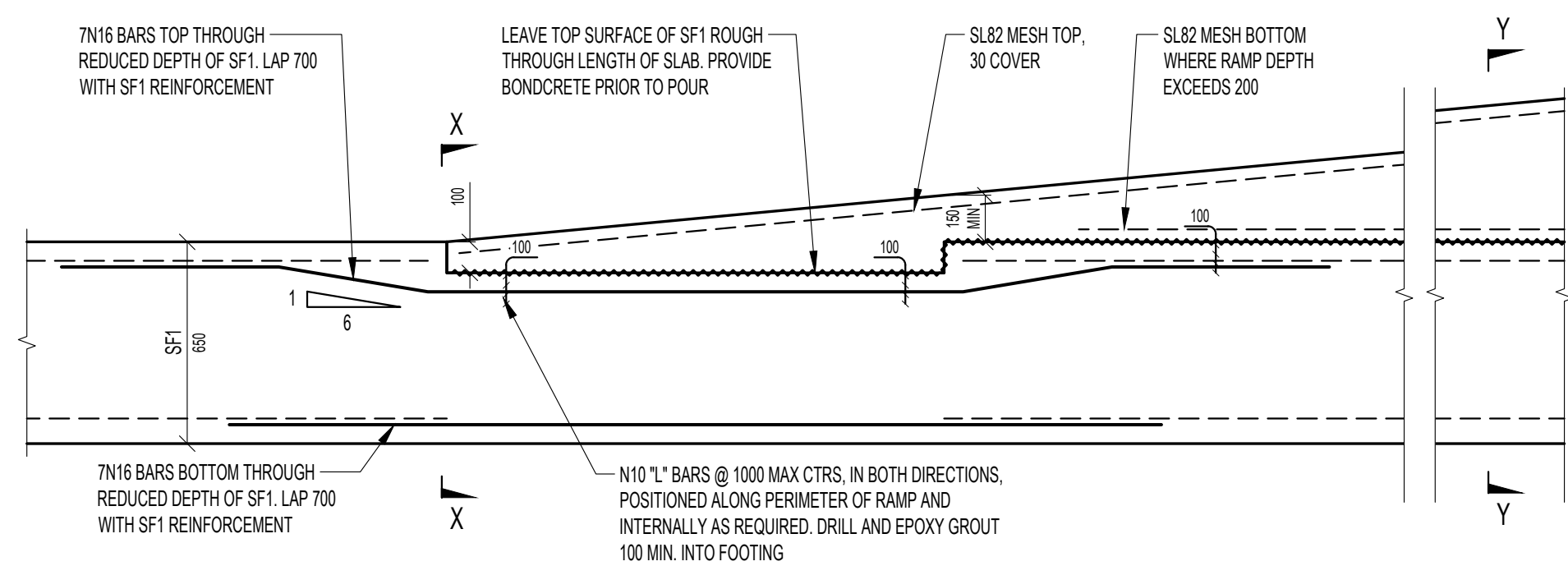
TYPICAL CONCRETE STAIR DETAIL
SCALE N.T.S.



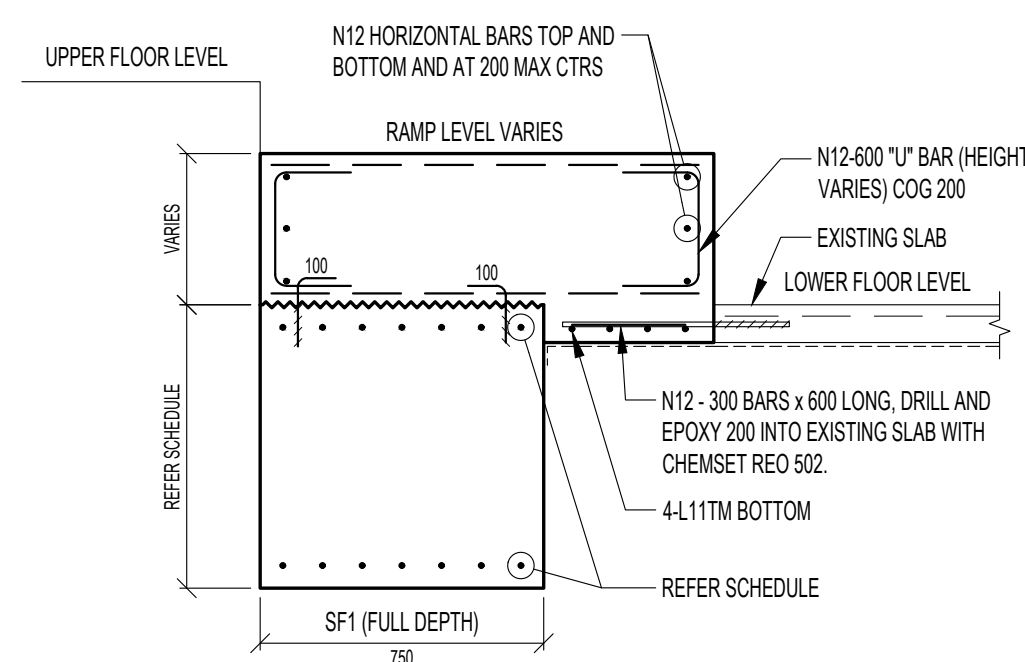
TYPICAL CAPPING BEAM DETAIL
SCALE N.T.S.



