

LIST OF DRADINGS

SL NO	DATE	DRG NO	SHEET NO	DESCRIPTION
CONTROL ROOM				
1	05.07.2017	CEJZ/WD/93/2017	1/1	PLAN, ROOF PLAN, E/M PLAN, ELEV-SEC, SCH OF FINISHES, DETAILS TOILET & LIST OF DRAWINGS
TYPICAL DRAWINGS				
01	21.03.2013	CEJZ/TD/01	1/4 TO 4/4	PANEL DOORS WITH PRESSED STEEL FRAME
02	10.10.2013	CEJZ/TD/20	1/3 TO 3/3	TYPICAL DETAILS OF BOX WINDOW(STEEL) WITH FLY PROOF SHUTTER
03	21.03.2013	CEJZ/TD/24	1/3 TO 3/3	TYPICAL DETAILS OF OPENABLE AND FIXED GLAZED BOX VENTILATOR (STEEL)
04	21.03.2013	CEJZ/TD/04	1/3 TO 3/3	MISC TYPICAL DETAILS - I
05	25.05.2015	CEJZ/TD/05	1/1	DETAILS OF LOCAL SUNK, GULLY TRAP & INSPECTION CHAMBER(FIRST MANHOLE)
06	04.10.2013	CEJZ/TD/14	1/1	TYPICAL DETAILS OF FIXING HDPE WATER STORAGE TANK OVER RCC ROOF SLAB
07	04.10.2013	CEJZ/TD/15	1/1	DETAILS OF EXHAUST FAN
08	04.10.2013	CEJZ/TD/16	1/1	ARCHITECTURAL NORMS
09	04.10.2013	CEJZ/TD/17	1/1	DETAILS OF FAN HOOK
10	14.12.2013	CEJZ/TD/30	1/3 TO 3/3	TYPICAL DETAILS OF SEPTIC TANK
11	14.12.2013	CEJZ/TD/29	1/3 TO 3/3	TYPICAL SOAK WELL(BK MASONRY)

- Note-
- Contractor to check and verify all dimensions before execution of the work.
 - Figured dimensions shall be followed.
 - All dimensions are given in mm, unless otherwise shown.
 - Jamb of doors/windows/ventilator shall be fixed in centre of wall.
 - All Walls are 230mm & 115mm Thick Unless otherwise Specified.
 - All Grids are marked through the centre of wall.
 - Beams/ Columns/ Plinth-Beam shall be provided as per structural dwg wherever not Shown in Architecture drawing.
 - All Ramps having 200mm thick Dwarf wall at the higher end, both sides and Toe wall at the lower end.
 - All Steps having Dwarf wall at the Plinth Lvl
 - All Steps having RISER = 150mm & TREAD = 300mm
 - Guard Bars/Grills shall be provided to all the windows.
 - All ventilators of WC/Toilets shall be provided with opaque glass.
 - All Chajja bearing shall be 250 MM on either side of opening.
 - Finished floor level of all toilets shall be 10mm lower than that of the adjacent room level. Similarly, there shall be drop of 10mm (from the room FFL) in case of verandah / platform / cantilevered projection unless specified otherwise.
 - The roof slab shall be laid in slope. The heights indicated in section shall be minimum at lowest end.
 - TOILETS- In all toilets, 1no 25mmØ CDR towel rail and 1no liquid soap holder (for counterless) shall be provided in WHB area.
 - Location of desert cooler to be decided as per users requirement (for desert cooler stand ref TD).
 - 750mm wide plinth protection shall be provided all around the building except where steps and ramp are there.
 - In officers room all windows (Lt Col & above) shall be provided Venetian Blinds (VB). Other room shall be provided Decorative Curtain Rod (DR)

LEGEND INTERNAL ELECTRIFICATION

1	LED TUBE LIGHT	
2	CEILING FAN	
3	EXHAUST FAN	
4	SOCKET 5 AMP	
5	SOCKET 15 AMP	
6	LED BULB	
7	DB	
8	SECURITY LIGHT	
9	SHEET ELCLOSURES WITH SOCKET	

SNO	DATE	DESCRIPTION	INITIAL
REVISIONS			

PROV OF 03 MW SOLAR POWER PLANT AT BARMER
JOB NO: SC/MW/1255

CONTROL ROOM
PLAN, ROOF, E/M PLAN. ELEV-SEC
DETAIL-TOILET, SCH OF FINISHES

DATE: 26 JULY 2017
 DRN: NK H S BISHT
 CKD: P S TANWAR
 SCALE: -
 DRG NO: CEJZ/WD/93/2017

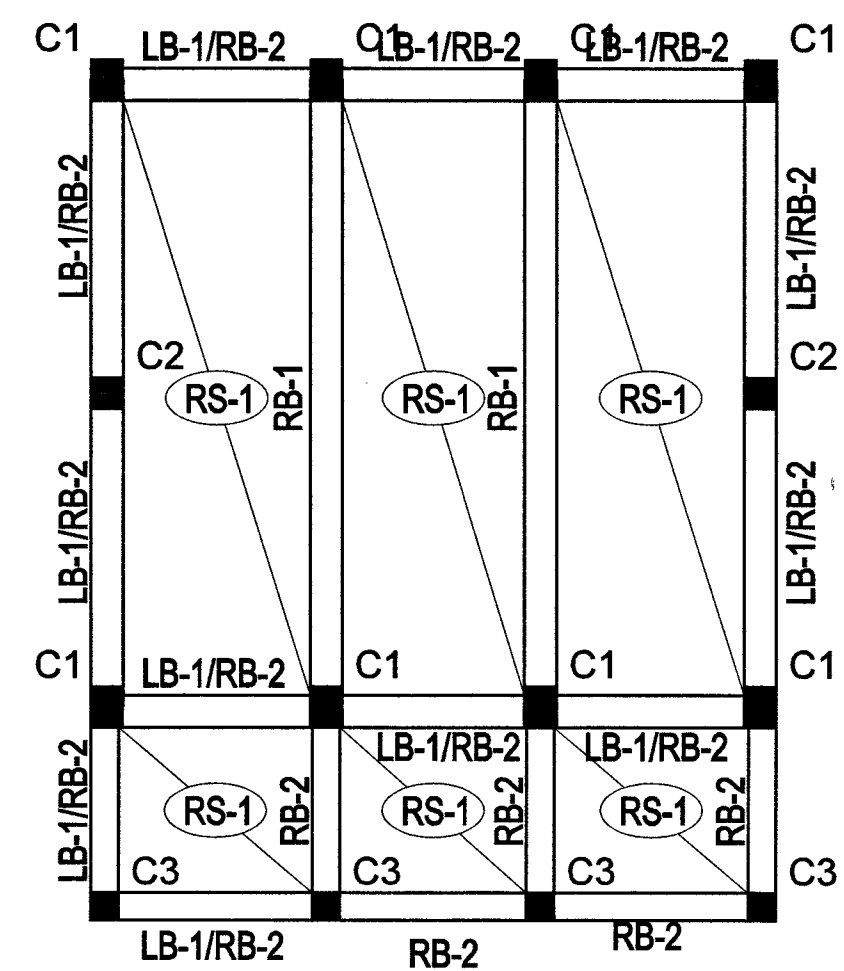
CHIEF ENGINEER
 JODHPUR ZONE
 JODHPUR

SHEET NO: 1

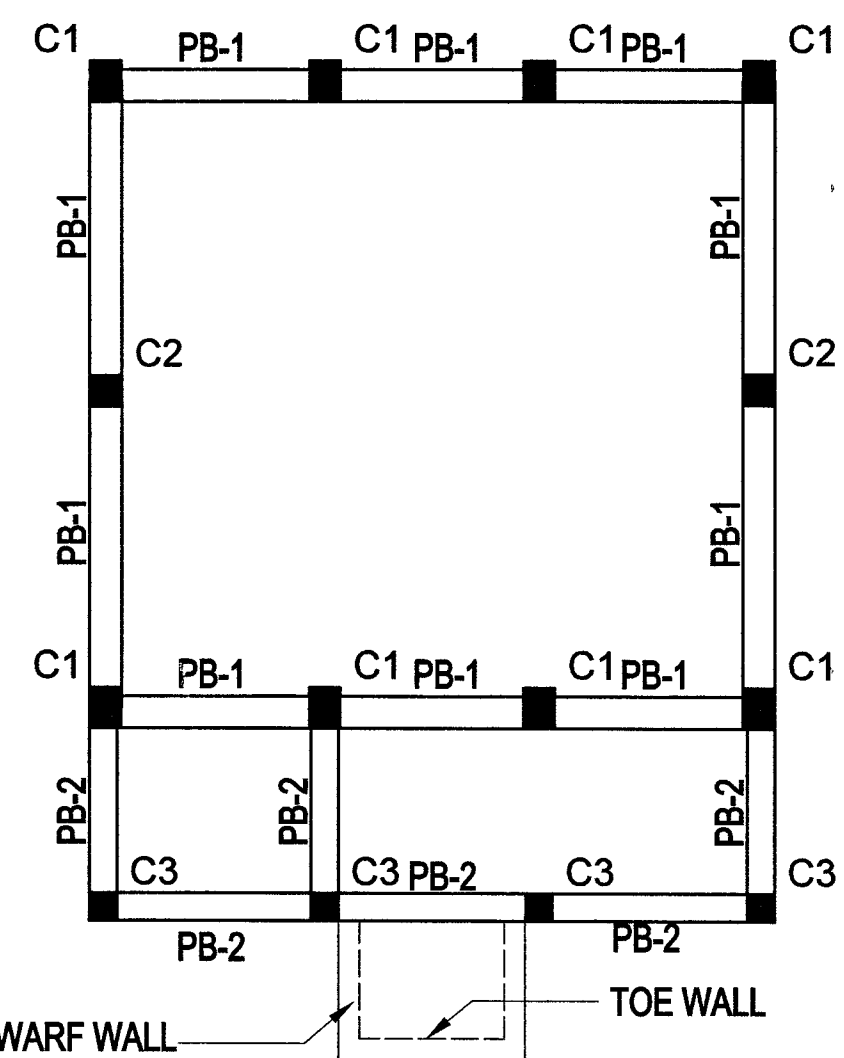
Signature: P S TANWAR
 Signature: SANJAY KUMAR
 SO-II (E/M)/JT DIR (E/M) DIR (Pig)
 SO-II (E/M)/JT DIR (E/M) JTDIR (ARCH) FOR CE JODHPUR ZONE

SCHEDULE OF FINISHES

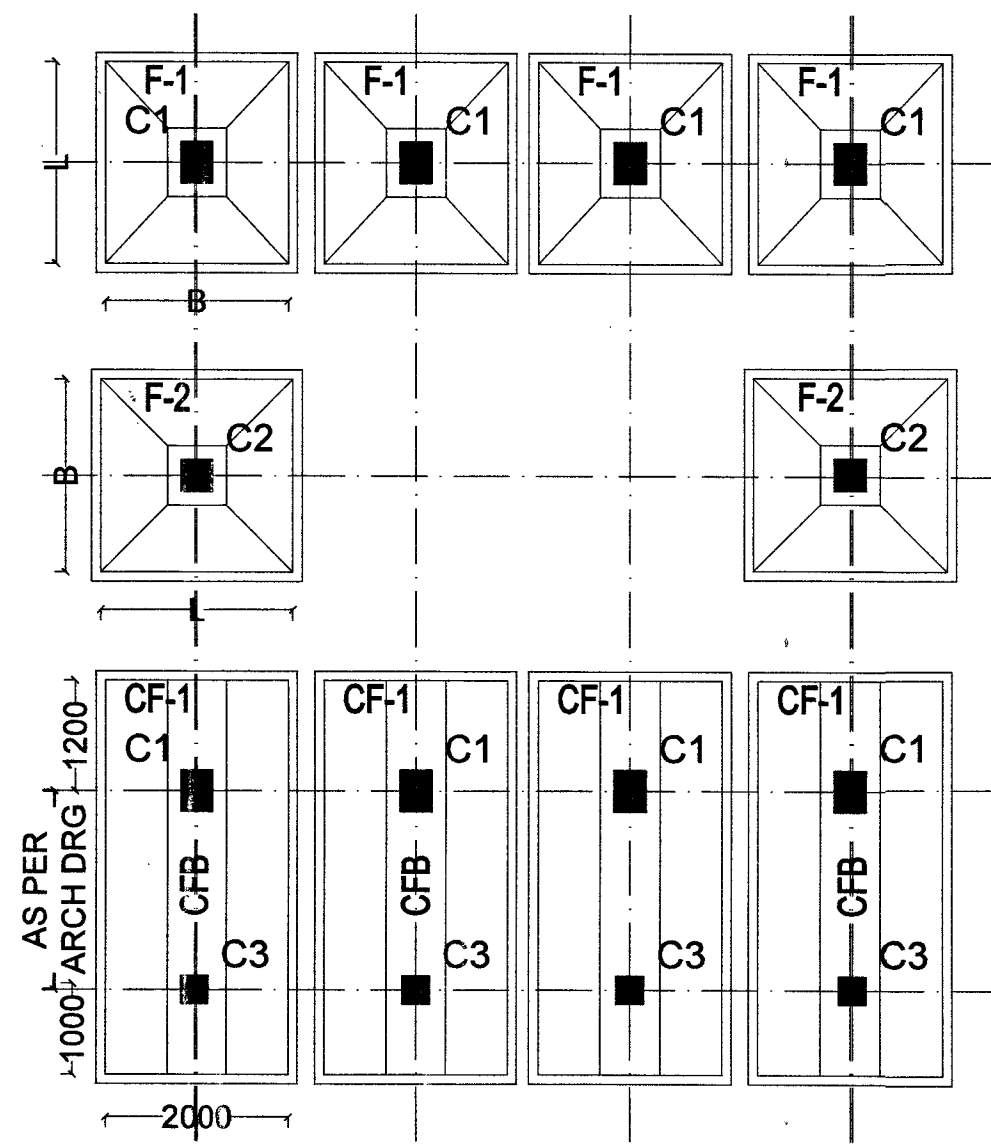
S. NO	DESCRIPTION OF FINISH	FLOORS		PLASTER		ROOF TREATMENT		FALSE CEILING		SKIRTINGS		DADO		INTERNAL FINISH ON WALLS		CEILING		EXTERNAL FINISH		PAINTING							
		Garrajes/Ramp	Porch	Kota Stone	acid resistant	Ceramic tiles	Vitrified tiles	internal	external	Ceiling	non accessible	garrajes, sentry post	pcc	kota	ceramic	vitrified tiles	ceramic tiles	Agd resistant	W/WASH	ODD WITH PUTTY	plastic emulsion	w/ wash ceiling	ODD base paint	Cement base paint	exterior emulsion	steel surface	wooden surface
1	CONTROL ROOM																										
2	REST ROOM																										
3	TOILET																										
4	VERANDAH																										
5	RAMP																										
6																											
7																											



PLAN AT ROOF LEVEL



PLINTH LEVEL PLAN



FOUNDATION PLAN

SCHEDULE OF COMBINED COL FOOTINGS																
COL FOOTING	SIZE			REINFORCEMENT				DEPTH OF FDN BELOW GL	FOUNDATION BEAM					REMARKS		
	LENGTH (L)	BREADTH (B)	HEIGHT		PARALLEL TO LENGTH		PARALLEL TO BREADTH		SIZE		REINFORCEMENT					
			d1	d2	BOTTOM	TOP	BOTTOM		TOP	B	D	BOTTOM	TOP		STIRRUPS	
CF-1	AS PER FDN PLAN			350	550	16# @ 150 C/C	16# @ 150 C/C	16# @ 150 C/C	16# @ 150 C/C	2200	650	750	5-20#	5-20#	4L-12#@150 C/C	

SCHEDULE OF ROOF SLABS													
SLAB NO	THICKNESS (T)	BOTTOM REINFORCEMENT				EXTRA BARS AT SUPPORTS UPTO 0.3 L				DIST. REINFORCEMENT AT CONT. AND DISCONTINUOUS SUPPORT			REMARKS
		SHORT SPAN		LONG SPAN		SHORT SPAN		LONG SPAN		AT CONT.		AT DISCONTINUOUS	
		Dia in mm	Spacing in mm c/c	Dia in mm	Spacing in mm c/c	Dia in mm	Spacing in mm c/c	DIA IN MM	SPACING IN MM C/C	DIA IN MM	SPACING IN MM C/C	SPACING IN MM C/C	
RS-1	140	10#	150	8#	180	10#	300	8#	360	10#	300		

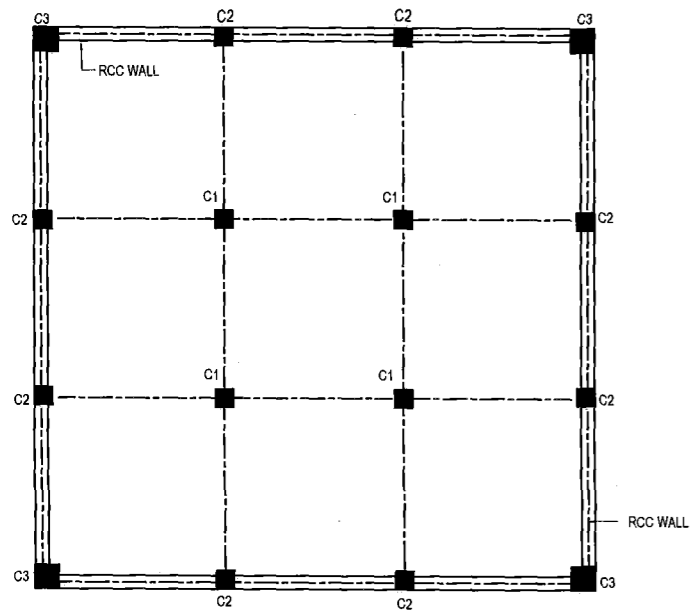
BEAM NO	SIZE (MM)		BOTTOM BARS	TOP BARS	EXTRA BARS OVER SUPPORTS		STIRRUPS (2 LEGGED)		REMARKS
	B	D			SUPPORT-I	SUPPORT-II	ZONE-A	ZONE-B	
	MAIN	MAIN							
PB-1	350	450	4-20#	2-20#	3-20#	3-20#	10# @ 100 C/C	10# @ 150 C/C	
PB-2	300	450	3-20#	3-20#	-	-	10# @ 100 C/C	10# @ 150 C/C	
RB-1	350	550	4-20#	2-20#	3-20#	3-20#	10# @ 100 C/C	10# @ 150 C/C	2-12# SIDE FOR REINF
RB-2	300	450	3-20#	3-20#	-	-	10# @ 100 C/C	10# @ 150 C/C	
LB-1	250	300	4-16#	4-16#	-	-	10# @ 100 C/C	10# @ 100 C/C	

FOOTING NO	SIZE OF FOOTING				DEPTH OF FDN	REINFORCEMENT		REMARKS
	OVERALL SIZE		HEIGHT			ALONG SHORT SPAN	ALONG LONG SPAN	
	L x B	d1	d2	d3				
F-1	2000 x 2200	300	550	150	2200	16# @ 150 C/C	16# @ 150 C/C	
F-2	2100 x 2100	300	600	150	2200	16# @ 150 C/C	16# @ 150 C/C	

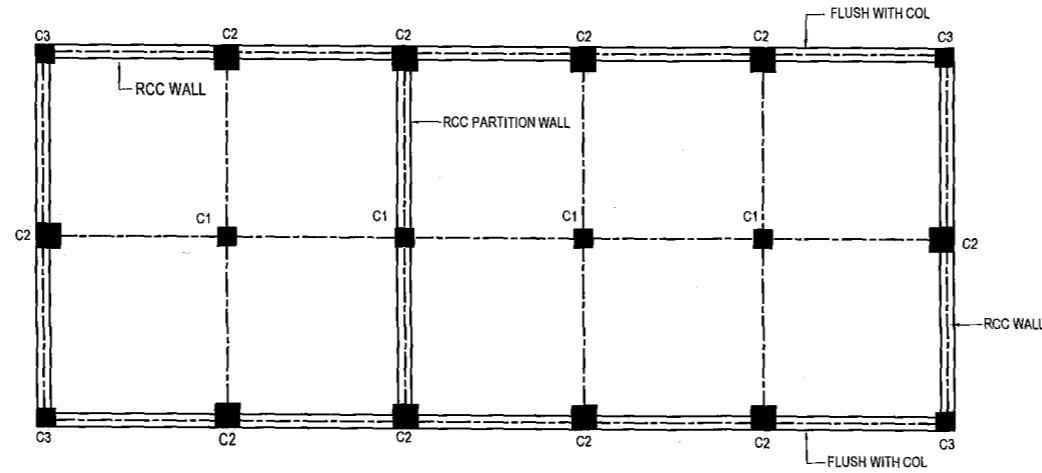
COL NO	SIZE	LONGI-TUDINAL	REINFORCEMENT		SECTION	SHAPE & SET OF TIES
			SET OF TIES			
			ZONE A (CR) RANGE - X	ZONE B RANGE - Y		
C-1	350 x 500	8 - 20# (a) 4 - 16# (b)	10# @ 75 C/C	10# @ 150 C/C		
C-2	350 x 350	4 - 20# (a) 8 - 16# (b)	10# @ 75 C/C	10# @ 150 C/C		
C-3	300 x 300	8 - 16# (a)	10# @ 75 C/C	10# @ 150 C/C		

- NOTE :-
- STRUCTURAL NOTES AND MISC TYPICAL DETAILS REF TO DRGS NO. CE/JZ/STD/08/2016 SHEET NO 1/29 TO 29/29
 - WRITTEN DIMENSIONS SHALL BE FOLLOWED. DRAW SHALL NOT BE SCALED.
 - CONTRACTORS AND EXECUTIVES SHALL VERIFY DRAW BEFORE EXECUTION. ANY DISCREPANCY SHALL BE BROUGHT TO NOTICE OF THIS OFFICE.
 - EXTRA EXCAVATION SHALL BE FILLED WITH PCC 1:5:8 BEFORE LAYING PCC OF FOUNDATION.
 - DETAILING OF REINFORCEMENT SHALL BE DONE AS PER TYPICAL DRAWINGS. PROVISIONS OF IS 456:2000 AND SP 34 SHALL BE APPLICABLE.
 - SBC ASSUMED 15 TM² @ 2.20 M DEPTH. IN CASE OF ANY VARIATION IN SBC/ SOIL STRATA, THIS HQ SHALL BE INTIMATED FOR REVIEW OF THE DESIGN, IF NECESSARY.

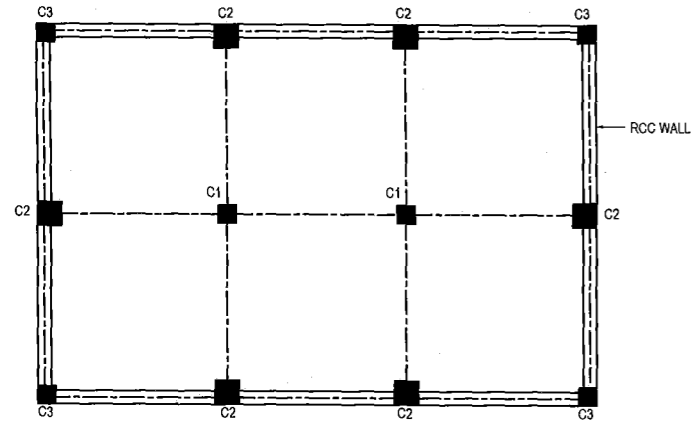
SL NO.	DATE	DESCRIPTION	SIGNATURE
REVISIONS			
PROVN OF 03 MW SOLAR POWER PLANT AT BARMER			
CONTROL ROOM			
FOUNDATION PLAN, RCC COL DETAIL & FOOTING, PLINTH BEAM PLAN, SCHEDULES & DETAILS			
DATE	28 JUL 2017		SHT NO.
DRN	NK ACHUDHAN K		01
TCD			01
CKD			
SCALE	AS SHOWN	Dwg No: CE/JZ/ STR/ 93 /2017	
 (KUMAR NAGENDRA) LT COL SO-1 (DESIGN)		 (K V RAO) SE (NF) JT DIR (DESIGN) FOR CHIEF ENGINEER	



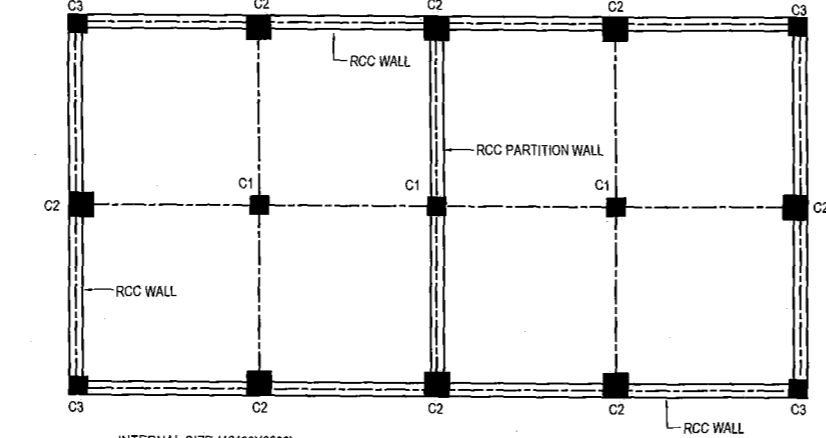
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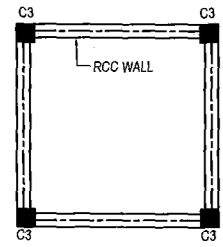
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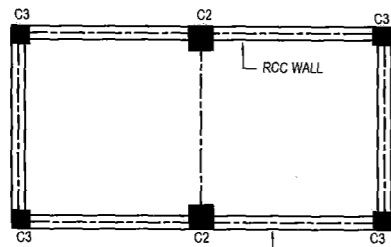
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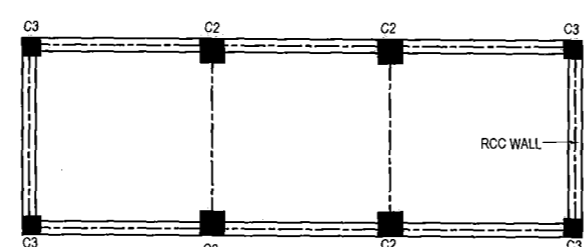
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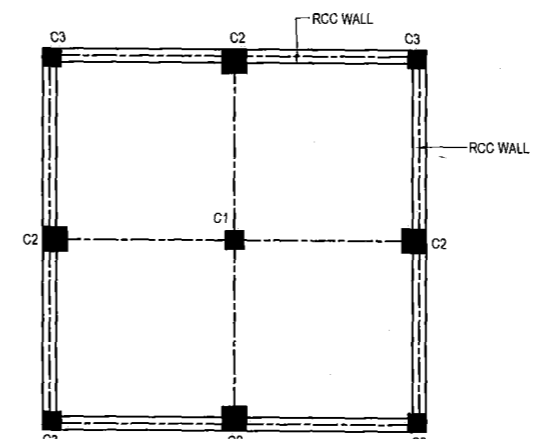
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TYPE - A



(INTERNAL SIZE 6200X3100)
TYPE - B



INTERNAL SIZE (9300X3100)
TYPE - C



INTERNAL SIZE (6200X6200)
TYPE - D

SR NO	CAPACITY (LTRS)	TYPE	HEIGHT	REMARKS
1	20,001 - 25,000	A	3000	PARTITION WALL SHALL BE PROVIDED BASED ON FUNCTIONAL REQUIREMENT SPANNING BETWEEN COLUMN TO COLUMN
2	25,001 - 40,000	B	2500	
3	40,001 - 50,000	B	3000	
4	50,001 - 60,000	C	2500	
5	60,001 - 75,000	C	3000	
6	75,001 - 90,000	D	2800	
7	90,001 - 1,00,000	D	3000	
8	1,00,001 - 1,25,000	E	2800	
9	1,25,001 - 1,50,000	E	3000	
10	1,50,001 - 1,75,000	F	2700	
11	1,75,001 - 2,00,000	F	3000	
12	2,00,001 - 2,25,000	G	3000	
13	2,25,001 - 2,50,000	H	3000	
14	2,50,001 - 2,75,000	I	2800	
15	2,75,001 - 3,00,000	I	3000	
16	3,00,001 - 3,25,000	J	2700	
17	3,25,001 - 3,50,000	J	2900	
18	3,50,001 - 3,75,000	K	2900	
19	3,75,001 - 4,00,000	K	3000	
20	4,00,001 - 4,25,000	L	2900	
21	4,25,001 - 4,50,000	L	3000	
22	4,50,001 - 4,75,000	M	2900	
23	4,75,001 - 5,00,000	M	3000	
24	< 10000	A	1500	
25	10,000-15,000	A	2000	
26	15,001-20,000	A	2500	
27	5,00,000-5,50,000	M	3150	

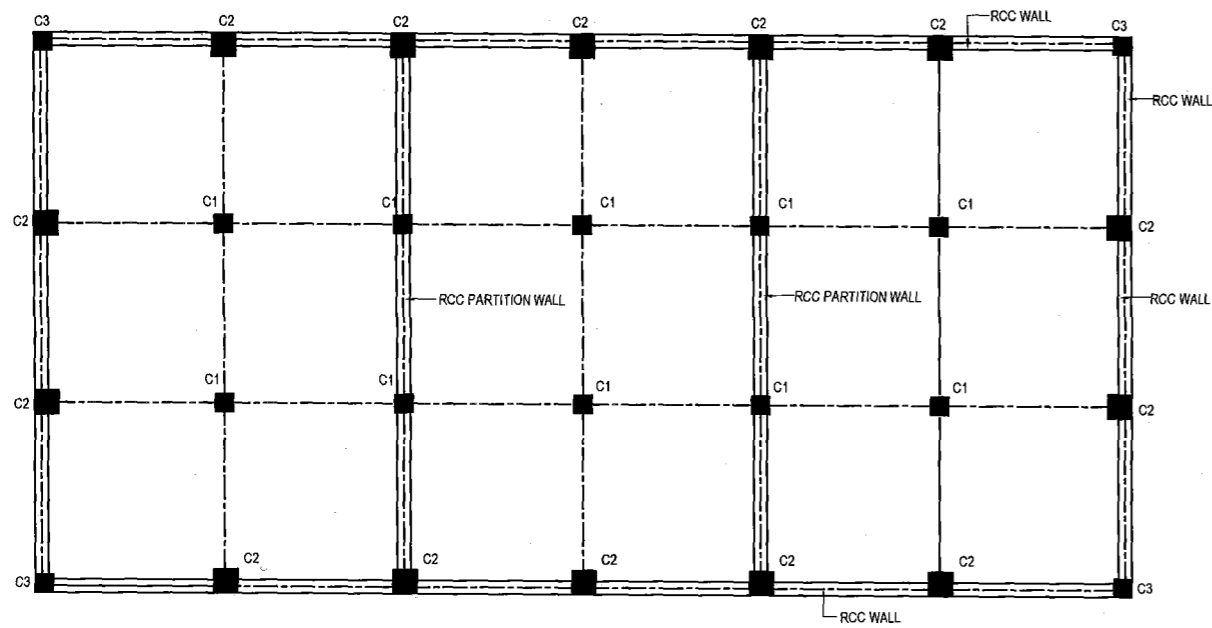
- Notes:-**
- CONTRACTOR TO CHECK AND VERIFY ALL DIMENSIONS BEFORE EXECUTION OF THE WORK.
 - FIGURED DIMENSIONS SHALL BE FOLLOWED.
 - ALL DIMENSIONS ARE GIVEN IN MILLIMETRES UNLESS OTHERWISE SPECIFIED.
 - THE FDN HAS BEEN DESIGNED FOR SBC OF SOIL IS 90KN/Sq.m AT DEPTH 2.0M. IF ANY VARIATION IN SBC FOUND AT SITE, THE SAME SHALL BE REFERRED TO THIS HQ FOR RE-DESIGN.
 - STEEL SHALL BE Fe-500 TMT GRADE. STEEL REINFORCEMENT CONFORMING TO IS:1786. TANK PORTION SHALL BE PROVIDED WITH FUSION BONDED EPOXY COATED STEEL.
 - STRUCTURAL CONCRETE SHALL CONFORM TO ALL REQUIREMENTS OF GRADE M-30 (DESIGN MIX) AS PER IS-456-2000.
 - ALL MASONRY WORK SHALL BE IN CM 1:4 UNLESS OTHERWISE SPECIFIED.
 - CLEAR COVER TO RCC MEMBERS SHALL BE FOLLOW:- FOOTINGS - 50mm, SLABS - 50mm, BEAMS - 30mm, COLUMNS - 40mm, WALLS - 30mm.
 - EXTRA BARS SHALL BE PROVIDED AROUND OPENING AS PER STD PRACTICE.
 - WATER TO BE USED FOR CONCRETING SHALL MEET ALL REQUIREMENTS OF CLAUSE 5.4 OF IS -456-2000.
 - WATER PROOFING OF TANK FLOOR & WALLS TO BE DONE AS SPECIFIED IN CONTRACT OTHERWISE DRG SPECIFICATION SHALL BE FOLLOWED.
 - INLET, OUTLET, OVERFLOW ETC PIPES SHALL BE PROVIDED AS PER APPROVED SYSTEM DESIGN AT SUITABLE LOCATION.
 - FOLLOWING CODES HAVE BEEN FOLLOWED:- IS 456-2000 SP-34, IS-3370 FOR ANY MISSING DETAILS PLEASE REFER ABOVE CODES.
 - CONSTRUCTION JOINTS SHALL BE TREATED AS PER CLAUSE 8.1 (b) OF IS3370 PT-1
 - ALL CONCRETE MUST BE MACHINE MIXED & MACHINE VIBRATED.
 - SLOPE TO FLOOR SLAB OF TANKS SHOWN IN DRG ARE TENTATIVE, SLOPE SHALL BE PROVIDED AS PER SYSTEM DESIGN
 - SLOPE OF EXCAVATION SHALL BE DONE AS PER THE SOIL STRATA MET WITH AT SITE.
 - AGGREGATE SHALL CONFORM TO ALL REQUIREMENTS OF IS 383-1970
 - ALL PIPES SLEEVES SHALL BE PLACED BEFORE CASTING OF THE CONCRETE. BREAKING OF CONC SHALL NOT BE PERMITTED.
 - TANK SHALL BE CHECKED FOR WATER TIGHTNESS BY FILLING WATER IN INCREMENTS OF 600MM HEIGHT.
 - THOUGH REINFORCEMENT IS TMT, THE HOOKS ARE SHOWN TO INDICATE THE EXTENT OF THE BAR BUT NO HOOKS ARE TO BE PROVIDED CRANKING SHALL BE PROVIDED AS PER IS-456-2000.
 - THE BOTTOM SLAB CONCRETING & VERTICAL WALL CONCRETING SHALL BE CAST MONOLITHIC FOR A MINIMUM HEIGHT OF 1000.
 - CASTING OF ROOF SLAB WILL BE DONE AFTER PROVIDING SLIP JOINTS WITH TWO LAYERS OF TARRED PAPER.
 - AREA DRAINAGE WORK OF THE SURROUNDING AREA SHALL BE CARRIED OUT IN SUCH WAY THAT NO WATER ACCUMULATION TAKES PLACES AROUND UG SUMP.
 - EXTREME CARE WILL BE TAKEN BY THE EXECUTIVE AND CONTRACTOR TO MAINTAIN THE GEOMETRY OF ALL THE COMPONENTS UTMOST CARE IS NECESSARY TO MAINTAIN VERTICALITY OF MEMBERS.
 - ALL FORM WORK/FALSE WORK SHALL BE DESIGNED.
 - AS SOON AS TANK CONSTRUCTION IS COMPLETED THE SUMP SHALL NOT BE KEPT EMPTY. INITIALLY FOR TESTING IT WILL BE FILLED GRADUALLY BUT NOT EXCEEDING 1M DEPTH PER DAY.
 - INDIVIDUAL VALVE CHAMBERS FOR EACH PIPE & SLUICE VALVE SHALL BE PROVIDED WHEREVER SHOWN.

SL NO	DATE	DESCRIPTION	INITIALS
REVISIONS			

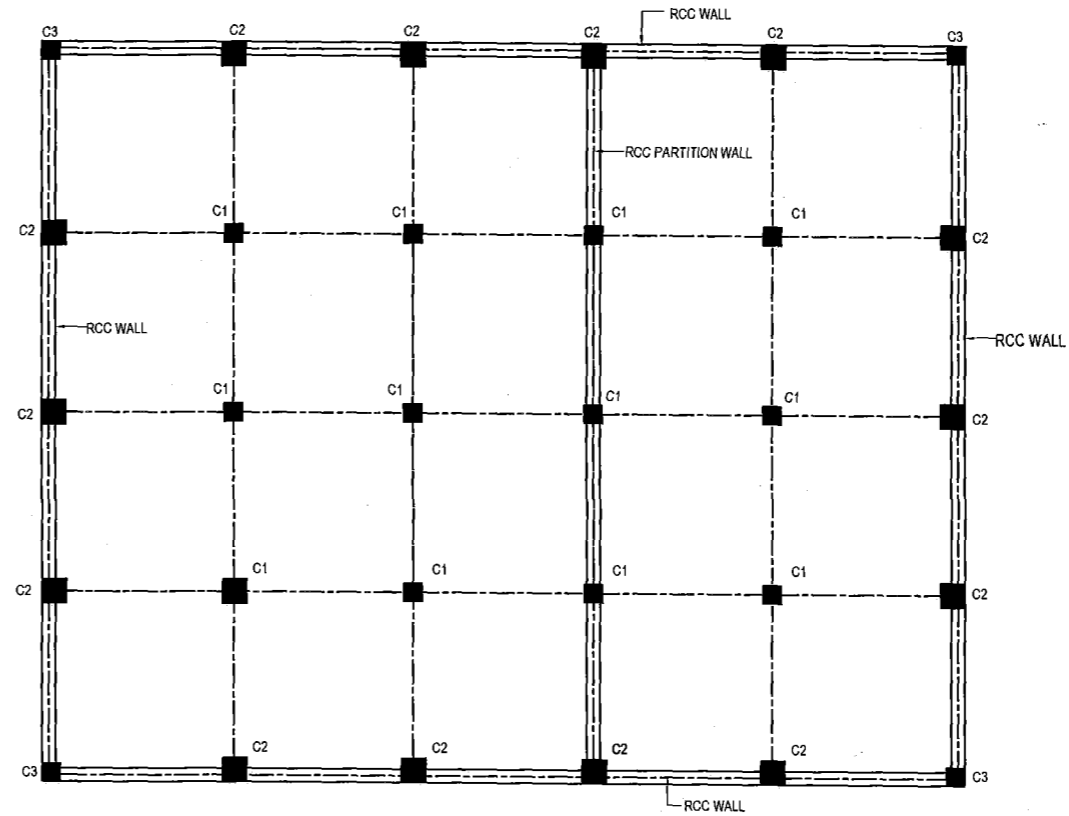
RCC UNDER GROUND UG SUMP
LINE PLAN OF UG SUMP FOR VARIOUS CAPACITIES.

DATE: 12 May 15	CHIEF ENGINEER JODHPUR ZONE JODHPUR	SHT NO
DRN V. DOSHI		13/16
TCD		
SCALE 1:100	REF.DRG NO:-CEJZ / STR / 48 / 2015	

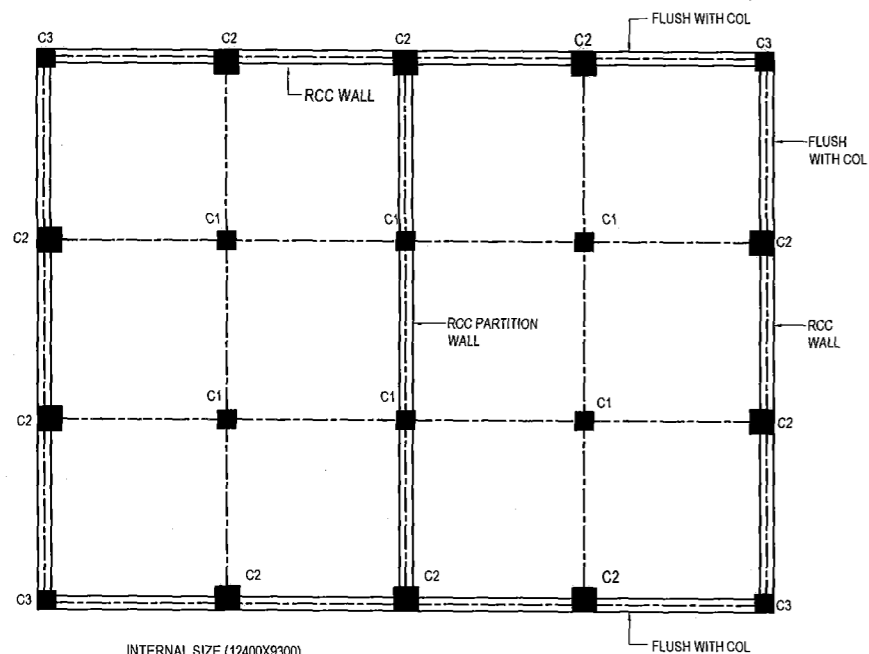
(Signature)
(D N BAHTT)
BRIG
CHIEF ENGINEER



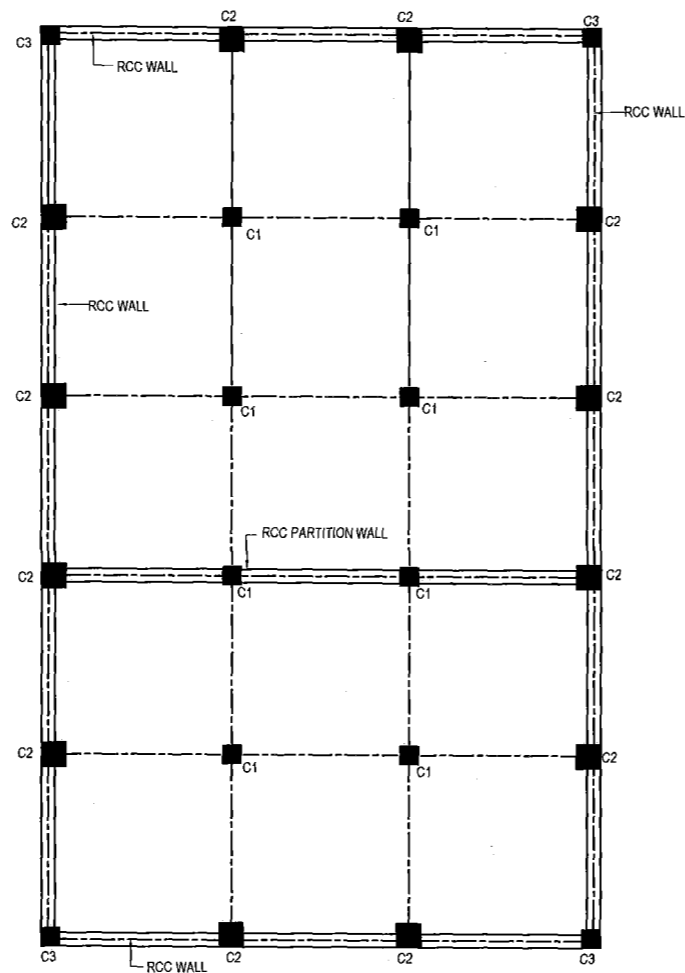
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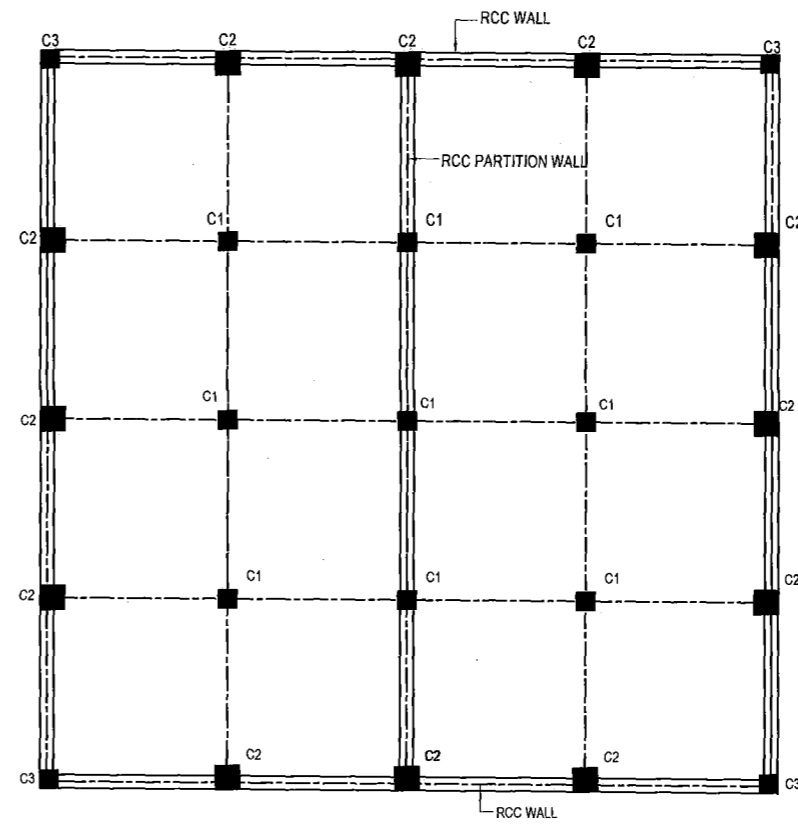
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- 31 WATER TIGHTNESS OF THE SUMP SHOULD BE ENSURED AS PER IS 3370(PART-1 OF 1986).
- 32 SPACER BAR OF 25# TO BE PROVIDED WHEREVER REINFORCEMENT IS PROVIDED IN TWO OR MORE LAYER OR REINFORCEMENT CAN NOT BE ACCOMMODATED IN SINGLE LAYER OF BEAM.
- 33 A COAT OF NITOBOND(FOSROC) SHALL BE APPLIED OVER OLD CONCRETE BEFORE LAYING FRESH CONCRETE.

34 TABLE: DEVELOPMENT LENGTH

GRADE OF CONCRETE	LAP LENGTH/DEVELOPMENT LENGTH	
	BARS IN TENSION AND COL BARS	BARS IN COMPRESSION EXCEPT IN COL BARS
M-30	46 DIA	37 DIA

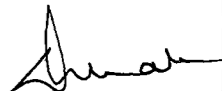
- 35. EACH COMPARTMENT OF SUMP SHALL BE PROVIDED WITH ONE MANHOLE AND VENT PIPE AND THE ACTUAL LOCATION OF VENT PIPE, MANHOLE, PIPES, SHALL BE INDICATED BY ENGR IN CHARGE AT SITE.

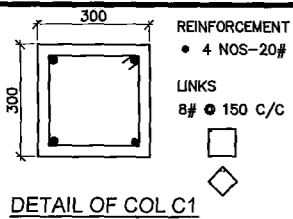
SL NO	DATE	DESCRIPTION	INITIALS
REVISIONS			

RCC UNDER GROUND SUMP

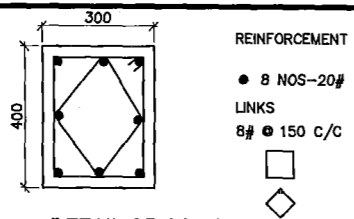
LINE PLAN OF UG SUMP FOR VARIOUS CAPACITIES.

DATE: 12 May	CHIEF ENGINEER JODHPUR ZONE JODHPUR	SHT NO
DRN V. DOSHI		14/16
TCD		
SCALE 1:100	REF.DRG NO:- CEJZ / STR /48/2015	

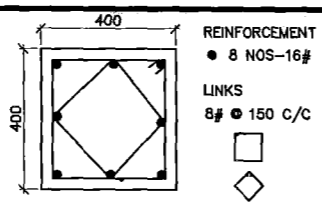

 (D N BAHTT)
 BRIG
 CHIEF ENGINEER



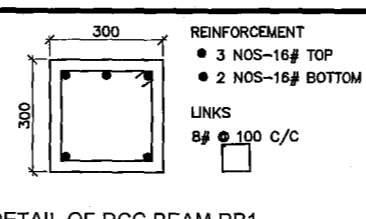
DETAIL OF COL C1



DETAIL OF COL C2



DETAIL OF COL C3

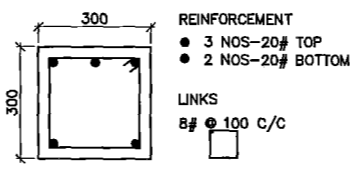
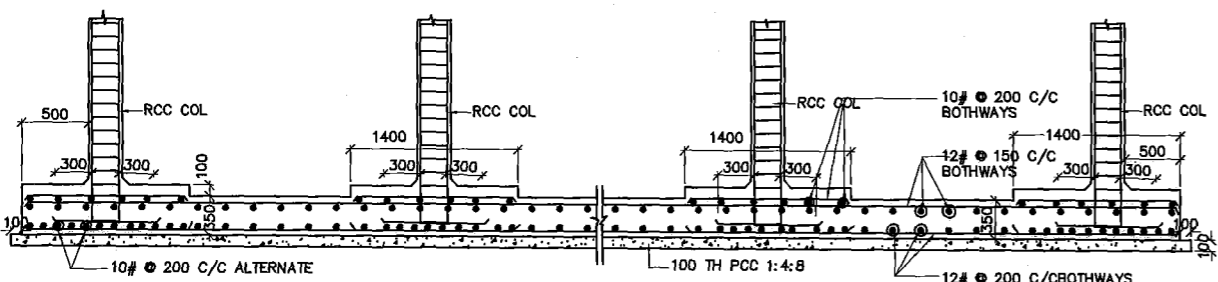


DETAIL OF RCC BEAM RB1

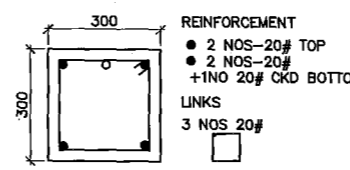
SCHEDULE OF RCC ROOF SLAB						
NAME	SLAB THK	MAIN BARS		EXTRA BARS AT TOP		REMARKS
		SHORT SPAN	LONG SPAN	SHORT SPAN	LONG SPAN	
RS	150	8#-140C/C	8#-140C/C	8#-280C/C	8#-280C/C	TWO WAY SLAB

NOTES

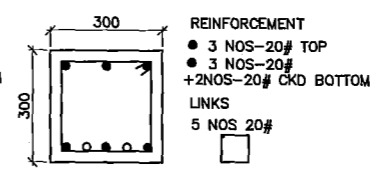
1. FOR ALL NOTES REFER SHEET NO 8/16 OF THIS PROJECT.



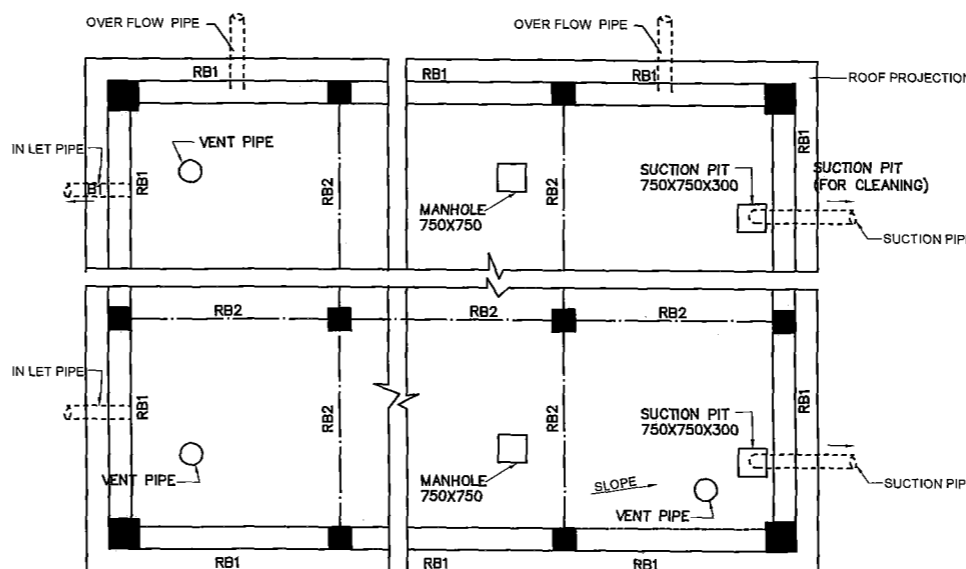
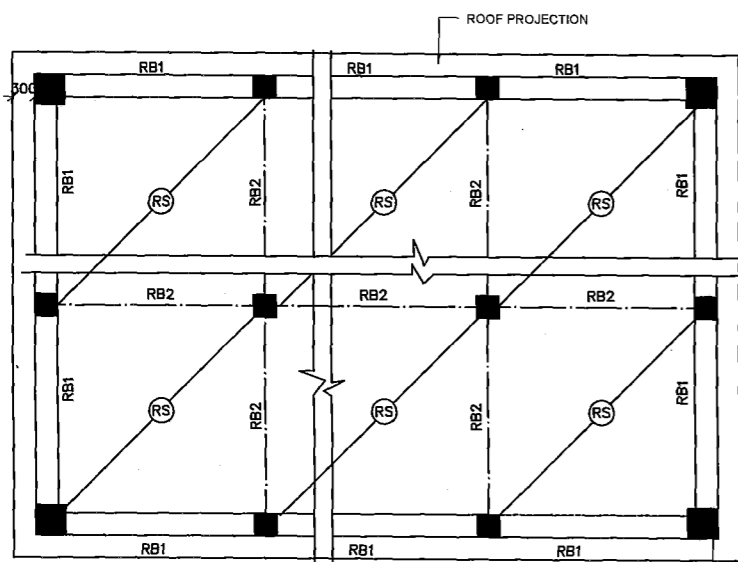
DETAIL OF RCC BEAM RB2



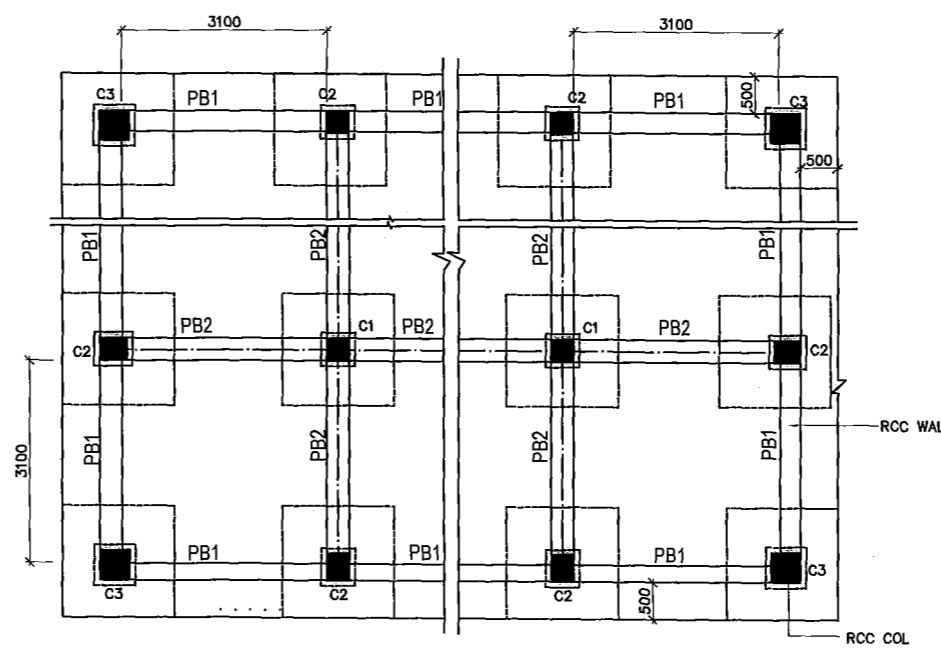
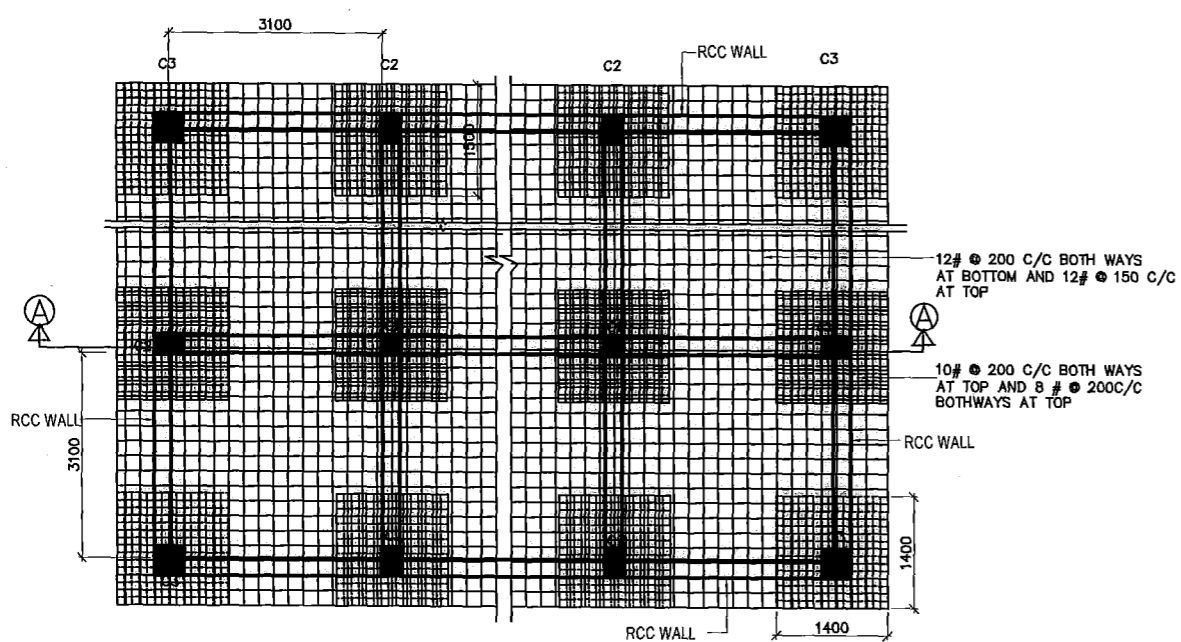
DETAIL OF PB1



DETAIL OF PB2



SCALE - 1:100



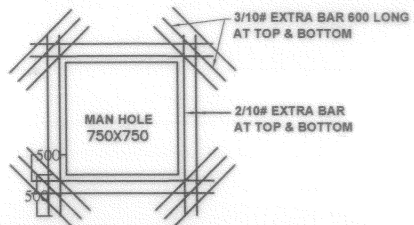
SL NO	DATE	DESCRIPTION	INITIALS
REVISIONS			

RCC UNDER GROUND SUMP

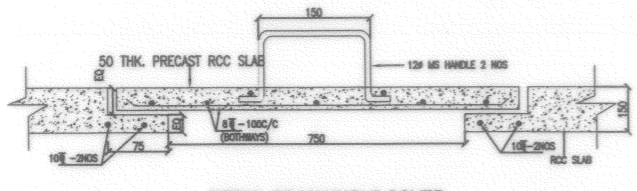
TYPICAL BASE SLAB AND ROOF SLAB PLAN OF SUMP, PLAN SHOWING BOTTOM SLAB REINFORCEMENTS, SECTION ELEVATION OF SUMP, DETAIL OF RCC COLS AND BEAMS

DATE: 12 May 15	CHIEF ENGINEER JODHPUR ZONE JODHPUR	SHT NO
DRN V. DOSHI		15/16
TCO		
SCALE 1:100	REF.DRG NO:- CEJZ / STR / 48 / 2015	

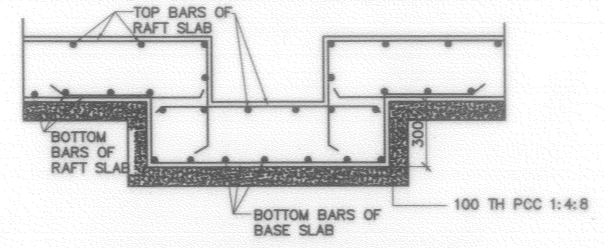
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CHIEF ENGINEER



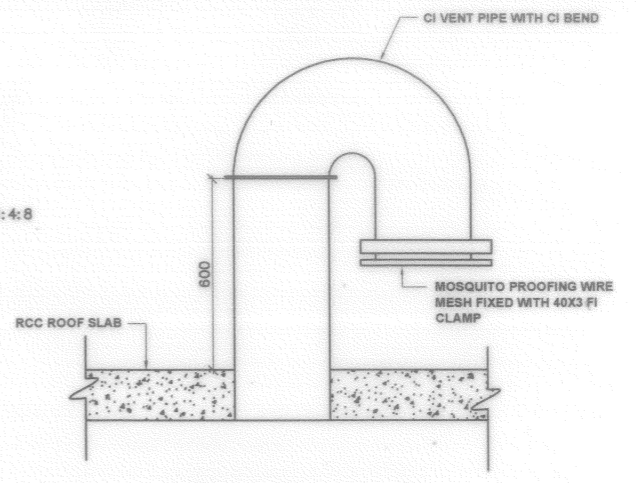
DETAIL OF ADDL REINFORCEMENT AROUND OPENINGS
SCALE: 1:25



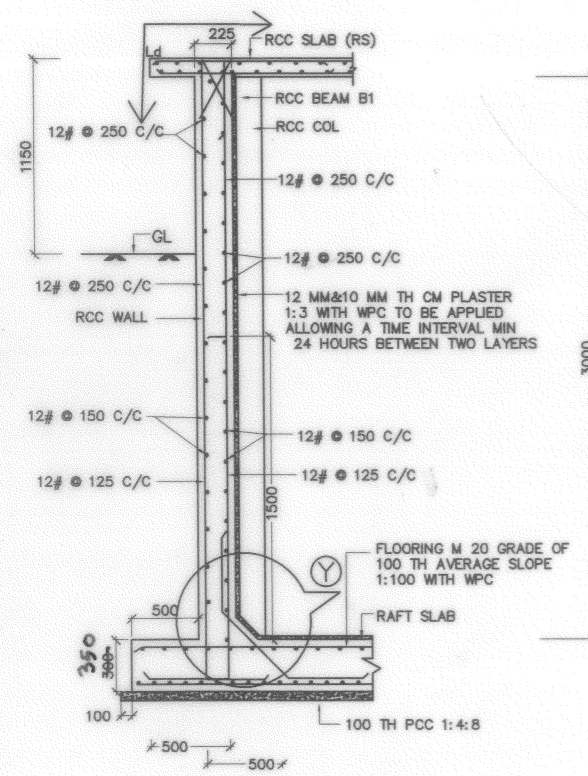
DETAIL OF MANHOLE COVER



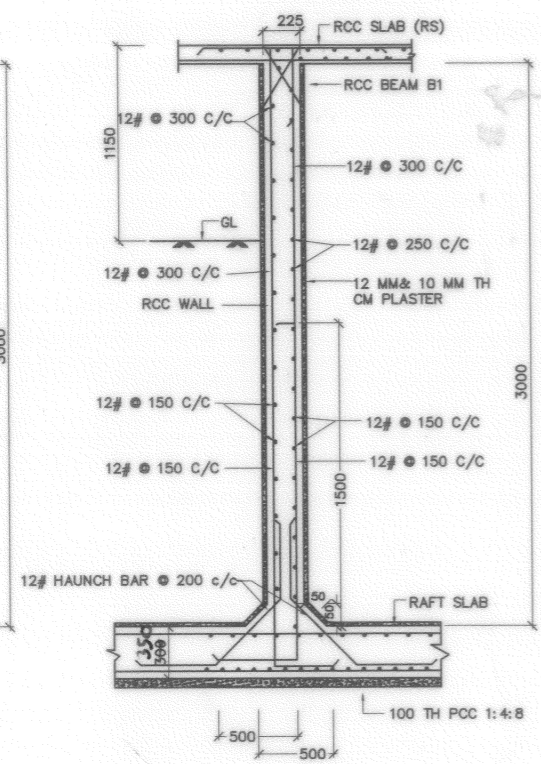
DETAIL OF SUCTION PIT BASE SLAB (750X750X300)



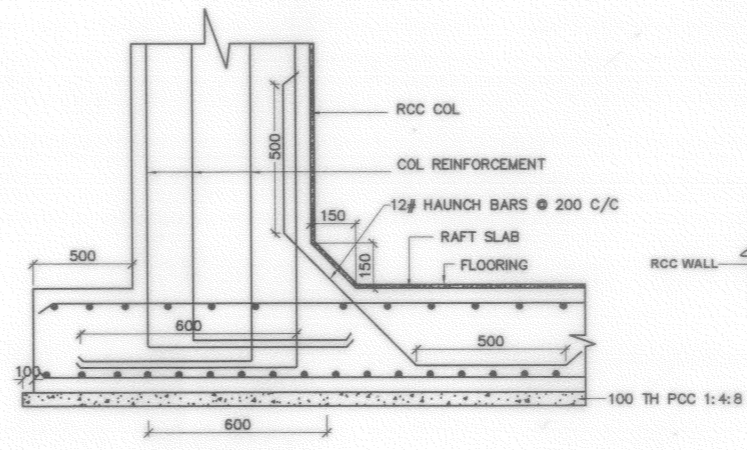
DETAIL OF CI VENT PIPE



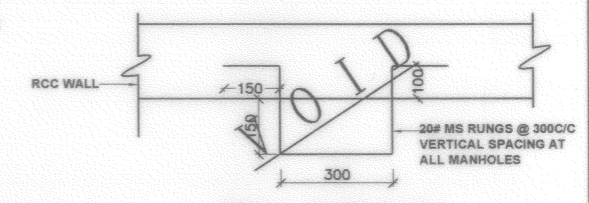
DETAIL OF RCC WALL



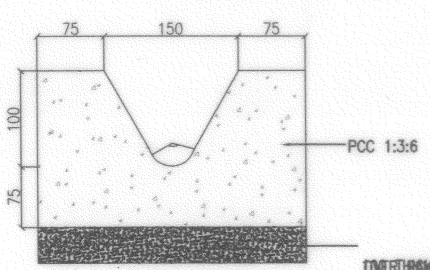
DETAIL OF RCC PARTITION WALL



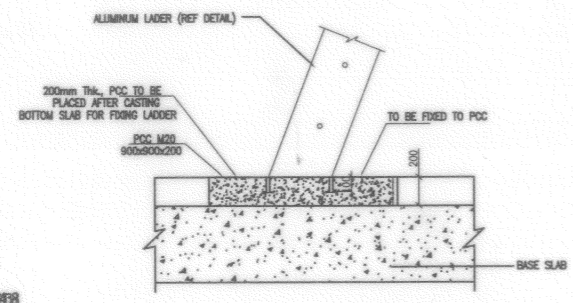
DETAIL AT 'Y'



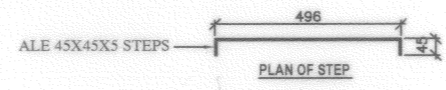
DETAIL OF MS RUNGS
SCALE: 1:10



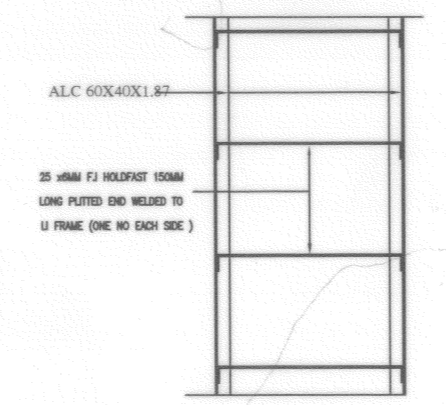
PCC SAUCER DRAIN



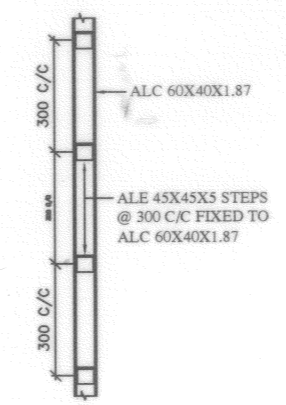
FIXING DETAIL OF ALUMINIUM LADDER



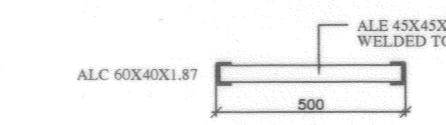
PLAN OF STEP



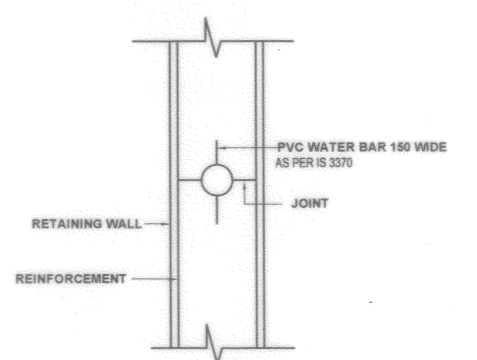
ELEVATION



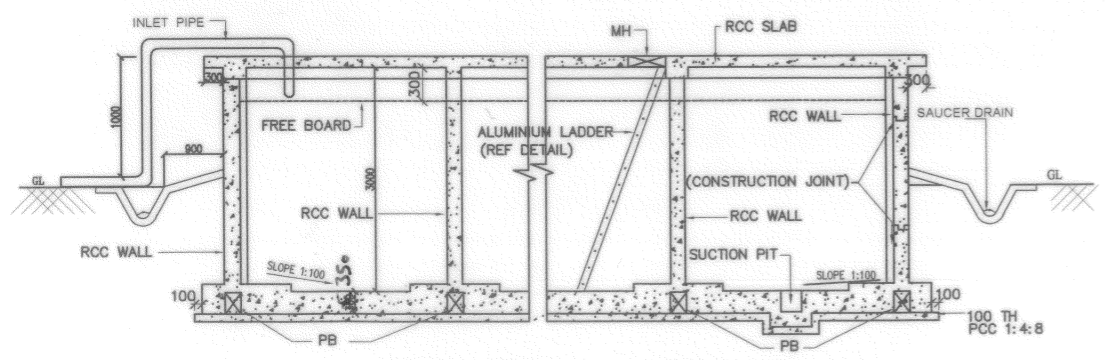
SECTION OF LADDER



DETAIL OF ALUMINIUM LADDER



DETAIL OF CONSTRUCTION JOINT IN RETAINING WALL (SECTION)



TYPICAL SECTIONAL ELEVATION OF UG SUMP

NOTES

1. FOR ALL NOTES REFER SHEET NO 8/16 OF THIS PROJECT.

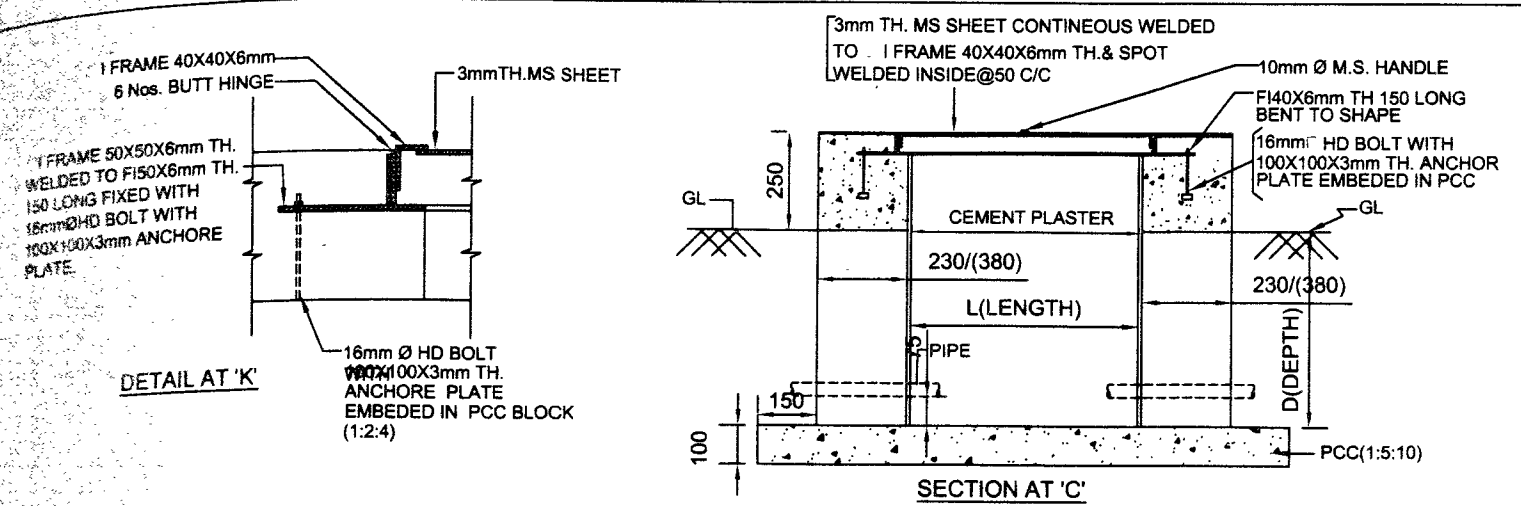
1. *JSK* CORRECTED UP TO DATE *JS*

SL NO	DATE	DESCRIPTION	INITIALS
REVISIONS			

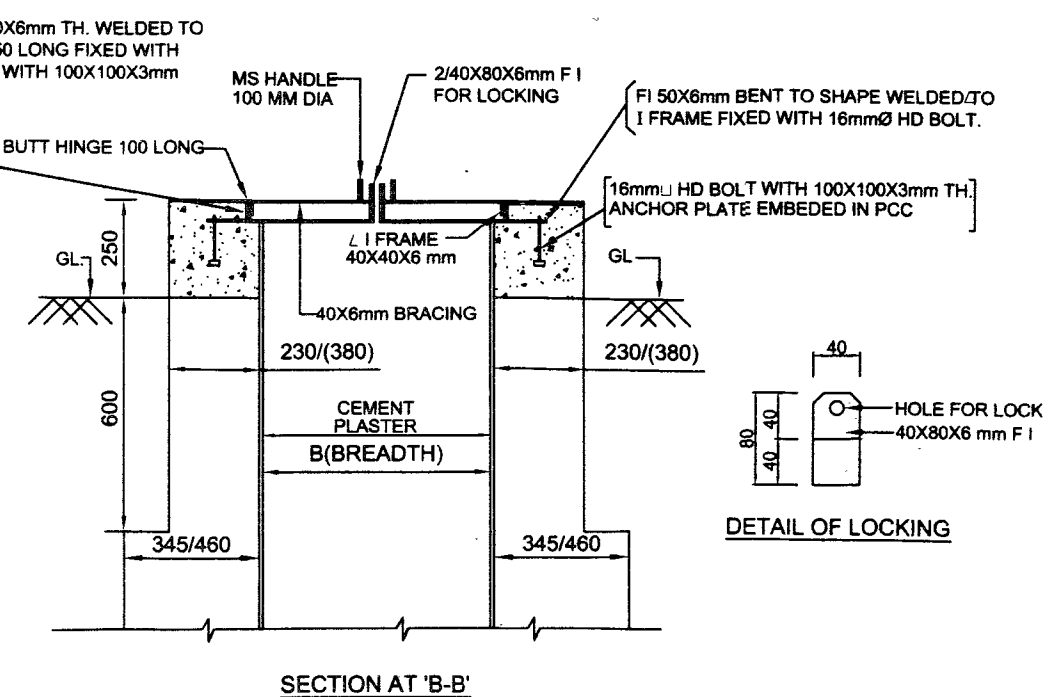
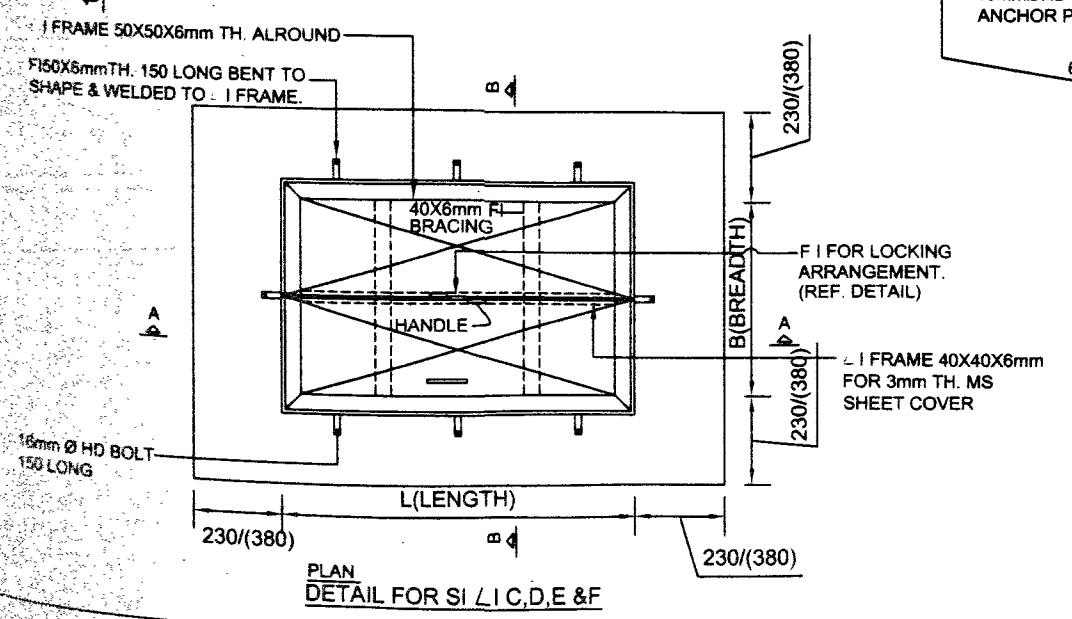
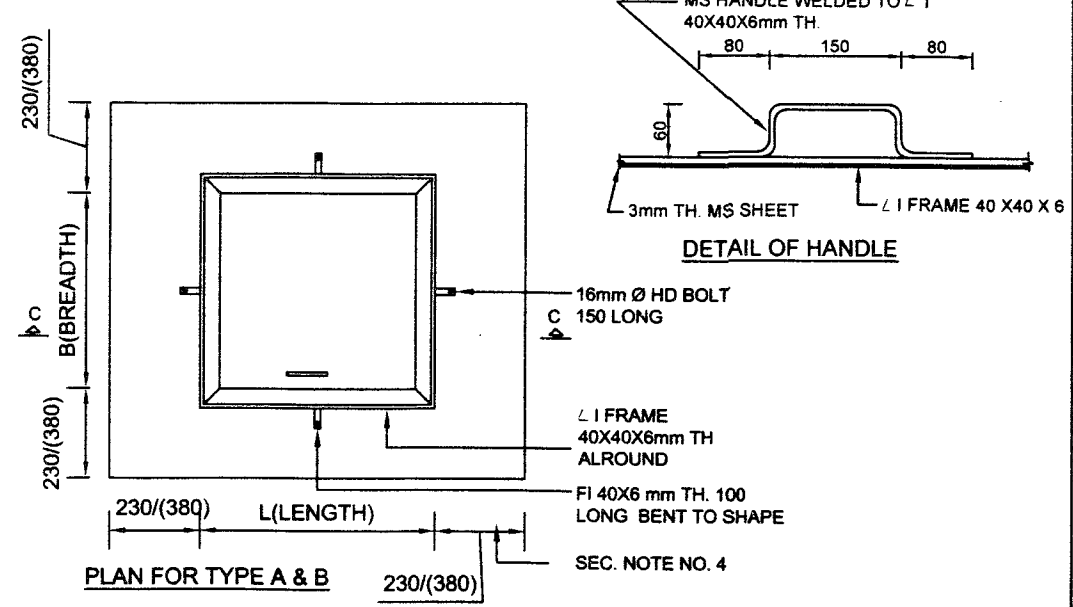
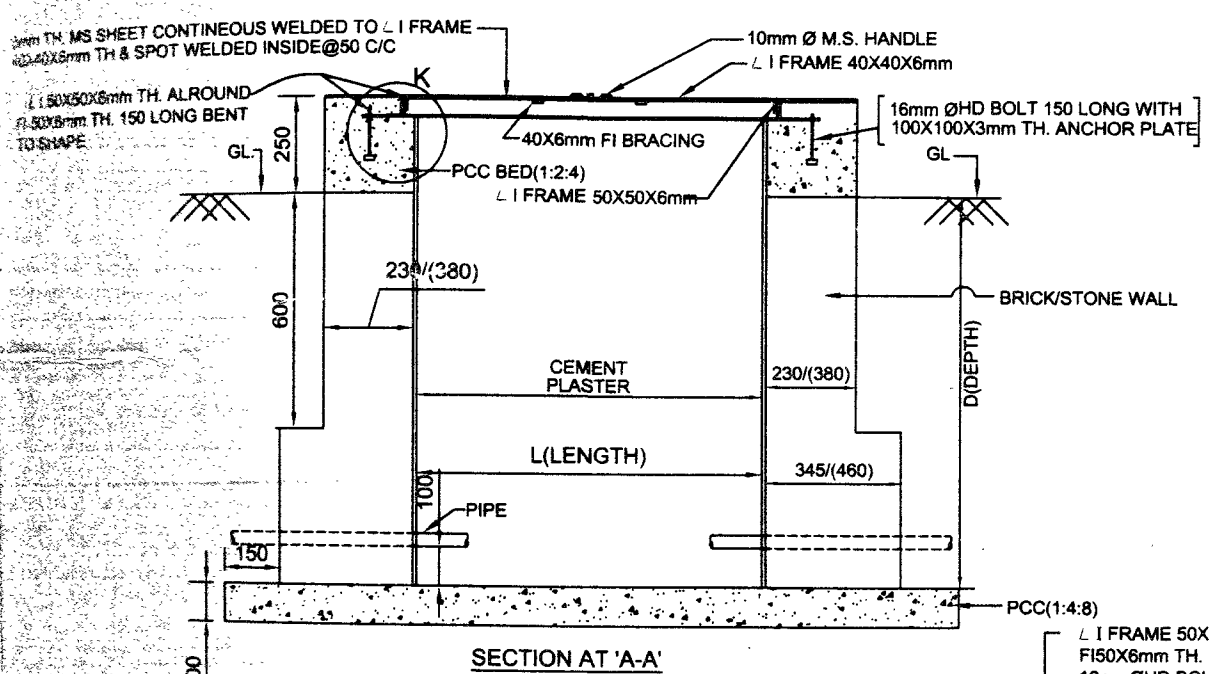
RCC UNDER GROUND UG SUMP
DETAILS OF RCC WALL, RCC PARTITION WALL
ELEVATION OF UG SUMP AND MISC DETAILS

DATE: 12 May 15	CHIEF ENGINEER JODHPUR ZONE JODHPUR	SHT NO
DRN V. DOSHI		16/16
TC		
SCALE 1:100	REF.DRG NO:- CEJZ / STR / 48/2015	

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BRIG
CHIEF ENGINEER



SCHEDULE OF VALVE PIT					
SL No.	TYPE	L(LENGTH)	B(BREADTH)	D(DEPTH)	REMARKS
1	A	380	380	450	FOR 15, 20 & 25 mm Ø STOP COCKS GATE VALVE
2	B	450	450	600	FOR 40 & 50 mm Ø STOP COCKS GATE VALVES
3	C	900	600	1000	FOR 80 & 100 mm Ø SLUICE/ REFLUX VALVES.
4	D	1050	750	1000	FOR 150 & 200 mm Ø SLUICE/ REFLUX VALVES
5	E	1350	1000	1200	FOR 250 & 300 mm Ø SLUICE/ REFLUX VALVES
6	F	2000	2000	2000	FOR 400 mm Ø SLUICE / REFLUX



NOTES

- CONTRACTOR TO CHECK & VERIFY ALL DIMENSIONS BEFORE TAKING EXECUTION OF THE WORK.
- FIGURED DIMENSIONS SHALL BE FOLLOWED
- ALL DIMENSIONS ARE GIVEN IN mm. UNLESS OTHERWISE STATED.
- ALTHOUGH TYPICAL DETAILS HAVE BEEN SHOWN FOR BRICK MASONRY VALVE PITS, THE SAME ARE EQUALLY APPLICABLE TO STONE MASONRY VALVE PITS DIMENSIONS SHOWN IN BRACKETS ARE FOR STONE MASONRY VALVE PITS.
- THE VALVE PITS IS PRIMARILY TO ACCOMMODATE THE STOP COCK OR SLUICE VALVE & DIE FITTING DETAILS REQUIRED FOR INSERTING THE SAME IN PIPE LINE TO PIPE JOINTS SHALL NOT BE LOCKETED WITH IN THE VALVE PITS WITH IN 1.5 METER FROM THE FOUNDATION OF THE VALVE PIT
- IN CASE OF VALVE A SUITABLE DETACH- ABLE UNION SHALL BE PROVIDED WITH THE PIT FOR REMOVAL OF STOP COCK/ GATE VALVE DURING REPAIRS.

TYPICAL DETAIL OF VALVE PIT PLAN & SECTION AT 'A-A'

DATE	01-08-2011	CHIEF ENGINEER BHPAL ZONE BHOPAL	SHEET No.
DRN.			1/1
TCD			
CKD			
SCALE		DRG No. CEBZ/TD/43/2011	

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FOR CHIEF ENGINEER

CHIEF ENGINEER JODHPUR ZONE



JODHPUR

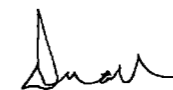
STRUCTURAL TYPICAL DRAWINGS

FOREWORD

1. CERTAIN STRUCTURAL TYPICAL DRAWINGS (TDs) AS PER INDEX. WHICH ARE REPEATEDLY REFERRED IN MOST OF THE WORKS, HAVE BEEN AUTOMATED AND COMPILED IN THE FORM OF THIS BOOKLET FOR EASE OF PLANNERS AS WELL AS EXECUTIVES. THE COPY OF THESE TD's WILL BE KEPT HANDY WITH ALL EXECUTIVES UP TO JE LEVEL.
2. HENCE FORTH SOFT COPIES OF ALL THESE TDs WILL BE UPLOADED ALONG WITH THE TENDER DRAWINGS. HOWEVER, REFERENCE TO THESE TDs AS REQUIRED SHALL BE MADE IN THE TENDER DRAWINGS. ALL THE TDs IN THIS TD SET SHALL BE DEEMED TO BE PART OF TENDER. HOWEVER, IF THERE IS CONTRADICTION ON SAME DETAIL BETWEEN WORKING DRAWING (IF DETAIL PROVIDED IN WORKING DRAWING) AND THESE TDs, THE DETAILS GIVEN IN WORKING DRAWINGS WILL SUPERCEDE FOR THAT PARTICULAR DETAIL.
3. THE LOWER FORMATIONS WILL MAKE THESE TD's PART OF THEIR CONTRACT, IF REQUIRED. NO LOWER FORMATION WILL HAVE THE RIGHT TO AMEND THESE TDs. ALL THE SUGGESTIONS FOR AMENDMENTS WILL BE FORWARDED TO HQ CHIEF ENGINEER JODHPUR ZONE, JODHPUR AND AMENDMENTS WILL BE ISSUED ONLY BY HQ CHIEF ENGINEER JODHPUR ZONE, JODHPUR, IF NECESSARY.
4. IT WILL BE THE RESPONSIBILITY OF ALL EXECUTIVES UPTO AGE LEVEL AND ALL CONTRACTORS IN RECEIPT OF THESE TDs TO ACKNOWLEDGE ALL THE AMENDMENTS FORWARDED TO THEM IN FUTURE AND KEEP THEIR SET UPDATED ALWAYS.

STN : JODHPUR

DATE : 31 MAR 2016



(DN BHATT)
BRIG
CHIEF ENGINEER

INDEX

LIST OF TYPICAL DRAWINGS INCLUDED IN STRUCTURAL TD FOLDER

S. No.	TYP DRG No.	SHT No.	NOMENCLATURE
1.	CEJZ/STD/08/2016	1/ 29 TO 29/29	NOTES FOR RCC STRUCTURE
2.	CEJZ/STD/09/2016	1/2 TO 2/2	TYPICAL DETAILS OF RCC STAIR WITH TOE BEAM AND CANTILEVER LANDING FOR SPAN UP TO 4000
3.	CEJZ/STD/10/2016	1/1	RR MASONRY RETAINING WALL
4.	CEJZ/STD/11/2016	1/1	TYPICAL DETAILS OF FOUNDATION FOR LOAD BEARING WALLS. (SBC OF SOIL 50 TO 150 KN/M ²)
5.	CEJZ/STD/12/2016	1/2 TO 2/2	SEPTIC TANK FOR 100 TO 1500 USERS.
6.	CEJZ/STD/13/2016	1/3 TO 3/3	DETAILS FOR RCC/ STONE CHHATRI
7.	CEJZ/STD/14/2016	1/1	DETAILS OF SOAKAGE PIT UP TO 100 USERS
8.	CEJZ/STD/15/2016	1/2 TO 2/2	DETAILS OF RCC PIPE CULVERTS
9.	CEJZ/STD/16/2016	1/2 TO 2/2	DETAILS OF RCC SLAB CULVERTS
10.	CEJZ/STD/17/2016	1/3 TO 3/3	DETAILS OF MANHOLE WITH RCC SLAB & RCC COVER
11.	CEJZ/STD/18/2016	1/1	HUME PIPE SEPTIC TANK UP TO 50 USERS
12.	CEJZ/STD/19/2016	1/2 TO 2/2	TYPICAL GUIDE PLAN OF STATIC WATER TANK

NOTES :-

1. GENERAL

- 1.1 CONTRACTOR AND EXECUTIVES SHALL CAREFULLY STUDY IN ADVANCE ALL THE DIAGRAMS AND SPECIFICATIONS AND TO CHECK & VERIFY THE DRAWINGS & DIMENSIONS BEFORE STARTING THE EXECUTION OF THE WORK. ALL RCC WORK SHALL FULFIL THE REQUIREMENTS GIVEN IN IS 456 AND OTHER RELEVANT IS CODES.
- 1.2 ALL DIMENSIONS ARE GIVEN IN MILLIMETRES UNLESS OTHERWISE STATED. WHEREVER ANY INDIAN STANDARD IS MENTIONED, THE LATEST EDITION SHALL BE FOLLOWED.
- 1.3 WHERE DETAILS SHOWN IN THIS STRUCTURAL DRAWING ARE AT VARIANCE WITH THE NOTES GIVEN BELOW THE DETAILS AS PER STRUCTURAL DRAWING SHALL BE FOLLOWED.
- 1.4 THE WORK SHALL BE EXECUTED IN ACCORDANCE WITH SPECIFICATIONS AND AS PER RELEVANT INDIAN STANDARDS WITH GOOD AND SOUND ENGINEERING PRACTICE. THE NOTES DESCRIBED BELOW ONLY HIGH LIGHT CERTAIN IMPORTANT ASPECTS AND THESE SHOULD NOT BE CONSTRUED THE ONLY PROVISIONS.
- 1.5 TESTS AS SPECIFIED IN CA, SHALL BE CONDUCTED IN ACCORDANCE WITH THE RELEVANT CODES OF BIS/IRC.
- 1.6 THE IS CODE REFERRED MEANS THE LATEST VERSION WITH ALL AMENDMENTS UP TO DATE.

2. MATERIALS

2.1 CEMENT

- 2.1.1 THE CEMENT FOR ALL RCC/PCC/NORMAL BUILDING CONSTRUCTION SHALL BE ANY OF THE FOLLOWING UNLESS OTHERWISE SPECIFIED IN CA/DRGS.
 - 2.1.1.1 33 GRADE ORDINARY PORTLAND CEMENT CONFORMING TO IS 269.
 - 2.1.1.1.2 43 GRADE ORDINARY PORTLAND CEMENT CONFORMING TO IS 8112.
 - 2.1.1.1.3 53 GRADE ORDINARY PORTLAND CEMENT CONFORMING TO IS 12269.
 - 2.1.1.1.4 RAPID HARDENING PORTLAND CEMENT CONFORMING TO IS 8041.
 - 2.1.1.1.5 PORTLAND SLAG CEMENT CONFORMING TO IS 455.
 - 2.1.1.1.6 PORTLAND POZZOLANA CEMENT (FLY ASH BASED) CONFORMING TO IS 1489 (PART 1).
 - 2.1.1.1.7 PORTLAND POZZOLANA CEMENT(CALCINED CLAY BASED) CONFORMING TO IS 1489 (PART 2).
 - 2.1.1.1.8 HYDROPHOBIC CEMENT CONFORMING TO IS 8043.
 - 2.1.1.1.9 LOW HEAT PORTLAND CEMENT CONFORMING IS 12600.
 - 2.1.1.1.10 SULPHATE RESISTING PORTLAND CEMENT CONFORMING TO IS 12330.
 - 2.1.1.1.11 CEMENT OF DIFFERENT TYPE SHALL NOT BE MIXED FOR CASTING ANY STRUCTURAL MEMBER.

2.2 WATER

- 2.2.1 WATER USED IN CONCRETE SHALL CONFORM TO THE REQUIREMENT OF CLAUSE 5.4 OF IS 456.
- 2.2.2 SOURCES OF WATER SHALL BE GOT TESTED FOR ITS SUITABILITY FOR CONSTRUCTION PURPOSE AND AVAILABILITY AS PER REQUIREMENT OF THE PROJECT.

2.3 AGGREGATES

- 2.3.1 COARSE AGGREGATE SHALL BE FROM NATURAL SOURCE AND SHALL CONSIST OF (CRUSHED OR UN CRUSHED) STONE , GRAVEL AND OR COMBINATION OF THESE CONFORMING TO IS 383.
- 2.3.2 THE NOMINAL MAXIMUM SIZE OF COARSE AGGREGATE SHALL NOT BE GREATER THAN ONE FOURTH OF THE MINIMUM THICKNESS OF THE MEMBER UNLESS OTHERWISE SPECIFIED. FOR REINFORCED CONCRETE MEMBERS OF THICKNESS MORE THAN 80 MM, 20 MM NOMINAL SIZED AGGREGATE MAY BE USED.

NOTES FOR RCC STRUCTURE

DATE	31 MAR 2016	CHIEF ENGINEER JODHPUR ZONE JODHPUR	SHT NO
DRN	SUB GAIKWAD J M		1
TCD			29
CKD	U S SHARMA		
SCALE		REF DRG NO. - CEJZ/STR/STD/08/2016	

C.K. Chanchlani

C.K. CHANCLANI
TECH OFFR.

Subodh Kumar

(SUBODH KUMAR)
SE
DIRECTOR (DESIGN)
FOR CHIEF ENGINEER

- 2.3.3 FINE AGGREGATES SHALL BE NATURALLY AVAILABLE RIVER SAND CONFORMING TO IS 383. DELETERIOUS ORGANIC MATTER, MICA AND SILT ETC SHALL NOT EXCEED THE TOLERANCE GIVEN IN THE RELEVANT IS CODE.
- 2.3.4 THE UNIFORMITY OF THE QUALITY, SIZE AND GRADING OF THE AGGREGATES SHALL BE ENSURED BY CONDUCTING REGULAR TESTS AS PER QUALITY ASSURANCE MANUAL 2002 .

2.4 ADMIXTURES

- 2.4.1 ADMIXTURES USED IN CONCRETE SHALL COMPLY WITH THE REQUIREMENTS OF CLAUSE 5.2 & 5.5 OF IS 456.
- 2.4 THE QUANTITY OF POZZOLANA AND SLAG SHALL NOT EXCEED THE LIMITS SPECIFIED IN IS 1489 (PART 1) AND IS 455 RESPECTIVELY.

3. FOUNDATION

- 3.1 MINIMUM DEPTH OF FOUNDATION SHALL BE 1.0 M FROM GL/ MADE UP GL UNLESS OTHERWISE MENTIONED.
- 3.2 FOUNDATION OF THE BUILDING SHALL REST ON FIRM GROUND OF SPECIFIED SAFE BEARING CAPACITY (SBC). THE BUILDING SHALL NOT BE FOUNDED ON TREACHEROUS, ORGANIC OR FILLED EARTH, WHICH IS EXPECTED TO CONSOLIDATE WITH PASSAGE OF TIME UNDER LOADS. BUILDINGS SHALL ALSO NOT BE FOUNDED IN GROUNDS WHERE ROOTS OF TREES AND SHRUBS ARE PRESENT.
- 3.3 LEAN CONCRETE (M-10) SHALL BE PROVIDED ALL RCC FOUNDATIONS AND FOOTINGS UNLESS OTHERWISE SPECIFIED.
- 3.4 THE MINIMUM DEPTH 'D' OF FOUNDATION SHALL BE MEASURED FROM NATURAL GROUND LEVEL WHILE DESIGNING THE FOUNDATION. IT HAS BEEN PRESUMED THAT THE VARIOUS POCKETS OF THE SITE SHALL BE BROUGHT TO ONE LEVEL BY CUTTING ONLY SO THAT AT NO POINT THE FOUNDATION LEVEL IS LESS THAN 1000 MM DEEP FROM NATURAL GROUND LEVEL.
- 3.5 GROUND WATER TABLE HAS BEEN CONSIDERED WELL BELOW FOUNDATION LEVEL IN ALL SEASON UNLESS OTHERWISE MENTIONED IN SOME SPECIFIC BUILDING.
- 3.6 EXECUTIVE SHALL CHECK THE STRATA AFTER DIGGING ON GROUND. THEY WILL ENSURE THAT STRATA IS SAME AS HAS BEEN ASSUMED IN DESIGN AND IN CASE OF ANY VARIATION THE WORK WILL NOT BE PROGRESSED AND CASE WILL BE REFERRED TO DESIGNER FOR REVISION IN DESIGN.

4. FORM WORK

4.1 GENERAL

- 4.1.1 FORM WORK FOR CONCRETE SHALL HAVE ADEQUATE STRENGTH AND RIGIDITY TO SAFELY WITHSTAND FORCES DUE TO PLACING AND COMPACTION OF CONCRETE AND SHALL BE DESIGNED TO WITH STAND MOST ADVERSE COMBINATION OF DEAD LOAD, LIVE LOAD, CONSTRUCTION LOADS (INCLUDING IMPACT LOAD, EFFECT OF VIBRATION, COMPACTIONS, FLUID PRESSURE OF CONCRETE) AND WIND LOAD.
- 4.1.2 THE JOINT/ JUNCTIONS OF FORM WORK SHALL BE APPROPRIATELY SEALED TO AVOID LEAKAGE OF SLURRY / PASTE FROM CONCRETE WHEN POURED. ALL FORM WORK INCLUDING SUPPORTS/ PROPS, SCHEME OF ERECTION AND REMOVAL OF FORM WORK SHALL BE APPROVED BY GE.
- 4.1.3 THE PERMISSIBLE TOLERANCE SHALL BE AS PER CLAUSE 11.1 OF IS 456.
- 4.1.4 SPECIAL CARE IS TO BE TAKEN IN PROVIDING THE FORM WORK FOR LARGE SPAN (>5M) AND FOR HEIGHT MORE THAN 4 METRES .
- 4.1.5 IN CASE OF CANTILEVER BEAMS /SLAB , THE FORM WORK SHALL BE REMOVED STARTING FROM FREE END SIDE ONLY.

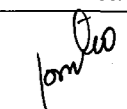
4.2 PROPS

- 4.2.1 ONLY STEEL PROPS SHALL BE USED FOR SUPPORTING THE FORM WORK. SPECIAL CARE IS TO BE TAKEN TO ENSURE THAT JOINTS IN PROPS ARE ADEQUATELY STRONG AND STIFF. THE PROPS SUPPORTING THE FORM WORK SHALL BE BRACED TRANSVERSALLY IN BOTH DIRECTIONS AT SUITABLE INTERVALS TO PREVENT FAILURE BY BUCKLING.
- 4.2.2 PROPS OF CANTILEVER BEAM/ SLAB SHALL BE REMOVED ONLY AFTER THE WALL OVER THE BEAM/ COUNTER WEIGHT HAS BEEN CONSTRUCTED AND SHALL BE REMOVED STARTING FROM FREE END.

NOTES FOR RCC STRUCTURE

DATE	31 MAR 2016	CHIEF ENGINEER JODHPUR ZONE JODHPUR	SHT NO
DRN	SUB GAIKWAD J M		2
TCD			29
CKD	U S SHARMA		
SCALE		REF DRG NO. - CEJZ/STR/STD/08/2016	


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TECH OFFR.


(SUBODH KUMAR)
SE
DIRECTOR (DESIGN)
FOR CHIEF ENGINEER

4.3 STRIPPING TIME

4.3.1 STRIPPING TIME SHALL BE IN ACCORDANCE WITH CLAUSE 11.3 OF IS-456 AND MAY BE MODIFIED BY GE, DEPENDING UPON THE SITE CONDITIONS, WEATHER & TYPE OF CEMENT ETC. IN GENERAL MINIMUM STRIKING PERIOD SHALL BE AS GIVEN IN TABLE -1 BELOW, WHERE AMBIENT TEMPERATURE DOES NOT FALL BELOW 15 CELCIUS AND WHERE OPC IS USED AND ADEQUATE CURING IS DONE.

TABLE-1

SL NO	TYPE OF FORM WORK	MINIMUM PERIOD BEFORE STRIKING FORMWORK
(i)	VERTICAL FORMWORK TO COLUMNS, WALL AND BEAMS	24 HOURS
(ii)	SOFFIT FORMWORK TO SLABS (PROPS TO BE REFIXED IMMEDIATELY AFTER REMOVAL OF FORMWORK)	03 DAYS
(iii)	SOFFIT FORMWORK TO BEAMS (PROPS TO BE REFIXED IMMEDIATELY AFTER REMOVAL OF FORMWORK)	07 DAYS
(iv)	PROPS OF SLABS :-	07 DAYS
	(a) SPANNING UP TO 4.5 M	14 DAYS
(iv)	(b) SPANNING OVER 4.5 M	14 DAYS
	PROPS TO BEAMS AND ARCHES :-	14 DAYS
	(a) SPANNING UP TO 6 M	21 DAYS
	(b) SPANNING OVER 6 M	21 DAYS

4.3.2 FOR OTHER CEMENT AND LOWER TEMPERATURE, THE STRIPPING TIME RECOMMENDED AT 4.3.1 MAY BE SUITABLY MODIFIED BY GE.

4.3.3 THE STRIPPING PERIOD MENTIONED AT 4.3.1 SHALL BE EXTENDED ADEQUATELY AS DIRECTED BY GE, IN CASE OF CONCRETE WHERE MINERAL ADMIXTURES OR BLENDED CEMENT ARE USED.

5. STEEL REINFORCEMENT

5.1 GENERAL

5.1.1 UNLESS OTHERWISE SPECIFIED IN STRUCTURAL DRAWING, STEEL FOR REINFORCEMENT IN ALL RCC WORKS SHALL BE ANY OF FOLLOWING:-

5.1.1.1 HIGH YIELD STRENGTH DEFORMED BARS/COLD TWISTED DEFORMED BARS/TMT BARS CONFORMING TO IS 1786 WITH MINIMUM YIELD STRESS OF 500 N/Sqm OR AS INDICATED IN DRAWING #.

5.1.1.2 MILD STEEL REINFORCEMENT BARS IF SPECIFIED SHALL CONFORM TO IS 432 (PART-1) AND SHALL HAVE A MINIMUM YIELD STRESS OF 250 N/SQ MM. THESE ARE INDICATED IN DRAWINGS BY "Ø".

5.1.1.3 STEEL WIRE FABRIC WELDED MESH REINFORCEMENT SHALL CONFORM TO IS 1566.

5.1.1.4 THE DIAMETER OF REINFORCEMENT BARS SHALL NOT EXCEED ONE EIGHTH OF THE TOTAL THICKNESS OF THE SLAB.

5.1.1.5 THE BARS SHALL NOT BE LESS THAN 12 mm IN DIAMETER FOR LONGITUDINAL REINFORCING BARS IN A COLUMN.

5.1.2 ALL REINFORCEMENT IN RCC WORKS SHALL BE CORRECTLY INCORPORATED AS PER DETAILS GIVEN IN THE STRUCTURAL DRAWINGS. IT SHALL BE FABRICATED IN CONFORMITY WITH IS 2502 AND IS 5525.

5.1.3 A REINFORCING BAR ONCE HOOKED OR CRANKED SHALL NOT BE STRAIGHTENED AND USED AGAIN.

5.1.4 BAR BENDING SCHEDULE SHALL BE PREPARED FOR ALL REINFORCEMENT WORKS BEFORE PLACING THE REINFORCEMENT.

NOTES FOR RCC STRUCTURE

DATE	31 MAR 2016	CHIEF ENGINEER JODHPUR ZONE JODHPUR	SHT NO
DRN	SUB GAIKWAD J M		3
TCD			29
CKD	U S SHARMA		
SCALE		REF DRG NO. - CEJZ/STR/STD/08/2016	

C.K. Chanchlani
C.K. CHANCLANI
TECH OFFR.

Subodh Kumar
(SUBODH KUMAR)
SE
DIRECTOR (DESIGN)
FOR CHIEF ENGINEER

- 5.1.5 IT SHALL BE ENSURED THAT THE REQUIRED COVER TO REINFORCEMENT IS PROVIDED AS PER CLAUSE 26.4 OF IS 456 WHEREVER NOT SPECIFIED IN DRG .
- 5.1.6 IT SHALL BE ENSURED THAT WHILE CONCRETING THE BARS ARE NOT DISPLACED OR DISTURBED FROM POSITION DUE TO MOVEMENT OF WORKERS/ EQUIPMENT ETC. ADEQUATE TEMPORARY WORKING PLATFORM SHALL BE PROVIDED FOR WORKERS/EQUIPMENT. SPECIAL CARE IS TO BE TAKEN IN CASE OF CANTILEVER SLABS & BEAMS.
- 5.1.7 BARS PROJECTING FROM MEMBERS SHALL NOT BE BENT OUT OF SHAPE/POSITION AND SHALL BE ADEQUATELY HELD IN PLACE.

5.2 DEVELOPMENT LENGTH

- 5.2.1 UNLESS OTHERWISE INDICATED IN STRUCTURAL DRAWINGS, ALL LONGITUDINAL BARS IN TENSION SHALL BE ANCHORED INTO SUPPORT/ADJACENT SPAN TO ITS FULL DEVELOPMENT LENGTH 'Ld' AS GIVEN IN THE TABLE-2 BELOW (Ld IS GIVEN IN CM).

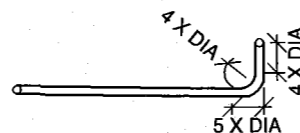
TABLE- 2

BAR DIA	GRADE OF CONCRETE				
	M-20	M-25	M-30	M-35	M-40 & ABOVE
8	46	39	37	32	29
10	57	49	46	40	36
12	68	59	55	48	43
16	91	78	73	64	58
20	114	98	91	80	72
25	142	122	114	100	90
32	182	156	145	128	115
40	227	195	182	160	144

- 5.2.2 FOR BARS IN COMPRESSION, ABOVE VALUES OF Ld MAY BE REDUCED TO 0.8 TIMES.

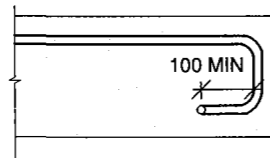
5.3 ANCHORAGE

- 5.3.1 REINFORCEMENT BARS MUST BE ANCHORED BEYOND THE POINT THEY ARE NO LONGER REQUIRED BY PROVIDING NECESSARY DEVELOPMENT LENGTH. HOOK OR BENDS MAY BE PROVIDED AT ENDS OF PLAIN ROUND BARS AND BENDS MAY BE PROVIDED AT END OF DEFORMED BARS. ANCHORAGE VALUE OF BARS PROVIDED BY HOOKS AND BENDS SHALL BE DEDUCTED FROM THE OVER ALL DEVELOPMENT LENGTH.
- 5.3.2 NO HOOK SHALL BE PROVIDED TO HYSD / TOR STEEL BARS, THE BARS SHALL BE TERMINATED IN ' L ' SHAPE AS SHOWN IN SKETCH NO-1 BELOW.



SKETCH NO - 1

- 5.3.3 REINFORCEMENT OF SLAB, CHAJJAS SHALL HAVE BEND AT THEIR ENDS AS SHOWN IN SKETCH NO - 2 BELOW.



SKETCH NO - 2

5.4 JOINTS / LAPS

5.4.1 GENERAL

- 5.4.1.1 JOINTS IN REINFORCEMENT SHALL BE AVOIDED AS FAR AS POSSIBLE.
- 5.4.1.2 IT IS UNDESIRABLE TO HAVE JOINTS IN THE REINFORCEMENT IN THE REGION OF MAXIMUM STRESSES.
- 5.4.1.3 IF JOINTS ARE UNAVOIDABLE, THEY SHALL BE STAGGERED. AT ANY CROSS SECTION THE No. OF LAPS SHALL NOT BE MORE THAN HALF THE No. OF BARS PROVIDED. LAP SHALL BE CONSIDERED STAGGERED IF C/C DISTANCE OF THE SPLICE IS 1.3 X Ld OR MORE.

NOTES FOR RCC STRUCTURE

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- 5.4.1.4 FOR SPLICING BARS OF TWO DIFFERENT DIAMETERS, THE LAP LENGTH SHALL BE CALCULATED ON THE BASIS OF DIAMETER OF THE LARGER DIA BAR.
- 5.4.1.5 LAP SPLICES SHALL NOT BE USED FOR BARS LARGER THAN 36 MM. LAPPING OF BAR LARGER THAN 36 MM MAY BE PERMITTED IN WHICH ADDITIONAL SPIRALS SHOULD BE PROVIDED AROUND THE LAPPED BAR.
- 5.4.1.6 LONGITUDINAL BARS IN CASE OF RCC COLUMNS IN FRAMED STRUCTURE SHALL BE SPLICED IN THE CENTRAL HALF OF THE MEMBER LENGTH. IT SHOULD BE PROPORTIONED AS A TENSION SPLICE. LATERAL TIES SHALL BE PROVIDED OVER THE ENTIRE SPLICE LENGTH AT SPACING NOT EXCEEDING 150 MM C/C AND < 50% OF THE BARS SHALL BE SPLICED AT ONE SECTION.
- 5.4.1.7 LAP LENGTH INCLUDING ANCHORAGE VALUE OF HOOKS FOR BARS IN FLEXURAL TENSION SHALL BE L_d OR 30 DIA WHICHEVER IS GREATER AND FOR DIRECT TENSION SHALL NOT BE LESS THAN 15 DIA OR 200 MM WHICHEVER IS GREATER.
- 5.4.1.8 WHERE LAP OCCURS FOR A TENSION BAR LOCATED AT TOP OF A SECTION AS CAST AND THE MINIMUM COVER IS LESS THAN TWICE THE DIAMETER OF THE LAPPED BAR, THE LAP LENGTH SHALL BE INCREASED TO 1.4 TIMES.
- 5.4.1.9 WHERE LAP OCCURS FOR TENSION BAR LOCATED AT CORNER OF A SECTION AND THE MINIMUM COVER TO THE EITHER FACE IS LESS THAN TWICE THE DIAMETER OF THE LAPPED BAR OR WHERE THE CLEAR DISTANCE OF LAPPED BAR, WHICHEVER IS GREATER, THE LAP LENGTH SHOULD BE INCREASED TO 1.4 TIMES.
- 5.4.1.10 WHEN BOTH THE CONDITIONS AT 5.4.1.8 & 5.4.1.9 APPLY THE LAP LENGTH SHOULD BE TWICE THE FIGURE CALCULATED AS ABOVE.
- 5.4.1.11 THE LAP IN COMPRESSION SHALL BE EQUAL TO THE DEVELOPMENT LENGTH IN COMPRESSION BUT NOT LESS THEN 24 DIA.

5.4.2 WELDING

- 5.4.2.1 WELDING FOR TMT BARS IS NOT PERMITTED.

5.5 PLACING

- 5.5.1 UNLESS OTHERWISE SPECIFIED THE REINFORCEMENT SHALL BE PLACED WITHIN THE FOLLOWING TOLERANCES:-

- (a) FOR EFFECTIVE DEPTH UPTO 200 MM \pm 10MM
 (b) FOR EFFECTIVE DEPTH MORE THAN 200 MM \pm 15MM

- 5.5.2 TO MAINTAIN THE SPECIFIED NOMINAL COVER TO STEEL REINFORCEMENT SPACER/COVER BLOCK OF PVC OR CONCRETE OF SAME STRENGTH SHALL BE USED. SPACER/COVER BLOCKS SHALL BE PLACED AT A MAXIMUM SPACING OF 1M

- 5.5.3 ROUGH HANDLING SHOCK LOADING (PRIOR TO EMBEDMENT) AND THE DROPPING OF REINFORCEMENT FROM A HEIGHT SHOULD BE AVOIDED. REINFORCEMENT SHOULD BE SECURED AGAINST DISPLACEMENT OUT SIDE THE SPECIFIED LIMITS.

5.6 SPACING

- 5.6.1 SPACING OF REINFORCEMENT SHALL BE IN ACCORDANCE WITH CLAUSE 26.3 OF IS 456, UNLESS OTHERWISE SPECIFIED.

5.6.2 COLUMNS

5.6.2.1 LONGITUDINAL REINFORCEMENT OF COLUMNS.

- 5.6.2.1.1 SPACING OF LONGITUDINAL BARS MEASURED ALONG THE PERIPHERY OF THE COLUMN SHALL NOT EXCEED 300 MM C/C SPACING.

5.6.2.2 PITCH OF LATERAL TIES.

- 5.6.2.2.1 THE PITCH OF TRANSVERSE REINFORCEMENT SHALL NOT BE MORE THAN THE LEAST OF THE FOLLOWING DISTANCES:-

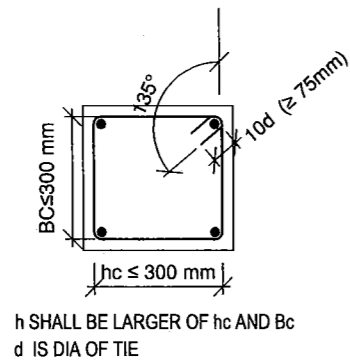
- (a) THE LEAST LATERAL DIMENSIONS OF THE COMPRESSION MEMBERS.
 (b) 16 TIMES THE SMALLEST DIAMETER OF THE LONGITUDINAL REINFORCEMENT BAR TO BE TIED.
 (c) 300 MM.
 (d) THE TIES SHALL BE BENT TO AN ANGLE OF 135° AS SHOWN IN SKETCHES 3(a), 3(b) & 3(c).

NOTES FOR RCC STRUCTURE

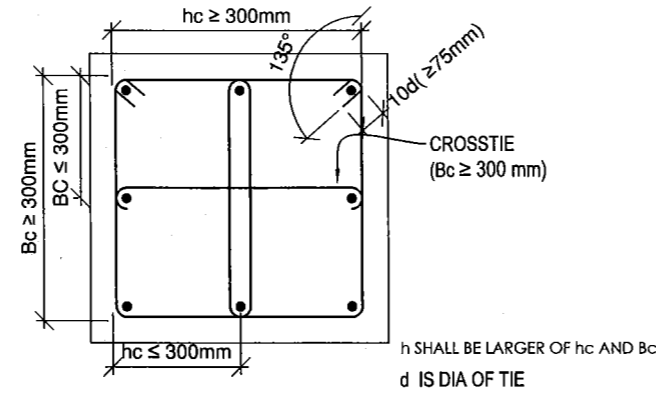
DATE	31 MAR 2016	CHIEF ENGINEER JODHPUR ZONE JODHPUR	SHT NO
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CKD	U S SHARMA		
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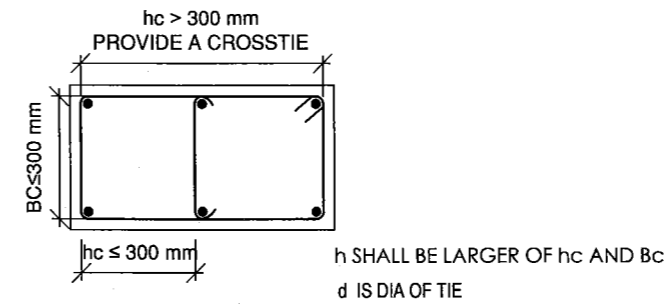
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SINGLE HOOP
SKETCH NO - 3(a)



OVERLAPPING HOOPS WITH A CROSS TIE
TRANSVERSE REINFORCEMENT IN COLUMN
SKETCH NO. 3(b)



SINGLE HOOK WITH A CROSSTIE
SKETCH NO - 3(c)

5.6.3 BEAMS

5.6.3.1 TENSION / COMPRESSION REINFORCEMENT

5.6.3.1.1 MINIMUM HORIZONTAL SPACING FOR ALL GRADES OF STEEL REINFORCEMENT SHALL BE THE GREATEST OF THE FOLLOWING :

- (a) DIAMETER OF BAR WHEN EQUAL DIA BARS ARE USED.
- (b) LARGER BAR DIA WHEN UNEQUAL DIA BARS ARE USED
- (c) 5 MM MORE THAN THE NOMINAL MAXIMUM SIZE OF COARSE AGGREGATE.
- (d) DIA OF NEEDLE OF VIBRATOR NEEDLE.

5.6.3.1.2 MINIMUM VERTICAL SPACING FOR ALL GRADES OF STEEL REINFORCEMENT SHALL BE THE GREATEST OF THE FOLLOWING :

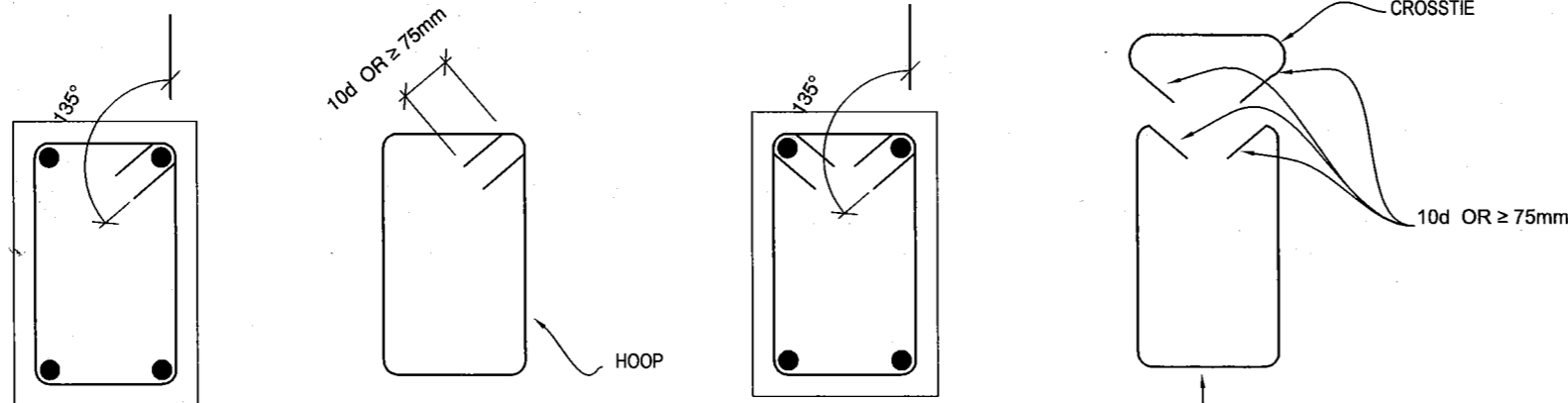
- (a) DIA OF BAR WHEN EQUAL DIA BARS ARE USED.
- (b) DIA OF LARGER BAR WHEN UNEQUAL DIA BARS ARE USED.
- (b) 2/3 OF MAX SIZE OF AGGREGATE.
- (d) 15 MM.

5.6.3.2 SHEAR REINFORCEMENT

5.6.3.2.1 MAX SPACING OF STIRRUPS OVER A LENGTH OF 2d AT EITHER END OF A BEAM SHALL NOT EXCEED d/4 OR 8 X DIA OF SMALLEST LONGITUDINAL BAR WHICHEVER IS LESS. d IS EFFECTIVE DEPTH OF THE BEAM.

5.6.3.2.2 FOR THE PORTION OF THE BEAM OTHER THAN AS SPECIFIED IN 5.6.3.2.1 ABOVE THE MAX SPACING OF SHEAR REINFORCEMENT MEASURED ALONG THE AXIS OF THE MEMBER SHALL NOT EXCEED 0.75 d FOR VERTICAL STIRRUPS AND d FOR INCLINED STIRRUPS AT CONSIDERATION. IN NO CASE SHALL THE SPACING EXCEED 300 MM.

5.6.3.2.3 STIRRUPS IN BEAMS SHALL BE BENT TO AN ANGLE OF 135°. LINKS SHALL HAVE STANDARD HOOKS AT BOTH ENDS AND PLACED SUCH THAT HOOK PASSES OVER THE STIRRUPS / LATERAL TIES TO ENGAGE IT WITH LONG BAR AS SHOWN BELOW IN SKETCH No- 4. THIS IS APPLICABLE FOR BOTH MS / CTD BARS. STIRRUPS/ LATERAL TIES SHALL BE PROVIDED TO ALL BEAMS AND COLUMNS AS INDICATED IN STRUCTURAL DRAWINGS.



BEAM WEB REINFORCEMENT
SKETCH NO -4

5.6.3.2.4 IN BEAM STIRRUPS/ LINK NEAREST TO THE SUPPORT SHALL NOT BE MORE THAN 50 MM AWAY FROM SUPPORT. IN CASE OF COLUMNS LATERAL TIE/LINK NEAREST TO FLOOR OR SOFFIT OF BEAM SHALL NOT BE MORE THAN 50 MM AWAY FROM THE FLOOR OR SOFFIT OF THE BEAM.

NOTES FOR RCC STRUCTURE

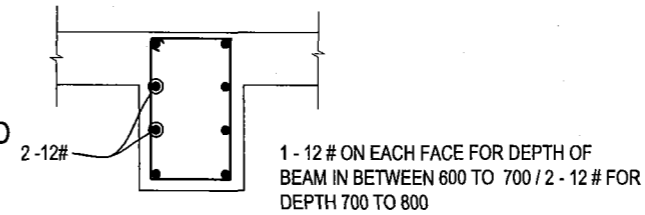
DATE	31 MAR 2016	CHIEF ENGINEER	SHT NO
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5.6.3.3 SIDE FACE REINFORCEMENT

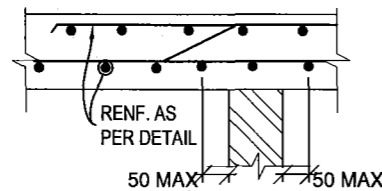
5.6.3.3.1 WHERE THE DEPTH OF THE WEB IN A BEAM EXCEEDS 600MM, SIDE FACE REINFORCEMENT SHALL BE PROVIDED ALONG THE TWO FACES. THE SIDE FACE REINFORCEMENT SHALL BE PROVIDED AS GIVEN IN SKETCH NO-5.



SKETCH NO - 5

5.6.4 SLABS

5.6.4.1 BARS SHALL BE SUCH LAID THAT THE BAR NEAREST TO SUPPORT IS NOT AWAY MORE THAN 50 MM FROM IT AS SHOWN IN SKETCH No-6 BELOW.

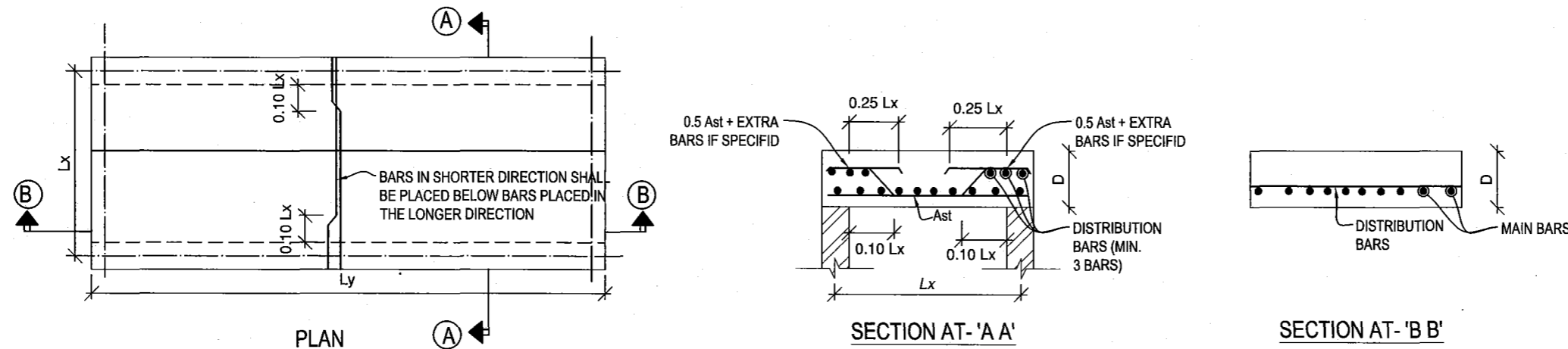


SKETCH NO- 6

5.6.4.2 (a) THE HORIZONTAL DISTANCE BETWEEN PARALLEL MAIN REINFORCEMENT BARS SHALL NOT BE MORE THAN THREE TIMES THE EFFECTIVE DEPTH OF SOLID SLAB OR 300MM WHICHEVER IS SMALLER.

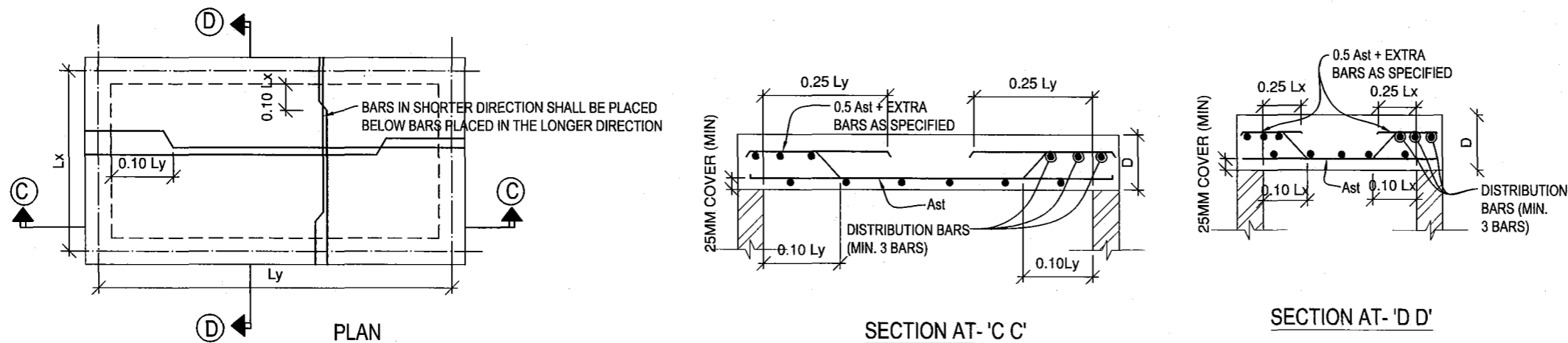
(b) THE HORIZONTAL DISTANCE BETWEEN PARALLEL REINFORCEMENT BARS PROVIDED AGAINST SHRINKAGE AND TEMPERATURE (DIST STEEL) SHALL NOT BE MORE THAN FIVE TIMES THE EFFECTIVE DEPTH OF SOLID SLAB OR 400 MM WHICHEVER IS SMALLER.

5.6.4.3 PLAN SHOWING ARRANGEMENT OF REINFORCEMENT IN A ONE WAY SLAB (SIMPLY SUPPORTED) IS SHOWN IN SKETCH No-7.



TYPICAL DETAILS OF A SLAB SPANNING IN ONE DIRECTIONS
SKETCH NO- 7

5.6.4.4 ARRANGEMENT OF REINFORCEMENT IN TWO WAY SLAB (SIMPLY SUPPORTED) IS SHOWN IN SKETCH No-8.



TYPICAL DETAILS OF A SLAB SPANNING IN TWO DIRECTIONS
SKETCH NO-8

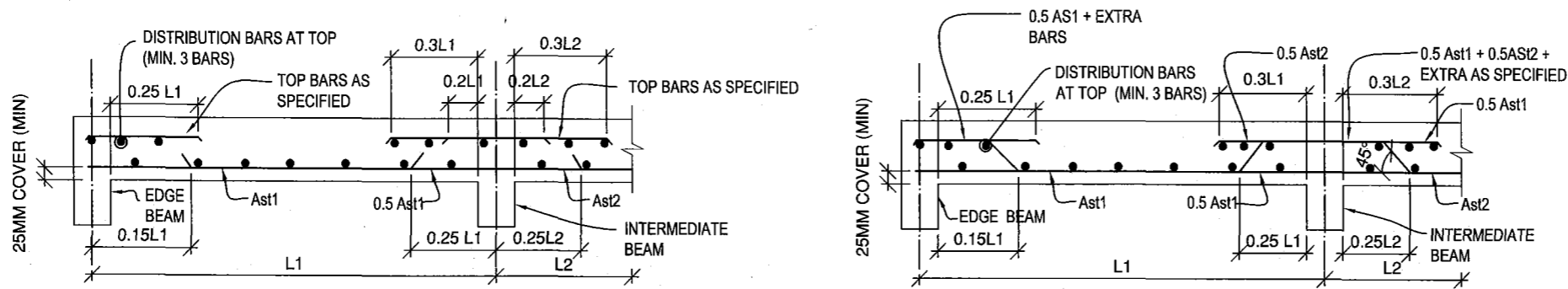
NOTES FOR RCC STRUCTURE

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DRN	SUB GAIKWAD J M		7
TCD			29
CKD	U S SHARMA		
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5.6.4.5 ARRANGEMENT OF REINFORCEMENT IN CONTINUOUS SLAB IS SHOWN IN SKETCH No-9.



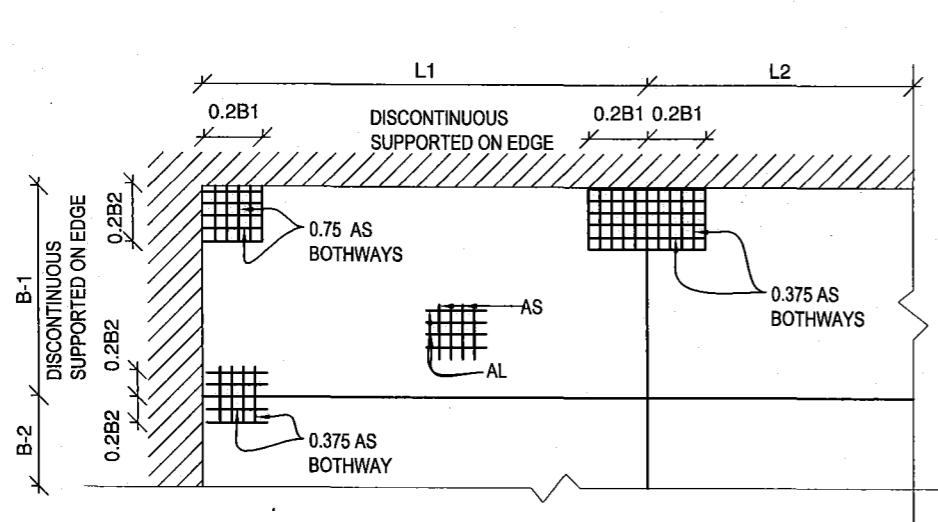
B- USING STRAIGHT BARS

A- USING BENT UP BARS

SIMPLIFIED RULES FOR CURTAILMENT OF BARS- SECTION THROUGH MIDDLE STRIP

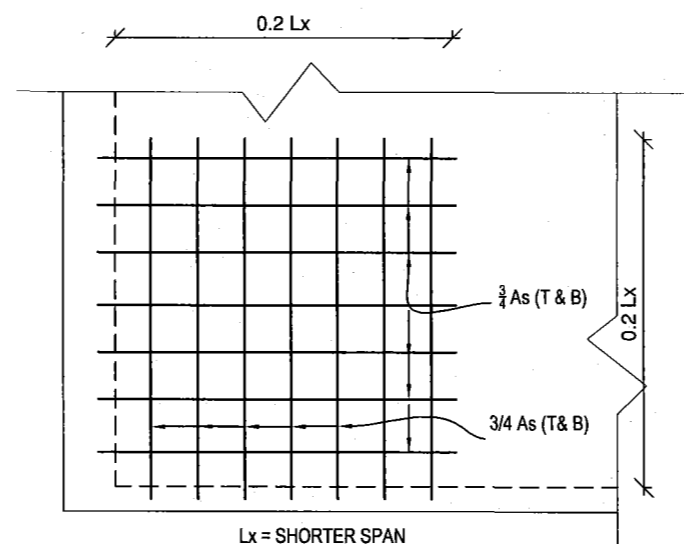
SKETCH NO- 9

5.6.4.6 DETAILS OF TORSION REINFORCEMENT IN SLAB AS SHOWN IN SKETCH No 10,11 & 12 SHALL BE PROVIDED AS APPLICABLE.



DETAIL OF TORSION REINFORCEMENT IN SLAB

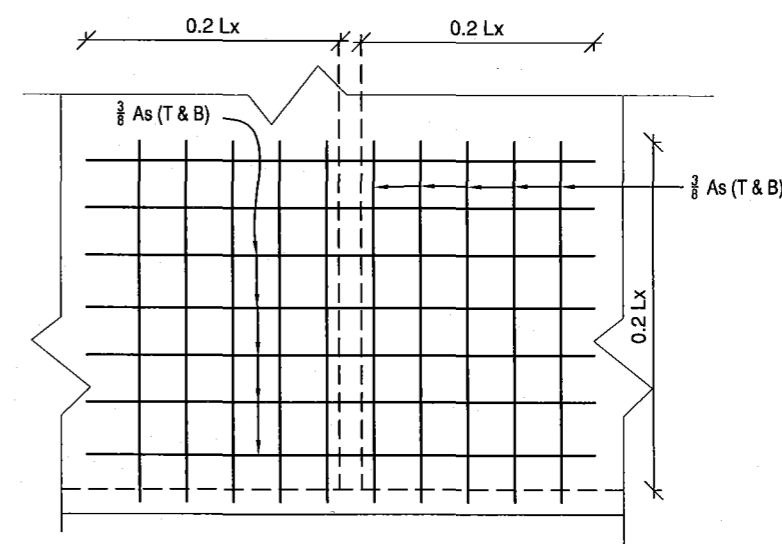
SKETCH NO- 10



CORNER WITH TWO DISCONTINUOUS ENDS

SKETCH NO-11

TORSIONAL REINFORCEMENT IN SLAB



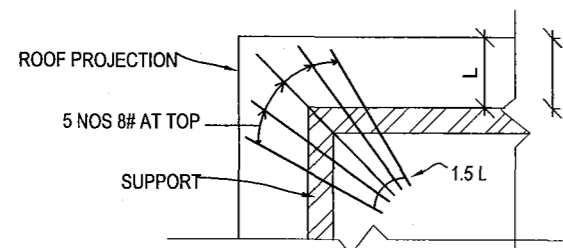
CORNER WITH ONE DISCONTINUOUS END

SKETCH NO-12

5.6.4.7 PLAN SHOWING ARRANGEMENTS OF REINFORCEMENT AT CORNERS HAVING ROOF PROJECTION IS SHOWN IN SKETCH No 13.

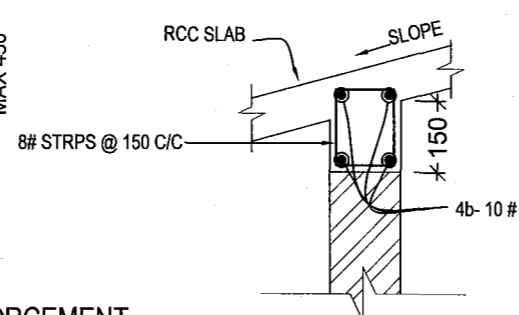
5.6.4.8 RCC SLABS HAVING SLOPE 1:20 OR STEEPER WILL BE PROVIDED WITH RCC ROOF BAND ON ALL WALLS AS SHOWN IN SKETCH No 14 , TO ENSURE HORIZONTAL SEATING ON WALLS AND SUPPORTS. THE ROOF BAND SHALL NOT BE PROVIDED IN LOCATIONS WHERE ROOF BEAMS HAVE BEEN PROVIDED IN THE STRUCTURAL PLANS.

5.6.4.9 EXTRA REINFORCEMENT SHALL BE PROVIDED AT RIDGES OF RCC SLAB AS SHOWN IN SKETCH No.15, IN CASE OF SLOPE MORE THAN 1:20.



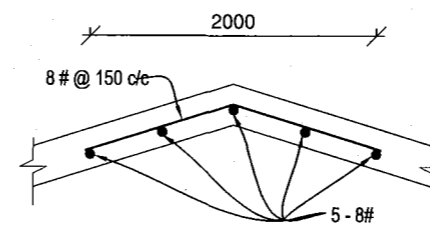
PLAN SHOWING ARRANGEMENT OF REINFORCEMENT AT CORNERS HAVING ROOF PROJECTION

SKETCH NO- 13



ROOF BAND

SKETCH NO - 14



RIDGE

SKETCH NO - 15

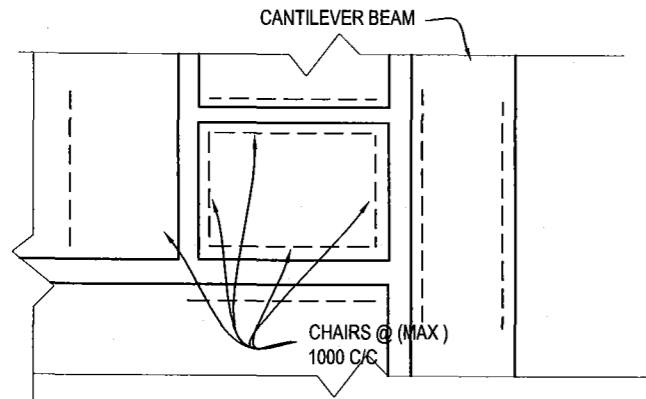
NOTES FOR RCC STRUCTURE

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DRN	SUB GAIKWAD J M		
TCD		JODHPUR	29
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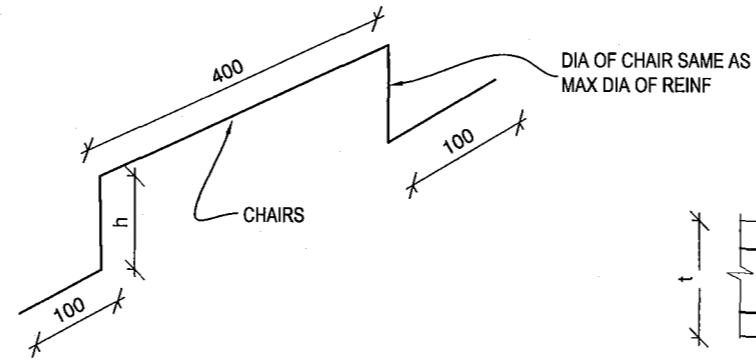
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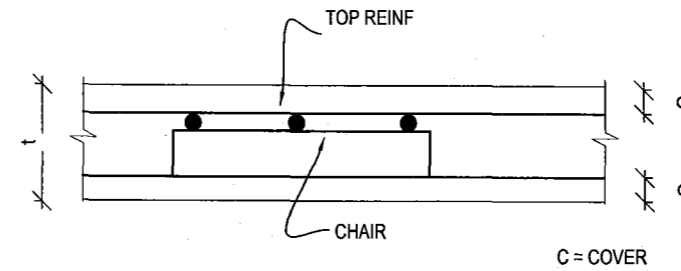
5.6.4.10 CHAIRS AS SHOWN IN THE GIVEN SKETCH 16 (a) TO 16 (c) SHALL BE USED TO SUPPORT TOP REINFORCEMENT IN SLAB/FOOTING .



DETAILS OF CHAIRS IN RCC SLAB
SKETCH NO-16 (a)



ISOMETRIC VIEW OF CHAIR
SKETCH NO-16(b)



ELEVATION
SKETCH NO-16 (c)

5.7 NOMINAL COVER TO REINFORCEMENT

5.7.1 MINIMUM VALUES FOR THE NOMINAL COVER SHALL BE AS GIVEN IN TABLE - 3 BELOW :

TABLE- 3

SL NO	STRUCTURAL MEMBERS	NOMINAL COVER IN MM NOT LESS THAN
1	SLAB / FIN / PARAPET/ CHAJJA / DROP/ WALL	25
2	BEAM / LINTEL	30
3	COLUMN	40
4	FOOTING / FOUNDATION	50
5	PILES/ PILE CAPS	65

5.7.2 THE NOMINAL COVER, SPECIFIED AT 5.7.1 IS DESIGN DEPTH OF CONCRETE COVER TO ALL STEEL REINFORCEMENTS INCLUDING LINKS.

5.7.3 MAXIMUM DEVIATION IN COVER SHOULD BE +10 MM -0 MM.

6. CONCRETE

6.1. GENERAL

6.1.1 QUALITY ASSURANCE MEASURES IN PRODUCTION OF CONCRETE SHALL BE TAKEN ALL AS SPECIFIED IN CLAUSE 10.1 OF IS 456.

6.1.2 FOR ALL CONCRETE, THE CONCRETE USED SHALL BE OF DESIGN MIX CONCRETE AS PER IS 456.

6.1.3 DESIGN OF MIX SHALL BE DONE AS PER SP-23 (S & T) OF BIS.

6.1.4 FREQUENCY OF SAMPLING OF CONCRETE AND ITS ACCEPTANCE CRITERIA SHALL BE AS PER CLAUSES 15 AND 16 OF IS 456 RESPECTIVELY.

6.1.5 HAND MIXING OF CONCRETE IS NOT ALLOWED. CONCRETE FOR ALL RCC WORKS SHALL BE MIXED IN A MECHANICAL MIXER. THE MIXING PROCEDURE SPECIFIED IN CA SHALL BE FOLLOWED.

6.1.6 DURING HOT OR COLD WEATHER, THE CONCRETING SHALL BE DONE AS PER THE PROCEDURE SET OUT IN IS 7861 (PART 1) & IS 7861 (PART 1) RESPECTIVELY.

