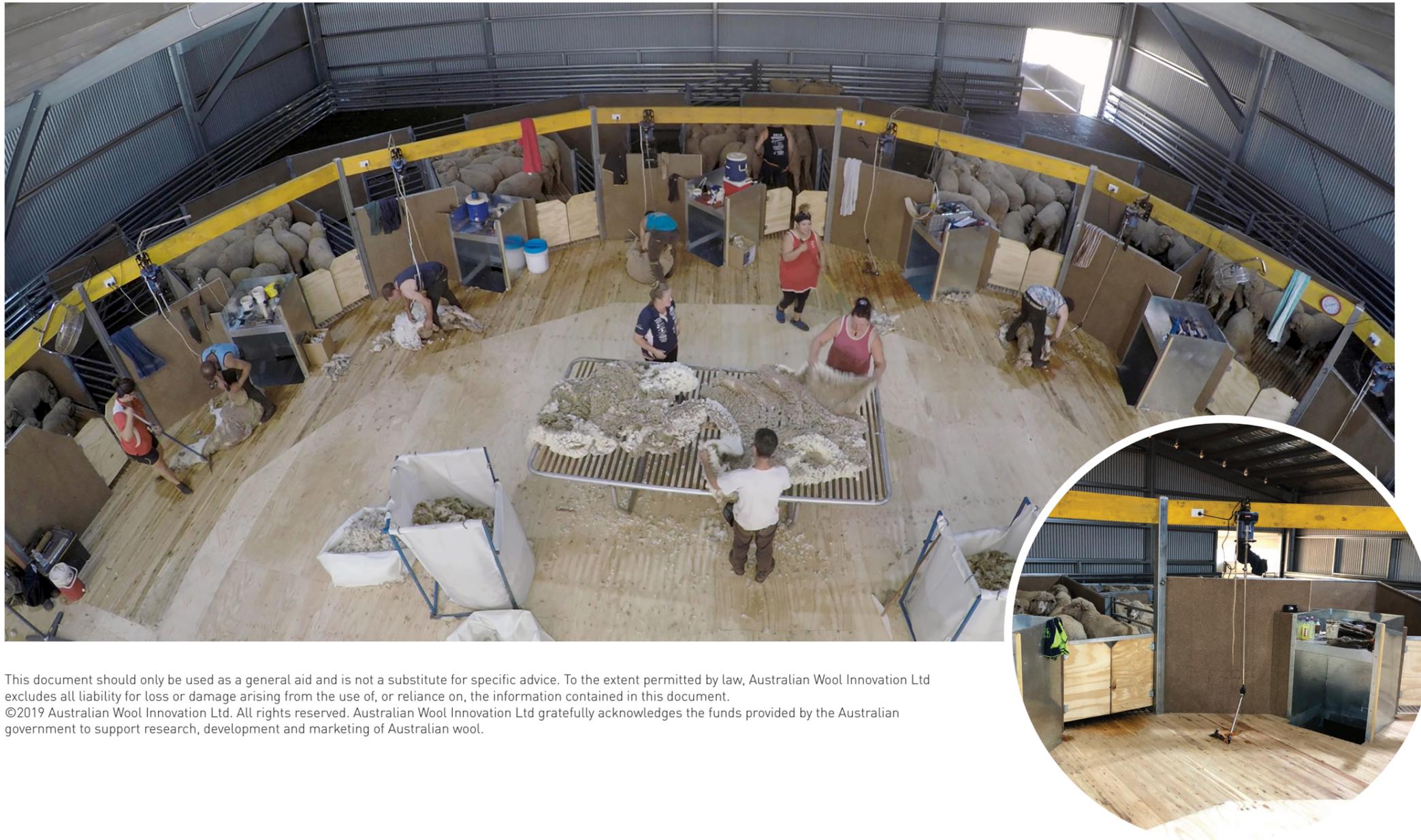


SIX STAND SHEARING SHED

TECHNICAL DRAWINGS



The purpose of this document **'SIX STAND SHEARING SHED, TECHNICAL DRAWINGS'** is to provide woolgrowers with a general shed blueprint.

It is intended that woolgrowers will take this document to a competent builder or contractor who will be able to build as designed, or extract certain elements of the design to suit specific on-site requirements.

For the Arrow Park shearing shed floor plan refer to **'FLOOR PLAN 'ARROW PARK' SHEARING SHED'**.

TECHNICAL DRAWING, SIX STAND SHEARING SHED

STRUCTURAL ELEMENTS



GENERAL NOTES:

- G1. THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH ALL ARCHITECTURAL AND OTHER CONSULTANTS' DRAWINGS AND SPECIFICATIONS AND WITH SUCH OTHER WRITTEN INSTRUCTIONS AS MAY BE ISSUED DURING THE COURSE OF THE CONTRACT. ALL DISCREPANCIES SHALL BE REFERRED TO THE ARCHITECT FOR DECISION BEFORE PROCEEDING WITH THE WORK.
- G2. ANY DISCREPANCIES WITHIN THE STRUCTURAL DRAWINGS SHALL BE REFERRED TO THE ENGINEER FOR DECISION. DIMENSIONS SHALL NOT BE OBTAINED BY SCALING THE STRUCTURAL DRAWINGS.
- G3. SETTING OUT DIMENSIONS SHOWN ON THE DRAWINGS SHALL BE VERIFIED BY THE BUILDER.
- G4. DURING CONSTRUCTION THE STRUCTURE SHALL BE MAINTAINED IN A STABLE CONDITION & NO PART SHALL BE OVERSTRESSED. TEMPORARY BRACING SHALL BE PROVIDED BY THE BUILDER AS REQUIRED.
- G5. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE SAA CODES AND THE BY-LAWS AND ORDINANCES OF THE RELEVANT BUILDING AUTHORITY.
- G6. THE STRUCTURAL WORK SHOWN ON THESE DRAWINGS HAS BEEN DESIGNED FOR THE FOLLOWING LIVE LOADS:-

CLASSIFICATION		
LIVESTOCK (SHEEP)	LIVE LOAD	2.0 kPa
BULK STORAGE	LIVE LOAD	10.0 kPa
BUILDING IMPORTANCE LEVEL		2

- G7. REFER TO ARCHITECTURAL DRAWINGS FOR FALLS IN SLABS, EXTRA PACKING, WATERPROOFING MEMBRANES, CONTRACTION JOINT FILLING MATERIALS AND ALL OTHER ARCHITECTURAL FEATURES SUCH AS DRIP GROOVES, POUR BREAKS IN OFF-FORM CONCRETE, FILLETS AND THE LIKE.
- G8. UNLESS NOTED OTHERWISE, ALL LEVELS ARE IN METRES AND ALL DIMENSIONS ARE IN MILLIMETRES.
- G9. CONTRACTOR SHALL CHECK LOCATION OF EXISTING SERVICES PRIOR TO COMMENCEMENT OF ANY WORK AND ACCEPT FULL RESPONSIBILITY FOR THE COST OF REPAIRS AND CONSEQUENCES OF ANY DAMAGE WHICH MAY OCCUR TO THESE SERVICES AS A RESULT OF CONSTRUCTION WORKS.
- G10. THIS STRUCTURE IS DESIGNED TO BE LOCATED INSIDE A SHED OR OTHER SHELTERING STRUCTURE & AS SUCH HAS NOT BEEN DESIGNED FOR EXTERNAL WIND OR SNOW LOADS.