SECTION X - X

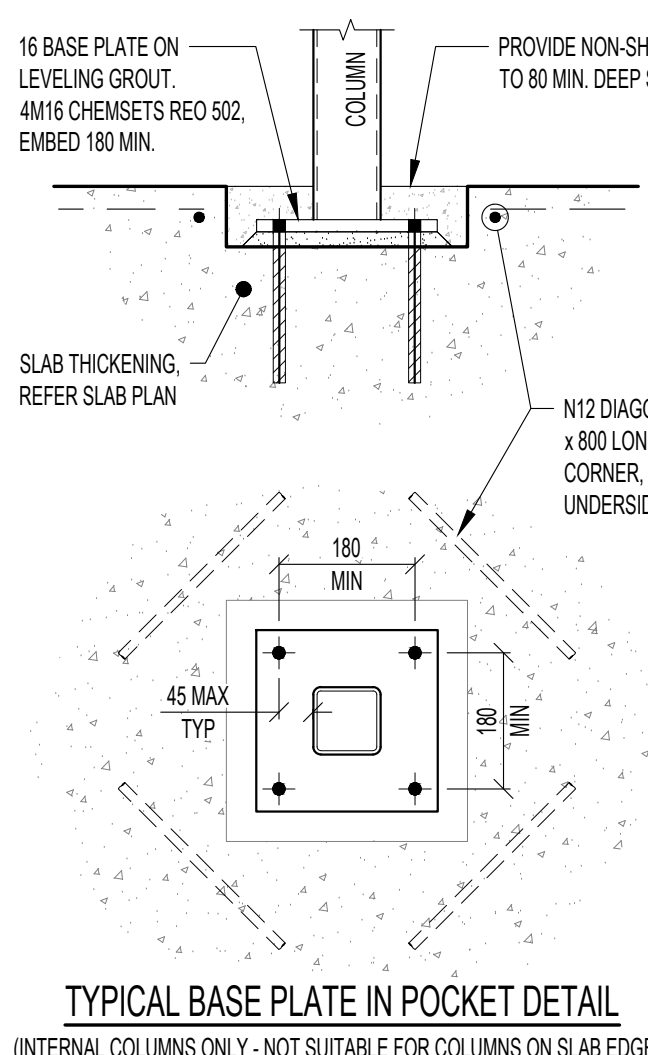


SECTION X - X

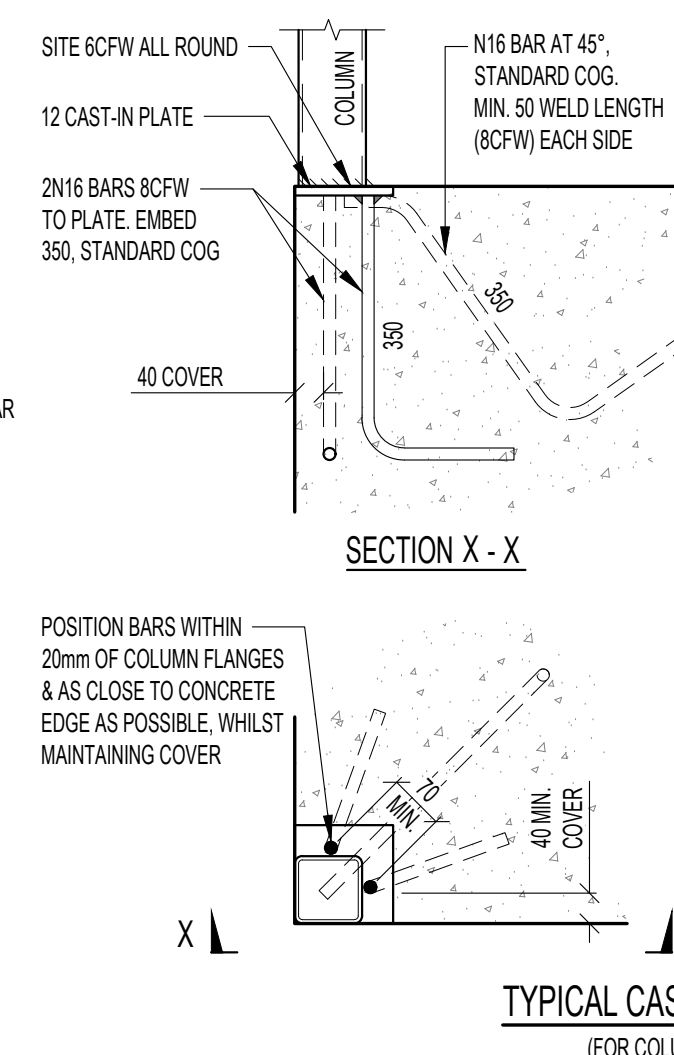


SECTION Y - Y

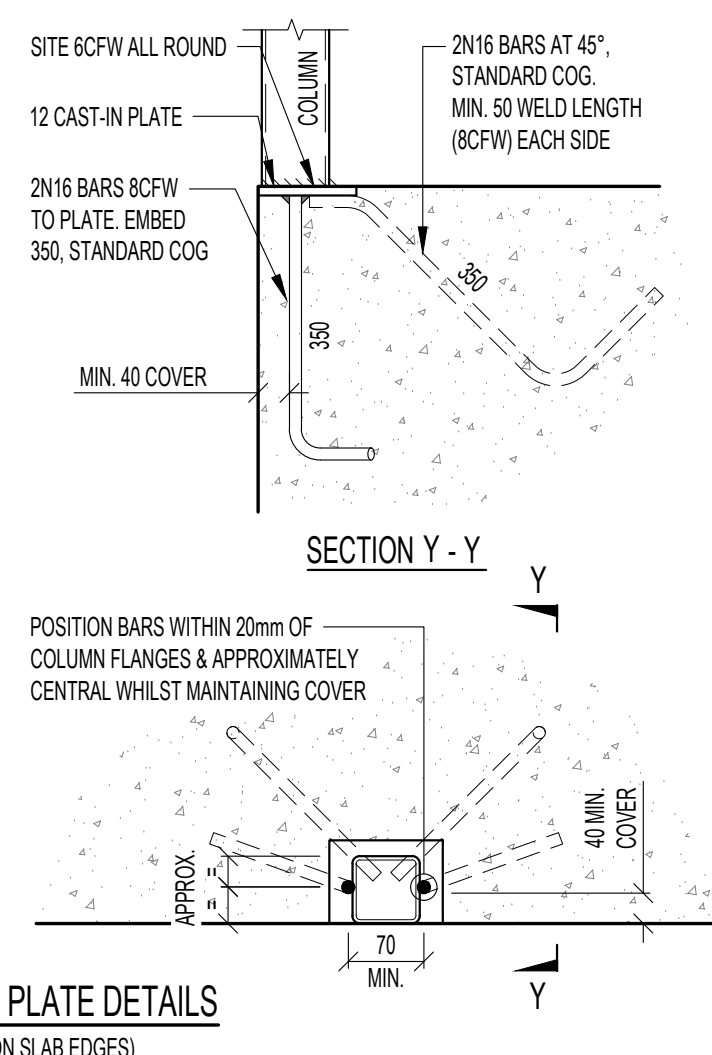
TYPICAL CONCRETE RAMP DETAILS
SCALE N.T.S.



TYPICAL BASE PLATE IN POCKET DETAIL
(INTERNAL COLUMNS ONLY - NOT SUITABLE FOR COLUMNS ON SLAB EDGES)

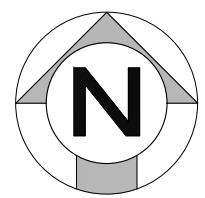


TYPICAL CAST-IN PLATE DETAILS
(FOR COLUMNS ON SLAB EDGES)



BRACING COLUMN BASE CONNECTION DETAILS (U.N.O.)
SCALE N.T.S.

T2	REVISION AS CLOUDED	30.06.2025	C.S.
T1	TENDER	30.05.2025	SW
P2	PRELIMINARY	05.02.2025	L.R.
P1	PRELIMINARY	02.10.2024	L.R.
REV	AMENDMENTS	DATE	INIT.
PRINTED: 30/06/2025 BY: CODY SCHUTT			
Suite 2, Level 1 150-160 Ovens St, Wangaratta, Vic. 3677 Ph: (03) 5721 9673 Fax: (03) 5721 8108 Email: info@connexgroup.com.au Web: www.connexgroup.com.au			
CLIENT: T. REED			
DRAWING TITLE: FOOTING DETAILS			
TITLE: MG DEALERSHIP REFURBISHMENT FOR T. REED			
AT 56 - 58 HIGH STREET, WODONGA, VIC			
ISSUE STAMP: TENDER			
<small>IF THESE DRAWINGS ARE THE INTELLECTUAL PROPERTY OF CONNEX GROUP, THE USE OR COPIING OF THIS DOCUMENT AS A WHOLE OR IN PART WITHOUT THE WRITTEN PERMISSION OF CONNEX GROUP constitutes an infringement of copyright.</small>			
DESIGN: D. BEGE	DRAWN: L. RICHARDSON	A1	
CHECKED:	SCALE: AS INDICATED	REVISION	
PROJECT NO. E24133	DRAWING NO. S03	T2	

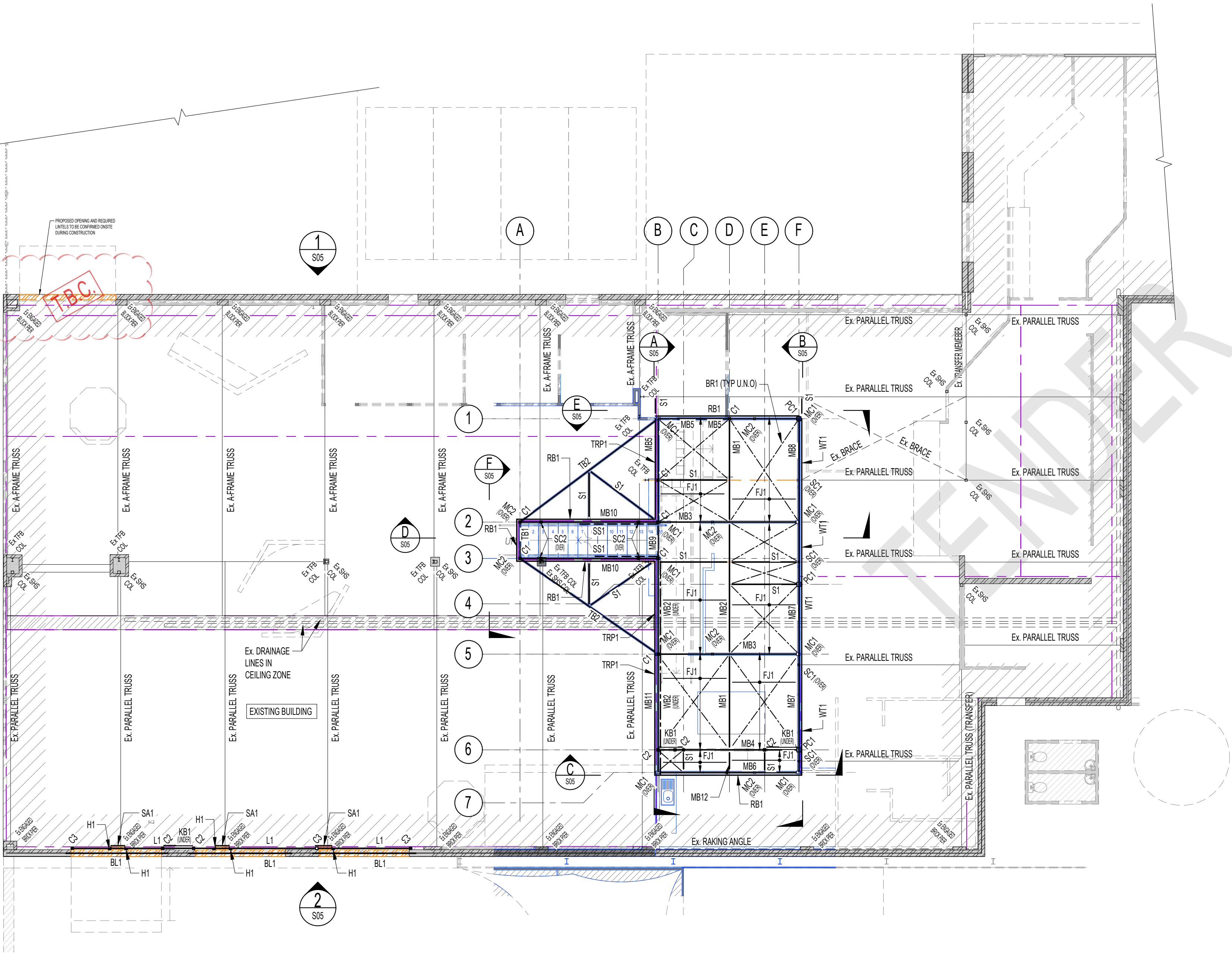


PURLIN SCHEDULE					
MARK	SIZE	LAPS	BRIDGING	MAX. SPACING	COMMENTS
FP1	C150 19	-	AS PER PURLINS	N / A	FASCIA PURLIN
FP2	C150 15	-	-	N / A	FASCIA PURLIN
P1	C150 15	-	1 ROW	1200	PURLINS - DOUBLE SPAN
P2	C150 12	-	-	1200	PURLINS