6.1.7 GRADES OF CONCRETE SHALL BE IN ACCORDANCE WITH CLAUSE 6.1 OF IS 456.

NOTES FOR RCC STRUCTURE

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6.2 DURABILITY

- 6.2.1 STRUCTURAL DESIGNS ARE BASED ON EXPOSURE CONDITIONS AS MENTIONED IN TABLE -3 OF IS 456. IF THERE IS ANY VARIATION, THE SAME SHALL BE BROUGHT TO THE NOTICE OF THE DESIGNER.
- 6.2.2 MINIMUM CEMENT CONTENT, MAXIMUM FREE W/C RATION AND MINIMUM GRADE OF CONCRETE FROM DURABILITY CONSIDERATIONS SHALL BE ENSURED AS PER CLAUSE 8.0 (TABLE-5) OF IS 456. IN CASE SUB SOIL IS FOUND TO BE HAVING SULPHATE CONTENTS, THE SELECTION OF CEMENT, MINIMUM CEMENT CONTENT AND MAXIMUM FREE WATER CEMENT RATIO WILL BE MADE BASED ON TABLE-4 AND CLAUSE 8.2.2.4 OF IS 456.
- 6.2.3 MAXIMUM CEMENT CONTENT NOT INCLUDING FLY ASH AND GROUND GRANULATED BLAST FURNACE SLAG IN EXCESS OF 450Kg/cum SHOULD NOT BE USED UNLESS SPECIAL CONSIDERATION HAS BEEN GIVEN IN DESIGN TO THE INCREASED RISK OF CRACKING DUE TO DRYING SHRINKAGE IN THIN SECTIONS OR TO EARLY THERMAL CRACKING AND TO THE INCREASED RISK OF DAMAGE DUE TO ALKALI SILICA REACTIONS.
- 6.2.4 IN REINFORCED CONCRETE STRUCTURES CARE SHALL BE TAKEN TO PROTECT THE REINFORCEMENT FROM EXPOSURE TO SALINE ATMOSPHERE DURING STORAGE, FABRICATION AND USE. IT MAY BE ACHIEVED BY TREATING THE SURFACE OF REINFORCEMENT WITH CEMENT WASH OR BY OTHER SUITABLE METHODS.
- 6.2.5 OTHER REQUIREMENTS FOR DURABILITY SHALL BE ENSURED IN ACCORDANCE WITH CLAUSE 8.2 OF IS 456.

6.3 FORM WORK

- 6.3.1 THE FORM WORK SHALL BE DESIGNED AND CONSTRUCTED SO AS TO HAVE SUFFICIENT STRENGTH AND REMAIN SUFFICIENTLY RIGID DURING PLACING AND COMPACTION OF CONCRETE AND SHALL BE SUCH AS TO PREVENT LOSS OF SLURRY FROM THE CONCRETE. FOR TYPICAL STRUCTURES AND LONG SPAN IT SHALL BE DESIGNED AS PER IS 14687.
- 6.3.2 ONLY STEEL PROPS SHALL BE USED FOR SUPPORTING THE FORM WORK. SPECIAL CARE SHALL BE TAKEN TO ENSURE THAT JOINTS IN PROPS ARE ADEQUATELY STRONG AND STIFF. THE PROPS SUPPORTING THE FORM WORK SHALL BE BRACED TRANSVERSELY IN BOTH DIRECTIONS AT SUITABLE INTERVALS TO PREVENT FAILURE BY BUCKLING.
- 6.3.3 DEVIATIONS IN DIMENSIONS SHALL BE AS PER CLAUSE 11.1 OF IS 456.
- 6.3.4 OTHER REQUIREMENTS GIVEN IN CLAUSE 11.2 OF IS 456 SHALL BE MET.

6.4 PLACING AND COMPACTION

6.4.1 PLACING

- 6.4 .1.1 THE SCHEME OF CONCRETE PLACING SHALL BE AS PER CLAUSE 13.2 OF IS 456 AND WILL BE APPROVED BY THE GE. IT SHALL BE ENSURED THAT DURING CONCRETING THERE IS NO SEGREGATION OF ITS CONSTITUENTS.
- 6.4 .1.2 AS FAR AS POSSIBLE ALL CONCRETING SHALL BE DONE IN ONE OPERATION UP TO THE PREDECIDED STAGE AS PER CLAUSE 13.4 OF IS 456. CONCRETE ONCE PLACED AND COMPACTED SHALL NOT BE DISTURBED OR REMOULDED. .
- 6.4 .1.3 INCASE OF BEAMS, CONCRETE SHALL BE PLACED STARTING FROM SUPPORTS AND CONTINUED TOWARDS MID SPAN.
- 6.4 .1.4 INCASE OF CANTILEVERS, CONCRETE SHALL BE PLACED STARTING AT THE FIXED END, MOVING TOWARDS FREE END.
- 6.4 .1.5 ANY PIPE, DUCT OR ANY OTHER FIXTURE TO BE FIXED OR TAKEN THROUGH A RCC/PCC MEMBER SHALL BE INITIALLY PLACED IN POSITION BEFORE CONCRETING. CONCRETE ONCE CAST AND HARDENED SHALL NOT BE BROKEN/DAMAGED/ DISTURED/ REMOULDED TO PROVIDE OPENEINGS FOR PIPES OR OTHER FIXTURES ETC.
- 6.4 .1.6 INCASE ADJOINING MEMBER IS HAVING DIFFERENT GRADE OF CONCRETE, THE RICHER CONCRETE SHALL BE PLACED AND COMPACTED FIRST BY CONTAINING THE CONCRETE WITH THE HELP OF STOP BOARDS.

6.4.2 COMPACTION

- 6.4.2.1 ALL CONCRETE FOR RCC WORK SHALL BE COMPACTED USING APPROPRIATE TYPE OF VIBRATORS SO AS TO ACHIEVE DENSE AND COMPACT CONCRETE AROUND REINFORCEMENT, ANY EMBEDDED FIXTURE AND TO THE SIDE OF FORM WORK.
- 6.4.2.2 OVER VIBRATION MAY LEAD TO SEGREGATION OF CONCRETE AND SHOULD BE AVOIDED WHERE AS UNDER VIBRATION MAY NOT GIVE THE NECESSARY COMPACTION. PROPER VIBRATION TO ACHIEVE A DENSE AND VOID FREE CONCRETE SHALL BE ENSURED.

NOTES FOR RCC STRUCTURE

DATE	31 MAR 2016	CHIEF ENGINEER JODHPUR ZONE JODHPUR	SHT NO
DRN	SUB GAIKWAD J M		10
TCD			29
CKD	U S SHARMA		
SCALE		REF DRG NO. - CEJZ/STR/STD/08/2016	


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6.5 WORKABILITY

- 6.5.1 THE CONCRETE MIX PROPORTIONS CHOSEN SHOULD BE SUCH THAT THE CONCRETE IS OF ADEQUATE WORKABILITY FOR THE PLACING CONDITIONS OF THE CONCRETE AND CAN PROPERLY BE COMPACTED WITH THE MEANS AVAILABLE. SUGGESTED RANGES OF WORKABILITY OF CONCRETE MEASURED IN ACCORDANCE WITH IS 1199 ARE GIVEN BELOW IN TABLE - 4

TABLE- 4

SL NO	STRUCTURAL MEMBERS	SLUMP
1	SLAB (INCLUDING CHAJJA), BEAMS(INCLUDING LINTELS), COLUMNS, PEDESTALS AND RETAINING WALLS (LIGHTLY REINFORCED SECTIONS)	25 - 75
2	- DO - (HEAVILY REINFORCED SECTIONS)	50 - 100
3	IN - SITU PILING AND TRENCH FILL.	100 - 150
4	TREMIE CONCRETE	AS PER IS 9103

NOTE :- STATUS OF REINFORCEMENT AS LIGHT/HEAVY AND THE FLOW OF CONCRETE AS PER I.S- 9103 SHALL BE DECIDED BY GE AS PER SITE REQUIREMENTS.

6.6 CURING

- 6.6.1 EXPOSED SURFACES OF CONCRETE SHALL BE CURED ADEQUATELY IN ACCORDANCE WITH CLAUSE 13.5.1 OF IS 456.
- 6.6.2 **MEMBRANE CURING :-** MEMBRANE CURING WILL BE RESORTED TO IN THE WORST CONDITION OF NON-AVAILABILITY OF WATER. APPROVED CURING COMPOUNDS MAY BE USED IN LIEU OF MOIST CURING WITH THE PERMISSION OF THE GARRISON ENGINEER. SUCH COMPOUNDS SHALL BE APPLIED TO ALL EXPOSED SURFACES OF THE CONCRETE AS SOON AS POSSIBLE AFTER THE CONCRETE HAS SET. IMPERMEABLE MEMBRANES SUCH AS POLYETHYLENE SHEETING COVERING CLOSELY THE CONCRETE SURFACE MAY ALSO BE USED TO PROVIDE EFFECTIVE BARRIER AGAINST EVAPORATION.REQUIREMENT OF MEMBRANE CURING OR ANY OTHER SPECIAL CURING, WHEREVER REQUIRED SHALL BE SEPARATELY SPECIFIED.
- 6.6.3 **MOIST CURING :-** EXPOSED SURFACES OF CONCRETE SHALL BE KEPT CONTINUOUSLY IN A DAMP OR WET CONDITION BY PONDING OR BY COVERING WITH A LAYER OF CANVAS, HESSIAN OR SIMILAR MATERIALS AND KEPT CONSTANTLY WET FOR AT LEAST SEVEN DAYS FROM THE DATE OF PLACING CONCRETE, IN CASE OF ORDINARY PORTLAND CEMENT. AT LEAST 10 DAYS WHERE MINERAL ADMIXTURES OR BLENDED CEMENTS ARE USED. THE PERIOD OF CURING SHALL NOT BE LESS THAN 10 DAYS FOR CONCRETE EXPOSED TO DRY AND HOT WEATHER CONDITIONS. IN THE CASE OF CONCRETE WHERE BLENDED CEMENTS ARE USED, IT IS RECOMMENDED THAT ABOVE MINIMUM PERIODS MAY BE EXTENDED TO 14 DAYS.
- 6.6.4 FOR THE CONCRETE CONTAINING PORTLAND POZZOLANA CEMENT, PORTLAND SLAG CEMENT OR MINERAL ADMIXTURE, PERIOD OF CURING MAY BE INCREASED BY GE SUITABLY BASED ON COMPRESSIVE STRENGTH ACHIEVED BY 7 DAYS OBTAINED FROM SAMPLE CUBES.

7. PANEL WALLS

7.1 GENERAL

- 7.1.1 MASONRY PANEL WALLS SHALL BE CONSTRUCTED AS SPECIFIED IN CA AND ALL AS PER SSR UNLESS OTHERWISE MENTIONED IN TENDER DRAWINGS. THE MORTAR SHALL BE 1:6 FOR WALLS 200 MM THICK OR MORE AND 1:4 FOR <200 MM THICK WALLS.
- 7.1.2 THE VERTICAL FACE OF CONCRETE AT THE JUNCTION OF WALL AND RCC MEMBER SHALL BE RAKED TO GIVE A ROUGH SURFACE. CM (1:4) MORTAR AT THIS JUNCTION SHOULD BE APPLIED AS THE WORK PROCEEDS SO AS TO DEVELOP PROPER BOND BETWEEN WALL AND RCC MEMBER.
- 7.1.3 A GAP OF 10 MM SHALL BE LEFT BETWEEN THE SOFFIT OF RCC BEAMS/SLAB AND TOP OF PANEL WALL, WHICH WILL BE FILLED UP WITH LEAN MORTAR (1:8).


7.2 HALF BRICK WALLS

- 7.2.1 HALF BRICK THICK WALLS SHALL BE RAISED OFF THE SUB FLOOR IN GF AND OFF THE SLAB IN OTHER CASES.
- 7.2.2 HALF BRICK THICK WALLS SHALL HAVE TWO 8mm CTD BARS AT EVERY 4TH COURSE (i.e NOT EXCEED 350MM)

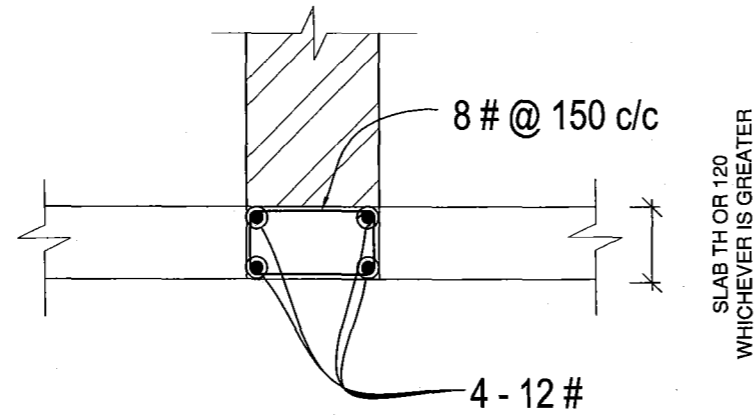
NOTES FOR RCC STRUCTURE

DATE	31 MAR 2016	CHIEF ENGINEER JODHPUR ZONE JODHPUR	SHT NO
DRN	SUB GAIKWAD J M		11
TCD			29
CKD	U S SHARMA		
SCALE		REF DRG NO. - CEJZ/STR/STD/08/2016	


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7.2.3 HALF BRICK WALLS IF PLACED DIRECTLY OVER RCC SLAB, HIDDEN BEAM SHALL BE PROVIDED IN THE SLAB AS SHOWN IN SKETCH No-17.



HIDDEN BEAM
SKETCH NO-17

8. RCC LINTELS, BANDS AND CHAJJAS

8.1 RCC LINTELS AS SHOWN IN SKETCH No -18 (a) & 18 (b) AND AS PER SCHEDULE SHOWN IN TABLE-5 WILL BE PROVIDED OVER ALL OPENING AS APPLICABLE, IF THE STRUCTURAL DESIGN OF THE SAME IS NOT PROVIDED IN WORKING DRGS OF THE PROJECT.

TABLE- 5

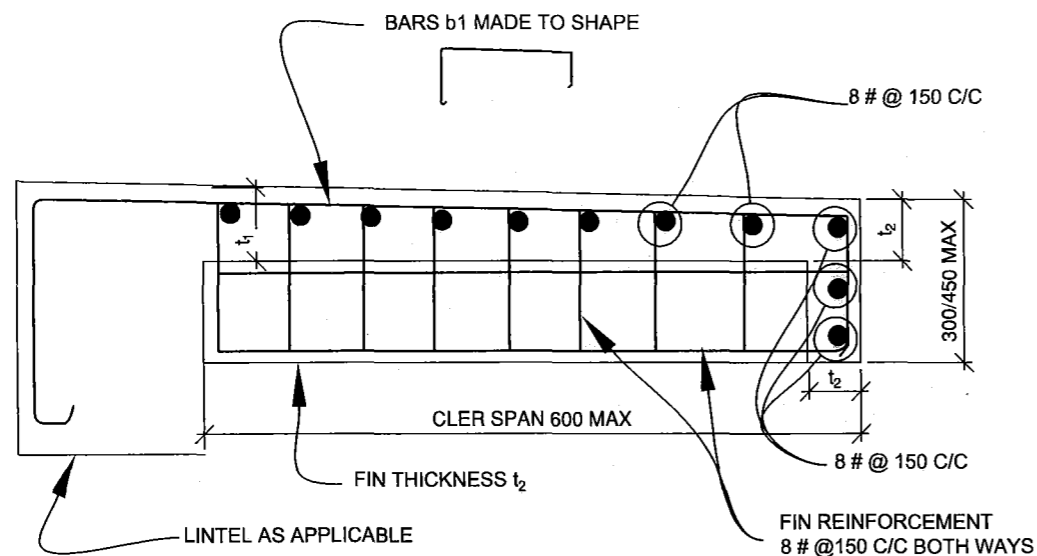
SCHEDULE OF RCC LINTELS										
SL NO	CLEAR SPAN	LINTEL NO	'b' BEARING IN MM	'd' DEPTH IN MM	'T' THICKNESS OF WALL IN MM	REINFORCEMENT (BOTTOM BARS)	TOP BARS		STIRRUPS	REMARKS
							THROUGH OUT	EXTRA AT SUPPORT		
1	UP TO 1000	LT-1	150	150	UP TO 300MM	2 - 12#	2 - 12 #	-	8 # @ 150 C/C	
2	UP TO 1000 WITH CHAJJA MAXM 600 WIDE AND FACIA & FIN MAXM 300 DEEP	LTC-1	150	200	UP TO 300MM	2 - 12#	2 - 12 #	-	8 # @ 100 C/C	THICKNESS $t_1=100, t_2=75$ b1 = 8 # @ 100 C/C b2 = 8 # @ 150 C/C
3	1001 TO 1500	LT-2	150	250	UP TO 300MM	3 - 12#	3 - 12 #	-	8 # @ 100 C/C	
4	1001 TO 1500 WITH CHAJJA MAXM 600 WIDE AND FACIA & FIN MAXM 300 DEEP	LTC-2	150	300	UP TO 300MM	3 - 12#	3 - 12 #	-	8 # @ 100 C/C	THICKNESS $t_1=100, t_2=75$ b1 = 8 # @ 100 C/C b2 = 8 # @ 150 C/C
5	1501 TO 2150	LT-3	200	300	UP TO 300MM	2 - 16#	2 - 16#	-	8 # @ 100 C/C	
6	1501 TO 2150 WITH CHAJJA MAXM 600 WIDE AND FACIA & FIN MAXM 450 DEEP	LTC-3	200	300	UP TO 300MM	3 - 16#	3 - 16#	-	8 # @ 100 C/C	THICKNESS $t_1=125, t_2=100$ b1 = 8 # @ 100 C/C b2 = 8 # @ 150 C/C
7	2151 TO 2600	LT-4	250	300	UP TO 300MM	2 - 20#	2 - 16#	1 - 16#	8 # @ 100 C/C	
8	2151 TO 2600 WITH CHAJJA MAXM 600 WIDE AND FACIA & FIN MAXM 450 DEEP	LTC-4	250	300	UP TO 300MM	3 - 20#	2- 20#	1 - 20#	8 # @ 100 C/C	THICKNESS $t_1=125, t_2=100$ b1 = 8 # @ 100 C/C b2 = 8 # @ 150 C/C
9	2601 TO 3000	LT-5	250	350	UP TO 300MM	3 - 20#	2 - 20#	1 - 20#	8 # @ 100 C/C	
10	2601 TO 3000 WITH CHAJJA MAXM 600 WIDE AND FACIA & FIN MAXM 450 DEEP	LTC-5	250	350	UP TO 300MM	4 - 20#	2 - 20#	2 - 20#	8 # @ 100 C/C	THICKNESS $t_1=125, t_2=100$ b1 = 8 # @ 100 C/C b2 = 8 # @ 150 C/C

NOTES FOR RCC STRUCTURE

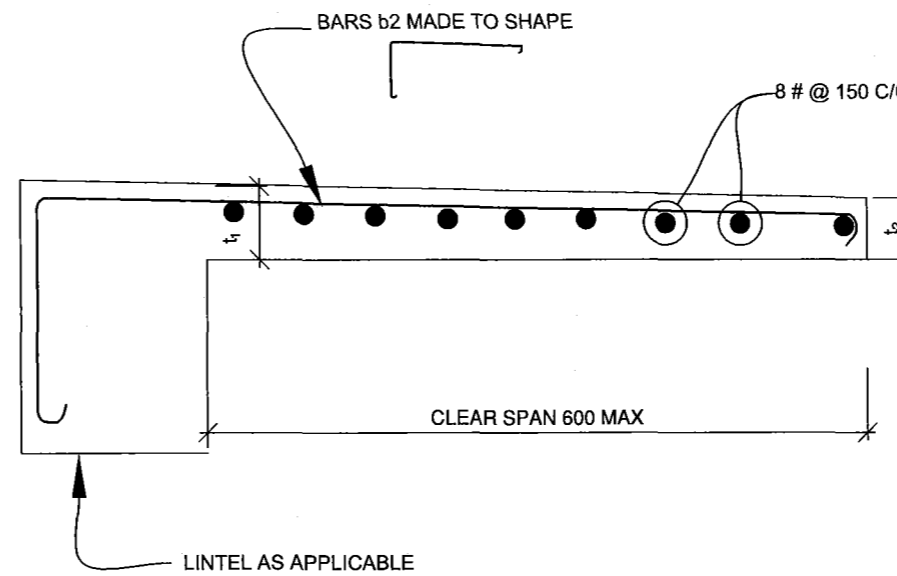
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DRN	SUB GAIKWAD J M		12
TCD			29
CKD	U S SHARMA		
SCALE		REF DRG NO. - CEJZ/STR/STD/08/2016	

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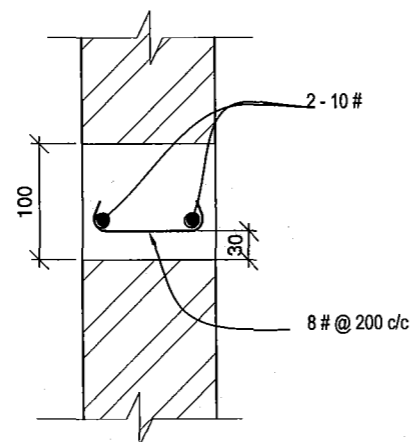
TYPICAL DETAIL OF LINTLE WITH
CHAJJA AND FACIA & FIN
SKETCH NO-18 (a)



TYPICAL DETAIL OF LINTLE WITH CHAJJA
SKETCH NO-18 (b)

NOTE - SAME DETAIL MAY BE APPLICABLE FOR LINTLE WITH CHAJJA & FACIA WITHOUT FIN

- 8.2. A CONTINUOUS RCC BAND AT LINTEL LEVEL AS SHOWN BELOW IN SKETCH NO -16 SHALL BE PROVIDED TO ALL WALLS WHEN A STRUCTURAL MEMBER HAS NOT BEEN PROVIDED AT LINTEL LEVEL.



RCC BAND
SKETCH NO-19

8.3 NON STRUCTURAL MEMBERS, CHAJJAS etc

- 8.3.1 MIX OF CONCRETE FOR ALL RCC WKS FOR NON STRUCTURAL MEMBERS LIKE CHAJJA, PROJECTIONS, CORNICES, RCC ARCHITECTURAL FACADES ETC SHALL BE SAME AS THAT FOR MAIN STRUCTURAL MEMBERS IN SUPER STRUCTURE AS PER IS 456.
- 8.3.2 UNLESS OTHERWISE SPECIFIED THE TOP OF CHAJJA MUST BE PROVIDED WITH 12 MM TH. PLASTER IN CM 1:4 WITH WATER PROOFING COMPOUND AS SPECIFIED. THIS PLASTERING SHALL BE DONE BEFORE THE CONCRETE FINALLY SET.
- 8.3.3 SHUTTERING OF CHAJJAS SHOULD NOT BE REMOVED UNLESS SUFFICIENT COUNTERWEIGHT FOR ANCHORAGE HAS DEVELOPED AT THE SUPPORT PORTION.
- 8.3.4 SHUTTERING OF CHAJJAS SHOULD BE REMOVED STARTING FROM THE FREE END TOWARDS THE FIXED SUPPORT.

NOTES FOR RCC STRUCTURE

DATE	31 MAR 2016	CHIEF ENGINEER JODHPUR ZONE JODHPUR	SHT NO
DRN	SUB GAIKWAD J M		13
TCD			29
CKD	U S SHARMA		
SCALE		REF DRG NO. - CEJZ/STR/STD/08/2016	

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9. JOINTS

9.1 CONSTRUCTION JOINTS

- 9.1.1 AS FAR AS POSSIBLE ALL CONCRETING SHALL BE DONE IN ONE OPERATION UPTO THE PRE DECIDED STAGE AS PER CLAUSE 13.4 OF IS 456 TO AVOID CONSTRUCTION JOINTS.
- 9.1.2 IF CONSTRUCTION JOINT IS NECESSARY, THE SAME SHALL BE MADE IN ACCORDANCE WITH THE REQUIREMENTS OF IS 11817.
- 9.1.3 CONSTRUCTION JOINTS IF TO BE PROVIDED IN FLOORS & ROOFS, SHALL BE LOCATED NEAR THE THE MIDDLE OF THE SPANS OF SLABS, BEAMS UNLESS SECONDARY BEAM INTERSECTS THE MAIN BEAM AT THE POINT. IN WHICH CASE THE JOINTS IN THE MAIN BEAMS SHALL BE OFF SET A DISTANCE EQUAL TO TWICE THE WIDTH OF THE BEAM. SPECIAL PRECAUTIONS MENTIONED IN CLAUSE 13.4 OF IS 456 SHALL HOWEVER BE TAKEN WHEN PROVIDING CONSTRUCTION JOINTS.

9.2 EXPANSION JOINTS

- 9.2.1 EXPANSION JOINTS SHALL BE PROVIDED IN ACCORDANCE WITH CLAUSE 27 OF IS 456 UNLESS OTHERWISE SPECIFIED IN STRUCTURAL DRG / CA.
- 9.2.2 DESIGN CONSIDERATIONS OF EXPANSION JOINTS SHALL BE IN ACCORDANCE WITH IS 3414.

9.3 DETAILS OF CRUMPLE JOINTS IN BUILDINGS

- 9.3.1 VARIOUS DETAILS OF CRUMPLE JOINTS IN BUILDINGS ARE GIVEN IN SKETCH No.20 (a) TO 20(gg) AND SHALL BE FOLLOWED AS REQUIRED.
- 9.3.2 THIS DRG INCORPORATES THE PROVISIONS OF IS 3413. ALL CRUMPLE JOINTS SHALL BE 50 MM WIDE.
- 9.3.3 METAL STRAP TO COVER THE CRUMPLE JOINT SHALL BE FIXED AT ONE SIDE WITH SLOTTED HOLE WITH SCREW AND ADJACENT SIDE WITH SUITABLE ROUND HOLE WITH SCREW AS SHOWN IN THE TYPICAL SECTION.
- 9.3.4 THE EXPANSION JOINTS IN WALLS, SLABS AND IN THE BUILDING SHALL BE PROVIDED AT THE POSITIONS INDICATED IN VARIOUS STRUCTURAL DRGS.
- 9.3.5 THE CRUMPLE JOINT PROVIDED IN THE BUILDING SHALL BE A COMPLETE BREAK RIGHT FROM GL TO THE ROOF INCLUDING THE CAPING OVER PARAPETS.
- 9.3.6 FOR CHAJJAS, BALCONIES AND PARAPETS IN A JOINT MUST BE PROVIDED AT 6 TO 12 M INTERVALS. THE EXPANSION JOINT SHALL HOWEVER NOT EXTEND INTO THE PORTION WHERE SUNSHADE IS EMBEDDED INTO MASONRY.
- 9.3.7 ONLY POLYURETHANE BASED JOINT FILLERS AND SEALANT SHALL BE USED.
- 9.3.8 SCREW USED IN SLOTTED HOLE IN EXPANSION JOINTS SHALL NOT PREVENT FREE MOVEMENT OF THE ALUMINIUM PLATE.

10. BED BLOCK

- 10.1 **PCC BED BOLCKS** :- RCC BEAMS RESTING ON WALLS SHALL BE PROVIDED WITH PCC M-15 BED BLOCK OF SIZE (WIDTH OF BEAM +300) X WALL TH X 150 TH. UNLESS OTHERWISE SPECIFIED. RCC BEAMS RESTING ON MASONRY PILLARS B X D SHALL BE PROVIDED WITH PCC M-15 BED BLOCK OF SIZE B X D X 150 TH. UNLESS THERWISE SPECIFIED.

11. LEVELING LAYER

THE BEARINGS OF SLOPING SLABS/BEAMS HAVING SLOPE <1 : 20 SHALL BE MADE HORIZONTAL BY PROVIDING A LEVELLING LAYER OF PCC M-15 OF AVERAGE TH OF 20 MM.

12. PAVEMENTS

- 12.1 THE PAVEMENTS WHETHER RIGID/ FLEXIBLE SHALL BE DESIGNED BASED ON SOIL & TRAFFIC DATA.


13. TYPICAL DETAILS

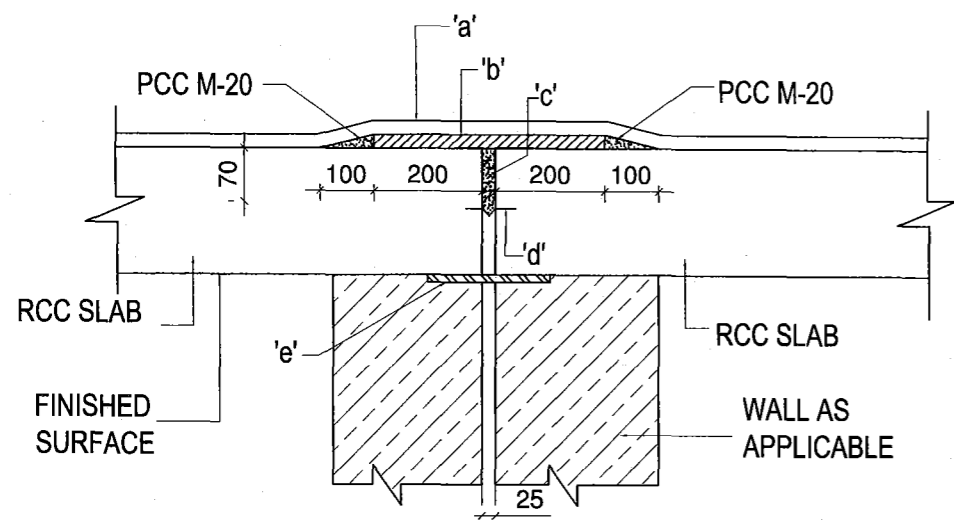
- 13.1 TYPICAL DETAILS OF CERTAIN COMMONLY USED STRUCTURAL/NON STRUCTURAL PARTS SHALL BE FOLLOWED AS PER SKETCHES.

NOTES FOR RCC STRUCTURE

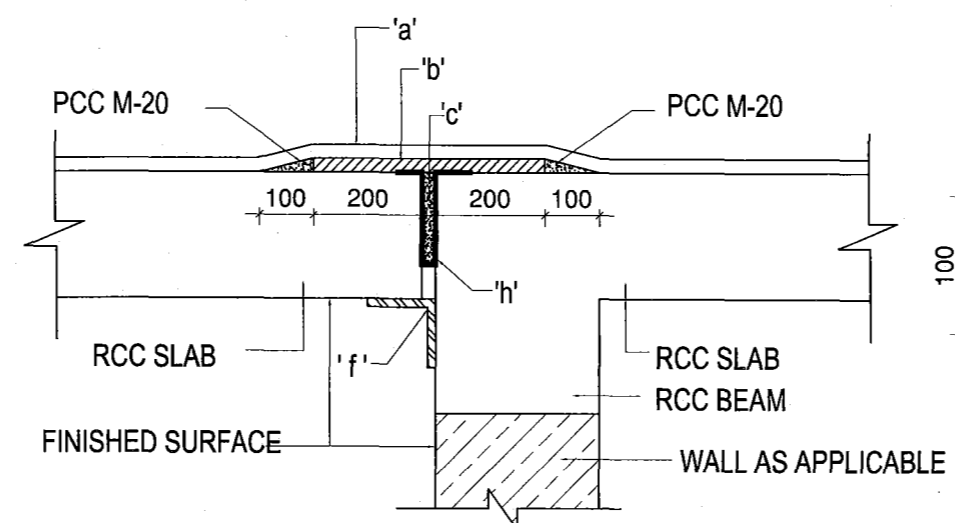
DATE	31 MAR 2016	CHIEF ENGINEER JODHPUR ZONE JODHPUR	SHT NO
DRN	SUB GAIKWAD J M		14
TCD			29
CKD	U S SHARMA		
SCALE		REF DRG NO. - CEJZ/STR/STD/08/2016	


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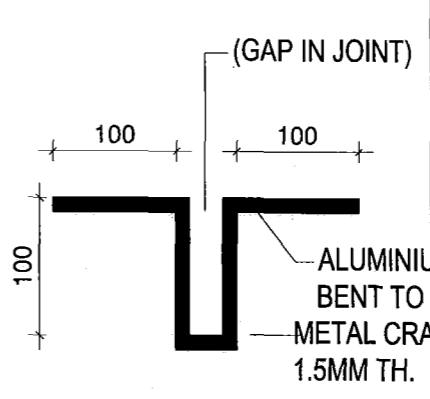

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SKETCH NO - 20(a)

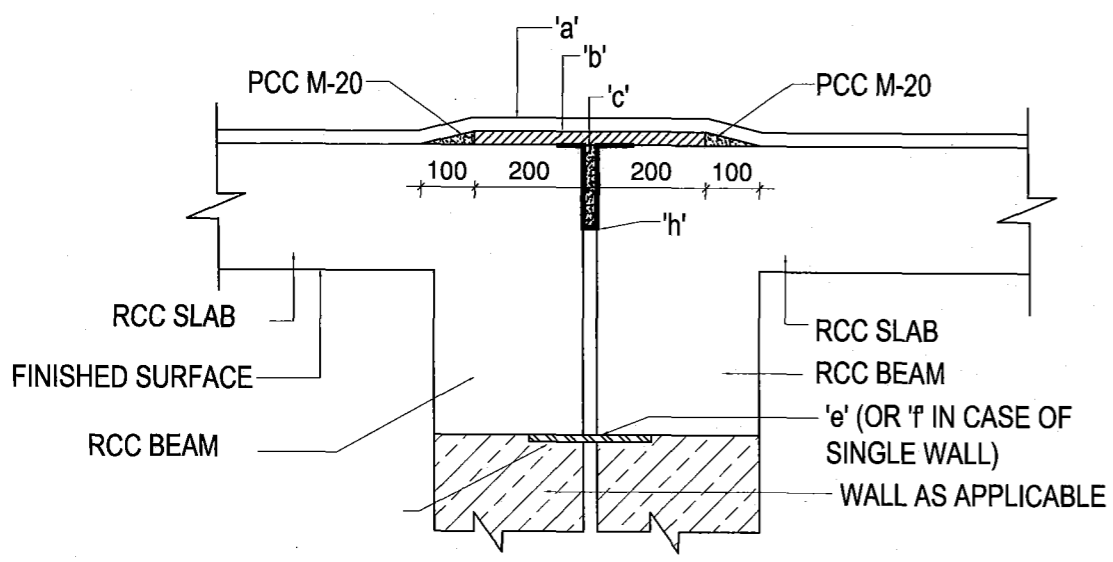


SKETCH NO - 20(b)

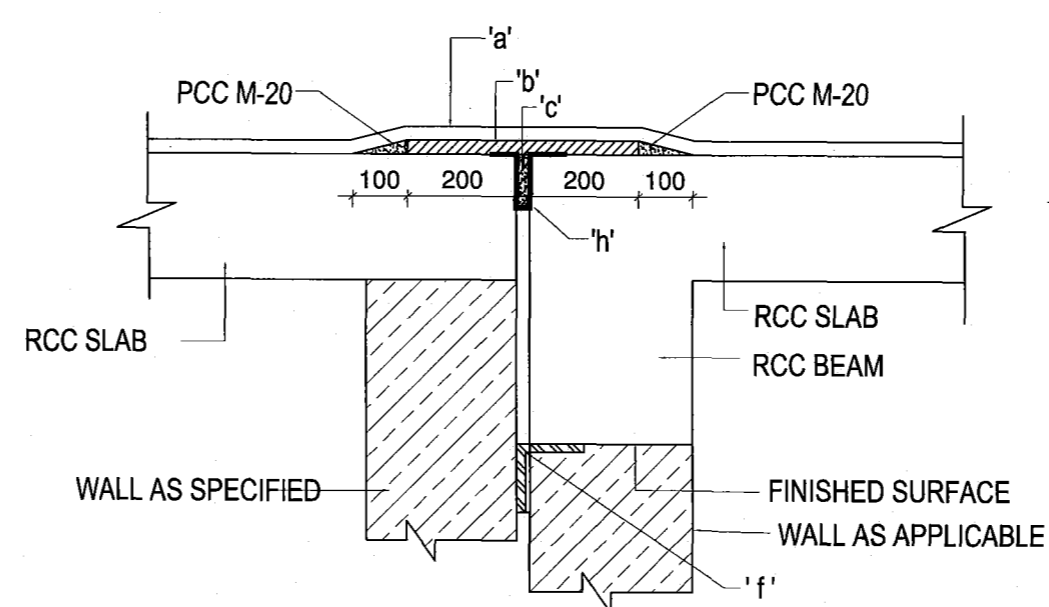


DETAIL OF METAL CRADLE
SKETCH NO - 20(C)

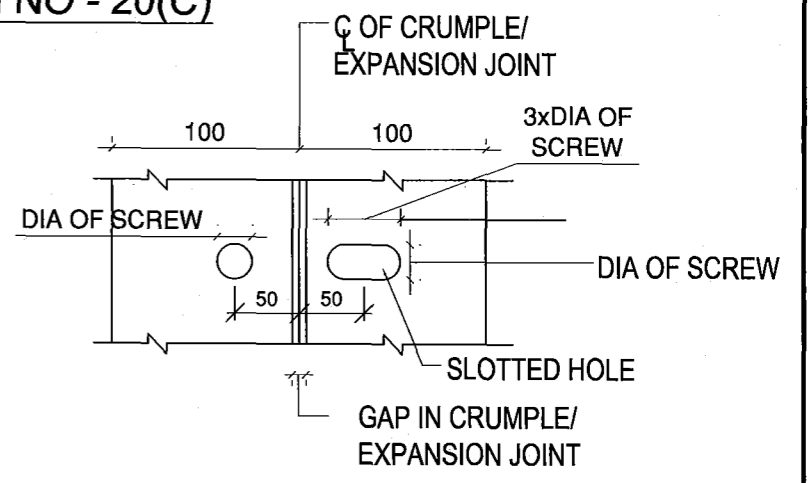
NOTES
1. WALL SHOWN IN DOTTED LINES SHALL BE PROVIDED IF REQUIRED OR SPECIFICALLY GIVEN IN ARCH DRGS.
NOTES CONTD IN SHEET NO. 16



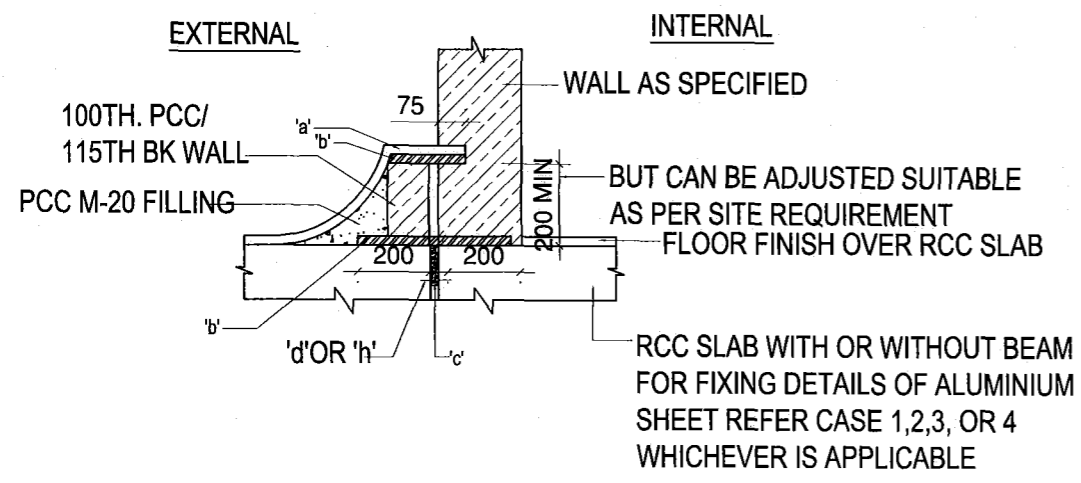
SKETCH NO - 20(d)



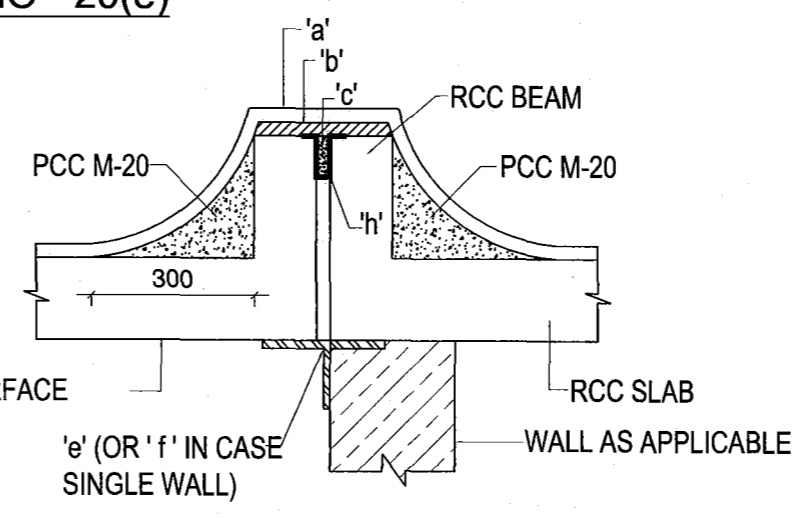
SKETCH NO - 20(e)



DETAILS OF ALUMINIUM STRIP FIXING
SKETCH NO - 20(f)



SKETCH NO - 20(g)



SKETCH NO - 20(h)

EXPANSION JOINT AT ROOF

NOTES FOR RCC STRUCTURE

EXPANSION JOINTS			
DATE	31 MAR 2016	CHIEF ENGINEER JODHPUR ZONE	SHT NO 15
DRN	SUB GAIKWAD J M		
TCD		JODHPUR	29
CKD	U S SHARMA		
SCALE		REF DRG NO. - CEJZ/STR/STD/08/2016	

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.....NOTES CONTD. FROM SHEET NO 15

- IN CASE, WALLS ARE TO BE PROVIDED ON EITHER SIDE OF CRUMPLE JOINT, NO ALUMINIUM SHEET WILL BE FIXED BELOW RCC BEAM/SLAB. HOWEVER WHEN WALL IS TO BE PROVIDED ON ONE SIDE OF JOINT, ALUMINIUM SHEET BENT IN 'L' SHALL BE PROVIDED.
- PCC M-15 IN LIEU OF TILES OF W.P.T. SHALL BE PROVIDED AS PER DIRECTION OF ENGINEER IN CHARGE ON ACCESSIBLE ROOF FOR CURVED PORTION WHERE LAYING OF TILES ARE NOT FEASIBLE.

- NOTATION 'a' 'b' 'c' 'd'.... IN DRG DENOTES SPECIFICATION AS UNDER:-

'a':- WATER PROOFING TREATMENT AS SPECIFIED

'b':- 50TH PRECAST RCC M-20 SLAB WITH XPM (WEIGHT MORE THAN 4 Kg/M²), 500 LONG.

'c':- PRE MOULDED BITUMINOUS FILLER

'd':- PVC WATER BAR, 6mm TH. 200mm WIDE.

'e':- ALUMINIUM SHEET 1.5mm THICK AND 200mm WIDE POWDER COATED WITH SAME COLOUR OF SIDE WALL ON EXTERNAL SIDE.

'f':- DITTO- BUT BENT IN 'L' SHAPE.

'g':- ONE ROW OF LOOSELY PLACED FLOOR TILES.

'h':- METAL CRADLE (AS PER DETAIL)

NOTES CONTD IN SHEET NO-17

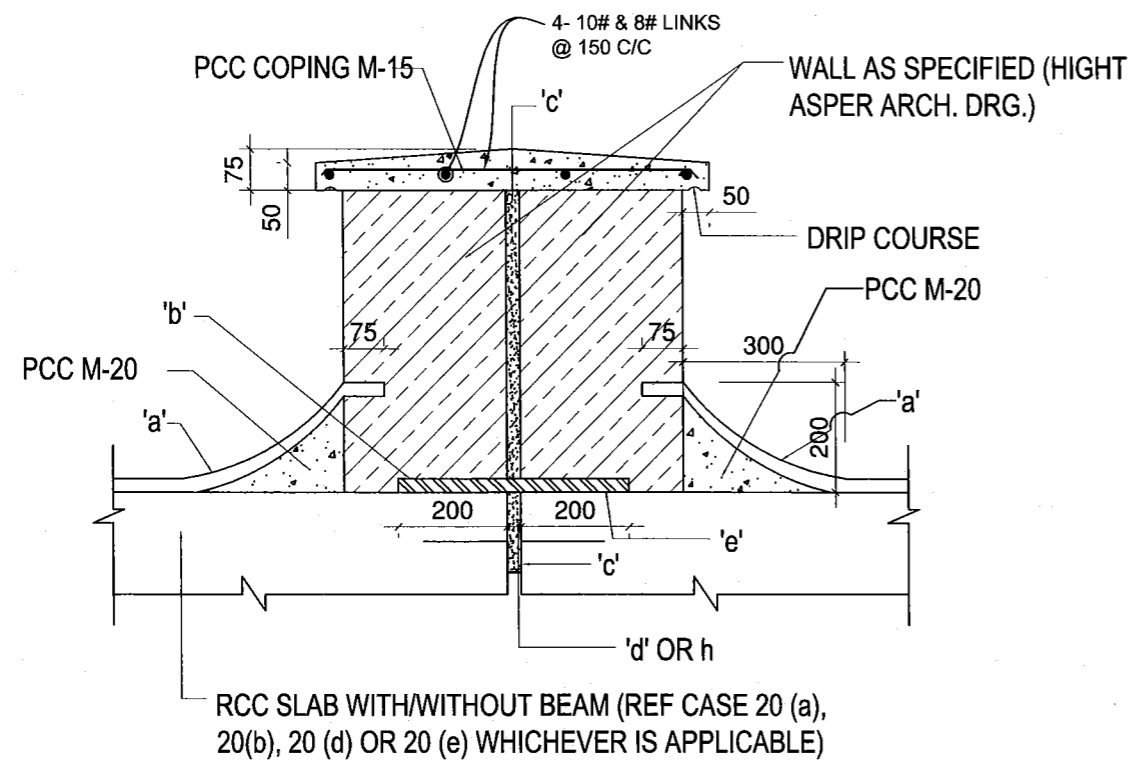
NOTES FOR RCC STRUCTURE

EXPANSION JOINTS

DATE	31 MAR 2016	CHIEF ENGINEER	SHT NO
DRN	SUB GAIKWAD J M		
TCD		JODHPUR	29
CKD	U S SHARMA	REF DRG NO. - CEJZ/STR/STD/08/2016	
SCALE			

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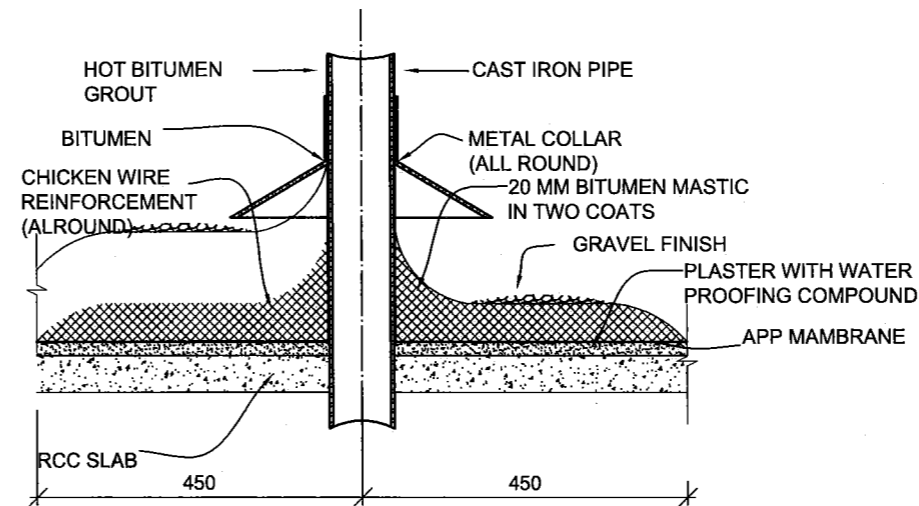
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RCC SLAB WITH/WITHOUT BEAM (REF CASE 20 (a), 20(b), 20 (d) OR 20 (e) WHICHEVER IS APPLICABLE)

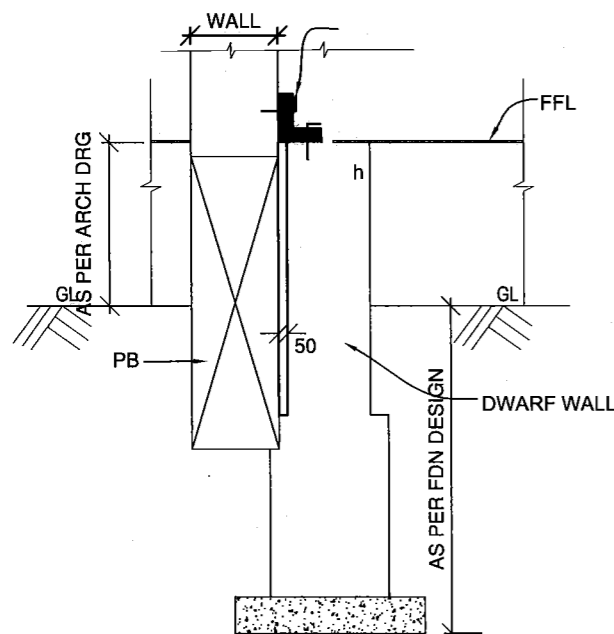
EXPANSION JOINT WITH PARAPET WALL

SKETCH NO - 20(i)



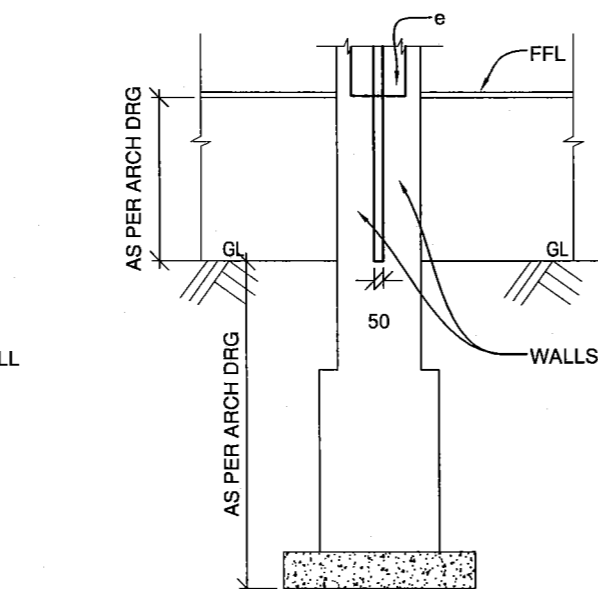
TREATMENT WHEN A PIPE PASSES THROUGH A ROOF SLAB

SKETCH NO - 20(j)



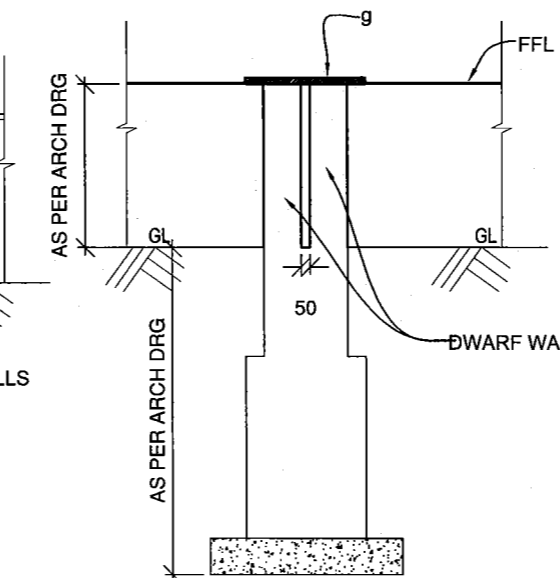
FOUNDATION AT CRUMPLE SECTION BETWEEN DWARF WALL & WALL

SKETCH NO - 20(k)



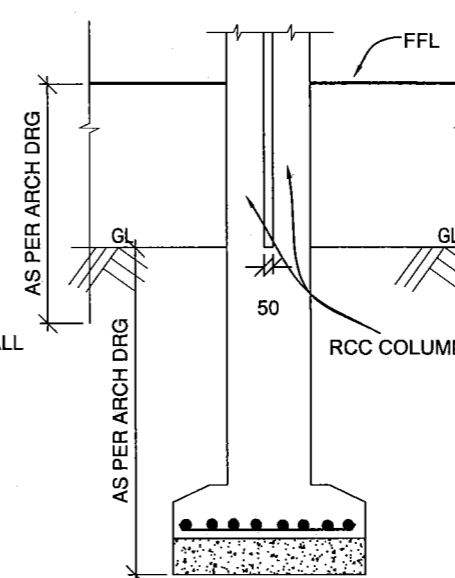
CRUMPLE SECTION BETWEEN DWARF WALLS

SKETCH NO - 20(l)



CRUMPLE SECTION BETWEEN DWARF WALLS

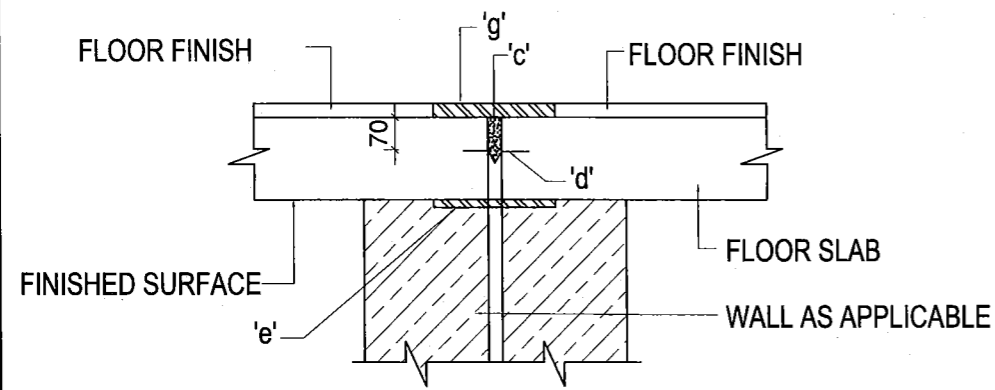
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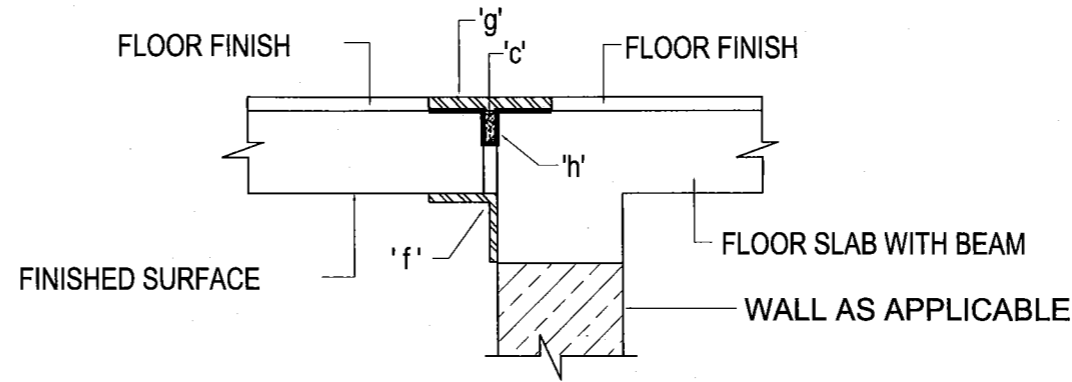
FOUNDATION AT CRUMPLE SECTION (COL TO COL)

SKETCH NO - 20(n)

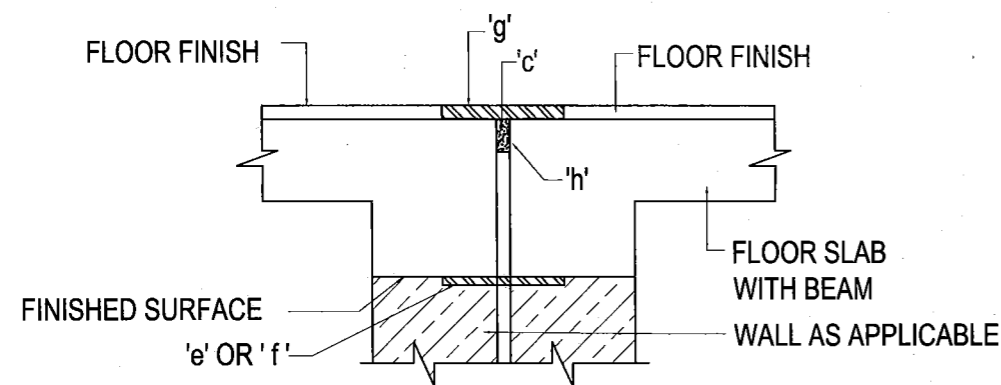
.....NOTES CONTD. FROM SHEET NO 16



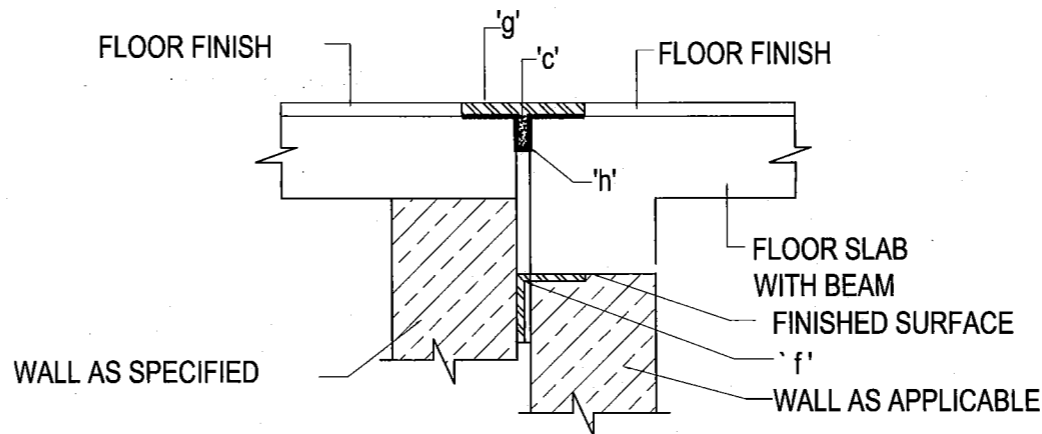
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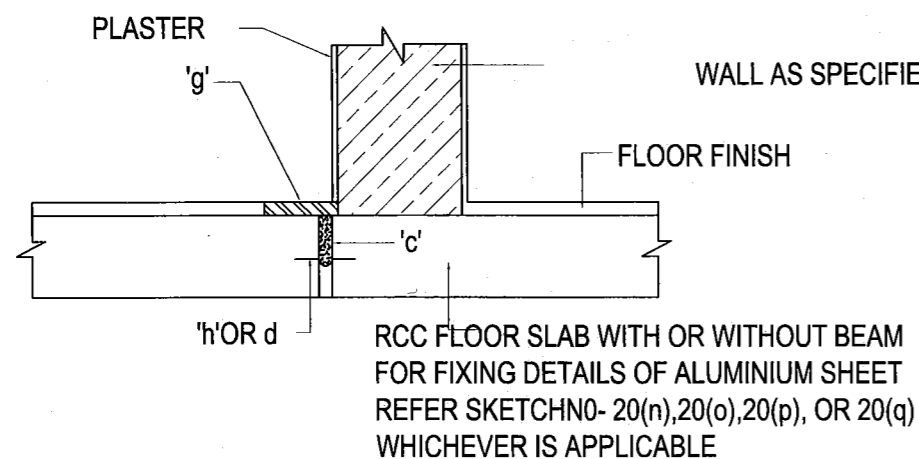
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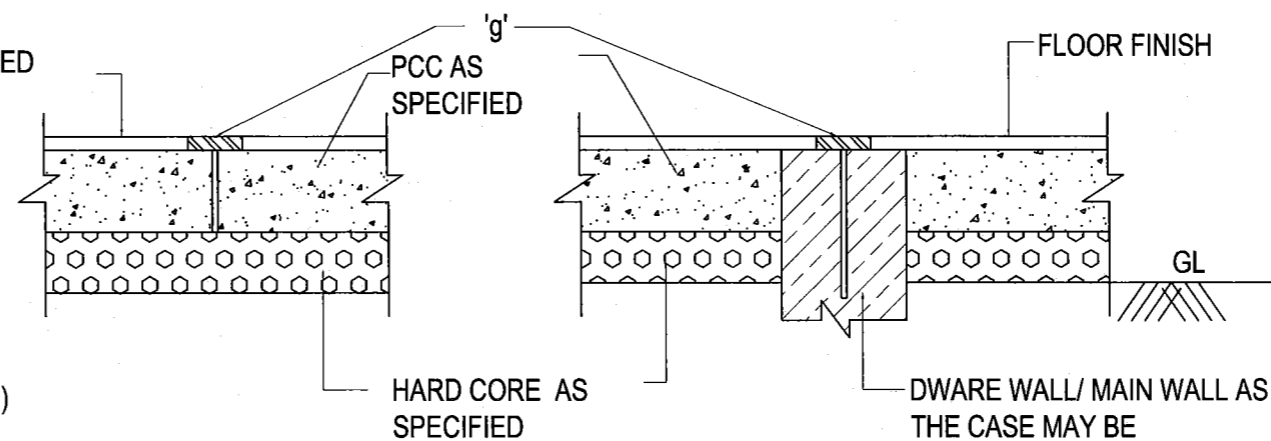
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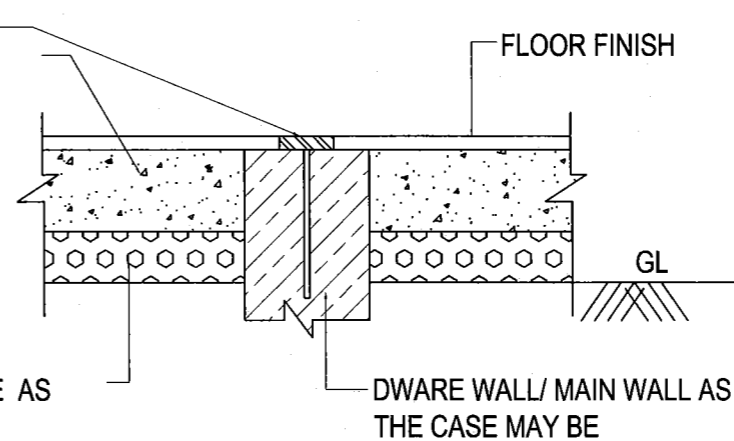
SKETCH NO - 20(r)



SKETCH NO - 20(s)



SKETCH NO - 20(t)



SKETCH NO - 20(u)

5. ANY OTHER SPECIFIED CONDITION WHICH ARE NOT EXACTLY COVERED UNDER DRGs. DETILS CLOSELY MATCHING WITH SITUATION AS DIRECTED BY GE SHALL BE PROVIDED.
6. GAP OF CRUMPLE/EXPANSION JOINTS SHALL BE 50mm UNLESS OTHERWISE SPECIFIED.
7. IN CASE OF STONE MASONRY WALLS, WALL SURFACE ALONG JOINT FOR A DISTANCE EQUAL TO 150 MM MINIMUM ON EITHER SIDE SHALL BE DRESSED PROPERLY FOR FIXING ALUMINIUM SHEET.
8. IN CASE OF JOINTS BETWEEN RCC BEAM AND RCC SLAB OR RCC BEAM AND RCC BEAM, METAL CRADLE IS SHOWN IN DETAIL SHALL BE PROVIDED
9. FIXING OF ALUMINIUM STRIP (PLAIN OR 'L' SHAPED) SHALL BE AS UNDER - CADMIUM/ BRASS SCREWS WITH GREASED CUP WASHERS FIXED ON RAWAL PLUG @ 300c/c STAGGERED.
10. JOINTS BETWEEN TWO UNITS OF PRECAST SLAB WILL BE PROPERLY GROUTED WITH CEMENT MORTAR 1:2 MIXED WITH WATER PROOFING COMPOUND BEFORE LAYING WATER PROOFING TREATMENT OVER IT.

NOTES FOR RCC STRUCTURE

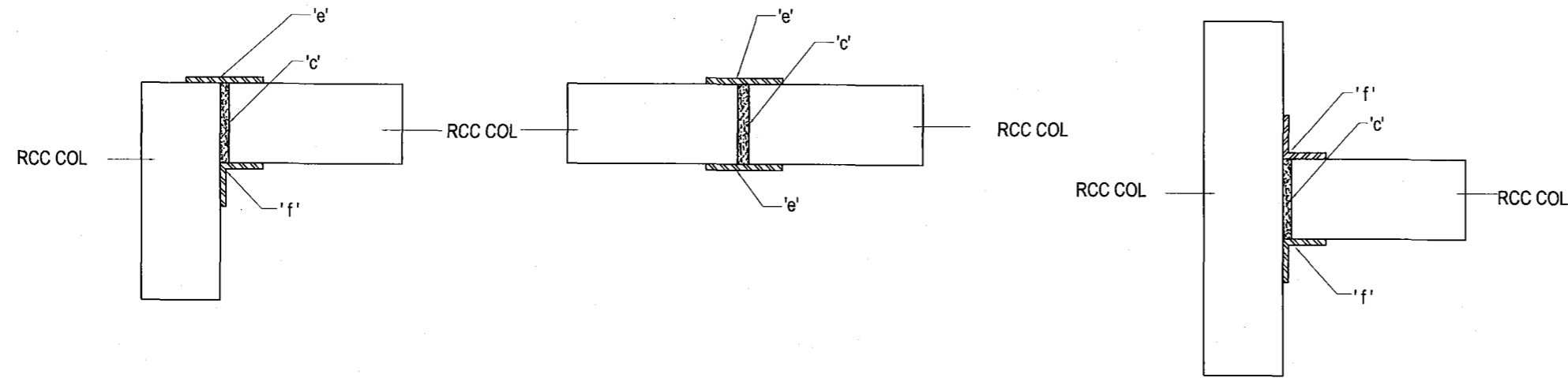
EXPANSION JOINTS

DATE	31 MAR 2016	CHIEF ENGINEER JODHPUR ZONE JODHPUR	SHT NO
DRN	SUB GAIKWAD J M		17
TCD			29
CKD	U S SHARMA		
SCALE		REF DRG NO. - CEJZ/STR/STD/08/2016	

EXPANSION JOINTS OF GROUND FLOOR

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C.K. CHANCLANI
TECH OFFR.

Subodh Kumar
(SUBODH KUMAR)
SE
DIRECTOR (DESIGN)
FOR CHIEF ENGINEER

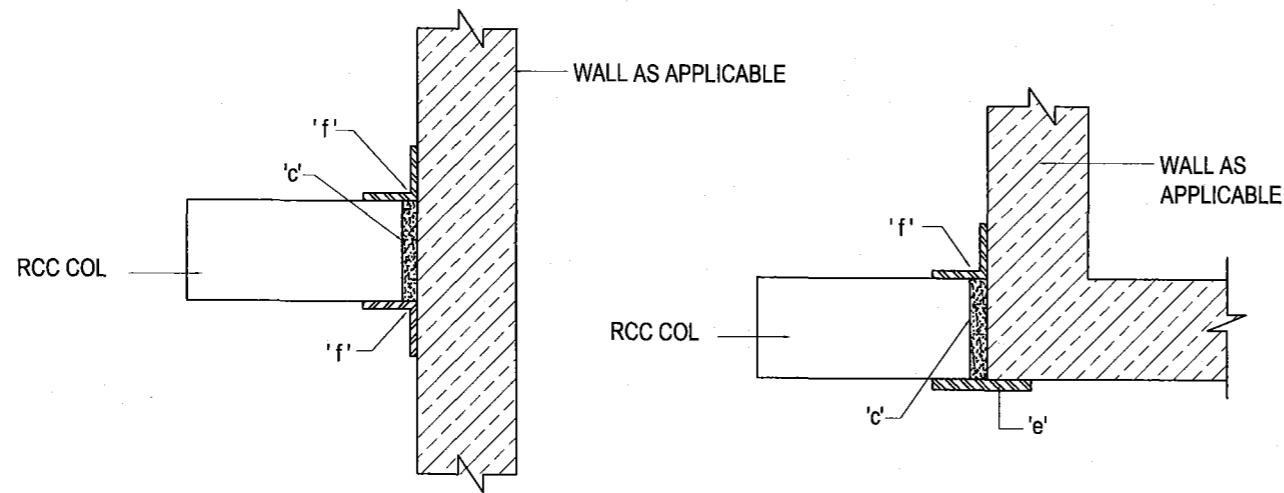


SKETCH NO - 20(v)

SKETCH NO - 20(w)

SKETCH NO - 20(x)

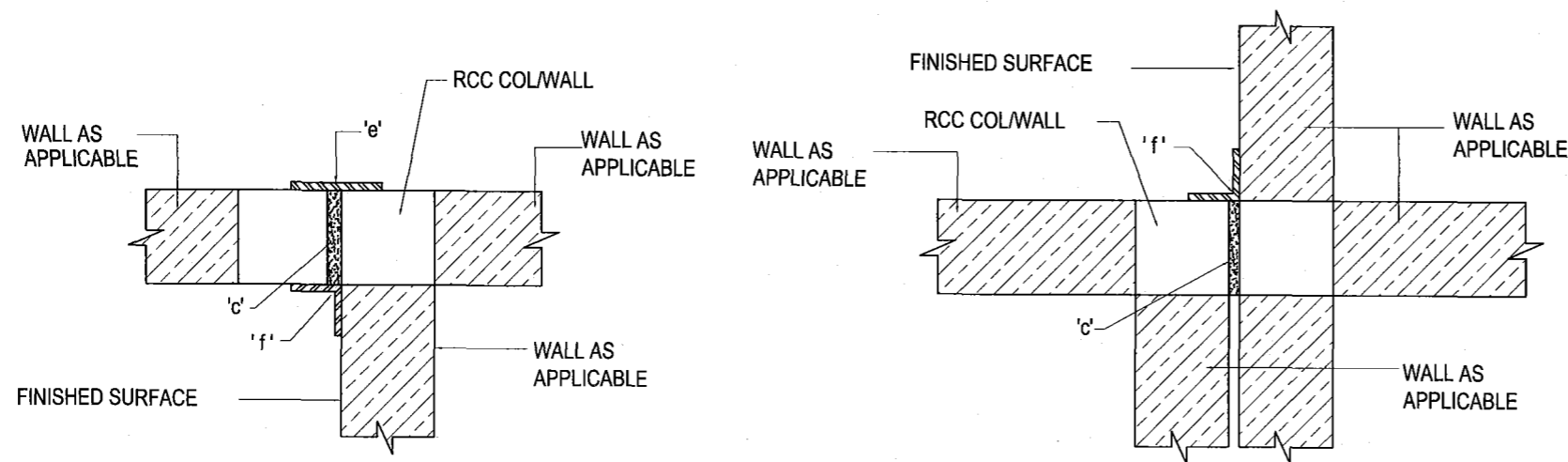
JOINTS BETWEEN COL & COL



SKETCH NO - 20(y)

SKETCH NO - 20(z)

JOINTS BETWEEN COL/WALL



SKETCH NO - 20(aa)

SKETCH NO - 20(bb)

JOINTS BETWEEN COL/WALL & COL/COL

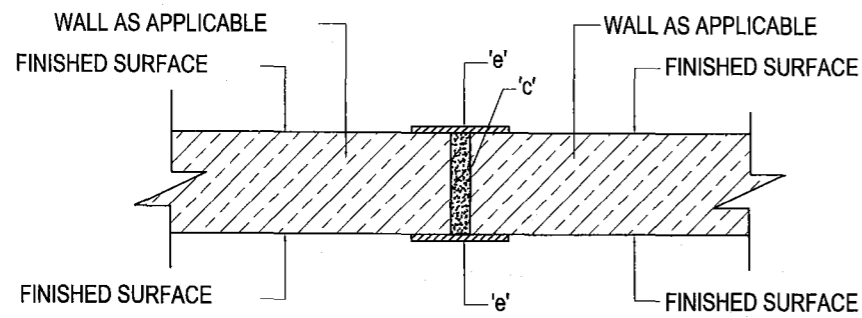
NOTES FOR RCC STRUCTURE

EXPANSION JOINTS

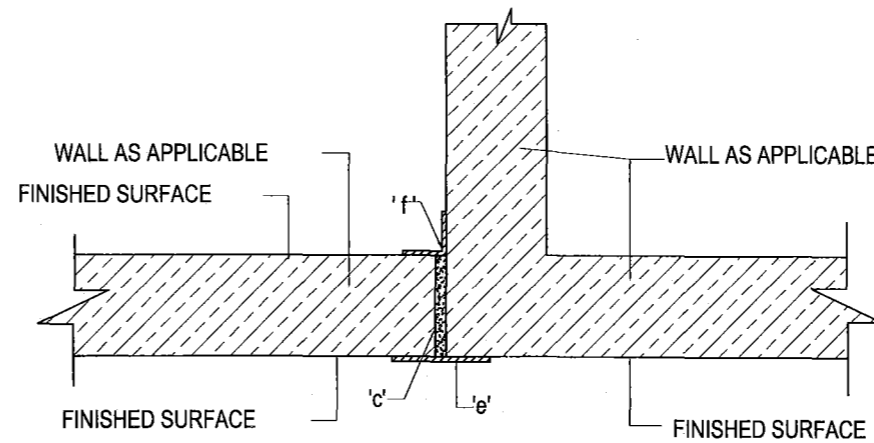
DATE	31 MAR 2016	CHIEF ENGINEER JODHPUR ZONE JODHPUR	SHT NO
DRN	SUB GAIKWAD J M		18
TCD			29
CKD	U S SHARMA		
SCALE		REF DRG NO. - CEJZ/STR/STD/08/2016	

Reer
C.K. CHANGLANI
TECH OFFR.

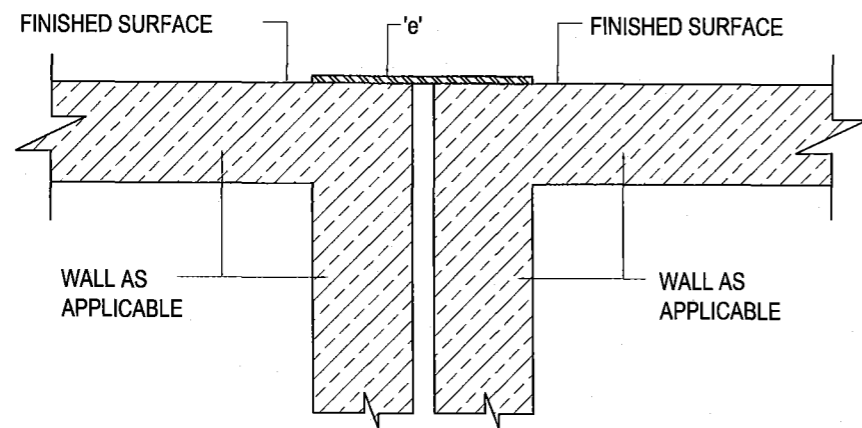
Subodh Kumar
(SUBODH KUMAR)
SE
DIRECTOR (DESIGN)
FOR CHIEF ENGINEER



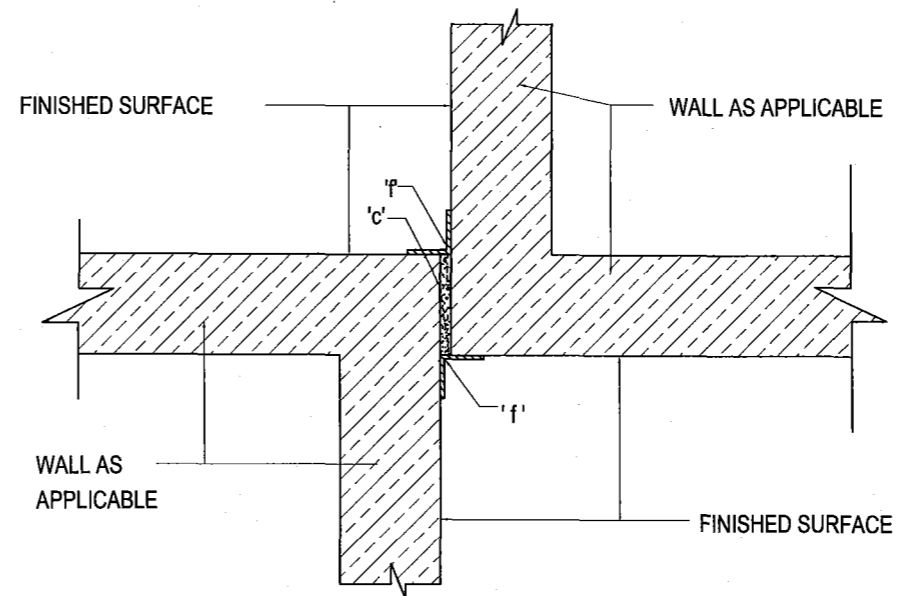
SKETCH NO - 20(cc)



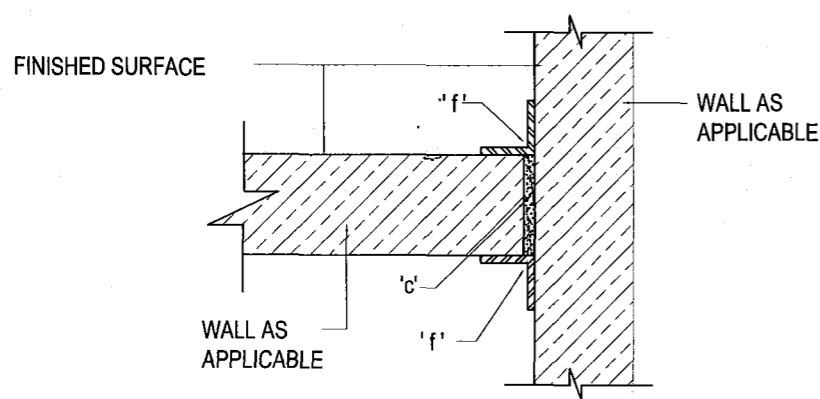
SKETCH NO - 20(dd)



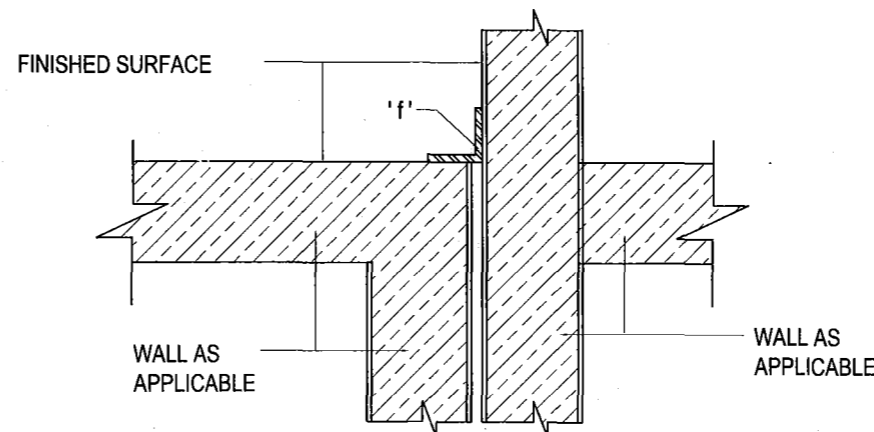
SKETCH NO - 20(ee)



SKETCH NO - 20(ff)



SKETCH NO - 20(gg)



SKETCH NO - 20(hh)

EXPANSION JOINTS AT WALL

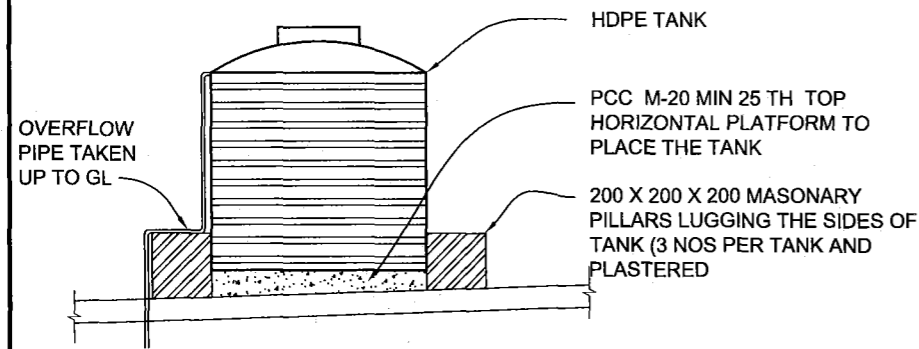
NOTES FOR RCC STRUCTURE

EXPANSION JOINTS

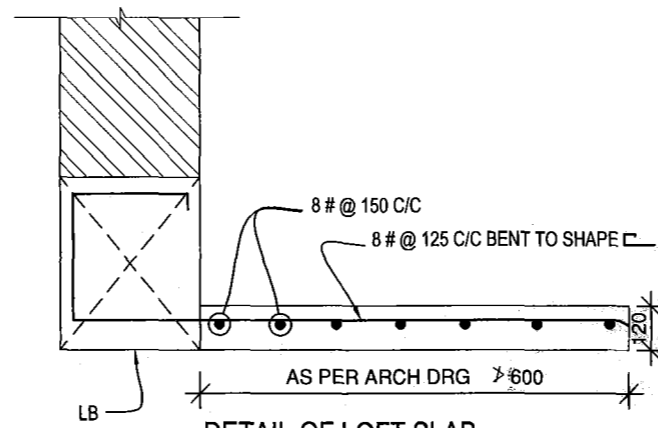
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DRN	SUB GAIKWAD J M		19
TCD			29
CKD	U S SHARMA		
SCALE		REF DRG NO. - CEJZ/STR/STD/08/2016	

C.K. Chanclani
C.K. CHANCLANI
TECH OFFR.

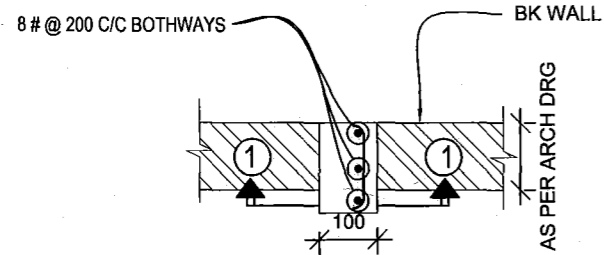
Subodh Kumar
(SUBODH KUMAR)
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DIRECTOR (DESIGN)
FOR CHIEF ENGINEER



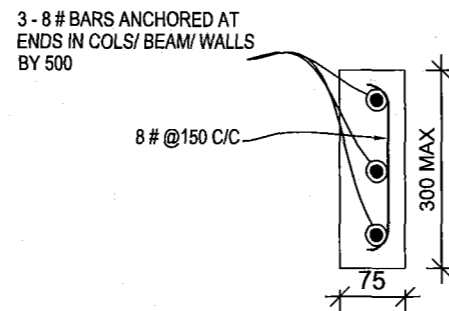
PLACEMENT DETAIL OF HDPE WATER TANK
SKETCH NO - 21



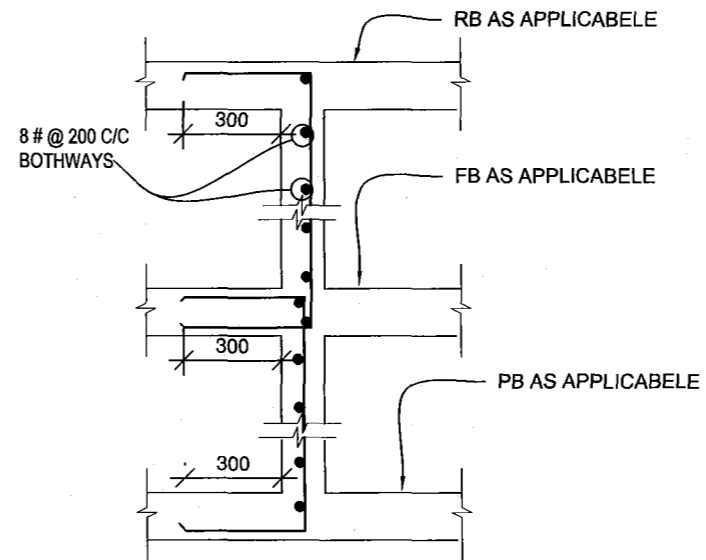
DETAIL OF LOFT SLAB
SKETCH NO - 22



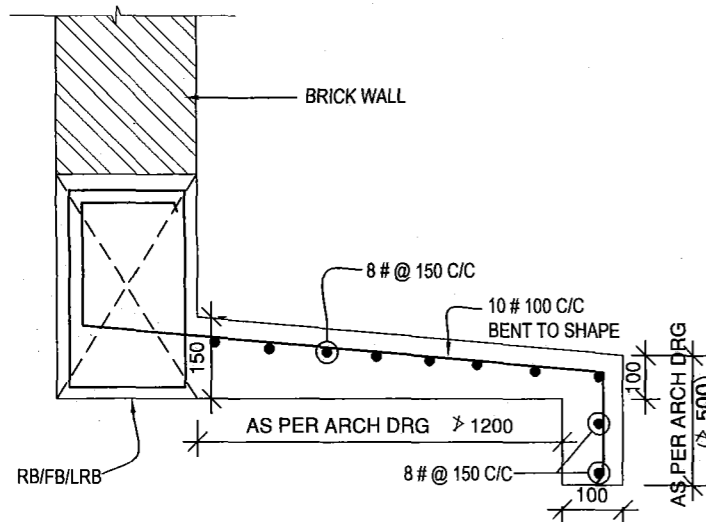
PLAN OF RCC FIN
SKETCH NO - 23 (a)



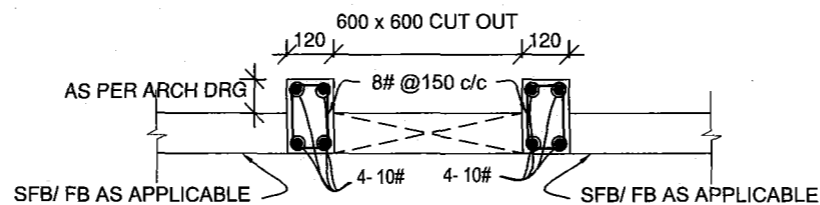
TYPICAL DETAILS OF FIN
SKETCH NO - 23 (b)



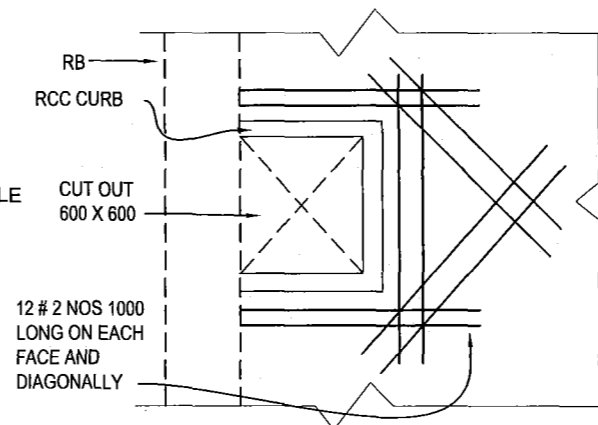
SECTION AT '1 - 1'
SKETCH NO - 23 (c)



DETAIL OF STAIR-CASE LANDING ROOF
SKETCH NO - 24



DETAIL OF RCC CURB
SKETCH NO - 25



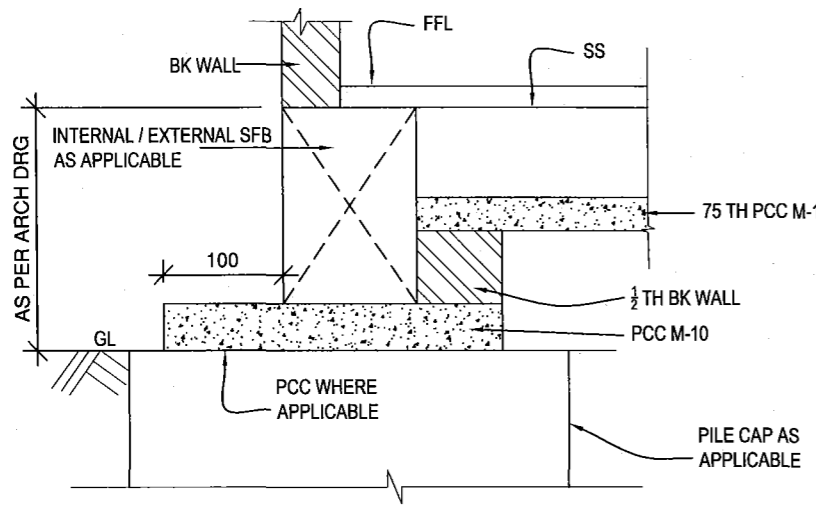
PART ROOF PLAN SHOWING CUT OUT FOR RUNGS
SKETCH NO - 26

NOTES FOR RCC STRUCTURE

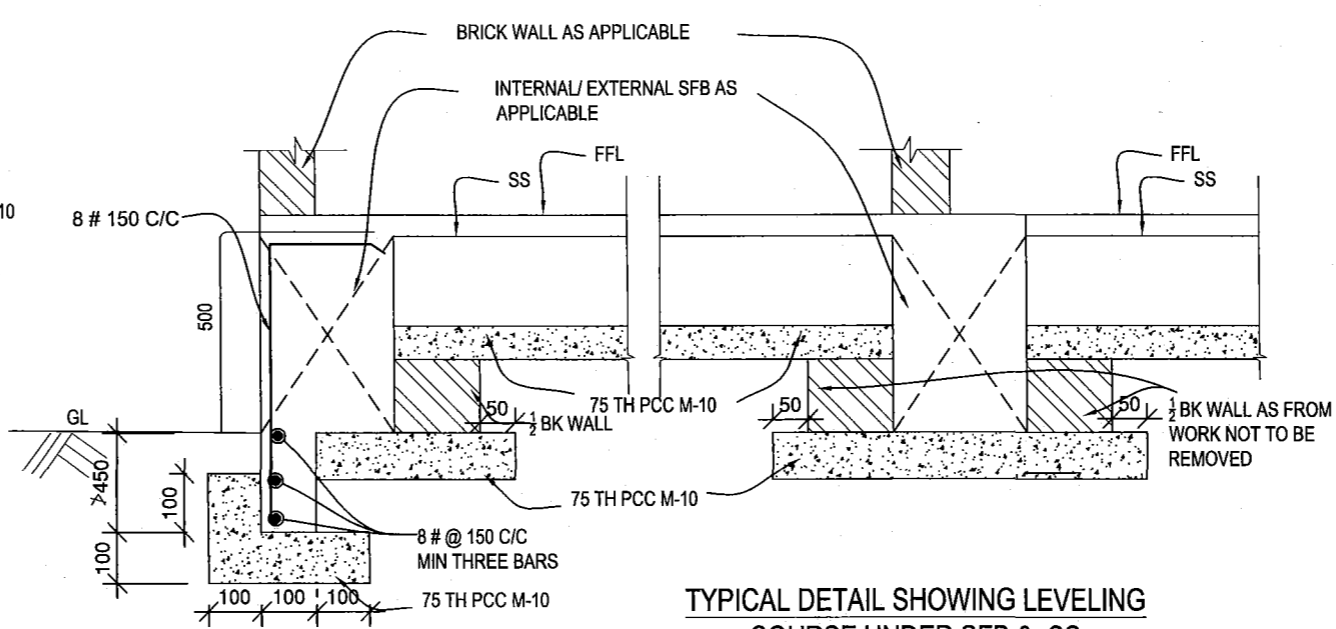
DATE	31 MAR 2016	CHIEF ENGINEER JODHPUR ZONE JODHPUR	SHT NO
DRN	SUB GAIKWAD J M		20/
TCD			29
CKD	U S SHARMA		
SCALE		REF DRG NO. - CEJZ/STR/STD/08/2016	

C.K. Chanchlani
C.K. CHANCHLANI
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(Subodh Kumar)
(SUBODH KUMAR)
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DIRECTOR (DESIGN)
FOR CHIEF ENGINEER

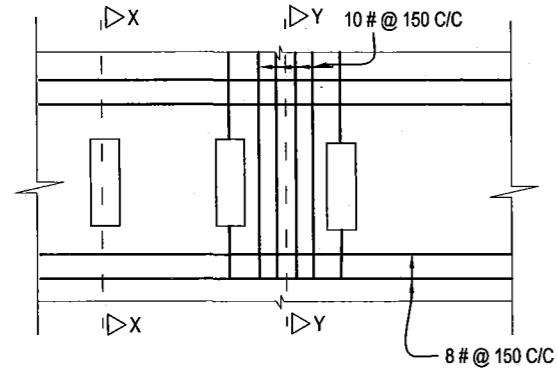


TYPICAL DETAIL OF LEVELLING COURSE UNDER SFB AT PILE CAP
SKETCH NO - 27

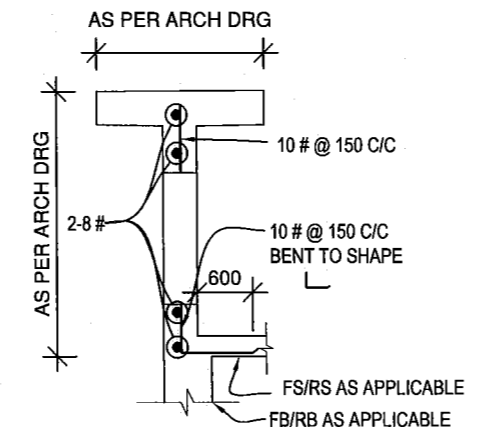


TYPICAL DETAIL SHOWING LEVELLING COURSE UNDER SFB & SS
SKETCH NO - 28

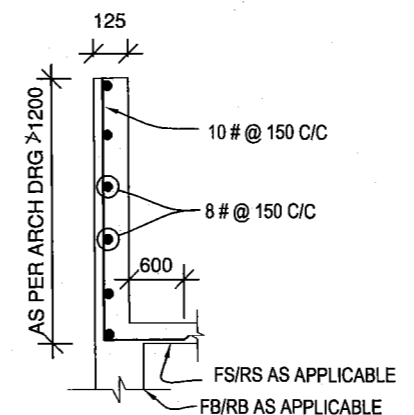
SFB - STAIR FLOOR BEAM



SECTIONAL ELEVATION OF RCC PARAPET
SKETCH NO - 29



SECTION AT X-X



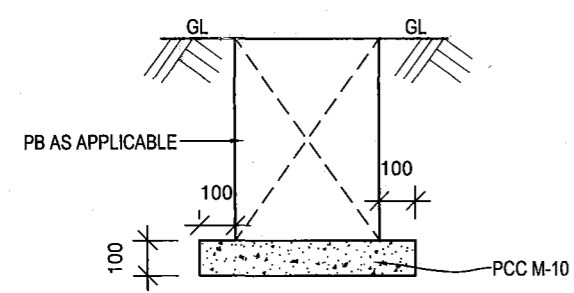
SECTION AT Y-Y

ic : COMPRESSION DEVELOPMENT LENGTHS

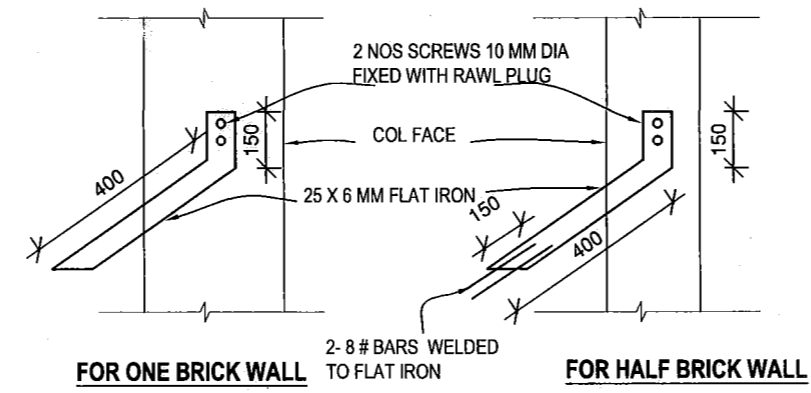
NOTE : SAME DETAILS MAY BE APPLICABLE FOR SOLID PARAPET.

SKETCH NO - 30(a)

SKETCH NO - 30(b)



TYPICAL DETAILS OF LEVELLING COURSE UNDER PB
SKETCH NO - 31

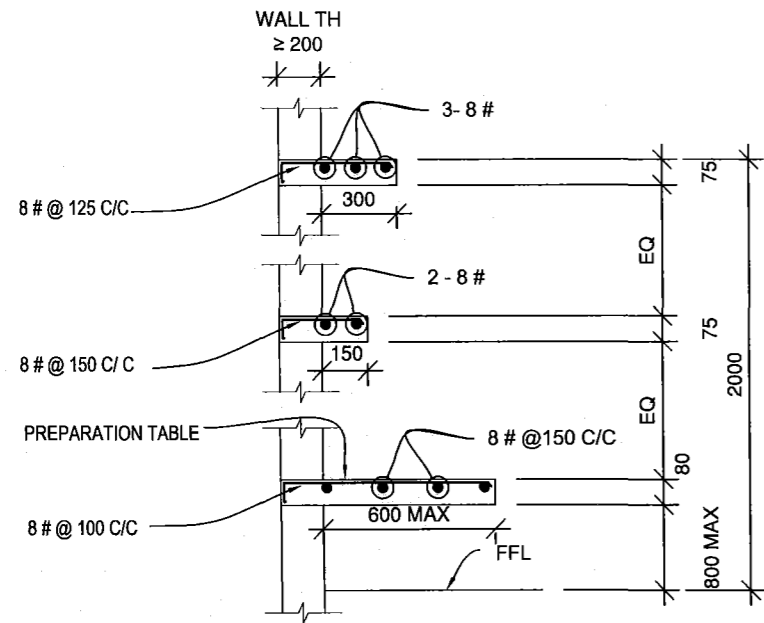


FOR ONE BRICK WALL

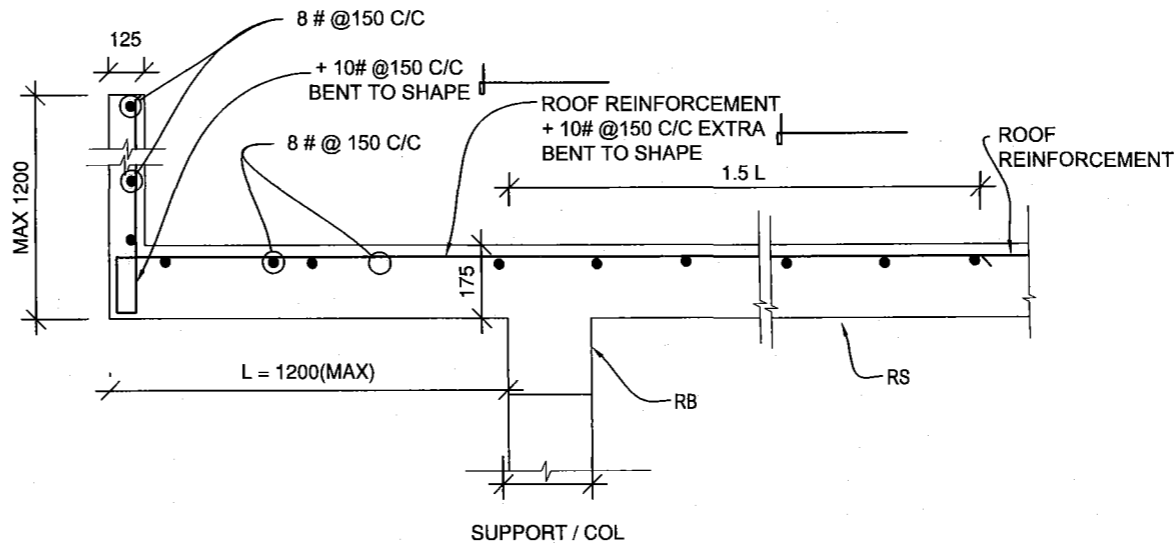
FOR HALF BRICK WALL

FIXING DETAIL OF 25 X 6 MM FLAT IRON TO COL FACE
SKETCH NO - 32

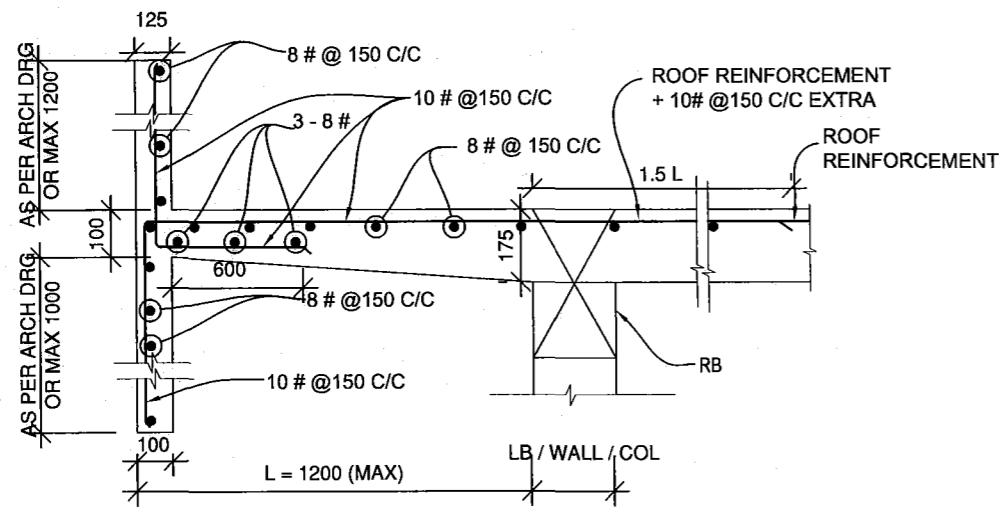
NOTES FOR RCC STRUCTURE				
DATE	31 MAR 2016	CHIEF ENGINEER JODHPUR ZONE JODHPUR	SHT NO	21 29
DRN	SUB GAIKWAD J M			
TCD				
CKD	U S SHARMA			
SCALE		REF DRG NO. - CEJZ/STR/STD/08/2016		
 C.K. CHANCLANI TECH OFFR		 (SUBODH KUMAR) SE DIRECTOR (DESIGN) FOR CHIEF ENGINEER		



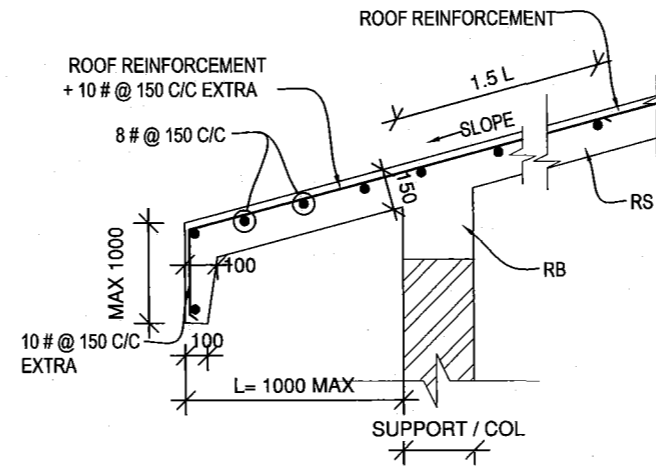
TYPICAL DETAILS OF PREPARATION TABLE AND SHELVES IN KITCHEN
SKETCH NO - 33



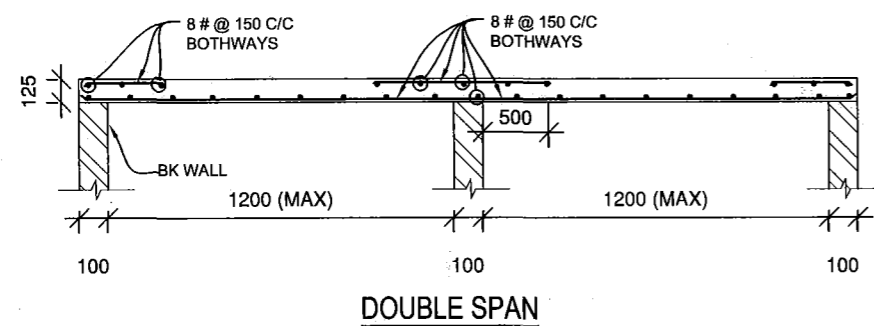
TYPICAL DETAILS OF ROOF PROJECTION WITH RCC PARAPET
SKETCH NO - 34



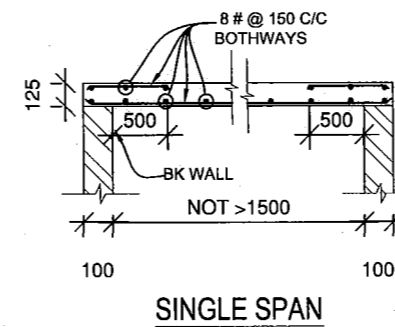
NOTE : SAME DETAILS MAY BE APPLICABLE EVEN IF PARAPET IS NOT THERE
TYPICAL DETAILS OF ROOF PROJECTION WITH RCC PARAPET & DROP
SKETCH NO - 35



TYPICAL DETAIL OF ROOF PROJECTION WITH DROP
SKETCH NO - 36



DETAIL OF COOKING PLATFORM WITH 100 TH BK WALL SUPPORT
SKETCH NO - 37



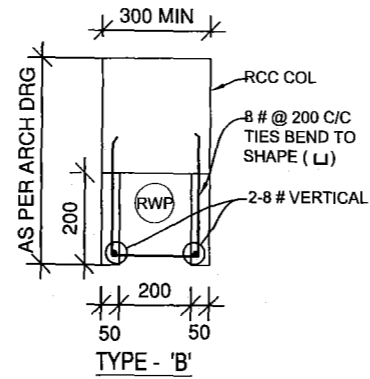
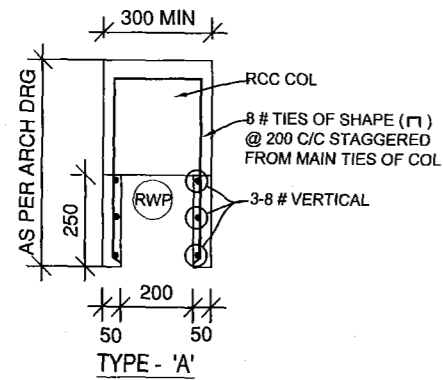
SINGLE SPAN

NOTES FOR RCC STRUCTURE

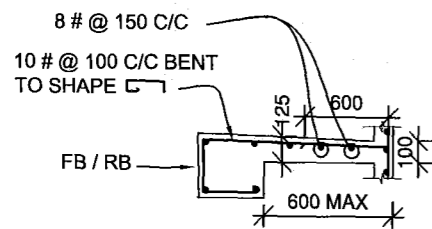
DATE	31 MAR 2016	CHIEF ENGINEER JODHPUR ZONE JODHPUR	SHT NO
DRN	SUB GAIKWAD J M		22
TCD			29
CKD	U S SHARMA		
SCALE		REF DRG NO. - CEJZ/STR/STD/08/2016	

C.K. Chanchlani
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TECH OFFR

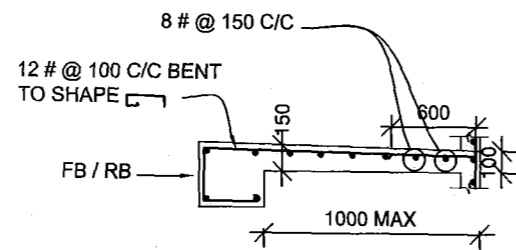
(Subodh Kumar)
-(SUBODH KUMAR)
SE
DIRECTOR (DESIGN)
FOR CHIEF ENGINEER



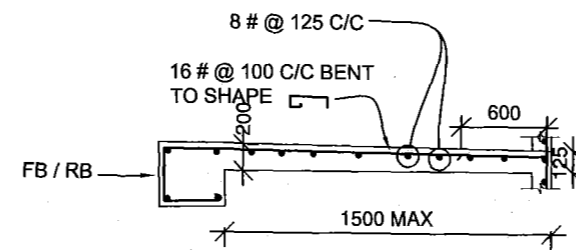
TYPICAL DETAILS OF ENCASING OF RWP WITH RCC COLUMN
SKETCH NO - 38



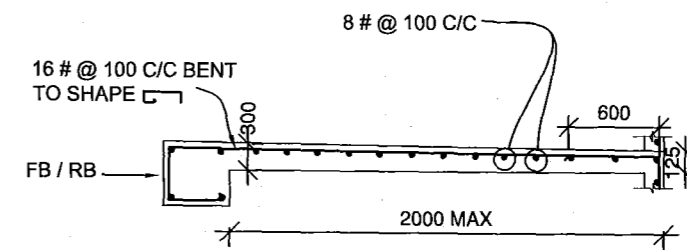
UP TO 600 MAX



UP TO 1000 MAX



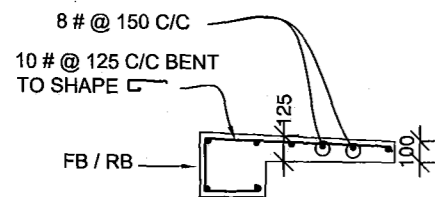
UP TO 1500 MAX



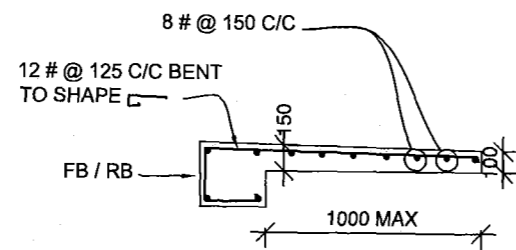
UP TO 2000 MAX

TYPICAL DETAILS OF BALCONY / ROOF PROJECTION / CANTILEVER PROJECTION FROM BEAM WITH PARAPET AND / OR DROP AS PER SKETCH NO. 41 & 42

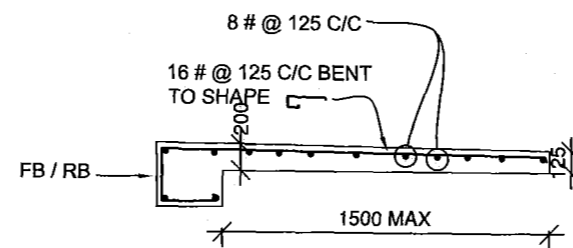
SKETCH NO - 39



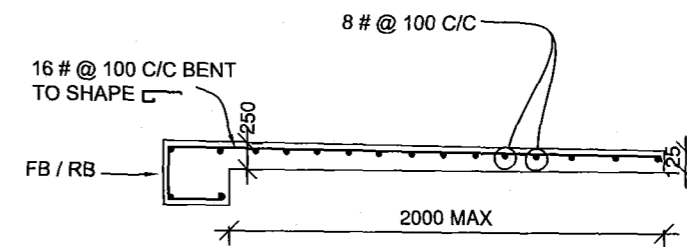
UP TO 600 MAX



UP TO 1000 MAX



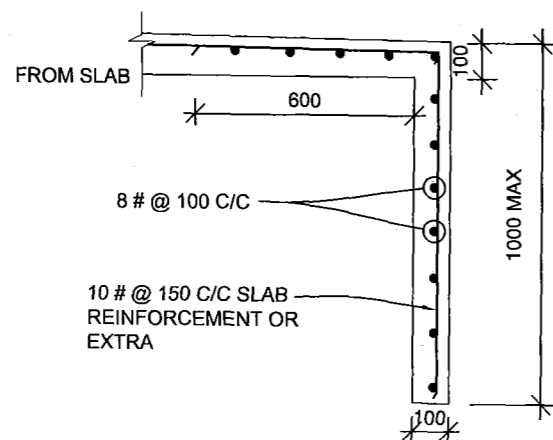
UP TO 1500 MAX



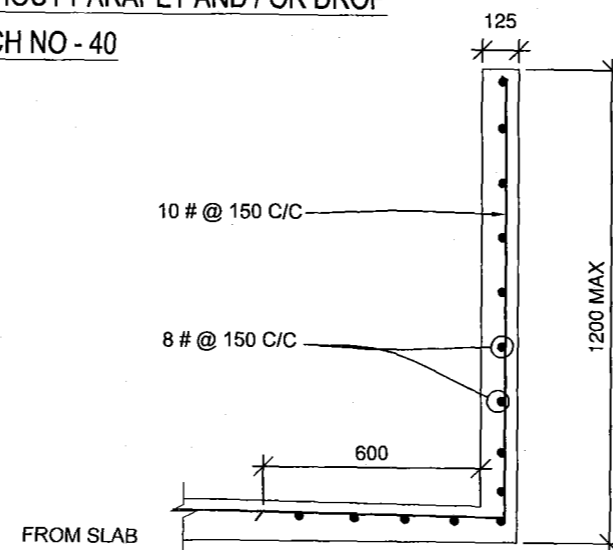
UP TO 2000 MAX

TYPICAL DETAILS OF BALCONY / ROOF PROJECTION / CANTILEVER PROJECTION FROM BEAM WITHOUT PARAPET AND / OR DROP

SKETCH NO - 40



DETAILS OF RCC DROP 1000 MAX
SKETCH NO - 41



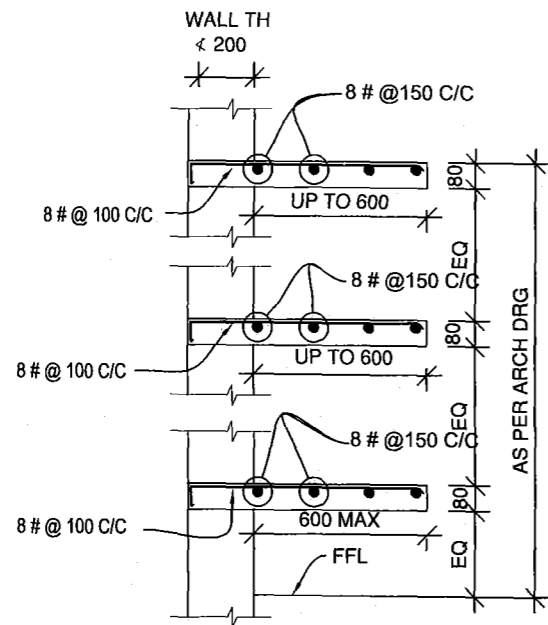
DETAILS OF PARAPET 1200 HIGH MAX
SKETCH NO - 42

NOTES FOR RCC STRUCTURE

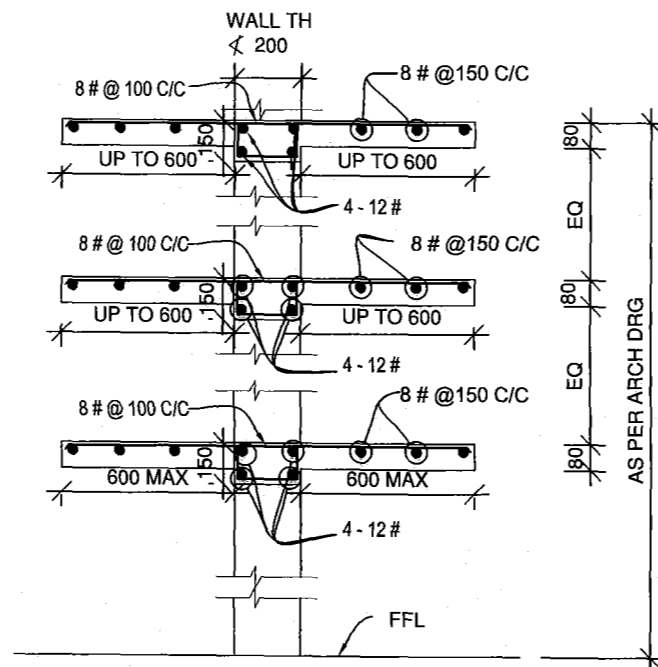
DATE	31 MAR 2016	CHIEF ENGINEER JODHPUR ZONE JODHPUR	SHT NO
DRN	SUB GAIKWAD J M		23
TCD			29
CKD	U S SHARMA		
SCALE		REF DRG NO. - CEJZ/STR/STD/08/2016	

C.K. Chanchlani
C.K. CHANCLANI
TECH OFFR

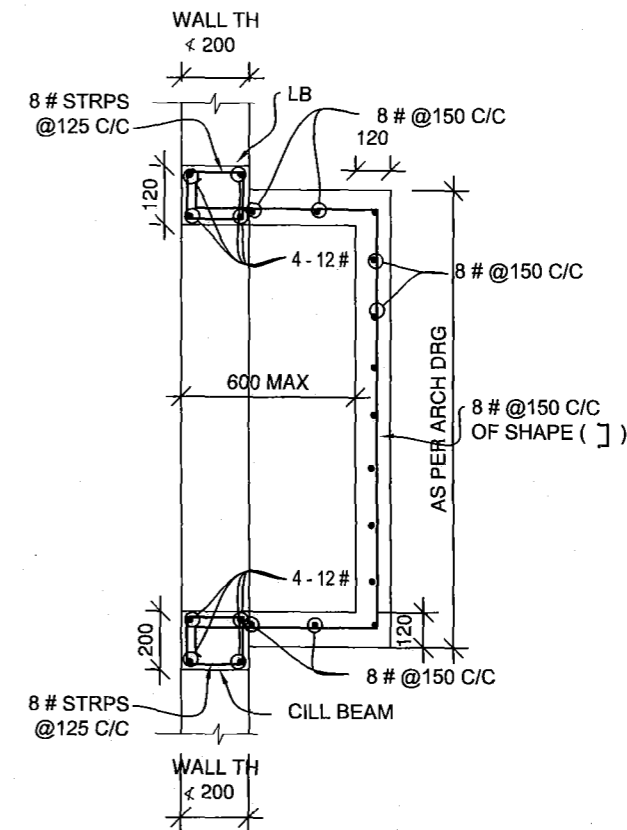
Subodh Kumar
(SUBODH KUMAR)
SE
DIRECTOR (DESIGN)
FOR CHIEF ENGINEER



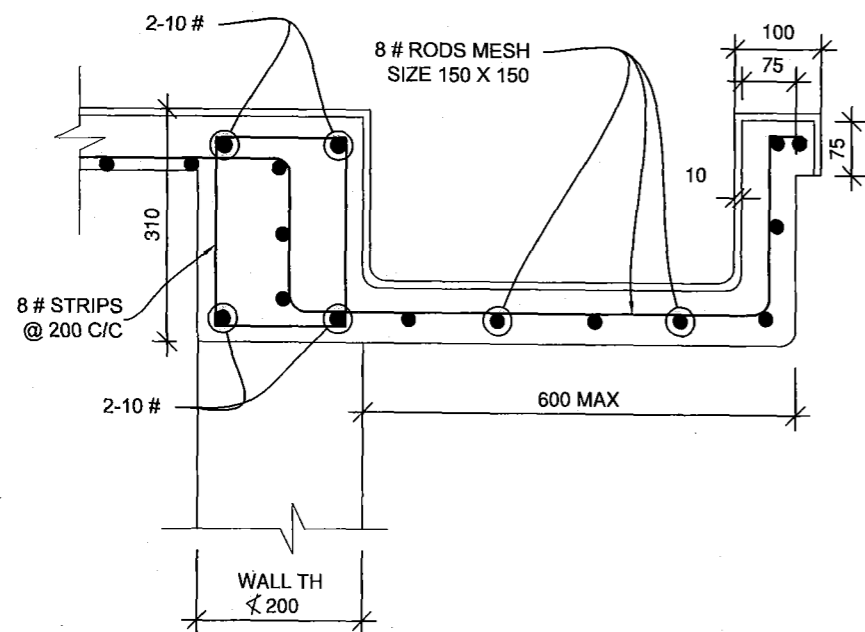
DETAILS RCC SHELVES ONE SIDE
SKETCH NO - 43(a)



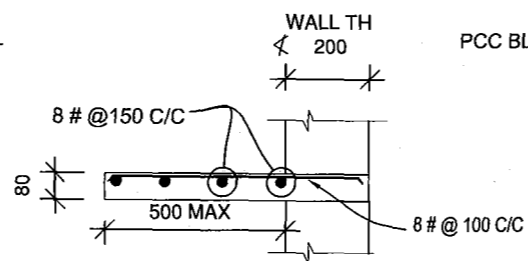
DETAILS RCC SHELVES (BOTH SIDE)
SKETCH NO - 43(b)



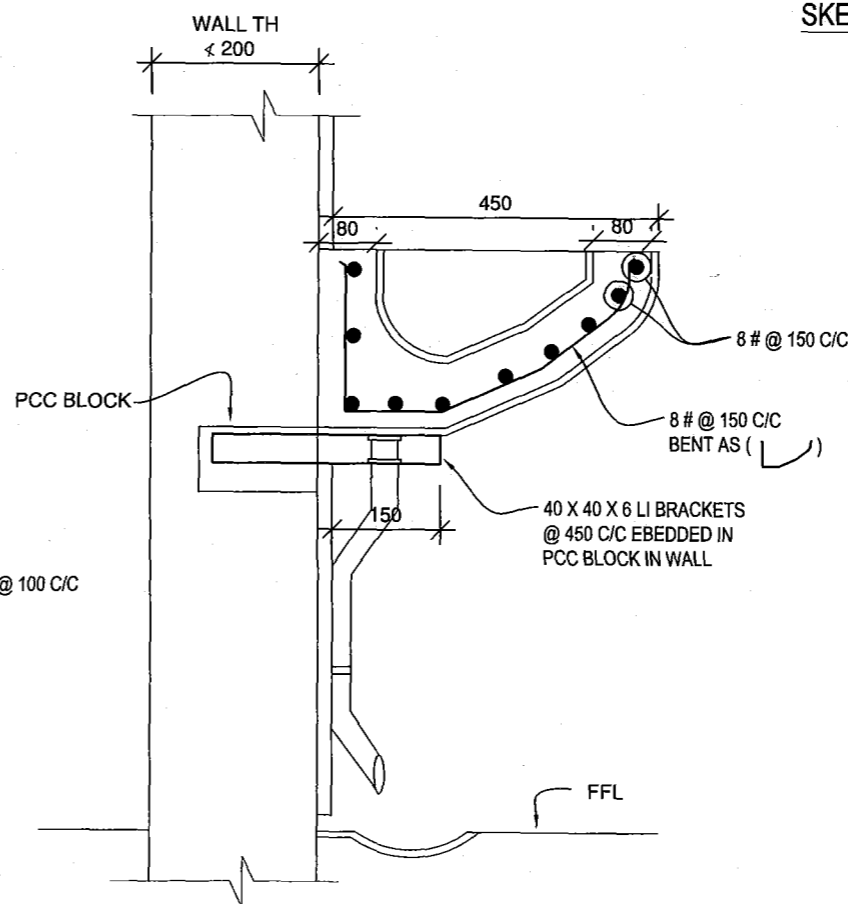
DETAIL OF RCC CUP BOARD
PROJECTING OUTSIDE OF MAIN WALL
SKETCH NO - 44



DETAILS RCC SINK
SKETCH NO - 45



DETAIL OF RCC SLAB FOR
DRAINING BOARD
SKETCH NO - 46



TYPICAL DETAILS OF TROUGH TYPE W H B
SKETCH NO - 47

NOTES FOR RCC STRUCTURE

DATE	31 MAR 2016	CHIEF ENGINEER JODHPUR ZONE JODHPUR	SHT NO
DRN	SUB GAIKWAD J M		24
TCD			29
CKD	U S SHARMA		
SCALE		REF DRG NO. - CEJZ/STR/STD/08/2016	

C.K. Chanchlani
C.K. CHANCLANI
TECH OFFR

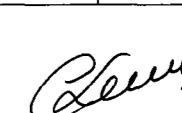
S. Parikh
(SUBODH KUMAR)
SE
DIRECTOR (DESIGN)
FOR CHIEF ENGINEER

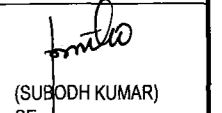
RCC NOTES

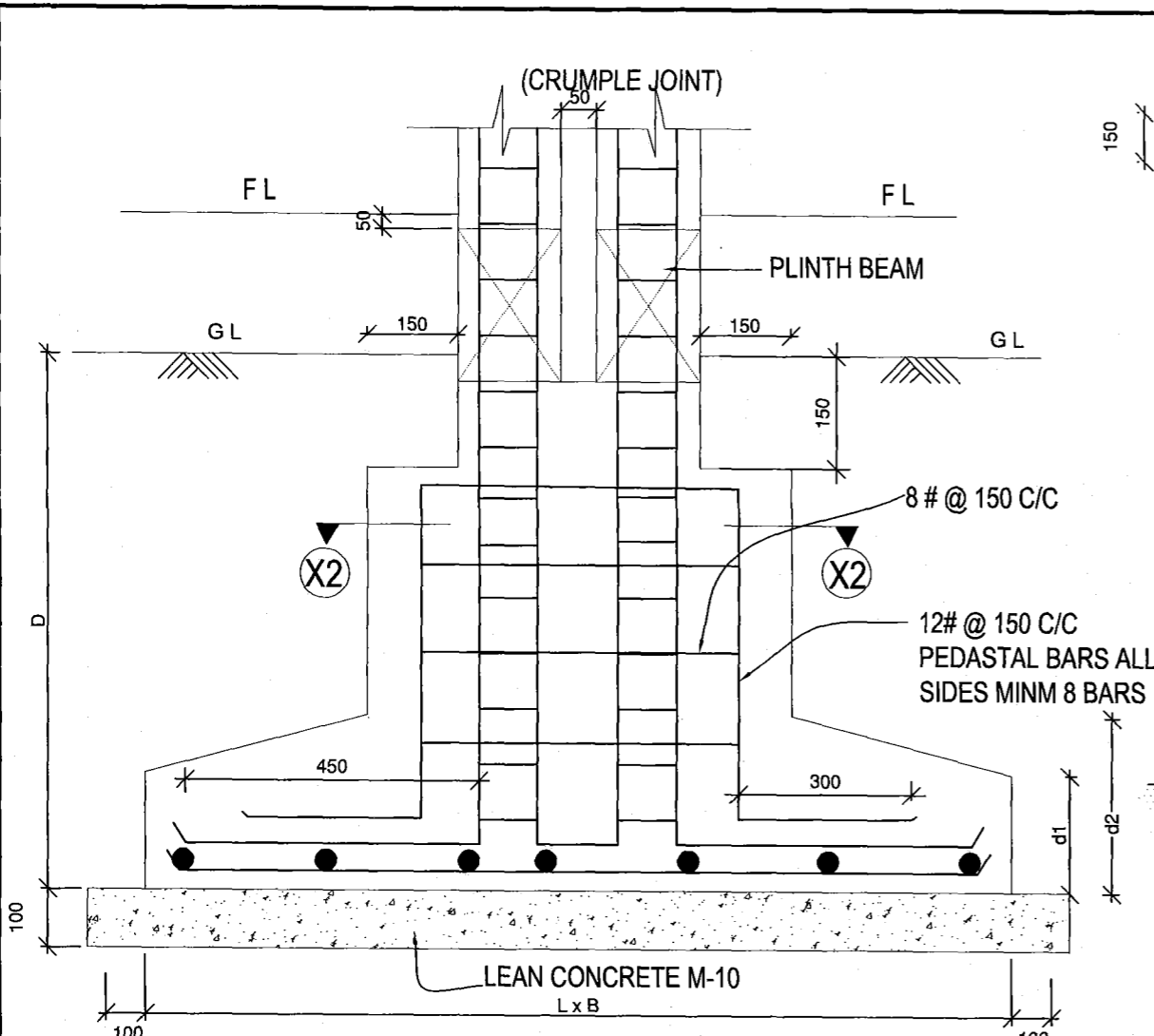
1. IF ANY VARIATION BETWEEN THE DETAILS GIVEN IN STRUCTURAL DRG AND TYPICAL DRG IS FOUND THEN DETAILS GIVEN IN STRUCTURAL DRG, SHALL BE FOLLOWED.
2. ALL HALF BRICK WALL WHERE FOUNDATION IS NOT SHOWN, SHALL BE CONSTRUCTED FROM SUB-BASE LEVEL / SLAB.
3. AT WALL/RCC COLUMN JUNCTION F.I 40 X 3 MM AND 400MM LONG SHALL BE PROVIDED @ 450 MM VERTICAL DISTANCE, 150 MM LENGTH OF FI SHALL BE EMBEDDED INTO THE COL. FOR HALF BRICK WALLS, THE FI WILL NOT BE PROVIDED. THE REINFORCEMENT OF THE WALL SHALL BE ANCHORED INTO THE COL.
4. THE MISSING DETAIL IF ANY IN STRUCTURAL DRG AND TECHNICALLY REQUIRED BASED ON SOUND ENGINEERING PRACTICES MUST BE FOLLOWED PROVIDED BY THE CONTRACTOR AT NO EXTRA COST HOWEVER, THE DETAILS WILL BE GOT APPROVED FROM THE DESIGN SECTION BEFORE EXECUTION ON THE GROUND.
5. IN BEAMS WHEREVER REINFORCEMENT BARS ARE PROVIDED IN TWO OR MORE LAYERS, SPACER BARS OF 20# OR THE EQUAL TO DIA OF BIGGEST SIZE BAR USED AS MAIN BAR IN BEAM @ 1500 C/C SHALL BE PROVIDED BETWEEN THE REINFORCEMENT LAYERS, IF NOT SPECIFIED.
6. COLUMNS SHOWN IN FOUNDATION PLAN/DRGS SHALL BE CONTINUED UPTO THE TOP OF STRUCTURE IN THAT PORTION WITH THE SAME DESIGN, IF NOTHING ELSE HAS BEEN SPECIFIED.
7. WHEN EVER BEAM IS RESTING ON BEAM THE SPACING OF STIRRUPS IN SUPPORTING BEAM SHALL BE HALF FOR A DISTANCE ON EACH SIDE OF SUPPORTED BEAMS AS SHOWN IN DETAILS.
8. WHENEVER TWO TYPES OF BEAMS MEET AT ONE SUPPORT THE EXTRA BARS AT TOP AS SHOWN IN DETAILS OF BEAMS SHALL BE PROVIDED AS HIGHER OF TWO.
9. SURFACE VIBRATOR IS TO BE USED FOR COMPACTING THE CONCRETE OF SLAB
10. SPECIAL CARE SHALL BE TAKEN TO ENSURE THAT HOOPS IN THE COLUMN SHOULD NOT BE OMITTED AT THE BEAM COLUMN JUNCTION. THESE SHOULD BE PROVIDED AS PER THE SEISMIC DETAILING. IF CLOSED HOOPS ARE NOT FEASIBLE, 'U' SHAPED LINKS (WITH ANCHORING =LD) SHALL BE PROVIDED.
11. STRUCTURES ARE DESIGNED AS PER IS 456 AND FOR SEISMIC ZONE SPECIFIED IN IS 1893. REINFORCEMENT DETAILING IS AS PER IS 13920. IF ANY CONDITION OF "IS" IS NOT BEING MET, MATTER SHALL BE BROUGHT TO THE NOTICE OF AO.
12. STIRRUPS GIVEN IN THE COLUMNS SHALL BE PROVIDED FROM BOTTOM OF FOOTING TO THE TOP OF ROOF SLAB.
13. FOR PROVN OF DRAINAGE/SEWERAGE PIPES, SLEEVES SHALL BE PROVIDED. NO CHISELLING/CUTTING SHALL BE RESORTED TO. IF A HOLE IS TO BE MADE IN RCC, CORE-CUTTING PROCESS OF M/S HILTI OR EQUIVALENT (APPROVED BY GE) SHOULD BE USED.
14. 10 MM WIDE EXPANSION GAP SHALL BE PROVIDED IN PARAPET WALL AT SPACING NOT EXCEEDING 10 M & ALSO AT CHANGE OF DIRECTION. SIMILAR GAP WILL BE GIVEN IN VERTICAL FACIA, BOTH UPWARD AND DOWNWARD. 10 MM GAP BETWEEN RCC PARAPET AND RCC COLUMN WILL ALSO BE PROVIDED
15. TOP OF PARAPET SHALL BE PROVIDED WITH 1:10 SLOPE (INWARD) IF NOTHING ELSE IS SPECIFIED.
16. CAPACITY OF TANKS WILL BE AS PER ARCH DRGS. HDPE TANK SHOULD BE PLACED IN SUCH A MANNER THAT THE CENTRE OF TANK IS SAME AS CENTRE OF COLUMN. IF THIS IS NOT POSSIBLE THEN TANK SHOULD BE PLACED ON THE CENTRE-LINE OF A BEAM, AND NEAR TO A COLUMN. NO WATER TANK WILL BE PLACED OVER SLAB VIOLATING THE CONDITION MENTIONED AFORESAID WITHOUT CHECKING FROM THE DESIGNER.
17. LEAN PCC GIVEN UNDER THE PB'S TO ACT AS SHUTTERING, AND TO SUPPORT THE SHUTTERING OF VERTICAL FACE. GE CAN DECIDE TO USE STEEL/WOODEN SHUTTERING IN LIEU OF PCC, WITHOUT D.O. AND REFERRING TO E-2 (D) SECTION.
18. IN CASE OF RECTANGULAR FOOTING, LONGER SIDE OF FOOTING SHALL BE PARALLEL TO LONGER SIDE OF COLUMN.
19. WHERE DISTANCE OF FOOTING EDGE TO COLUMN IS SHOWN, IT WILL BE FROM THE FACE OF THE COLUMN TO END OF THE FOOTING.
20. CENTRE OF COLUMN & CENTRE OF FOOTING SHOULD MATCH, UNLESS SHOWN OTHERWISE.
21. FOR DETAILING OF REINFORCEMENT PL REFER IS 13920 & SP 34. IN CASE OF ANY VARIATION IN DIFFERENT DRGS, DETAILS GIVEN IN IS 13920 & SP 34 (S&T) SHALL BE FOLLOWED.
22. PARAPET / FACIA / PARDI REINF SHOULD BE PLACED AT CENTRE OF THE X-SECTION PREFERABLY. NORMAL COVER IS THE DEPTH OF CONCRETE COVER TO ALL REINFORCEMENT INCLUDING STIRRUPS / LINKS.
23. IRRESPECTIVE OF WHAT EVER IS SHOWN IN DRG, THE CRUMPLE JOINT SHALL BE 50 MM.
24. FOR SLAB WHERE EVER NO CRANKING IS SHOWN IN DRG ALL THE TOP BAR SHALL BE TAKEN INTO THE ADJUSTING SLAB UP TO 0.3L FROM END OF THE SUPPORT. L IS THE SPAN OF LARGER SLAB.

