

NOTES :-

1.	GENERAL
1.1	CONTRACTOR TO CHECK AND VERIFY ALL DIMENSIONS BEFORE STARTING EXECUTION OF THE WORK.
1.2	FIGURED DIMENSIONS SHALL BE FOLLOWED.
1.3	ALL DIMENSIONS ARE GIVEN IN MILLIMETERS UNLESS OTHERWISE SPECIFIED.
1.4	EXECUTIVES SHALL CHECK THE DRAWING BEFORE EXECUTION OF WORK AND IF ANY DISCREPANCY IS OBSERVED THE SAME SHALL BE REPORTED TO ACCEPTING OFFICER FOR CLARIFICATION/DECISION.
1.5	ALL STRL DRGS SHALL BE READ IN CONJUNCTION WITH RELEVANT ARCH DRGS AND ANY DISCREPANCY BETWEEN THEM SHALL BE BROUGHT TO THE ACCEPTING OFFICER FOR NECESSARY ACTION.
1.6	IF THERE IS VARIATION BETWEEN DETAILS SHOWN IN STRUCTURAL DRAWINGS AND TD DRAWINGS THEN DETAILS SHOWN IN STRUCTURAL DRAWING SHALL BE FOLLOWED.
1.7	THE STRUCTURE IS DESIGNED FOR THE FOLLOWING CRITERIA a) SEISMIC ZONE-IV b) BASIC WIND SPEED -39M /SEC c) EXPOSURE CONDITIONS - MODERATE d) FIRE RESISTANCE FOR RCC STRUCTURE - 1.5HR
1.8	ALL RCC COLUMNS ARE FROM FOUNDATION TO ROOF LEVEL EXCEPT OTHERWISE SPECIFICALLY SHOWN IN DRGS. ORIENTATION OF RCC COLUMNS SHALL BE AS PER STRUCTURAL DRGS.
1.9	ROOF SLOPE 1:30 SHALL BE ACHIEVED BY INCREASING THE HEIGHT OF MIDDLE COLUMNS FOR THE RCC ROOF BUILDING.

2.	MATERIALS
2.1	CEMENT
2.1.1	CEMENT SHALL BE 43 GRADE ORDINARY PORTLAND CEMENT CONFORMING TO IS: 8112-2013. CEMENT SHALL BE ISI MARKED.

2.2	REINFORCEMENT FOR STEEL
2.2.1	REINFORCEMENT BARS SHALL BE TMT BARS GRADE Fe 550D CONFORMING TO IS:1786-2008. BARS SHALL BE ISI MARKED. MINIMUM ELONGATION SHALL BE AS PER IS 1786-2008.
2.3	WATER
2.2.1	WATER TO BE USED FOR CONCRETING SHALL MEET ALL REQUIREMENTS OF CLAUSE 5.4 OF IS :456-2000. SOURCE OF WATER SHALL BE APPROVED BY GE AND TESTING OF WATER SHALL BE DONE FOR ITS SUITABILITY.
2.4	CONCRETE MIX
2.4.1	GRADE OF CONCRETE FOR ALL RCC WORKS SHALL BE M-25 DESIGN MIX AS PER IS:10262 EXCEPT FOR WATER TANKS. M - 30 GRADE CONCRETE WILL BE USED FOR WATER TANKS
2.4.2	LEAN CONCRETE UNDER ALL THE RCC FOUNDATIONS SHALL BE 100 THK PCC M-10. LEAN CONCRETE WILL EXTEND BY 100 MM BEYOND THE EDGE OF RCC UNLESS OTHERWISE SPECIFIED.

3.	FORM WORK
3.1	ONLY STEEL PROPS SHALL BE USED. NO WOODEN BALLIES SHALL BE USED AS PROPS STEEL FORM WORK SHALL BE USED. GE TO PERSONALLY ENSURE THIS BEFORE APPROVAL OF FORM WORK. FORM WORK SHALL BE WELL DESIGNED, MADE AND ERECTED IN ACCORDANCE TO THE RELEVANT IS CODE AND SHALL BE APPROVED BY GE.
3.2	GRADE BEAM SHALL BE CASTED USING FORM WORK ON ALL FACES (INCLUDING BOTTOM).
3.3	DIFFERENT DEPTH OF SLAB SHALL BE ADJUSTED BY PROVIDING FORM WORK FOR SLABS AT DIFFERENT DEPTH.
4.	CONCRETE QUALITY ASSURANCE MEASURES
4.1	ACCEPTANCE CRITERIA FOR STRENGTH OF CONCRETE AS LAID DOWN IN CLAUSE 16 AND TABLE 11 OF IS:456-2000 SHALL BE STRICTLY FOLLOWED. CONTRACTOR TO CHECK AND VERIFY ALL DIMENSIONS BEFORE STARTING EXECUTION OF THE WORK.
4.2	VARIOUS QUALITY ASSURANCE MEASURE AS LAID DOWN IN CLAUSE 10 TO 17 OF IS:456-2000 SHALL BE STRICTLY FOLLOWED.

contd.....

NOTES :-

5.	FOUNDATION DETAILS
5.1	SOIL INVESTIGATION REPORT FOR THE SITE TO BE FWD AT EARLIEST CONFIRMING THE SBC.
5.2	FOR THE PURPOSE OF DESIGN MEDIUM & STIFF SOIL (TYPE II) HAS BEEN CONSIDERED FOUNDATION HAS BEEN PROVISIONALLY DESIGNED FOR THE ASSUMED NET SBC 12 TM ² AT 1500 MM DEPTH BELOW GL. GE TO VERIFY THE SAME BEFORE EXECUTION OF WORK ALONG WITH THE FOLLOWING. a) SOIL IS NOT EXPANSIVE, TREACHEROUS AND LOOSE / FILLED UP b) SULPHATE AND CHLORIDES PRESENCE IN SOIL AND GROUND WATER (IF ENCOUNTERED) ARE WITHIN PERMISSIBLE LIMIT. IN CASE OF ANY VARIATION, SAME TO BE COMMUNICATED TO THIS HQ.
5.3	GL MENTIONED IN THIS DRG IS ORIGINAL GROUND LEVEL OR THAT LEVEL OBTAINED BY CUTTING. IN NO CIRCUMSTANCES FOOTING SHALL BE FOUNDED ON FILLED UP SOIL. IN CASE OF MADE UP GL, MIN DEPTH OF FDN FROM VIRGIN SOIL SHALL BE 1500 MM.
5.4	ALL FOOTINGS SHALL BE FOUNDED AT SAME LEVEL.
5.5	PROPER DRAINAGE SYSTEM AROUND THE BUILDING SHALL BE PROVIDED TO AVOID INGRESS OF WATER IN FOUNDATION.
5.6	GE TO ENSURE THAT EXPANSIVE SOIL IS NOT PRESENT BELOW THE FOUNDATIONS. PAVEMENTS OR FLOOR, BLACK COTTON SOIL IN CASE ENCOUNTD, SHALL BE DISPOSED OFF OUT SIDE THE PROJECT BOUNDARY. BACK FILL REQUIRED BELOW THE FOUNDATIONS OR FLOOR SLAB SHALL BE COMPACTED GRANULAR NON SWELLING SOIL.
5.7	DIMENSIONS OF FOOTING INDICATED IN FOUNDATION PLAN ARE EXCLUSIVE OF OFFSET OF THE LEAN CONC.

6.	FABRICATION AND DETAILING OF STEEL REINFORCEMENT
6.1	GENERAL
6.1.1	GE SHALL SPECIALLY ENSURE THAT TIES/LINKS SPECIFIED FOR THE COLUMNS ARE PROVIDED IN THE REGION OF BEAM-COLUMN JUNCTION ALSO. TIES/LINKS SHOULD NOT BE OMITTED FROM THAT AREA DESPITE PLACEMENT DIFFICULTIES.
6.1.2	IF ANY DETAILS OF REINFORCEMENT IS NOT SHOWN IN THE DRGS, THE PROVISIONS GIVEN IN HANDBOOK FOR DETAILING OF REINFORCEMENT (SP-34) AND IS :13920-2016 SHALL BE FOLLOWED.
6.1.3	HOOKS OF REINFORCEMENT, BARS OF STIRRUPS IN BEAMS AND TIES/ LINK IN COLUMNS SHALL BE BENT TO AND ANGLE OF 135°. HOOK LENGTH SHALL BE 8 TIMES DIA OF BAR OR 75MM WHICHEVER IS MORE.
6.1.4	WHEREVER PARTITION WALL IS PROVIDED OVER RCC SLAB WITHOUT ANY BEAM UNDERNEATH, HIDDEN BEAM SHALL BE PROVIDED OF WIDTH 400 AND DEPTH EQUAL TO SLAB THICKNESS WITH MAIN REINFORCEMENT 8 BARS OF 12MM (TOP 4 & BOTTOM 4) AND 8MM 2L STIRRUPS @ 75 C/C.
6.1.5	3 NOS 10Ø 'U' SHAPED (IN PLAN) BARS SHALL BE PROVIDED AT ALL EXTERIOR COLUMNS AND BEAMS JUNCTION AS SHOWN IN DRG.
6.1.6	WHEREVER RCC SILL HAS BEEN SHOWN IN ARCH DRG, RCC SILLS 75 MM TH WITH 3 NOS 10 # AND 8 # @ 200 C/C DISTRIBUTION EXTENDING 50 MM BEYOND THE WINDOWS BOTH SIDES IN THE WALL TO BE PROVIDED AT CILL LEVEL.

6.2	<u>DEVELOPMENT LENGTH</u>					
6.2.1.	DEVELOPMENT LENGTH (LD) FOR REINFORCEMENT BAR SHALL BE AS GIVEN BELOW.					
	STEEL USED	Fe500	Fe500	Fe500	Fe500	Fe500
	GRADE OF CEMENT	M20	M25	M30	M35	M40 & ABOVE
	DEVELOPMENT LENGTH, Ld (Ø-DIA OF BAR)	57Ø	49Ø	45Ø	40Ø	36Ø
6.2.2	WHEN BAR OF DIFFERENT DIA ARE SPLICED, LAP LENGTH SHALL BE CALCULATED BASED ON LARGER DIA.					
6.3	<u>COVER TO REINFORCEMENT</u>					
6.3.1	CLEAR COVER TO OUTER MOST REINFORCEMENT BAR / STIRRUPS SHALL BE AS UNDER: a) FOOTING:- = 60MM b) COLUMNS:- = 40MM c) BEAMS:- = 30MM d) RCC SLABS:- = 25MM					
6.3.2	TO ENSURE PROPER COVER TO REINFORCEMENT, COVER BLOCKS OF FIBRE REINFORCED CONCRETE OF STRENGTH NOT LESS THAN 50 MPa OR READY MADE POLYPROPYLENE BLOCKS AS APPROVED BY GE SHALL BE PROVIDED.					

contd.....

SL NO	DATE	DESCRIPTION	INITIAL
R E V I S I O N			
CONSTR OF OTM ACCN (KLP) AT BDE HQ IN PALLANWALA MIL STN UNDER AMWP 2023-24			
RCC NOTES (APPLICABLE FOR ALL BUILDINGS)			
DATE	18/03	2026	SHT. NO
DRN	HAV KISHAN SINGH		
DES	LT COL UTSAV KUMAR		
CKD	LT COL UTSAV KUMAR		
SCALE	NTS		
DRG NO	CEUZ/WP-0515T/2026		
TECH OFFICER		SOT (DESIGN) FOR CHIEF ENGINEER	

CHIEF ENGINEER
UDHAMPUR
ZONE

1/3

NOTES :-

6.4	BEAM REINFORCEMENT
6.4.1	WHEREVER TWO TYPES OF BEAMS MEET AT ONE SUPPORT, THE EXTRA BARS AT TOP HAVING HIGHER DIA SHALL BE PROVIDED IN BOTH THE BEAMS.
6.4.2	BEAM BARS SHALL ALWAYS PASS THROUGH INNER SIDE OF THE COLUMN BARS.
6.4.3	WHETHER SHOWN OR NOT SHOWN IN LONGITUDINAL SECTIONS OF BEAMS, ALL REINFORCEMENT BARS OF BEAM TERMINATING IN COLUMNS SHALL BE TAKEN IN COLUMN FOR A DISTANCE OF $L_d + 10\phi$ (ϕ = DIA OF BARS) "MINUS ANCHORAGE VALUE OF HOOKS" MEASURED FROM FACE OF SUPPORT.
6.4.4	SPACER BAR OF 25# SHALL BE PROVIDED AT 600MM C/C WHEREVER REINFORCEMENT IS PLACED IN TWO LAYERS.
6.4.5	WHEREVER OVERALL DEPTH OF BEAM IS 750 OR MORE, SIDE FACE REINFORCEMENT OF 2 NOS #12 (ONE BAR ON EACH FACE) SHALL BE PROVIDED IF NOT SHOWN IN THE SCHEDULE.
6.4.6	BARS OF BEAM TERMINATING AT ANY SUPPORT IN A SPAN SHALL BE TAKEN INTO THE ADJOINING SPAN OF THAT SUPPORT FOR A DISTANCE EQUAL TO L_d OR $L/3$ (WHERE 'L' IS THE ADJOINING SPAN) WHICHEVER IS MORE.
6.5	COLUMN REINFORCEMENT
6.5.1	CONFINING SHEAR REINFORCEMENT SHALL BE PROVIDED AT ALL COLUMN BEAM JOINTS AS SHOWN IN DRG.
6.5.2	DIA AND SPACING OF TIES + LINKS AT NEAR JUNCTION OF LINTEL BEAMS AND COLUMN SHALL BE SAME AS THAT FOR ZONE 'CR' AND SHALL EXTEND UPTO 600 MM BELOW SOFFIT OF LINTEL BEAM IF NOT SHOWN IN DRGS.
6.5.3	SPlicing OF REINFORCEMENT BARS IN RCC COLUMNS SHALL BE DONE IN MID HALF PORTION ONLY. NOT MORE THAN 50 PERCENT OF AREA OF STEEL BARS SHALL BE SPliced AT ANY ONE SECTION. SPACING OF TIES AND LINKS IN SPliced PORTION SHALL BE 100 MM.
6.6	WHETHER SHOWN OR NOT SHOWN ALL REINFORCEMENT BARS OF COLUMNS AT ROOF LEVEL SHALL EXTEND INTO BEAMS FOR A DISTANCE OF $L_d + 10\phi$ (ϕ =DIA OF BARS) "MINUS ANCHORAGE VALUE OF HOOKS" MEASURED FROM BOTTOM FACE OF BEAM.
6.6.1	SLAB REINFORCEMENT
6.6.2	TO KEEP THE TOP FACE REINFORCEMENT IN PLACE, CHAIRS OF 10# BARS @ 1 No./SQM FOR SLABS, ROOF PROJECTIONS AND CHAJJAS WILL BE PLACED.
6.6.3	AT EVERY CORNER OF SLAB PROJECTION ADDITIONAL REINF. SHALL BE PROVIDED WITH 5 NOS OF 10# BARS AT TOP.
6.6.4	IN SLABS, DISTRIBUTION BARS 10 # @ 200 C/C SHALL BE PUT IF NOTHING ELSE HAS BEEN SPECIFIED.
6.6.5	TORSION REINFORCEMENT SHALL BE PROVIDED IN SLABS WHICH ARE CAST MONOLITHICALLY WITH BEAMS (AS PER NOTES 8.7.8 & 8.7.9 OF TD NO CE / TD - 1252 / 2007 SHEET NO 6 / 11) IF NOTHING ELSE HAS BEEN SPECIFIED.
6.6.6	THE SLOPE FOR THE ROOF SHALL BE MAINTAINED IN RCC SLABS SO THAT THE THICKNESS OF ROOF TREATMENT REMAINS CONSTANT AT ALL THE POINTS.
6.6.7	AT SOME LOCATIONS SOFFIT OF THE RB/FB HAS BEEN PROVIDED AT THE TOP OF WINDOW / DOOR OPENINGS. AT SUCH LOCATIONS SLOPE OF THE ROOF SLAB SHALL BE SUITABLY MODIFIED TO ACCOMMODATE THE BEAM DEPTH.
6.6.8	OVER THE SUPPORT PORTION OF BEAMS AND THOSE OF THE SLABS, WHEREVER TWO DIFFERENT QUANTITIES OF TOP REINFORCEMENT IS INDICATED ON EITHER SIDE IN THE SCHEDULE, LARGER OF TWO QUANTITIES WILL BE PROVIDED.
6.6.9	THICKNESS OF ROOF PROJECTION WHEREVER NOT INDICATED, WILL BE EQUAL TO THAT OF THE ADJOINING SLAB.
7.	MASONRY WORKS DETAILS
7.1	230/115 THK. BRICK TO BE USED IN MASONRY SHALL BE OF GRADE AS SPECIFIED IN PS.
7.2	ALL WALLS ARE NON LOAD BEARING WALLS. PANEL WALLS SHALL BE CONSTRUCTED AFTER THE FORM WORK & SCAFFOLDING OF THE SLABS/BEAMS ABOVE IT HAS BEEN REMOVED FULLY FOR THE WHOLE FLOOR. A GAP OF 10MM SHALL BE LEFT BETWEEN THE WALL WHICH WILL BE FILLED UP WITH WEAK MORTAR. NO VERTICAL LOAD FROM ANY BEAM SHALL BE ALLOWED TO BE TRANSFERRED TO THE PANEL WALL.
7.3	IN 115 THICK BRICK WALL 2-10 # BAR WITH 8 # @100 C/C TIE SHALL BE PROVIDED AT EVERY FOURTH COURSE OF BRICK WALL MASONRY WORK.
7.4	AT THE JUNCTION OF WALL AND RCC COLUMN FLAT IRON (FI) OF SIZE 40 X 3 MM LONG SHALL BE PROVIDED AS PER THE DETAILS OF JUNCTION BETWEEN COLUMN AND WALL SHOWN IN RCC MISCELLANEOUS DETAILS SHEET.
7.5	115 BRICK MASONRY WALL WITH HEIGHT MORE THAN 2100MM WILL BE PROVIDED WITH RCC BAND @ 2100MM HEIGHT (LINTEL HEIGHT).

NOTES :-

7.6	IF THE LENGTH OF THE WALL EXCEEDS 3.0M / 4.0M FOR HALF/FULL BRICK MASONRY WALL IN PLAN WHICH IS UN-SUPPORTED IN PERPENDICULAR DIRECTION, THE VERTICAL BAND OF SIZE 100X100 /200X200 SHALL BE PROVIDED FOR HALF / FULL BRICK WALL AS PER FIG SHOWN IN DRG. THIS BAND SHOULD BE ANCHORED IN SLAB/BEAMS SUB BASE AT BOTTOM. THE BAND SHALL BE ANCHORED WITH ONE 10MM DIA BAR AT TOP TO HOLD IT IN POSITION.
7.7	BRICKS SHALL HAVE MINIMUM CRUSHING STRENGTH OF 75 KG / SQ CM AND THESE WILL MEET ALL OTHER REQUIREMENTS GIVEN IN BIS CODES IF NOT GIVEN IN PS.
7.8	LINTEL BANDS AS PER THE DETAILS PROVIDED IN COMMON TYPICAL DETAILS DRG WILL BE PROVIDED ON ALL WALLS AND WHERE LINTEL BEAMS ARE NOT PROVIDED, LONGITUDINAL BARS OF LINTEL BAND WILL BE TAKEN THROUGH THE COLUMN AND LAPPED INTO THE LINTELS / LINTEL BEAMS TO LENGTH ' L_d '
8	MISCELLANIES NOTES
8.1	STEEL WALK BOARD: NO LABOUR / MATERIAL MOVEMENT SHALL BE ALLOWED ON BARE REINFORCEMENT OF THE SLAB DURING CONCRETING. READY MADE STEEL WALK BOARD SHALL BE USED FOR THIS PURPOSE.
8.2	ALL OPENINGS SHALL BE PROVIDED WITH LINTEL AS PER TD UNLESS BEAMS ARE SPECIFICALLY INDICATED AT THE LOCATION IN THIS SERIES OF DRGS.
8.3	THE STRUCTURAL DRAWINGS ARE BASED ON STRUCTURAL DESIGN CALCULATIONS CONTAINED IN DESIGN FOLDER OF THE PROJECT. THE PROVISION OF RELEVANT IS CODES HAVE BEEN CONSIDERED IN DESIGN OF THE STRUCTURE.
8.4	THE DESIGN / SPECIFICATIONS INCLUDED IN THESE DRAWING ARE IN ACCORDANCE WITH THE CURRENT GOVT. POLICY, IS SPECIFICATIONS, E-IN-C'S BRANCH TECHNICAL INSTRUCTIONS, SOUND ENGINEERING PRACTICE AND EARTHQUAKE RESISTANT DESIGN FOR ZONE IV.
8.5	IN CASE OF VARIATIONS IN THE DETAILS GIVEN IN ARCH & STRUCTURAL DRGS, THE DETAILS GIVEN IN STRUCTURAL DRGS SHALL SUPERSEDE.
8.6	THE ROOF SLAB IS NOT DESIGNED FOR TO STAGE ANY WATER / SINTEX TANKS. NO WATER / SINTEX TANK TO BE PLACED ON THE TOP OF THE ROOF SLAB.
8.7	GE WILL PERSONALLY ENSURE THAT SEISMIC PROVISIONS FOR BRICK MASONRY AND R.C.C. STRUCTURAL WORK ARE PROVIDED.
8.8	DETAILS GIVEN IN THIS DRG SHALL SUPERSEDE THE DETAILS GIVEN IN TDS.
8.9	FOR PREVENTION OF LEAKAGE AND SEEPAGE, MEASURES INDICATED IN TD NO. 1123/96 SHEET NO. 1/1 WILL BE ADOPTED IF NOTHING SHOWN IN DRG AND PS. BEAMS AND OTHER STRUCTURAL MEMBER SHALL NOT BE CUT THROUGH TO PROVIDE DRAIN PIPES ETC. SLEEVES AT THE TIME OF CASTING THE SLAB TO INSERT THE PIPES LATE.
8.10	WATER TANK TO BE PLACED AS INDICATED ON STRUCTURAL DRAWING ONLY.

TYPICAL DETAILS DRAWINGS.

