PROPOSED THREE NEW DOUBLE STOREY DWELLINGS
LOT 1, NO. 17 RAILWAY PARADE, SEAFORD

GENERAL

1. PRIOR TO THE COMMENCEMENT OF WORK CONTRACTOR/BUILDER SHALL :
   - 1.1. READ THESE DRAWINGS IN CONJUNCTION WITH ALL ARCHITECTURAL AND OTHER ENGINEER/CONSULTANT'S DRAWINGS, SPECIFICATIONS AND ALL OTHER WRITTEN INSTRUCTIONS AS MAY BE ISSUED DURING THE COURSE OF THE WORKS.
   - 1.2. ENSURE THAT THE WORKS CAN BE CONSTRUCTED AS DESIGNED. IF THE WORK CANNOT BE CARRIED OUT AS SHOWN THE PROJECT ENGINEER IS TO BE NOTIFIED IMMEDIATELY.
   - 1.3. REFER ANY DISCREPANCIES OR UNFORESEEN CHANGE OF SITE CONDITIONS TO THE RELEVANT SUPERINTENDENT, ENGINEER OR/AND ARCHITECT BEFORE PROCEEDING WITH THE WORKS ON SITE, AND NOTIFY ALL VARIATIONS ARISING FROM THE CLARIFICATION/ ADJUSTMENTS OF THE DISCREPANCIES (IF ANY) TO ALL PARTIES.
   - 1.4. CONFIRM ALL RELEVANT DIMENSIONS FROM THE ARCHITECT'S DRAWINGS OR FROM SITE. ENGINEER'S DRAWINGS MUST NOT BE SCALED.
   - 1.5. SETOUT AND CHECK ALL LEVELS AND MEASUREMENTS ON SITE.
   - 1.6. REVIEW AND CHECK ALL PROPOSED MEMBER SIZE AND MATERIALS SHOWN IN ENGINEERING DRAWINGS.
   - 1.7. OBTAIN ALL RELEVANT AND NECESSARY PERMITS AND APPROVALS FROM THE RELEVANT AUTHORITIES.
   - 1.8. ALLOW MINIMUM 48 HOURS NOTICE FOR ALL ENGINEERING INSPECTIONS IN ANY STAGE OF WORKS.
   - 1.9. SEEK FOR ENGINEERS, ARCHITECT AND CLIENT'S WRITTEN APPROVAL PRIOR TO PROVIDING ANY SUBSTITUTIONS.
   - 1.10. CHECK THAT ENGINEERING DRAWINGS BEING USED FOR PROCUREMENT, FABRICATION AND BUILD ON SITE ARE THE LATEST REVISION AND 'ISSUED FOR CONSTRUCTION'.
   - 1.11. VERIFY ALL LOCATION, SIZE AND DEPTH OF ALL EXISTING SERVICES. CONTRACTOR MUST ALLOW FOR RELOCATION OF EXISTING SERVICES (IF REQUIRED) AND SHALL MAKE ALL APPLICATIONS AND PAY ALL FEES RELEVANT TO THE APPLICABLE AUTHORITY. NOTE THIS OFFICE MAY NOT BE IN POSSESSION OF ALL INFORMATION DETAILING EXISTING SERVICES AT THE TIME OF ISSUE.

2. DURING CONSTRUCTION OF WORK CONTRACTOR/BUILDER SHALL:
   - 2.1. IT IS THE CONTRACTORS RESPONSIBILITY TO MAINTAIN THE STRUCTURE IN A STABLE CONDITION AND ENSURE THAT NO PART OF THE STRUCTURE IS OVERSTRESSED UNDER CONSTRUCTION ACTIVITIES. AS4801 AND THE REQUIREMENTS OF ALL RELEVANT AUTHORITIES ARE TO BE COMPLIED WITH.
   - 2.2. ADEQUATELY DRAIN THE SITE DURING ALL STAGES OF CONSTRUCTION. ALL WATER RUN-OFF SHALL BE CONTROLLED AT ALL TIMES INCLUDING SURFACE DRAINAGE , BUILDING RUN-OFF, AC CONDENSERS, HW OVERFLOW, WATER TANKS AND ADJOINING PROPERTIES. TEMPORARY DOWNPIPES ARE RECOMMENDED TO COLLECT WATER FROM THE ROOFED AREAS.
   - 2.3. REINSTATE ANY PAVEMENT, FOOTPATHS, DRIVEWAYS, ROADWAYS, KERBS , R.O.W.'S , NATURE STRIP OR EXISTING FEATURES OR ASSETS DAMAGED DURING THE COURSE OF THE CONSTRUCTION AND MAKE GOOD TO THE SATISFACTION OF THE CLIENT AND RELEVANT AUTHORITIES' STANDARDS AND SPECIFICATIONS. BUILDER/CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ANY RECTIFICATION REQUIRED ON SITE.
   - 2.4. REINSTATE ALL NATURE STRIPS AND LAWN AREAS OUTSIDE PRIVATE PROPERTY WITH TOP SOIL AND SEEDED.
   - 2.5. 2.4. DOCUMENT THE PROJECT CONSTRUCTION METHOD AND `AS BUILT' CONDITIONS FOR FUTURE MAINTENANCE AND DEMOLITION AT THE END OF THE LIFE OF THE STRUCTURE.

3. ALL DIMENSIONS ARE IN MILLIMETERS OR METERS UNLESS NOTICED OTHERWISE (U.N.O).
4. SITES SHOULD BE DRAINED SO THAT WATER CANNOT POND AGAINST OR NEAR THE HOUSE. THE GROUND IMMEDIATELY ADJACENT TO THE HOUSE SHOULD BE GRADED AWAY TO FALL 50mm OVER THE FIRST METER. WHERE THIS IS IMPRACTICABLE (IE: ON SEVERE SLOPING SITES) USE A.G. DRAINS ADJACENT TO FOOTINGS WHERE THE GROUND FALLS TOWARDS THE BUILDING. (REFER TO DETAILS BELOW).
5. BUILDER/CONTRACTOR SHALL REFER AND APPLY THESE NOTES AND DETAILS IN ANY SUBSEQUENT ENGINEERING INSTRUCTIONS, U.N.O.
6. CONSTRUCTION METHODS AND TEMPORARY WORKS ARE RESPONSIBILITY OF THE RELEVANT CONTRACTOR.
7. MATERIAL AND WORKMANSHIP ARE TO BE IN ACCORDANCE WITH THE RELEVANT AUSTRALIAN STANDARDS, SAA CODES, BUILDING CODE, BCA/NCC REQUIREMENTS UNLESS OTHERWISE NOTED IN THE PROJECT SPECIFICATION.
8. NOMINATION OF PROPRIETARY PRODUCTS DOES NOT INDICATE EXCLUSIVE PREFERENCE. SIMILAR ALTERNATIVE ITEMS CAN BE USED IF APPROVED BY ENGINEER. PROPRIETARY PRODUCTS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS AND DETAILS.
13. REFER ARCHITECTURAL DRAWINGS FOR ALL FINISHES.
14. ALL WATERPROOFING TO ARCHITECTS DETAILS.
15. BUILDER/CONTRACTOR SHALL REMOVE ANY WASTE/SURPLUS MATERIAL OFF SITE AND IMPLEMENT SOIL AND WATER MANAGEMENT PROCEDURE TO AVOID EROSION, CONTAMINATION AND SEDIMENTATION OF THE SITE SURROUNDING AREAS AND DRAINAGE SYSTEMS.
16. THE STRUCTURAL WORK SHOWN ON THESE DRAWINGS HAS BEEN DESIGNED FOR THE FOLLOWING LIVE LOADS:
    - 16.1. FLOOR= 1.5kPa
    - 16.2. ROOF= THE GREATER OF 0.25kPa OR (1.8/A + 0.12)
    - 16.3. BALCONY= 2kPa
    - 16.4. GARAGE= 2.5kPa
17. XSTRUCT ACCEPTS NO RESPONSIBILITY FOR THE WORKS COMPLETED ON SITE UNLESS THE WORKS ARE INSPECTED AND APPROVED BY THE ENGINEER FROM THIS OFFICE DURING CONSTRUCTION.
18. THE DESIGN/DRAWINGS ARE PART OF THE BUILDING CONTRACT ENTERED INTO BY THE CLIENT. ANY SUBSTITUTION OR AMENDMENT CONDUCTED ON SITE WILL VOID THE CERTIFIED DESIGN. ANY DEFECT OR DEVIATION FROM THE CONTRACT DOCUMENTS THAT REQUIRES ASSESSMENT AND DETERMINATION OF CORRECTIVE MEASURES BY THE ENGINEER SHALL BE UNDERTAKEN AT THE CONTRACTOR'S EXPENSE.

DEMOLITION NOTES

1. THE CONTRACTOR MUST TAKE ALL NECESSARY PRECAUTIONS BEFORE AND DURING DEMOLITION WORKS. WORK TO BE UNDERTAKEN STRICTLY IN ACCORDANCE WITH AS 2601 'DEMOLITION OF STRUCTURES'.
2. THE WORK IS TO BE CARRIED OUT IN ACCORDANCE WITH THE DEMOLITION CONTRACTOR'S SAFE WORK METHOD STATEMENT IN A SEQUENCE THAT MAINTAINS THE STRUCTURE IN A SAFE AND STABLE CONDITION AT ALL TIMES.
3. PRIOR TO WORKS COMMENCING THE DEMOLITION CONTRACTOR SHALL CARRY OUT AN INVESTIGATION OF THE BUILDING AND SITE AND ADVISE OF ANY MATTERS RELATING TO HAZARDOUS MATERIALS, INTERFERENCE OF SERVICES OR OTHER MATTERS WHICH MAY INFLUENCE THE PROPOSED DEMOLITION PROCEDURES.
4. ALL ELECTRICAL CABLES AND OTHER SERVICES IN THE VICINITY OF PROPOSED DEMOLITION SHALL BE DISCONNECTED PRIOR TO THE COMMENCEMENT OF DEMOLITION WORKS.
5. THE WORK SITE SHALL BE FULLY HOARDED TO PREVENT UNAUTHORISED PUBLIC ACCESS.
6. NOTICES DISPLAYING 'DANGER DEMOLITION WORK IN PROGRESS' OR SIMILAR ARE TO BE FIXED TO THE HOARDING.
7. NO WALL, CHIMNEY OR OTHER SIMILAR STRUCTURE SHALL BE LEFT UNSUPPORTED IN SUCH A DANGEROUS CONDITION IT MAY COLLAPSE DUE TO WIND OR VIBRATIONS.
8. PROTECTIVE OUTRIGGERS SHALL BE INSTALLED WHERE NECESSARY TO GUARD AGAINST DANGER TO LIFE OR PROPERTY.
9. ALL ASBESTOS ON SITE SHALL BE REMOVED BY AN ACCREDITED ASBESTOS REMOVALIST REGISTERED WITH THE OCCUPATION HEALTH AND SAFETY AUTHORITIES.
10. THE DEMOLISHER MUST NOT CARRY OUT ANY WORKS ON OVER OR IN THE AIR SPACE OF AN ADJOINING PROPERTY WITHOUT THE PRIOR APPROVAL.

PREPARATION OF SUB-BASE FOR SLABS ON GROUND

1. CLEAR AREA UNDER SLAB OF ALL TOP SOIL CONTAINING HUMUS AND VEGETABLE MATTER 100mm MIN.
2. PROVIDE FILL UNDER SLAB WHERE REQUIRED TO PRODUCE FINISHED LEVELS AS SHOWN ON PLANS.
3. FILLING USED IN THE CONSTRUCTION OF A SLAB, EXCEPT WHERE THE SLAB IS SUSPENDED, SHALL CONSIST OF CONTROLLED FILL OR ROLLED FILL AS FOLLOWS:

   (a) CONTROLLED FILL IS MATERIAL THAT HAS BEEN PLACED AND COMPACTED IN LAYERS BY COMPACTION EQUIPMENT WITHIN A DEFINED MOISTURE RANGE TO A DEFINED DENSITY REQUIREMENT. EXCEPT AS PROVIDED BELOW, CONTROLLED FILL SHALL BE PLACED IN ACCORDANCE WITH AS3798.
   SAND FILL UP TO 0.8m DEEP, WELL COMPACTED IN NOT MORE THAN 0.3m THICK LAYERS BY A VIBRATING PLATE OR VIBRATING ROLLER SHALL BE DEEMED TO COMPLY WITH THIS REQUIREMENT. A SATISFACTORY TEST FOR SAND FILL NOT CONTAINING GRAVEL SIZED MATERIAL IS THE ACHIEVEMENT OF A BLOW COUNT OF 7 OR MORE PER 0.3m USING THE PENETROMETER TEST DESCRIBED IN AS1289.6.3.3.
   NON-SAND FILL UP TO 0.4m DEEP, WELL COMPACTED IN NOT MORE THAN 0.15 M LAYERS BY A MECHANICAL ROLLER SHALL BE DEEMED TO COMPLY WITH THIS REQUIREMENT. CLAY FILL SHALL BE MOIST DURING COMPACTION.

   (b) ROLLED FILL CONSISTS OF MATERIAL COMPACTED IN LAYERS BY REPEATED ROLLING WITH AN EXCAVATOR. ROLLED FILL SHALL NOT EXCEED 0.6m COMPACTED IN LAYERS NOT MORE THAN 0.3m THICK FOR SAND MATERIAL OR 0.3m COMPACTED IN LAYERS NOT MORE THAN 0.15m THICK FOR OTHER MATERIAL.
   NOTE: THE DEPTHS OF FILL GIVEN IN THIS CLAUSE ARE THE DEPTHS MEASURED AFTER COMPACTION.
4. A 50mm MIN. BASE COURSE OF PACKING SAND SHALL BE SPREAD OVER THE SUB-BASE AND TO BE THOROUGHLY ROLLED AND COMPACTED TO A SMOOTH LEVEL SURFACE. THE SAND SHALL BE MOISTENED PRIOR TO THE PLACEMENT OF A 0.2mm POLYTHENE MEMBRANE IN 3600mm MIN. WIDE SHEETS LAPPED 150mm AND JOINED WITH 75mm WIDE PRESSURE SENSITIVE TAPE. THE TAPE SHALL BE LAID UNDER ALL SLABS AND WALLS IN CONTACT WITH THE GROUND.
5. THE TOTAL FILL BENEATH THE SLAB PANELS MUST NOT EXCEED THAT SPECIFIED ABOVE, IE. THE SUM OF EXISTING FILL PLUS ANY NEW FILLING PLACED TOGETHER MUST NOT EXCEED 600mm MAX. (ROLLED), 800mm MAX. (CONTROLLED) NOTE EXISTING FILL MUST SATISFY COMPACTION REQUIREMENTS OUTLINED ABOVE.

DRAINAGE NOTES

1. DRAINAGE DESIGN IS IN ACCORDANCE WITH AS3500 - 2021.
2. ALL SURFACE DRAINAGE WORKS SHALL BE INSTALLED IN ACCORDANCE WITH CLAUSE 5.6.3 DRAINAGE REQUIREMENTS OF AS 2870-2011, WHEREIN FOR BUILDINGS ON MODERATELY, HIGHLY AND REACTIVE SITES:
   - 2.11. SURFACE DRAINAGE SHALL BE CONTROLLED THROUGHOUT CONSTRUCTION AND BE COMPLETED BY THE FINISH OF CONSTRUCTION.
   - 2.12. WHERE PIPES PASS UNDER THE FOOTING SYSTEMS, CLAY PLUGS ARE ADOPTED TO PREVENT THE INGRESS OF WATER.
   - 2.13. THE BASE OF TRENCHES SHALL SLOPE AWAY FROM THE BUILDING.
3. FOR BUILDINGS ON HIGHLY AND REACTIVE SITES, DRAINER SHALL PROVIDE DRAINAGE ARTICULATION TO ALL STORMWATER, SANITARY PLUMBING DRAINS AND DISCHARGE PIPES IN ACCORDANCE WITH CLAUSE 5.6.4 PLUMBING REQUIREMENTS, WHEREIN FLEXIBLE JOINTS IMMEDIATELY OUTSIDE BUILDING AND COMMENCING WITHIN 1m OF THE BUILDING PERIMETER ARE REQUIRED TO ACCOMMODATE THE REQUIRED DIFFERENTIAL MOVEMENT BASE ON THE SOIL CLASSIFICATION, REFER TABLE 'MIN. REQUIREMENTS FOR EXPANSION AND ALLOWABLE IN FITTINGS. REFER TO TABLE BELOW.

MINIMUM REQUIREMENT FOR EXPANSION/FLEXI JOINTS (IF REQUIRED)

SITE CLASS	DESIGN Ys MOVEMENT (mm)	MIN. EXPANSION JOINT CAPACITY REQUIREMENT	ALLOWABLE ROTATION
E	Ys >75	150mm	15°
H2	60<Ys ≤ 75	90mm	15°
H1	40<Ys ≤ 60	50mm	15°
M	Ys<40	MIN. 25mm LAGGING THROUGH FOOTING	N/A

TREE EFFECT NOTE

1. TREE EFFECTS ARE TAKEN INTO CONSIDERATION IN THE DESIGNS (IDENTIFIED AT THE TIME OF SOIL INVESTIGATION).
2. BUILDER TO REMOVE ALL TREES AND TREE ROOTS/MATERIAL OVER THE PROPOSED BUILDING AREA;
3. ANY SOFT OR LOOSE MATERIAL THAT DOES NOT RESPOND TO COMPACTION SHOULD BE EXCAVATED TO ACHIEVE A FIRM BASE, BACKFILL HOLES WITH NON POROUS MATERIAL, COMPACTED IN 150mm MAXIMUM LAYERS.
4. THERE ARE SIGNIFICANT TREES IN THE VICINITY OF THE PROPOSED WORKS. WE HAVE ATTEMPTED TO ACCOUNT FOR THEIR EFFECTS BY DESIGNING FOR A GREATER SOIL MOVEMENT THAN WOULD OTHERWISE OCCUR, HOWEVER, DUE TO THE COMPLEX TREE ROOT GEOMETRY, VARIABLE MOISTURE EXTRACTION BY THE TREE AND THE DIFFICULTY IN PREDICTING FUTURE TREE GROWTH, A PRECISE DESIGN FOR THE EFFECTS OF TREES IS OUTSIDE CURRENT KNOWLEDGE. THE OWNER MUST BE AWARE THAT ALTHOUGH PRECAUTIONS HAVE BEEN TAKEN FOR THE EFFECTS OF TREES IN OUR DESIGN, SOME DISTORTION MUST BE ACCEPTED. ENGINEERS ARE NOT EXPERTS IN TREE GROWTH AND CANNOT BE EXPECTED TO KNOW THE ANTICIPATED GROWTH AND MATURE HEIGHT OF TREES.
5. AT THE TIME OF SLAB DESIGN, NO TREES WERE CONSIDERED WITHIN LANDSCAPE AND NATURE STRIP. IF SITE CONDITIONS ARE TO BE CHANGED DUE TO THE INTRODUCTION OF NEW TREES, THIS OFFICE IS TO BE CONTACTED TO REVIEW THE SLAB DESIGN PRIOR TO CONSTRUCTION.

FOOTING AND SLAB NOTES

1. FOOTING AND SLAB DESIGNS SHOULD BE READ IN CONJUNCTION WITH ARCHITECTURAL DRAWINGS, CIVIL DRAINAGE DESIGN AND SOIL REPORT RELEVANT TO THIS SITE.
2. ALL WORKS, DESIGN AND MATERIALS SHALL BE IN ACCORDANCE WITH AS 2870.
3. ALL EXCAVATION SHALL :
   - 3.1. BE INSPECTED ON SITE BY THE RELEVANT AUTHORITY AND THIS OFFICE MUST BE NOTIFIED IMMEDIATELY IF THE SITE CONDITIONS VARIED FROM THOSE DESCRIBED IN THE SOIL REPORT.
   - 3.2. BE FREE OF WATER AND STABLE.
   - 3.3. NOT AFFECT SURROUNDING PROPERTIES AND SERVICES.
4. FOOTING SHALL BE FOUNDED IN MATERIALS AND DEPTH NOMINATED ON THESE DRAWINGS OR, WHEN NOT ON THE DRAWINGS, AS SHOWN IN THE SITE GEOTECHNICAL REPORT.
5. FOUNDING MATERIAL SHALL BE INSPECTED AND APPROVED BEFORE LYING MEMBRANES, FIXING REINFORCEMENT AND ORDERING CONCRETE.
6. IF THE NEW FOOTING CONSTRUCTED TO ADJACENT EXISTING FOOTING IS LESS OR EQUAL TO 1000mm, THIS OFFICE SHOULD BE CONTACTED FOR FURTHER ADVICE.
7. PROVIDE MEMBRANE IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS, AS 2870, AND NCC.
   - 7.1. MEMBRANE TO BE LAPPED 200MIN AND TAPED AT JOINTS ON MAX 50mm COMPACTED QUARRY PRODUCT (IF REQUIRED).
   - 7.2. MEMBRANE TO BE TAPED AT PENETRATIONS TO ENSURE A COMPLETE VAPOUR BARRIER IS PROVIDED. TO PREVENT PUNCTURING OR DAMAGE A PLASTIC PLATE CAN BE PLACED UNDER REINFORCEMENT SUPPORTS.
   - 7.3. MEMBRANE TO EXTEND UNDER AND TO THE SIDES OF ALL SLABS, BEAMS AND THICKENINGS.
   - 7.4. TWO LAYERS OF POLYETHYLENE MEMBRANE ARE REQUIRED FOR STRIP FOOTINGS AND BEAMS BELOW FINISHED GROUND LEVEL GREATER THAN 700mm DEEP TYPICAL U.N.O.
8. PERCHED GROUND WATER MAY OCCUR DURING HIGH PERIODS OF RAINFALL WHICH CAN LEAD TO CONSTRUCTION DIFFICULTIES. IF THIS SITUATION IS ENCOUNTERED ONSITE THIS OFFICE IS TO BE CONTACTED TO PROVIDE CONFIRMATION OF FOOTING DESIGN AND ALTERNATIVE CONSTRUCTION METHODS THAT MAY BE REQUIRED.
9. ANY OVER EXCAVATION SHALL BE BACK FILLED WITH BLINDING CONCRETE GRADE N20.
10. LOCATE FOOTING CENTRALLY UNDER WALLS AND COLUMNS (U.N.O.)
11. ADEQUATE CONSTRUCTION METHODS , TECHNIQUES AND EQUIPMENT SHALL BE USED FOR BACKFILLING TO AVOID DIFFERENTIAL SOIL PRESSURE AND PREVENT STRUCTURES OVERSTRESS AND DAMAGE.
12. USE APPROPRIATE FLEXIBLE BEDDING MORTAR FOR BRITTLE FLOOR COVERING WHERE BRITTLE AREA IS GREATER THAN 16m² (eg. CERAMIC TILES); ALTERNATIVELY IF FLEXIBLE ADHESIVE TO BE USED FOR LAYING OF TILES, MINIMUM 90 DAYS WAITING PERIOD IS REQUIRED AFTER SLAB HAS BEEN POURED.
13. TERMITE PROTECTION SHALL BE PROVIDED AS REQUIRED BY THE AUSTRALIAN STANDARDS AS 3990 AND THE LOCAL STATUTORY AUTHORITY.
14. THIS OFFICE MUST BE CONTACTED FOR FURTHER ADVICE IF ANY ADDITIONAL HEATING SYSTEMS ARE REQUIRED WITHIN THE SLAB. SLAB THICKNESS MUST BE INCREASED TO A MIN 125mm.
15. OWNERS SHALL MAINTAIN THE SLAB AS NOTED IN APPENDIX B OF AS2870 AND IN THE CSIRO PUBLICATION 'BTF16 FOUNDATION MAINTENANCE AND FOOTING PERFORMANCE - A HOMEOWNERS GUIDE'. IT IS THE BUILDERS RESPONSIBILITY TO ENSURE THE OWNER IS INFORMED OF THESE REQUIREMENTS.
16. FOUNDATION MATERIAL TO BE APPROVED BEFORE POURING CONCRETE FOR A SAFE BEARING CAPACITY OF:
    - 16.1. 50kPa- WAFFLE SLAB
    - 16.2. 100kPa- STRIP AND PAD FOOTING
    - 16.3. 100kPa- RAFT SLAB BEAMS
    - 16.4. 250kPa- BORED PIERS
    - 16.5. FOR SCREW PILES BASED ON TEST PILE
17. THE BUILDER SHALL BE RESPONSIBLE FOR MAINTAINING ANY EXCAVATION IN A STABLE CONDITION WITHOUT ADVERSELY AFFECTING SURROUNDING PROPERTY OR GROUND SERVICES. THIS INCLUDES OBTAINING ALL NECESSARY APPROVALS FOR SHORING SYSTEMS AND THEIR EXPECTED DURATION ON SITE. STABILITY OF EXCAVATION TO BE RE-ASSESSED IF DELAYS GREATER THAN THREE DAYS OCCUR.
18. FOOTING MUST NOT UNDERMINE EXISTING FOOTING OR BE UNDERMINED BY PROPOSED EXCAVATION.

OCCUPATIONAL, HEALTH AND SAFETY

1. FOR ALL WORKS CONDUCTED ON THIS PROJECT, THE BUILDER SHALL HAVE ALL APPROPRIATE AND SUFFICIENT SAFETY MEASURES AND PROCEDURES IN PLACE.
2. DEEP TRENCHES MAY EXIST ON THIS SITE. BUILDER TO ENSURE NECESSARY SAFETY MEASURES ARE TAKEN TO PREVENT FALL AND TRIPPING HAZARDS ARE ELIMINATED.
3. FOR LARGE SPAN BEAMS (≥ 6000mm), BUILDER TO ENSURE SEAT PLATES/ANGLES TO STEEL COLUMNS FOR MAJOR BEAMS AND LINTELS ARE INSTALLED FOR SAFER CONNECTION, BOLTING AND SITE WELDING.
4. ADEQUATE PROPPING MAY BE REQUIRED FOR ANY RETAINING/LOAD BEARING WALLS ON BOUNDARIES. TEMPORARY SHORING MAY BE REQUIRED.
5. PROVISIONS SHALL BE MADE FOR APPROPRIATE DISTANCE FOR ROOF BATTENS/RAFTERS TO PROVIDE A SAFE WORKING PLATFORM DURING ROOF INSTALLATION AND WORKING AT HEIGHTS.
6. BUILDER MAY NEED TO BE AWARE OF APPROPRIATE MEASURES TO DEAL WITH HAZARDOUS MATERIALS SUCH AS ASBESTOS WHICH STILL CAN BE FOUND IN SERVICE PITS.
7. IF A CRANE IS REQUIRED, THE BUILDER IS TO PROVIDE ADEQUATE SAFETY MEASURES FOR CRANE USAGE AROUND POWER LINES.
8. IF ANY DIGGING IS REQUIRED OUTSIDE OF SITE BOUNDARIES, INFORMATION REGARDING EXISTING COUNCIL ASSETS NEED TO BE SOUGHT FROM "DIAL BEFORE YOU DIG".
9. THE SAFETY CONCERNS AND HAZARDS IDENTIFIED ABOVE REPRESENT COMMONLY OCCURRING RISKS. THE LIST DOES NOT COVER THE FULL RANGE OF RISK AVOIDANCE MEASURES REQUIRED.