NOTES FOR RCC STRUCTURE

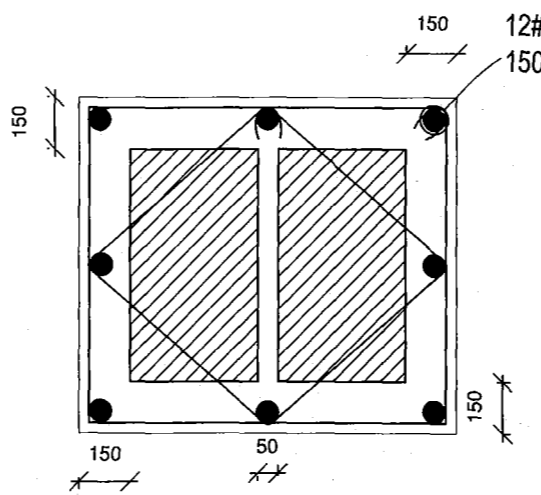
DATE	31 MAR 2016	CHIEF ENGINEER JODHPUR ZONE JODHPUR	SHT NO
DRN	SUB GAIKWAD J M		25
TCD			29
CKD	U S SHARMA		
SCALE		REF DRG NO. - CEJZ/STR/STD/08/2016	


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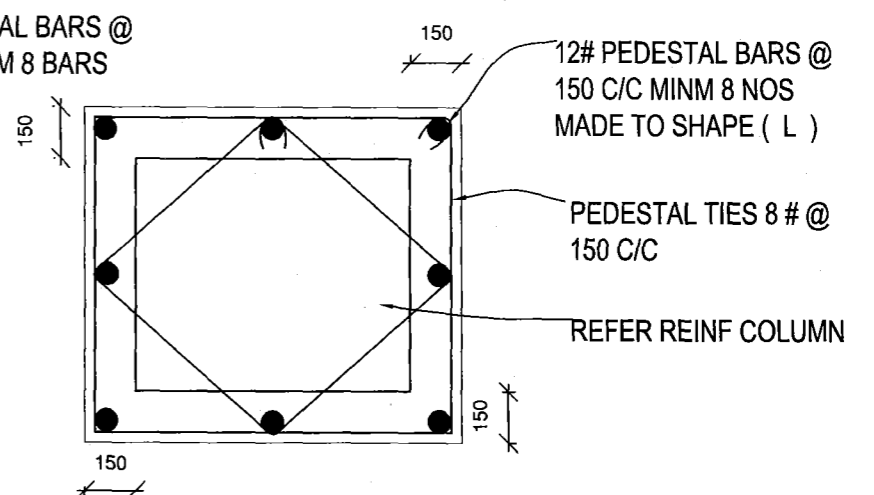

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SE
DIRECTOR (DESIGN)
FOR CHIEF ENGINEER



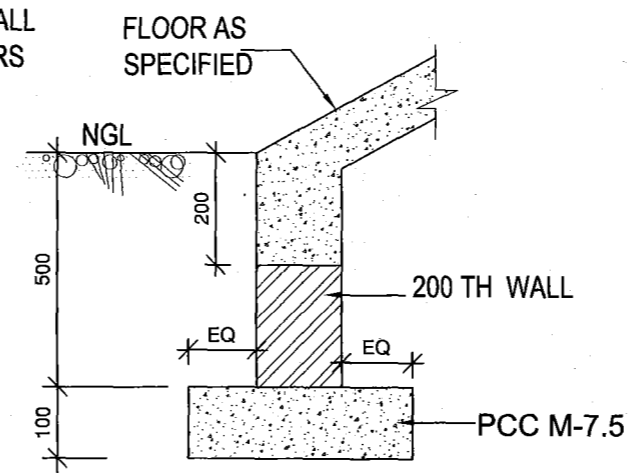
D = DEPTH OF FOUNDATION
 TYPICAL DETAIL AT CRUMPLE FOOTINGS
 (AS APPLICABLE)



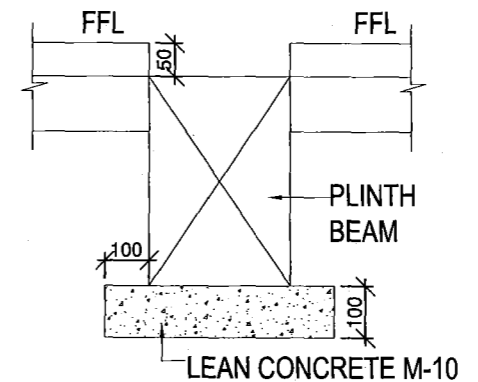
TYPICAL CROSS SEC OF COL PEDESTAL AT- X2-X2



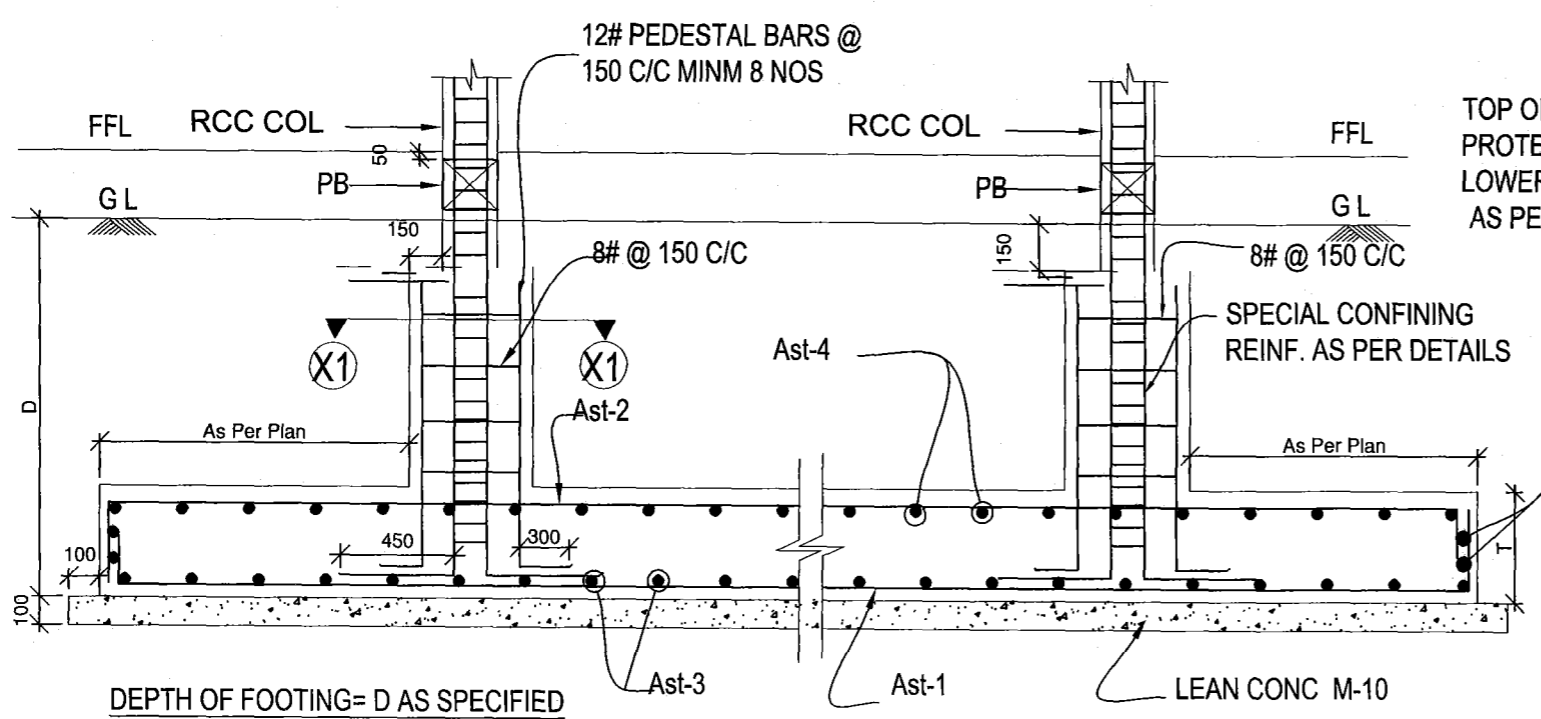
DET OF COL PEDESTAL PLAN AT X1-X1



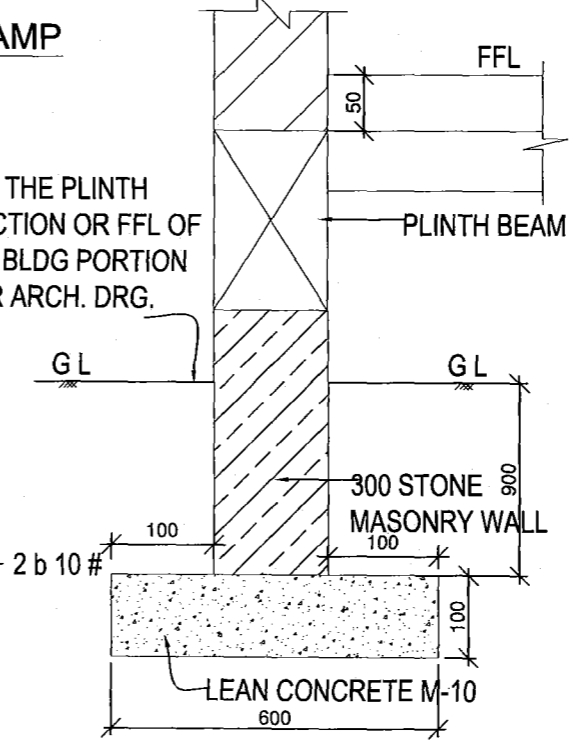
TOE WALL FOR RAMP



TYPICAL SECTION OF INTERIOR PB



L SECTION OF COMBINED FOOTING

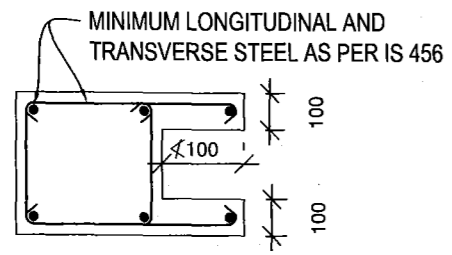


TYPICAL SECTION OF PB AT EXTERIOR WALLS

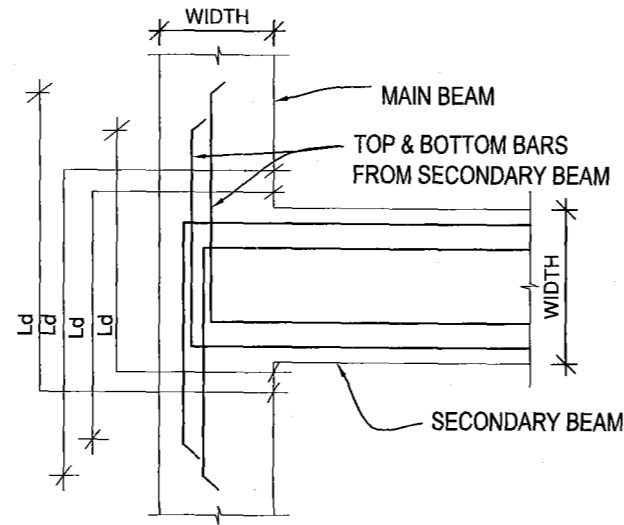
NOTES FOR RCC STRUCTURE				
DATE		CHIEF ENGINEER		SHT NO
DRN	SUB GAIKWAD J M	JODHPUR ZONE		26
TCD		JODHPUR		29
CKD	U S SHARMA	REF DRG NO. - CEJZ/STR/STD/08/2016		
SCALE				

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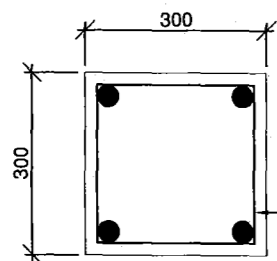
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REINFORCEMENT REQUIREMENT FOR COLUMN WITH MORE THAN 100 MM PROJECTION BEYOND CORE



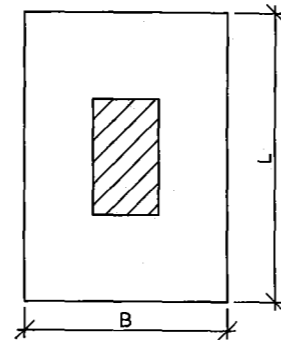
TYPICAL DETAIL OF BEAM RESTING ON BEAM



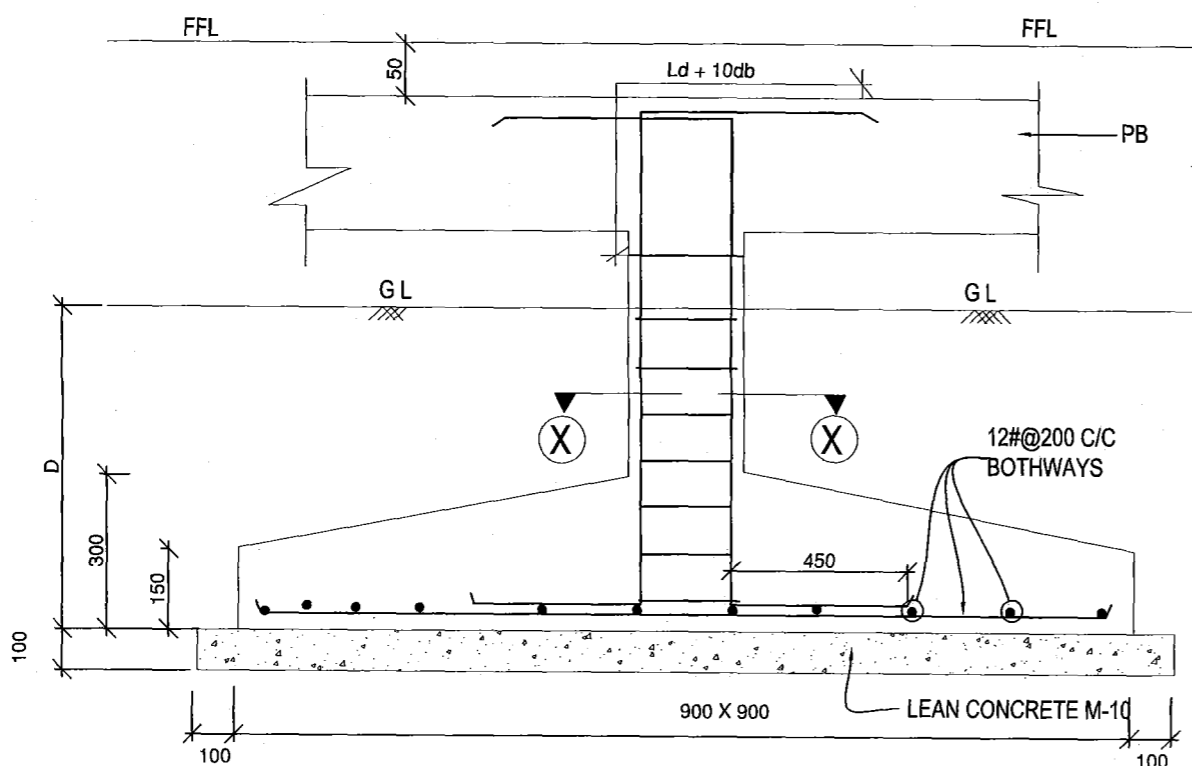
PLAN AT X-X

4 - 16#

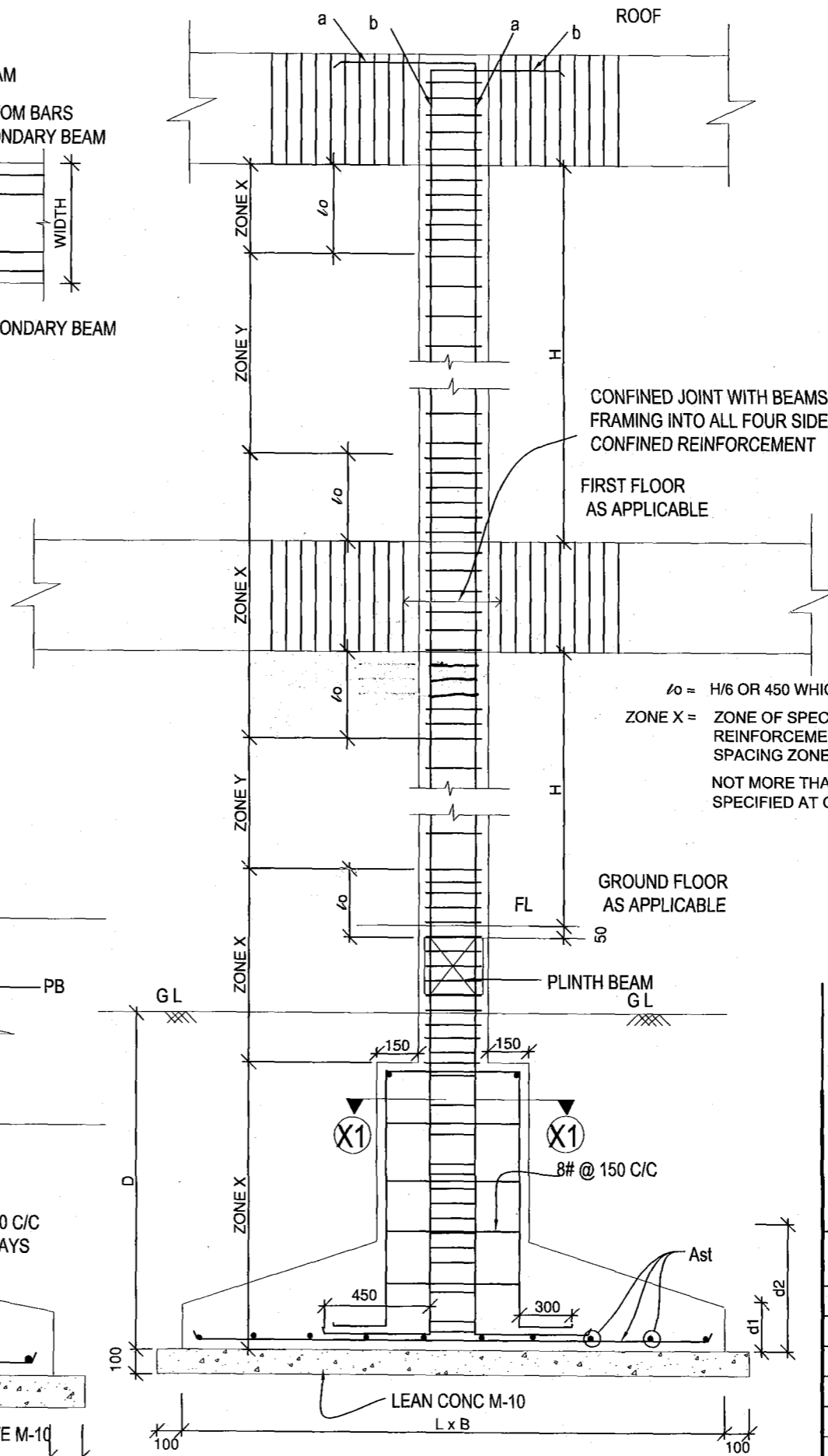
COL TIES 8# @ 100 C/C



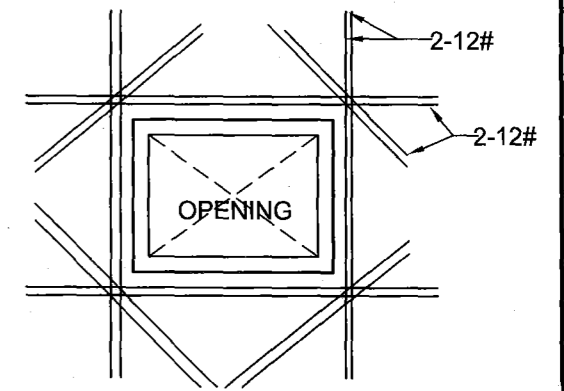
PLAN



STUB COL SC



TYPICAL DETAIL OF COL & COL FOOTINGS



REINFORCEMENT DETAILS AROUND OPENING

CONFINED JOINT WITH BEAMS FRAMING INTO ALL FOUR SIDES CONFINED REINFORCEMENT

FIRST FLOOR AS APPLICABLE

GROUND FLOOR AS APPLICABLE

$l_0 = H/6$ OR 450 WHICHEVER IS GREATER

ZONE X = ZONE OF SPECIAL CONFINING REINFORCEMENT i.e. TIES AT LOWER SPACING ZONE

NOT MORE THAN 50% OF THE BARS SHALL BE SPECIFIED AT ONE SECTION.

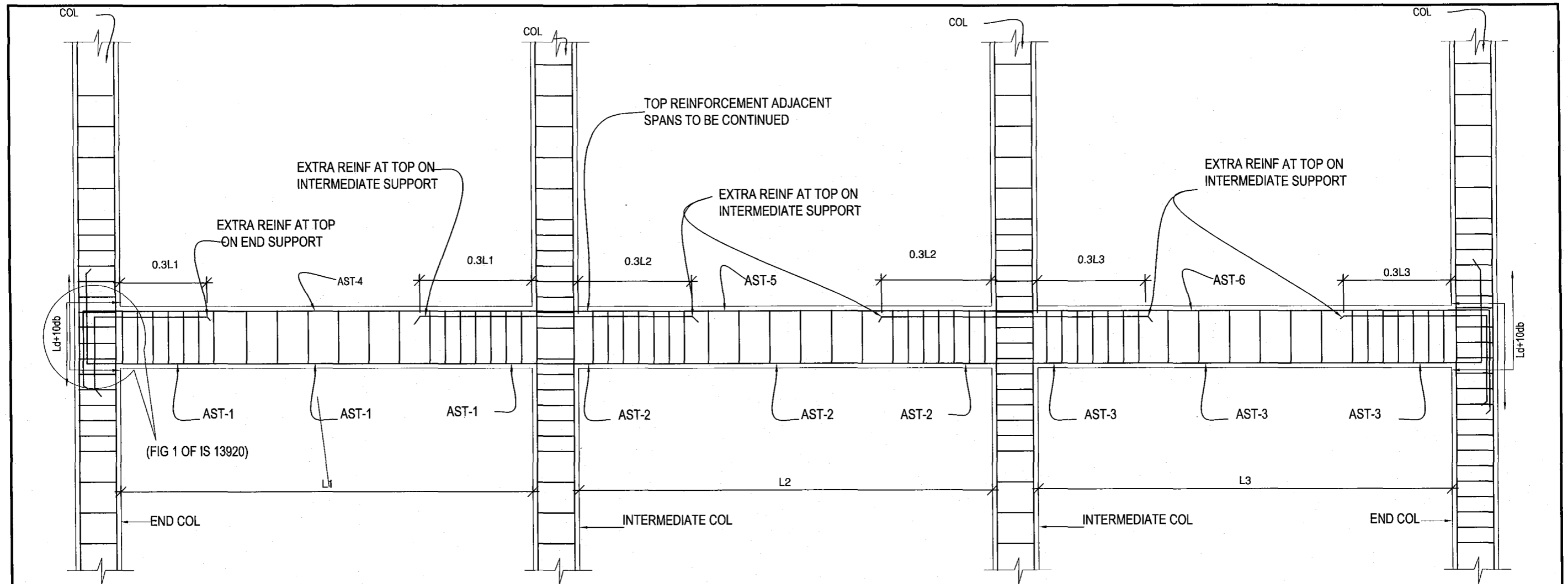
db = DIA OF BAR
Ld = DEVELOPMENT LENGTH
D = DEPTH OF FOUNDATION

NOTES FOR RCC STRUCTURE

DATE	31 MAR 2016	CHIEF ENGINEER JODHPUR ZONE	SHT NO 27
DRN	SUB GAIKWAD J M		
TCD		JODHPUR	29
CKD	U S SHARMA		
SCALE		REF DRG NO. - CEJZ/STR/STD/08/2016	

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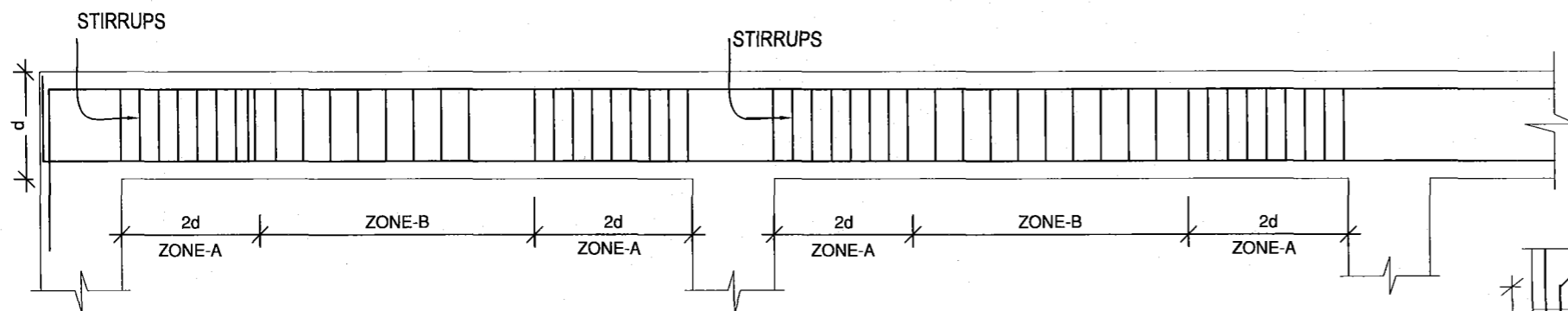
Subodh Kumar
(SUBODH KUMAR)
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DIRECTOR (DESIGN)
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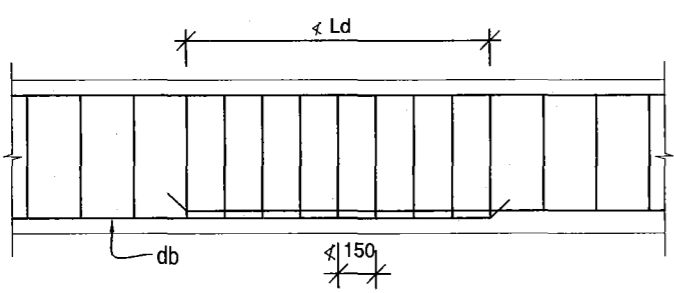
NOTE :- AST-1, AST-2 AND AST-3 ARE BOTTOM MIDDLE REINF & AST-4, AST-5, AST-6 ARE TOP REINF. OF BEAMS OF SPANS L1, L2 AND L3 RESPECTIVELY

TYPICAL BAR DETAILS FOR SPECIAL DUCTILE MOMENT RESISTING FRAMES (COLUMN DETAILS, SPLICING DETAILS, STIRRUPS DETAILS EXCLUDED)

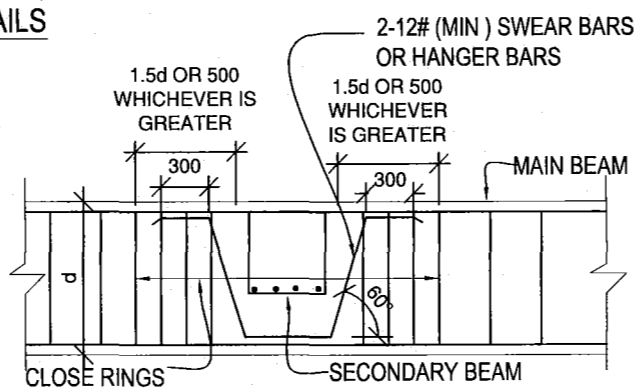
d = DEPTH OF BEAM
db = BAR DIAMETER



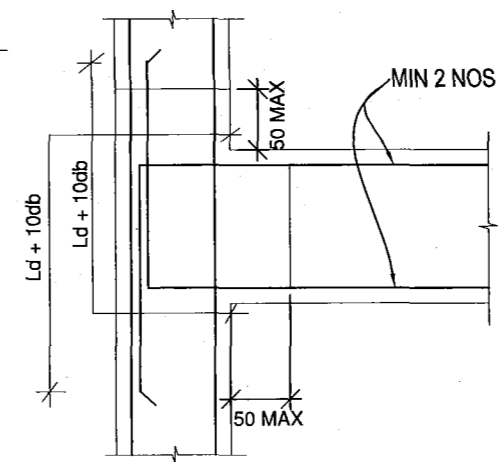
STIRRUPS ZONE DETAILS



LAP SPLICE IN BEAM (FIG 2 OF IS 13920)



DETAILS OF MAIN & SECONDARY BEAM

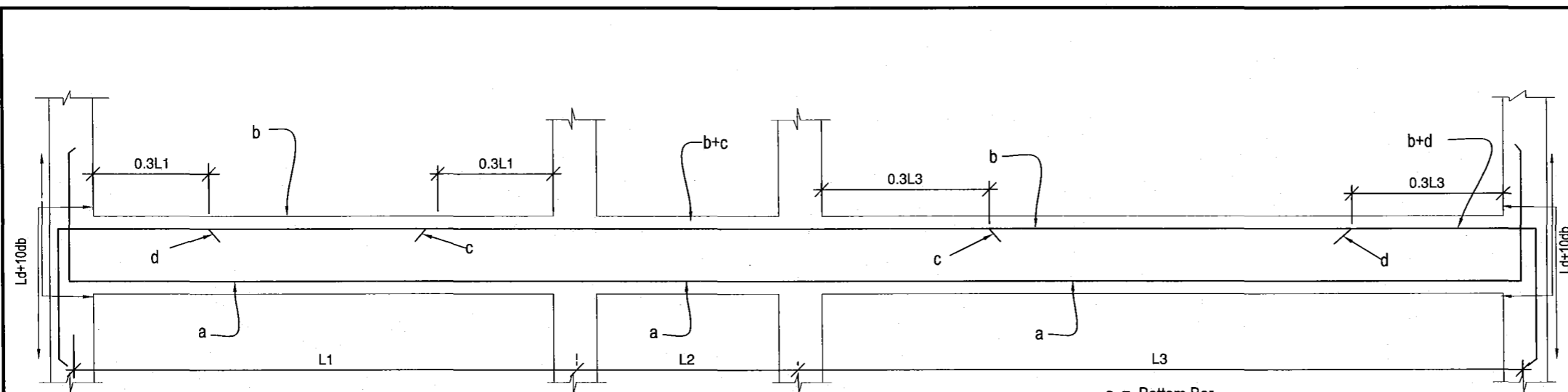


ANCHORAGE OF BEAM BARS IN AN EXTERNAL JOINT

NOTES FOR RCC STRUCTURE			
DATE	31 MAR 2016	CHIEF ENGINEER JODHPUR ZONE JODHPUR	SHT NO
DRN	SUB GAIKWAD J M		28/29
TCD			
CKD	U S SHARMA		
SCALE		REF DRG NO. - CEJZ/STR/STD/08/2016	

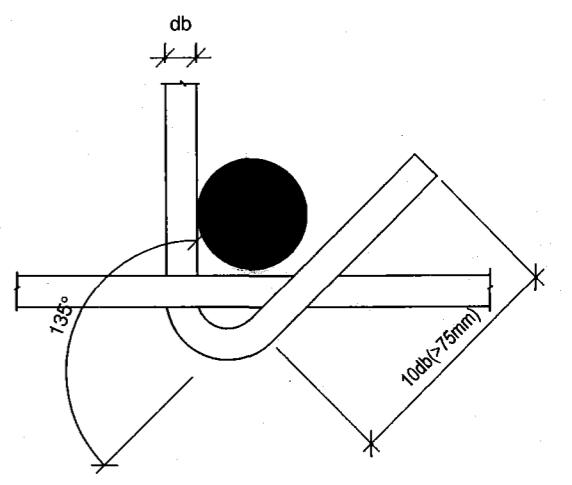
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C.K. CHANCLANI
TECH OFFR

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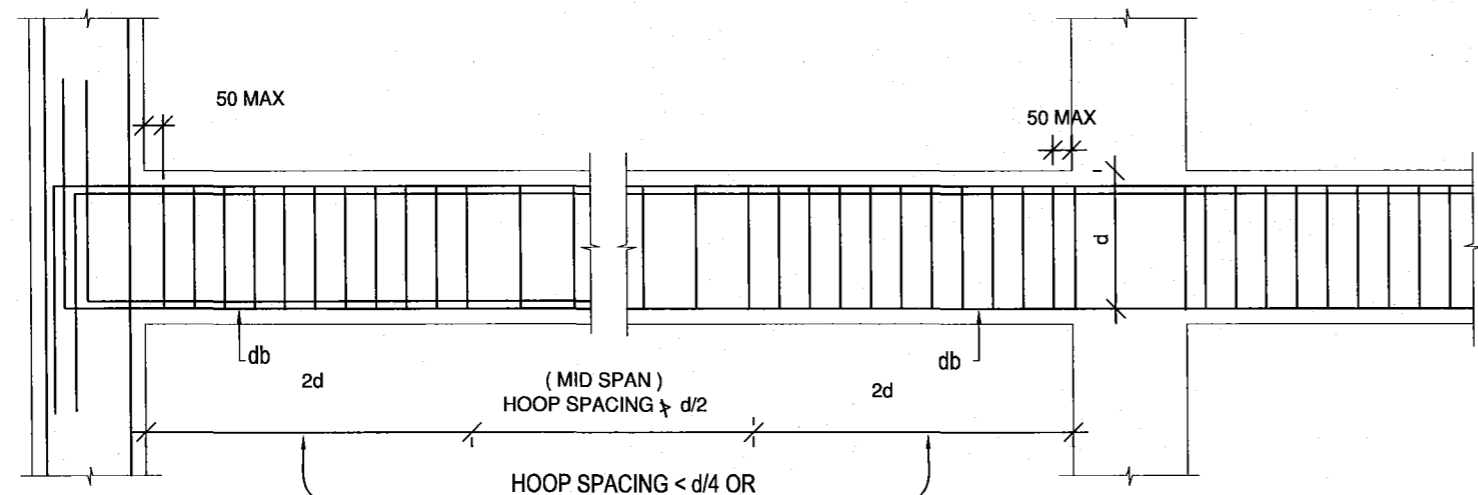


TYPICAL DETAILS OF BEAM (UNEQUAL CENTRAL SPAN)

- a = Bottom Bar
- b = Top Bar
- c = Extra Bar at Interior Support
- d = Extra Bar at Exterior Support



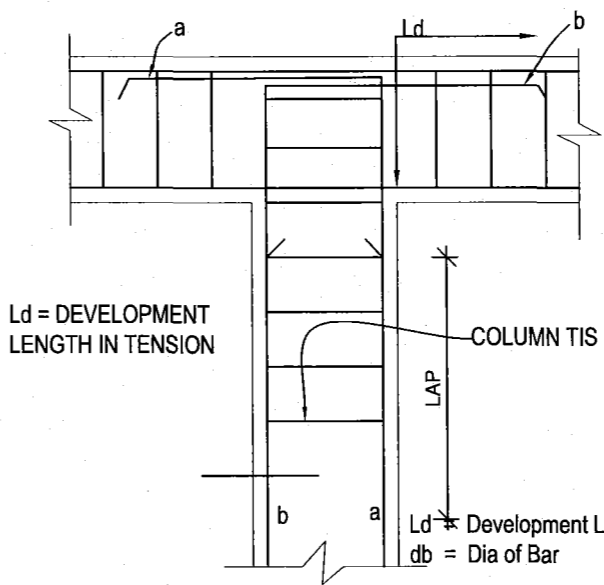
DETAIL OF STIRRUPS HOOK



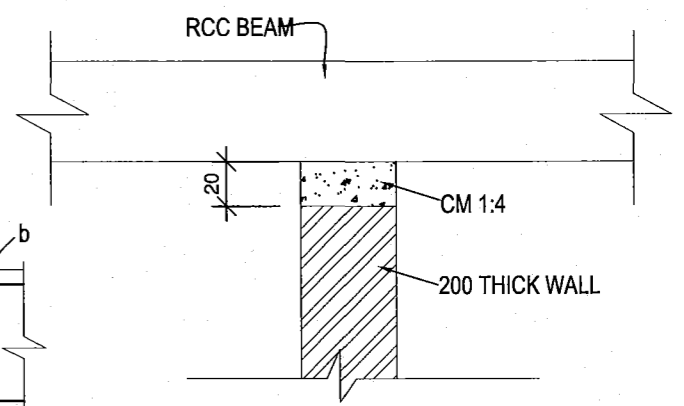
(MID SPAN) HOOP SPACING $\leq d/2$

HOOP SPACING $< d/4$ OR 100 OR DESIGN SPACING WHICHEVER IS LESS

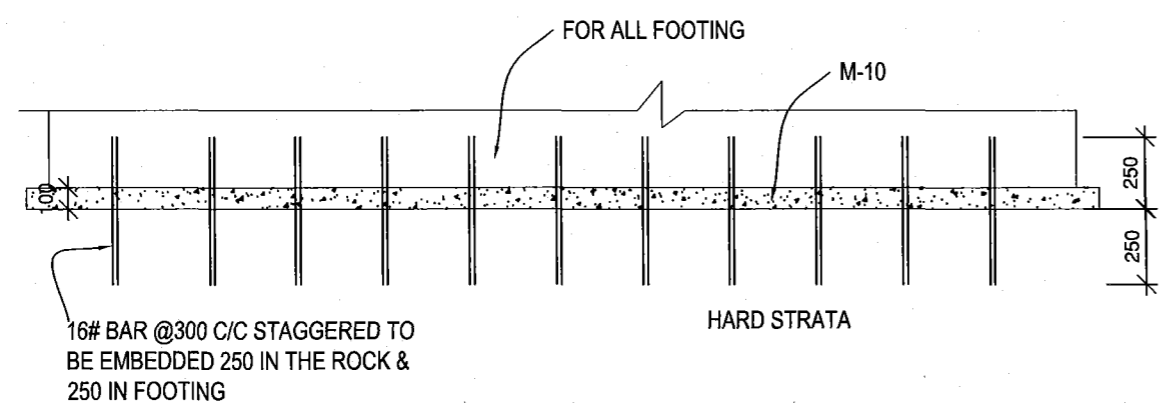
db = DIAMETER OF LONGITUDINAL BAR (FIG 5 OF IS 13920)
d = EFFECTIVE DEPTH OF BEAM



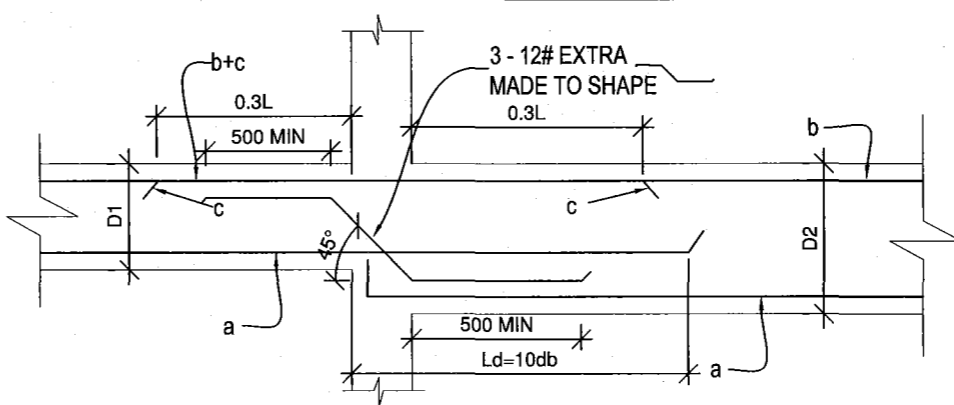
TERMINATION OF COLUMN BARS INSIDE BEAM (FIG 7.14 OF SP 34)



JUNCTION DETAILS FOR NON LOAD BEARING WALL



ARRANGEMENT OF FOOTING ON ROCK SBC EXCEEDING 200 KN/m² WHERE ADEQUATE DEPTH OF FOUNDATION THAT i.e. 1000 MM IS NOT AVAILABLE



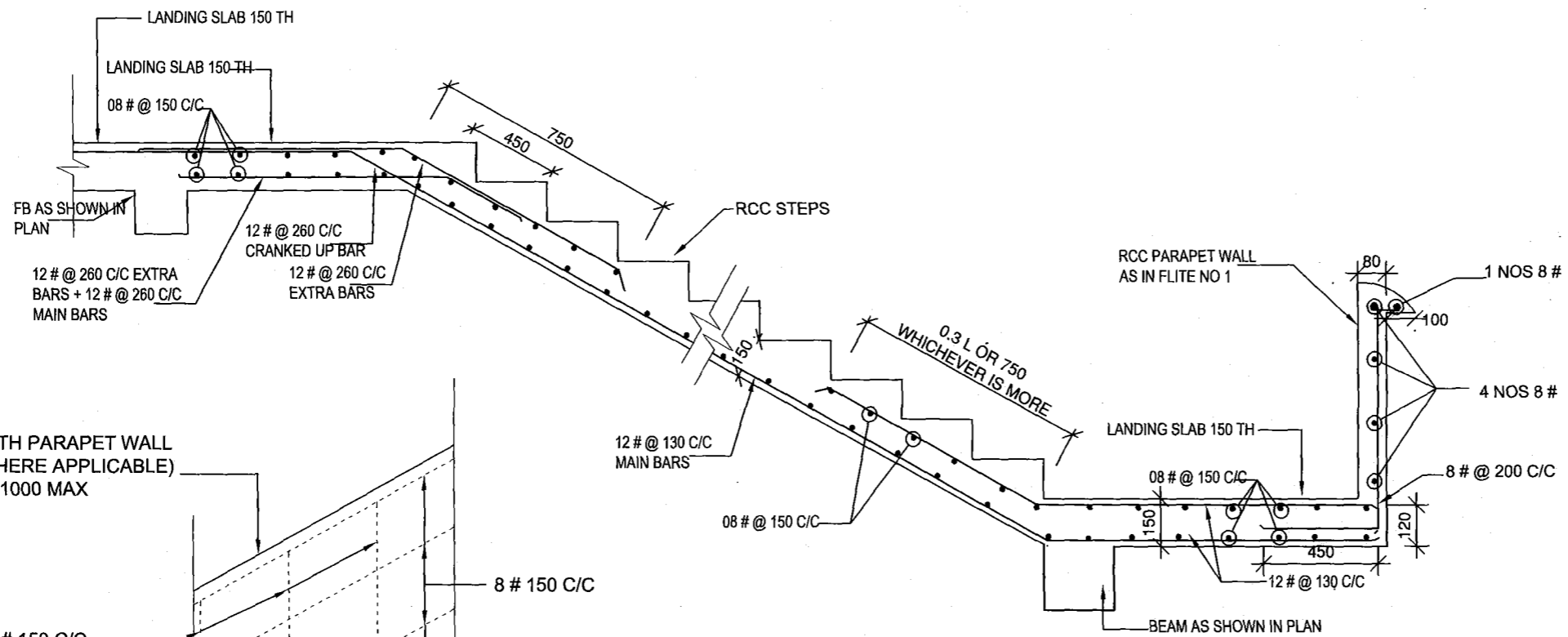
TYPICAL DETAILS OF BEAM (UNEQUAL DEPTH)

NOTES FOR RCC STRUCTURE

DATE		CHIEF ENGINEER JODHPUR ZONE JODHPUR	SHT NO
DRN	SUB GAIKWAD J M		29
TCD			29
CKD	U S SHARMA		
SCALE		REF DRG NO. - CEJZ/STR/STD/08/2016	

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DETAIL OF SECOND FLIGHT

80 TH PARAPET WALL
(WHERE APPLICABLE)
Ht 1000 MAX

8 # 150 C/C

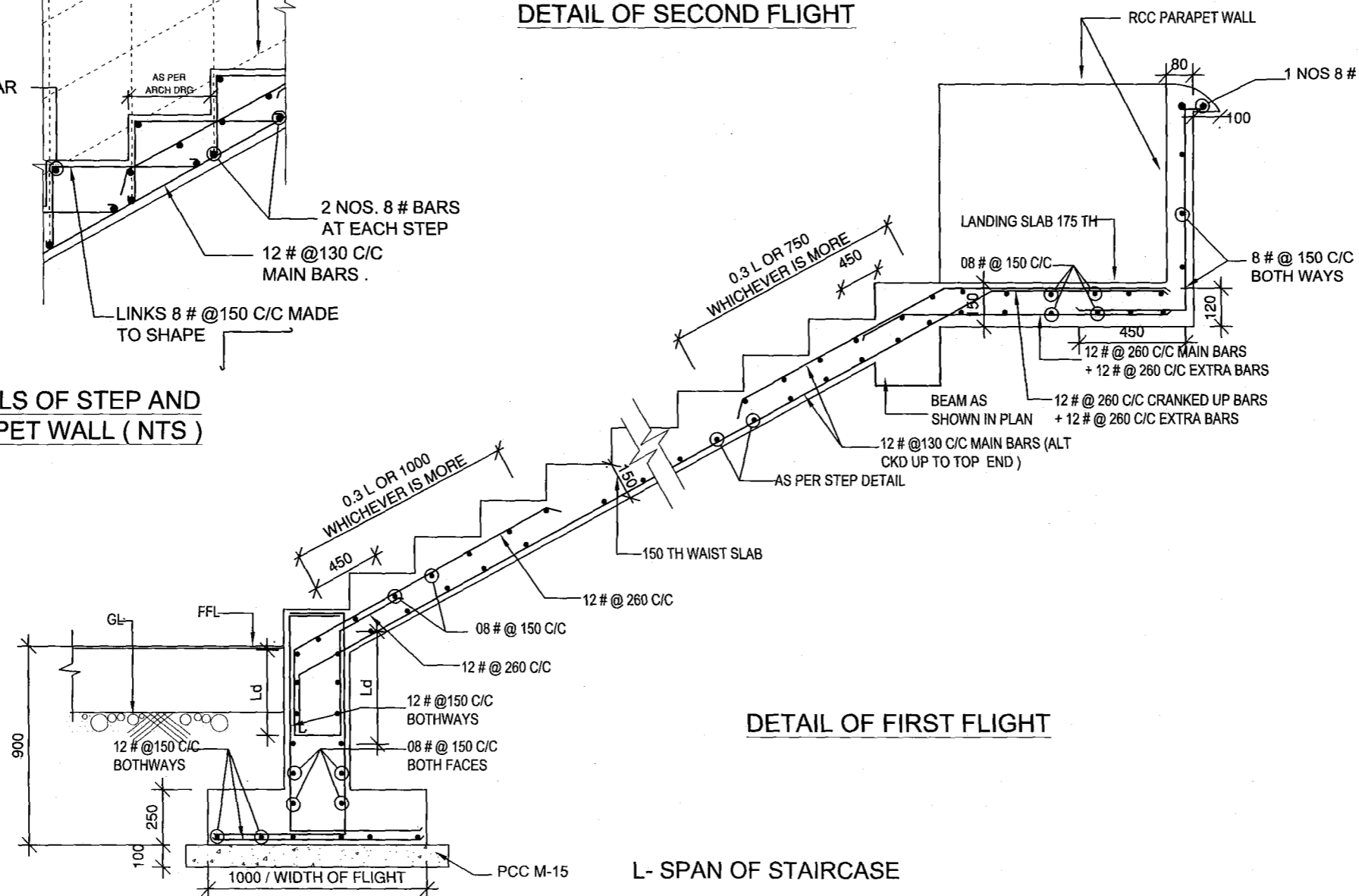
1 - 8 # NOSING BAR

2 NOS. 8 # BARS
AT EACH STEP

12 # @ 130 C/C
MAIN BARS .

LINKS 8 # @ 150 C/C MADE
TO SHAPE

DETAILS OF STEP AND
PARAPET WALL (NTS)



DETAIL OF FIRST FLIGHT

TYPICAL DETAILS OF RCC STAIR
WITH TOE BEAM AND CANTILEVER
LANDING FOR SPAN UP TO 4000

PLAN, SECTIONS & DETAILS

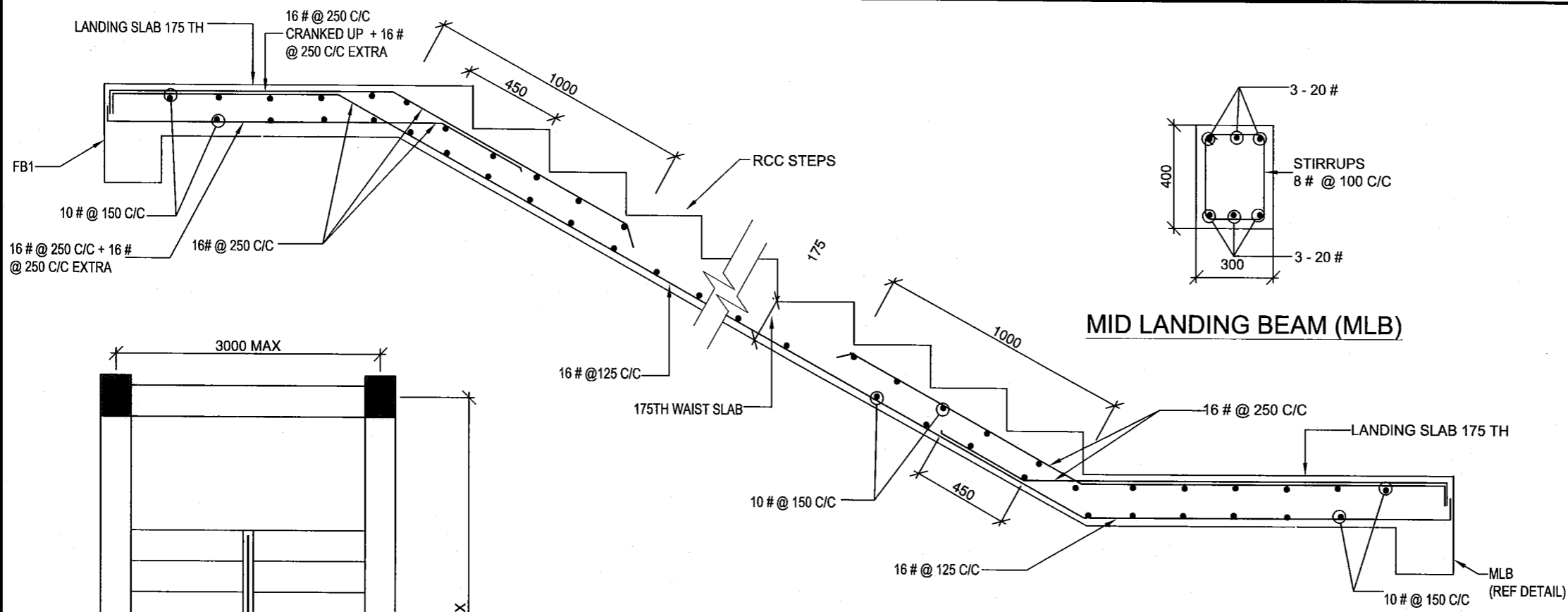
DATE	31 MAR 2016	CHIEF ENGINEER JODHPUR ZONE	SHT NO
DRN	SUB GAIKWAD J M		1
TCD		JODHPUR	2
CKD	U S SHARMA		
SCALE	AS SHOWN	REF DRG NO. - CEJZ/STR/STD/09/2016	

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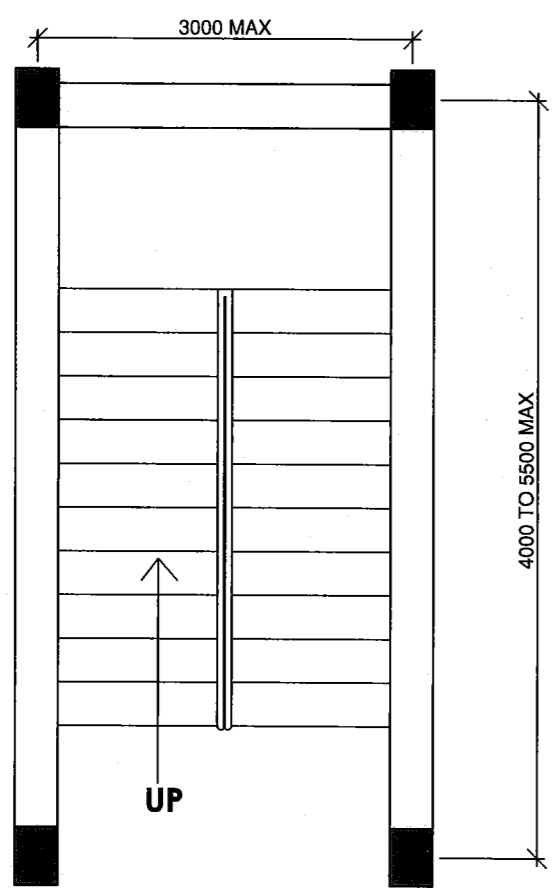
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TECH OFFR

Subodh Kumar

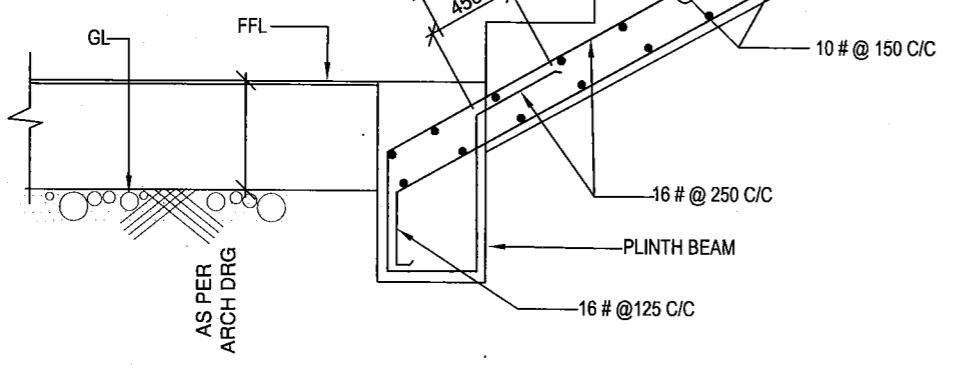
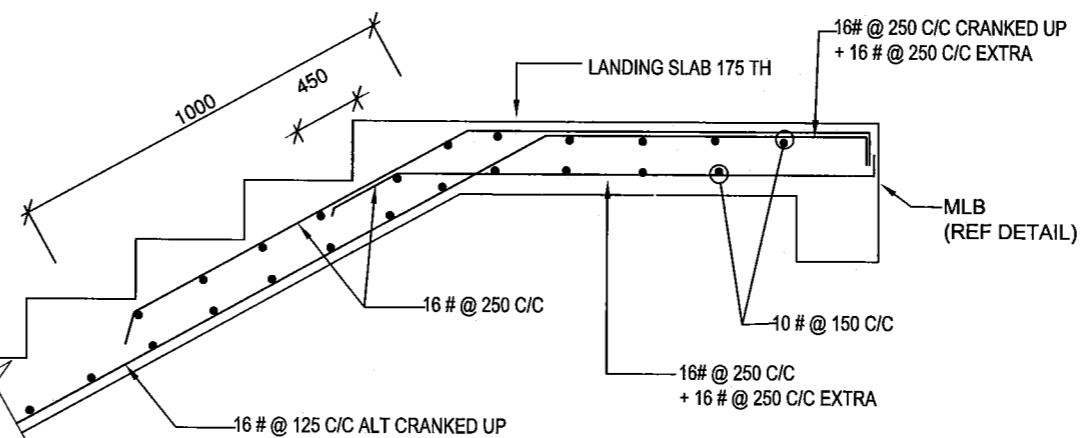
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DIRECTOR (DESIGN)
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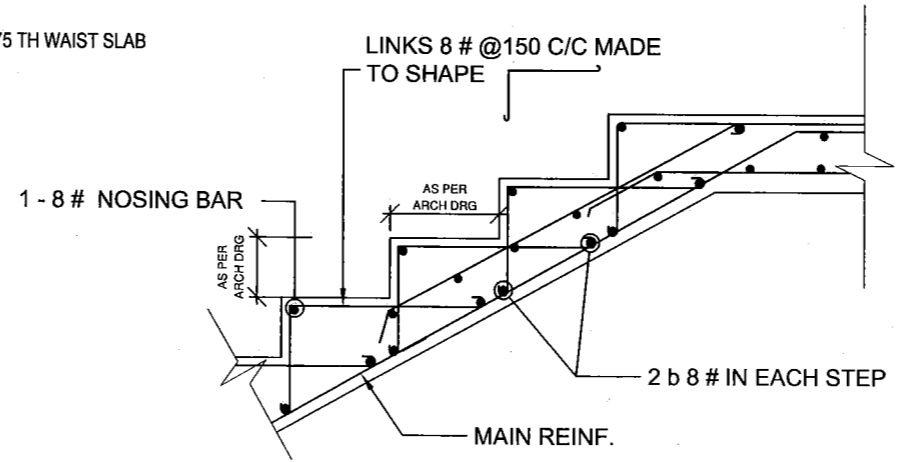
DETAIL OF SECOND FLIGHT



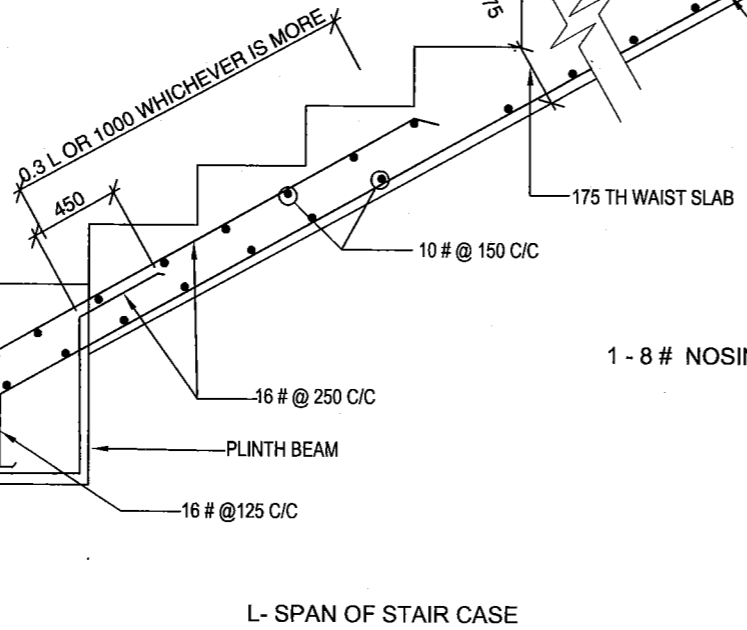
PLAN OF STAIRCASE



DETAIL OF FIRST FLIGHT



TYPICAL REINFORCEMENT IN STEPS OF STAIR.



L- SPAN OF STAIR CASE

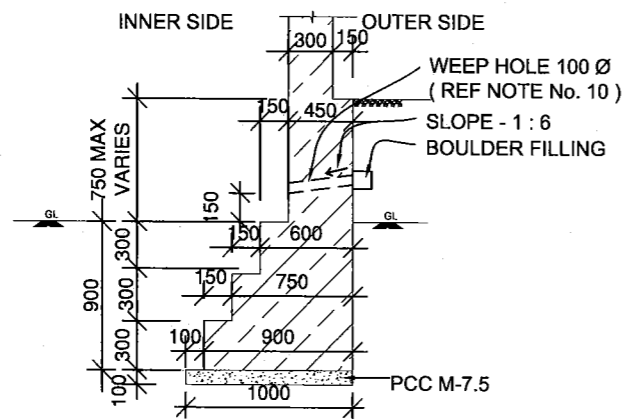
TYPICAL DETAILS OF RCC STAIR
CASE UP TO SPAN 4000-5500 (MAX)
FROM PLINTH BEAM

PLAN, SECTIONS & DETAILS

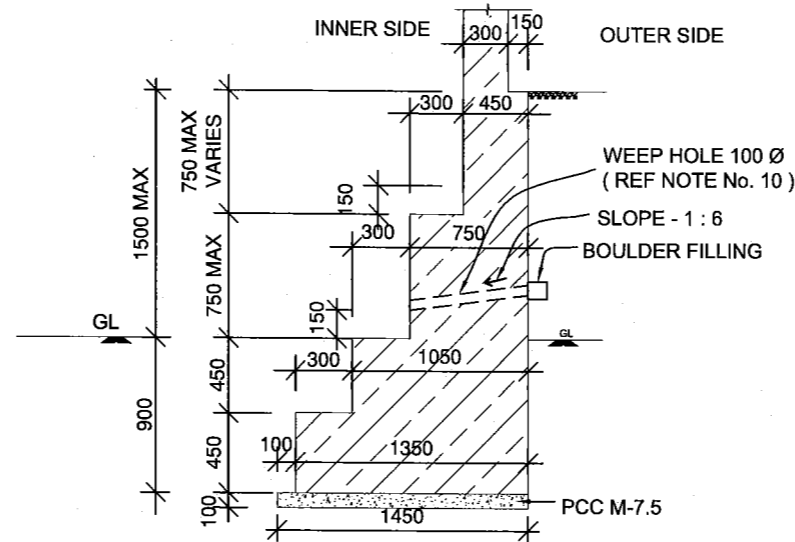
DATE	31 MAR 2016	CHIEF ENGINEER JODHPUR ZONE	SHT NO 2
DRN	SUB GAIKWAD J M		
TCD		JODHPUR	2
CKD	U S SHARMA		
SCALE	AS SHOWN	REF DRG NO. - CEJZ/STR/STD/09/2016	

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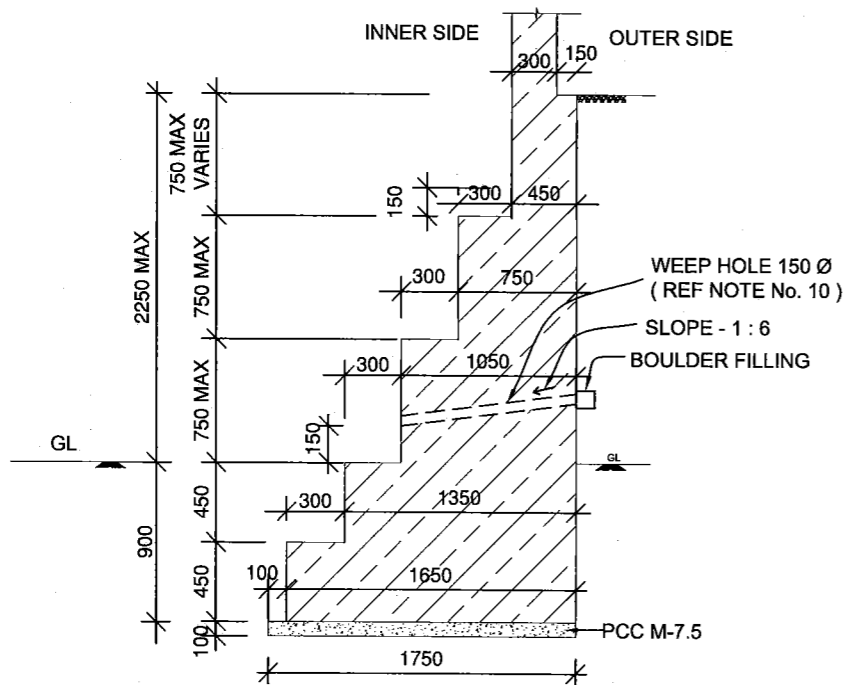
Subodh Kumar
(SUBODH KUMAR)
SE
DIRECTOR (DESIGN)
FOR CHIEF ENGINEER



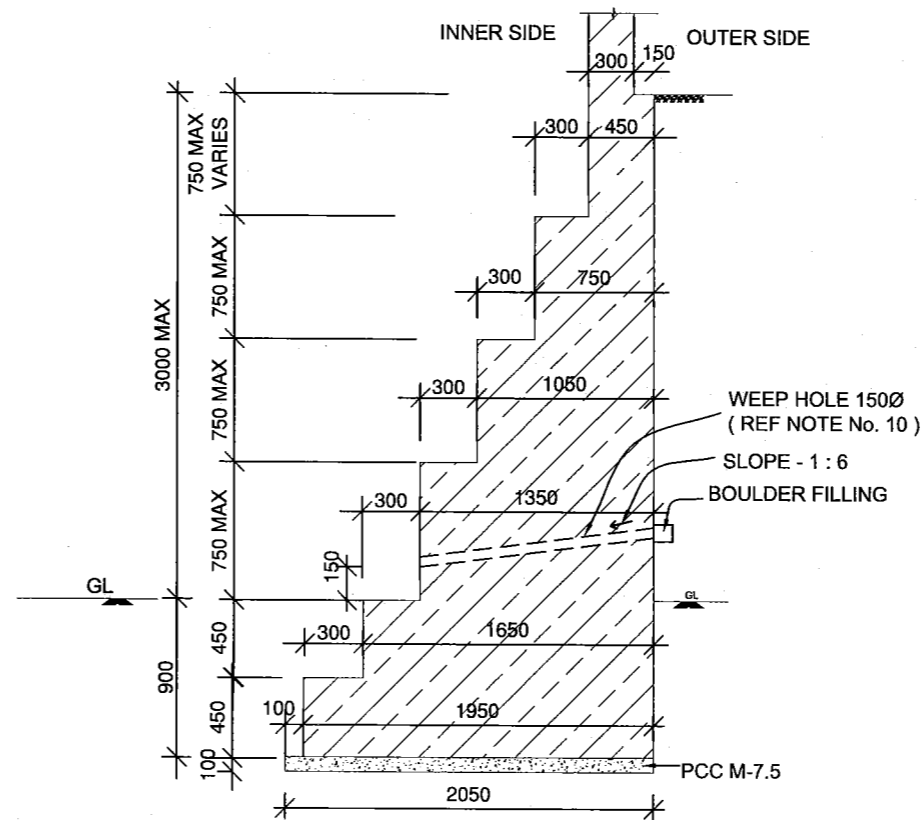
UPTO 750 HEIGHT



UPTO 1500 HEIGHT



UPTO 2250 HEIGHT



UPTO 3000 HEIGHT

NOTES

1. CONTRACTOR TO CHECK & VERIFY ALL DIMENSIONS BEFORE EXECUTION OF THE WORK.
2. ALL DIMENSIONS ARE GIVEN IN MILLIMETRES UNLESS OTHERWISE SPECIFIED.
3. FIGURED DIMENSIONS ONLY SHALL BE FOLLOWED.
4. THIS STRUCTURAL DRG SHALL BE READ IN CONJUNCTION WITH ARCH DRG.
5. MIX OF CONCRETE FOR ALL RCC WORK SHALL BE OF M-30 GRADE (DESIGN MIX) AS PER IS 456.
6. MINIMUM CLEAR COVER TO MAIN REINFORCEMENT SHALL BE 40 MM, 50MM & 65MM FOR BEAMS, COL & FOOTINGS RESPECTIVELY.
7. THE FOUNDATION HAS BEEN DESIGNED BASED ON SBC (SAFE BEARING CAPACITY OF SOIL) AS 100 KN/M² AND ANY CHANGE IN SBC SHALL BE INTIMATED TO THIS OFFICE FOR REDESIGNING OF FOUNDATION.
8. '# ' INDICATES DIA OF HIGH STRENGTH DEFORMING BARS CONFIRMING TO IS 1786.
9. ALL EXPOSED SURFACES OF STEEL MEMBERS PROVIDE FOR WATER VENT WAYS SHALL BE TREATED WITH TWO COATS OF ANTI CORROSIVE BITUMINOUS WITH TWO COATS OF ANTI CORROSIVE BITUMINOUS PAINT.
10. A 100 Ø/150 Ø AC PIPE SLEEVES OF REQUIRED LENGTH SHALL BE PROVIDED @ 2000 C/C BOTH HORIZONTAL AND VERTICAL DIRECTIONS (ZIG-ZAG PATTERN) AS DIRECTED BY ENGINEER IN CHARGE AND BOULDER FILLING 300x300x300 AROUND THE PIPE SHALL BE PROVIDED AS SHOWN IN DRG.

RR MASONRY RETAINING WALL

DATE	31 MAR 2016	CHIEF ENGINEER JODHPUR ZONE JODHPUR	SHT NO
DRN	SUB GAIKWAD J M		1
TCD			1
CKD	U S SHARMA		
SCALE		REF DRG NO. - CEJZ/STR/STD/10/2016	

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DIRECTOR (DESIGN)
FOR CHIEF ENGINEER

SCHEDULE OF FOOTINGS

SL No.	SBC IN KN/M ²	LOAD IN KN/M	NOMEN-CLATURE OF FOOTING	WIDTH OF FOOTING IN mm 'W'	THICKNESS OF FDN. CONC 'T'	REINFORCEMENT				REF. TO CROSS SECTION
						BAR 'A'		BAR 'B'		
1.	50	50	A-5	1000	150	8 #	200	5	8 #	FIG - 4
		60	A-6	1200	150	8 #	200	5	8 #	FIG - 4
		70	A-7	1400	150	8 #	150	5	8 #	FIG - 4
		80	A-8	1600	150	8 #	150	6	8 #	FIG - 4
		90	A-9	1800	150	10 #	150	7	8 #	FIG - 4
2.	75	50	B-5	700	150	-	-	-	-	FIG - 3
		60	B-6	800	150	-	-	-	-	FIG - 3
		70	B-7	950	150	8 #	200	4	8 #	FIG - 4
		80	B-8	1100	150	8 #	200	5	8 #	FIG - 4
		90	B-9	1200	150	10 #	200	5	8 #	FIG - 4
		100	B-10	1350	150	10 #	150	5	8 #	FIG - 4
3.	100	50	C-5	500	150	-	-	-	-	FIG - 2
		60	C-6	600	150	-	-	-	-	FIG - 2
		70	C-7	700	150	-	-	-	-	FIG - 3
		80	C-8	800	150	-	-	-	-	FIG - 3
		90	C-9	900	150	10 #	200	4	8 #	FIG - 4
4.	125	50	D-5	500	150	-	-	-	-	FIG - 2
		60	D-6	500	150	-	-	-	-	FIG - 2
		70	D-7	600	150	-	-	-	-	FIG - 2
		80	D-8	650	150	-	-	-	-	FIG - 3
		90	D-9	750	150	-	-	-	-	FIG - 3
		100	C-10	800	150	-	-	-	-	FIG - 3
5.	150	50	E-5	500	150	-	-	-	-	FIG - 2
		60	E-6	500	150	-	-	-	-	FIG - 2
		70	E-7	500	150	-	-	-	-	FIG - 2
		80	E-8	600	150	-	-	-	-	FIG - 2
		90	E-9	600	150	-	-	-	-	FIG - 2
		100	E-10	680	150	-	-	-	-	FIG - 3
110	E-11	750	150	-	-	-	-	FIG - 3		
120	E-12	850	200	-	-	-	-	FIG - 3		

NOTES : - DEPTH 'D' OF THE FOOTING SHALL BE DECIDED BASED ON RECOMMENDATION OF SOIL INVESTIGATION REPORT OF THE SITE. 'D' SHALL IN NO CASE BE LESS THAN 1 M.

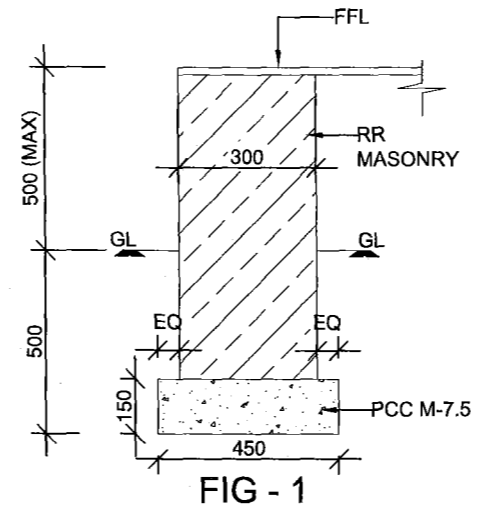


FIG - 1
FOUNDATION FOR DWARF WALL

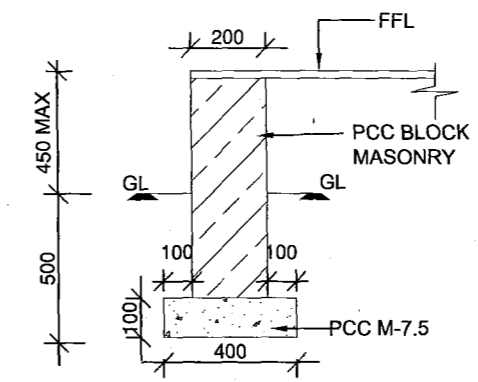


FIG - 1(a)
DWARF WALL PCC BLOCK MASONRY

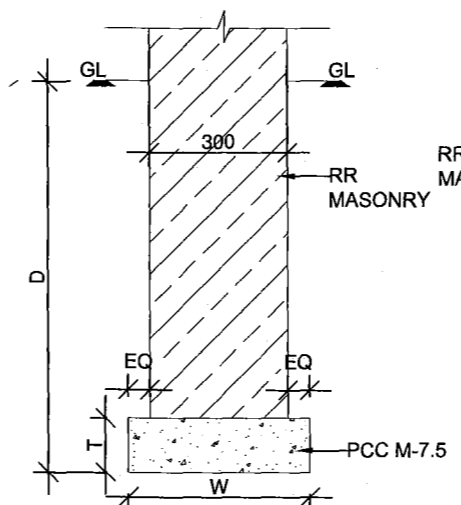


FIG - 2

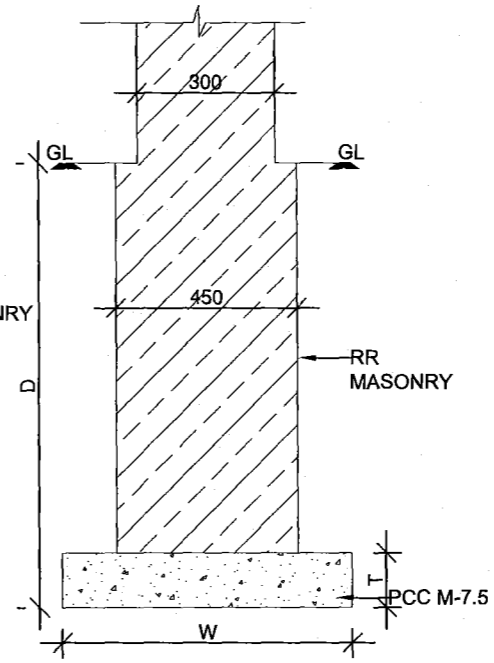


FIG - 3

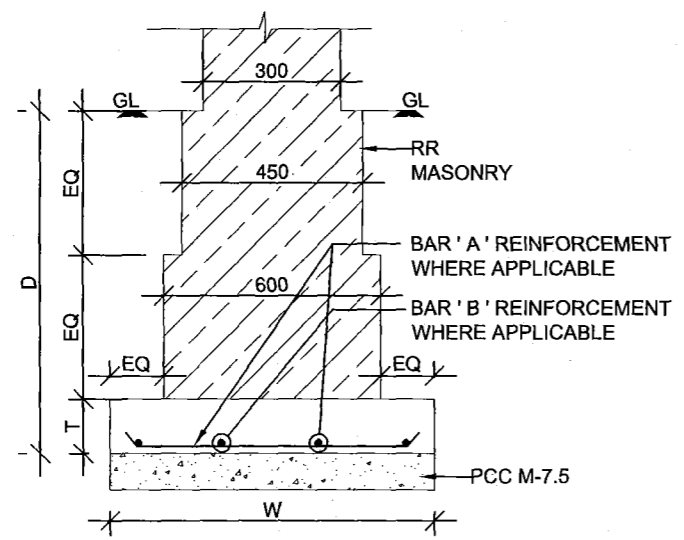


FIG - 4

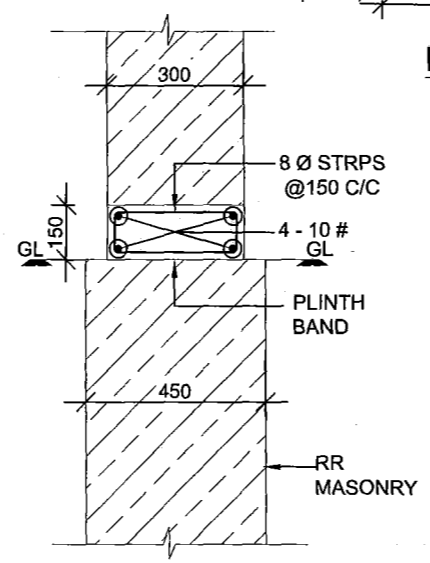


FIG - 5
TYPICAL CROSS SECTION OF PLINTH BAND

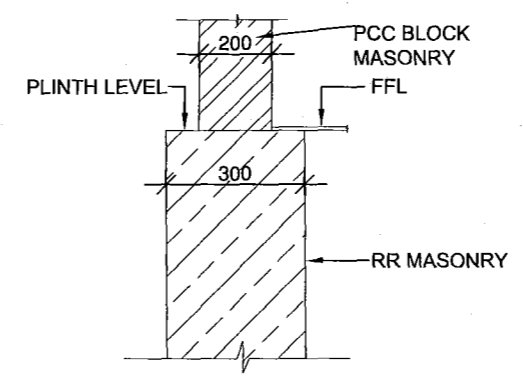


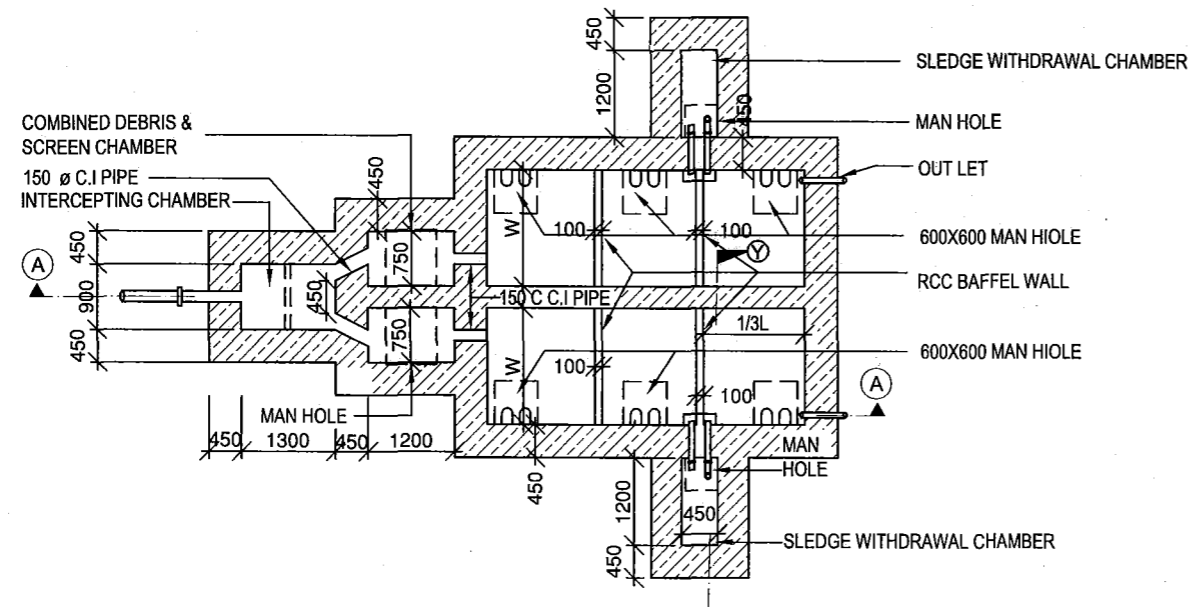
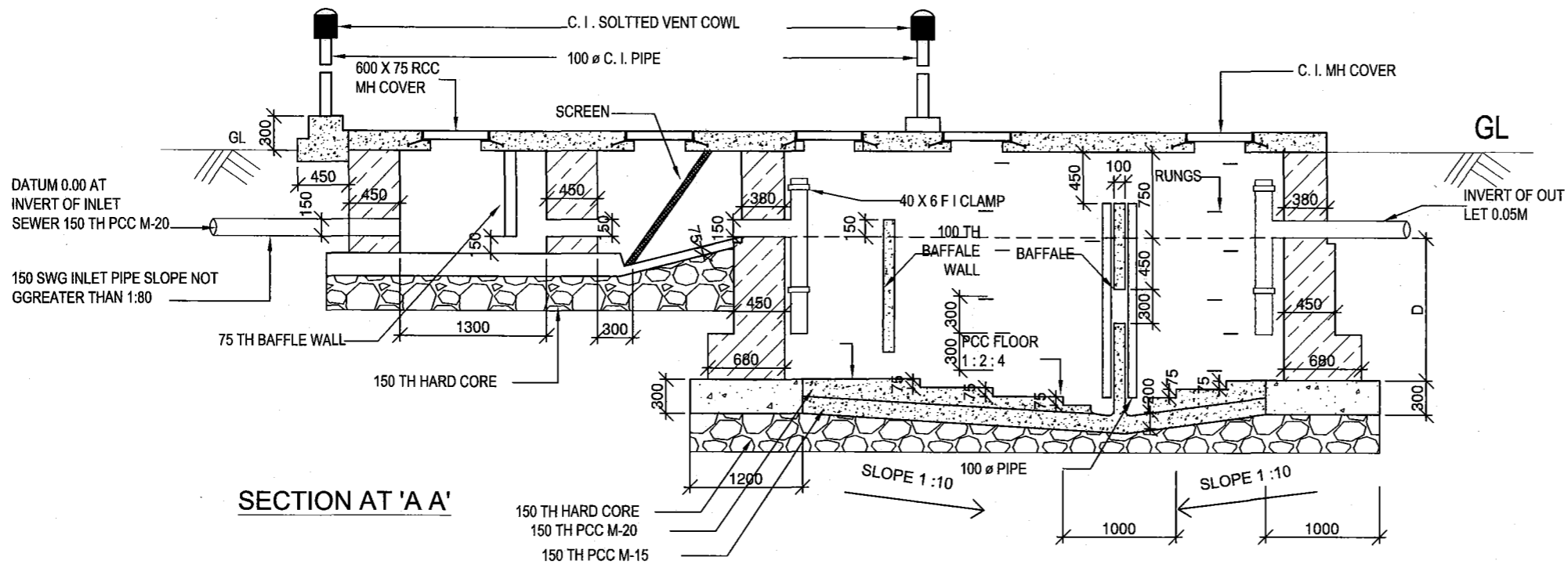
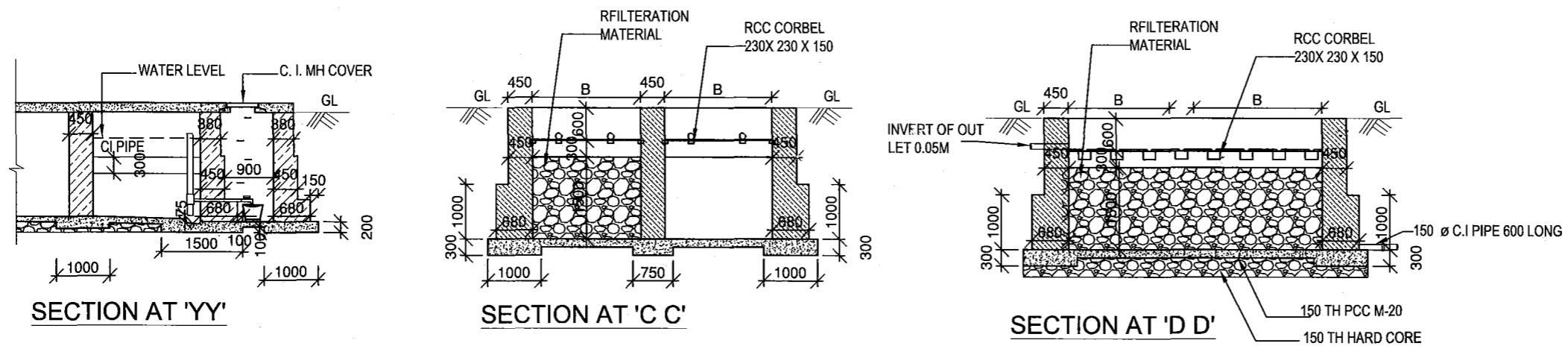
FIG - 6
TYPICAL FOUNDATION DETAIL FOR 200 TH BK WALL (NON-LOAD BEARING)

TYPICAL DETAILS OF FOUNDATION FOR LOAD BEARING WALLS. (SBC OF SOIL 50 TO 150 KN/M²)

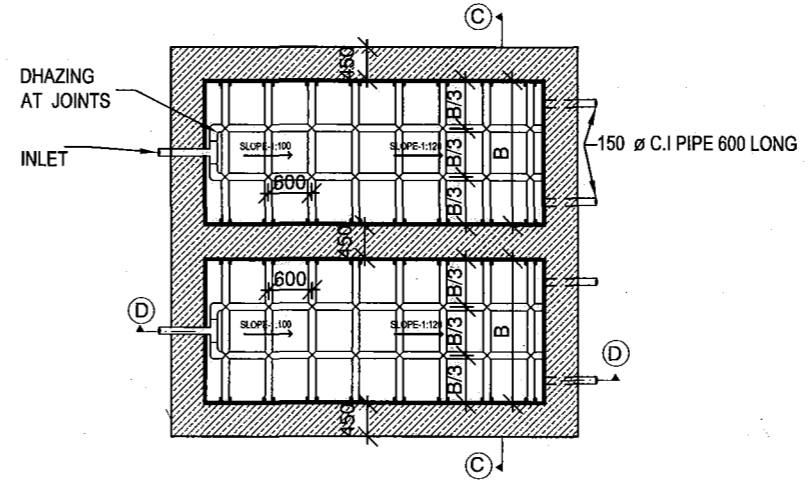
DATE	31 MAR 2016	CHIEF ENGINEER JODHPUR ZONE JODHPUR	SHT NO 1
DRN	SUB GAIKWAD J M		
TCD			
CKD	U S SHARMA		
SCALE		REF DRG NO. - CEJZ/STR/STD/11/2016	

C.K. Chanchlani
C.K. CHANCHLANI
TECH OFFR

Subodh Kumar
(SUBODH KUMAR)
SE
DIRECTOR (DESIGN)
FOR CHIEF ENGINEER



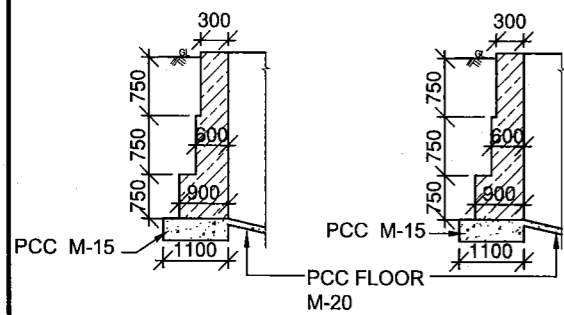
TYPICAL PLAN AT WATER LEVEL OF SEPTIC TANK FOR 100 & ABOVE USERS



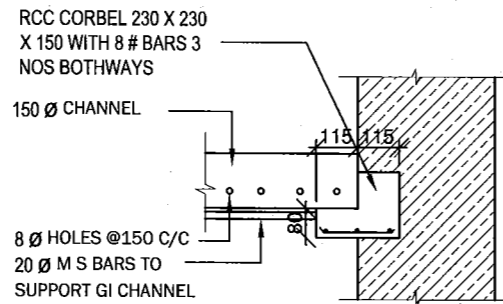
PLAN OF FILTER BED FOR 100 & ABOVE USERS

- SL. No. NOTES**
13. WATER TABLE IS ASSUMED TO BE AT 3000 BELOW GL.
 14. THE DESIGN HAS BEEN MADE ASSUMING A CLEANING INTERVAL OF ONE YEAR
 15. CI VENT COWL SHALL BE MADE MOSQUITO PROOF.
 16. C.I. VENT COWL SHALL BE TAKEN TO A HEIGHT OF 2000 WHEN THE SEPTIC TANK IS ATLEAST 1500 AWAY FROM RESIDENTIAL AREA.
 17. FILTRATION MATERIAL TO BE HARD CORE BREEZE OF 65, 50, 40, 25 & 12 IN LAYERS OF 450, 300, 200, & 100 RESPECTIVELY LAID FROM BOTTOM TO TOP.
 18. THE RCC SLAB OVER THE SLEDGE WITHDRAW CHAMBER SHALL BE 100 TH WITH MAIN BARS 8 # TMT /HYSD BARS @200 C/C & DISTRIBUTION BARS 8#@250 C/C.
 19. EFFLUENT FROM FILTER BED WILL BE ABSORBED IN THE DRAIN 5 M LONG.
 20. IN CASE OF BRICK WORK / PCC BLOCKS/ FLY ASH BRICKS CONSTRUCTION INSTEAD OF STONE MASONRY. THE WALL THICKNESS SHALL BE 3 BRICK THICK, 2 BRICK THICK, & 1½ BRICK THICK INSTEAD OF 680, 450 & 380 RESPECTIVELY. (BASED ON MODULAR BRICKS OF 230 X 115 X 100 CLAY BRUNT BRICKS , 200X 100X 100 PCC BLOCK/ FLY ASH BRICKS)

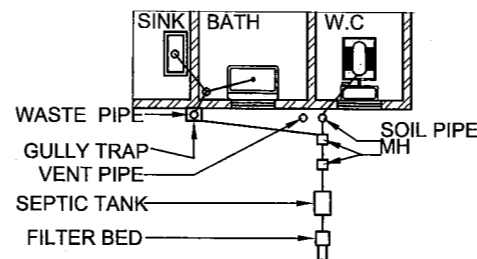
SEPTIC TANK FOR 100 TO 1500 USERS.			
DATE	31 MAR 2016	CHIEF ENGINEER JODHPUR ZONE JODHPUR	SHT NO
DRN	SUB GAIKWAD J M		1
TCD			2
CKD	U S SHARMA		
SCALE		REF DRG NO. - CEJZ/STR/STD/12/2016	
 C.K. CHANCLANI TECH OFFR		 (SUBODH KUMAR) SE DIRECTOR (DESIGN) FOR CHIEF ENGINEER	



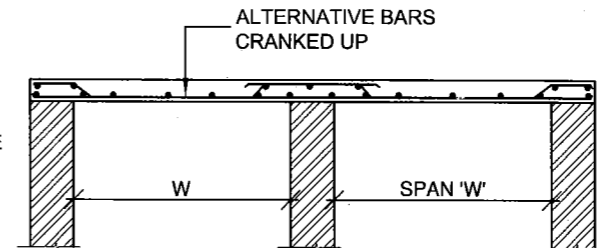
SECTION AT - 'P' P' SECTION AT - 'Q Q'



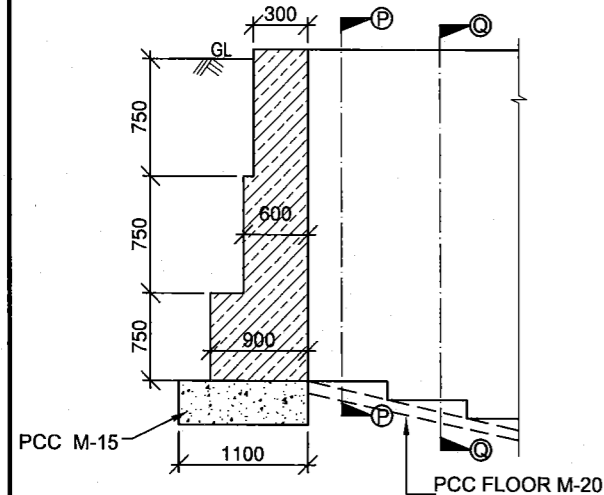
LONGITUDINAL SECTION OF GI SHEET CHANNEL RESTING ON RCC CORBEL



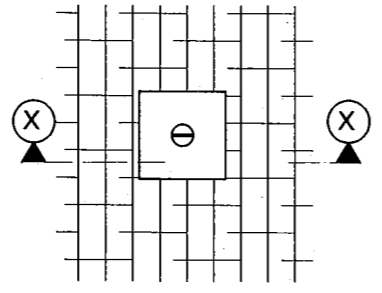
TYPICAL LAY OUT OF SEPTIC TANK SEWERAGE SYSTEM



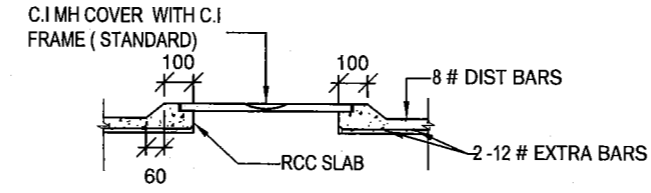
CRANKING UP BARS FOR RCC SLAB CONTINUOUS SPAN (DIAGRAMATIC)



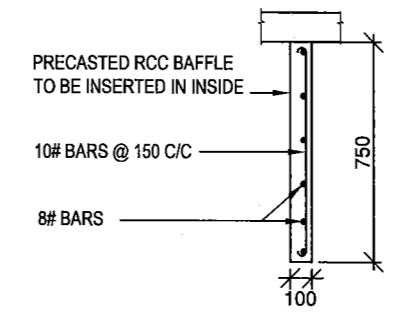
DETAIL OF SIDE WALLS



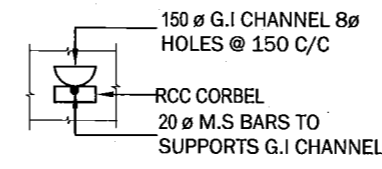
DETAIL OF EXTRA REINFORCEMENT AROUND MANHOLE COVER OPENING



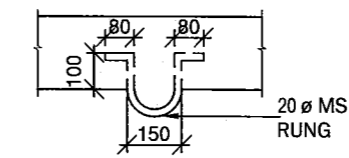
SECTION AT 'X X'



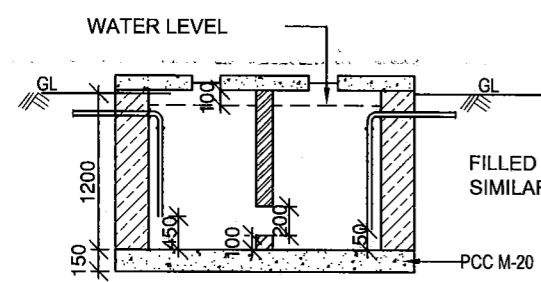
DETAIL OF RCC BAFFLE WALL



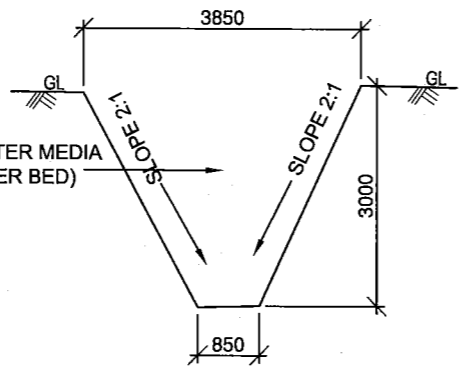
CROSS SECTION OF G.I SHEET CHANNEL



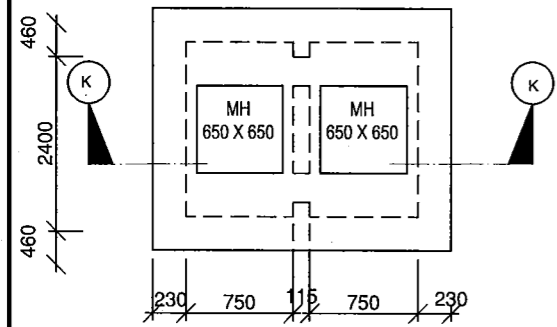
DETAIL OF C.I RUNG



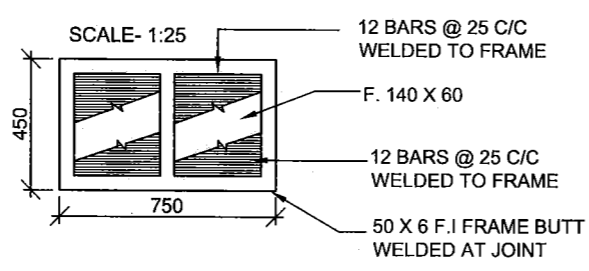
SECTION AT 'K K'



DETAIL OF DRAIN



GRASE TRAP FOR 100 USERS



DETAIL OF SCREEN

TABLE SHOWING DIMENSIONS & DETAILS OF RCC SLAB FOR DIFFERENT SEPTIC TANKS								
SL. NO.	NO OR USERS	SEPTIC TANK DIMENSIONS			REINFORCEMENT		SIZE OF FILTER BED	
		LENGTH 'L'	WIDTH 'W'	LIQUID DEPTH 'D'	THICK-NESS	MAIN BARS		DISTRIBUTION
1.	100	4400	1600	1300	125	8 # @ 150 C/C	8 # @ 200 C/C	2/1500X2500
2.	150	5800	1800	1300	125	8 # @ 150 C/C	8 # @ 200 C/C	2/1800X3200
3.	200	7100	1450	1300	125	8 # @ 150 C/C	8 # @ 200 C/C	2/1450X4000
4.	250	8400	2000	1300	125	8 # @ 150 C/C	8 # @ 200 C/C	2/2000X4700
5.	300	9000	2400	1300	125	8 # @ 140 C/C	8 # @ 150 C/C	2/2200X5500
6.	350	10000	2400	1300	125	8 # @ 140 C/C	8 # @ 150 C/C	2/2200X6000
7.	400	10000	2400	1500	125	8 # @ 125 C/C	8 # @ 150 C/C	2/2500X6000
8.	450	9300	2400	1830	125	8 # @ 125 C/C	8 # @ 100 C/C	2/2000X6800
9.	500	9300	2700	1830	125	8 # @ 125 C/C	8 # @ 150 C/C	2/2500X7200
10.	550	9300	3000	1830	125	10 # @ 150 C/C	8 # @ 200 C/C	2/2800X7500
11.	650	10800	3000	1830	125	10 # @ 150 C/C	8 # @ 200 C/C	2/3000X8100
12.	750	11300	3300	1830	140	10 # @ 120 C/C	8 # @ 150 C/C	2/3100X4500
13.	1000	12400	4000	1830	150	12 # @ 130 C/C	8 # @ 150 C/C	2/3200X12000
14.	1500	16500	4500	1830	150	12 # @ 100 C/C	8 # @ 150 C/C	23300X12500

NOTES

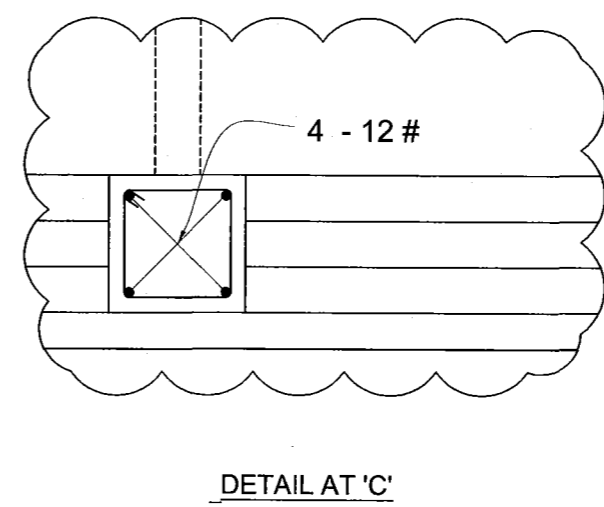
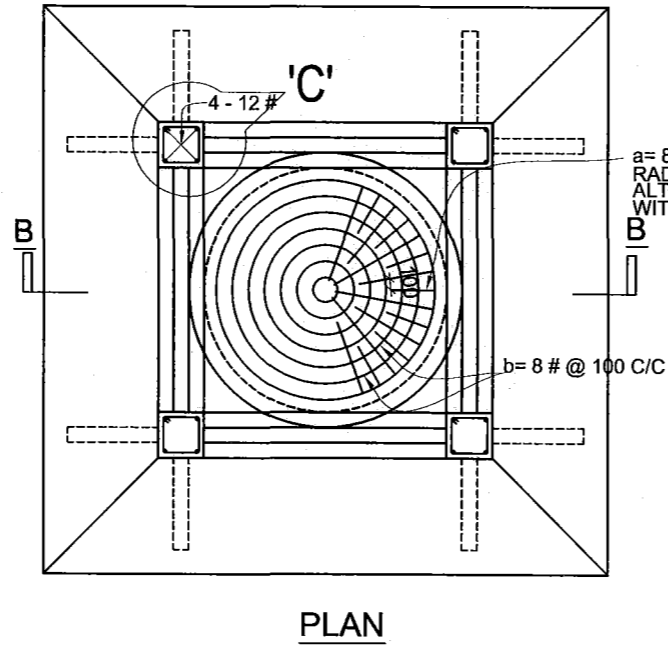
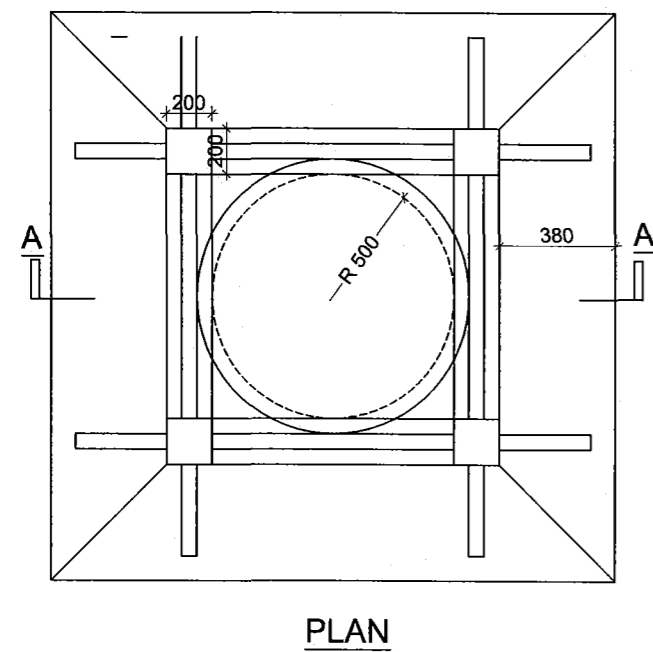
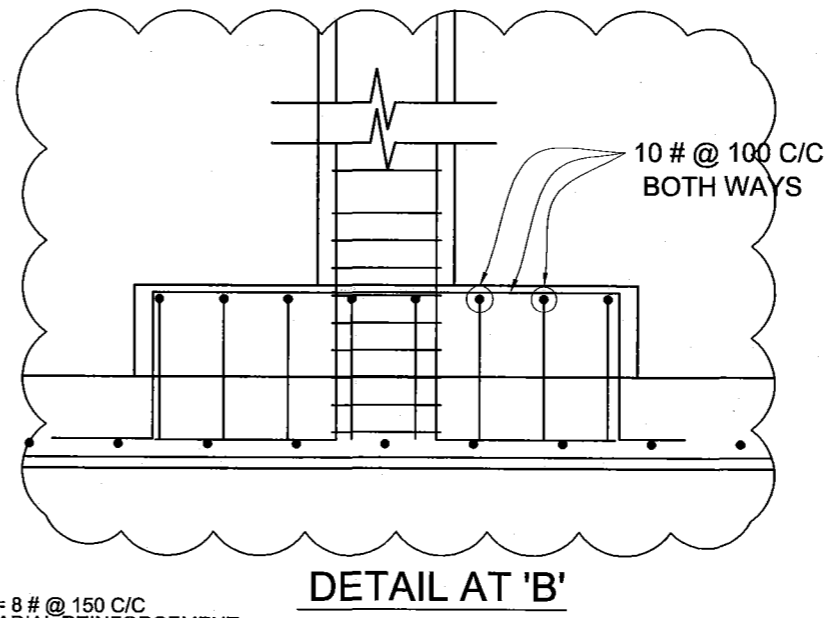
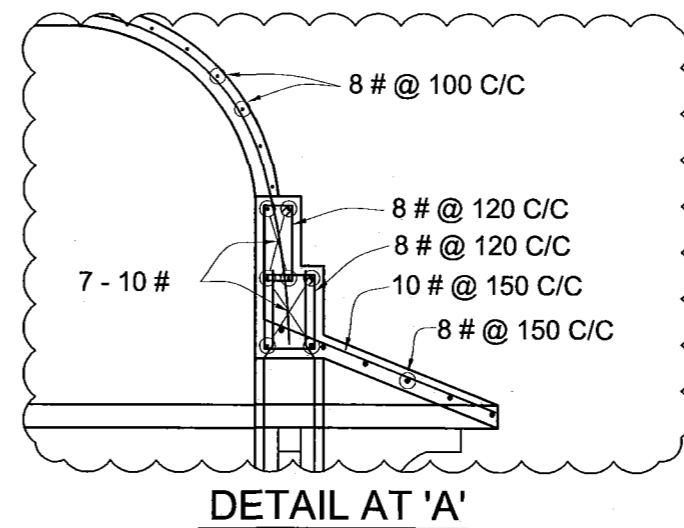
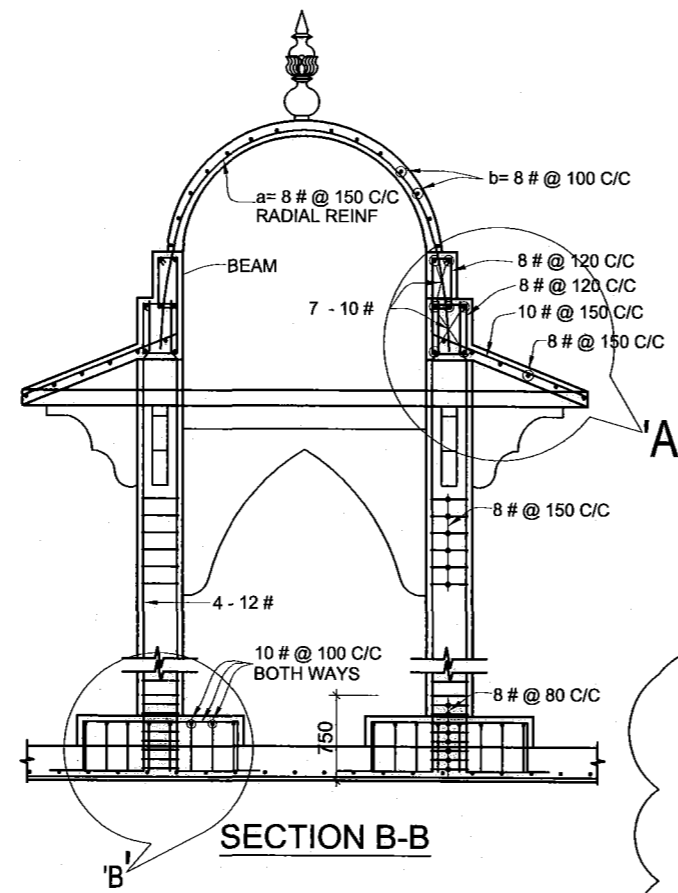
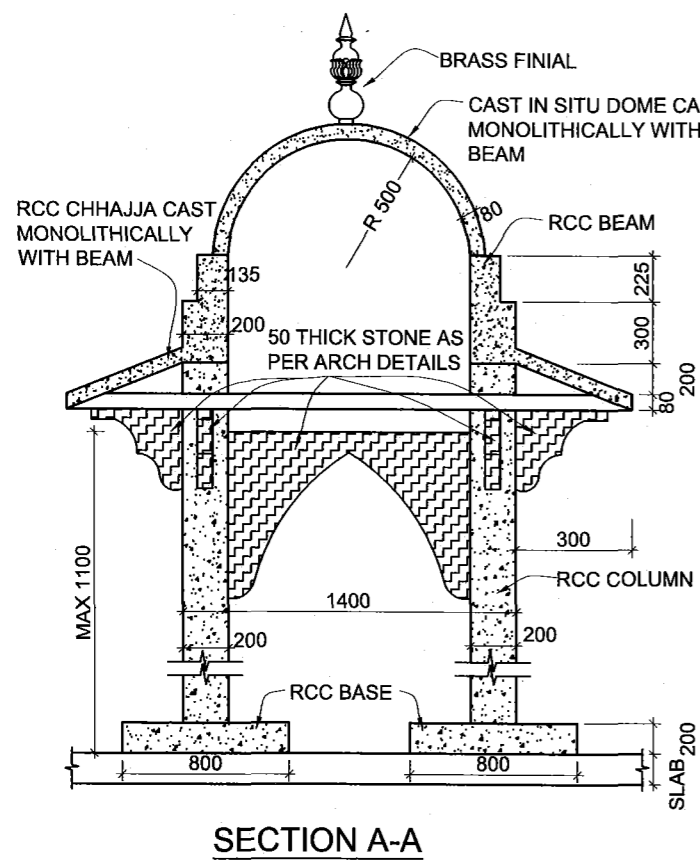
- ALL STONE MASONRY SHALL BE IN RANDOM RUBBLE INTERNALLY 15 TH CEMENT PLASTERED.
- THE CHANNEL SHALL BE MADE OF 18 GAUGE GI SHEET
- GROOVE IN FLOOR AND SIDE WALLS TO BE PROVIDED IN COMBINED DEBRIS & SCREEN CHAMBER FOR INSERTING THE SCREEN 25 WIDE x 18 DEEP
- ALL JOINTS OF GI SHEET CHANNELS TO BE BRAZED AT JOINTS.
- DETAILS OF SEPTIC TANK & FILTER BEDS FOR 100 TO 1500 USERS SHALL BE SAME AS SHOWN IN TYPICAL DETAILS WITH THE RELEVANT DIMENSION SHOWN AGAINST EACH IN THE TABLE.
- TWO LAYERS OF WATER PROOFING PAPER OVER PLASTER SHALL BE PROVIDED UNDER THE BEARING OF RCC SLAB.
- THESE CAN BE BUILT IN ORDINARY SOILS OTHER THAN IN CLAY OR BLACK COTTON SOIL.
- RCC SLAB FOR SEPTIC TANK PROJECTS 100 FROM THE FACE OF WALL AROUND.
- ALL WALLS SHALL BE TAKEN TO A MINIMUM HEIGHT OF 150 ABOVE GL EXTERNAL FACE OF WALLS SHALL HAVE FLUSH POINTING.
- FILTER BED SHALL BE PROVIDE ALONG THE LONGER SIDE OF GI CHANNEL @ 450C/C.
- THE SEPTIC TANK AND FILTER BED HAVE BEEN DESIGNED BASED ON SBC OF 100 KN/M². IN CASE OF ANY CHANGE IN SBC AT SITE THE MATTER SHALL BE REF TO THIS OFFICE FOR REDISIGN.
- COVER TO REINFORCEMENT IN SLAB WILL BE 30MM.

SEPTIC TANK FOR 100 TO 1500 USERS.

DATE	31 MAR 2016	CHIEF ENGINEER JODHPUR ZONE JODHPUR	SHT NO
DRN	SUB GAIKWAD J M		2
TCD			2
CKD	U S SHARMA		
SCALE		REF DRG NO. - CEJZ/STR/STD/12/2016	

C.K. Chanchlani
C.K. CHANCLANI
TECH OFFR

Subodh Kumar
(SUBODH KUMAR)
SE
DIRECTOR (DESIGN)
FOR CHIEF ENGINEER

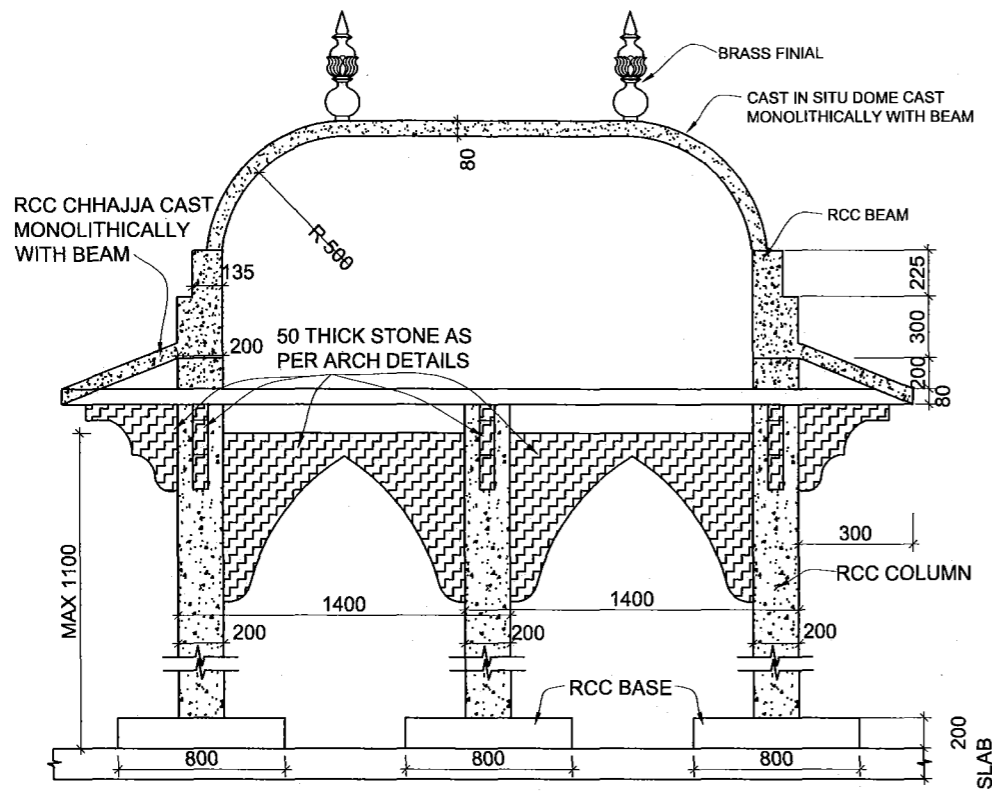


DETAILS OF 500 DIA SINGLE DOME RCC/ STONE CHHATRI

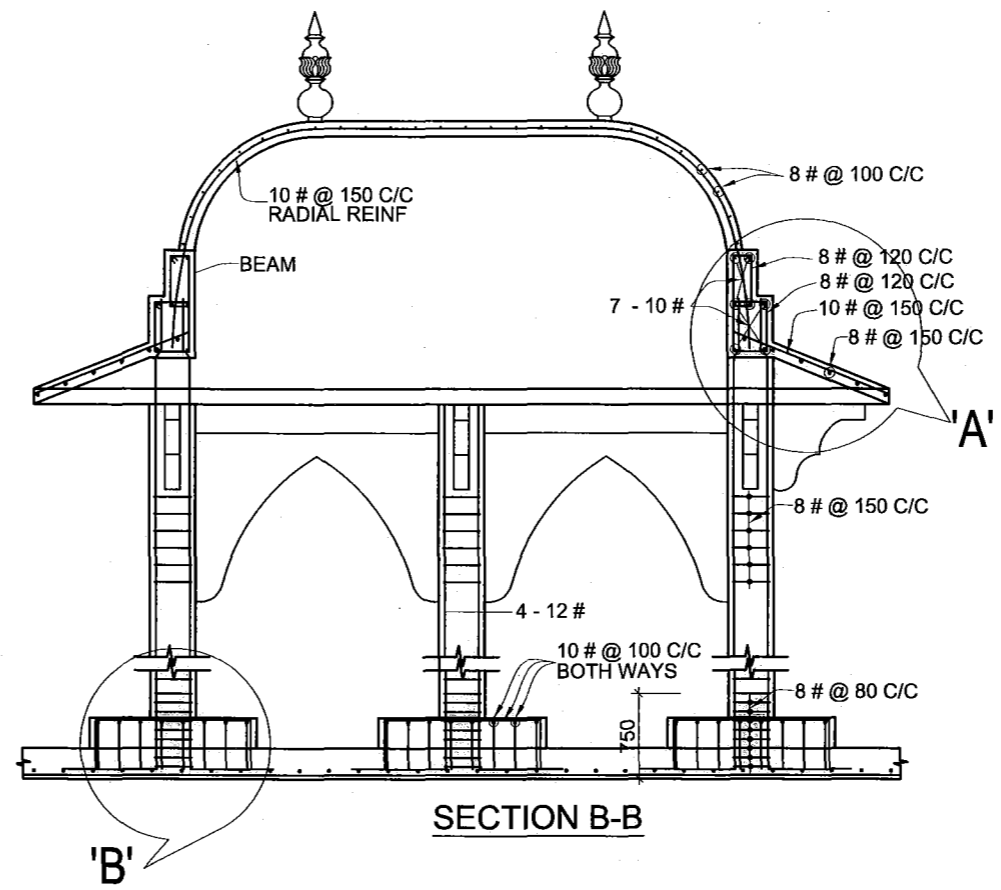
DETAILS FOR RCC/STONE CHHATRI			
DATE	31 MAR 2016	CHIEF ENGINEER JODHPUR ZONE JODHPUR	SHT NO
DRN	SUB GAIKWAD J M		1
TCD			3
CKD	U S SHARMA		
SCALE		REF DRG NO. - CEJZ/STR/STD/13/2016	

Chanchlani
C.K. CHANCLANI
TECH OFFR

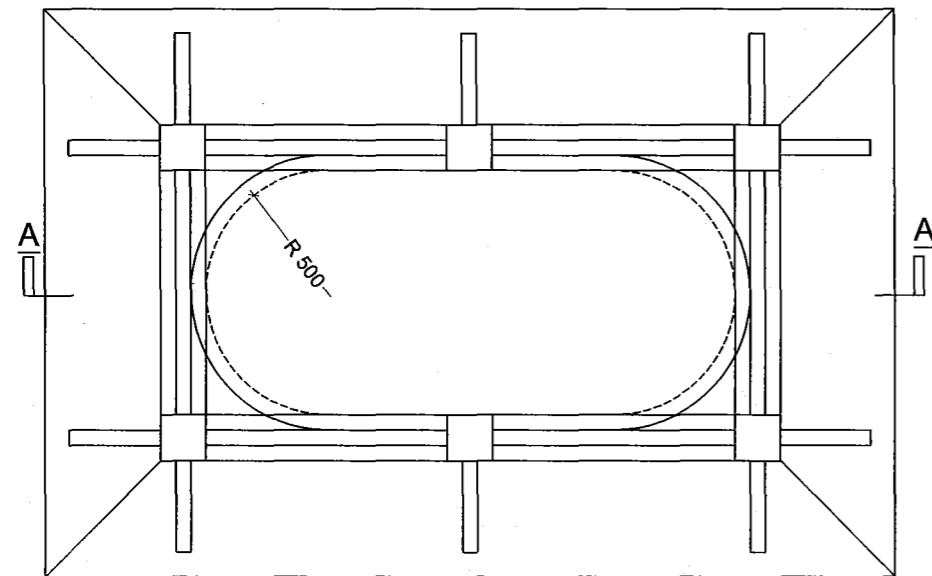
formls
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DIRECTOR (DESIGN)
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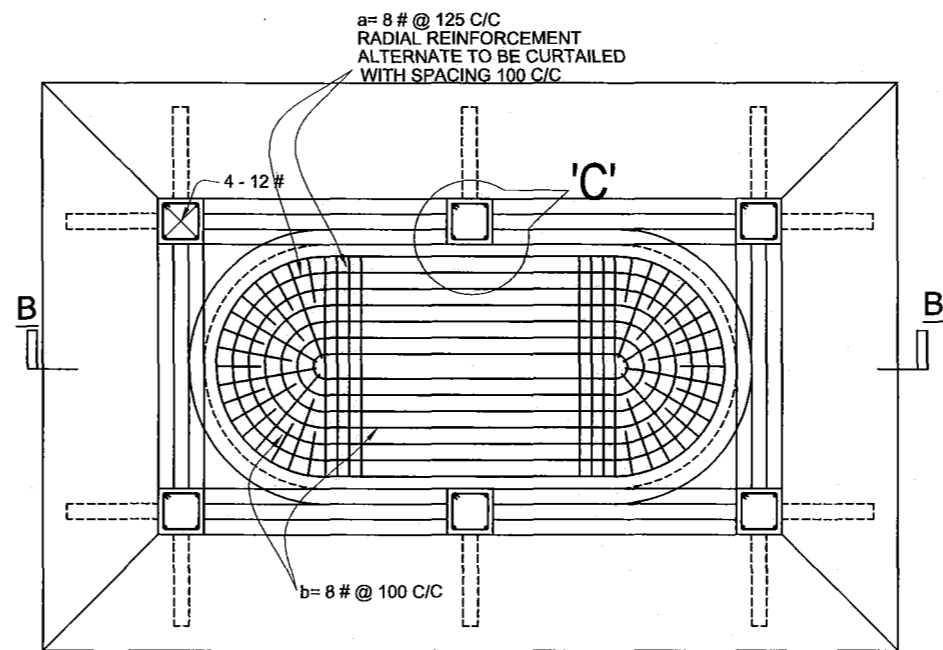
SECTION A-A



SECTION B-B



PLAN



PLAN

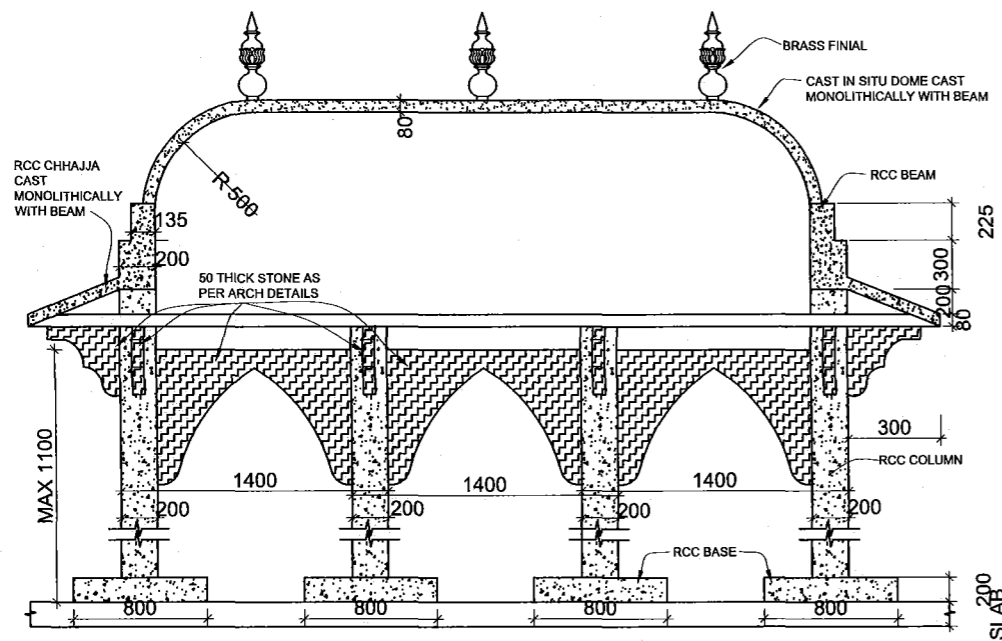
DETAILS OF 500 DIA TWIN DOME RCC/STONE CHHATRI

DETAILS FOR RCC/STONE CHHATRI

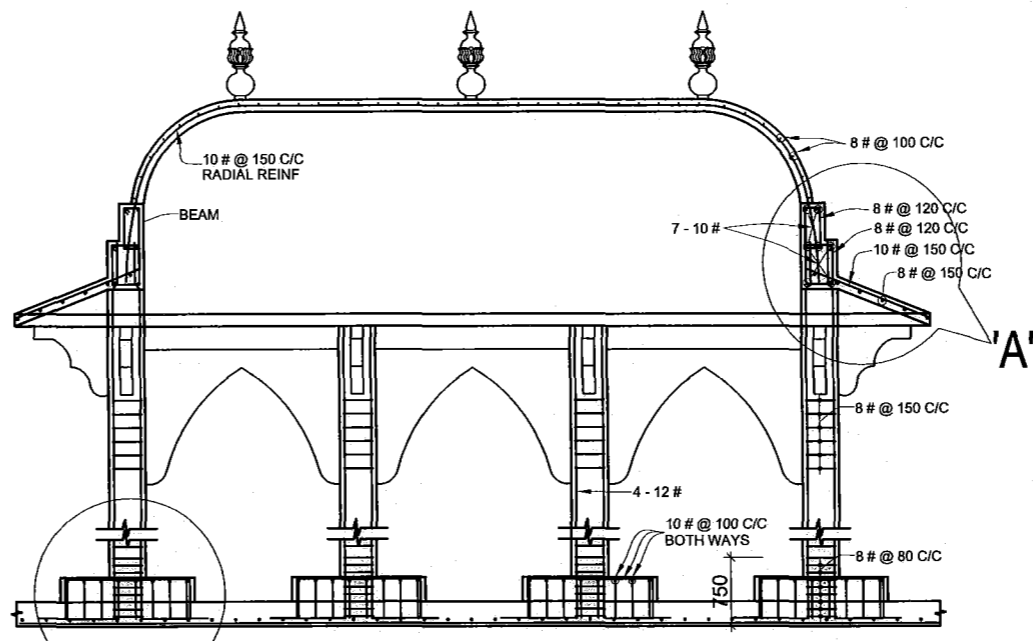
DATE	31 MAR 2016	CHIEF ENGINEER JODHPUR ZONE JODHPUR	SHT NO
DRN	SUB GAIKWAD J M		2
TCD			3
CKD	U S SHARMA		
SCALE		REF DRG NO. - CEJZ/STR/STD/13/2016	

C.K. Chanclani
C.K. CHANCLANI
TECH OFFR

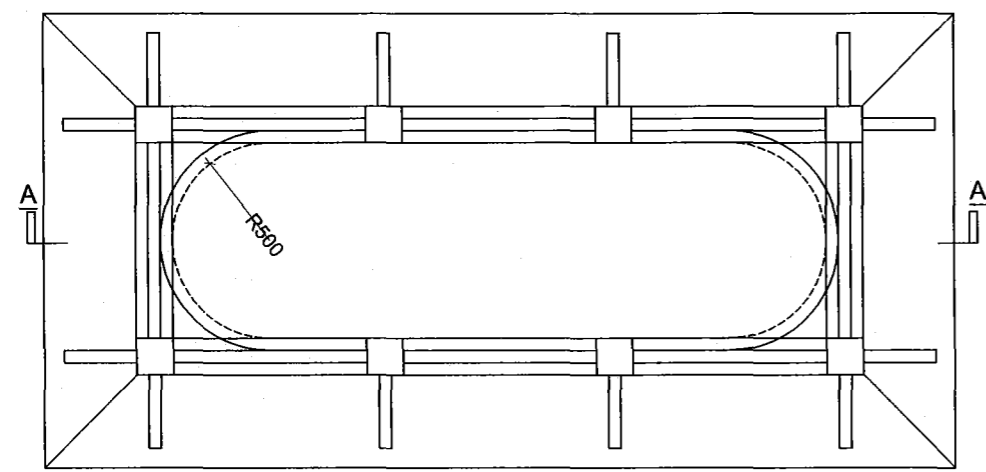
Subodh Kumar
(SUBODH KUMAR)
SE
DIRECTOR (DESIGN)
FOR CHIEF ENGINEER



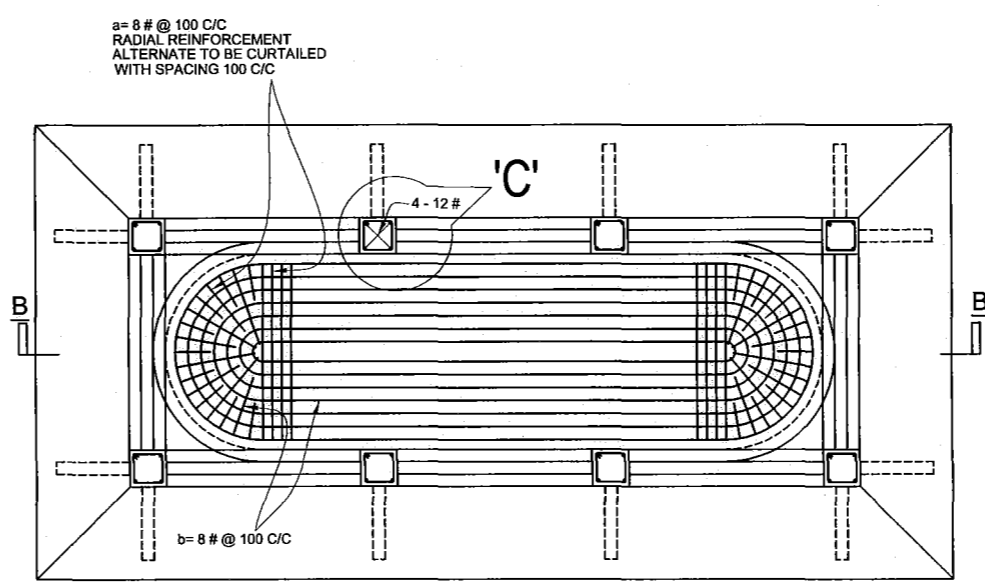
SECTION A-A



SECTION B-B



PLAN



PLAN

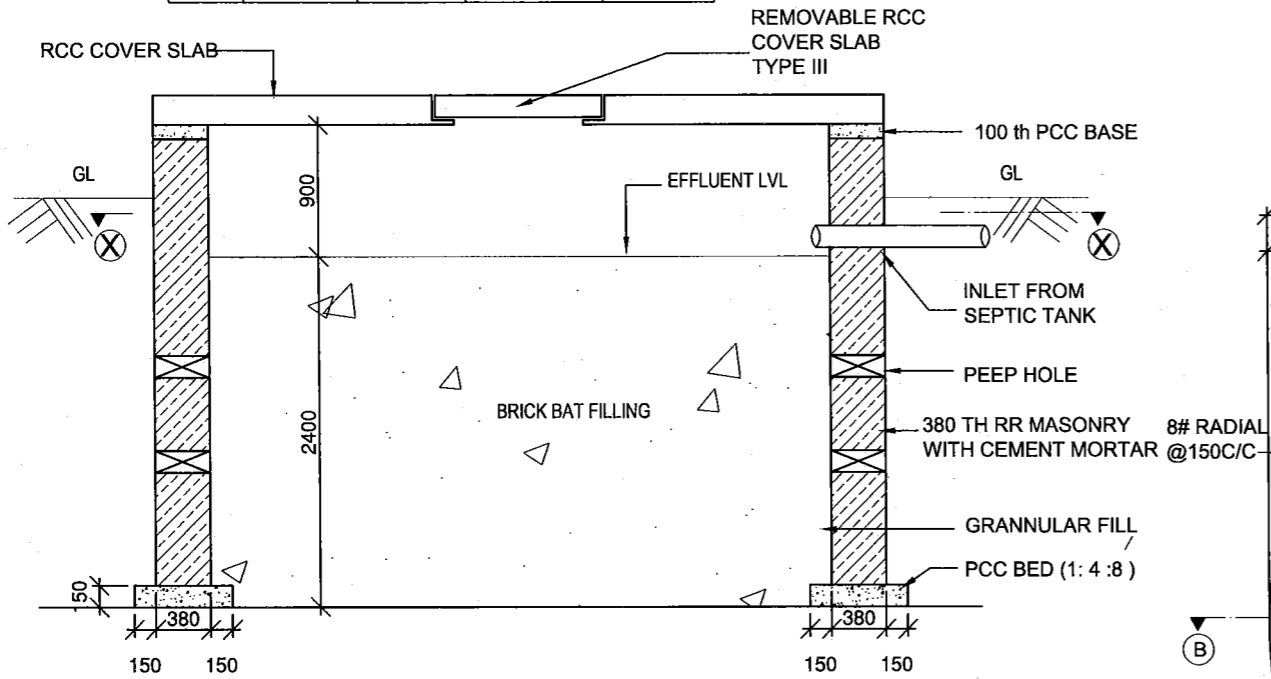
DETAILS OF 500 DIA TRIPLE DOME RCC/STONE CHHATRI

DETAILS FOR RCC/STONE CHHATRI			
DATE	31 MAR 2016	CHIEF ENGINEER JODHPUR ZONE JODHPUR	SHT NO
DRN	SUB GAIKWAD J M		3
TCD			3
CKD	U S SHARMA		
SCALE		REF DRG NO. - CEJZ/STR/STD/13/2016	

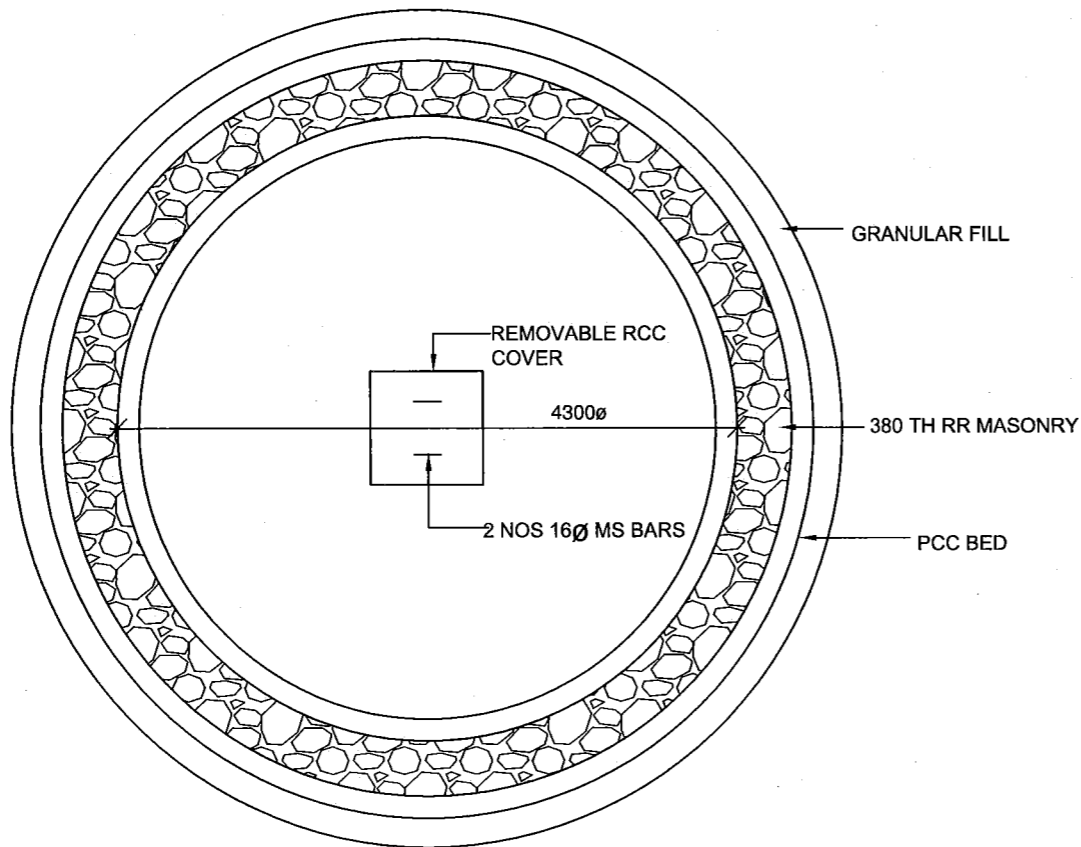
C.K. Chanchlani
C.K. CHANCLANI
TECH OFFR

SUBODH KUMAR
(SUBODH KUMAR)
SE
DIRECTOR (DESIGN)
FOR CHIEF ENGINEER

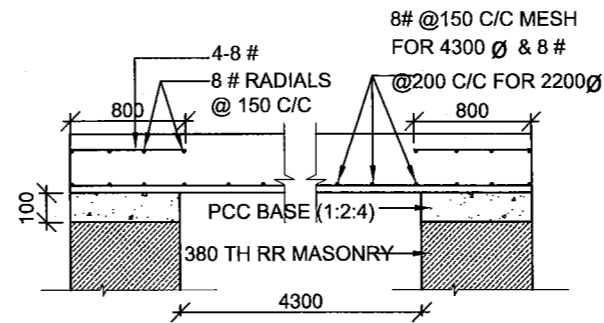
No of USERS	No of Soakage Pit	Dia (D) MM Internal	Depth (H) MM (Effluent level)	TH of cover slab (MM)
Up to 25	01	2200	2400	100
26 to 50	01	4300	2400	120
51 to 75	01 + 01	2200	2400	100
		4300	2400	120
76 to 100	01	2200	2400	120



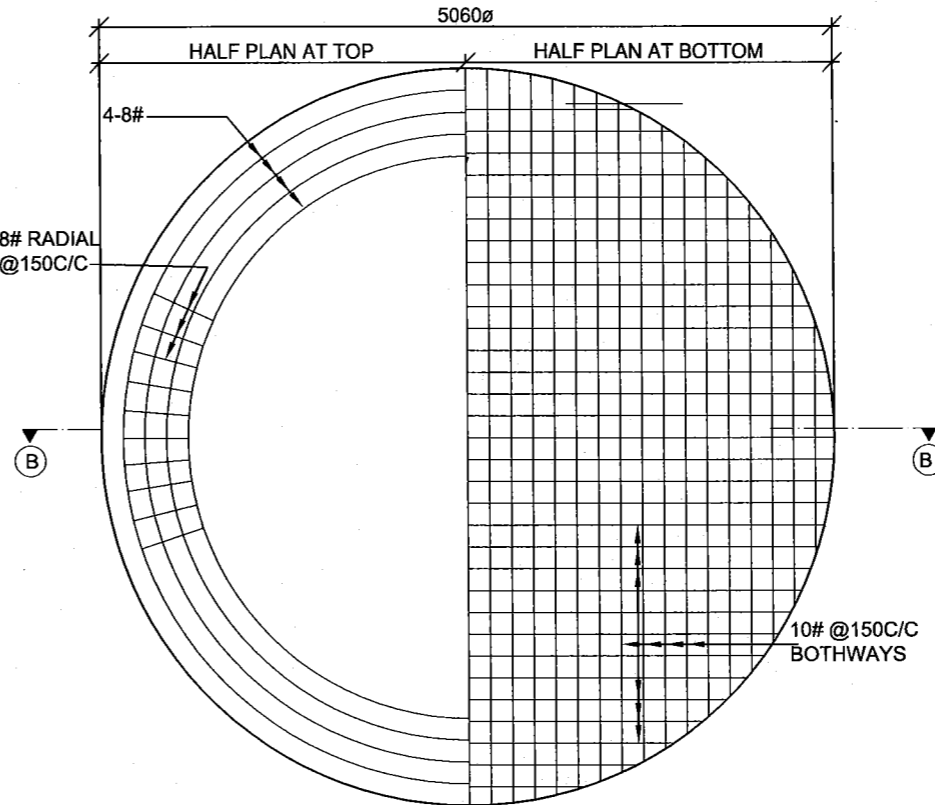
SECTION OF SOAK PIT



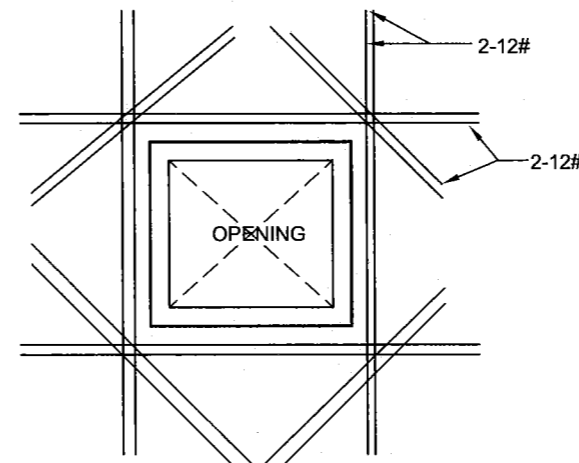
PLAN AT 'X X'



PLAN AT 'B B'



RCC ROOF SLAB OF SOAKAGE PIT



REINFORCEMENT DETAILS AROUND OPENING

NOTES

1. CONTRACTOR AND EXECUTIVE AUTHORITY TO CHECK & VERIFY ALL DIMENSIONS BEFORE TAKING EXECUTION IN HAND.
2. ALL DIMENSIONS ARE GIVEN IN MILLIMETRES UNLESS OTHERWISE SPECIFIED.
3. FIGURED DIMENSIONS ONLY SHALL BE FOLLOWED.
4. STEEL CHAIRS OF 8# 600 LONG ARE TO BE PROVIDED TO SUPPORT THE TOP FACE REINFORCEMENT FOR SOAKAGE PIT ROOF SLAB.
5. MIX OF CONCRETE FOR ALL RCC WORK SHALL BE OF M-30 GRADE.
6. PEEP HOLES ARE TO BE PROVIDED IN STAGGERED MANNER AT CIRCUMFERENTIAL DIMENSION OF 1.5M C/C IN TWO LAYERS. SIZE OF PEEP HOLES ARE TO BE MAINTAINED AS 15 CM X 15 CM.