FOUNDATION NOTES:

- F1. FOOTINGS HAVE BEEN DESIGNED FOR AN ALLOWABLE INTENSITY OR BEARING PRESSURE OF 150 kPa.
- F2. FOOTINGS SHALL BE LOCATED CENTRALLY UNDER WALLS AND COLUMNS UNLESS NOTED OTHERWISE.
- F3. DO NOT EXCEED A RISE OF 1 IN A RUN 4 FOR THE LINE OF SLOPE BETWEEN ADJACENT FOOTINGS OR EXCAVATIONS.
- F4. FOOTINGS TO BE CONSTRUCTED AND BACKFILLED AS SOON AS POSSIBLE FOLLOWING EXCAVATION TO AVOID SOFTENING OR DRYING OUT BY EXPOSURE.
- F5. WHERE THE FOOTING OR EDGE BEAM ENCOUNTERS A SINGLE LOCAL ROCK OUTCROP OVER A LENGTH LESS THAN 1m, THE DEPTH OF THE FOOTING OR EDGE BEAM MAY BE REDUCED BY UP TO ONE-THIRD, PROVIDED THE AMOUNT OF TOP AND BOTTOM REINFORCEMENT IS DOUBLE AND EXTENDED 500mm PAST THE SECTION WITH REDUCED DEPTH.

CONCRETE NOTES:

- C1. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH AS 3600-2009 'CONCRETE STRUCTURES' WITH AMENDMENTS, EXCEPT WHERE VARIED BY THE CONTRACT DOCUMENTS.
- C1. CONCRETE QUALITY, EXPOSURE CLASSIFICATION AND CLEAR CONCRETE COVER TO ALL REINFORCEMENT FOR DURABILITY IN ACCORDANCE WITH AS 3600-2009, SHALL BE AS FOLLOWS (UNO.):

ELEMENT	GRADE F'c MIN. (CEMENT)	EXPOSURE CLASS.	SLUMP	MAX. AGGREGATE	COVER (AGAINST GROUND)	COVER (AGAINST OTHER)
PILES	32	B1	80	20	60	40
FOOTINGS	32	B1	80	20	60	40

- C3. CEMENT TYPE TO BE GP THROUGHOUT IN ACCORDANCE WITH AS 3972-2010 'PORTLAND BLENDED CEMENTS.'
- C4. NO ADMIXTURES SHALL BE USED IN CONCRETE UNLESS APPROVED IN WRITING.
- C5. PROJECT CONTROL TESTING SHALL BE CARRIED OUT IN ACCORDANCE WITH AS 1012.
- C6. SIZES OF CONCRETE ELEMENTS DO NOT INCLUDE THICKNESS OF APPLIED FINISHES.
- C7. CONSTRUCTION JOINTS WHERE NOT SHOWN SHALL BE LOCATED TO THE APPROVAL OF THE ENGINEER.
- C8. NO HOLES OR CHASES OTHER THAN THOSE SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE MADE IN CONCRETE MEMBERS WITHOUT FIRST THE PRIOR APPROVAL OF THE ENGINEER.
- C9. THE FINISHED CONCRETE SHALL BE A DENSE HOMOGENOUS MASS, COMPLETELY FILLING THE FORMWORK THOROUGHLY EMBEDDING THE REINFORCEMENT & FREE OF STONE POCKETS. ALL CONCRETE INCLUDING SLABS ON GROUND & FOOTINGS SHALL BE COMPACTED WITH MECHANICAL VIBRATORS.
- C10. CURING OF ALL THE CONCRETE IS TO BE ACHIEVED BY KEEPING SURFACES CONTINUOUSLY WET FOR A PERIOD OF 3 DAYS, AND PREVENTION OF LOSS OF MOISTURE FOR A TOTAL OF 7 DAYS FOLLOWED BY A GRADUAL DRYING OUT. APPROVED SPRAY ON CURING COMPOUNDS MAY BE USED WHERE NO FLOOR FINISHES ARE PROPOSED. POLYTHENE SHEETING OR WET HESSIAN MAY BE USED IF PROTECTED FROM WIND AND TRAFFIC.
- C11. CONSTRUCTION SUPPORT PROPPING IS TO BE LEFT IN PLACE WHERE NEEDED TO AVOID OVERSTRESSING THE STRUCTURE DUE TO CONSTRUCTION LOADING. NO BRICKWORK OR PARTITION WALLS ARE TO BE CONSTRUCTED ON SUSPENDED LEVELS UNTIL PROPPING IS REMOVED AND THE SLAB HAS ABSORBED IT'S DEAD LOAD DEFLECTION.
- C12. FOR CHAMFERS, DRIP GROOVES, REGLETS etc. REFER TO DETAILS, MAINTAIN COVER TO REINFORCEMENT AT THESE DETAILS.
- C13. BEAM DEPTHS ARE WRITTEN FIRST AND INCLUDE SLAB THICKNESS (IF ANY).

STEELWORK NOTES:

- S1. ALL WORKMANSHIP & MATERIALS SHALL BE IN ACCORDANCE WITH AS 4100 AND AS 1554 EXCEPT WHERE VARIED BY THE CONTRACT DOCUMENTS.
- S2. ALL STEELWORK SHALL BE IN ACCORDANCE (UNO) WITH:
AS 3679.1 FOR UB, UC, PFC, EA AND UA SECTIONS
AS 1163 (GRADE 350) FOR RHS, CHS AND SHS SECTIONS
AS 1397 FOR COLD FORMED STEEL PURLINS & GIRTS
- S3. THE BUILDER SHALL PREPARE WORKSHOP DRAWINGS AND SHALL SUBMIT A COPY OF EACH DRAWING FOR APPROVAL. FABRICATION SHALL NOT COMMENCE UNTIL APPROVAL HAS BEEN RECEIVED. APPROVAL OF DRAWINGS DOES NOT INCLUDE DIMENSIONS.

- S4. ALL COMMERCIAL GRADE BOLTS, NUTS AND WASHERS SHALL COMPLY WITH AS 1111, AS 1112 AND AS 1237 RESPECTIVELY.
- S5. WHERE NOT SPECIFIED, ALL BOLTS ARE TO BE 20 DIAMETER HIGH STRENGTH, OF GRADE 8.8 SNUG TIGHT (M20-8.8/S) - EXCEPT PURLIN AND H.D. BOLTS. ALL BOLTS ARE DESIGNATED BY THE NUMBER, DIAMETER, GRADE AND TIGHTENING PROCEDURE. FOR EXAMPLE 4M16-4.6/S MEANS FOUR M16 DIAMETER COMMERCIAL GRADE BOLTS, SNUG TIGHT.
- S6. ALL CONNECTIONS TO HAVE 2 BOLTS MIN. PER CONNECTION WITH GUSSET PLATES 10 THICK (UNO).
- S7. ALL WELDING DESIGN & FABRICATION SHALL CONFORM TO AS 1554 (UNO.). ALL WELDS TO BE 6mm CONTINUOUS FILLET FROM E48XX ELECTRODES. ALL STRUCTURAL WELDS SHALL BE CATEGORY SP (UNO.). GENERAL PURPOSE WELDS SHALL BE NOTED 'GP'. BUTT WELDS WHERE INDICATED IN THE DRAWINGS ARE TO BE COMPLETE PENETRATION BUTT WELDS AS DEFINED IN AS 1554. ALL WELDING SYMBOLS TO AS 1101 PART 3.
- S8. STRUCTURAL STEELWORK SHALL HAVE THE SURFACE TREATMENT IN ACCORDANCE WITH AS.NZ5.2312 AND SPECIFICATION.

ELEMENT	SURFACE PREPARATION	PRIME COAT	FINISH
STEELWORK	HOT DIPPED GALV. DEGREASE WASH AND DRY		

- NOTE: CONCRETE ENCASED STEELWORK SHALL BE LEFT UNPAINTED.
- S9. THE BUILDER SHALL PROVIDE ALL CLEATS AND DRILL ALL HOLES NECESSARY FOR FIXING STEEL TO STEEL, AND TIMBER TO STEEL WHETHER OR NOT DETAILED IN THE DRAWINGS.
- S10. ALL THE REQUIREMENTS OF THE STRUCTURAL STEEL SPECIFICATION SHALL APPLY (UNO.).
- S11. THE BUILDER IS TO BE PRESENT WHEN ALL HOLDING DOWN BOLTS ARE INSTALLED TO ENSURE THEY ARE NOT DISPLACED DURING CONCRETE PLACEMENT.
- S12. THE BUILDER IS TO MAKE GOOD AND OR REPAIR ALL DAMAGED SURFACES DURING PERFORMANCE OF THE WORK.