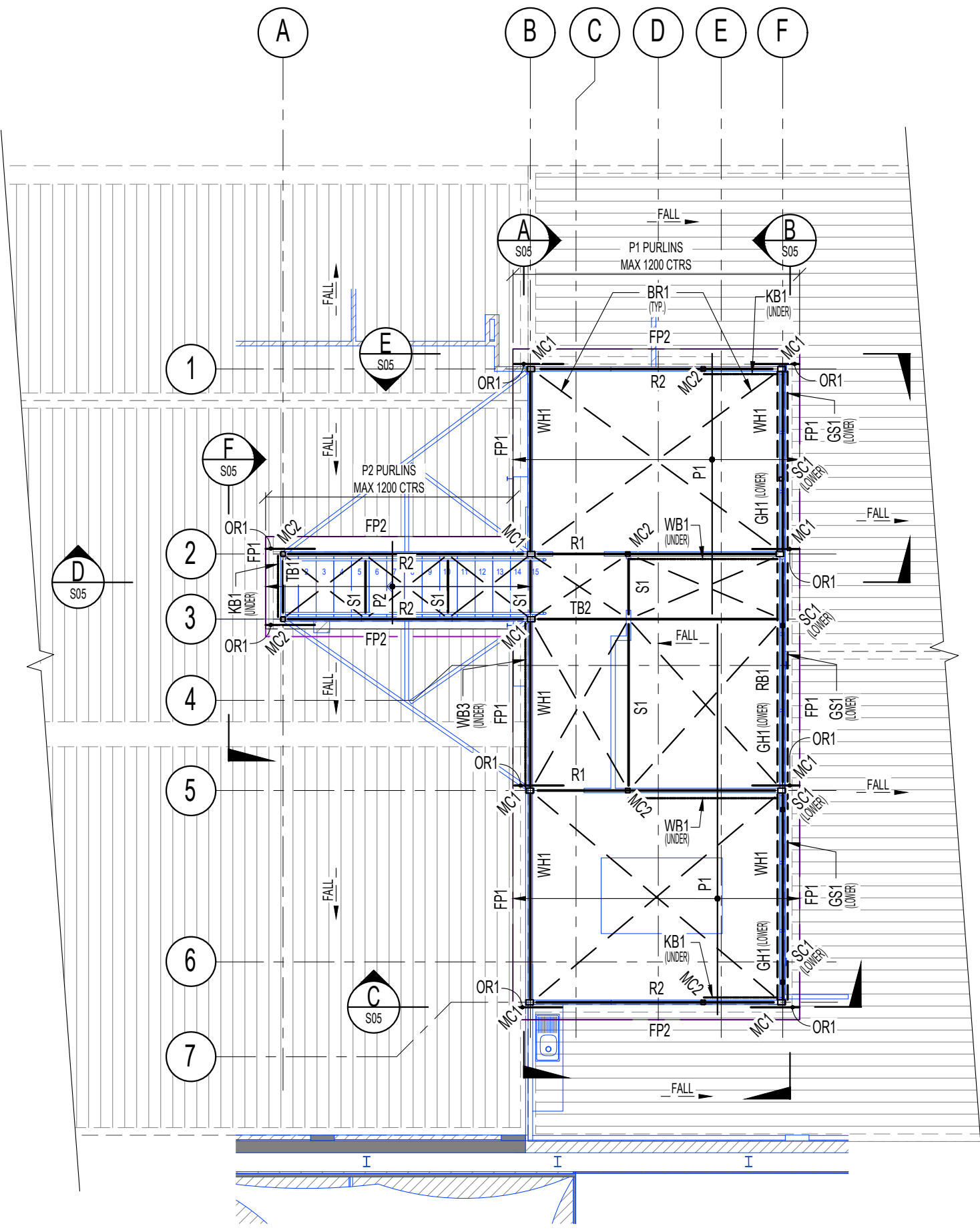
NOTE:
ROOF SHEETING
SELECTED ROOF SHEETING TO BE
0.48 BMT MINIMUM GRADE

NOTE:
EXISTING STRUCTURE TO BE ADEQUATELY
PROPPED AS REQUIRED, IN ORDER TO
INSTALL NEW STRUCTURE

MEMBER SCHEDULE		
MARK	SIZE	COMMENTS
BL1	250UC 73	BRICK LINTEL
BR1	16mm DIA ROD	ROOF BRACE - TENSIONED
C1	89 x 5.0 SHS	COLUMN
C2	89 x 5.0 SHS	COLUMN - BRACED
C3	89 x 5.0 SHS	COLUMN
FJ1	C150 19 @ MAX 450 C/C	FLOOR JOISTS
GH1	250 PFC	GLAZING HEADER (PORTAL TIE) SITE WELDED TO COLUMNS
GS1	250 PFC	GLAZING SILL (PORTAL TIE) SITE WELDED TO COLUMNS
H1	75 x 10 EA	HANGING BEAM
KB1	65 x 3.0 SHS	K' BRACE - (SHOP WELDED TO COLUMNS)
L1	200 PFC	LINTEL
MC1	150 x 100 x 4.0 RHS	MEZZANINE COLUMN
MC2	89 x 5.0 SHS	MEZZANINE COLUMN
MB1	250UB 26	MEZZANINE BEAM
MB2	250UB 31	MEZZANINE BEAM
MB3	250UB 37	MEZZANINE BEAM
MB4	250UB 26	MEZZANINE BEAM
MB5	250PFC	MEZZANINE BEAM - CANTL
MB6	250PFC	MEZZANINE BEAM
MB7	250UB 37	MEZZANINE BEAM - CANTL ENDS
MB8	250UB 37	MEZZANINE BEAM
MB9	250UB 26	MEZZANINE BEAM - DOUBLE SPAN
MB10	180 PFC	MEZZANINE BEAM
MB11	250UB 26	MEZZANINE BEAM - CANTL
MB12	180UB 18	MEZZANINE BEAM
OR1	150 x 50 x 3.0 RHS	OUTRIGGER - (SHOP WELD TO COLUMNS)
PC1	150 x 6.0 SHS	PORTAL COLUMN
R1	200UB 22	RAFTER
R2	150 PFC	RAFTER
RB1	150 PFC	ROOF BEAM
SC1	75 x 3.0 SHS	STUB COLUMN - SHOP WELDED TO MB7 AND MB8
SC2	75 x 3.0 SHS	STUB COLUMN - SHOP WELDED TO MB10
SS1	200 x 100 x 6.0 RHS	STAIR STRINGER - UTILIZED AS A BRACE FOR LATERAL STABILITY
S1	76.1 x 3.2 CHS	STRUT
SA1	75 x 10 EA	SEATING ANGLE
TB1	150 PFC	TIE BEAM
TB2	150 UC 30	TIE BEAM
TRP1	C150 19	TRIMMER PURLIN
WB1	89 x 5.0 SHS	WALL DIAGONAL BRACE
WB2	20mm DIA ROD	WALL CROSS BRACE - TENSIONED
WB3	89 x 5.0 SHS	WALL DIAGONAL BRACE
WH1	100 x 3.0 SHS	WINDOW HEADER
WT1	200 PFC	WALL TIE - SITE WELDED TO TOP OF EX TRUSSES



FIRST FLOOR FRAMING PLAN
SCALE 1:100



ROOF FRAMING PLAN
SCALE 1:100

LEGEND

- WALL TO BE DEMOLISHED, REFER ARCHITECT'S DRAWINGS
- WALL UNDER
- WALL OVER
- LOAD BEARING WALL OVER (L.B.W. OVER)

T2	REVISION AS CLOUDED	30.06.2025	C.S.
T1	TENDER	30.05.2025	SW
P2	PRELIMINARY	05.02.2025	L.R.
P1	PRELIMINARY	02.10.2024	L.R.
REV.	AMENDMENTS	DATE	INIT.

PRINTED: 30/06/2025 BY: CODY SCHUTT



Suite 2, Level 1/50-100 Owens St, Wangaratta, Vic. 3677
Ph: (03) 5721 5673 Fax: (03) 5721 6106
Email: info@connexgroup.com.au
Web: www.connexgroup.com.au