DETAILS OF SOAKAGE PIT UP TO 100 USERS

PLAN , SECTIONS AND DETAILS

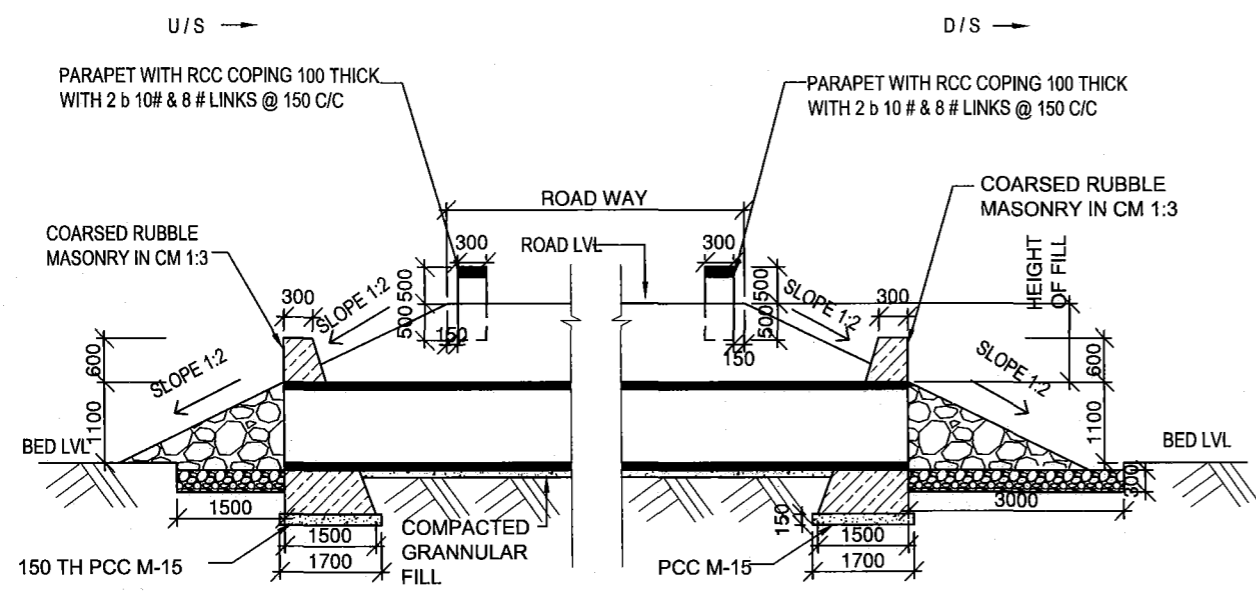
DATE	31 MAR 2016	CHIEF ENGINEER JODHPUR ZONE JODHPUR	SHT NO
DRN	SUB GAIKWAD J M		1
TCD			1
CKD	U S SHARMA		
SCALE	REF DRG NO. - CEJZ/STR/STD/14/2016		

C.K. CHANHLANI
TECH OFFR

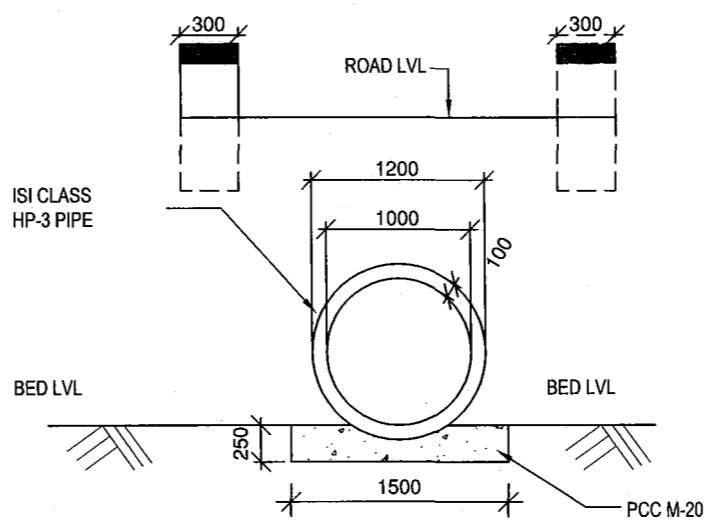
(SUBODH KUMAR)
SE
DIRECTOR (DESIGN)
FOR CHIEF ENGINEER

NOTES

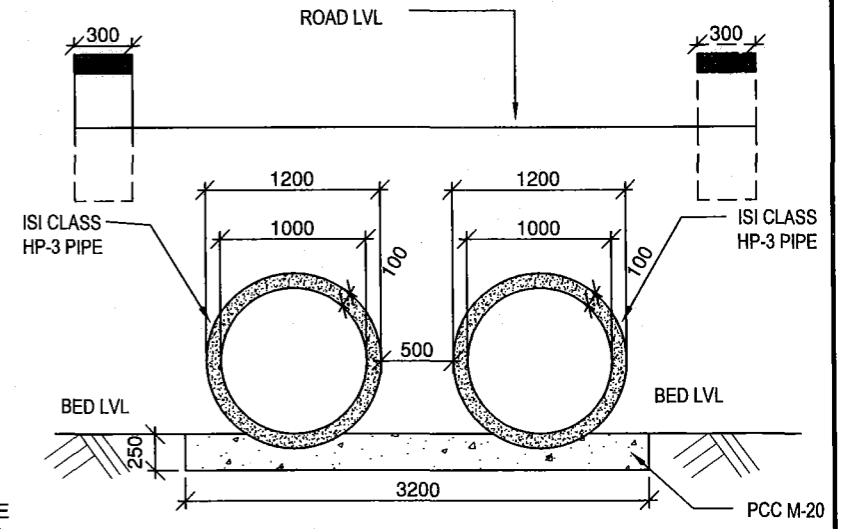
1. ALL DIMENSIONS ARE GIVEN IN MILLIMETERS UNLESS OTHERWISE SPECIFIED.
2. LONGITUDINAL SLOPE OF PIPE SHOULD BE MINIMUM OF 1:1000.
3. CONCRETE CRADLE BEDDING CAN BE USED FOR MAXIMUM HEIGHT OF FILL OF 8 M.
4. THE DIMENSION SUCH AS WIDTH OF BASE & HEIGHT OF WING WALLS / ABUTMENT ETC ARE GIVEN BASED ON 1000 MM H. P. CULVERT. FOR OTHER DIAMETERS THE DIMENSIONS MUST BE WORKED OUT PROPORTIONATELY KEEPING TOP WIDTH OF WALLS & SLOPE OF EMBANKMENT / WALLS SAME AS ABOVE.
5. FIRST CLASS BEDDING CAN BE USED FOR MAXIMUM HEIGHT OF FILL OF 4 METRE.
6. THE DRG. HAS BEEN PREPARED BASED ON " IRS SPECIAL PUBLICATION NO -13 "
7. CONCERT FOR RCC WORK WILL BE M-30



SECTION AT 'AA'

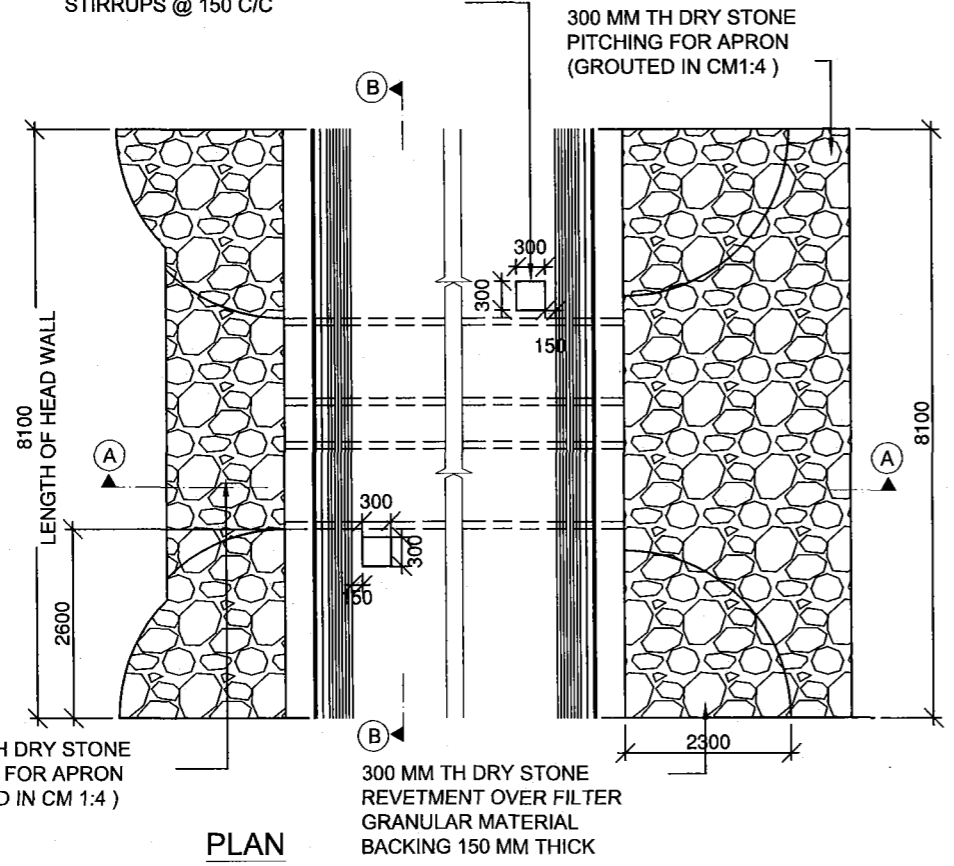


SECTION AT 'CC'



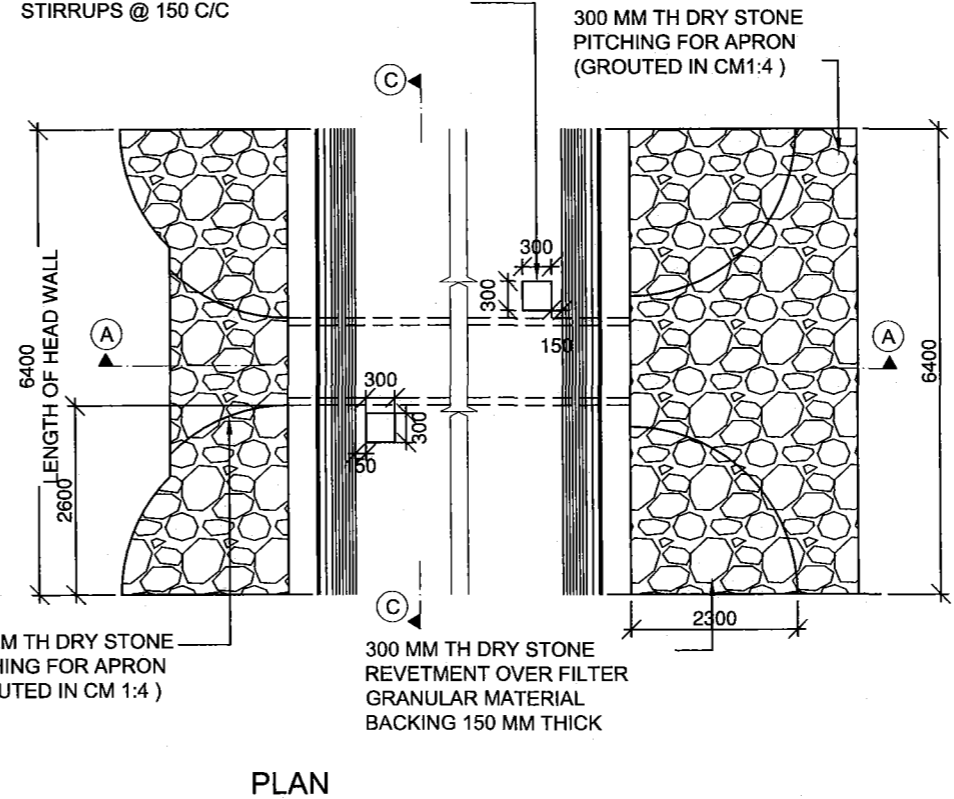
SECTION AT 'BB'

RCC PILLAR FOR INSCRIBING STRUCTURE NUMBER REINFORCED WITH 4 b # AND 8 # STIRRUPS @ 150 C/C



RCC PIPE CULVERTS WITH 2 PIPES OF 1 METER Ø CONCRETE CRADLE BEDDING FOR HEIGHT OF FILL FROM 4.0 M TO 8.0 M

RCC PILLAR FOR INSCRIBING STRUCTURE NUMBER REINFORCED WITH 4 b 10 # AND 8 # STIRRUPS @ 150 C/C



RCC PIPE CULVERTS WITH 1 PIPE OF 1 METER Ø AND FIRST CLASS BEDDING FOR HEIGHTS OF FILL VARYING FROM 4.0 M TO 8.0M

DETAILS OF RCC PIPE CULVERTS

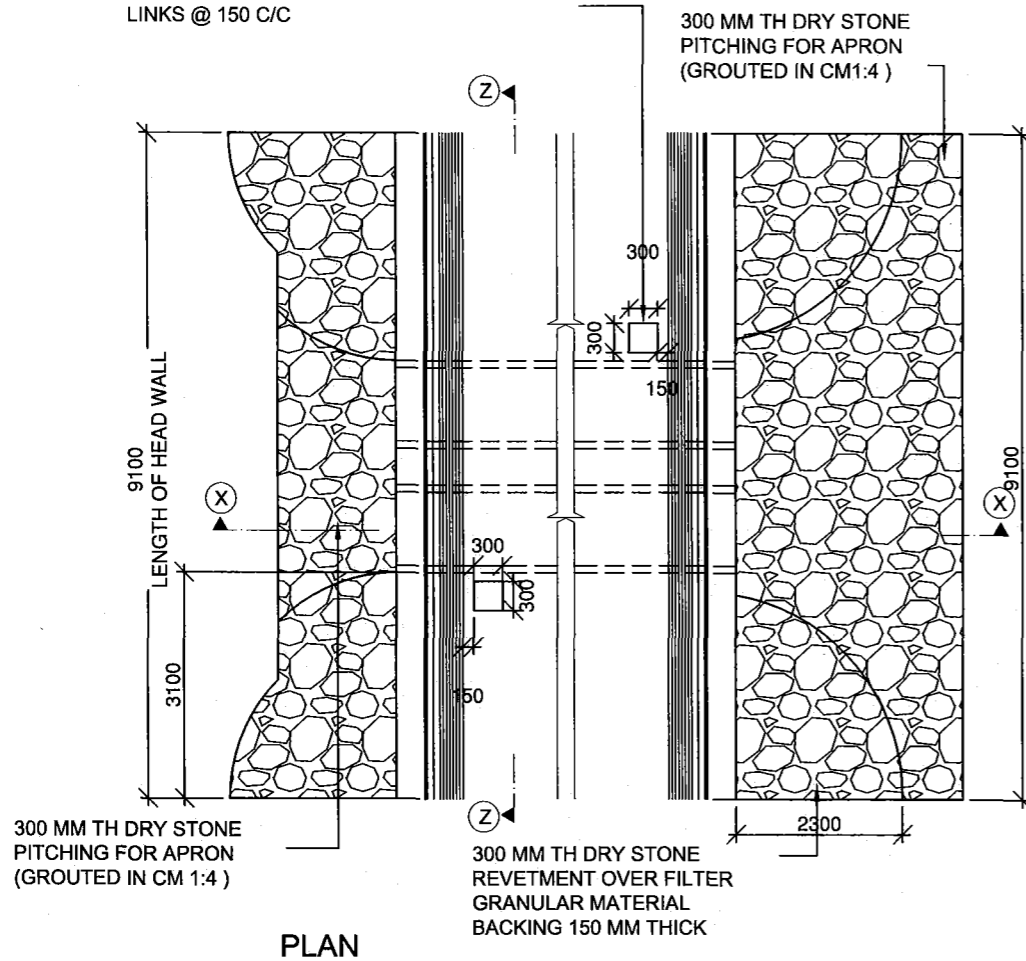
PLAN AND SECTIONS

DATE	31 MAR 2016	CHIEF ENGINEER	SHT NO
DRN	SUB GAIKWAD J M		
TCD		JODHPUR ZONE	1
CKD	U S SHARMA		
SCALE		JODHPUR	2
		REF DRG NO. - CEJZ/STR/STD/15/2016	

C.K. CHANCLANI
TECH OFFR

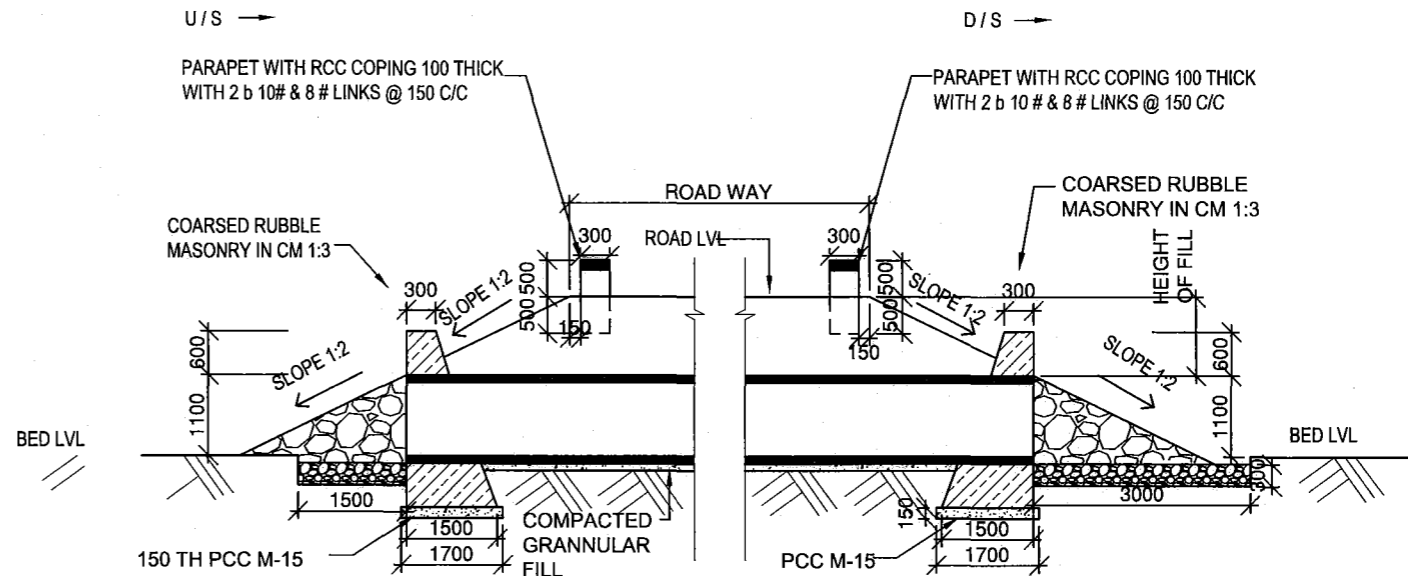
(SUBODH KUMAR)
SE
DIRECTOR (DESIGN)
FOR CHIEF ENGINEER

RCC PILLAR FOR INSCRIBING STRUCTURE
NUMBER REINFORCED WITH 4 b # AND 8 #
LINKS @ 150 C/C



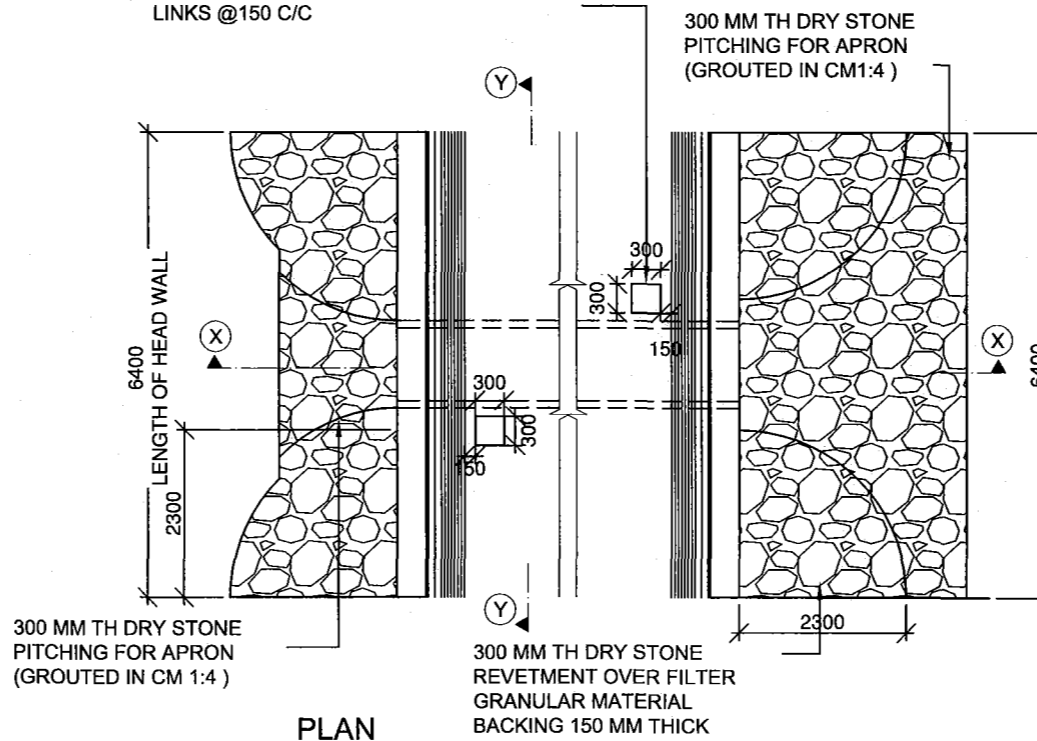
PLAN

**RCC PIPE CULVERTS WITH 2 PIPES OF 1 METER ϕ
AND FIRST CLASS BEDDING FOR HEIGHTS OF FILL
VARYING FROM 0.6 M TO 4.0 M**



SECTION AT 'AA'

RCC PILLAR FOR INSCRIBING STRUCTURE
NUMBER REINFORCED WITH 4 b # AND 8 #
LINKS @ 150 C/C



PLAN

**RCC PIPE CULVERTS WITH SINGLE PIPE OF 1 METER ϕ
CONCRETE CRADLE BEDDING FOR HEIGHT OF FILL
FROM 0.6 M TO 4.0 M**

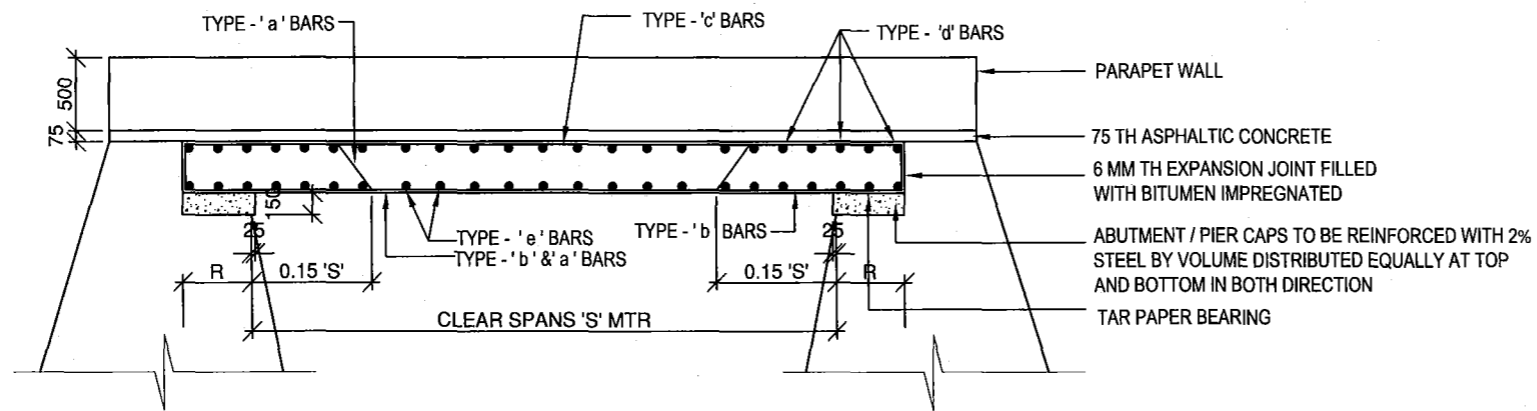
**DETAILS OF RCC PIPE
CULVERTS**

PLAN AND SECTIONS

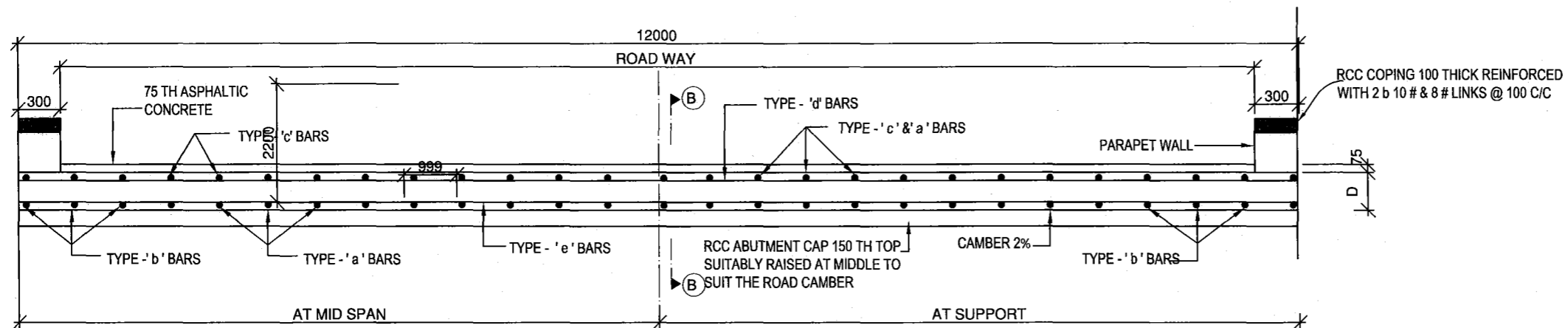
DATE	31 MAR 2016	CHIEF ENGINEER JODHPUR ZONE	SHT NO 2
DRN	SUB GAIKWAD J M		
TCD		JODHPUR	2
CKD	U S SHARMA		
SCALE		REF DRG NO. - CEJZ/STR/STD/15/2016	

C.K. Chanclani
C.K. CHANCLANI
TECH OFFR

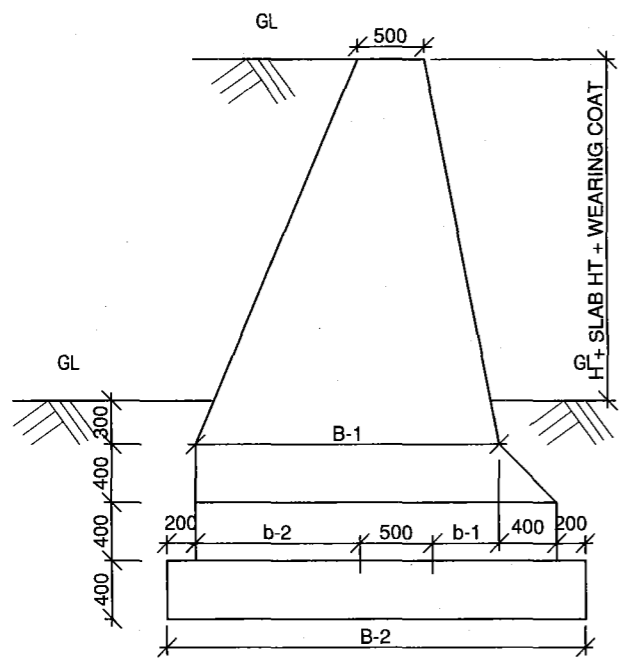
Subodh Kumar
(SUBODH KUMAR)
SE
DIRECTOR (DESIGN)
FOR CHIEF ENGINEER



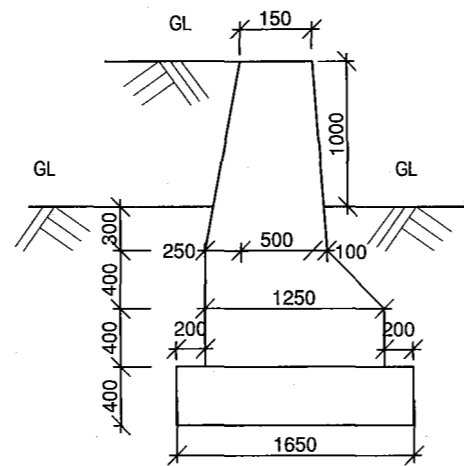
LONGITUDINAL SECTION AT 'AA'



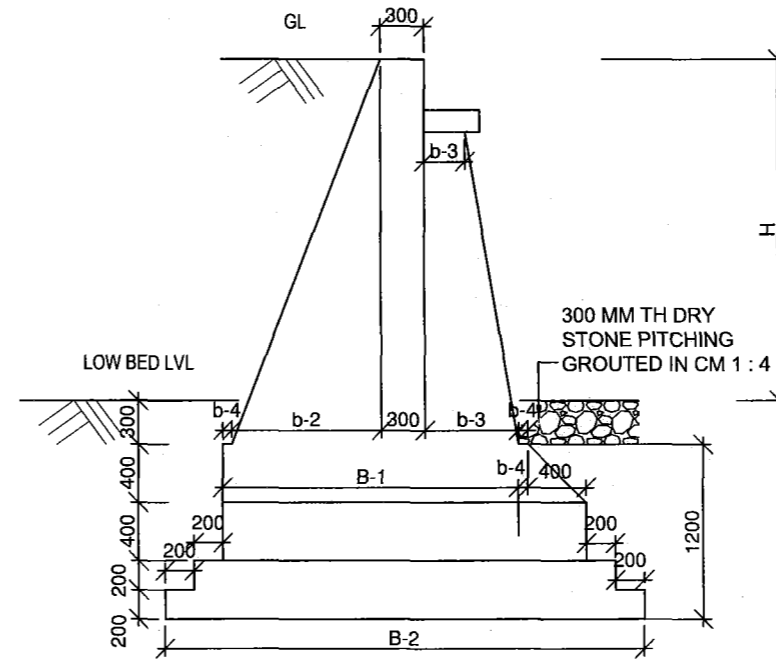
CROSS SECTION



WING WALL SEC. AT HIGH END



WING WALL SEC. AT LOW END
(FOR ALL SPAN)



SECTION OF ABUTMENT

ABUTMENT AND WING WALL SECTIONS FOR CULVERTS

NOTES

1. ALL DIMENSIONS ARE GIVEN IN MILLIMETERS UNLESS OTHERWISE SPECIFIED.
2. THIS DRG. HAS BEEN PREPARED BASED ON A ROAD WIDTH OF 12M AS INDICATED. FOR OTHER ROAD WIDTH THE SPACING & OF REINFORCEMENT MAY BE KEPT SAME AS THAT OF 12 M WIDE ROAD WAY.
3. THIS DRAWING HAS BEEN PREPARED BASED ON THE GUIDE LINES GIVEN IN IRC SPECIAL PUBLICATION NO -18.
4. FOR RCC NOTES REFER TD NO
5. M-30 DESIGN MIX CONCRETE SHALL BE USED AS PER IS 456.

GENERAL NOTES

1. DESIGN SPECIFICATION :- IRC STANDARD SPECIFICATIONS AND CODES OF PRACTICE FOR ROAD BRIDGES SECTIONS -I, II & III
2. DESIGN LIVE LOAD :- TWO LANES OF IRC CLASS 'A' OR ONE LANE OF CLASS 70 R (TRACKED OR WHEELED) VEHICLE.
3. REINFORCEMENT:- DEFORMED HYSD/TMT BARS CONFORMING TO I.S- 1786.
4. COVER :- MINIMUM CLEAR COVER REINFORCEMENT SHALL BE 40 MM EXCEPT WHERE SHOWN OTHERWISE.
5. BEARING :- TAR PAPER OR ANY SUITABLE TYPE AS DECIDED BY THE GE.

DETAILS OF RCC SLAB CULVERTS

PLAN AND SECTIONS

DATE	31 MAR 2016	CHIEF ENGINEER JODHPUR ZONE	SHT NO 1
DRN	SUB GAIKWAD J M		
TCD		JODHPUR	2
CKD	U S SHARMA		
SCALE		REF DRG NO. - CEJZ/STR/STD/16/2016	

C.K. Chanchlani
C.K. CHANCLANI
TECH OFFR

(Signature)
(SUBDDH KUMAR)
SE
DIRECTOR (DESIGN)
FOR CHIEF ENGINEER

REINFORCEMENT DETAILS OF SLAB CULVERTS

CONTROLLED CONCRETE M-30

CLEAR SPAN OF SLAB 'S' (M)	BEARING LENGTH AT EACH END (R) (MM)	OVER ALL LENGTH OF SLAB (M)	OVER ALL TH OF SLAB 'D' (MM)	STEEL IN LONGITUDINAL DIRECTION												STEEL IN TRANSVERSE DIRECTION																				
				TYPE 'a' BARS						TYPE 'b' BARS				TYPE 'c' BARS				TYPE 'e' BARS					TYPE 'd' BARS													
				SPACING (MM)	No OF BARS	X (M)	Y (M)	Z (M)	2(X+Y)+Z+ HOOKS (M)	TOTAL LENGTH (M)	DIA (MM)	SPACING (MM)	NO. of BARS	I (M)	LENGTH INCLUDING HOOKS (M)	TOTAL LENGTH (M)	DIA (MM)	SPACING (MM)	No. of BARS	'm' (M)	'm-1' (M)	(m+2m-1+ HOOKS) (M)	TOTAL LENGTH (M)	DIA (MM)	SPACING (MM)	No. of BARS	'J' (M)	LENGTH INCLUDING HOOKS (M)	TOTAL LENGTH (M)	DIA (MM)	SPACING (MM)	No. of BARS	'Y' (M)	LENGTH INCLUDING HOOKS (M)	TOTAL LENGTH (M)	
1.0	300	1.6	150	16	180	66	0.293	0.119	0.7	1.903	125.6	12	180	66	1.478	1.762	116.29	10	360	33	1.55	0.06	1.907	62.93	16	125	13	11.854	12.333	159.03	10	300	5	11.89	12.127	60.63
1.5	300	2.1	200	16	180	66	0.338	0.161	1.85	2.427	168.18	16	180	66	1.954	2.333	153.98	10	360	33	2.05	0.89	2.467	81.41	16	125	21	11.854	12.333	256.89	10	300	7	11.89	12.127	84.88
2.0	300	2.6	250	12	150	80	0.338	0.216	1.4	2.885	231.04	16	150	80	2.454	2.833	226.66	10	300	40	2.55	0.125	3.037	121.48	16	100	26	11.854	12.333	318.06	10	300	9	11.89	12.127	109.14
3.0	300	3.6	300	16	150	80	0.468	0.296	2.10	4.006	320.64	18	150	80	3.442	3.870	309.6	10	300	40	3.55	0.185	4.157	166.28	18	150	24	11.854	12.333	294.45	10	300	12	11.89	12.127	145.524
4.0	300	4.6	350	16	150	80	0.548	0.396	2.80	5.066	405.28	20	150	80	4.43	4.904	392.32	10	300	40	4.58	0.255	5.297	211.88	16	150	30	11.854	12.333	366.99	10	300	15	11.89	12.127	181.905
5.0	400	5.8	400	20	150	80	0.740	0.460	3.50	6.374	509.92	20	150	80	4.63	6.104	488.32	10	300	40	5.75	0.805	6.597	263.88	16	150	39	11.854	12.333	477.09	10	300	19	11.89	12.127	230.41
6.0	400	6.8	450	20	150	80	0.848	0.537	4.2	7.350	588.0	25	150	80	6.6	7.1925	575.4	10	300	40	6.75	0.355	7.697	307.88	16	150	44	11.854	12.333	538.25	10	300	23	11.89	12.127	278.92

TABLE OF DIMENSIONS FOR WING WALL

SPAN	UP TO 2 METRES						3 METRES						4 METRES						5 METRES						6 METRES								
H	1.50	2.00	2.50	3.0	3.50	4.0	1.50	2.00	2.50	3.0	3.50	4.0	1.50	2.00	2.50	3.0	3.50	4.00	2.00	2.50	3.00	3.50	4.00	2.00	2.50	3.00	3.50	4.00	2.00	2.50	3.00	3.50	4.00
b-1	0.18	0.23	0.28	0.33	0.38	0.43	0.19	0.24	0.29	0.34	0.39	0.44	0.19	0.24	0.29	0.34	0.39	0.44	0.25	0.30	0.35	0.40	0.45	0.25	0.30	0.35	0.40	0.45	0.25	0.30	0.35	0.40	0.45
b-2	0.45	0.57	0.70	0.82	0.95	1.07	0.46	0.59	0.71	0.84	0.96	1.09	0.48	0.60	0.73	0.85	0.98	1.10	0.62	0.75	0.87	1.00	1.13	0.63	0.75	0.88	1.00	1.13	0.63	0.75	0.88	1.00	1.13
B-1	1.13	1.30	1.48	1.65	1.83	2.00	1.15	1.33	1.50	1.68	1.85	2.03	1.17	1.34	1.52	1.69	1.87	2.04	1.37	1.55	1.72	1.90	2.08	1.38	1.55	1.73	1.90	2.08	1.38	1.55	1.73	1.90	2.08
B-2	1.93	2.10	2.28	2.45	2.63	2.80	1.95	2.13	2.30	2.48	2.65	2.83	1.97	2.14	2.32	2.69	2.67	2.84	2.17	2.35	2.52	2.70	2.88	2.18	2.36	2.53	2.70	2.88	2.18	2.36	2.53	2.70	2.88

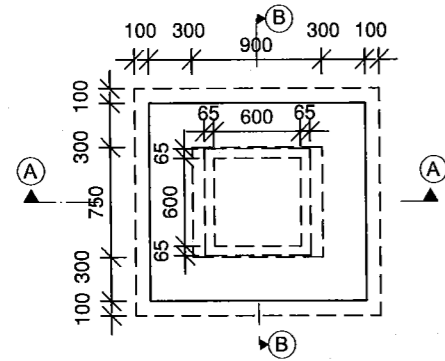
TABLE OF DIMENSIONS FOR ABUTMENT

SPAN	6M AND 5M					4M, 3M, 2M 1.5M AND 1M					
H	2.0M	2.5M	3.0M	3.5M	4.0M	1.5M	2.0M	2.5M	3.0M	3.5M	4.0M
b-1	0.2	0.25	0.3	0.35	0.4	0.15	0.2	0.25	0.3	0.35	0.4
b-2	0.6	0.85	1.0	1.2	1.4	0.5	0.7	0.95	1.1	1.25	1.4
b-3	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3
b-4	-	0.1	0.2	0.4	0.6	-	-	0.1	0.2	0.3	0.5
B-1	1.5	1.8	2.0	2.25	2.5	1.25	1.5	1.8	2.0	2.2	2.4
B-2	2.7	3.2	3.6	4.25	4.9	2.45	2.7	3.2	3.6	4.0	4.6

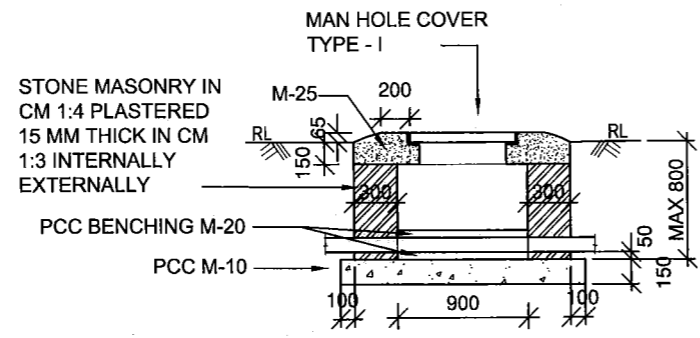
NOTES

- ABUTMENT AND WING WALL SECTIONS ARE APPLICABLE FOR MINIMUM BEING CAPACITY OF THE SOIL OF 16.5 T/M² FOR SOILS HAVING LOWER BEARING CAPACITY, THE SECTIONS SHOULD BE INCREASED SUITABLY.
- ABUTMENT AND WING WALL SECTIONS FOR INTERMEDIATE HEIGHTS TO BE ADOPTED SUITABLY.
- THE VARIOUS DIMENSIONS TO BE SUITABLY ADJUSTED TO SUIT THE SIZE OF BRICKS WHERE NECESSARY.
- THE SECTIONS ARE APPLICABLE FOR CULVERTS DESIGNED FOR IRC CLASS 70-R OR 2 LANES ODF CLASS 'A' LOADING WHICHEVER IS SEVERER WITHOUT PROVISIONS OF APPROACH SLAB.
- SEC COARSED RUBBLE MASONRY (2nd SORT) IN CEMENT MORTAR 1:3 THE FOUNDATION CONCRETE SHALL BE IN CEMENT CONCRETE M-15.

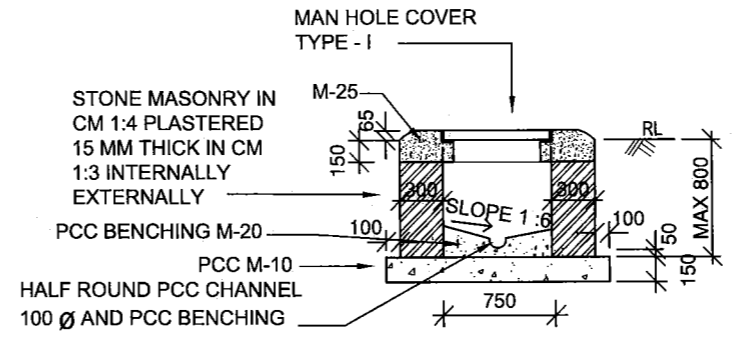
DETAILS OF RCC SLAB CULVERTS			
ABUTMENT AND WING WALL SECTIONS AND REINFORCEMENT DETAILS OF RCC SLAB FOR CULVERTS.			
DATE	31 MAR 2016	CHIEF ENGINEER JODHPUR ZONE JODHPUR	SHT NO
DRN	SUB GAIKWAD J M		2 2
TCD			
CKD	U S SHARMA		
SCALE		REF DRG NO. - CEJZ/STR/STD/16/2016	
C.K. CHANCLANI TECH OFFR		(SUBODH KUMAR) SE DIRECTOR (DESIGN) FOR CHIEF ENGINEER	



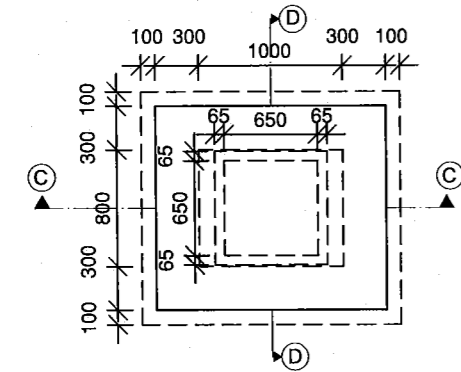
**TYPE - I
PLAN OF MANHOLE**
(DEPTH UP TO 800)



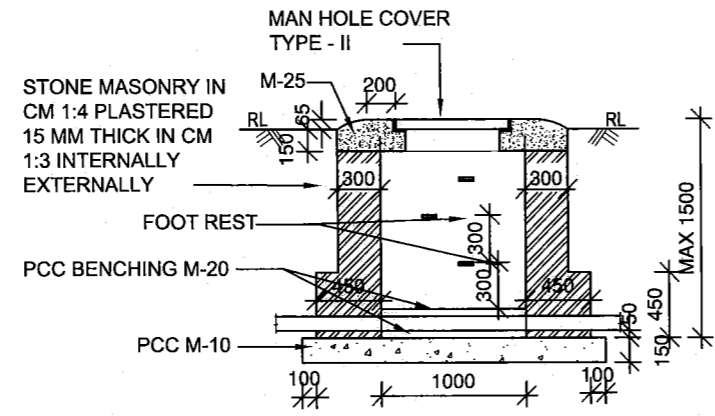
SECTION AT - 'A A'



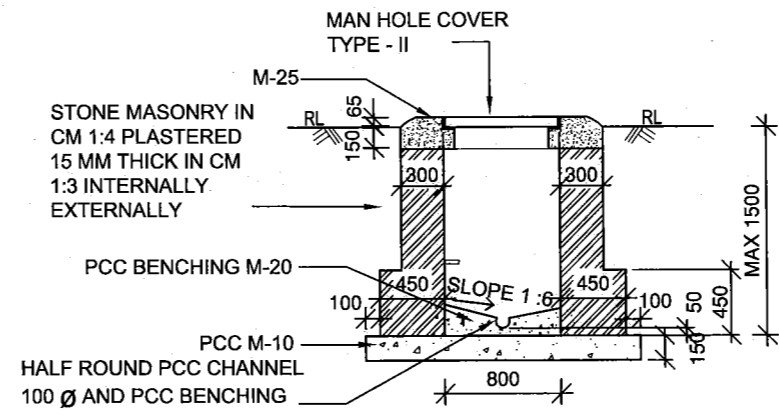
SECTION AT - 'B B'



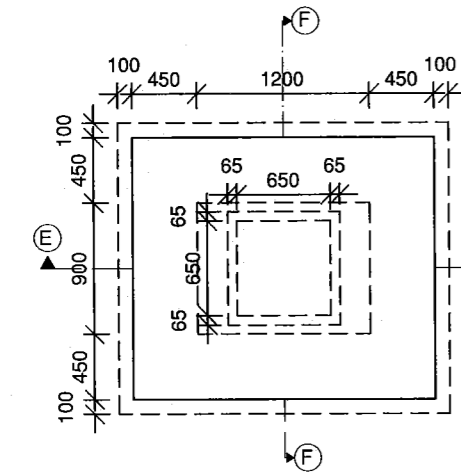
**TYPE - II
PLAN OF MANHOLE**
(DEPTH UP TO 801-1500)



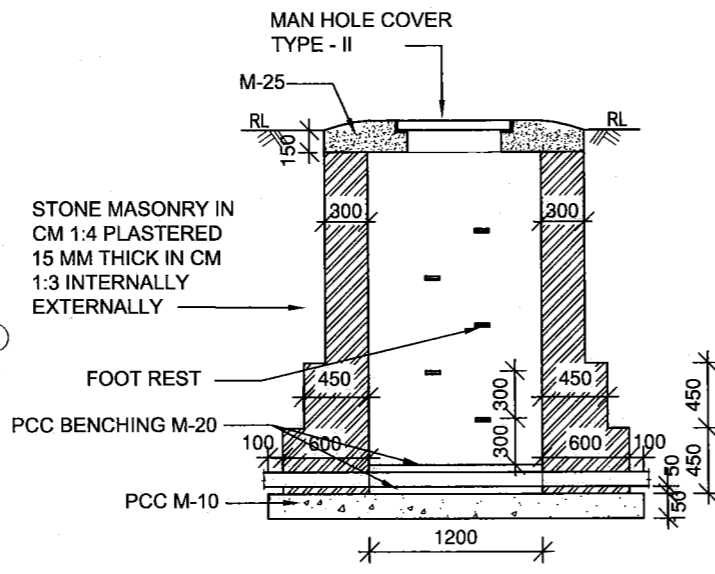
SECTION AT - 'C C'



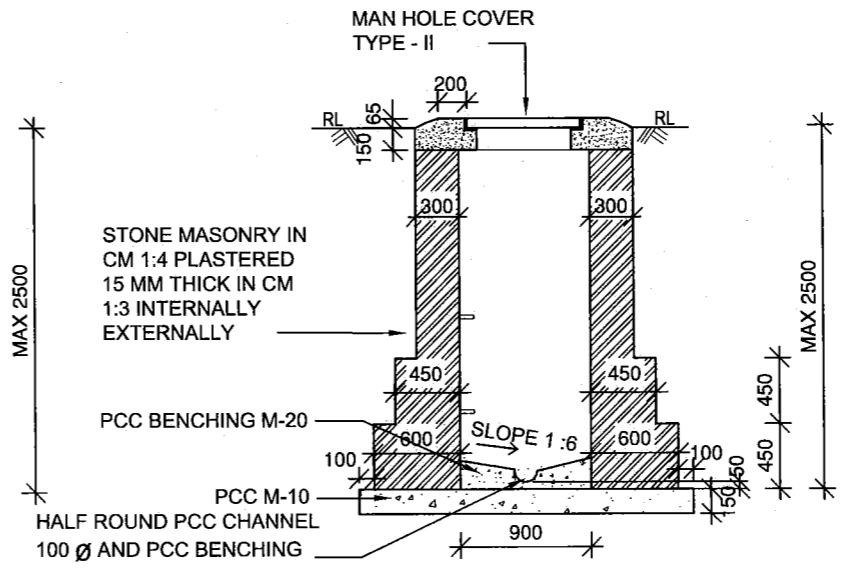
SECTION AT - 'D D'



**TYPE - III
PLAN OF MANHOLE**
(DEPTH UP TO 1501-2500)



SECTION AT - 'E E'



SECTION AT - 'F F'

NOTES :

1. THE MANHOLE SHALL BE WATER PROOF & CLEAR SIZE OF OF MANHOLE OPENING SHALL BE 600/650.
2. WHEN SUBSS OIL LAYER CONDITION EXIST USE A RICH MIXED OF PCC M-20 IN LIEU OF PCC M-10 AS LEAN CONCRETE.
3. THE DIA OF CHANNEL DIA OF PIPE IS VARIABLE ACCORDING TO THE DIA OF SEWAGE.
4. MINIMUM 14 DAYS SUBMERGED CURING WILL BE DONE.
5. STEP SHALL BE PROVIDED HAVING CHECKERED DESIGN.
6. STEEL USED Fe-500 GRADE.
7. THE GRADE OF CONCRETE WILL BE

(a) LEAN CONCRETE	M-10/20
(b) BEDDING/HAUANCHING	M-20
(c) COVER SLAB	M-25
(d) MANHOLE COVER SLAB	M-30

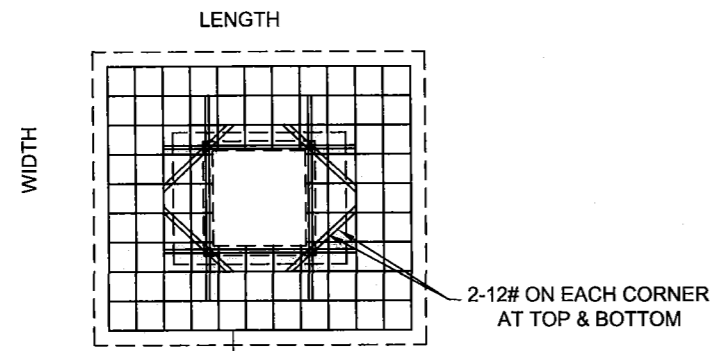
**DETAILS OF MANHOLE WITH
RCC SLAB & RCC COVER**

PLANS & SECTIONS

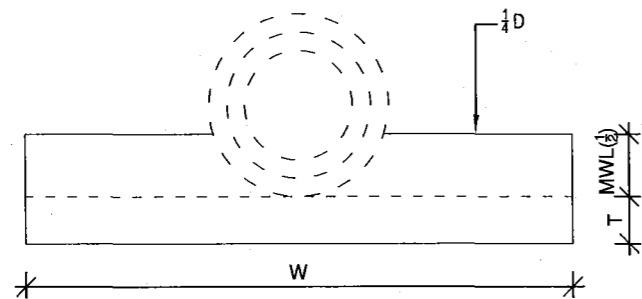
DATE	31 MAR 2016	CHIEF ENGINEER JODHPUR ZONE JODHPUR	SHT NO
DRN	SUB GAIKWAD J M		1 3
TCD			
CKD	U S SHARMA		
SCALE		REF DRG NO. - CEJZ/STR/STD/17/2016	

C.K. Chanclani
C.K. CHANCLANI
TECH OFFR

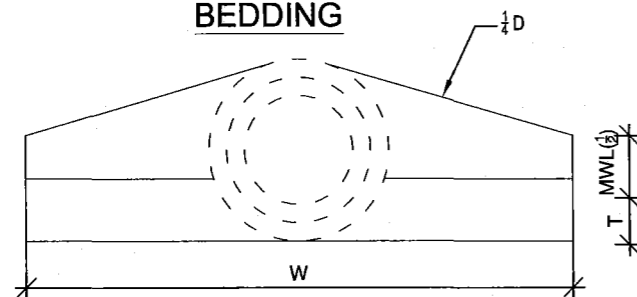
J. Kumar
(SUBODH KUMAR)
SE
DIRECTOR (DESIGN)
FOR CHIEF ENGINEER



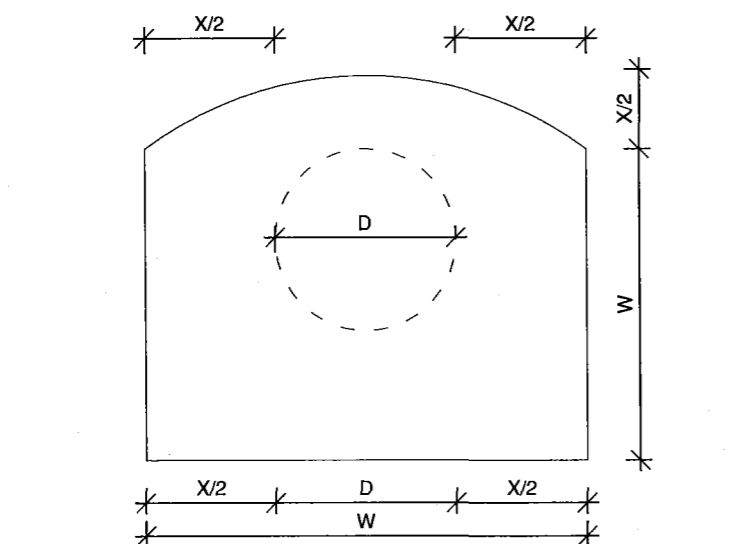
PLAN OF MANHOLE SLAB



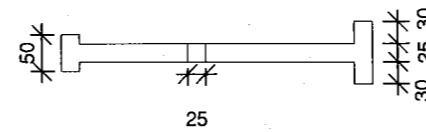
BEDDING



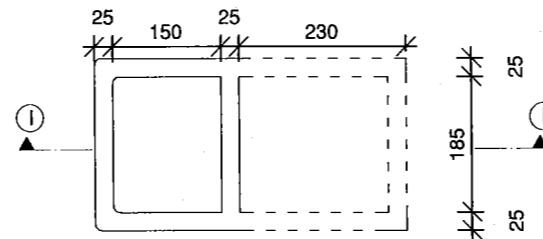
HAUNCHING



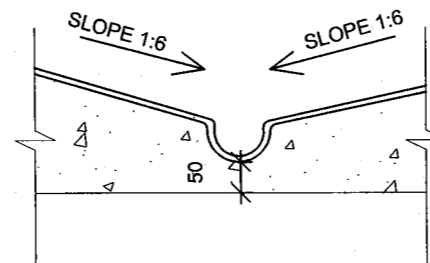
SURROUNDING (ENCASING)
TYPE OF CONCRETE BEDDING FOR SEWAGE



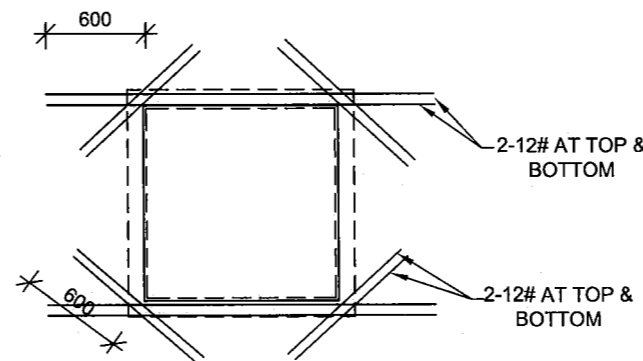
SECTION AT 'I-I'



PLAN
DETAILS OF STEP



DETAIL OF BENCHING



TYPICAL DETAILS OF EXTRA
REINFORCEMENT AROUND M H

LEGEND :

$W = D + X$, WHERE 'D' IS THE EXTERNAL DIA OF THE PIPE.

$X = 300$ UP TO TRENCH DEPTH OF 1000
ADD 100 FOR EACH ADDITIONAL TRENCH DEPTH OF 1000

$T = 100$ FOR PIPES UP TO DIA 150. NOMINAL DIAMETER
ONE FOURTH OF INTERNAL DIAMETER SUBJECT TO A
MIN OF 150 AND MAX OF 300 FOR PIPES OF MORE
THAN 150 DIA.

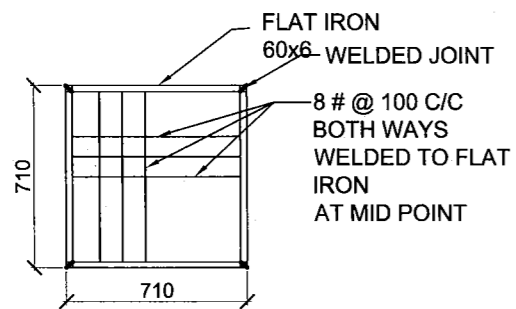
**DETAILS OF MANHOLE WITH
RCC SLAB & RCC COVER**

OTHER DETAILS

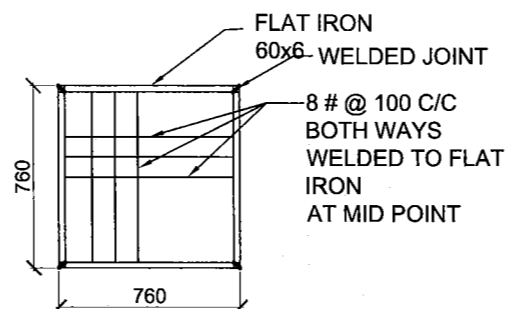
DATE	31 MAR 2016	CHIEF ENGINEER JODHPUR ZONE JODHPUR	SHT NO
DRN	SUB GAIKWAD J M		2 3
TCD			
CKD	U S SHARMA		
SCALE		REF DRG NO. - CEJZ/STR/STD/17/2016	

C.K. Chanchlani
C.K. CHANCLANI
TECH OFFR

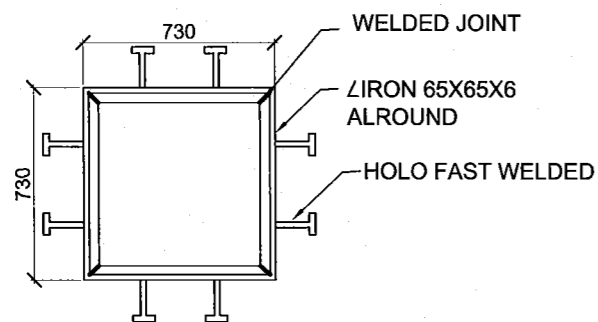
Subodh Kumar
(SUBODH KUMAR)
SE
DIRECTOR (DESIGN)
FOR CHIEF ENGINEER



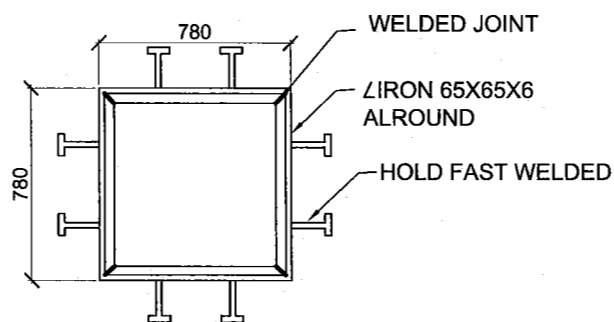
**DETAIL OF COVER
(TYPE-I)**



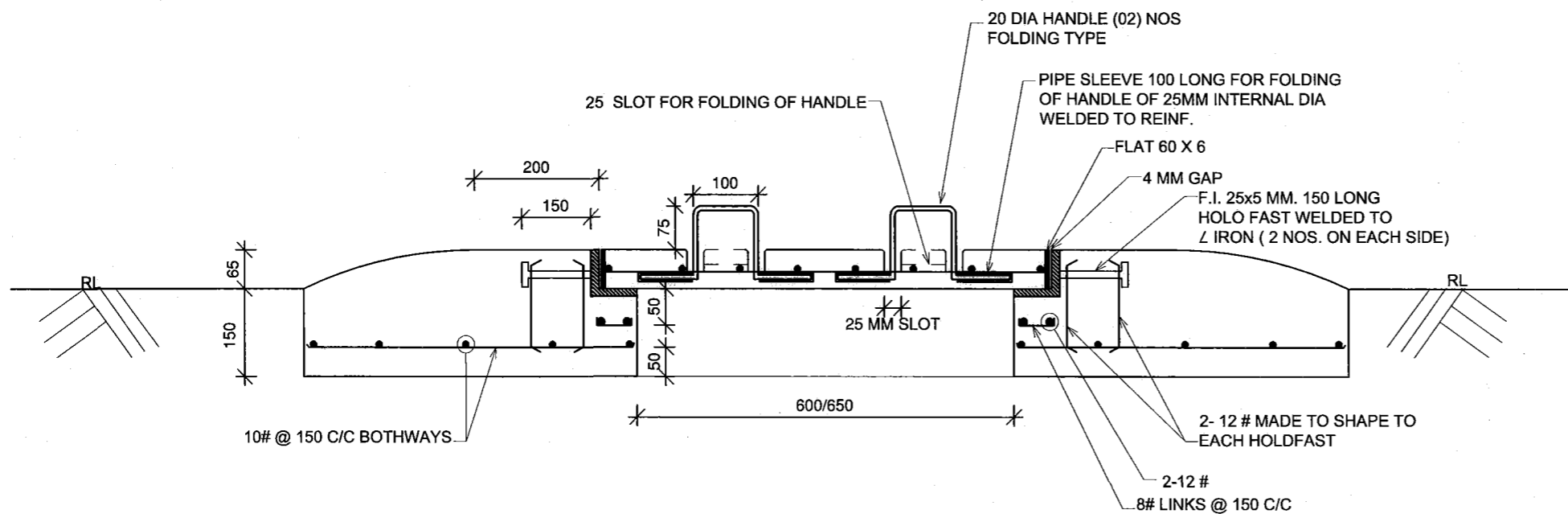
**DETAIL OF COVER
(TYPE-II)**



**DETAIL OF ANGLE IRON FRAME
(TYPE-I)**



**DETAIL OF ANGLE IRON FRAME
(TYPE-II)**



**TYPICAL SECTION OF
MANHOLE SLAB AND COVER**

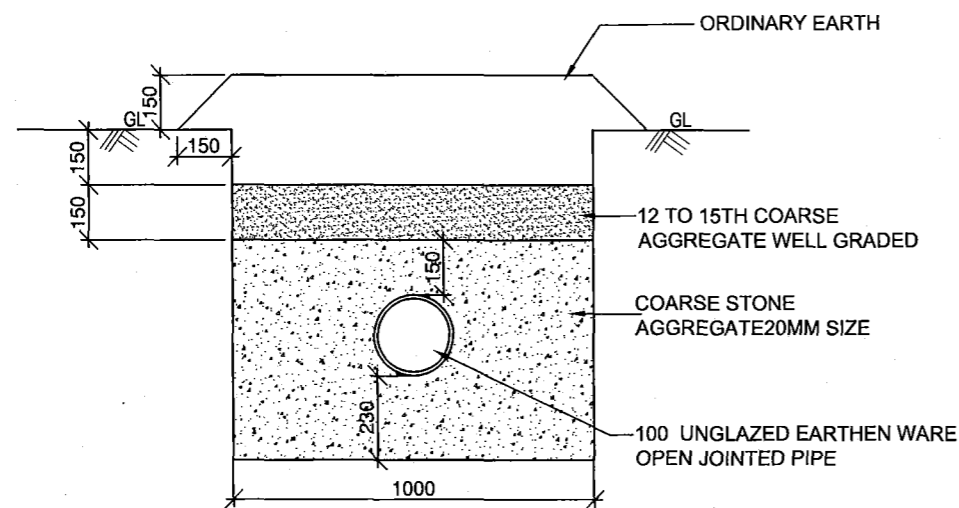
**DETAILS OF MANHOLE WITH
RCC SLAB & RCC COVER**

OTHER DETAILS

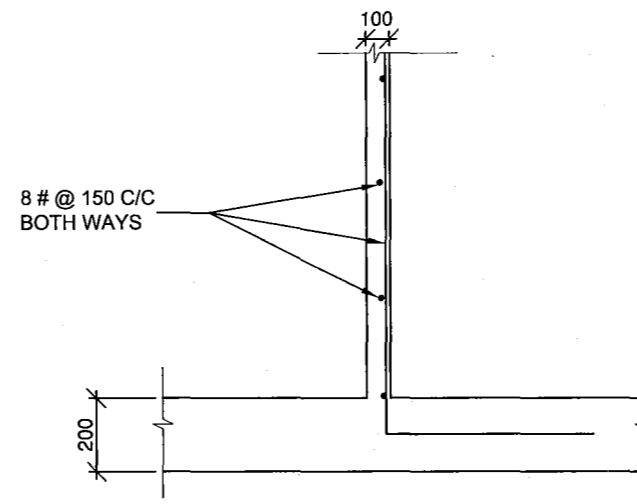
DATE	31 MAR 2016	CHIEF ENGINEER JODHPUR ZONE JODHPUR	SHT NO
DRN	SUB GAIKWAD J M		3
TCD			3
CKD	U S SHARMA		
SCALE		REF DRG NO. - CEJZ/STR/STD/17/2016	

C.K. Chanchlani
C.K. CHANCLANI
TECH OFFR

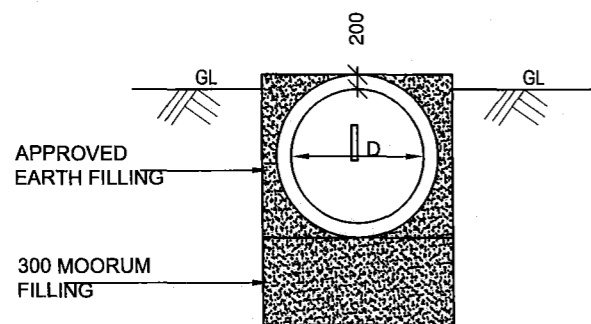
Subodh Kumar
(SUBODH KUMAR)
SE
DIRECTOR (DESIGN)
FOR CHIEF ENGINEER



SECTION AT 'C-C'
(DISPERSION TRENCH)

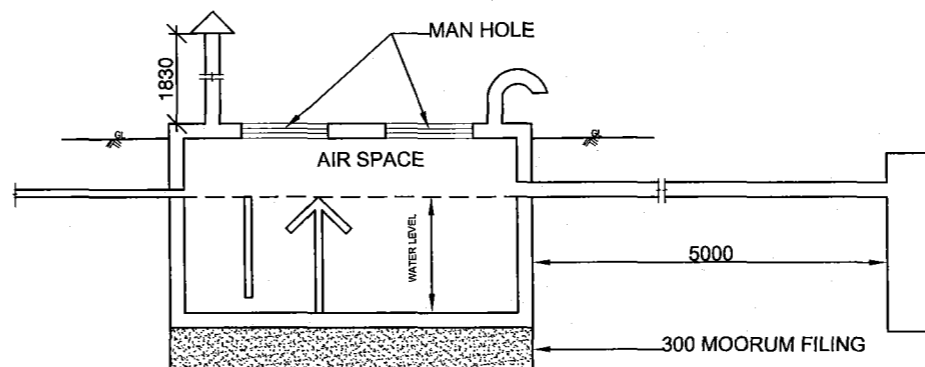


DETAIL OF BAFFLE WALL

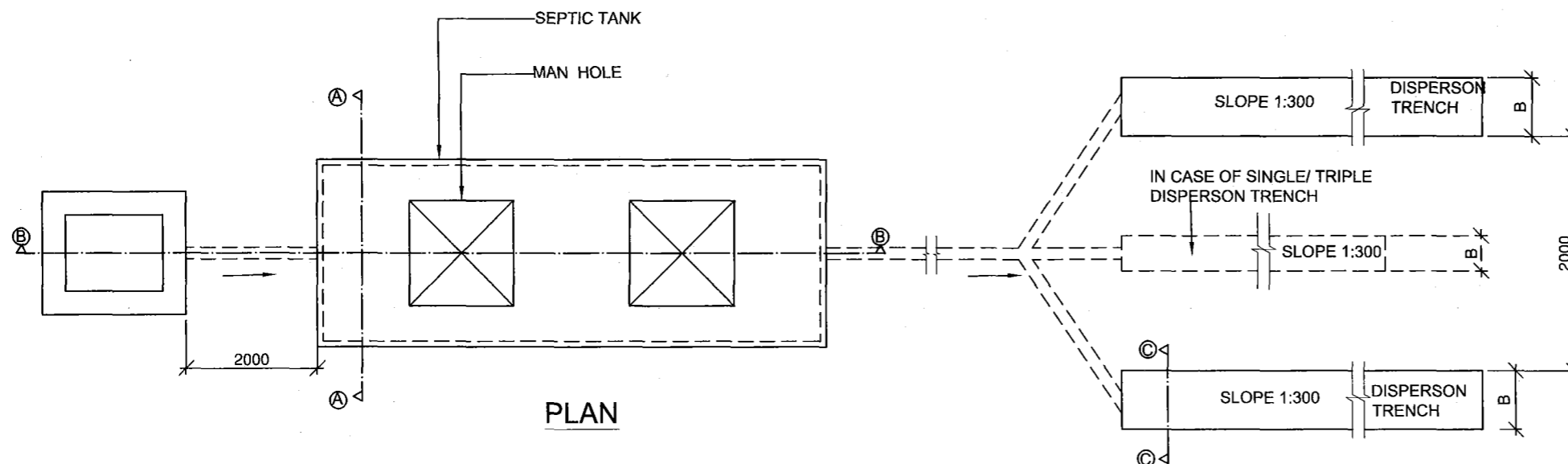


SECTION AT - 'A A'

MANHOLE AS APPLICABLE AS PER DRAWING NO CEJZ/STD/17/2016 SHT NO 1/3



SECTION AT - 'B B'



PLAN

NOTES

1. CONTRACTOR AND EXECUTIVE AUTHORITY TO CHECK & VERIFY ALL DIMENSIONS BEFORE TAKING EXECUTION IN HAND.
2. ALL DIMENSIONS ARE GIVEN IN MILLIMETRES UNLESS OTHERWISE SPECIFIED.
3. FIGURED DIMENSIONS ONLY SHALL BE FOLLOWED.
4. MOORUM FILLING SHOWN BELOW HUME PIPE SEPTIC TANK SHALL BE INCREASED TO 600 MM RECLAIMED SOIL AREA
5. THE GRADE OF CONCRETE FOR ALL RCC WORKS SHALL M-30 DESIGN MIX.
6. WHEREVER PCC SHOWN IT SHALL BE M-20

FOR DISPERSION TRENCH			
S NO	NO OF USERS	LENGTH 'L'	BREATH 'B'
1	36-50	2 X 30 M OR 3 X 20 M	1M
2	26-35	2X20 M	1M
3	16-25	1 X 30	1M
4	11-25	1 X 20	1M
5	UP TO 10	1 X 12	1M

DIAMETER OR SEPTIC TANK	
D = 48" ∅	FOR 36-50 USERS
D = 42" ∅	FOR 26-35 USERS
D = 36" ∅	FOR 16-25 USERS
D = 30" ∅	FOR 11-15 USERS
D = 24" ∅	UP TO 10 USERS

HUME PIPE SEPTIC TANK UP TO 50 USERS

DATE	31 MAR 2016	CHIEF ENGINEER JODHPUR ZONE JODHPUR	SHT NO
DRN	SUB GAIKWAD J M		1
TCD			1
CKD	U S SHARMA		
SCALE		REF DRG NO. - CEJZ/STR/STD/18/2016	

C.K. Chanchlani
C.K. CHANCLANI
TECH OFFR

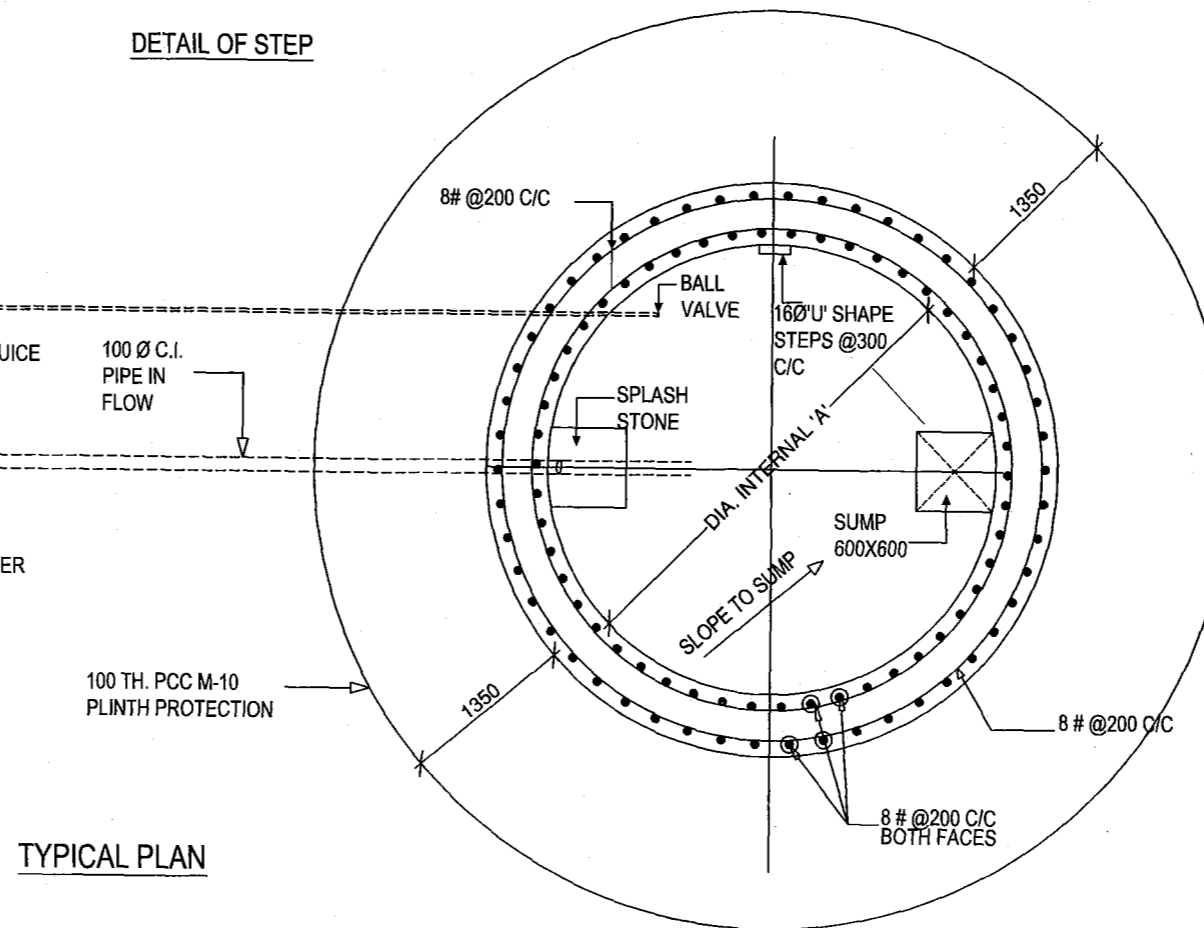
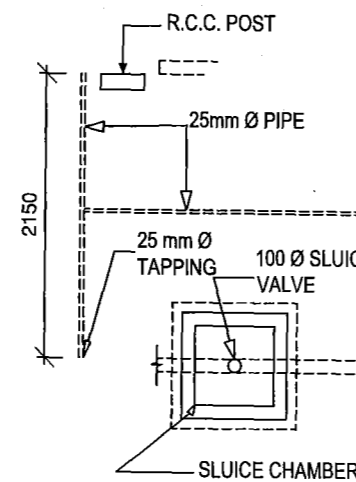
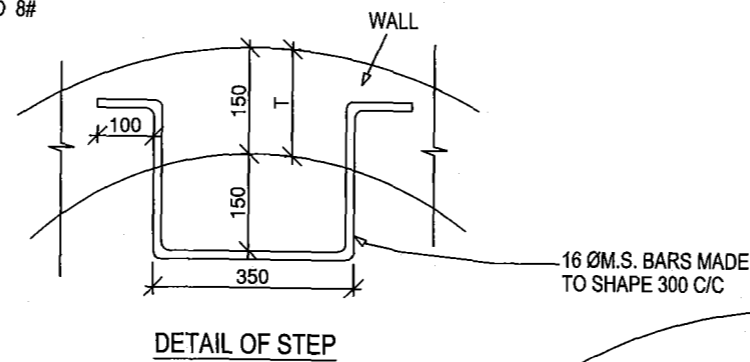
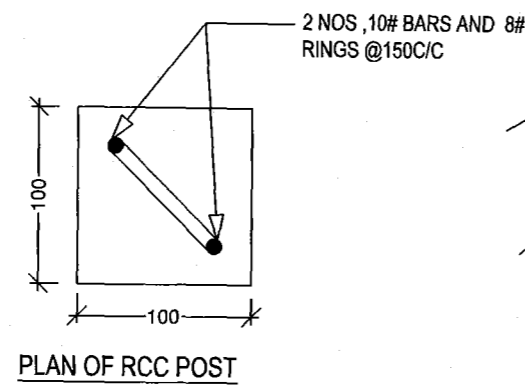
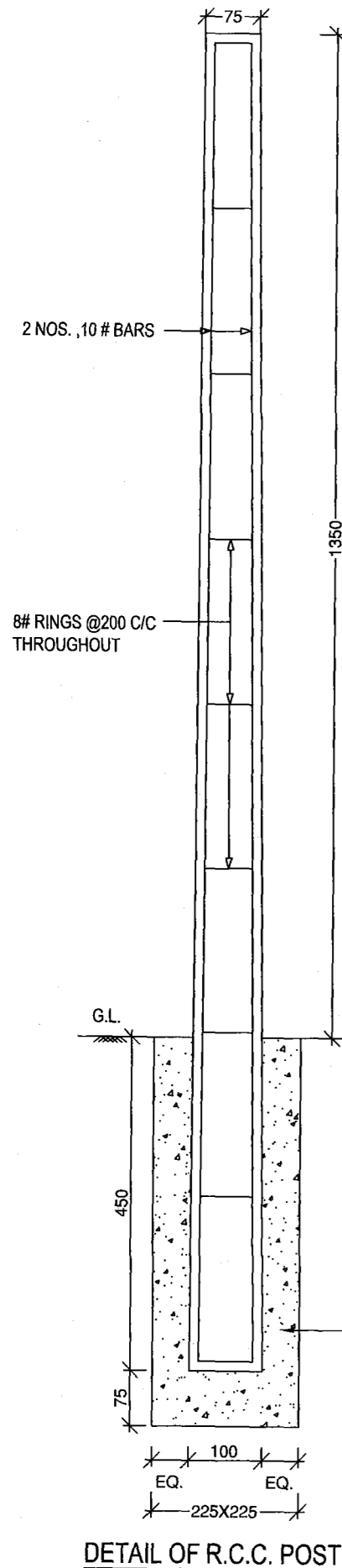
Subodh Kumar
(SUBODH KUMAR)
SE
DIRECTOR (DESIGN)
FOR CHIEF ENGINEER

NOTES

- 1 CONTRACTOR TO CHECK & VERIFY ALL DIMENSIONS BEFORE TAKING EXECUTION IN HAND.
- 2 FIGURED DIMENSIONS SHALL BE FOLLOWED
- 3 ALL DIMENSIONS ARE GIVEN IN mm.
- 4 ALL REINF. MARKED THUS # ARE HIGH YIELD STRENGTH DEFORMED BARS Fe 500 CONFORMING TO I.S. 1786 OF 1985.
- 5 THE WATER TABLE HAS BEEN ASSUMED AT 4 M BELOW GL, IN CASE W.T IS FOUND HIGH DURING EXECUTION THE FOUNDATION HAS TO BE REDESIGNED.
- 6 IN CASE OF BLACK COTTON SOIL 300 TH. MURRUM SHALL BE PROVIDED UNDER THE FDN CONC.
- 7 GDE. OF CONC. FOR ALL RCC WORK PCC BED BLOCK SHALL BE M:30 (DESIGN MIX) CONFORMING TO I.S. 456 OF 2000.

SCHEDULE OF STATIC TANK				
SL.NO.	CAPACITY IN LITRES	INTERNAL DIA. 'A'	DEPTH	WALL THICKNESS 'T'
1.	10,000	2500	2100	200
2.	20,000	3300	2350	200
3.	22,500	3500	2350	200
4.	45,500	5000	2350	200
5.	50,000	5210	2350	200
6.	68,000	6100	2350	200
7.	70,500(15,500 GALS)	6200	2350	200
8.	91,000	7000	2350	200
9.	1,13,500	7750	2350	200
10.	2,27,000	10950	2350	200
11.	2,72,000	12200	2350	200

PANELS IN FLOOR SLAB		
SL.NO.	CAPACITY IN LITRES	TYPICAL FLOOR PANELS
1.	UP TO 50,000	CONTRACTION JOINT
2.	68,000 TO 1,13,500	EXPANSION JOINT CONTRACTION JOINT
3.	2,27,000 TO 2,72,000	A/3 A/3 A/3 A/3 A/3 CONTRACTION JOINT EXPANSION JOINT



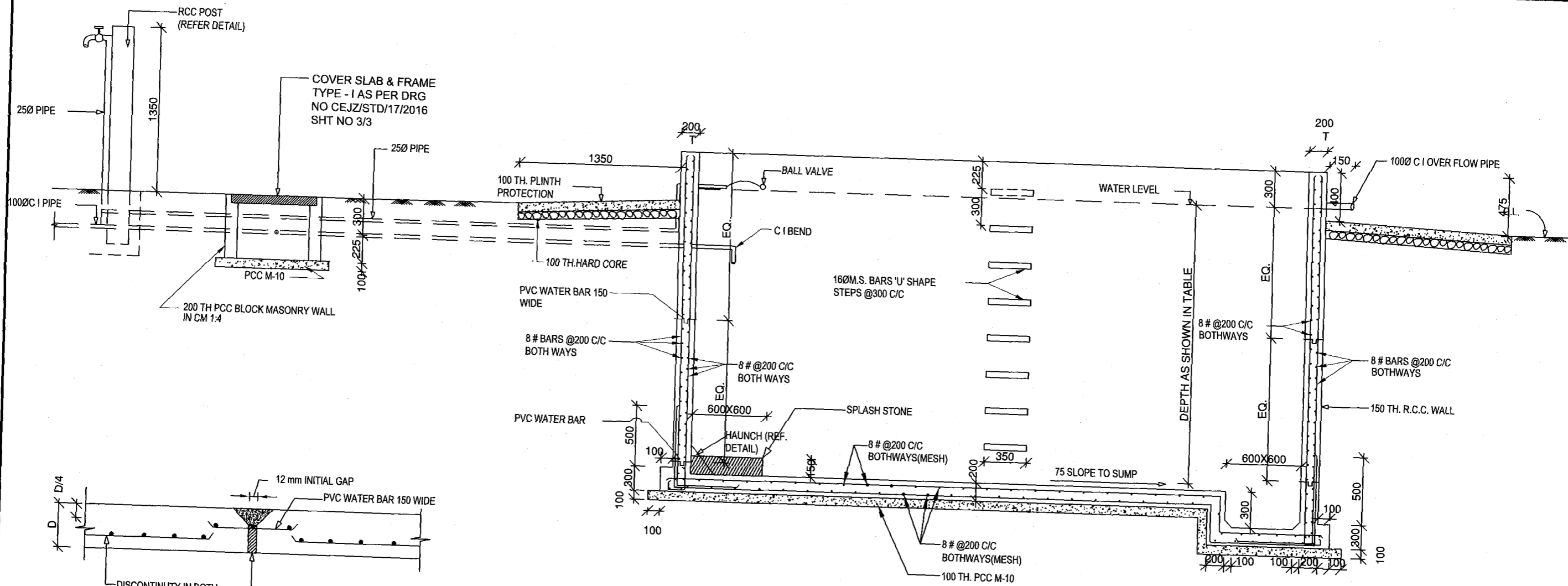
TYPICAL DETAILS OF STATIC WATER TANK

TYPICAL PLAN, SECTION OF STATIC TANK, DETAIL OF RCC POST ETC.

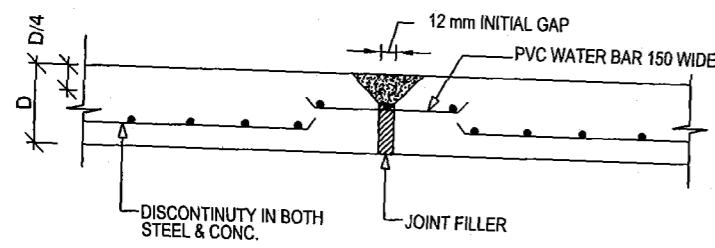
DATE	31 MAR 2016	CHIEF ENGINEER JODHPUR ZONE JODHPUR	SHT NO
DRN	SUB GAIKWAD J M		1
TCD			2
CKD	U S SHARMA		
SCALE		REF DRG NO. - CEJZ/STR/STD/19/2016	

C.K. Chanchlani
C.K. CHANCLANI
TECH OFFR

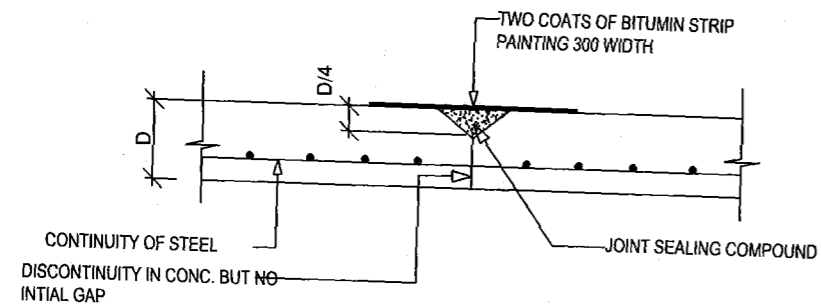
(Subodh Kumar)
(SUBODH KUMAR)
SE
DIRECTOR (DESIGN)
FOR CHIEF ENGINEER



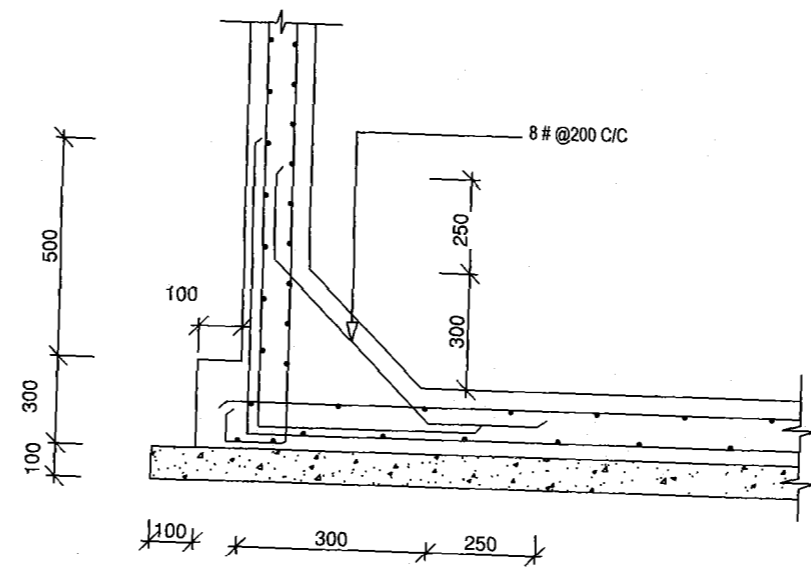
TYPICAL CROSS SECTION



DETAIL OF EXPANSION JOINT



DETAIL OF CONTRACTION JOINT



DETAIL OF HAUNCH

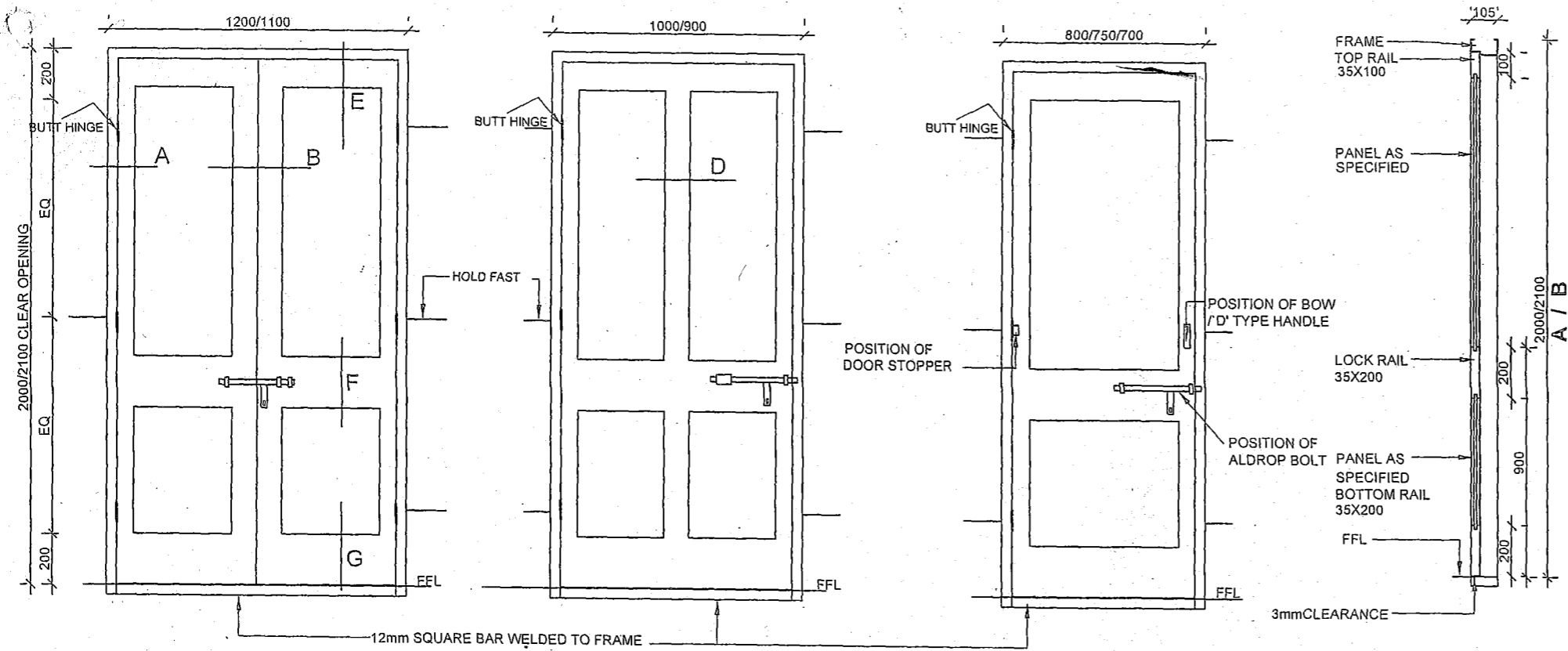
TYPICAL DETAILS OF STATIC WATER TANK

TYPICAL CROSS SECTION, DETAIL OF HAUNCH, CONSTRUCTION JOINT & EXPANSION JOINT

DATE	31 MAR 2016	CHIEF ENGINEER JODHPUR ZONE JODHPUR	SHT NO 2 2
DRN	SUB GAIKWAD J M		
TCD			
CKD	U S SHARMA		
SCALE		REF DRG NO. - CEJZ/STR/STD/19/2016	

C.K. Chanclani
 C.K. CHANCLANI
 TECH OFFR

(Subodh Kumar)
 (SUBODH KUMAR)
 SE
 DIRECTOR (DESIGN)
 FOR CHIEF ENGINEER

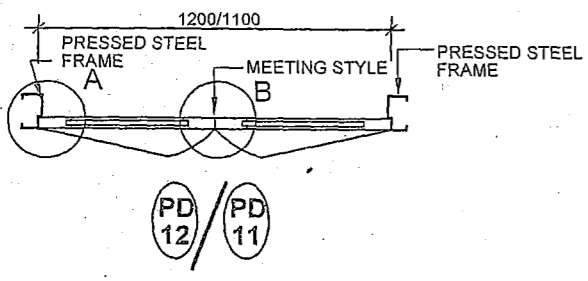


ELEVATIONS

SECTION

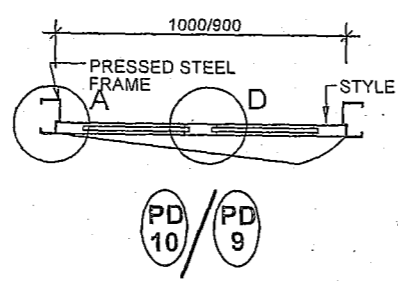
- NOTES Contd.....**
14. SIZE OF SHEET USED FOR PRESSED STEEL FRAME SHALL BE 1.25mm TH PRESSED STEEL FRAME SHALL CONFIRM TO I.S.-4351.
 15. ONE NO RUBBER CHOCK STOPPER PER LEAF SHALL BE SCREWED TO BOTTOM RAIL TO KEEP THE DOOR SHUTTER AWAY FROM WALL.
 16. IN CASE OF R.C.C COL/R.C.C WALL THE DOOR FRAME SHALL BE FIXED WITH DASH THRU BOLTS OF STANDARD QUALITY .
 17. ONE HANDLE & 2 NOS TOWER BOLTS 150 mm LONG SHALL BE PROVIDED TO EACH SHUTTER .
 18. 03 NOS. BUTT HINGES 75 LONG , ONE LEAF WELD TO PRESSED STEEL FRAME AND OTHER LEAF SCREWED TO SHUTTER FRAME WITH 50 LONG SCREWS, PER LEAF , 200 MM ABOVE AND BELOW FLOOR AND LINTEL LEVEL RESPECTIVELY AND 3RD HINGE OF CENTER OF SHUTTER
 19. THE HOLDFAST/LUGS FOR WINDOWS AND VENTILATORS SHALL BE EMBEDDED IN PCC 1:3:6 OF SIZE 150X 150X TH OF WALL
 20. FOR WIDTH & HEIGHT OF A PARTICULAR DOOR THE NOTATION SHALL BE NOMNICLATURE OF DOOR FOLLOWED WITH NOMNICLATURE OF HEIGHT. FOR EXAMPLE FOR A DOOR SIZE 1200x2100 THE NOTATION SHALL BE $\text{PD} \begin{matrix} 12 \\ 2100 \end{matrix}$
 21. 6 NOS FLAT IRON HOLD FAST SHALL BE WELDED WITH EACH DOOR FRAME AND THE SPLIT END SHALL BE EMBEDDED INTO PCC BLOCK 1:3:6 OF SIZE 150X150XTHICKNESS OF WALL.
 22. ALL EXOPSED STEEL SURFACES SHALL BE TREATED WITH TWO COAT OF ENAMELPAINTS OF APPROVED COLOUR OVER ONE COAT OF METEL PRIMER.
 23. ALL WELDING AND FINISHING WORKS OF STEEL MEMBERS SHALL BE AS PER STANDRAD PRATICE / MANUFACTURER'S INSTRUCTION.
 24. WIRE GUAGE SHUTTER SHALL BE PROVIDED WITH STAINLESS STEEL 32 GAUGE FLY MESH OF 304 GRADE WITH 144 HOLES PER SQ. INCH.

- NOTES**
1. CONTRACTOR / EXECUTIVE AUTHORITY SHALL CHECK & VERIFY THE DRAWING BEFORE TAKING EXECUTION IN HAND.
 2. FIGURED DIMENSIONS SHALL BE FOLLOWED.
 3. ALL DIMENSIONS ARE GIVEN IN MILLIMETRES UNLESS OTHERWISE SHOWN IN DRAWING.
 4. DOOR FRAME SHALL BE FIXED IN THE CENTER OF THE WALL . UNLESS OTHER WISE SHOWN . WIDTH OF THE DOOR IS INCLUSIVE OF 10mm CLEARANCE AS AROUND.
 5. THE HEIGHT OF DOOR OPENING SHALL BE 2000mm FOR ALL MARRIED ACCN AND 2100 FOR OTM ACCN UNLESS OTHER WISE STATED.
 6. FOR MARRIED & SINGLE OFFICERS QTRS, OFFICER MESS AND OTHER PRESTIGIOUS BUILDING ALL FITTINGS SHALL BE OF ANODISED ALUMINIUM AND IN ALL OTHER ACCN IRON MONGERY SHALL BE OF STOVE ENAMALLED BLACK FINISH EXCEPT BUTT HINGE WHICH SHALL BE OF PRESSED STEEL.
 7. GUARD CHAIN AND MAGIC EYE SHALL BE PROVIDED TO MAIN ENTRANCE DOOR OF ALL MARRIED ACCOMMODATION.
 8. BUTT HINGES SHALL BE SCREWED TO DOOR CONFIRMING TO IS 4351-1976.
 9. PD STANDS FOR PANEL DOOR, PDF STANDS FOR PANEL DOOR WITH WIRE GAUGE SHUTTER AND DWG STANDS FOR DOOR WITH WIRE GAUGE SHUTTER.
 10. IN CASE OF FLY PROOF DOOR, THE WIRE GAUGE SHUTTERS SHALL OPEN OUTSIDE UNLESS OTHERWISE SHOWN.
 11. 19 DIA 300mm LONG ALDROP BOLT SHALL BE PROVIDED TO ALL EXTERNAL DOORS.
 12. DOUBLE ACTION/SINGLE ACTION SPRING HINGES TWO LOADED AND ONE DUMMY SHALL BE PROVIDED IN PLACE OF BUTT HINGES FOR WIRE GAUGE SHUTTER OF MAIN ENTRANCE DOOR.
 13. HOLLOW PORTION OF PRESSED STEEL FRAME SHALL BE FILLED WITH PCC (1:3:6) 10/12mm GRADED.



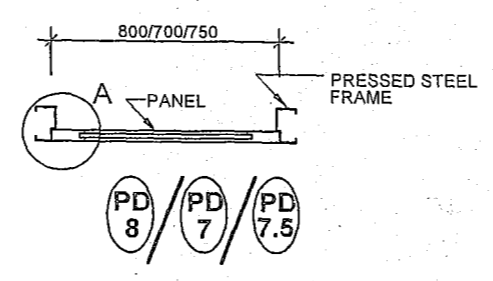
$\text{PD} \begin{matrix} 12 \\ 11 \end{matrix}$

PLAN



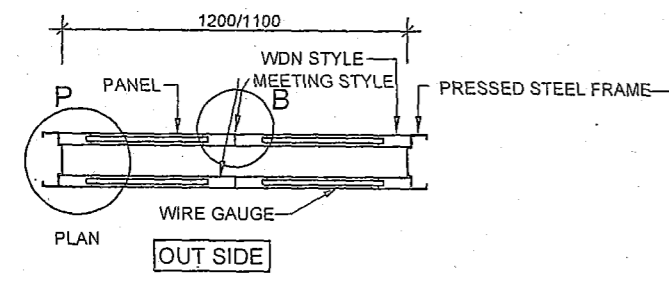
$\text{PD} \begin{matrix} 10 \\ 9 \end{matrix}$

PLAN



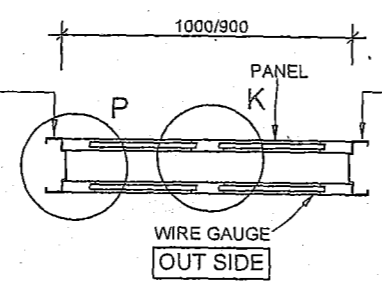
$\text{PD} \begin{matrix} 8 \\ 7 \\ 7.5 \end{matrix}$

PLAN



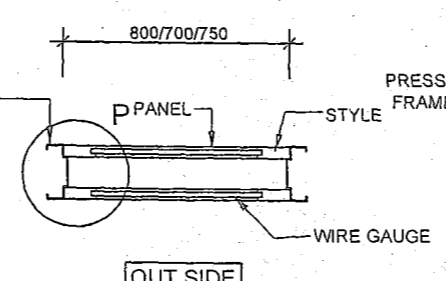
$\text{PDF} \begin{matrix} 12 \\ 11 \end{matrix}$

PLAN



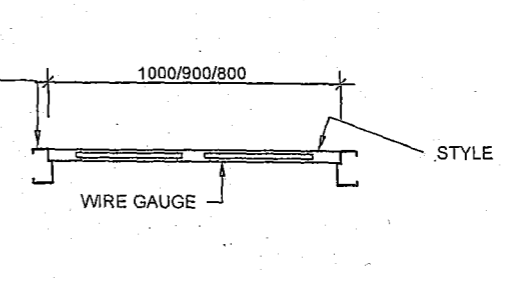
$\text{PDF} \begin{matrix} 9 \\ 10 \end{matrix}$

PLAN



$\text{PDF} \begin{matrix} 8 \\ 7 \\ 7.5 \end{matrix}$

PLAN



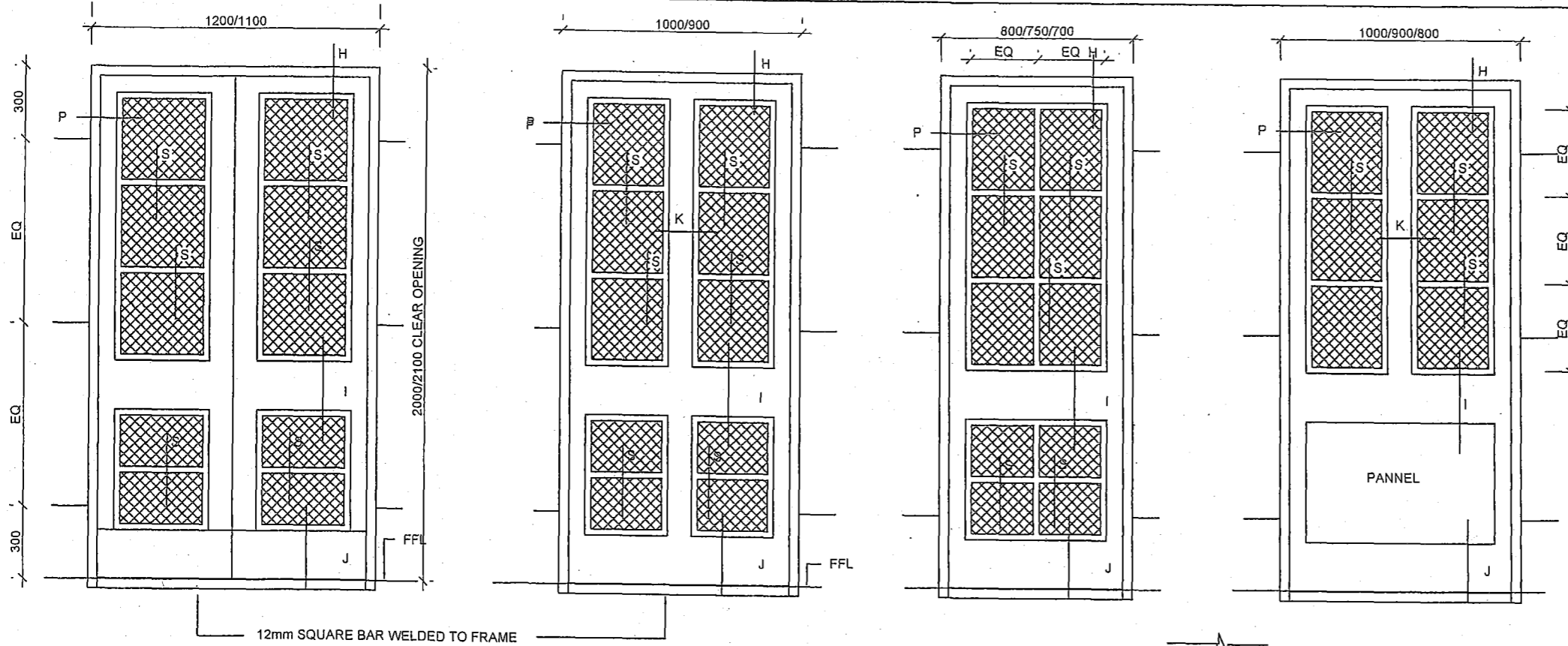
$\text{DWG} \begin{matrix} 10 \\ 9 \\ 8 \end{matrix}$

PLAN

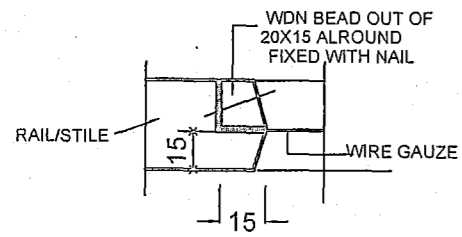
PANEL DOORS WITH PRESSED STEEL FRAME

DATE	21/03/2013	CHIEF ENGINEER JODHPUR ZONE JODHPUR	SHT No 1/4
DRN.	C S ASERI		
CKD.	VINOD		
SCALE		DRG. NO. CEJZ / TD / 01	

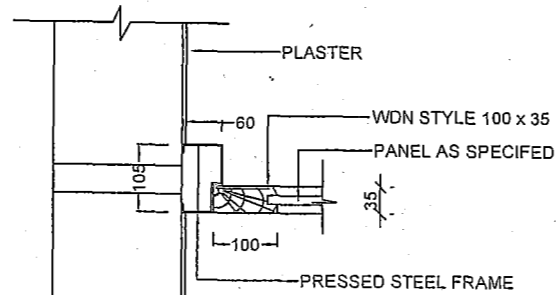
(Signature)
(R C SWAIN)
LT COL
SENIOR ARCHITECT
FOR CHIEF ENGINEER



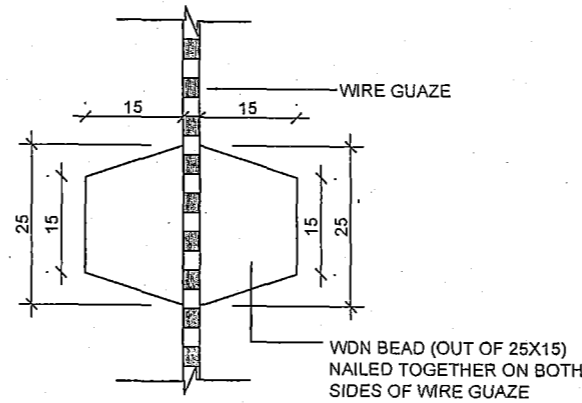
ELEVATIONS OF FLYPROOFING



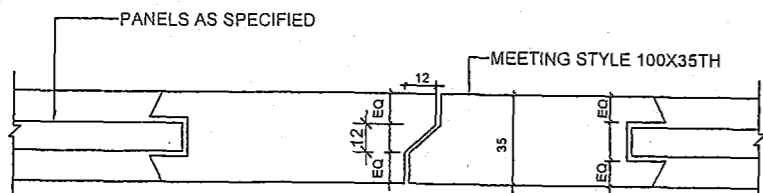
TYPICAL DETAIL OF FIXING " OF WDN BEAD"



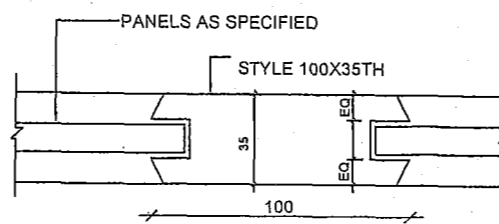
PLAN DETAIL AT 'A'



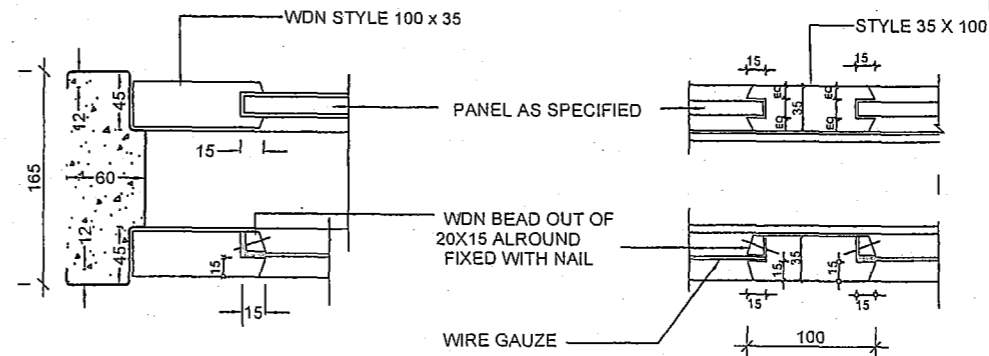
SECTION WDN BEADING (BOTH SIDES) DETAIL AT 'S'



PLAN DETAIL AT 'B'



PLAN DETAIL AT 'D'



DETAIL AT " P"

PLAN DETAIL AT 'K'

NOTES

1 FOR ALL NOTES REFER SHEET NO. 1/4 OF THIS DRG.

PANEL DOORS WITH PRESSED STEEL FRAME

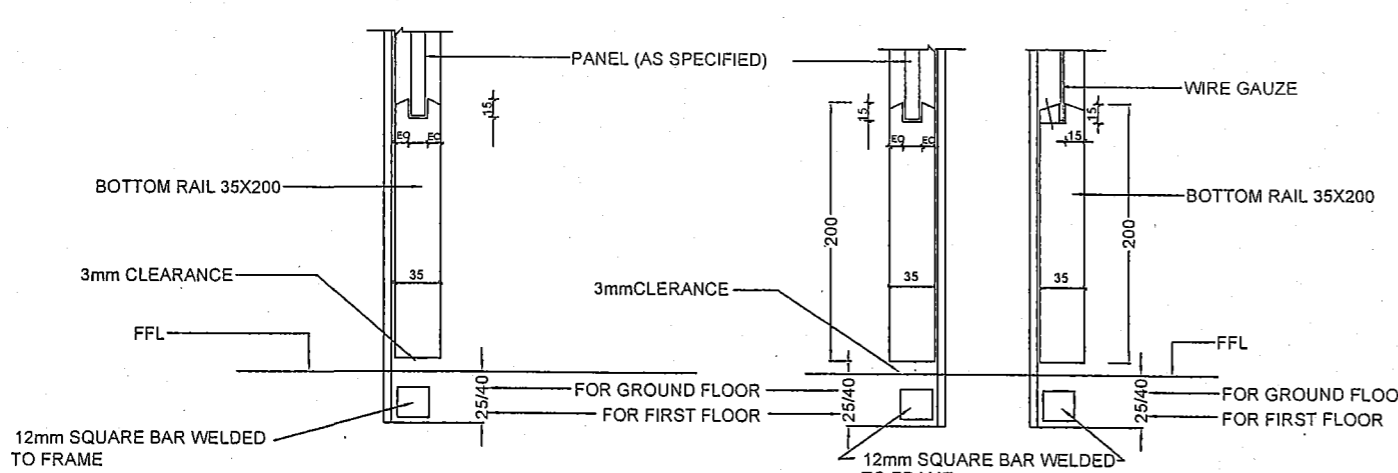
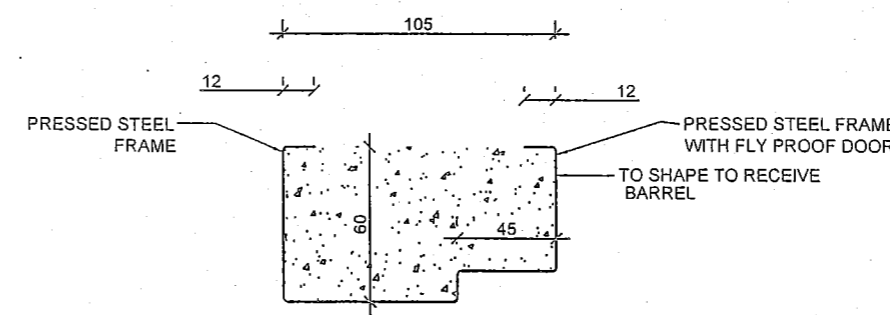
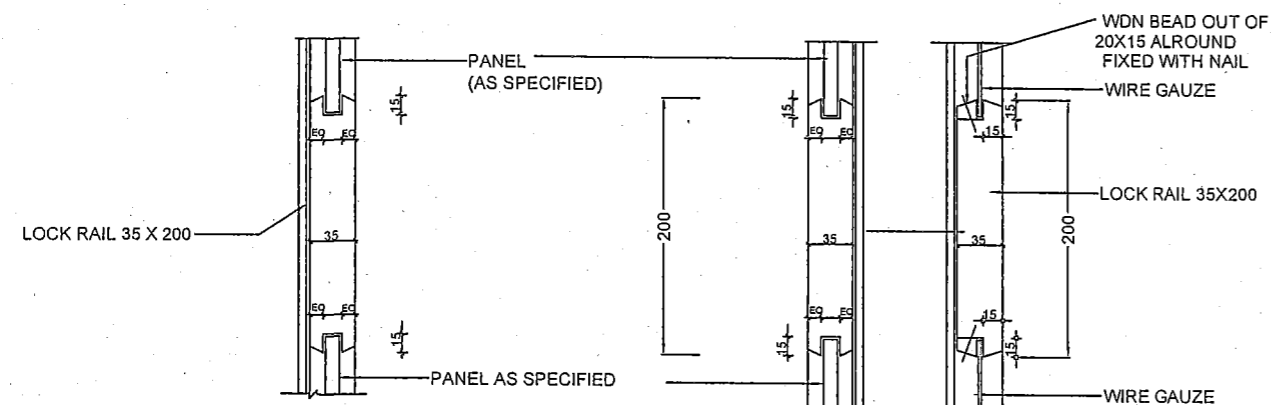
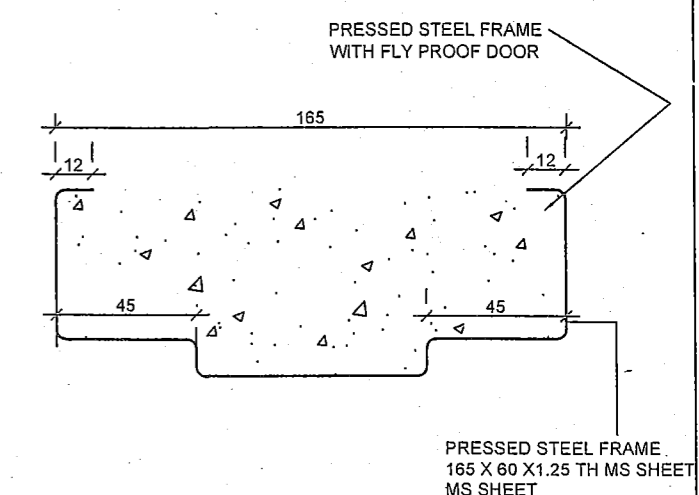
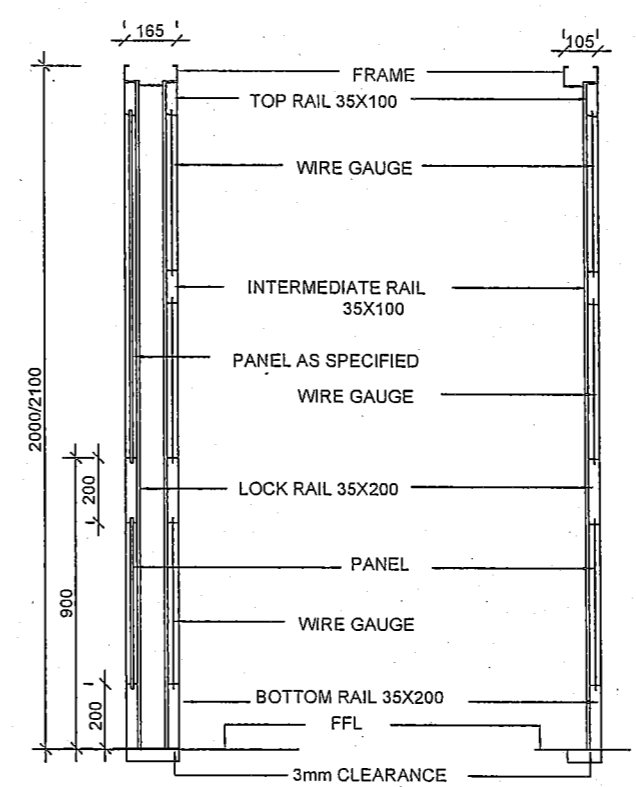
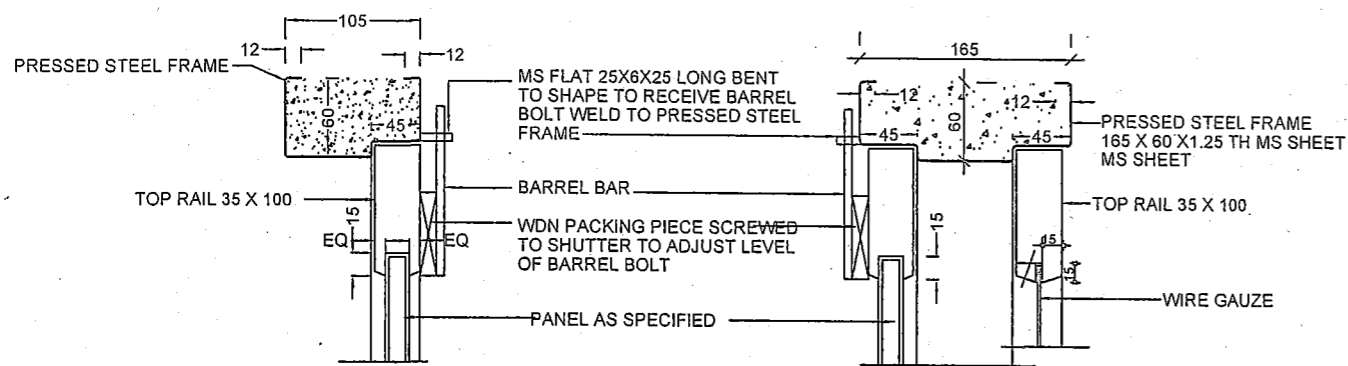
DATE	21/03/2013	CHIEF ENGINEER JODHPUR ZONE JODHPUR	SHT No
DRN.	C S ASERI		2
TCD.			4
CKD.	VINOD		
SCALE		DRG. NO. CEJZ/TD/01	

R C Swain

(R C SWAIN)
LT COL
SENIOR ARCHITECT
FOR CHIEF ENGINEER

NOTES

1 FOR ALL NOTES REFER SHEET NO. 1/4 OF THIS DRG.



PANEL DOORS WITH PRESSED STEEL FRAME			
DATE	21/03/2013	CHIEF ENGINEER JODHPUR ZONE JODHPUR	SHT No
DRN.	C S ASERI		3/4
TCD.			
CKD.	VINOD		
SCALE		DRG. NO. CEJZ/TD/01	

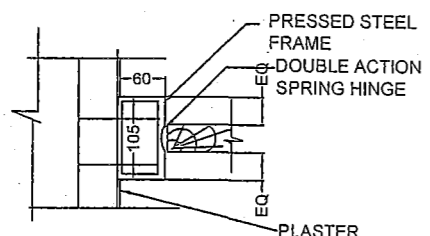
(Signature)
 (R C SWAIN)
 LT COL
 SENIOR ARCHITECT
 FOR CHIEF ENGINEER

SCHEDULE OF IRON MONGERY

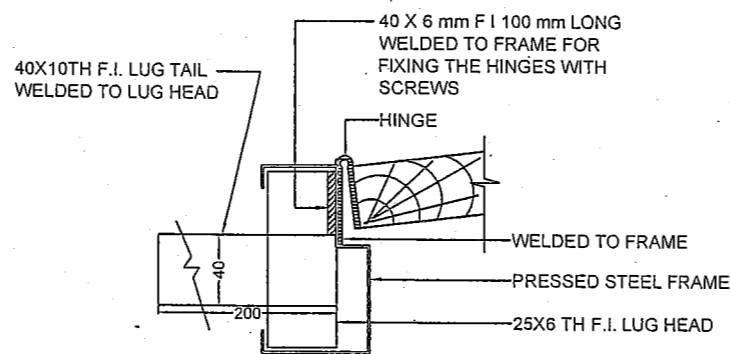
SL. NO.	TYPE OF DOOR	SIZE OF DOOR	BUTT HINGE 100 LONG PER LEAF	BARREL BOLT 200 LONG AT TOP	BARREL BOLT 150 LONG AT BOTTOM	SPRING HINGE FOR FLY-PROOFING SHUTTER ONLY	BOW / D TYPE HANDLE 150 LONG	STD F.I. HOLDFAST	WDN STOPPER OUT OF 35X35X100 LONG WITH 35mm LONG BUTT HINGE	DOUBLE ACTION SPRING HINGE	MAGIC EYE AND GUARD CHAIN AND ALDROP BOLT RUBBER CHOCK	REMARKS
1	PD-12 & PD-11	1200/1100 X 2000/2100	3	2	1		3	6	2	REFER NOTE NO 15	REFER NOTE NO 8 REFER NOTE NO 13 REFER NOTE NO 19	⊙ INDICATES IRON MONGERY PER DOOR
2	PD-10, PD-9, PD-8, PD-7 & PD-7.5	1000/900/800/700/750 X 2000/2100	3	1	1		2	6	1			
3	PDF-12 & PDF-11	1200/1100 X 2000/2100	3	4	2	6	6	6	2			
4	PDF-10, PDF-9, PDF-8, PDF-7 & PDF-7.5	1000/900/800/700 X 2000/2100	3	2	2	3	4	6	1			
5	DWG-10, DWG-9 & DWG-8	1000/900/800 X 2000/2100	3	1	1	3	2	6	1			

NOTES

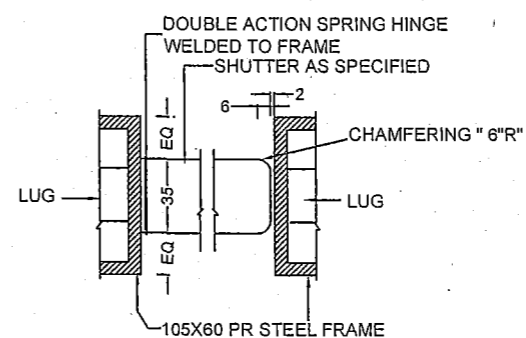
1 FOR ALL NOTES REFER SHEET NO. 1/4 OF THIS DRG.



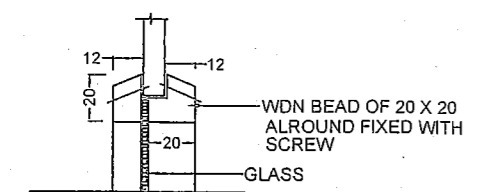
DETAIL OF SWING DOOR



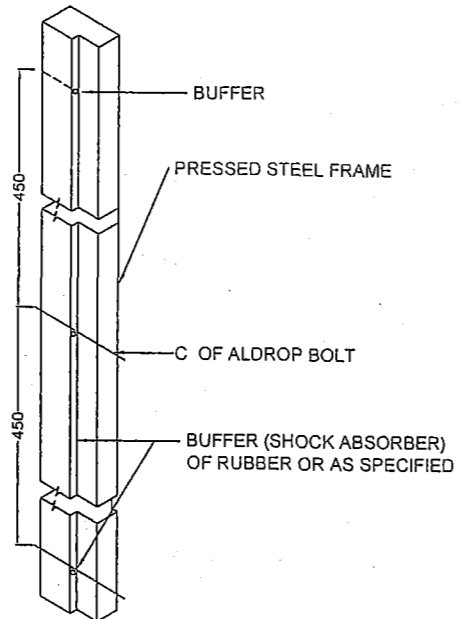
DETAIL OF FIXING LUG & HINGE TO PRESSED STEEL FRAME



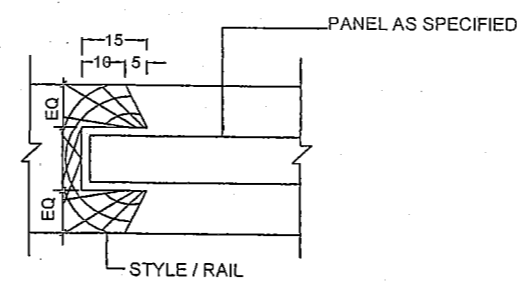
DETAIL OF SINGLE SHUTTER WITH DOUBLE ACTION SPRING HINGE



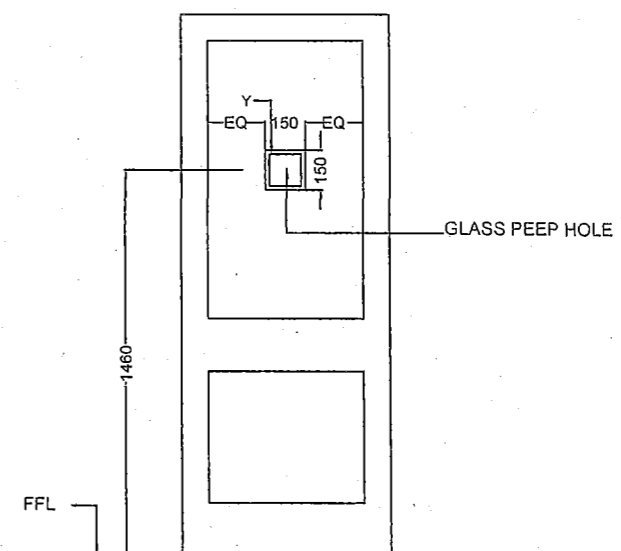
DETAIL OF PEEP HOLE SECTION AT 'Y'



LOCATION OF SHOCK ABSORBER (BUFFER 3 NOs - EACH SHUTTER)



DETAIL OF CHAMFER TO STYLE / RAIL

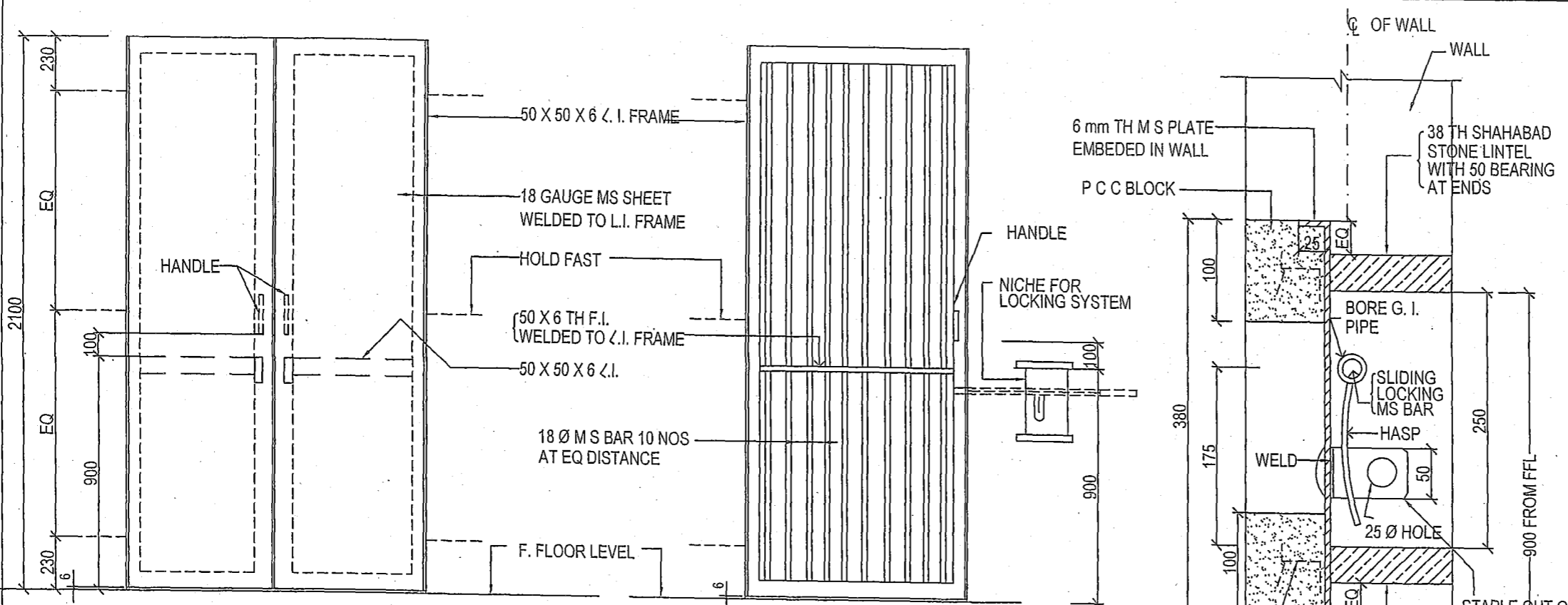


TYPICAL ELEVATION OF PEEP HOLE

PANEL DOORS WITH PRESSED STEEL FRAME

DATE	21/03/2013	CHIEF ENGINEER JODHPUR ZONE JODHPUR	SHT No
DRN.	C S ASERI		4/4
TCD.			
CKD.	VINOD		
SCALE		DRG. NO. CEJZ/TD/01	

Chin
(R C SWAIN)
LT COL
SENIOR ARCHITECT
FOR CHIEF ENGINEER

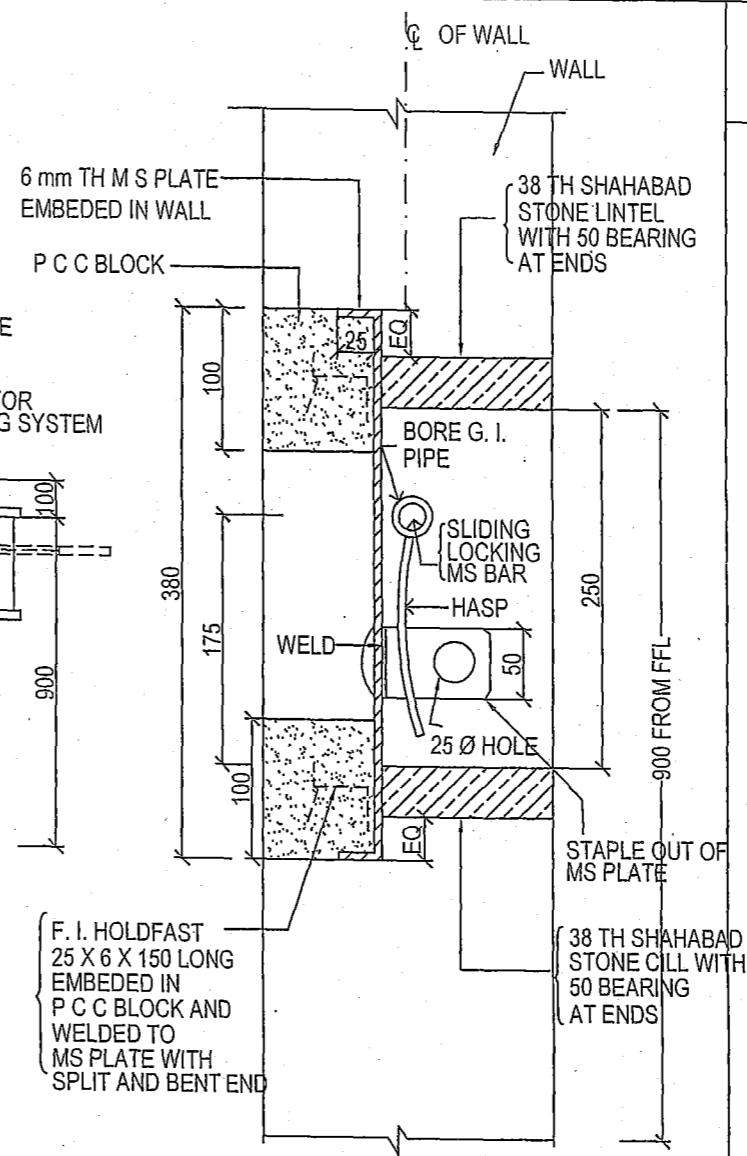


ELEVATION

SCALE 1:20

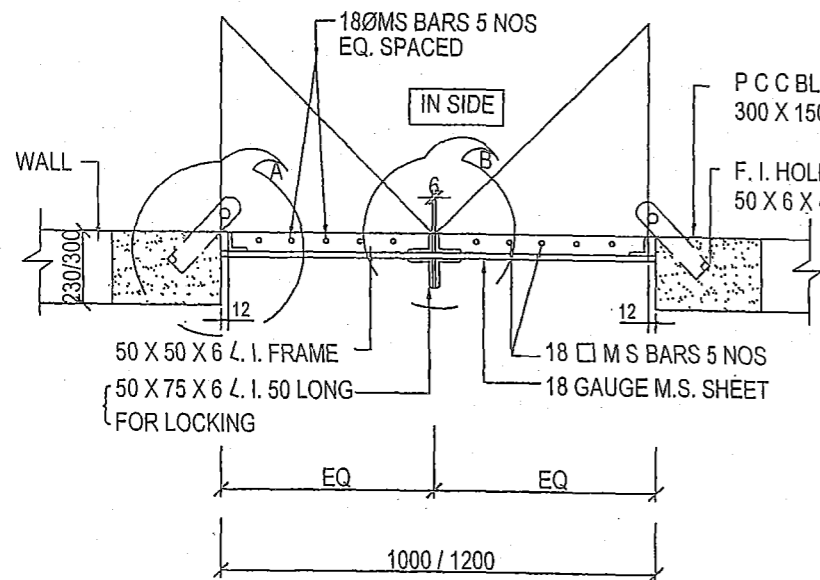
ELEVATION

SCALE 1:20



SECTION F F

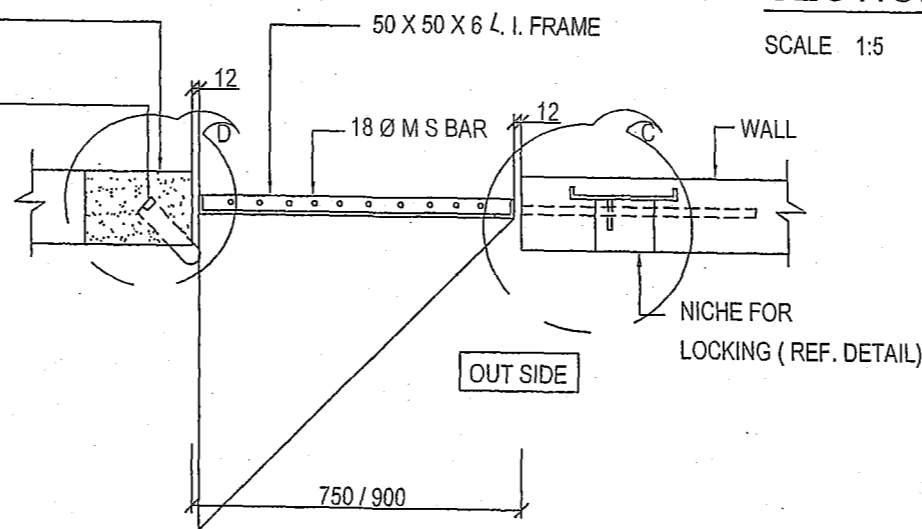
SCALE 1:5



SD 10 / SD 12

PLAN

SCALE 1:20



GD 7.5 / GD 9

PLAN

SCALE 1:20

NOTES

1. CONTRACTOR TO CHECK AND VERIFY ALL DIMENSION BEFORE EXECUTION OF THE WORK.
2. FIGURED DIMENSIONS SHALL BE FOLLOWED
3. ALL DIMENSIONS ARE GIVEN IN MILLIMETRES UNLESS OTHERWISE STATED.
4. SIZE OF DOORS MENTIONED HERE IN IS CLEAR SIZE OF MASONARY OPENING. A TOLERANCE OF 10 mm ON EITHER SIDE SHALL BE ALLOWED WHEN THE DOORS ARE FITTED IN TO BUILT IN OPENING.
5. ALL EXPOSED STEEL SURFACES SHALL BE TREATED WITH TWO COAT OF ENAMEL PAINT OF APPROVED COLOUR OVER ONE COAT OF METEL PRIMER.
6. ALL WELDING AND FINISHING WORKS OF STEEL MEMBERS SHALL BE AS PER STANDRAD WORKMESHIP PRATICE.