TIMBER NOTES:

- T1. ALL TIMBER DESIGN, CONSTRUCTION, WORKMANSHIP & MATERIAL SHALL BE IN STRICT ACCORDANCE WITH AS 1720 SAA 'TIMBER STRUCTURES CODE.'
- T2. WHERE NOT SPECIFICALLY DETAILED STANDARD DOMESTIC CONSTRUCTION TO BE USED AS PER AS 1684 'NATIONAL TIMBER FRAMING CODE.'
- T3. ALL SOFTWOOD TIMBER SHALL BE MINIMUM F7 STRESS GRADE (UNO). ALL HARDWOOD TO BE MINIMUM GRADE F8 (UNO)
- T4. ALL BOLTS IN TIMBER CONSTRUCTION TO BE COMMERCIAL BOLTS OF GRADE 4.6 SNUG TIGHT (M16-4.6/S) CONFORMING TO AS 1111 WITH WASHERS AS SPECIFIED (UNO)
- T5. END AND EDGE DISTANCES FOR BOLTS WHERE NOT SPECIFIED SHALL BE IN ACCORDANCE WITH THE PROVISIONS OF AS 1720.1.
- T6. ALL BOLTS, NUTS & WASHERS TO BE HOT DIP GALVANISED, OR STAINLESS STEEL GRADE A4 (316), NOT ZINC OR CADMIUM PLATED.
- T7. EXTERNAL TIMBER TO BE EITHER HARDWOOD DURABILITY CLASS 1 OR II TO AS 1720.2 OR IMPREGNATED PINE MINIMUM GRADE F7, PRESSURE TESTED TO AS 1604 AND RE-DRIED PRIOR TO USE. SUPPLEMENTARY TREATMENT SHALL BE APPLIED TO CUT SURFACES.

PLYWOOD NOTES:

- ALL STRUCTURAL PLYWOOD TO COMPLY WITH AS/NZS 2269 - 2012 PLYWOOD - STRUCTURAL.
- PLYWOOD ADHESIVES TO BE CLASS A-BOND - DURABLE PHENOLIC BOND (MARINE GRADE).
- ALL PLYWOOD TO BE MINIMUM STRESS GRADE F11 UNLESS OTHERWISE APPROVED BY THE ENGINEER.
- ALL STRUCTURAL PLYWOOD TO BE TREATED TO H3 HAZARD CLASS AS PER AS1604.3 - 2010 SPECIFICATION FOR PRESERVATIVE TREATMENT PART 3 PLYWOOD.
- SHEET LAYOUT TO COMPLY WITH MANUFACTURER'S SPECIFICATION UNLESS OTHERWISE APPROVED BY THE ENGINEER.

DRAFTING ABBREVIATIONS:

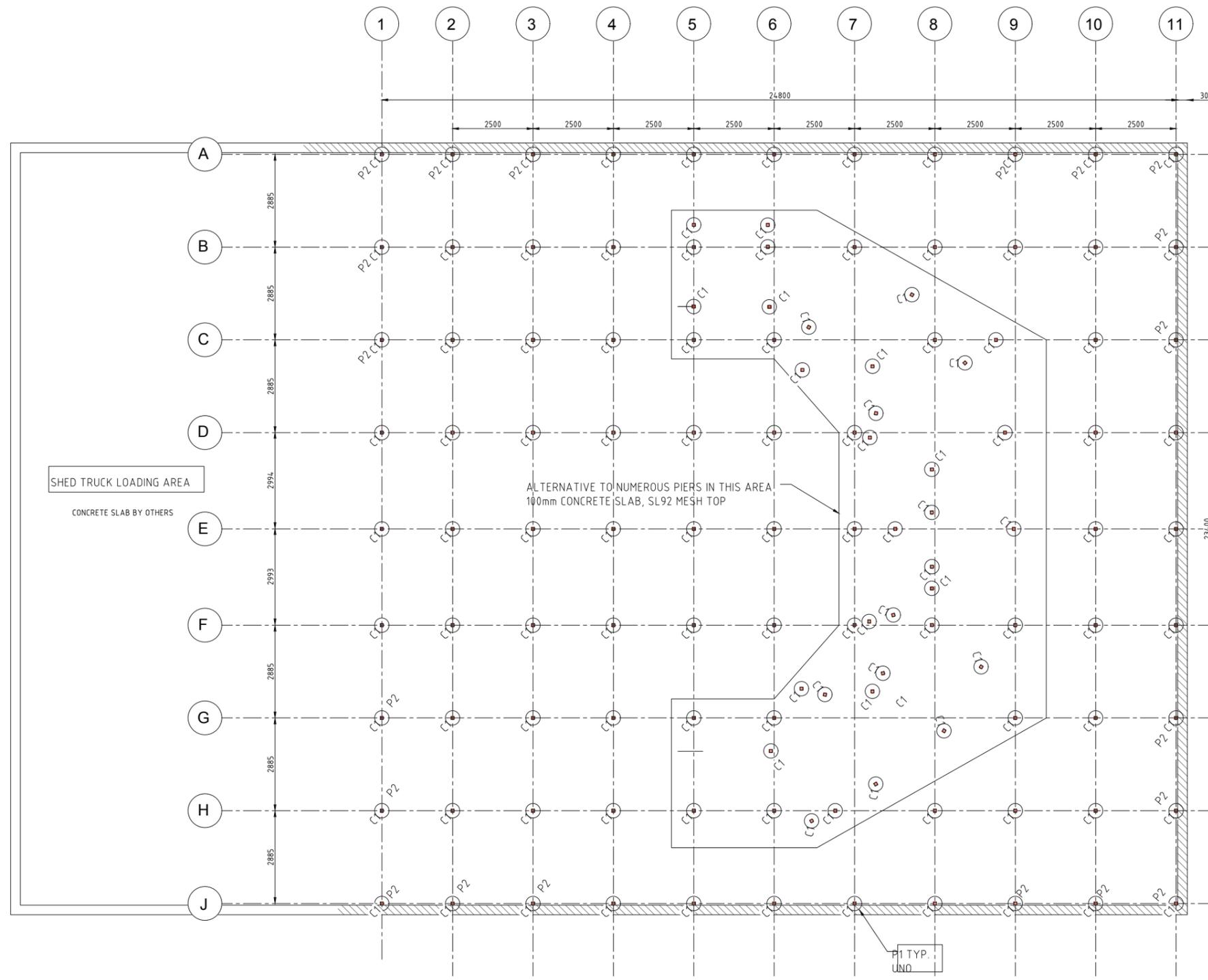
NGL	NATURAL GROUND LEVEL
FGL	FINISHED GROUND LEVEL
FFL	FINISHED FLOOR LEVEL
UNO	UNLESS NOTED OTHERWISE
VB	VAPOUR BARRIER
ZPEF	ZIPPED POLYETHYLENE FOAM
BCJ	BRICK CONTROL JOINT
C/C	CENTRES
C/S	COURSES
REINF	REINFORCEMENT
HORIZ	HORIZONTAL
VERT	VERTICAL
B/W	BOTHWAYS
KJ	KEYED JOINT
DJ	DOWELLED JOINT
VJ	VERTICAL JOINT
NTS	NOT TO SCALE
TYP	TYPICAL
BWK	BRICKWORK
BLK	BLOCKWORK
CONC	CONCRETE
CJ	CONTROL JOINT
CFW	CONTINUOUS FILLET WELD