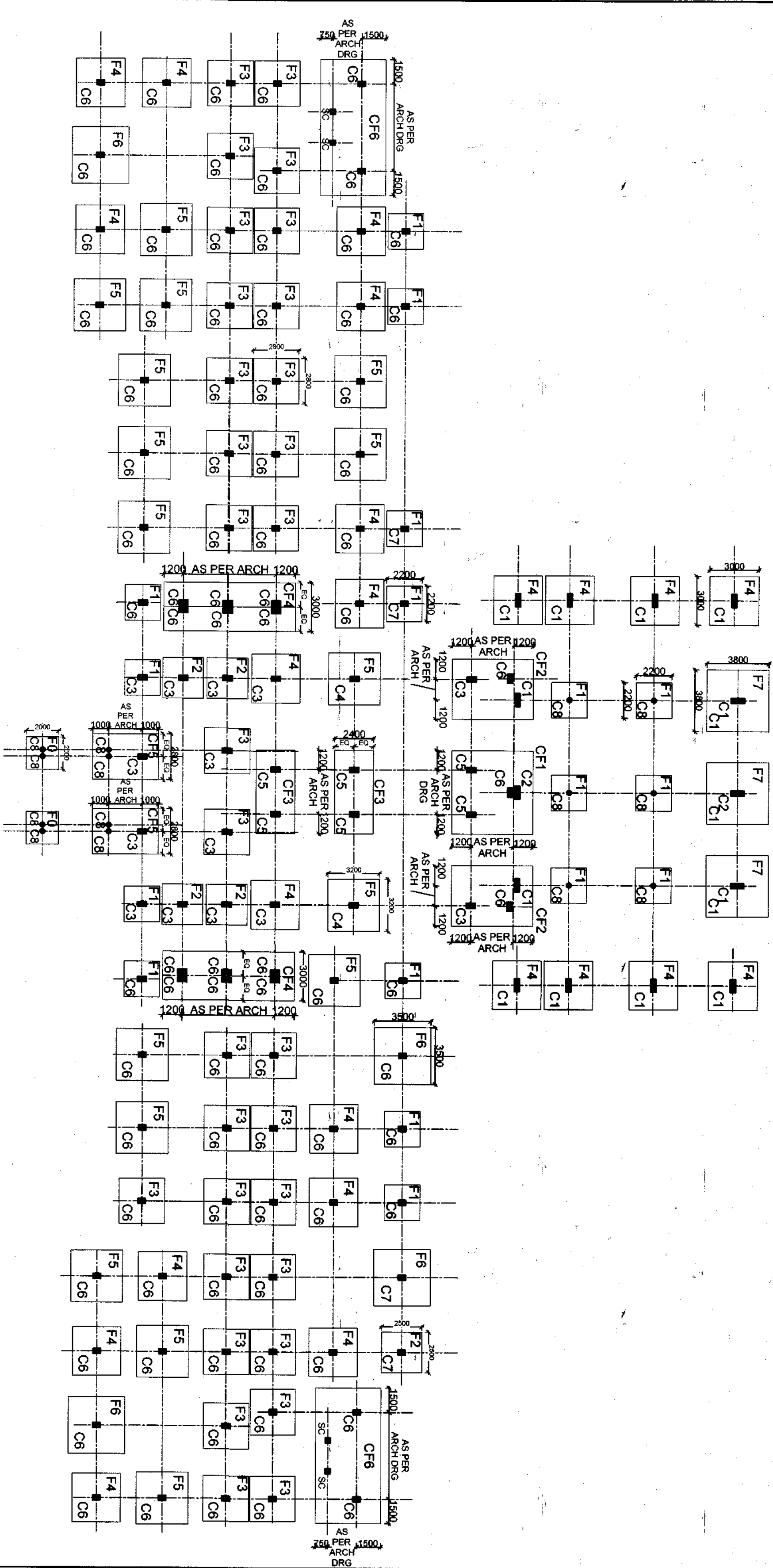
1.	CEUZ/TD - 1123 /1995	1/1	LEAKAGE, SEEPAGE AND DAMPNESNESS PREVENTION AND CURE
2.	CEUZ/TD - 1187/2002	1/1	DETAILS OF INTERNAL PLASTER GROOVES AND EXTERNAL PLASTER DETAILS AT JUNCTION OF WALL / BEAM / COLUMN
3.	CEUZ/TD - 1191/2002	1/3 TO 3/3	TYPICAL RCC DETAILS OF LINTEL, CHAJJAS, SHELVES AND CRUMPLE SECTIONS ETC.
4.	CEUZ/TD - 1250/2007	1/1	TYPICAL FOUNDATION AND BEAM / COLUMN JUNCTION DETAILS.
5.	CEUZ/TD - 1251/2007	1/1	TYPICAL RCC DETAILS.
6.	CEUZ/TD - 1252/2007	1/11 TO 11/11	GENERAL NOTES FOR RCC WORKS.
7.	CEUZ/TD - 1584/2021	1/5 TO 5/5	TYPICAL DETAILS OF SEISMIC PROVISIONS.

SL NO	DATE	DESCRIPTION	INITIAL
R E V I S I O N			
CONSTR OF OTM ACCN (KLP) AT BDE HQ IN PALLANWALA MIL STN UNDER AMWP 2023-24			

RCC NOTES (APPLICABLE FOR ALL BUILDINGS)			
DATE	8 / 03 / 2026	CHIEF ENGINEER	SHT. NO
DRN	HAV KISHAN SINGH	UDHAMPUR	2
DES	LT COL UTSAV KUMAR	ZONE	3
CKD	LT COL UTSAV KUMAR		
SCALE	NTS		
DRG NO	CEVZ / WD - 05 / ST / 2026		

TECH OFFICER	SET (DESIGN) FOR CHIEF ENGINEER
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SCHEDULE OF ISOLATED AND COMBINED COLUMN FOOTINGS :-													
COL MARK	SIZE OF COL	COL. FOOTING MARK	SIZE OF FOOTING		THICKNESS			OVER ALL DEPTH (D) OF FOUNDATION BELOW GL	REINFORCEMENT IN FOUNDATION				REMARKS
			LENGTH (L)	BREADTH (B)	d1	d2	d3		PARALLEL TO LENGTH		PARALLEL TO BREADTH		
									BOTTOM	TOP	BOTTOM	TOP	
AS PER FOOTING PLAN	AS PER SCHEDULE	F0	2000	2000	350	-	-	1500	12 # @ 150 C/C	10 # @ 200 C/C	12 # @ 150 C/C	10 # @ 200 C/C	
		F1	2200	2200	350	-	-	1500	12 # @ 150 C/C	10 # @ 200 C/C	12 # @ 150 C/C	10 # @ 200 C/C	
		F2	2500	2500	350	-	-	1500	12 # @ 150 C/C	10 # @ 200 C/C	12 # @ 150 C/C	10 # @ 200 C/C	
		F3	2800	2800	350	-	-	1500	12 # @ 150 C/C	10 # @ 200 C/C	12 # @ 150 C/C	10 # @ 200 C/C	
		F4	3000	3000	350	-	-	1500	12 # @ 150 C/C	10 # @ 200 C/C	12 # @ 150 C/C	10 # @ 200 C/C	
		F5	3200	3200	350	-	-	1500	12 # @ 150 C/C	10 # @ 200 C/C	12 # @ 150 C/C	10 # @ 200 C/C	
		F6	3500	3500	350	-	-	1500	12 # @ 150 C/C	10 # @ 200 C/C	12 # @ 150 C/C	10 # @ 200 C/C	
		F7	3500	3500	350	-	-	1500	12 # @ 150 C/C	10 # @ 200 C/C	12 # @ 150 C/C	10 # @ 200 C/C	
		CF1	AS PER FOOTING PLAN	350	-	-	-	1500	12 # @ 150 C/C	12 # @ 150 C/C	12 # @ 150 C/C	12 # @ 150 C/C	
		CF2	AS PER FOOTING PLAN	350	-	-	-	1500	12 # @ 150 C/C	12 # @ 150 C/C	12 # @ 150 C/C	12 # @ 150 C/C	
AS PER FOOTING PLAN	CF3	AS PER FOOTING PLAN	350	-	-	-	1500	12 # @ 150 C/C	12 # @ 150 C/C	12 # @ 150 C/C	12 # @ 150 C/C		
	CF4	AS PER FOOTING PLAN	350	-	-	-	1500	12 # @ 150 C/C	12 # @ 150 C/C	12 # @ 150 C/C	12 # @ 150 C/C		
	CF5	AS PER FOOTING PLAN	350	-	-	-	1500	12 # @ 150 C/C	12 # @ 150 C/C	12 # @ 150 C/C	12 # @ 150 C/C		
	CF6	AS PER FOOTING PLAN	350	-	-	-	1500	12 # @ 150 C/C	12 # @ 150 C/C	12 # @ 150 C/C	12 # @ 150 C/C		



RCC FOOTING PLAN

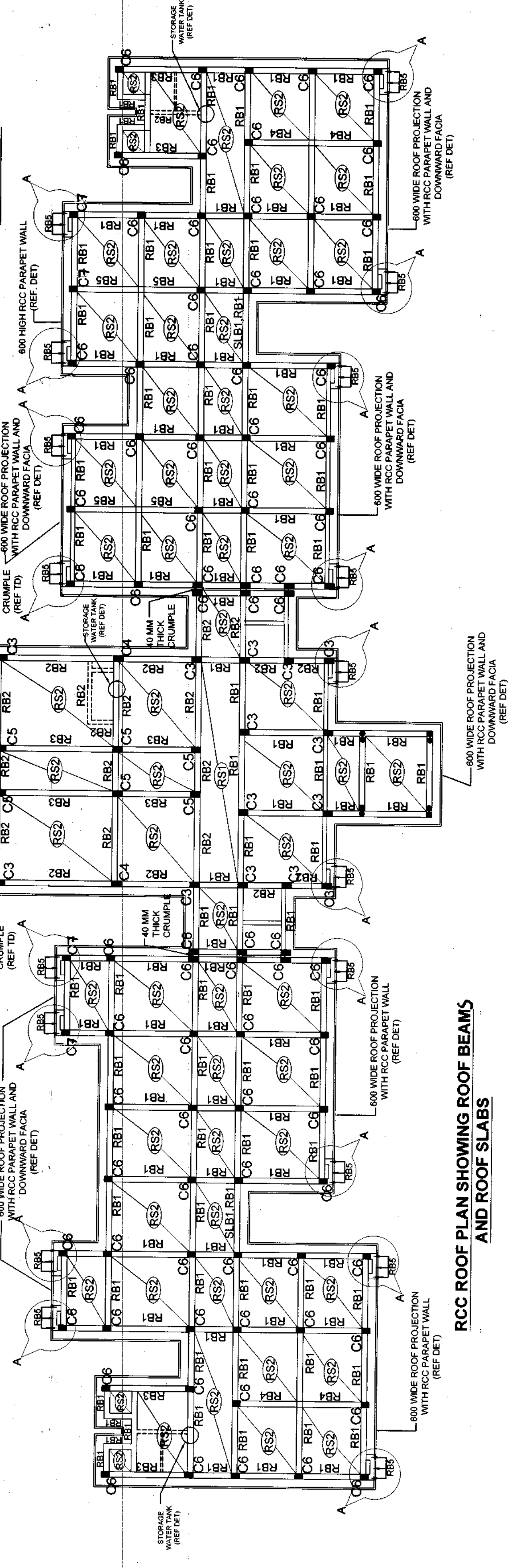
PROVN OF OTM ACCN (KLP) AT BDE HQ PALLANWALA MIL STN UNDER (AMWP 2023-24)	
OFFICER AND ADMINISTRATIVE ACCN FOOTINGS	
RCC FOOTING PLAN AND SCHEDULE OF FOOTINGS	
DATE	18/03/2025
DRN	HAY JON KUMAR
TCD	LITOO UTSAY KUMAR
CKD	LITOO UTSAY KUMAR
SCALE	AS SHOWN
DRG NO.	CEUJWD-05A1ST 2026
CHIEF ENGINEER UDHAMPUR ZONE	
1	
6	
TECH OFFICER	
SO1 (DESIGN) FOR CHIEF ENGINEER	

SCHEDULE OF RCC BEAMS																				
SL NO	TYPE	OVERALL DIMENSIONS			BOTTOM BARS		EXTRA BARS AT BOTTOM		TOP BARS		EXTRA BARS AT TOP				STIRRUPS				REINFORCEMENT (ON EACH FACE)	REMARKS
					STRAIGHT THROUGH BARS "a"		AT MID SPAN "d"		STRAIGHT THROUGH BARS "t"		CONT SUPPORT BARS "b"		SUPPORT SPAN (X1 / X2)		MID SPAN (X3)					
		WIDTH	DEPTH	NOS	DIA	NOS	DIA	NOS	DIA	NOS	DIA	NOS	DIA	NOS	DIA	NOS	DIA	NOS		
ROOF BEAMS (RB)																				
1	RB1	350	500	4	12	2	12	4	12	2	12	2	8	2	100	8	2	125	-	-
2	RB2	350	600	4	16	2	12	4	16	2	12	2	8	2	100	8	2	125	-	-
3	RB3	350	600	4	20	2	12	4	20	2	12	2	8	2	100	8	2	125	-	-
4	RB4	350	800	4	20	2	12	4	20	2	16	2	8	2	100	8	2	125	2	12
5	RB5	250	300	3	12	2	12	3	12	2	12	2	8	2	100	8	2	125	-	-
6	SLB1	250	400	4	16	-	-	4	16	-	-	-	8	2	100	8	2	125	-	-
SCHEDULE OF RCC SLABS																				

[illegible]

SL NO	NOMENCLATURE	THICKNESS 'T'	TYPE OF SLAB	REINFORCEMENT										DISTR REIN AT TOP CONT/ NON-CONT ENDS	REMARKS
				MAIN BARS BOTTOM RFT (ALTERNATIVELY CRANKED)				EXTRA BARS AT TOP OVER END SUPPORT IN BETWEEN CRANKED UP BARS							
				SHORT SPAN		LONG SPAN		SHORT SPAN			LONG SPAN				
				DIA	SPACING C/C	DIA	SPACING C/C	DIA	SPACING C/C	DIA	SPACING C/C				
1	RS1	125	ONE WAY	10	175	10	175	10	350	10	350	10 @ 200 C/C			
2	RS2	140	TWO WAY	10	175	10	175	10	350	10	350	10 @ 200 C/C			

SL NO	NOMENCLATURE	THICKNESS 'T'	TYPE OF SLAB	REINFORCEMENT										DISTR REIN AT TOP CONT/ NON-CONT ENDS	REMARKS	
				MAIN BARS BOTTOM RFT (ALTERNATIVELY CRANKED)						EXTRA BARS AT TOP OVER END SUPPORT IN BETWEEN CRANKED UP BARS						
				SHORT SPAN			LONG SPAN			SHORT SPAN		LONG SPAN				
				DIA	SPACING C/C		DIA	SPACING C/C		DIA	SPACING C/C		DIA			SPACING C/C
1	RS1	125	ONE WAY	10	175		10	175		10	350		10	350	10 @ 200 C/C	
2	RS2	140	TWO WAY	10	175		10	175		10	350		10	350	10 @ 200 C/C	



800 WIDE ROOF PROJECTION
WITH RCC PARAPET WALL AND
DOWNWARD FACIA
(REF DET)

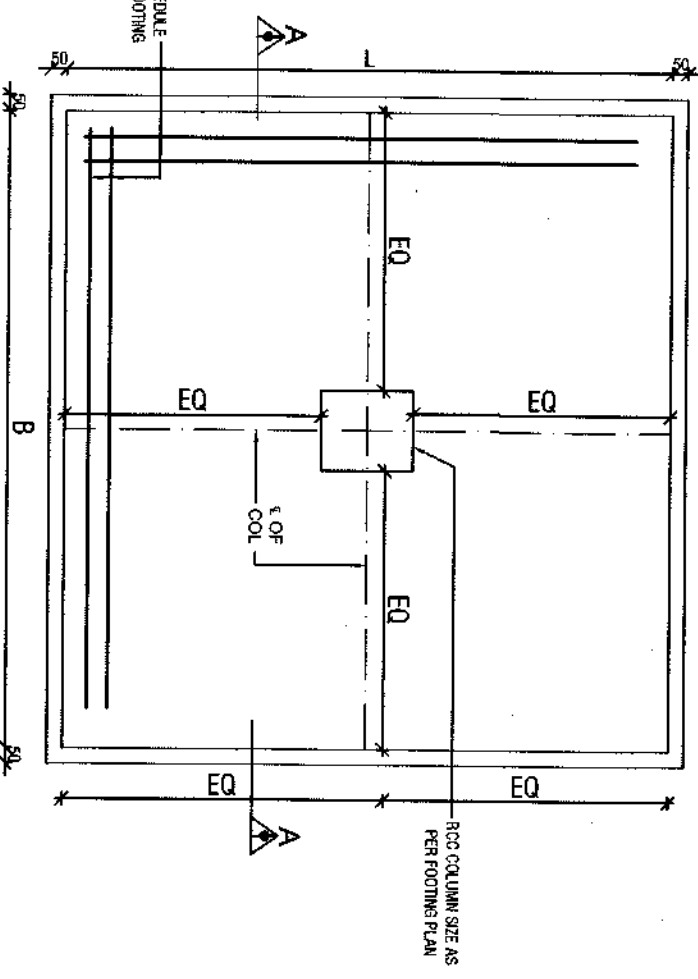
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TECH OFFICER

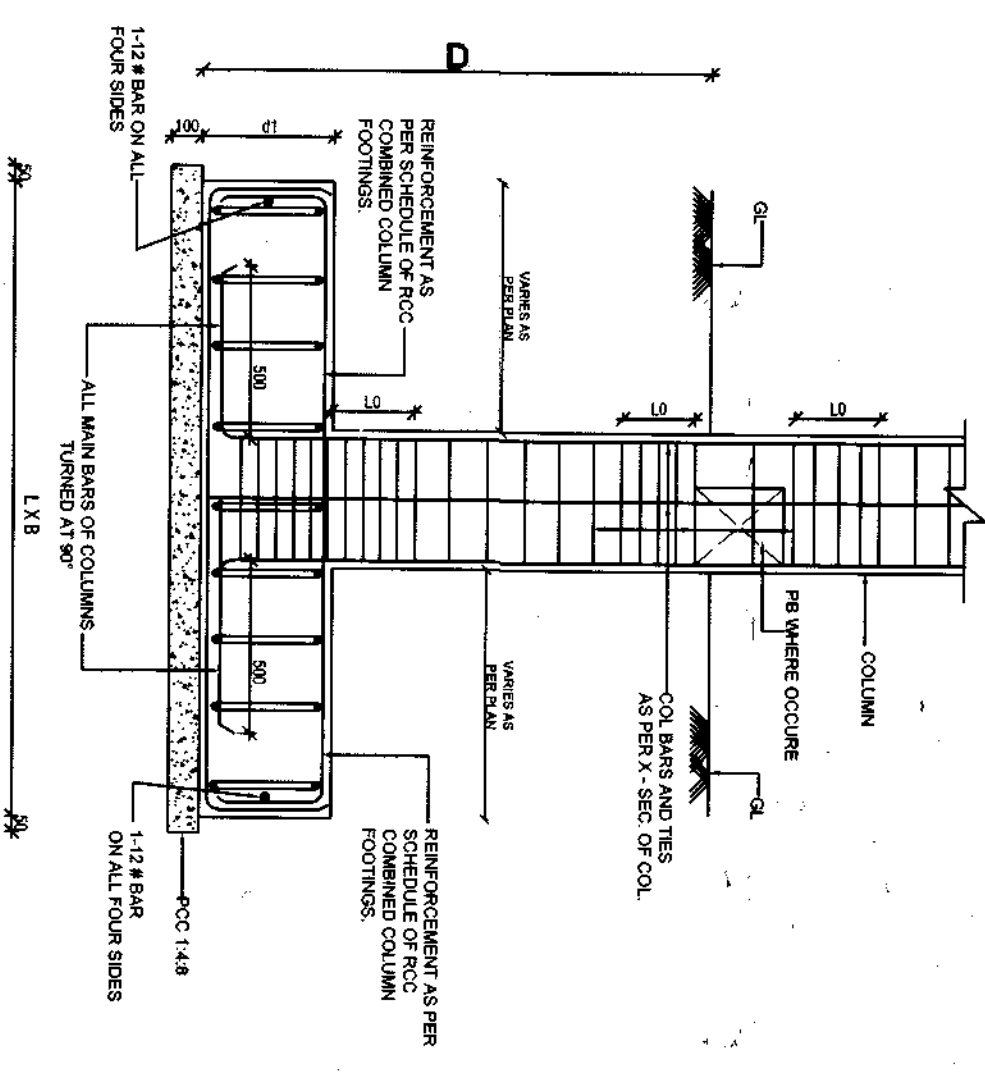
SOT (DESIGN)
FOR CHIEF ENGINEER

SCHEDULE OF RCC COLUMNS :-

REINFORCEMENT							REMARKS	
COLUMN NO		COLUMN SIZE	TIES		SECTION	SHAPE OF TIES		
			CONFINING REGION (CR)	NON CONFINING REGION (NCR)				
SL NO	COLUMN NO	COLUMN SIZE	LONGITUDINAL	TRANSVERSE / SPECIAL REINFORCEMENT TIES AND LINKS FOR FULL DEPTH OF BEAMS, 450 DEPTH IN FOUNDATIONS AND FOR LENGTH L/4 ON EITHER SIDE OF THE INTERSECTION BEAMS AS PER FIG NO.9 AND 10 ON CE / TD NO. 1253 / 2007 SHT NO. 5 / 5	TRANSVERSE REINFORCEMENT IN BALANCE MIDDLE PORTION			
1	C1	400 X 850	12 NOS - 20 #	10 # @70 C/C	8 # @ 150 C/C		a + b + c	
2	C2	400 X 850	16 NOS - 20 #	10 # @70 C/C	8 # @ 150 C/C		a + b + c + d	
3	C3	350 X 650	8 NOS - 16 #	10 # @70 C/C	8 # @ 150 C/C		a + b + c	
4	C4	350 X 650	12 NOS - 16 #	10 # @70 C/C	8 # @ 150 C/C		a + b + c	
5	C5	350 X 650	12 NOS - 20 #	10 # @70 C/C	8 # @ 150 C/C		a + b + c	
6	C6	350 X 500	8 NOS - 16 # 4 NOS - 12 #	10 # @70 C/C	8 # @ 150 C/C		a + b + c	
7	C7	350 X 500	12 NOS - 16 #	10 # @70 C/C	8 # @ 150 C/C		a + b + c	
8	C8	350 (DIA)	8 NOS - 16 #	10 # @70 C/C	8 # @ 160 C/C			CIRCULAR COLUMN
9	SC	350X350	8 NOS - 12 #	10 # @70 C/C	8 # @ 150 C/C		a + b + c	UPTO PLINTH LEVEL



TYPICAL PLAN OF RCC ISOLATED COLUMN FOOTING



X - SECTION OF ISOLATED / CIRCULAR COLUMN FOOTING AT A-A

SLNO	DATE	DESCRIPTION	INITIAL

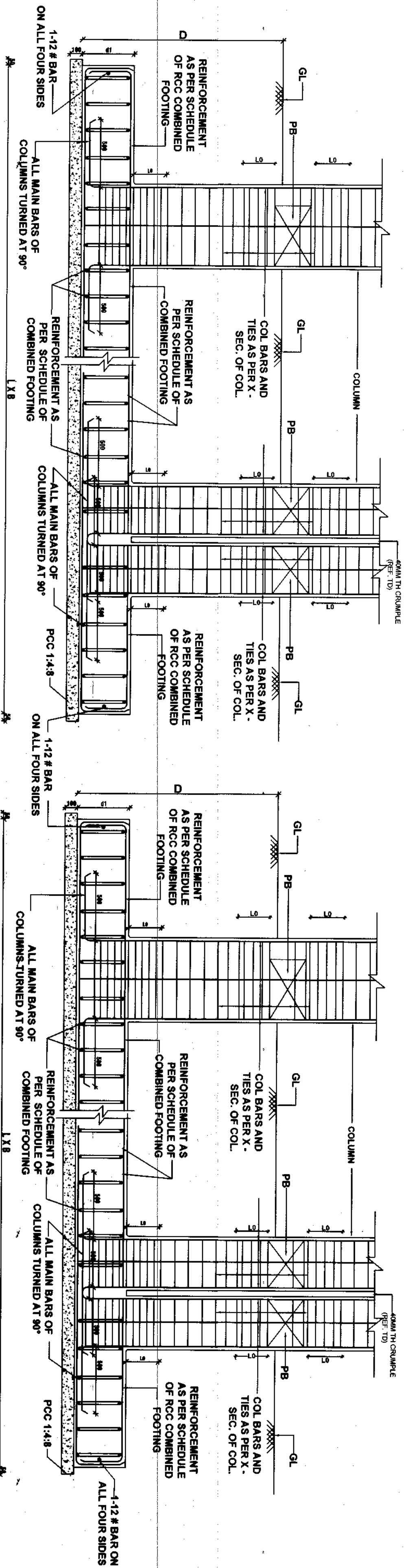
PROVN OF OTM ACCN (KLP) AT BDE HQ
PALLANWALA MIL STN UNDER
(AMWP 2023-24)