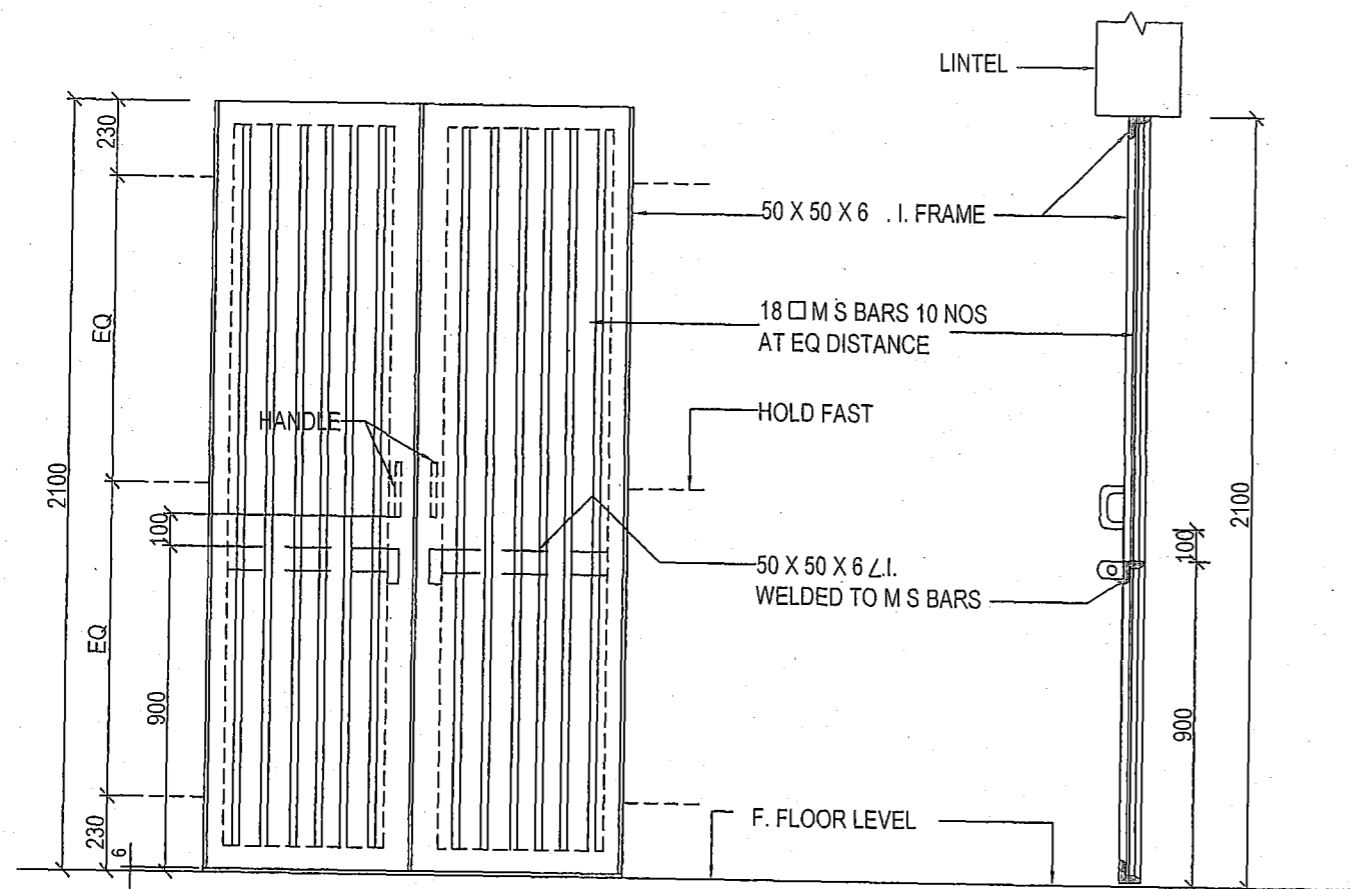
S.NO	DATE	DESCRIPTION	SIGN
		REVISION	
STEEL DOORS FOR GUARD - HOUSE / ARMOURY			
DATE	21-03-2013	CHIEF ENGINEER JODHPUR ZONE JODHPUR	SHT NO:
DRN	C S ASERI		1
TCD			3
CKD			
SCALE	AS SHOWN	REF DRG. NO. CEJZ/TD/02	

R Swain

(R C SWAIN)
LT COL
SR ARCH
FOR CHIEF ENGINEER

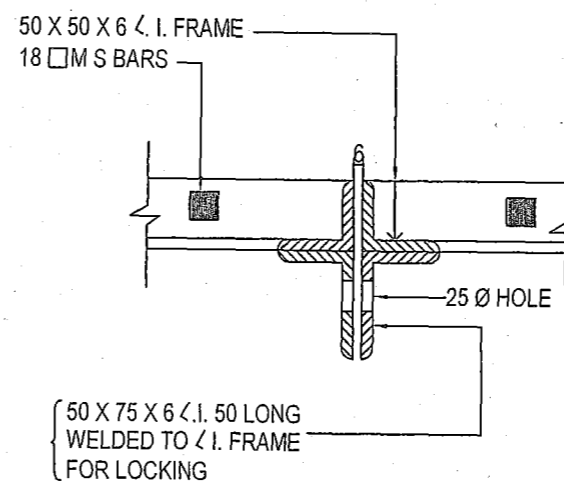
NOTES

- FOR NOTES AND ALL OTHER REFERENCES REF. DRG. NO CEJZ/TD/02 ,SHT NO 1/3

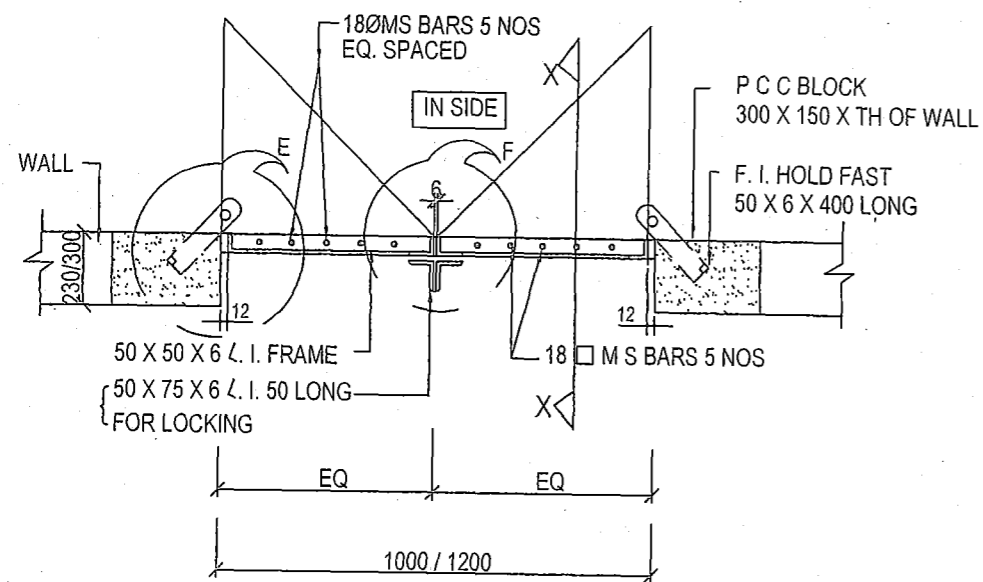


ELEVATION
SCALE 1:20

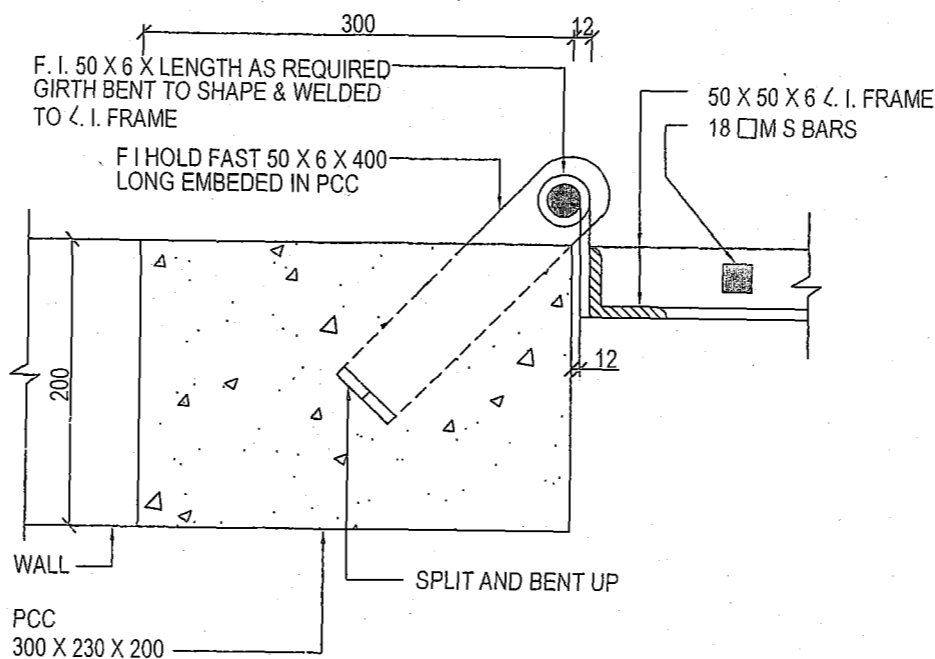
SECTION "X-X"
SCALE 1:20



DETAIL AT (F)
SCALE 1:5



PLAN
SCALE 1:20



DETAIL AT (E)
SCALE 1:5

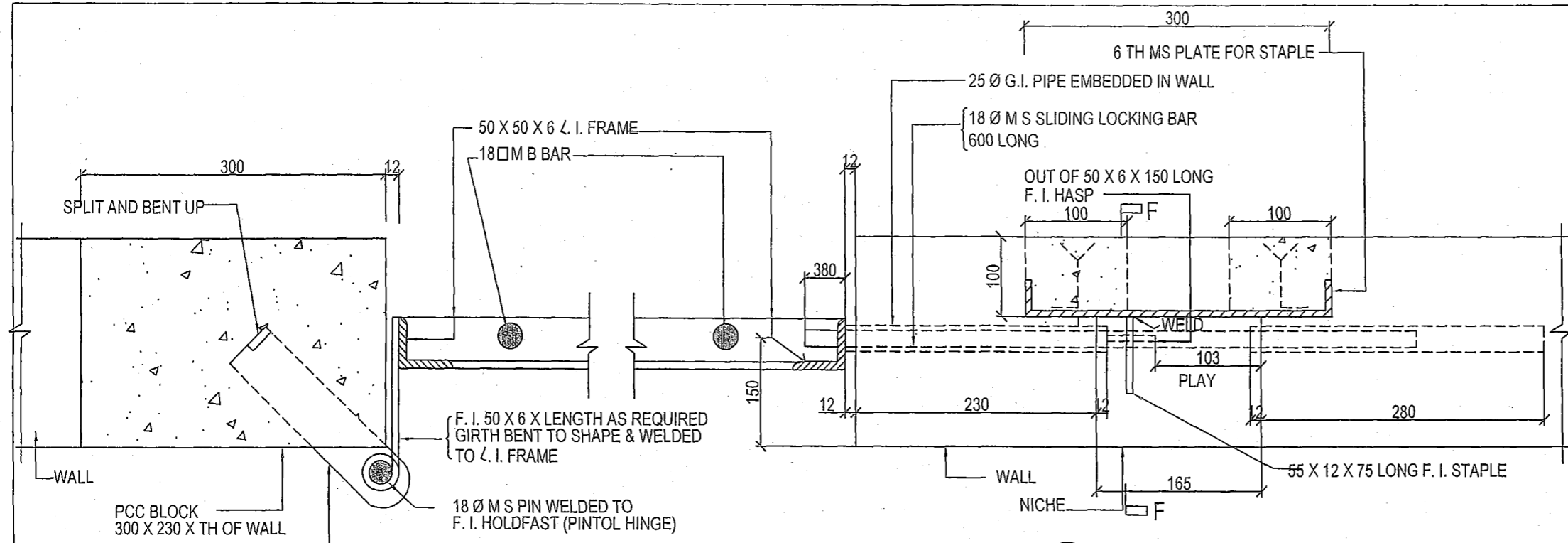
S.NO	DATE	DESCRIPTION	SIGN
		REVISION	

STEEL DOORS FOR GUARD - HOUSE / ARMOURY

DATE	21-03-2013	CHIEF ENGINEER JODHPUR ZONE JODHPUR	SHT NO:
DRN	C S ASERI		2
TCD			3
CKD			
SCALE	AS SHOWN	REF DRG. NO. CEJZ/TD/02	

(Signature)

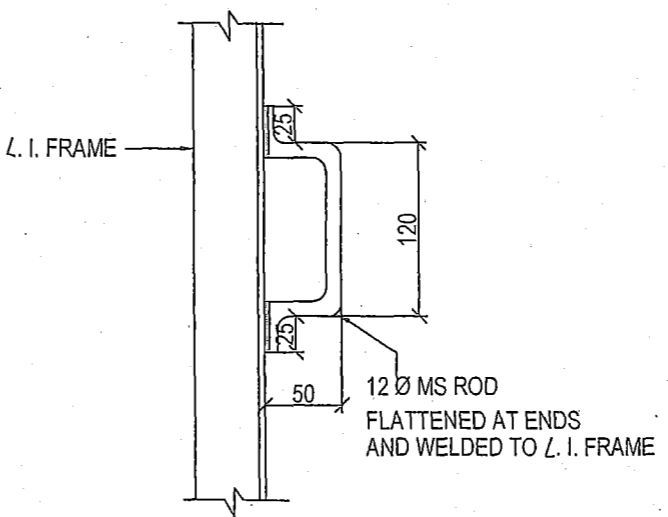
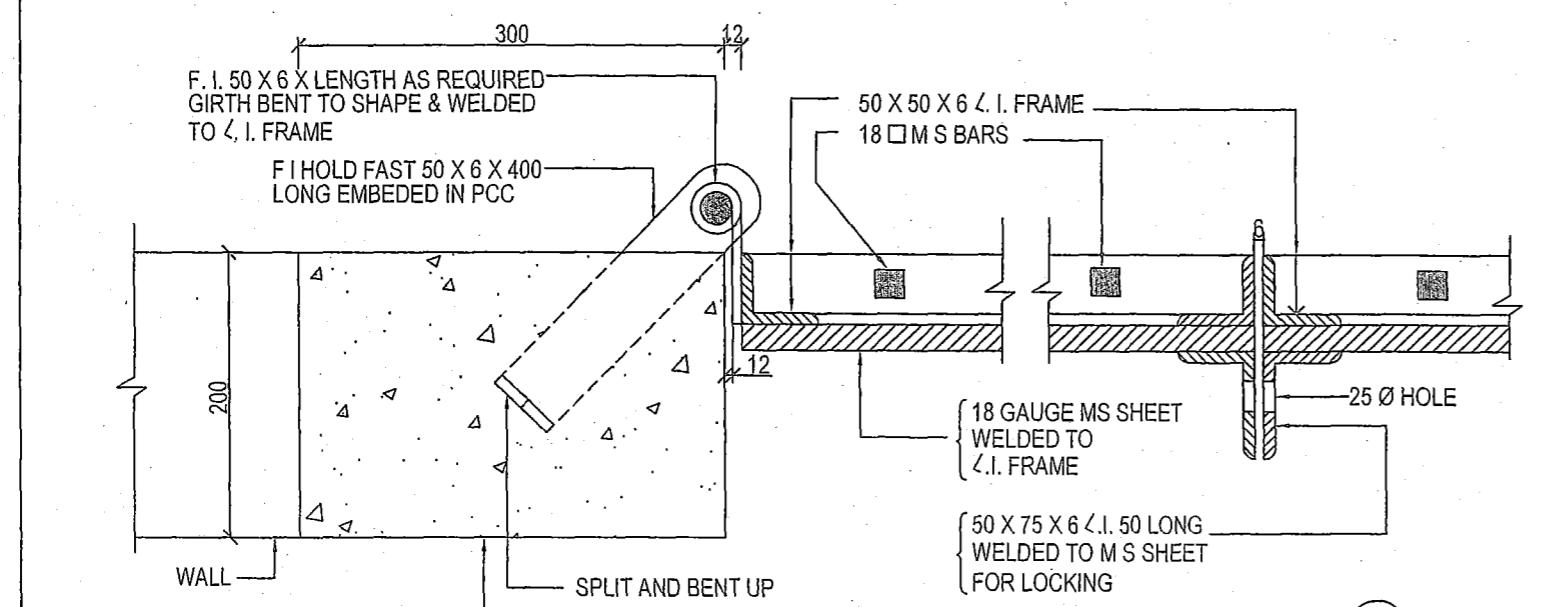
(R C SWAIN)
LT COL
SR ARCH
FOR CHIEF ENGINEER



NOTES
1. FOR NOTES AND ALL OTHER REFERENCES REF. DRG. NO CEJZ/TD/02 ,SHT NO 1/3

DETAIL PLAN AT (D)
SCALE 1:5

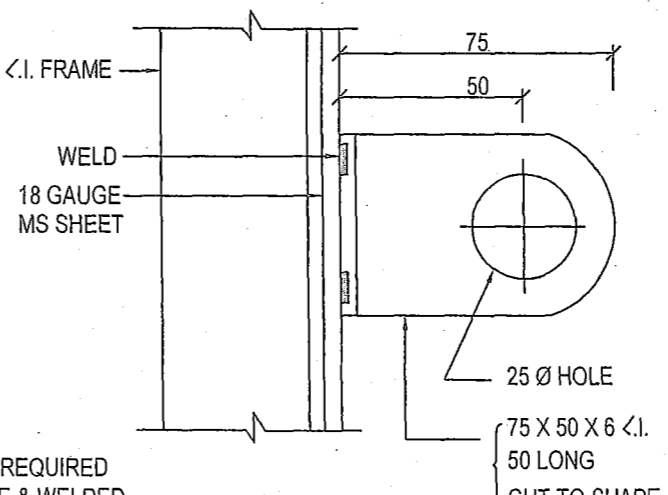
DETAIL PLAN AT (C)
SCALE 1:5



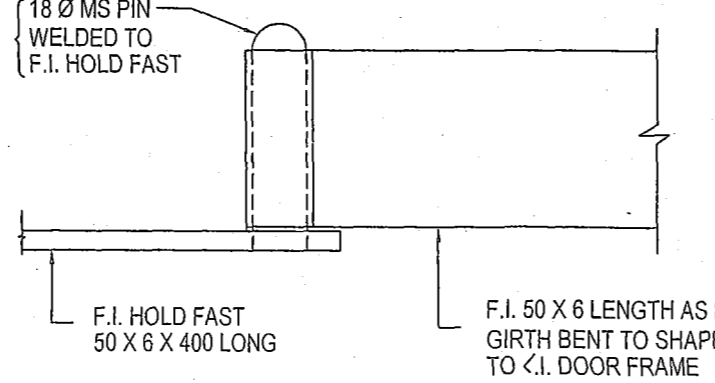
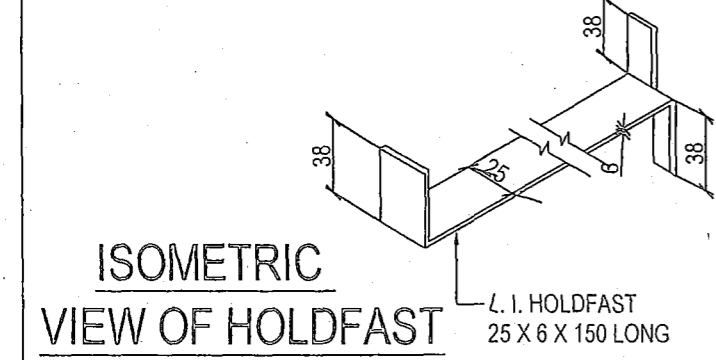
DETAIL OF HANDLE
SCALE 1:5

DETAIL AT (A)
SCALE 1:5

DETAIL AT (B)
SCALE 1:5



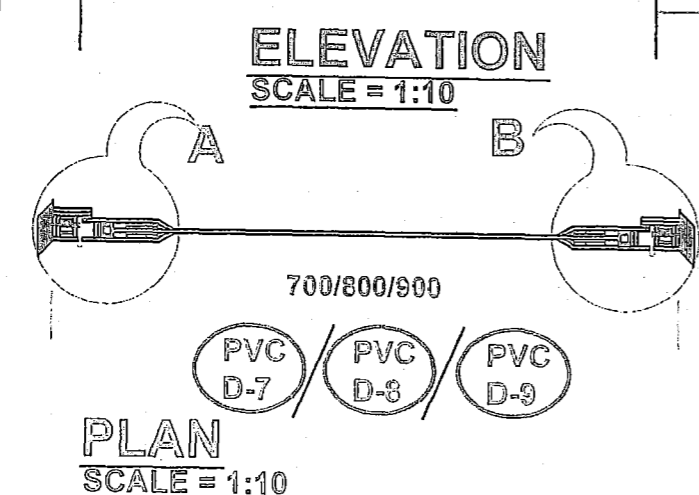
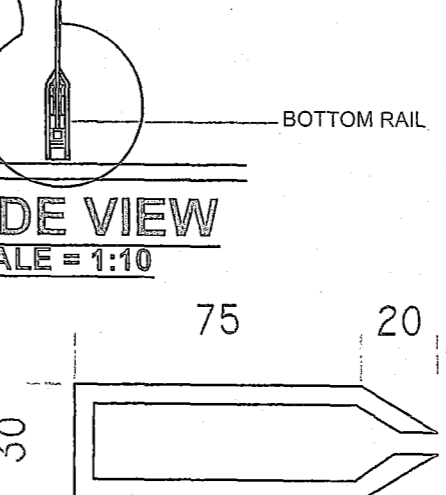
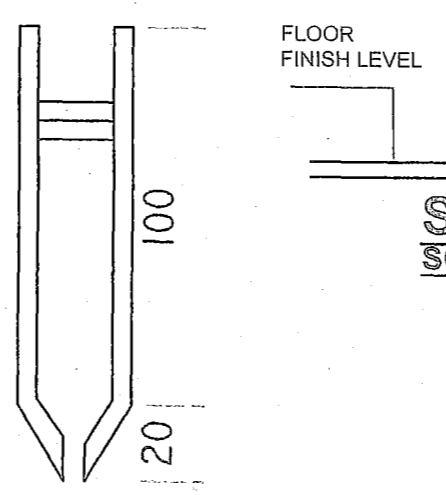
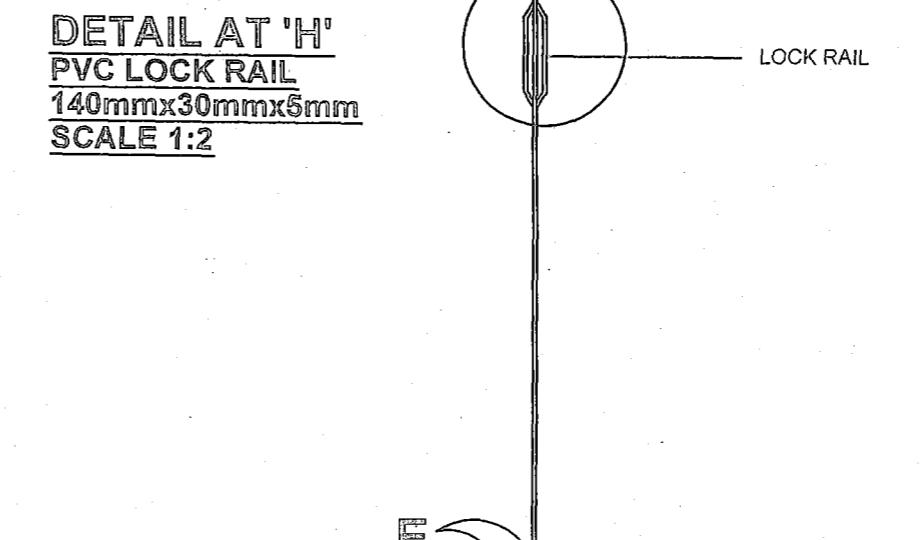
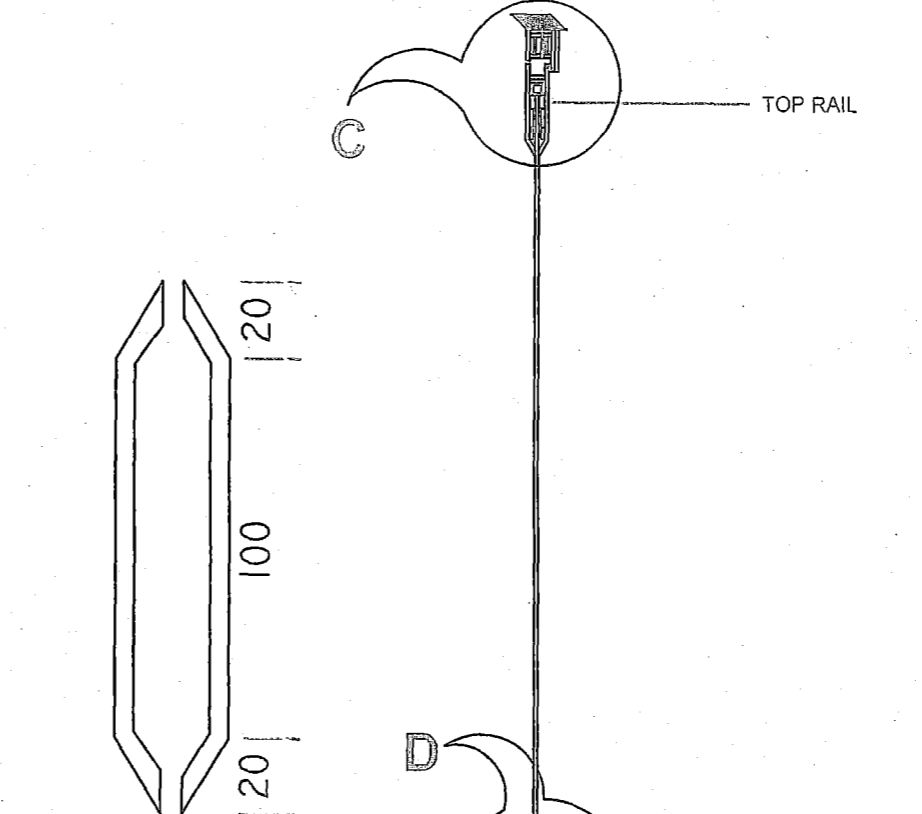
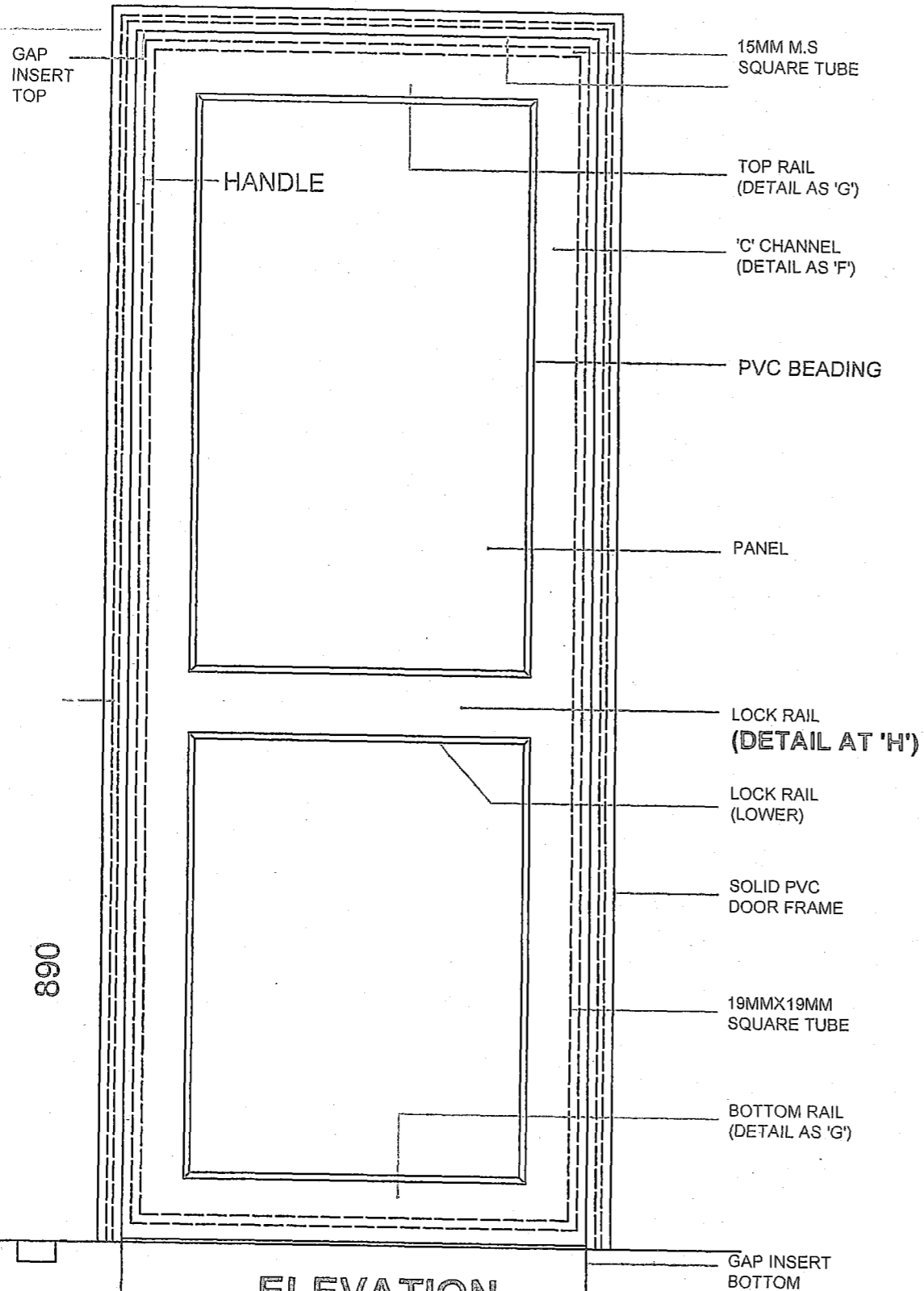
DETAIL OF LOCKING ARRANGEMENT (SIDE ELEVATION)



DETAIL OF PINTOL HINGE

S.NO	DATE	DESCRIPTION	SIGN
REVISION			
STEEL DOORS FOR GUARD - HOUSE / ARMOURY			
DATE	21-03-2013	CHIEF ENGINEER JODHPUR ZONE JODHPUR	SHT NO:
DRN	C S ASERI		3
TCD			3
CKD			
SCALE	AS SHOWN	REF DRG. NO. CEJZ/TD/02	

(Signature)
(R C SWAIN)
LT COL
SR ARCH
FOR CHIEF ENGINEER



NOTES

1. CONTRACTOR TO CHECK AND VERIFY ALL DIMENSIONS BEFORE EXECUTION OF THE WORK
2. ALL DIMENSIONS ARE GIVEN IN MILLIMETRE UNLESS OTHERWISE SPECIFIED
3. FIGURED DIMENSIONS ARE FOLLOWED
4. IRON MONGERY SHALL BE OF ALUMINUM ANODISED EXCEPT BUTT HINGES, WHICH SHALL OF COLD ROLLED M.S.OR SPECIFIED IN THE TENDER DOCUMENTS.
5. PVC SHEET TO BE CEALD WITH SOLVENT CEMENT.(PVC PIPE JOINT ADHESIVE)
6. PANEL SHALL BE OF SINGLE 5MM SOLID THICK PV SHEET (ONE PIECE)
7. PVC DOOR SHOWN HERE IN THIS DRG. CONFORM TO DOOR SHUTTERS- METHOD OF TESTS IS 4020 PART (I) 1998 3rd REVISION.
8. FOR FIXING HINGES ON THE STILE PRE-DRILLED A HOLE OF THE SIZE OF SHIFT, FITTED SCREW THEN DRIVE THE SCREW.DO NOT HAMMER THE SCREW.
9. PVC DOORS FRAME SHALL FIXED TO WALL USING 75MM LONG M,S SCREWS THROUGH THE FRAME FOR USING PVC FASTENERS.
10. COLUR OF THE PVC SHEET, PVC PANEL TO BE FINISHED BY ENGINEER-IN-CHARGE

S.No	Date	Description	Chkd
REVISIONS			

PRELAMINATED PVC DOORS
PLAN, ELEVATION, SECTION & DETAILS

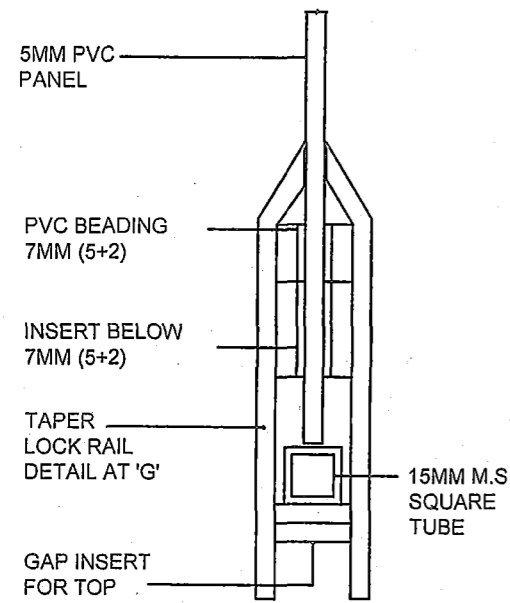
DATE	21.2.2013	CHIEF ENGINEER JODHPUR ZONE	SHT NO. 1/2
DRAWN	C S ASERI		
CHKD	VINOD	SCALE AS SHOWN REF DRG. NO. : CEJZ/TD/ 03	

(Signature)
 (R C SWAIN)
 LT COL
 SR ARCHITECT
 FOR CE JODHPUR ZONE

SPECIFICATION

NOTES

1. FOR ALL NOTES SHT NO -1/2 OF THIS DRG.

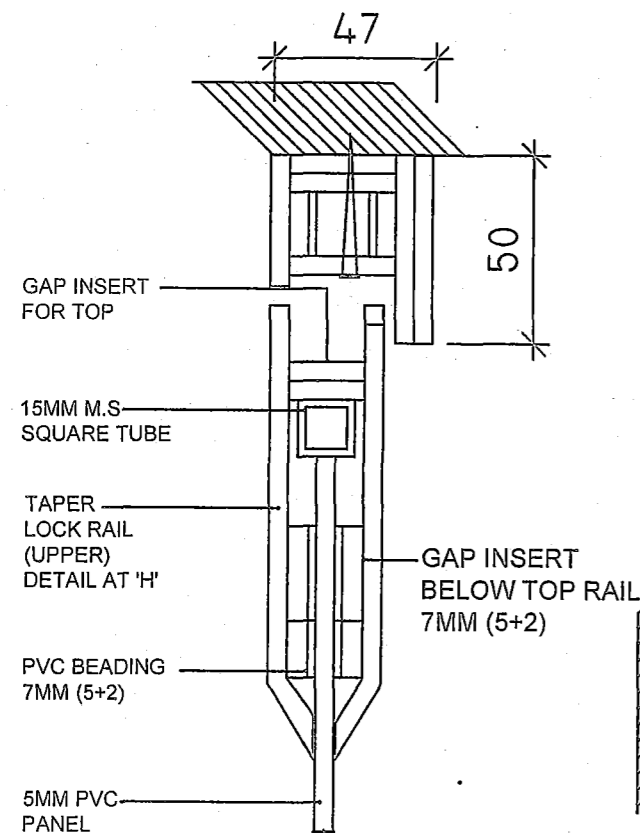


DETAIL AT 'E'
SCALE 1:2

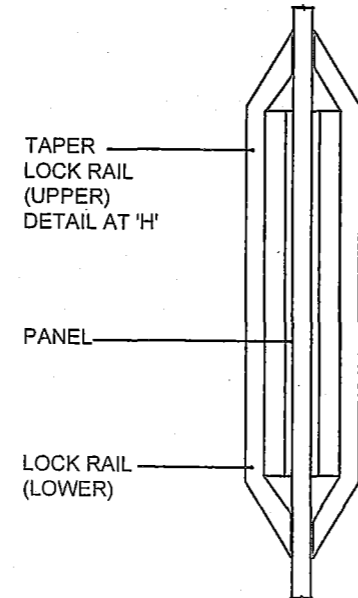
1.	SL. NO.	SCHEDULE OF IRON MONGERY (FOR EACH DOOR)
D-9, D-8, D-7	TYPE OF DOORS	
3.	BUTT HINGE 100MM LONG	
2.	BAREL BOLT 150 MM LONG	
2.	BOW HANDLE 150MM LONG 'D' TYPE	
1.	18MM S ALDROP BOLT 250MM LONG	
2.	'L' SHAPE BRACKET 150MM LONG	
	REMARKS	

PROVIDING AND FIXING 30MM THICK BRAND FACTORY MADE SOLID BOTH SIDES PRELAM PANEL PVC DOOR SHUTTER CONSISTING OF FRAME MADE OUT OF M.S TUBES OF 19 GAUGES THICKNESS AND SIZE 19MMX19MM FOR STILES , TOP AND BOTTOM RAILS M.S FRAME SHALL HAVE A COAT OF STEEL PRIMERS OF APPROVED MAKE AND MANUFACTURE. M.S FRAME COVERED WITH 5MM THICK HEAT MOULDED PRELAM PVC 'C' CHANNEL SIZE 30MM THICKNESS, 70MM WIDTH OUT OF WHICH 50MM SHALL BE FLAT AND 20MM SHALL TAPERED IN 45° ON EITHER SIDE FORMING STILES AND 5MM ,95MM WIDE PRELAM PVC SHEET OUT OF WHICH 75MM SHALL BE FLAT AND 20MM SHALL TAPERED IN 45° ON THE INNER SIDE TO FROM TOP AND BOTTOM RAIL AND 115MM WIDE. PRELAM PVC SHEET OUT OF WHICH 75MM SHALL BE FLAT AND 20MM SHALL BE TAPERAD ON BOTH SIDES TO FORM LOCK RAIL. TOP, BOTTOM AND LOCK RAIL SHALL BE PROVIDED EITHER SIDE OF THE PANEL.10MM (5MMX2MM) THICK, 20MM WIDE CROSS PVC SHEET SHALL BE PROVIDED AS GAP INSERT FOR TOP RAIL AND BOTTOM RAIL PANELING OF 5MM THICK BOTH SIDE PRELAM PVC SHEET TO BE FITTED IN THE M.S FRAME WELDED/SEALED TO THE TILES AND RAILS WITH 7MM (5MM+2MM) THICK X15MM WIDE PVC SHEET BEADING ON INNER SIDE AND JOINED TOGETHER WITH SOLVENT CEMENT ADHESIVE, AN ADDITIONAL 5MM THICK PVC STRIP OF 20MM WIDTH IT TO BE STUCK ON THE INTERIOR SIDE OF THE 'C' CHANNEL USING PVC SOLVENT ADHESIVE etc. COMPLETE AS PER DIRECTION OF ENGINEER-INCHARGE, MANUFACTURER'S SPECIFICATION & DRAWING.

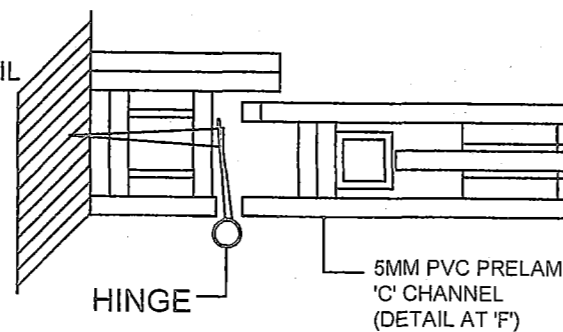
DOOR WIDTH	STILES SIZE		RAILS SIZE		REMARKS
	INCH	MM	INCH	MM	
2' TO 2.5	2"	50MM	3"	75MM	
2.5' TO 3'	3"	75MM	4"	100MM	
3' AND ABOVE	4"	100MM	5"	125MM	



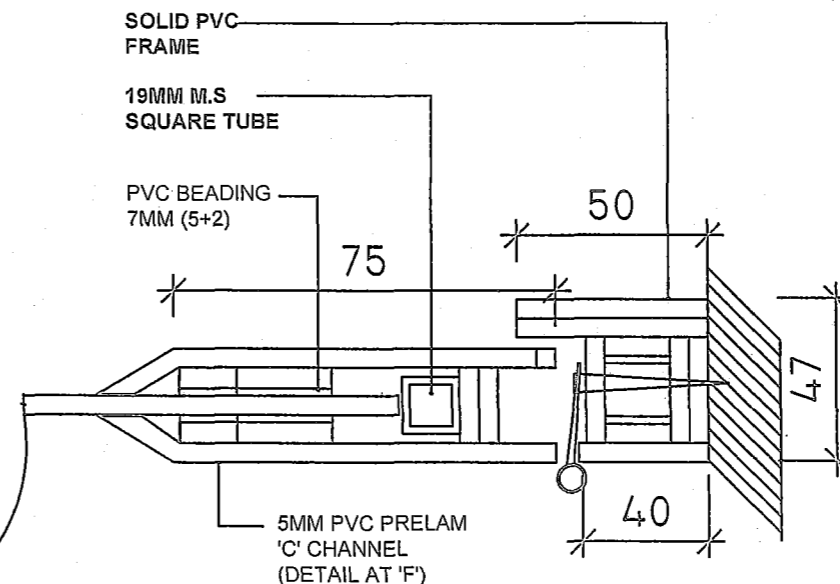
DETAIL AT 'C'
SCALE 1:2



DETAIL AT 'D'
SCALE 1:2



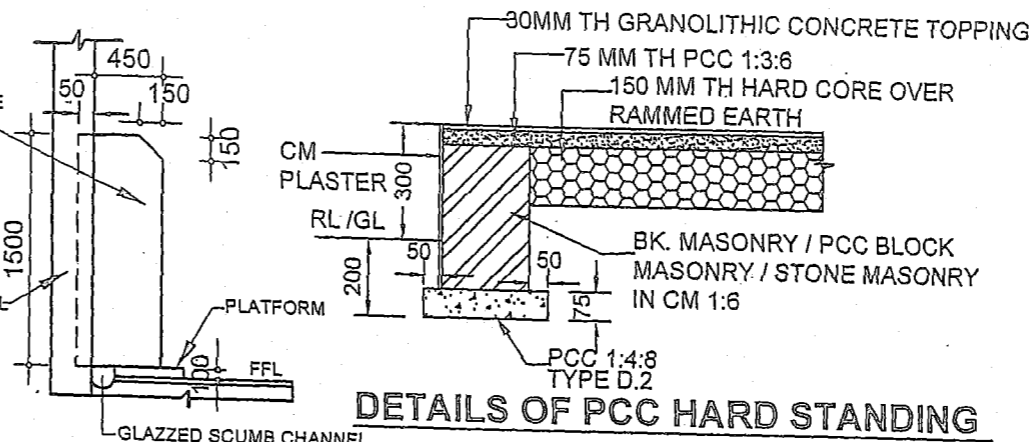
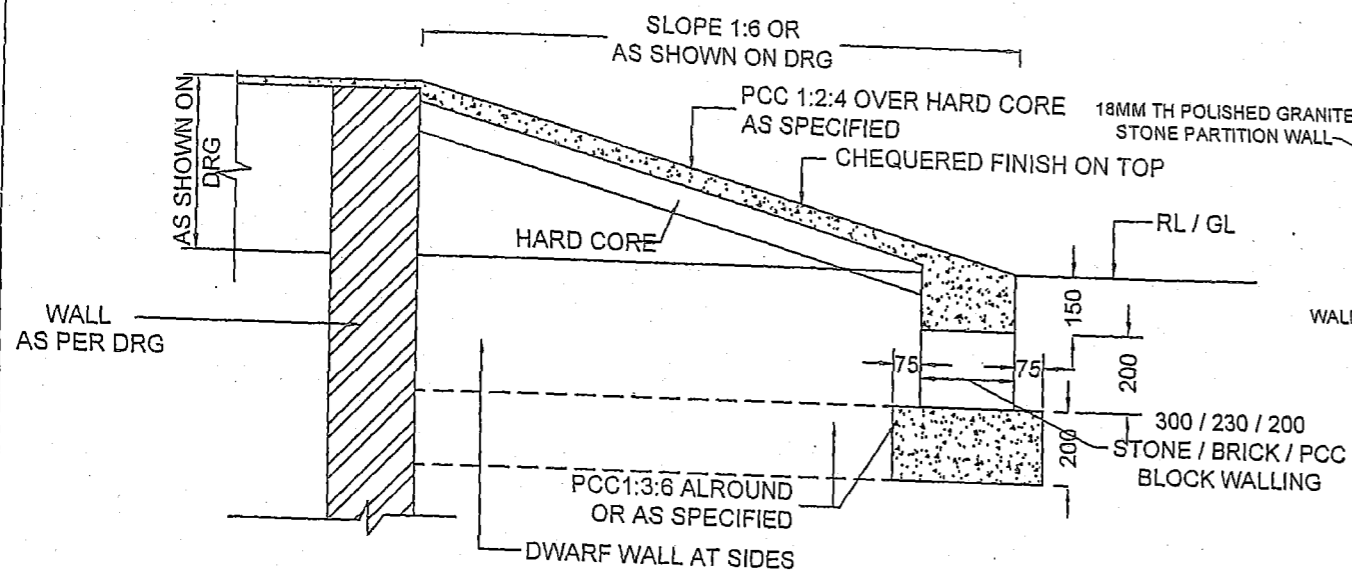
DETAIL AT 'A'
SCALE :- 1:2



DETAIL AT 'B'
SCALE :- 1:2

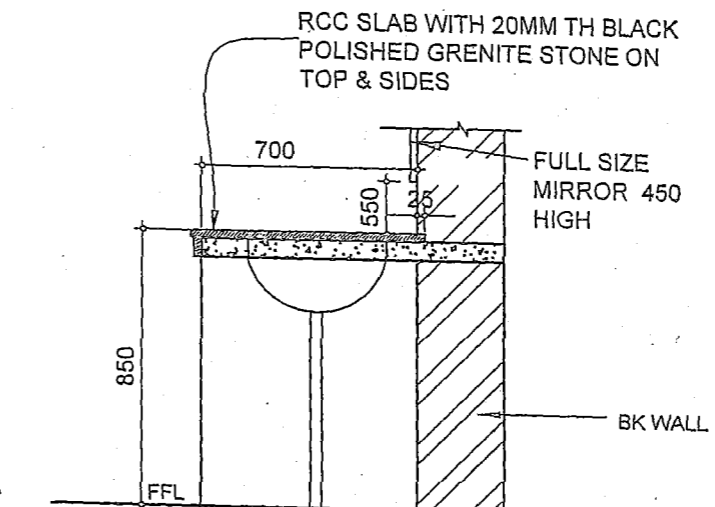
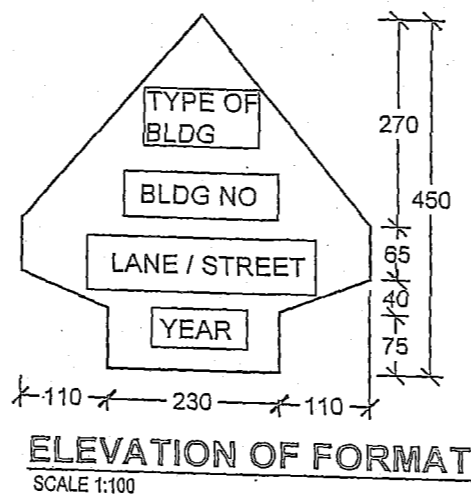
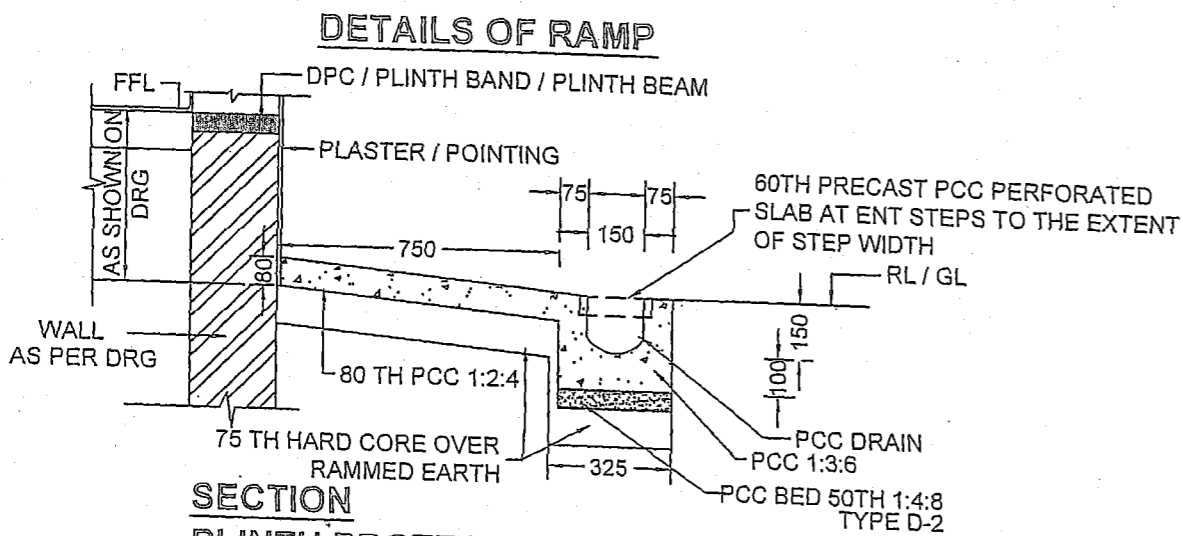
S.No	Date	Description	Chgd
REVISIONS			
PRELAMINATED PVC DOORS DETAILS & SPECIFICATIONS			
DATE	23/5/2013	CHIEF ENGINEER	SHT NO.
DRAWN	C S ASERI	JODHPUR ZONE	2/2
CHKD:	VINOD		
SCALE	AS SHOWN	REF DRG. NO. : CEJZ/TD/ 03	

(Signature)
(R C SWAIN)
LT COL
SR ARCHITECT
FOR CE JODHPUR ZONE

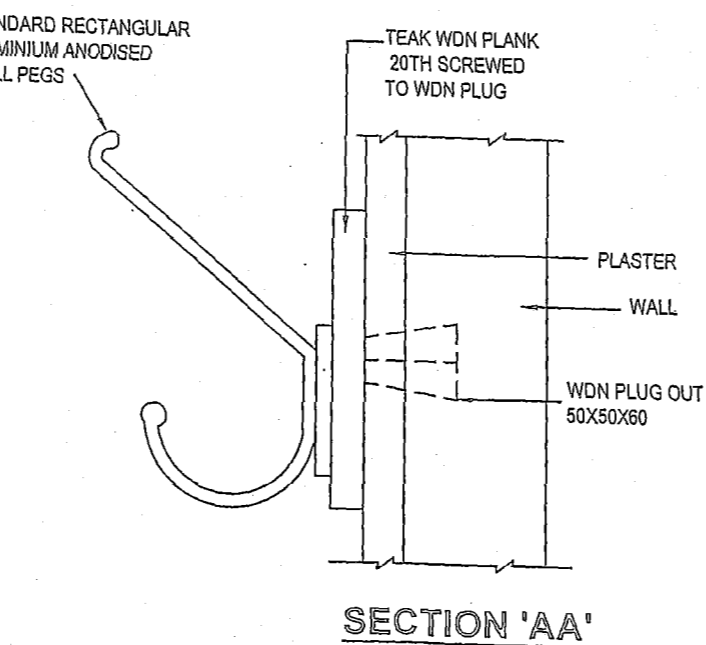
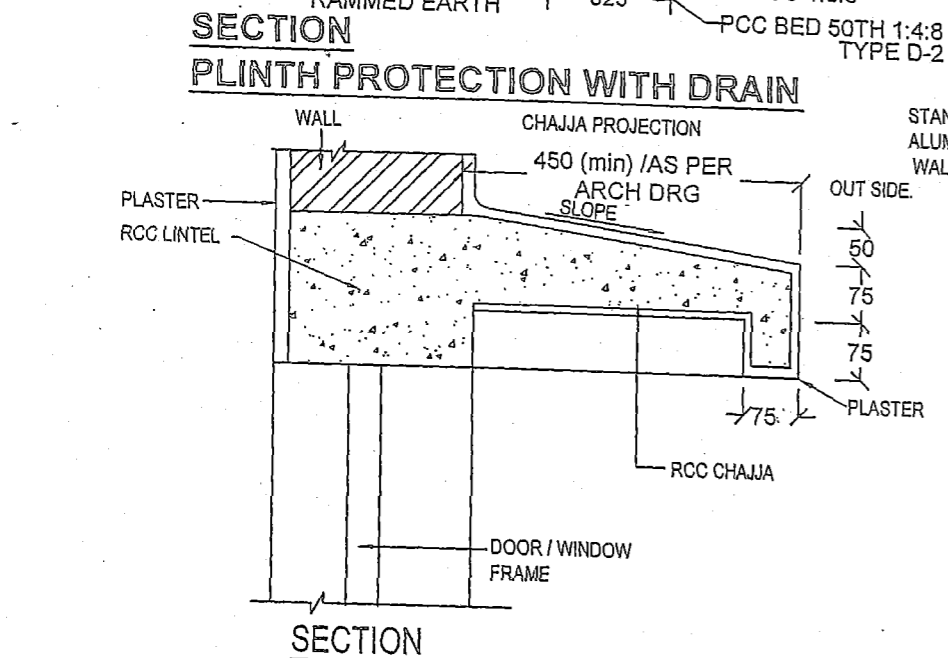


DETAIL OF URINAL PARTITION)
SCALE - 1:50

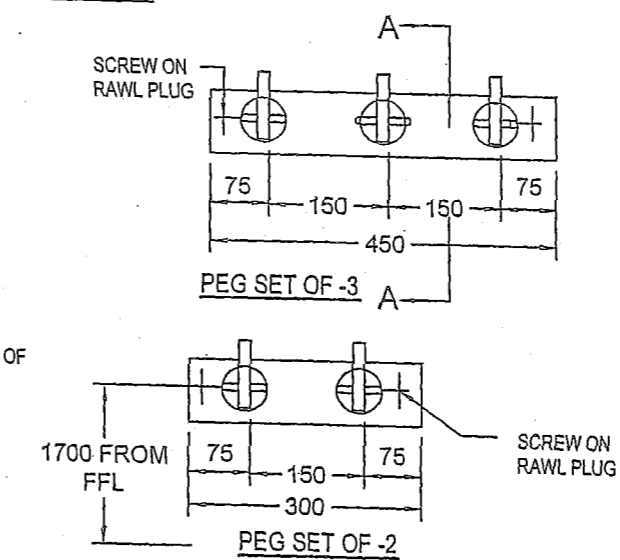
- NOTES :-**
- 1 CONTRACTOR TO CHECK AND VERIFY ALL THE DIMENSIONS BEFORE EXECUTION OF THE WORK.
 - 2 FIGURED DIMENSIONS SHALL BE FOLLOWED.
 - 3 ALL DIMENSIONS ARE GIVEN IN MILLIMETERS.
 - 4 WALL THICKNESS SHALL BE AS INDICATED ON MAIN DRAWINGS OR AS SPECIFIED.
 - 5 REFER TYPICAL DETAILS SHOWN IN THIS DRG AS APPLICABLE WHEN NOT SHOWN IN THE MAIN DRGS
 - 6 THE DETAILS/SPECIFICATION SHOWN IN THE MAIN DRGS SHALL SUPERCEED THE DETAILS/SPECIFICATION SHOWN IN THIS DRG.
 - 7 THE FORMAT SHALL BE PROVIDED TO EACH BLDG AND POSITION SHALL BE DECIDED BY ENGINEER IN-CHARGE AS PER BLDG. POSITION.
 - 8 THE HEIGHT OF LETTERS IN FORMAT SHALL BE 60 MM HIGH & WIDTH OF LETTERS SHALL BE 40MM. THESE SHALL BE PAINTED WITH BLACK PAINT ON WHITE BACK GROUND.



TYPICAL DETAIL OF COUNTER SUNK WHB OVAL TYPE WITH WITH MIRROR
SCALE 1:25



DEATIL OF RCC CHAJJA
SCALE 1:10



DETAIL OF PEG SET OF 2/3
(NOT TO SCALE)

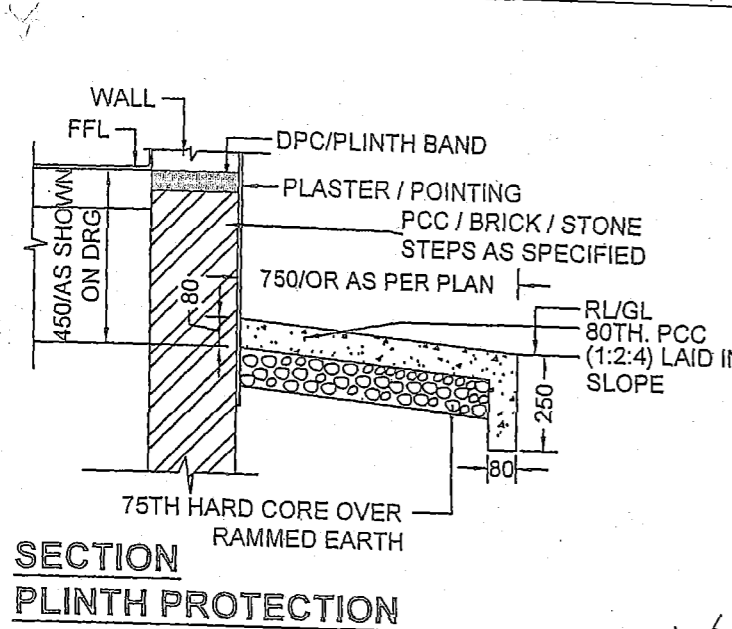
S.No.	Date	Description	Chkd.
REVISIONS			

MISC TYPICAL DETAILS - 1

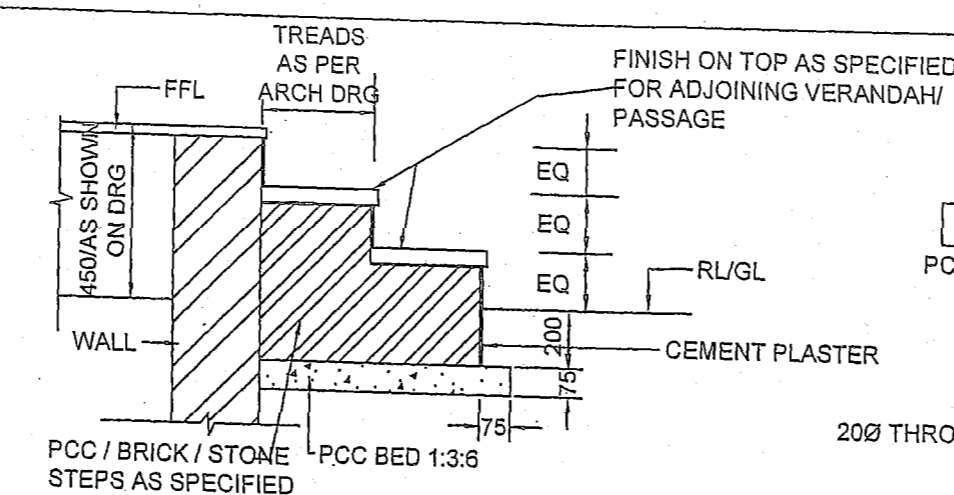
DETAILS OF RAMP, URINAL PARTATION, PCC HARDSTANDING, PLINTH PROTECTION WITH DRAIN, COUNTER SUNK WITH OWL TYPE, RCC CHAJJA, PEG SETS

Date	21.03.2013	CHIEF ENGINEER JODHPUR ZONE	Sht no.
Drawn	C S ASERI		1/3
Chkd	VINOD		
Scale	As shown	REF DRG. NO. : CEJZ/TD/04	

Chin
(R C SWAIN)
LT COL
SR ARCHITECT
FOR CE JODHPUR ZONE

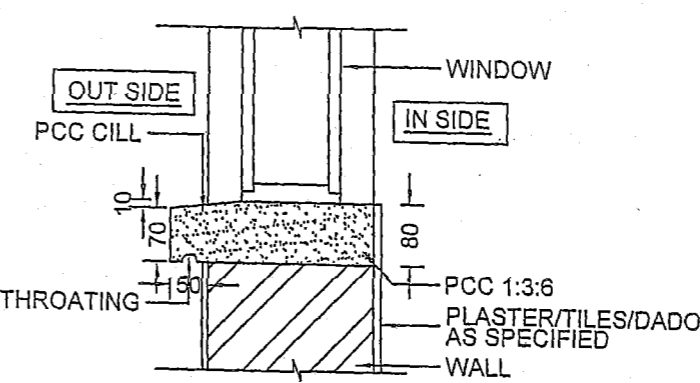


**SECTION
PLINTH PROTECTION**

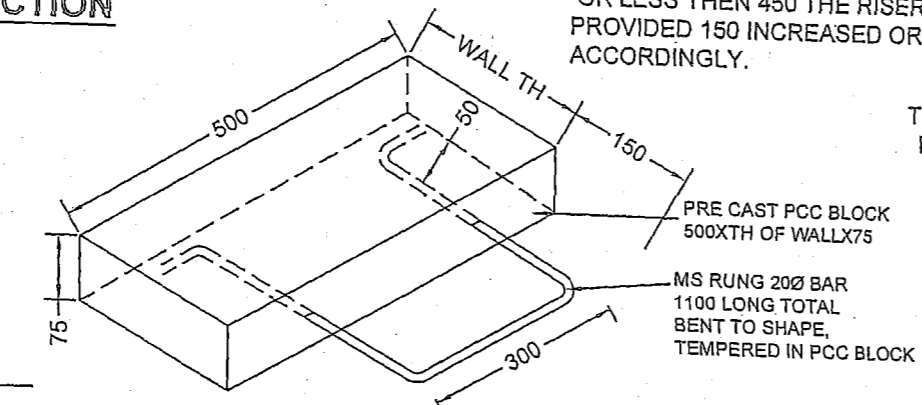


DETAILS OF STEP

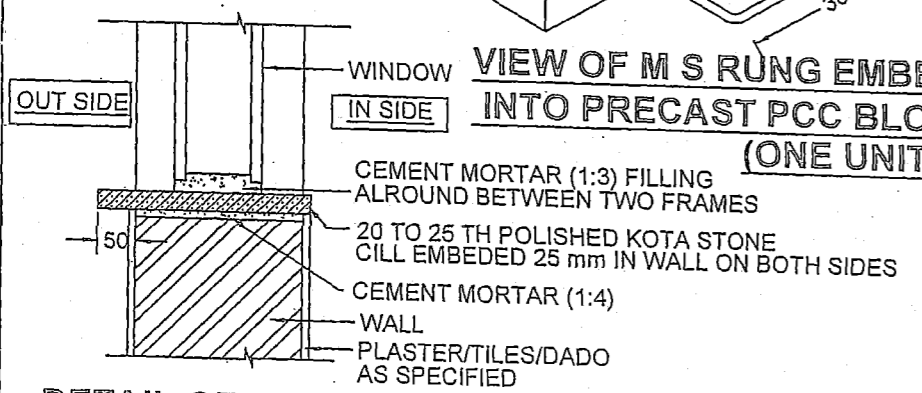
NOTE :- IN CASE OF PLINTH HT. MORE THEN 500 OR LESS THEN 450 THE RISER SHALL BE PROVIDED 150 INCREASED OR DECREASED ACCORDINGLY.



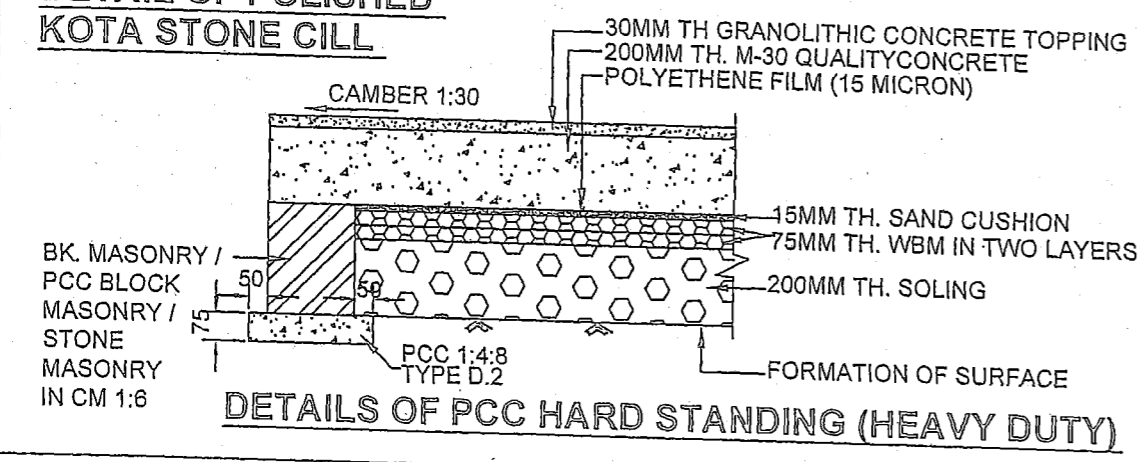
**SECTION
PCC CILL**



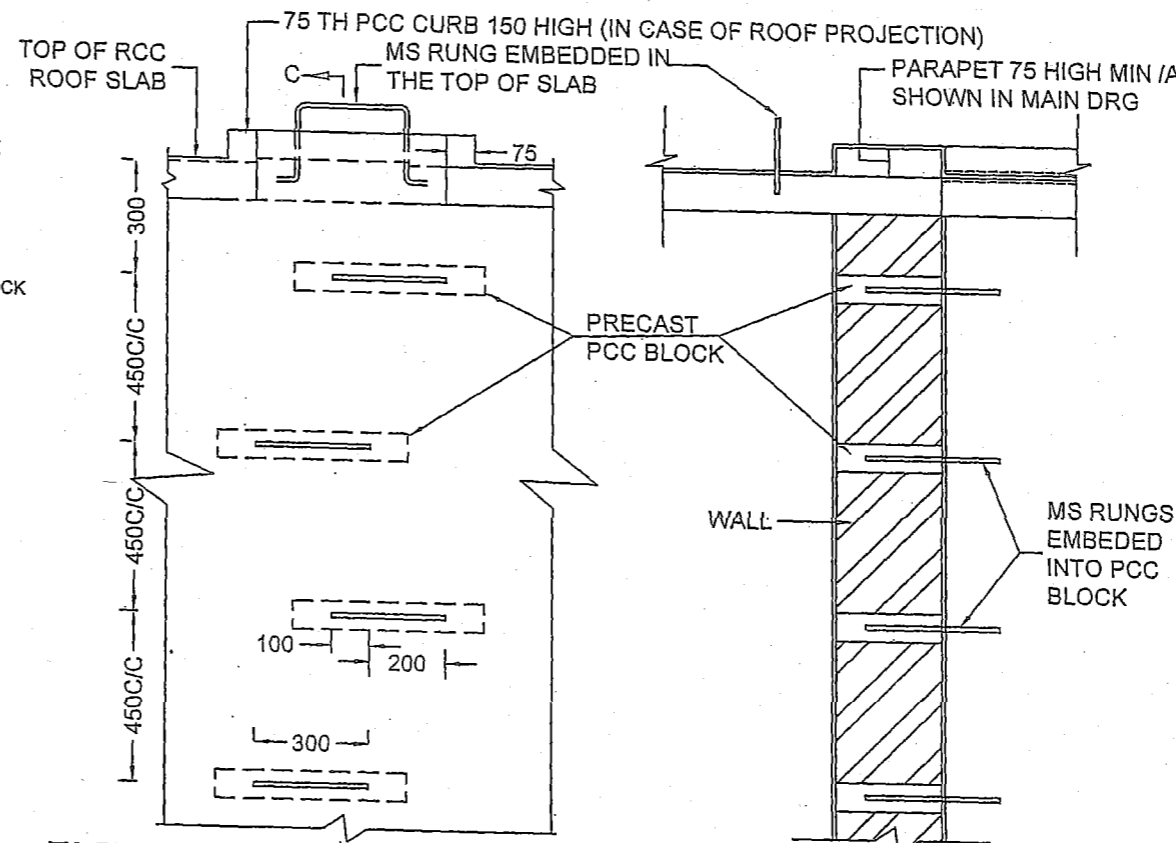
VIEW OF M S RUNG EMBEDDED INTO PRECAST PCC BLOCK (ONE UNIT)



DETAIL OF POLISHED KOTA STONE CILL

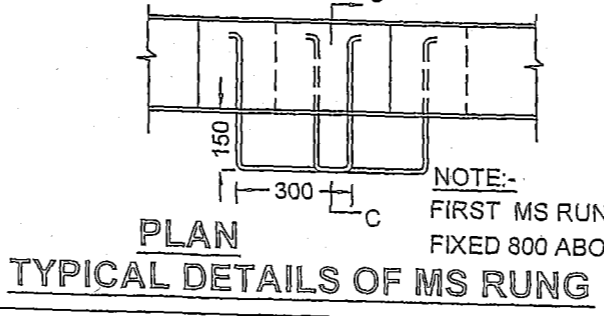


DETAILS OF PCC HARD STANDING (HEAVY DUTY)

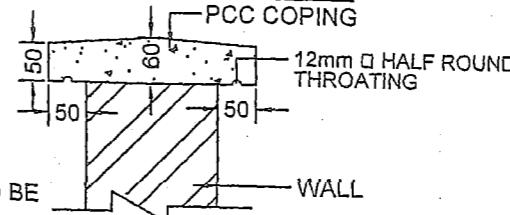


ELEVATION

SECTION 'C-C'



**PLAN
TYPICAL DETAILS OF MS RUNG**



**SECTION
PCC COPING**

NOTE:- FIRST MS RUNG TO BE FIXED 800 ABOVE GL / RL

NOTES:-
1 FOR ALL NOTES REFER SHT NO - 1/3 OF THIS DRG.

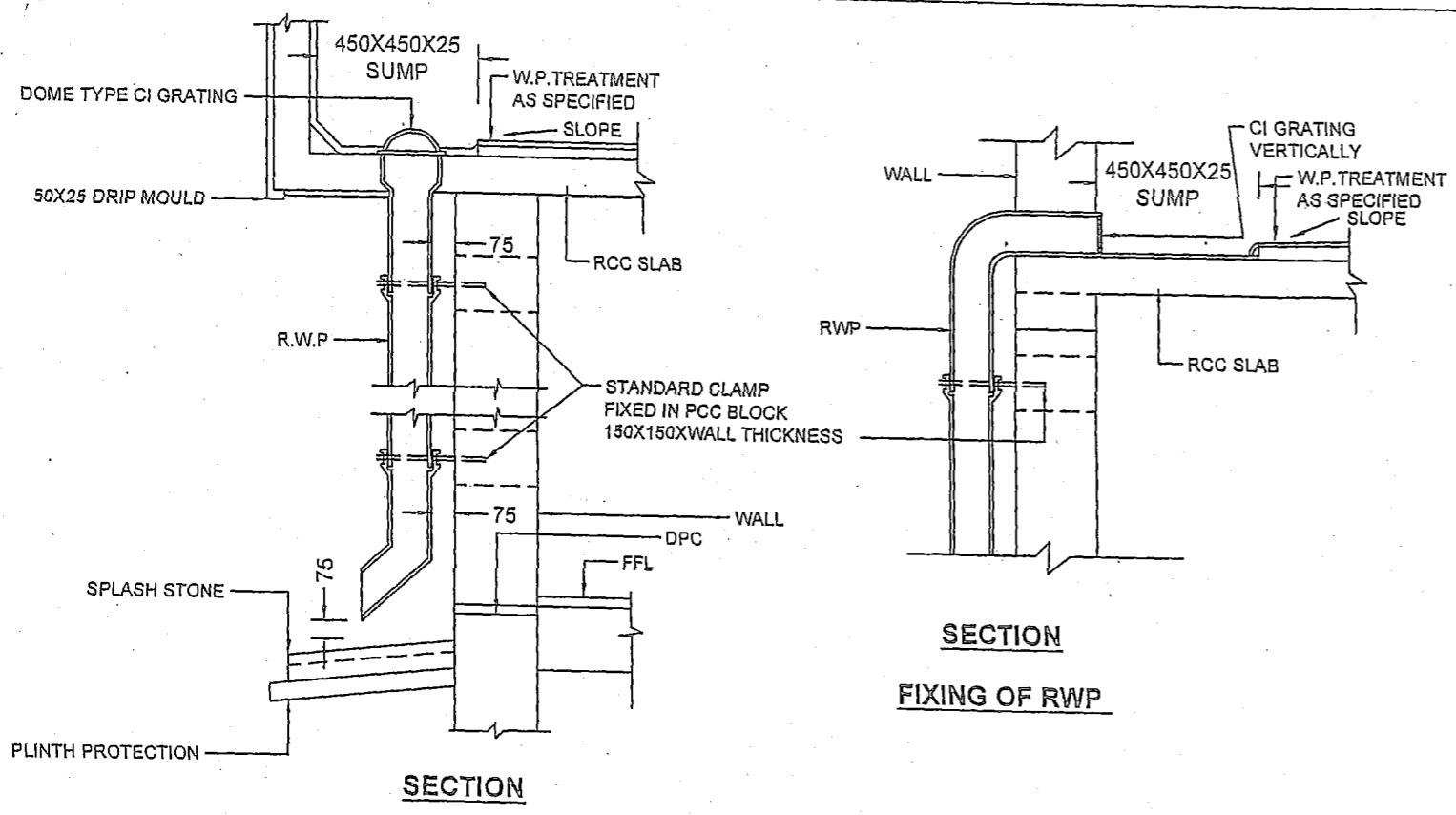
S.No.	Date	Description	Chkd.
REVISIONS			

MISC TYPICAL DETAILS -2
DETAILS OF PLINTH PROTECTION, STEPS, POLISHED KOTA STONE CILL, COPING, MS RUNGS, PCC HARD STANDING (HEAVY DUTY)

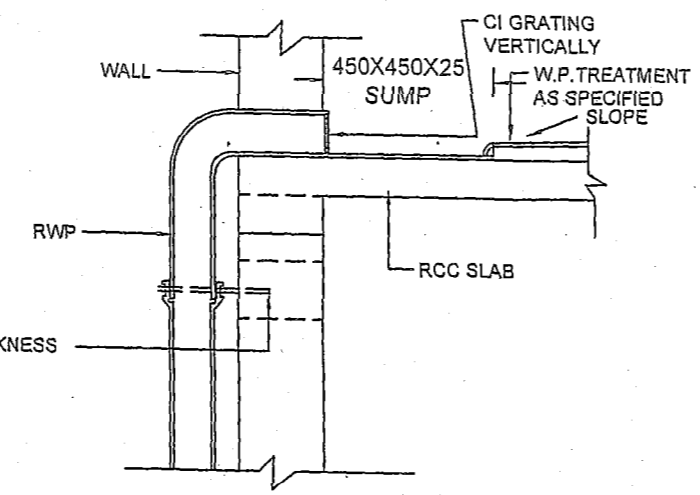
Date	21.03.2013	CHIEF ENGINEER JODHPUR ZONE	Sht no.
Drawn	C S ASERI		2/3
Chkd	VINOOD		
Scale	As shown		

REF DRG. NO. : CEJZ/TD/04

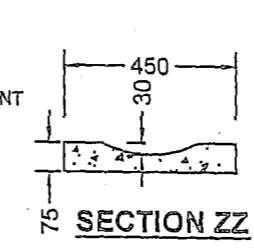
(Signature)
(R C SWAIN)
LT COL
SR ARCHITECT
FOR CE JODHPUR ZONE



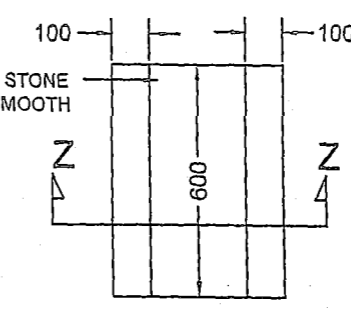
**SECTION
FIXING OF RWP FOR
PROJECTED ROOF SLAB**



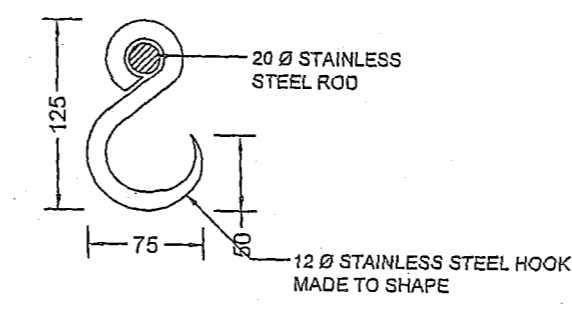
**SECTION
FIXING OF RWP**



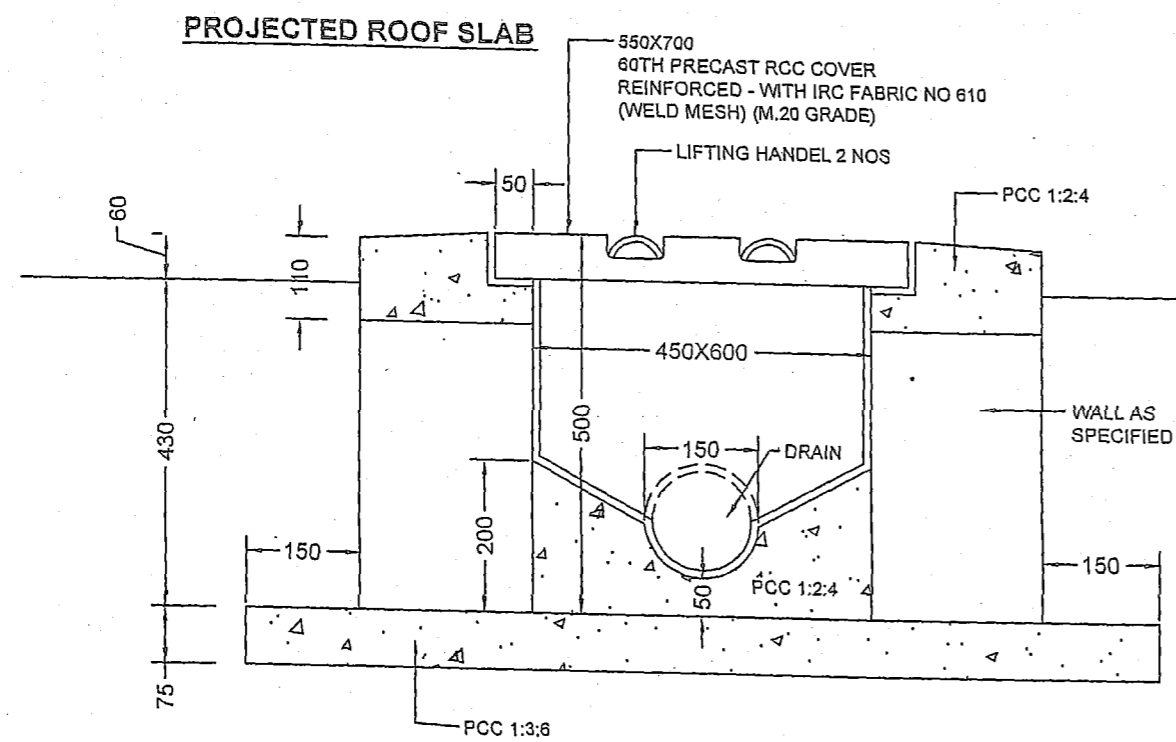
SECTION ZZ



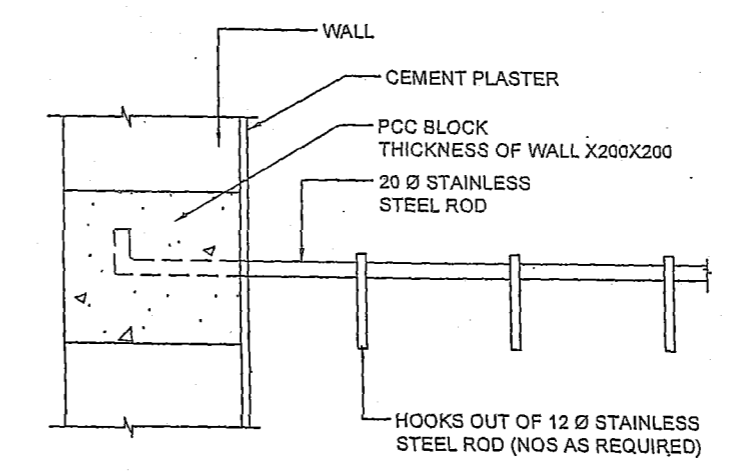
**PLAN
SPLASH STONE**



DETAIL OF MEAT HOOK



**SECTION
INSPECTION CHAMBER (FIRST MANHOLE)**



**FIXING DETAILS OF MEAT
HOOK HANGING ROD**

NOTES

1 FOR ALL NOTES REFER SHT NO - 1/3 OF THIS DRG.

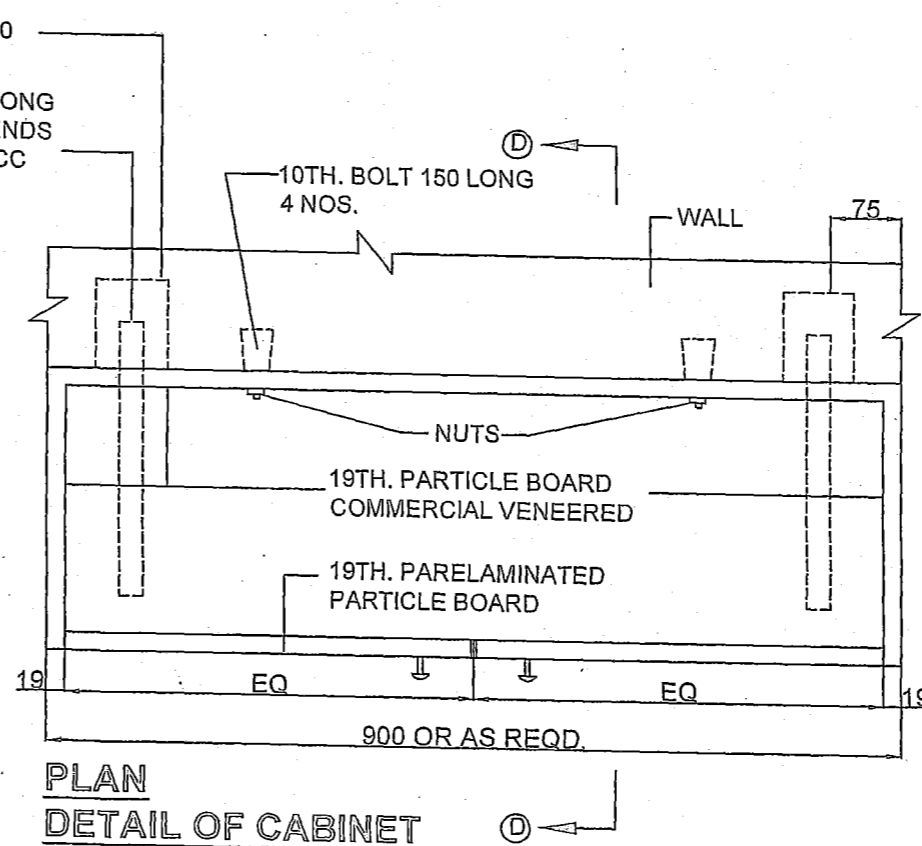
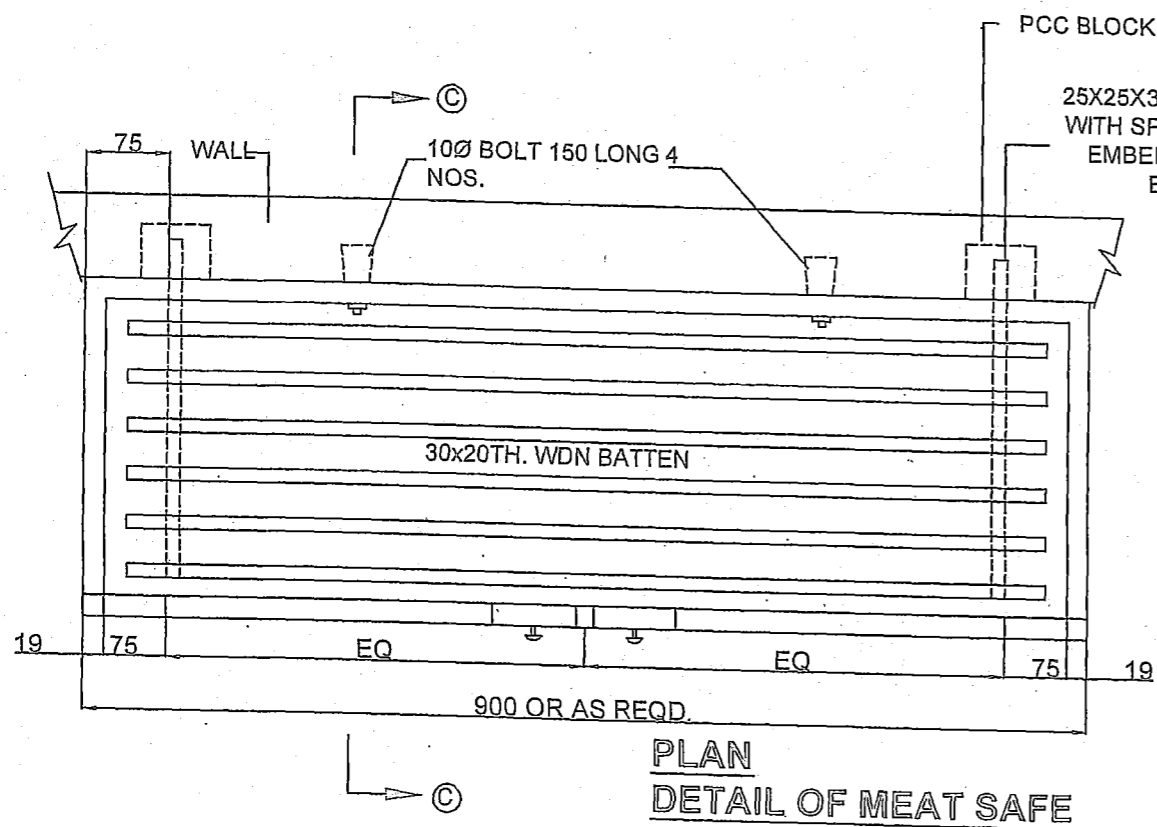
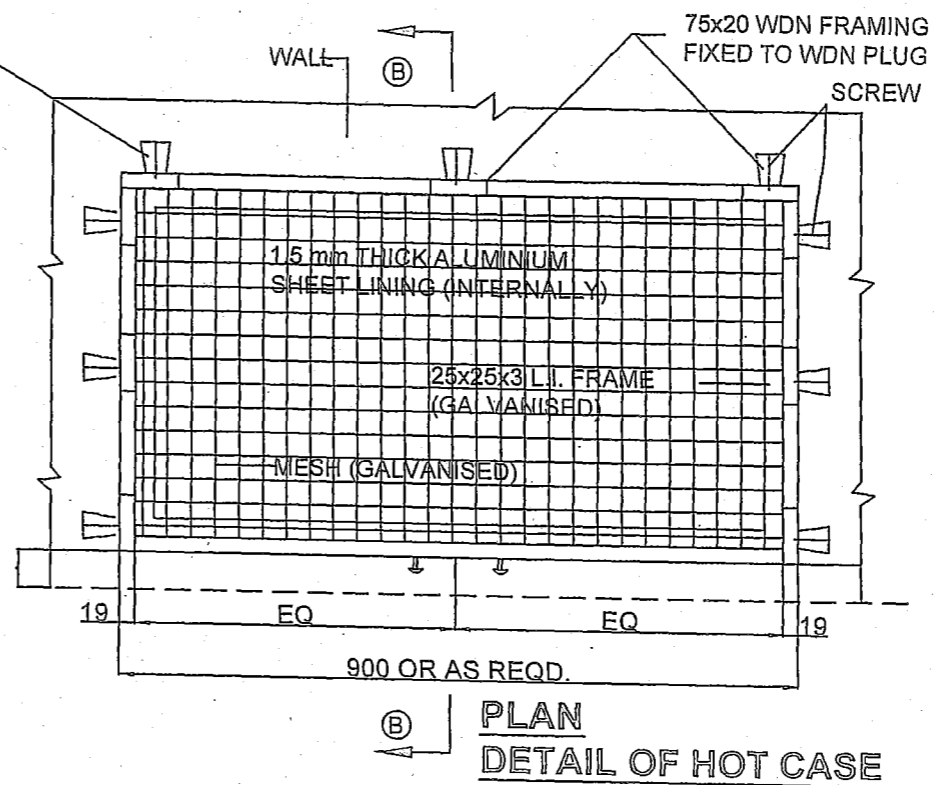
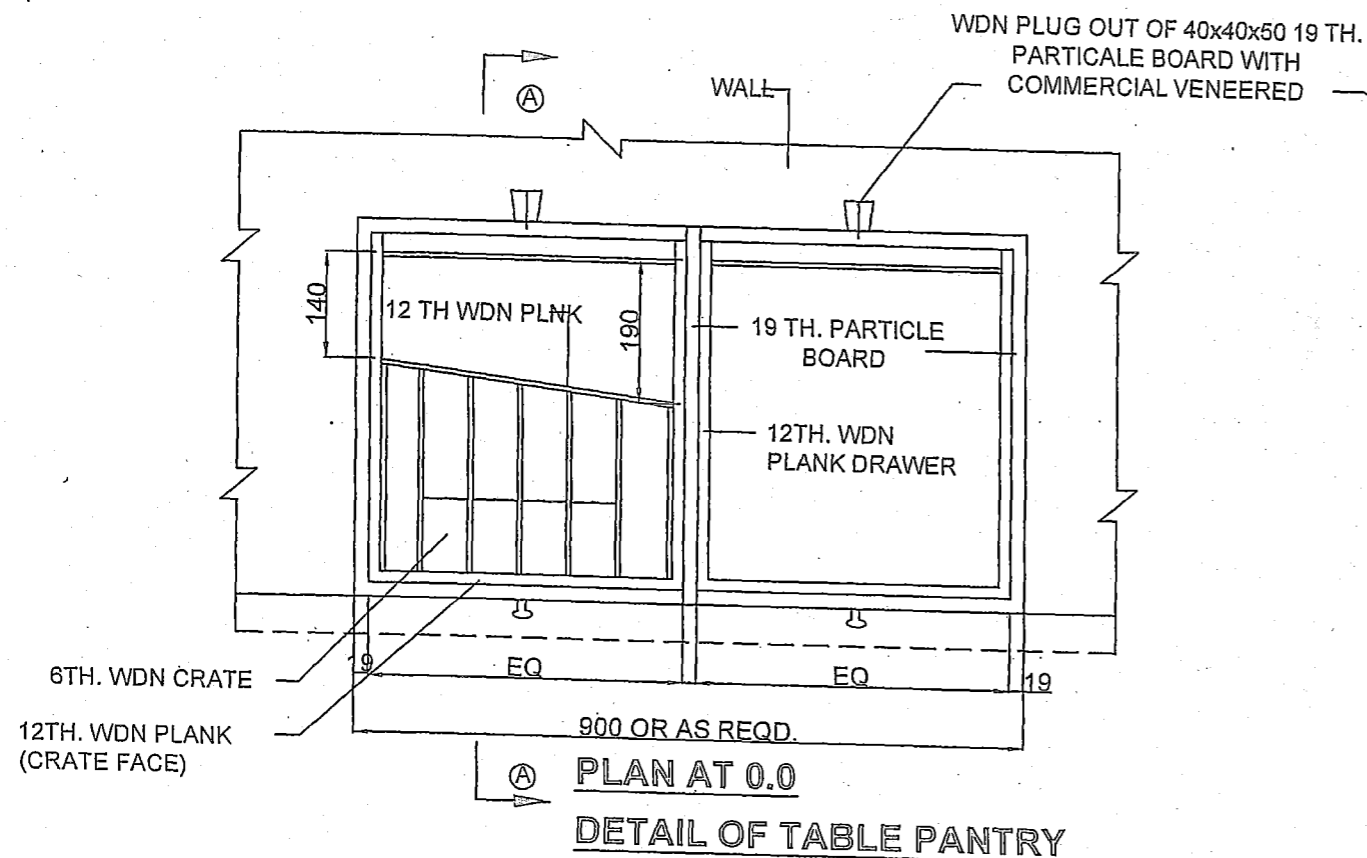
S.No.	Date	Description	Chkd.
REVISIONS			

MISC TYPICAL DETAILS - 3

FIXING OF RWP FOR PROJECTED ROOF SLAB, FIXING OF RWP, SPLASH STONE, INSPECTION CHAMBER (FIRST MANHOLE), DETAIL OF MEAT HOOK, FIXING DETAIL OF MEAT HOOK HANGING ROD, DETAIL OF COOLER REST, CILL TYPE 'C', DETAIL OF SPACE FOR GAS CYLINDER, PLAN OF SERVICE COUNTER AND HATCH WINDOW AND DETAIL OF MOSQUITO PROOFING FOR E F

Date	21.03.2013	CHIEF ENGINEER JODHPUR ZONE	Sht no. 3/3
Drawn	C S ASERI		
Chkd	VINOO	REF DRG. NO. : CEJZ/TD/04	
Scale	As shown		

(Signature)
 (R C SWAIN)
 LT COL
 SR ARCHITECT
 FOR CE JODHPUR ZONE



NOTES

- 1 CONTRACTOR TO CHECK & VERIFY ALL THE DIMENSIONS BEFORE EXECUTION OF THE WORK.
- 2 FIGURED DIMENSIONS SHALL BE FOLLOWED.
- 3 ALL DIMENSIONS GIVEN IN MILLIMETRES.
- 4 TABLE PANTRY, CABINET, MEAT SAFE SHALL BE TREATED WITH SYNTHETIC ENAMEL PAINT WHITE <INTERNALLY AND EXTERNALLY EXCEPT LAMINATION>.
- 5 ALL BUILDERS HARDWARE SHALL BE ALUMINIUM ANODISED EXCEPT OTHERWISE SPECIFIED.
- 6 PRELAMINATED <T.W.> PARTICLE BOARD SHALL BE 19/18 TH. OF EXTERIOR GRADE BWP PHENOL BONDED <WHITE SHADE>.
- 7 THICKNESS OF THE PARTICLE BOARD MENTIONED AS 19 MM TO BE CONSIDERED AS 19/18 MM THICK.
- 8 20X19/18 MM TH. TEAKWOOD EDGING SHALL BE PROVIDED TO ALL SIDES OF THE PARTICLE BOARD. THIS EDGING SHALL BE FIXED BY USING THE SYNTHETIC RESIN ADHESIVE AND WITH 30X35 MM LONG SCREW @ 300c/c DIPPED IN SYNTHETIC RESIN ADHESIVE.
- 9 PIANO TYPE HINGED SHALL BE MILD STEEL, BRIGHT FINISH OR ELECTROGALVANISED.

DETAILS OF TABLE PANTRY, HOT CASE, MEAT SAFE AND CABINET (COOK HOUSE)

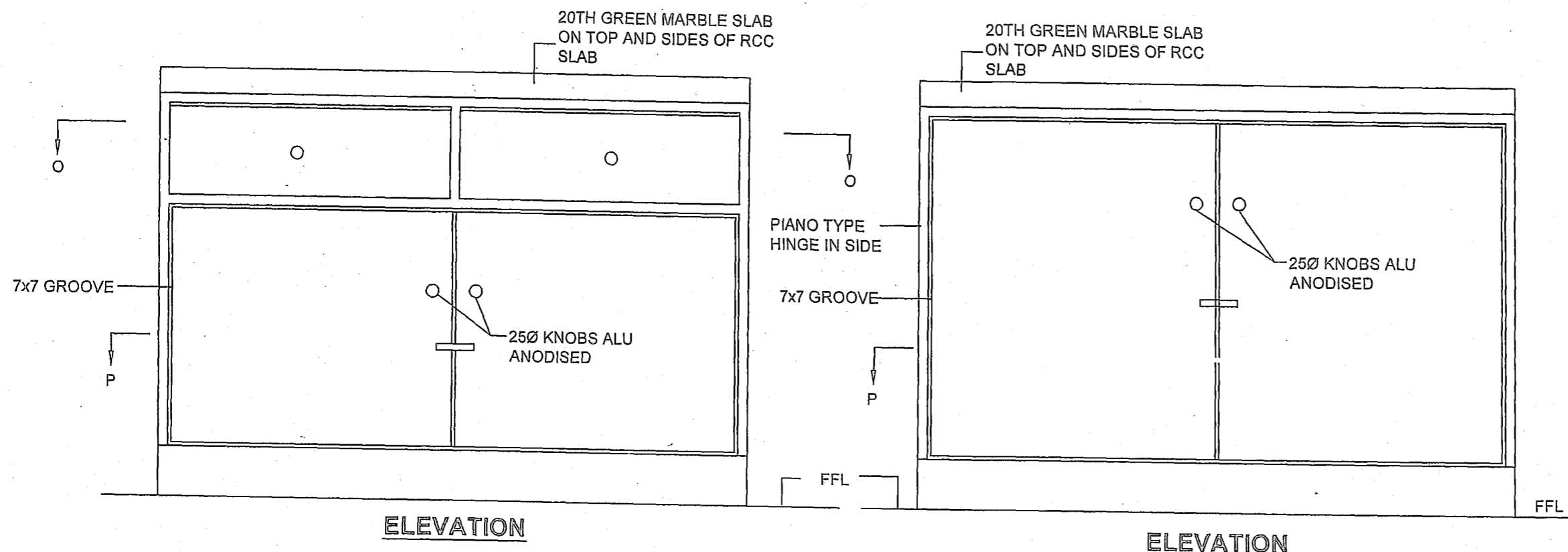
DATE	21.03.2013	CHIEF ENGINEER JODHPUR ZONE JODHPUR	SHT No.
DRN.	C S ASERI		1/4
TCD.			
CKD.	VINOD		
SCALE	1 : 10	DRG. NO. CEJZ/TD/05	

R. Swain

(R C SWAIN)
LT COL
SR ARCHITECT
FOR CE JODHPUR ZONE

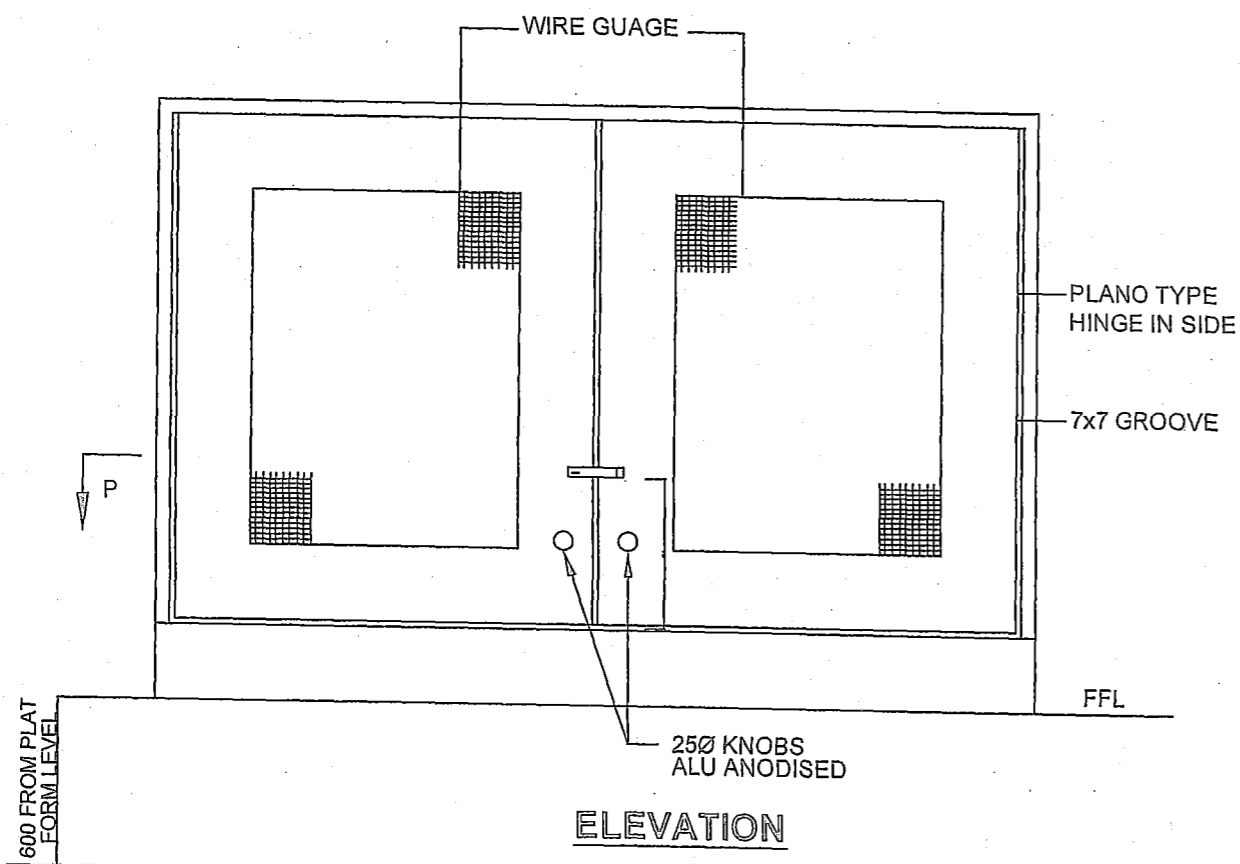
NOTES

1 FOR NOTES REFER SHT. NO. 1/4 OF THIS DRG.

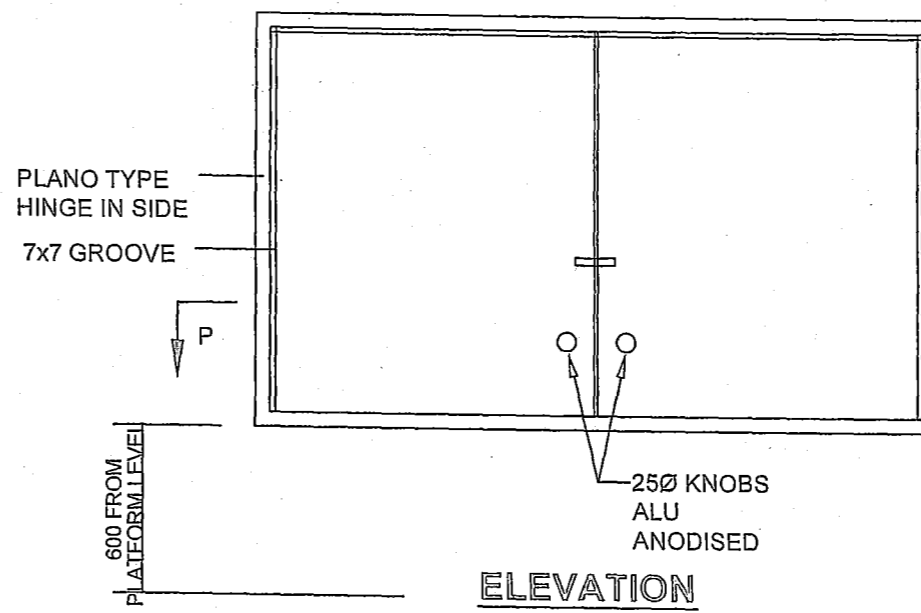


ELEVATION

ELEVATION



ELEVATION



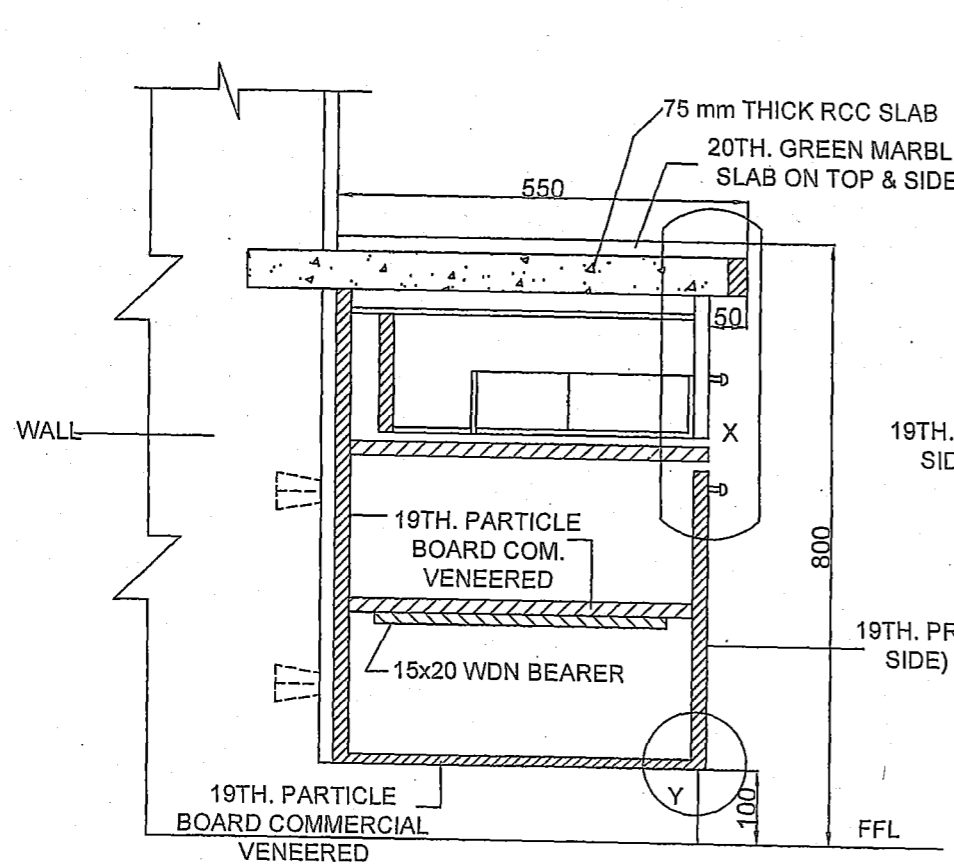
ELEVATION

DETAILS OF TABLE PANTRY, HOT CASE, MEAT SAFE AND CABINET (COOK HOUSE)

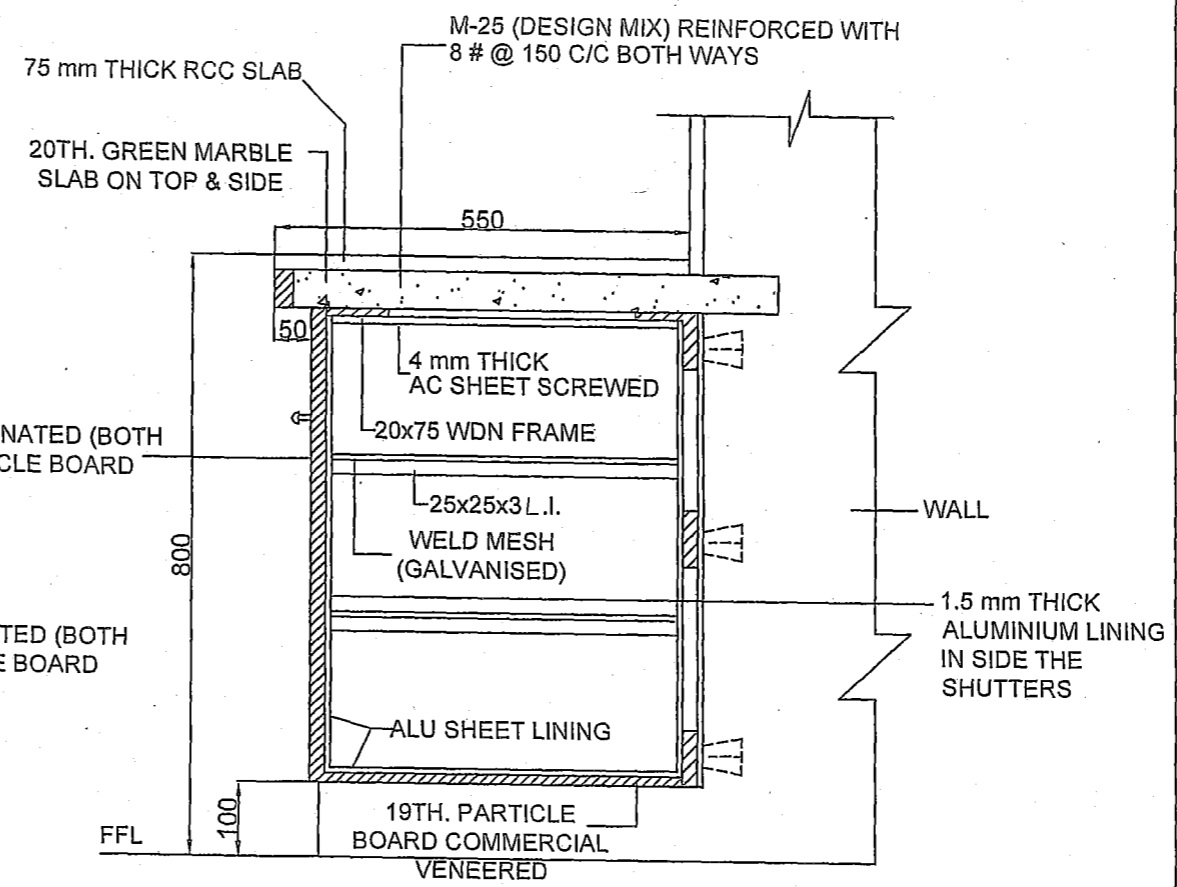
DATE	21.03.2013	CHIEF ENGINEER JODHPUR ZONE JODHPUR	SHT No.
DRN.	C S ASERI		2/4
TCD.			
CKD.	VINOD	DRG. NO. CEJZ/TD/05	
SCALE	1 : 10		

(Signature)

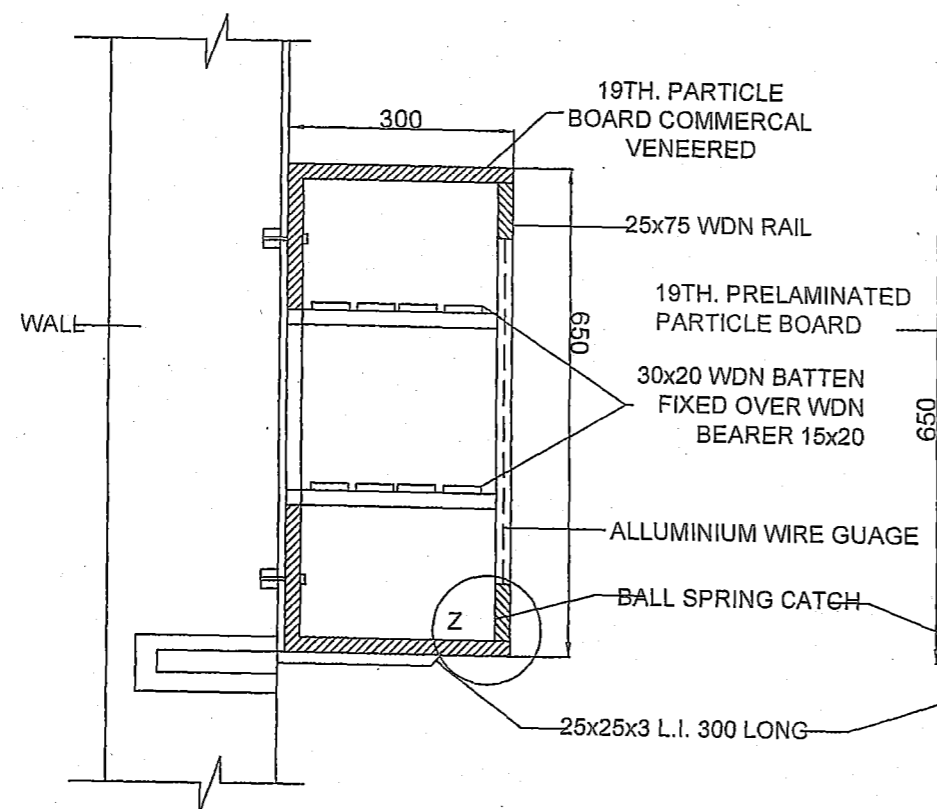
(R C SWAIN)
LT COL.
SR ARCHITECT
FOR CE JODHPUR ZONE



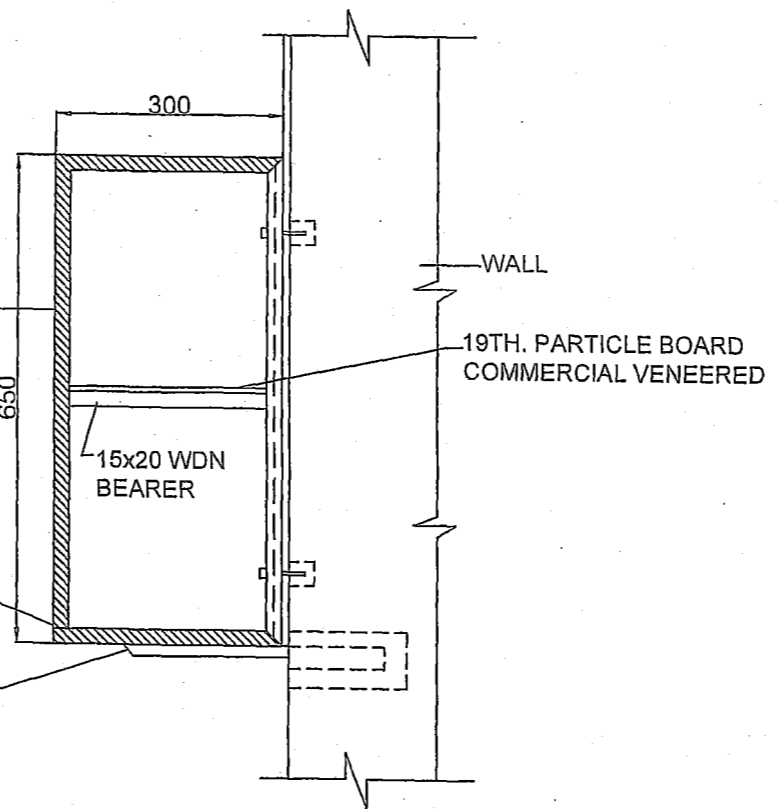
SECTION AT A-A



SECTION AT B-B



SECTION AT C-C



SECTION AT D-D

NOTES

1 FOR NOTES REFER SHT. NO. 1/4 OF THIS DRG.

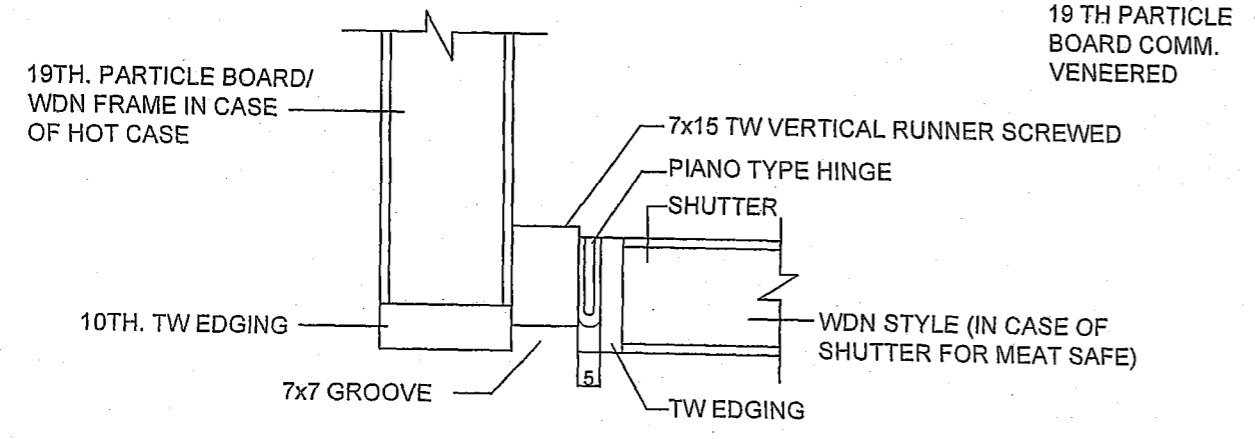
DETAILS OF TABLE PANTRY, HOT CASE, MEAT SAFE AND CABINET (COOK HOUSE)

DATE	21.03.2013	CHIEF ENGINEER JODHPUR ZONE JODHPUR	SHT No.
DRN.	C S ASERI		3/4
TCD.			
CKD.	VINOD		
SCALE	1 : 10	DRG. NO. CEJZ/TD/05	

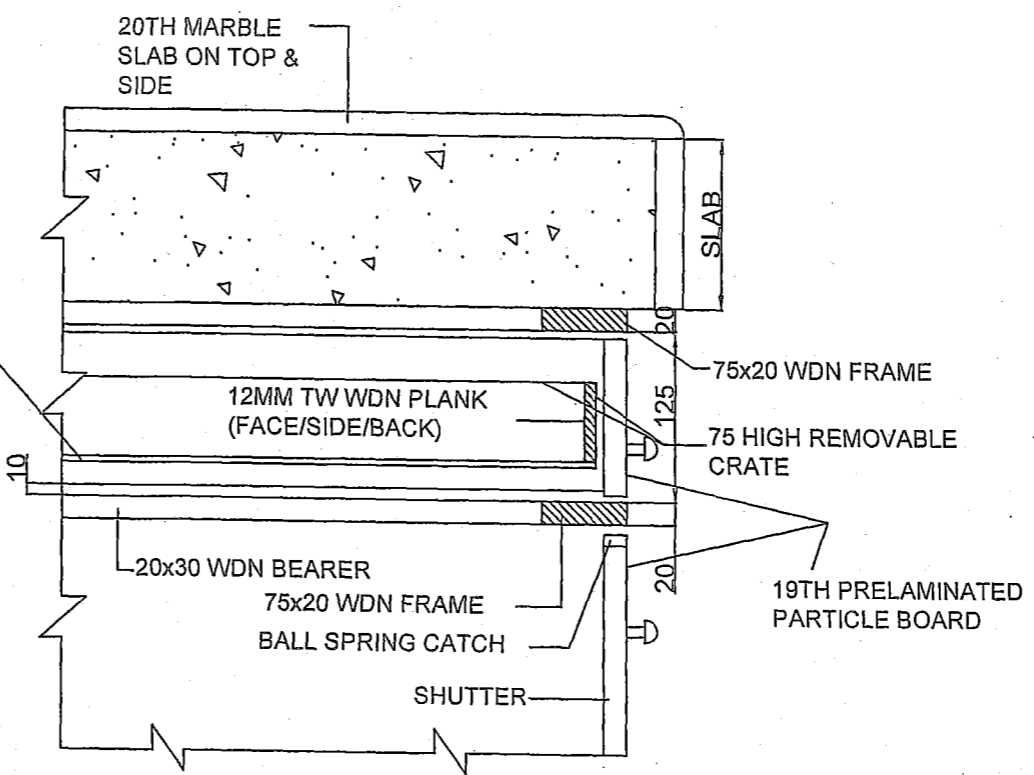
(R C SWAIN)
LT COL
SR ARCHITECT
FOR CE JODHPUR ZONE

NOTES

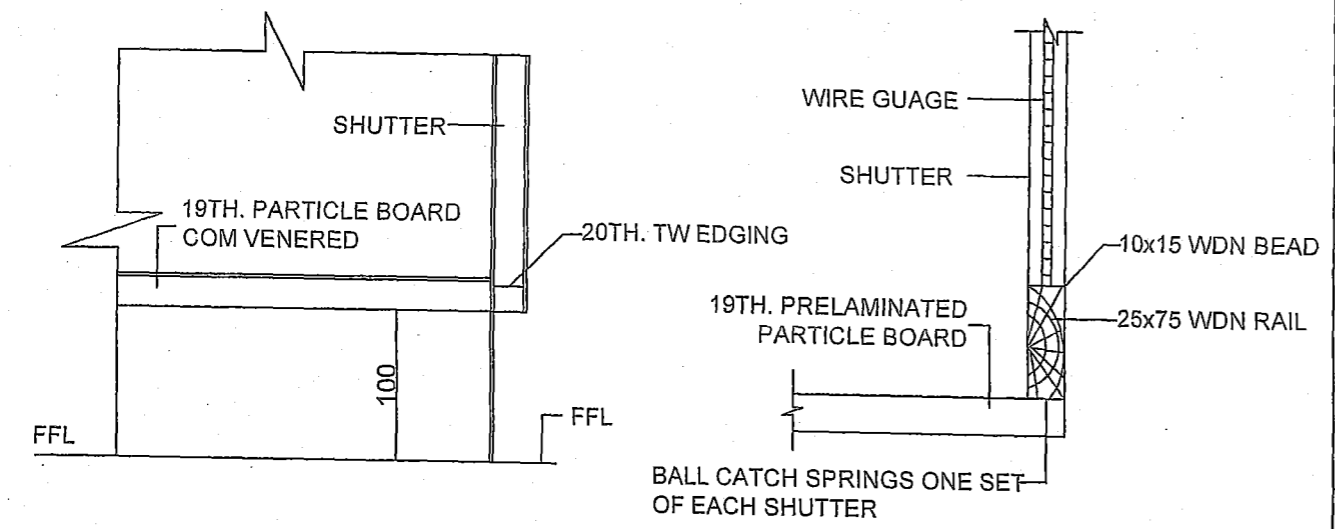
1 FOR NOTES REFER SHT. NO. 1/4 OF THIS DRG.



DETAIL AT - P



DETAIL AT - X



DETAIL AT - Y

DETAIL AT - Z

SCH. OF BUILDERS HARD WARE

SER. NO.	NOMENCLATURE	CONTINUOUS PIANO HINGE OF MILD STEEL ELECTRO GALVANISED	25Ø KNOBS ALUMINIUM ANODIZED	BALL SPRING CATCH	HASP & STAPLE 75 mm ALUMINIUM ALLOY	
		NOS	NOS	NOS	NOS	
1	HOT CASE	2	2	2	-	1
2	TABLE PANTRY	2	4	2	-	1
3	MEAT SAFE	2	2	2	-	1
4	CABINET	2	2	2	-	1

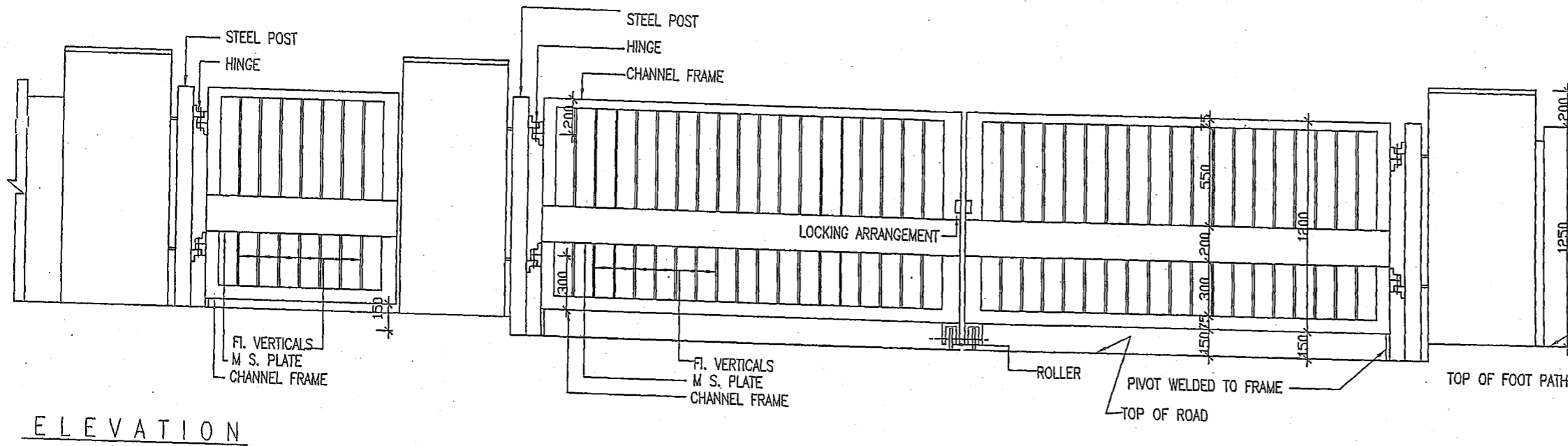
DETAILS OF TABLE PANTRY, HOT CASE, MEAT SAFE AND CABINET (COOK HOUSE)

DATE	21.03.2013	CHIEF ENGINEER JODHPUR ZONE JODHPUR	SHT No.
DRN.	C S ASERI		4/4
TCD.			
CKD.	VINOD		
SCALE	1:5	DRG. NO. CEJZ/TD/05	

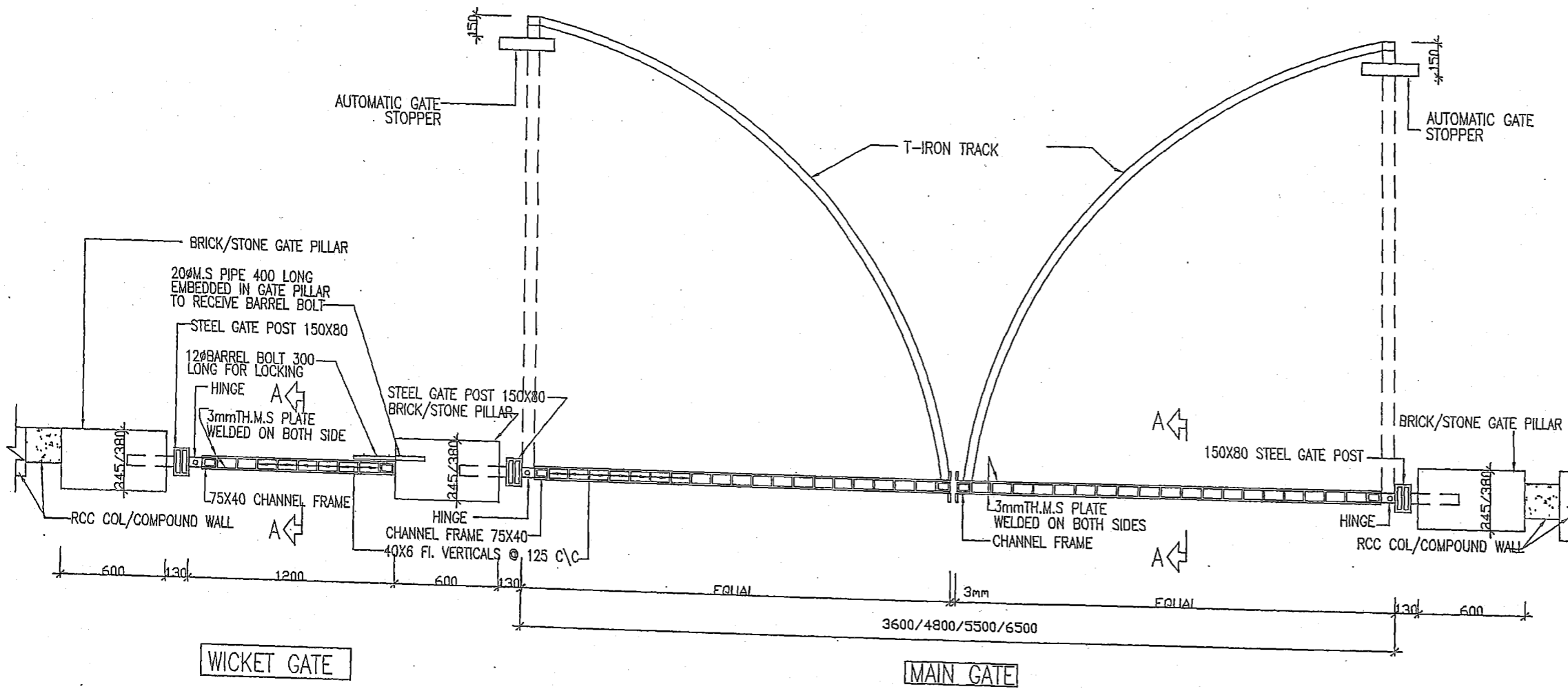
(Signature)
 (R C SWAIN)
 LT COL
 SR ARCHITECT
 FOR CE JODHPUR ZONE

NOTES

1. CONTRACTOR TO CHECK AND VERIFY ALL DIMENSIONS BEFORE EXECUTION OF THE WORK.
2. FIGURED DIMENSIONS SHALL BE FOLLOWED.
3. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE MENTIONED.
4. ALL STEEL JOINTS TO BE SPOT WELDED.
5. ALL STEEL MEMBERS OF GATE TO BE TREATED WITH OIL PAINT OVER A COAT OF PRIMER.
6. FOR SECTION 'A-A' AND OTHER DETAILS REFER SHEET NO. 2/2.



ELEVATION



WICKET GATE

MAIN GATE

PLAN OF STEEL GATE WITH COMPOUND WALL
SCALE 1:25

SL NO	DATE	DESCRIPTION	INITIAL
-------	------	-------------	---------

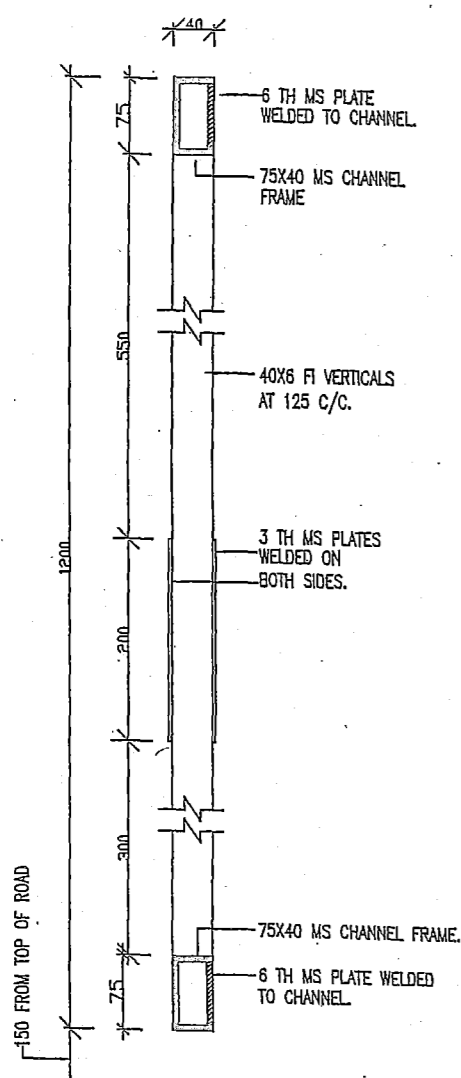
REVISIONS

STEEL GATE 3600/4800/5500/
6500 WIDE WITH WICKET GATE

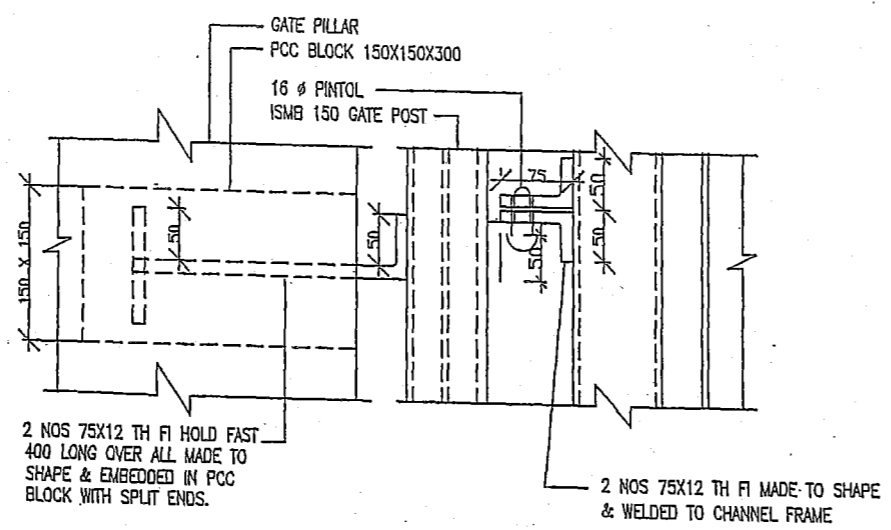
PLAN AND ELEVATION

Date	21.03.2013	CHIEF ENGINEER JODHPUR ZONE	SHEET No.
Drn	C S ASERI		1
TCD			2
CKD	VINOD		
Scale		DRG NO :- CEJZ / TD / 06	

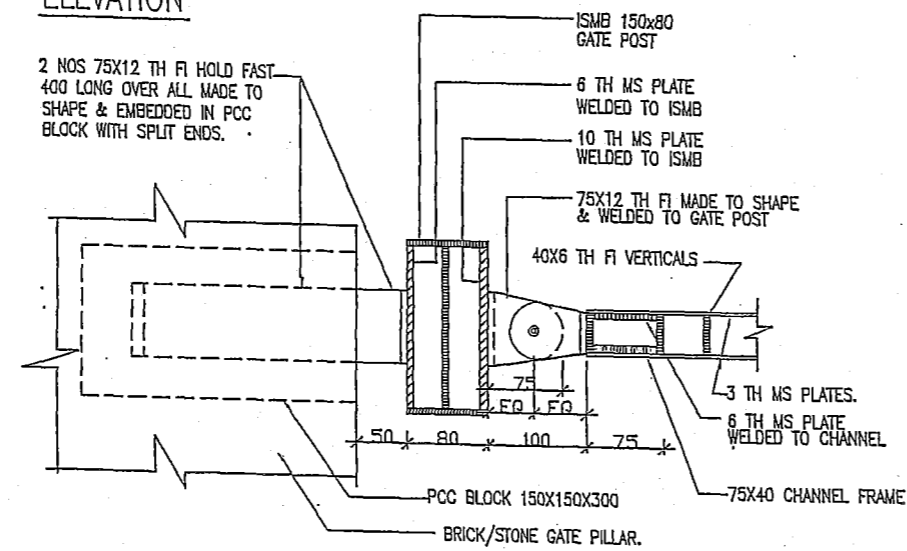
(Signature)
(R C SWAIN)
LT COL
SENIOR ARCHITECT
FOR CHIEF ENGINEER



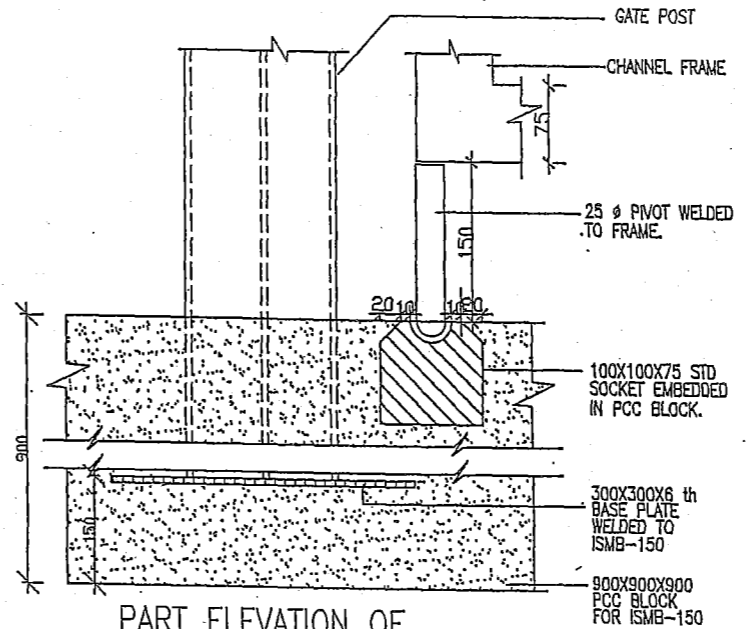
SECTION AT 'A-A'
SCALE 1:5



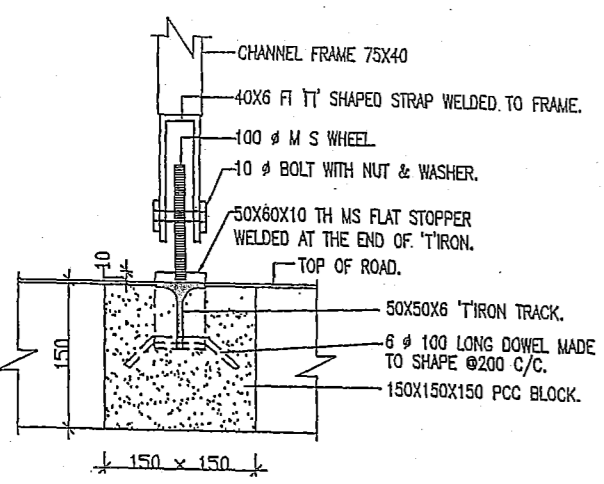
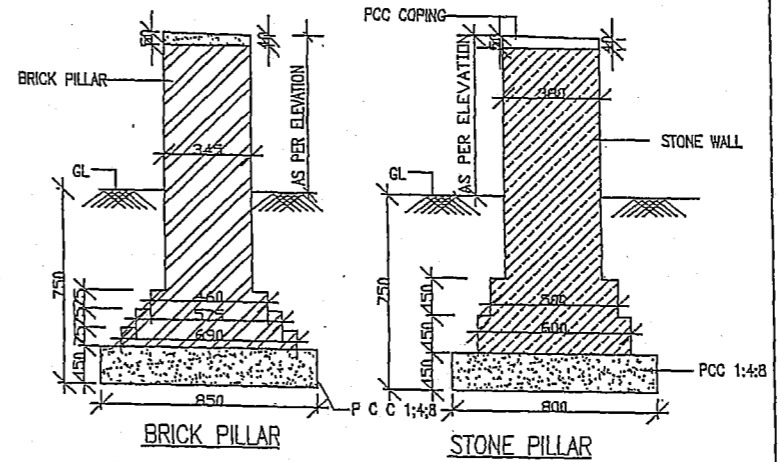
ELEVATION



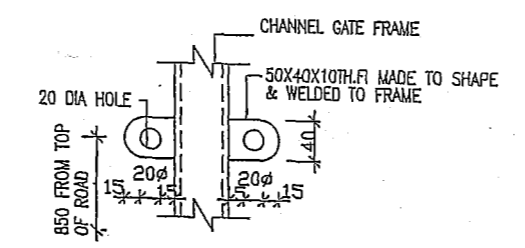
DETAILED PLAN OF GATE POST & HINGE
SCALE 1:5



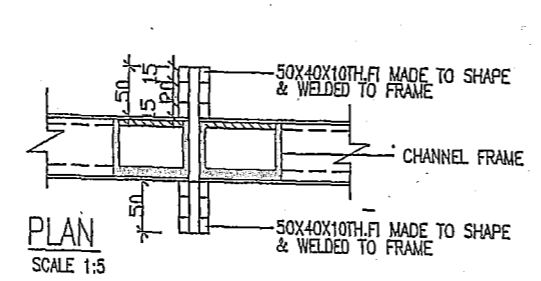
PART ELEVATION OF GATE WITH FOUNDATION
SCALE 1:5



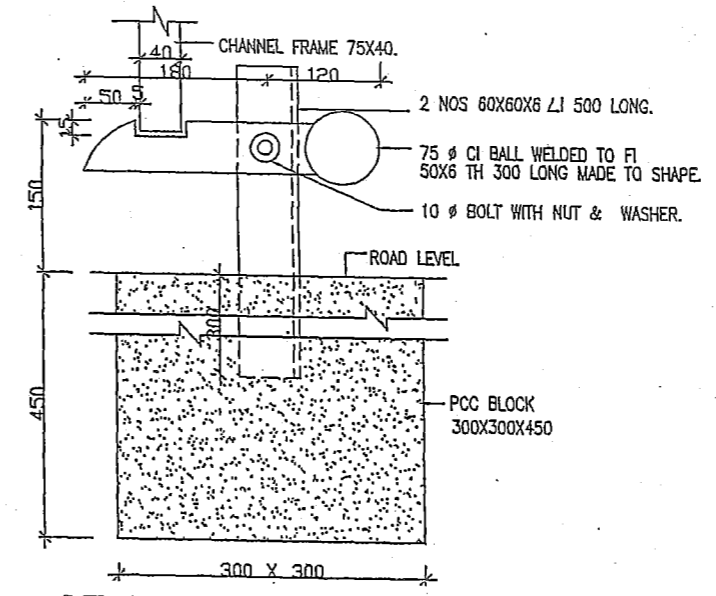
DETAIL OF ROLLER & TRACK
SCALE 1:5



SIDE ELEVATION DETAIL OF LOCKING ARRANGEMENT
SCALE 1:5



PLAN
SCALE 1:5



DETAIL OF GATE STOPPER
SCALE 1:5

NOTES

1. FOR ALL NOTES REF SHT NO 1/2 OF THIS DRG.

SL NO	DATE	DESCRIPTION	INITIAL
-------	------	-------------	---------

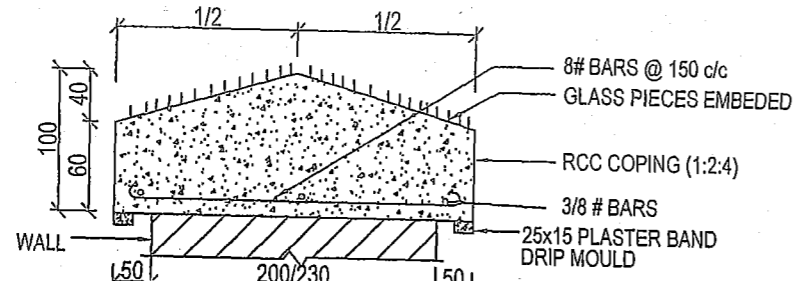
REVISIONS

STEEL GATE 3600/4800/5500/
6500 WIDE WITH WICKET GATE

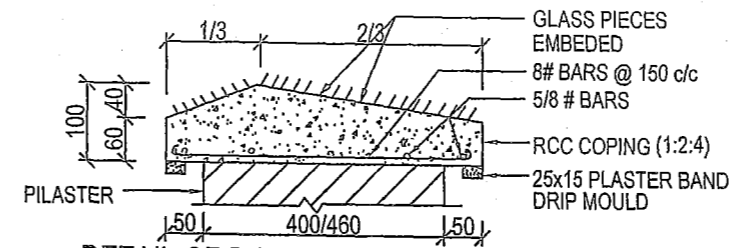
SECTIONS AND DETAILS

Date	21.03.2013	CHIEF ENGINEER JODHPUR ZONE	SHT No
Drn	C S ASERI		2/2
TCD			
CKD	VINOD		
Scale	VINOD	DRG NO :- CEJZ / TD / 06	

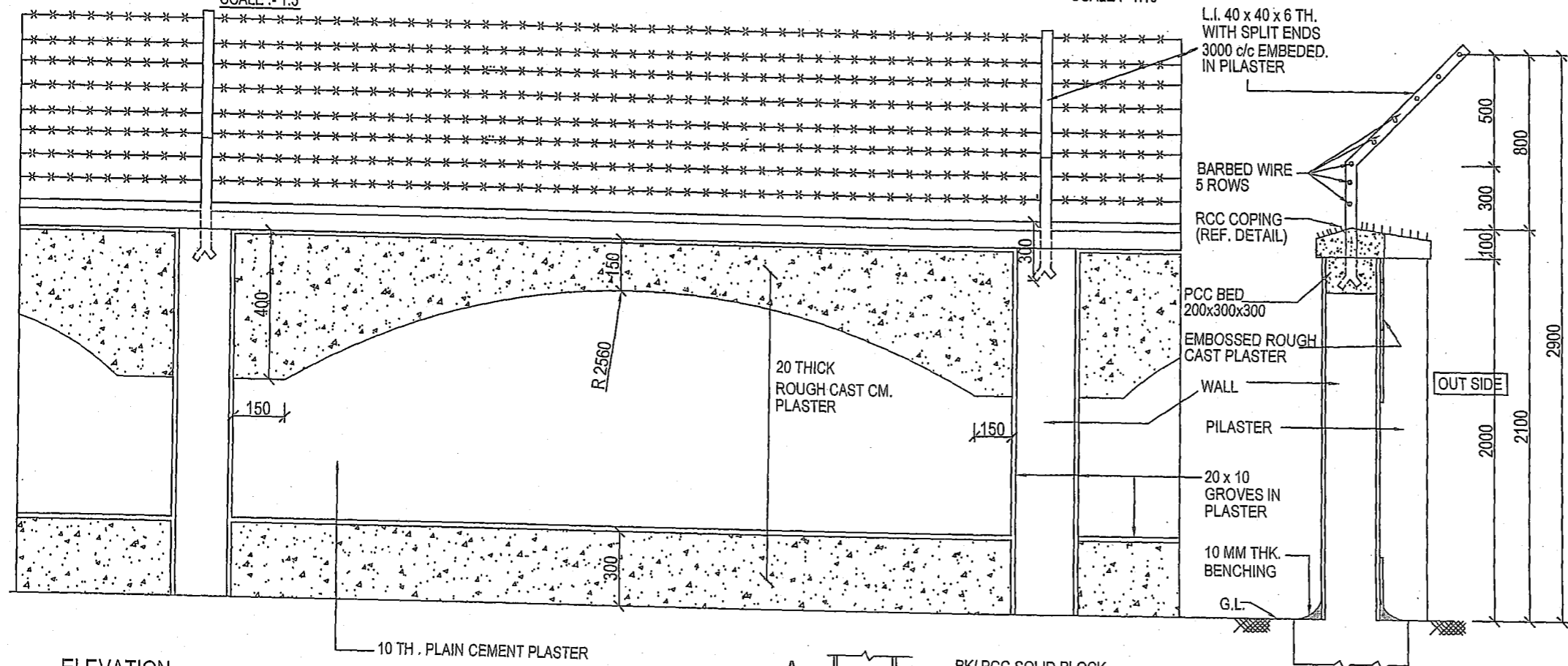
(Signature)
(R C SWAIN)
LT COL
SENIOR ARCHITECT
FOR CHIEF ENGINEER



DETAIL OF RCC COPING ON COMPOUND WALL
SCALE :- 1:5

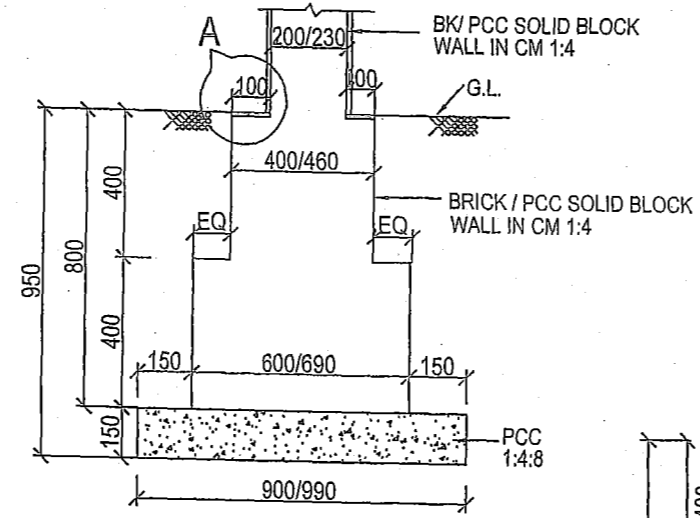
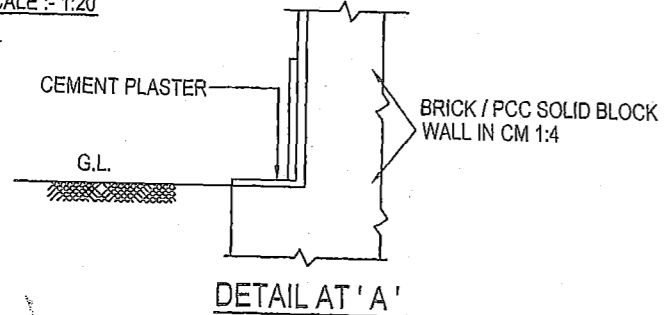


DETAIL OF RCC COPING ON PILASTER
SCALE :- 1:10

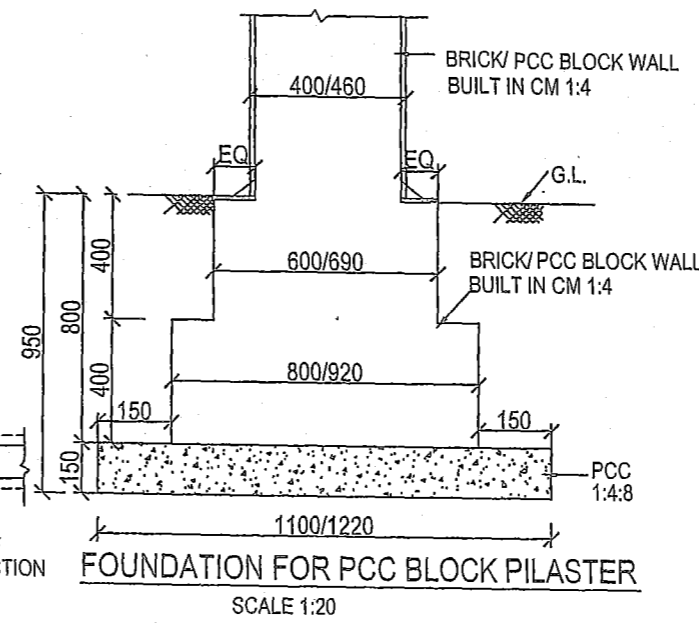


SECTION P-P
SCALE :- 1:20

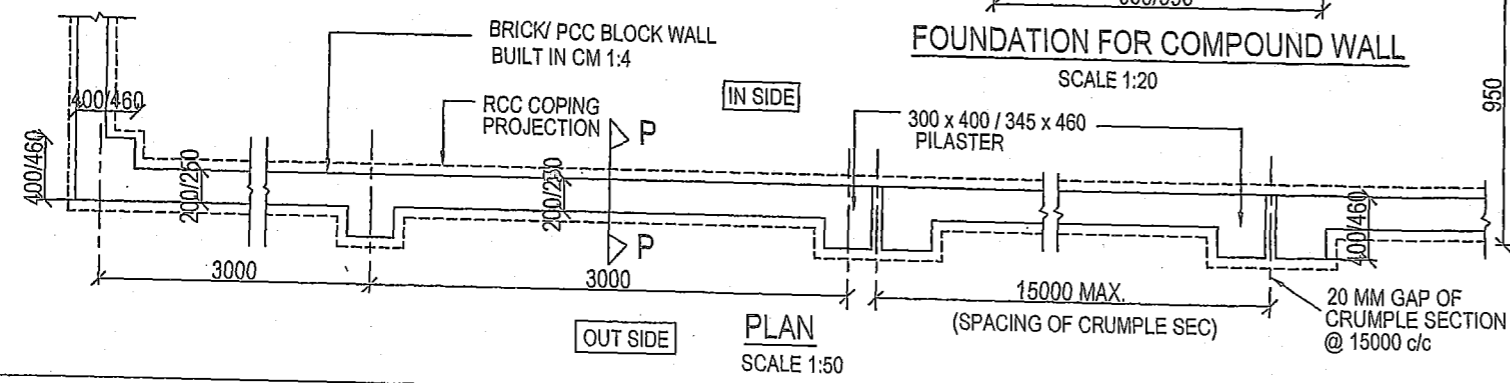
ELEVATION
SCALE :- 1:20



FOUNDATION FOR COMPOUND WALL
SCALE 1:20



FOUNDATION FOR PCC BLOCK PILASTER
SCALE 1:20



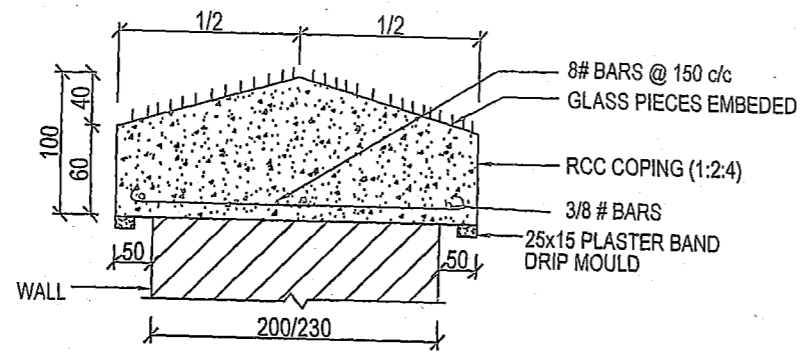
PLAN
SCALE 1:50

- | SL NO | NOTE |
|-------|--|
| 1. | CONTRACTOR TO CHECK & VERIFY ALL DIMENSIONS BEFORE EXECUTION OF THE WORK. |
| 2. | FIGURED DIMENSIONS SHALL BE FOLLOWED. |
| 3. | ALL DIMENSIONS ARE GIVEN IN MM UNLESS OTHERWISE STATED. |
| 4. | FOUNDATION HAS BEEN DESIGNED FOR SAFE BEARING CAPACITY OF 10 T/m ² . THE EXECUTIVE SHOULD ENSURE THAT FOUNDATION IS RESTING ON SOIL HAVING THE SPECIFIED SAFE BEARING CAPACITY. |
| 5. | 20 mm WIDE CRUMPLE JOINT SHALL BE PROVIDED AT NOT EXCEEDING 15000 c/c. |
| 6. | GOOD QUALITY BRICK /PCC SOLID BLOCK MASONRY SHALL BE OF GDE D-5 AS SPECIFIED IN I.S. 2185-1979. |
| 7. | 10 mm TH CEMENT PLASTER , 20 MM TH ROUGH CAST CEM. PLASTER & GROOVES IN PLASTER SHALL BE PROVIDED ON BOTH SIDES OF THE COMPOUND WALL AS SHOWN IN ELEVATION. |

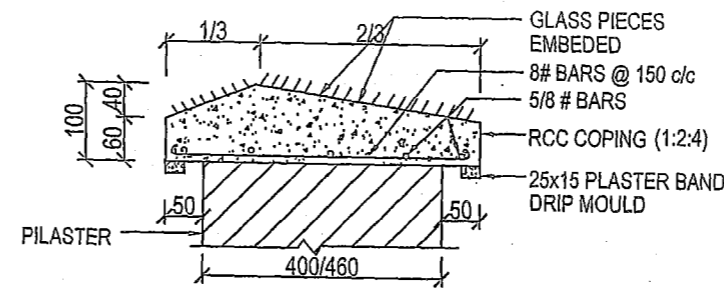
S.NO	DATE	DESCRIPTION	SIGN
		REVISION	
LOW SECURITY WALL (230 BK / 200 TH PCC BLOCK WALL WITH BARBED WIRE)			
PLAN, ELEVATION SECTIONS & DETAILS			
DATE	04-10-13	CHIEF ENGINEER JODHPUR ZONE JODHPUR	SHT NO:
DRN	C S ASERI		1
TCD			1
CKD			
SCALE	AS SHOWN	REF DRG. NO. CEJZ/TD/ 07	

SO-I (D)

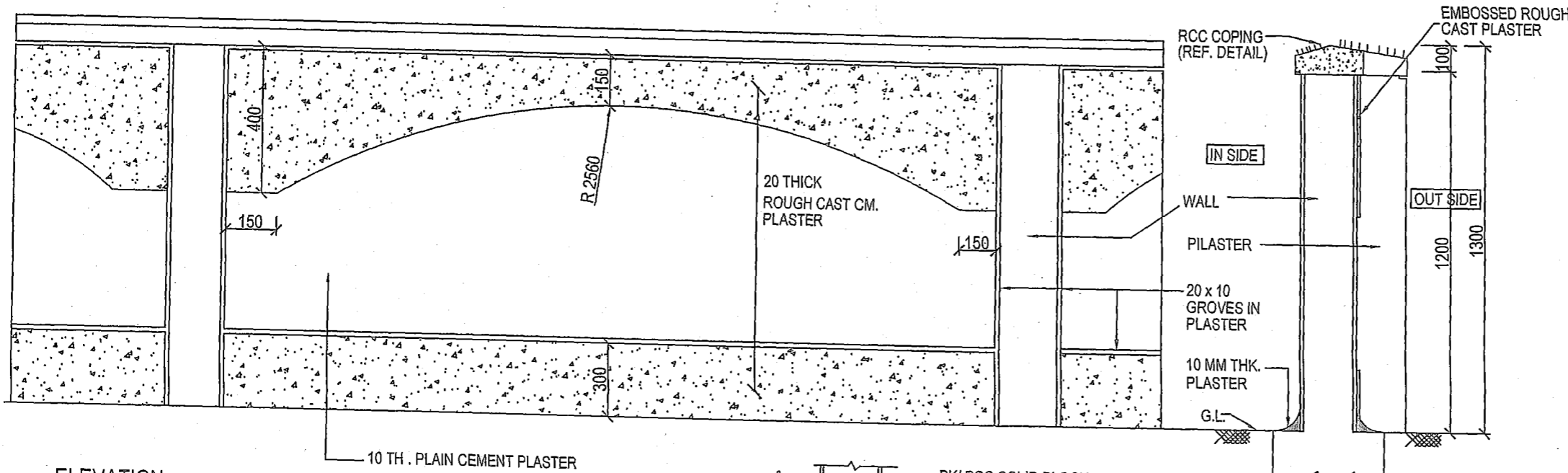
(R C SWAIN)
LT COL
SR ARCH
FOR CHIEF ENGINEER