PLEASE NOTE: THESE PLANS ARE DESIGNED TO BE PRINTED AT A1 SIZE FOR LEGIBILITY

SCHEDULE OF DRAWINGS	
DRAWING	TITLE
S01	TITLE SHEET & NOTES
S02	FOOTING PLAN
S03	FLOORING PLAN
S04	GROUND FLOOR FRAMEWORK MARKING PLAN
S05	SHEARING FLOOR FRAMEWORK MARKING PLAN
S06	ELEVATIONS SHEET 1 OF 2
S07	ELEVATIONS SHEET 2 OF 2
S08	DETAILS SHEET 1 OF 2
S09	DETAILS SHEET 2 OF 2

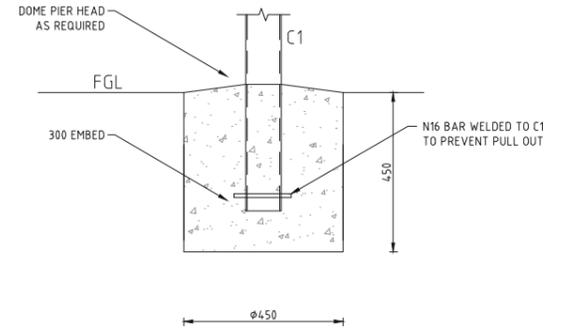
TECHNICAL DRAWING, SIX STAND SHEARING SHED

S01 - TITLE SHEET & NOTES

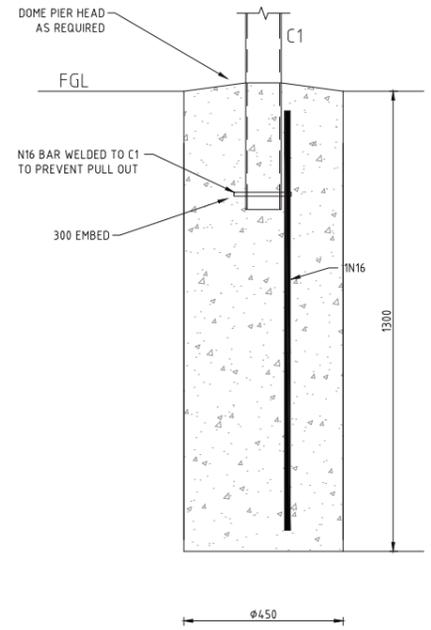


FOOTING PLAN
SCALE 1:75 (A1)
SCALE 1:150 (A3)

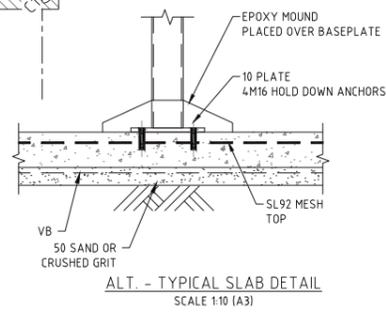
NOTE: P2 REQUIRED WHERE BRACING IS LOCATED SEE SHEET S04.



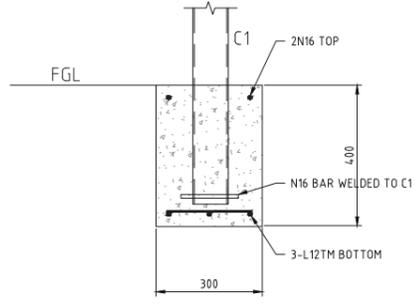
P1 - PIER DETAIL
SCALE 1:10 (A1)
SCALE 1:20 (A3)



P2 - PIER DETAIL
SCALE 1:10 (A1)
SCALE 1:20 (A3) FOR BRACING

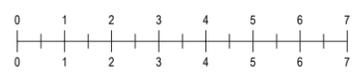


ALT. - TYPICAL SLAB DETAIL
SCALE 1:10 (A3)



SF1 - STRIP FOOTING DETAIL
SCALE 1:10 (A1)
SCALE 1:20 (A3)

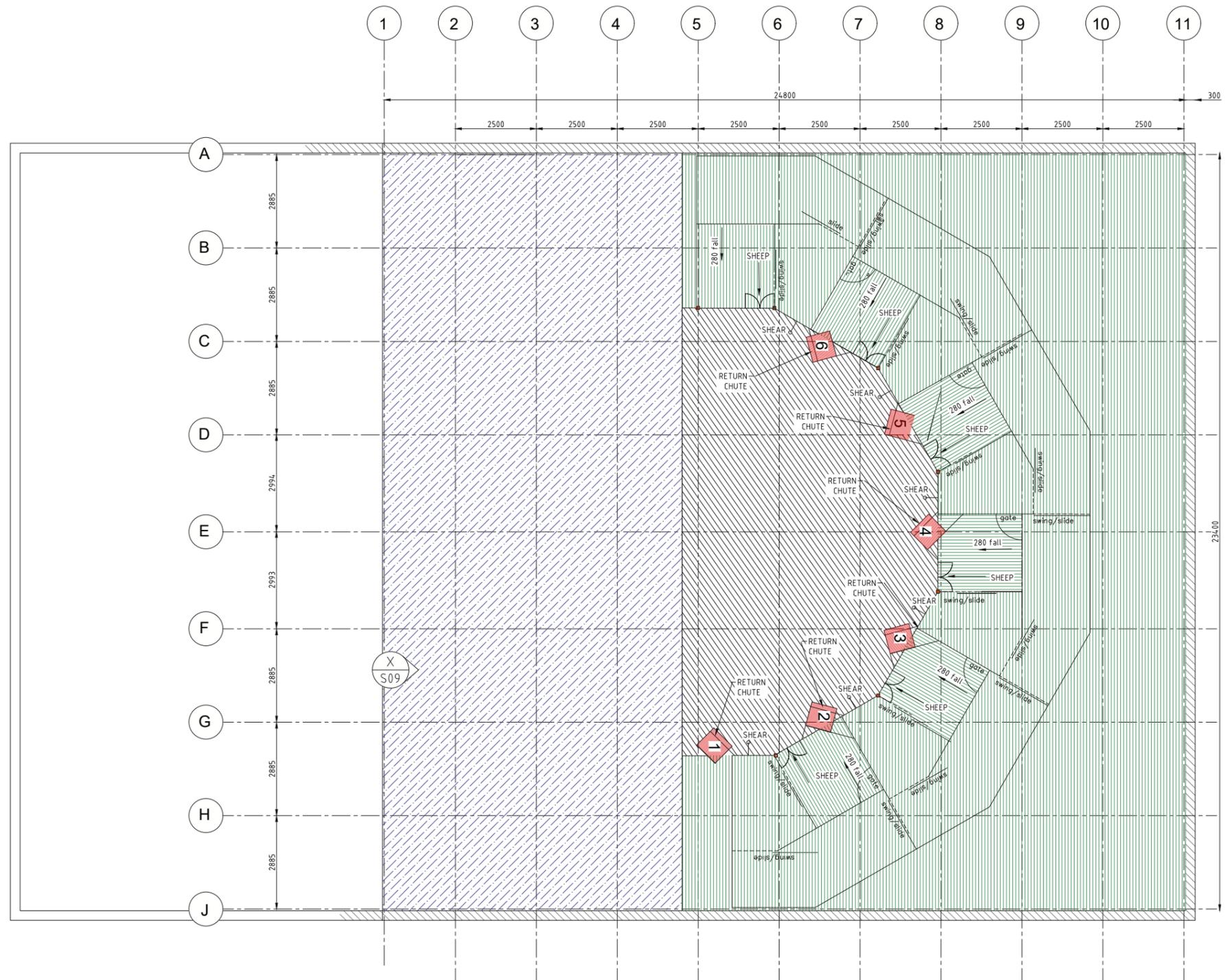
SCALE 1:75 (A1)



SCALE 1:150 (A3)

TECHNICAL DRAWING, SIX STAND SHEARING SHED

S02- FOOTING PLAN

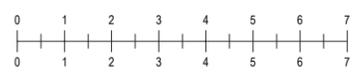


FLOOR PLAN
 SCALE 1:75 (A1)
 SCALE 1:150 (A3)

LEGEND

-  MARINE PLYWOOD UNDERLAY (21mm THICK, 7 PLY) WITH CYPRESS FLOOR BOARDS TOPPING. AT ANGLES REQUIRED FOR SHEARING (ANGLES TBC)
-  PLYWOOD ON STEEL SUPPORTS (21mm THICK, 7 PLY)
-  45x23 HARDWOOD SLATS, 20 GAP.