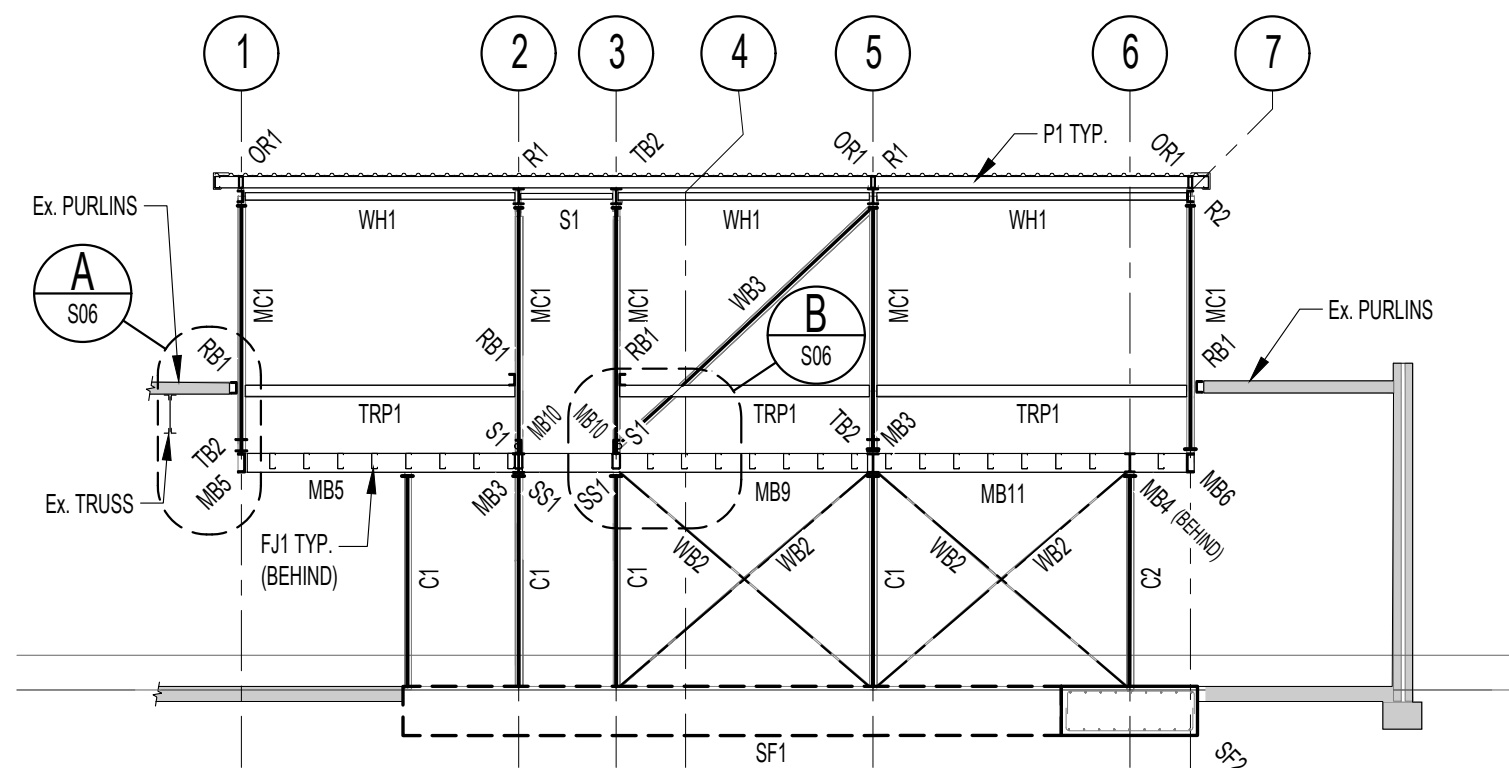
CLIENT: T. REED

DRAWING TITLE:
FIRST FLOOR & ROOF FRAMING PLAN

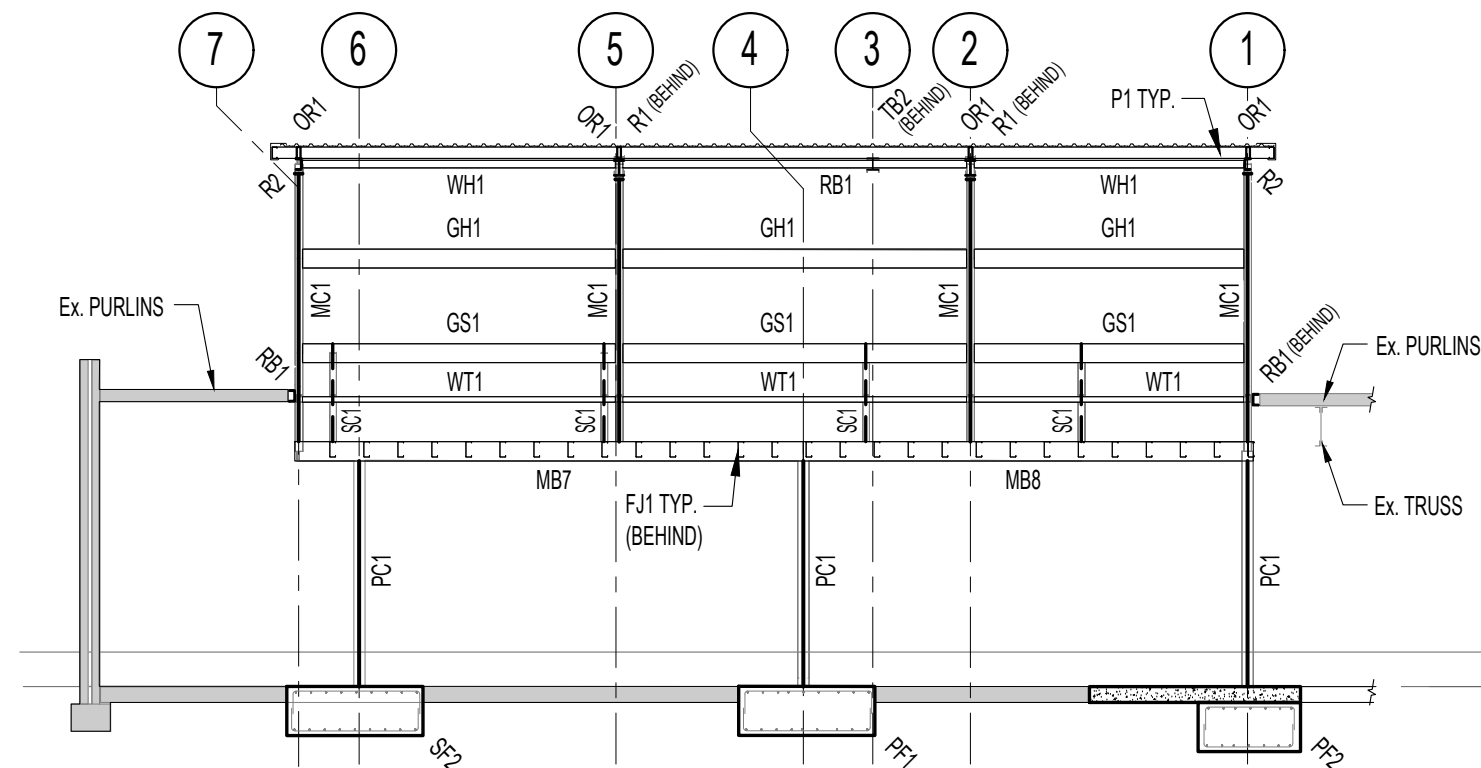
TITLE:
MG DEALERSHIP REFURBISHMENT
FOR T. REED
AT 56 - 58 HIGH STREET,
WODONGA, VIC

ISSUE STAMP:
TENDER

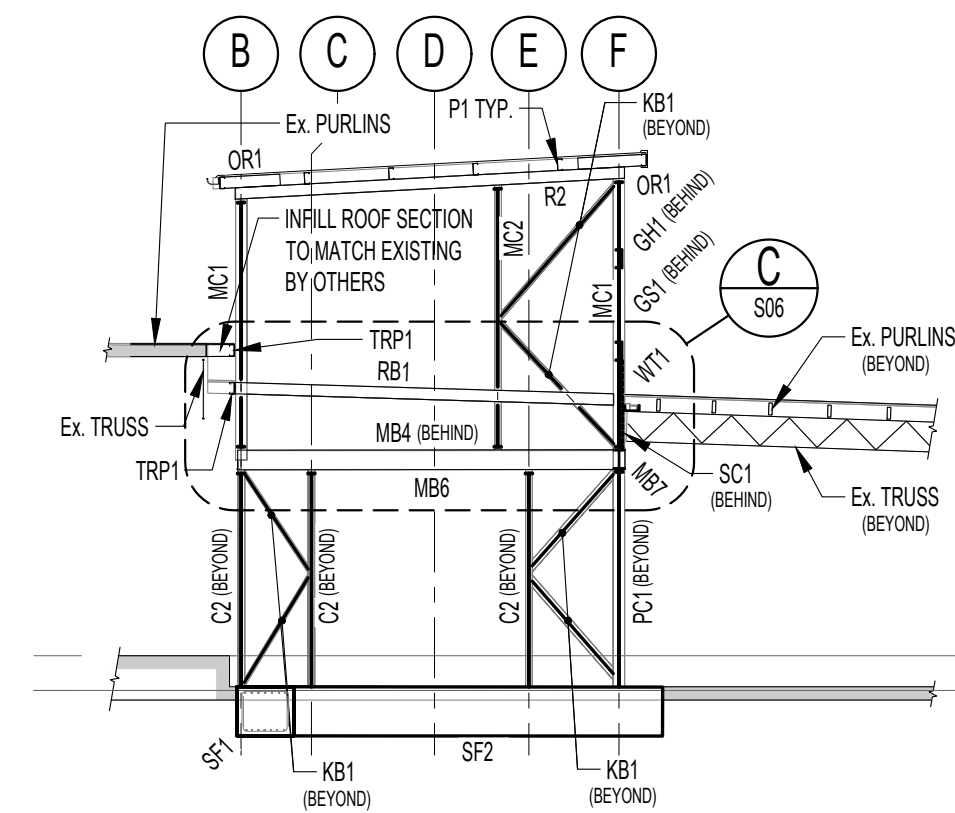
DESIGN: D. BEGE	DRAWN: L. RICHARDSON	A1
CHECKED:	SCALE: AS INDICATED	
PROJECT NO. E24133	DRAWING NO. S04	
	REVISION T2	