OFFICER AND ADMINISTRATIVE ACCN

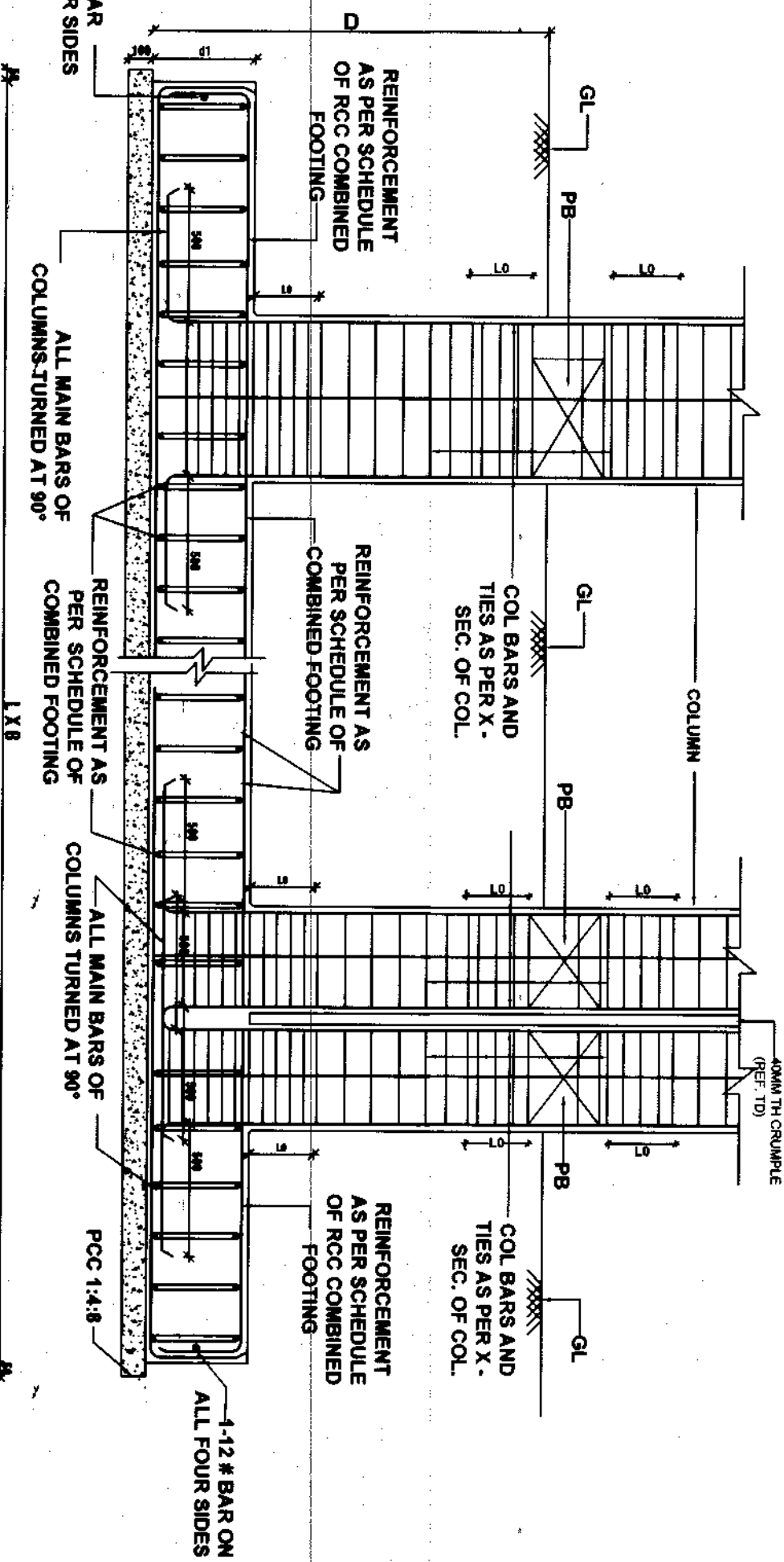
PLAN OF ISOLATED COLUMN FOOTING,
X-SECTION AND SCHEDULE OF RCC
COLUMNS

DATE	/8/5/2026	CHIEF ENGINEER	SHT NO
DRN	HAV JONI KUMAR	UDHAMPUR	4
TCD	LT COL UTSAV KUMAR	ZONE	6
CKD	LT COL UTSAV KUMAR		
SCALE	AS SHOWN		
DRG NO.	CEUZIWD-45A ST 2026		

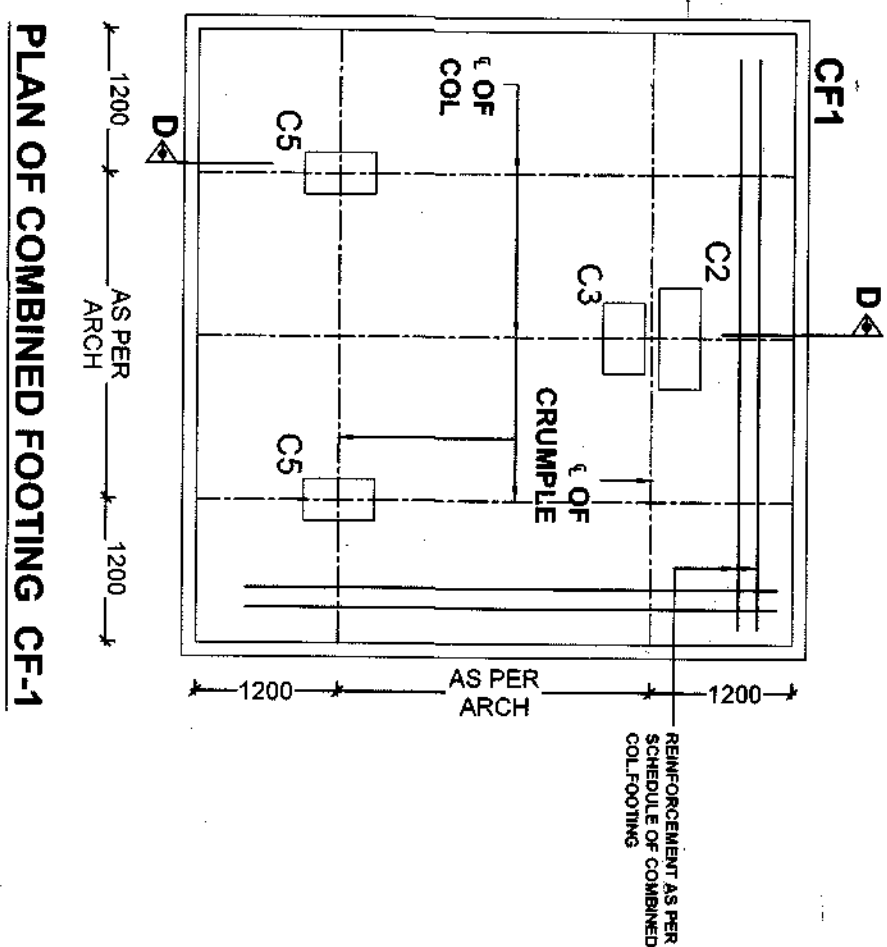
TECH OFFICER
SOT (DESIGN)
FOR CHIEF ENGINEER



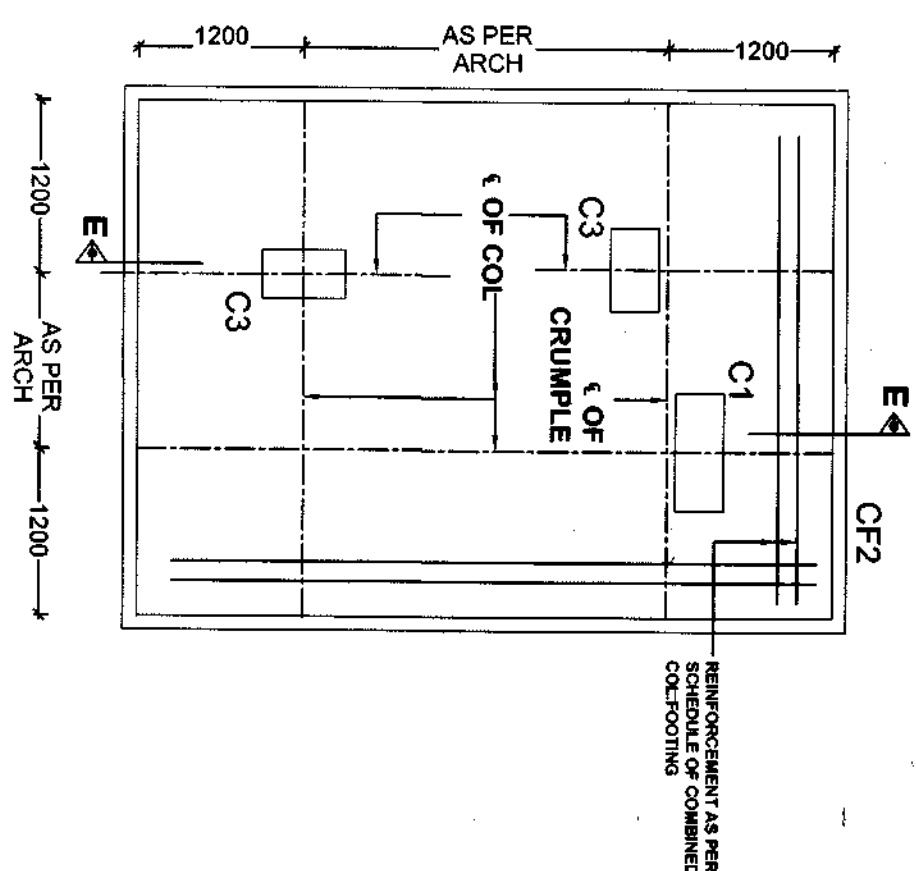
CROSS SECTION OF COMBINED
FOOTING (CF-1) AT D-D



CROSS SECTION OF COMBINED
FOOTING (CF-2) AT E-E

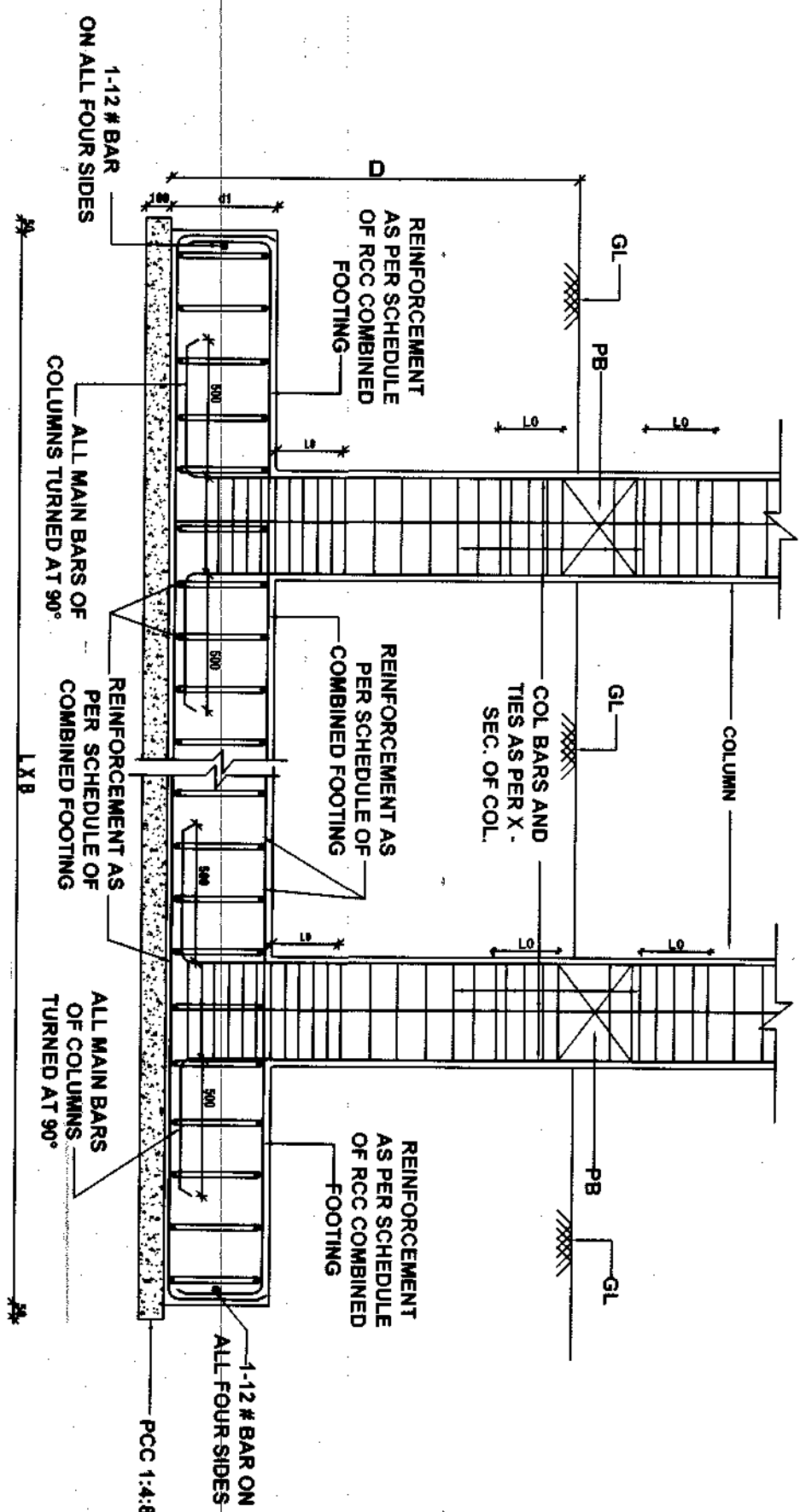


PLAN OF COMBINED FOOTING CF-1

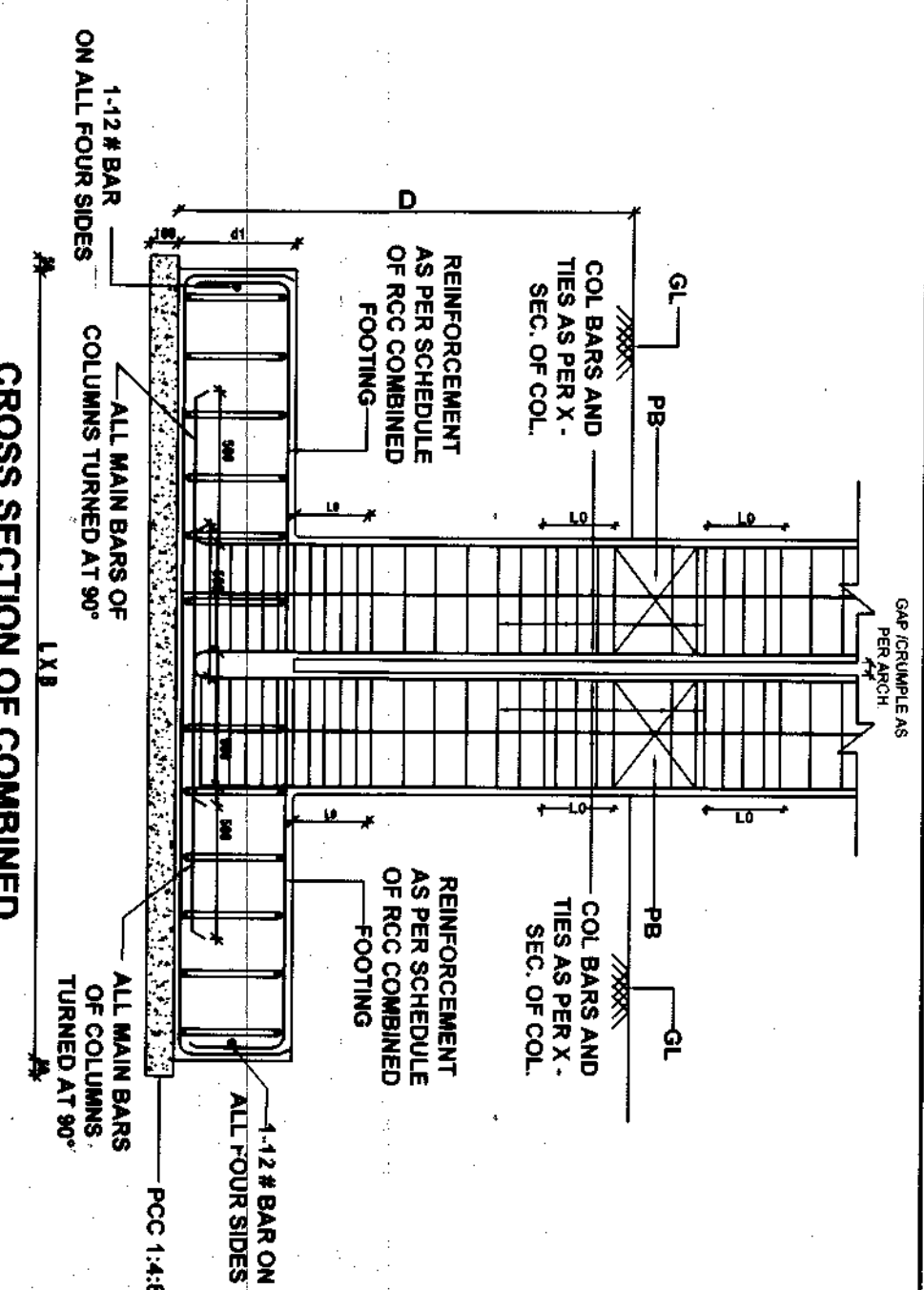


PLAN OF COMBINED FOOTING CF-2

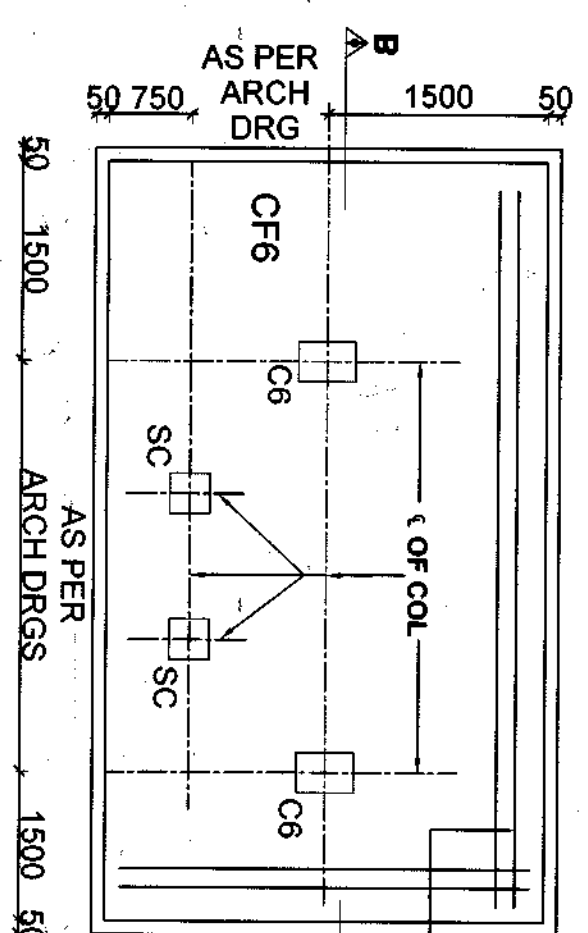
SLNO	DATE	DESCRIPTION	INITIAL
REVISIONS			
PROVN OF OTM ACCN (KLP) AT BDE HQ			
PALLANWALA MIL. STN UNDER			
(AMWP 2023-24)			
OFFICER AND ADMINISTRATIVE ACCN			
FOOTING PLANS AND SECTIONS			
DATE	18/03/2026	CHIEF ENGINEER	SHT NO
DRN	HAY JONI KUMAR	UDHAMPUR	5
TOD	LT COL UTSAY KUMAR	ZONE	6
OKD	LT COL UTSAY KUMAR		
SCALE	AS SHOWN		
DRG NO.	CEVZ/MD-05A/CT/2026		
TECH OFFICER		SO1 (DESIGN) FOR CHIEF ENGINEER	



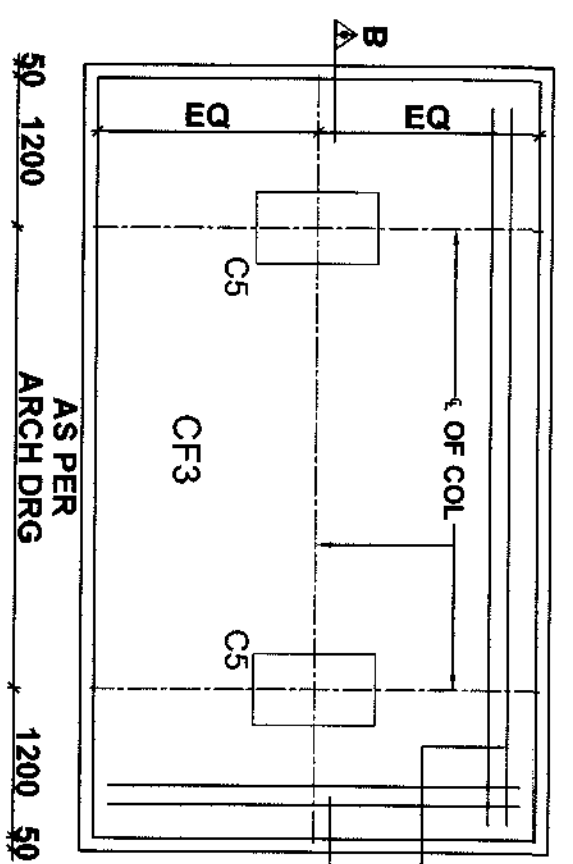
CROSS SECTION OF COMBINED FOOTING (CF-3 & CF-6) AT B-B



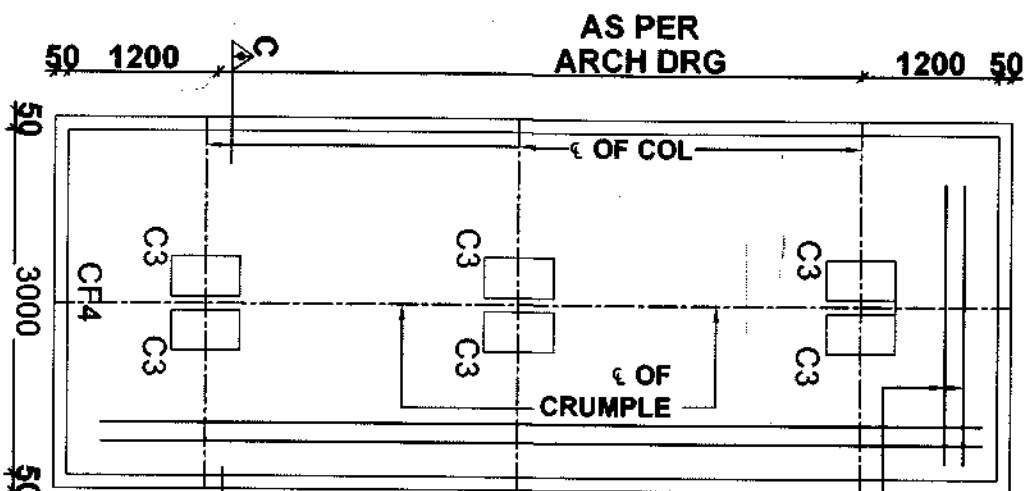
CROSS SECTION OF COMBINED FOOTING (CF-4, CF-5, F0) AT C-C