WELDING AND BOLTING

1. ALL WELDING SHALL BE IN ACCORDANCE WITH AS 1554 AND CURRENT CODES OF PRACTICE. ALL FILLET WELDS SHALL BE AT LEAST 6mm FILLET CONTINUOUS FOR THE FULL CONTACT OF THE MEMBER, UNLESS OTHERWISE NOTED. BUTT WELDS MUST DEVELOP THE FULL TENSILE STRENGTH OF THE MEMBER UNLESS OTHERWISE NOTED. ALL WELDING SHALL BE CATEGORY "SP", UNLESS OTHERWISE NOTED.
2. BOLTING SYMBOL EXAMPLE: 2M 10 - 4.5/S
   --- (2) NUMBER OF BOLTS
   --- (M10) DIAMETER IN mm
   --- (4.6) STRENGTH GRADE
   --- (S) SNUG TIGHT (BOLTING PROCEDURE)
3. ALL BOLTS SHALL BE HIGH TENSILE TO AS 1252, USED IN CONFORMITY WITH AS 4100. U.N.O.
   COMMERCIAL GRADE BOLTS DENOTED: M20 4.6/S
   HIGH TENSILE BOLTS FULLY TENSIONED: M20 8.8/TF
   HIGH TENSILE BOLTS IN BEARING, BUT TENSIONED: M20 8.8/TB
   HIGH TENSILE BOLT TO SNUG TIGHT: M20 8.8/S
4. ALL BOLTS SHALL BE HOT DIP GALVANIZED.
5. WHERE FULLY TENSIONED BOLTS ARE REQUIRED, TENSIONING SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF AS 4100 USED IN CONFORMITY WITH AS 1252. ALL BOLT HOLES SHALL BE 2mm LARGER THAN THE NOMINAL BOLT DIAMETER, UNLESS OTHERWISE NOTED. ALL CLEATS TO BE 10mm THICK UNLESS OTHERWISE NOTED. HIGH TENSILE BOLTS SHALL NEVER BE WELDED.
6. PROVIDE 2-M20 8.8/S BOLTS TO ALL STRUCTURAL STEEL CONNECTIONS UNLESS NOTED OTHERWISE.

REINFORCEMENT

1. ALL REINFORCEMENT SHALL BE SUPPORTED IN ITS CORRECT POSITION SO AS NOT TO BE DISPLACED DURING CONCRETING ON APPROVED BAR CHAIRS AT 1.0m MAX CRS BOTH WAYS. WHERE REQUIRED PROVIDE SUPPORT BARS N16 AT 1.0M MAX CRS.
2. REINFORCEMENT IS SHOWN DIAGRAMMATICALLY AND NOT NECESSARILY IN TRUE PROJECTION.
3. BAR NOTATION GIVES THE FOLLOWING INFORMATION IN THIS ORDER: NO. OF BARS, TYPE, BAR SIZE (mm), SPACING (mm), LAYER. E.G. 2-N16-250-B(LL)
4. REINFORCEMENT SHALL BE EVENLY DISTRIBUTED OVER THE WIDTHS SHOWN (U.N.O.).
5. ALL REINFORCEMENT FOR ANY ONE POUR SHALL BE COMPLETELY PLACED AND TIED PRIOR TO INSPECTION BY THE ENGINEER OR ARCHITECT. NO CONCRETE SHALL BE POURED UNTIL REINFORCEMENT HAS BEEN INSPECTED AND APPROVED BY RELEVANT BUILDER INSPECTOR.
6. ALL REINFORCEMENT AND INSERTS SHALL BE SUPPORTED AND HELD IN THE DESIGN LOCATION BY APPROVED CHAIRS, SPACERS OR TIES. BAR CHAIRS SHALL BE PLACES AT MINIMUM 1000mm CENTRES IN TWO DIRECTIONS (U.N.O.)
7. TRENCH MESH IN BEAMS TO BE LAID CONTINUOUSLY WITH EACH LAYER BEING LAPPED FOR ITS FULL WIDTH AT INTERSECTIONS AND FOR A MINIMUM OF 500mm AT SPLICES. THE TRENCH MESH SHALL BE OVERLAPPED BY THE WIDTH OF THE FABRIC AT T & L JUNCTIONS.
8. SPLICES IN REINFORCEMENT SHALL BE MADE ONLY IN POSITIONS SHOWN. WELDING OF REINFORCEMENT WILL NOT BE PERMITTED UNLESS SHOWN ON THE STRUCTURAL DRAWINGS.
9. REINFORCEMENT TO BE CLEAN TO ENSURE ADEQUATE BOND WITH CONCRETE.
10. PROVIDE 2N12 x 1200 LONG TOP BARS DIAGONALLY ACROSS RE-ENTRANT CORNERS OF SLABS, TIED UNDER TOP FABRIC (TYPICAL).
11. CLEAR COVER TO FACE OF ALL REINFORCEMENT AND CONCRETE STRENGTH SHALL CONFORM TO THE FOLLOWING TABLE U.N.O. ON THE DRAWINGS.

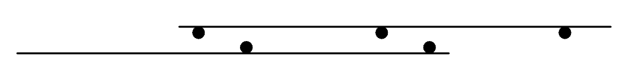
EXPOSURE CONDITIONS	COVER (mm)		
	F'c=25	F'c=32	F'c=40
1. SURFACES OF MEMBERS IN CONTACT WITH THE GROUND (A) SURFACES PROTECTED BY DAMP PROOF MEMBRANE	30	30	30
(B) UNPROTECTED SURFACES	50	45	40
2. SURFACES OF MEMBERS IN INTERIOR ENVIRONMENTS (I.E. FULLY ENCLOSED WITHIN A BUILDING).	25	25	25
3. SURFACES OF MEMBERS IN ABOVE GROUND EXTERIOR ENVIRONMENTS.	60	40	30

12. LAP REINFORCEMENT ONLY AT LOCATIONS SHOWN ON THE DRAWINGS OR AS APPROVED. UNLESS NOTED OTHERWISE, LAP ALL BARS AS TABULATED BELOW:

(LAP LENGTH SHOWN IN BRACKETS APPLY TO HORIZONTAL BARS WITH MORE THAN 300mm OF CONCRETE CAST BELOW THE BAR)

BAR SIZE	MIN LAP LENGTH (mm)	
N12	625	(800)
N16	850	(1125)
N20	1100	(1450)
N24	1400	(1800)
N28	1700	(2200)
N32	2000	(2600)
N34	2200	(2825)

13. FABRIC SHALL BE LAPPED SUCH THAT THE TWO OUTERMOST WIRES OF ONE SHEET OVERLAP THE TWO OUTERMOST WIRES OF THE OTHER SHEET BY 25mm MINIMUM.



14. FOR EVERY 100mm EXTRA INCREASE IN WIDTH FOR EXTERNAL AND INTERNAL BEAMS, PROVIDE 1N16 BAR TOP AND BOTTOM.

CONCRETE

1. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH AS 3600, AS 2870, AS 3610, AS 1379, AS 1478, AS 3582, AS 5100 AND AS3972.
3. ALL CONCRETE SHALL BE GRADE 25MPa - 100mm SLUMP (U.N.O.).
4. CONCRETE SHALL BE CURED BY AN APPROVED METHOD FOR AT LEAST 7 DAYS AFTER PLACEMENTS.
5. CONCRETE SHALL BE COMPACTED USING MECHANICAL VIBRATOR, TO GIVE A MAXIMUM COMPACTION AND AVOID ANY SEGREGATION OF THE CONCRETE.
2. HOLES, CHASES OR PIPES OTHER THAN THOSE SHOWN ON THE STRUCTURAL DRAWINGS SHALL NOT BE PLACED IN CONCRETE MEMBERS WITHOUT THE PRIOR APPROVAL OF THE ENGINEER.CONDUITS, PIPES AND THE LIKE SHALL NOT BE PLACED WITHIN THE CONCRETE COVER.
3. CONCRETE SLABS AND BEAMS ARE TO BE POURED TOGETHER (U.N.O.).
4. SIZE OF CONCRETE ELEMENTS DOES NOT INCLUDE THICKNESS OF APPLIED FINISH.CONCRETE SIZES MUST NOT BE REDUCED OR HOLED IN ANY WAY WITHOUT THE ENGINEER APPROVAL.
5. THE BEAM DEPTH IS WRITTEN FIRST ON THE DRAWINGS AND INCLUDES SLAB THICKNESS (IF ANY).
6. CONCRETE TO BE KEPT FREE OF SUPPORTING BRICKWORK BY TWO LAYERS OF A SUITABLE MEMBRANE (MALTHOID, ETC.), OR AS DIRECTED BY THE ENGINEER. VERTICAL FACES OF CONCRETE TO BE KEPT FREE BY 10mm THICKNESS OF BITUMINOUS CANITE.
7. WHERE WALLS ARE NON-LOAD BEARING AT EITHER HORIZONTAL OR VERTICAL FACES THEY SHALL BE SEPARATED FROM CONCRETE OR BRICKWORK BY 10mm THICK CANITE.
8. LOCATION AND DETAILS OF CONSTRUCTION JOINTS (IF NOT SHOWN ON PLAN) SHALL BE TO FUTURE DETAIL APPROVED BY THE ENGINEER.
9. SAW JOINTS SHALL BE MADE AT A TIME APPROPRIATE TO THE CONCRETE MIX AND CLIMATIC CONDITIONS.
10. WHERE SLABS AND BEAMS ARE TO SUPPORT BRICKWORK OVER, FORMWORK AND PROPS MUST BE REMOVED BEFORE COMMENCEMENT OF BRICKWORK.
11. AS A GENERAL POLICY, XSTRUCT DO NOT RECOMMEND THE USE OF POLISHED CONCRETE. THE OWNER SHOULD BE MADE AWARE BY THE BUILDING DESIGNER AND BUILDER THAT CONCRETE IS A NATURAL MATERIAL AND THE POSSIBILITY OF SURFACE CRACK FORMATION MAY OCCUR AND CANNOT BE GUARANTEED EITHER IN THE SHORT OR LONG TERM, WE HIGHLY RECOMMEND CURING THE SLAB USING AN APPROVED CURING SPRAYED MEMBRANE.
12. WHEN NEW FOOTING IS ABUTTED TO THE ADJACENT STRUCTURES OF NEIGHBOURING BUILDING AT BOUNDARY, A MINIMUM OF 10mm THICK "ABLEFLEX" (OR APPROVED EQUIVALENT) MUST BE PLACED BETWEEN STRUCTURES (UNLESS OTHERWISE NOTED ON ENGINEERING DRAWINGS TYPICAL.
13. FORMWORK SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH AS3610. FORMWORK SHALL REMAIN IN POSITION FOR A MINIMUM OF 28 DAYS AFTER POURING OF CONCRETE UNLESS WRITTEN APPROVAL BY THE ERECTION ENGINEER/ CONTRACTOR STATING ADEQUATE CURING HAS BEEN OBTAINED.
14. ALL SERVICES PENETRATIONS PASSING THROUGH FIRE SEPARATED AREAS SHALL BE PROVIDED WITH FIRE STOP COLLARS COMPATIBLE WITH THE REQUIRED FIRE RATING.
15. ADMIXTURES SHALL NOT BE USED IF THEY HAVE A DETRIMENTAL EFFECT ON THE MECHANICAL PROPERTIES OF THE CONCRETE. WHERE SPRAYED WATER RETENTION MEMBRANE COMPOUNDS ARE USED THEY SHALL COMPLY WITH AS 3799.
16. ALL CONCRETE MEMBERS AND REINFORCEMENT MUST BE LOCATED TO WITHIN THE REQUIRED TOLERANCES SPECIFIED IN AS3600 SECTION 17.
17. CAMBER TO BEAMS AND SLAVS SHALL BE 2.6MM FOR EVERY 1M OF SPAN UNO.
18. MINIMUM STRIPPING TIMES FOR CONCRETE ELEMENTS SHALL BE AS FOLLOWS:
    - 18.1. WALLS AND COLUMNS - 3 DAYS PROVIDED THAT CURING IS MAINTAINED FOR A FURTHER 7 DAYS.
    - 18.2. BEAMS AND SLABS - 7 DAYS, PROVIDED THAT THE FULL SELF WEIGHT AND ANY SUPERIMPOSED LOADS ARE BACK-PROPPED AND CURING IS MAINTAINED FOR A FURTHER 7 DAYS (NOT REQUIRED FOR SLABS ON GROUND).
19. SLABS AND FOOTINGS WITH CONCRETE SURFACE EXPOSED TO SALINE OR ACID SULFATE SOILS WITH MAGNESIUM CONTENT MORE THAN 1000ppm OR MORE, THE FOOTINGS AND SLAB SHALL BE ISOLATED FROM THE SOIL IN ACCORDANCE WITHAS2870.
20. THE CONCRETE SHALL BE TRANSPORTED, PLACED, COMPACTED AND CURED IN ACCORDANCE WITH GOOD BUILDING PRACTICE.

STRUCTURAL TIMBERWORK

1. ALL TIMBER FRAMING IS TO BE IN ACCORDANCE WITH AS 1684-2010 RESIDENTIAL TIMBER FRAMED CONSTRUCTION, AS1720 SAA TIMBER ENGINEERING CODE.
2. ALL TIMBER STRESS GRADES NOMINATED SHALL BE IN ACCORDANCE WITH THE RELEVANT CODES AND MEANS THE STRUCTURAL QUALITY OF A TIMBER SECTION (REFER TO AS 1720).
3. TIMBER MEMBERS NOT MARKED TO CONFORM WITH AS1684.2.
4. TIMBER SIZES AND BRACING NOT NOMINATED IN THESE DRAWINGS SHALL BE IN ACCORDANCE WITH AS1684 OR THE ARCHITECTURAL DRAWINGS. ANY DISCREPANCY SHOULD BE REFEREED TO THE ENGINEER AND ARCHITECT.
5. TIMBER MUST BE STRAIGHT AND FREE FROM SIGNIFICANT DEFECTS INCLUDING BUT NOT LIMITED TO: WHITE ANT, BORER, SAP, LOOSE KNOTS, WARP, FRACTURES AND HOLES.
6. TIMBER SHALL BE STORED AND HANDLED SO AS NOT TO BE DETRIMENTAL TO THEIR PERFORMANCE OR DAMAGE THEM. REFER APPENDIX H AS 1684-2:201.
7. ALL TIMBER SHALL BE DRY, IE: LESS THAN 15% MOISTURE CONTENT AT THE TIME OF CONSTRUCTION AND SHALL BE PROTECTED AND/OR TREATED AS NOTED.
8. ALL TIMBER BEAMS AND LINTELS ARE TO BEAR ON DOUBLE STUDS (ONE JAMB AND ONE BEARING STUD), UNLESS OTHERWISE NOTED.
9. BEAMS/STUDS HAVING MORE THAN 1 MEMBER TO BE NAIL LAMINATED TOGETHER IN ACCORDANCE WITH AS 1684-2010 AND AS 1328. .
10. NAILS TO COMPLY WITH AS 2334. NAIL PENETRATION TO OTHER TIMBER MEMBER, SHALL BE 10 TIMES THE NAIL DIAMETER WHEN DRIVEN INTO THE SIDE GRAIN AND MIN. 15 TIMES THE NAIL DIAMETER WHEN DRIVEN INTO THE GRAIN END.
11. ALL EXPOSED TIMBER TREATMENT MUST BE IN ACCORDANCE WITH EXPOSURE CLASSIFICATION AS1684.2 TABLE B1, MINIMUM H3 TREATED OR DURABLE SPECIES TO BE ADOPTED TYPICAL U.N.O.
12. ALL PROPRIETARY FIXINGS SHALL BE INSTALLED TO DEVELOP THEIR MAXIMUM CAPACITY AS PER MANUFACTURERS' SPECIFICATIONS AND DETAILS.
13. ALL TIMBER FRAMEWORK SHALL BE ADEQUATELY TIED TO RESIST UPLIFT AND RACKING FORCES IN ACCORDANCE WITH AS 1684.
14. METAL FIXINGS SHALL BE COMPATIBLE WITH TIMBER GLUES AND PRESERVATIVE TREATMENT.
15. NO PENETRATIONS OR CHASES OTHER THAN THOSE NOMINATED ON THIS DRAWINGS SHALL BE MADE IN TIMBER MEMBERS WITHOUT PRIOR APPROVAL OF ENGINEER FROM THIS OFFICE.
16. PROVIDE SOLID BLOCKING (45 WIDE x D-25 DEEP) SECURELY NAILED TO JOISTS/RAFTERS (D=DEPTH OF JOIST/RAFTER) AT 1800 MAX. CRS.
17. ALL BRICKWORK LINTELS TO ARCHITECTS DETAILS. ALL BRICKWORK LINTELS TO COMPLY WITH F.3.3.3.5 OF B.C.A 2012 VOLUME 2.
18. ALL BEAMS/GIRDER & HIP TRUSSES TO BE SUPPORTED ON DOUBLE STUDS EACH END (U.N.O.)
19. BUILDER TO SUPPLY MANUFACTURERS TRUSS LAYOUT TO THIS OFFICE FOR APPROVAL PRIOR TO CONSTRUCTION. TRUSS DESIGN MUST BE IN ACCORDANCE WITH AS1720 AND AS1684. TRUSS FABRICATOR/BUILDER IS RESPONSIBLE FOR PROVIDING ADEQUATE ROOF/WALL BRACING TO ENSURE STABILITY OF THE STRUCTURE IN ACCORDANCE TO AS1684.
20. ALL TRUSSES & WALL FRAMES TO MANUFACTURER'S DESIGN & DETAILS.
21. TRUSS MANUFACTURERS MUST CHECK ASSUMPTIONS MADE FOR GIRDER TRUSSES ON ROOF FRAMING LAYOUT PLAN ON THIS DRAWINGS (IF APPLICABLE). IF ANY DISCREPANCIES ARE NOTED THIS OFFICE MUST BE CONTACTED IMMEDIATELY PRIOR TO PROCUREMENT, FABRICATION AND CONSTRUCTION.
22. ALL INTERNAL WALLS TO BE NON-LOAD BEARING (TYPICAL) UNLESS HATCHED OTHERWISE ON PLANS.

BRICKWORK/BLOCKWORK

1. ALL MASONRY CONSTRUCTIONS TO COMPLY WITH THE SAA MANSONRY CODE AS 3700.
2. THE UNCONFINED COMPRESSIVE STRENGTH FOR CLAY BRICK UNIT TO BE MIN. OF 30MPa AND COMPRESSIVE STRENGTH OF BLOCK (CONCRETE MASONRY) TO BE A MIN. OF 20MPa
3. ALL CLAY BRICKS SHALL COMPLLY WITH AS 1225.
4. WALL CAVITY TO BE 50mm (U.N.O.).
5. THE MORTAR MIX FOR UNREINFORCED MASONRY (BRICKWORK) SHALL BE 1:1:6, AND FOR REINFORCED MASONRY 1:0.25:3 SHALL BE USED WITHOUT THE APPROVAL OF THE ENGINEER.
6. FOR NON-LOAD BEARING WALLS SEE NOTES IN THE CONCRETE SECTION.
7. ARTICULATION (OR EXPANSION) JOINT SPACING MUST BE IN ACCORDANCE WITH AS4773.1 - 2015, AS4773.2 - 2015 & TECHNICAL NOTE 61 (AUG 2008) FOR ARTICULATED WALLING (U.N.O.).
8. ARTICULATION JOINTS SHALL BE POSITIONED AS INDICATED ON THIS DRAWINGS AND/OR IN THE ARCHITECTURAL PLANS
9. ALL WALL TIES MUST BE GALVANIZED AND COMPLY WITH AS 2699. OTHER CONNECTORS, TIES, BED JOINT MESH, SHALL COMPLY WITH AS 2975.
10. BUILDER/CONTRACTOR SHALL REMOVE ALL FORMWORK AND PROPS AFTER THE SPECIFIES CURING TIME TO SUPPORT BRICKWORK OVER SUSPENDED REINFORCED CONCRETE ELEMENTS.
11. ALL BLOCKWORK AND ITS TESTING SHALL COMPLY WITH THE CURRENT A.S. 3700 SAA MASONRY CODE.
12. ALL BED AND PERPENDICULAR JOINTS SHALL BE SOLIDLY FILLED WITH MORTAR, WITHOUT FURROWING, TO A NOMINAL THICKNESS OF 10mm.
13. WHERE SLAB BEARS ON MASONRY, USE TWO LAYERS OF MALTHOID OR EQUIVALENT, MINIMUM 120mm BEARING.
14. 'CLEAN OUT' OPENINGS SHALL BE PROVIDED AT THE BASE OF ALL CORES TO BE CORE FILLED. ADDITIONAL 'CLEAN OUT' OPENINGS ARE REQUIRED AT ALL HORIZONTAL BREAKS IN CONSTRUCTION.
15. MORTAR FINS PROTRUDING FROM JOINTS SHALL BE REMOVED BEFORE GROUTING CORES.
16. GROUT SHALL NOT BE POURED INTO CORES FROM ANY HEIGHT GREATER THAN 1000mm. STOP POUR 50mm BELOW TOP OF BLOCK TO PROVIDE KEY FOR THE FOLLOWING POUR. RODDING OR OTHER APPROVED MEANS SHALL BE USED TO ENSURE PROPER COMPACTION OF GROUT IN CORES.
17. WHERE R.C. BEAMS OR STEEL BEAMS BEAR ON BRICKWORK, 230mm MIN BEARING IS REQUIRED.

STRUCTURAL STEEL

1. ALL STRUCTURAL STEEL SHALL BE GRADE 250 FOR HOT ROLLED PLATES, GRADE 300PLUS FOR UB, UC PFC, ANGLES. PLATES GRADE 300 FOR WB, WC GRADE 350 FOR SHS, CHS TO AS 1163, AS 1594, AS 3678 AND AS 3679 UNLESS NOTED OTHERWISE ON THE DRAWINGS. ALL STRUCTURAL STEEL IS TO BE PROVIDED WITH ACRS CERTIFICATION PRIOR TO FABRICATION TO ENSURE COMPLIANCE WITH AUSTRALIAN STANDARDS AND REGULATIONS.
2. SHOP DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW OF CONFORMING WITH DESIGN INTENT BEFORE FABRICATION COMMENCES. ALLOW FIVE WORKING DAYS FOR OUR REVIEW.
3. CLEATS, CONNECTIONS, HOLES, LINTELS AND OTHER MISCELLANEOUS STEEL WORK SHALL BE PROVIDED AS REQUIRED BY THE ARCHITECTURAL OR OTHER CONSULTANTS DRAWINGS OR SPECIFICATIONS.
4. ALL STEELWORK EXPOSED TO THE EXTERNAL ENVIRONMENT OR INTERNAL WET/HUMID ENVIRONMENTS SHALL BE HOT-DIPPED GALVANISED WITH ZINC COATING TO MEET THE REQUIREMENTS OF AS4680. IF STEEL HOLLOW SECTIONS ARE TO BE GALVANISED, ENSURE TUBE IS NOT SEALED AT BOTH ENDS, UNLESS BREATHER HOLES ARE INCLUDED IN THE PLATES. MEMBERS WHICH ARE NEITHER GALVANISED OR FIRE-SPRAYED REQUIRE CLASS 1 SURFACE CLEANING & A PRIME-COAT 75 MICRONS (ALKYD PAINT OR SIMILAR) IN ADDITION TO ANY TOP-COAT NOTED BY THE ARCHITECT.
5. GALVANISED STEELWORK THAT IS SITE WELDED OR SUSTAINS ANY OTHER KIND OF SURFACE DAMAGE IS TO BE PREPARED TO AS 1627:2 CLASS 3 AND PRIMED WITH 2 COATS OF GALVANISE (MANUFACTURED BY JOTUN) TO MANUFACTURERS SPECIFICATIONS.
6. FOR GALVANISED STEELWORK, MATING SURFACES OR FRICTION TYPE BOLTED CONNECTIONS SHALL BE POST TREATED BY DISC ABRASION (OR EQUIVALENT) TO IMPROVE THE SURFACES SLIP FACTOR. THE TREATMENT SHALL PROVIDE THE SURFACES WITH A MINIMUM SLIP FACTOR OF 0.35 IN ACCORDANCE WITH AS 4100.
7. ALL STRUCTURAL STEELWORK TO BE GRADE 300 PLUS UNLESS NOTED OTHERWISE.
8. CAMBER TO STRUCTURAL STEEL ROOF BEAMS, TRUSSES, PORTALS, ETC.,TO BE 2mm FOR EVERY 1m OR SPAN UNLESS OTHERWISE NOTED.
9. THE STEEL FABRICATOR IS TO PROVIDE ALL CLEATS AND HOLES FOR THE FIXING OF TIMBERS ETC. REFER ALSO TO ARCHITECTS DRAWINGS FOR DETAILS
10. ALL GALVANISED STEELWORK IS TO BE FIXED USING GALVANISED FASTNERS.
11. THE STEEL FABRICATOR IS TO PROVIDE ALL CLEATS AND HOLE FOR THE CONNECTION OF ALL FRAMING MEMBERS, BATTENS AND FURRING STRIPS
12. UNLESS DETAILED OTHERWISE ALL PURLIN AND GIRT DETAILING MUST COMPLY WITH THE STANDARD DETAILS RECOMMENDED BY THE PURLIN MANUFACTURER.
13. PROVIDE PURLIN TRIMMERS TO ALL ROOF PENETRATIONS. TRIMMERS ARE TO BE THE SAME SIZE AS THE PURLINS SPECIFIED WITH A 6mm ANGLE CLEAT AND 2No. M12 BOLTS TO EACH MEMBER. PROVIDE ADDITIONAL TRIMMERS TO SUPPORT THE HIGH SIDE OF SOAKER GUTTERS. THE ENDS OF ALL TUBULAR MEMBERS ARE TO BE SEALED WITH NOMINAL THICKNESS PLATES AND CONTINUOUS FILLET WELD UNLESS OTHERWISE SHOWN.
14. PROVIDE 75x75x1.5 PRESSED GALVANISED STEEL ANGLES TO SUPPORT ANY FREE EDGES OF ROOF OR WALL SHEETING AT VALLEYS, GUTTERS AND RIDGES OR THE LIKE. TRIMMERS ARE TO BE FIXED TO STEEL MEMBERS WITH 6Ø SELF TAPPING TEKS.
15. NO PENETRATION CURTAILMENTS OF FLANGES OR WEBS ARE TO BE MADE IN STEEL MEMBERS WITHOUT WRITTEN APPROVAL OF THE CONSULTING ENGINEER.
16. ALL STEEL PURLINS SPECIFIED ON THESE DRAWINGS ARE TO BE SUPPLIED BY STRAMMIT.
17. ALL STEELWORK IS TO BE FABRICATED & ERECTED TO WITHIN THE REQUIRED TOLERANCES SET-OUT IN SECTIONS 14 & 15 OF AS4100.
18. ALL GROUTING UNDER BASEPLATES IS TO BE INSTALLED AFTER STEELWORK IS PROPERLY ALIGNED AND LEVELLED. RAMSET "PREMIER GROUT" OR EQUIVALENT 20MPa STRENGTH NON-SHRINK GROUT TO BE INSTALLED TO MANUFACTURERS SPECIFICATION UNDER PRESSURE OR RAMMING.