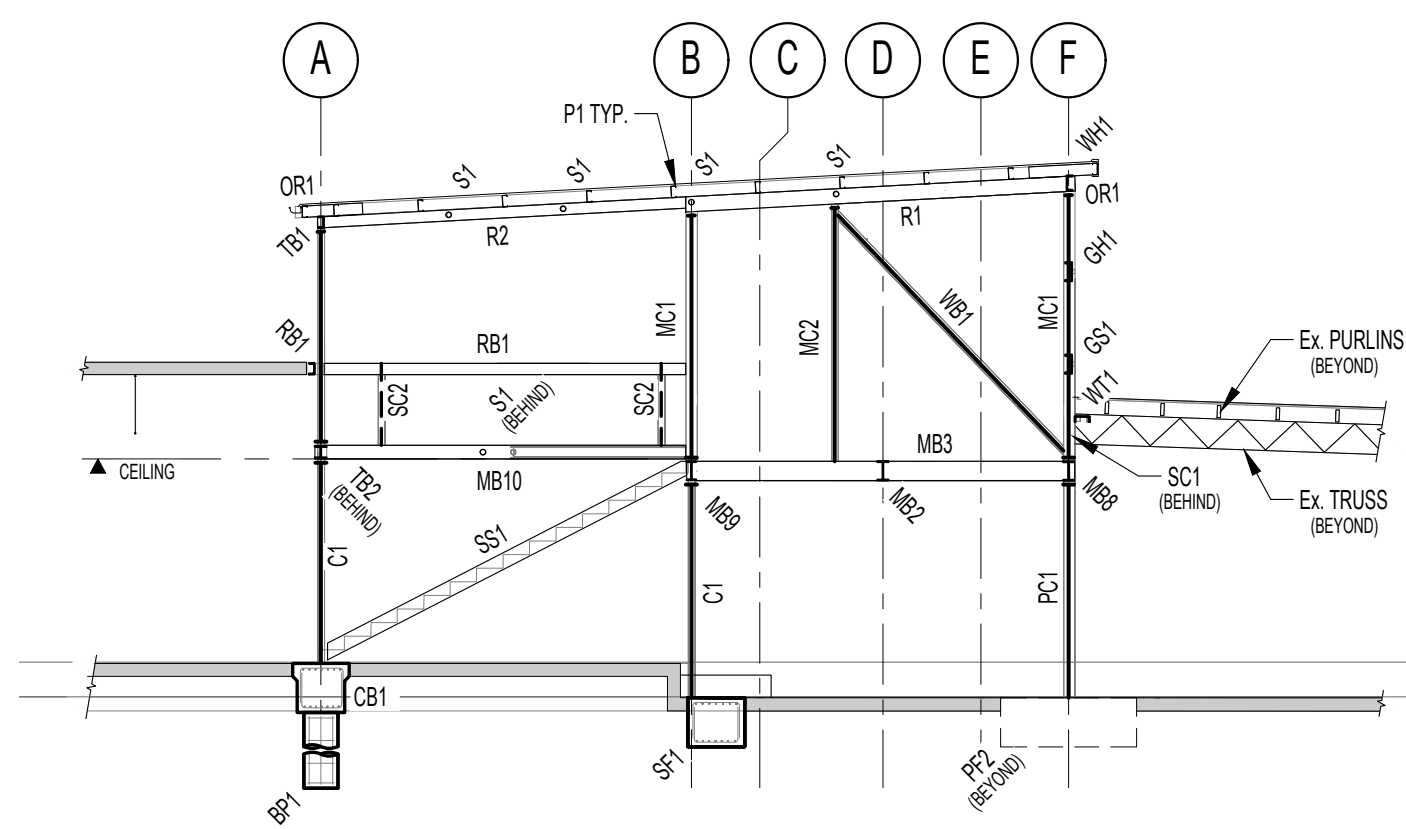
SECTION A
SCALE 1:100
S02.4



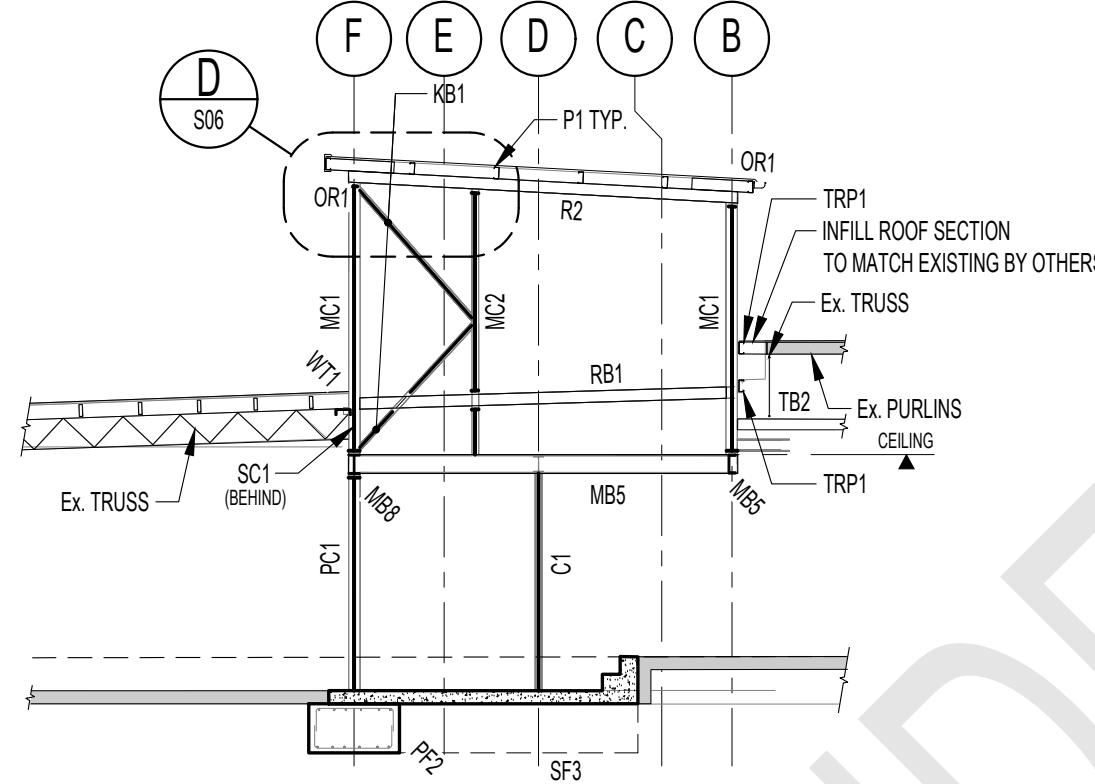
SECTION B
SCALE 1:100
S02.4



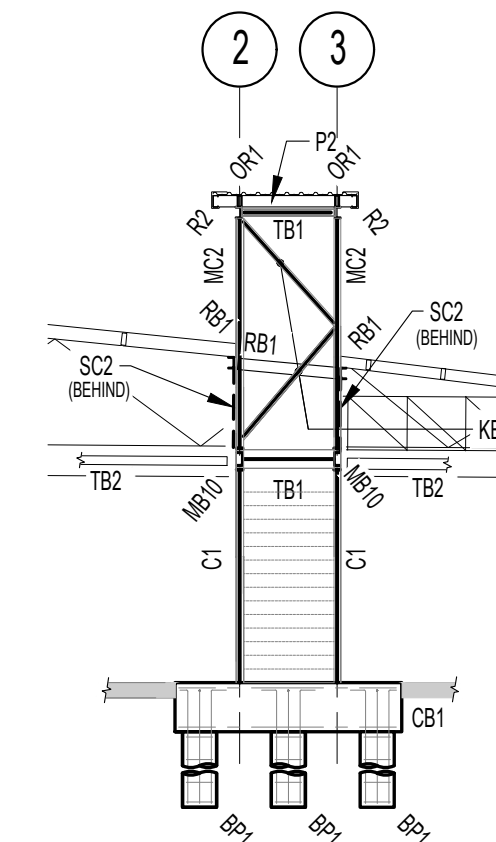
SECTION C
SCALE 1:100
S02.4