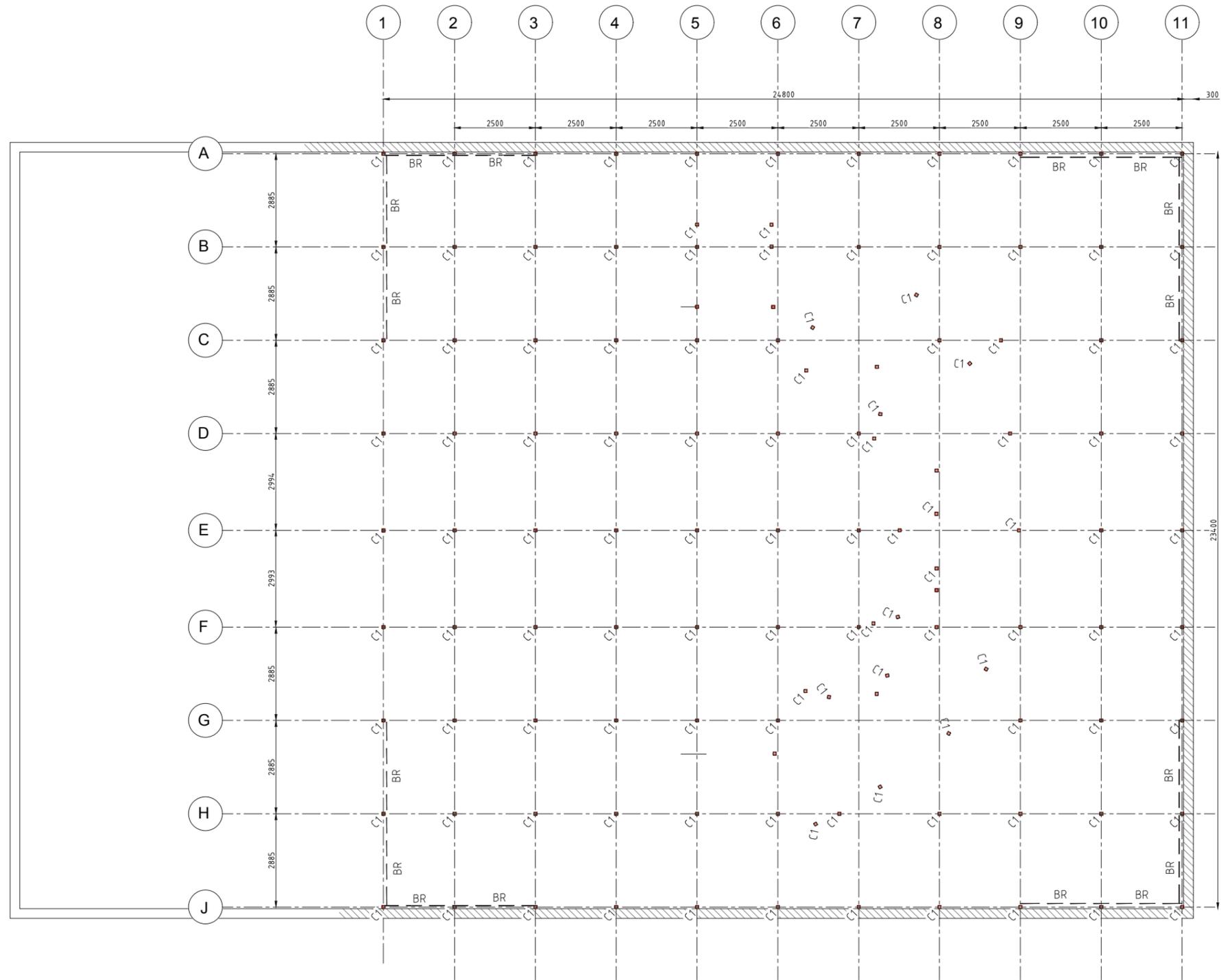
SCALE 1:75 (A1)



SCALE 1:150 (A3)

TECHNICAL DRAWING, SIX STAND SHEARING SHED

S03 - FLOORING PLAN



GROUND FLOOR STEELWORK MARKING PLAN

SCALE 1:75 (A1)
SCALE 1:150 (A3)

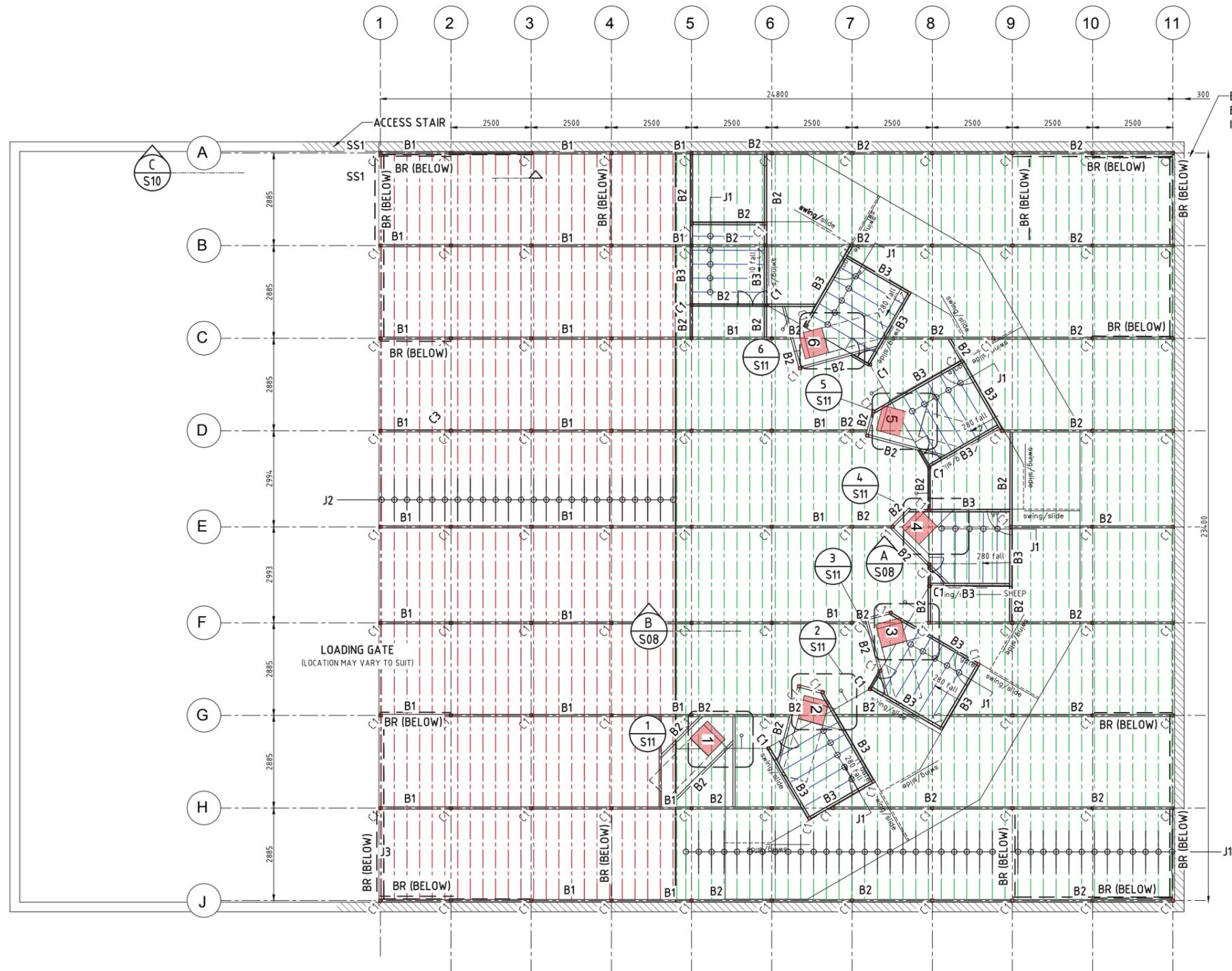
SCALE 1:75 (A1)