REFERENCE DOCUMENTATIONS

SOIL AND SITE INVESTIGATIONS
COMPANY: RESCOM CONSULTING ENGINEERS
REF No: 2240433-1
DATED: 23.02.24
SITE CLASS: P/M

ARCHITECTURAL WORKING DRAWINGS
COMPANY: CREATIVE HOUSE PLANS
REF No: Jobs/23-24/1S
DATED: 12.05.24

No.	REVISION	DATE
A	CONSTRUCTION ISSUE	10.09.24
P1	PRELIMINARY REVISION	24.07.24

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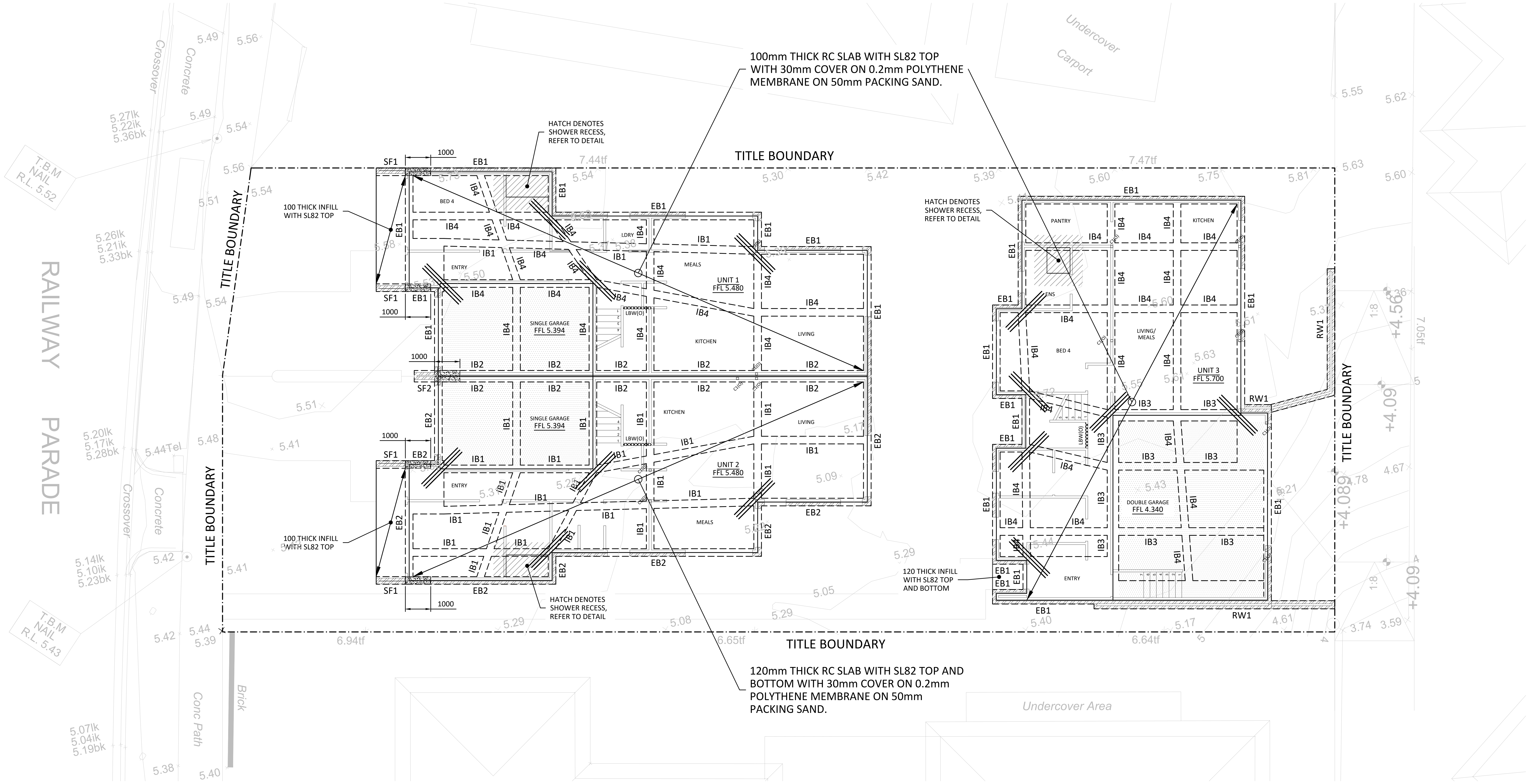
CLIENT: CREATIVE HOUSE PLANS
DRAWING TITLE: SITE PLAN & GENERAL NOTES
PROJECT TITTLE: PROPOSED THREE NEW DOUBLE STOREY DWELLINGS
PROJECT ADDRESS: LOT 1, NO.17 RAILWAY PARADE, SEAFORD
DESIGNED: YD
DRAWN: ED
DATE: 24.07.24
PAGE No: S0
SCALE: AS SHOWN - A1
DRAWING NO.: 1685
REVISION: A

FOOTING & SLAB PLAN

SCALE 1:100



DRAFTING LEGEND

☐	TIMBER STUD WALL
▨	BRICKWORK WALL
☐	DENOTES SLAB STEPDOWN
▩	DENOTES INTERNAL RIB TO MATCH EXTERNAL RIB PROPERTIES (SEE SLAB SCHEDULE)
///	DENOTES 3-N12 CRACK CONTROL BARS 2000mm LONG TIED TO UNDERSIDE OF SLAB MESH
▫ C1(O)	C1 COLUMN OVER
LBW(O)	LOAD BEARING WALL OVER
RW1	REFER TO BRICKWALL RETAINING WALL, REFER TO DETAIL AND TABLE

FOOTING LEGEND

EB1	300 WIDE x 400 DEEP EDGE BEAM, WITH 3-N12 BOTTOM. IF DEEPENED REBATE IS REQUIRED, REFER TO DETAIL.
IB1	300 WIDE x 400 DEEP INTERNAL BEAM, WITH 3-N12 TOP AND BOTTOM.
EB2	300 WIDE x 400 DEEP EDGE BEAM, WITH 3-N12 TOP AND BOTTOM. IF DEEPENED REBATE IS REQUIRED, REFER TO DETAIL.
IB2	450 WIDE x 400 DEEP INTERNAL BEAM, WITH 4-N12 TOP AND BOTTOM, REFER TO DETAIL.
IB3	450 WIDE x 400 DEEP INTERNAL BEAM, WITH 4-N12 TOP AND BOTTOM, REFER TO DETAIL.
IB4	300 WIDE x 400 DEEP INTERNAL BEAM, WITH 3-N12 BOTTOM, REFER TO DETAIL.
SF1	300 WIDE x 400 DEEP STRIP FOOTING WITH 3-L11TM TOP AND BOTTOM, FOUNDED 100mm INTO SILTY SAND WITH POLYETHYLENE MEMBRANE.
SF2	450 WIDE x 400 DEEP STRIP FOOTING WITH 4-L11TM TOP AND BOTTOM, FOUNDED 100mm INTO SILTY SAND WITH POLYETHYLENE MEMBRANE.

ALL EXTERNAL AND INTERNAL BEAMS MUST BE FOUND 100mm INTO NATURAL SILTY SAND AS NOTED IN THE SOIL REPORT. BLINDING CONCRETE MAY BE USED TO ACHIEVE FOUNDING REQUIREMENTS. THIS FOUNDING REQUIREMENT IS NOT REQUIRED IF THE BEAM IS FOUNDED ON BORED PIERS.

No.	REVISION	DATE
A	CONSTRUCTION ISSUE	10.09.24
P1	PRELIMINARY REVISION	24.07.24

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DRAWING TITLE:	FOOTING & SLAB PLAN
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PROJECT ADDRESS:	LOT 1, NO.17 RAILWAY PARADE, SEAFORD

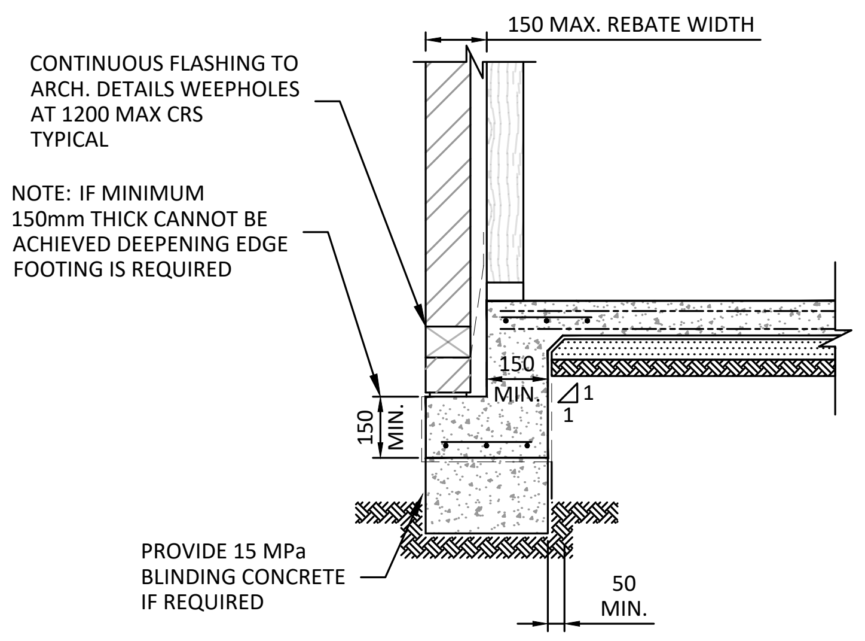
DESIGNED:	DRAWN:	DATE:
YD	ED	24.07.24

PAGE No:	SCALE:
S1	1:100 - A1

DRAWING NO.:	REVISION:
1685	A

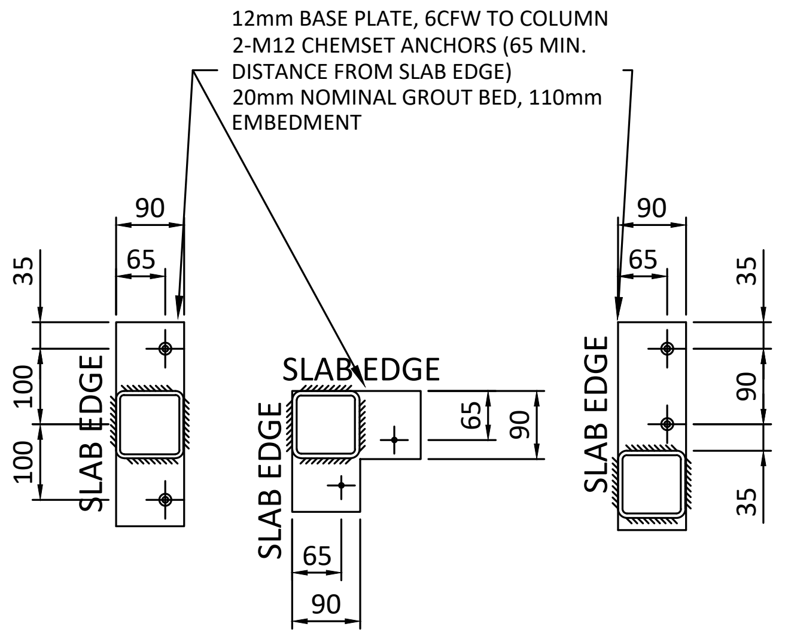
FOOTING & SLAB DETAILS

SCALE = AS SHOWN

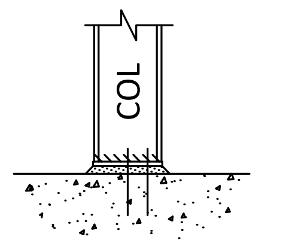


TYPICAL EXTERNAL BEAM DETAIL

SCALE = NTS



BASE PLATE PLAN



COLUMB BASE CONNECTION DETAIL

FOR INTERNAL COLUMN BASE PLATE BOLTS TO BE LOCATED ON THE CENTER OF THE BASE PLATE

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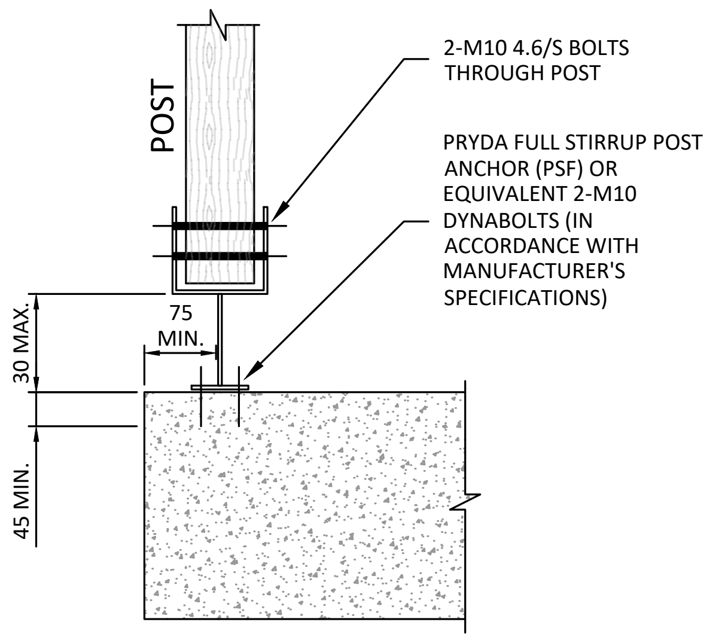

PRYDA FULL STIRRUP POST (PSF) ON CONCRETE SLAB/FOOTING DETAIL

DETAIL SHOWN FOR A 90x90 POST, WHICH IS ALSO APPLICABLE FOR 115SQ, 125SQ, 135SQ & 180SQ POST

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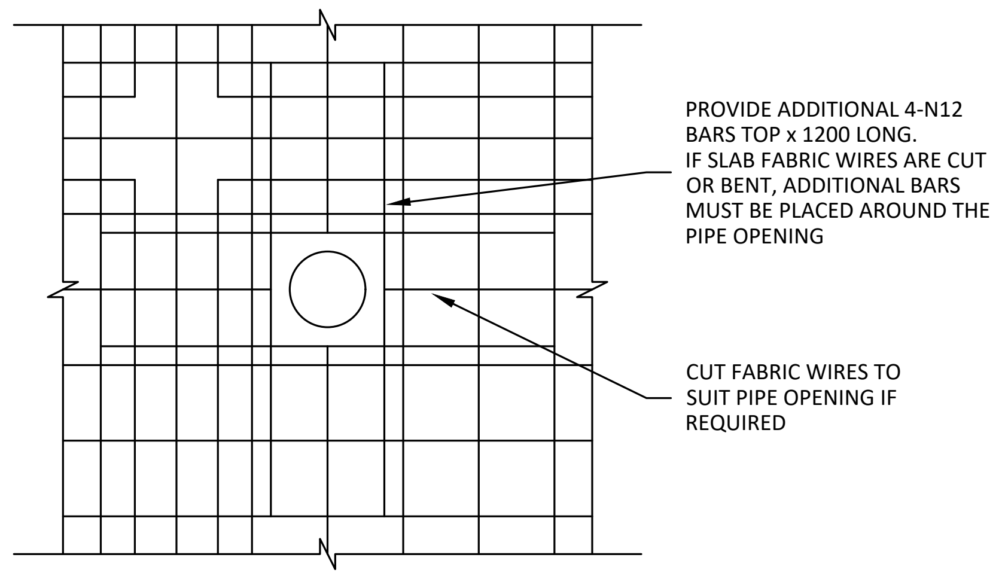

SLAB PENETRATION DETAIL

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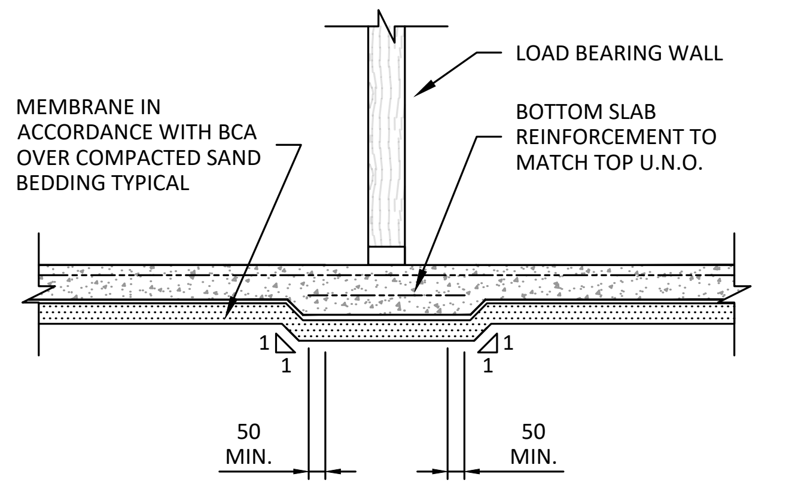

LOAD BEARING WALL ON SLAB DETAIL

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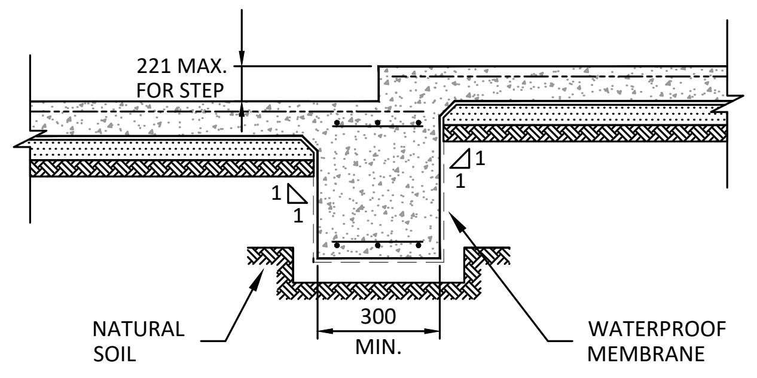
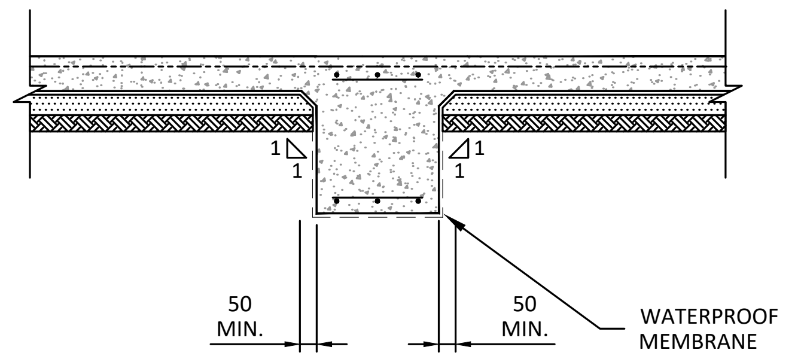


STEPDOWN DETAIL AT GARAGE/PORCH



TYPICAL INTERNAL RIB DETAIL

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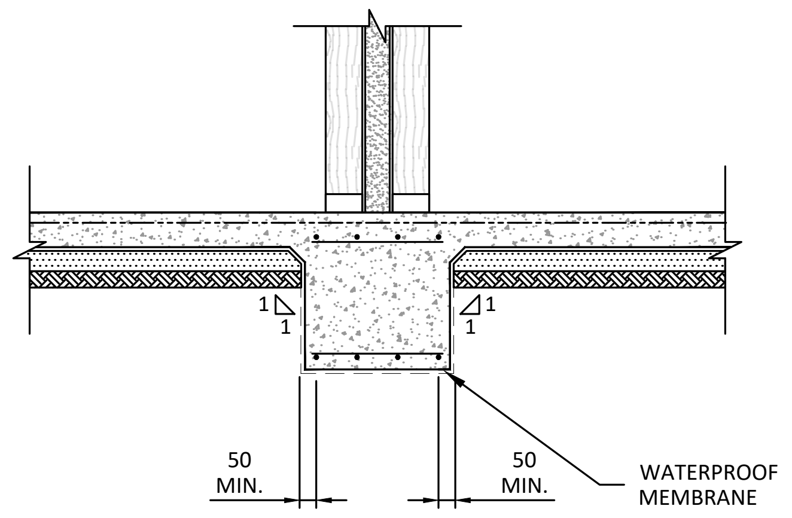

PARTY WALL FOOTING DETAIL - IB2

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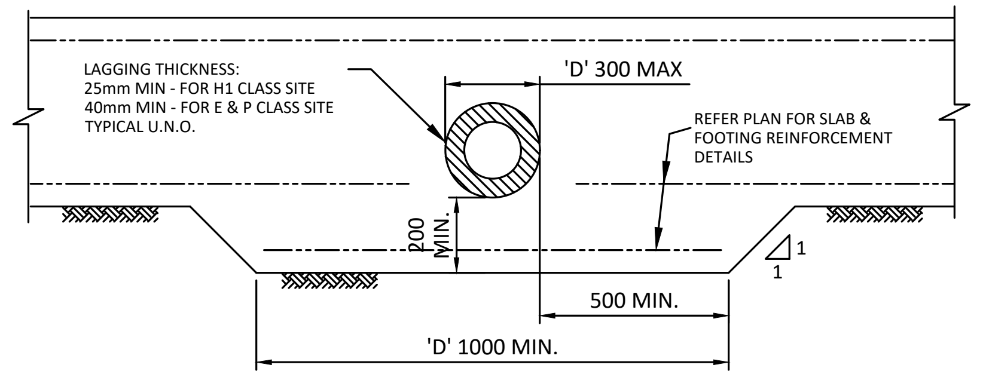

PENETRATION THROUGH FOOTING DETAIL

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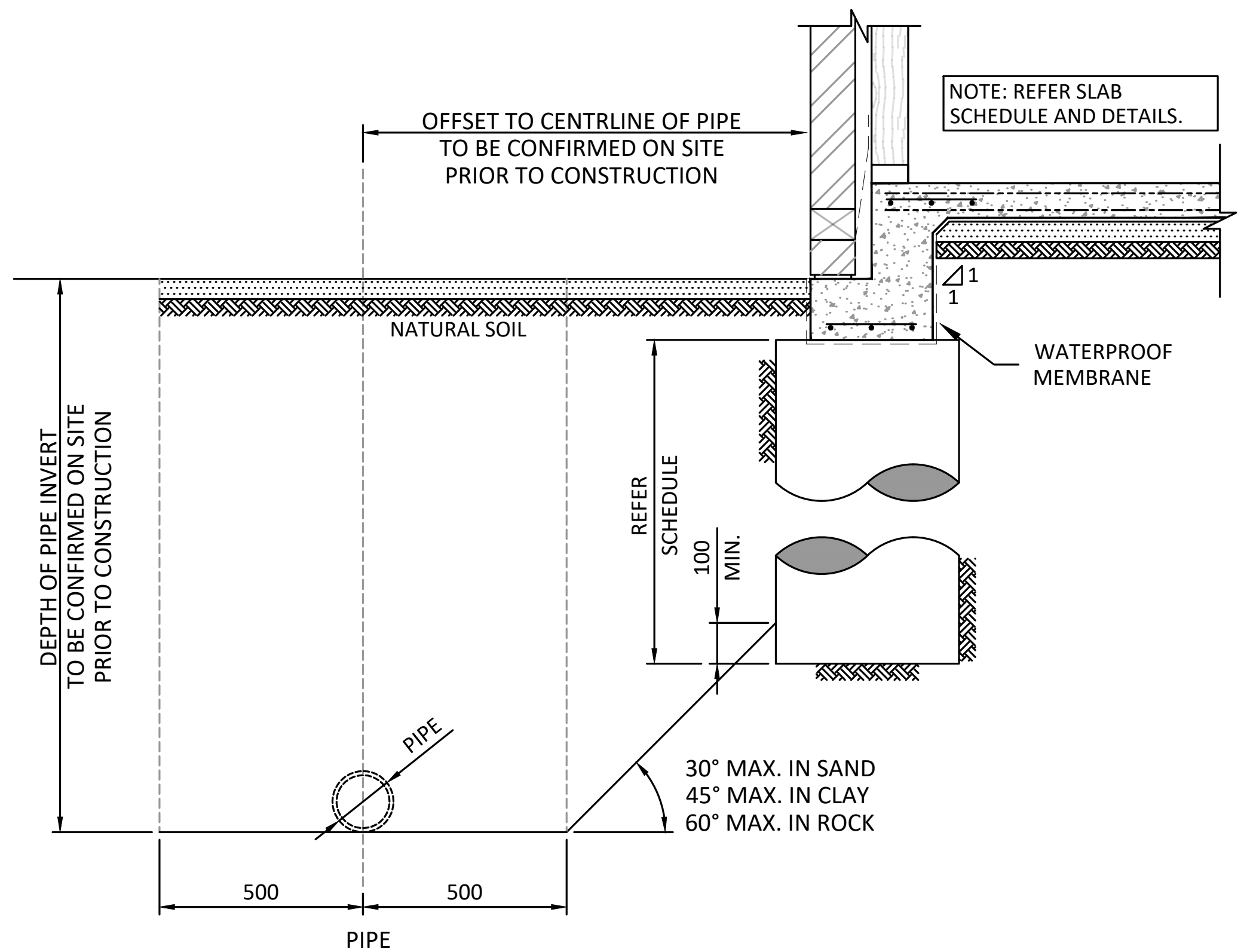

ANGLE OF REPOSE DETAL (TYPICAL)