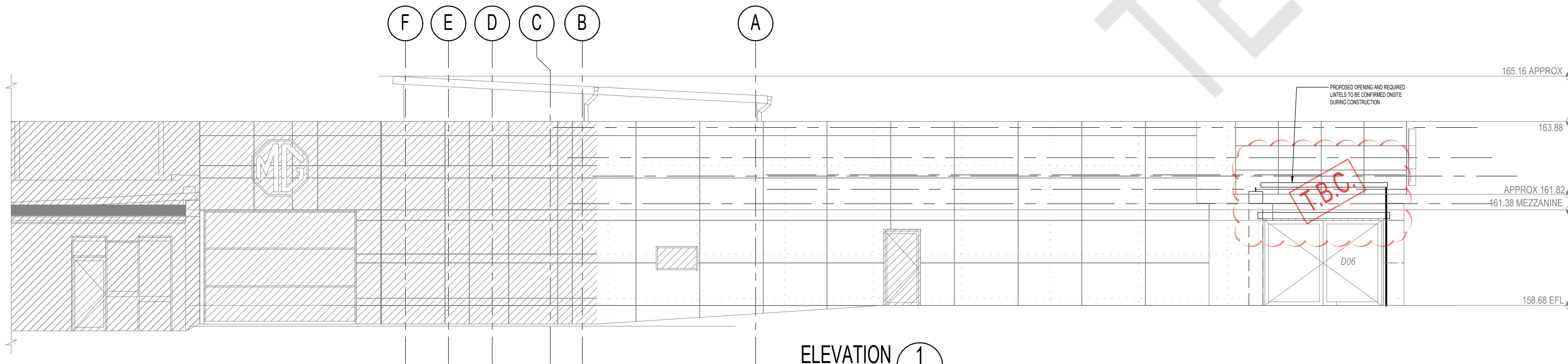
SECTION D
SCALE 1:100
S02.4



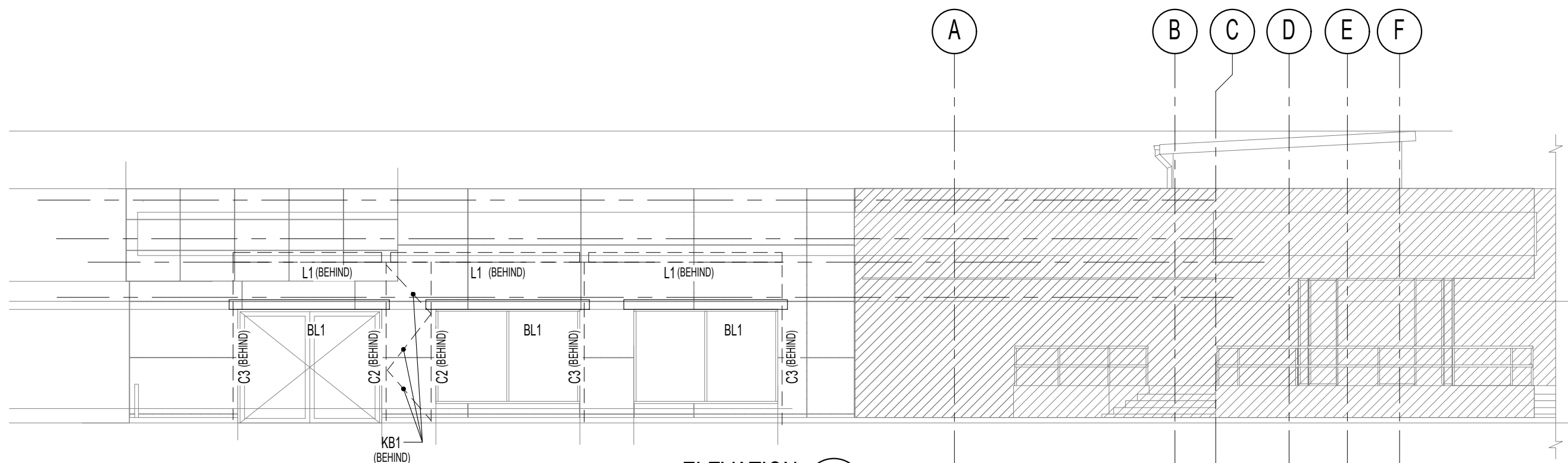
SECTION E
SCALE 1:100
S02.4



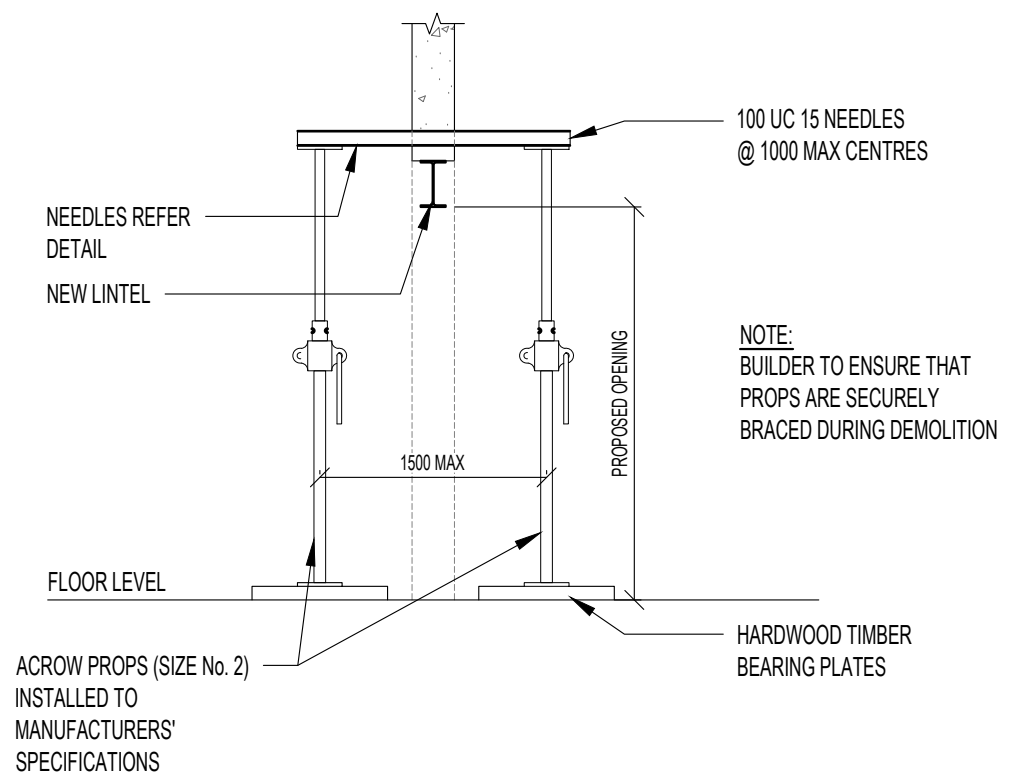
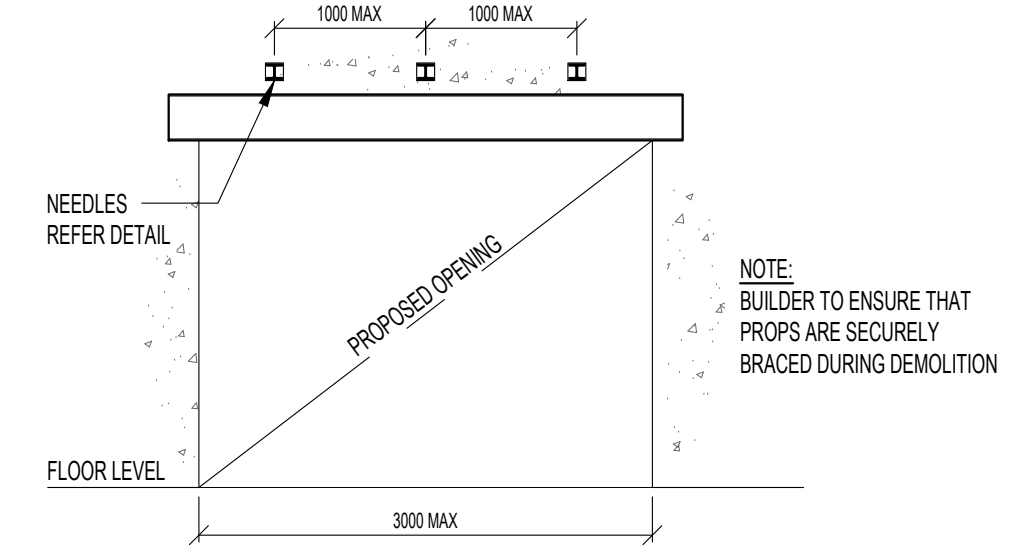
SECTION F
SCALE 1:100
S02.4



