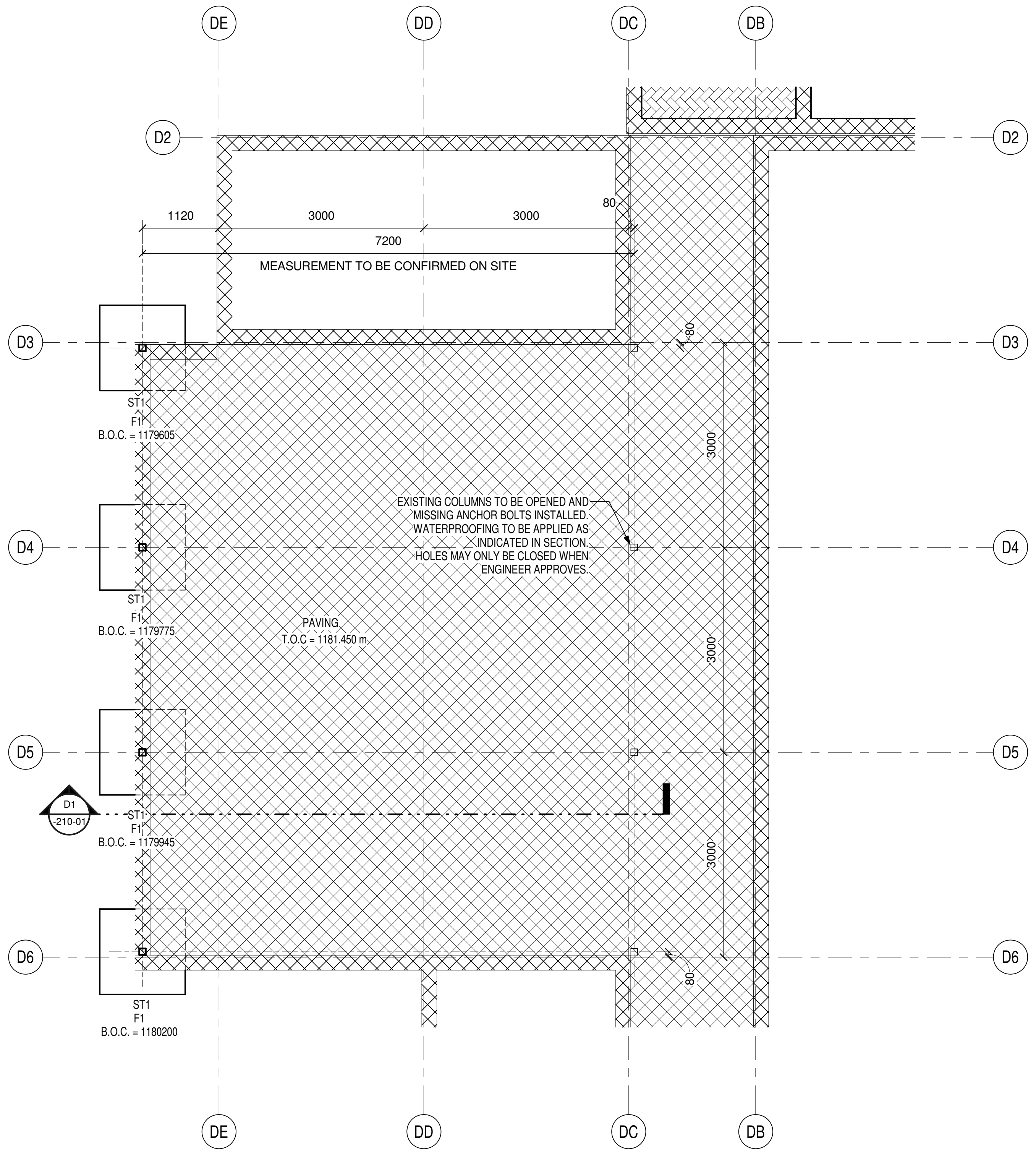