DETAIL OF RCC COPING ON COMPOUND WALL
SCALE :- 1:5

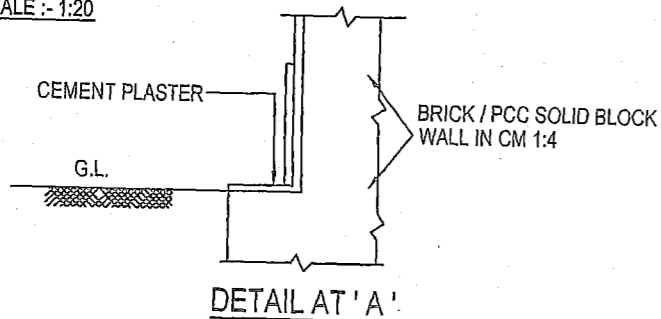


DETAIL OF RCC COPING ON PILASTER
SCALE :- 1:10

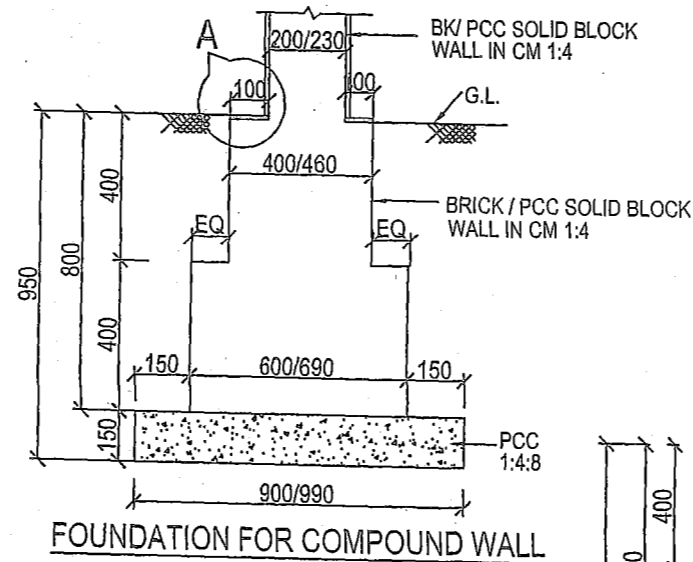


ELEVATION
SCALE :- 1:20

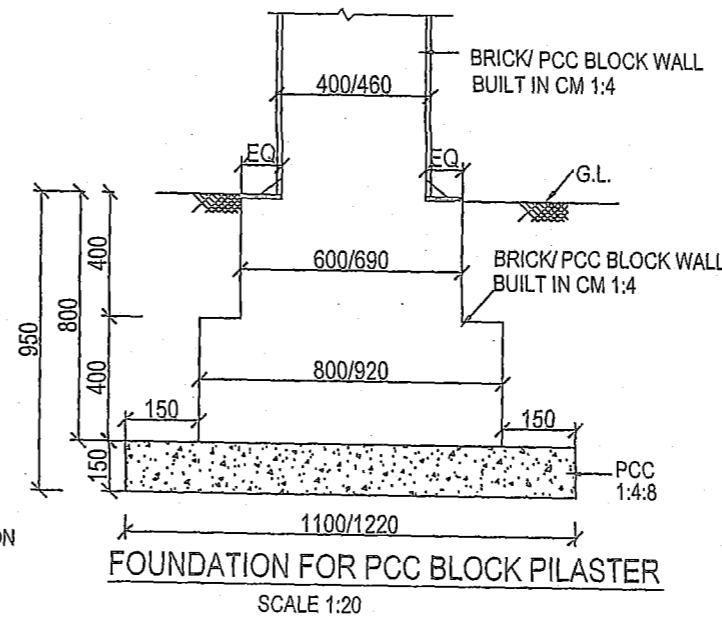
SECTION X-X
SCALE :- 1:20



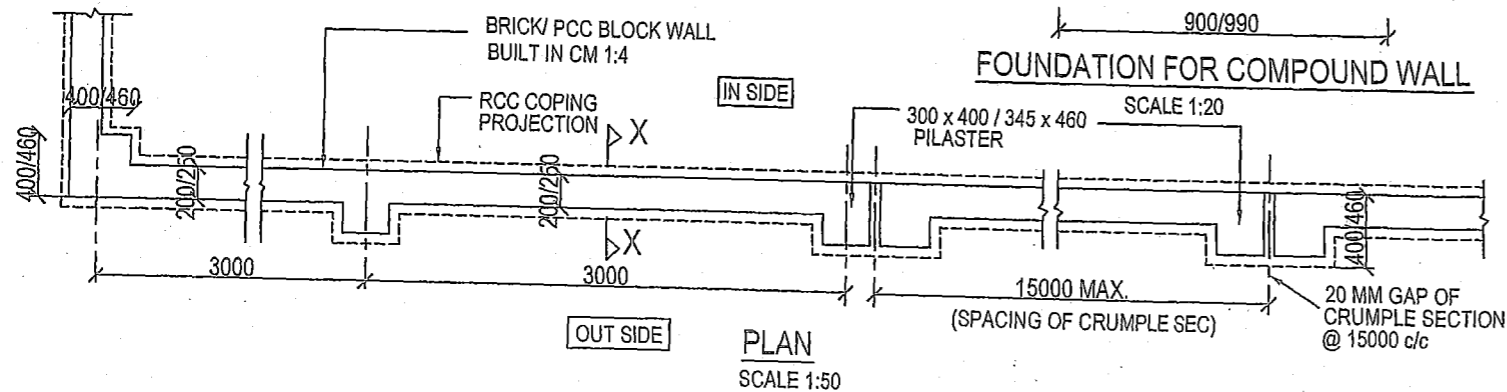
DETAIL AT 'A'



FOUNDATION FOR COMPOUND WALL
SCALE 1:20

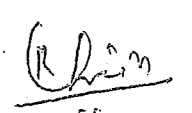


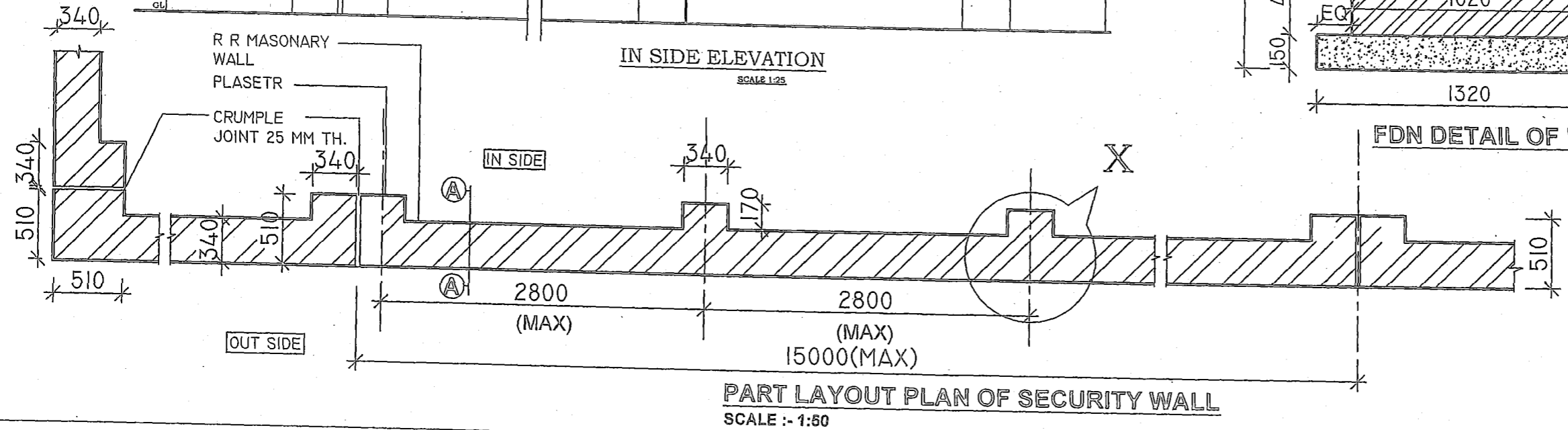
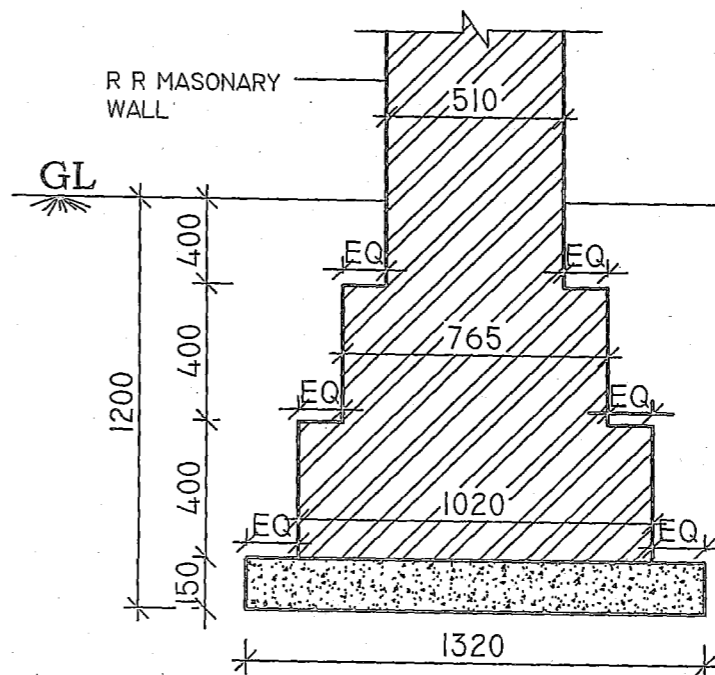
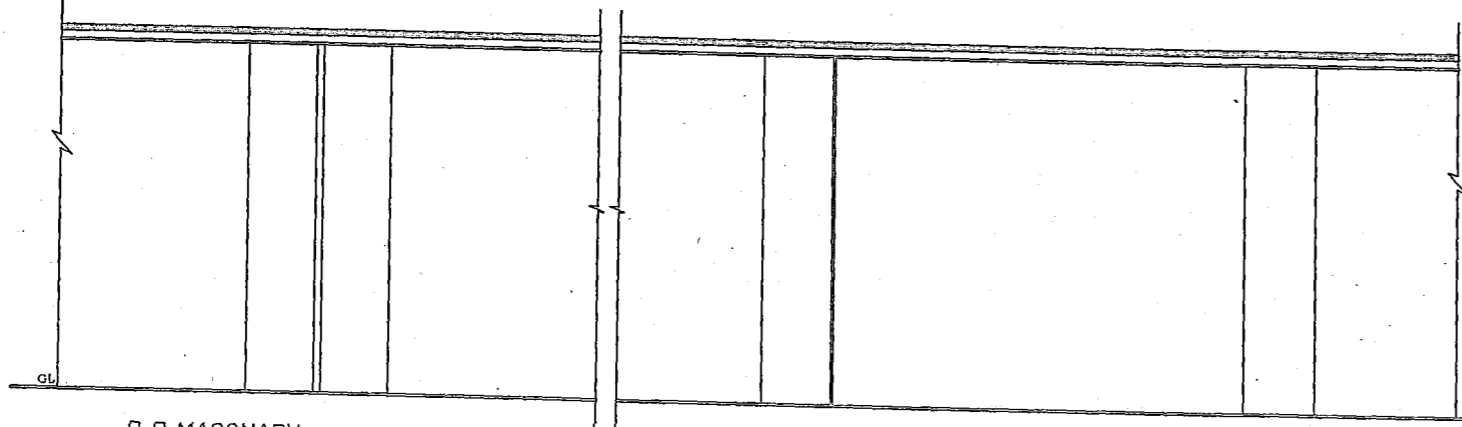
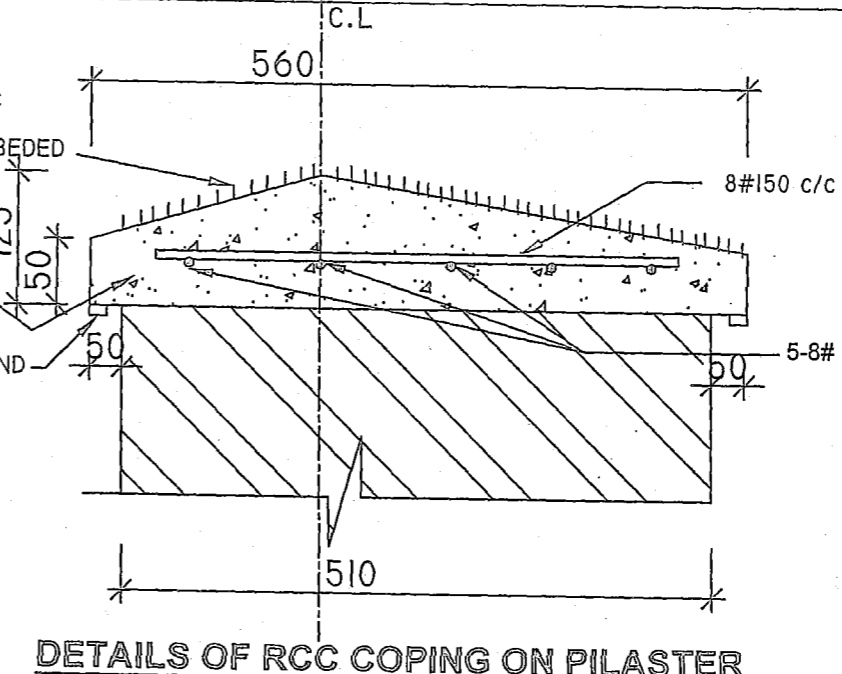
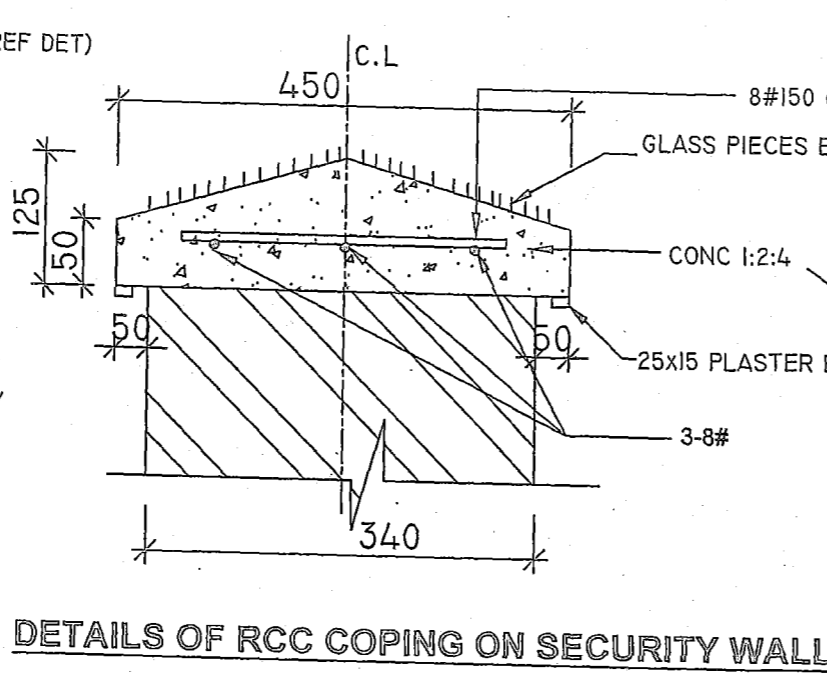
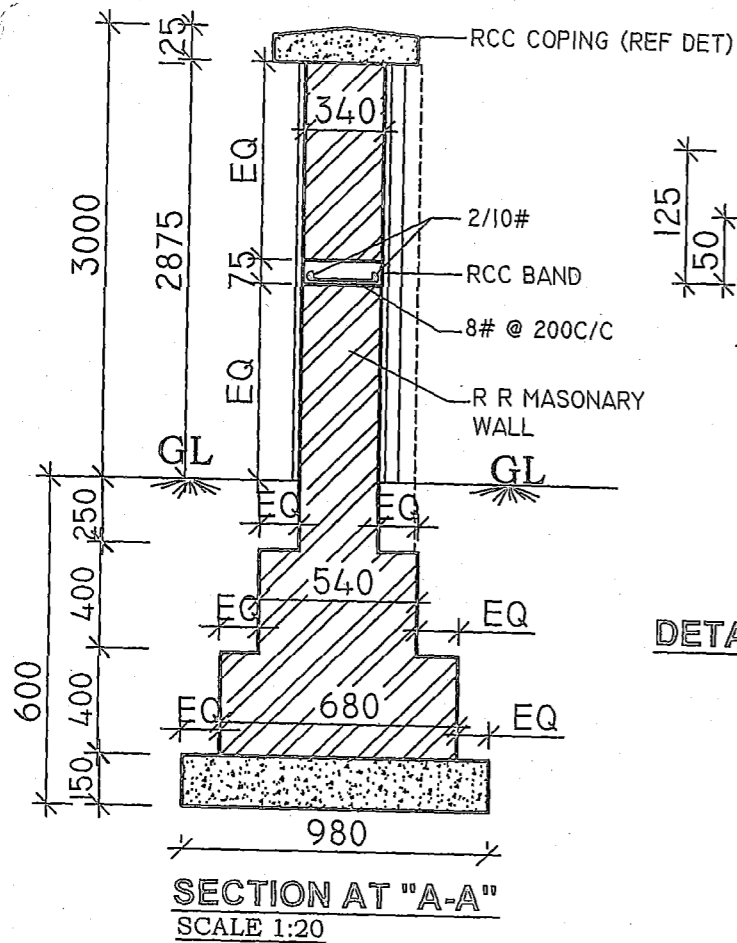
FOUNDATION FOR PCC BLOCK PILASTER
SCALE 1:20



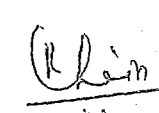
PLAN
SCALE 1:50

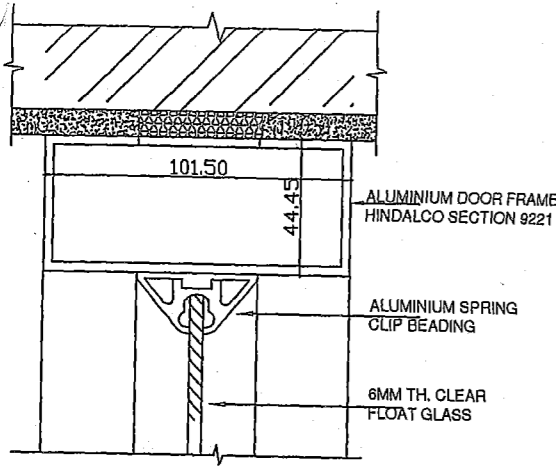
- | SL NO. | NOTE |
|--------|--|
| 1. | CONTRACTOR TO CHECK & VERIFY ALL DIMENSIONS BEFORE EXECUTION OF THE WORK. |
| 2. | FIGURED DIMENSIONS SHALL BE FOLLOWED. |
| 3. | ALL DIMENSIONS ARE GIVEN IN MM UNLESS OTHERWISE STATED. |
| 4. | FOUNDATION HAS BEEN DESIGNED FOR SAFE BEARING CAPACITY OF 10 T/m ² . THE EXECUTIVE SHOULD ENSURE THAT FOUNDATION IS RESTING ON SOIL HAVING THE SPECIFIED SAFE BEARING CAPACITY. |
| 5. | 20 mm WIDE CRUMPLE JOINT SHALL BE PROVIDED AT NOT EXCEEDING 15000 c/c. |
| 6. | GOOD QUALITY BRICK PCC SOLID BLOCK MASONRY SHALL BE OF GDE D-5 AS SPECIFIED IN I.S. 2185-1979. |
| 7. | 10 mm TH CEM PLASTER, 20 MM TH ROUGH CAST CEM. PLASTER & GROOVES IN PLASTER SHALL BE PROVIDED ON BOTH SIDES OF THE COMPOUND WALL AS SHOWN IN ELEVATION. |

S.NO.	DATE	DESCRIPTION	SIGN
REVISION			
COMPOUND / BOUNDARY WALL (230BK/200 TH PCC BLOCK WALL-1300 HIGH)			
PLAN, ELEVATION SECTIONS & DETAILS			
DATE	04-10-13	CHIEF ENGINEER JODHPUR ZONE JODHPUR	SHT NO.
DRN	C S ASERI		1
TCD			1
CKD			
SCALE	AS SHOWN	REF DRG. NO. CEJZ/TD/08	
SO-I (D)		 (R C SWAIN) LT COL SR ARCH FOR CHIEF ENGINEER	

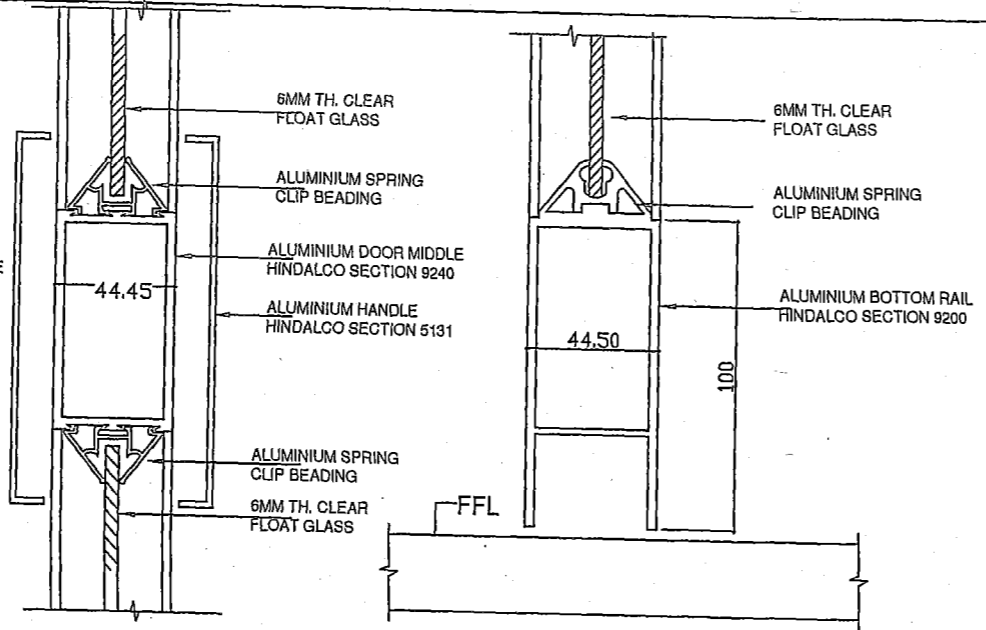


- NOTES**
1. CONTRACTOR TO CHECK AND VERIFY ALL DIMENSIONS BEFORE EXECUTION
 2. ALL DIMENSIONS ARE GIVEN IN MILLIMETRE UNLESS OTHERWISE SPECIFIED FIGURED DIMENSIONS ARE FOLLOWED
 3. EXECUTION AUTHORITY SHALL CHECK ALL DRAWINGS BEFORE EXECUTING OF THE WORK
 4. ALL MEMBERS OF GATE TO BE TREATED WITH OIL PAINT OVER A COAT OF PRIMER
 5. CONC. MIX FOR RCC WORK SHALL BE M-20 UNLESS OTHERWISE SPECIFIED.
 6. SBC IS 10T / M³

S.No.	DATE	DESCRIPTION	CHKD.
REVISIONS			
SECURITY WALL 3M HT			
DATE: 04/10/2013	CHIEF ENGINEER		SHEET NO.
DRAWN: C S ASERI	JODHPUR ZONE		1/1
CHKD:	JODHPUR		
SCALE: AS SHOWN	REF DRG. NO : CEDZ /TD/09		
		 (R C SWAIN) LT COL SR ARCH FOR CHIEF ENGINEER	

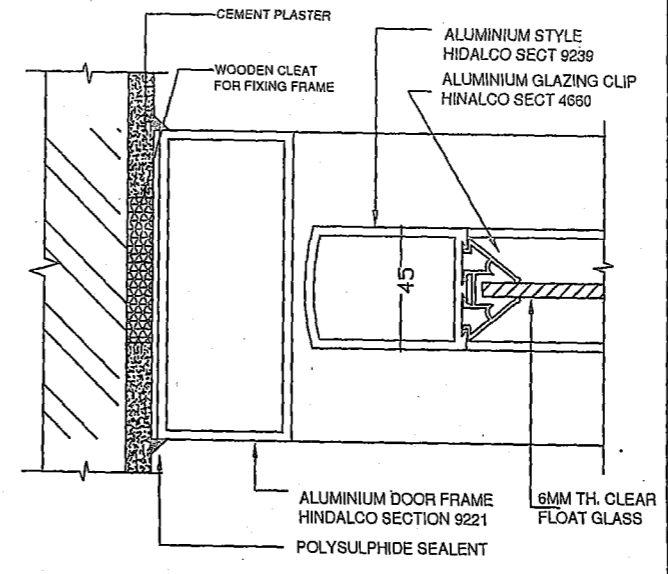


DETAIL AT S

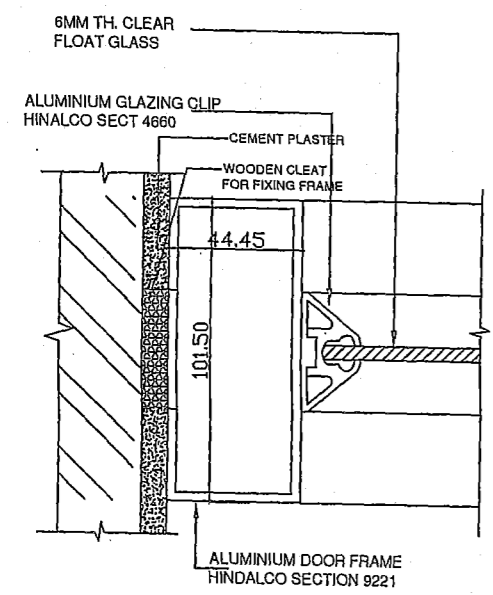


DETAIL AT U

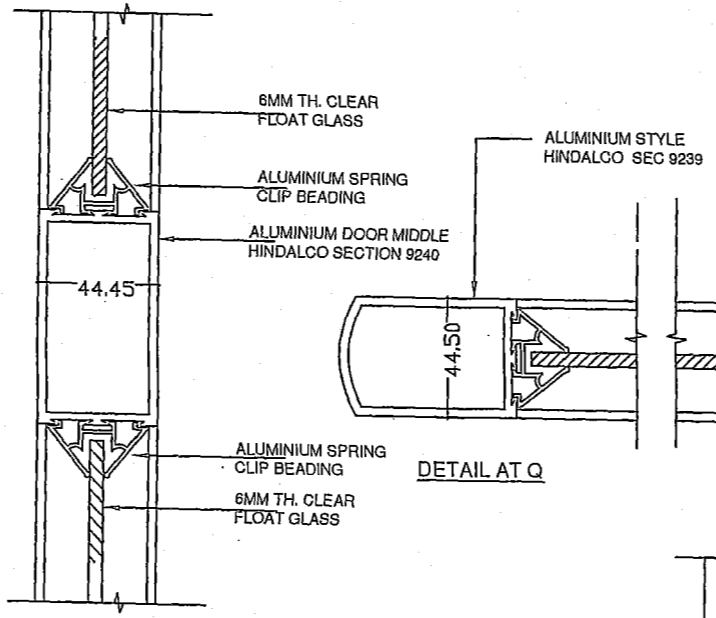
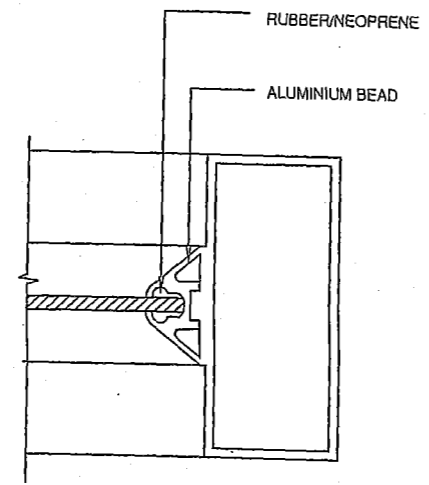
DETAIL AT V



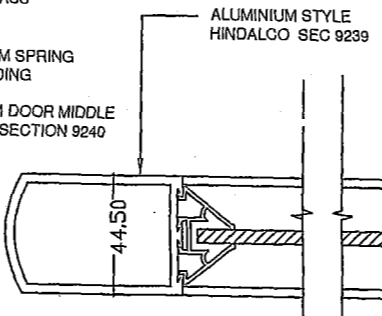
DETAIL AT X



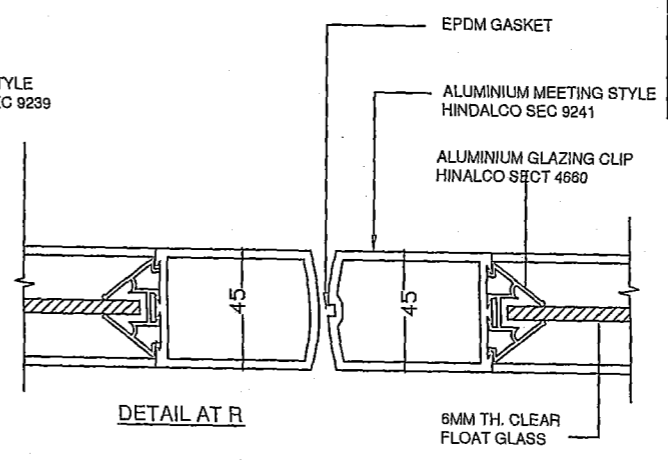
DETAIL AT P



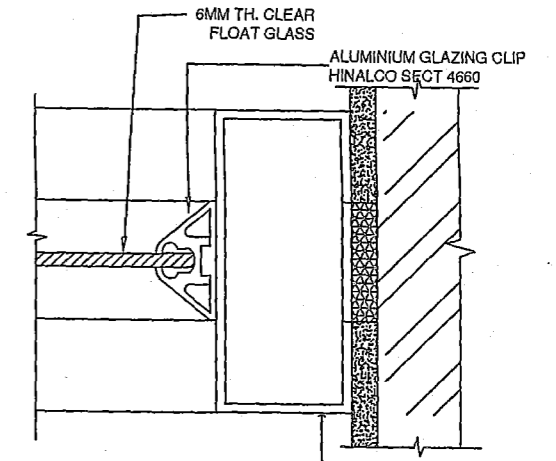
DETAIL AT Y



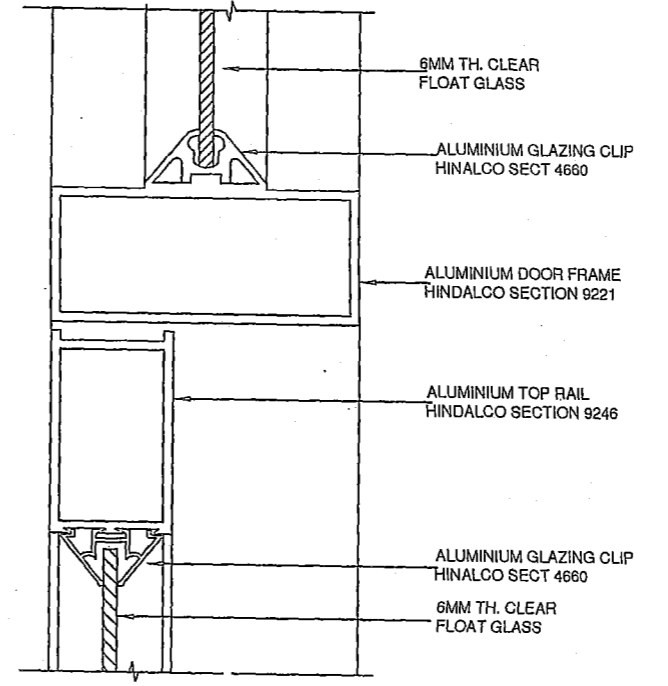
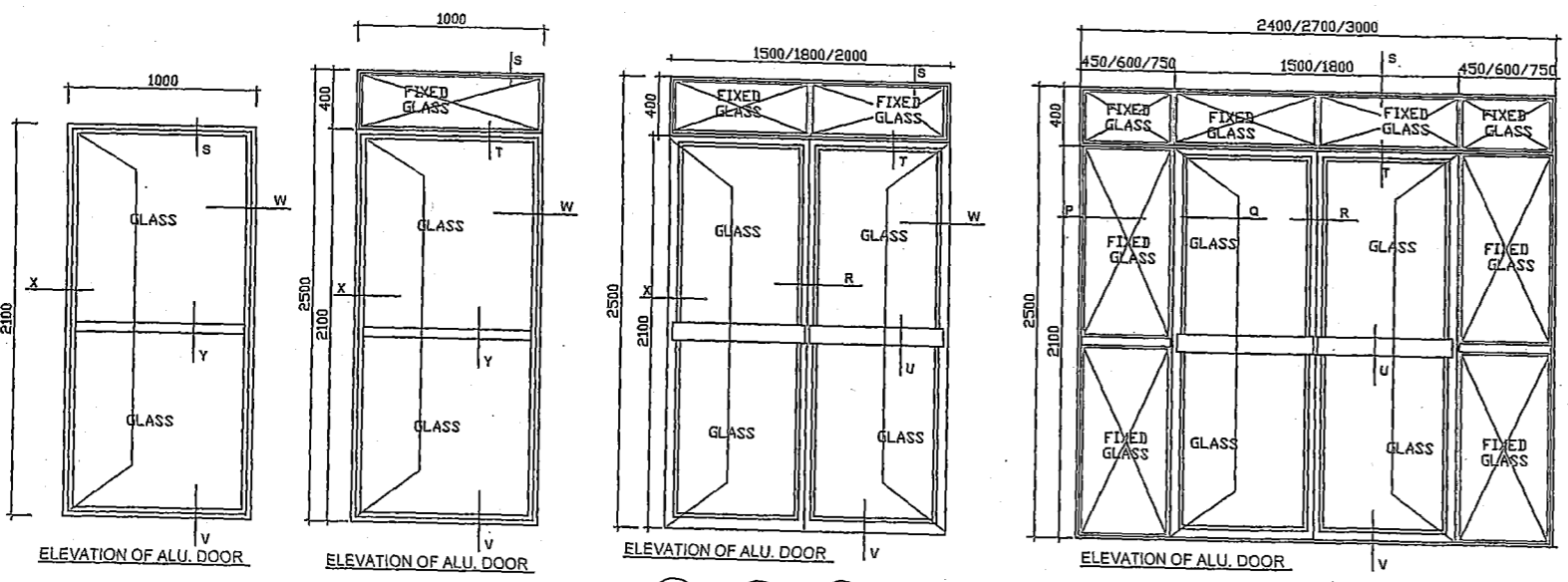
DETAIL AT Q



DETAIL AT R



DETAIL AT W



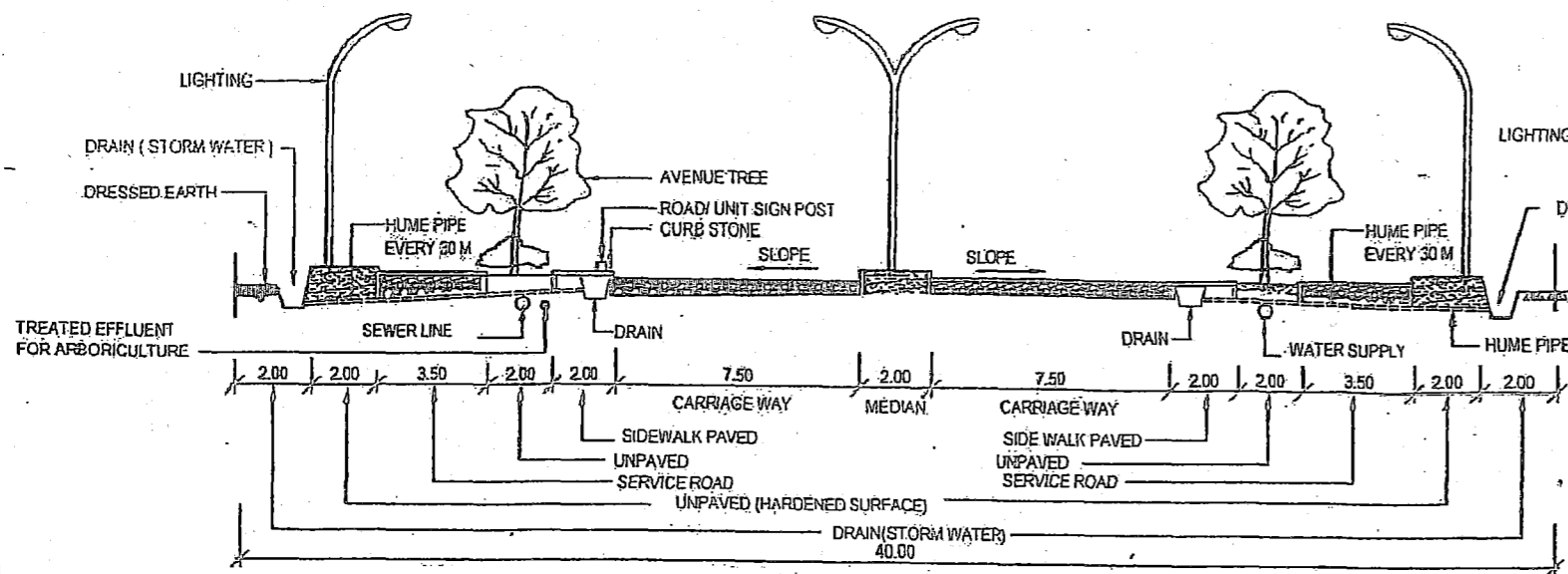
DETAIL AT T

- NOTES**
- CONTRACTOR TO CHECK AND VERIFY ALL DIMENSIONS BEFORE EXECUTION OF THE WORK.
 - ALL DIMENSIONS ARE GIVEN IN MILLIMETRES.
 - FIGURED DIMENSIONS SHALL BE FOLDED.
 - ALL GASKET SHALL BE OF PVC / RUBBER.
 - MINIMUM AVERAGE THICKNESS OF ANODISING (COATING ANODISING) ON ALUMINIUM SECTIONS CONFIRM TO IS-1868-1985.
 - ALL LEG / HOLD FAST SHALL BE EMBEDDED IN (250XTHICKNES OF WALL) PCC BLOCK.
 - FIXING OF FRAMES SHUTTERS SHALL BE AS PER MANUFACTURES INSTRUCTIONS.
 - PVC PROTECTED SHEETING SHALL BE USED WHILE FIXING THE FRAME OF DOORS TO AVOID DAMAGES / SCRATCHES ETC.
 - ALL GLASS PANEL SHALL BE 6 MM THICK FLOAT GLASS CONFIRMING TO IS-UNLESS OTHERWISE SPECIFIED.
 - TESTING OF ANODISING COATING SHALL BE INACCORDANCE WITH IS-5523-1983.
 - ALL ALUMINIUM DOORS SHALL BE PROVIDED WITH STANDARD ALUMINIUM HANDLE, STOPPER AND OTHER HARDWARE ITEMS. AS PER MANUFACTURER'S INSTRUCTION.
 - ALL ALUMINIUM SECTIONS SHOWN IN THIS DRAWING ARE OF HINDALCO MAKE. EQLT SECTIONS OF JINDAL/ INDAL MAKE MAY BE PROVIDED.
 - AD STANDS FOR ALUMINIUM DOOR AND ADF STANDS FOR ALUMINIUM DOOR WITH FAN LIGHT.
- | SCHEDULE OF ALU DOORS | | SCHEDULE OF ALU DOORS | |
|-----------------------|---------------------|-----------------------|---------------------|
| AD-1 = 1000x2100 | ADF-2 = 2000x2500 | ADF-2 = 2000x2500 | ADF-3.0 = 3000x2500 |
| ADF-1 = 1000x2500 | ADF-2.4 = 2400x2500 | ADF-2.7 = 2700x2500 | |
| ADF-1.5 = 1500x2500 | ADF-2.7 = 2700x2500 | | |
| ADF-1.8 = 1800x2500 | | | |

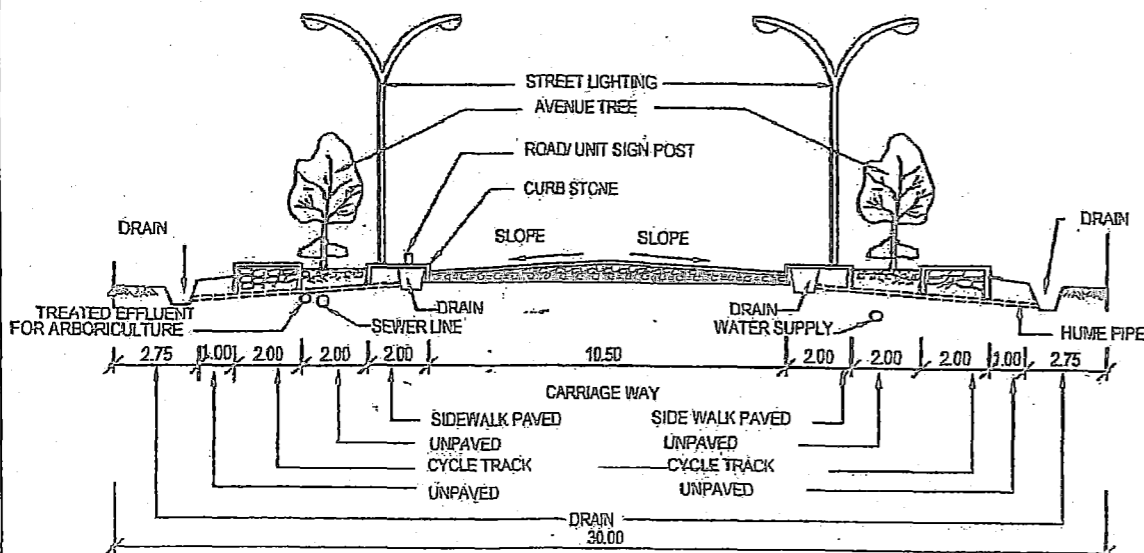
TYPICAL DETAILS OF ALUMINIUM DOORS

DATE	04/10/2013	CHIEF ENGINEER JODHPUR ZONE JODHPUR	SHEET NO 1/1
DRAWN	C S ASERI		
TCD			
CKD			
SCALE	1:200	REF DRG NO : CEJZ-JD/ 10	

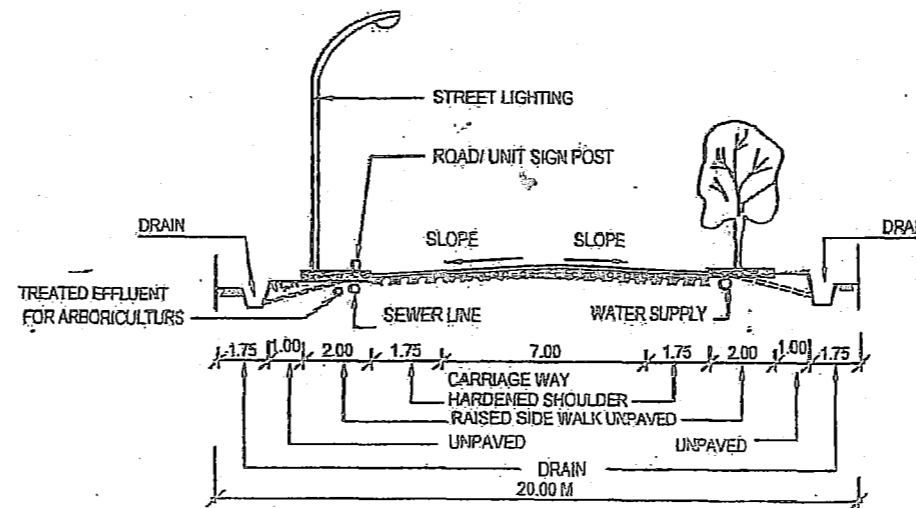
(Signature)
 (R C SWAIN)
 LT COL
 SR ARCH
 FOR CHIEF ENGINEER



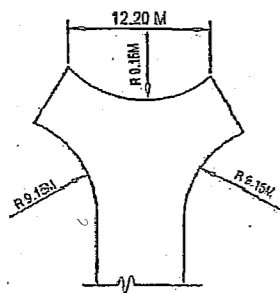
40 M RIGHT OF WAY RD - 1



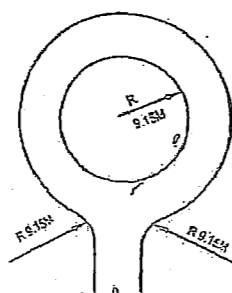
30 M RIGHT OF WAY RD - 2



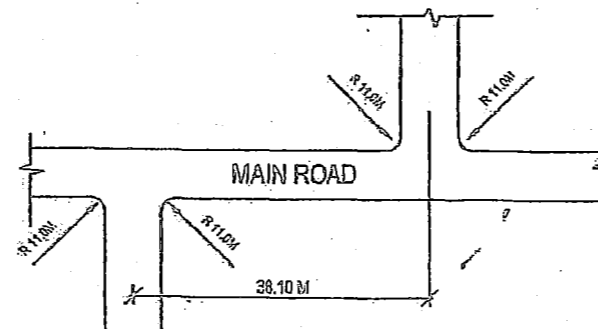
20 M RIGHT OF WAY RD - 3



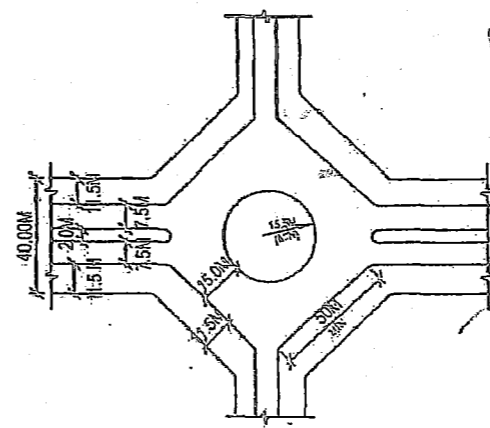
ALT - I DETAIL OF CUL-DE-SACS



ALT - II



TYPICAL STAGGERED JUNCTION OF LIGHT TRAFFIC ROAD WITH MAIN ROAD



RD-1 TO RD-4 TYPICAL-DETAIL

NOTES

1. ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN.
2. FIGURED DIMENSIONS SHALL BE FOLLOWED.
3. THE WIDTH & DEPTH OF STORM WATER DRAIN SHOWN ON THE DRG IS INDICATIVE ONLY. THE EXACT SIZE SHALL BE DECIDED BY ENGINEER-IN-CHARGE AS PER SURFACE DRAINAGE SCHEME.
4. POSITION OF TREES IS INDICATIVE. THE ACTUAL TYPE, NAME AND SPACING OF TREES TO BE AS PER ARBORICULTURE SCHEME.
5. THE LOCATION OF THE STREET LIGHT POLES SHOULD BE KEPT AS MARKED VIS-A-VIS CROSS SECTION OF ROAD.
6. THE SPACING OF THE POLES ARE TO BE DECIDED TO ACHIEVE UNIFORM ILLUMINATION AND AS PER LATEST TECH INSTRUCTIONS.
7. THE MINIMUM HEIGHT OF THE CONDUCTORS SHOULD CONFORM TO THE STANDARDS LAID UNDER IER.
8. AT CROSS JUNCTION, TEE JUNCTIONS, ROUND ABOUT ETC THE POLES / STREET LIGHT SHOULD BE LOCATED TO ACHIEVE THE UNIFORM ILLUMINATION AROUND AND THEIR LOCATION SHOULD MINIMIZE THE TRAFFIC HAZARDS.
9. CUL-DE-SACS LENGTH SHALL NOT BE MORE THAN 120/150 M AS A RULE.
10. SMALL BUSHES TO BE PLANTED BETWEEN AVENUE TREES.
11. DESIGN THICKNESS OF GRANULAR MATERIAL BE ARRIVED AS PER TTC AND SOIL PARAMETERS.
12. MIN 40 MM TH BITUMINOUS LAYER SHOULD BE LAID WITH MECHANICAL PAVER OVER WBM/WMA.
13. FOR RESURFACING/MAINTENANCE MIN 30 MM TH BITUMINOUS LAYER SHOULD BE LAID WITH MECHANICAL PAVER.
14. BALANCE GRANULAR THICKNESS BE PROVIDED AS GSB AND WMA SUB BASE/ BASE COURSE.
15. THIS DRG SUPERCEDES DRG NO:-MOSC/PT-59/91/R, DATED 11.11.91.
16. IRC GUIDELINES SHALL BE FOLLOWED.

10 M RIGHT OF WAY RD - 4

NOTE:- GSB AND WBM / WMA BE EXTENDED TO FULL WIDTH (UPTO EDGE OF DRAIN) AND IN SHOULDER AREA, WMM / WBM BE PROVIDED AS HARDENED SHOULDER.

GENERAL GUIDE LINES

1. RD-1 SHALL BE ADOPTED AS ARTERIAL FOR ALL ROADS TAKING OFF FROM NATIONAL STATE HIGHWAYS IN THE MILITARY STATIONS WHERE DIV HQ OR ABOVE IS LOCATED.
2. RD-2 SHALL BE ADOPTED FOR SUB ARTERIAL ROADS WHERE BDE HQ IS LOCATED.
3. GEOMETRIC SHAPE & SPECIFICATION OF ELECTRIC POLE ALONG WITH LUMINARY AS PER REQUIREMENT BE PROVIDED.
4. WHERE EVER ARRANGEMENT FOR USE OF TREATED EFFLUENT IS MADE ITS LINE SHALL BE PROVIDED AS INDICATED ON ROAD CROSS SECTION.
5. RD-3 SHALL BE USED AS APPROACH TO UNITS AND MARRIED ZONES FROM THE DIAMETRIC APPROACHES.
6. RD-4 SHALL BE USED AS APPROACHES WITHIN THE UNIT LINES & INDIVIDUAL APPROACHES TO THE MARRIED ACCOMMODATION.
7. THE FOLLOWING GRADIENTS ARE RECOMMENDED IN THE PLANS AND UNDOULATING CONTOUR.

DESCRIPTIONS	RULING GRADIENTS	LIMITED GRADIENTS	SHORT STRETCHES NOT EXCEEDING 100M
(a) FLAT OR ROLLING TOPOGRAPHY	1 IN 30	1 IN 20	1 IN 15
(b) HILLY OR MOUNTAINOUS TOPOGRAPHY	1 IN 30	1 IN 15	1 IN 12

8. IT IS IMPORTANT TO AVOID STEEP GRADIENTS AT APPROACHES TO ROAD JUNCTION ROUNDABOUTS, BRIDGES ACUTE BENDS & WHERE THE MOVEMENT OF TRAFFIC IS RESTRICTED.
9. WHEN RD-2 IS USED AS ARTERIAL ROAD IN A BDE AND LESSER SIZE STATION A CENTRAL VERGE OF 2M SHALL BE PROVIDED WITH LOW LEVEL LANDSCAPING THE VERGE WILL BE OBTAINED BY DELETING UNPAVED PORTION PROVIDED IN CROSS SECTION.
10. HEIGHT OF CURB STONE SHALL BE AS PER SITE CONDITIONS.

SNO	DATE	DESCRIPTION	INITIAL
REVISION			

STANDRAD ROAD CROSS SECTION FOR PLAIN

DATE	04/10/2013	CHIEF ENGINEER	SHEET NO
DRAWN	CSASERJ		
TCD		JODHPUR ZONE	1/1
CKD			
SCALE	1:100	REF DRG NO : CEJZ-JD/ 11	

(R G SWAIN)
LT COL
SR ARCH
FOR CHIEF ENGINEER

NOTES

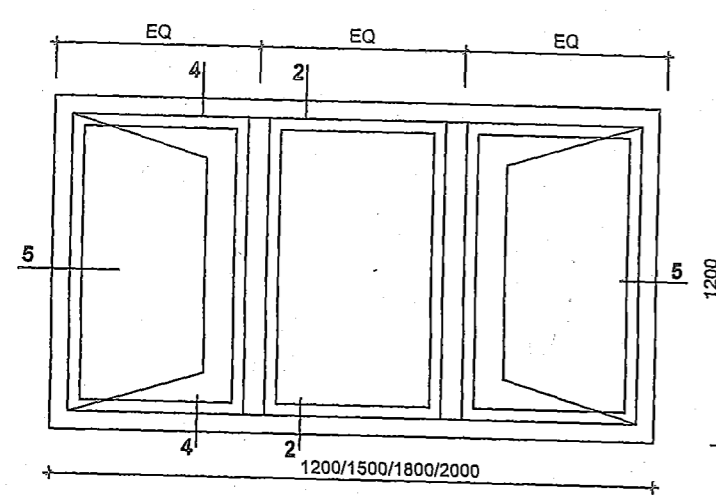
1. CONTRACTOR TO CHECK AND VERIFY ALL DIMENSIONS BEFORE EXECUTION OF THE WORK.
2. ALL DIMENSIONS ARE GIVEN IN MILLIMETRES.
3. FIGURED DIMENSIONS SHALL BE FOLLOED.
4. ALL GASKET SHALL BE OF PVC / RUBBER.
5. MINIMUM AVERAGE THICKNESS OF ANODISING (COATING ANODISING) ON ALUMINIUM SECTIONS CONFIRM TO IS-1868-1985.
6. ALL LEG / HOLD FAST SHALL BE EMBEDDED IN (25XTHICKNESS OF WALL) PCC BLOCK.
7. FIXING OF FRAMES SHUTTERS SHALL BE AS PER MANUFACTURES INSTRUCTIONS.
8. PVC PROTECTED SHEETING SHALL BE USED WHILE FIXING THE FRAME OF WINDOWS AND VENTILATORS TO AVOID DAMAGES / SCRATCHES ETC.
9. ALL GLASS PANEL SHALL BE 6 MM THICK FLOAT GLASS CONFIRMING TO IS-5523-1983.
10. TESTING OF ANODISING COATING SHALL BE INACCORDANCE WITH IS-5523-1983.
11. ALL ALUMINIUM WINDOW & VENTS SHALL BE PROVIDED WITH STANDARD ALUMINIUM HANDLE, STOPPER AND OTHER HARDWARE ITEMS. AS PER MANUFACTURER'S INSTRUCTION.
12. ALL ALUMINIUM SECTIONS SHOWN IN THIS DRAWING ARE OF HINDALCO MAKE. EQLT SECTIONS OF JINDAL/ INDAL MAKE MAY BE PROVIDED.
13. **ALW** STANDS FOR ALUMINIUM WINDOW AND **FALW** STANDS FOR FIXED ALUMINIUM WINDOW. **ALV** STANDS FOR ALUMINIUM VENTILATOR

SCHEDULE OF ALU DOORS	SCHEDULE OF ALU DOORS
AD-1 = 1000x2100	ADF-2 = 2000x2500
ADF-1 = 1000x2500	ADF-2.4 = 2400x2500
ADF-1.5 = 1500x2500	ADF-2.7 = 2700x2500
ADF-1.8 = 1800x2500	ADF-3.0 = 3000x2500

TYPICAL DETAILS OF ALUMINIUM WINDOWS & VENTILATORS

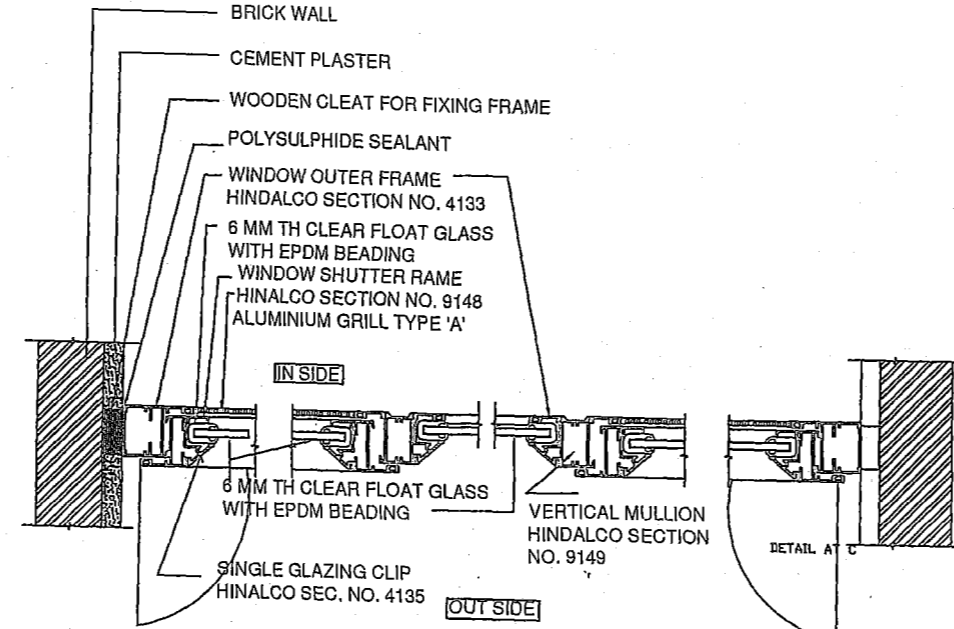
DATE	04/10/2013	CHIEF ENGINEER JODHPUR ZONE JODHPUR	SHEET NO 1/2
DRAWN	C S ASERI		
TCD		REF DRG NO : CEJZ-/TD/ 12	
CKD			
SCALE	1:150		

(Signature)
(R C SWAIN)
LT COL
SR ARCH
FOR CHIEF ENGINEER

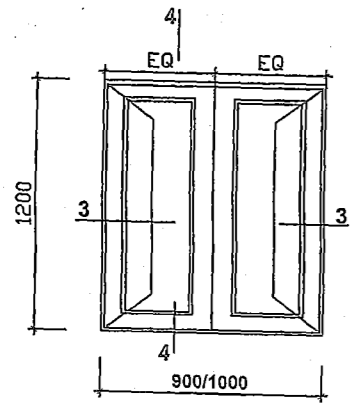


ELEVATION OF ALU. WINDOW

- ALW 12
- ALW 15
- ALW 18
- ALW 20

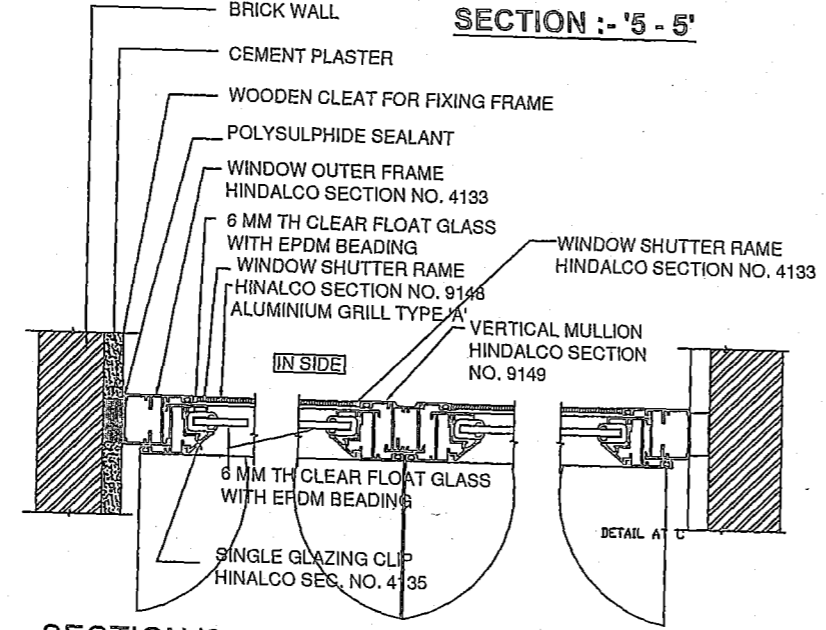


SECTION :- '5 - 5'

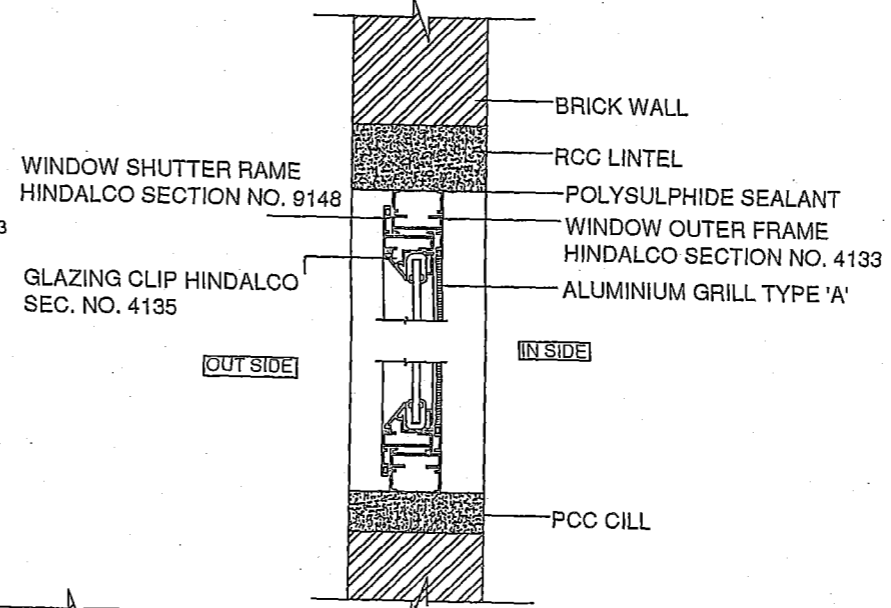


ELEVATION OF ALU. WINDOW

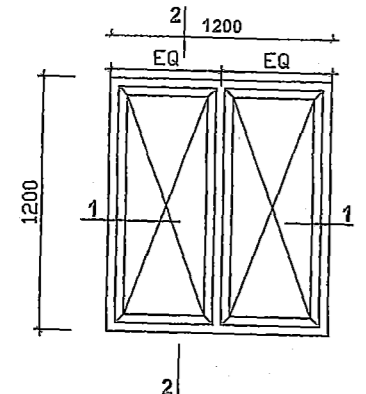
- ALW 9
- ALW 10



SECTION '3 - 3'

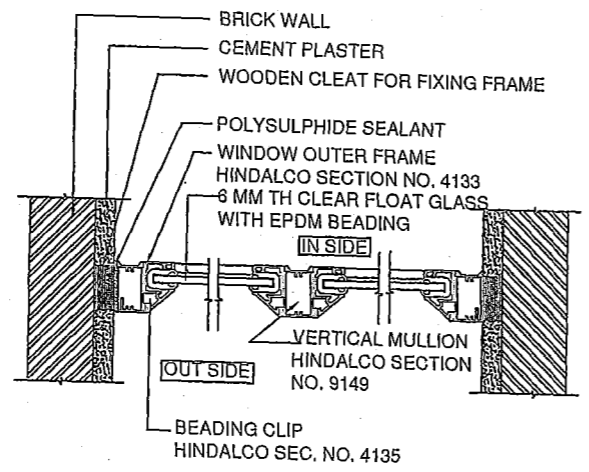


SECTION '4 - 4'

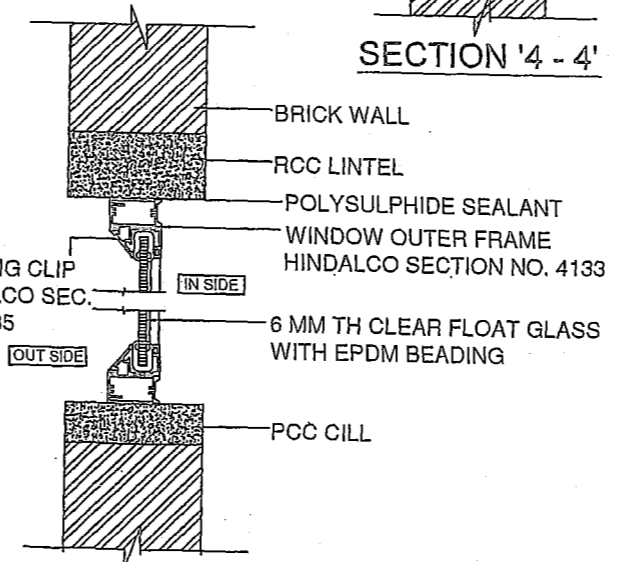


ELEVATION OF ALU. WINDOW

- FALW

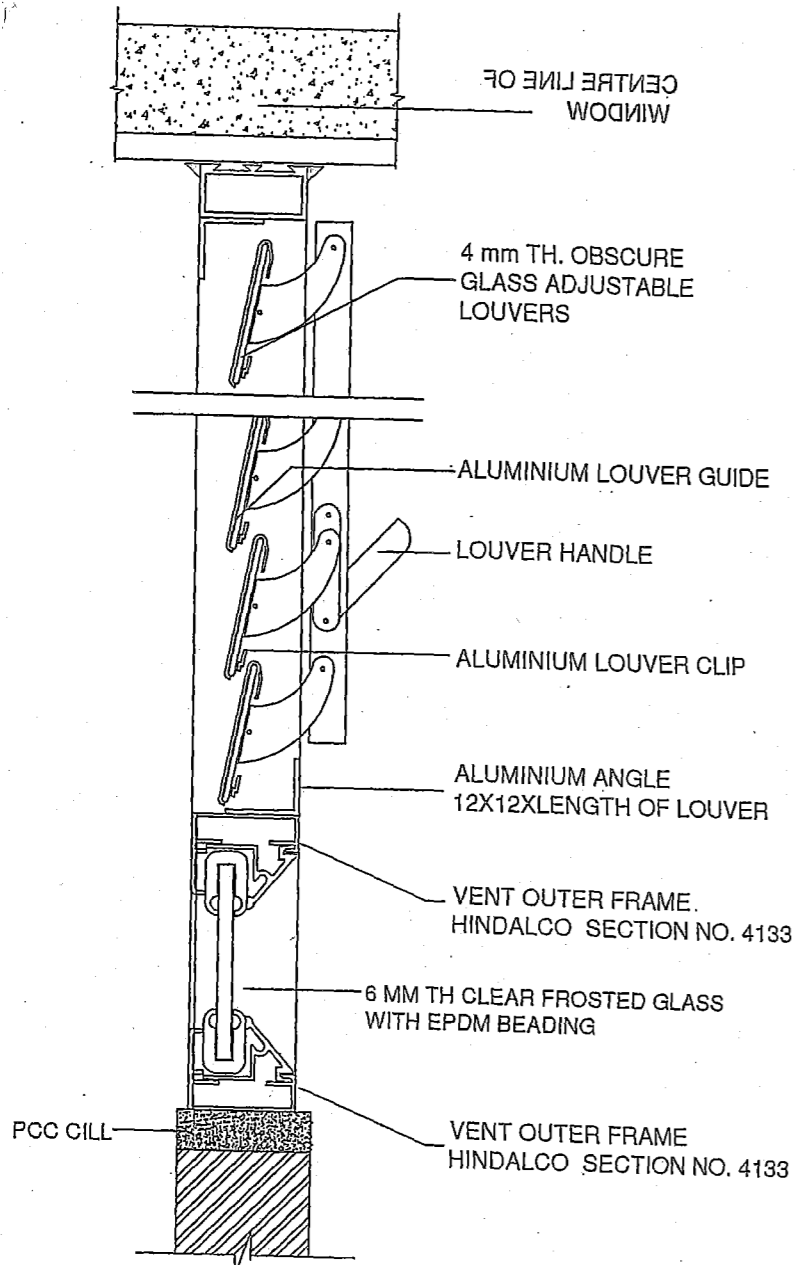


SECTION '1 - 1'

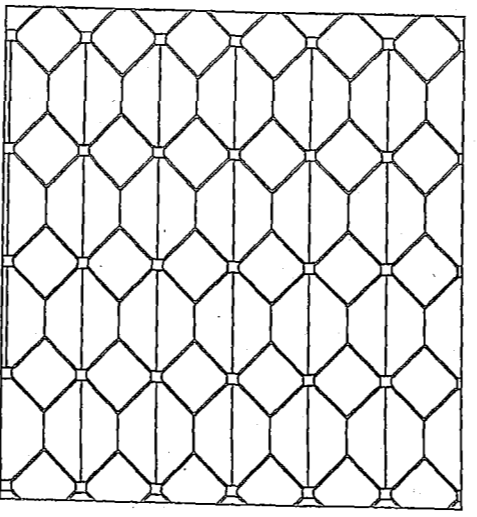
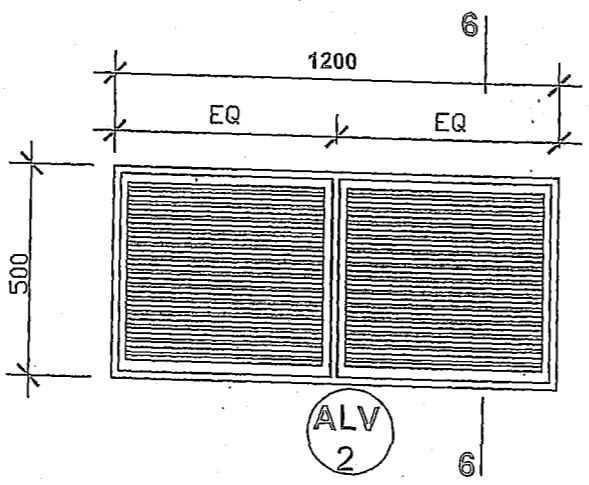
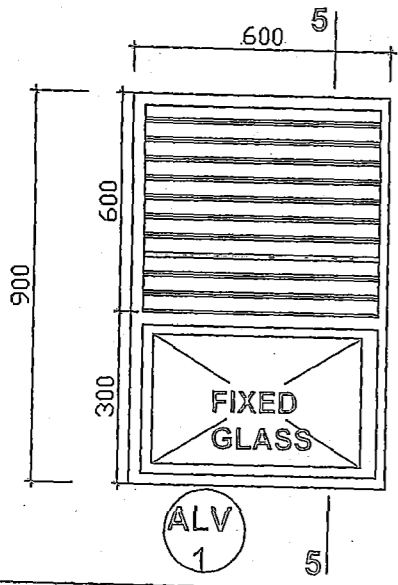


SECTION '2 - 2'

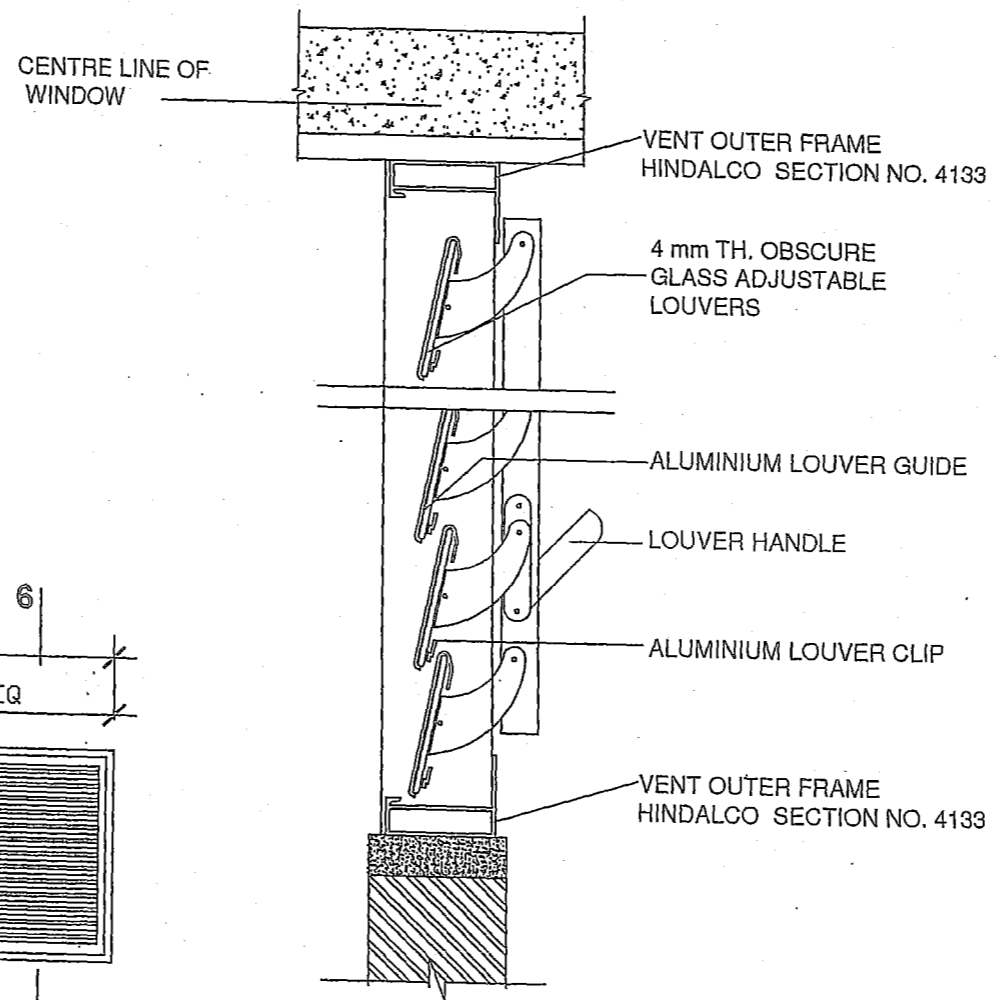
NOTE : FALW STANDS FOR FIXED ALUMINIUM WINDOW



SECTION '5-5'



ALUMINIUM GRILL
TYPE -A
3.766 Kg/SQM
(WITH FRAME)



SECTION '6-6'

NOTES

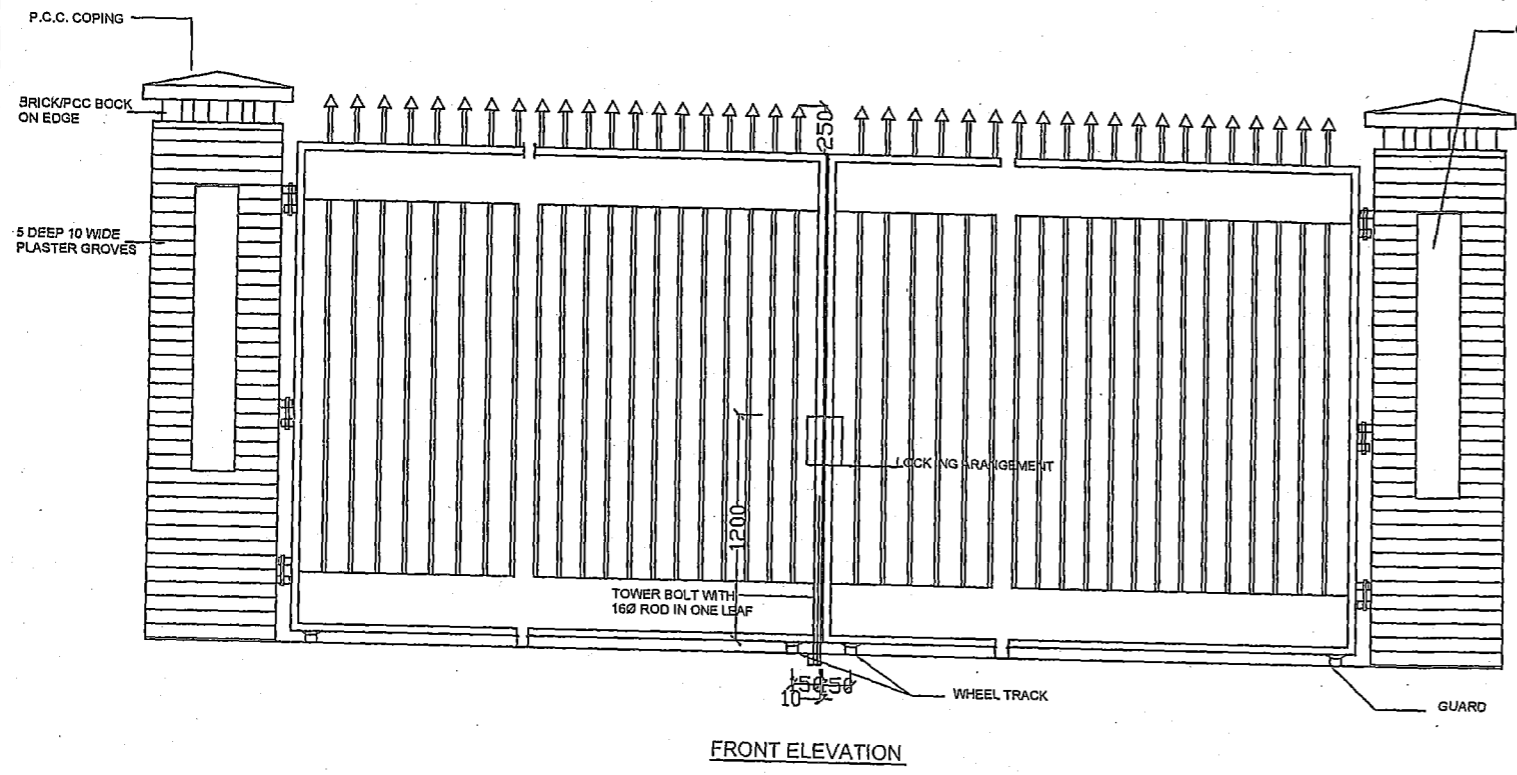
1. CONTRACTOR TO CHECK AND VERIFY ALL DIMENSIONS BEFORE EXECUTION OF THE WORK.
2. ALL DIMENSIONS ARE GIVEN IN MILLIMETRES.
3. FIGURED DIMENSIONS SHALL BE FOLDED.
4. ALL GASKET SHALL BE OF PVC / RUBBER.
5. MINIMUM AVERAGE THICKNESS OF ANODISING (COATING ANODISING) ON ALUMINIUM SECTIONS CONFIRM TO IS-1868-1985.
6. ALL LEG / HOLD FAST SHALL BE EMBEDDED IN (2 50XTHICKNES OF WALL) PCC BLOCK.
7. FIXING OF FRAMES SHUTTERS SHALL BE AS PER MANUFACTURES INSTRUCTIONS.
8. PVC PROTECTED SHEETING SHALL BE USED WHILE FIXING THE FRAME OF WINDOWS AND VENTILATORS TO AVOID DAMAGES / SCRATCHES ETC.
9. ALL GLASS PANEL SHALL BE 6 MM THICK FLOAT GLASS CONFIRMING TO IS- UNLESS OTHERWISE SPECIFIED.
10. TESTING OF ANODISING COATING SHALL BE INACCORDANCE WITH IS-5523-1983.
11. ALL ALUMINIUM WINDOW & VENTS SHALL BE PROVIDED WITH STANDARD ALUMINIUM HANDLE, STOPPER AND OTHER HARDWARE ITEMS. AS PER MANUFACTURER'S INSTRUCTION.
12. ALL ALUMINIUM SECTIONS SHOWN IN THIS DRAWING ARE OF HINDALCO MAKE. EQLT SECTIONS OF JINDAL/INDAL MAKE MAY BE PROVIDED.
13. **[ALV]** STANDS FOR ALUMINIUM WINDOW AND **[FALV]** STANDS FOR FIXED ALUMINIUM WINDOW. **[ALV]** STANDS FOR ALUMINIUM VENTILATOR

SCHEDULE OF ALU DOORS		SCHEDULE OF ALU DOORS	
AD-1	= 1000x2100	ADF-2	= 2000x2500
ADF-1	= 1000x2500	ADF-2.4	= 2400x2500
ADF-1.5	= 1500x2500	ADF-2.7	= 2700x2500
ADF-1.8	= 1800x2500	ADF-3.0	= 3000x2500

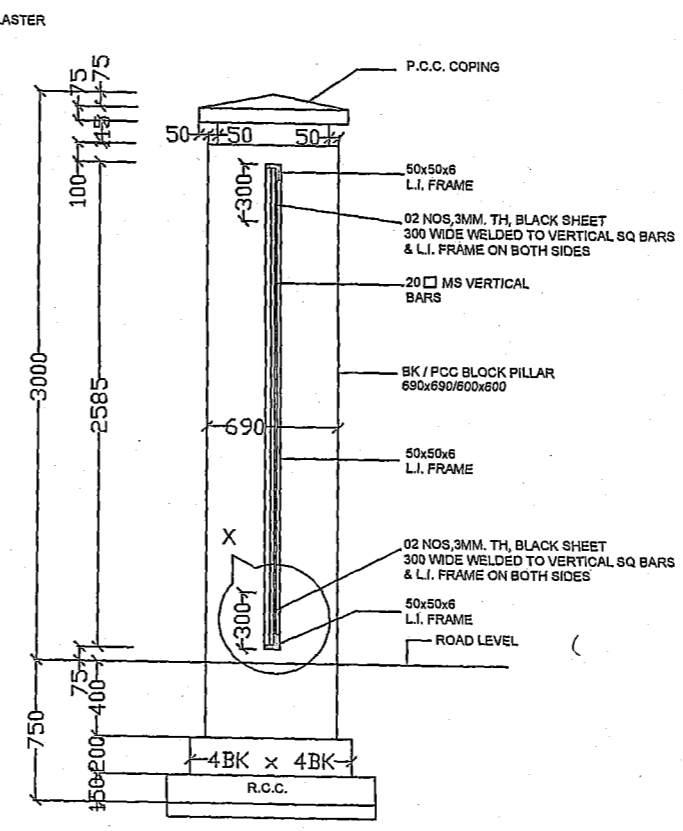
TYPICAL DETAILS OF ALUMINIUM WINDOWS & VENTILATORS

DATE	04/10/2013	CHIEF ENGINEER	SHEET NO
DRAWN	C S ASERI		
TCD		JODHPUR ZONE	2/2
CKD			
SCALE	1:150	REF DRG NO : CEJZ-/TD/ 12	

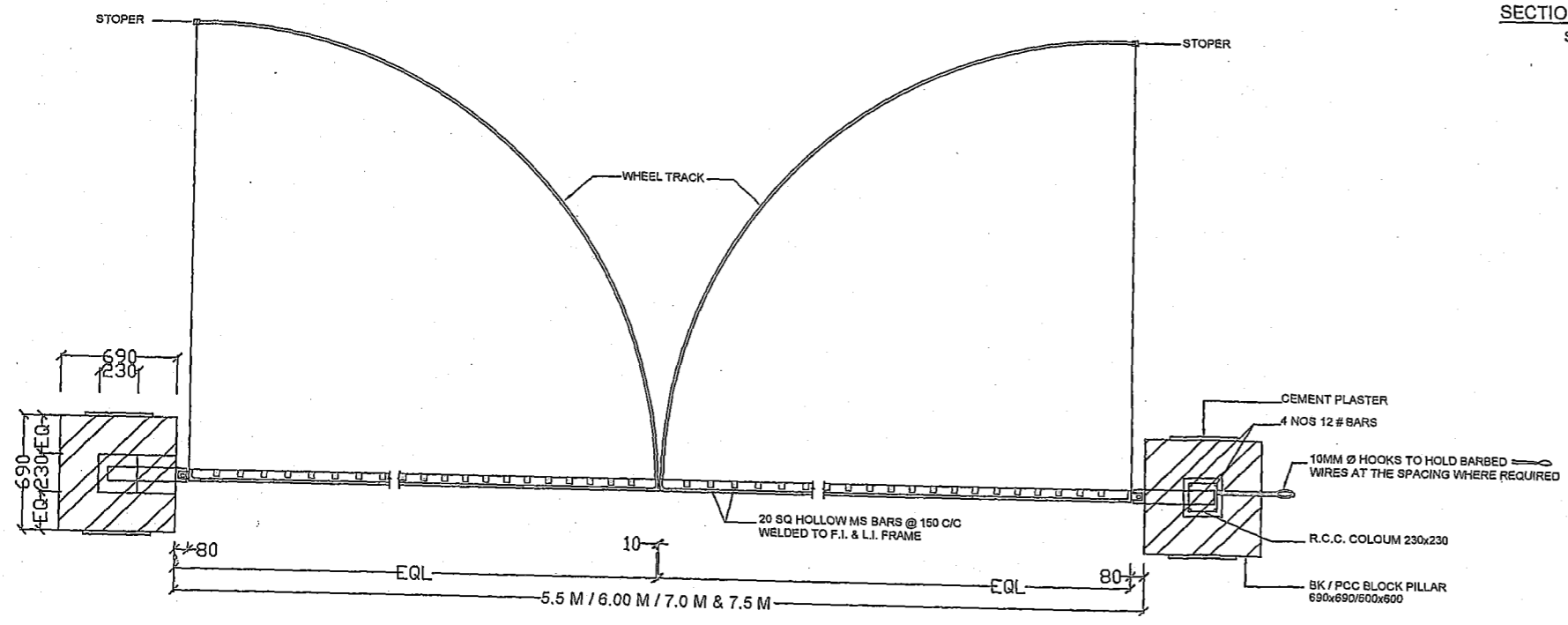
(Signature)
(R C SWAIN)
LT COL
SR ARCH
FOR CHIEF ENGINEER



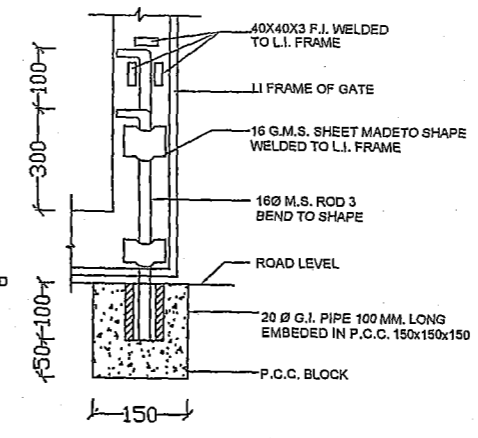
FRONT ELEVATION



SECTION OF STEEL GATE
SCALE 1:20



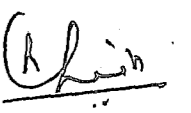
PLAN
SCALE 1:20

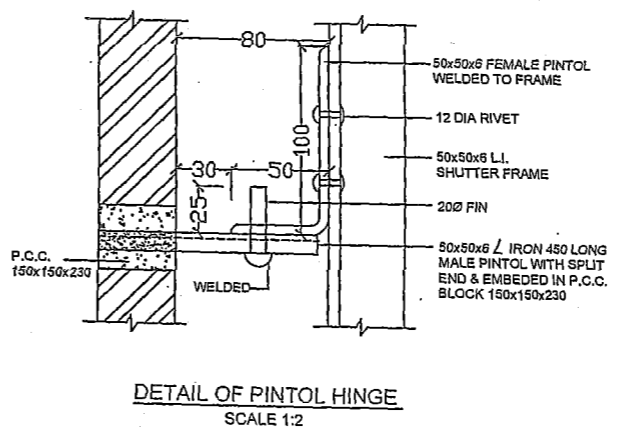
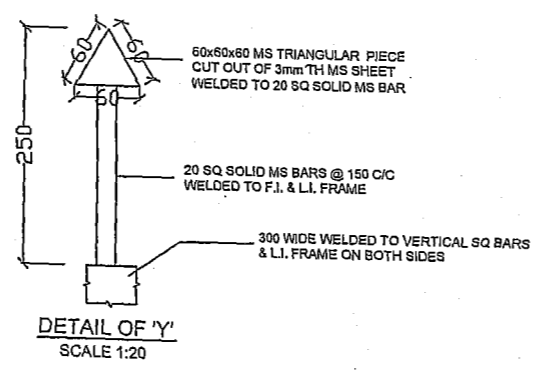
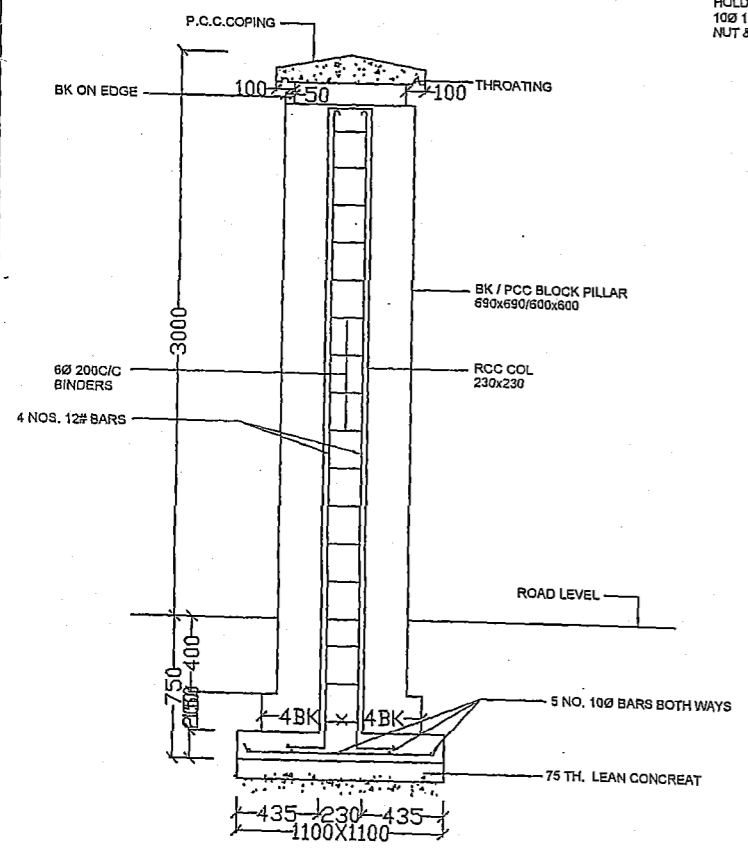
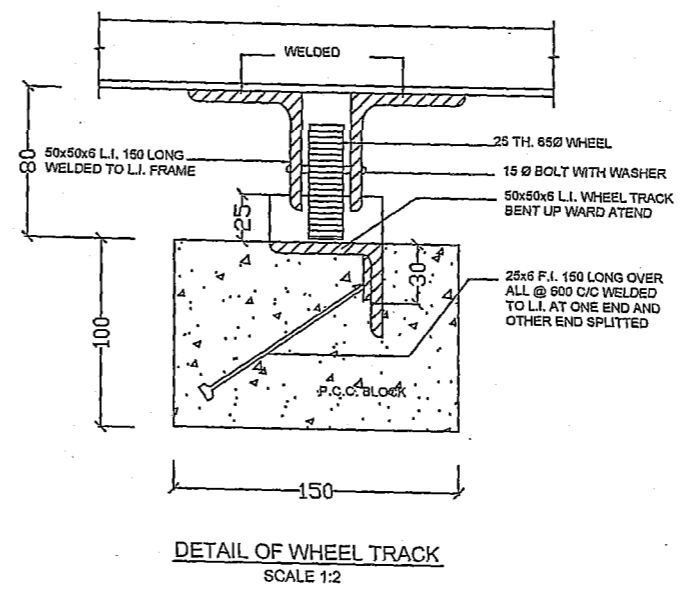
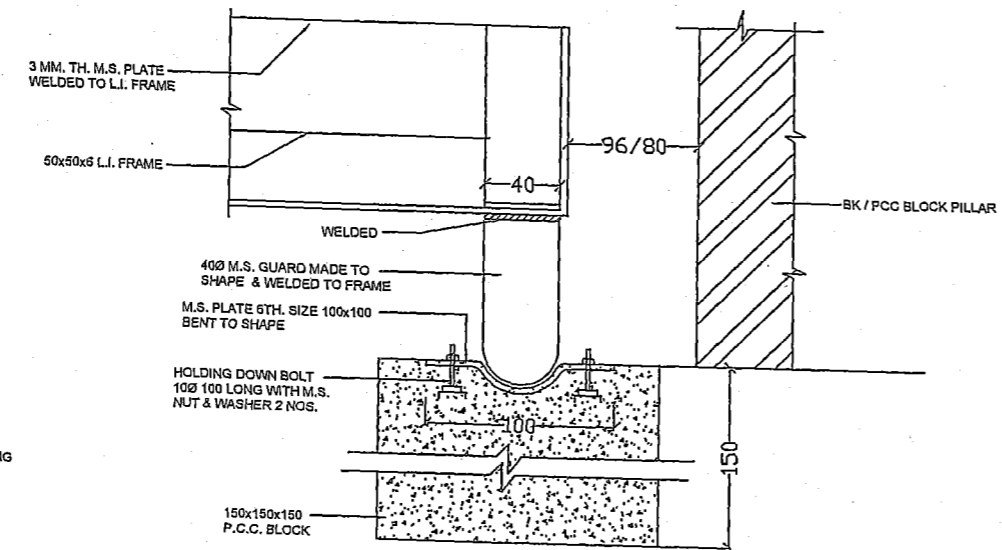
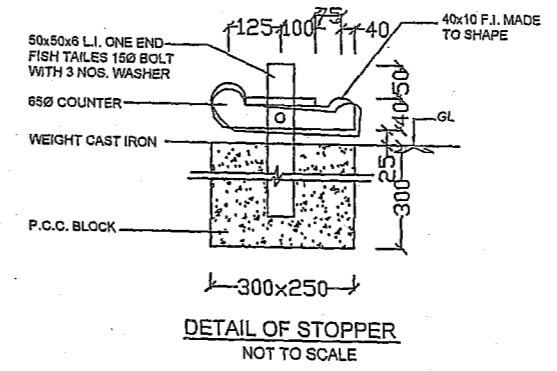
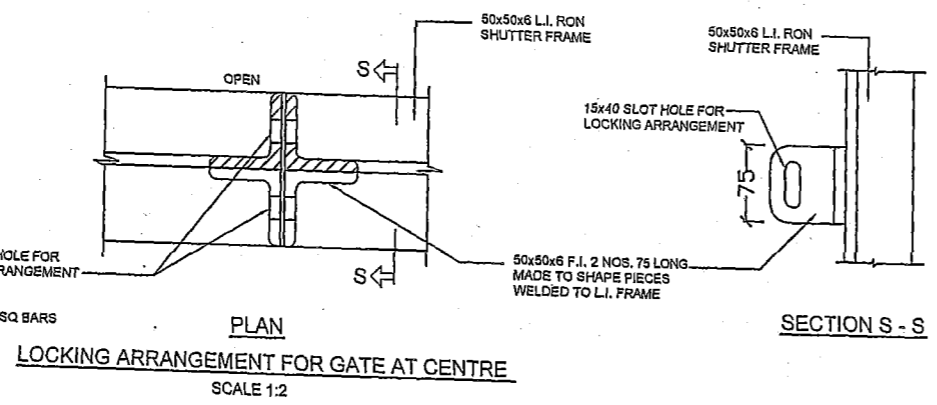
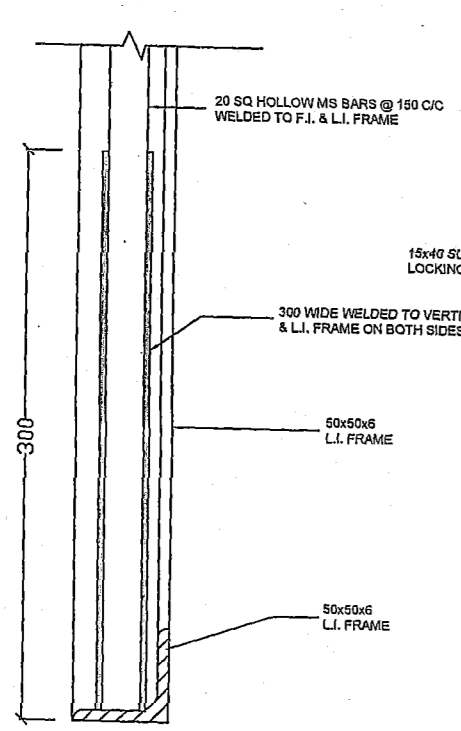


DETAIL OF TOWER BOLT FOR STEEL GATE
NOT TO SCALE

- NOTES :-
1. CONTRACTOR TO CHECK & VERIFY ALL DIMENSIONS BEFORE EXECUTION OF THE WORK.
 2. FIGURED DIMENSIONS SHALL BE FOLLOWED.
 3. ALL DIMENSIONS GIVEN ARE IN MM.
 4. ALL EXPOSED STEEL MEMBERS OF GATE SHALL BE PAINTED TWO COATS ENAMEL PAINT OVER ONE COAT OF PRIMER.
 5. PLASTER SURFACE IN BK / PCC BLOCKPILLAR SHALL BE COLOUR WASHED AS APPROVED.
 6. PLASTER GROOVES SURFACE IN PILLAR SHALL BE COLOUR WASHED MARON COLOUR.
 7. ALL WELDS SHALL BE 6 MM. SIZE.
 8. MADE TO SHAPE HOOKS SHALL BE EMBEDDED IN BK / PCC BLOCK PILLAR FOR HOLDING THE FENCING WIRES AS REQUIRED AT SITE.

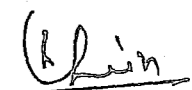
S.NO	DATE	DESCRIPTION	SIGN
REVISION			
STEEL GATE 5.5,6.0,7.0,7.5M WIDE			
DATE	04-10-13	CHIEF ENGINEER JODHPUR ZONE JODHPUR	SHT NO: 1 2
DRN	C S ASERI		
TCD			
CKD			
SCALE	AS SHOWN	REF DRG. NO. CEJZ / TD / 13	

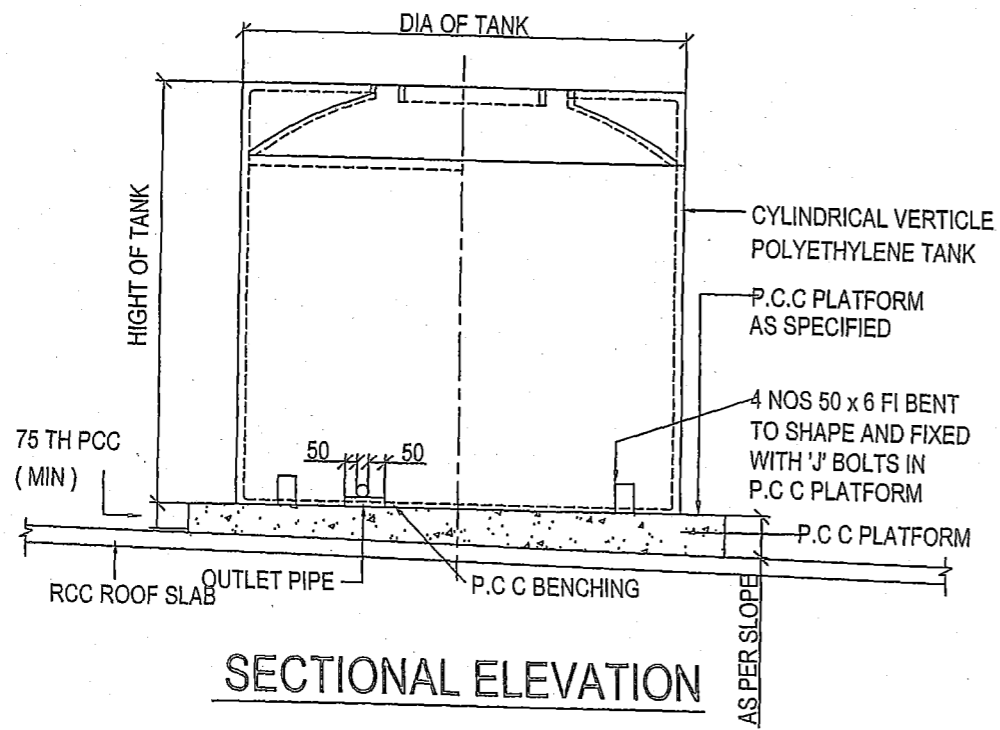

 (R C SWAIN)
 LT COL
 SR ARCH
 FOR CHIEF ENGINEER



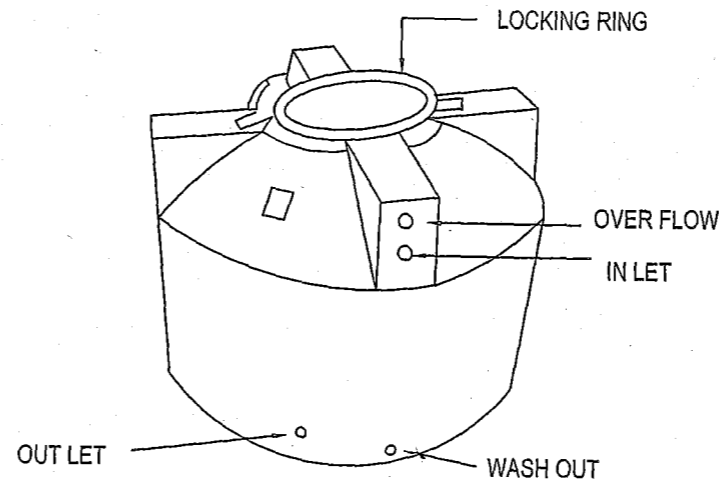
- NOTES :-
1. CONTRACTOR TO CHECK & VERIFY ALL DIMENSIONS BEFORE EXECUTION OF THE WORK.
 2. FIGURED DIMENSIONS SHALL BE FOLLOWED.
 3. ALL DIMENSIONS GIVEN ARE IN MM.
 4. ALL EXPOSED STEEL MEMBERS OF GATE SHALL BE PAINTED TWO COATS ENAMELL PAINT OVER ONE COAT OF PRIMER.
 5. PLASTER SURFACE IN BK / PCC BLOCK PILLAR SHALL BE COLOUR WASHED AS APPROVED.
 6. PLASTER GROOVES SURFACE IN PILLAR SHALL BE COLOUR WASHED MARON COLOUR.
 7. ALL WELDS SHALL BE 6 MM. SIZE.
 8. MADE TO SHAPE HOOKS SHALL BE EMBEDDED IN BK / PCC BLOCK PILLAR FOR HOLDING THE FENCING WIRES AS REQUIRED AT SITE.

S.NO	DATE	DESCRIPTION	SIGN
REVISION			
STEEL GATE 5.5,6.0,7.0,7.5M WIDE			
DATE	04-10-13	CHIEF ENGINEER JODHPUR ZONE JODHPUR	SHT NO.
DRN	C S ASERI		2
TCD			2
CKD			
SCALE	AS SHOWN	REF DRG. NO. CEJZ / TD / 13	

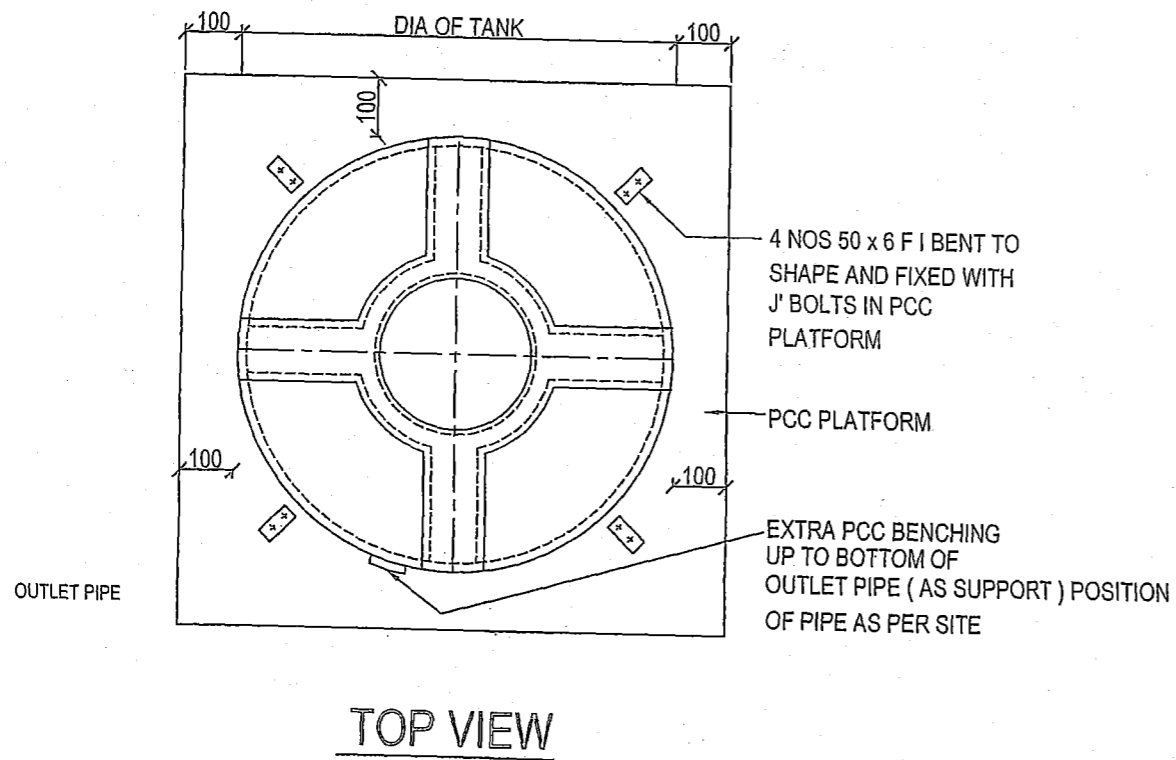

 (R C SWAIN)
 LT COL
 SR ARCH
 FOR CHIEF ENGINEER



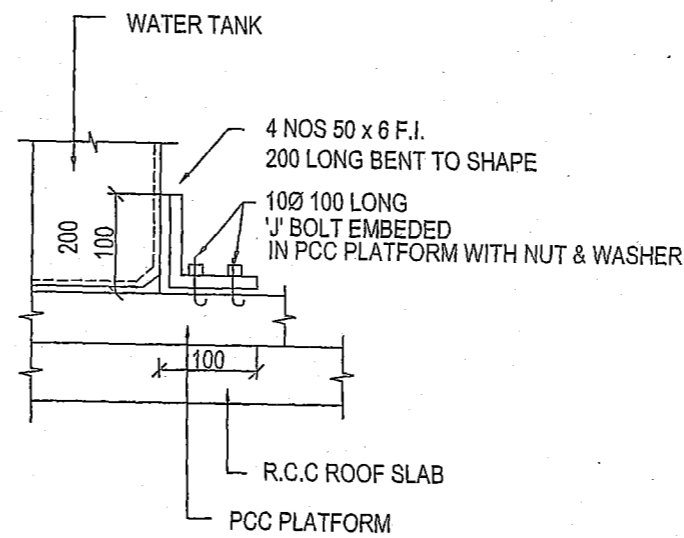
SECTIONAL ELEVATION



ISOMETRIC VIEW



TOP VIEW



DETAIL AT X-X

NOTES

- 1) CONTRACTOR TO CHECK & VERIFY ALL DIMENSIONS BEFORE EXECUTION OF THE WORK.
- 2) FIGURED DIMENSIONS SHALL BE FOLLOWED.
- 3) ALL DIMENSIONS ARE IN MILLIMETRES
- 4) TANKS ARE TO BE ONE PIECE MOULDED AND MANUFACTURED OUT OF LOW DENSITY POLYETHYLENE.
- 5) TANKS ARE TO BE CYLINDRICAL SHAPE AND VERTICAL TYPE WITH CLOSED TOP.
- 6) TANKS ARE TO BE INSTALLED ON A SURFACE WHICH GIVES FULL BEARING TO THE BOTTOM OF TANK
- 7) TANK SHALL BE PROVIDED WITH CHECK NUT ADAPTER SYSTEM OF GI FOR IN LETS & OUTLETS OF SUITABLE SIZES
- 8) SUITABLE LOCKING RING ARRANGEMENT IS TO BE PROVIDED TO THE TOP COVER

S.NO	DATE	DESCRIPTION	SIGN
		REVISION	

TYPICAL DETAILS OF FIXING HDPE WATER STORAGE TANKS OVER RCC ROOF SLAB

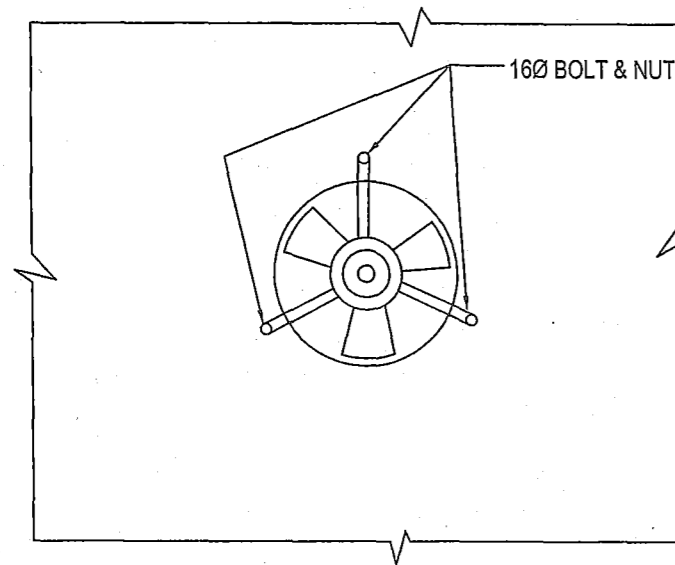
DATE	04-10-13	CHIEF ENGINEER JODHPUR ZONE JODHPUR	SHT NO:
DRN	C S ASERI		1
TCD			1
CKD			
SCALE	AS SHOWN	REF DRG. NO. CEJZ/TD/14	

(Signature)

(R C SWAIN)
LT COL
SR ARCH
FOR CHIEF ENGINEER

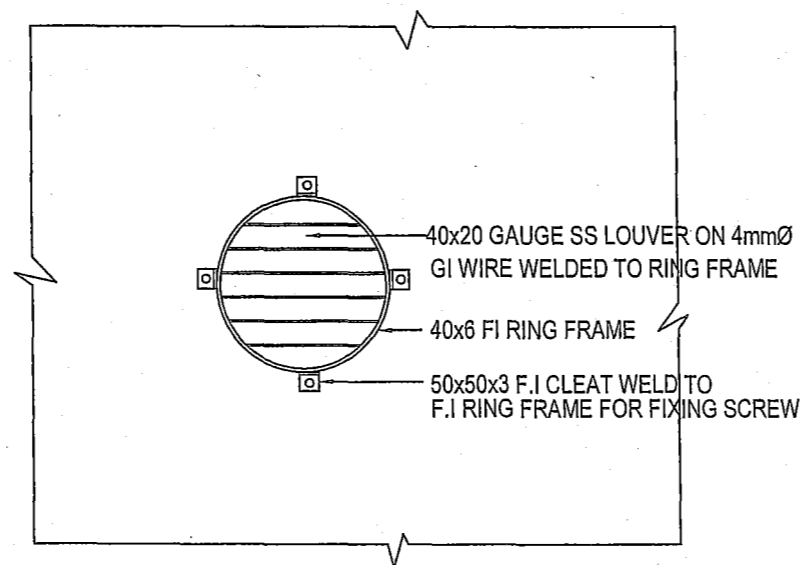
NOTES

- 1) CONTRACTOR TO CHECK AND VERIFY ALL DIMENSIONS BEFORE EXECUTION OF THE WORK
- 2) FIGURED DIMENSIONS SHALL BE FOLLOWED
- 3) ALL DIMENSIONS ARE IN MM



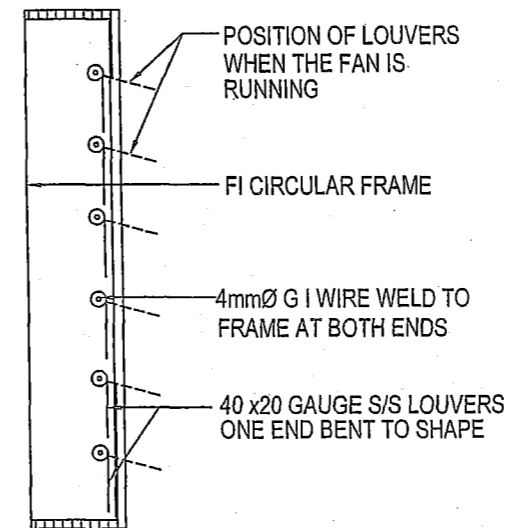
IN SIDE ELEVATION

NOT TO SCALE



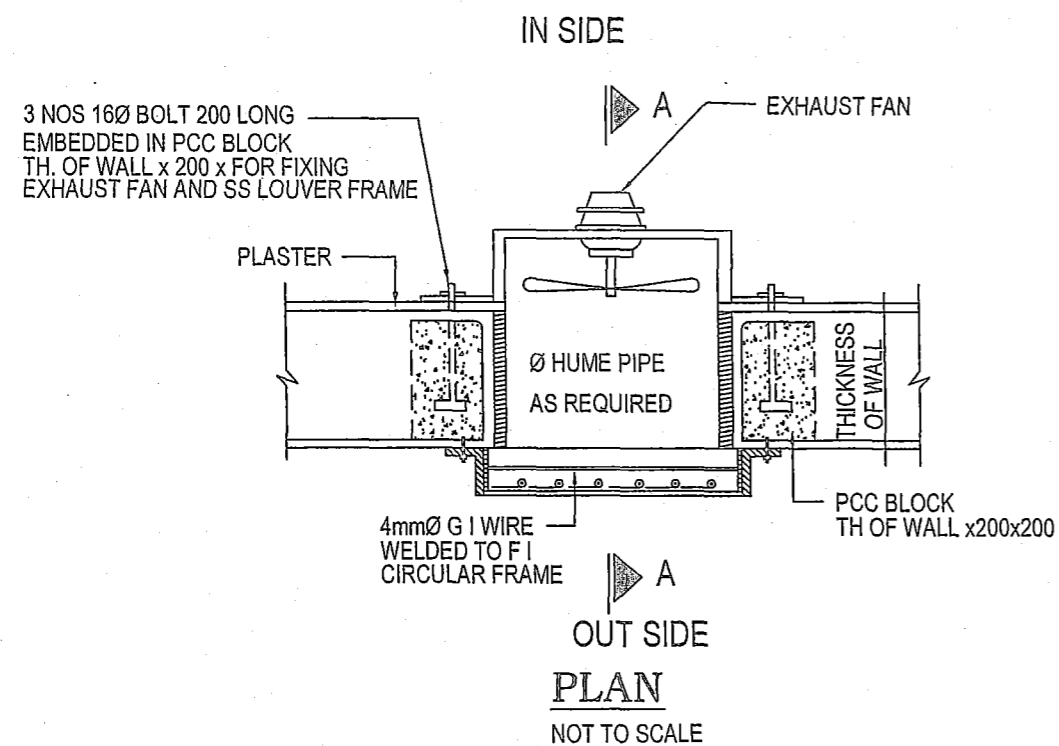
OUT SIDE ELEVATION

NOT TO SCALE

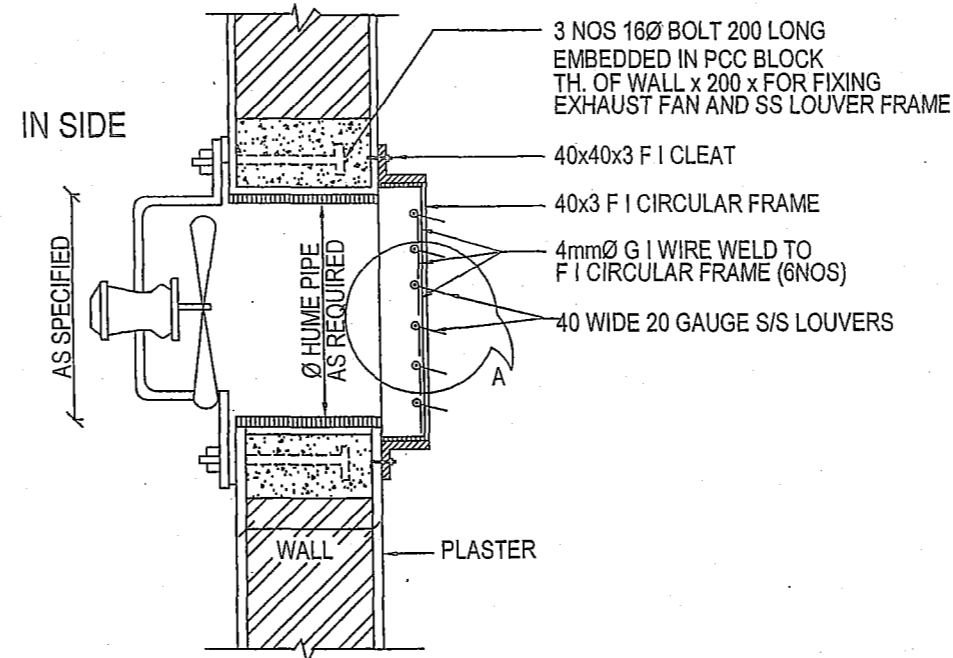


DETAIL AT 'A'

NOT TO SCALE

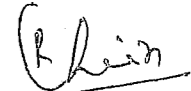


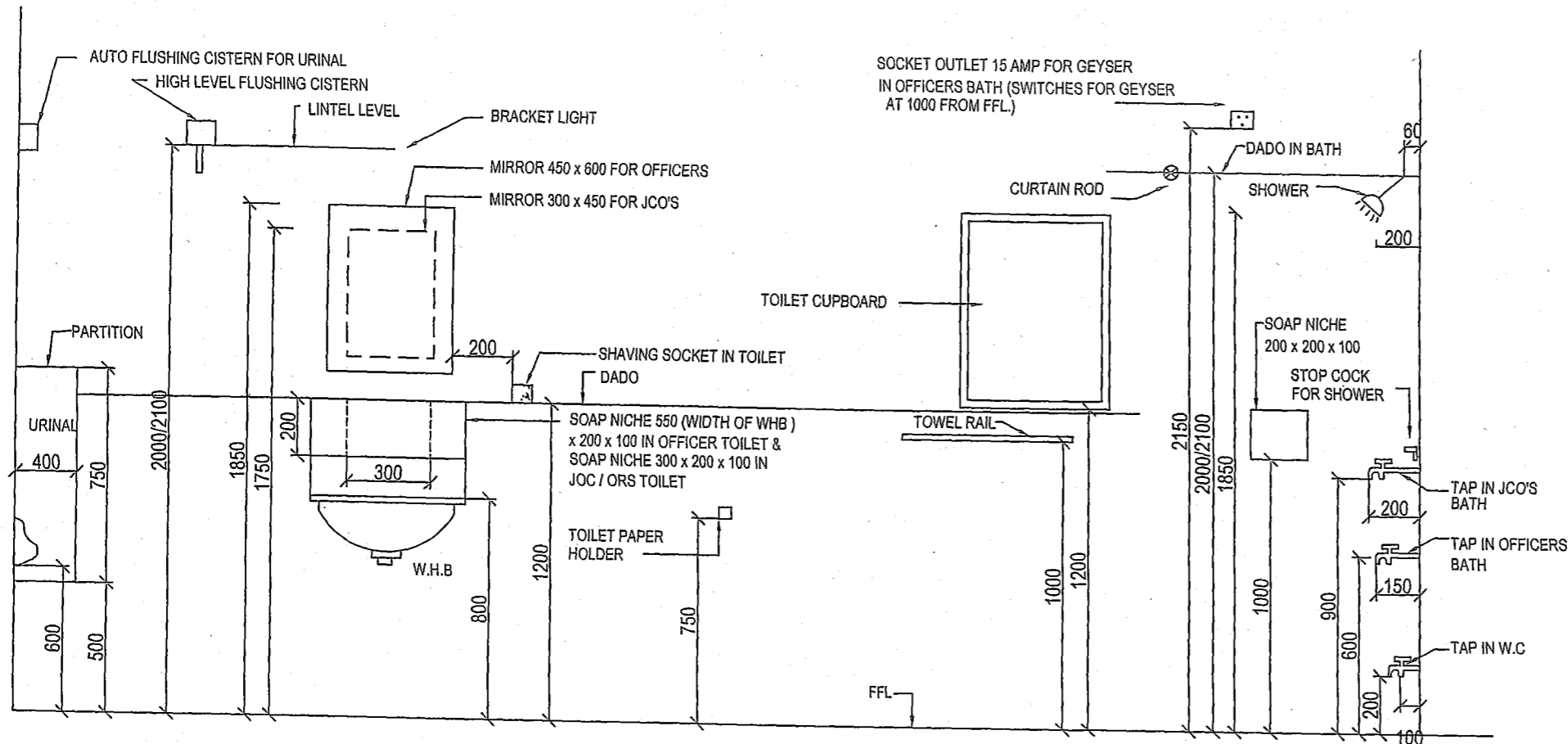
OUT SIDE PLAN
NOT TO SCALE



SECTION AT 'A-A'
NOT TO SCALE

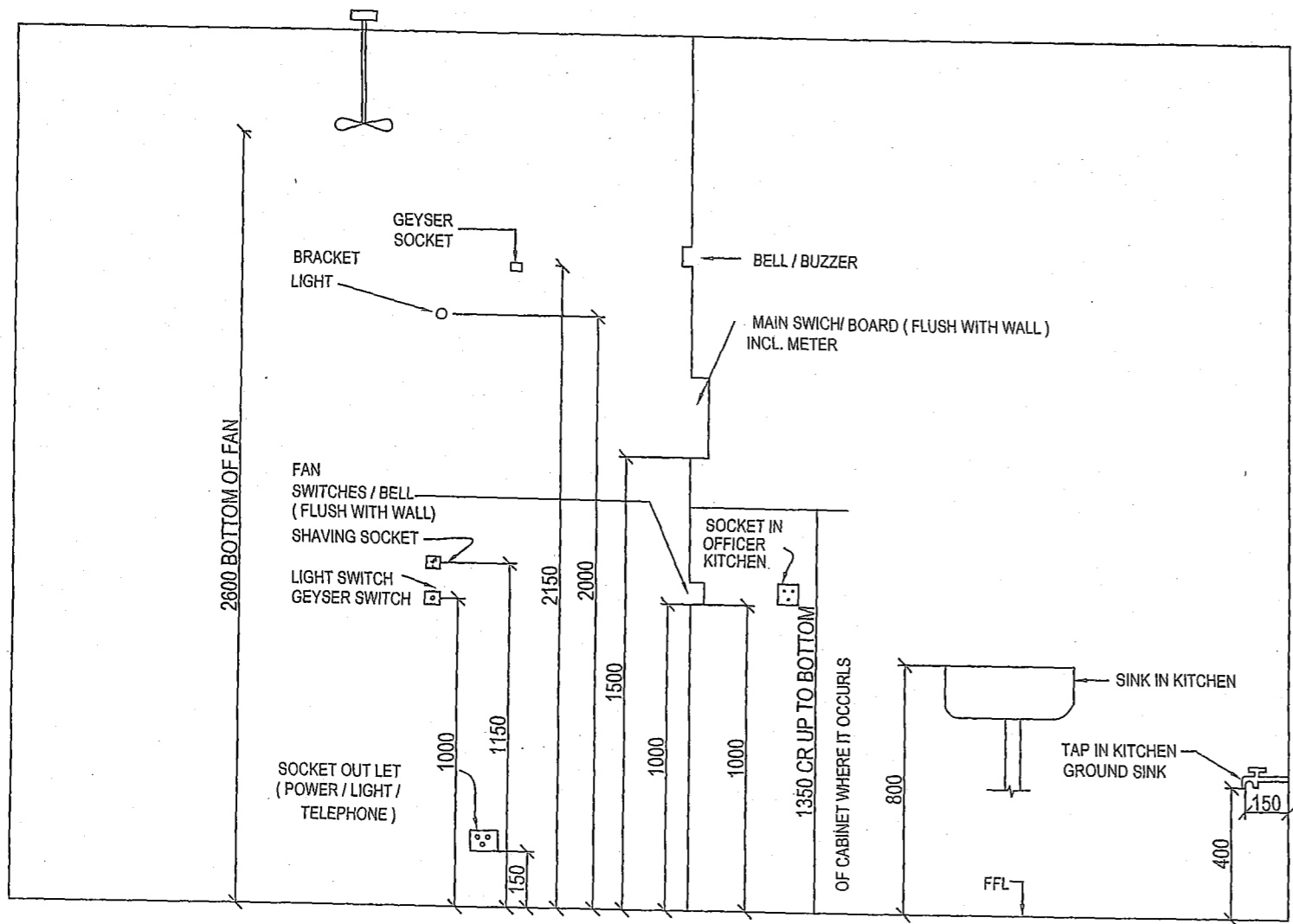
S.NO	DATE	DESCRIPTION	SIGN
REVISION			
DETAILS OF FIXING OF EXHAUST FAN PLAN, ELEVATION, AND SECTION			
DATE	04-10-13	CHIEF ENGINEER JODHPUR ZONE JODHPUR	SHT NO:
DRN	C S ASERI		1
TCD			1
CKD			
SCALE	AS SHOWN	REF DRG. NO. CEJZ/TD/ 15	


 (R.C SWAIN)
 LT COL
 SR ARCH
 FOR CHIEF ENGINEER



NOTES

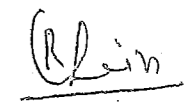
- 1 CONTRACTOR TO CHECK & VERIFY ALL DIMENSIONS BEFORE EXECUTION OF THE WORK.
- 2 FIGURED DIMENSIONS SHALL BE FOLLOWED.
- 3 ALL DIMENSIONS ARE GIVEN IN MILLIMETRES.
- 4 PEG SET SHALL BE FIXED AT 1700 FROM FFL
- 5 THIS DRAWINGS IS BASED ON E - IN - C'S TECH INSTRUCTIONS NO. 13 OF 1969, 23 OF 1969 AND SHALL BE READ IN CONJUNCTION WITH THESE INSTRUCTIONS.
- 6 FLOOR OF BATH/ WC/ TOILET SHALL BE SUNKEN AS PER DETAIL DRAWING
- 7 CENTRELINE OF WATER CLOSET SHALL BE MINIMUM 450 FROM THE SIDE WALL, IN CASE OF INDIPENDANT WC IT SHALL BE AT CENTRE.
- 8 TOILET CUPBOARD DETAILS SHALL BE AS PER DETAIL DRAWING.
- 9 POSITION OF ELECTRICAL POINTS SHALL BE AS PER E/M PLANS.
- 10 INTERNAL FINISHES OF SOAP NICHE SHALL BE AS SAME AS DADO FINISH.
- 11 MINIMUM CLEARANCE FOR WHB FROM SIDE WALL SHALL BE 200mm.

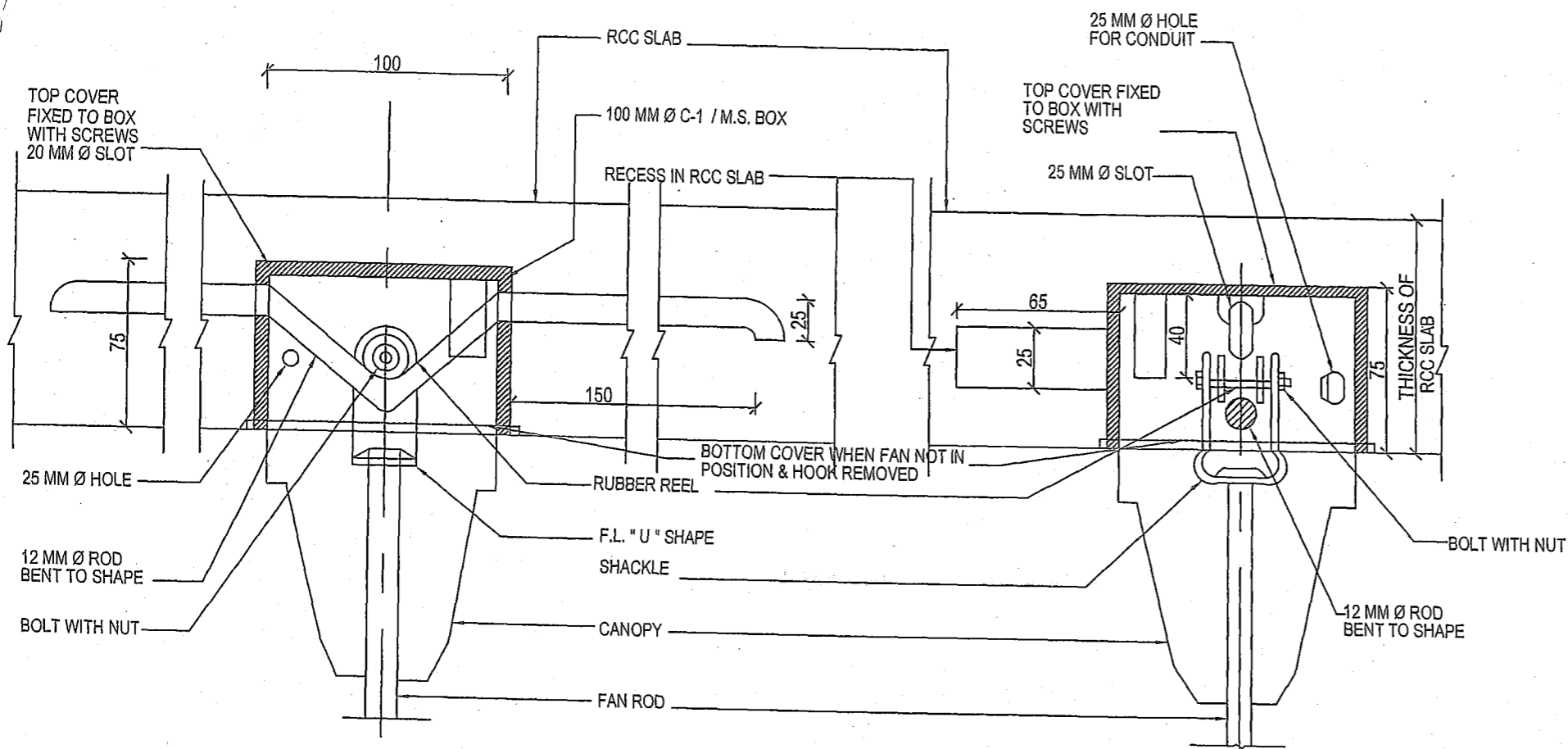


S.NO	DATE	DESCRIPTION	SIGN
		REVISION	

ARCHITECTURAL NORMS

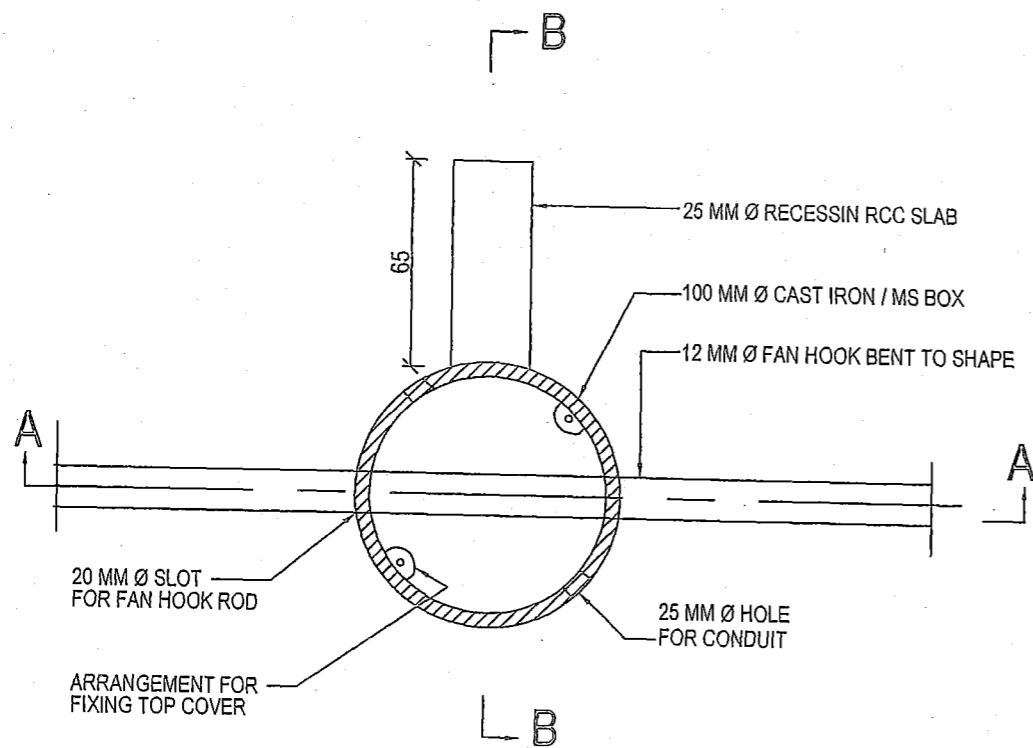
DATE	04-10-13	CHIEF ENGINEER JODHPUR ZONE JODHPUR	SHT NO:
DRN	C S ASERI		1
TCD			1
CKD			
SCALE	AS SHOWN	REF DRG. NO. CEJZ/TD/16	


 (R C SWAIN)
 LT COL
 SR ARCH
 FOR CHIEF ENGINEER

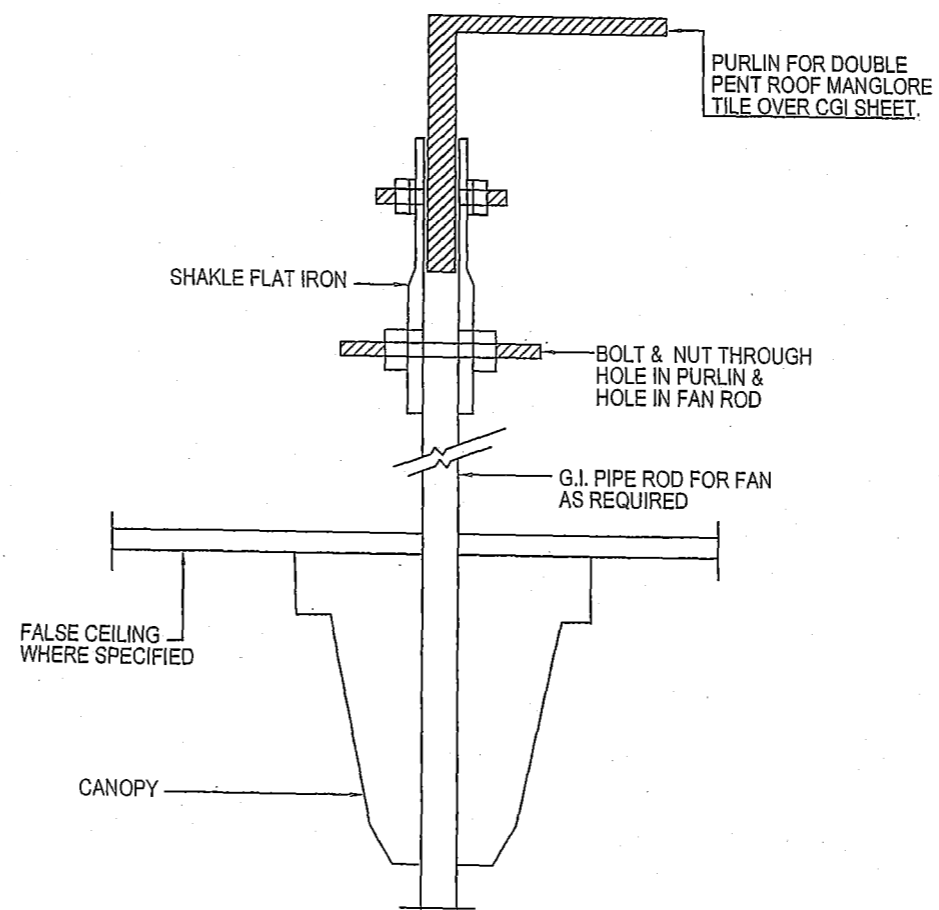


SECTION ON A-A
FIXING DETAILS OF FAN HOOK TO RCC SLAB

SECTION ON B-B



PLAN OF CAST IRON / MS BOX



FIXING DETAILS OF FAN HOOK TO PURLIN

NOTES

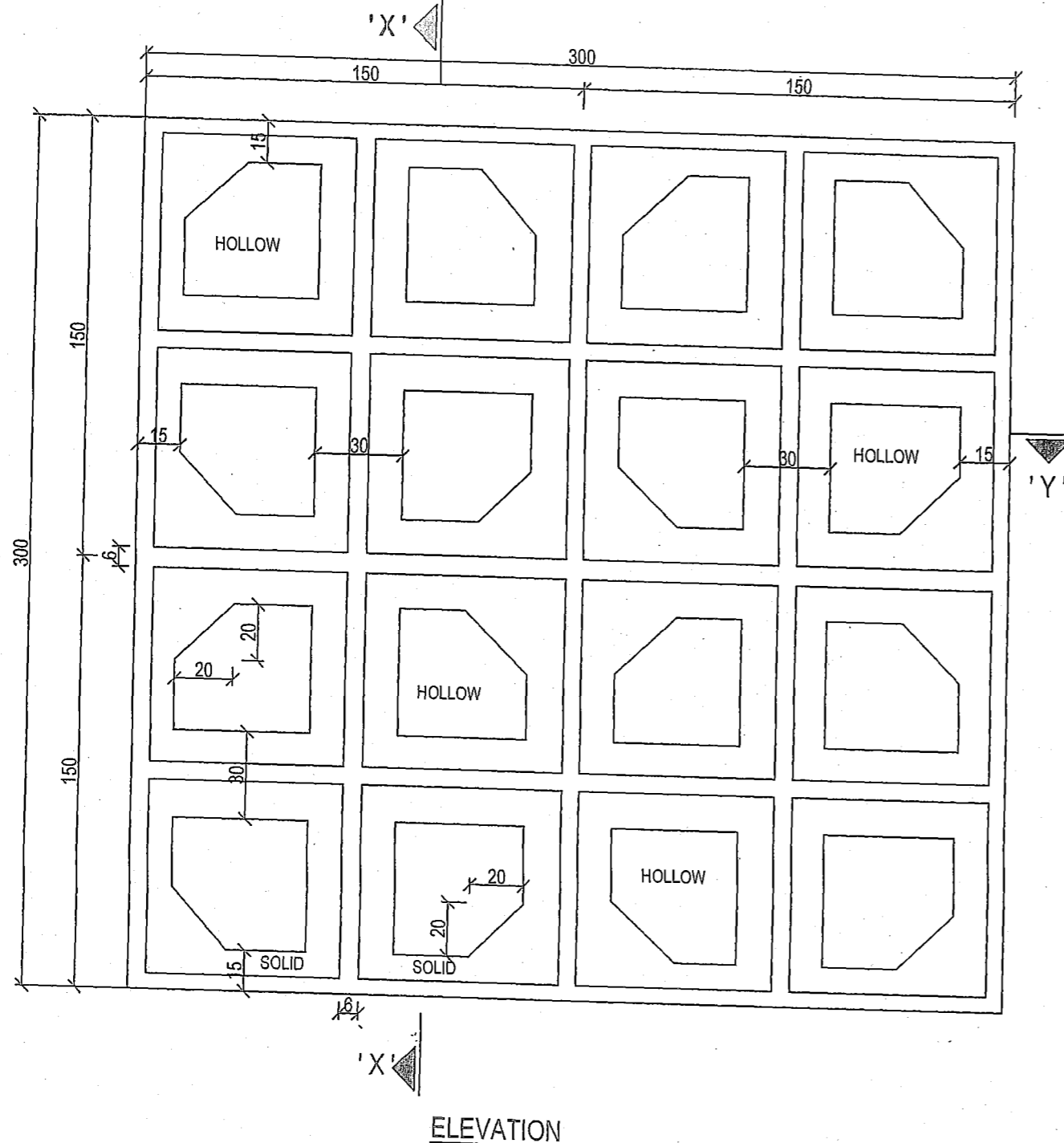
1. CONTRACTOR TO CHECK & VERIFY ALL DIMENSIONS BEFORE EXECUTION OF THE WORK.
2. FIGURED DIMENSIONS SHALL BE FOLLOWED.
3. ALL DIMENSIONS ARE GIVEN IN MILLIMETRES UNLESS OTHERWISE STATED.
4. BOLT FOR SUSPENDING THE FAN WILL BE PLACED IN THE RECESS IN RCC SLAB AS SHOWN IN THIS DRG BEFORE PLACING SHACKLE AND RUBBER REEL IN POSITION.
5. AFTER THIS REEL AND SHACKLE HAVE BEEN KEPT IN POSITION THE BOLT WILL BE SLIDED IN TO HOLE OF THE REEL AND NUT TIGHTENED.