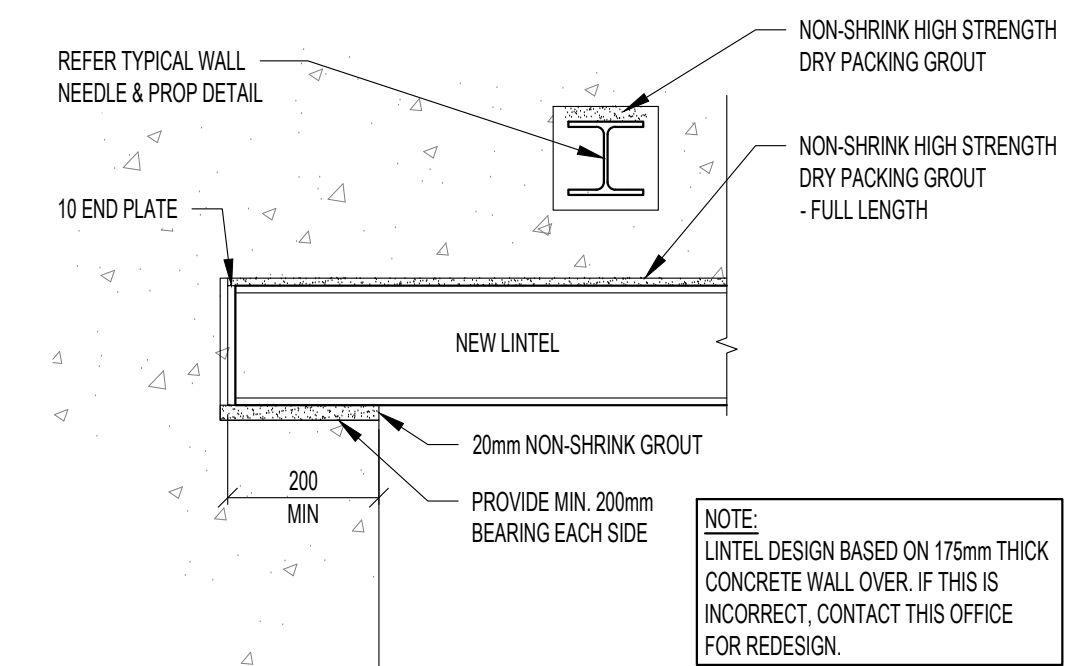
ELEVATION 1
SCALE 1:100
S02.4



ELEVATION 2
SCALE 1:100
S02.4



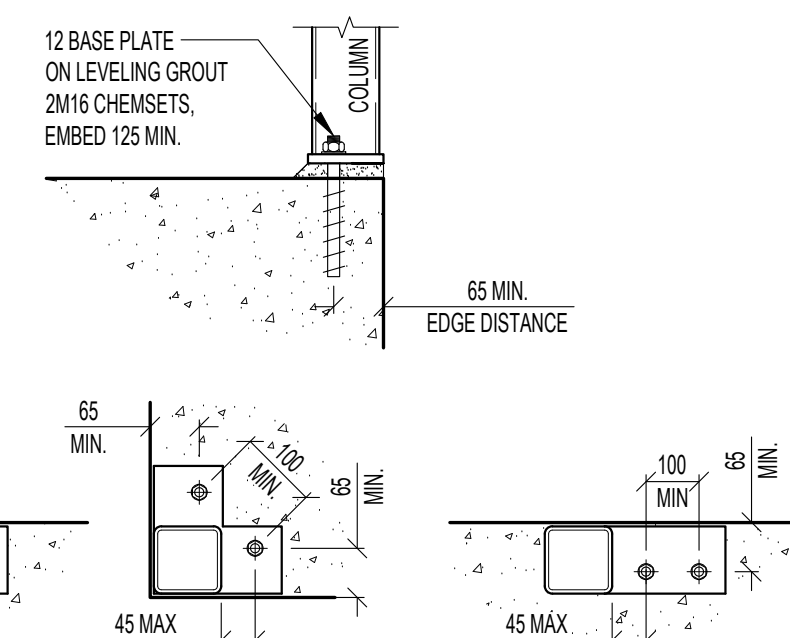
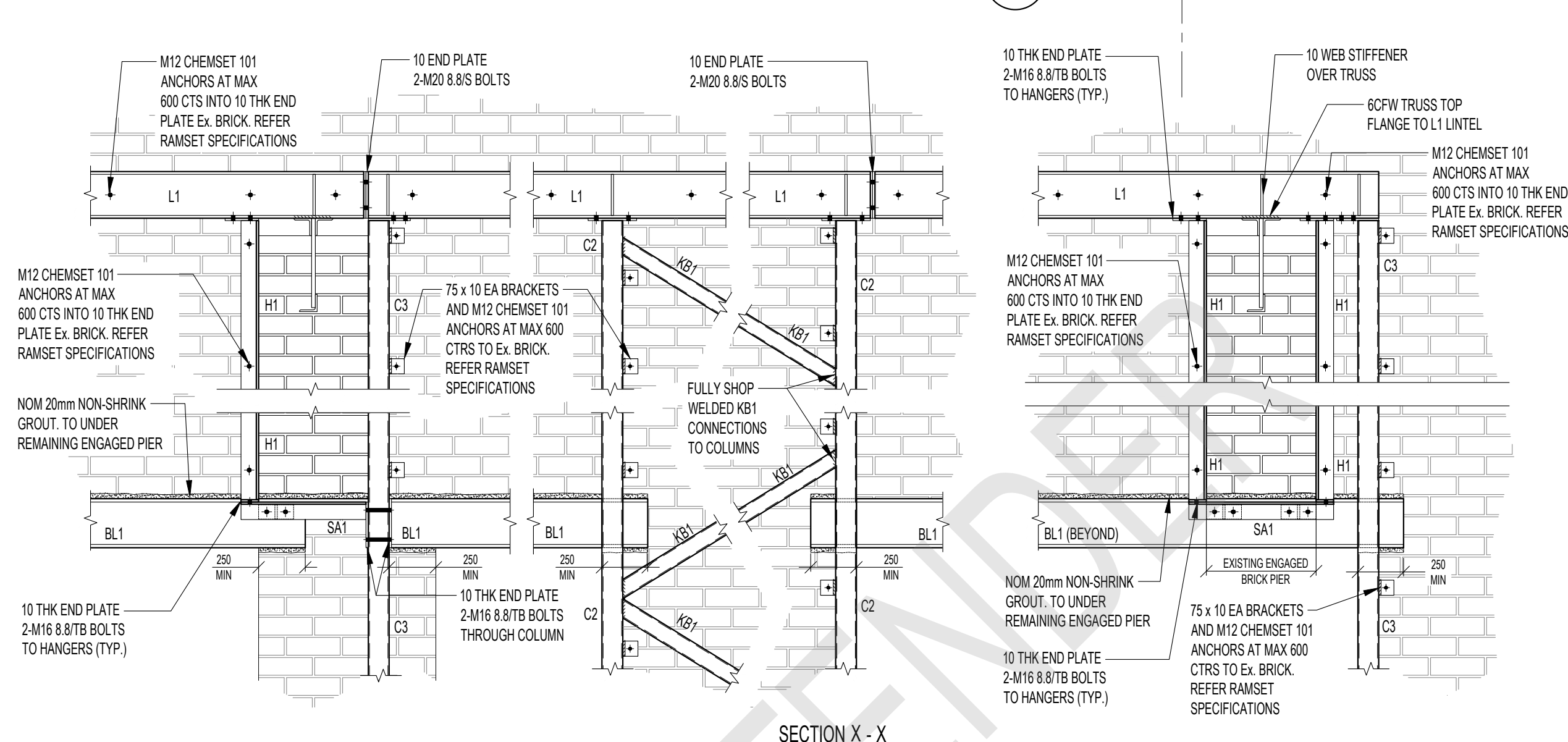
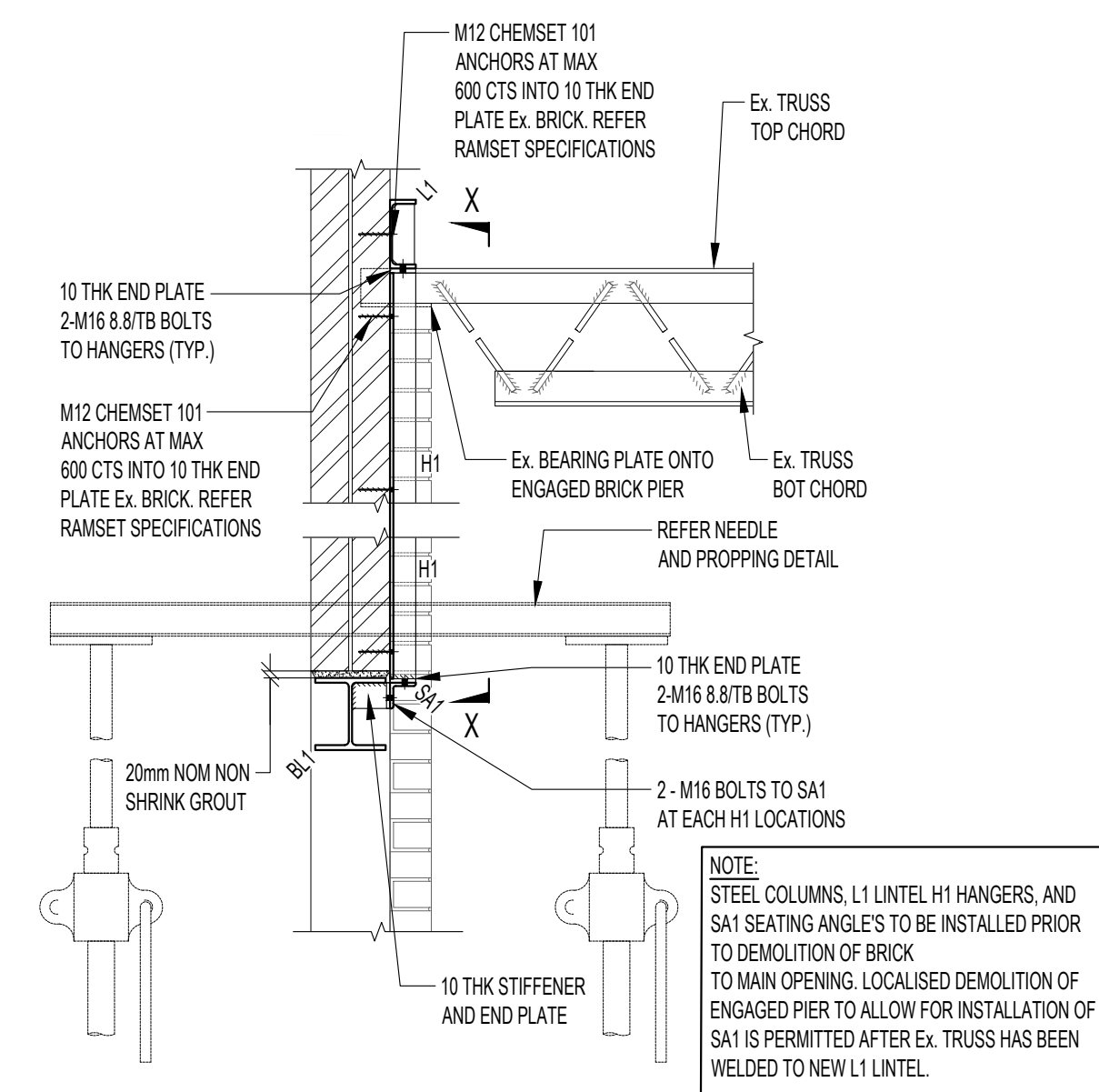
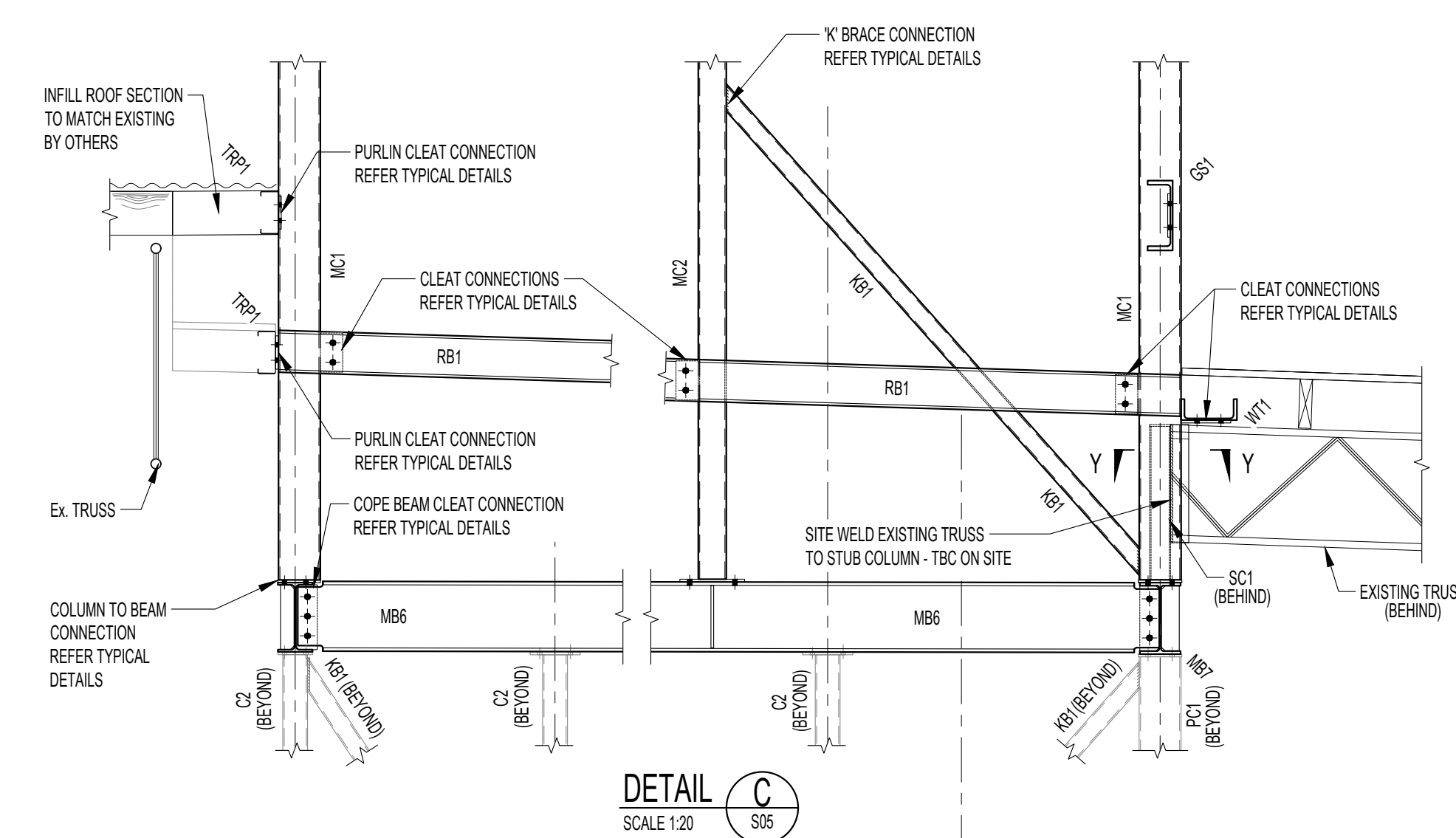
TYPICAL WALL NEEDLE & PROP DETAIL
SCALE - NTS