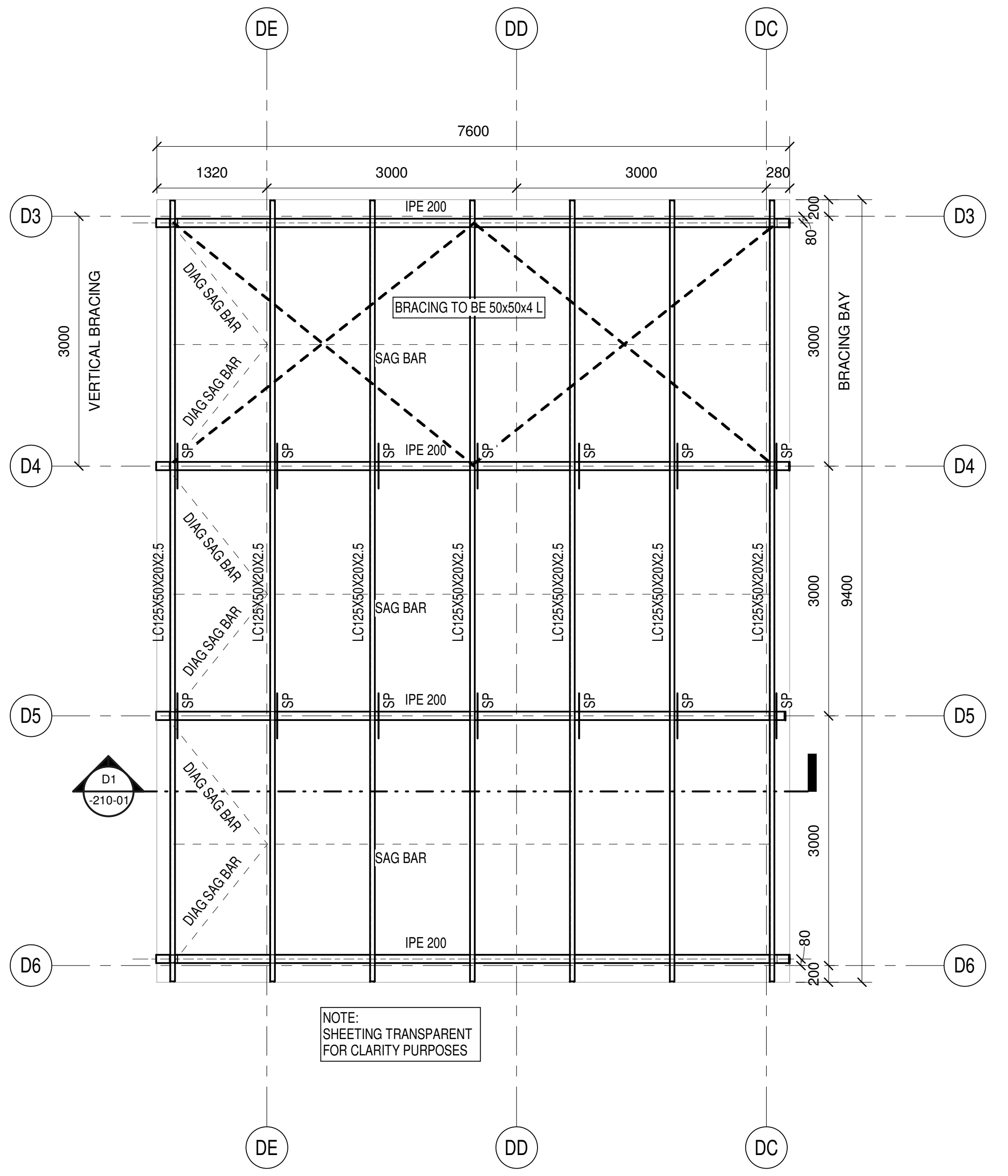