SCALE 1:150 (A3)

TECHNICAL DRAWING, SIX STAND SHEARING SHED

S04 - STRUCTURAL FRAME GROUND FLOOR PLAN



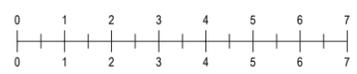
BRACING NOTE: LOCATIONS OF BR CAN BE VARIED TO SUIT YARD LAYOUT. IF REQUIRED CONSULT WITH ENGINEER.

MEMBER SCHEDULE		
	MEMBER	COMMENTS
COLUMNS		
C1	100x6 SHS	MAX. COLUMN LENGTH 2600 GRD TO U/S FLOOR. TOP OF CONCRETE TO TOP OF COLUMN
BEARERS		
B1 *	180 PFC	*ALTERNATIVE C20024 LIGHT STEEL.
B2	2x190x35 F14	TIMBER
B3	2x190x35 F14+170x45 TAPERED TO SUIT SLOPE	TIMBER
BR	30x3 EA	BRACING
JOISTS		
J1	120x45 F14 @400C/C MAX. SPACING	TIMBER
J2	Z15015 @ 400C/C MAX.	STEEL

* WHERE B1* USED, FLOOR CAPACITY REDUCED TO 4.0 kPa ONLY.

SHEARING FLOOR FRAMEWORK MARKING
 PLAN
 SCALE 1:75 (A1)
 SCALE 1:150 (A3)

SCALE 1:75 (A1)

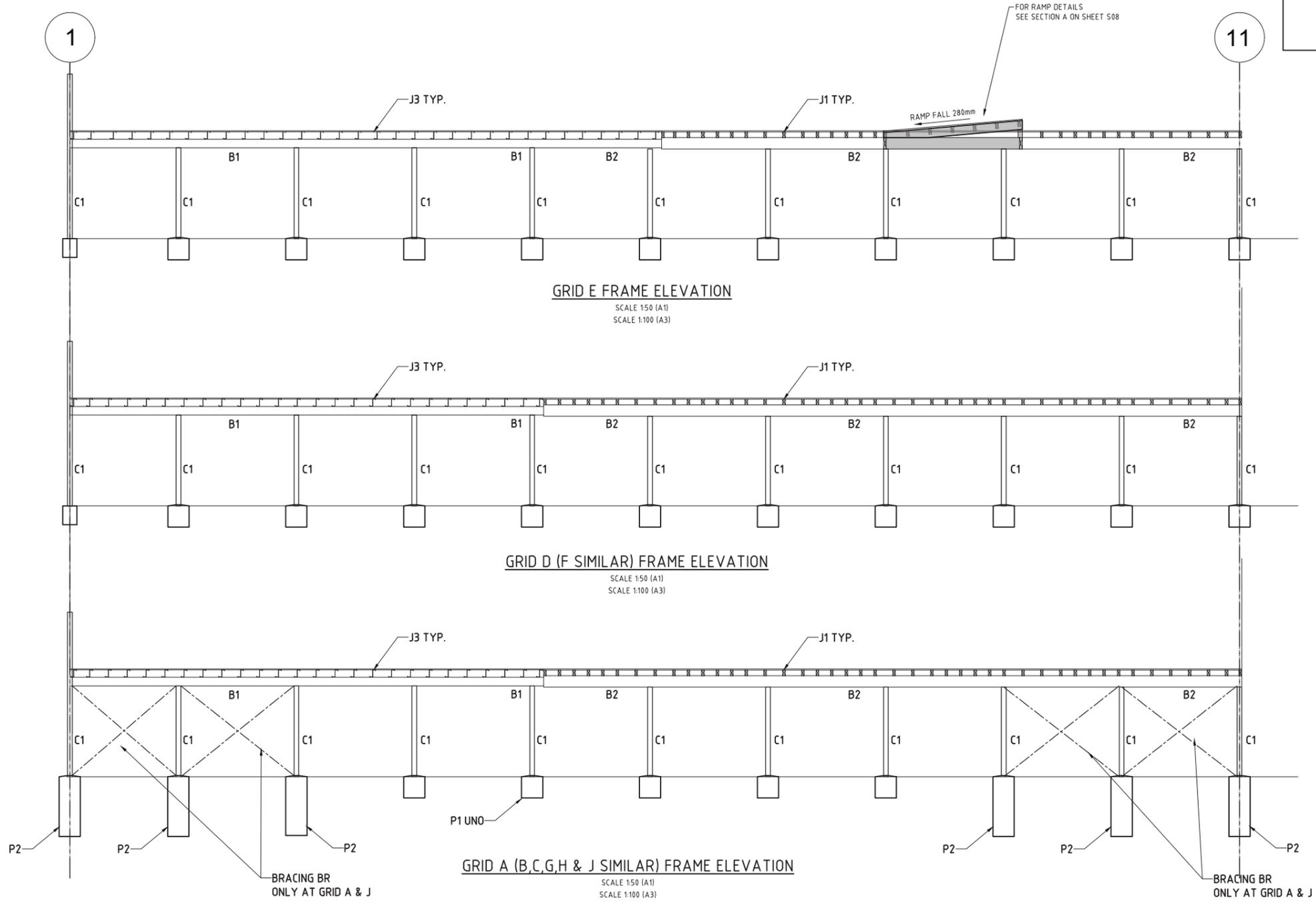


SCALE 1:150 (A3)

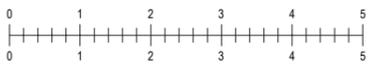
TECHNICAL DRAWING, SIX STAND SHEARING SHED

S05 - STRUCTURAL FRAME SHEARING FLOOR PLAN

* FOR HEIGHTS OVER 2600, HEAVIER COLUMNS C1 ARE REQUIRED. CONSULT WITH ENGINEER.