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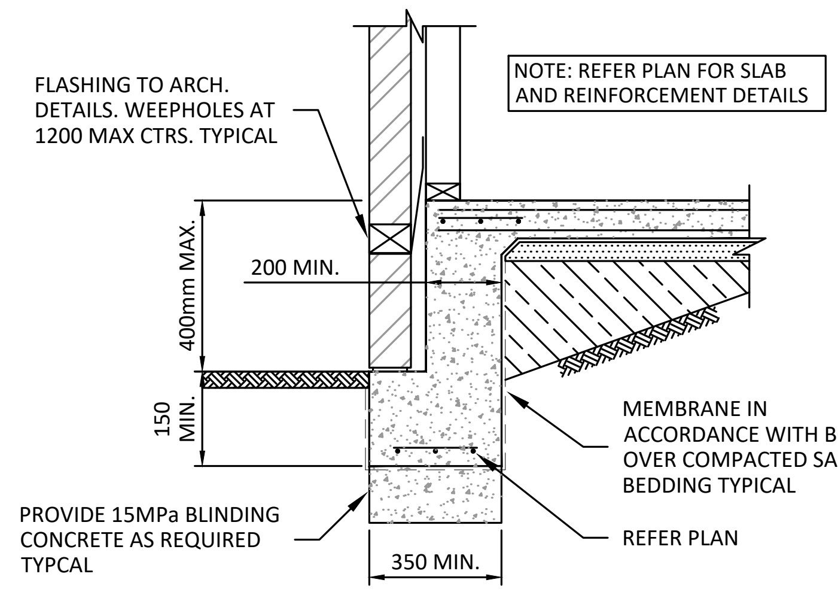

EXTERNAL RIB DEEPENED REBATE DETAIL (400mm MAX)

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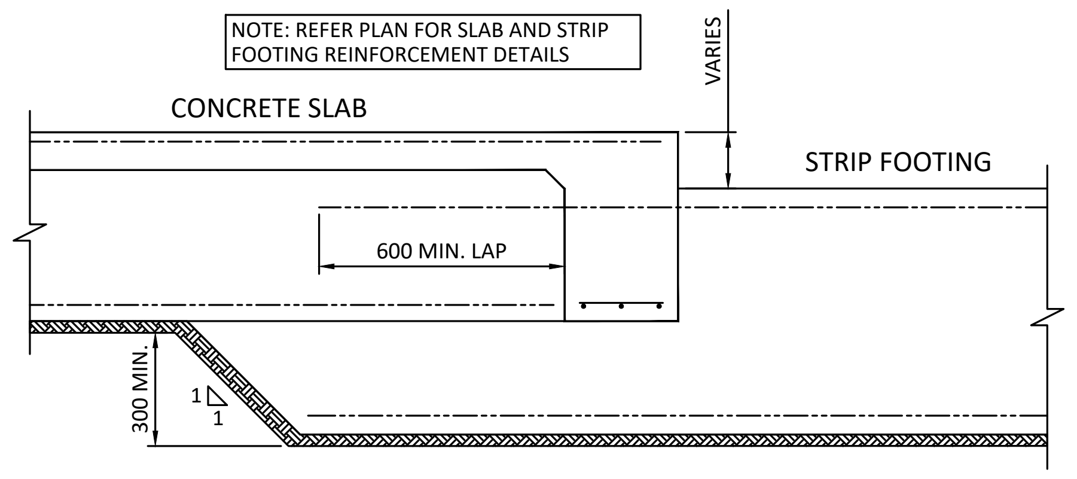
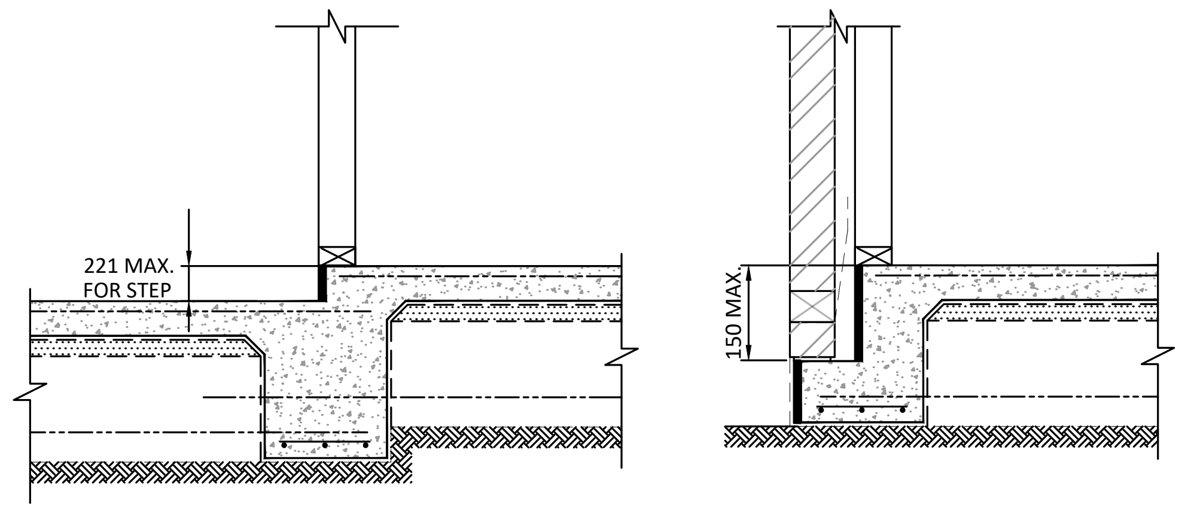
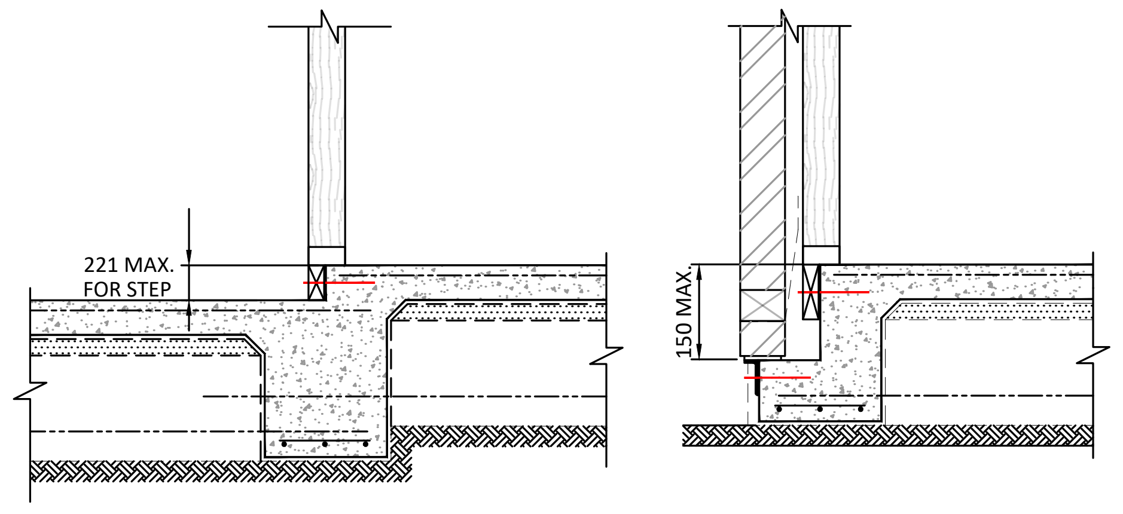


TYPICAL STRIP FOOTING TO SLAB EDGE BEAM CONNECTION DETAIL

SCALE = NTS



BRICK AND FRAME (25mm MAX) OVERHANG RECTIFICATION DETAIL (TYP.)- GROUT OPTION



BRICK AND FRAME (45mm MAX) OVERHANG RECTIFICATION DETAIL (TYP.) - TIMBER OPTION

IMPORTANT NOTES:

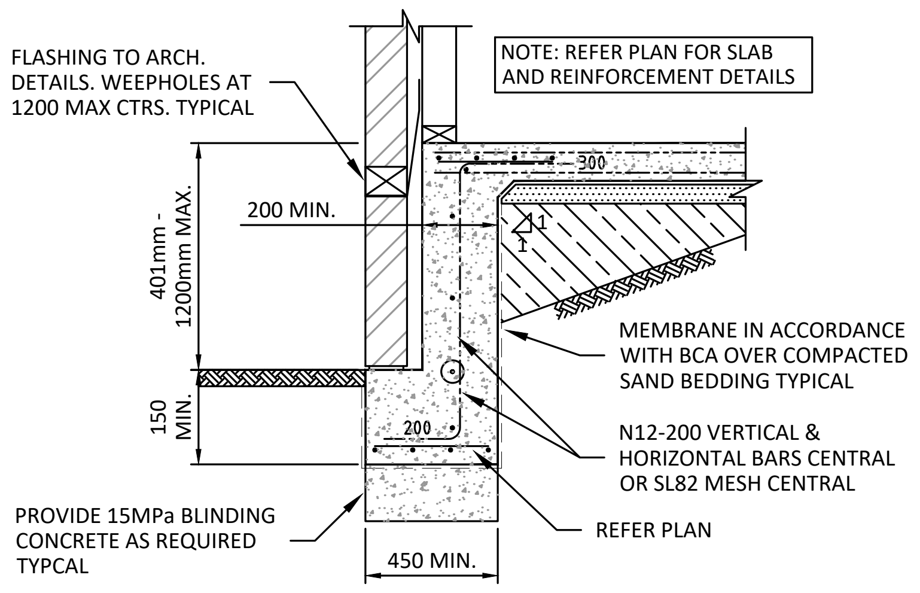
1. THE EDGES OF THE EXISTING CONCRETE SLAB ARE TO BE SCABBLED THEN CLEANED TO PROVIDE A COARSE SURFACE TO ACCEPT THE NON-SHRINK GROUT.
2. APPLY A BONDCRETE PRODUCT TO THE SURFACE OF THE CONCRETE TO RECEIVE THE NON-SHRINK GROUT IN ACCORDANCE WITH MANUFACTURERS SPECIFICATION.
3. WHILE THE SLURRY MIX IS STILL WET, PROVIDE HIGH-STRENGTH NON-SHRINK GROUT (SUCH AS LANKO 702 DURABED OR SIMILAR APPROVED) TO BENEATH THE OVERHANG, AND INSTALL IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS. THE THICKNESS OF THE GROUT MUST BE CONSISTENT WITH THE OVERHANG AND GROUT MUST BE AT LEAST 150 DEEP.

IMPORTANT ADDITIONAL NOTES FOR ALL RECTIFICATION DETAIL OPTIONS:

1. THE DESIGN SHOULD BE READ IN CONJUNCTION WITH THE STRUCTURAL DRAWINGS DOCUMENTATION FOR THIS SPECIFIC SITE.
2. BUILDER TO ADVISE THIS OFFICE IF THE EXISTING STRUCTURE VARIES FROM THESE SPECIFICATIONS.
3. REFER TO EXTERNAL EDGE BEAM TYPICAL DETAIL FOR SLAB, FOOTING AND REINFORCEMENT SPECIFICATIONS.
4. REFER SLAB AND FOOTING PLAN FOR FOOTING FOUNDING SPECIFICATIONS.
5. BUILDER TO CONTACT THIS OFFICE IF THERE IS COLUMN OVERHANG FOR FURTHER ADVICE.
6. BUILDER TO ENSURE ADEQUATE WATER PROOF MEMBER IS INSTALLED TO AVOID ANY POTENTIAL MOISTURE DAMAGES TO THE FRAMING ITEMS.
7. DO NOT SCALE DIMENSIONS FROM DRAWING.
8. BRICK VENEER CAVITY WIDTH/WALL TIES TO BE AS PER BCA REQUIREMENTS.
9. BOTTOM PLATE TO BE FIXED TO CONCRETE SLAB IN ACCORDANCE WITH TIMBER FRAMING MANUAL BUILDER TO INFORM THIS OFFICE IF GREATER THAN 3.4kN/m BRACING WALL IS INSTALLED ON WALL OVER.

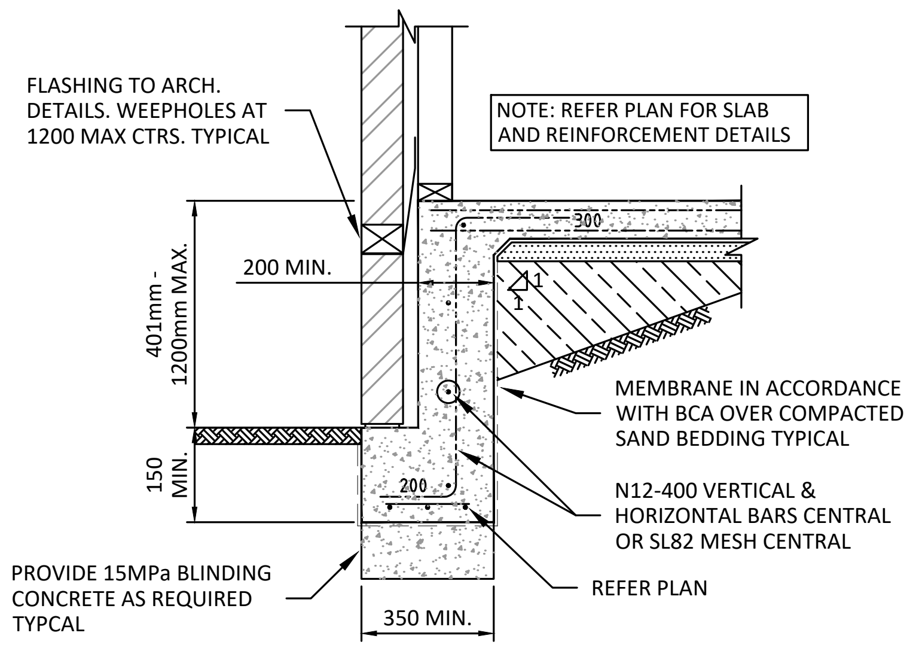
IMPORTANT NOTES:

1. FOR STUD OVERHANG (45mm MAX.):
   1.1. PROVIDE 120x45 H3 TREATED F5 PINE TIMBER BEAM FOR STUD OVERHANG (MAX 45mm)
   1.2. M10 GALVANISED BOLTS CHEMSET 502 (OR EQUIVALENT) AT 400 CRS, CENTRALLY THROUGH TIMBER BEAM 150mm (MIN.) INTO EXISTING SLAB.
2. FOR STUD OVERHANG AT STEPDOWN (45mm MAX.):
   2.1. PROVIDE 120x45 H3 TREATED F5 PINE TIMBER BEAM FOR STUD OVERHANG (MAX 45mm) - ALTERNATIVE IF STEPDOWN IS LESS THAN 100mm PROVIDE 90X45 H3 TREATED F5 PINE TIMBER BEAM.
   2.2. M10 GALVANISED BOLTS CHEMSET 502 (OR EQUIVALENT) AT 400 CRS, CENTRALLY THROUGH TIMBER BEAM 150mm (MIN.) INTO EXISTING SLAB.
3. FOR FRAME OVERHANG (75mm MAX.):
   3.1. GALVANISED 75 x 100 x 8 UA TO BE GROUND FLUSH WITH BRICK/TIMBER BOTTOM PLATE FACE (COLD GALVANISE GROUND EDGE) TYPICAL U.N.O
   3.2. M12 GALVANISED BOLTS CHEMSET 502 (OR EQUIVALENT) AT 400 CRS, CENTRALLY THROUGH ANGLE 150mm (MIN.) INTO EXISTING SLAB.
4. A MINIMUM OF 2 CHEMSET BOLTS AT 100 CRS ARE REQUIRED CENTRALLY UNDER ALL POINT LOAD AND GIRDER TRUSS LOAD LOCATIONS.
5. ALL CHEMSET BOLTS TO BE EMBEDDED INTO EXISTING FOOTING/SLAB IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS, DYNABOLTS ARE NOT PERMITTED. MINIMUM OF ONE BOLT TO BE INSTALLED 100 FROM EACH END OF RECTIFICATION MEMBER.
6. LONGER LENGTH OF RECTIFICATION MEMBER TO BE VERTICAL AND FIXED AGAINST THE FACE OF SLAB/FOOTING.



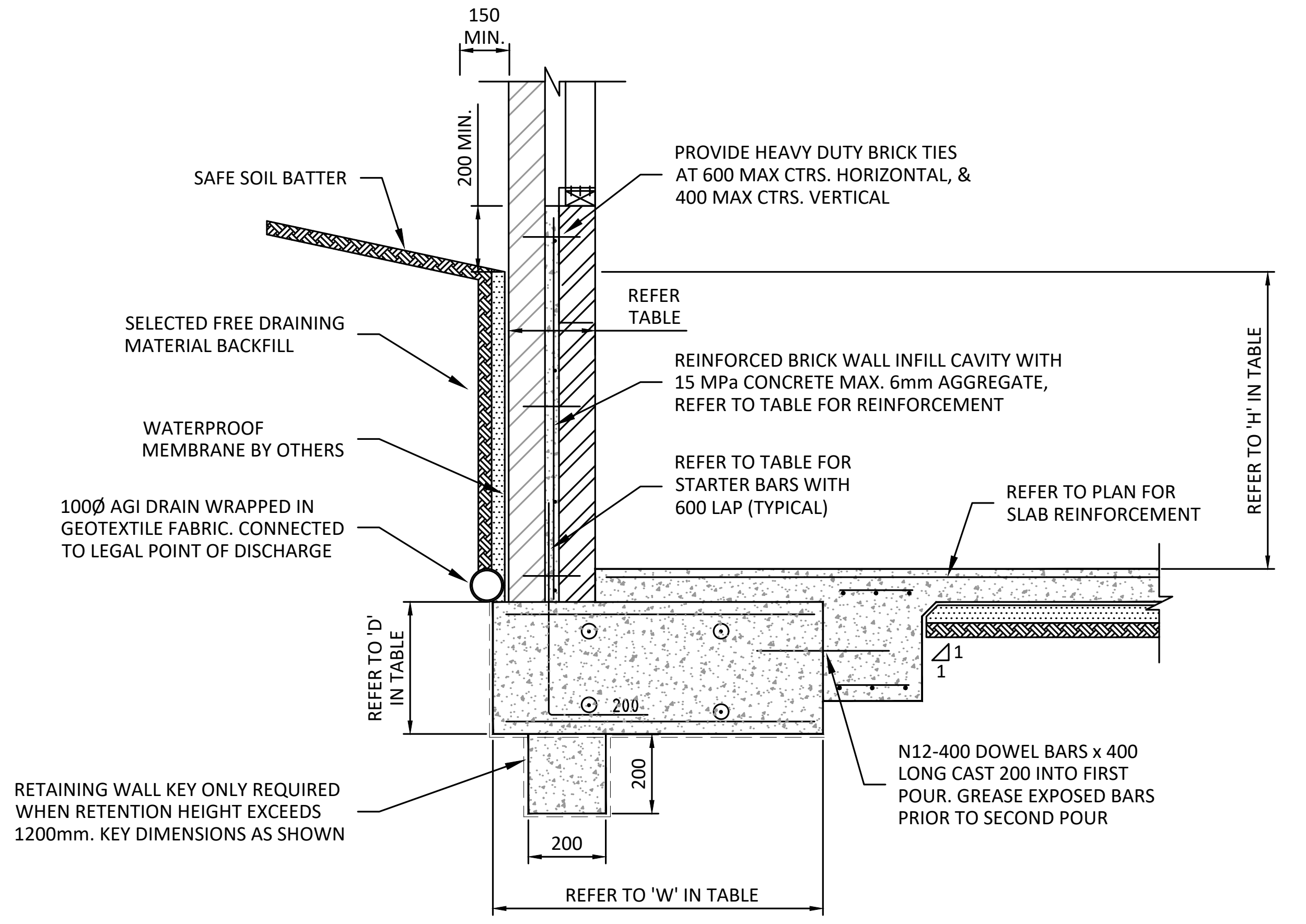
EXTERNAL RIB DEEPENED REBATE DETAIL (401mm - 1200mm MAX)

SCALE = NTS



EXTERNAL RIB DEEPENED REBATE DETAIL (401mm - 1200mm MAX)

SCALE = NTS



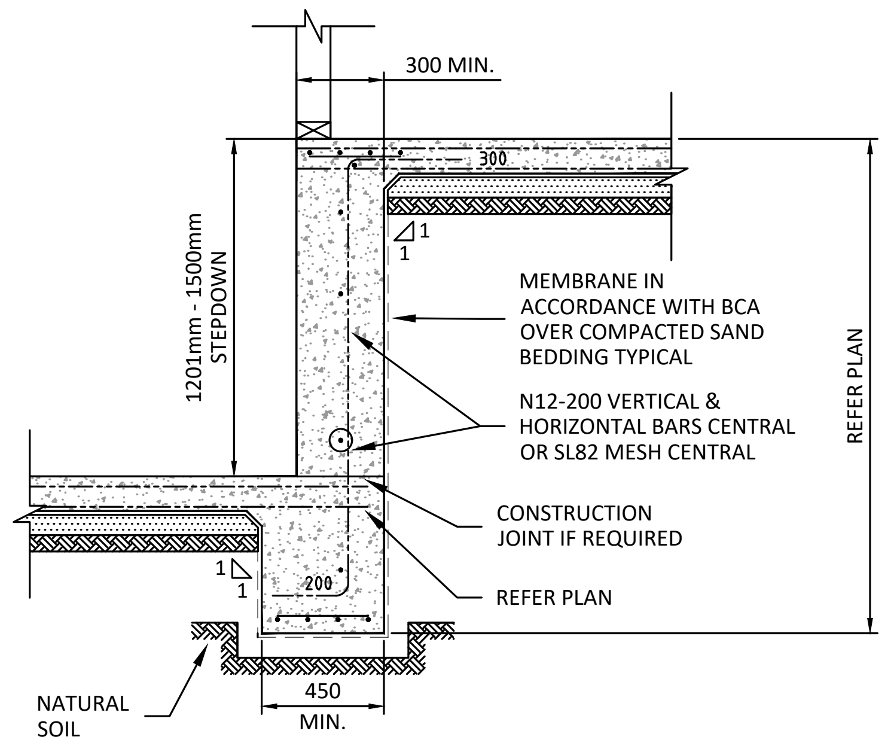
BRICKWALL RETAINING WALL TABLE

MAX RETAINING WALL HEIGHT 'H' (mm)	BRICK WALL THINCKNESS & REINFORCEMENT			FOOTING SIZES & REINFORCEMENT					MINIMUM FOOTING BEARING CAPACITY
	MIN. BRICKWALLL THICKNESS (mm)	VERTICAL BARS	HORIZONTAL BARS	MIN. FOOTING WIDTH 'W'(mm)	MIN. FOOTING DEPTH 'D'(mm)	STARTER BARS	FOOTING TRENCH MESH OR FABRIC (TOP & BOTTOM)		
0-600	300	N12-400 CTRS.	N12-400 CTRS.	800	600	N12-400 CTRS.	SL82	SL82	100 kPa
601-1200	300	N12-400 CTRS.	N12-400 CTRS.	1400	600	N12-400 CTRS.	SL82	SL82	100 kPa

BRICKWALL RETAINING WALL DETAIL AND NOTES - RW1

WALL DESIGN FOR MAX SURCHARGE LOAD OF 5.0kPa

SCALE = NTS



INTERNAL BEAM STEPDOWN DETAIL - IB3

SAFETY-IN-DESIGN-REVIEW

XSTRUCT CONSILTING ENGINEERS HAS CONDUCTED A PRELIMINARY SAFETY-IN-DESIGN REVIEW OF THE DESIGN SHOWN ON THESE DRAWINGS, IT IS SUMMARIZED IN THE TABLE BELOW. THE REVIEW IS BASED GENERALLY ON THE PROCEDURE OUTLINED IN THE SAFE WORK AUSTRALIA PUBLICATION "SAFE DESIGN OF STRUCTURES CODE OF PRACTICE" (JULY 2012)

THE DESIGN HAS NOT BEEN REVIEWED WITH A CONTRACTOR/BUILDER AT THE TIME OF ISSUE FOR TENDER OR CONSTRUCTION. CONSTRUCTION METHODS VARY BETWEEN CONTRACTORS SO IT IS NOT POSSIBLE FOR XSTRUCT CONSULTING ENGINEERS TO PERFORM AN EXHAUSTIVE SAFETY-IN-DESIGN OR SAFETY-IN-CONSTRUCTION REVIEW. ONCE APPOINTED, THE CONTRACTOR IS REQUIRED TO UNDERTAKE A THOROUGH REVIEW OF THE DESIGN WITH THEIR SUB-CONTRACTORS TO IDENTIFY SAFETY RISKS DURING CONSTRUCTION AND DURING THE LIFE OF THE BUILDING.

CONTRACTORS ARE RESPONSIBLE FOR ENGAGING AN ERECTION ENGINEER AT THEIR OWN COST TO REVIEW THEIR PROPOSED ERECTION PROGRAMS/SEQUENCE AND TO DESIGN AND CERTIFY THE TEMPORARY FRAMING TO SUPPORT STRUCTURAL ELEMENTS.

CONTRACTORS SHALL PROVIDE DOCUMENTATION THAT OUTLINE HOW THE PROJECT WAS BUILT SO THAT THE DEMOLITION CONTRACTOR CAN ADEQUATELY EVALUATE RISKS DURING DEMOLITION PLANNING AT THE END OF THE LIFE OF THE BUILDING.