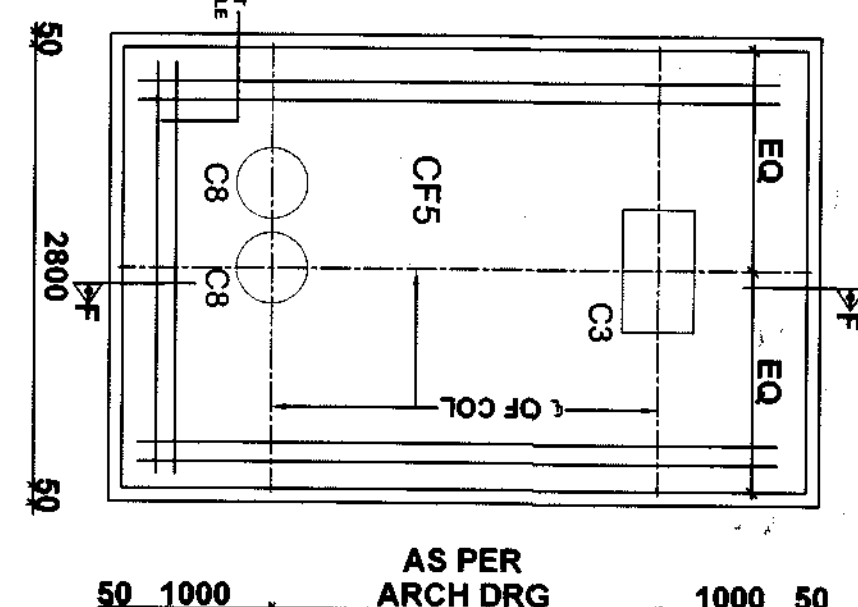
PLAN OF COMBINED FOOTING CF-6



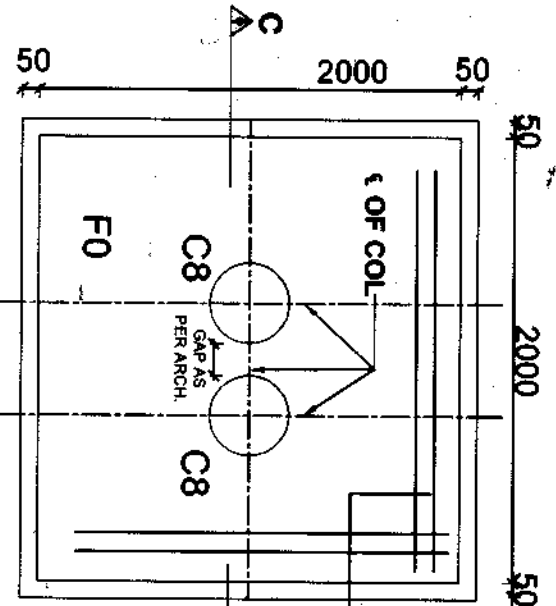
PLAN OF COMBINED FOOTING CF-3



PLAN OF COMBINED FOOTING CF-4



PLAN OF COMBINED FOOTING CF-5



PLAN OF FOOTING F0

REINFORCEMENT AS PER SCHEDULE OF COMBINED COL. FOOTING

PROVN OF OTM ACCN (KLP) AT BDE HQ
PALLANWALA MIL STN UNDER
(AMWP 2023-24)

OFFICER AND ADMINISTRATIVE ACCN

FOOTING PLANS AND SECTIONS

DATE	18/12/2025	SHT NO	6
DRN	HAV JONI KUMAR		
TCD	LT COL UTSAV KUMAR		
CMD	LT COL UTSAV KUMAR		
SCALE	AS SHOWN		
DRG NO	CEU2 WD-05 A1 ST 1/2025		

CHIEF ENGINEER

UDHAMPUR

ZONE









TECH OFFICER

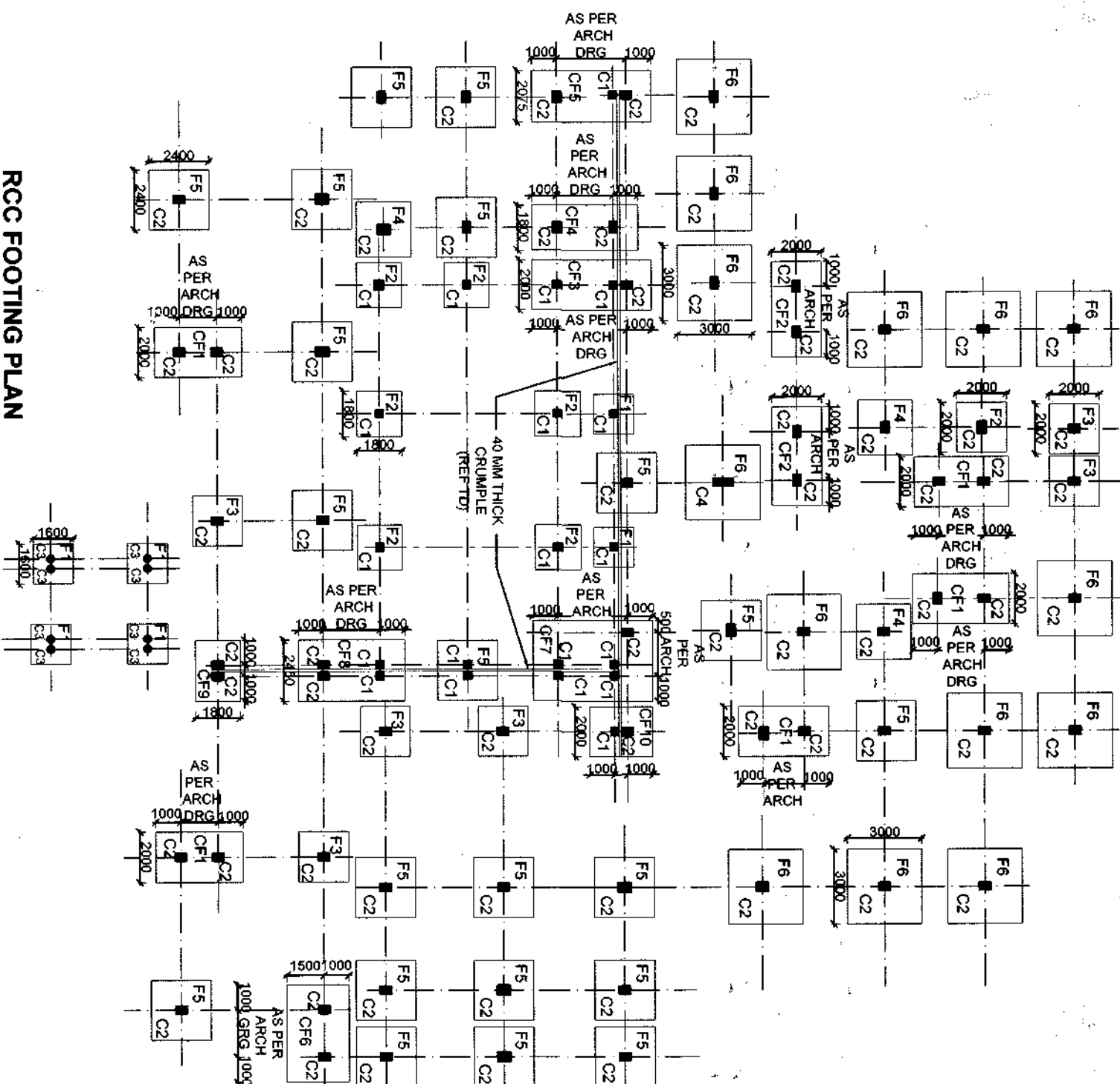
SOI (DESIGN)
FOR CHIEF ENGINEER

SCHEDULE OF CIRCULAR ISOLATED AND COMBINED COLUMN FOOTINGS :-

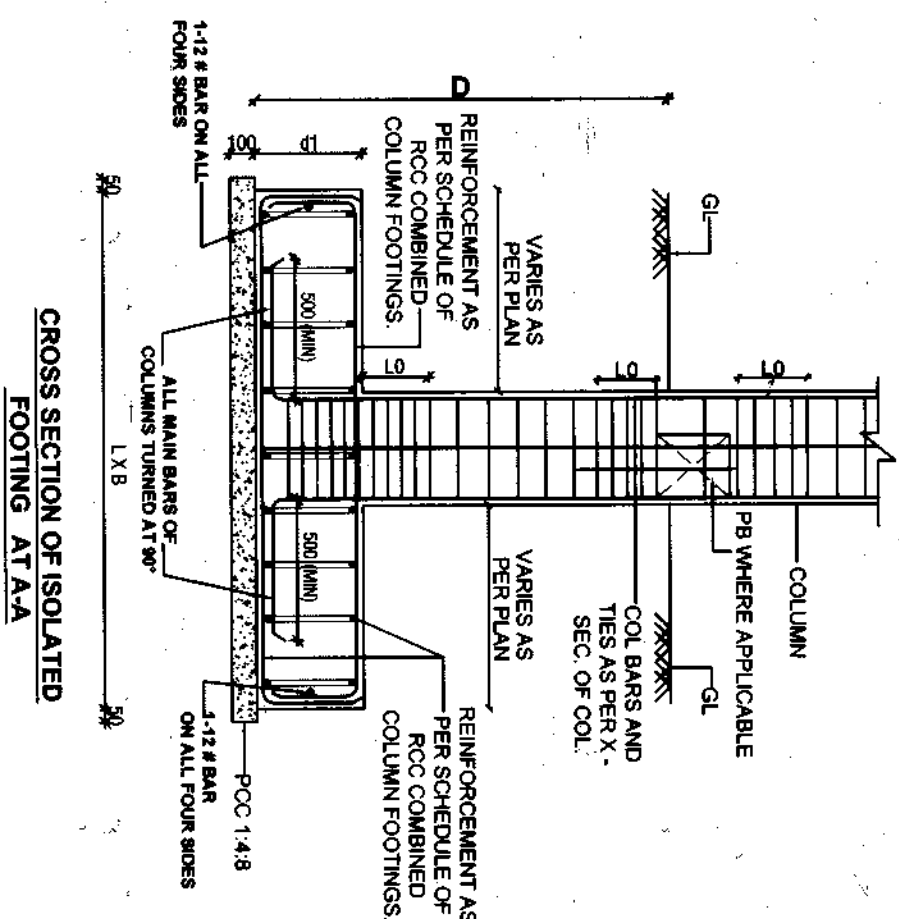
COL. MARK	SIZE OF COL.	COL. FOOTING MARK	SIZE OF FOOTING (L) BREADTH (B)	THICKNESS			OVER ALL DEPTH (D) OF FOUNDATION BELOW GL.	REINFORCEMENT IN FOUNDATION						REMARKS
				d1	d2	d3		PARALLEL TO LENGTH		PARALLEL TO BREADTH				
								BOTTOM	TOP	BOTTOM	TOP			
AS PER FOOTING PLAN	AS PER SCHEDULE	F1	1600	1600	350	-	-	1500	12 # @ 150 C/C	10 # @ 200 C/C	12 # @ 150 C/C	10 # @ 200 C/C		
		F2	1800	1800	350	-	-	1500	12 # @ 150 C/C	10 # @ 200 C/C	12 # @ 150 C/C	10 # @ 200 C/C		
		F3	2000	2000	350	-	-	1500	12 # @ 150 C/C	10 # @ 200 C/C	12 # @ 150 C/C	10 # @ 200 C/C		
		F4	2200	2200	350	-	-	1500	12 # @ 150 C/C	10 # @ 200 C/C	12 # @ 150 C/C	10 # @ 200 C/C		
		F5	2400	2400	350	-	-	1500	12 # @ 150 C/C	10 # @ 200 C/C	12 # @ 150 C/C	10 # @ 200 C/C		
		F6	3000	3000	350	-	-	1500	12 # @ 150 C/C	10 # @ 200 C/C	12 # @ 150 C/C	10 # @ 200 C/C		
		CF1	AS PER FOOTING PLAN	350	-	-	1500	12 # @ 150 C/C	12 # @ 150 C/C	12 # @ 150 C/C	12 # @ 150 C/C			
		CF2	AS PER FOOTING PLAN	350	-	-	1500	12 # @ 150 C/C	12 # @ 150 C/C	12 # @ 150 C/C	12 # @ 150 C/C			
		CF3	AS PER FOOTING PLAN	350	-	-	1500	12 # @ 150 C/C	12 # @ 150 C/C	12 # @ 150 C/C	12 # @ 150 C/C			
		CF4	AS PER FOOTING PLAN	350	-	-	1500	12 # @ 150 C/C	12 # @ 150 C/C	12 # @ 150 C/C	12 # @ 150 C/C			
AS PER FOOTING PLAN	AS PER FOOTING PLAN	CF5	AS PER FOOTING PLAN	350	-	-	1500	12 # @ 150 C/C	12 # @ 150 C/C	12 # @ 150 C/C	12 # @ 150 C/C			
		CF6	AS PER FOOTING PLAN	350	-	-	1500	12 # @ 150 C/C	12 # @ 150 C/C	12 # @ 150 C/C	12 # @ 150 C/C			
		CF7	AS PER FOOTING PLAN	350	-	-	1500	12 # @ 150 C/C	12 # @ 150 C/C	12 # @ 150 C/C	12 # @ 150 C/C			
		CF8	AS PER FOOTING PLAN	350	-	-	1500	12 # @ 150 C/C	12 # @ 150 C/C	12 # @ 150 C/C	12 # @ 150 C/C			
		CF9	AS PER FOOTING PLAN	350	-	-	1500	12 # @ 150 C/C	12 # @ 150 C/C	12 # @ 150 C/C	12 # @ 150 C/C			
		CF10	AS PER FOOTING PLAN	350	-	-	1500	12 # @ 150 C/C	12 # @ 150 C/C	12 # @ 150 C/C	12 # @ 150 C/C			

SCHEDULE OF RCC COLUMNS:-

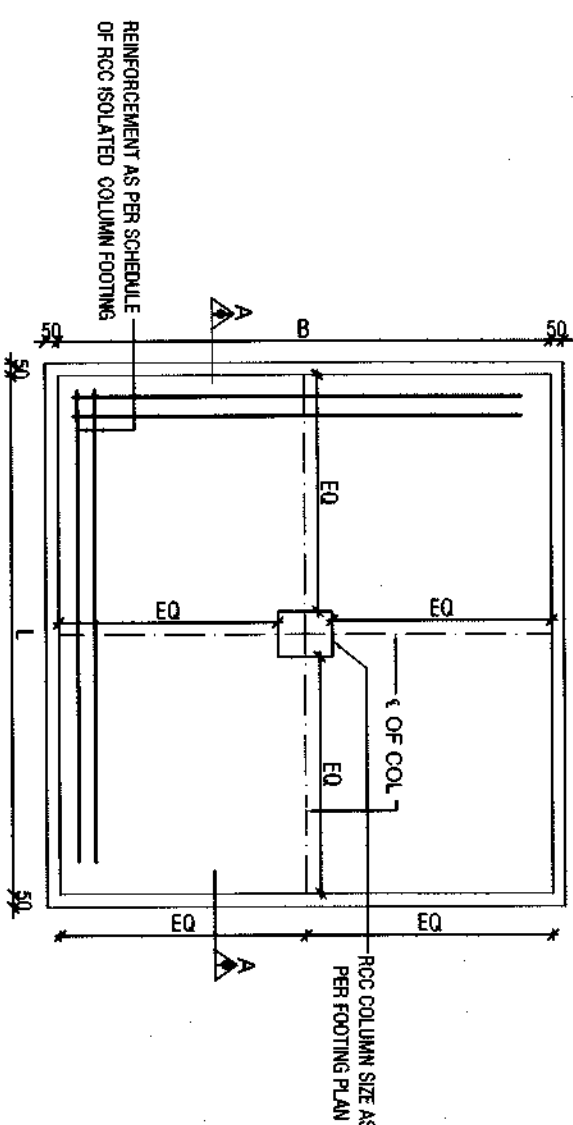
SL. NO	COLUMN NO	COLUMN SIZE	LONGITUDINAL	REINFORCEMENT		SECTION	SHAPE OF TIES	REMARKS
				CONFINING REGION (CR)	NON CONFINING REGION (NCR)			
				TRANSVERSE / SPECIAL REINFORCEMENT (TIES AND LINKS) FOR FULL DEPTH OF BEAMS, 450 DEPTH IN FOUNDATIONS AND FOR LENGTH L _p ON EITHER SIDE OF THE INTERSECTIONING BEAMS AS PER IS 10259 AND 10 ON CE / TD NO. 1253 / 2007 SHT NO. 5 / 5	TRANSVERSE REINFORCEMENT IN BALANCE MIDDLE PORTION			
1	C1	350X350	8 NOS - 12 #	10 # @ 70 C/C	8 # @ 150 C/C			
2	C2	350X500	8 NOS - 12 # 4 NOS - 16 #	10 # @ 70 C/C	6 # @ 150 C/C			
3	C3	350 (DIA)	8 NOS - 12 #	10 # @ 70 C/C	6 # @ 160 C/C			CIRCULAR COLUMN
4	C4	400 X 850	12 NOS - 20 #	10 # @ 70 C/C	8 # @ 150 C/C			



RCC FOOTING PLAN



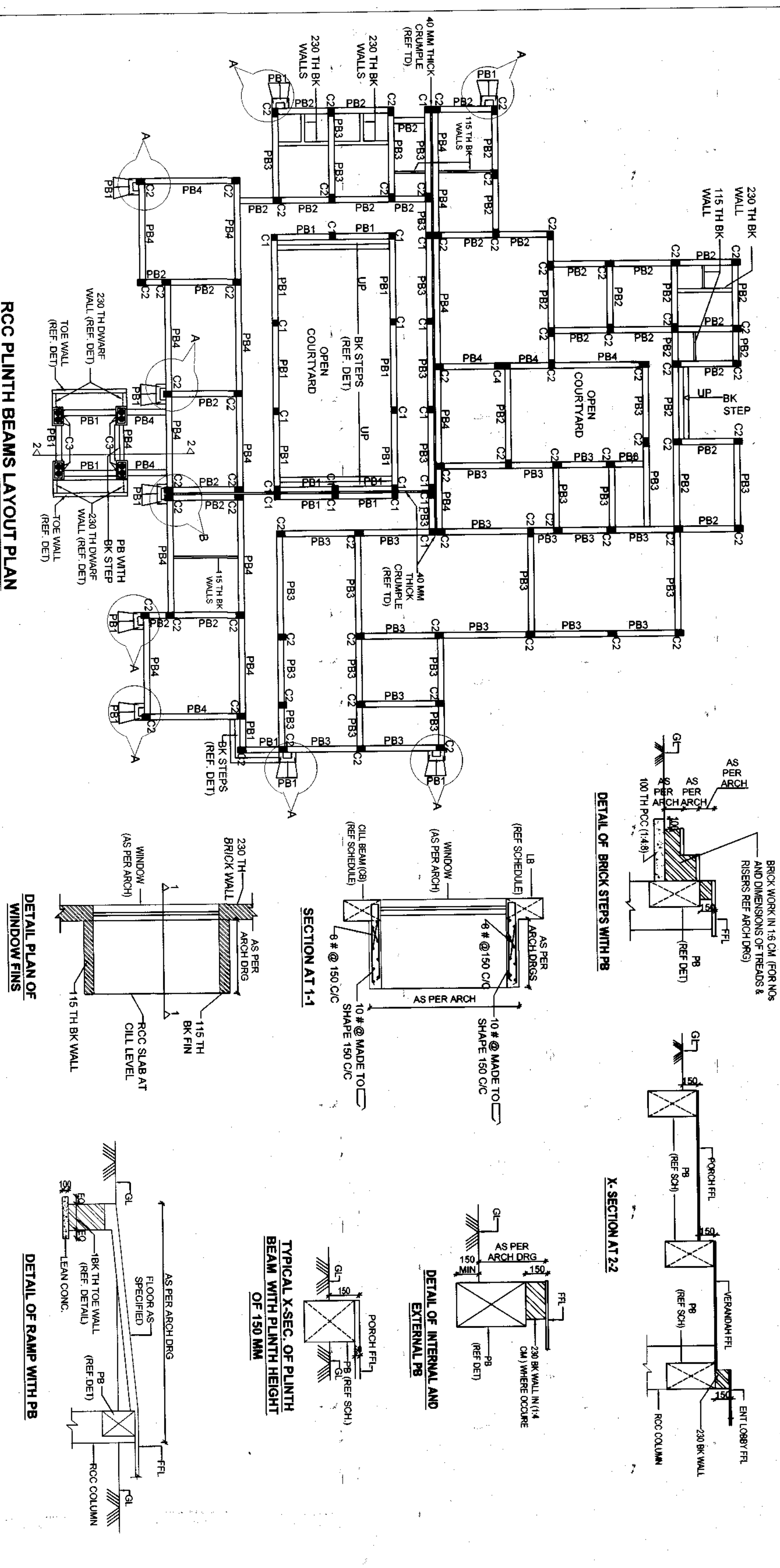
CROSS SECTION OF ISOLATED FOOTING AT A-A



TYPICAL PLAN OF RCC ISOLATED COLUMN FOOTING

SL. NO.	DATE	DESCRIPTION	INITIAL
REVISIONS			
PROVN OF OTM ACCN (KLP) AT BDE HQ PALLANWALA MIL STN UNDER (AMWP 2023-24)			
OFFICER MESS			
RCC FOOTING PLAN, SCHEDULE OF ISOLATED COLUMN FOOTING, SCHEDULE OF COLUMN AND DETAIL OF COLUMN FOOTING			
DATE	18/03/2025	CHIEF ENGINEER	SHT NO.
DRN	HAV KISHAN SINGH	UDHAMPUR	1
TRD	LT COL UTSAY KUMAR	ZONE	7
CKD	LT COL UTSAY KUMAR		
SCALE	INTS		
DRG NO.	CEU2100D-05B1ST/2025		
TECH OFFICER		SO1 (DESIGN) FOR CHIEF ENGINEER	

SCHEDULE OF RCC BEAMS																				
SL NO	TYPE	OVERALL DIMENSIONS		BOTTOM BARS		EXTRA BARS AT BOTTOM		TOP BARS		EXTRA BARS AT TOP		STIRRUPS				SIDE FACE REINFORCEMENT (ON EACH FACE)		REMARKS		
				STRAIGHT THROUGH BARS "a"	DIA	NOS	DIA	STRAIGHT THROUGH BARS "b"	NOS	DIA	CONT SUPPORT BARS "b"	NOS	DIA	SUPPORT SPAN (X1 / X2)					MID SPAN (X3)	
		WIDTH	DEPTH	NOS	DIA	NOS	DIA	NOS	DIA	NOS	DIA	NOS OF LEGS	SPACING C/C	DIA	NOS OF LEGS	SPACING C/C	NOS		DIA	
PLINTH BEAMS (PB)																				
1	PB1	250	300	3	12	2	12	4	12	2	12	8	2	100	8	2	125	-	-	
2	PB2	300	450	4	12	2	12	4	12	2	12	8	2	100	8	2	125	-	-	
3	PB3	300	500	4	12	2	12	4	12	2	12	8	2	100	8	2	125	-	-	
4	PB4	300	500	4	16	2	16	4	16	2	12	8	2	100	8	2	125	-	-	



PROVN OF OTM ACCN (KLP) AT BDE HQ
PALLANWALA MIL STN UNDER
(AMWP 2023-24)