DE
DD
DC
DB
D2
D3
D4
D5
D6
1120
3000
3000
7200
80
MEASUREMENT TO BE CONFIRMED ON SITE
ST1
F1
B.O.C. = 1179605
ST1
F1
B.O.C. = 1179775
ST1
F1
B.O.C. = 1179945
ST1
F1
B.O.C. = 1180200
EXISTING COLUMNS TO BE OPENED AND MISSING ANCHOR BOLTS INSTALLED. WATERPROOFING TO BE APPLIED AS INDICATED IN SECTION. HOLES MAY ONLY BE CLOSED WHEN ENGINEER APPROVES.
PAVING
T.O.C = 1181.450 m
3000
3000
3000
80
80
D1
-210-01

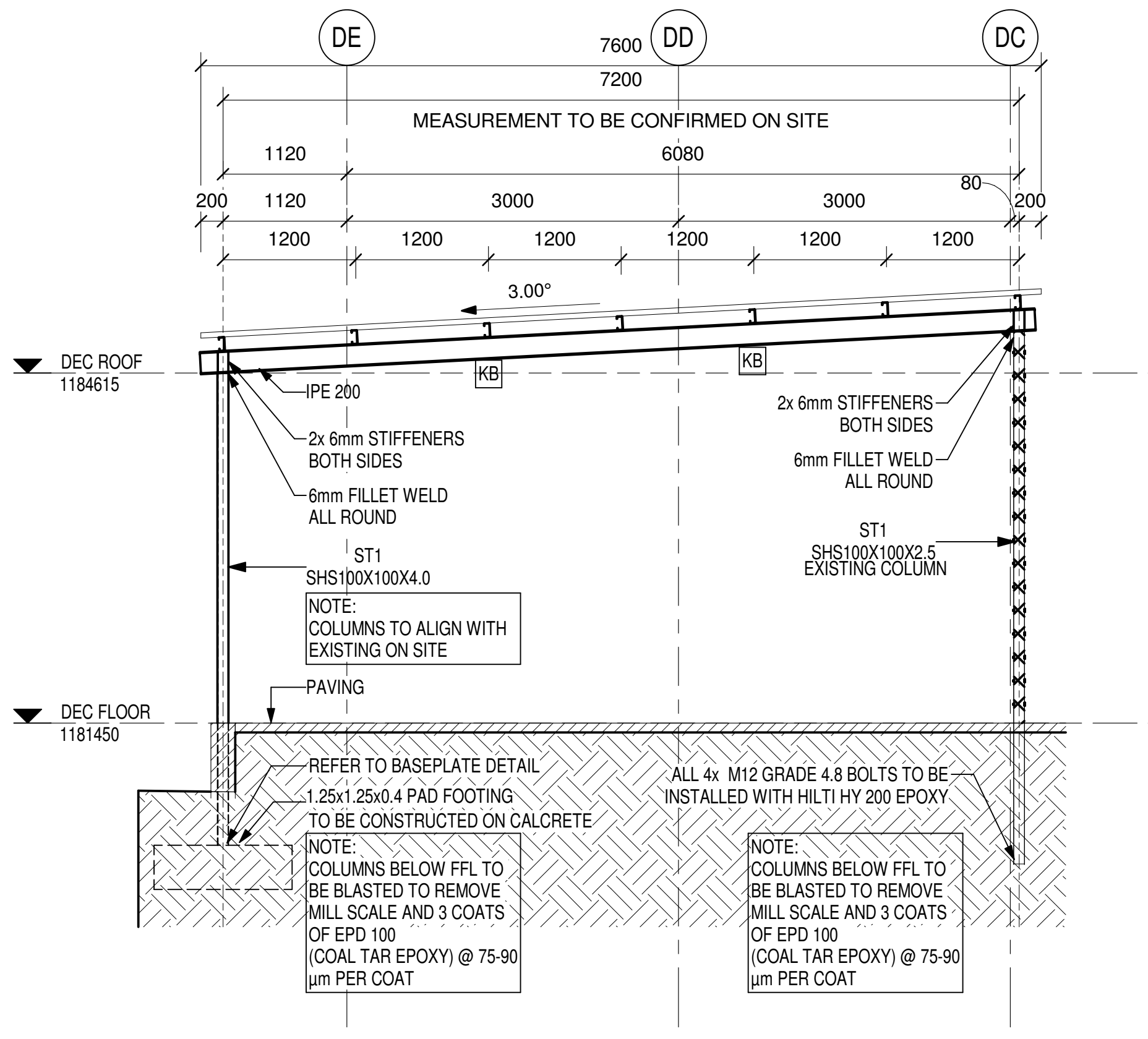
DECANTING WAITING AREA FOUNDATION

1 : 50



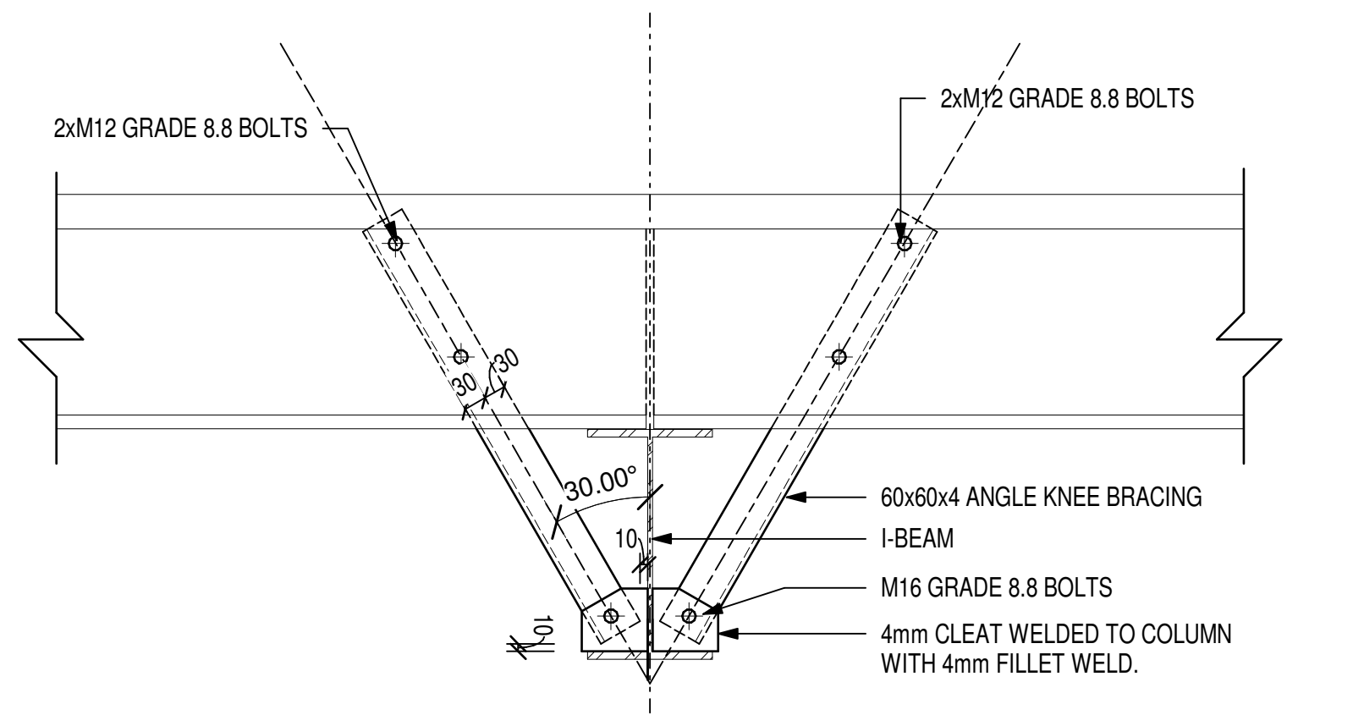
DECANTING WAITING AREA ROOF