S.NO	DATE	DESCRIPTION	SIGN
		REVISION	

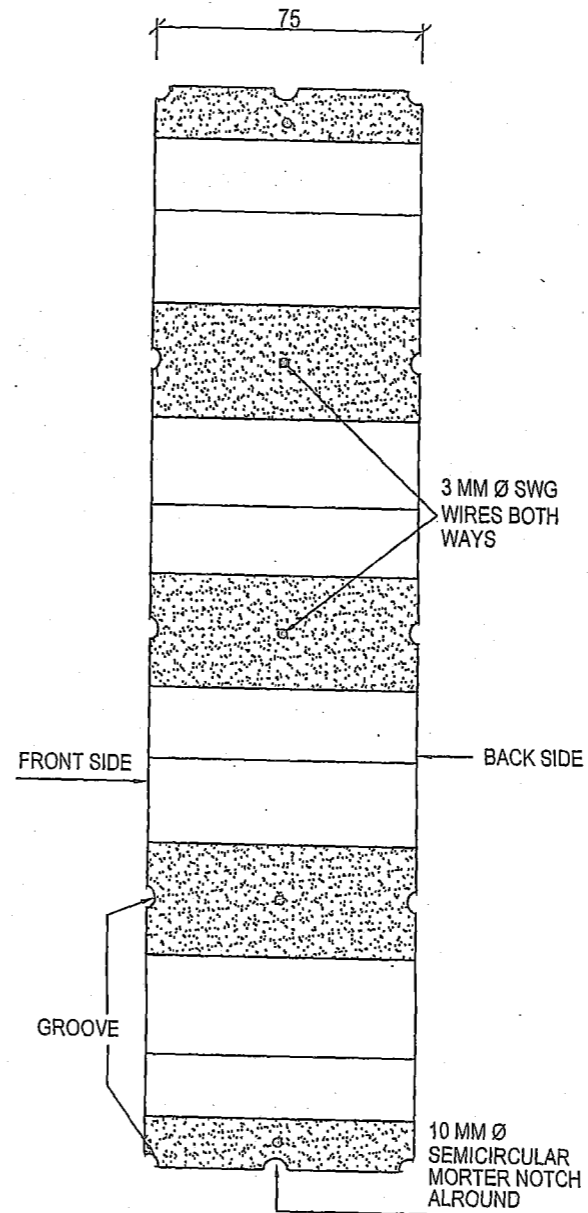
DETAILS OF FAN - HOOK

DATE	04-10-13	CHIEF ENGINEER JODHPUR ZONE JODHPUR	SHT NO:
DRN	C S ASERI		1
TCD			1
CKD			
SCALE	AS SHOWN	REF DRG. NO. CEJZ/TD/ 17	

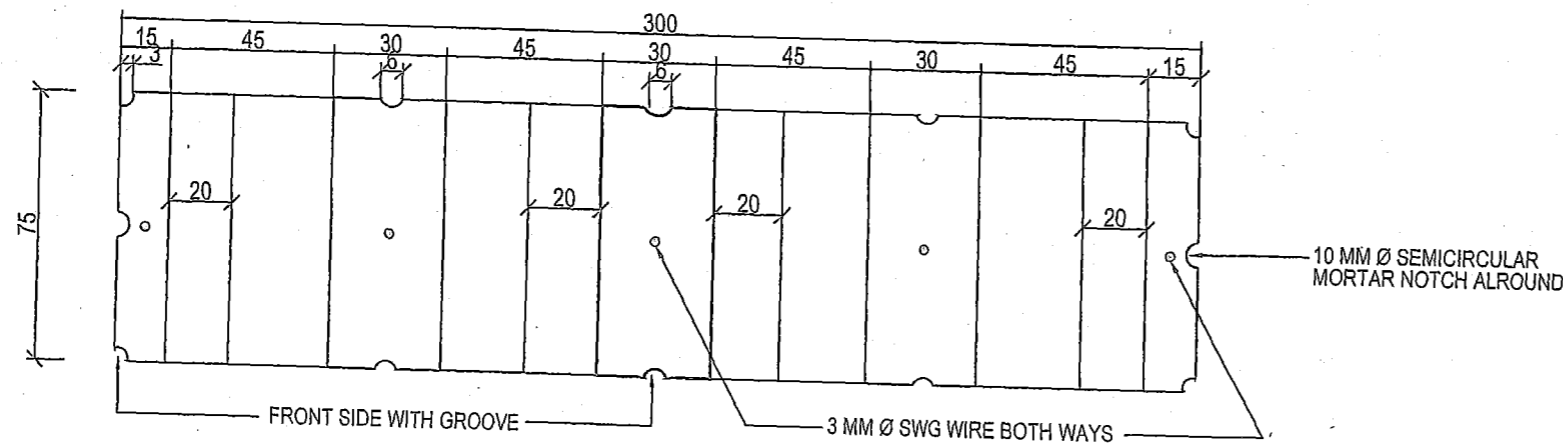
R Swain
(R C SWAIN)
LT COL
SR ARCH
FOR CHIEF ENGINEER



ELEVATION



SECTION 'X-X'

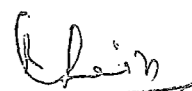


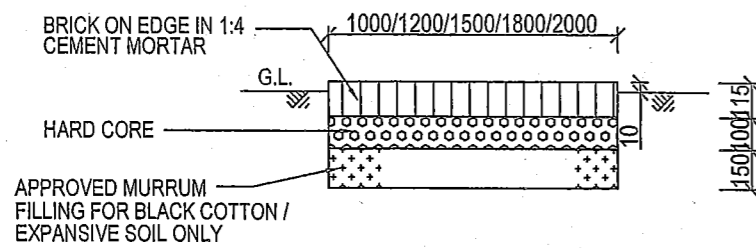
PLAN AT 'Y-Y'
SCALE :- 1:2

NOTES

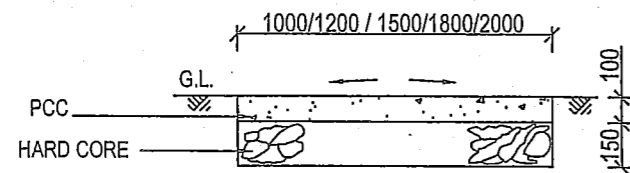
1. CONTRACTOR TO CHECK & VERIFY ALL DIMENSIONS BEFORE EXECUTION OF THE WORK.
2. ALL DIMENSIONS ARE GIVEN IN MM UNLESS OTHERWISE STATED.
3. FIGURED DIMENSIONS SHALL BE FOLLOWED.

S.NO	DATE	DESCRIPTION	SIGN
		REVISION	
TYPICAL DETAIL OF PRECAST R C C JALLI			
DATE	04-10-13	CHIEF ENGINEER JODHPUR ZONE JODHPUR	SHT NO:
DRN	C S ASERI		1
TCD			1
CKD			
SCALE	AS SHOWN	REF DRG. NO. CEJZ/TD/ 18	

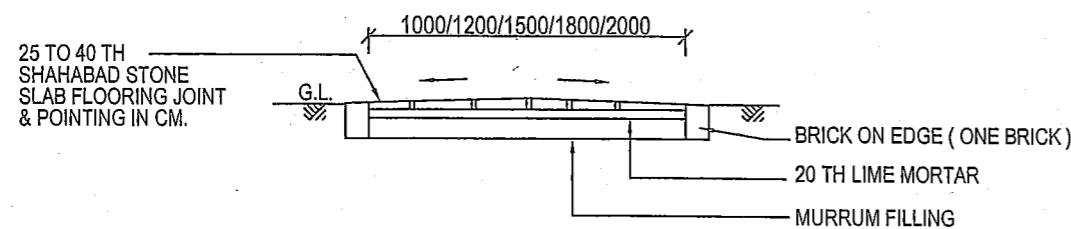

 (R C SWAIN)
 LT COL
 SR ARCH
 FOR CHIEF ENGINEER



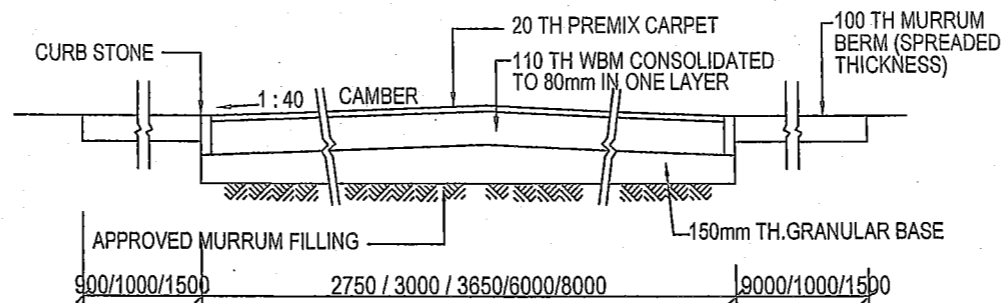
BRICK FOOT PATH



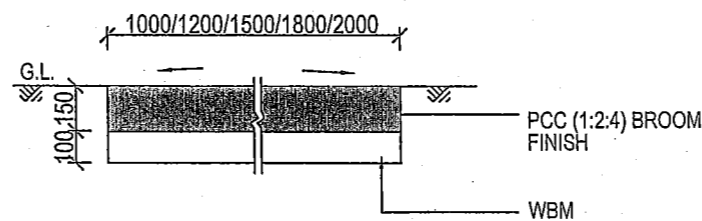
PCC FOOT PATH



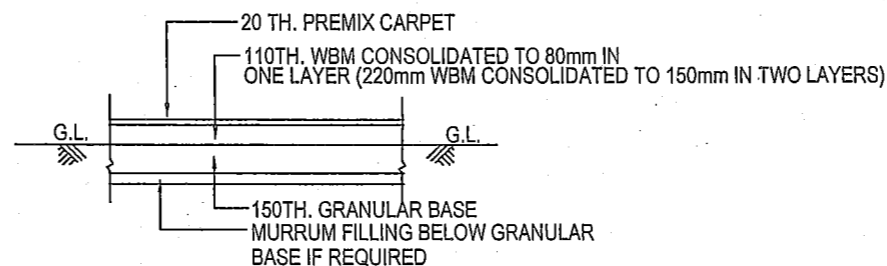
**SHAHABAD / KOTA STONE FOOT PATH
CROSS SECTION OF FOOT PATHS**



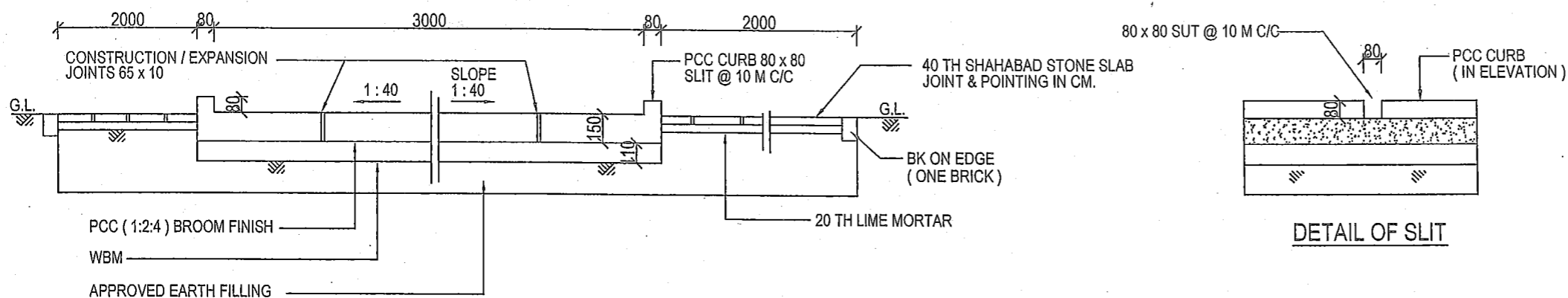
TYPICAL CROSS SECTION OF ROAD



PCC FOOT PATH (BROOM FINISH)



TYPICAL SECTION THROUGH PRE MIX HARDSTANDING

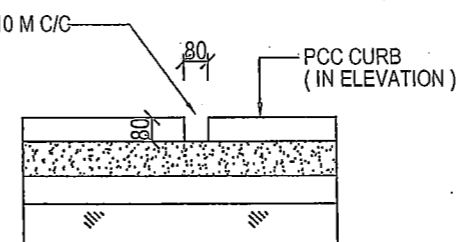


SECTION THROUGH PCC CLEAN WAY

SCALE :- 1:25

NOTE :-
CONSTRUCTION EXPANSION JOINTS 65 x 10
FILLED WITH SEALING COMPOUND GDE-A
JOINTS PROVIDED IN CLEANWAY @ 2000 c/c BOTH WAY.

THIS DRG IS BASED ON DRG NO.
CEPZ/86/TD/5 SHT NO. 1/1 DT. 4/3/86.



DETAIL OF SLIT

NOTES

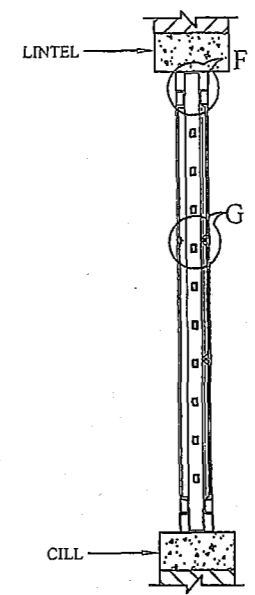
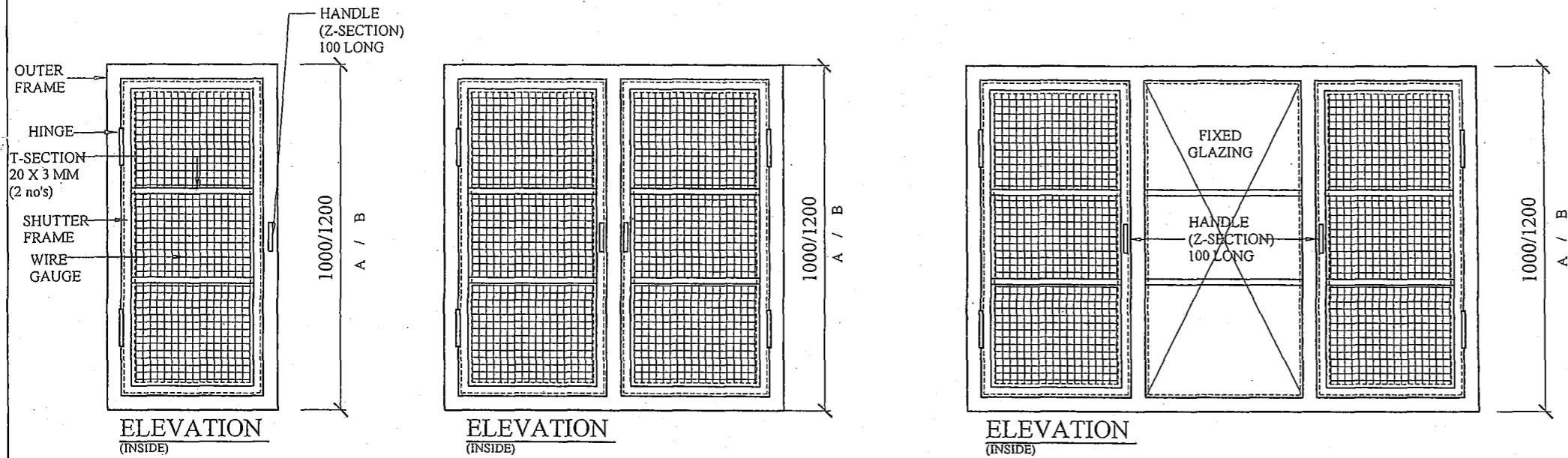
1. CONTRACTOR TO CHECK & VERIFY ALL DIMENSIONS BEFORE EXECUTION OF THE WORK.
2. FIGURED DIMENSIONS SHALL BE FOLLOWED.
3. ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE STATED.
4. WHEREVER BLACK COTTON SOIL IS MET WITH BELOW FOOT PATH / ROAD FOLLOWING SPECIFICATION IS TO BE DONE.
5. a) ROAD :- REMOVE BLACK COTTON SOIL BELOW THE ROAD STRUCTURE TO A DEPTH OF 600 MM OR UP TO THE HARD STRATA WHICHEVER IS LESS & REPLACED WITH MURUM DULY CONSOLIDATED.
- b) FOOT PATH :- REMOVE BLACK COTTON SOIL BELOW THE FOOT PATH TO A DEPTH OF 300 MM OR HARD STRATA WHICHEVER IS LESS AND REPLACE WITH MURUM DULY CONSOLIDATED.
6. FOR 8000 WIDE ROAD WBM 220mm TH. CONSOLIDATED TO 110mm IN TWO LAYERS TO BE PROVIDED.

S.NO	DATE	DESCRIPTION	SIGN
		REVISION	

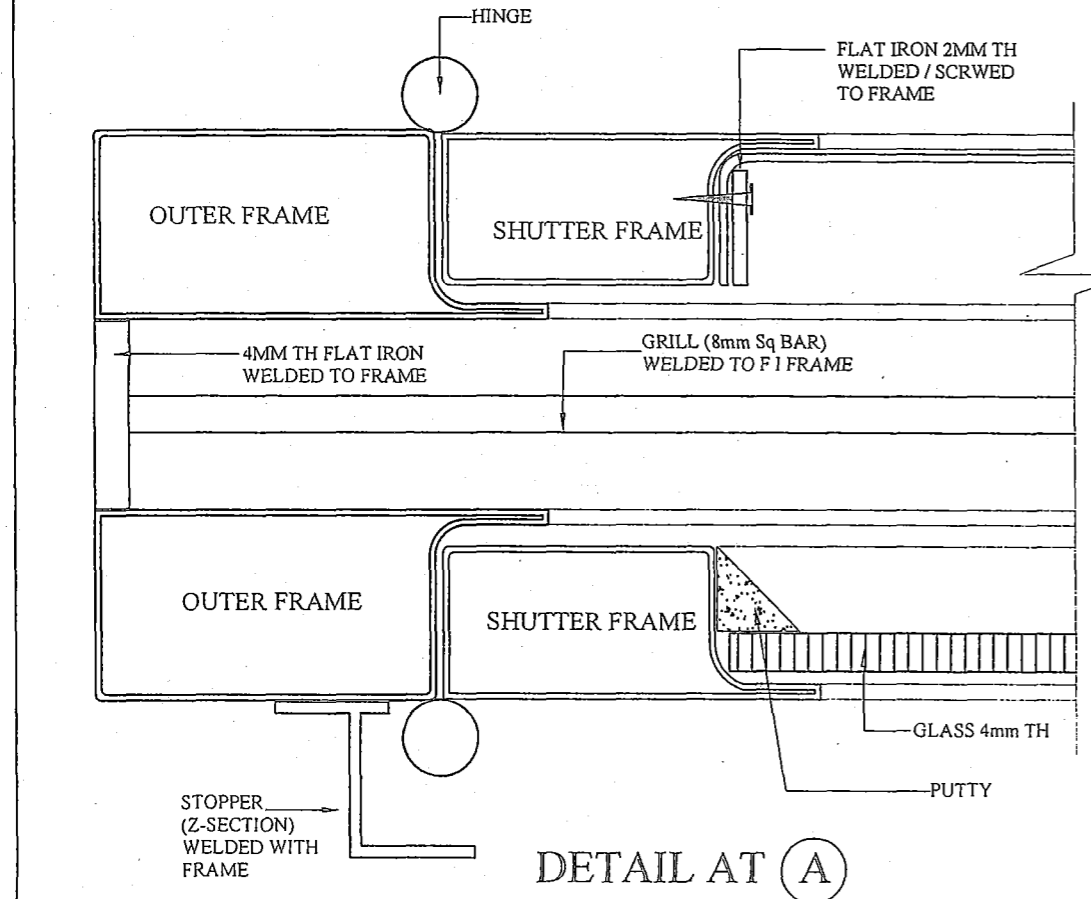
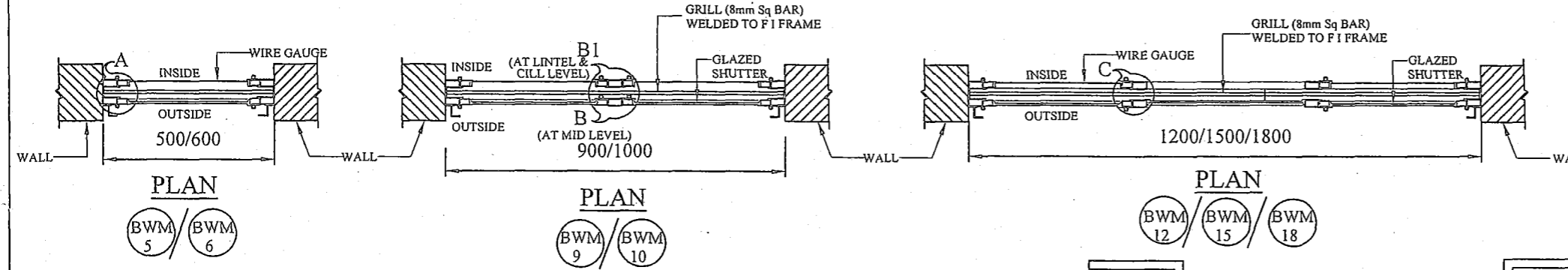
TYPICAL DETAILS OF FOOT PATHS & PCC CLEAN WAY.

DATE	04-10-13	CHIEF ENGINEER JODHPUR ZONE JODHPUR	SHT NO:
DRN	C S ASERI		1
TCD			1
CKD			
SCALE	AS SHOWN	REF DRG. NO. CEJZ/TD/ 19	

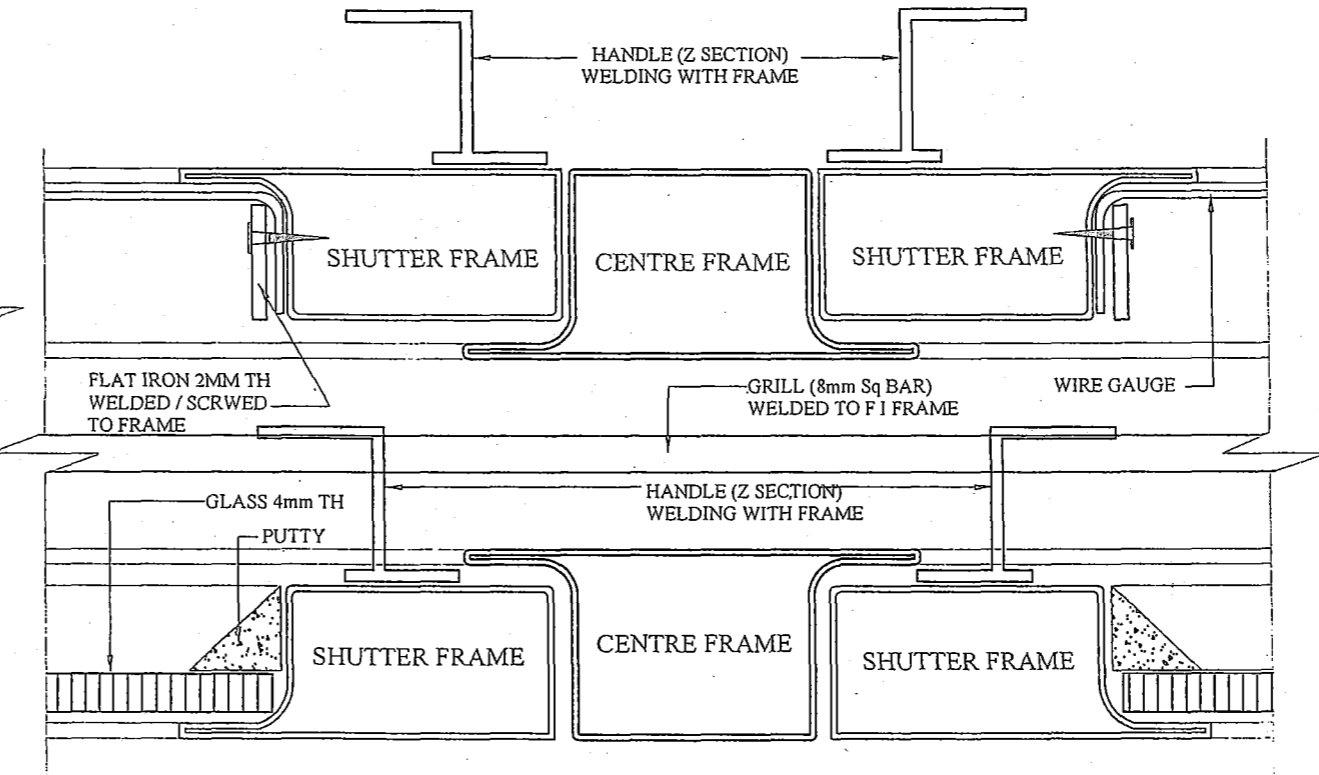
(Signature)
(R C SWAIN)
LT COL
SR ARCH
FOR CHIEF ENGINEER



SECTION



DETAIL AT (A)

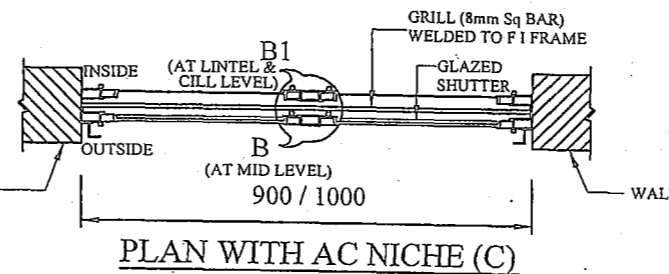
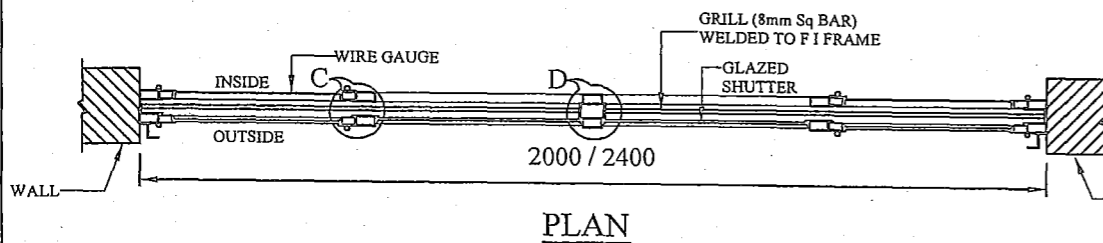
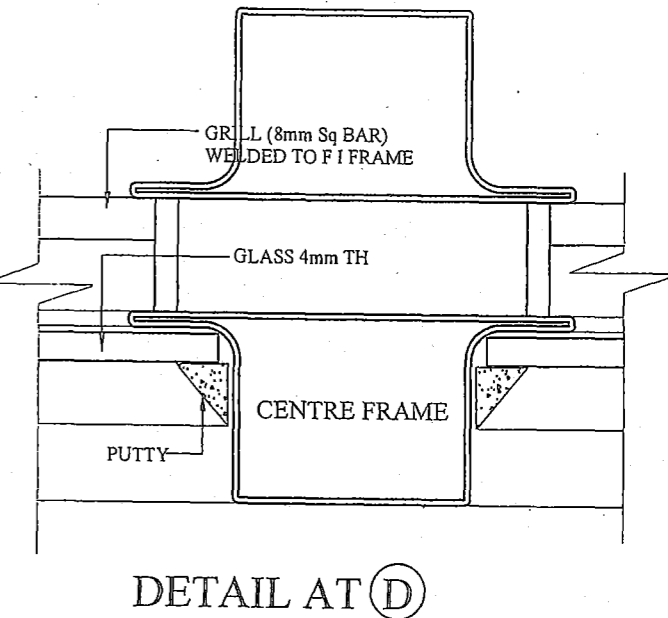
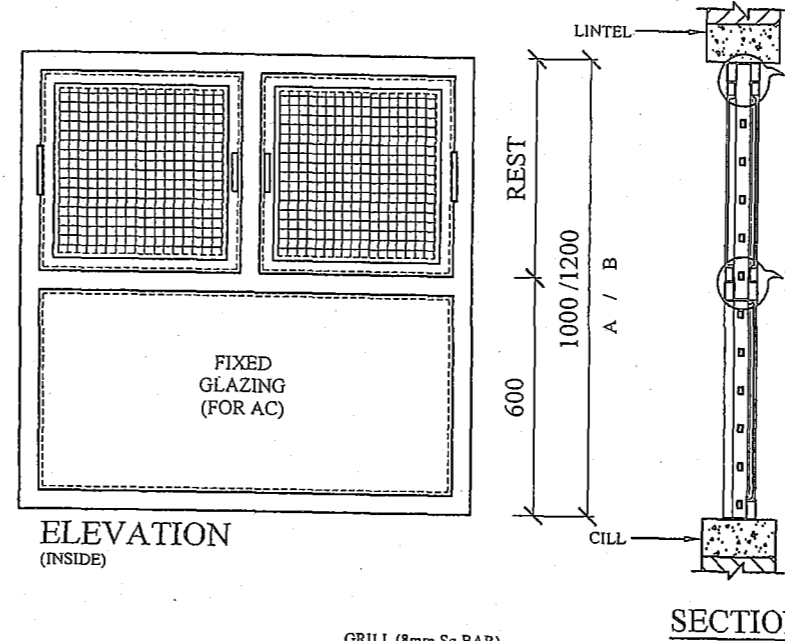
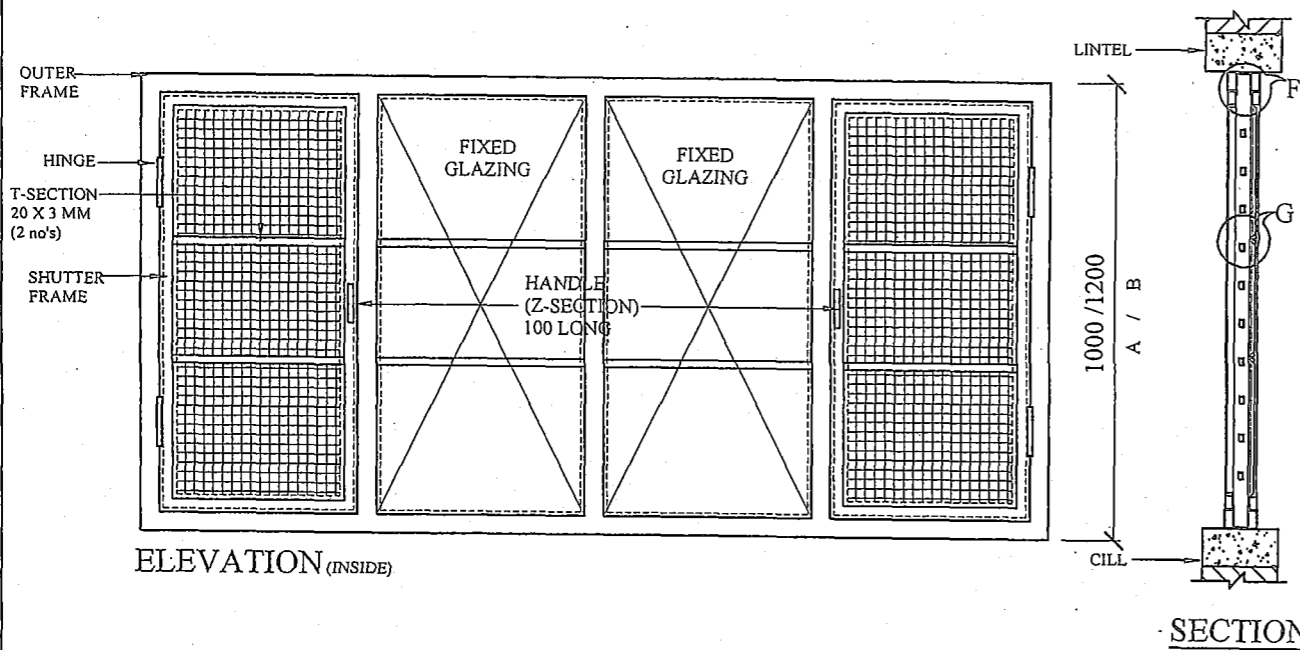


DETAIL AT (B)
(AT MID LEVEL)

- NOTES**
- CONTRACTOR TO CHECK & VERIFY ALL THE DIMENSIONS BEFORE EXECUTION OF THE WORK.
 - FIGURED DIMENSIONS SHALL BE FOLLOWED.
 - ALL DIMENSIONS GIVEN IN THIS DRG. ARE IN MILLIMETRES UNLESS OTHERWISE SHOWN.
 - SIZE OF WINDOW MENTIONED HERE IN IS CLEAR SIZE OF MASONARY OPENING A TOLERANCE OF 10 mm ON EITHER SIDE SHALL BE ALLOWED WHEN THE WINDOWS ARE FITTED IN TO BUILT IN OPENING.
 - WIRE GAUGE SHUTTERS IN FLY PROOF WINDOW SHALL BE MADE OPENABLE INSIDE UNLESS OTHERWISE MENTIONED.
 - 4mm TH PLAIN SHEET GLASS PANES SHALL BE PROVIDED TO ALL WINDOWS UNLESS OTHERWISE SPECIFIED.
 - 'M' STANDS FOR MOSQUITO PROOF WIRE GAUGE WINDOW (HAVING GLAZED AND WIRE GAUGE SHUTTER), A / B STAND FOR HEIGHT AS 1000 / 1200 mm RESPECTIVELY.
 - ALL WINDOWS OF TOILETS, BATH & W.C SHALL HAVE FROSTED / PIN HEADED GLASS.
 - IN CASE OF R.C.C. COLUR.C.C WALL THE WINDOWS FRAME SHALL BE FIXED WITH DASH THRU BOLTS OF STANDARD QUALITY AND SIZE AT 300MM C/C.
 - ONE HANDLE & 2 NOS TOWER BOLTS 150 mm LONG SHALL BE PROVIDED TO EACH SHUTTER.
 - HINGES WILL BE PROVIDED AT 115 mm ABOVE THE WINDOW CILL LEVEL AND 115 mm BELOW FROM SOFFIT OF LINTEL.
 - THE HOLDFAST/LUGS FOR WINDOWS AND VENTILATORS SHALL BE EMBEDDED IN PCC 1:3:6 OF SIZE 150X 150X TH OF WALL.
 - ALL FRAMES USED ARE BOX STEEL SECTIONS.
 - FOR WIDTH & HEIGHT OF A PARTICULAR WINDOW VENTS THE NOTATION SHALL BE NOMNCLATURE OF WINDOW FOLLOWED WITH NOMNCLATURE OF HT. FOR EXAMPLE FOR A WINDOW SIZE 900x1200 THE NOTATION SHALL BE $\frac{BWM}{9B}$.
 - PIN HOLE @ 300 C/C TO BE PROVIDED FOR SUPPORTING GLASS WITH G.I CLIPS/WIRE IN CASE OF GLAZED SHUTTERS.
 - 2 NOS OF PINTOL HINGES 75mm LONG 12 mm dia WITH ONE PART OF THE HINGE SPOT WELDED WITH FRAME & OTHER WITH SHUTTER FOR EACH OPENABLE SHUTTER.
 - 4 NOS FLAT IRON HOLD FAST SHALL BE WELDED WITH EACH WINDOW.
 - BWM STANDS FOR BOX WINDOW (STEEL) WITH MOSQUITO PROOF SHUTTER
 - MS GRILL (8mm Sq BAR) WELDED TO F.I FRAME @ 100 C/C.
 - ALL EXPOSED STEEL SURFACES SHALL BE TREATED WITH TWO COAT OF ENAMEL PAINTS OF APPROVED COLOUR OVER ONE COAT OF METEL PRIMER.
 - ALL WELDING AND FINISHING WORKS OF STEEL MEMBERS SHALL BE AS PER STANDRAD WORKMENSHP PRATICE / MANUFACTURER'S INSTRUCTION.
 - WIRE GUAGE SHUTTER SHALL BE PROVIDED WITH STAINLESS STEEL 32 GAUGE FLY MESH OF 304 GRADE WITH 144 HOLES PER SQ. INCH.
 - ALL FRAMES OF BOX TYPE MILD STEEL WINDOW SHALL BE MADE WITH ERW SECTION HAVING WALL THICKNESS 1.25mm (i.e 18 GAUGE).

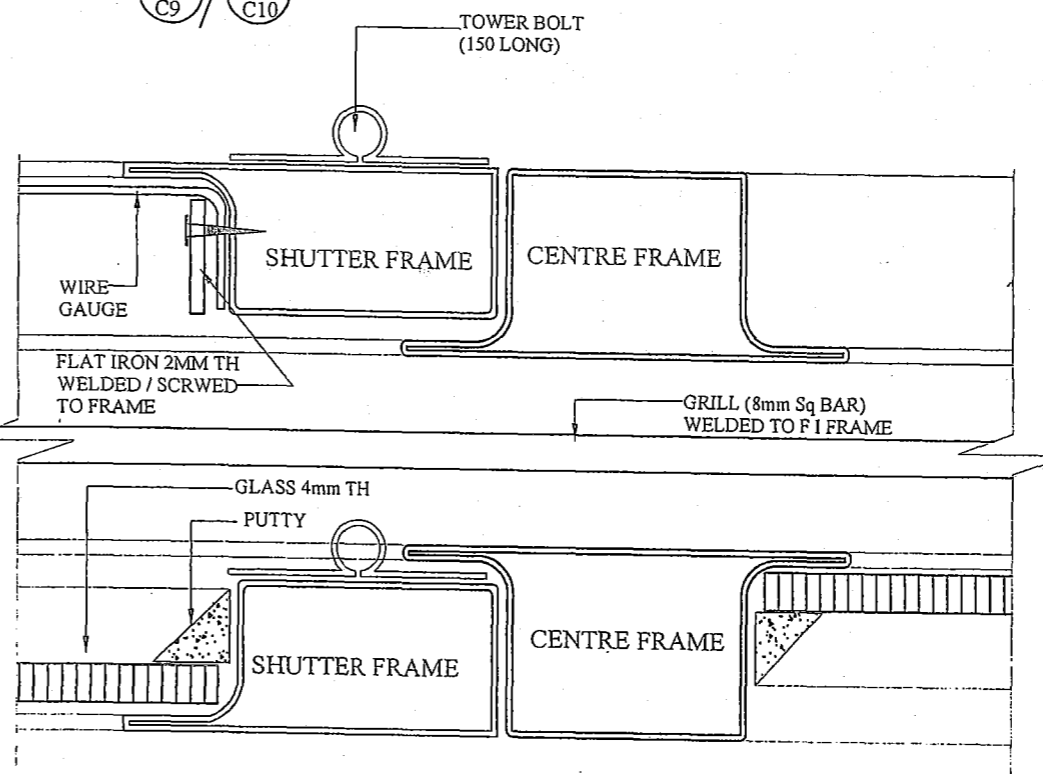
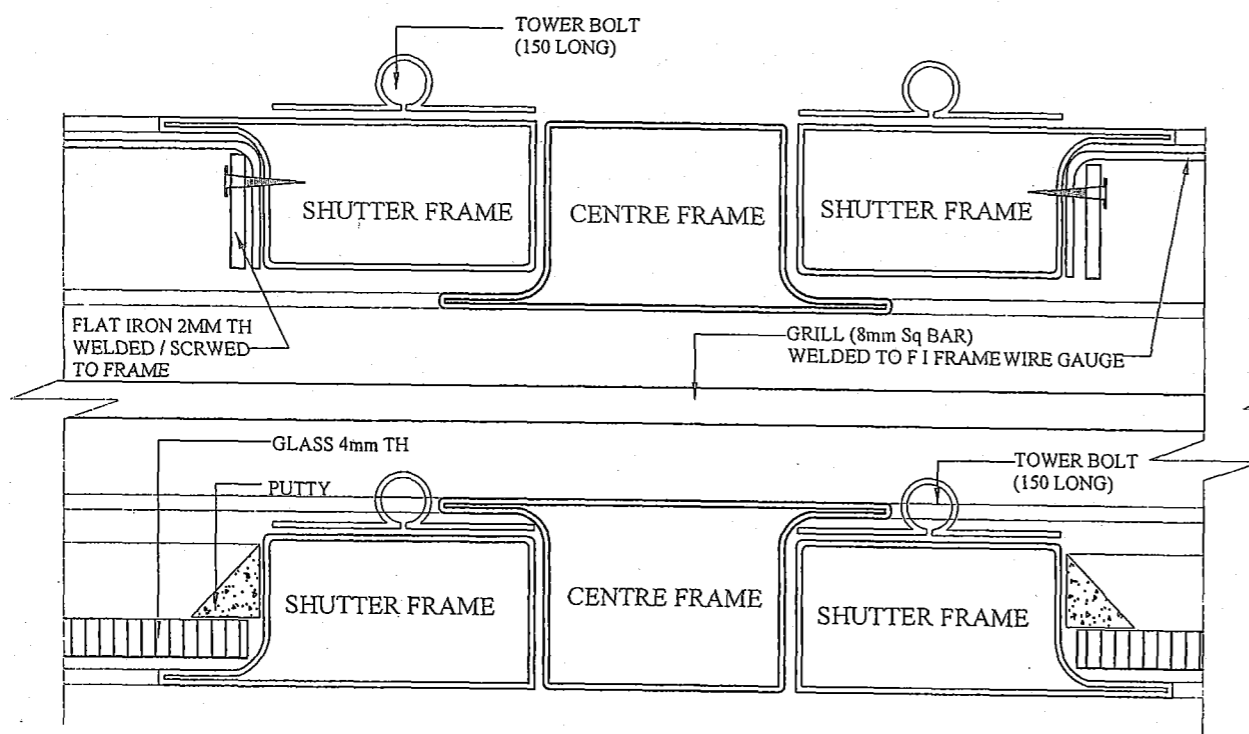
S NO	DATE	DESCRIPTION	INITIALS
REVISIONS			
TYPICAL DETAIL OF BOX WINDOW (STEEL) WITH FLY PROOF SHUTTER			
DATE	10.10.2013	CHIEF ENGINEER	SHEET NO
DRN	C S ASERI	JODHPUR ZONE	1/3
CKD	VRNOD	DRG NO : CEJZ/TD/20	
SCALE	1:20		

R C Swain
(R C SWAIN)
LT COL
SR ARCHITECT
FOR CE JODHPUR ZONE



(BWM 20 / BWM 24)

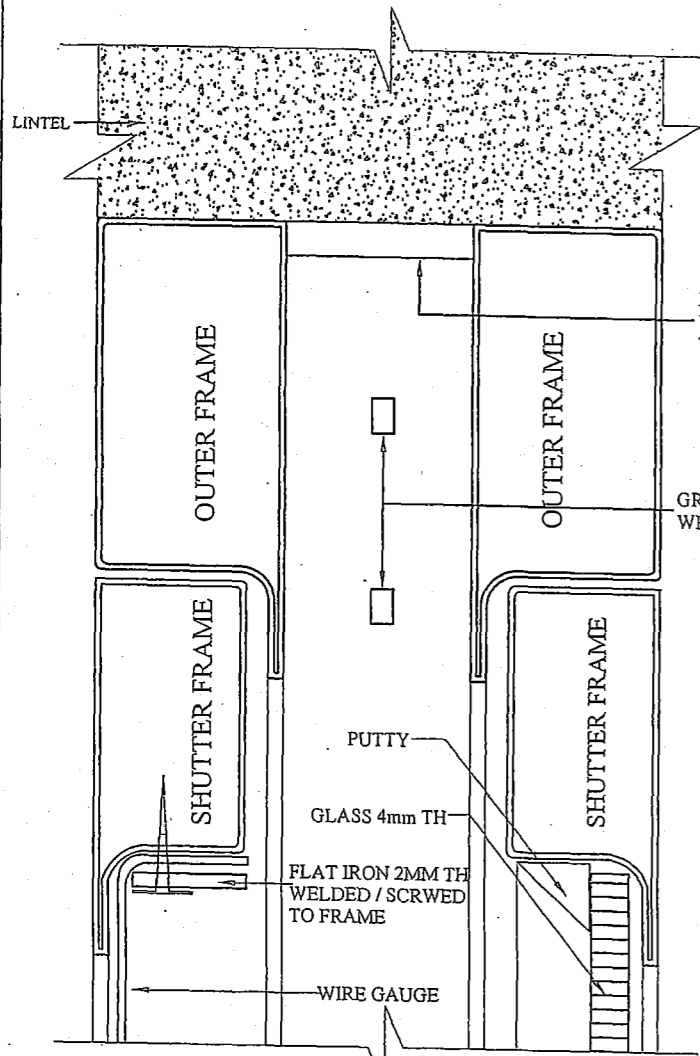
(BWM C9 / BWM C10)



NOTES
1. FOR ALL NOTES REFER SHT NO 1/3 OF THIS DRG.

SNO	DATE	DESCRIPTION	INITIALS
REVISIONS			
TYPICAL DETAIL OF BOX WINDOW (STEEL) WITH FLY PROOF SHUTTER			
DATE	10.10.2013	CHIEF ENGINEER	SHEET NO
DRN	C S ASER	JODHPUR ZONE	2/3
CKD	VINOD	DRG NO : CEJZ/TD/20	
SCALE	1:20		

(Signature)
(R C SWAIN)
LT COL
SR ARCHITECT
FOR CE, JODHPUR ZONE

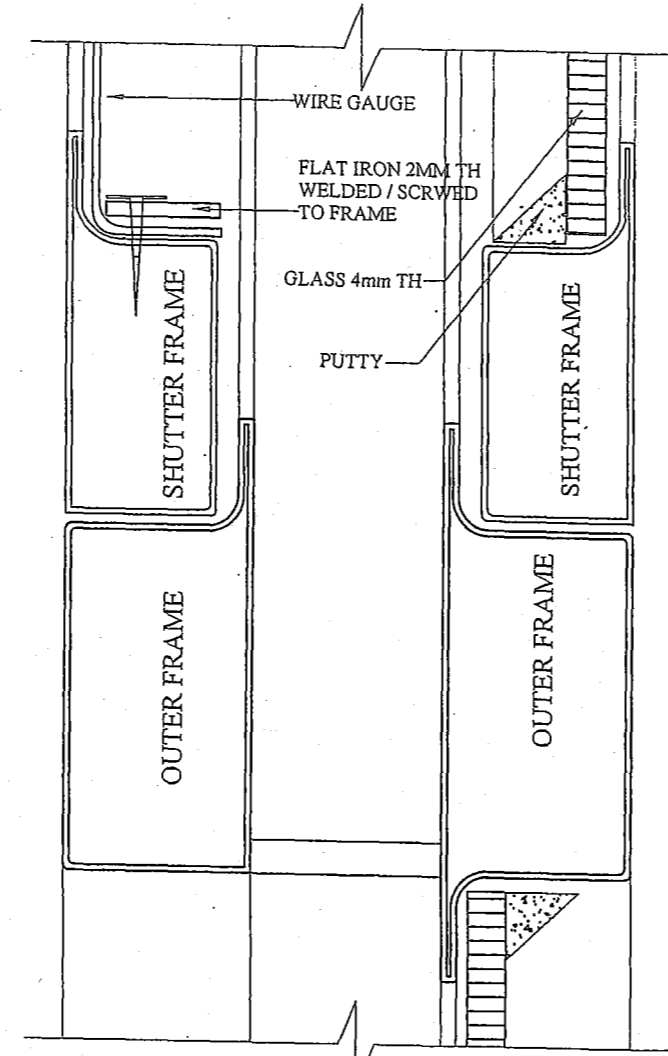


DETAIL AT (F)

FLAT IRON 2MM TH
WELDED / SCRVED
TO FRAME

GRILL (8mm Sq BAR)
WELDED TO F I FRAME

OUT SIDE



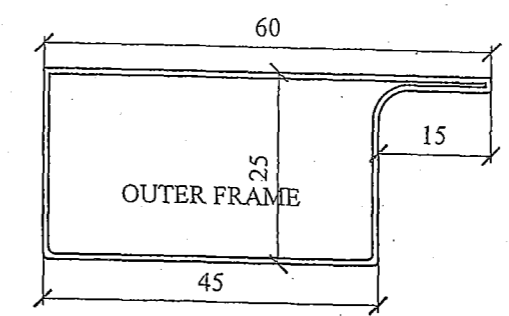
DETAIL AT (F1)

WIRE GAUGE

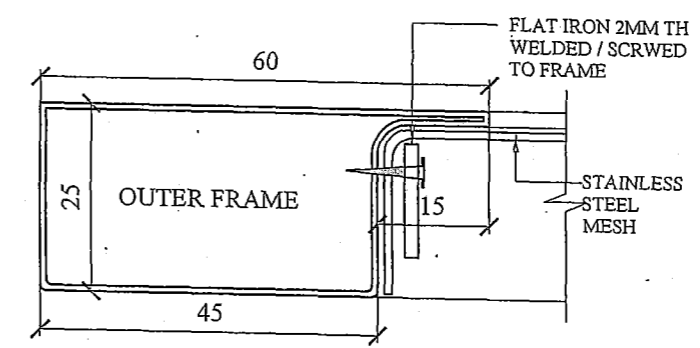
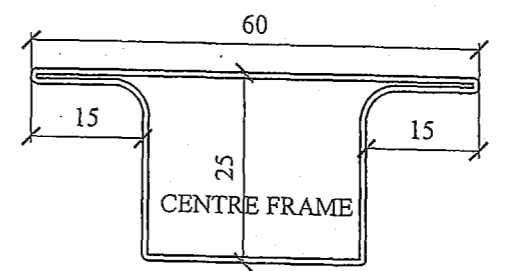
FLAT IRON 2MM TH
WELDED / SCRVED
TO FRAME

GLASS 4mm TH

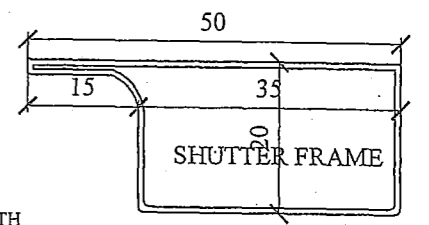
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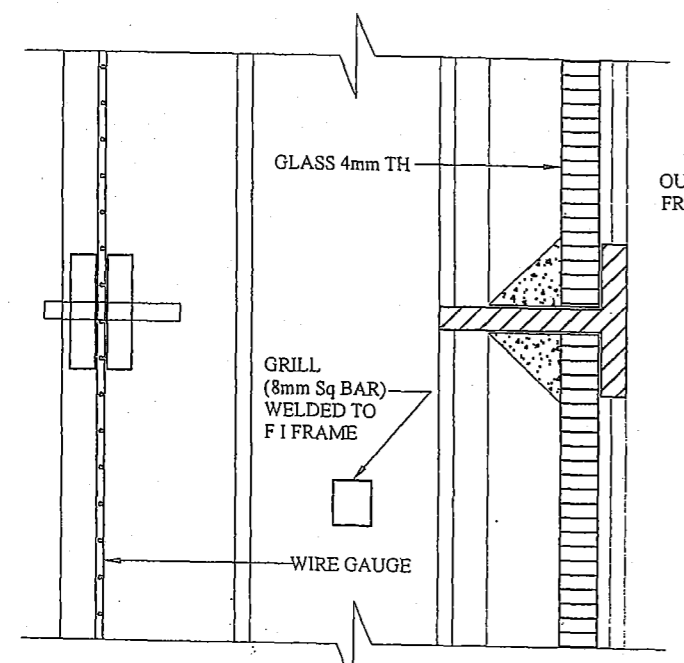
DETAIL OF OUTER SHUTTER FRAME
MADE OF ERW TUBE 'P' SECTION



FIXING DETAIL OF WIREMESH
WITH SHUTTER FRAME



DETAIL OF 'Z' SECTION AS
HANDLE AND STOPPER

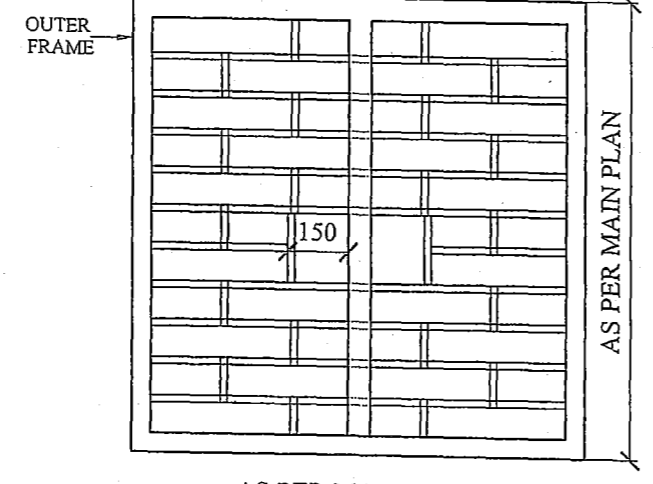


DETAIL AT (G)

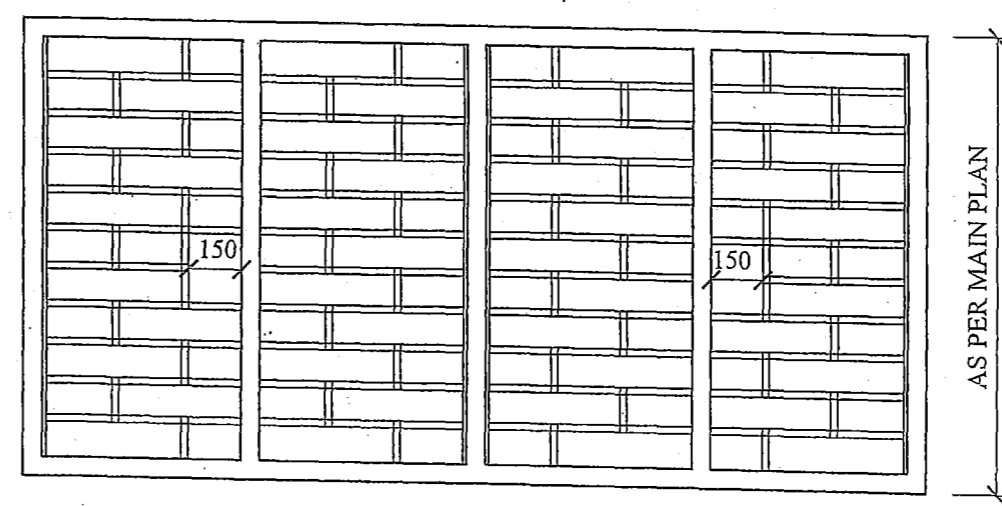
GLASS 4mm TH

GRILL
(8mm Sq BAR)
WELDED TO
F I FRAME

WIRE GAUGE



AS PER MAIN PLAN
ELEVATION OF GRILL

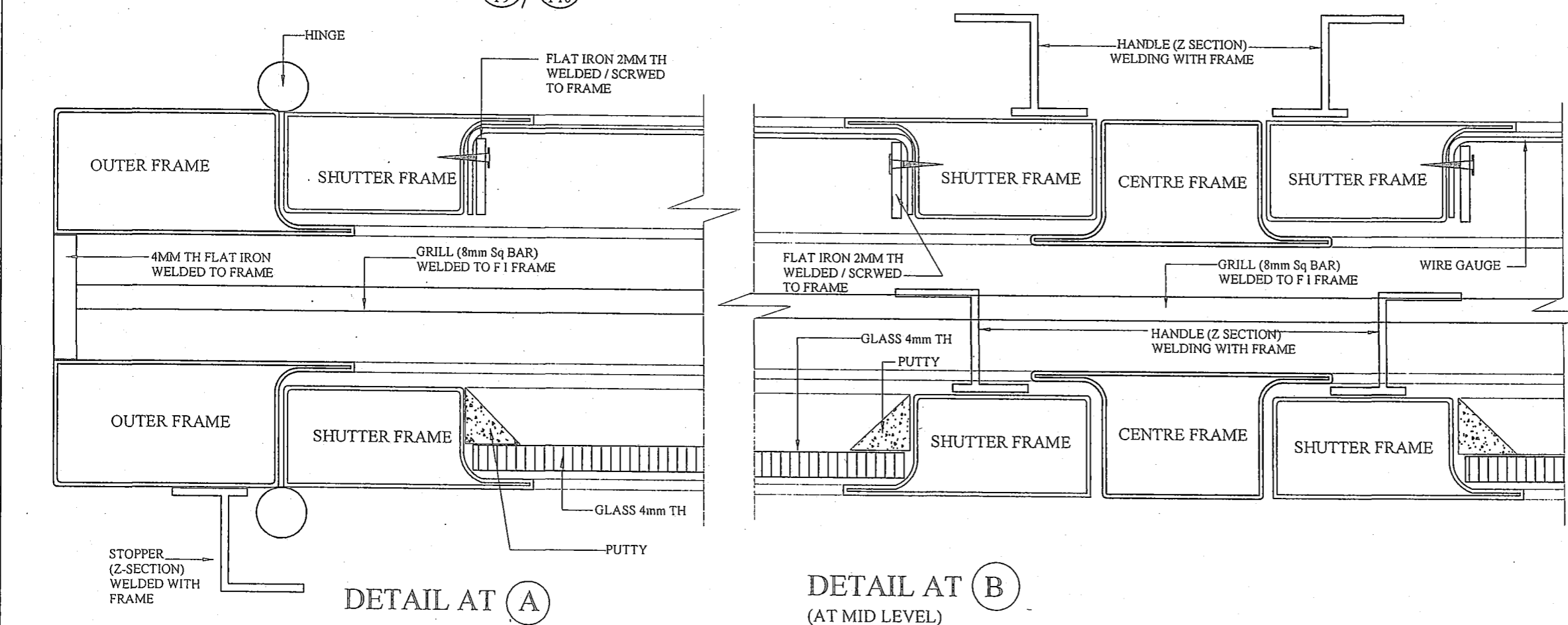
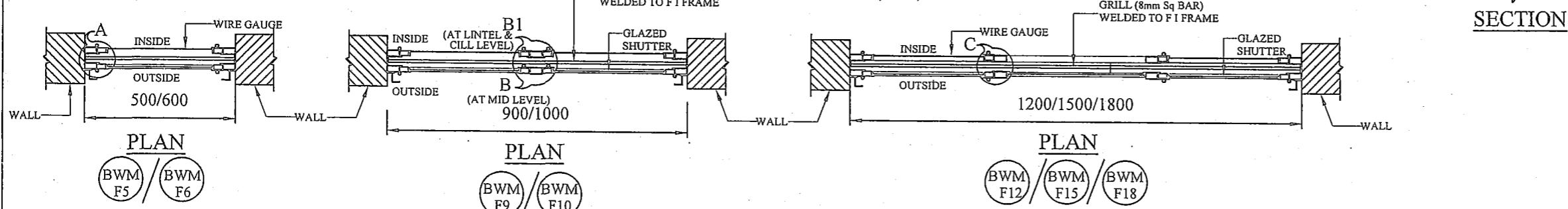
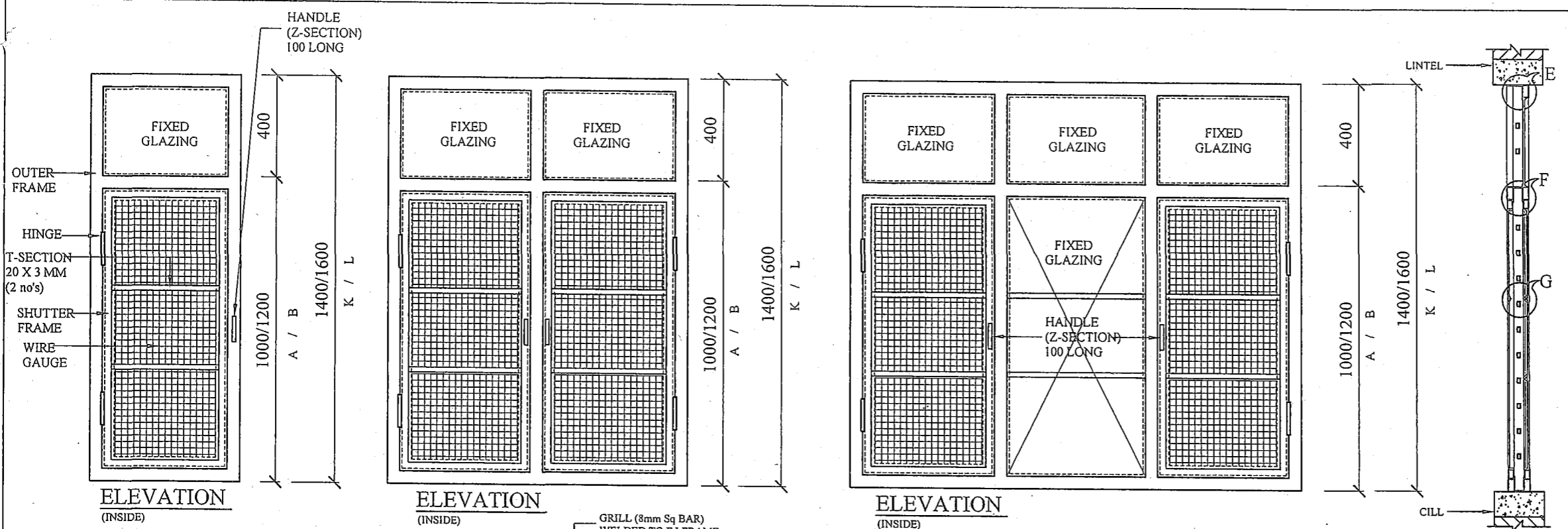


AS PER MAIN PLAN
ELEVATION OF GRILL

NOTES
1. FOR ALL NOTES REFER SHT NO 1/3 OF THIS DRG.

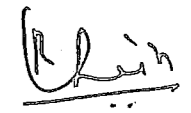
SNO	DATE	DESCRIPTION	INITIALS
REVISIONS			
TYPICAL DETAIL OF BOX WINDOW (STEEL) WITH FLY PROOF SHUTTER			
DATE	10.10.2013	CHIEF ENGINEER	SHEET NO
DRN	C S ASER	JODHPUR ZONE	3/3
CKD	VINOD	DRG NO : CEJZ/TD/20	
SCALE	1:20		

Chin
(R C SWAIN)
LT COL
SR ARCHITECT
FOR CE JODHPUR ZONE

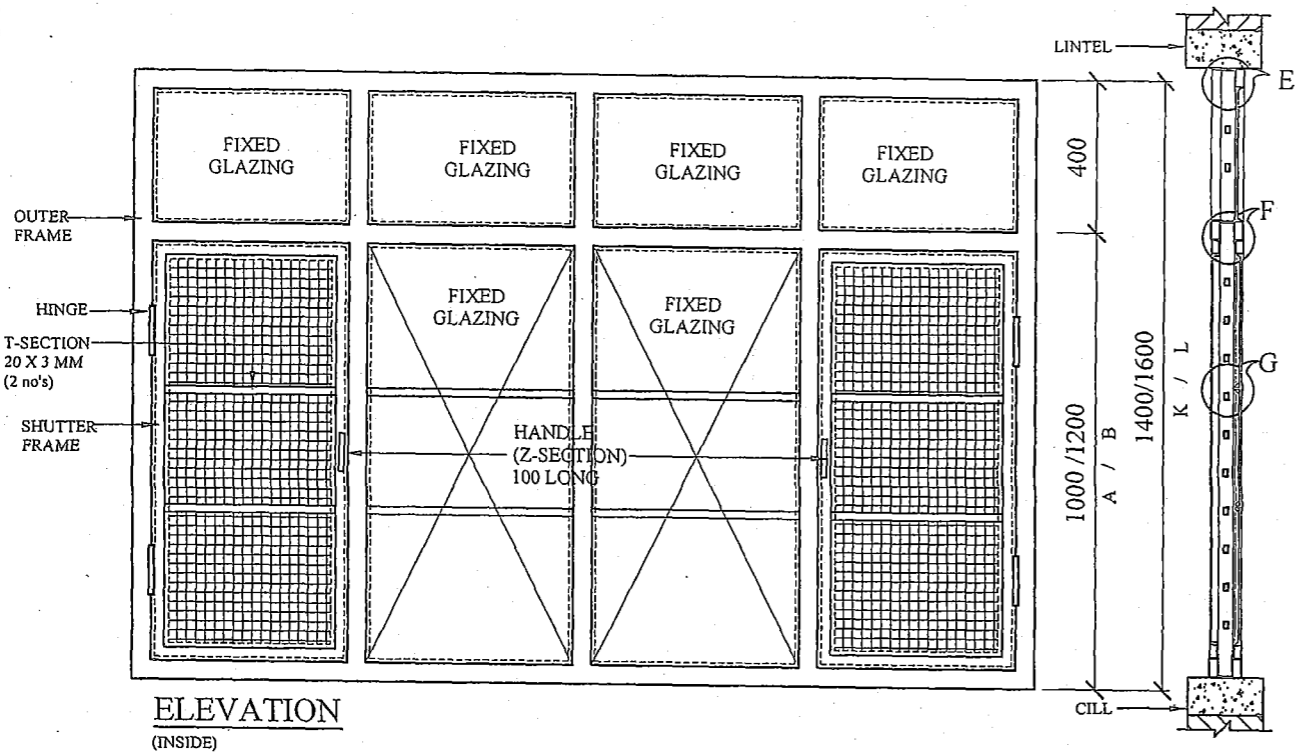


- NOTES**
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 - FIGURED DIMENSIONS SHALL BE FOLLOWED.
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 - SIZE OF WINDOW MENTIONED HERE IN IS CLEAR SIZE OF MASONRY OPENING A TOLERANCE OF 10 mm ON EITHER SIDE SHALL BE ALLOWED WHEN THE WINDOWS ARE FITTED IN TO BUILT IN OPENING.
 - WIRE GAUGE SHUTTERS IN FLY PROOF WINDOW SHALL BE MADE OPENABLE INSIDE UNLESS OTHERWISE MENTIONED.
 - 4mm TH PLAIN SHEET GLASS PANES SHALL BE PROVIDED TO ALL WINDOWS UNLESS OTHERWISE SPECIFIED.
 - 'M' STANDS FOR MOSQUITO PROOF WIRE GAUGE WINDOW (HAVING GLAZED AND WIRE GAUGE SHUTTER) A / B & K / L FOR HEIGHT AS 1000 / 1200 & 1400 / 1600mm RESPECTIVELY.
 - ALL WINDOWS OF TOILETS, BATH & W.C SHALL HAVE PIN HEAD GLASS.
 - IN CASE OF R.C.C COL/R.C.C WALL THE WINDOWS FRAME SHALL BE FIXED WITH DASH THRU BOLTS OF STANDARD QUALITY AND SIZE AT 300MM C/C.
 - ONE HANDLE & 2 NOS TOWER BOLTS 150 mm LONG SHALL BE PROVIDED TO EACH SHUTTER.
 - HINGES WILL BE PROVIDED AT 115 mm ABOVE THE WINDOW CILL LEVEL AND 115 mm BELOW FROM SOFFIT OF LINTEL.
 - THE HOLDFAST/LUGS FOR WINDOWS AND VENTILATORS SHALL BE EMBEDDED IN PCC 1:3:6 OF SIZE 150X 150X TH OF WALL.
 - ALL FRAMES USED ARE BOX STEEL SECTIONS.
 - FOR WIDTH & HEIGHT OF A PARTICULAR WINDOW/VENTS THE NOTATION SHALL BE NOMNCLATURE OF WINDOW FOLLOWED WITH NOMNCLATURE OF HEIGHT. FOR EXAMPLE FOR A WINDOW SIZE 900x 1400 THE NOTATION SHALL BE $\frac{BWM}{F9}$.
 - PIN HOLE @ 300 C/C TO BE PROVIDED FOR SUPPORTING GLASS WITH G.I CLIPS/WIRE IN CASE OF GLAZED SHUTTERS.
 - 2 NOS OF PINTOL HINGES 75mm LONG 12 mm dia WITH ONE PART OF THE HINGE SPOT WELDED WITH FRAME & OTHER WITH SHUTTER FOR EACH OPENABLE SHUTTER.
 - 4 NOS FLAT IRON HOLD FAST SHALL BE WELDED WITH EACH WINDOW.
 - BWMF STANDS FOR BOX WINDOW WITH FAN LIGHT (STEEL) & MOSQUITO PROOF SHUTTER.
 - MS GRILL (8mm Sq BAR) WELDED TO F I FRAME @ 100 C/C.
 - ALL EXPOSED STEEL SURFACES SHALL BE TREATED WITH TWO COAT OF ENAMEL PAINTS OF APPROVED COLOUR OVER ONE COAT OF METEL PRIMER.
 - ALL WELDING AND FINISHING WORKS OF STEEL MEMBERS SHALL BE AS PER STANDRAD WORKMENSHP PRATICE / MANUFACTURER'S INSTRUCTION.
 - WIRE GAUGE SHUTTER SHALL BE PROVIDED WITH STAINLESS STEEL 32 GAUGE FLY MESH OF 304 GRADE WITH 144 HOLES PER SQ. INCH.
 - ALL FRAMES OF BOX TYPE MILD STEEL WINDOW SHALL BE MADE WITH ERW SECTION HAVING WALL THICKNESS 1.25mm (i.e 18 GAUGE).

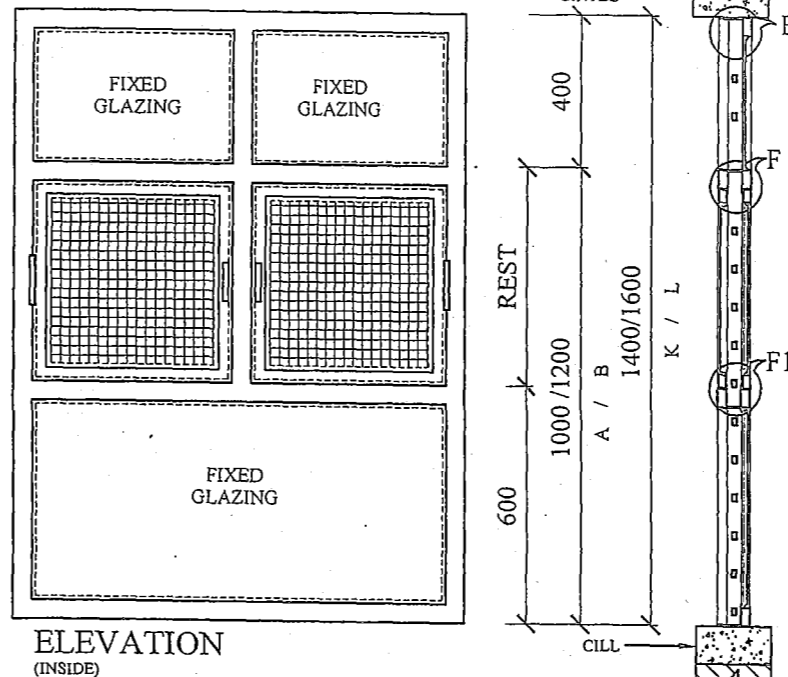
SNO	DATE	DESCRIPTION	INITIALS
REVISIONS			
TYPICAL DETAIL OF BOX WINDOW (STEEL) WITH FLY PROOF SHUTTER & FAN LIGHT			
DATE	10.10.2013	CHIEF ENGINEER	SHEET NO
DRN	C S ASERI	JODHPUR ZONE	1/3
CKD	VINOD	DRG NO : CEJZ/TD/21	
SCALE	1:20		


 (R C SWAIN)
 LT COL
 SR ARCHITECT
 FOR CE JODHPUR ZONE

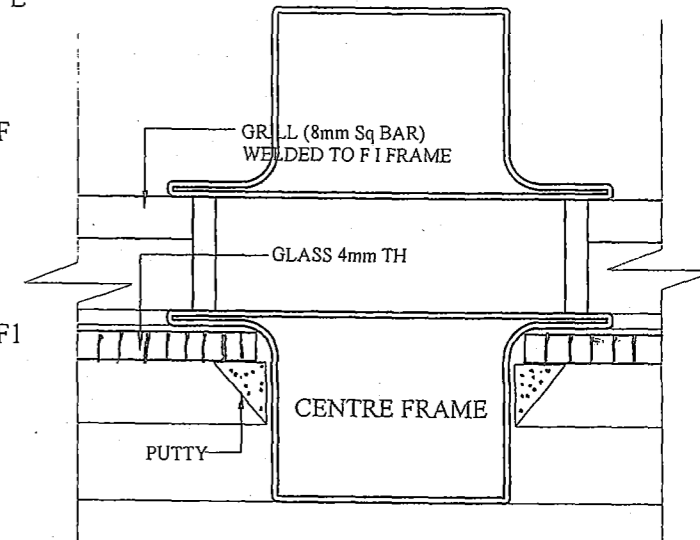
DETAIL AT (A)
 DETAIL AT (B)
 (AT MID LEVEL)



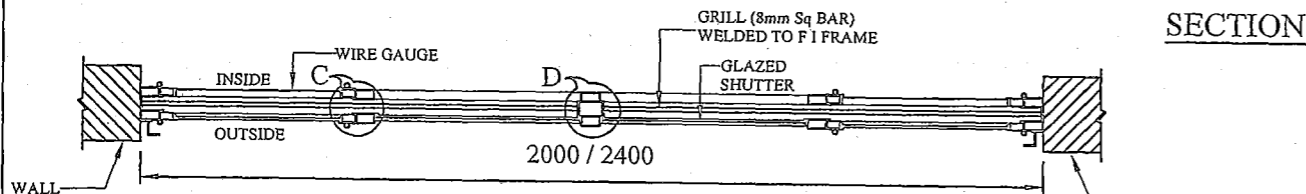
ELEVATION
(INSIDE)



ELEVATION
(INSIDE)



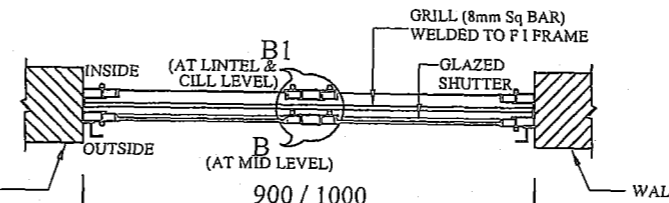
DETAIL AT (D)



PLAN

(BWM F20) / (BWM F24)

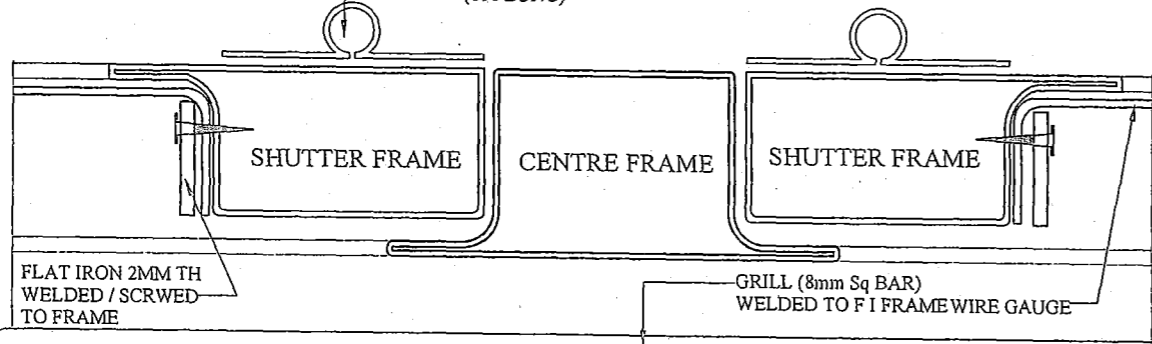
TOWER BOLT (150 LONG)



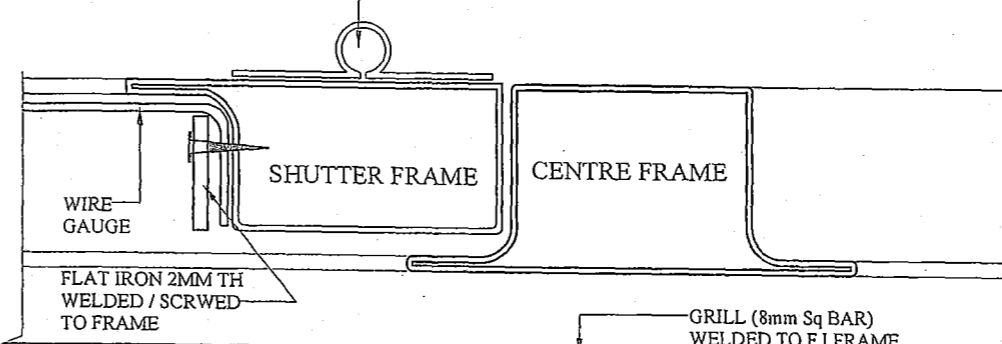
PLAN WITH AC NICHE (C)

(BWM FC9) / (BWM FC10)

TOWER BOLT (150 LONG)



DETAIL AT (B1)
(AT LINTEL & CILL LEVEL)



DETAIL AT (C)

NOTES
1. FOR ALL NOTES REFER SHT NO 1/3 OF THIS DRG.

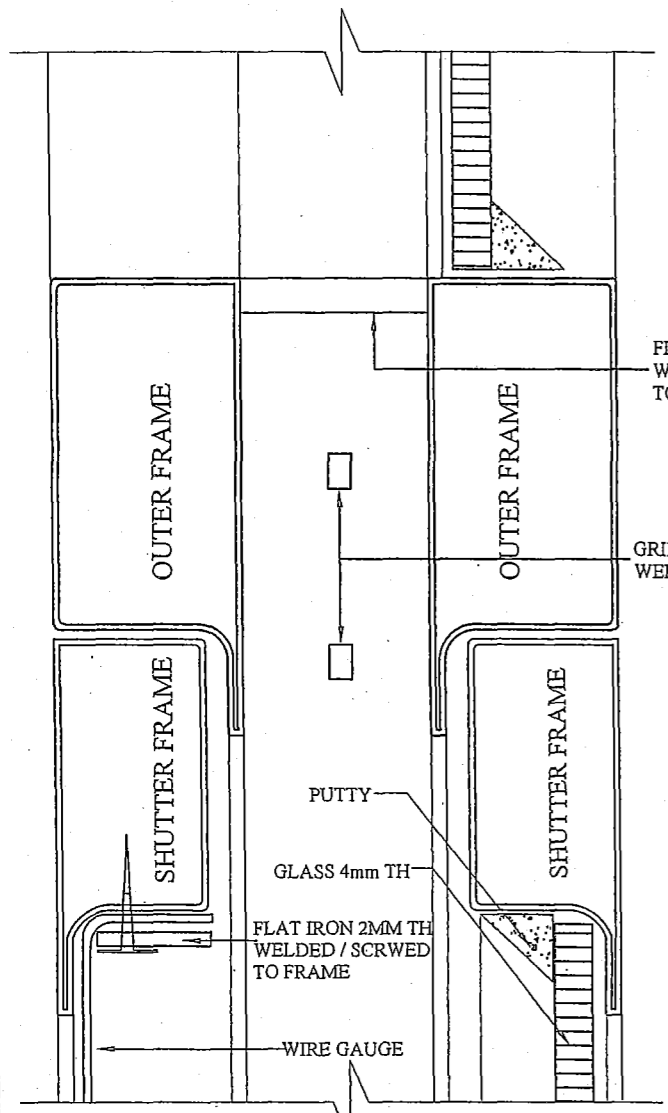
SNO	DATE	DESCRIPTION	INITIALS
REVISIONS			

TYPICAL DETAIL OF BOX WINDOW (STEEL) WITH FLY PROOF SHUTTER & FAN LIGHT

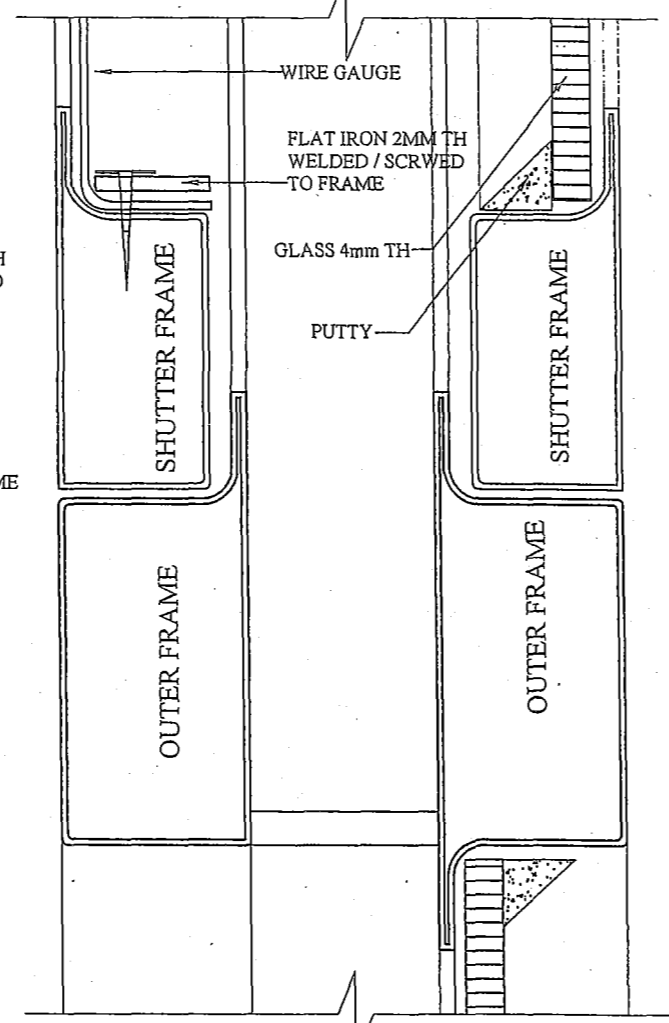
DATE	10.10.2013	CHIEF ENGINEER	SHEET NO.
DRN	C S ASERJ	JODHPUR ZONE	2/3
CKD	VINOD		
SCALE	1:20	DRG NO : CEJZ/TD/21	

(Signature)
(R C SWAIN)
LT COL
SR ARCHITECT
FOR CE JODHPUR ZONE

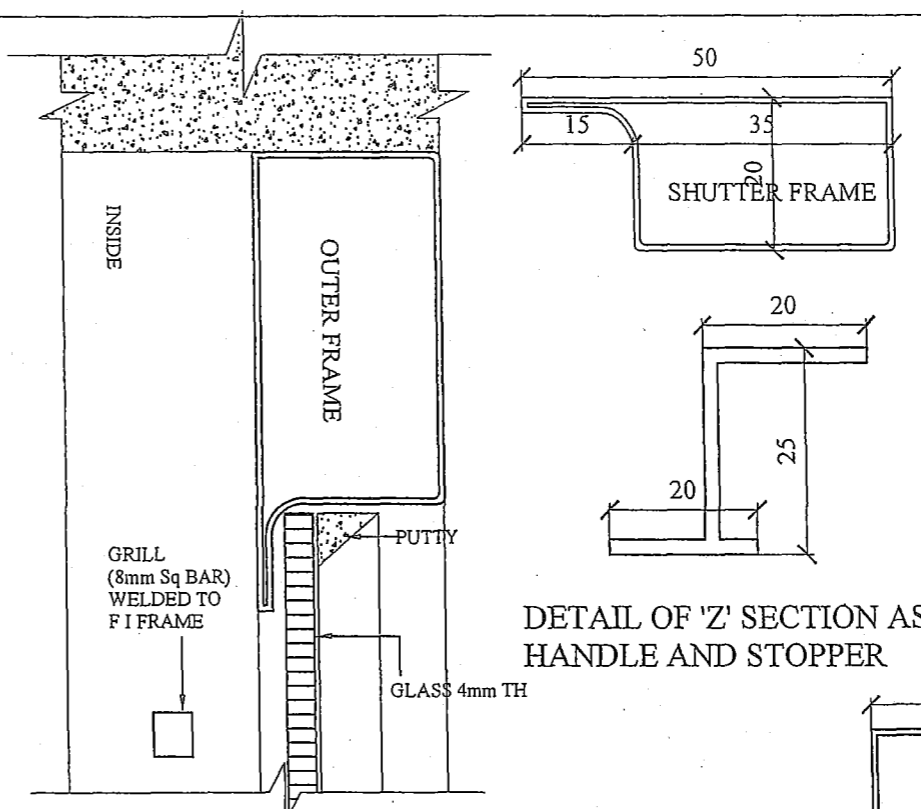
NOTES
1. FOR ALL NOTES REFER SHT NO 1/3 OF THIS DRG.



DETAIL AT F

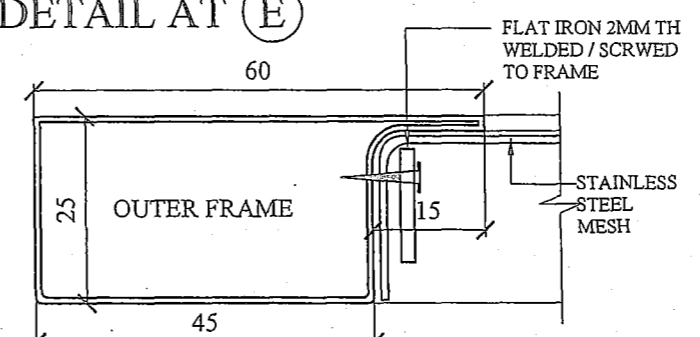


DETAIL AT F1

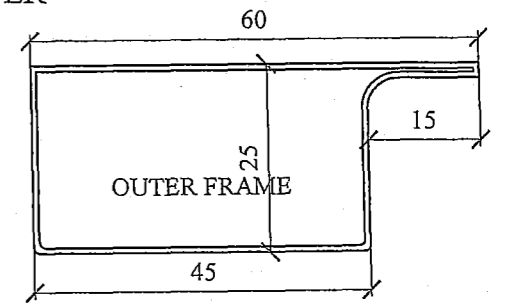


DETAIL AT E

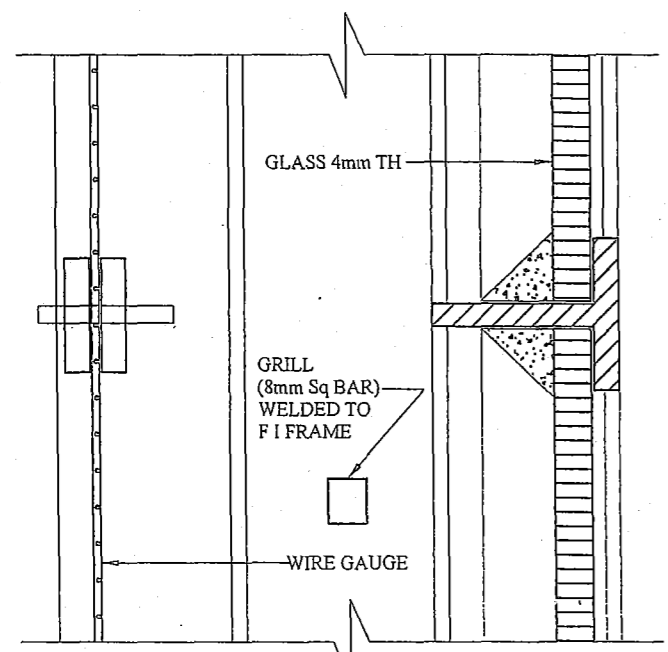
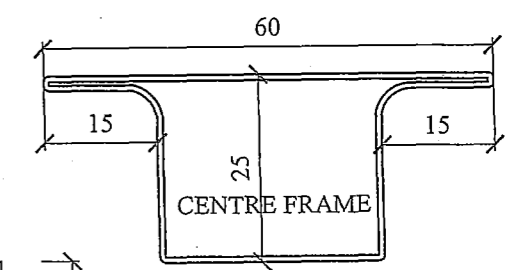
DETAIL OF 'Z' SECTION AS HANDLE AND STOPPER



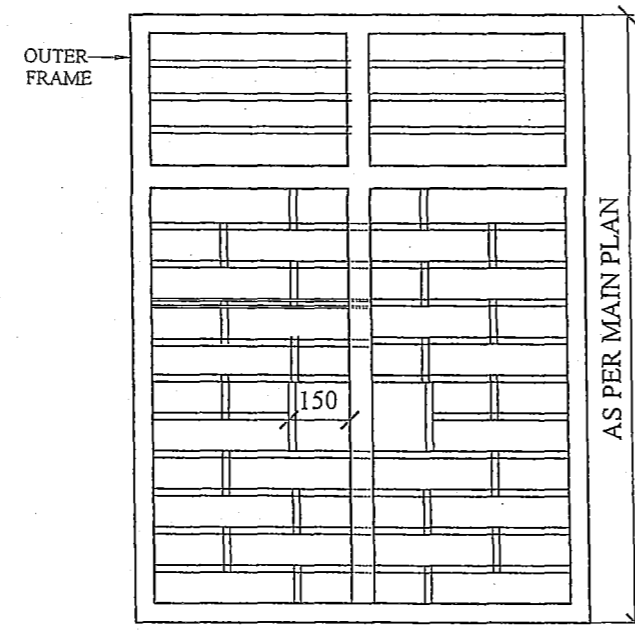
FIXING DETAIL OF WIREMESH WITH SHUTTER FRAME



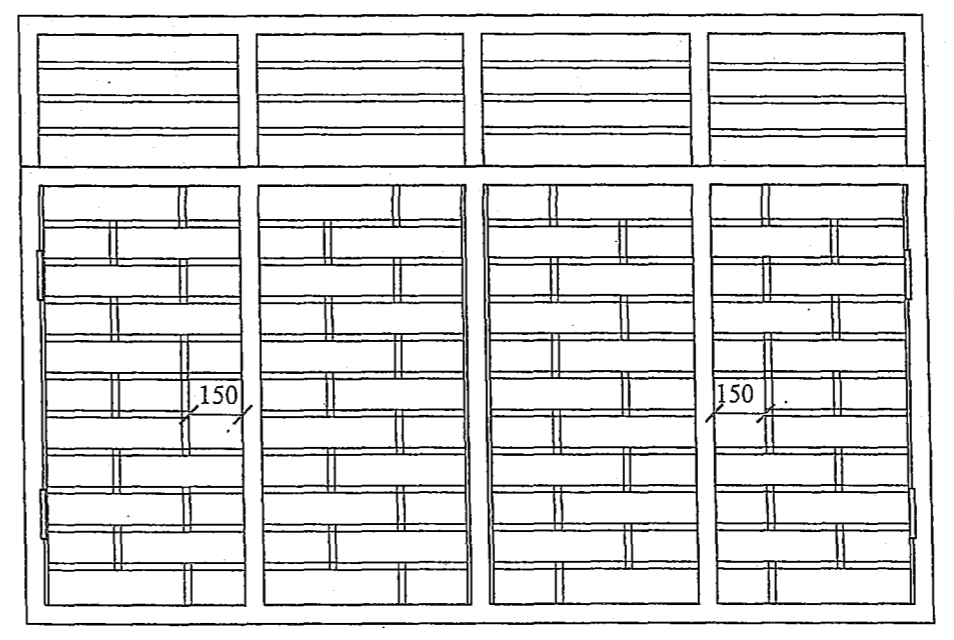
DETAIL OF OUTER SHUTTER FRAME MADE OF ERW TUBE 'P' SECTION



DETAIL AT G



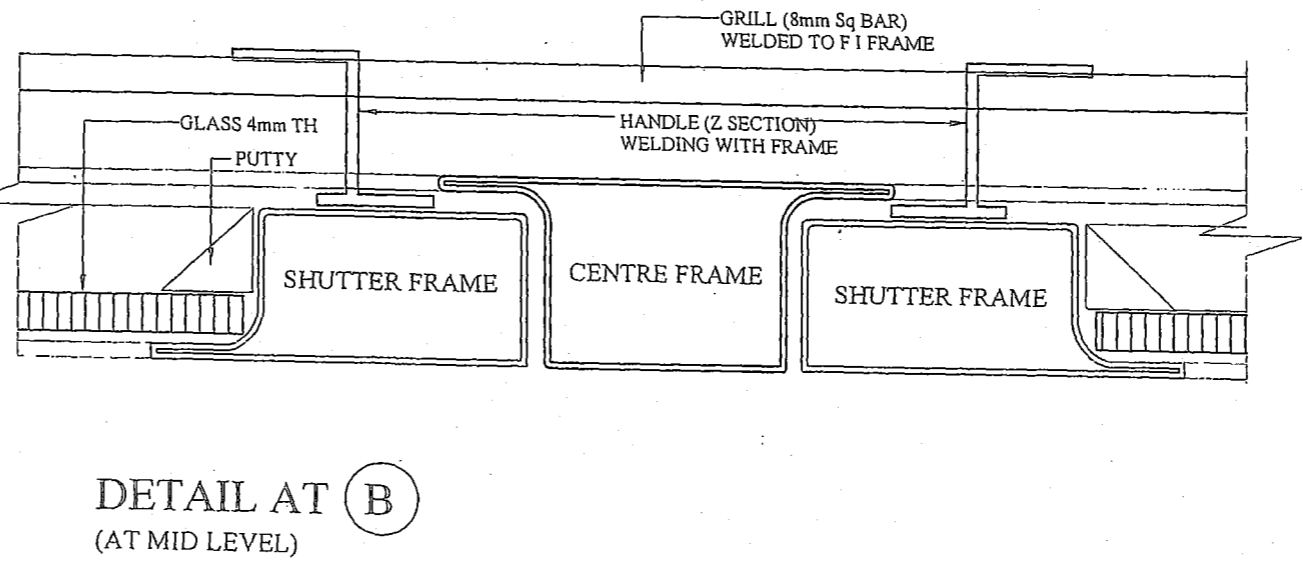
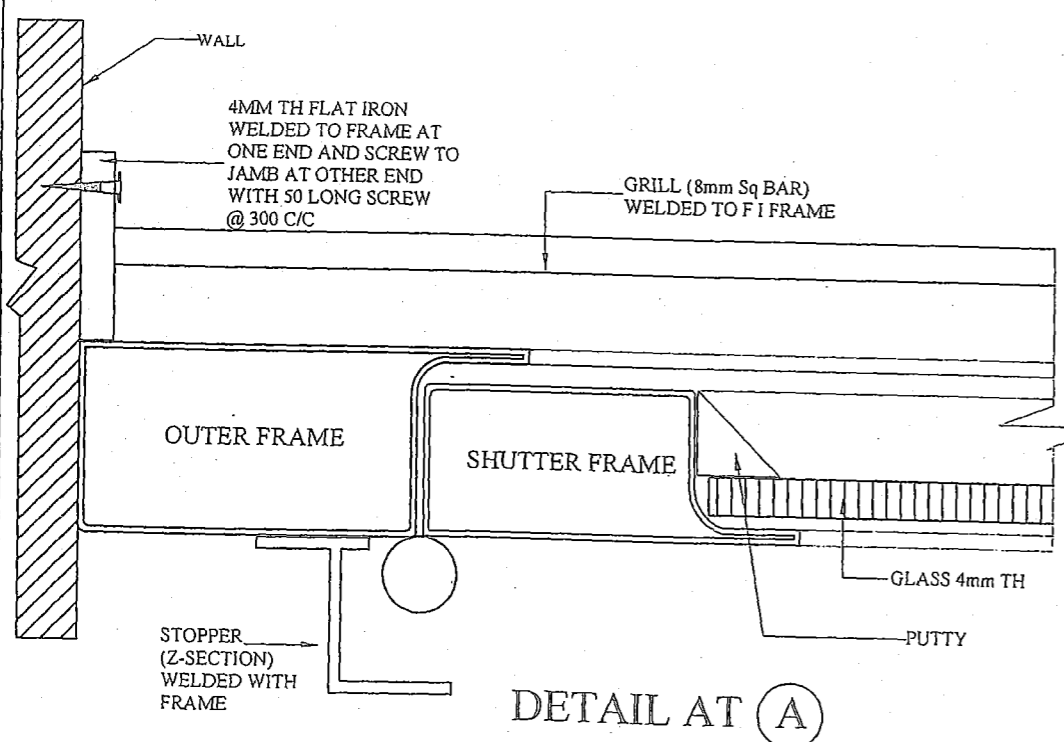
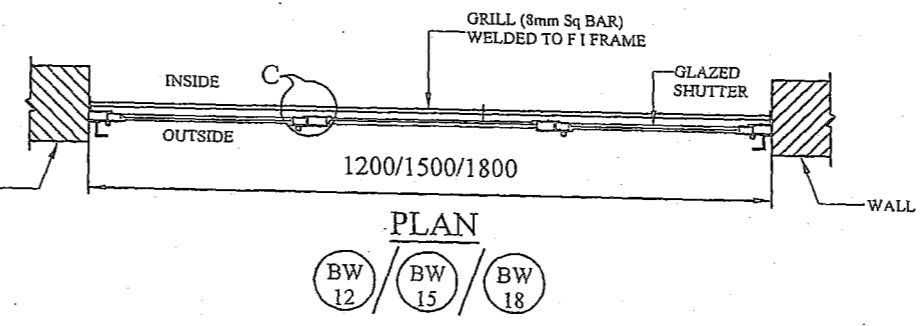
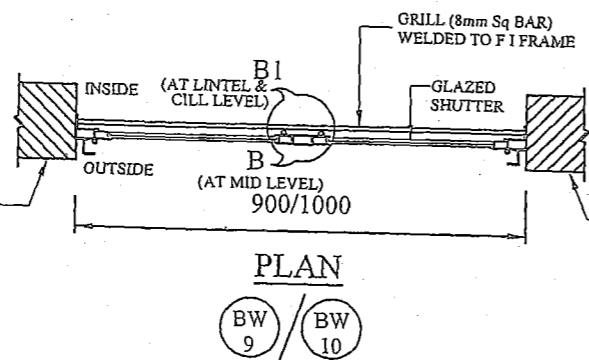
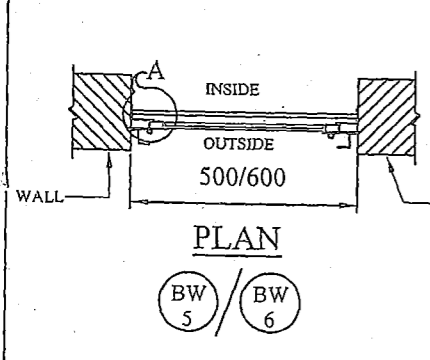
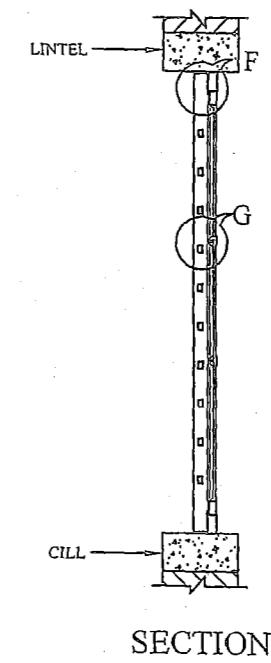
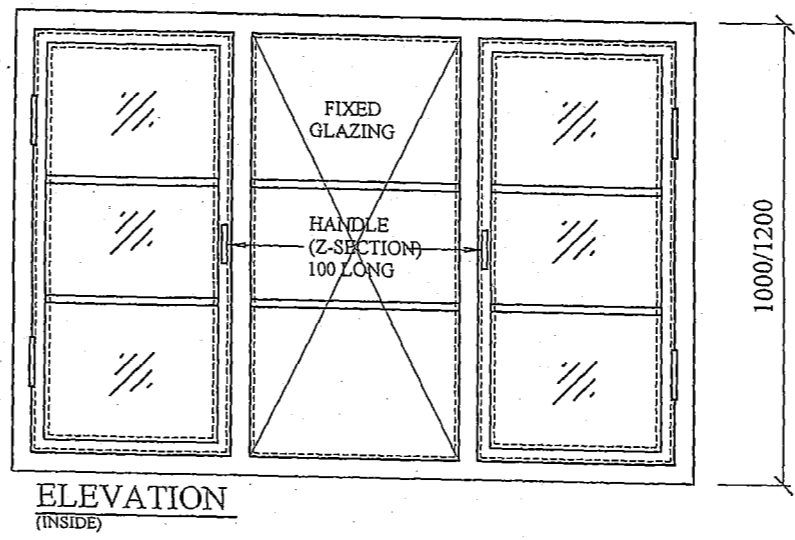
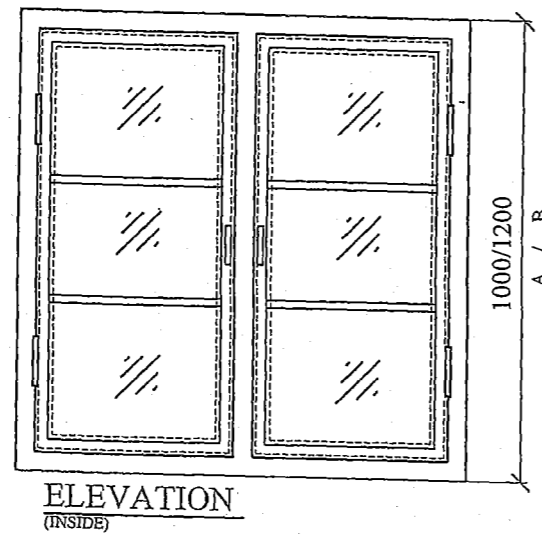
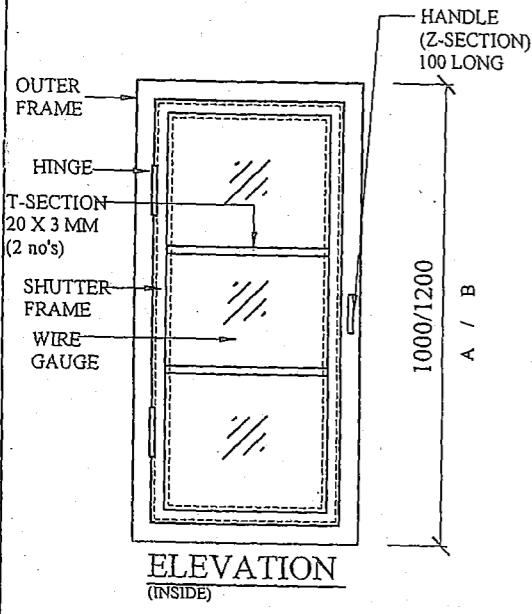
AS PER MAIN PLAN
ELEVATION OF GRILL



AS PER MAIN PLAN
ELEVATION OF GRILL


S NO	DATE	DESCRIPTION	INITIALS
REVISIONS			
TYPICAL DETAIL OF BOX WINDOW (STEEL) WITH FLY PROOF SHUTTER & FAN LIGHT			
DATE	10.10.2013	CHIEF ENGINEER	SHEET NO
DRN	C S ASERI	JODHPUR ZONE	3/3
CKD	VINOD	DRG NO : CEJZ/TD/21	
SCALE	1:20		

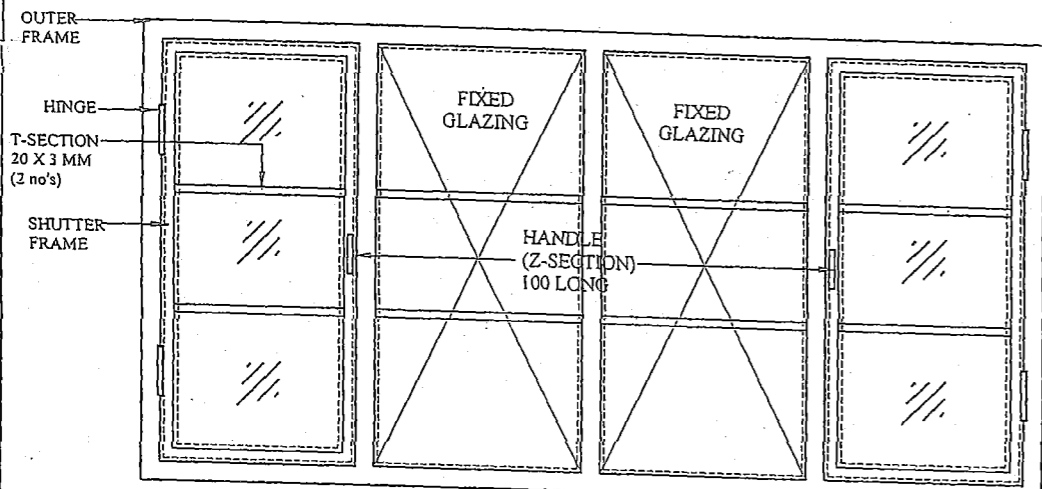
(Signature)
(R C SWAIN)
LT COL
SR ARCHITECT
FOR CE JODHPUR ZONE



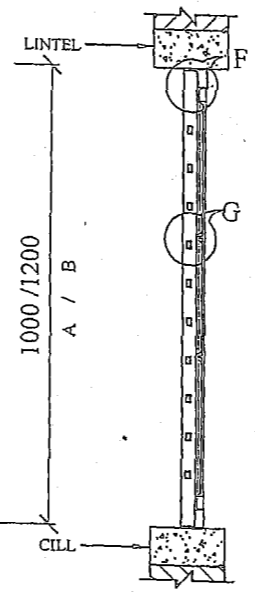
- NOTES**
- CONTRACTOR TO CHECK & VERIFY ALL THE DIMENSIONS BEFORE EXECUTION OF THE WORK.
 - FIGURED DIMENSIONS SHALL BE FOLLOWED.
 - ALL DIMENSIONS GIVEN IN THIS DRG. ARE IN MILLIMETRES UNLESS OTHERWISE SHOWN.
 - SIZE OF WINDOW MENTIONED HERE IN IS CLEAR SIZE OF MASONRY OPENING A TOLERANCE OF 10 mm ON EITHER SIDE SHALL BE ALLOWED WHEN THE WINDOWS ARE FITTED IN TO BUILT IN OPENING.
 - 4mm TH PLAIN SHEET GLASS PANES SHALL BE PROVIDED TO ALL WINDOWS UNLESS OTHERWISE SPECIFIED.
 - 'BW' STANDS FOR BOX WINDOW STEEL WITH GLAZED SHUTTER WITH GUARD BAR. A / B STAND FOR HEIGHT AS 1000 / 1200 mm RESPECTIVELY.
 - ALL WINDOWS OF TOILETS, BATH & W.C SHALL HAVE FROSTED / PIN HEADED GLASS.
 - IN CASE OF R.C.C COL/R.C.C WALL THE WINDOWS FRAME SHALL BE FIXED WITH DASH THRU BOLTS OF STANDARD QUALITY AND SIZE AT 300MM C/C.
 - ONE HANDLE & 2 NOS TOWER BOLTS 150 mm LONG SHALL BE PROVIDED TO EACH SHUTTER.
 - HINGES WILL BE PROVIDED AT 115 mm ABOVE THE WINDOW CILL LEVEL AND 115 mm BELOW FROM SOFFIT OF LINTEL.
 - THE HOLDFAST/LUGS FOR WINDOWS AND VENTILATORS SHALL BE EMBEDDED IN PCC 1:3:6 OF SIZE 150X 150X TH OF WALL.
 - ALL FRAMES USED ARE BOX STEEL SECTIONS.
 - FOR WIDTH & HEIGHT OF A PARTICULAR WINDOW / VENT, THE NOTATION SHALL BE NOMNCLATURE OF WINDOW FOLLOWED WITH NOMNCLATURE OF HEIGHT. FOR EXAMPLE FOR A WINDOW OF SIZE 900x1200 THE NOTATION SHALL BE (900/1200).
 - PIN HOLE @ 300 C/C TO BE PROVIDED FOR SUPPORTING GLASS WITH G.I CLIPS/WIRE IN CASE OF GLAZED SHUTTERS.
 - 2 NOS OF PINTOL HINGES 75mm LONG 12 mm dia WITH ONE PART OF THE HINGE SPOT WELDED WITH FRAME & OTHER WITH SHUTTER FOR EACH OPENABLE SHUTTER.
 - 4 NOS FLAT IRON HOLD FAST SHALL BE WELDED WITH EACH WINDOW.
 - MS GRILL (8mm Sq BAR) WELDED TO F I FRAME @ 100 C/C.
 - ALL EXPOSED STEEL SURFACES SHALL BE TREATED WITH TWO COAT OF ENAMEL PAINTS OF APPROVED COLOUR OVER ONE COAT OF METEL PRIMER.
 - ALL WELDING AND FINISHING WORKS OF STEEL MEMBERS SHALL BE AS PER STANDRAD WORKMENSHP PRATICE / MANUFACTURER'S INSTRUCTION.
 - WIRE GAUGE SHUTTER SHALL BE PROVIDED WITH STAINLESS STEEL 32 GAUGE FLY MESH OF 304 GRADE WITH 144 HOLES PER SQ. INCH.
 - ALL FRAMES OF BOX TYPE MILD STEEL WINDOW SHALL BE MADE WITH ERW SECTION HAVING WALL THICKNESS 1.25mm (i.e 18 GAUGE).

SNO	DATE	DESCRIPTION	INITIALS
REVISIONS			
TYPICAL DETAIL OF BOX WINDOW (STEEL) WITH GLAZED SHUTTER			
DATE	10.10.2013	CHIEF ENGINEER	SHEET NO
DRN	C/S ASERJ	JODHPUR ZONE	1/3
CKD	VINOD	DRG NO : CEJZ/TD/22	
SCALE	1:20		

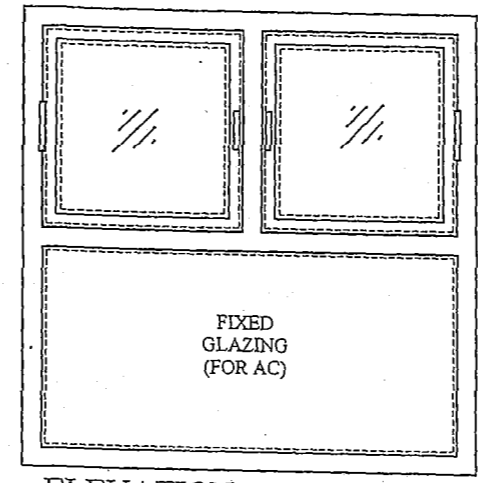

 (R C SWAIN)
 LT COL
 SR ARCHITECT
 FOR CE JODHPUR ZONE



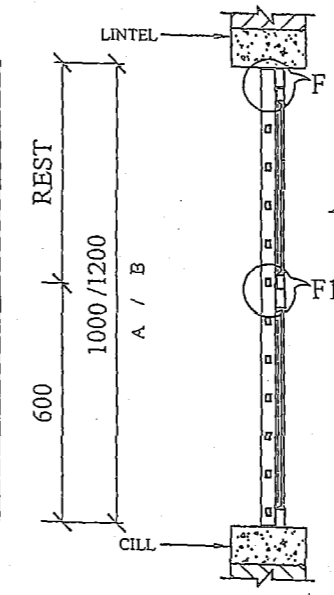
ELEVATION (INSIDE)



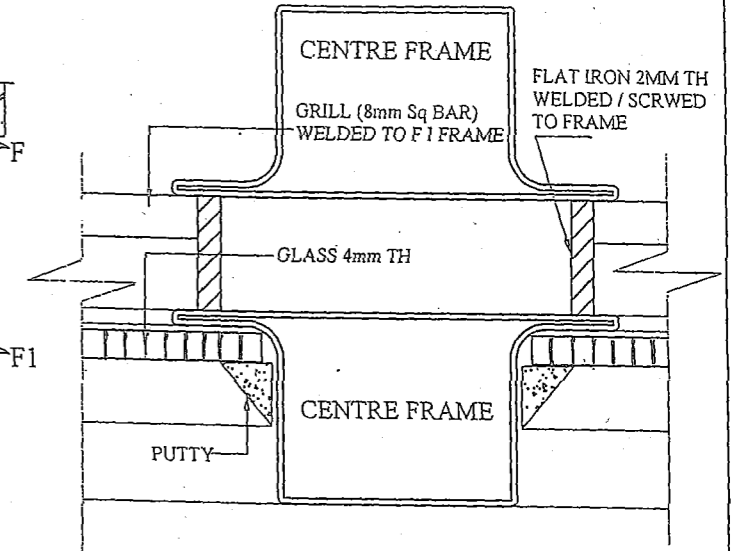
SECTION



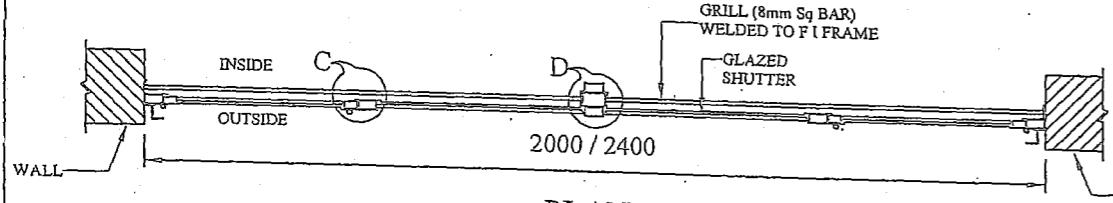
ELEVATION (INSIDE)



SECTION

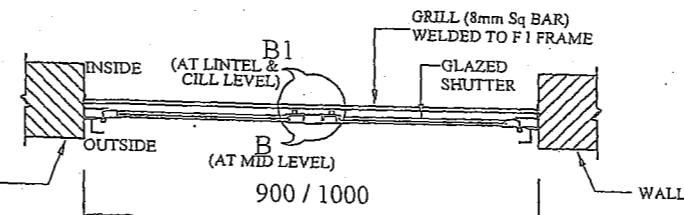


DETAIL AT (D)



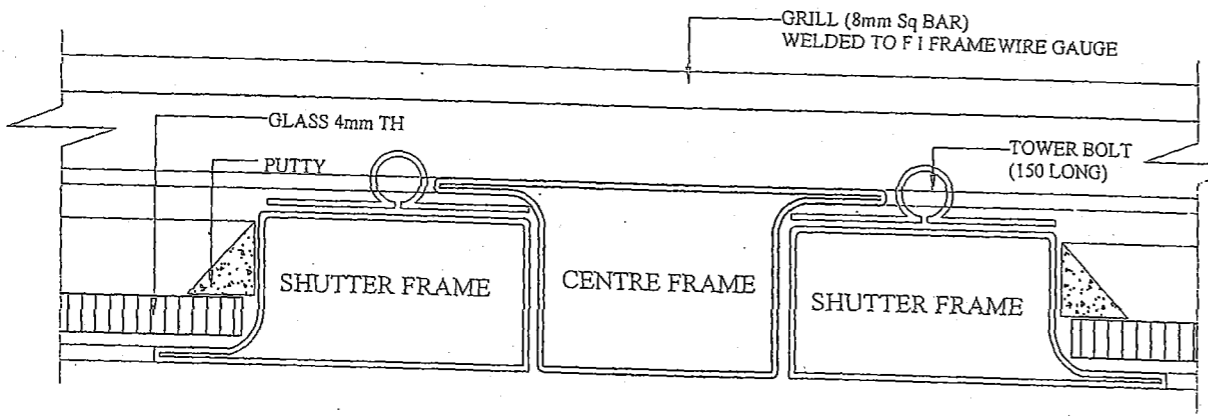
PLAN

BW 20 / BW 24

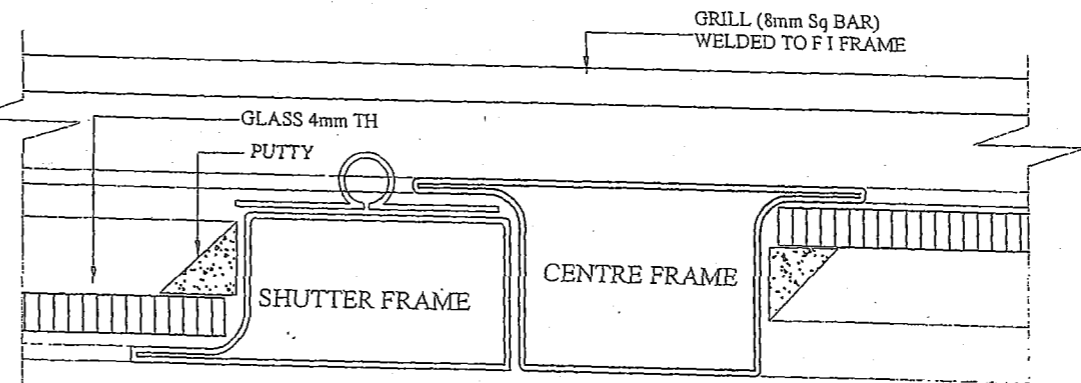


PLAN WITH AC NICHE (C)

BW C9 / BW C10



DETAIL AT (B1)
(AT LINTEL & CILL LEVEL)

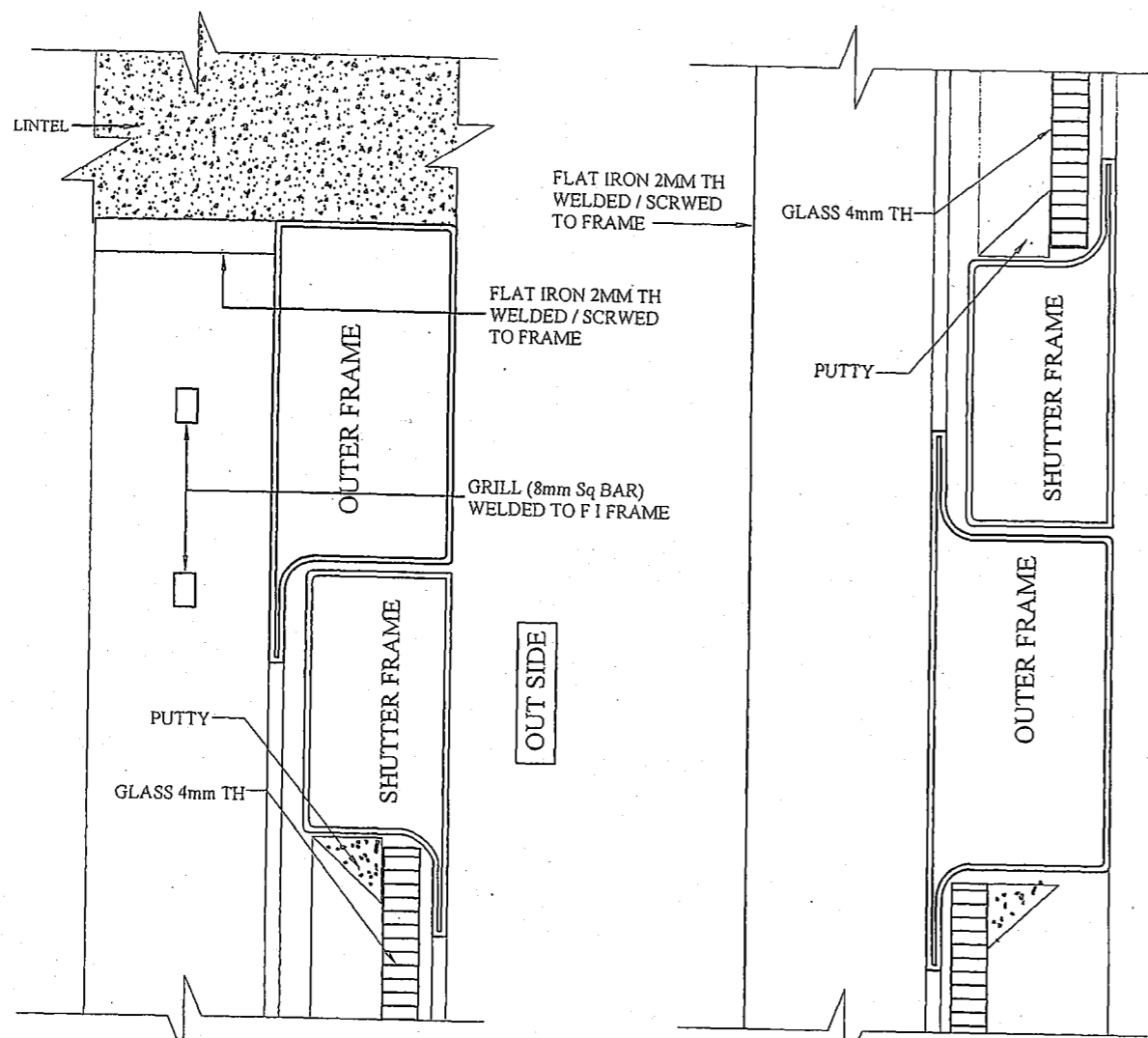


DETAIL AT (C)

NOTES
1. FOR ALL NOTES REFER SHT NO 1/3 OF THIS DRG.

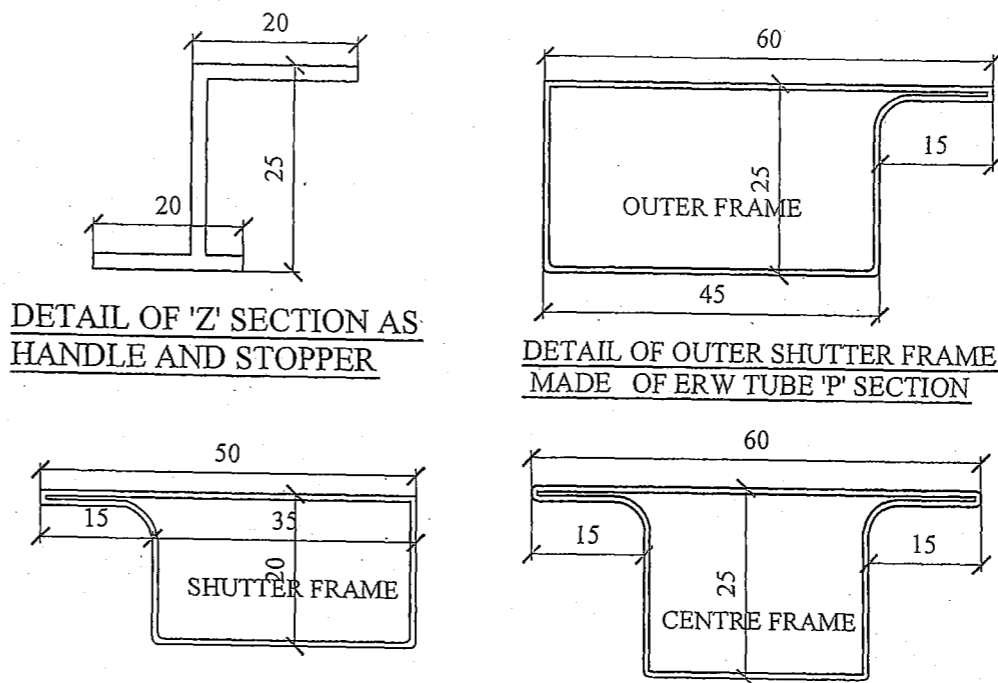
S NO	DATE	DESCRIPTION	INITIALS
REVISIONS			
TYPICAL DETAIL OF BOX WINDOW (STEEL) WITH FLY PROOF SHUTTER			
DATE	10.10.2013	CHIEF ENGINEER	SHEET NO
DRN	C S ASERI	JODHPUR ZONE	2/3
CKD	VINOD		
SCALE	1:20	DRG NO : CEJZ/TD/22	

Chin
(R C SWAIN)
LT COL
SR ARCHITECT
FOR CE JODHPUR ZONE



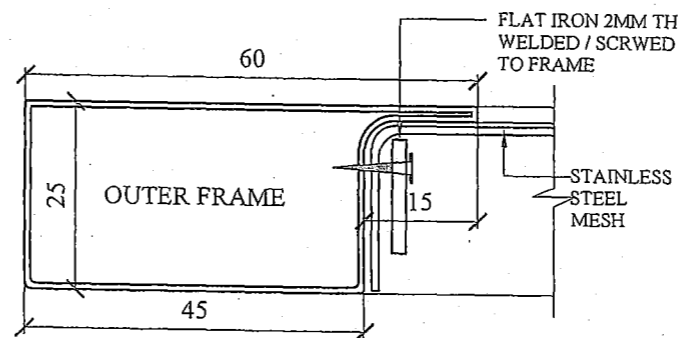
DETAIL AT (F)

DETAIL AT (F1)

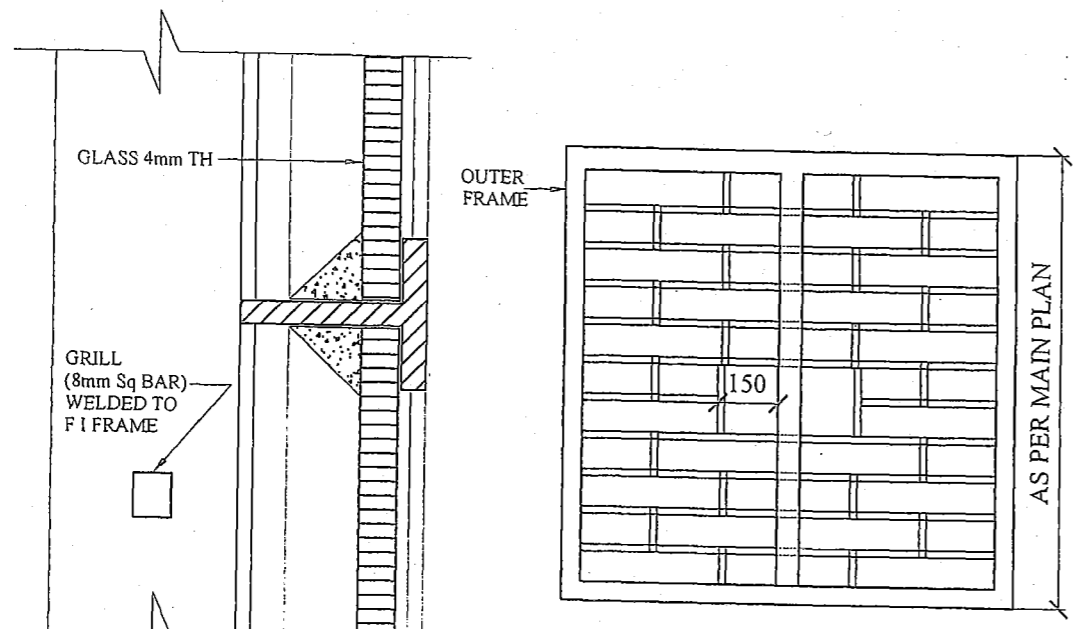


DETAIL OF 'Z' SECTION AS HANDLE AND STOPPER

DETAIL OF OUTER SHUTTER FRAME MADE OF ERW TUBE 'P' SECTION

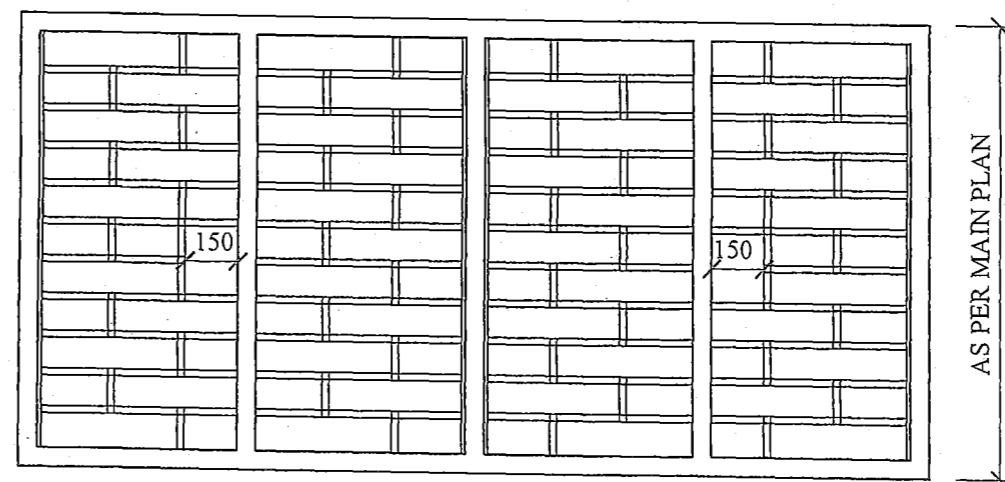


FIXING DETAIL OF WIREMESH WITH SHUTTER FRAME



DETAIL AT (G)

ELEVATION OF GRILL

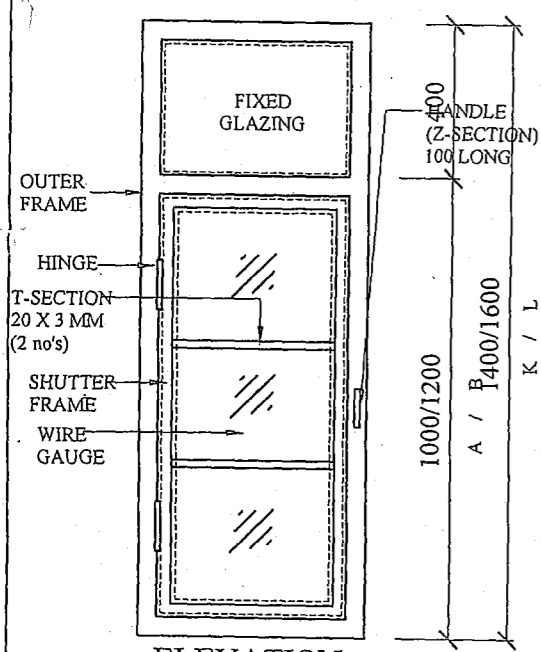


ELEVATION OF GRILL

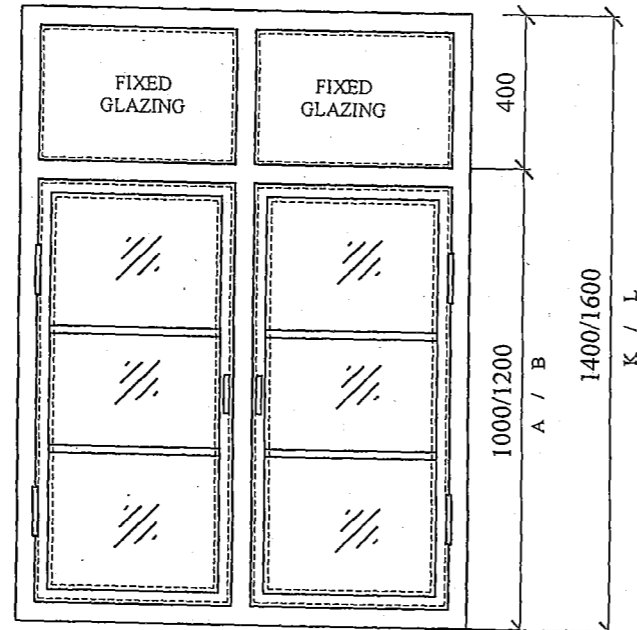
NOTES
1. FOR ALL NOTES REFER SHT NO 1/3 OF THIS DRG

SNO	DATE	DESCRIPTION	INITIALS
REVISIONS			
TYPICAL DETAIL OF BOX WINDOW (STEEL) WITH FLY PROOF SHUTTER			
DATE	10.10.2013	CHIEF ENGINEER	SHEET NO
DRN	C S ASER	JODHPUR ZONE	3/3
CKD	VINOD	DRG NO : CEJZ/TD/22	
SCALE	1:20		

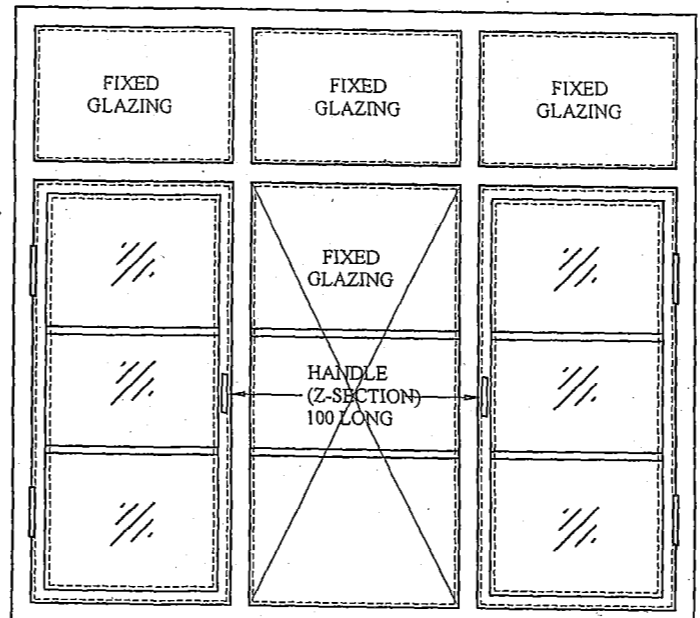
(Signature)
(R C SWAIN)
LT COL
SR ARCHITECT
FOR CE JODHPUR ZONE



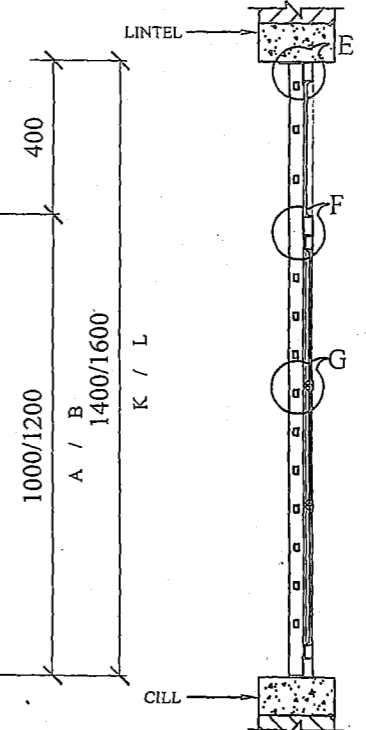
ELEVATION (INSIDE)



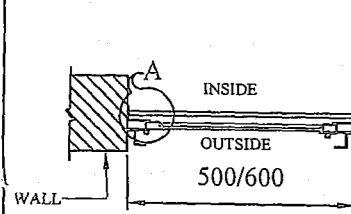
ELEVATION (INSIDE)



ELEVATION (INSIDE)

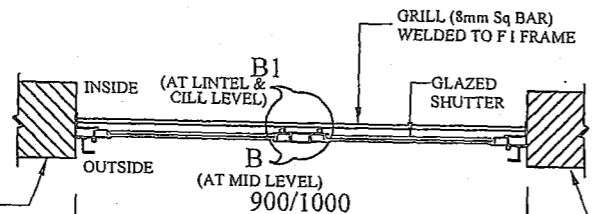


SECTION



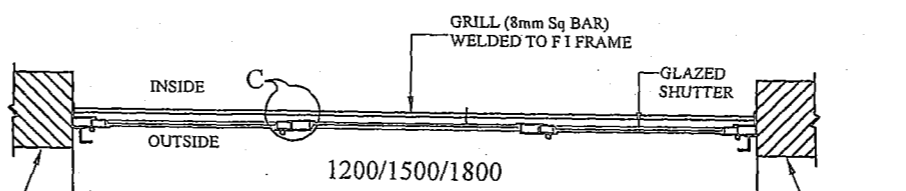
PLAN

(BWF) 5 / (BWF) 6



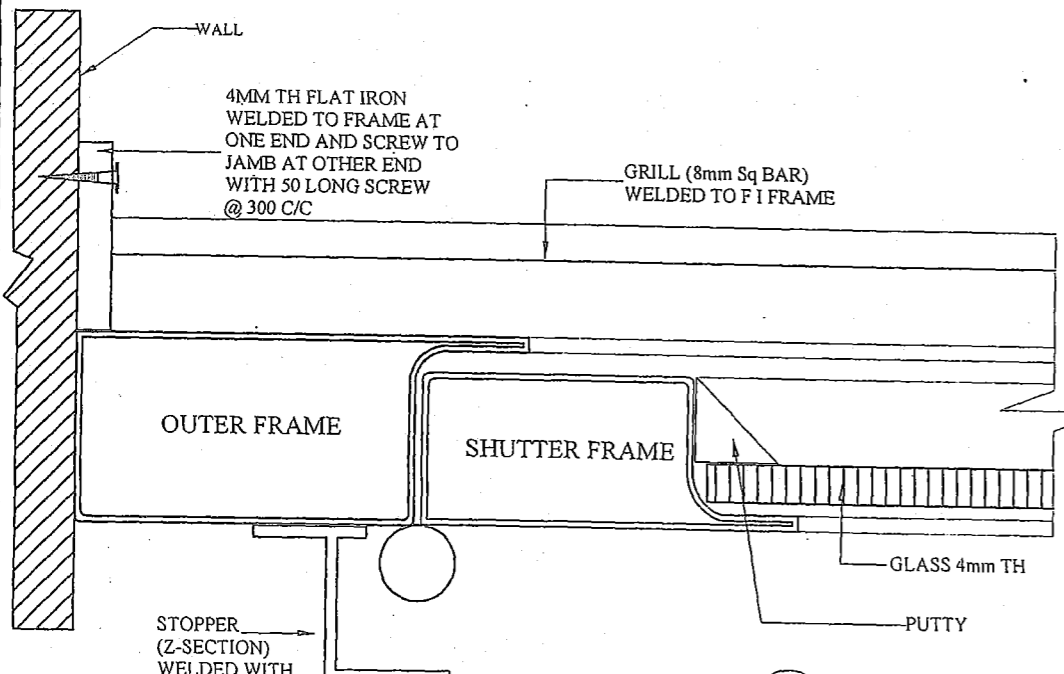
PLAN

(BWF) 9 / (BWF) 10

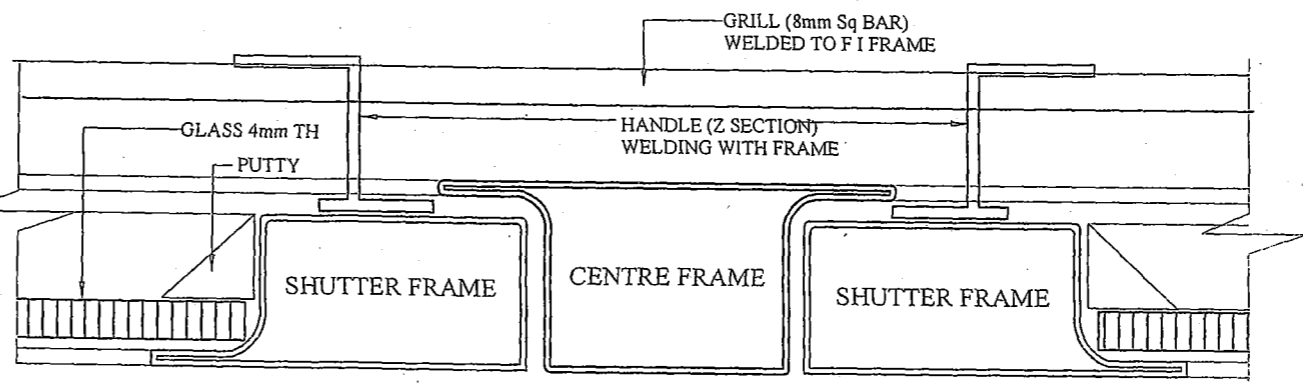


PLAN

(BWF) 12 / (BWF) 15 / (BWF) 18




DETAIL AT (A)

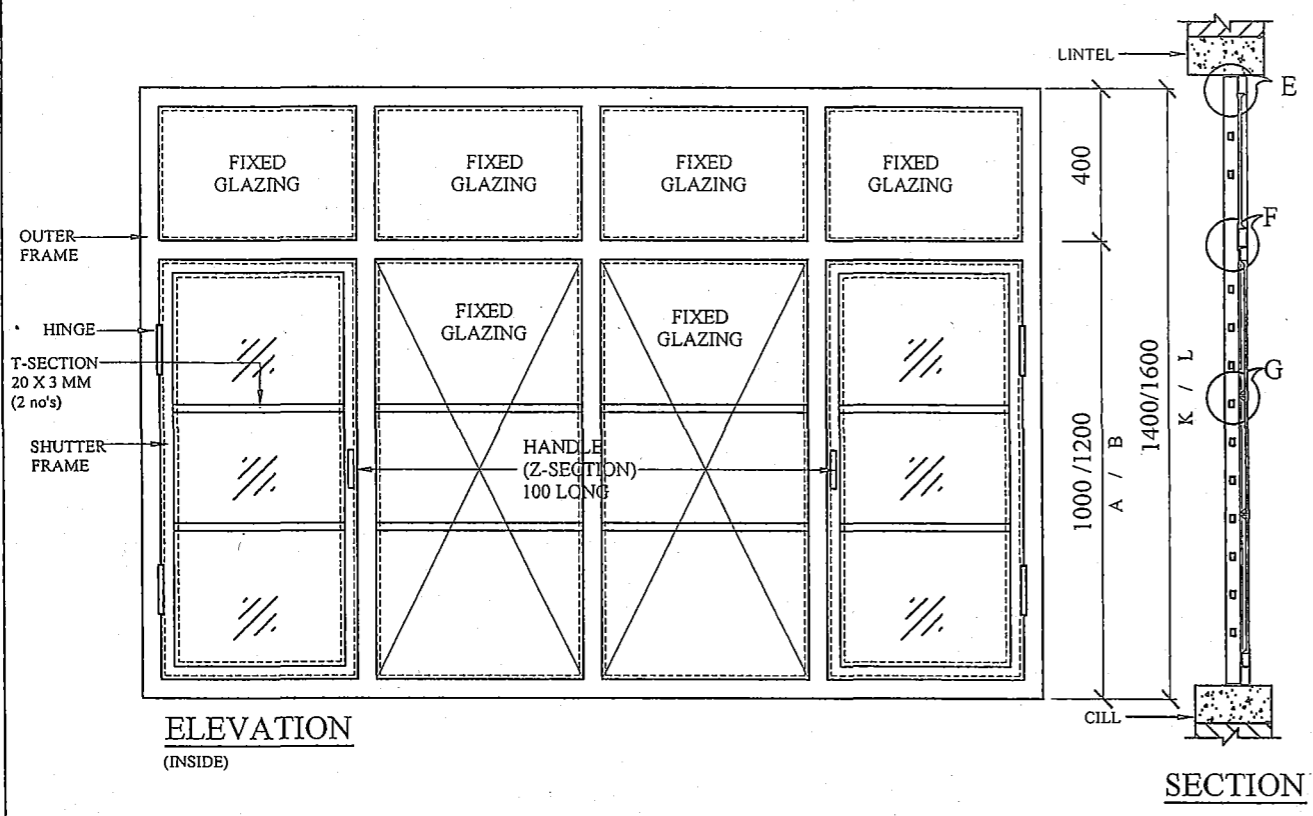


DETAIL AT (B) (AT MID LEVEL)

- NOTES
- CONTRACTOR TO CHECK & VERIFY ALL THE DIMENSIONS BEFORE EXECUTION OF THE WORK.
 - FIGURED DIMENSIONS SHALL BE FOLLOWED.
 - ALL DIMENSIONS GIVEN IN THIS DRG ARE IN MILLIMETRES UNLESS OTHERWISE SHOWN.
 - SIZE OF WINDOW MENTIONED HERE IN IS CLEAR SIZE OF MASONRY OPENING A TOLERANCE OF 10 mm ON EITHER SIDE SHALL BE ALLOWED WHEN THE WINDOWS ARE FITTED IN TO BUILT IN OPENING.
 - 4mm TH PLAIN SHEET GLASS PANES SHALL BE PROVIDED TO ALL WINDOWS UNLESS OTHERWISE SPECIFIED.
 - (BWF) STANDS FOR BOX WINDOW STEEL WITH GLAZED SHUTTER AND FAN LIGHT WITH GUARD BAR. K/L STAND FOR HEIGHT AS 1400 / 1600 mm RESPECTIVELY
 - ALL WINDOWS OF TOILETS, BATH & W.C SHALL HAVE FROSTED / PIN HEADED GLASS.
 - IN CASE OF R.C.C COLUR. C.C WALL THE WINDOWS FRAME SHALL BE FIXED WITH DASH THRU BOLTS OF STANDARD QUALITY AND SIZE AT 300MM C/C.
 - ONE HANDLE & 2 NOS TOWER BOLTS 150 mm LONG SHALL BE PROVIDED TO EACH SHUTTER.
 - HINGES WILL BE PROVIDED AT 115 mm ABOVE THE WINDOW CILL LEVEL AND 115 mm BELOW FROM SOFFIT OF LINTEL.
 - THE HOLDFAST/LUGS FOR WINDOWS AND VENTILATORS SHALL BE EMBEDDED IN PCC 1:3:6 OF SIZE 150X 150X TH OF WALL.
 - ALL FRAMES USED ARE BOX STEEL SECTIONS.
 - FOR WIDTH & HEIGHT OF A PERTICULAR WINDOW / VENT, THE NOTATION SHALL BE NOMNICALTURE OF WINDOW FOLLOWED WITH NOMNICALTURE OF HEIGHT. FOR EXAMPLE FOR A WINDOW OF SIZE 900x1400 THE NOTATION SHALL BE (BWF) 9 / (K/L) 14.
 - PIN HOLE @ 300 C/C TO BE PROVIDED FOR SUPPORTING GLASS WITH G.I CLIP/WIRE IN CASE OF GLAZED SHUTTERS.
 - 2 NOS OF PINTOL HINGES 75mm LONG 12 mm dia WITH ONE PART OF THE HINGE SPOT WELDED WITH FRAME & OTHER WITH SHUTTER FOR EACH OPENABLE SHUTTER.
 - 4 NOS FLAT IRON HOLD FAST SHALL BE WELDED WITH EACH WINDOW.
 - MS GRILL (8mm Sq BAR) WELDED TO F I FRAME @ 100 C/C.
 - ALL EXPOSED STEEL SURFACES SHALL BE TREATED WITH TWO COAT OF ENAMEL PAINTS OF APPROVED COLOUR OVER ONE COAT OF METEL PRIMER.
 - ALL WELDING AND FINISHING WORKS OF STEEL MEMBERS SHALL BE AS PER STANDRAD WORKMENSHP PRATICE / MANUFACTURER'S INSTRUCTION.
 - WIRE GAUGE SHUTTER SHALL BE PROVIDED WITH STAINLESS STEEL 32 GAUGE FLY MESH OF 304 GRADE WITH 144 HOLES PER SQ. INCH.
 - ALL FRAMES OF BOX TYPE MILD STEEL WINDOW SHALL BE MADE WITH ERW SECTION HAVING WALL THICKNESS 1.25mm (i.e 18 GAUGE).