TYPICAL LINTEL TO NEW OPENING DETAIL
SCALE 1:10

NOTE:
EXISTING STRUCTURE TO BE ADEQUATELY
PROPPED AS REQUIRED, IN ORDER TO
INSTALL NEW STRUCTURE

T2	REVISION AS CLOUDED	30.06.2025	C.S.
T1	TENDER	30.05.2025	SW
P2	PRELIMINARY	05.02.2025	L.R.
P1	PRELIMINARY	02.10.2024	L.R.
REV.	AMENDMENTS	DATE	INIT.
PRINTED: 30/06/2025 BY: CODY SCHUTT			
Suite 2, Level 1 150-100 Ovens St, Wangaratta, Vic. 3677 Ph: (03) 5721 9673 Fax: (03) 5721 8108 Email: info@connexgroup.com.au Web: www.connexgroup.com.au			
CLIENT: T. REED			
DRAWING TITLE: FRAMING ELEVATIONS & SECTIONS			
TITLE: MG DEALERSHIP REFURBISHMENT FOR T. REED AT 56 - 58 HIGH STREET, WODONGA, VIC			
ISSUE STAMP: TENDER			
<small>IF THESE DRAWINGS ARE THE INTELLECTUAL PROPERTY OF CONNEX GROUP, THE USE OR COPIING OF THIS DOCUMENT AS A WHOLE OR IN PART WITHOUT THE WRITTEN PERMISSION OF CONNEX GROUP IS STRICTLY PROHIBITED AND IS A BREACH OF COMPANY POLICY.</small>			
DESIGN: D. BEGE	DRAWN: L. RICHARDSON	A1	
CHECKED:	SCALE: AS INDICATED	REVISION	
PROJECT NO. E24133	DRAWING NO. S05	T2	



TYPICAL BASE PLATE DETAILS (U.N.O.)
(COLUMNS WITHIN WALLS)
SCALE N.T.S.

Diagram illustrating the connection between a column and a beam profile. The connection details include:

- 10 BASE PLATE, 4M16 8.8'S BOLTS. (2 BOLTS FOR PFC)
- BEAM PROFILE (UB OR PFC)
- 10 STIFFENER EACH SIDE (ONE SIDE FOR PFC BEAM)

NOTE: ALL ELEMENTS THAT ARE TO BE HUNG FROM PURLINS ARE TO BE SUPPORTED OFF PURLIN WEB, NOT FLANGES

2M12 4.6S BOLTS FOR PURLINS UP TO C / Z 250.
2M16 4.6S BOLTS FOR C / Z 300 OR LARGER, U.N.O.

TOP OF STEEL BEAM	TOP OF STEEL BEAM
TOP OF STEEL BEAM	TOP OF STEEL BEAM

DISTANCE 'D'	SUPPORT
< 20	8 CLEAT
20 TO 60	12 CLEAT
60 TO 300	75 x 5 EA

Diagram illustrating the connection of a rod bracket to a column/rafter web. The connection uses a turnbuckle for tensioning and a rod bracket. The bracket is welded to the column/rafter web using 6CFW (6mm fillet weld) on both sides. The weld length is denoted as 'L'. The bracket is also connected to the rod using a cleat plate, with weld length 'L' and bolt sizes specified. The cleat plate is also welded to the rod using 6CFW on both sides.

ROD DIAMETER	CLEAT PLATES	MINIMUM WELD LENGTH 'L'	BOLTS
12	75 x 10	30mm	2M16 8/8'S
16	75 x 10	50mm	2M16 8/8'S
20	90 x 10	80mm	2M16 8/8'S
24	100 x 10	100mm	2M20 8/8'S

Diagram illustrating a beam-to-column connection. The connection involves a 10 END PLATE, 6CFW ALL ROUND, 10 STIFFENER, TRANSFER BEAM, BEAM PROFILE (RHS), and BOLTS AS NOTED IN SCHEDULE. The connection is shown on both sides of the beam profile.

BEAM PROFILE	BOLTS
UP TO 150 RHS	2 M16 8.8/S
UP TO 200 RHS	2 M20 8.8/S
UP TO 250 RHS	3 M20 8.8/S

6CFW BOTH SIDES

5 SEAL PLATE

PLATE SLOTTED MIN. DISTANCE 'D' INTO STRUT. 6CFW BOTH SIDES

> 'D'

REFER SCHEDULE FOR CLEATS AND BOLTS

STRUT SIZE	PLATE SIZE	BOLTS
100 SHS	10 x 130	2M20 8.8/S
125 SHS	12 x 150	2M20 8.8/S
150 SHS	16 x 180	2M24 8.8/S
200 SHS	16 x 260	3M24 8.8/S

6CFW BOTH SIDES

5 SEAL PLATE

PLATE SLOTTED MIN. DISTANCE 'D' INTO STRUT. 6CFW BOTH SIDES

> 'D'

REFER SCHEDULE FOR CLEATS AND BOLTS

STRUT SIZE	PLATE SIZE	BOLTS
114.3 CHS	10 x 130	2M20 8.8/S
139.7 CHS	10 x 180	2M20 8.8/S
165.1 CHS	10 x 200	2M20 8.8/S
168.3 CHS	12 x 200	2M24 8.8/S

TYPICAL SLOTTED STRUT/BRACE
CONNECTION DETAIL
SCALE N.T.S.

Diagram illustrating the connection details for a beam-to-column joint, showing three configurations: Internal Support, End Support (UB), and End Support (PFC).

Internal Support: Shows a beam profile (UB or PFC) connected to a column. The connection details include:

- CAP PLATE AS NOTED IN SCHEDULE, 6CFW
- 10 FULL DEPTH STIFFENER (BOTH SIDES TO UB) 6CFW TO BEAM
- 4 BOLTS AS NOTED IN SCHEDULE. (2 BOLTS FOR PFC BEAMS)

End Support (UB): Shows a beam profile (UB) connected to a column. The connection details include:

- 10 FULL DEPTH STIFFENER (BOTH SIDES) 6CFW TO BEAM
- CAP PLATE AS NOTED IN SCHEDULE, 6CFW
- 2 BOLTS AS NOTED IN SCHEDULE

End Support (PFC): Shows a beam profile (PFC) connected to a column. The connection details include:

- 10 FULL DEPTH STIFFENER 6CFW TO BEAM
- CAP PLATE AS NOTED IN SCHEDULE, 6CFW
- 2 BOLTS AS NOTED IN SCHEDULE

BEAM PROFILE (PFC OR UB)	BOLTS	CAP PLATE THICKNESS
UP TO 380 PFC / 360 UB	M16 8.8/S	10
UP TO 610 UB	M20 8.8/S	12

BEAM PROFILE	BOLTS
UP TO 180 PFC / 180 UB	2 M16 8.8S
UP TO 250 PFC / 250 UB	2 M20 8.8S
UP TO 300 PFC / 360 UB	3 M20 8.8S
UP TO 380 PFC / 410 UB	4 M20 8.8S
UP TO 460 UB	5 M20 8.8S
UP TO 530 UB	6 M20 8.8S

10 CLEAT, 6CFW BOTH SIDES

10 STIFFENER

TRANSFER BEAM

BEAM PROFILE (UB OR PFC)

BOLTS AS NOTED IN SCHEDULE

COLUMN

BEAM PROFILE	BOLTS
UP TO 180 PFC / 180 UB	2 M16 8/8 S
UP TO 250 PFC / 250 UB	2 M20 8/8 S
UP TO 300 PFC / 360 UB	3 M20 8/8 S
UP TO 380 PFC / 410 UB	4 M20 8/8 S

FOR LOAD BEARING COLUMNS, PROVIDE CAP PLATE AND STIFFENERS (REFER TYPICAL COLUMN CONNECTION DETAILS).
FOR NON LOAD BEARING COLUMNS, PROVIDE 10 CLEAT, 2M16 8.8S BOLTS IN VERTICALLY SLOTTED HOLES, 20mm MIN. CLEARANCE TO BEAM, U.N.O. INNER COLUMN NOT TO BE LOAD BEARING

ALL CONNECTIONS SHOP WELDED 60PW ALL ROUND. WEBSHING MEMBERS MAY BE OFFSET TO BE FLUSH WITH OUTSIDE OF COLUMNS TO ALLOW SERVICES TO RUN PAST.

LOW SIDE OF BOTTOM DIAGONAL TOWARDS INSIDE OF BUILDING, U.N.O.

REFER TYPICAL BRACING COLUMN BASE PLATE DETAILS

10 CAP PLATE, 2M16 8.8S BOLTS TO WALL TIE

10 CLEAT, 2M16 8.8S BOLTS, U.N.O.

WALL TIE

REFER TYPICAL BEAM TO COLUMN CAP PLATE DETAIL

K-BRACE WEBSHING 'KB1'

REFER FRAMING PLANS AND MEMBERS SCHEDULES

ANGLE 'α' TO BE MIN. 30° AND MAX 60°

PROVIDE ADDITIONAL WEBSHING MEMBERS AS REQUIRED FOR TALL AND NARROW UNITS

MINIMUM DISTANCE AS REQUIRED FOR BUILDABILITY

CAST-IN PLATE REQUIRED FOR COLUMNS ON EDGE OF SLAB (REFER TYPICAL DETAILS)

NOTE: REFER FRAMING PLANS FOR ALL MEMBER SIZES

TYPICAL K-BRACE DETAILS