CATEGORY	SAFETY IN REVIEW COMMENTS
CONSTRUCTION OR IN-SERVICE LOADS DESIGNED FOR	1. THE DESIGN ALLOWS FOR A 2.5 TONNE SCISSOR LIFT TO BE DRIVEN ON SUSPENDED CONCRETE STRUCTURE. THE CONTRACTOR SHALL MAINTAIN A 1m EXCLUSION ZONE AROUND SCISSOR LIFTS. 2. PIERS/PILES TO BASEMENT WALLS HAVE BEEN DESIGN TO SUPPORT TEMPORARY SOIL LOADS AND A SURCHARGE FOR GROUND LOADING. IF THE CONSTRUCTION OF THE GROUND SLAB IS EXPECTED TO BE DELAYED OR TAKE LONGER THAN THREE (3) MONTHS THEN IT IS RECOMMENDED THAT THE SHORING STRUCTURE BE PROPPER OR THE DESIGN AMENDED. 3. IF CONTRACTOR-DESIGNED BUILDING MAINTENANCE/CLEANING SYSTEMS ARE PROPOSED THAT IMPOSE LOADS ON THE STRUCTURE, THE CONTRACTOR SHALL SUPPLY LOADS AND FIXING LOCATIONS TO XSTRUCT SO THAT WE CAN CONFIRM THAT THE STRUCTURE CAN SUPPORT THE LOADS. 4. THE FOOTINGS FOR THIS STRUCTURE HAVE NOT BEEN DESIGNED TO SUPPORT CRANE LOADING. IF REQUIRED, THE CONTRACTOR SHOULD CONTACT XSTRUCT TO DESIGN THE STRUCTURE TO SUPPORT SUCH LOADS OR ENGAGE AN INDEPENDANT ENGINEER.
LOCATION OF UNDERGROUND AND ABOVE GROUND SERVICES	1. XSTRUCT CARRIED OUT A BEFORE-YOU-DIG-AUSTRALIA REVIEW DURING THE DESIGN PHASE. THE CONTRACTOR SHALL UNDERTAKE A REVIEW OF THEIR OWN TO VERIFY SERVICES ENTERING THE PROPERTY AND IN PROXIMITY TO THE BOUNDARY IN THE STREET/SURROUNDING THE PROPERTY. 2. BEFORE-YOU-DIG-AUSTRALIA DOES NOT CONFIRM THE LAYOUT OF SERVICES WITHIN THE SITE. THE CONTRACTOR SHALL ALLOW TO ENGAGE A SERVICES LOCATION CONTRACTOR TO CONDUCT A SURVEY OF ALL SERVICES ON THE SITE. 3. THE LOCATION OF EXISTING SERVICES SHOWN ON XSTRUCT DRAWINGS IS APPROXIMATE ONLY. SUBMIT THE SURVEY RESULTS TO XSTRUCT FOR REVIEW TO CONFIRM DESIGN ASSUMPTIONS.
EXCAVATIONS	1. BATTER SLOPES SHALL BE IN ACCORDANCE WITH GEOTECHNICAL RECOMMENDATIONS AND SHALL BE INSPECTED BY THE GEOTECHNICAL ENGINEER TO CONFIRM ADEQUACY (INCLUDING REVIEW OF PROPOSED DURATION OF BATTER). 2. EXCAVATIONS GREATER THAN 1m DEEP REQUIRE SHORING AND SHALL NOT BE ACCESSED BY PERSONNEL WITHOUT APPROPRIATE CONFINED SPACE TRAINING. 3. PROVIDE BARRIERS TO ALL EXCAVATIONS TO PREVENT FALLS. 4. ENSURE MEASURES TO PROTECT ADJACENT PROPERTY/STRUCTURES ARE FOLLOWED STRICTLY IN ACCORDANCE WITH THESE DRAWINGS. IF IN DOUBT, CONTACT XSTRUCT. 5. CONTACT XSTRUCT AND THE GEOTECHNICAL ENGINEER IF GROUND WATER IS ENCOUNTERED DURING EXCAVATION.
OR	
VERIFICATION OF SOIL CONDITIONS	1. THE GEOTECHNICAL INVESTIGATION WAS BASED ON A LIMITED SURVEY VIA BORE HOLES IN DISCRETE LOCATIONS AROUND THE SITE (REFER TO THE GEOTECHNICAL REPORT REFERENCED ON THESE DRAWINGS). THE CONTRACTOR SHALL HAVE THE SOIL DESIGN PARAMETERS VERIFIED DURING EXCAVATION. ALLOW TO ENGAGE THE GEOTECHNICAL ENGINEER TO CONDUCT A REVIEW OF THE SOIL DURING CLEARING/EXCAVATION OF THE SITE.
FINISHES TO STEELWORK	1. WHILE THE FINISHES TO STEELWORK ARE TO THE ARCHITECT'S SPECIFICATION, THE CONTRACTOR SHALL CONFIRM THE FINISHES OF EXTERNAL EXPOSED STEELWORK OR CONNECTION OF DISSIMILAR METALS ARE SUITABLE TO AVOID THE ONSET OF CORROSION. CORROSION OF ELEMENTS THAT CANNOT BE READILY INSPECTED CAN LEAD TO STRUCTURAL DEFECTS OR COLLAPSE DURING THE LIFE OF THE STRUCTURE. CONDUCT A REVIEW OF EXPOSED STEELWORK WITH THE ARCHITECT.
BALUSTRADES	1. STRUCTURAL GLASS IN BALUSTRADES OR SKYLIGHTS SHALL BE DESIGNED WITH ADEQUATE REDUNDANCY TO ENSURE THAT A BREAKAGE DOES NOT LEAD TO COLLAPSE OF PART OF THE BARRIER WHILE IT IS EXPERIENCING LOADS.
MODIFICATION OF EXISTING STRUCTURES	1. OUR DESIGN HAS BEEN BASED ON A REVIEW OF VISIBLE STRUCTURE PRIOR TO THE REMOVAL OF FINISHES. THE BUILDER SHALL USE THEIR EXPERIENCE DURING DEMOLITION TO DETERMINE WHETHER UNCOVERED ELEMENTS ARE STRUCTURAL PRIOR TO PROCEEDING WITH DEMOLITION. 2. OPENING UP FACADES IN EXISTING STRUCTURES CAN CREATE DOMINANT OPENINGS IN BUILDINGS THAT SIGNIFICANTLY INCREASE THE WIND LOADS ON WALLS AND ROOFS. OPENINGS SHALL BE COVERED WITH TEMPORARY PROTECTION TO PREVENT THIS FROM OCCURING, CONTRACTOR TO ALLOW TO DESIGN AND INSTALL THIS TYPE OF PROTECTION FOR STRUCTURE.
BASEMENTS	1. STORMWATER INGRESS INTO EASEMENT VIA DRIVEWAY RAMP IS TO BE AVOIDED USING 300mm HIGH FREEBOARD ABOVE ROAD CROSSOVER AS A PASSIVE PROTECTION MEASURE. RAMP GRADIENTS TO MAINTAIN COMPLIANCE WITH CARPARK STANDARDS.

No.	REVISION	DATE
A	CONSTRUCTION ISSUE	10.09.24
P1	PRELIMINARY REVISION	24.07.24

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CONTRACTOR MUST DIAL 1100 TO CONFIRM LOCATION OF EXISTING SERVICES AND COMPLY WITH ANY AUTHORITY REQUIREMENTS REGARDING EXISTING SERVICES PRIOR TO COMMENCEMENT OF ANY WORKS.

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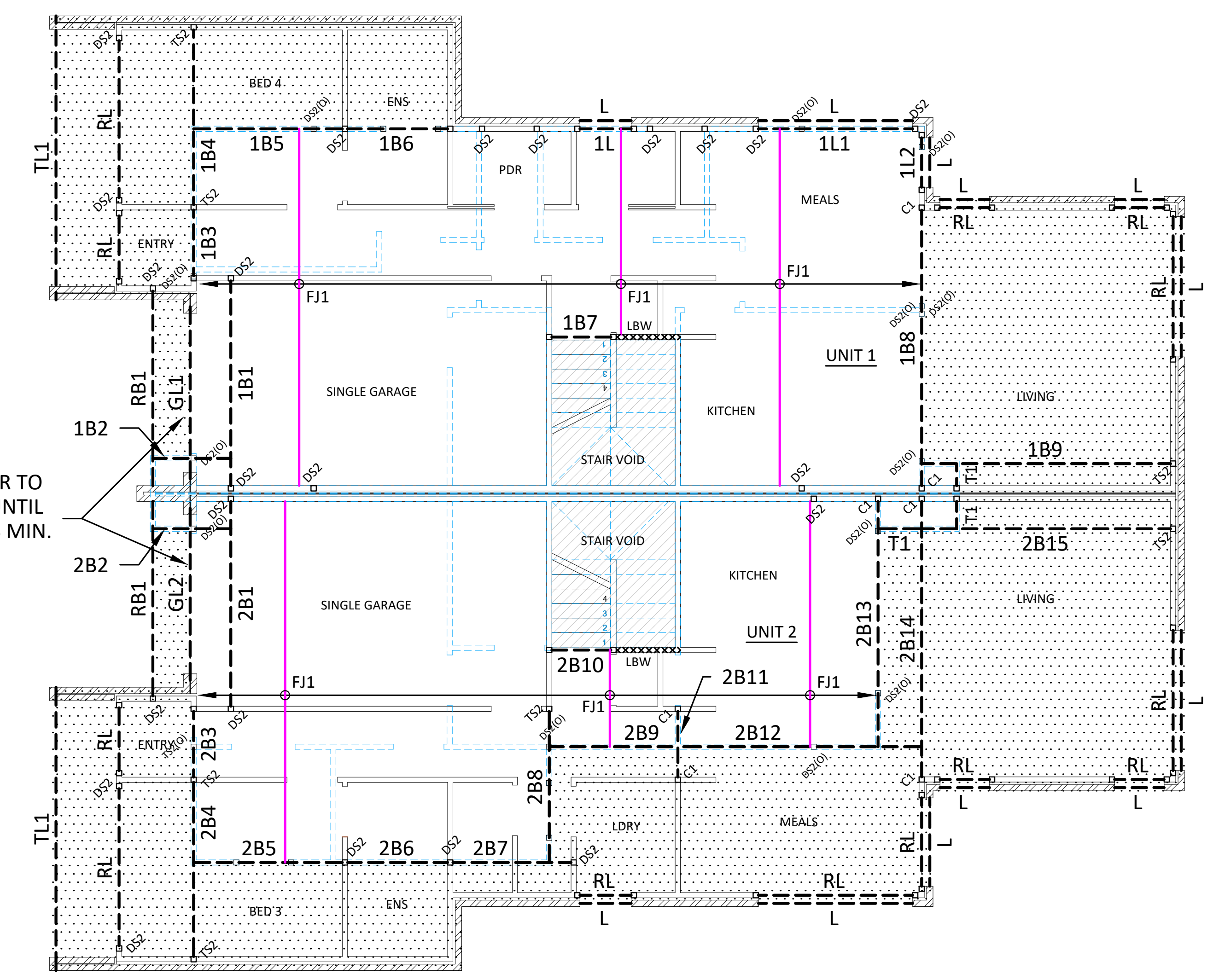
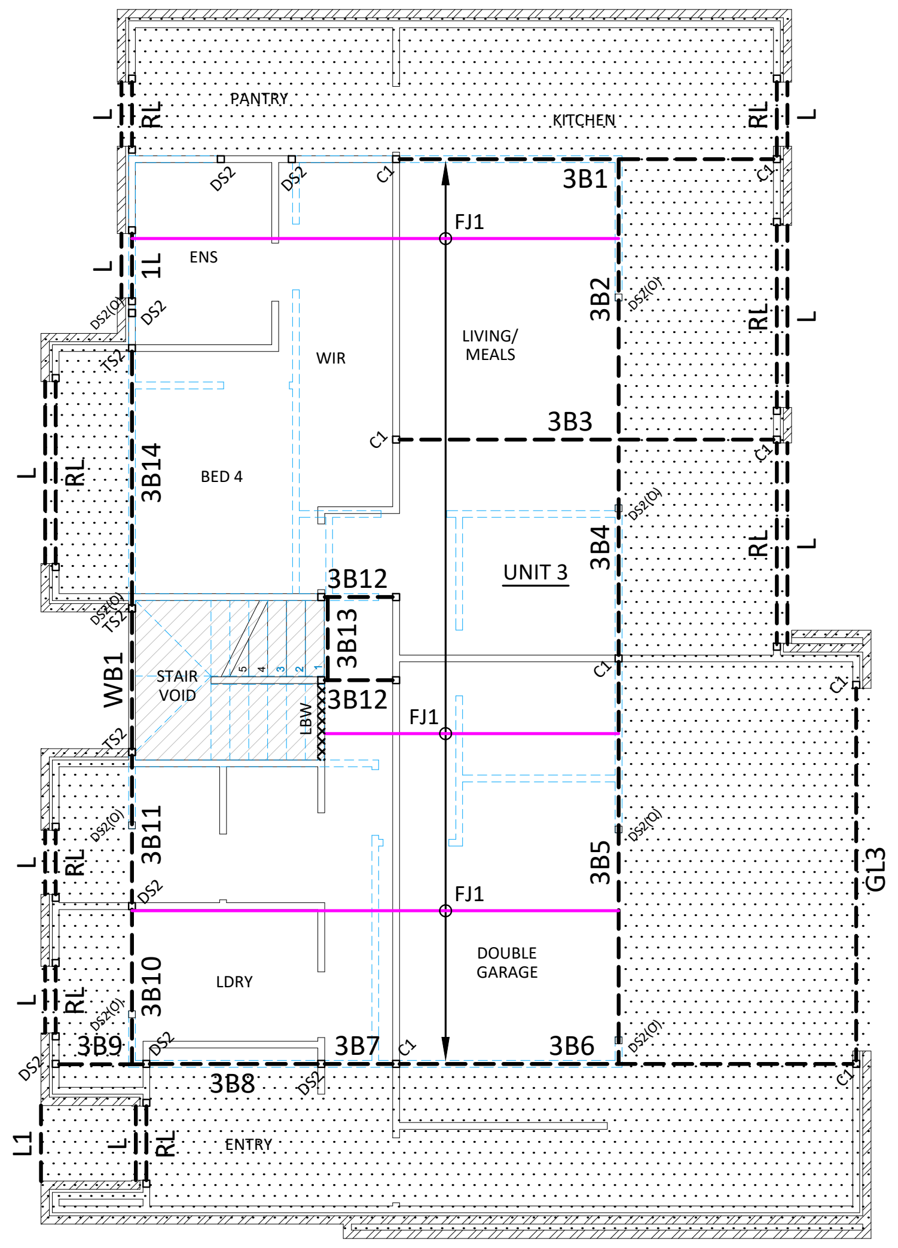
CLIENT:	CREATIVE HOUSE PLANS	DESIGNED: YD	DRAWN: ED	DATE: 24.07.24
DRAWING TITLE:	FOOTING & SLAB DETAILS	PAGE No: S2	SCALE: AS SHOWN - A1	
PROJECT TITTLE:	PROPOSED THREE NEW DOUBLE STOREY DWELLINGS	DRAWING NO.: 1685		REVISION: A
PROJECT ADDRESS:	LOT 1, NO.17 RAILWAY PARADE, SEAFORD			

GROUND FLOOR FRAMING PLAN

SCALE 1:100



STEEL MEMBER TO BE PROPPED UNTIL BRICKWORK IS MIN. 3 DAYS OLD



MEMBER SCHEDULE - UNIT 1

MEMBER	SECTION TYPE	REMARKS/ CONNECTIONS
1B1	2/290x42 SMART LVL 15	NAIL LAMINATED
1B2	2/140x42 SMART LVL 15	NAIL LAMINATED
1B3	2/120x42 SMART LVL 15	NAIL LAMINATED
1B4	2/300x58 SMART LVL 15	NAIL LAMINATED
1B5	2/240x42 SMART LVL 15	NAIL LAMINATED
1B6	2/190x42 SMART LVL 15	NAIL LAMINATED
1B7	120x42 SMART LVL 15	
1B8	250 PFC	
1B9	2/300x58 SMART LVL 15	NAIL LAMINATED
1L1	2/290x42 SMART LVL 15	NAIL LAMINATED
1L2	2/120x42 SMART LVL 15	NAIL LAMINATED
RB1	290x42 SMART LVL 15	
GL1	150x8 (V) x 200x8 (H)	T LINTEL, MIN. 110mm END BEARING REQUIRED, REFER TO DETAIL
TL1	250x12 (V) x 200x10 (H)	T LINTEL, MIN. 200mm END BEARING REQUIRED, REFER TO DETAIL
T1	2/120x42 SMART LVL 15	NAIL LAMINATED
FJ1	300 DEEP FLOOR JOISTS @ 450 CTRS	REFER TO MANUFACTURER'S SPECIFICATIONS
DS2	2/90x45 F17 KD HW	
TS2	3/90x45 F17 KD HW	
C1/SC1	89x89x6 SHS	
1L	FLOOR LINTEL	REFER TO TABLE
RL	ROOF LINTEL	REFER TO TABLE
L	BRICK LINTEL	REFER TO TABLE

MEMBER SCHEDULE - UNIT 2

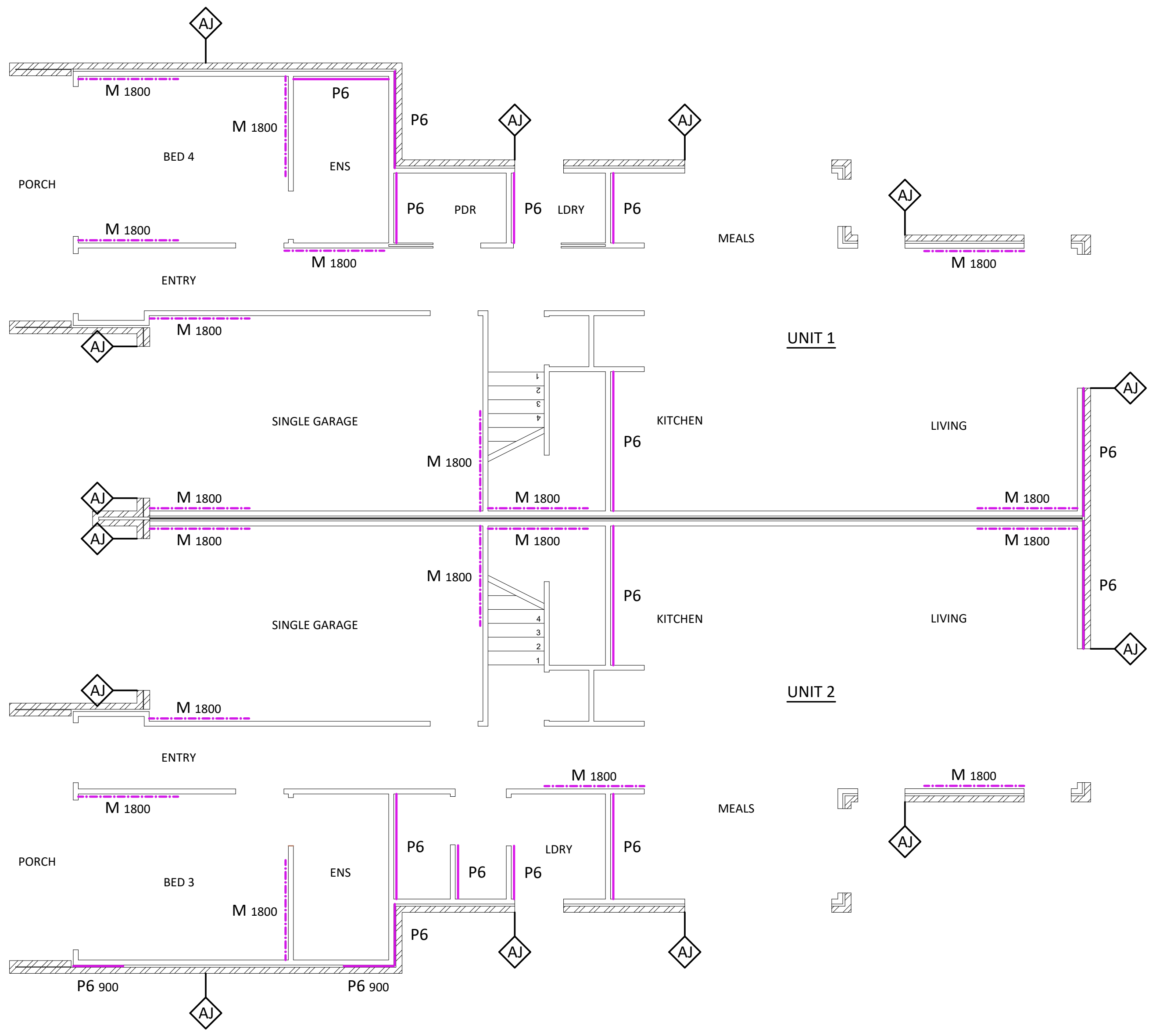
MEMBER	SECTION TYPE	REMARKS/ CONNECTIONS
2B1	2/290x42 SMART LVL 15	NAIL LAMINATED
2B2	2/140x42 SMART LVL 15	NAIL LAMINATED
2B3	2/140x42 SMART LVL 15	NAIL LAMINATED
2B4	2/300x58 SMART LVL 15	NAIL LAMINATED
2B5	2/240x42 SMART LVL 15	NAIL LAMINATED
2B6	2/190x42 SMART LVL 15	NAIL LAMINATED
2B7	2/290x42 SMART LVL 15	NAIL LAMINATED
2B8	2/300x58 SMART LVL 15	NAIL LAMINATED
2B9	2/190x42 SMART LVL 15	NAIL LAMINATED
2B10	120x42 SMART LVL 15	
2B11	200 PFC	
2B12	250 PFC	
2B13	200 PFC	
2B14	250 PFC	
2B15	2/300x58 SMART LVL 15	NAIL LAMINATED
RB1	290x42 SMART LVL 15	
GL2	150x8 (V) x 200x8 (H)	T LINTEL, MIN. 110mm END BEARING REQUIRED, REFER TO DETAIL
TL1	250x12 (V) x 200x10 (H)	T LINTEL, MIN. 200mm END BEARING REQUIRED, REFER TO DETAIL
T1	2/120x42 SMART LVL 15	NAIL LAMINATED
FJ1	300 DEEP FLOOR JOISTS @ 450 CTRS	REFER TO MANUFACTURER'S SPECIFICATIONS
DS2	2/90x45 F17 KD HW	
TS2	3/90x45 F17 KD HW	
C1/SC1	89x89x6 SHS	
RL	ROOF LINTEL	REFER TO TABLE
L	BRICK LINTEL	REFER TO TABLE

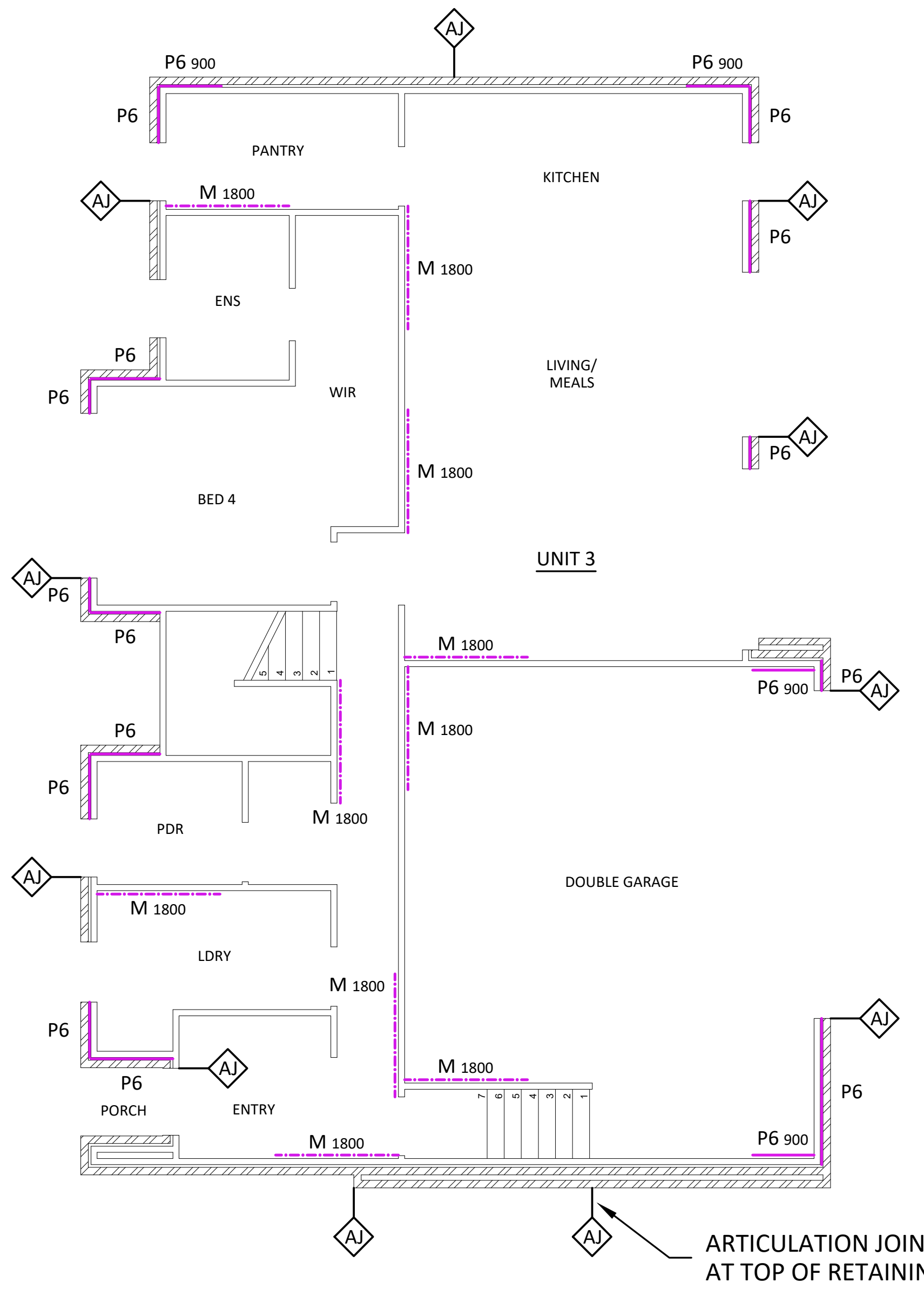
MEMBER SCHEDULE - UNIT 3

MEMBER	SECTION TYPE	REMARKS/ CONNECTIONS
3B1	300 PFC	
3B2	200 PFC	
3B3	310 UB 46	
3B4	2/300x42 SMART LVL 15	NAIL LAMINATED
3B5	300 PFC	
3B6	250 UC 89	
3B7	2/120x42 SMART LVL 15	NAIL LAMINATED
3B8	2/190x42 SMART LVL 15	NAIL LAMINATED
3B9	2/190x42 SMART LVL 15	NAIL LAMINATED
3B10	2/240x42 SMART LVL 15	NAIL LAMINATED
3B11	2/190x42 SMART LVL 15	NAIL LAMINATED
3B12	2/120x42 SMART LVL 15	NAIL LAMINATED
3B13	120x42 SMART LVL 15	NAIL LAMINATED
3B14	2/300x58 SMART LVL 15	WIND BEAM, NAIL LAMINATED
WB1	2/300x42 SMART LVL 15	NAIL LAMINATED
GL3	230 PFC + 150x90 (V) x 10 UA	PFC & ANGLE, REFER TO DETAIL
L1	150 x 100 x 10 UA	ANGLE LINTEL FOR BRICKWORK
FJ1	300 DEEP FLOOR JOISTS @ 450 CTRS	REFER TO MANUFACTURER'S SPECIFICATIONS
DS2	2/90x45 F17 KD HW	
TS2	3/90x45 F17 KD HW	
C1/SC1	89x89x6 SHS	
1L	FLOOR LINTEL	REFER TO TABLE
RL	ROOF LINTEL	REFER TO TABLE
L	BRICK LINTEL	REFER TO TABLE

GROUND FLOOR BRACING PLAN

SCALE 1:100





ARTICULATION JOINT TO STOP AT TOP OF RETAINING WALL

ANGLE LINTEL TABLE (L)

ANGLE LINTEL SPAN (mm)	BRICK HEIGHT	
	800mm MAX.	3200mm MAX.
0 - 900	100 x 100 x 6 EA	100 x 100 x 8 EA
901 - 1600	100 x 100 x 6 EA	100 x 100 x 10 EA
1601 -2100	100 x 100 x 6 EA	150 x 100 x 10 UA
2101 - 2600	150 x 100 x 10 UA	150 x 100 x 10 UA + 50 x 10 EXT. PL
2601 - 3100	150 x 100 x 10 UA	150 x 100 x 12 UA + 75 x 12 EXT. PL
3101 - 3600	150 x 100 x 12 UA	N/A

NOTES:
1. ANGLE LINTEL TO EACH MASONRY SKIN TYPICAL
2. SET ANGLES WITH LONG LEG VERTICAL TYPICAL U.N.O.
3. HOT DIP GALVANISED TO ALL EXPOSED ANGLE LINTELS TYPICAL

TIMBER ROOF LINTEL SCHEDULE (RL)

SPAN (mm)	SECTION
0 - 1200	2 - 90 * 45 F17 KD HW OR 2 - 90 * 45 HYSPAN
1201 - 1800	190 * 35 F17 KD HW OR 200 * 35 HYSPAN
1801 - 2400	240 * 45 F17 KD HW OR 240 * 45 HYSPAN
2401 - 3000	2 - 240 * 35 F17 KD HW OR 2 - 240 * 35 HYSPAN
3001 - 3700	2 - 290 x 45 F17 KD HW OR 2 - 300 * 45 HYSPAN

NOTES:
1.METAL ROOF-FOR MAXIMUM LOAD WIDTH OF 6.0m
(FOR UNIFORM DISTRIBUTED LOAD ONLY)

1st FLOOR TIMBER LINTEL SCHEDULE (1L)

SPAN (mm)	SECTION
900	140 * 45 F7 KD PINE
1200	190 x 35 F7 KD PINE
1800	190 x 45 F17 KD HW
2400	2 - 240 x 35 F17 KD HW OR 2 - 240 * 35 HYSPAN
3000	2 - 240 * 45 F17 KD HW OR 2 - 240 * 45 HYSPAN

NOTES:
1.SUPPORTING METAL ROOF-LOAD WIDTH OF 5.0m MAX,
2.FIRST FLOOR LOAD WITH OF 3.0m MAX

FRAMING LEGEND

▨	BRICKWORK UNDER
⬚	TIMBER WALL FROM FIRST FLOOR
⁘	HATCH DENOTES LOWER ROOF
▩	LOAD BEARING WALL (LBW)

BRACING LEGEND

M	3kN/m CAPACITY METAL STRAPPING - REFER TO TYPICAL DETAILS
P6	6kN/m CAPACITY PLYWOOD BRACING - REFER TO TYPICAL DETAILS
AJ	ARTICULATION JOINT LOCATION

IMPORTANT BRACING NOTES:

- WIND RATING - N1
- MAXIMUM DESIGN GUST WIND SPEED FOR THIS SITE IS 34M/S
- WIND SPEED CALCULATION (VH) FOR USE IN ULTIMATE LIMIT STATE DESIGN ONLY, CALCULATED IN ACCORDANCE WITH THE LIMITATIONS AS IN AS4055, SECTION 2.1.