OFFICER MESS

RCC PLINTH BEAMS PLAN, SCHEDULE OF
PLINTH BEAMS AND DETAILS

CHIEF ENGINEER
UDHAMPUR
ZONE

DATE 18/3/2026
DIN HAVAN SINGH
TOD LT COL UTSAV KUMAR
CND LT COL UTSAV KUMAR
SCALE NTS
DRG NO. CEU21WD-05 B1ST 12026

TECH OFFICER
SOP (DESIGN)
FOR CHIEF ENGINEER

REVISIONS

SHD DATE DESCRIPTION INITIAL

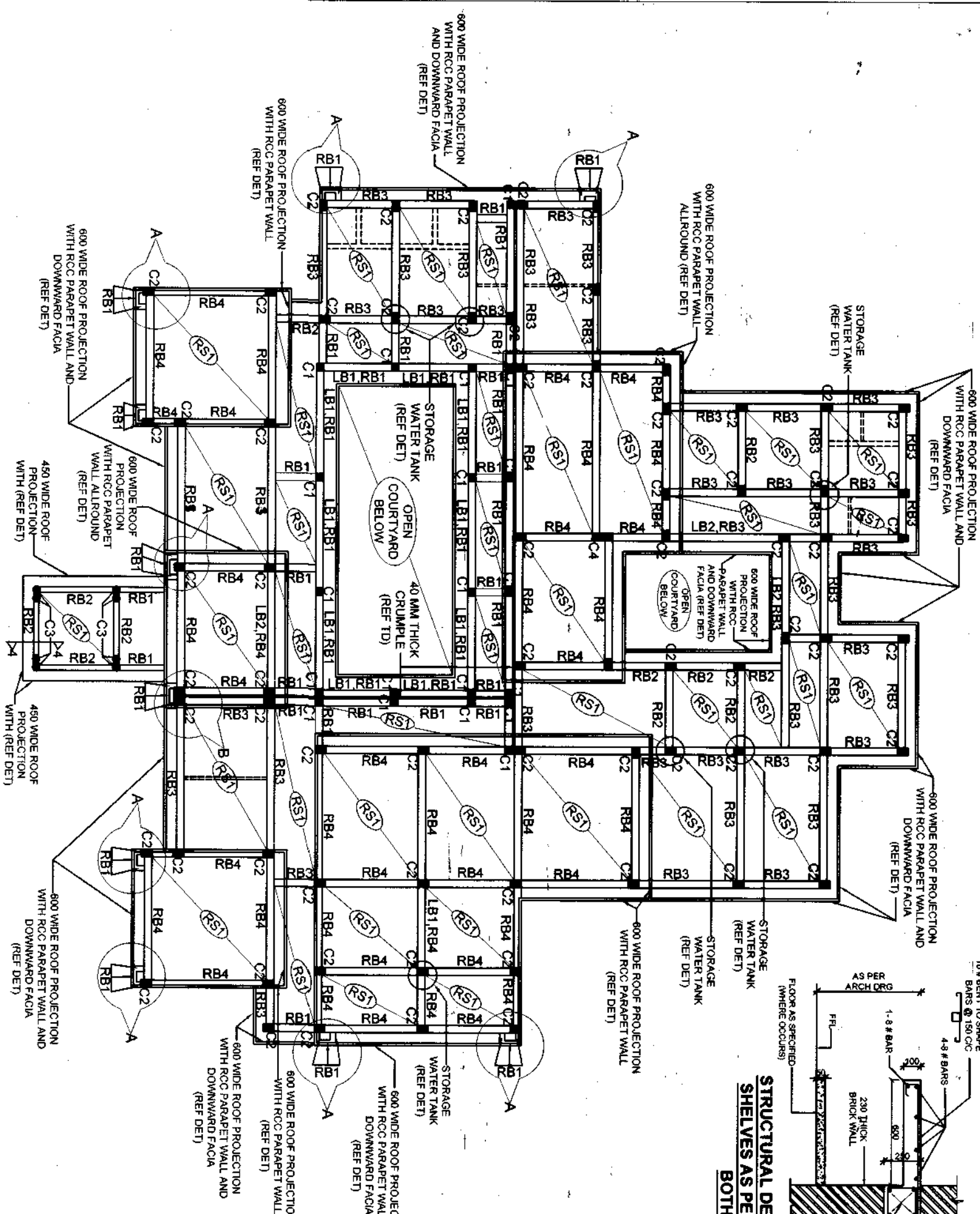
1

2

SCHEDULE OF RCC BEAMS																		
SL NO	TYPE	OVERALL DIMENSIONS		BOTTOM BARS		EXTRA BARS AT BOYYOM		TOP BARS		EXTRA BARS AT TOP		STIRRUPS			SIDE FACE REINFORCEMENT (ON EACH FACE)		REMARK	
				STRAIGHT THROUGH BARS "a"		AT MID SPAN "d"		STRAIGHT THROUGH BARS "b"		SUPPORT SPAN (X1 / X2)			MID SPAN (X3)					
		WIDTH	DEPTH	NOS	DIA	NOS	DIA	NOS	DIA	NOS	DIA	NOS OF LEGS	SPACING C/C	DIA	NOS OF LEGS	SPACING C/C		NOS
PLINTH BEAMS (PB)																		
1	RB1	250	300	3	12	2	12	3	12	2	12	8	2	100	8	2	125	-
2	RB2	300	450	4	12	2	12	4	12	2	12	8	2	100	8	2	125	-
3	RB3	300	500	4	16	2	12	4	16	2	12	8	2	100	8	2	125	-
4	RB4	300	550	4	16	2	12	4	16	2	12	8	2	100	8	2	125	-
5	LB1	250	350	4	12	-	-	4	12	-	-	8	2	100	8	2	125	-
5	LB2	250	500	4	16	-	-	4	16	-	-	8	2	100	8	2	125	-

SCHEDULE OF RCC SLABS

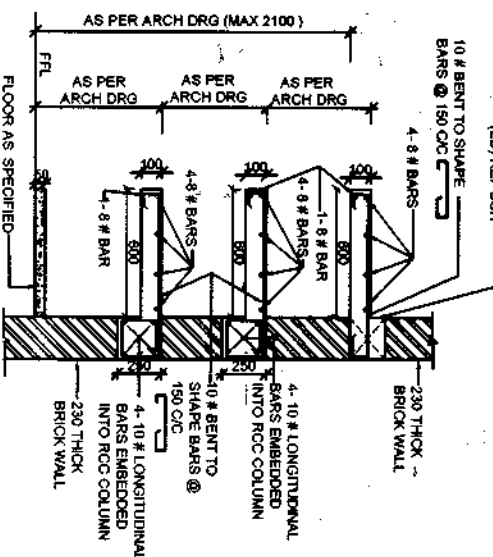
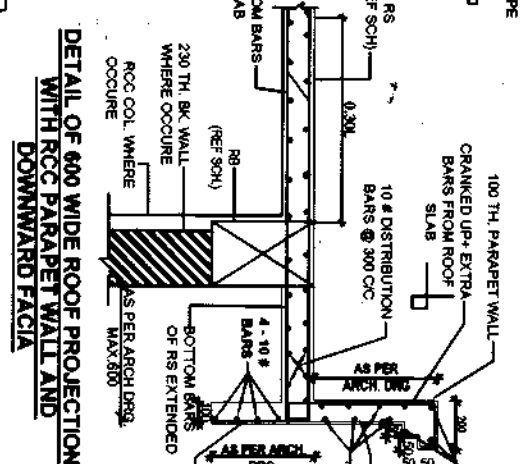
SL NO	NOMENCLATURE	THICKNESS T	TYPE OF SLAB	REINFORCEMENT								DISTR REIN AT TOP CONT/ NON-CONT ENDS	REMARKS
				MAIN BARS BOTTOM RFT (ALTERNATIVELY CRANKED)				EXTRA BARS AT TOP OVER END SUPPORT IN BETWEEN CRANKED UP BARS					
				SHORT SPAN		LONG SPAN		SHORT SPAN		LONG SPAN			
				DIA	SPACING C/C	DIA	SPACING C/C	DIA	SPACING C/C	DIA	SPACING C/C		
1	RS1	150	TWO WAY	10		10		10		350		10 @ 200 C/C	



RCC ROOF PLAN SHOWING ROOF BEAMS AND ROOF SLABS



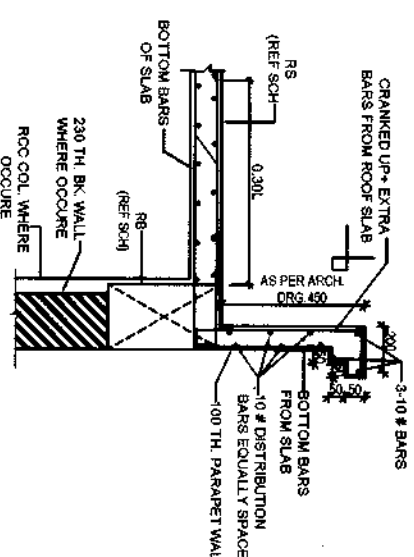
STRUCTURAL DETAILS OF 01 TIER
SHELVES AS PER ARCH DRG ON
BOTH SIDE



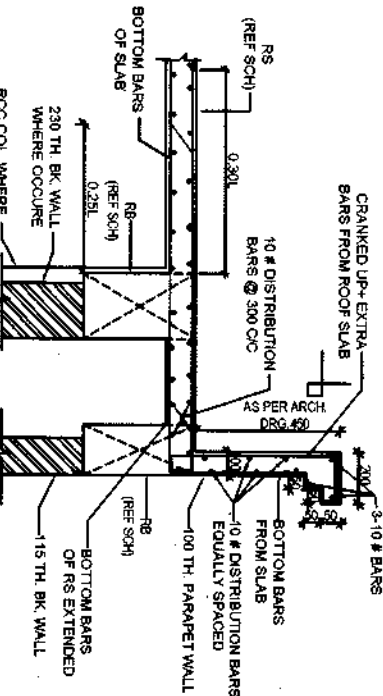
(WHERE OCCURS)

STRUCTURAL DETAILS OF

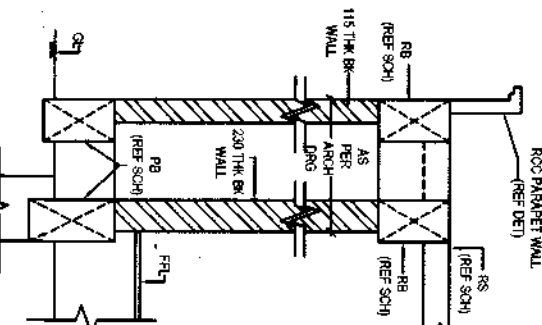
03 TIER SHELVES



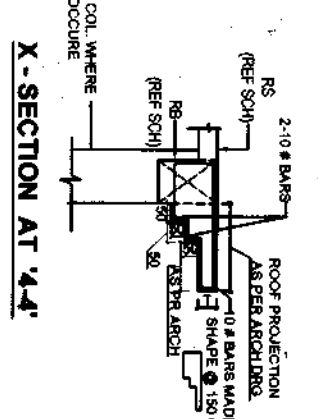
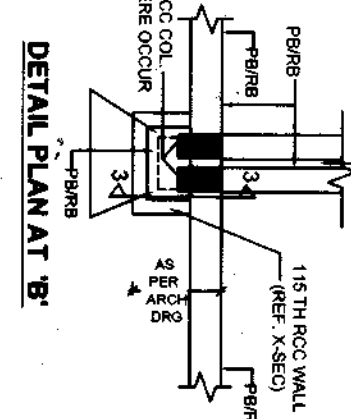
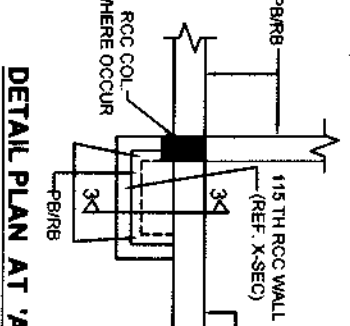
**TYPICAL DETAIL OF RCC PARAPET WALL
WITH ROOF BEAM**



**DETAIL OF 600 WIDE ROOF PROJECTION
WITH 480 HIGH RCG PARAPET WALL (IN
CASE OF SHAFT)**



X-SECTION AT 'A'

[illegible]

S/NO	DATE	DESCRIPTION	INITIAL

PROVN OF OTM ACCN (KLP) AT BDE HQ
PALLANWALA MIL STN UNDER
(AMWP 2023-24)

OFFICER MESS

RCC ROOF BEAMS PLAN, SCHEDULE OF ROOF BEAMS, ROOF SLABS AND DETAILS

DATE	18/03/2008
BY	HAVISHAN SINGH
CCD	LT COL UTSAV KUMAR
KNO	LT COL UTSAV KUMAR
NTS	
SCALE	

CHIEF ENGINEER

UDHAMPUR

ZONE

SRT NO	37
--------	----

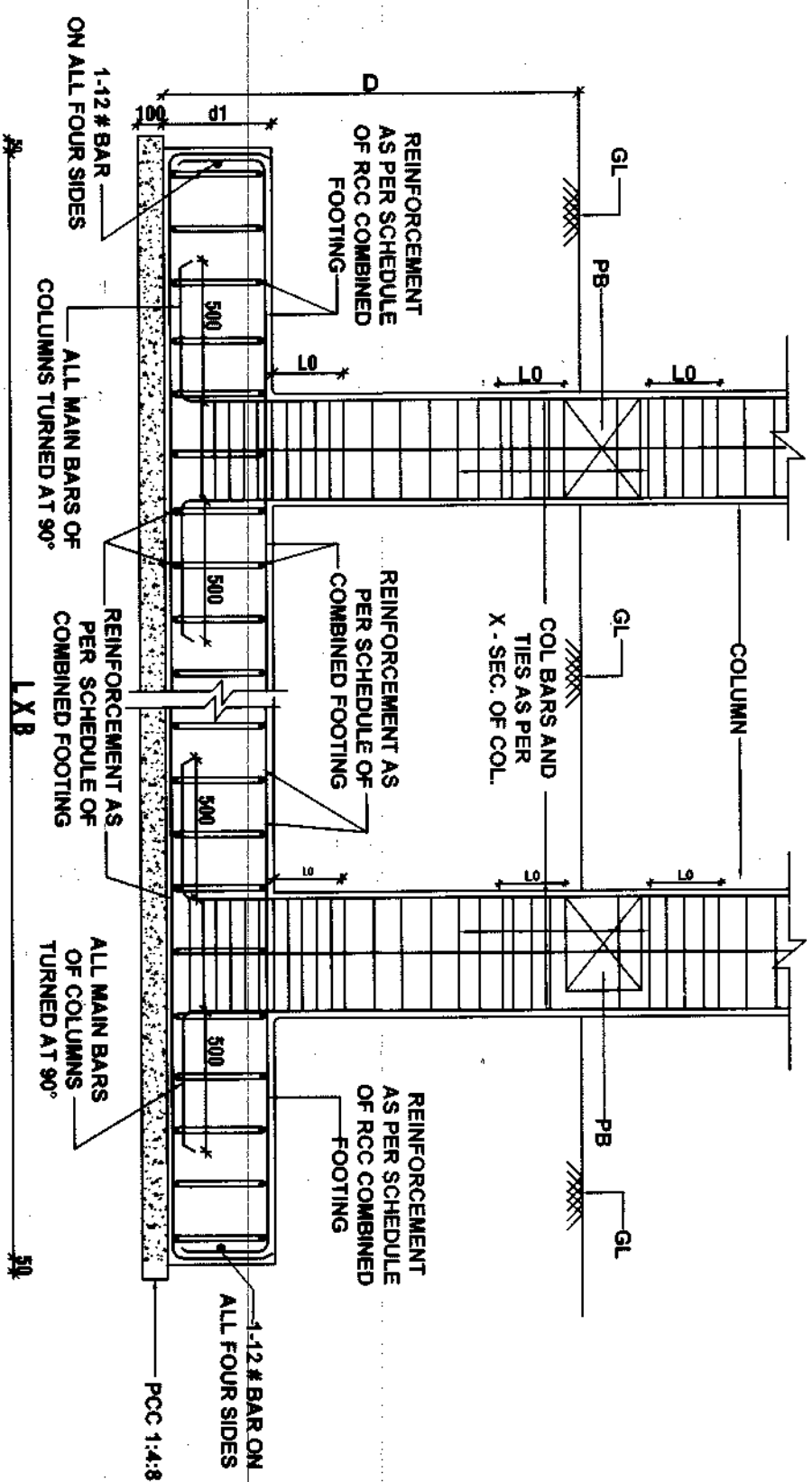
DRG NO. CENZ WD-05 R15T / 2026

TECH OFFICER

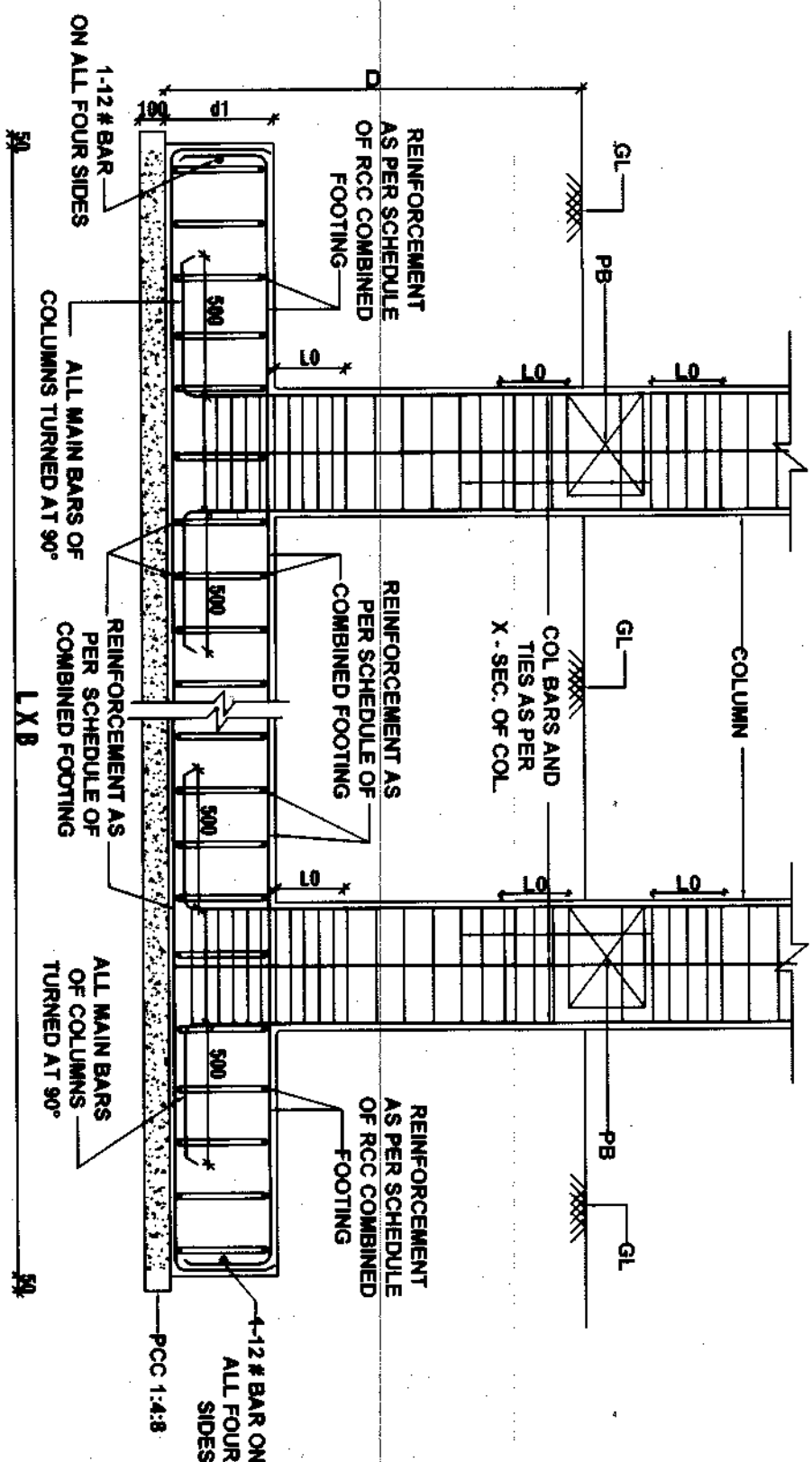
~~SOI (DESIGN)~~
FOR CHIEF ENGINEER

SO1 (DESIGN)
FOR CHIEF ENGINEER

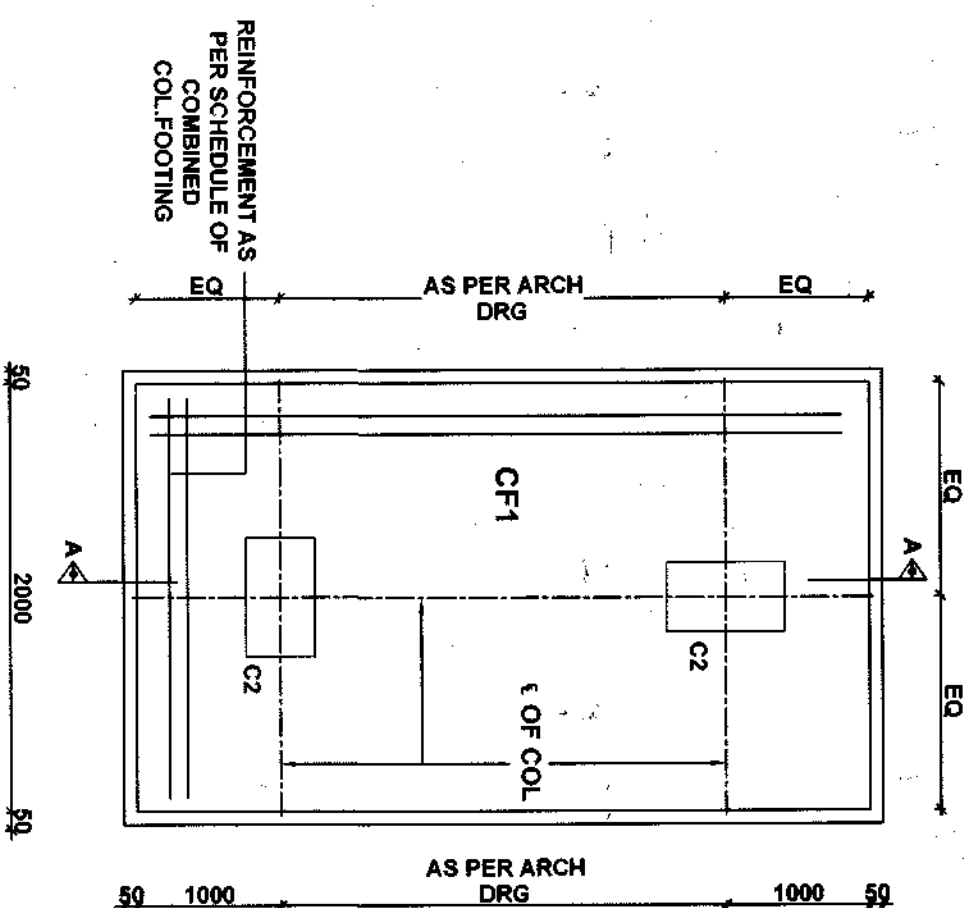
Q



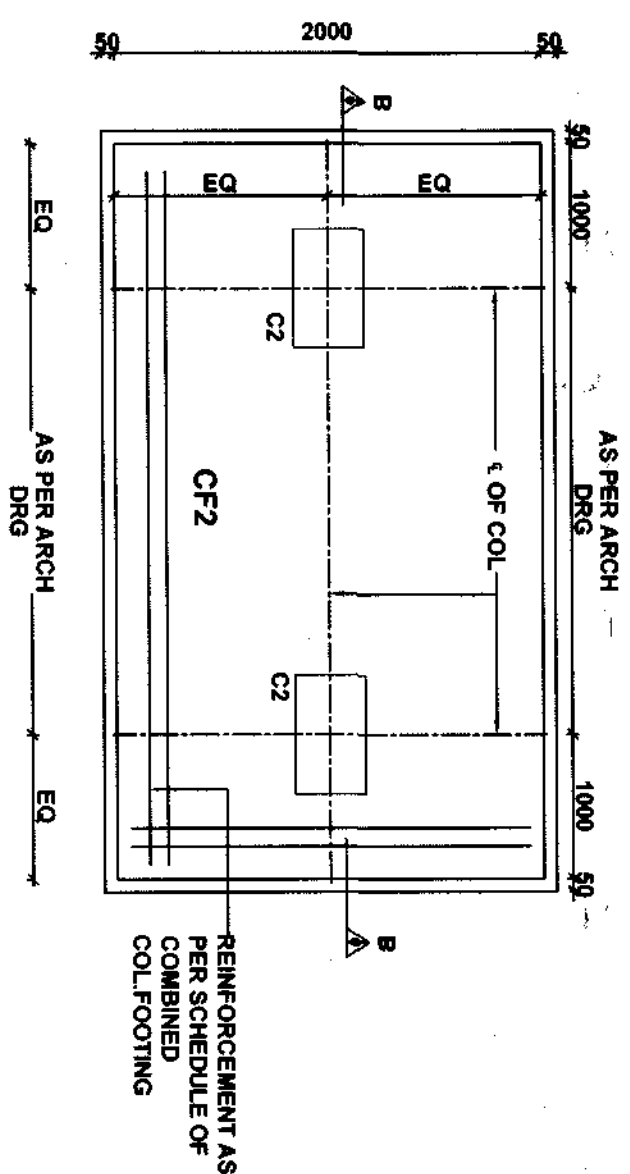
CROSS SECTION OF COMBINED FOOTING (CF-1) AT A-A