1 : 50

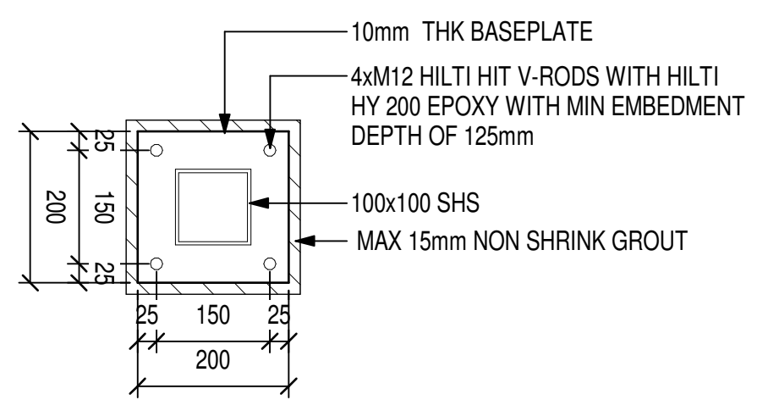

DE
DD
DC
7600
7200
MEASUREMENT TO BE CONFIRMED ON SITE
1120
6080
200
1120
3000
3000
80
200
1200
1200
1200
1200
1200
1200
3.00°
DEC ROOF
1184615
KB
KB
IPE 200
2x 6mm STIFFENERS BOTH SIDES
6mm FILLET WELD ALL ROUND
ST1
SHS100X100X4.0
NOTE:
COLUMNS TO ALIGN WITH EXISTING ON SITE
2x 6mm STIFFENERS BOTH SIDES
6mm FILLET WELD ALL ROUND
ST1
SHS100X100X2.5
EXISTING COLUMN
PAVING
DEC FLOOR
1181450
REFER TO BASEPLATE DETAIL
1.25x1.25x0.4 PAD FOOTING TO BE CONSTRUCTED ON CALCRETE
NOTE:
COLUMNS BELOW FFL TO BE BLASTED TO REMOVE MILL SCALE AND 3 COATS OF EPD 100 (COAL TAR EPOXY) @ 75-90 µm PER COAT
ALL 4x M12 GRADE 4.8 BOLTS TO BE INSTALLED WITH HILTI HY 200 EPOXY
NOTE:
COLUMNS BELOW FFL TO BE BLASTED TO REMOVE MILL SCALE AND 3 COATS OF EPD 100 (COAL TAR EPOXY) @ 75-90 µm PER COAT

D1 DECANTING WAITING AREA ROOF SECTION

1 : 50

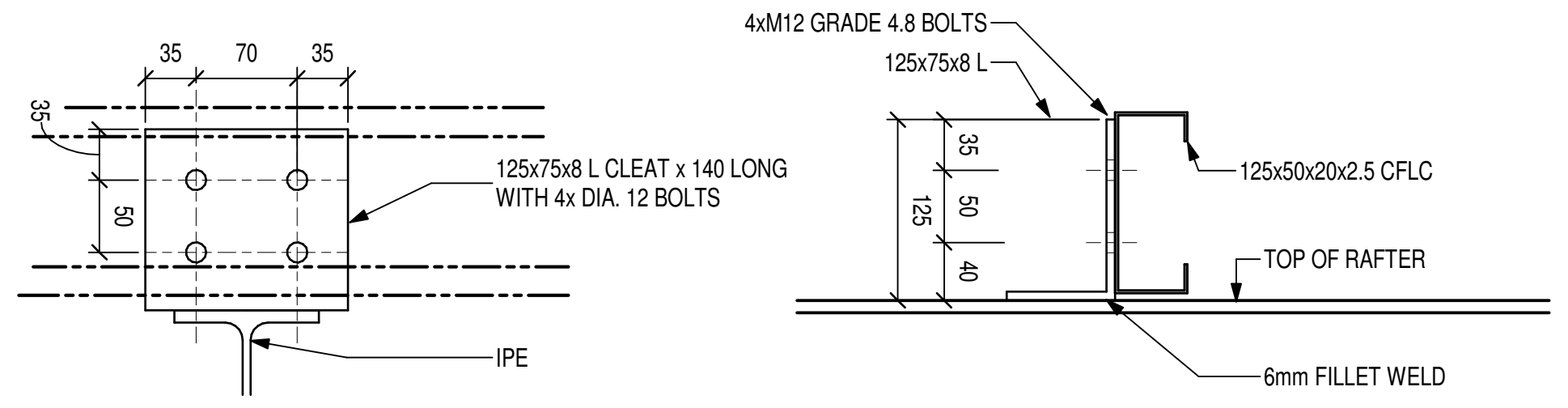


TYPICAL RAFTER KNEE BRACE (KB) DETAIL


10mm THK BASEPLATE
4xM12 HILTI HIT V-RODS WITH HILTI HY 200 EPOXY WITH MIN EMBEDMENT DEPTH OF 125mm
100x100 SHS
MAX 15mm NON SHRINK GROUT
25
150
25
200
25
150
25
200