ALTERNATIVE BRACING METHODS ARE PERMITTED AS LONG AS THEIR CAPACITIES ARE EQUIVALENT TO WHAT IS SPECIFIED IN THESE DRAWINGS. INSTALLATION OF ALL BRACING UNITS MUST BE IN ACCORDANCE WITH THE RESIDENTIAL TIMBER FRAMED CONSTRUCTION MANUALS, AS1684.2 2010.

No.	REVISION	DATE
A	CONSTRUCTION ISSUE	10.09.24
P1	PRELIMINARY REVISION	24.07.24

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CONTRACTOR MUST DIAL 1100 TO CONFIRM LOCATION OF EXISTING SERVICES AND COMPLY WITH ANY AUTHORITY REQUIREMENTS REGARDING EXISTING SERVICES PRIOR TO COMMENCEMENT OF ANY WORKS.

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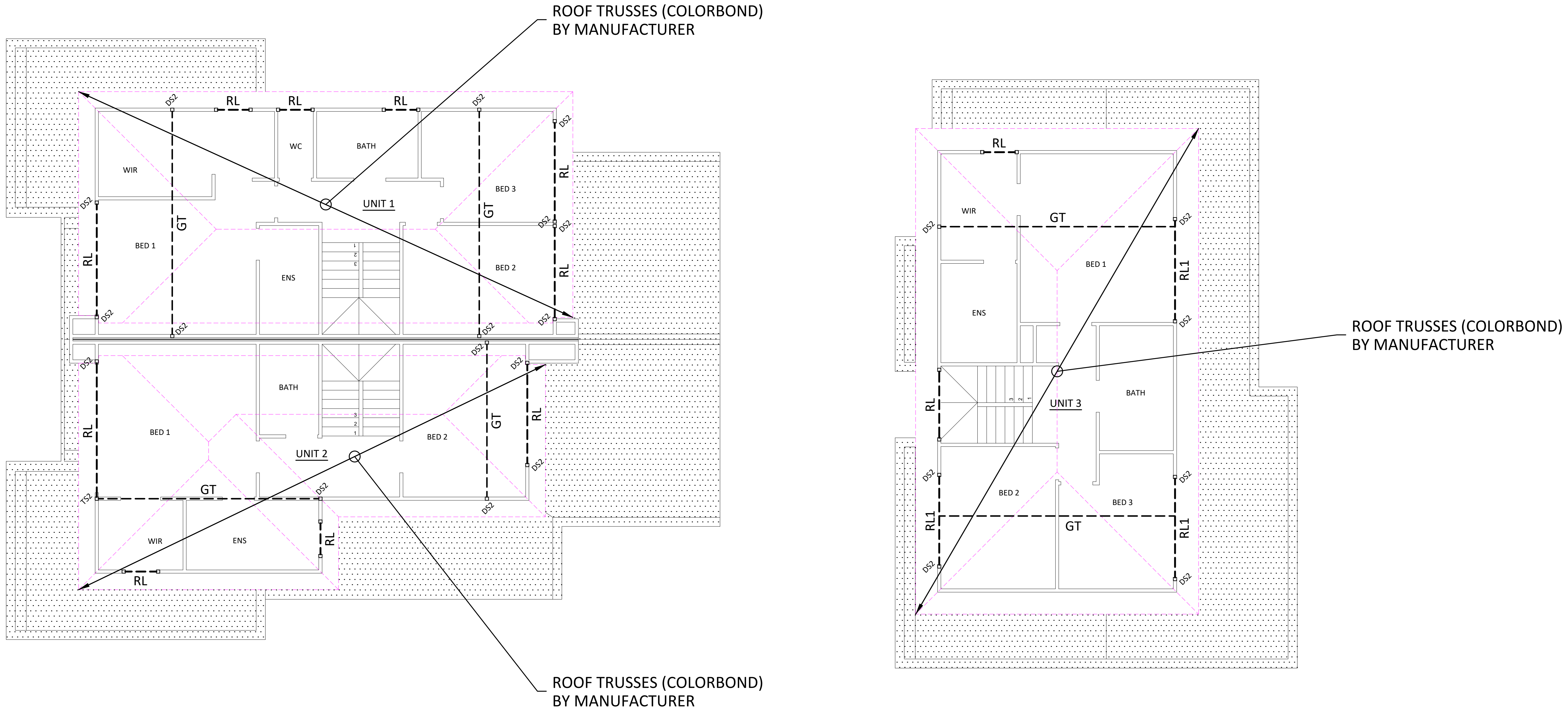
CLIENT:	CREATIVE HOUSE PLANS	DESIGNED: YD	DRAWN: ED	DATE: 24.07.24
DRAWING TITLE:	FRAMING AND BRACING DESIGN	PAGE No: S3	SCALE: 1:100 - A1	
PROJECT TITTLE:	PROPOSED THREE NEW DOUBLE STOREY DWELLINGS	DRAWING NO.: 1685		REVISION: A
PROJECT ADDRESS:	LOT 1, NO.17 RAILWAY PARADE, SEAFORD			

ROOF FRAMING PLAN

SCALE 1:100



ROOF TRUSSES (COLORBOND)
BY MANUFACTURER

ROOF TRUSSES (COLORBOND)
BY MANUFACTURER

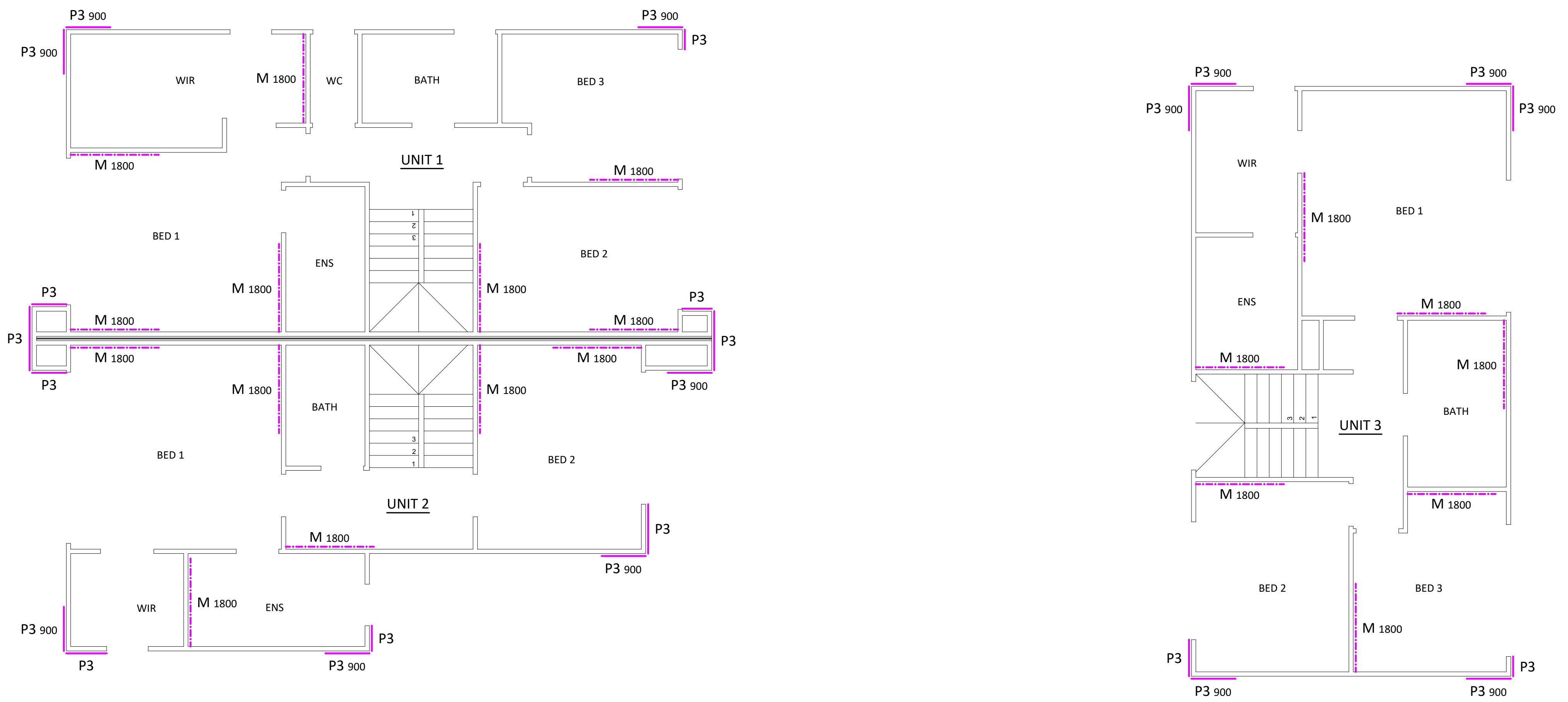
ROOF TRUSSES (COLORBOND)
BY MANUFACTURER

MEMBER SCHEDULE

MEMBER	SECTION TYPE	REMARKS/ CONNECTIONS
RL1	240x42 SMART LVL 15	
RL	ROOF LINTEL	REFER TO TABLE
DS2	2/90x45 F17 KD HW	
TS2	3/90x45 F17 KD HW	
GT	GIRDER TRUSS	LOCATIONS ASSUMED. IF DIFFERENT, THIS OFFICE IS TO BE CONTACTED

FIRST FLOOR BRACING PLAN

SCALE 1:100



ANGLE LINTEL TABLE (L)

ANGLE LINTEL SPAN (mm)	BRICK HEIGHT	
	800mm MAX.	3200mm MAX.
0 - 900	100 x 100 x 6 EA	100 x 100 x 8 EA
901 - 1600	100 x 100 x 6 EA	100 x 100 x 10 EA
1601 -2100	100 x 100 x 6 EA	150 x 100 x 10 UA
2101 - 2600	150 x 100 x 10 UA	150 x 100 x 10 UA + 50 x 10 EXT. PL
2601 - 3100	150 x 100 x 10 UA	150 x 100 x 12 UA + 75 x 12 EXT. PL
3101 - 3600	150 x 100 x 12 UA	N/A

NOTES:
1. ANGLE LINTEL TO EACH MASONRY SKIN TYPICAL
2. SET ANGLES WITH LONG LEG VERTICAL TYPICAL U.N.O.
3. HOT DIP GALVANISED TO ALL EXPOSED ANGLE LINTELS TYPICAL

TIMBER ROOF LINTEL SCHEDULE (RL)

SPAN (mm)	SECTION
0 - 1200	2 - 90 * 45 F17 KD HW OR 2 - 90 * 45 HYSPAN
1201 - 1800	190 * 35 F17 KD HW OR 200 * 35 HYSPAN
1801 - 2400	240 * 45 F17 KD HW OR 240 * 45 HYSPAN
2401 - 3000	2 - 240 * 35 F17 KD HW OR 2 - 240 * 35 HYSPAN
3001 - 3700	2 - 290 x 45 F17 KD HW OR 2 - 300 * 45 HYSPAN

NOTES:
1.METAL ROOF-FOR MAXIMUM LOAD WIDTH OF 6.0m
(FOR UNIFORM DISTRIBUTED LOAD ONLY)

1st FLOOR TIMBER LINTEL SCHEDULE (1L)

SPAN (mm)	SECTION
900	140 * 45 F7 KD PINE
1200	190 x 35 F7 KD PINE
1800	190 x 45 F17 KD HW
2400	2 - 240 x 35 F17 KD HW OR 2 - 240 * 35 HYSPAN
3000	2 - 240 * 45 F17 KD HW OR 2 - 240 * 45 HYSPAN

NOTES:
1.SUPPORTING METAL ROOF-LOAD WIDTH OF 5.0m MAX,
2.FIRST FLOOR LOAD WITH OF 3.0m MAX

FRAMING LEGEND	
▨	HATCH DENOTES LOWER ROOF

BRACING LEGEND	
M	3kN/m CAPACITY METAL STRAPPING - REFER TO TYPICAL DETAILS
P3	6kN/m CAPACITY PLYWOOD BRACING - REFER TO TYPICAL DETAILS

IMPORTANT BRACING NOTES:

- WIND RATING - N1
- MAXIMUM DESIGN GUST WIND SPEED FOR THIS SITE IS 34M/S
- WIND SPEED CALCULATION (VH) FOR USE IN ULTIMATE LIMIT STATE DESIGN ONLY, CALCULATED IN ACCORDANCE WITH THE LIMITATIONS AS IN AS4055, SECTION 2.1.

ALTERNATIVE BRACING METHODS ARE PERMITTED AS LONG AS THEIR CAPACITIES ARE EQUIVALENT TO WHAT IS SPECIFIED IN THESE DRAWINGS. INSTALLATION OF ALL BRACING UNITS MUST BE IN ACCORDANCE WITH THE RESIDENTIAL TIMBER FRAMED CONSTRUCTION MANUALS, AS1684.2 2010.

No.	REVISION	DATE
A	CONSTRUCTION ISSUE	10.09.24
P1	PRELIMINARY REVISION	24.07.24

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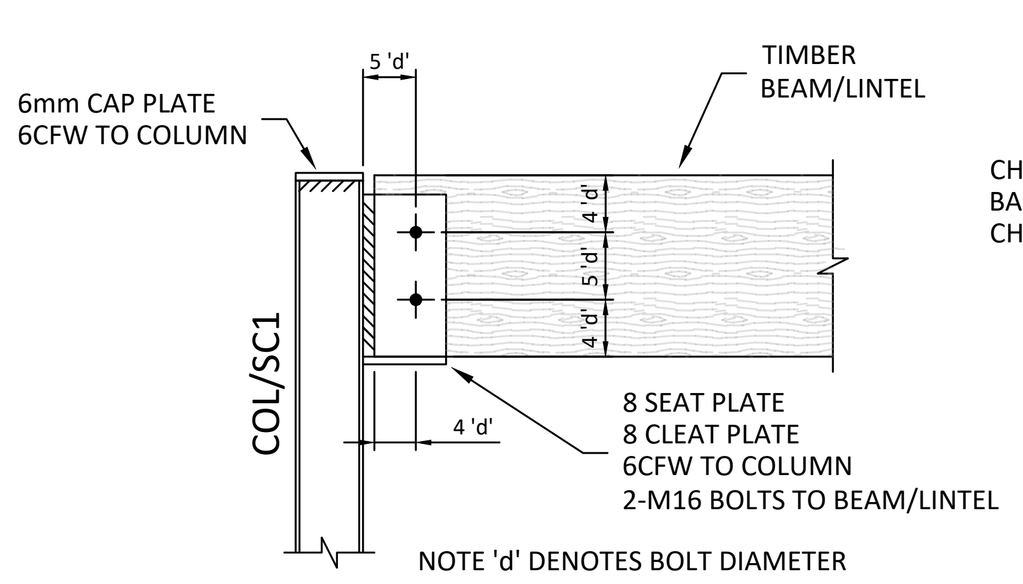
A: A11/2A Westall Road, Clayton,Vic, 3168

CLIENT:	CREATIVE HOUSE PLANS
DRAWING TITLE:	ROOF FRAMING AND FIRST FLOOR BRACING PLAN
PROJECT TITTLE:	PROPOSED THREE NEW DOUBLE STOREY DWELLINGS
PROJECT ADDRESS:	LOT 1, NO.17 RAILWAY PARADE, SEAFORD

DESIGNED:	DRAWN:	DATE:
YD	ED	24.07.24
PAGE No:	SCALE:	
S4	AS SHOWN - A1	
DRAWING NO.:		REVISION:
1685		A

FRAMING DETAILS

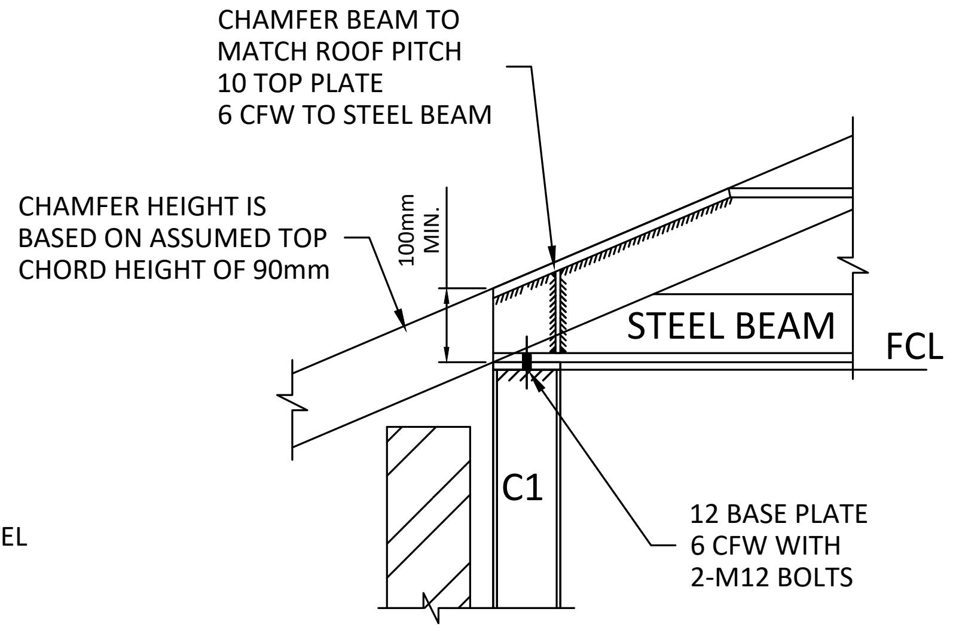
SCALE = AS SHOWN



NOTE 'd' DENOTES BOLT DIAMETER

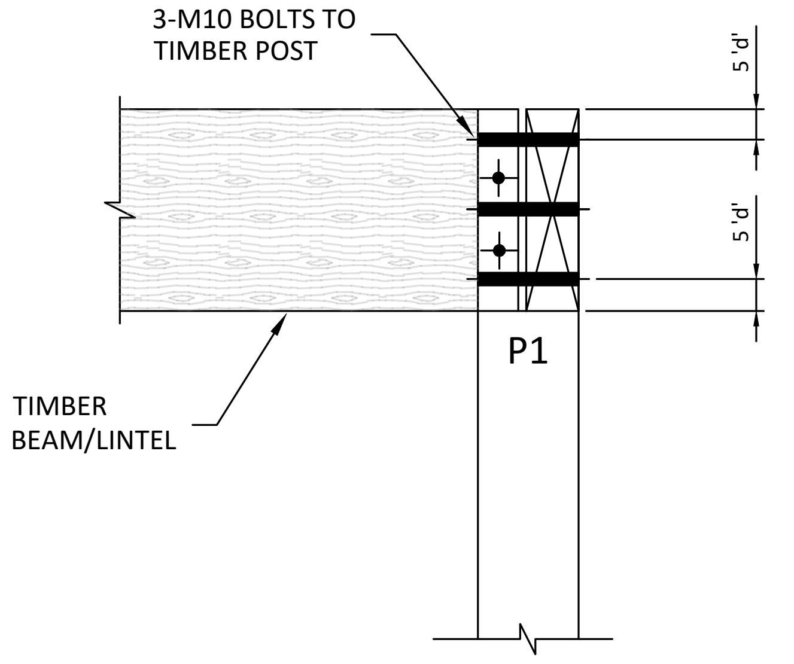
TIMBER BEAM/LINTEL TO COLUMN CONNECTION DETAILS

SCALE = NTS



STEEL BEAM CHAMFER DETAIL

SCALE = NTS



TIMBER BEAM TO TIMBER POST CONNECTION DETAIL

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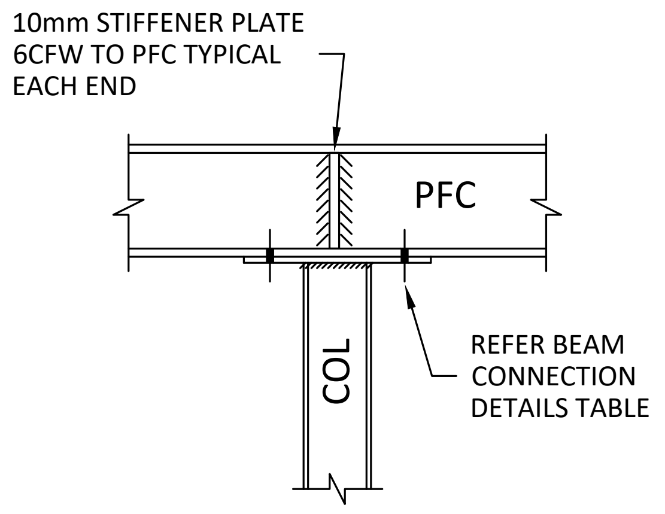

STEEL BEAM TO STEEL COLUMN DETAIL

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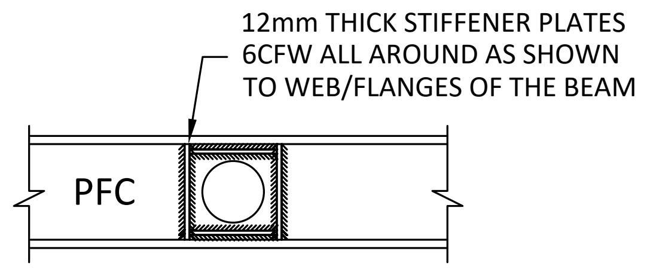
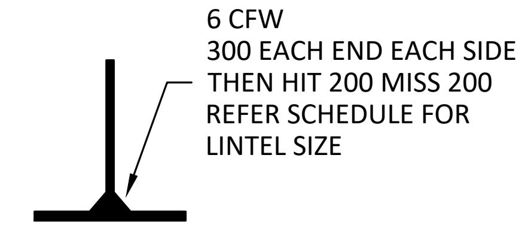


STEEL BEAM PENETRATION DETAIL (IF REQUIRED)