CROSS SECTION OF COMBINED FOOTING (CF-2) AT B-B



PLAN OF COMBINED FOOTING CF-1



PLAN OF COMBINED FOOTING CF-2

SNO	DATE	DESCRIPTION	INITIAL

PROVN OF OTM ACCN (KLP) AT BDE HQ
PALLANWALA MIL STN UNDER
(AMWP 2023-24)

OFFICER MESS

FOOTING PLAN AND SECTION

DATE	18/03/2023	SHT NO	4/7
DRN	HAV KISHAN SINGH		
TCD	LT COL UTSAV KUMAR		
QND	LT COL UTSAV KUMAR		
SCALE	MTS		
DRG NO	CEU2/PCD-058/ST/2026		

CHIEF ENGINEER

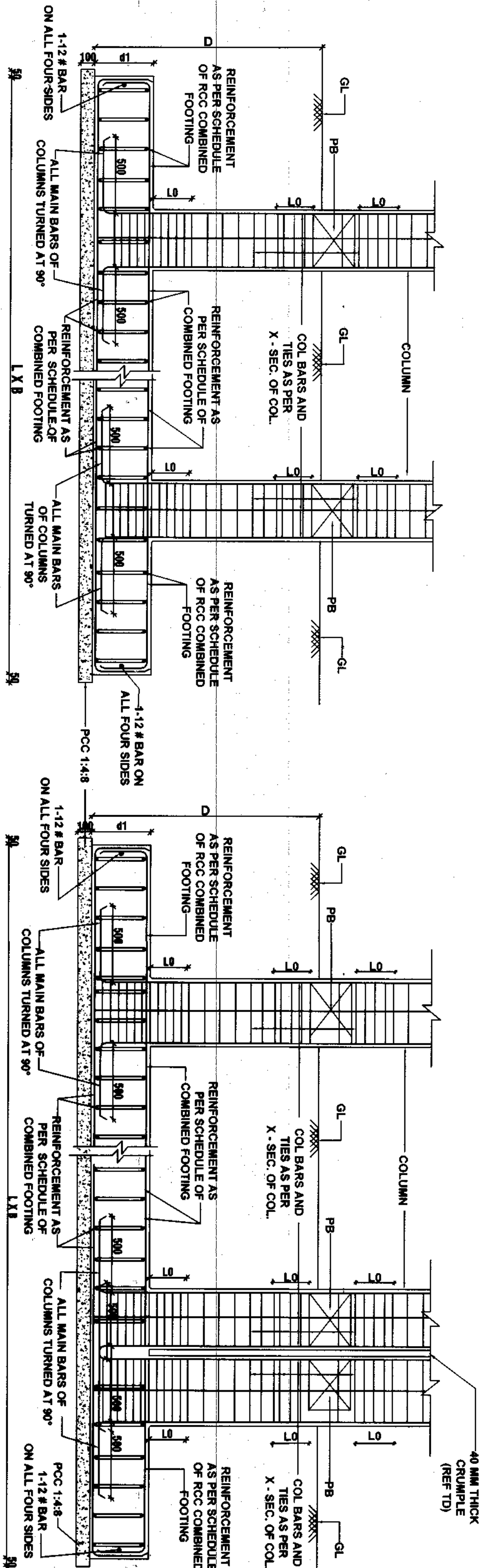
UDHAMPUR

ZONE

TECH OFFICER

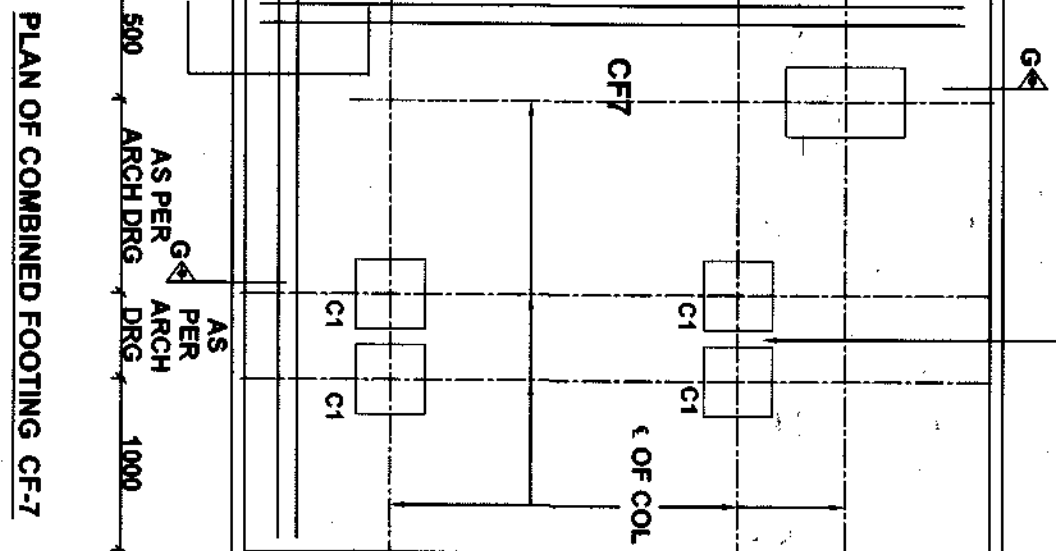
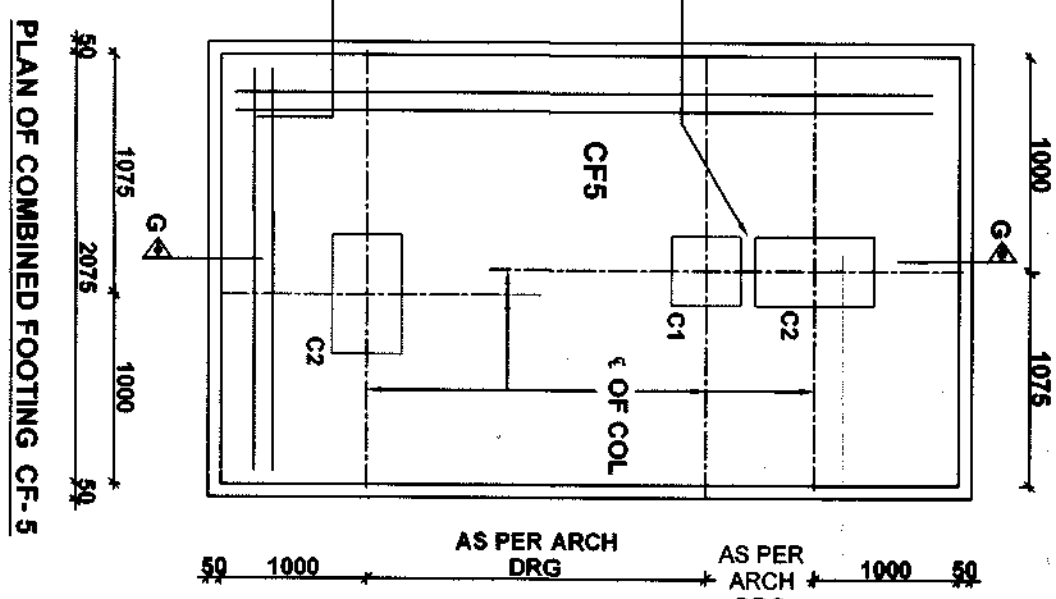
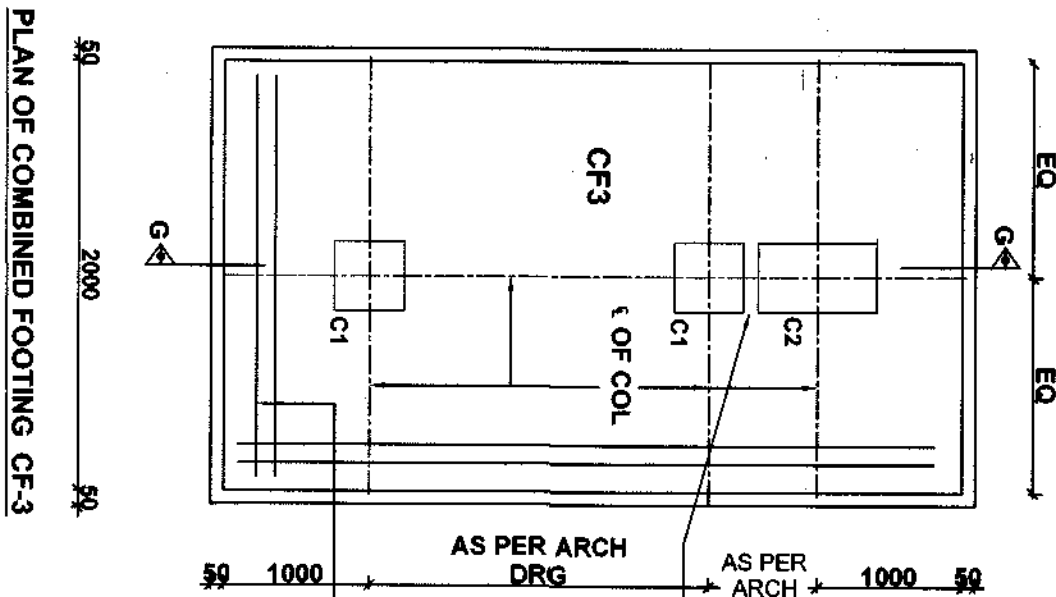
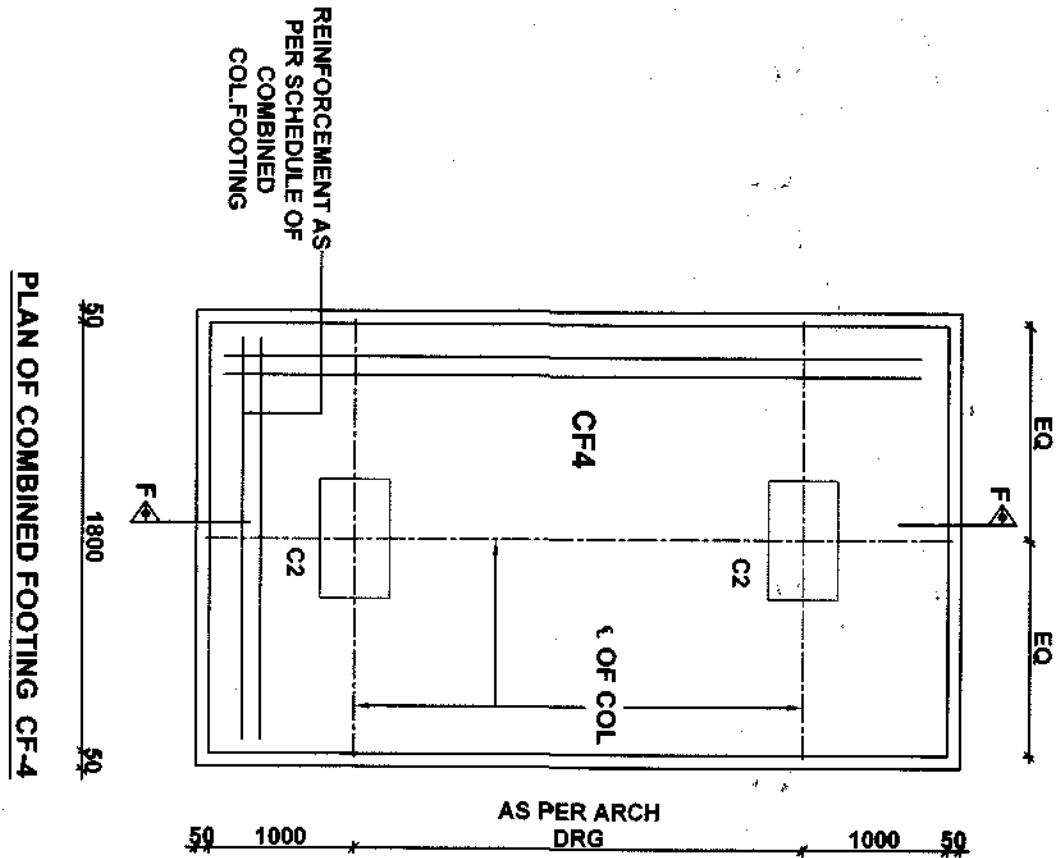
SOI (DESIGN)
FOR CHIEF ENGINEER

13



CROSS SECTION OF COMBINED FOOTING (CF-4) AT F-F

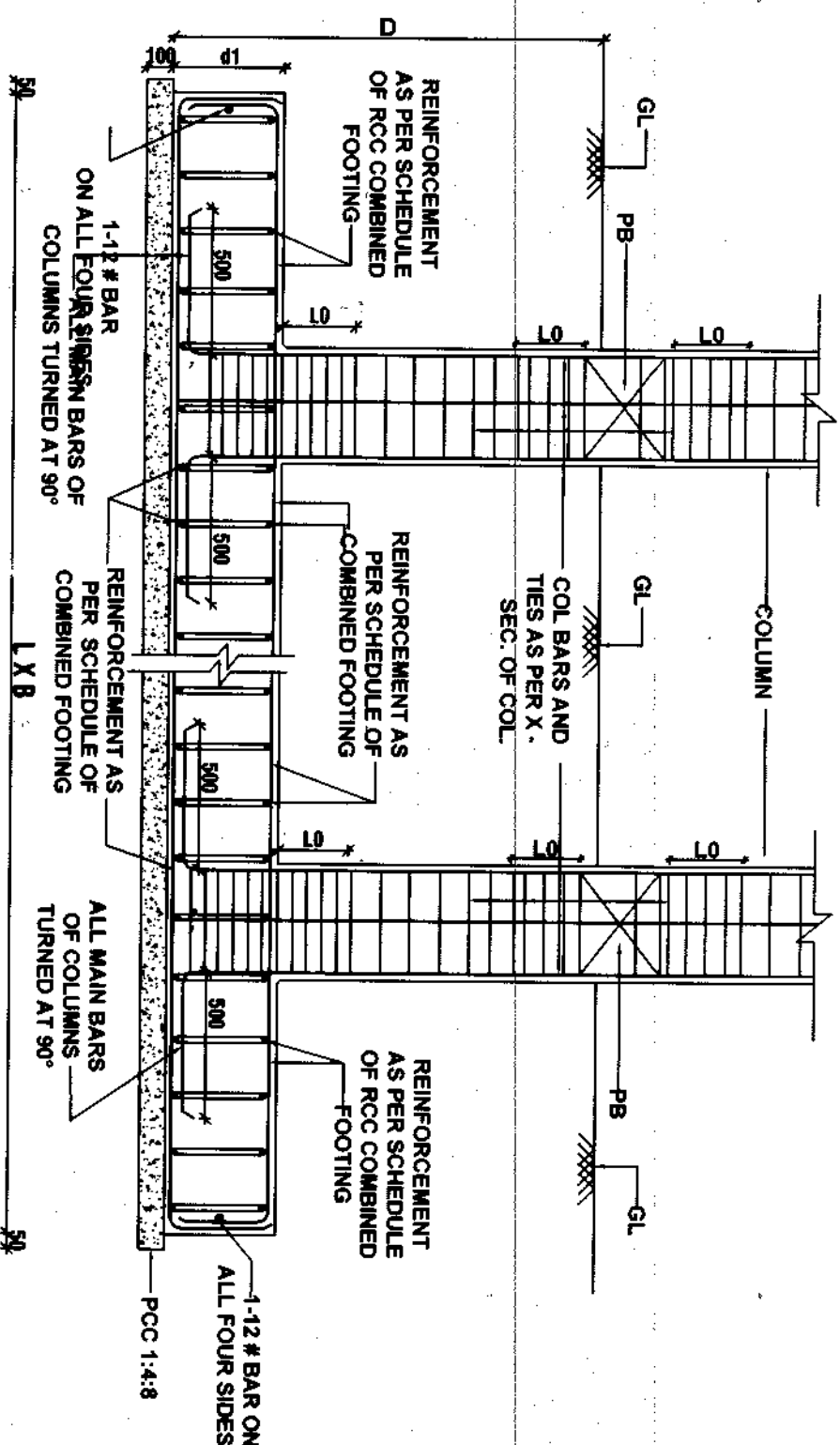
CROSS SECTION OF COMBINED FOOTING (CF-3,CF-5,CF-7) AT G-G



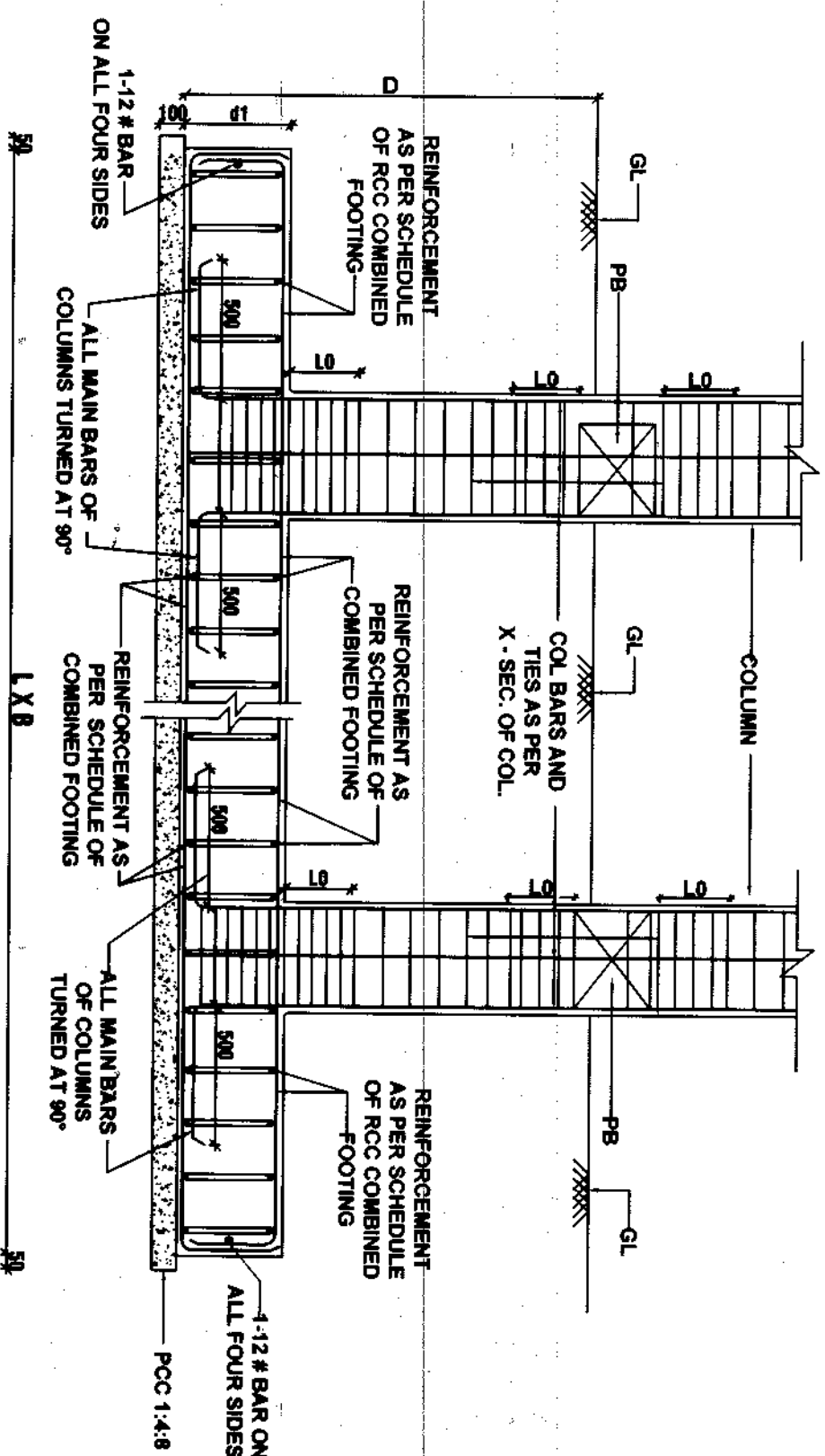
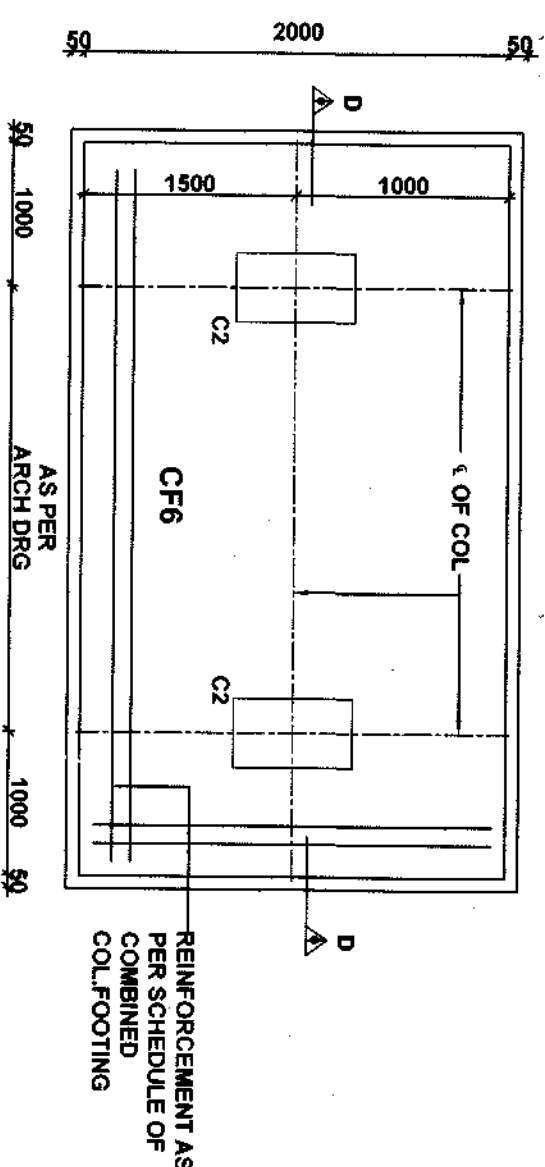
SLNO	DATE	DESCRIPTION	INITIAL
REVISIONS			
PROVN OF OTM ACCN (KLP) AT BDE HQ			
PALLANWALA MIL STN UNDER			
(AMWP 2023-24)			
OFFICER MESS			
FOOTING PLAN AND SECTION			
DATE	18/03/2026	CHIEF ENGINEER	SHT NO
DRN	HAY KISHAN SINGH	UDHAMPUR	5
TCD	LT COL UTSAV KUMAR	ZONE	7
CKD	LT COL UTSAV KUMAR		
SCALE	NTS		
DRG NO	CEU2/WD-05/157/2026		