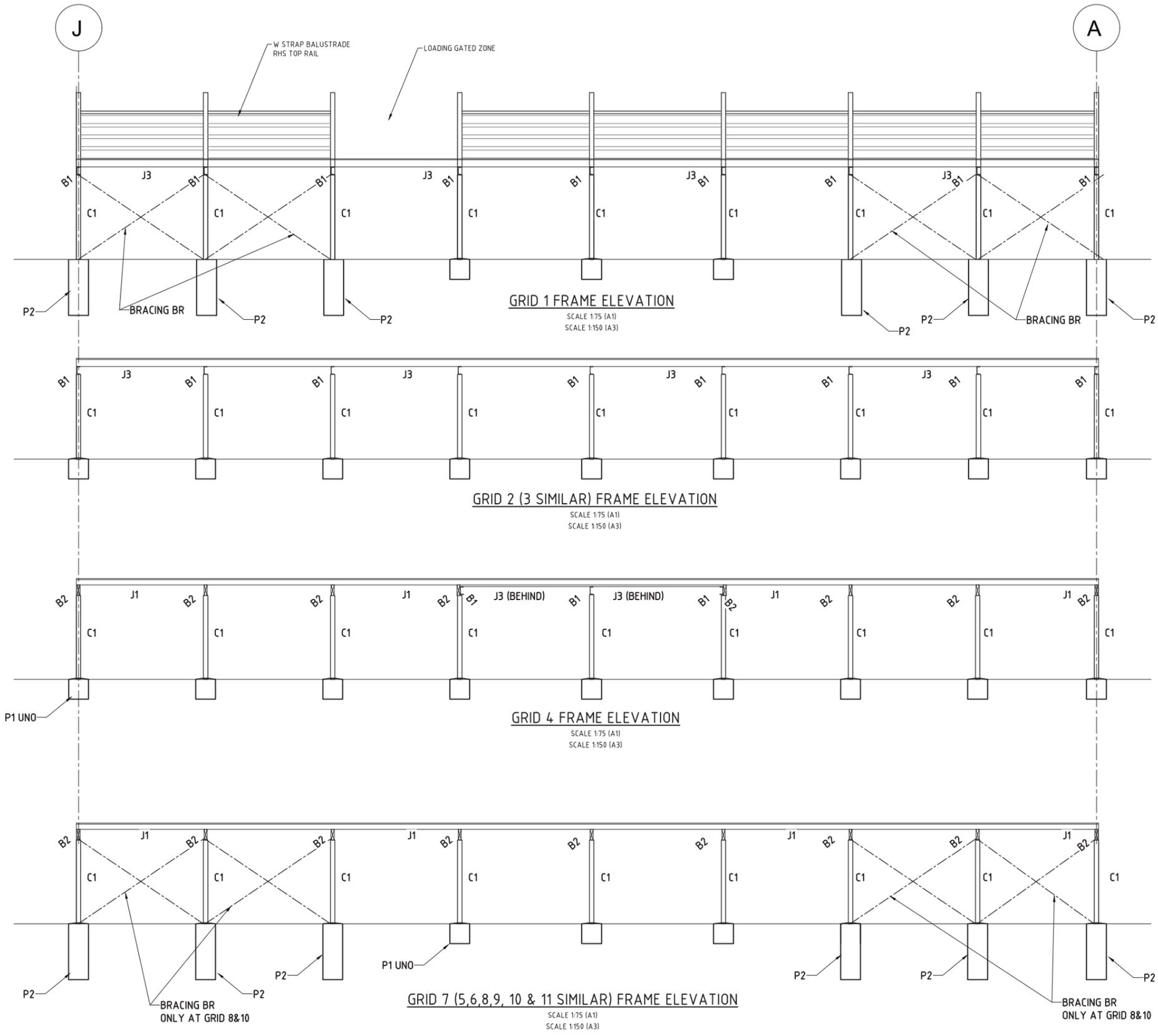


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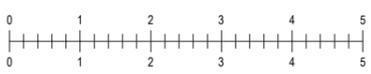