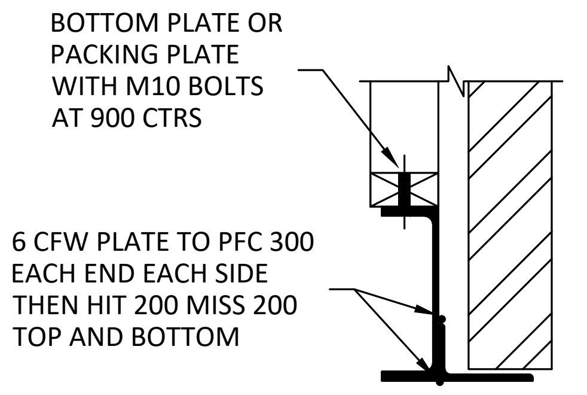
SCALE = NTS



LINTELS TO BE PROPPER AT MID SPAN UNTIL BRICKWORK IS A MINIMUM OF 3 DAYS OLD

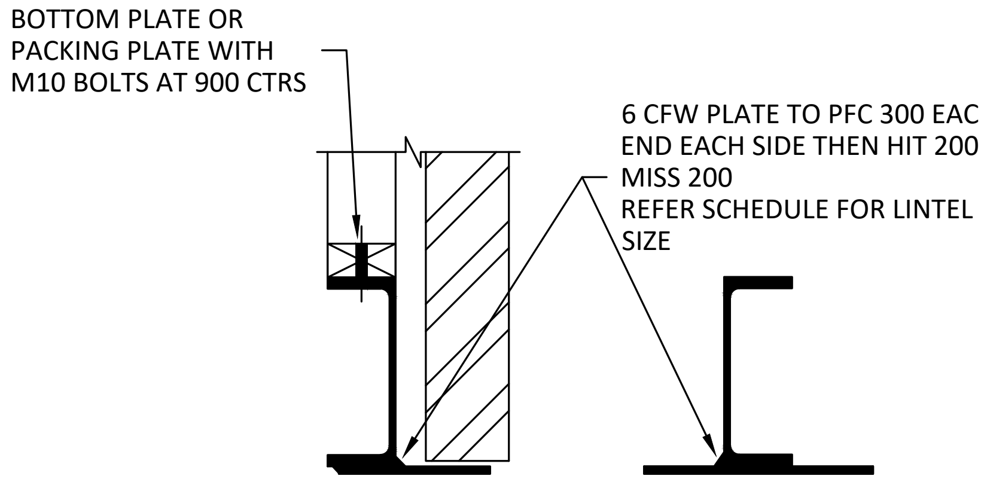
T LINTEL DETAIL

SCALE = 1:10



PFC/ANGLE LINTEL DETAIL

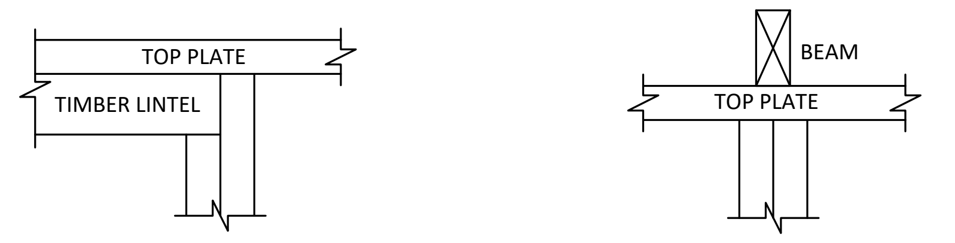
SCALE = NTS



PFC/PLATE LINTEL DETAIL

SCALE = NTS

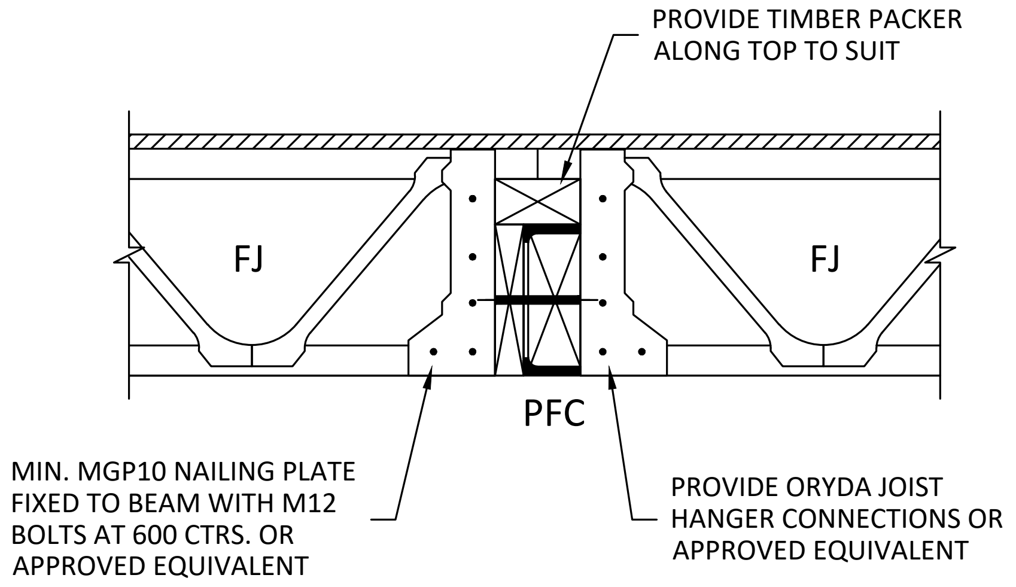
ALL STUDS SHALL BE NAIL LAMINATED IN ACCORDANCE WITH AS1684.2	DS1	DS2	DS3	DS4	TS1	TS2	TS3	QS1	QS2
	90x45	90x45	70x45	120x45	90x45	90x45	70x45	90x45	90x45
	MGP10	F17 KD HW	F17 KD HW	MGP10	MGP10	F17 KD HW	F17 KD HW	MGP10	F17 KD HW
NO. OF BEARING STUD	1	1	1	1	1	1	1	2	2
NO. OF JAMB STUD	1	1	1	1	2	2	2	2	2
NO. OF BEARING STUD	2	2	2	2	3	3	3	4	4



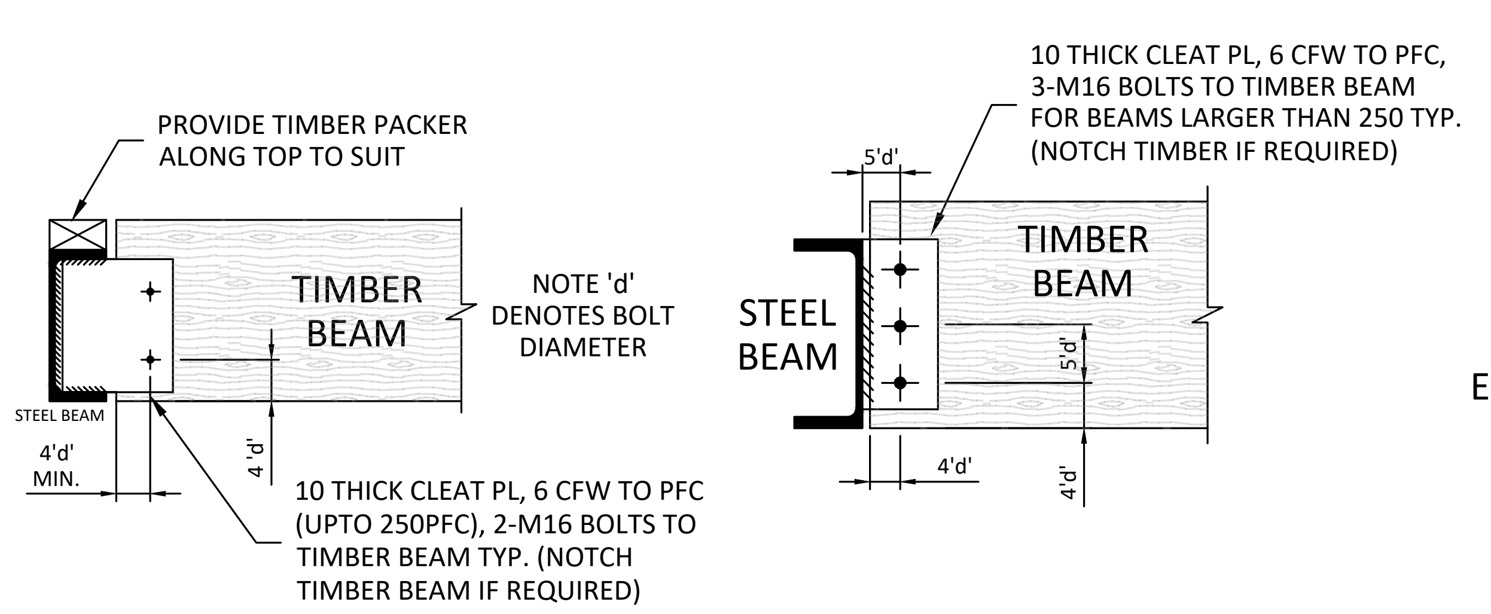
LINTEL SUPPORT ON STUDS

BEAM SUPPORT ON STUDS

TIMBER STUDS SCHEDULE

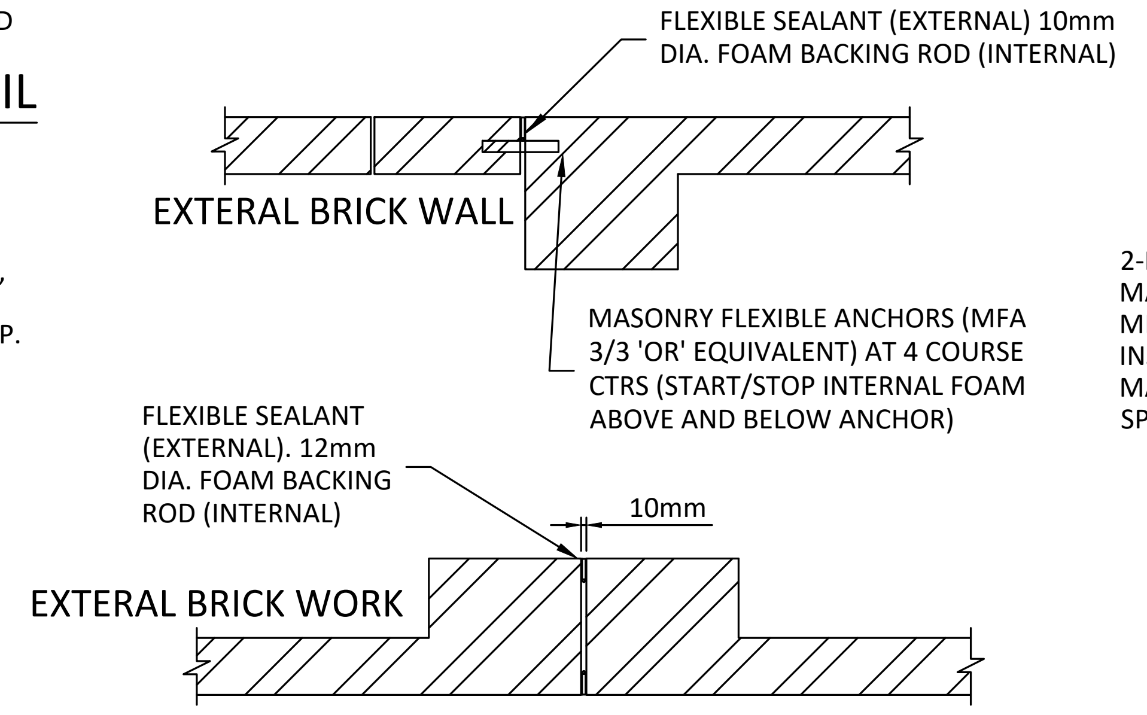


FLOOR JOIST TO PFC DETAIL



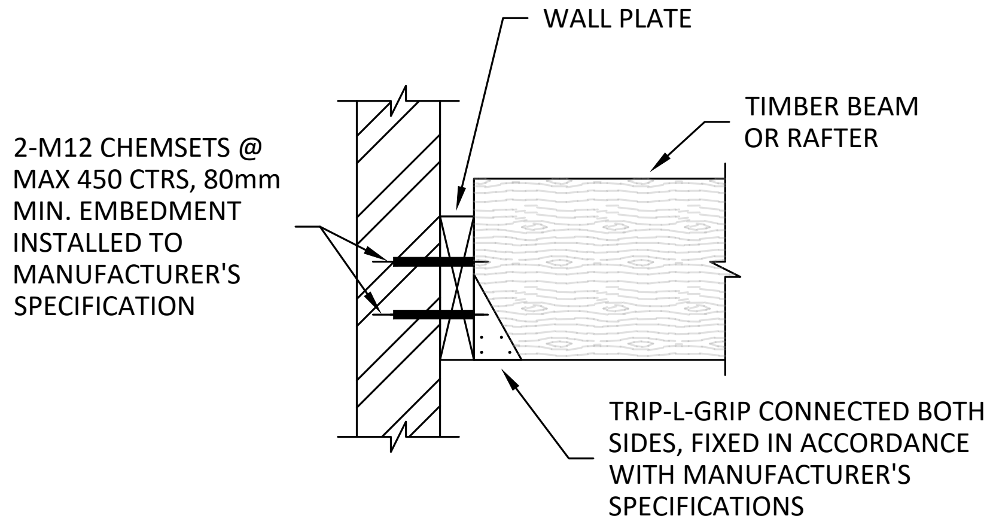
TIMBER BEAM TO STEEL BEAM CONNECTION DETAILS

SCALE = NTS



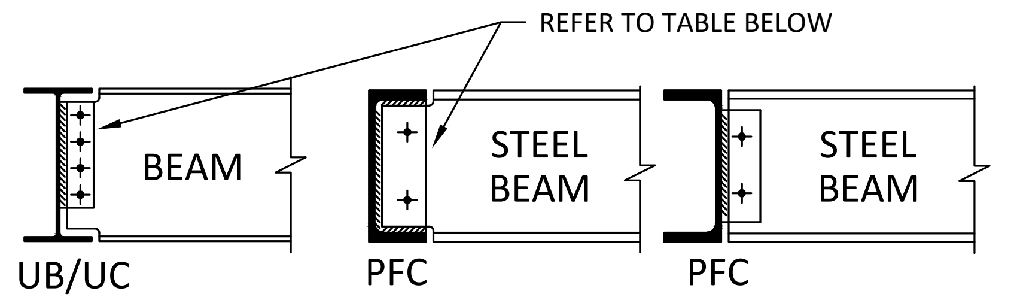
ENGAGED BRICK PIER ARTICULATION JOINT DETAILS

SCALE = NTS



TIMBER BEAM TO BRICKWALL CONNECTION DETAIL

SCALE = 1:10

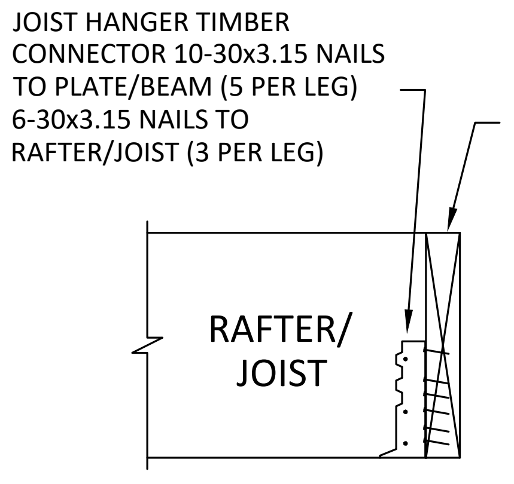


BEAM TO BEAM CONNECTION INFORMATION		
MEMBER SIZE	BOLTS REQUIRED	CLEAT/CAP PLATE THICKNESS
UPTO 200UB/PFC	2-M16 8.8/S BOLTS	10mm
UPTO 250UB & 250PFC	3-M20 8.8/S BOLTS	10mm
UPTO 410UB	4-M20 8.8/S BOLTS	12mm

NOTES:
- THIS TABLE IS APPLICABLE TO ALL STEEL BEAM TO COLUMN CONNECTION TYPICAL (U.N.O. ON DETAILS).
- ALL WELDING TO BE 6mm CFW TYPICAL (U.N.O. ON DETAILS).
- LEVEL OF TOP PLATES ARE INDICATIVE ONLY, NUMBER OF TOP PLATES MAY VARY.
- BUILDER/CONTRACTOR TO CONFIRM HEIGHT OF LINTEL & CLEAT PLATE TO SUIT WINDOW/DOOR OPENING.
- BOLT TO BOLT DISTANCE MIN 2.5xDIA
- BOLT TO EDGE DISTANCE MIN 2xDIA

STEEL BEAM TO STEEL BEAM CONNECTION INFORMATION

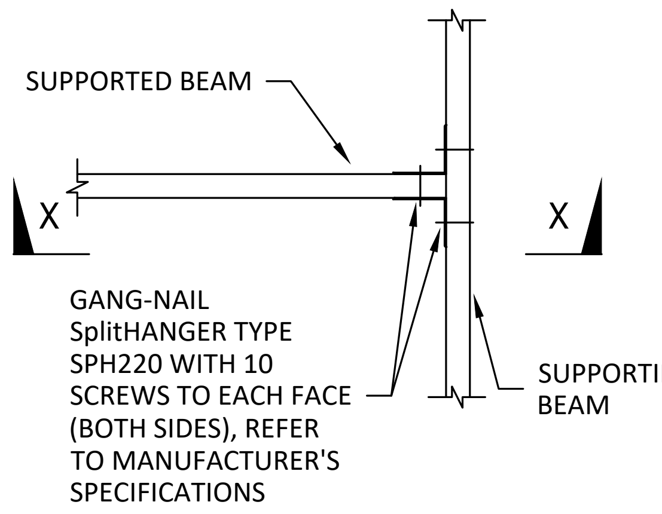
SCALE = NTS



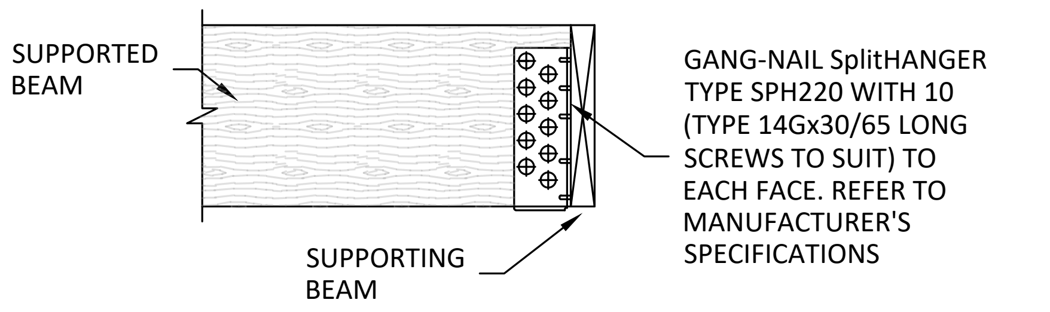
NOTE:
A) AT DOUBLE JOIST TO DOUBLE JOIST, USE JOIST HANGER TO ONE JOIST AND TRIP L GRIP FIXING TO SECOND JOIST WITH 5 NAILS/LEG (15 NAILS).
B) AT DOUBLE JOIST TO WALL PLATE USE JOIST HANGER TO ONE JOIST AND TRIP L GRIP FIXING TO SECOND JOIST WITH 5 NAILS/LEG (15 NAILS).
2-16Ø DYNABOLT TO WALL, SPACE DYNABOLTS AT 80mm CTRS AND 80mm EDGE DISTANCE

TIMBER TO TIMBER RAFTER/JOIST CONNECTION DETAIL

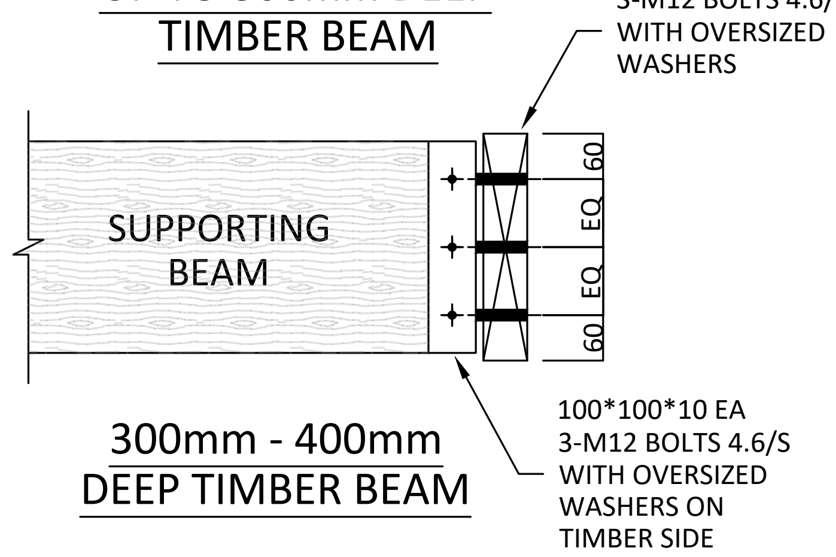
SCALE = NTS



PLAN VIEW



UP TO 300mm DEEP TIMBER BEAM

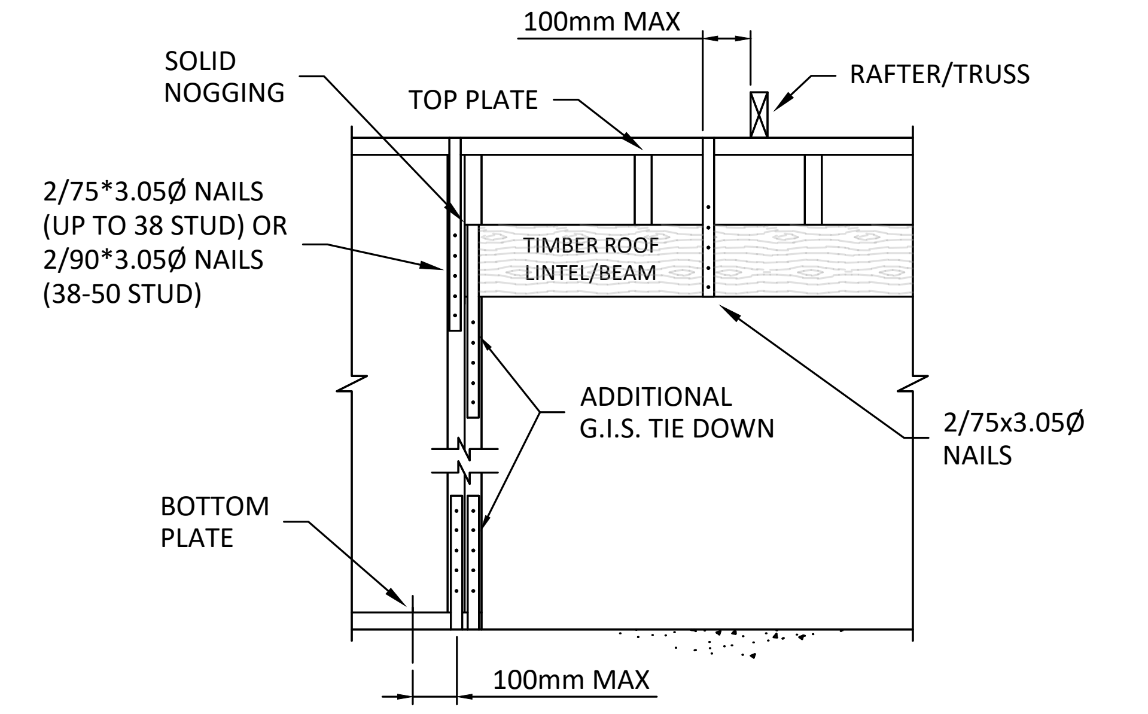


300mm - 400mm DEEP TIMBER BEAM

SECTION X-X

TIMBER TO TIMBER BEAM CONNECTION DETAIL

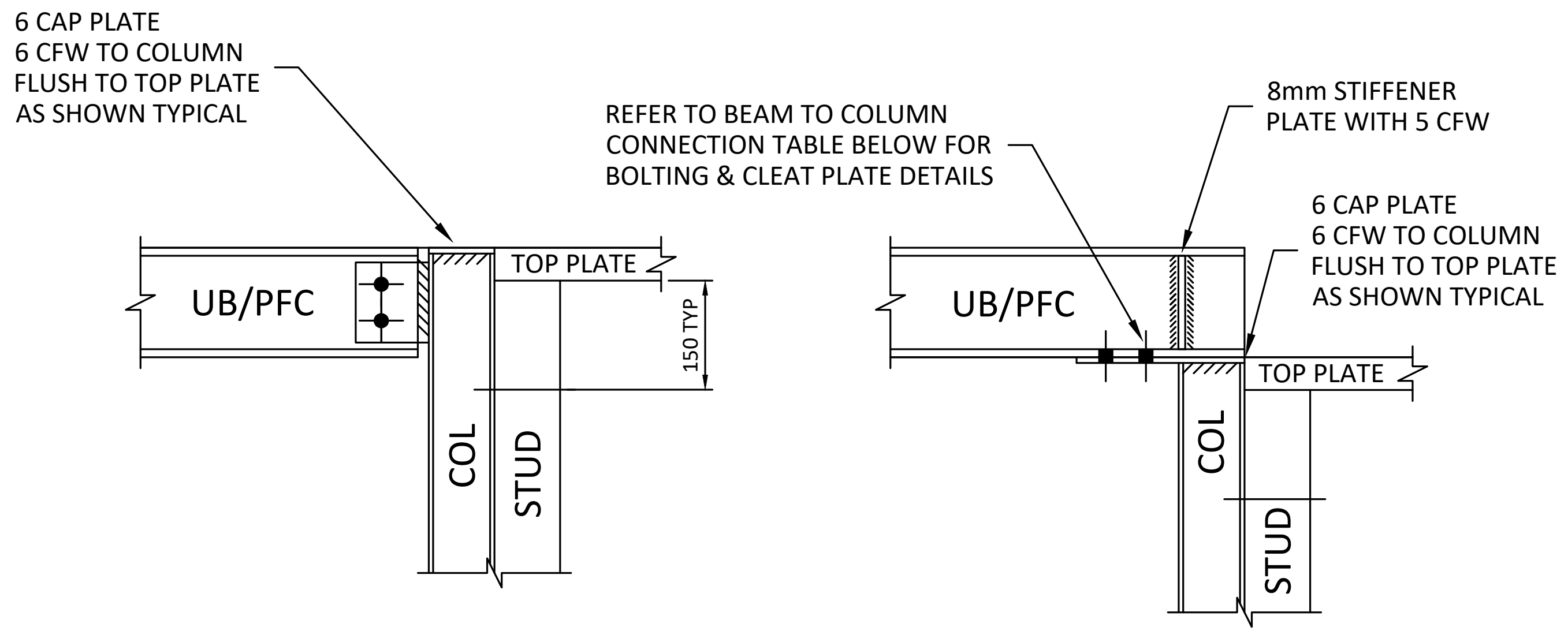
SCALE = NTS



1. ADOPTED IN LIEU OF ABOVE SPECIFICATION AND IT MUST BE IN ACCORDANCE WITH AS1684.2-2010
2. REFER TO TRUSS MANUFACTURER FOR TIE-DOWN FIXING ON ROOF BATTENS AND RAFTERS/TRUSSES
3. TIMBER MEMBERS ASSUMED TO BE JD4 GROUP OR STRONGER
4. HOUSE ASSUMED TO HAVE A MAXIMUM WIDTH OF 12m
5. STUDS ASSUMED TO BE AS 450 MAX. CTRS.
6. THE TOP PLATE SHALL BE FIXED OR TIED TO THE LINTEL WITHIN 100mm OF EACH RAFTER/TRUSS, OR THE RAFTER/TRUSS FIXED DIRECTLY TO THE LINTEL WITH A FIXING OF EQUIVALENT TIE-DOWN REQUIRED FOR THE RAFTER/TRUSS
7. G.I.S. MEANS 30 * 0.8 GALVANISED IRON STRAP

TIMBER BEAM/LINTEL TIE DOWN DETAIL

SCALE = NTS



BEAM TO COL/BEAM CONNECTION INFORMATION		
MEMBER SIZE	BOLTS REQUIRED	CLEAT/CAP PLATE THICKNESS
UPTO 200UB/PFC	2-M16 8.8/S BOLTS	10mm
UPTO 250UB & 250PFC	3-M20 8.8/S BOLTS	10mm
UPTO 410UB	4-M20 8.8/S BOLTS	12mm