TECH OFFICER

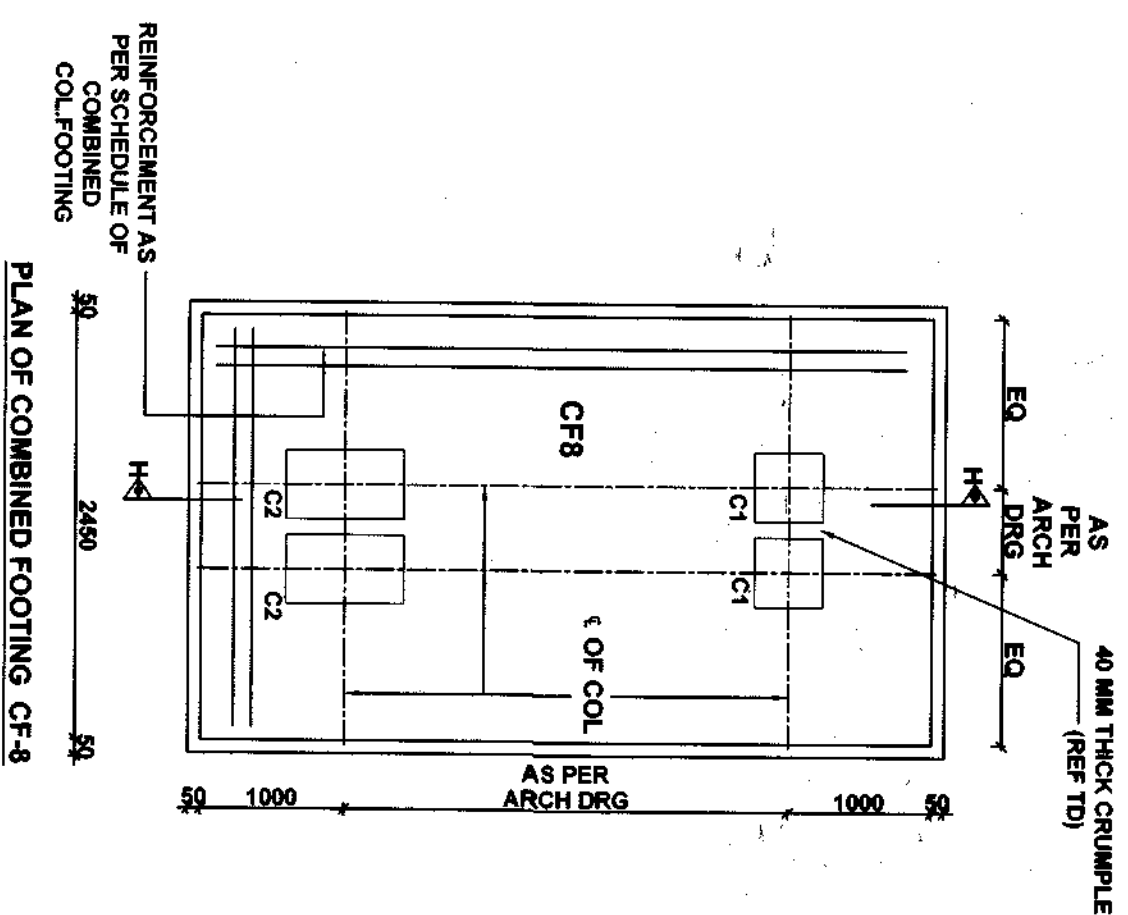
SO1 (DESIGN)
FOR CHIEF ENGINEER



CROSS SECTION OF COMBINED FOOTING (CF-6) AT D-D



CROSS SECTION OF COMBINED FOOTING (CF-8) AT H-H



SNO	DATE	DESCRIPTION	INITIAL

REVISIONS
PROVN OF OTM ACCN (KLP) AT BDE HQ
PALLANWALA MIL STN UNDER
(AMWP 2023-24)

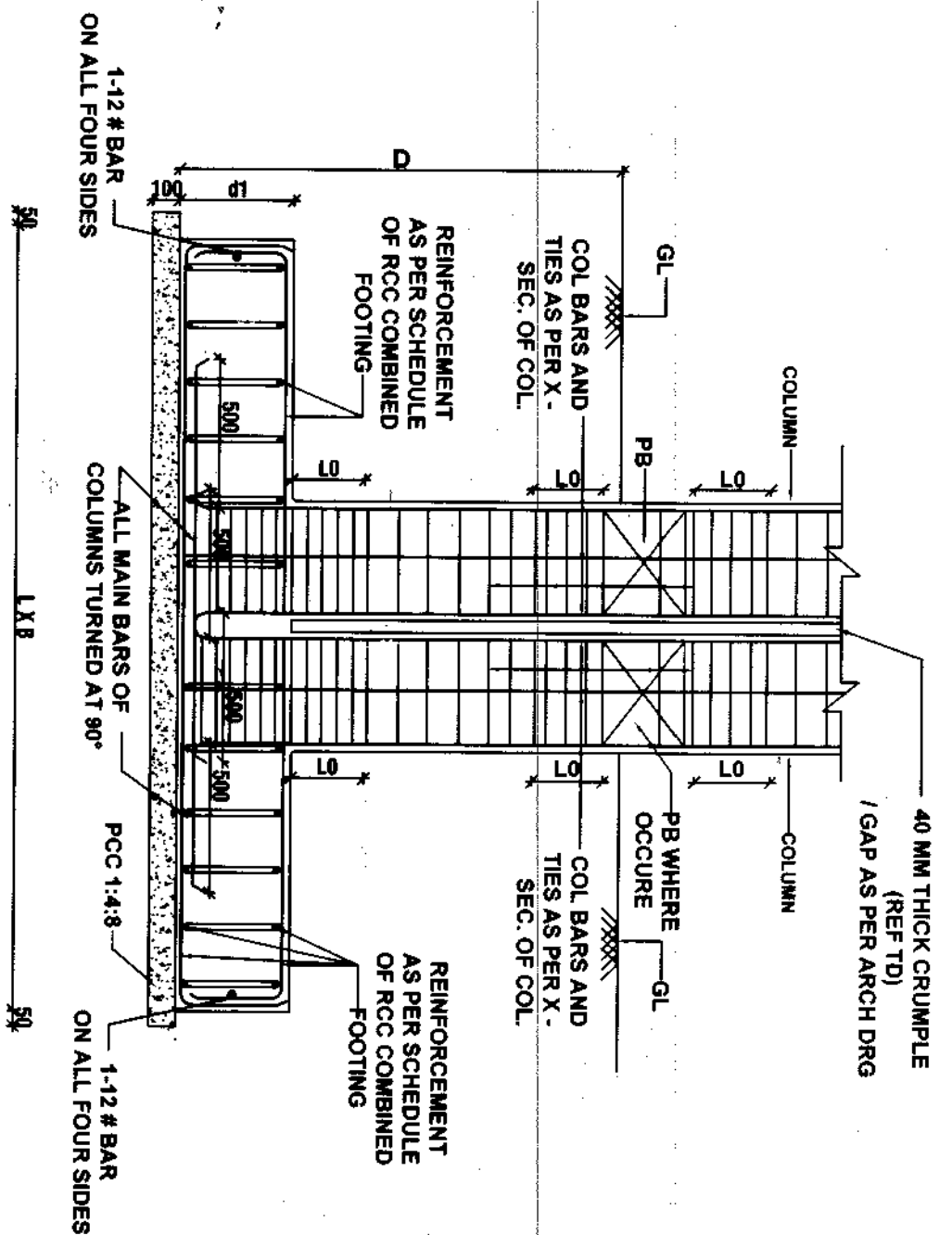
OFFICER MESS

FOOTING PLAN AND SECTION

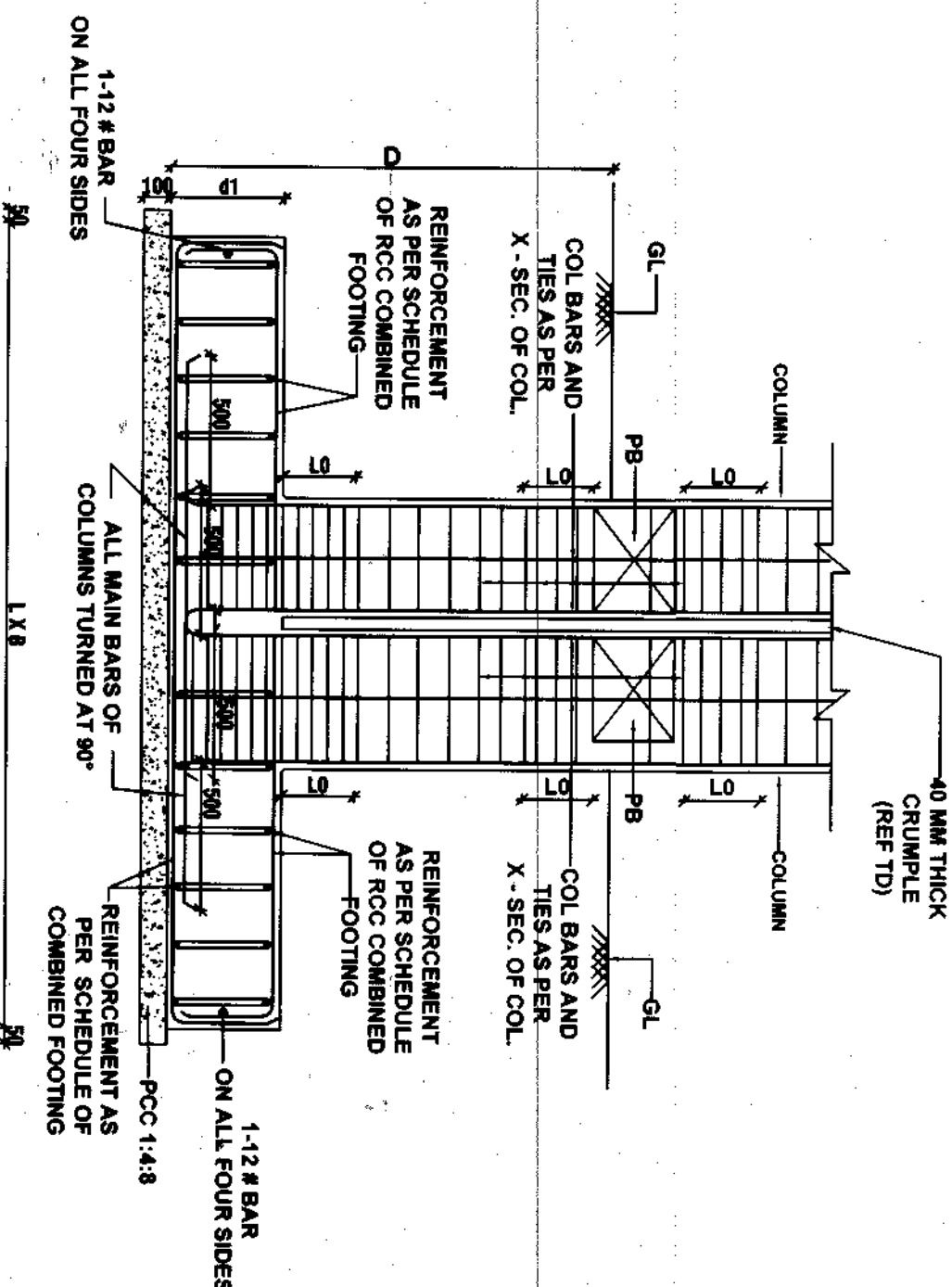
DATE	18/03/2025	CHIEF ENGINEER	SHT NO
DRN	HAY KISHAN SINGH	UDHAMPUR	6
TOD	LT COL. UTSAV KUMAR	ZONE	7
CKD	LT COL. UTSAV KUMAR		
SCALE	NTS		
DRG NO	CEU21ND-05R157/2026		

TECH OFFICER

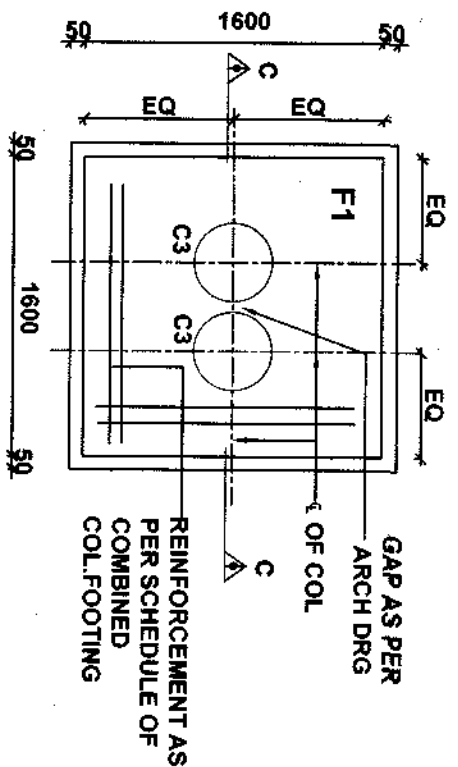
901 (DESIGN)
FOR CHIEF ENGINEER



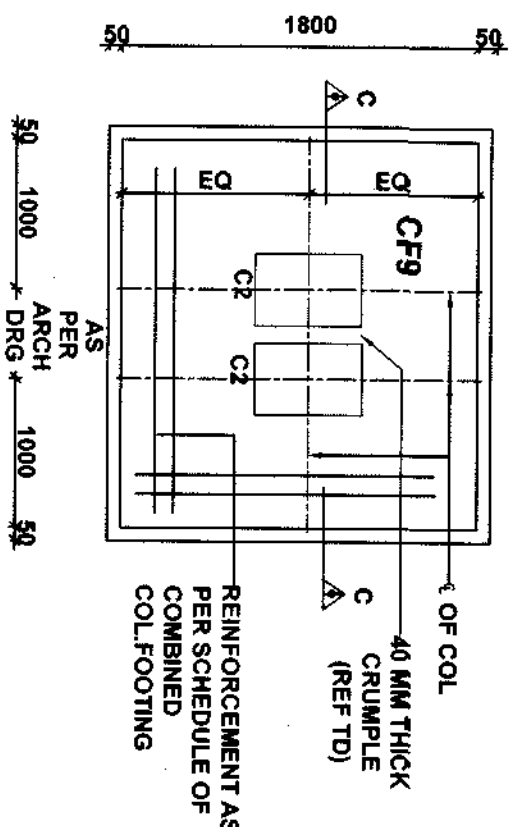
CROSS SECTION OF COMBINED FOOTING (F-1,CF-9) AT C-C



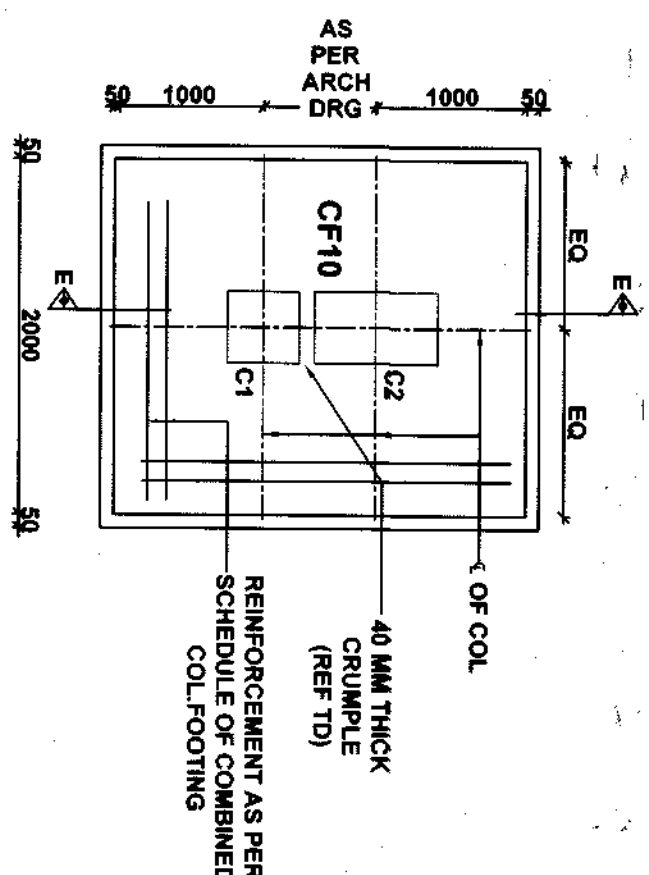
CROSS SECTION OF COMBINED FOOTING (CF-10) AT E-E



PLAN OF FOOTING F-1



PLAN OF COMBINED FOOTING CF-9



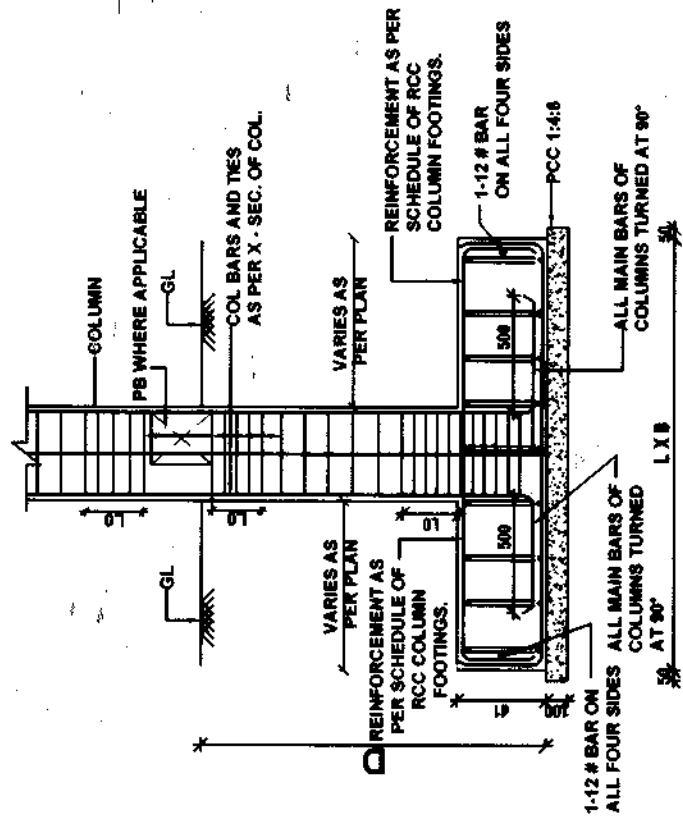
PLAN OF COMBINED FOOTING CF-10

SLNO	DATE	DESCRIPTION	INITIAL
<p align="center">REVISIONS</p> <p>PROVN OF OTM AACN (KLP) AT BDE HQ PALLANWALA MIL STN UNDER (AMWP 2023-24)</p> <p align="center">OFFICER MESS</p> <p align="center">FOOTING PLAN AND SECTION</p>			
<p align="center">CHIEF ENGINEER UDHAMPUR ZONE</p>			
<p align="center">TECH OFFICER</p>			
<p align="center">SOI (DESIGN) FOR CHIEF ENGINEER</p>			

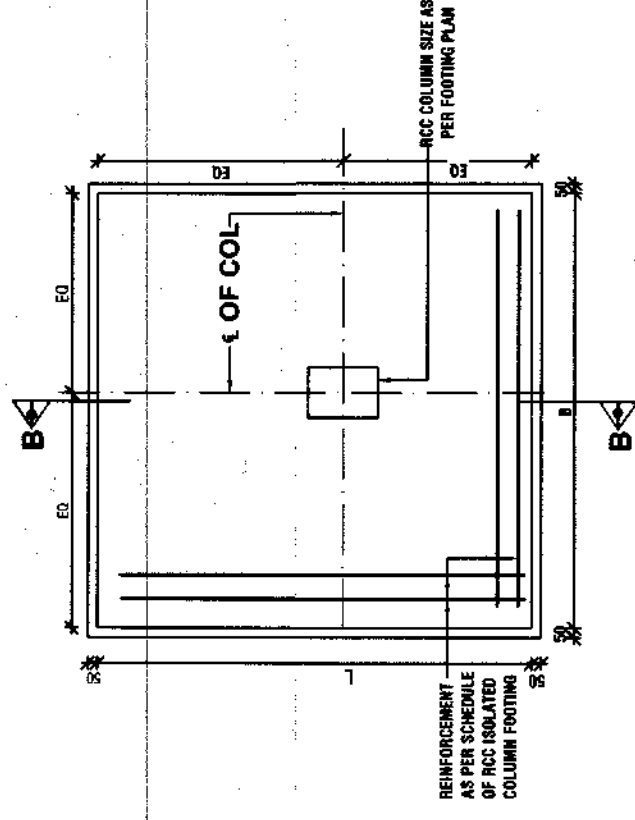
DATE	18/08/2025	SHT NO	7/7
DRN	HANASHAN SINGH		
TCO	LT COL UTSAV KUMAR		
GKD	LT COL UTSAV KUMAR		
SCALE	NTS		
DRG NO	CEU2/WD-45B/ST/2026		

SCHEDULE OF ISOLATED AND COMBINED COLUMN FOOTINGS:-

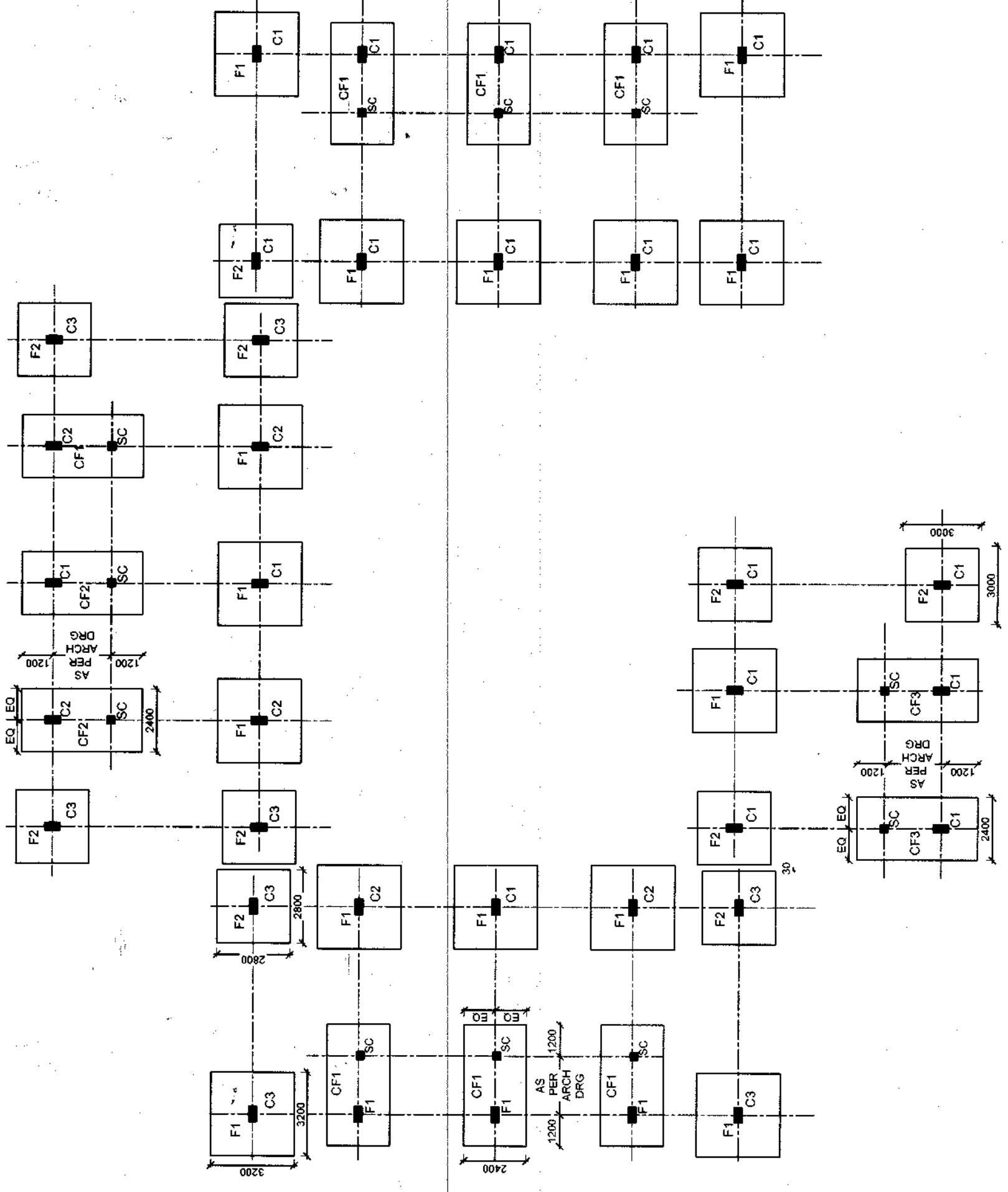
COL MARK	SIZE OF COL	COL FOOTING MARK	SIZE OF FOOTING		THICKNESS			OVER ALL DEPTH (D) OF FOUNDATION BELOW GL	REINFORCEMENT IN FOUNDATION				REMARKS
			LENGTH (L)	BREADTH (B)	d1	d2	d3		PARALLEL TO LENGTH		PARALLEL TO BREADTH		
									BOTTOM	TOP	BOTTOM	TOP	
AS PER FOOTING PLAN	AS PER SCHEDULE	F1	3200	3200	350	-	-	1500	12 # @ 150 C/C	10 # @ 200 C/C	12 # @ 150 C/C	10 # @ 200 C/C	
		F2	2800	2800	350	-	-	1500	12 # @ 150 C/C	10 # @ 200 C/C	12 # @ 150 C/C	10 # @ 200 C/C	
		CF1	AS PER FOOTING PLAN	AS PER FOOTING PLAN	350	-	-	1500	12 # @ 150 C/C	12 # @ 150 C/C	12 # @ 150 C/C	12 # @ 150 C/C	
		CF2	AS PER FOOTING PLAN	AS PER FOOTING PLAN	350	-	-	1500	12 # @ 150 C/C	12 # @ 150 C/C	12 # @ 150 C/C	12 # @ 150 C/C	
		CF3	AS PER FOOTING PLAN	AS PER FOOTING PLAN	350	-	-	1500	12 # @ 150 C/C	12 # @ 150 C/C	12 # @ 150 C/C	12 # @ 150 C/C	
SCHEDULE OF RCC COLUMNS:-													
REINFORCEMENT TIES													
SL NO	COLUMN NO	COLUMN SIZE	LONGITUDINAL	CONFINING REGION (CR)		NON CONFINING REGION (NCR)		SECTION	SHAPE OF TIES	REMARKS			
				TRANSVERSE / SPECIAL REINFORCEMENT (TIES AND LINKS) FOR FULL DEPTH OF BEAMS, 450 DEPTH IN FOUNDATIONS AND FOR LENGTH 'L' ON EITHER SIDE OF THE INTER SECTING BEAMS AS PER FIG NO.9 AND 10 ON CE/ TD NO. 1253/ 2007 SHT NO. 5/5	TRANSVERSE REINFORCEMENT IN BALANCE MIDDLE PORTION								
1	C1	350 X 600	12 NOS - 25 #	10 # @70 C/C			8 # @ 150 C/C						
2	C2	350 X 600	12 NOS - 20 #	10 # @70 C/C			8 # @ 150 C/C						
3	C3	350 X 600	12 NOS - 16 #	10 # @70 C/C			8 # @ 150 C/C						
4	SC	350 X 350	8 NOS - 12 #	10 # @70 C/C			8 # @ 150 C/C			STUB COLUMN UPTO PLINTH LEVEL			