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TECHNICAL DRAWING, SIX STAND SHEARING SHED

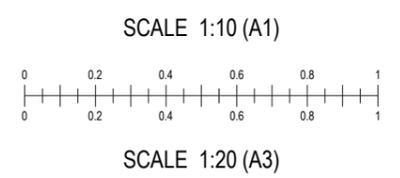
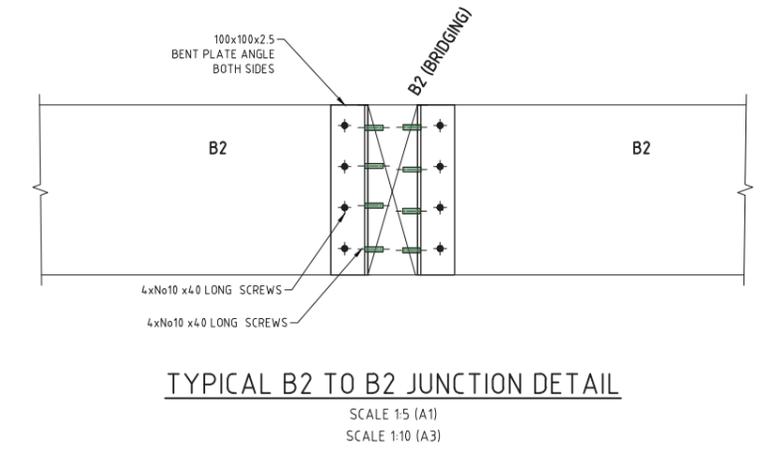
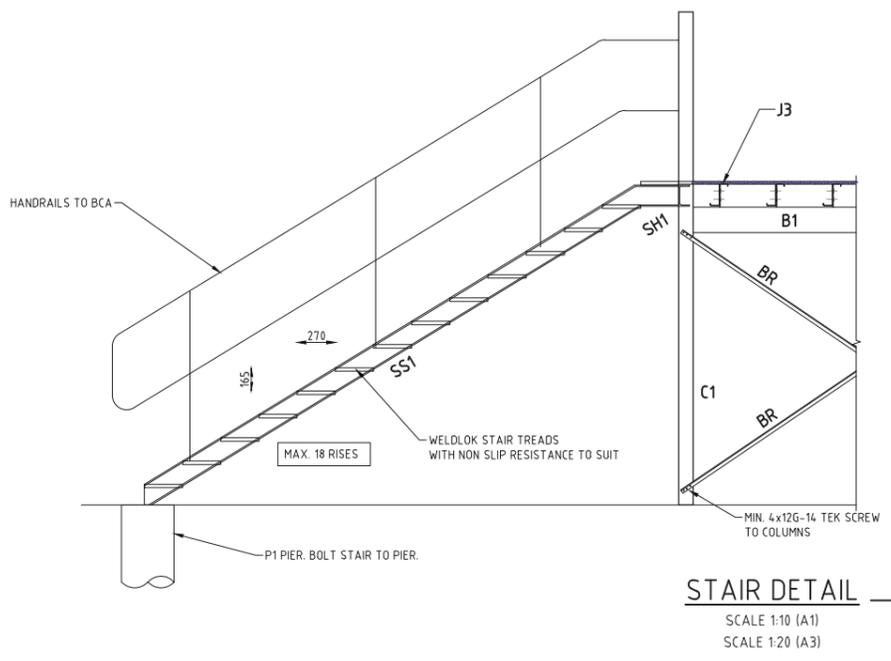
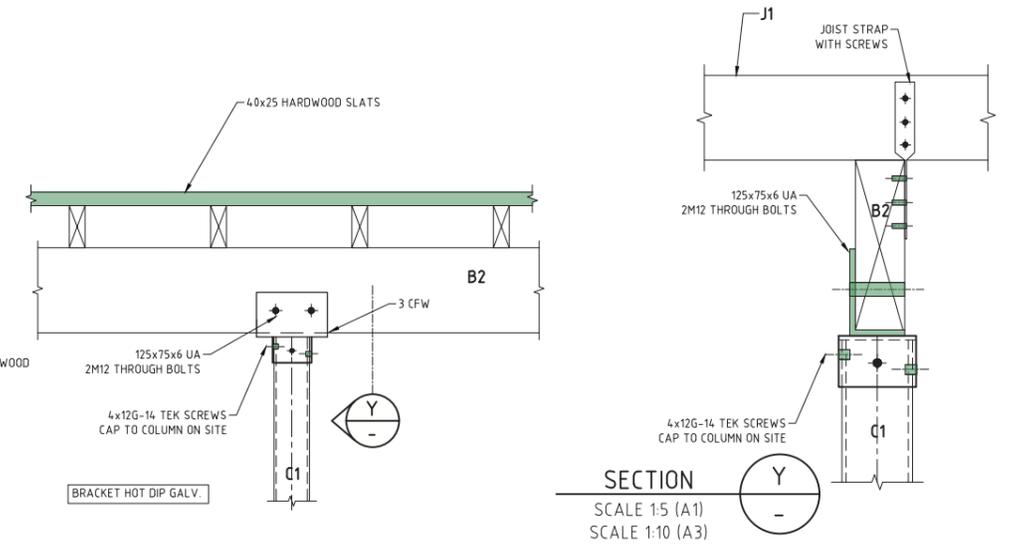
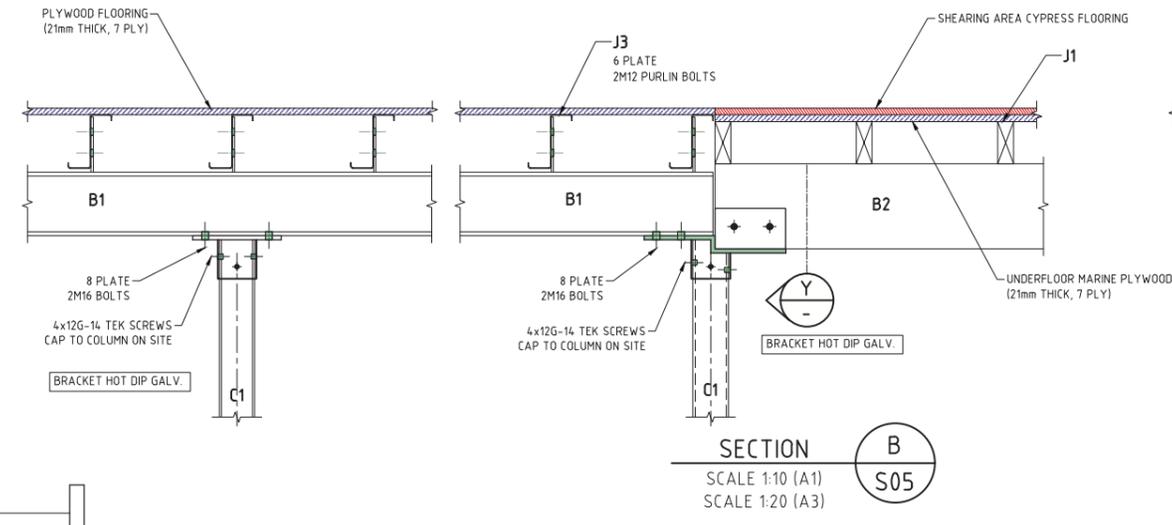
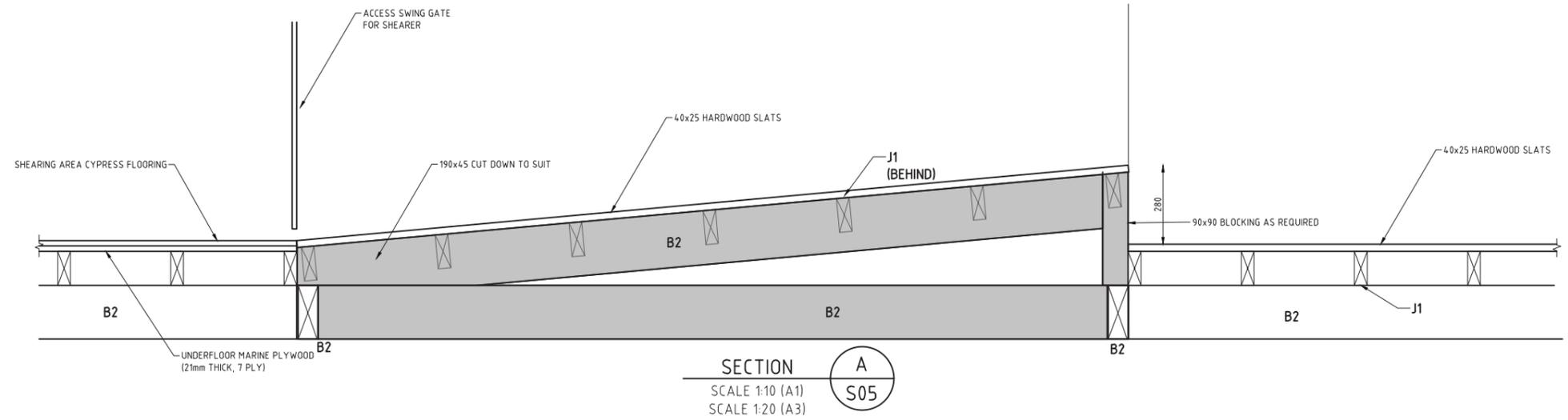


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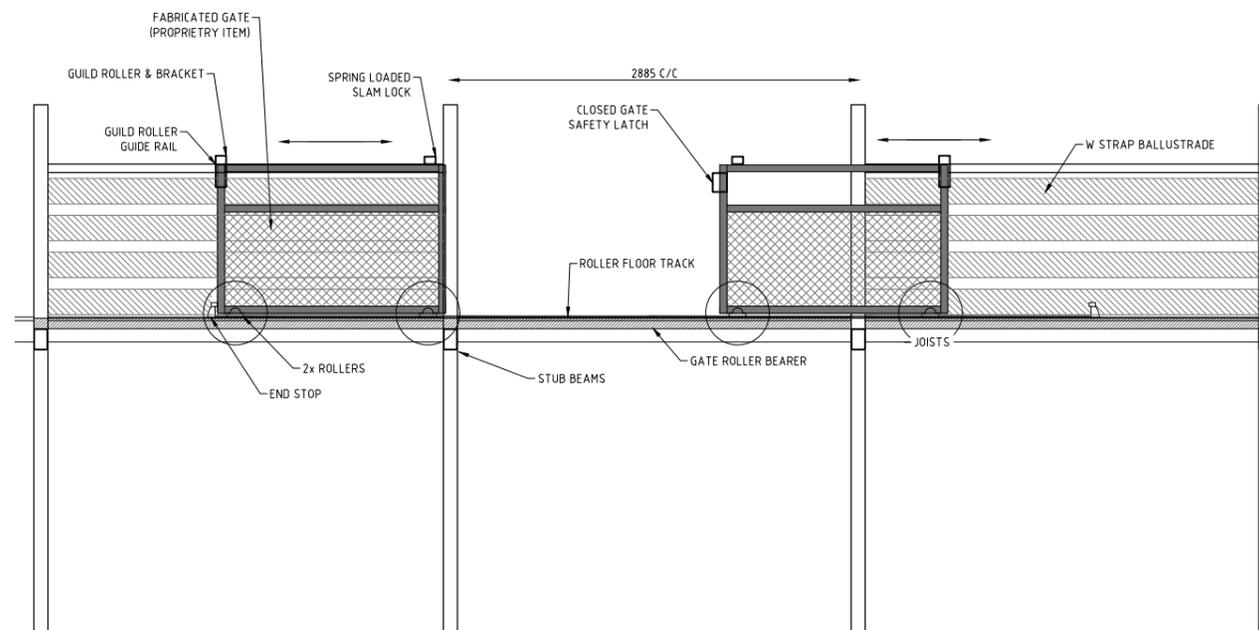


SCALE 1:100 (A3)

TECHNICAL DRAWING, SIX STAND SHEARING SHED



TECHNICAL DRAWING, SIX STAND SHEARING SHED



TRUCK LOADING GATE
 DETAIL 'X'
 SCALE 1:25 (A1)
 SCALE 1:50 (A3)

SCALE 1:10 (A1)



SCALE 1:20 (A3)



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Australian Wool Innovation Limited acknowledges the contribution made by Geolyse Pty Ltd to provide the drawings and supporting information detailed in this document.

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