NOTES:
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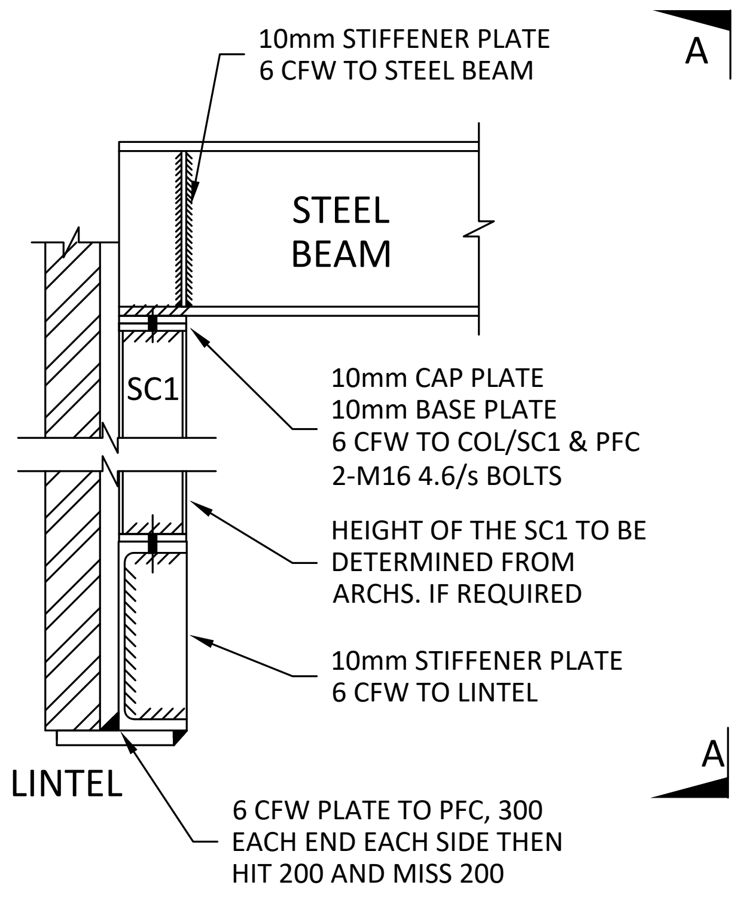
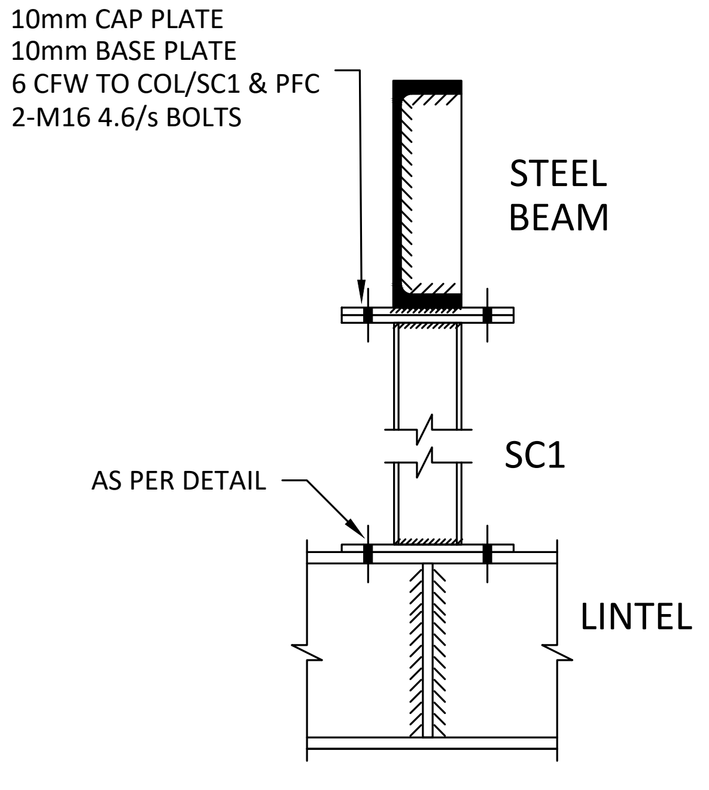
- BUILDER/CONTRACTOR TO CONFIRM HEIGHT OF LINTEL & CLEAT PLATE TO SUIT WINDOW/DOOR OPENING.
- BOLT TO BOLT DISTANCE MIN 2.5xDIA
- BOLT TO EDGE DISTANCE MIN 2xDIA

STEEL BEAM TO STEEL BEAM CONNECTION INFORMATION

SCALE = NTS





SECTION A-A

STUB COLUMN TO STEEL BEAM CONNECTION DETAIL - PFC

SCALE = 1:10

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PROJECT TITTLE:	PROPOSED THREE NEW DOUBLE STOREY DWELLINGS
PROJECT ADDRESS:	LOT 1, NO.17 RAILWAY PARADE, SEAFORD

DESIGNED:	DRAWN:	DATE:
YD	ED	24.07.24
PAGE No:	SCALE:	
S5	AS SHOWN - A1	
DRAWING NO.:		REVISION:
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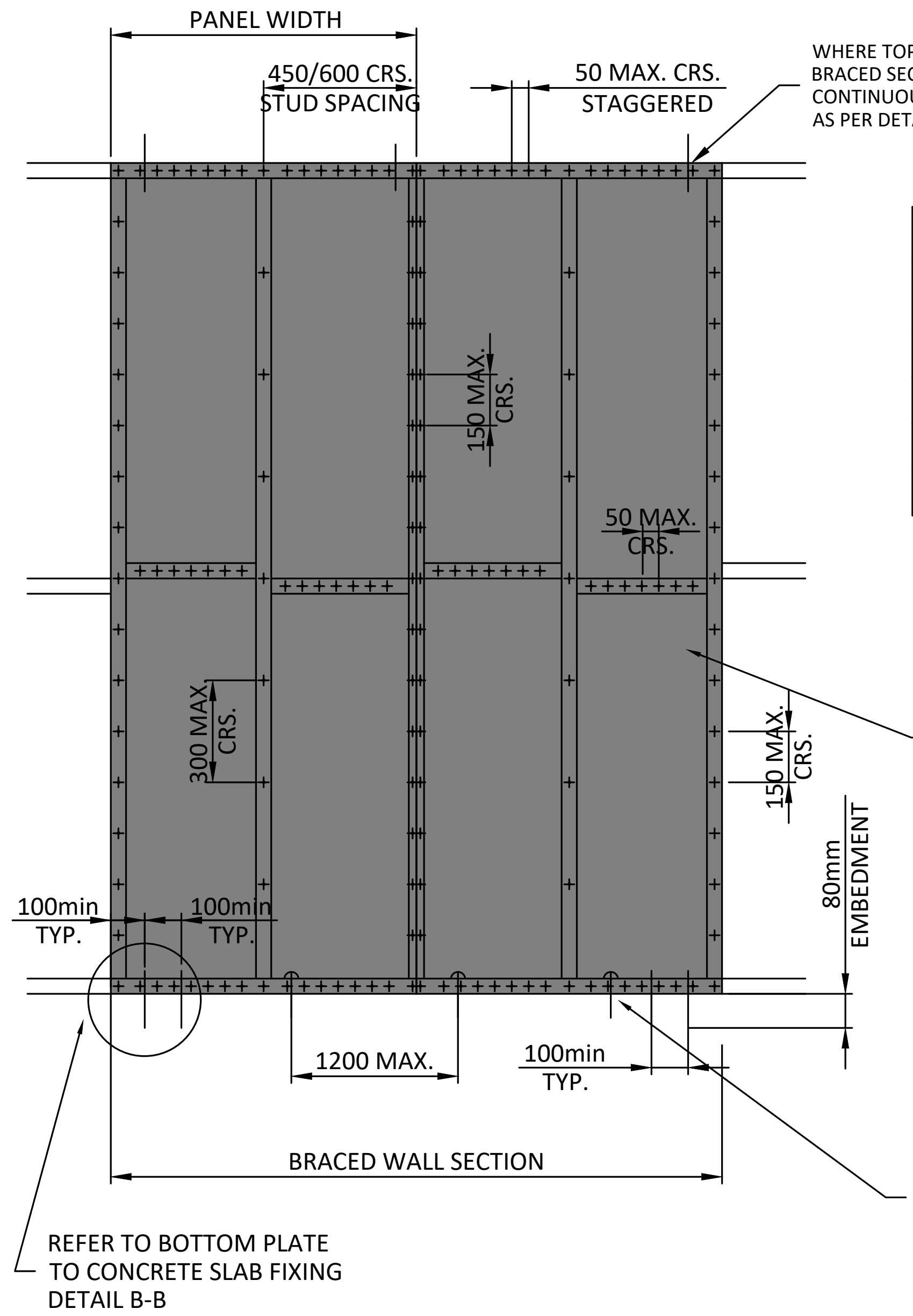
BRACING DETAILS

SCALE = AS SHOWN



WHERE TOP AND BOTTOM PLATES IN BRACED SECTIONS ARE NOT CONTINUOUS THEY MUST BE SPLICED AS PER DETAIL BELOW:

FIXING TO TIMBER FRAME
PAA APPROVED STRUCTURAL PLYWOOD FIXED WITH 2.8Ø x 30 GALVANISED FLATHEAD NAILS @ 150 CENTRES TO TOP AND BOTTOM WALL PLATES & NOGGINGS @ 150 CENTRES TO STUDS AT VERTICAL EDGES @ 300 CENTRES TO INTERNAL STUDS

INTERMEDIATE FIXING
FIX ONE 75mm MASONRY NAIL (HAND-DRIVEN AT SLAB EDGE) OR SCREW OR BOLT TO THE BOTTOM PLATE AT MAXIMUM 1200mm CENTRES

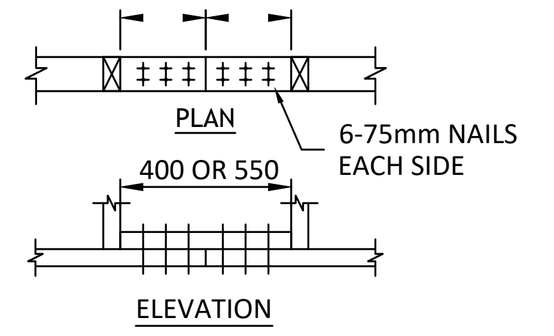
REFER TO BOTTOM PLATE TO CONCRETE SLAB FIXING DETAIL B-B

'P6' PLYWOOD WALL BRACING

SCALE:NTS

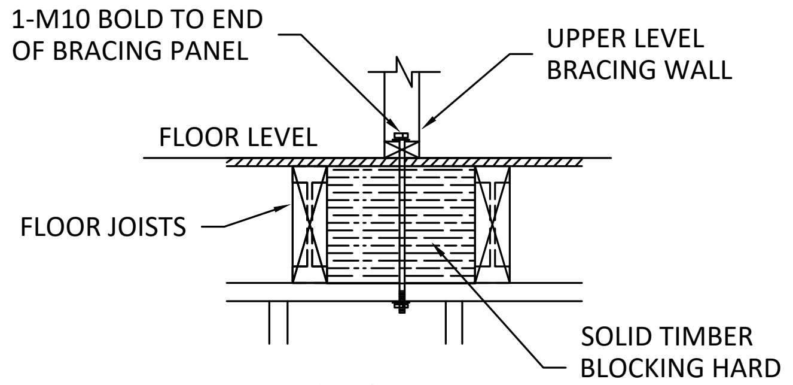
MINIMUM PLYWOOD THICKNESS (mm)

PLYWOOD STRESS GRADE	STUD SPACING (mm)	
	450 CRS	600 CRS
F8	7	9
F11	6	7
F14	4	6
F27	4	4.5

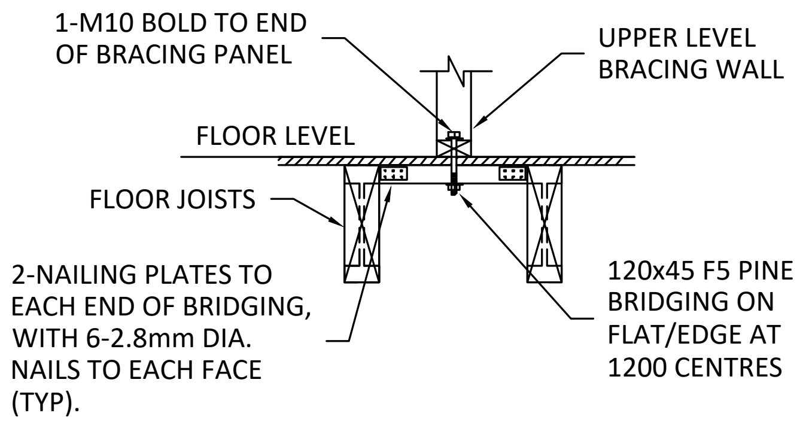


NOTES:
1. SPLICE PLATE MUST BE SAME SIZE & STRESS GRADE AS TOP & BOTTOM PLATES
2. WHERE TOP & BOTTOM PLATES IN BRACED SECTIONS ARE DISCONTINUED, THEY MUST BE SPLICED AS SHOWN IN THIS DETAIL

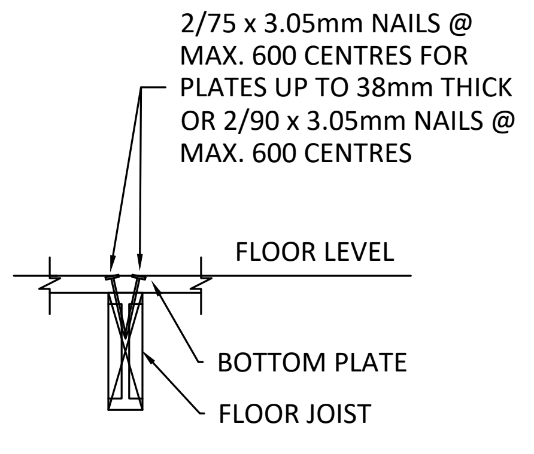
TYPICAL TOP & BOTTOM PLATE SPLICE DETAIL



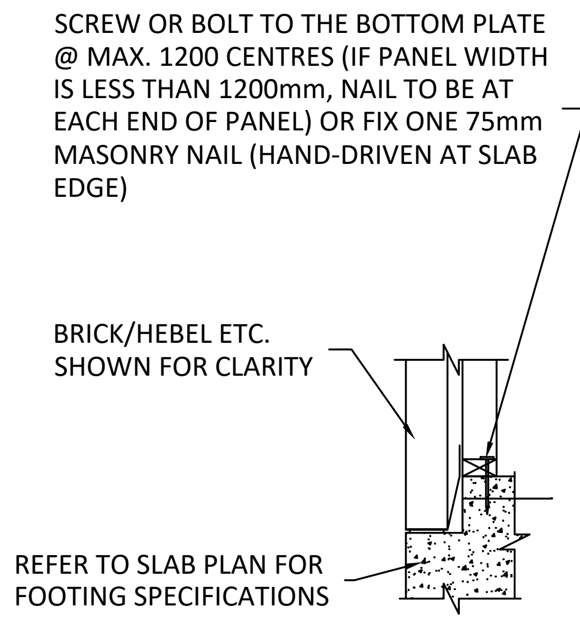
BRACING WALL (PARALLEL TO JOISTS)
(INTERNAL BRACING WALL SHOWN)



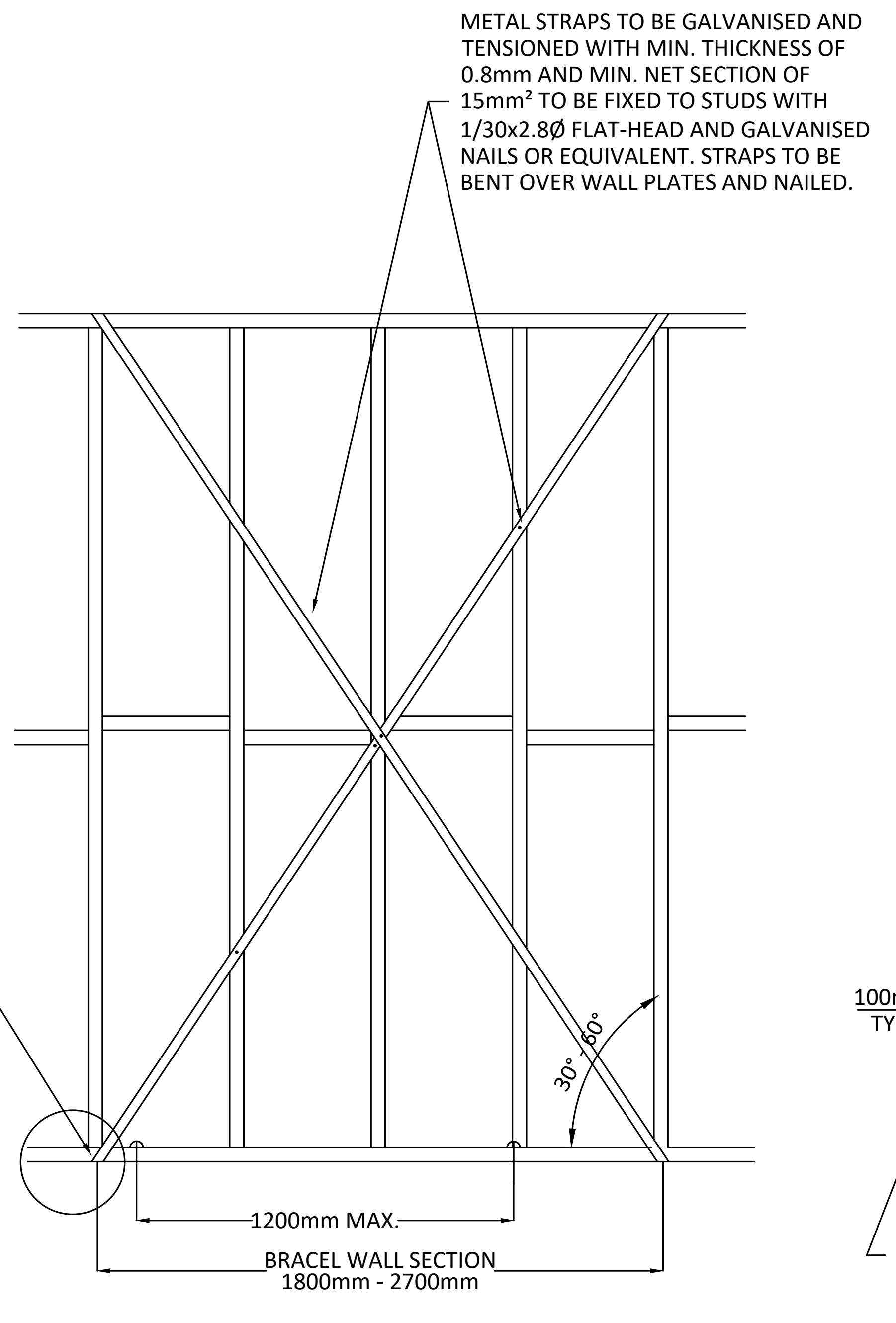
BRACING WALL (PARALLEL TO JOISTS)
(NO STUD WALL UNDER)



BOTTOM WALL PLATE TO FLOOR JOIST DETAIL



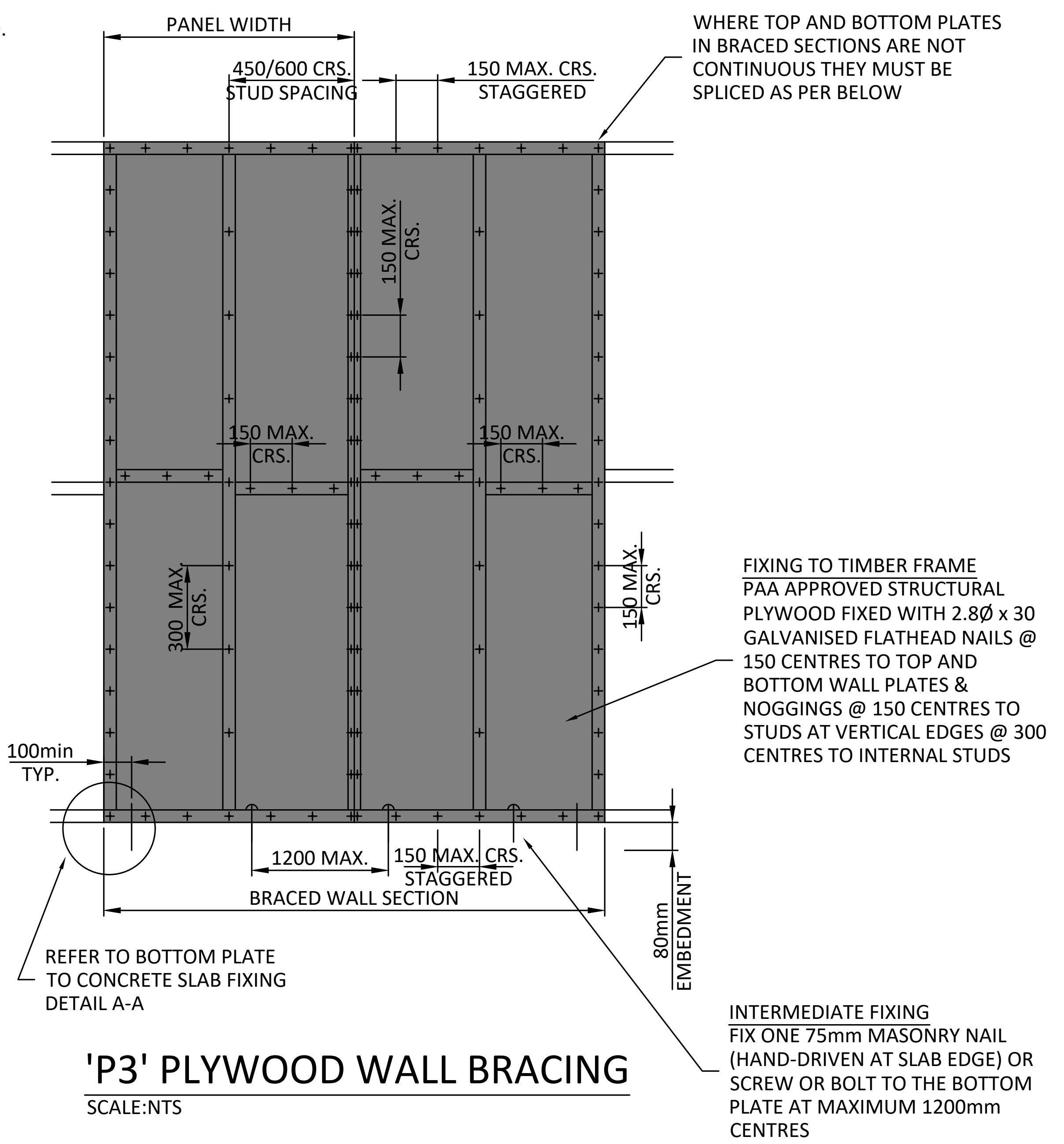
BOTTOM WALL PLATE TO CONCRETE SLAB FIXING DETAIL A-A



METAL STRAPS TO BE GALVANISED AND TENSIONED WITH MIN. THICKNESS OF 0.8mm AND MIN. NET SECTION OF 15mm² TO BE FIXED TO STUDS WITH 1/30x2.8Ø FLAT-HEAD AND GALVANISED NAILS OR EQUIVALENT. STRAPS TO BE BENT OVER WALL PLATES AND NAILED.

'M' DOUBLE DIAGONAL METAL STRAPPING

SCALE:NTS



WHERE TOP AND BOTTOM PLATES IN BRACED SECTIONS ARE NOT CONTINUOUS THEY MUST BE SPLICED AS PER BELOW

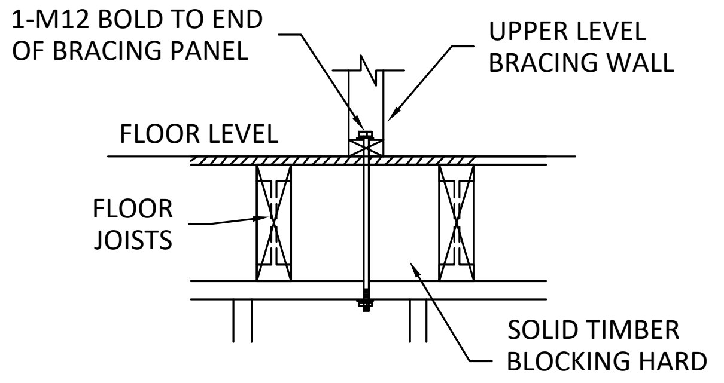
FIXING TO TIMBER FRAME
PAA APPROVED STRUCTURAL PLYWOOD FIXED WITH 2.8Ø x 30 GALVANISED FLATHEAD NAILS @ 150 CENTRES TO TOP AND BOTTOM WALL PLATES & NOGGINGS @ 150 CENTRES TO STUDS AT VERTICAL EDGES @ 300 CENTRES TO INTERNAL STUDS

REFER TO BOTTOM PLATE TO CONCRETE SLAB FIXING DETAIL A-A

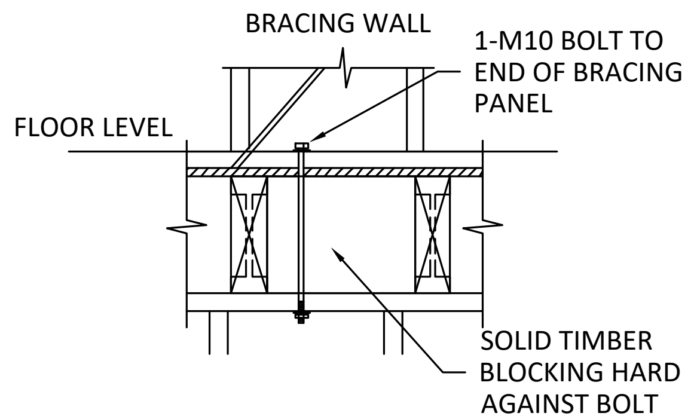
INTERMEDIATE FIXING
FIX ONE 75mm MASONRY NAIL (HAND-DRIVEN AT SLAB EDGE) OR SCREW OR BOLT TO THE BOTTOM PLATE AT MAXIMUM 1200mm CENTRES

'P3' PLYWOOD WALL BRACING

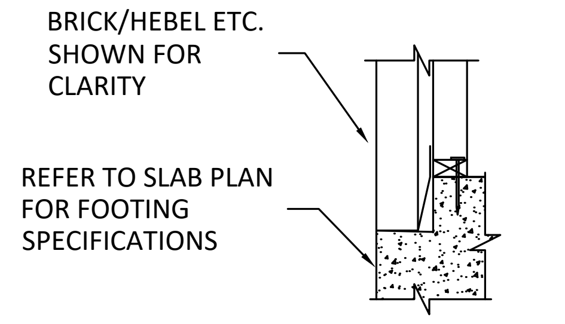
SCALE:NTS



BRACING WALL (PARALLEL TO JOISTS)
(INTERNAL BRACING WALL SHOWN)



BRACING WALL AT PERPENDICULAR TO JOISTS



BOTTOM WALL PLATE END FIXINGS:
2-M8 CHEMSET (ALTERNATIVELY EXCALIBUR SCREWBOLT OR APPROVED EQUIVALENT) TO EACH END OF BRACED SECTION

BOTTOM WALL PLATE TO CONCRETE SLAB FIXING DETAIL (END FIXING)

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