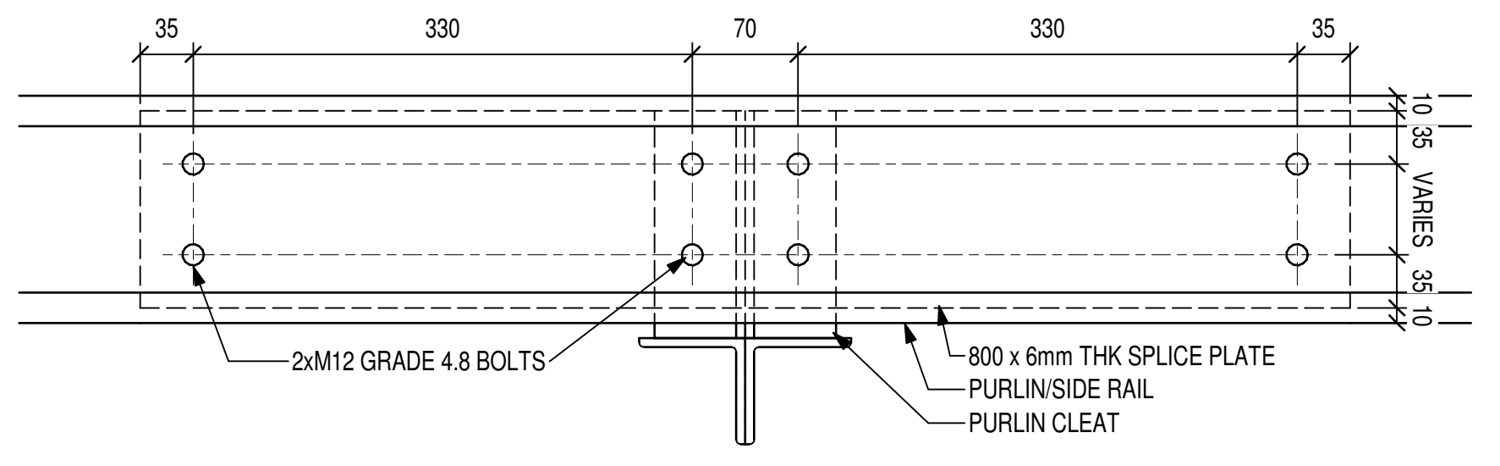
BASEPLATE DETAIL

SCALE 1:10



PURLIN CONNECTION DETAIL

SCALE 1:5



PURLIN SPLICE DETAIL

SCALE 1:5

NOTES ON STEEL WORK:

FASTENERS:
- ALL FASTENERS TO BE CLASS 8.8 BOLTS WITH CLASS 8 LOCK NUTS
- ONLY 2mm OVERSIZE BOLT HOLES ARE PERMITTED

CONSTRUCTION / MANUFACTURING / ERECTION:
- STEEL STRUCTURES ARE TO BE STRICTLY IN ACCORDANCE WITH SANS 2001.CS1
- STEEL GRADE S355J
- THE CONTRACTOR MUST SUBMIT DETAILED WORKSHOP DRAWINGS TO THE ENGINEER FOR REVIEW PRIOR TO MANUFACTURE
- ONLY SIZES OF STRUCTURAL MEMBERS, CONNECTIONS AND SPLICES WILL BE CHECKED
- FINAL DIMENSIONS AND THE CORRECT FITTING OF MEMBERS SHALL REMAIN THE RESPONSIBILTY OF THE CONTRACTOR

WELDING:
- WELDING MUST BE OF HIGH QUALITY WITH MINIMUM DEFECTS
- NO NOTCHES OR CRACKS SHALL BE ACCEPTED
- THE FULL PENETRATION GROOVE WELDS SHALL HAVE CONTOURED FILLET
  REINFORCING TO PROVIDE A SMOOTH FLOW OF STRESSES.
- ALL WELDS TO BE CONTINUOUS AND NOT INTERMITTENT WELDS SHALL BE ALLOWED
- INTERSECTING WELDS RUNNING IN VARIOUS DIRECTIONS AT ANY POINT MUST BE
- PREVENTED BY CUTTING SELECTED PLATES SO AS TO REMAIN CLEAR OF THE
  INTERSECTION

MINIMUM WELD SIZES:

	THICKNESS OF THICKER PART (mm)	MIN FILLET WELD
1.	UP TO 12mm	5mm
2.	OVER 12mm TO 20mm	6mm
3.	OVER 20mm TO 40mm	8mm

- ALL WELDS TO BE E70 XX ELECTRODES WITH MIN WELD STRENGTH OF 480 MPa

PAINT SPECIFICATIONS:
CORROSION PROTECTION TO ALL EXTERNAL STEEL ELEMENTS FOR ENVIRONMENTAL CLASS C3 INDUSTRIAL FOR 5 YEAR MAINTENANCE PERIOD IN ACCORDANCE WITH ISO 12944 PART 2

ROOF MEMBER SIZES

- FOUNDATION:	1.25x1.25x0.4m PAD FOUNDATION
- RAFTER:	IPE 200
- STEEL COL:	100x100x4.0 SHS LOWER SIDE (ST1)
- STEEL COL:	100x100x2.5 SHS HIGHER SIDE (EXISTING)
- SAG BARS:	50x50x3 SAG ANGLES WITH 4mm END PLATES & 2xM10 Gr 8.8 BOLTS PER CONNECTION
- BRACING:	50x50x4.0 L CROSS AND BOLTED MIDSPAN
- PURLIN:	125x50x20x2.5 CFLC
- PURLIN SPLICE	EVERY MEMBER END TO CREATE A CONTINUOUS SYSTEM - NOTED: "SP"
-KB:	KNEE BRACES 60x60x4 L

ROOF SHEETING:
ROOF CLADDING AS PER ARCHITECT'S SPECIFICATIONS, AND INSTALLATIONS AS PER SUPPLIER'S SPECIFICATIONS.

NOTES / LEGEND

GENERAL

* THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ALL MATERIALS AND WORKMANSHIP CONFORM WITH THE DETAILS AND SPECIFICATIONS SHOWN ON THIS DRAWING, AND ALL RELEVANT SABS SPECIFICATIONS, IRRESPECTIVE OF WHETHER THE ENGINEER HAS INSPECTED THE WORKS ON SITE OR NOT.

* ALL DIMENSIONS AND LEVELS TO BE CHECKED ON SITE AND CORRELATED WITH THE ENGINEER'S DRAWINGS BEFORE CONSTRUCTION COMMENCES.

* NO SCALING WITH SCALE RULER FROM THE DRAWING IS PERMITTED. THE CONTRACTOR MUST ENSURE THAT HE GETS THE CORRECT DIMENSIONS FROM THE ENGINEER BEFORE CONSTRUCTION COMMENCES.

ISSUE DATE:	DRAWING SIZE:	REVISION:
2025-11-12	A0	0

	PRELIMINARY
	INFO ONLY
	FOR TENDER
X	FOR CONSTRUCTION
	AS-BUILT

APPROVED BY COUNCIL / CLIENT

CITY ENGINEER / CLIENT REG. NO. DATE

AMENDMENTS CODE

A,B,C.../ : BEFORE TENDER
T0 / : TENDER DRAWING
0,1,2..../ : AFTER TENDER
Z / : AS BUILT

/A : BY CLIENT
/B : BY ARCHITECT
/C : BY MECHANICAL OR ELECTRICAL
/D : BY BVi
/E : BY OTHER ( )

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DATE.	INITIAL	NO.	DESCRIPTION OF REVISION
2025-11-12	JJH	0	ISSUED FOR CONSTRUCTION

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Registration no. 1998/000185/07

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UKAS QUALITY MANAGEMENT 015
BBBEE Level 1
CESA Consulting Engineers South Africa

CLIENT

health
Department:
Health
Northern Cape Province

PROJECT

UPGRADE AND REFURBISHMENT OF LOGOBATE PHC

DRAWING TITLE

DECANTING STEEL ROOF LAYOUT

APPROVED BY BVI

JJ HAEFELE	20190844	2025-11-12
ENGINEER/TECHNOLOGIST	REG. NO.	DATE

SCALE	As indicated	DRAWN	JJH
DESIGNED	JJH	CHECKED	DF LEUKES

TO BE READ IN CONJUNCTION WITH:
-35566S-200-G01

PLAN NUMBER	REVISION NO.	DATE SAVED
35566S -210-01	0	2025-11-12