CROSS SECTION OF ISOLATED FOOTING AT B-B



TYPICAL PLAN OF RCC ISOLATED COLUMN FOOTING

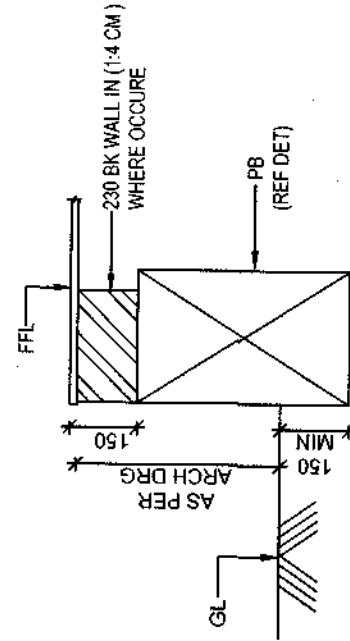


RCC FOOTING PLAN

SLNO	DATE	DESCRIPTION	INITIAL
REVISIONS			
CONSTR OF OTM ACCN (KLP) AT BDE HQ IN PALLANWALA MIL STN UNDER AMWP 2023-24			
SINGLE LIVING ACCN FOR SERVICE OFFICERS (07 NOS)			
RCC FOOTING PLAN, SCHEDULE OF FOOTINGS, SCHEDULE OF COLUMNS, FOOTING PLAN AND X-SECTION			
DATE	18/03/2026	CHIEF ENGINEER	SHT NO 14
DRN	HAY KISHAN SINGH	UDHAMPUR	
DES	LT COL UTSAV KUMAR	ZONE	
CKD	LT COL UTSAV KUMAR		
SCALE	INTS		
DRG NO	CEUZ/WD-501312026		
TECH OFFICER		SOT (D) SIGN FOR CHIEF ENGINEER	

SL NO	TYPE	OVERALL DIMENSIONS		BOTTOM BARS		EXTRA BARS AT BOTTOM		TOP BARS		EXTRA BARS AT TOP		STIRRUPS						SIDE FACE REINFORCEMENT (ON EACH FACE)		REMARKS
				STRAIGHT THROUGH BARS "g"		AT MID SPAN "d"		STRAIGHT THROUGH BARS "f"		CONT SUPPORT BARS "b"		SUPPORT SPAN (X1 / X2)		MID SPAN (X3)						
		NOS	DIA	NOS	DIA	NOS	DIA	NOS	DIA	NOS	DIA	NOS	DIA	NOS OF LEGS	SPACING C/C	DIA	NOS OF LEGS	SPACING C/C	NOS	
PLINTH BEAMS (PB)																				

1	PB1	350	700	4	16	-	-	4	16	-	-	8	2	100	8	2	125	-	-
2	PB2	350	500	4	16	-	-	4	16	-	-	8	2	100	8	2	125	-	-
3	PB3	250	350	3	12	-	-	3	12	-	-	8	2	100	8	2	125	-	-



BRICK WORK IN 1:6 CM (FOR NOS
AND DIMENSIONS OF TREADS &
RISERS REF ARCH DRG)

The diagram illustrates a three-phase power system configuration. It features two buses labeled RS (REF SCH) and PB (REF SCH). A transmission line connects these two buses, with a fault (FFL) indicated on the line near bus PB. The system includes two breakers, each represented by a box with an 'X'. Two thick black walls are shown, one between the breakers and another further along the line. Grounding symbols (G) are present at both ends of the system. The diagram is oriented vertically, with labels rotated 90 degrees clockwise.

RCC PLINTH BEAM LAYOUT PLAN

SL.NO	DATE	DESCRIPTION	INITIAL

CONSTR OF OTM ACCN (KLP) AT BDE HQ IN
PALLANWALA MIL STN UNDER AMWP 2023-24

SINGLE LIVING ACCN FOR SERVICE OFFICERS (07 NOS)

RCC PLINTH BEAMS PLAN, SCHEDULE OF PLINTH BEAMS AND DETAILS

DATE	18/03/2025		CHIEF ENGINEER UDHAMPUR ZONE	SHT NO 24
DRN	HAV KISHAN SINGH			
DES	LT COL UTSAV KUMAR			
CWD	LT COL UTSAV KUMAR			
SCALE	NTS			
DRG NO: CEUZ/WD-05C/ST/20266				

TECH OFFICER

~~SO1 (DESIGN)~~
~~FOR CHIEF ENGINEER~~

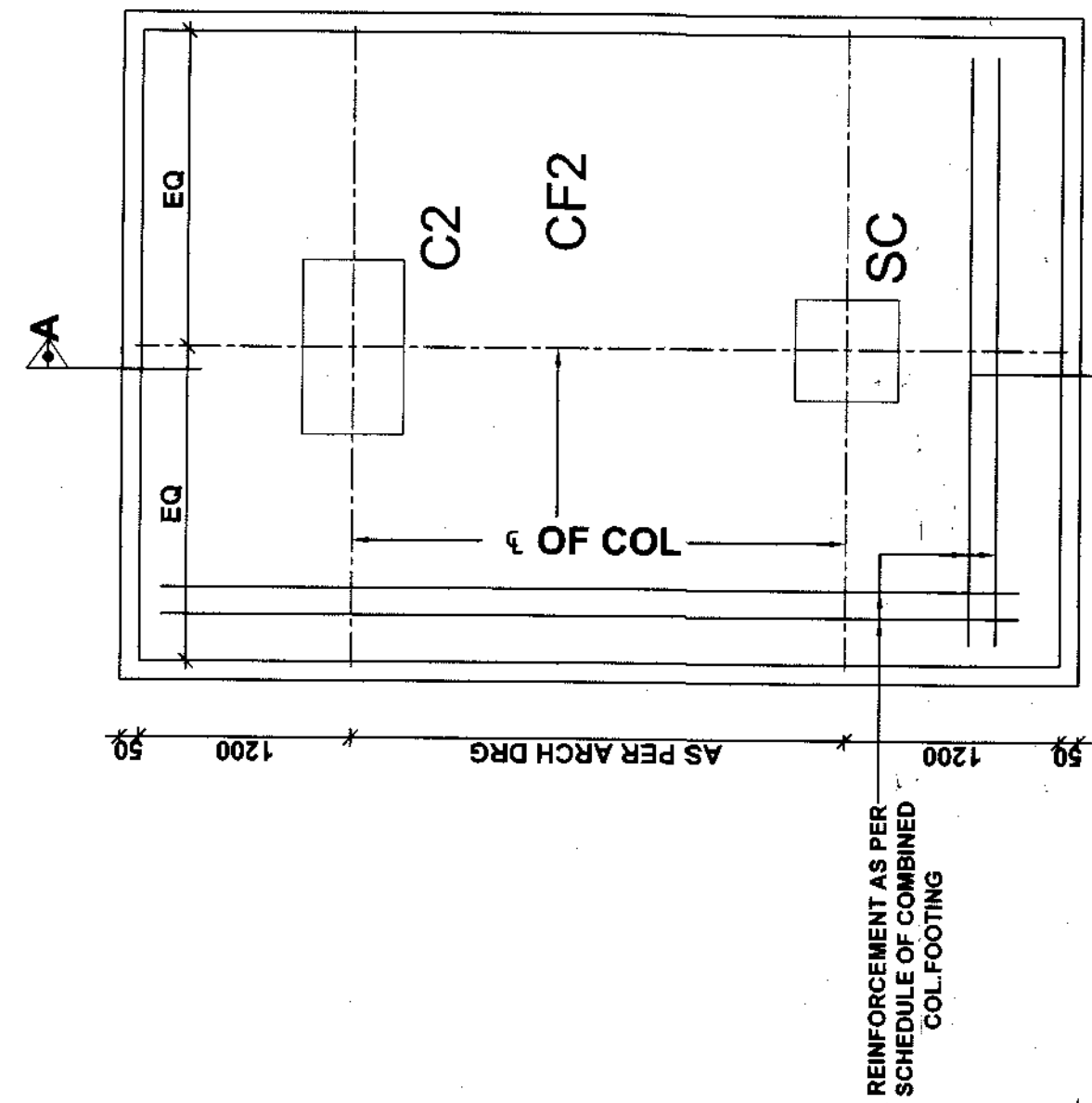
[illegible]

SCHEDULE OF RCC SLABS														
SL NO	NOMENCLATURE	THICKNESS 'T'	TYPE OF SLAB	REINFORCEMENT										REMARKS
				MAIN BARS BOTTOM RFT (ALTERNATIVELY CRANKED)				EXTRA BARS AT TOP OVER END SUPPORT IN BETWEEN CRANKED UP BARS						
				SHORT SPAN		LONG SPAN		SHORT SPAN			LONG SPAN			
				DIA	SPACING C/C	DIA	SPACING C/C	DIA	SPACING C/C	DIA	SPACING C/C	DIA	SPACING C/C	
1	RS1	150	TWO WAY	10	175	10	175	10	175	10	350	10	350	10 @ 200 C/C

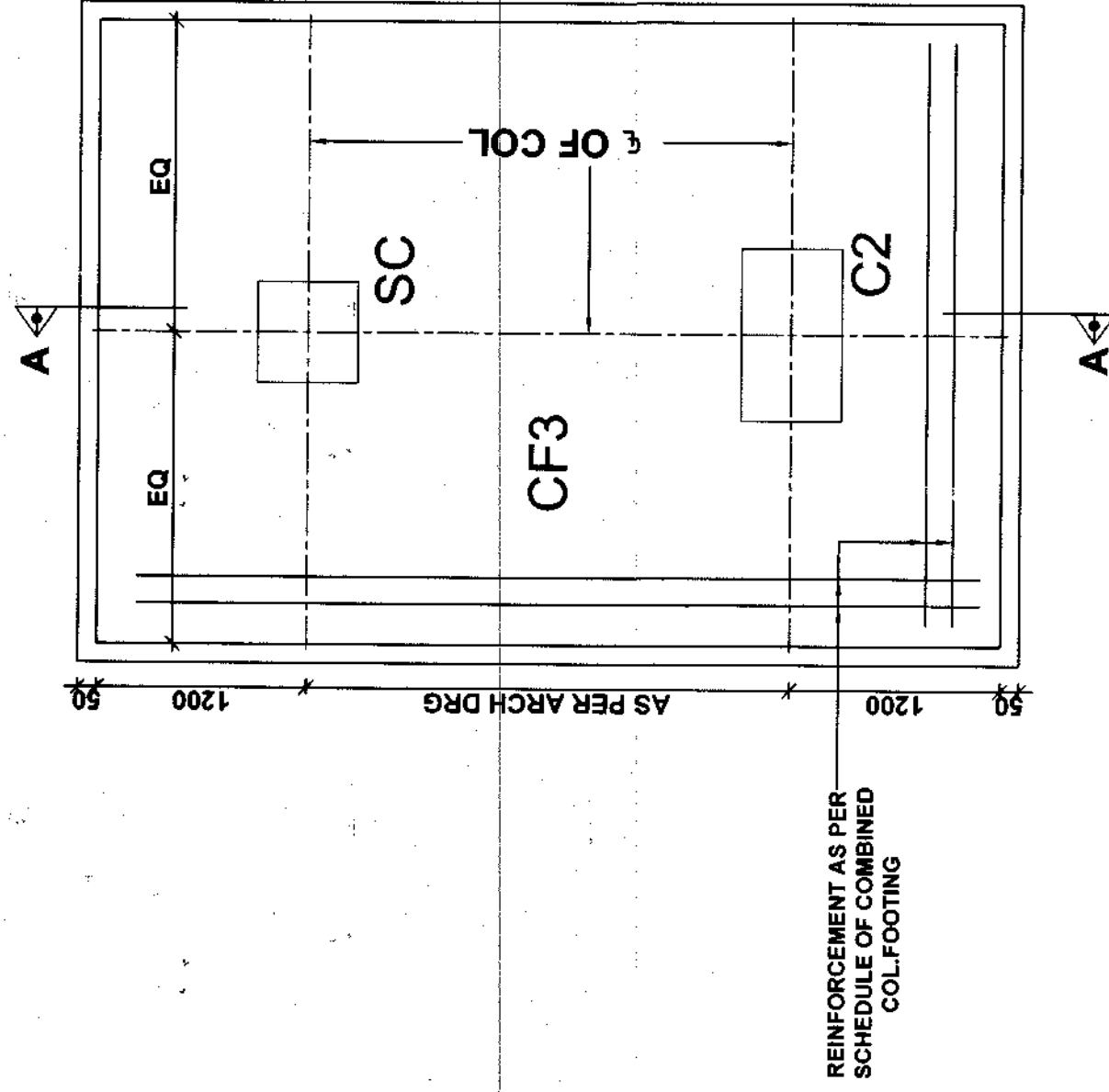


TECH OFFICER

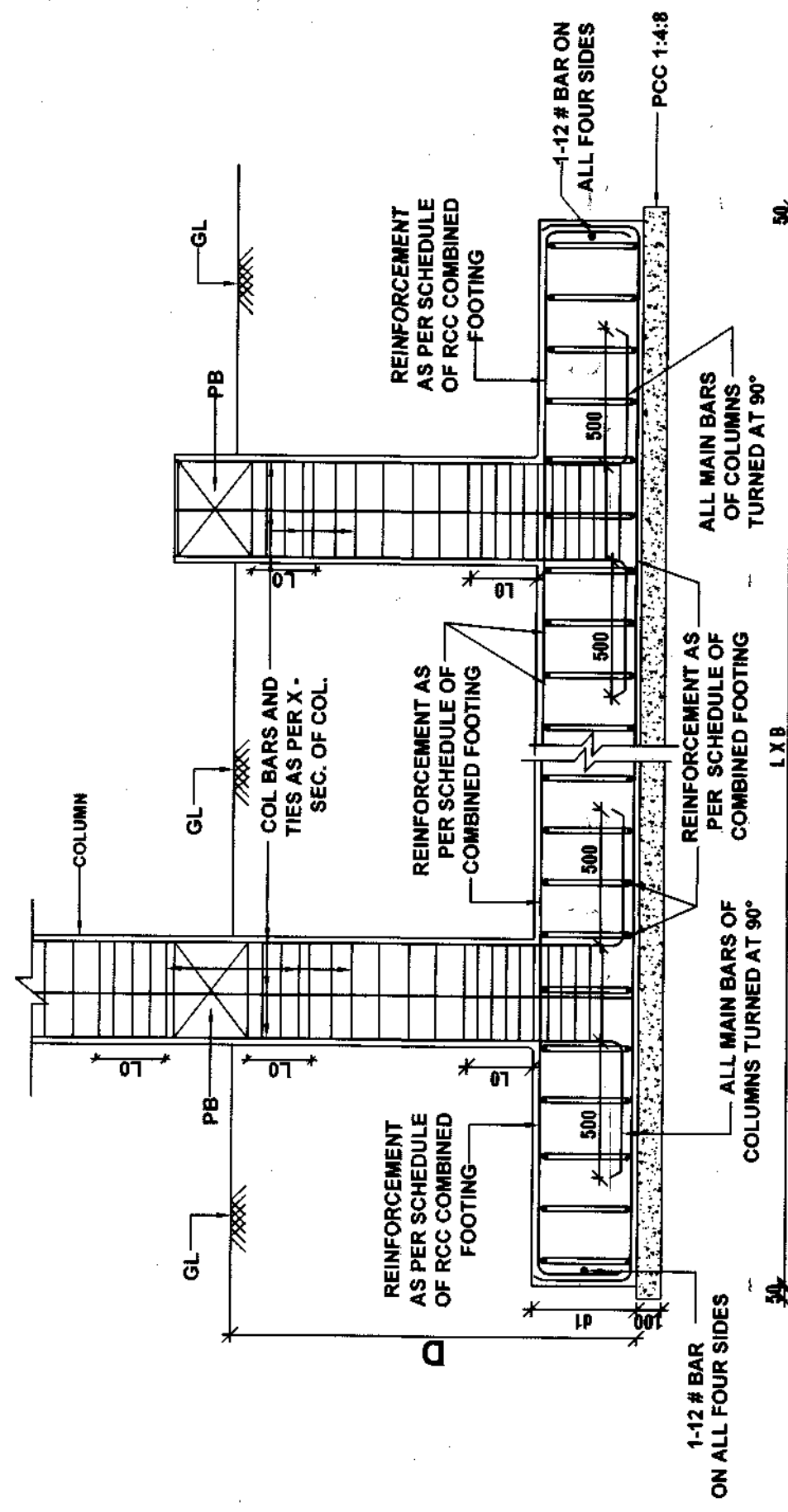
SO1 (DESIGN)
FOR CHIEF ENGINEER



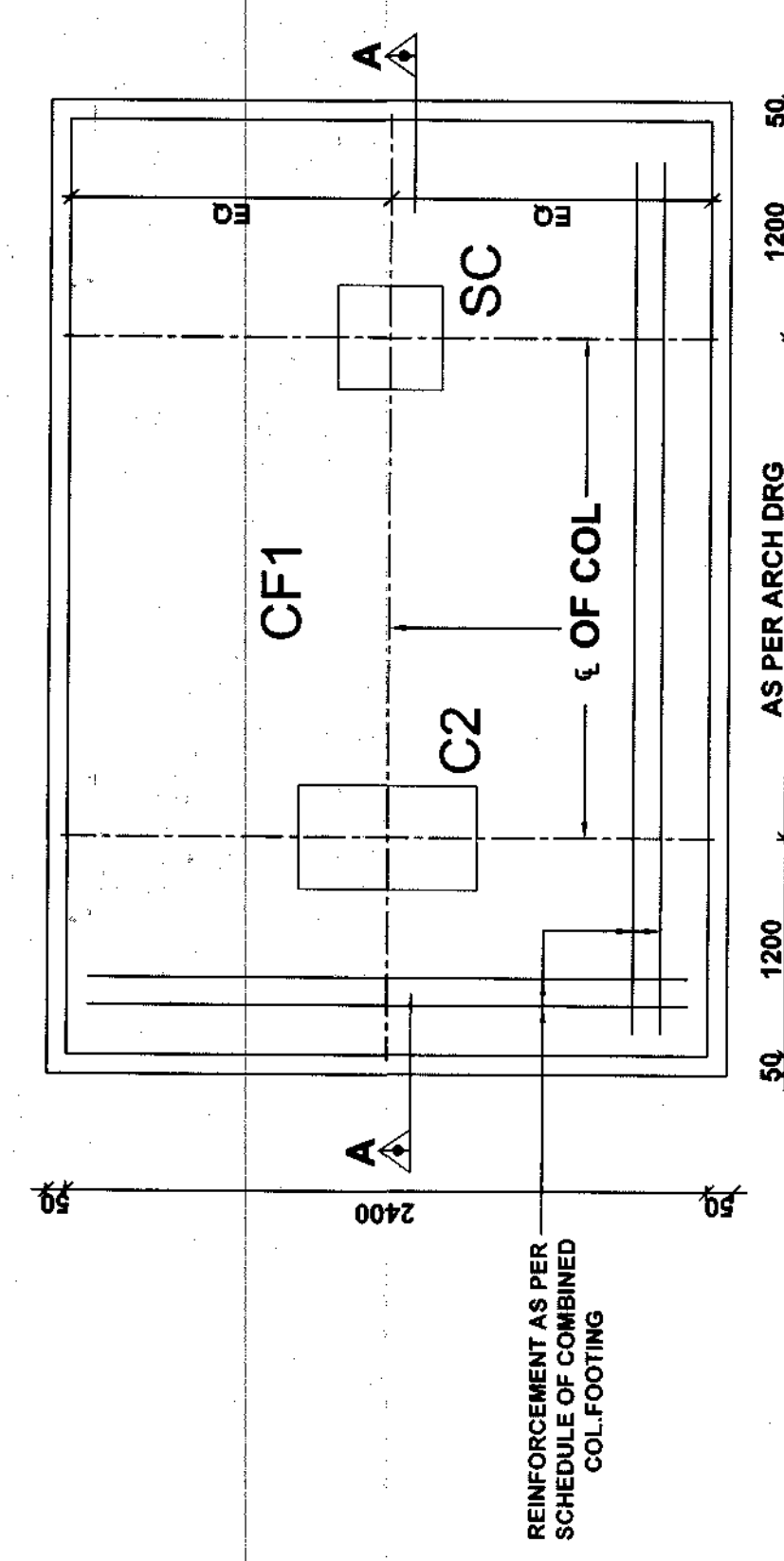
PLAN OF RCC COMBINED FOOTING CF-2



PLAN OF RCC COMBINED FOOTING CF-3



CROSS SECTION OF COMBINED FOOTING (CF-1,CF-2,CF-3) AT A-A



PLAN OF RCC COMBINED FOOTING CF-1

SL NO	DATE	DESCRIPTION	INITIAL
REVISION			

CONSTR OF OTM ACCN (KLP) AT BDE HQ IN PALLANWALA MIL STN UNDER AMWP 2023-24			
SINGLE LIVING ACCN FOR SERVICE OFFICERS (07 NOS)			
RCC FOOTING PLANS AND SECTIONS			
DATE	18/03/2026	SHT NO 4	
DRN	HAV KISHAN SINGH	CHIEF ENGINEER UDHAMPUR ZONE	
DES	LT COL UTSAV KUMAR		
CKD	LT COL UTSAV KUMAR		
SCALE	NTS		
DRG NO	CEUZ/WI7-05C/ST/2026		

TECH OFFICER	SO1 (DESIGN) FOR CHIEF ENGINEER