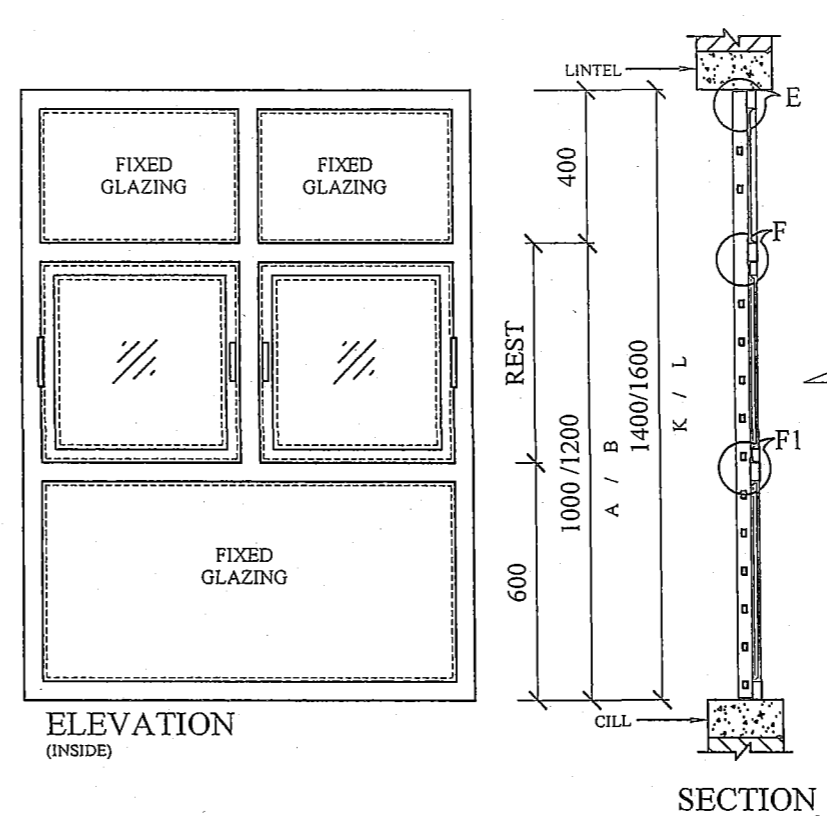
SNO	DATE	DESCRIPTION	INITIALS
REVISIONS			
TYPICAL DETAIL OF BOX WINDOW (STEEL) WITH GLAZED SHUTTER AND FAN LIGHT			
DATE	10.10.2013	CHIEF ENGINEER	SHEET NO
DRN	C/S ASERI	JODHPUR ZONE	1/3
CKD	VINOD	DRG NO : CEJZ / TD / 23	
SCALE	1:20		


 (R C SWAIN)
 LT COL
 SR ARCHITECT
 FOR CE JODHPUR ZONE



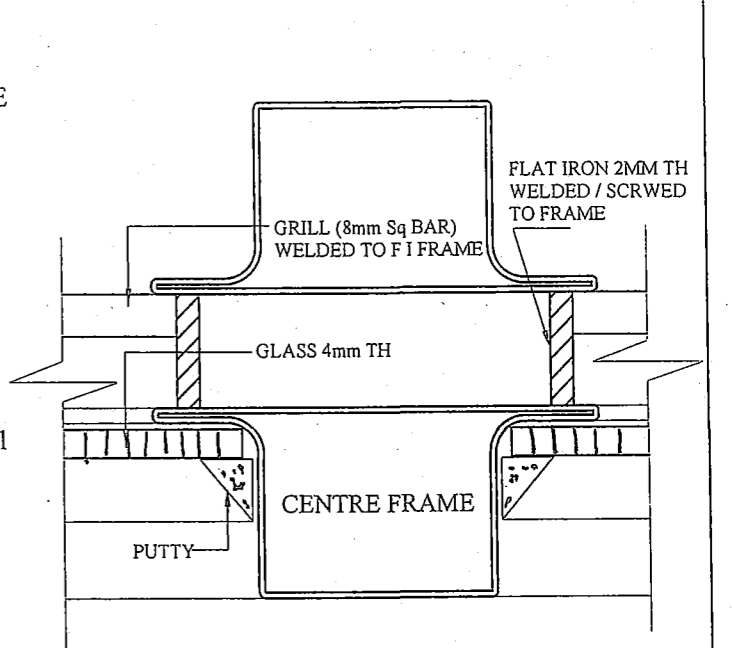
ELEVATION
(INSIDE)

SECTION

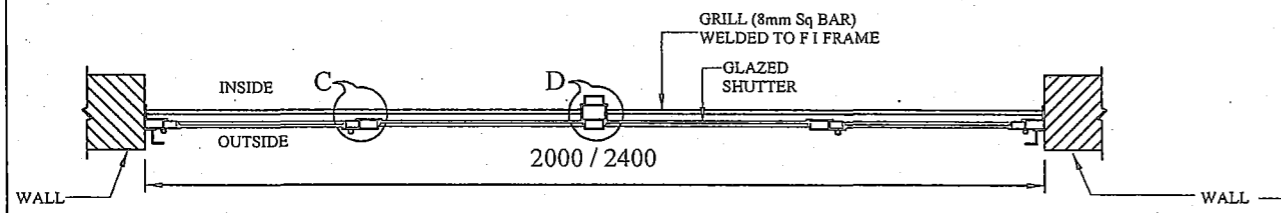


ELEVATION
(INSIDE)

SECTION

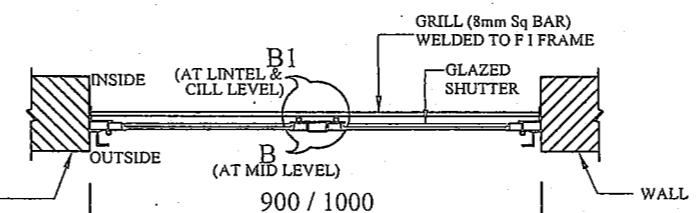


DETAIL AT (D)



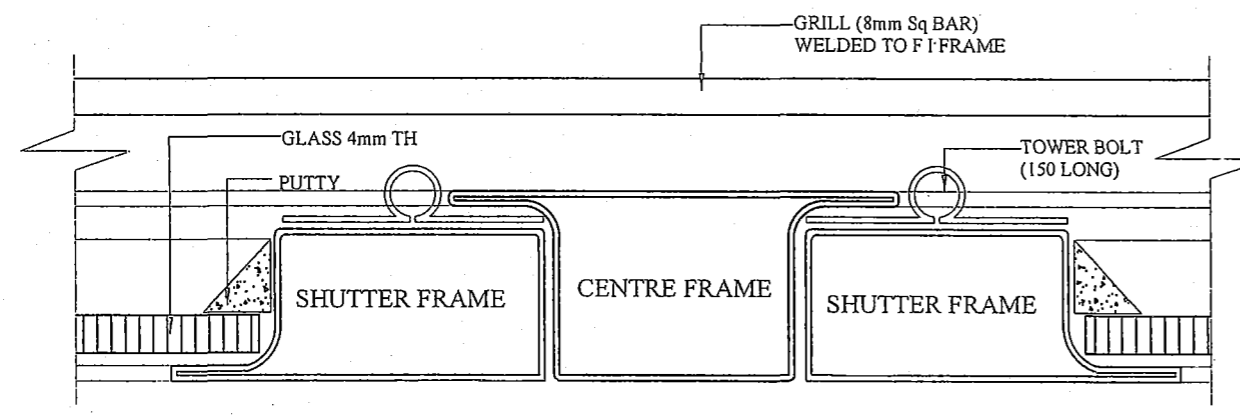
PLAN

(BWF 20) / (BWF 24)

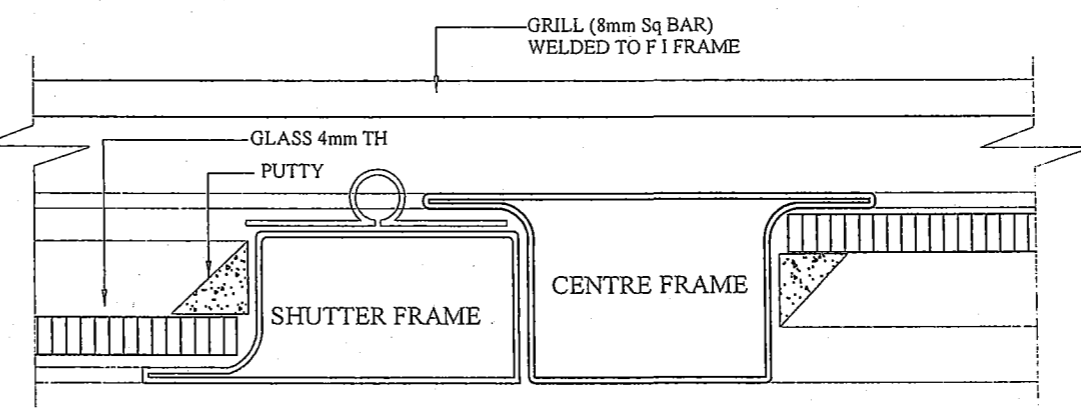


PLAN WITH AC NICHE (C)

(BWF C9) / (BWF C10)



DETAIL AT (B1)
(AT LINTEL & CILL LEVEL)

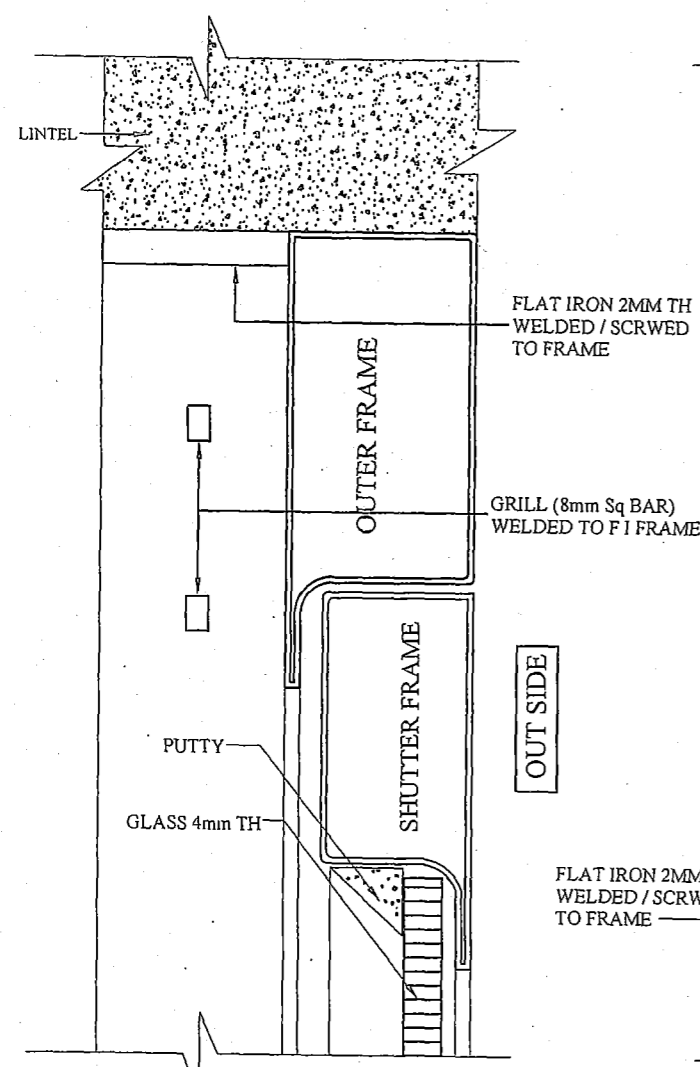


DETAIL AT (C)

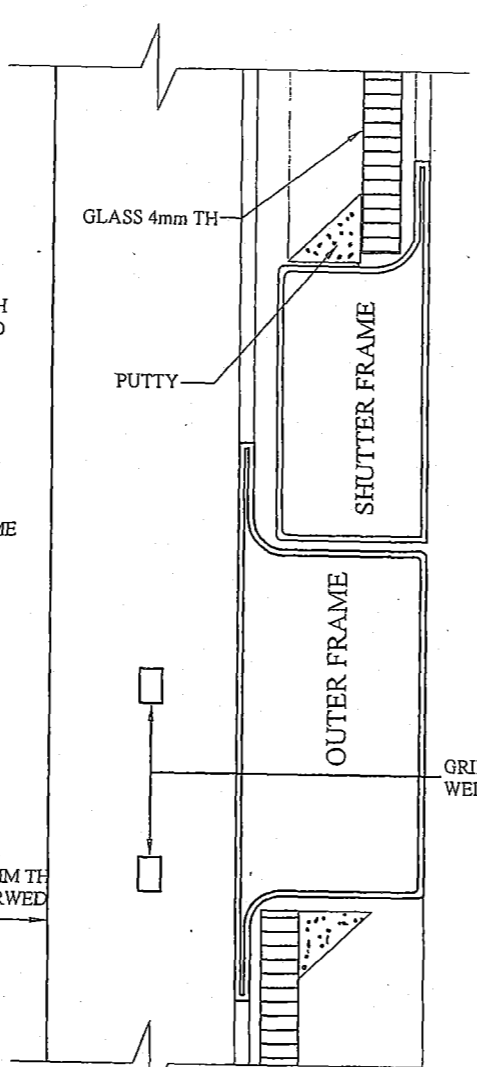
NOTES:
1. FOR ALL NOTES REFER SHT NO 1/3 OF THIS DRG.

SNO	DATE	DESCRIPTION	INITIALS
REVISIONS			
TYPICAL DETAIL OF BOX WINDOW (STEEL) WITH FLY PROOF SHUTTER & FAN LIGHT			
DATE	10.10.2013	CHIEF ENGINEER	SHEET NO
DRN	C S ASERI	JODHPUR ZONE	2/3
CKD	VINOD	DRG NO : CEJZ/TD/23	
SCALE	1:20		

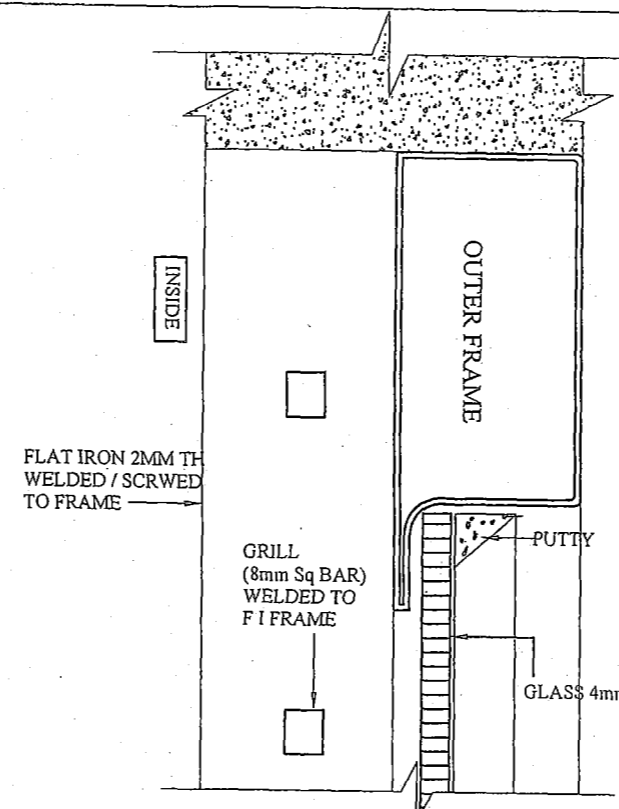
(Signature)
(R C SWAIN)
LT COL
SR ARCHITECT
FOR CE JODHPUR ZONE



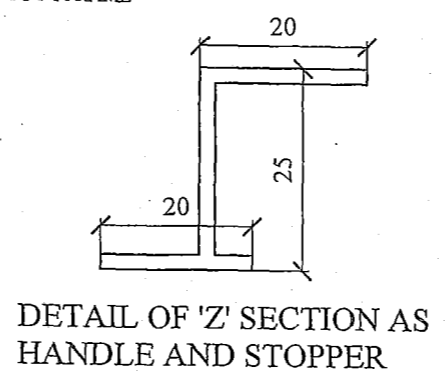
DETAIL AT (F)



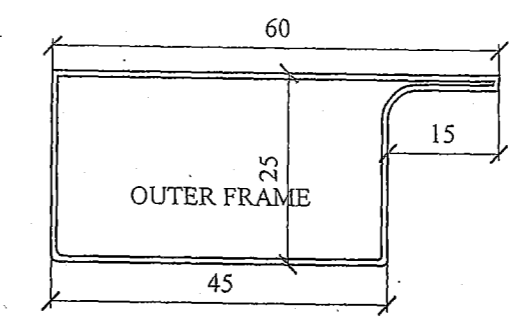
DETAIL AT (F1)



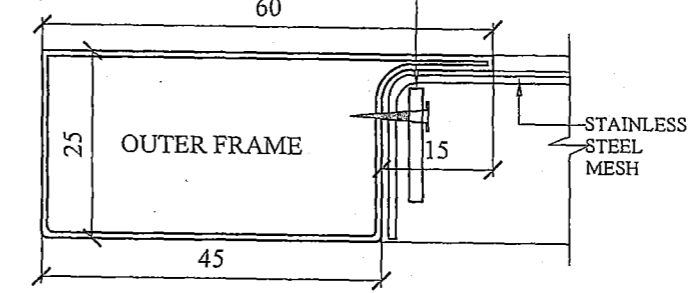
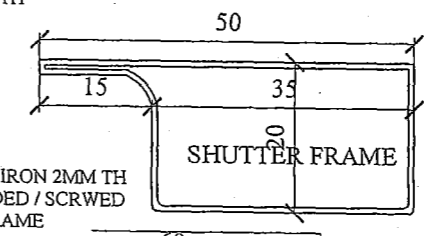
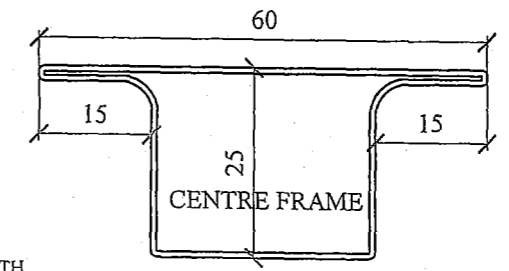
DETAIL AT (E)



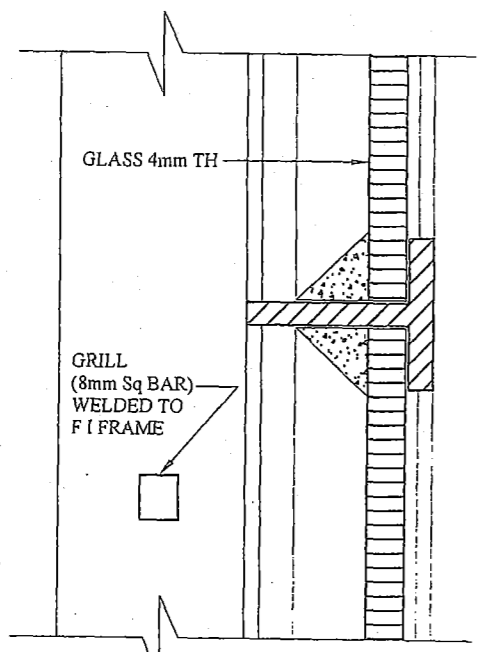
DETAIL OF 'Z' SECTION AS HANDLE AND STOPPER



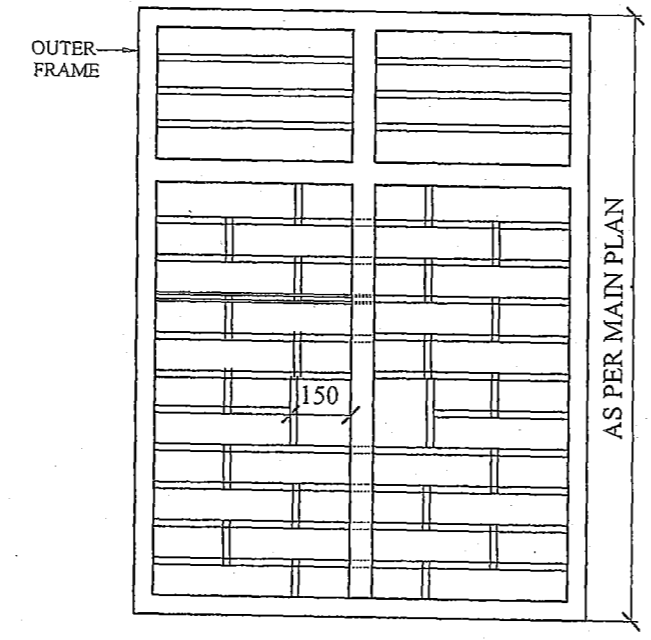
DETAIL OF OUTER SHUTTER FRAME MADE OF ERW TUBE 'P' SECTION



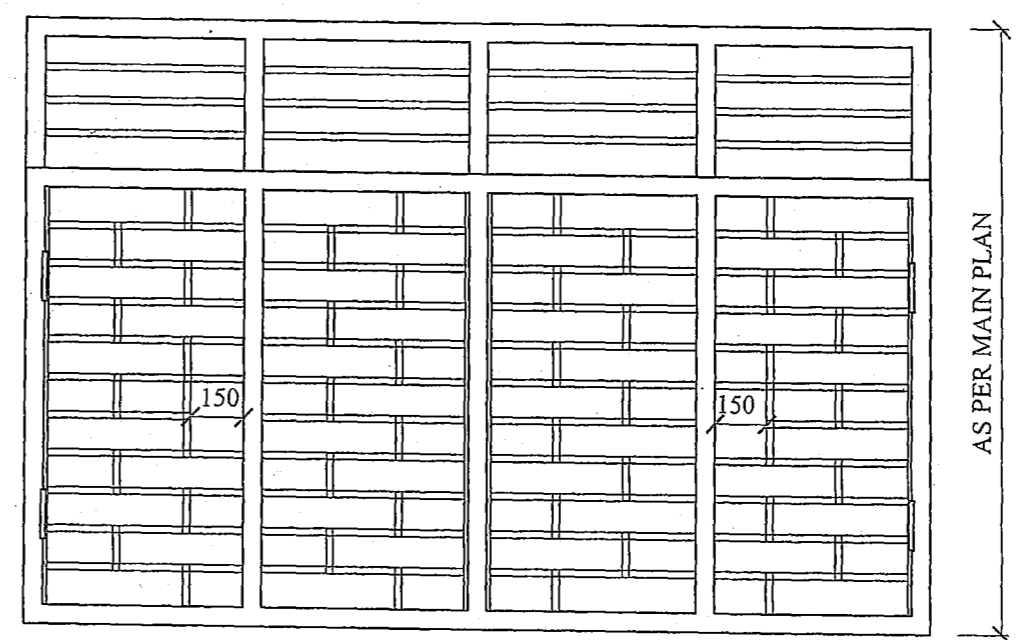
FIXING DETAIL OF WIREMESH WITH SHUTTER FRAME



DETAIL AT (G)



AS PER MAIN PLAN
ELEVATION OF GRILL

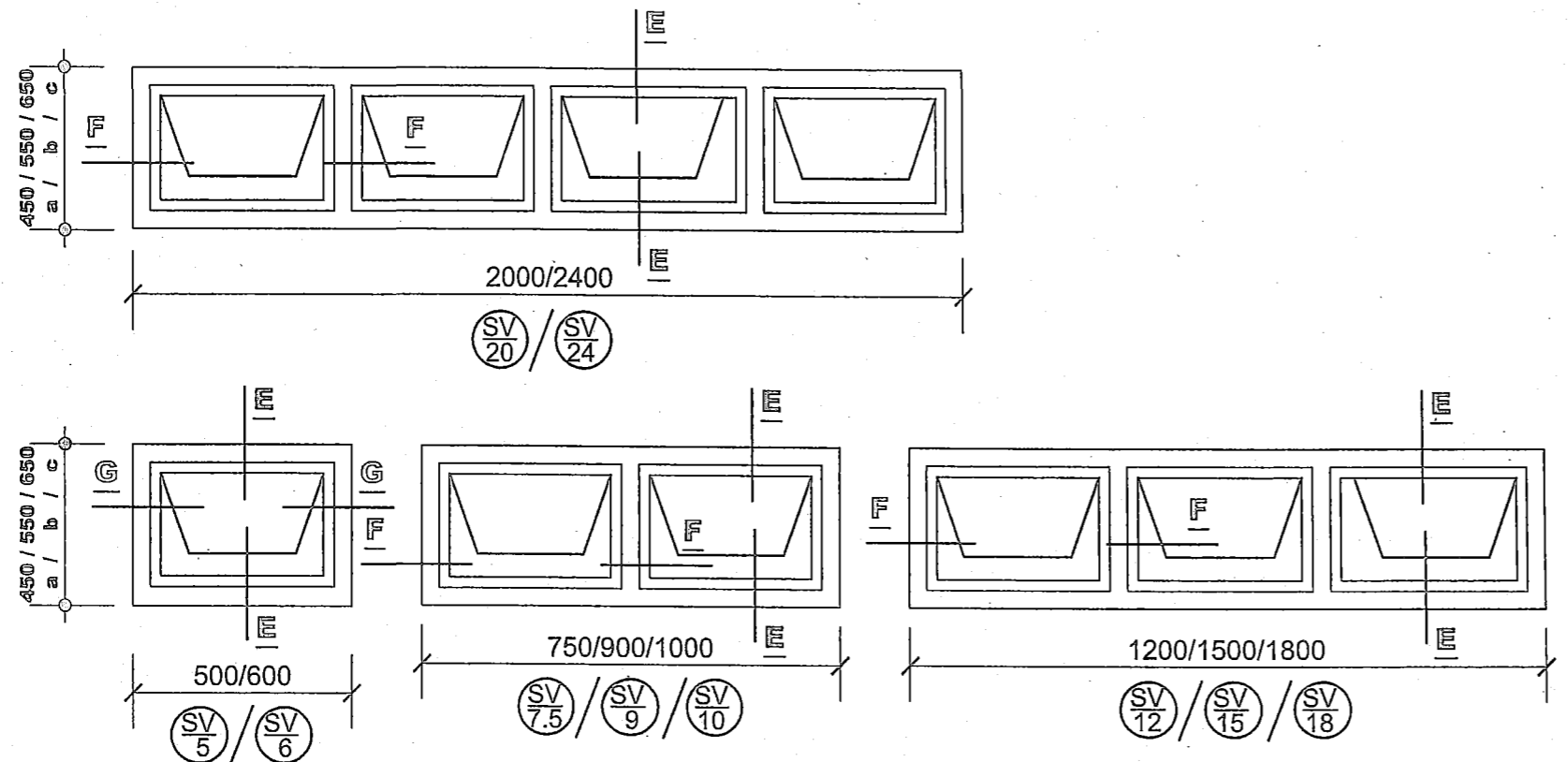


AS PER MAIN PLAN
ELEVATION OF GRILL

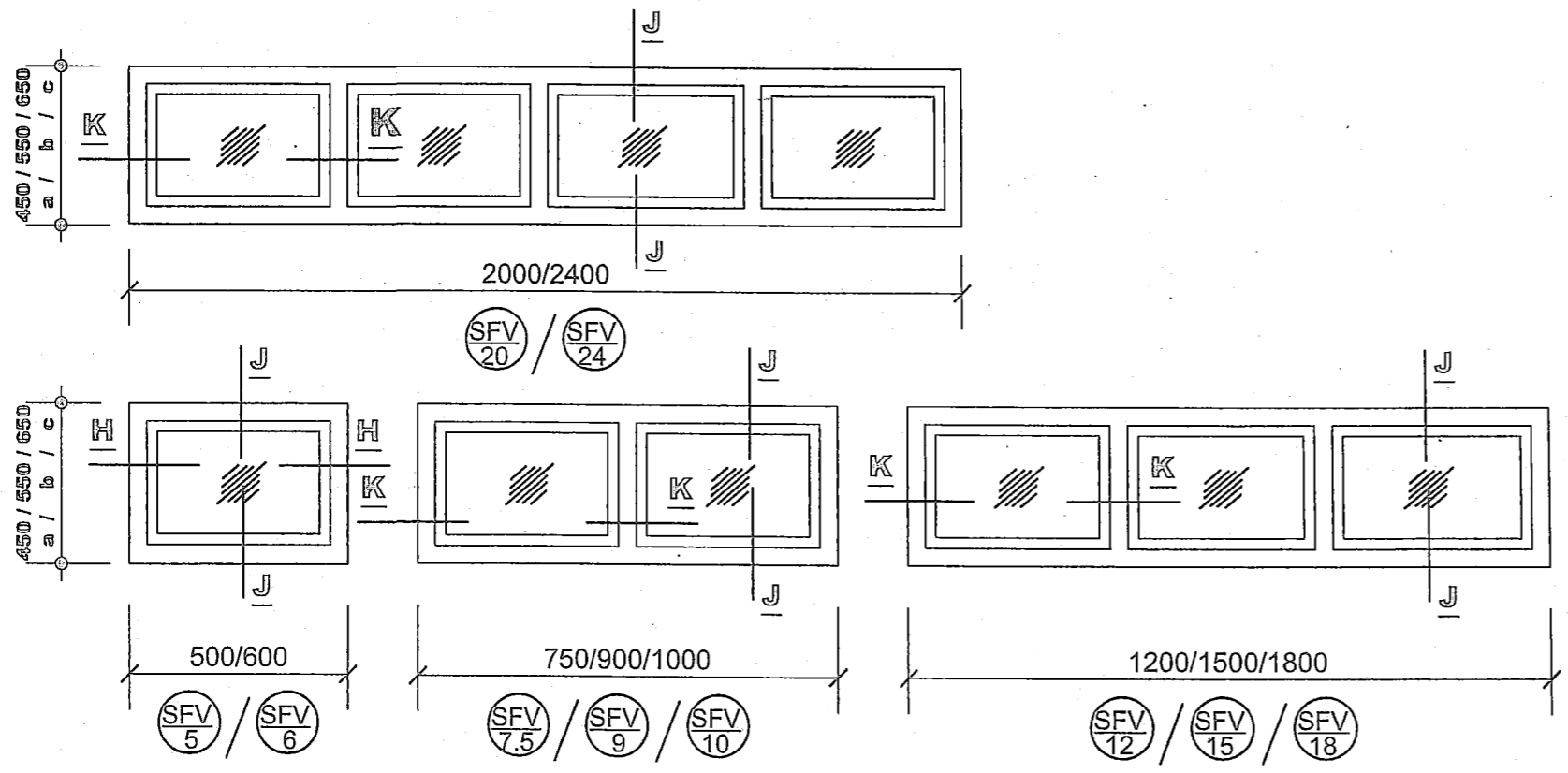
NOTES
1. FOR ALL NOTES REFER SHT NO 1/3 OF THIS DRG.

S NO	DATE	DESCRIPTION	INITIALS
REVISIONS			
TYPICAL DETAIL OF BOX WINDOW (STEEL) WITH FLY PROOF SHUTTER & FAN LIGHT			
DATE	10.10.2013	CHIEF ENGINEER	SHEET NO
DRN	C S ASERI	JODHPUR ZONE	3/3
CKD	VINOD	DRG NO : CEJZ/TD/23	
SCALE	1:20		

Chin
(R C SWAIN)
LT COL
SR ARCHITECT
FOR CE JODHPUR ZONE




ELEVATIONS OF OPENABLE VENTILATORS

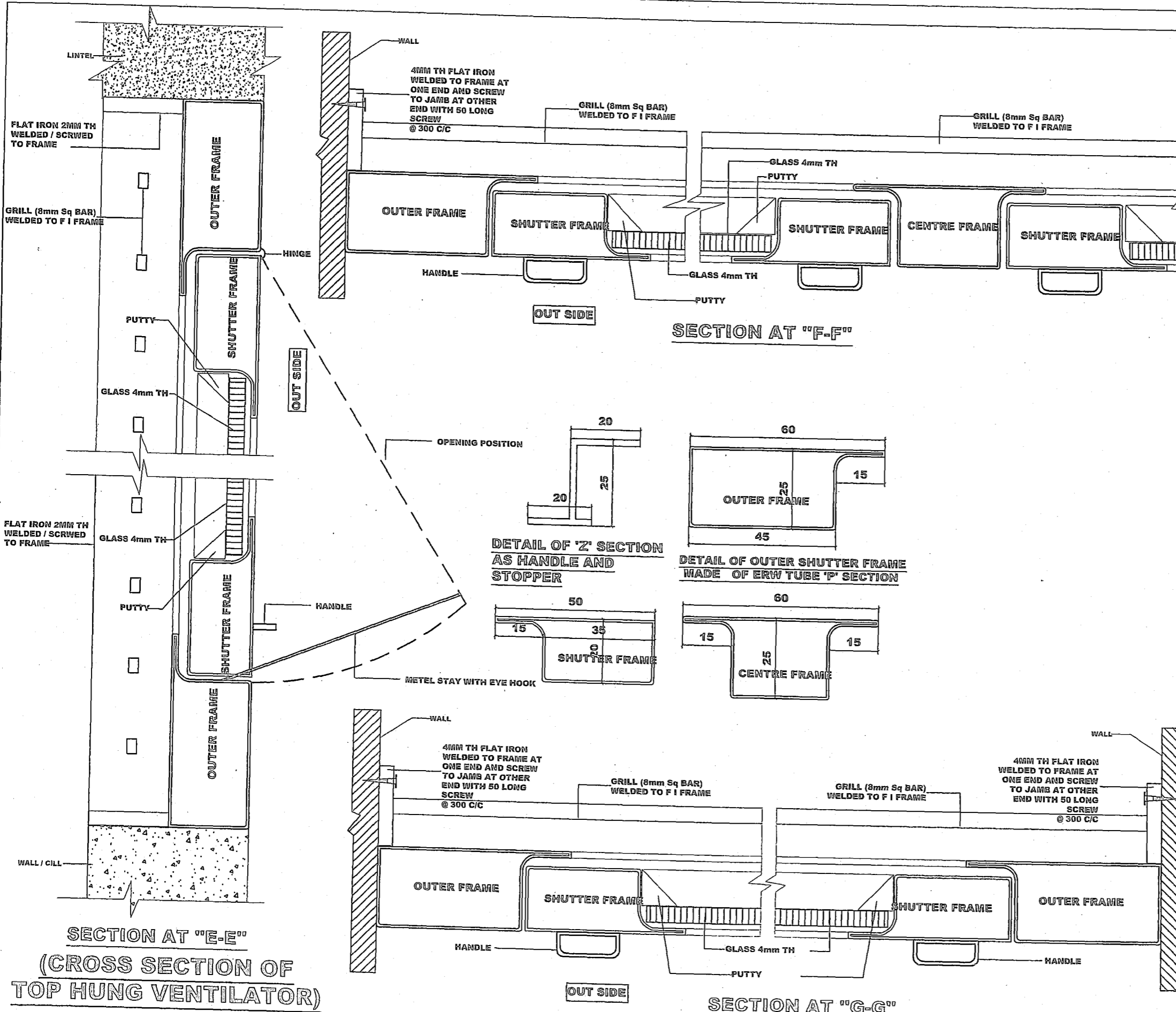


ELEVATIONS OF FIXED GLAZED VENTILATORS

- NOTES**
- CONTRACTOR TO CHECK & VERIFY ALL THE DIMENSIONS BEFORE EXECUTION OF THE WORK.
 - FIGURED DIMENSIONS SHALL BE FOLLOWED.
 - ALL DIMENSIONS GIVEN IN THIS DRG. AR IN MILLIMETRES UNLESS OTHER WISE SHOWN.
 - SIZE OF VENTS MENTIONED HERE ARE CLEAR SIZE OF MASONARY OPENING. A TOLERANCE OF 10 mm ON EITHER SIDE SHALL BE ALLOWED WHEN THE VENTS ARE FITTED IN TO BUILT IN OPENING.
 - 5mm TH PLAIN FLOAT GLASS PANES SHALL BE PROVIDED TO ALL WINDOWS UNLESS OTHERWISE SPECIFIED.
 - ALL VENTILATOR OF TOILETS, BATH & W.C SHALL HAVE FROSTED / PIN HEADED GLASS.
 - THE HOLDFAST/LUGS VENTILATORS SHALL BE EMBEDDED IN PCC 1:3:6 OF SIZE 150X 150X TH OF WALL
 - ALL FRAMES USED ARE BOX STEEL SECTIONS.
 - 'SV' STANDS FOR BOX VENTILATORS STEEL WITH TOP HUNG GLAZED SHUTTER & GUARD BAR. a / b / c STAND FOR HEIGHT AS 450 / 550 / 650 mm RESPECTIVELY
 - 'SFV' STANDS FOR BOX VENTILATORS STEEL WITH FIXED GLAZED SHUTTER & GUARD BAR. a / b / c STAND FOR HEIGHT AS 450 / 550 / 650 mm RESPECTIVELY
 - IN CASE OF R.C.C COL/R.C.C WALL THE VENTILATOR FRAME SHALL BE FIXED WITH DASH THRU BOLTS OF STANDARD QUALITY AND SIZE AT 300MM C/C.
 - FOR WIDTH & HEIGHT OF A PARTICULAR VENTILATOR, THE NOTATION SHALL BE NOMNICLATURE OF VENTILATOR FOLLOWED WITH NOMNICLATURE OF HEIGHT . FOR EXAMPLE FOR A VENTILATOR OF SIZE 500x450 THE NOTATION SHALL BE $\frac{SV}{5a}$.
 - PIN HOLE @ 300 C/C TO BE PROVISIONED FOR SUPPORTING GLASS WITH G.I CLIPS / WIRE IN CASE OF GLAZED SHUTTERS.
 - 2 NOS OF PINTOL HINGES 75mm LONG 12 mm dia WITH ONE PART OF THE HINGE SPOT WELDED WITH FRAME & OTHER WITH SHUTTER FOR EACH TOP HUNG SHUTTER.
 - 02 NOS FLAT IRON HOLD FAST SHALL BE WELDED WITH EACH VENTS.
 - MS GRILL (8mm Sq BAR) WELDED TO F I FRAME @ 100 C/C.
 - ALL EXOPSED STEEL SURFACES SHALL BE TREATED WITH TWO COAT OF ENAMEL PAINTS OF APPROVED COLOUR OVER ONE COAT OF METEL PRIMER.
 - ALL WELDING AND FINISHING WORKS OF STEEL MEMBERS SHALL BE AS PER STANDRAD WORKMENSHP PRATICE / MANUFACTURER'S INSTRUCTION.
 - ALL FRAMMES OF BOX TYPE MILD STEEL VENTS SHALL BE MADE WITH ERW SECTION HAVING WALL THICKNESS 1.25mm (i.e 18 GAUGE).

S NO	DATE	DESCRIPTION	INITIALS
REVISIONS			
TYPICAL DETAIL OF OPENABLE & FIXED GLAZED BOX VENTILATORS (STEEL)			
DATE	18.10.13	CHIEF ENGINEER	SHT NO
DRN	C S ASERI		
CKD	VINOD	JODHPUR ZONE	
SCALE	1:20	DRG NO : CEJZ / TD / 24	

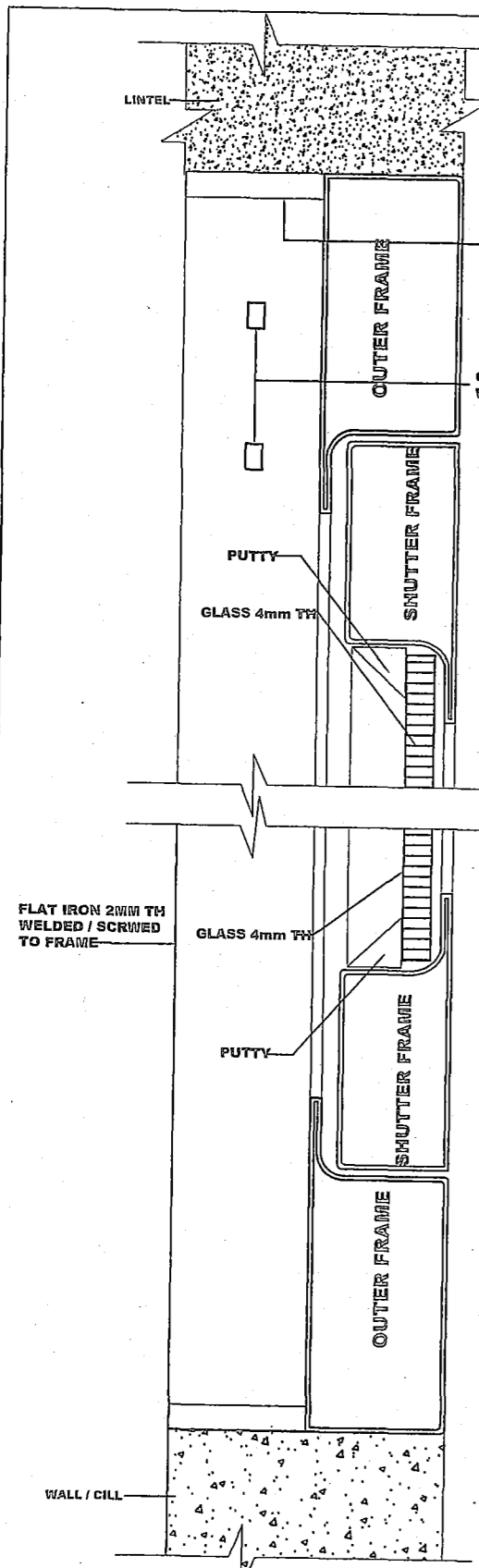

 (R C SWAIN)
 LT COL
 SR ARCHITECT
 FOR CE JODHPUR ZONE



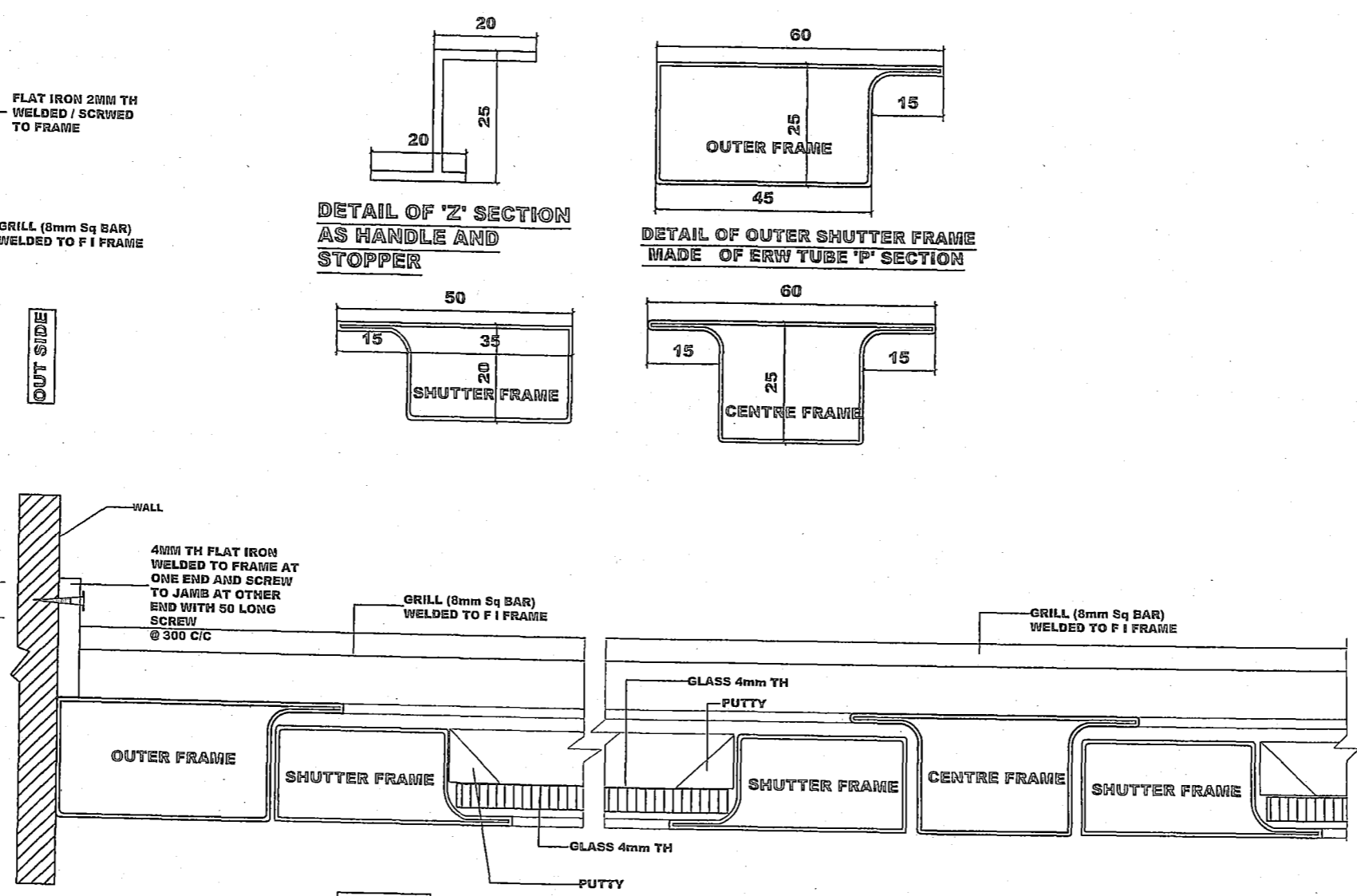
NOTES
 1. ALL OTHER NOTES REFER SHT NO 1/3 OF THIS DRG.

S NO	DATE	DESCRIPTION	INITIALS
REVISIONS			
TYPICAL DETAIL OF OPENABLE & FIXED GLAZED BOX VENTILATORS (STEEL)			
DATE	18.10.13	CHIEF ENGINEER	SHT NO
DRN	C S ASER	JODHPUR ZONE	2/3
CKD	VINOD	DRG NO : CEJZ / TD / 24	
SCALE	1:30		

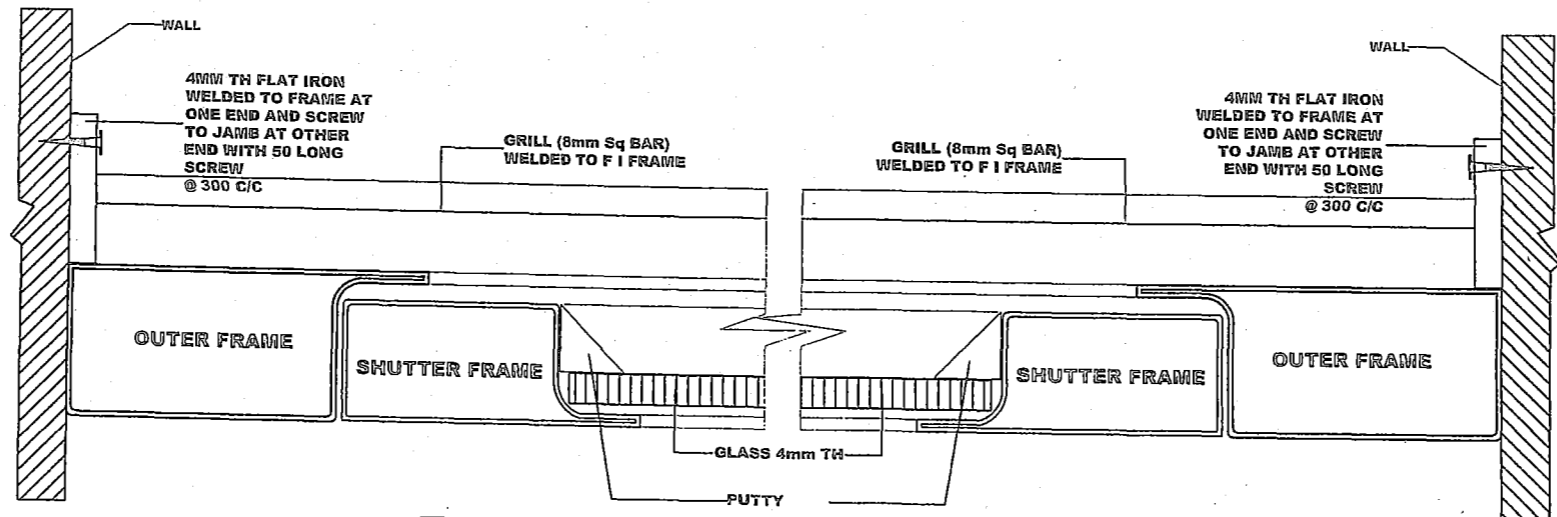
(Signature)
 (R C SWAIN)
 LT COL
 SR ARCHITECT
 FOR CE JODHPUR ZONE



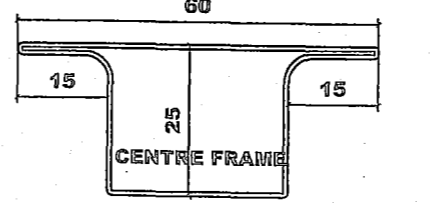
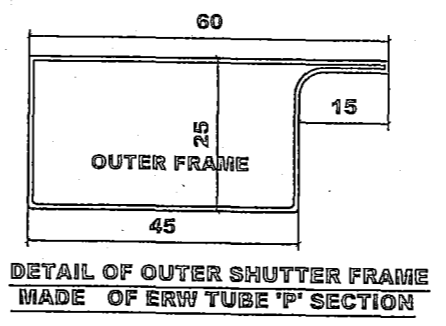
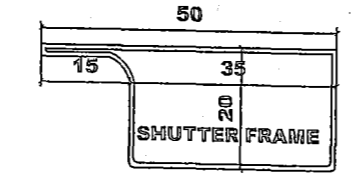
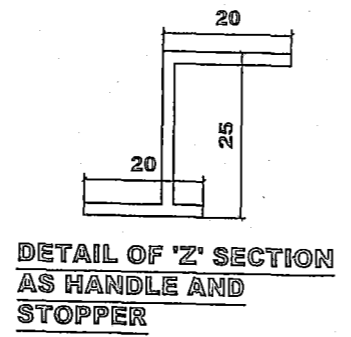
SECTION AT "J-J"
(CROSS SECTION OF
FIXED VENTILATOR)



SECTION AT "K-K"



SECTION AT "H-H"

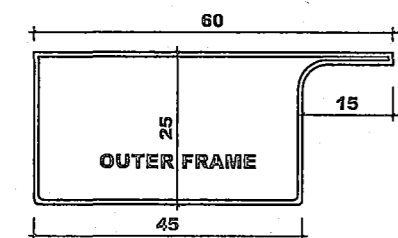


NOTES

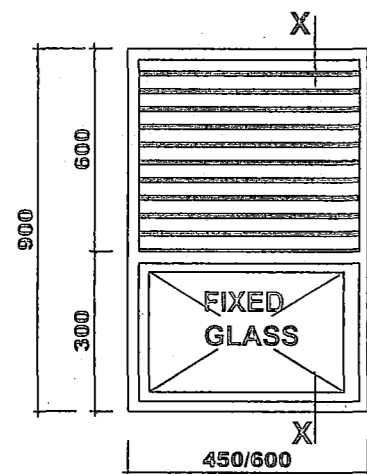
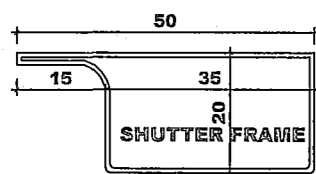
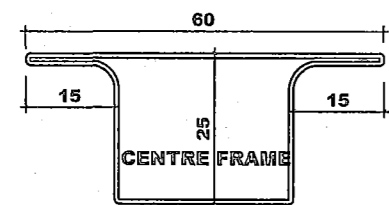
1. ALL OTHER NOTES REFER SHT NO 1/3 OF THIS DRG.

S NO	DATE	DESCRIPTION	INITIALS
REVISIONS			
TYPICAL DETAIL OF OPENABLE & FIXED GLAZED BOX VENTILATORS (STEEL)			
DATE	18.10.13	CHIEF ENGINEER	SHT NO
DRN	C S ASER	JODHPUR ZONE	3/3
CKD	VINOD	DRG NO : CEJZ / TD / 24	
SCALE	1:20		

(Signature)
(R C SWAIN)
LT COL
SR ARCHITECT
FOR CE JODHPUR ZONE

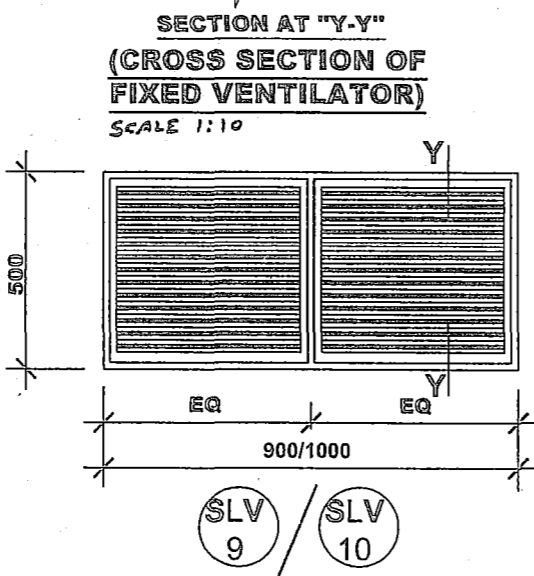


DETAIL OF OUTER SHUTTER FRAME MADE OF ERW TUBE 'P' SECTION

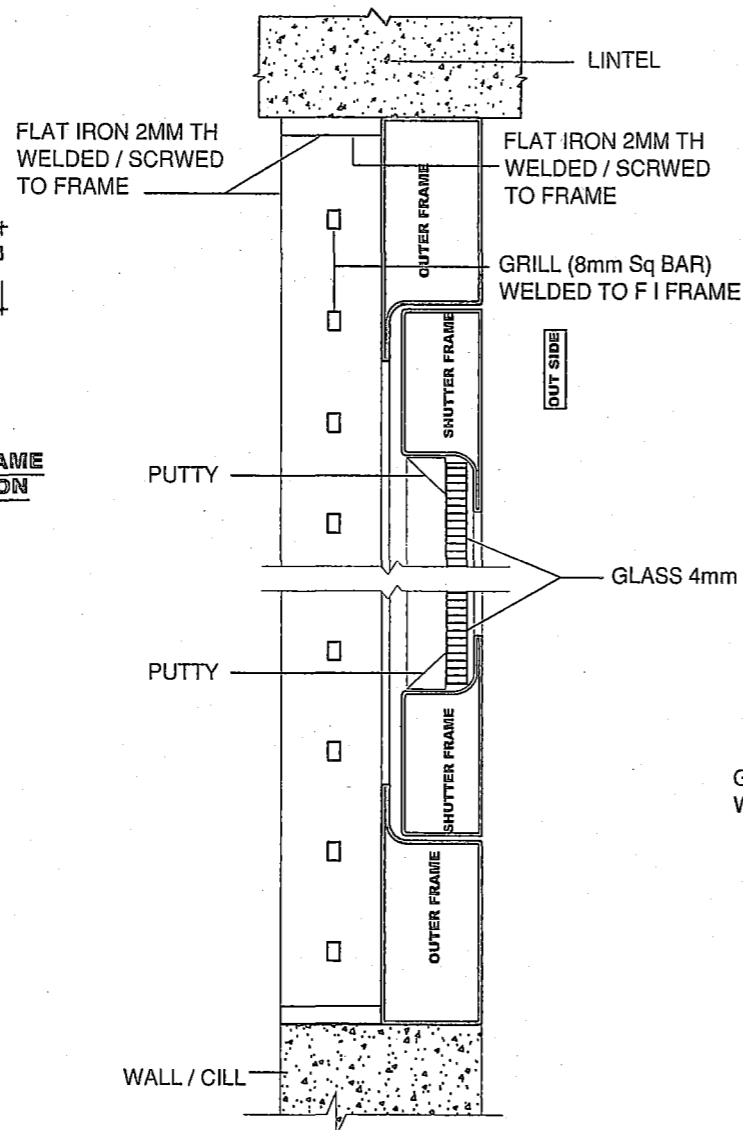


SLV 4.5 / SLV 6

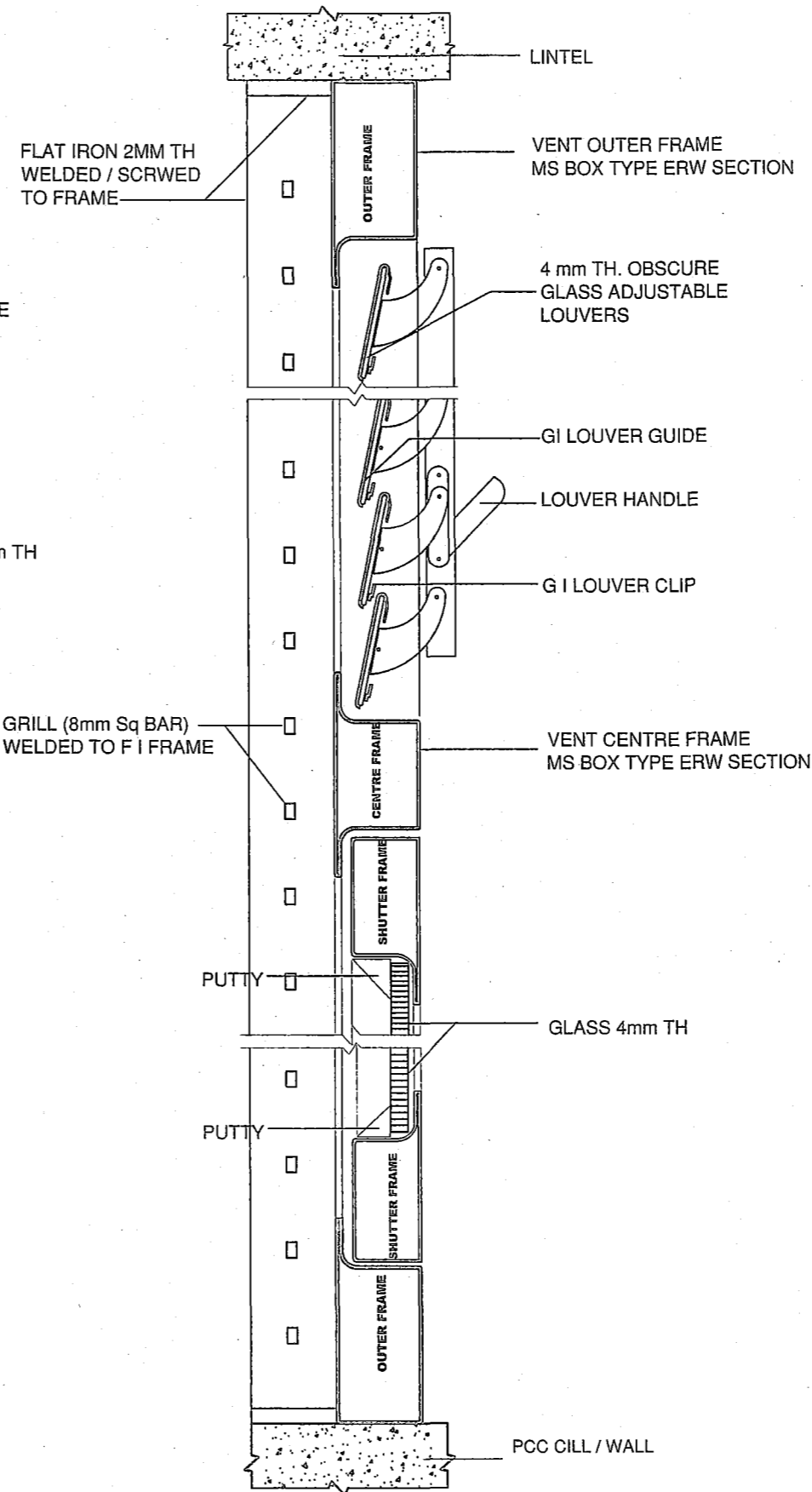
ELEVATIONS SCALE 1:20



SLV 9 / SLV 10



SECTION AT "Y-Y" (CROSS SECTION OF FIXED VENTILATOR) SCALE 1:10



SECTION AT "X-X" (CROSS SECTION OF LOUVERS VENTILATOR) SCALE 1:10

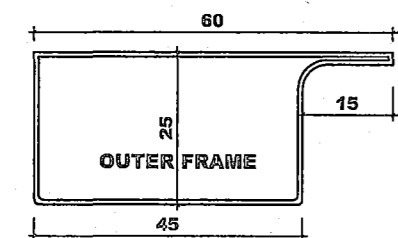
NOTES

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- 5mm TH PLAIN FLOAT GLASS PANS SHALL BE PROVIDED TO ALL WINDOWS UNLESS OTHERWISE SPECIFIED.
- ALL VENTILATOR OF TOILETS, BATH & W.C SHALL HAVE FROSTED / PIN HEADED GLASS.
- THE HOLDFAST/LUGS VENTILATORS SHALL BE EMBEDDED IN PCC 1:3:6 OF SIZE 150X 150X TH OF WALL.
- ALL FRAMES USED ARE BOX STEEL SECTIONS.
- 'SLV' STANDS FOR BOX VENTILATORS STEEL WITH LOUVERED & FIXED GLAZED SHUTTER & GUARD BAR.
- IN CASE OF R.C.C COL/R.C.C WALL THE VENTILATOR FRAME SHALL BE FIXED WITH DASH THRU BOLTS OF STANDARD QUALITY AND SIZE AT 300MM C/C.
- PIN HOLE @ 300 C/C TO BE PROVIDED FOR SUPPORTING GLASS WITH G.I CLIPS / WIRE IN CASE OF GLAZED SHUTTERS.
- 2 NOS OF PINTOL HINGES 75mm LONG 12 mm d/a WITH ONE PART OF THE HINGE SPOT WELDED WITH FRAME & OTHER WITH SHUTTER FOR EACH TOP HUNG SHUTTER.
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- ALL FRAMES OF BOX TYPE MILD STEEL VENTS SHALL BE MADE WITH ERW SECTION HAVING WALLTHICKNESS 1.25mm (i.e 18 GAUGE).

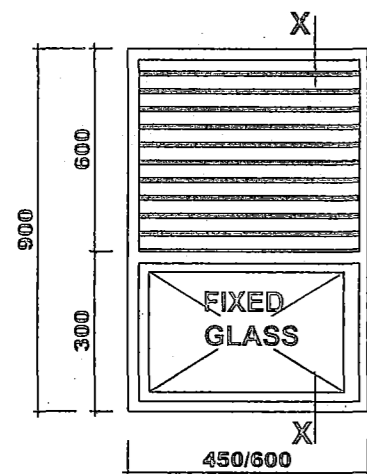
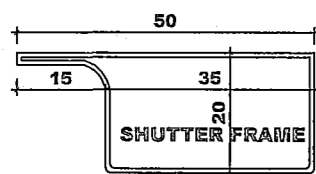
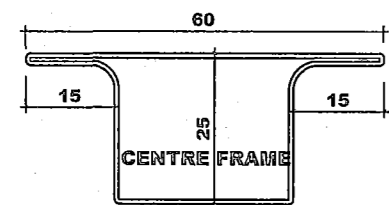
TYPICAL DETAIL OF FIXED GLAZED & LOUVERS BOX VENTILATORS (STEEL)

DATE	18/10/2013	CHIEF ENGINEER	SHEET NO
DRAWN	C S ASERI	JODHPUR ZONE	1/1
TCD		JODHPUR	
CKD		REF DRG NO:CEJZ/TD/ 25	
SCALE	AS SHOWN		

(Signature)
(R C SWAIN)
LT COL
SR ARCH
FOR CHIEF ENGINEER

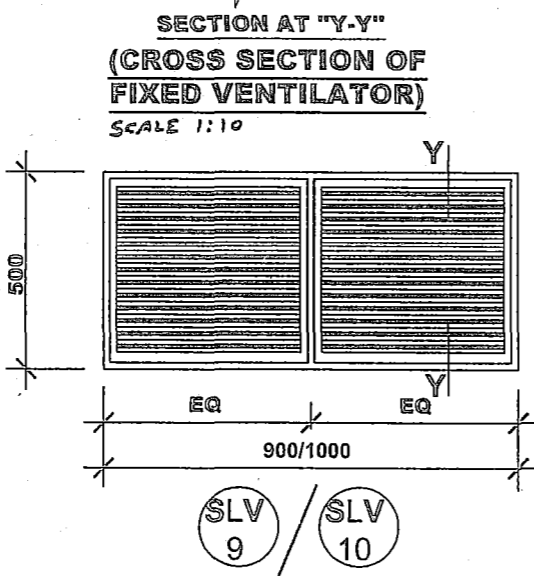


DETAIL OF OUTER SHUTTER FRAME MADE OF ERW TUBE 'P' SECTION

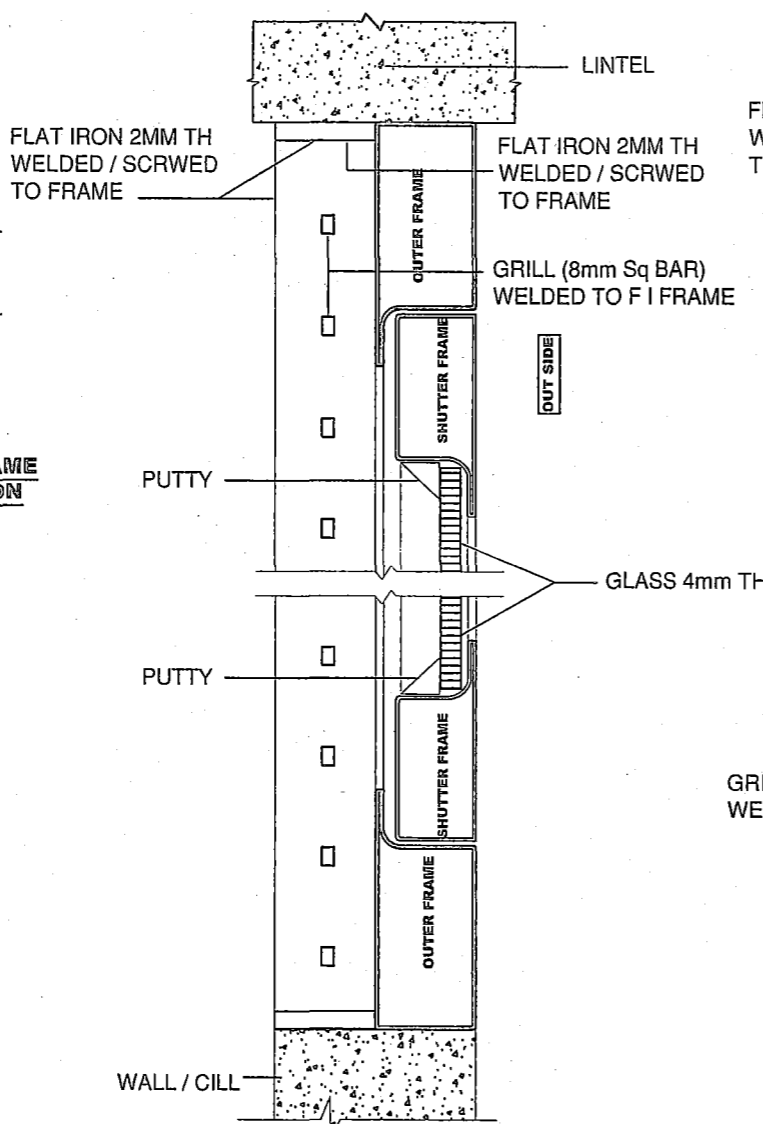


SLV 4.5 / SLV 6

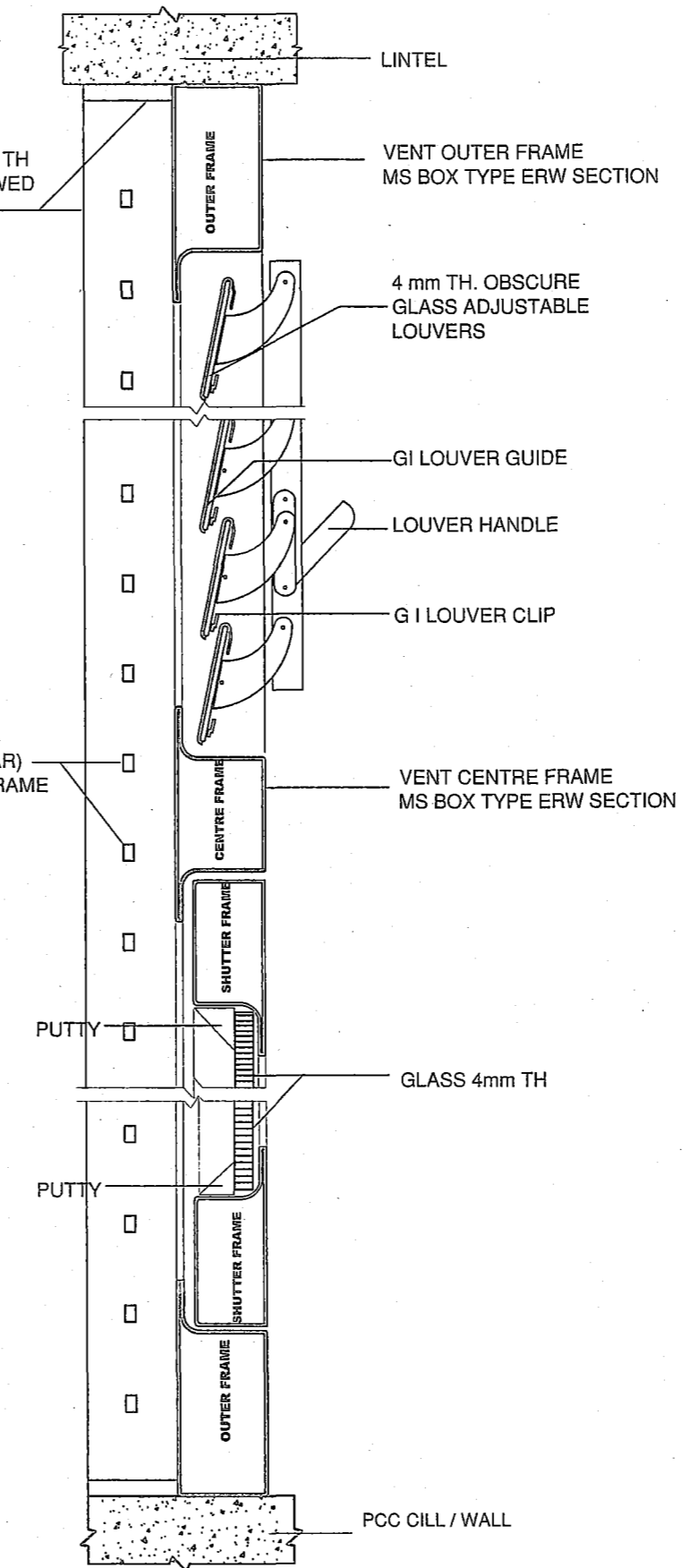
ELEVATIONS SCALE 1:20



SLV 9 / SLV 10



SECTION AT "Y-Y" (CROSS SECTION OF FIXED VENTILATOR) SCALE 1:10



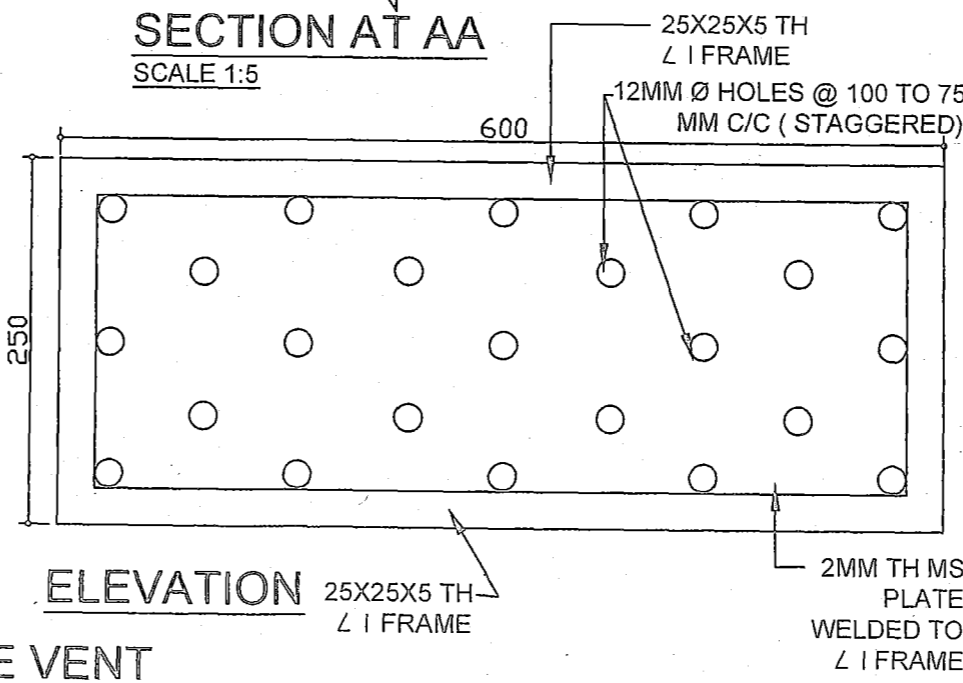
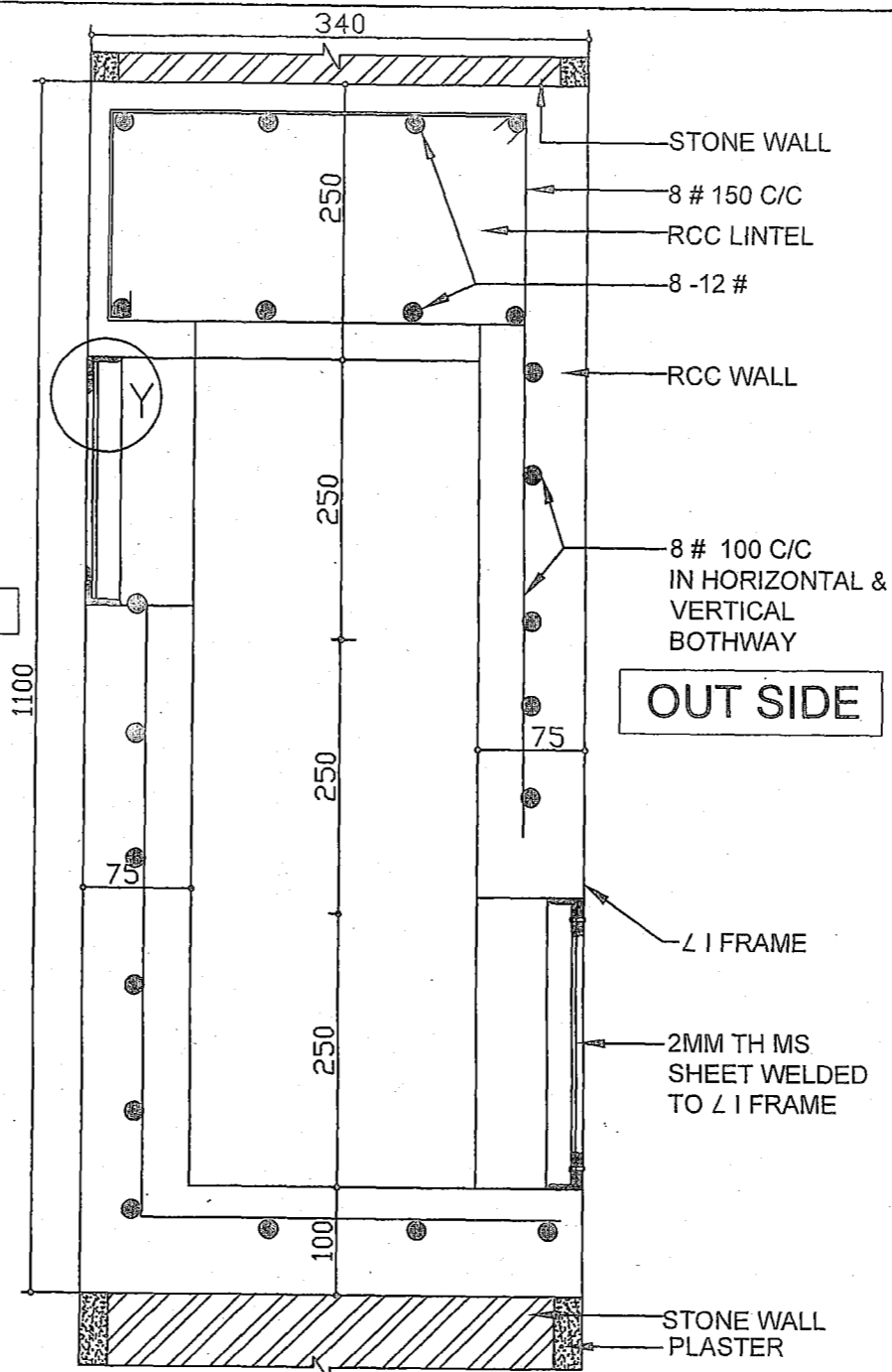
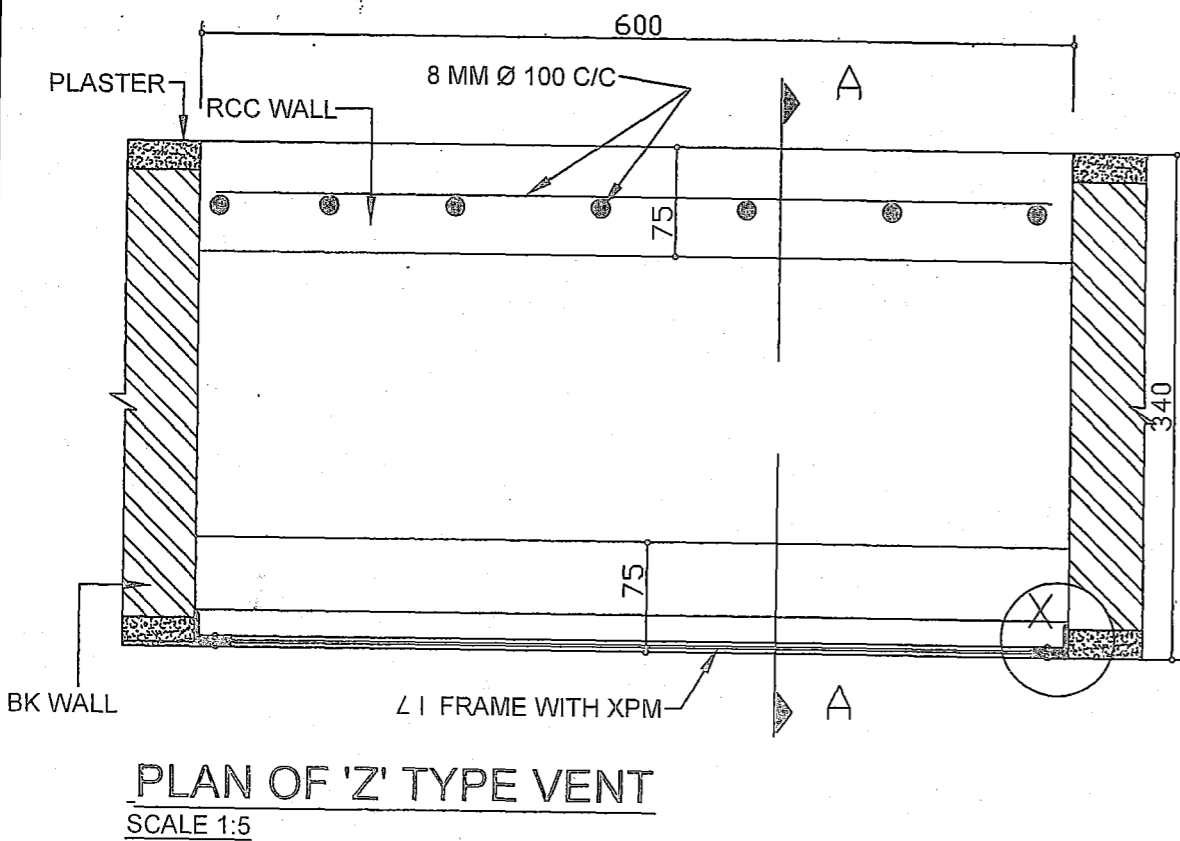
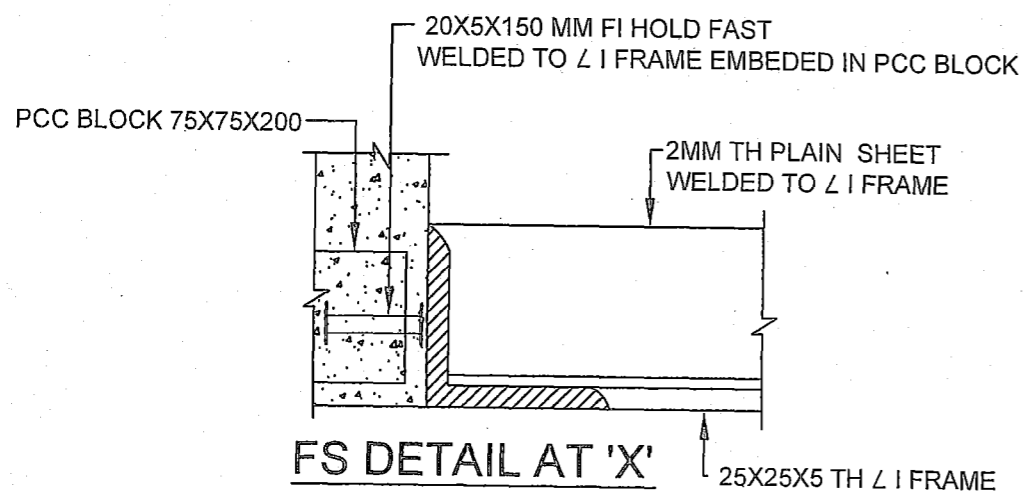
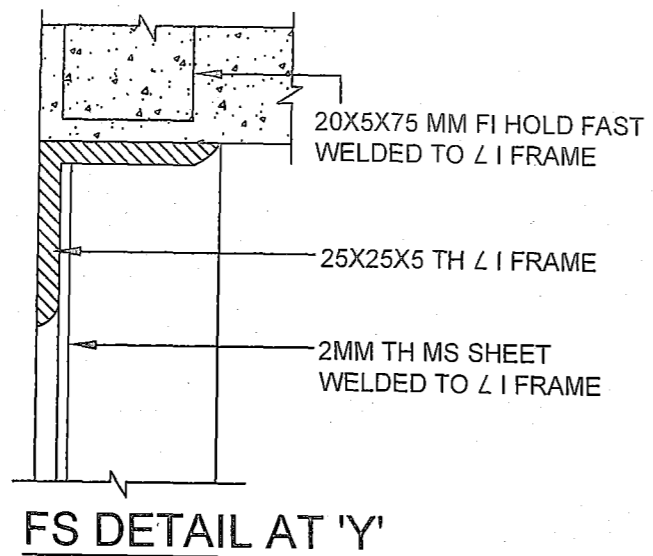
SECTION AT "X-X" (CROSS SECTION OF LOUVERS VENTILATOR) SCALE 1:10

- NOTES**
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 - ALL FRAMES OF BOX TYPE MILD STEEL VENTS SHALL BE MADE WITH ERW SECTION HAVING WALLTHICKNESS 1.25mm (i.e 18 GAUGE).

TYPICAL DETAIL OF FIXED GLAZED & LOUVERS BOX VENTILATORS (STEEL)

DATE	18/10/2013	CHIEF ENGINEER	SHEET NO
DRAWN	C S ASERI	JODHPUR ZONE	1/1
TCD		JODHPUR	
CKD		REF DRG NO:CEJZ/TD/ 25	
SCALE	AS SHOWN		

(Signature)
 (R C SWAIN)
 LT COL
 SR ARCH
 FOR CHIEF ENGINEER



NOTES

- 1 CONTRACTOR TO CHECK & VERIFY ALL DIMENSIONS BEFORE EXECUTION OF WORK.
- 2 ALL DIMENSIONS GIVEN ARE IN MM UNLESS OTHERWISE STATED.
- 3 FIGURED DIMENSIONS SHALL BE FOLLOWED.
- 4 FOR ALL OTHERS NOTES & REFERENCES REFER LIST OF DRGS OF THIS PROJECT.

DETAILS OF 'Z' (ZV) TYPE VENTILATOR

PLAN, SECTION AND OTHER DETAILS

DATE :- 30 NOV 13	CHIEF ENGINEER	SHT NO
DRN :- C S ASERI	JODHPUR ZONE	1/1
TCD :-	JODHPUR	
CKD :-	DRG NO :- CEJZ / TD / 27	
SCALE :- AS SHOWN		

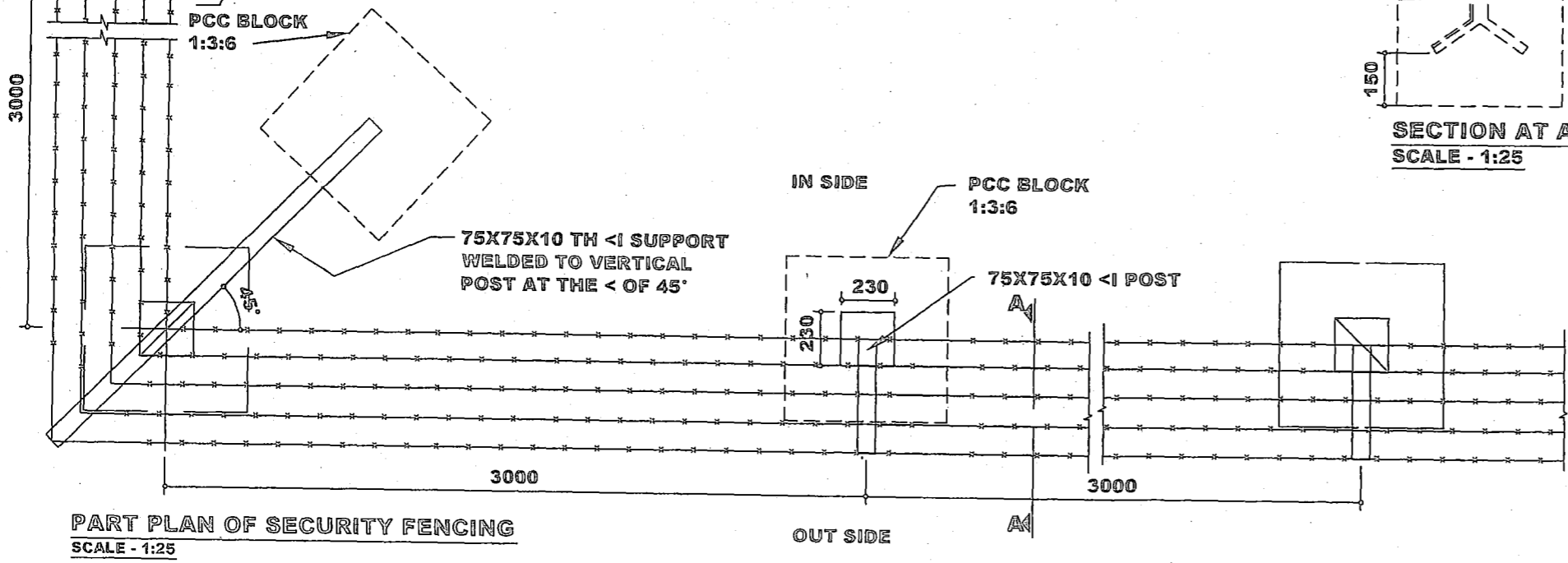
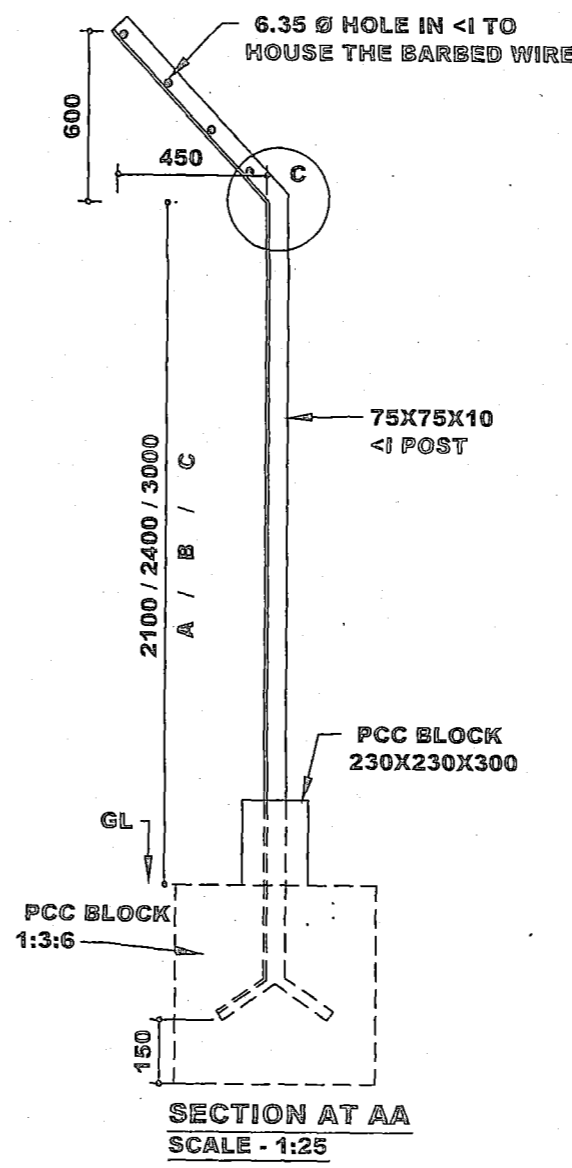
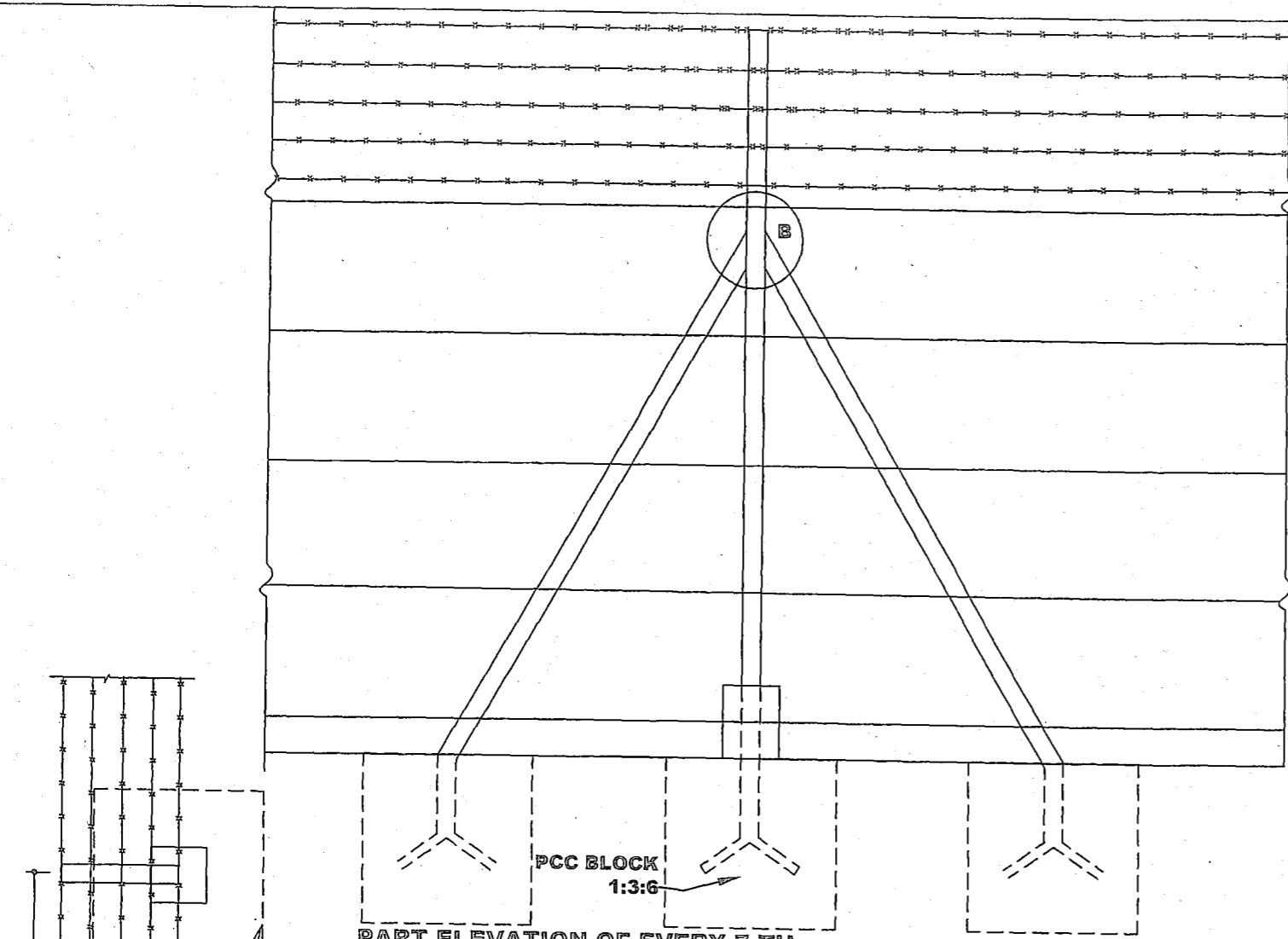
[Signature]

SO I (D)
FOR CHIEF ENGINEER

[Signature]

(R C SWAIN)
LT COL
SR ARCH
FOR CHIEF ENGINEER

DETAIL OF 'Z' (ZV) TYPE VENT



NOTE:-

1. CONTRACTOR TO CHECK & VERIFY ALL DIMENSIONS BEFORE TAKING EXECUTION IN HAND
2. FIGURED DIMENSIONS SHALL BE FOLLOWED
3. ALL DIMENSIONS ARE GIVEN IN MILLIMETERS UNLESS OTHERWISE SPECIFIED
4. ALL <I> POST / SUPPORT SHALL BE PAINTED WITH ONE COAT OF RED OXIDE & TWO COATS OF SYNTHETIC ENAMEL PAINT ABOVE GL & TWO COATS OF BITUMEN BELOW GL
5. BARBED WIRE SHALL BE TYPE A CONFIRMING TO I.S. 226
6. MS 10 Ø BARS PASSING THROUGH CHAIN LINK FENCING SHOULD BE CURTAILED AT <I> POST WITH HOOK OF SUFFICIENT LENGTH
7. ALL STRUCTURAL MEMBERS SHALL CONFORM TO I.S. 2062
8. MS BAR SHALL BE GRADE -1 QUALITY AS PER I.S. 432 PART-1
9. IF ANY BTD OR I.S. CODE GOT REVISED THE LATEST BTD / I/S/ CODES ARE TO BE FOLLOWED
10. <I> POST / <I> SUPPORT POST OF SIZE 75X75X10 SHALL BE PROVIDED

NOTATION

1. SECURITY FENCING TYPE- 'A' = 2100 HIGH
2. SECURITY FENCING TYPE- 'B' = 2400 HIGH
3. SECURITY FENCING TYPE- 'C' = 3000 HIGH


TABLE FOR SIZE OF <I> SECTION & PCC BLOCK

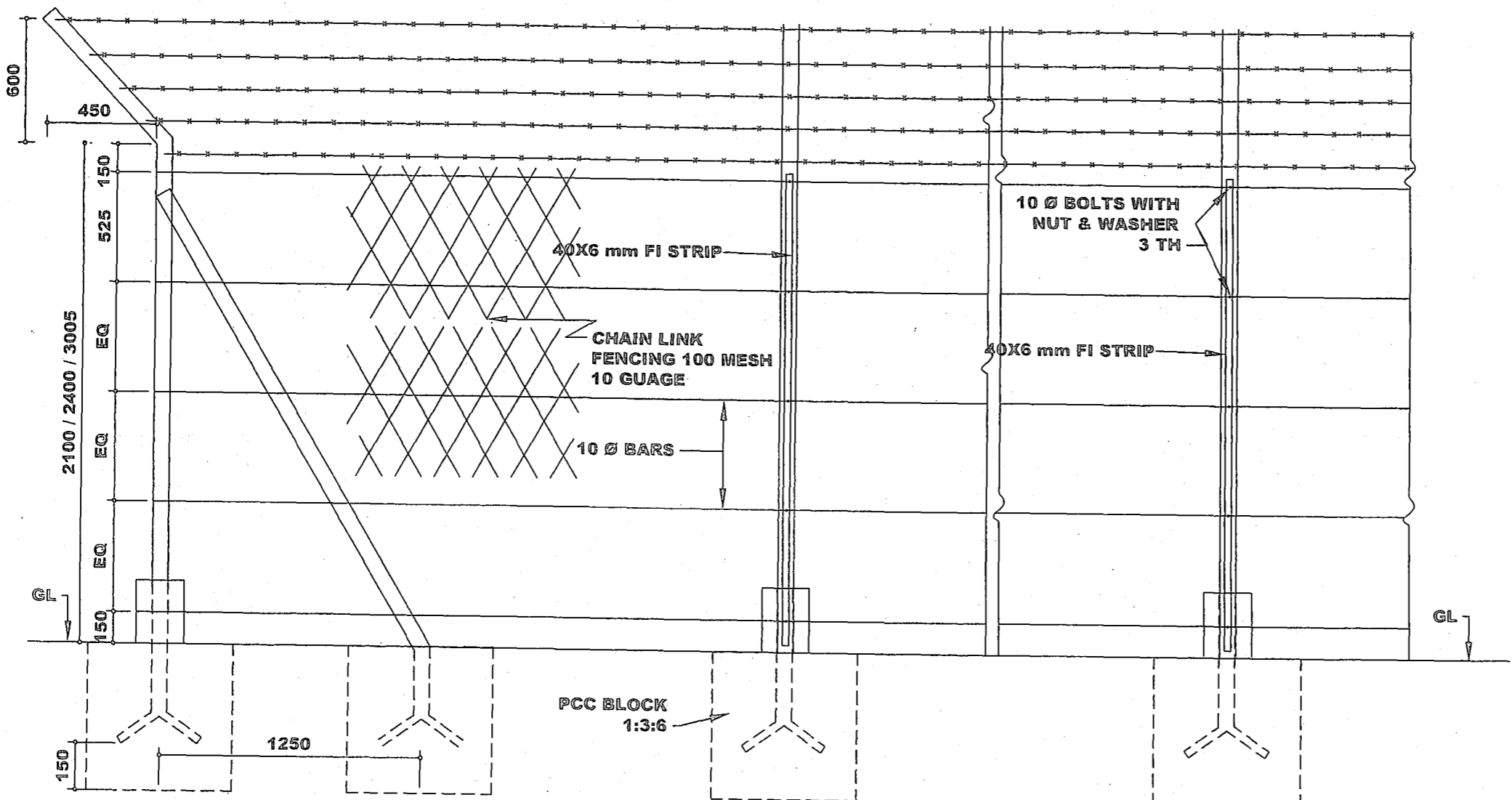
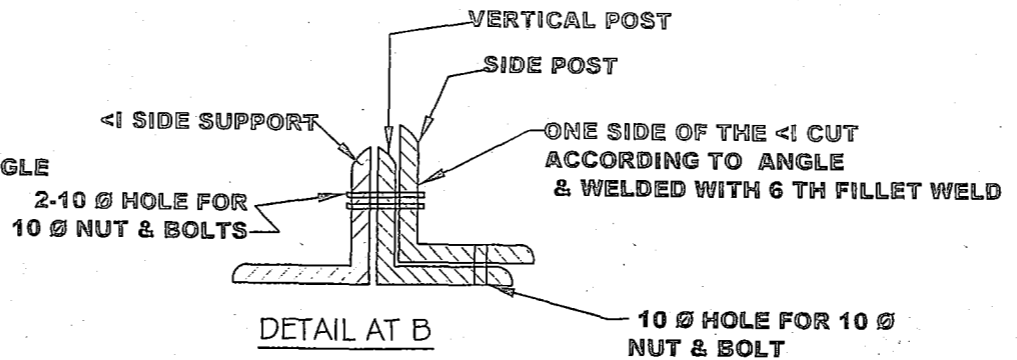
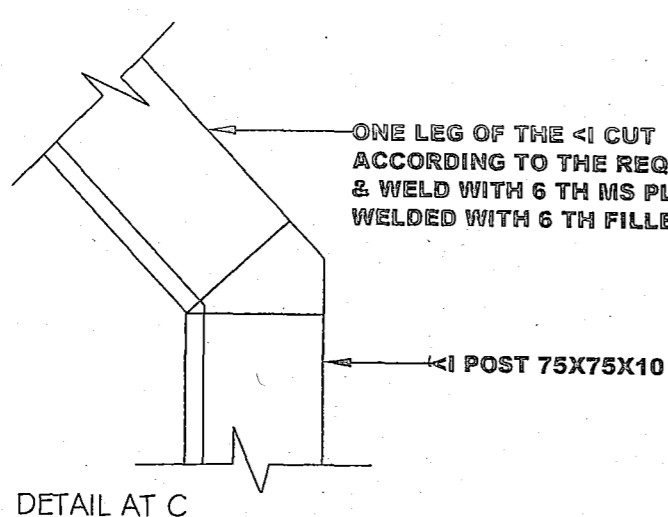
HT OF <I> POST	<I> SECTION	SIZE OF PCC BLOCK
2100 (TYPE 'A')	65X65X8	600X600X750
2400 (TYPE 'B')	75X75X10	750X750X750
3000 (TYPE 'C')	75X75X10	850X850X850

SNO	DATE	DESCRIPTION	INITIAL
REVISIONS			

DETAIL OF PERMANENT CHAIN LINK SECURITY FENCING <I> POST

DATE	09-12-2013	CHIEF ENGINEER JODHPUR ZONE	SHEET NO
DRN			1/2
TCD			
CKD			
SCALE	AS SHOWN	DRG.NO: CEJZ/TD/28	

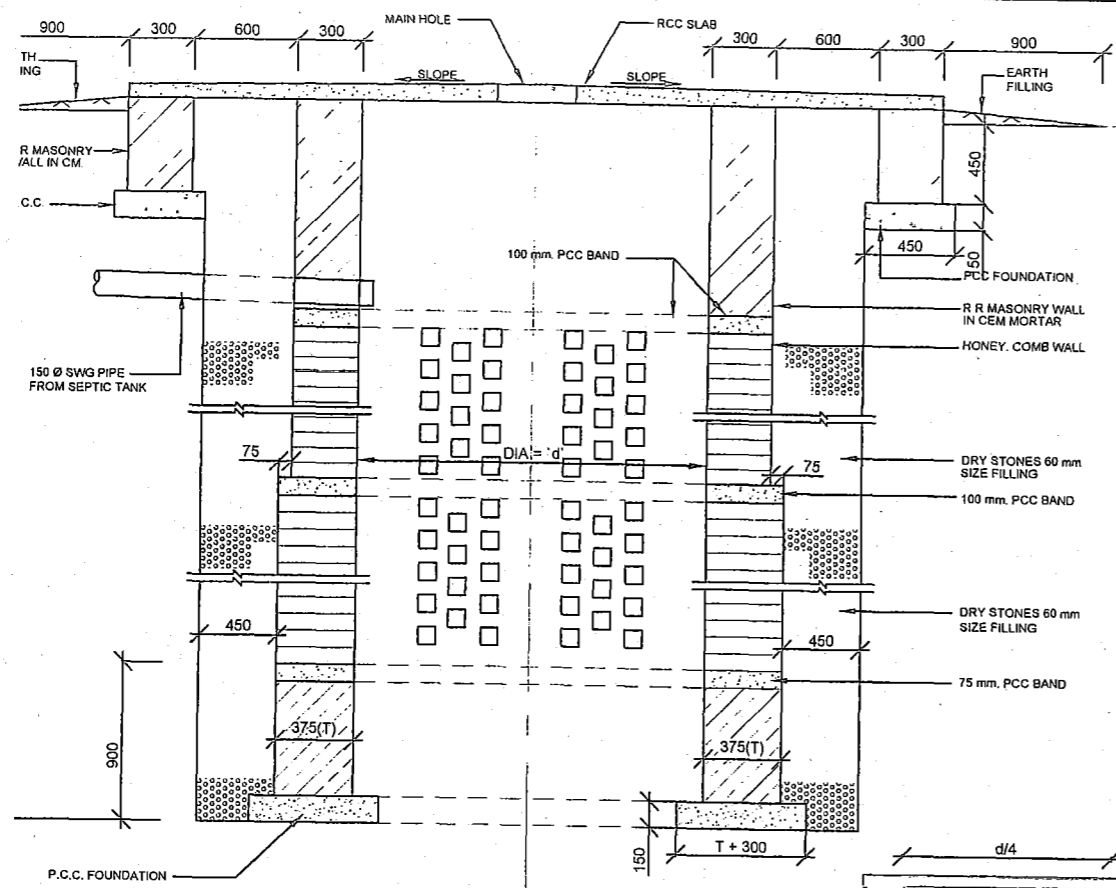

 (RC SWAIN)
 LT COL
 SR ARCH
 FOR CHIEF ENGINEER



PART ELEVATION FROM IN SIDE
SCALE - 1:25

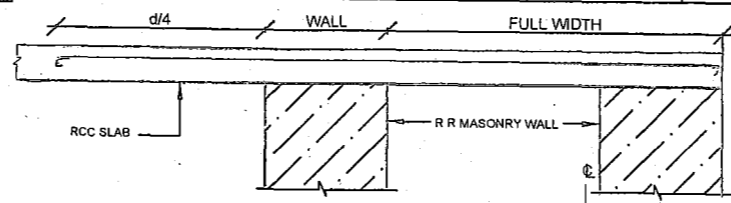
SNO	DATE	DESCRIPTION	INITIAL
REVISIONS			
DETAIL OF PERMANENT CHAIN LINK SECURITY FENCING <I> POST			
DATE	9-12-2013	CHIEF ENGINEER JODHPUR ZONE	SHEET NO
DRN			2/2
TCD			
CKD			
SCALE	AS SHOWN	DRG.NO: CEJZ/TD/28	

(Signature)
(RC SWAIN)
LT COL
SR ARCH
FOR CHIEF ENGINEER

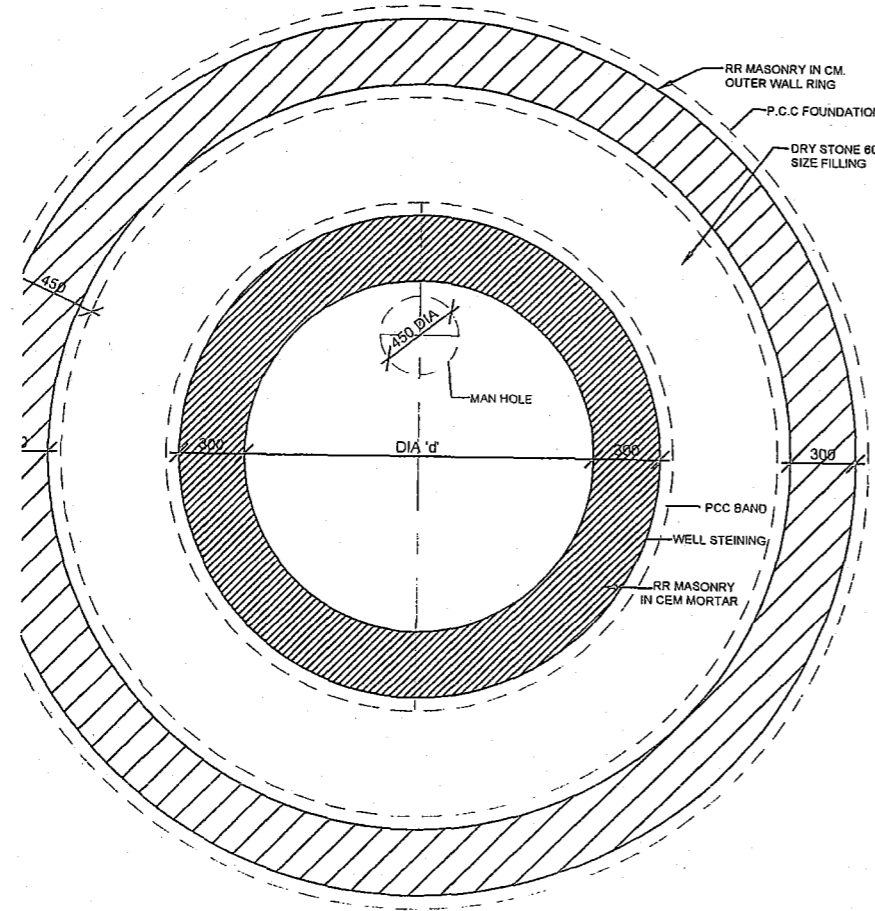


TYPICAL SECTION OF SOAK WELL AT 'A - A'
SCALE :- 1:20

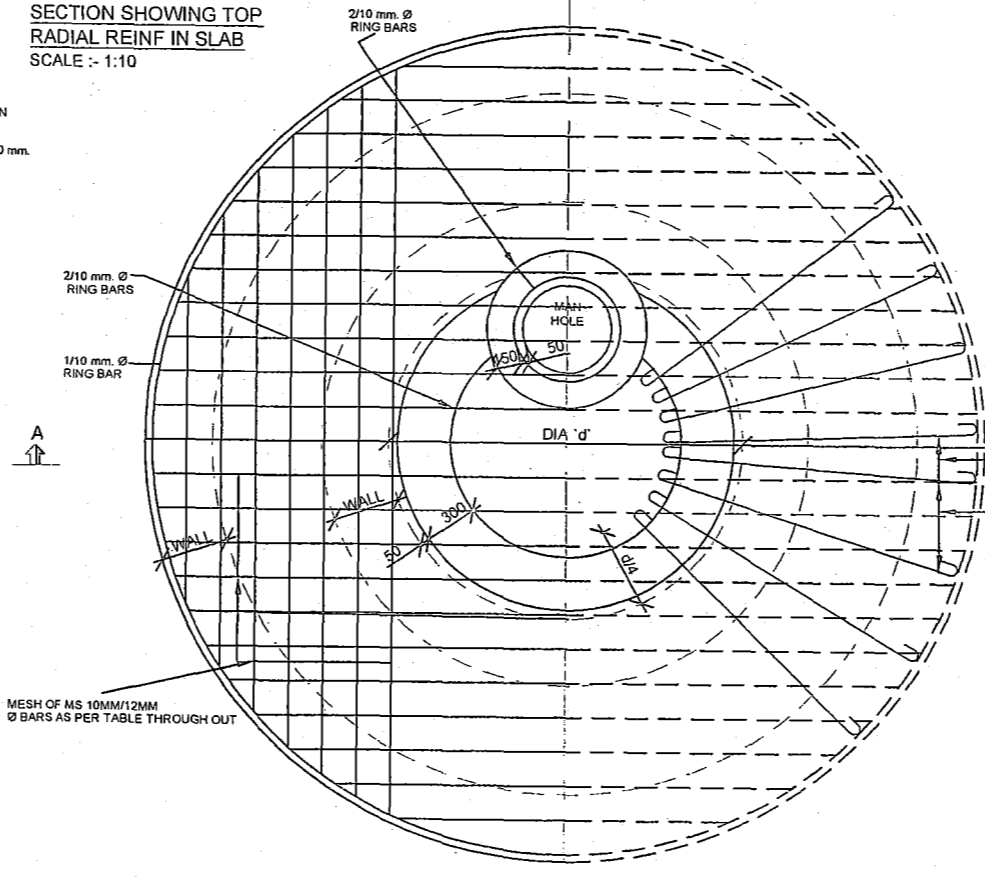
SERIAL NO.	DIA OF SOAK WELL IN METRE MARKED 'd'	EFFECTIVE DEPTH OF SOAK WELL IN METRE MARKED 'T'	THICKNESS OF WALL AT VARIOUS DEPTH FROM INLET S.W.G. PIPE LEVEL			THICKNESS OF RCC SLAB		REINFORCEMENTS IN SLAB (BOTH WAYS) BOTTOM	REINFORCEMENTS AT PERIPHERY IN SLAB	TOP RADIAL REINFORCEMENT
			FROM 0 TO 4.5 METRE	FROM 4.5M. TO 7.5 M.	FROM 7.5M. TO 9.0M.	AT CENTER	AT END			
			300 MM. (RR MASONRY)	300 MM. (RR MASONRY)	300 MM. (RR MASONRY)					
1.	1.2 M	3.0 M 4.5 M 6.0 M 7.5 M 9.0 M	300 MM. (RR MASONRY) 300 MM. (RR MASONRY) 300 MM. (RR MASONRY) 300 MM. (RR MASONRY) 300 MM. (RR MASONRY)	300 MM. (RR MASONRY) 300 MM. (RR MASONRY)	300 MM. (RR MASONRY)	100	75	10 MM Ø @ 180 C/C	5 NOS. 10 MM Ø	10 MM Ø @ 180 C/C
2.	1.8 M	3.0 M 4.5 M 6.0 M 7.5 M 9.0 M	300 MM. (RR MASONRY) 300 MM. (RR MASONRY) 300 MM. (RR MASONRY) 300 MM. (RR MASONRY) 300 MM. (RR MASONRY)	300 MM. (RR MASONRY) 300 MM. (RR MASONRY)	300 MM. (RR MASONRY)	100	75	10 MM Ø @ 180 C/C	5 NOS. 10 MM Ø	10 MM Ø @ 180 C/C
3.	2.4 M	3.0 M 4.5 M 6.0 M 7.5 M 9.0 M	300 MM. (RR MASONRY) 300 MM. (RR MASONRY) 300 MM. (RR MASONRY) 300 MM. (RR MASONRY) 300 MM. (RR MASONRY)	300 MM. (RR MASONRY) 300 MM. (RR MASONRY)	300 MM. (RR MASONRY)	100	75	10 MM Ø @ 180 C/C	5 NOS. 10 MM Ø	10 MM Ø @ 180 C/C
4.	3.0 M	3.0 M 4.5 M 6.0 M 7.5 M 9.0 M	300 MM. (RR MASONRY) 300 MM. (RR MASONRY) 300 MM. (RR MASONRY) 300 MM. (RR MASONRY) 300 MM. (RR MASONRY)	300 MM. (RR MASONRY) 300 MM. (RR MASONRY)	450 MM. (RR MASONRY)	110	85	10 MM Ø @ 140 C/C	3 NOS. 10 MM Ø	10 MM Ø @ 140 C/C
5.	3.6 M	3.0 M 4.5 M 6.0 M 7.5 M 9.0 M	300 MM. (RR MASONRY) 300 MM. (RR MASONRY) 300 MM. (RR MASONRY) 300 MM. (RR MASONRY) 300 MM. (RR MASONRY)	300 MM. (RR MASONRY) 300 MM. (RR MASONRY)	450 MM. (RR MASONRY)	110	85	10 MM Ø @ 140 C/C	3 NOS. 10 MM Ø	10 MM Ø @ 140 C/C
6.	5.0 M	3.0 M 4.5 M 6.0 M 7.5 M 9.0 M	300 MM. (RR MASONRY) 300 MM. (RR MASONRY) 300 MM. (RR MASONRY) 300 MM. (RR MASONRY) 300 MM. (RR MASONRY)	300 MM. (RR MASONRY) 450 MM. (RR MASONRY) 450 MM. (RR MASONRY)	600 MM. (RR MASONRY)	130	102	12 MM Ø @ 105 C/C	3 NOS. 10 MM Ø	12 MM Ø @ 105 C/C



SECTION SHOWING TOP RADIAL REINF IN SLAB
SCALE :- 1:10

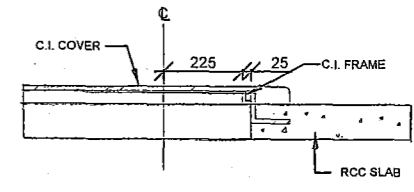


TYPICAL PLAN OF SOAK WELL
SCALE :- 1:20



TYPICAL PLAN OF SOAK WELL
SCALE :- 1:20

- NOTES :-
- CONTRACTOR TO CHECK & VERIFY ALL DIMENSIONS BEFORE EXECUTION OF THE WORK.
 - FIGURED DIMENSIONS SHALL BE FOLLOWED.
 - ALL DIMENSIONS ARE IN MM.
 - THE DIAMETER 'd' WILL BE INTERNAL OF THE SOAK WELL. THE EFFECTIVE DIA FOR ABSORPTION WILL BE (d + 0.9 + 2T).
 - HONEY COMB STONE WORK WILL BE 1/3 OF TOTAL SURFACE OF THE WELL.
 - THE SIZE OF THE HONEY COMB HOLES SHOULD BE LESS THAN 50x50 MM & NOT MORE 100x100 MM.



FIXING DETAIL OF CI COVER
SCALE :- 1:10

TYPICAL SOAK WELL (RR MASONRY)

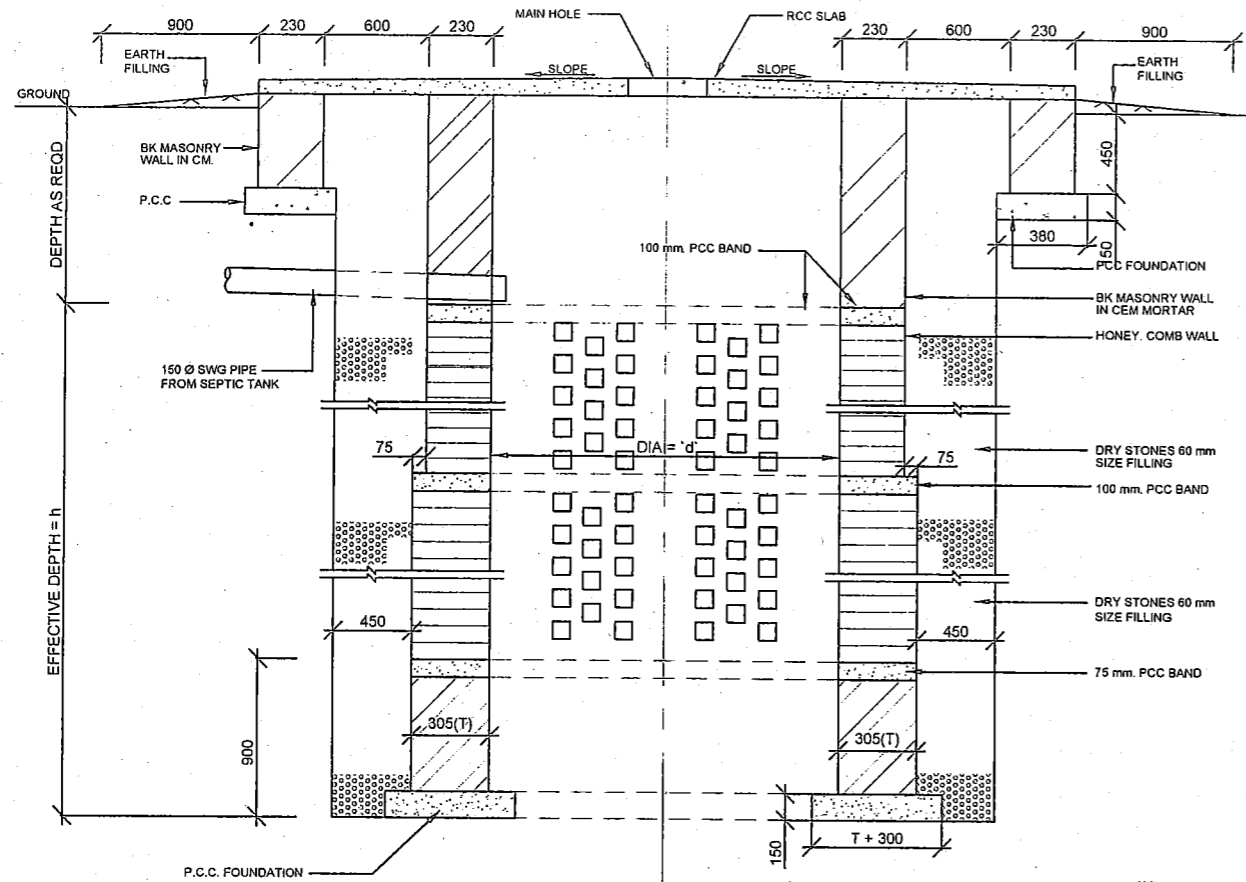
TYPICAL PLAN, SECTION, DETAILS & TABLE FOR RR MASONRY

DATE :- 14 DEC 2013	CHIEF ENGINEER JODHPUR ZONE	SHT NO
DRN :- C S ASERI		1/3
TCD :-		
CKD :-		
SCALE :- AS SHOWN	DRG NO :- CEJ / TD / 29	

SO I (DESIGN)

(R C SWAIN)
LT COL
SR ARCH
FOR CHIEF ENGINEER

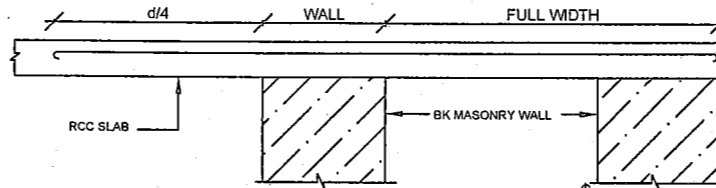
TABLE FOR BK MASONRY SOAK WELL



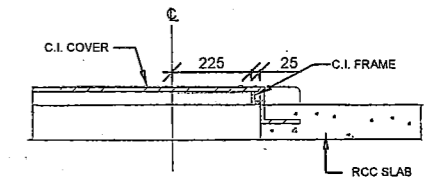
TYPICAL SECTION OF SOAK WELL AT 'A - A'
SCALE :- 1:20

SERIAL NO.	DIA OF SOAK WELL IN METRE MARKED 'd'	EFFECTIVE DEPTH OF SOAK WELL IN METRE MARKED 'h'	THICKNESS OF WALL AT VARIOUS DEPTH FROM INLET S.W.G. PIPE LEVEL			THICKNESS OF RCC SLAB		REINFORCEMENTS IN SLAB (MM) (BOTH WAYS) BOTTOM	REINFORCEMENTS AT PERIPHERY IN SLAB	TOP RADIAL REINFORCEMENT
			FROM 0 TO 4.5 METRE	FROM 4.5M. TO 7.5 M.	FROM 7.5M. TO 9.0M.	AT CENTER	AT END			
1.	1.2 M	3.0 M 4.5 M 6.0 M 7.5 M 9.0 M	230 MM. (BK MASONRY) 230 MM. (BK MASONRY) 230 MM. (BK MASONRY) 230 MM. (BK MASONRY) 230 MM. (BK MASONRY)	230 MM. (BK MASONRY) 230 MM. (BK MASONRY) 230 MM. (BK MASONRY)	230 MM. (BK MASONRY)	100	75	10 MM Ø @ 180 C/C	5 NOS. 10 MM Ø	10 MM Ø @ 180 C/C
2.	1.8 M	3.0 M 4.5 M 6.0 M 7.5 M 9.0 M	230 MM. (BK MASONRY) 230 MM. (BK MASONRY) 230 MM. (BK MASONRY) 230 MM. (BK MASONRY) 230 MM. (BK MASONRY)	230 MM. (BK MASONRY) 230 MM. (BK MASONRY) 230 MM. (BK MASONRY)	230 MM. (BK MASONRY)	100	75	10 MM Ø @ 180 C/C	5 NOS. 10 MM Ø	10 MM Ø @ 180 C/C
3.	2.4 M	3.0 M 4.5 M 6.0 M 7.5 M 9.0 M	230 MM. (BK MASONRY) 230 MM. (BK MASONRY) 230 MM. (BK MASONRY) 230 MM. (BK MASONRY) 230 MM. (BK MASONRY)	230 MM. (BK MASONRY) 230 MM. (BK MASONRY) 230 MM. (BK MASONRY)	230 MM. (BK MASONRY)	100	75	10 MM Ø @ 180 C/C	5 NOS. 10 MM Ø	10 MM Ø @ 180 C/C
4.	3.0 M	3.0 M 4.5 M 6.0 M 7.5 M 9.0 M	230 MM. (BK MASONRY) 230 MM. (BK MASONRY) 230 MM. (BK MASONRY) 230 MM. (BK MASONRY) 230 MM. (BK MASONRY)	230 MM. (BK MASONRY) 230 MM. (BK MASONRY) 230 MM. (BK MASONRY)	460 MM. (BK MASONRY)	110	85	10 MM Ø @ 140 C/C	3 NOS. 10 MM Ø	10 MM Ø @ 140 C/C
5.	3.6 M	3.0 M 4.5 M 6.0 M 7.5 M 9.0 M	230 MM. (BK MASONRY) 230 MM. (BK MASONRY) 230 MM. (BK MASONRY) 230 MM. (BK MASONRY) 230 MM. (BK MASONRY)	230 MM. (BK MASONRY) 230 MM. (BK MASONRY) 230 MM. (BK MASONRY)	460 MM. (BK MASONRY)	110	85	10 MM Ø @ 140 C/C	3 NOS. 10 MM Ø	10 MM Ø @ 140 C/C
6.	5.0 M	3.0 M 4.5 M 6.0 M 7.5 M 9.0 M	230 MM. (BK MASONRY) 230 MM. (BK MASONRY) 230 MM. (BK MASONRY) 230 MM. (BK MASONRY) 230 MM. (BK MASONRY)	230 MM. (BK MASONRY) 230 MM. (BK MASONRY) 230 MM. (BK MASONRY)	690. (BK MASONRY)	130	102	12 MM Ø @ 105 C/C	3 NOS. 10 MM Ø	12 MM Ø @ 105 C/C

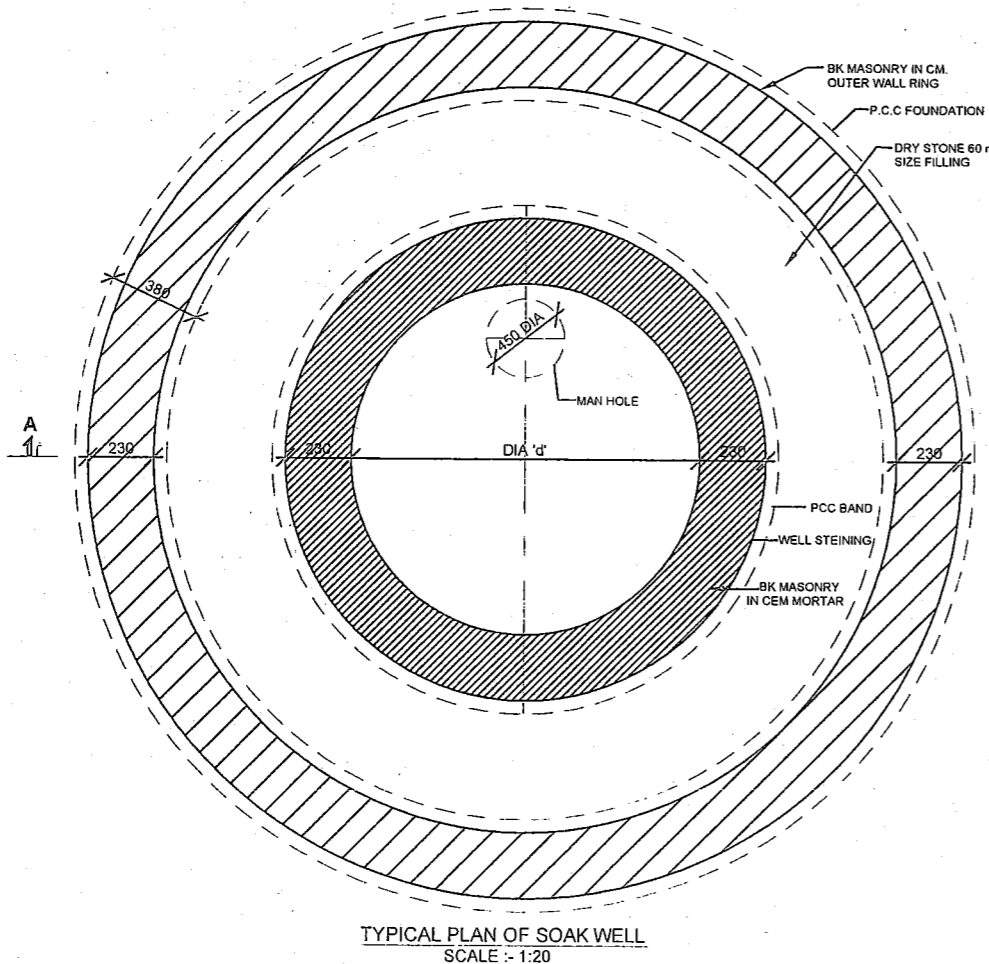
- NOTES :-
- CONTRACTOR TO CHECK & VERIFY ALL DIMENSIONS BEFORE EXECUTION OF THE WORK.
 - FIGURED DIMENSIONS SHALL BE FOLLOWED.
 - ALL DIMENSIONS ARE IN MM.
 - THE DIAMETER 'd' WILL BE INTERNAL OF THE SOAK WELL. THE EFFECTIVE DIA FOR ABSORPTION WILL BE (d + 0.9 * 2T)
 - HONEY COMB STONE WORK WILL BE 1/3 OF TOTAL SURFACE OF THE WELL.
 - THE SIZE OF THE HONEY COMB HOLES SHOULD BE LESS THAN 50x50 MM & NOT MORE 100x100 MM.



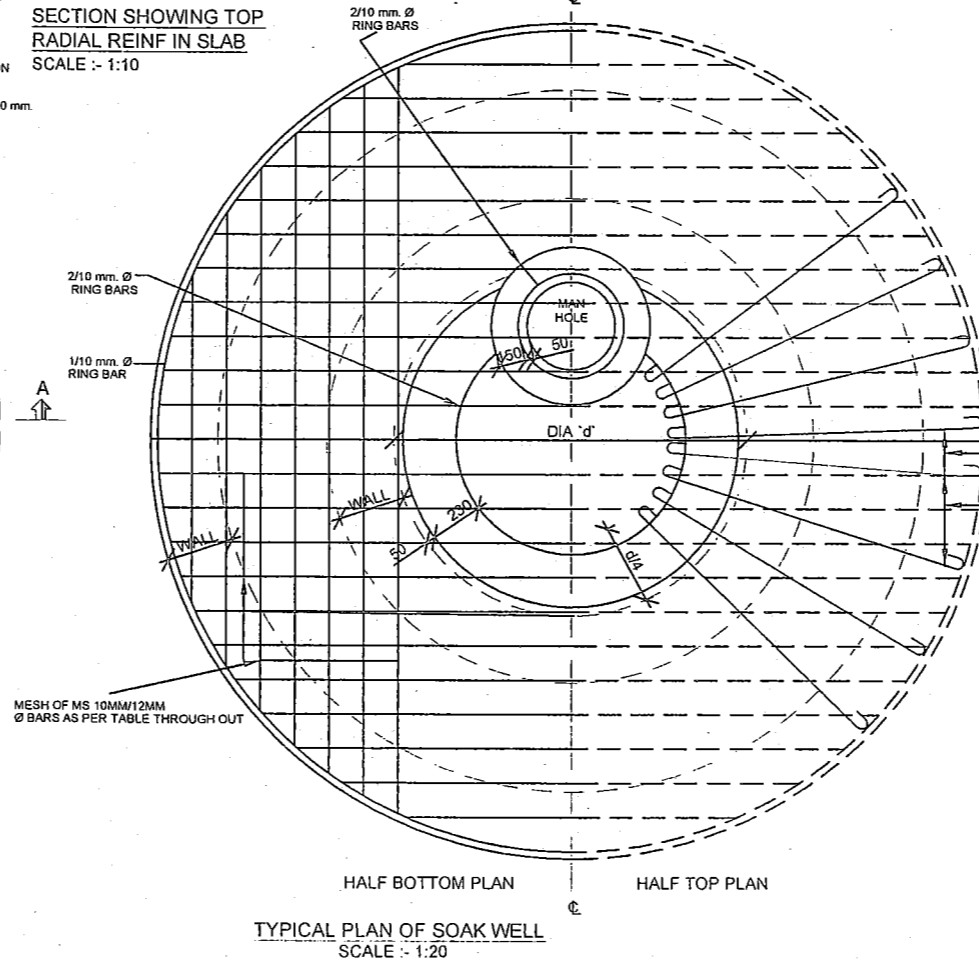
SECTION SHOWING TOP RADIAL REIN IN SLAB
SCALE :- 1:10



FIXING DETAIL OF C.I. COVER
SCALE :- 1:10



TYPICAL PLAN OF SOAK WELL
SCALE :- 1:20



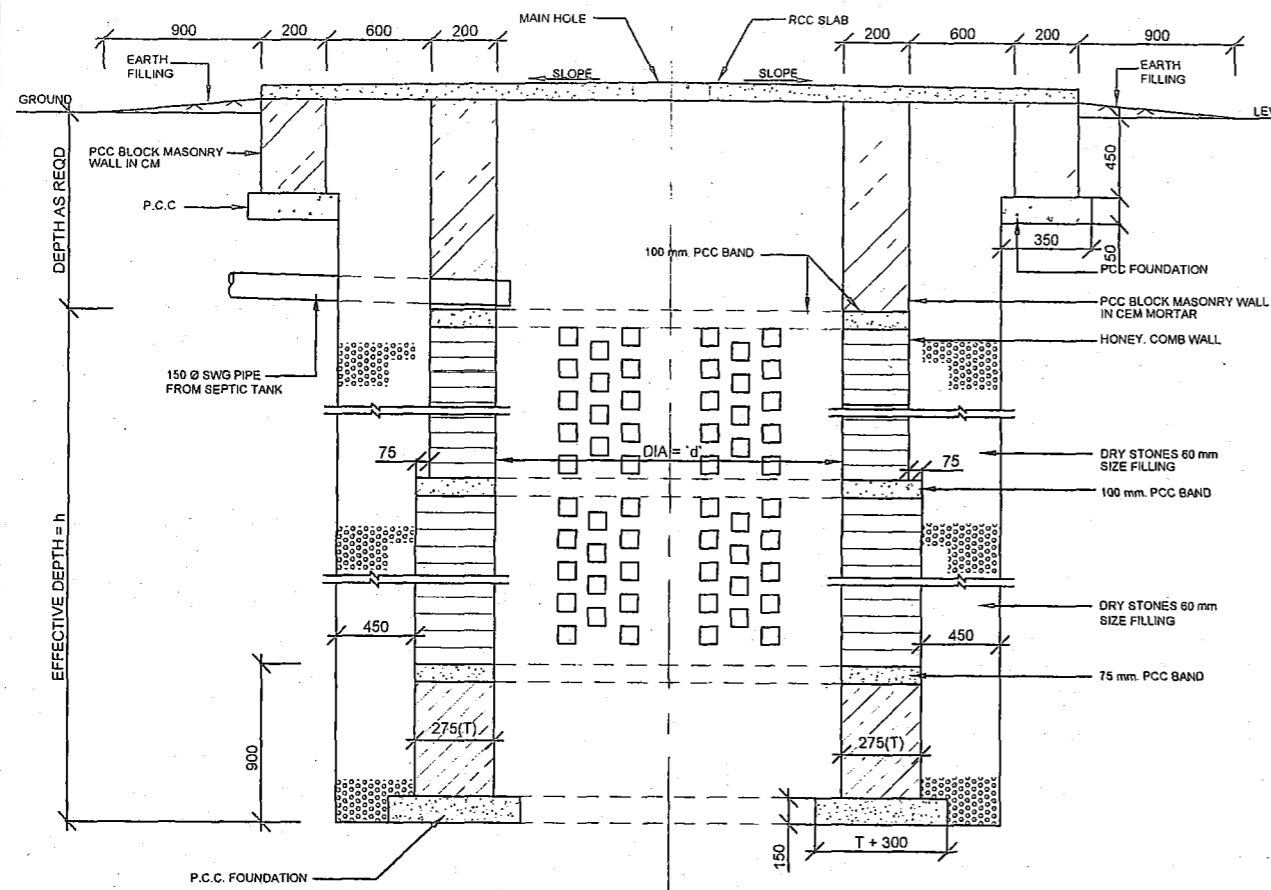
TYPICAL PLAN OF SOAK WELL
SCALE :- 1:20

TYPICAL SOAK WELL (BK MASONRY)
TYPICAL PLAN, SECTION, DETAILS & TABLE FOR BRICK MASONRY

DATE :- 14 DEC 2013	CHIEF ENGINEER JODHPUR ZONE	SHT NO
DRN :- C S ASERI		2/3
TCD :-	DRG NO :- CEJZ / TD / 29	
CKD :-		
SCALE :- AS SHOWN		

SO I (DESIGN)

(R C SWAIN)
LT COL
SR ARCH
FOR CHIEF ENGINEER

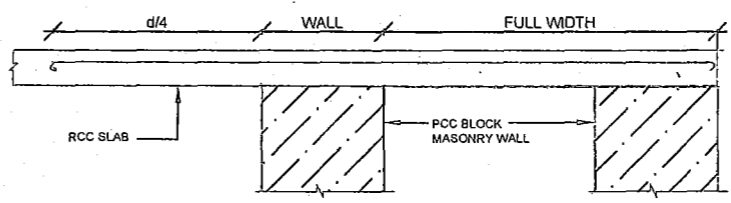


TYPICAL SECTION OF SOAK WELL AT 'A - A'
SCALE :- 1:20

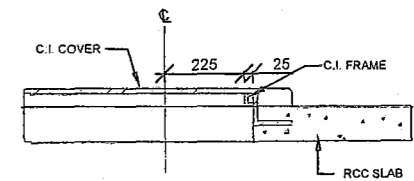
TABLE FOR DIFFERENT SOLID PCC BLOCK MASONRY (SBPM) SOAK WELL

SERIAL NO.	DIA OF SOAK WELL IN METRE MARKED 'd'	EFFECTIVE DEPTH OF SOAK WELL IN METRE MARKED 'h'	THICKNESS OF WALL AT VARIOUS DEPTH FROM INLET S.W.G. PIPE LEVEL			THICKNESS OF RCC SLAB		REINFORCEMENTS IN SLAB (BOTH WAYS)	REINFORCEMENTS AT PERIPHERY IN SLAB	TOP RADIAL REINFORCEMENT
			FROM 0 TO 4.5 M.	FROM 4.5M. TO 7.5 M.	FROM 7.5M. TO 9.0M.	AT CENTER	AT END			
1.	1.2 M / 1.8M / 2.4M	3.0 M 4.5 M 6.0 M 7.5 M 9.0 M	200 MM. (SPBM) 200 MM. (SPBM) 200 MM. (SPBM) 200 MM. (SPBM) 200 MM. (SPBM)	- - 200 MM. (SPBM) 200 MM. (SPBM) 200 MM. (SPBM)	- - 200 MM. (SPBM)	100	75	10 MM Ø @ 180 C/C	5 NOS. 10 MM Ø	10 MM Ø @ 180 C/C
2.	3.0 M / 3.6 M	3.0 M 4.5 M 6.0 M 7.5 M 9.0 M	200 MM. (SPBM) 200 MM. (SPBM) 200 MM. (SPBM) 200 MM. (SPBM) 200 MM. (SPBM)	- - 200 MM. (SPBM) 200 MM. (SPBM) 200 MM. (SPBM)	- - 400 MM. (SPBM)	110	85	10 MM Ø @ 140 C/C	3 NOS. 10 MM Ø	10 MM Ø @ 140 C/C
3.	5.0 M	3.0 M 4.5 M 6.0 M 7.5 M 9.0 M	200 MM. (SPBM) 200 MM. (SPBM) 200 MM. (SPBM) 200 MM. (SPBM) 200 MM. (SPBM)	- - 200 MM. (SPBM) 400 MM. (SPBM) 400 MM. (SPBM)	- - 600 MM. (SPBM)	130	102	12 MM Ø @ 105 C/C	3 NOS. 10 MM Ø	12 MM Ø @ 105 C/C

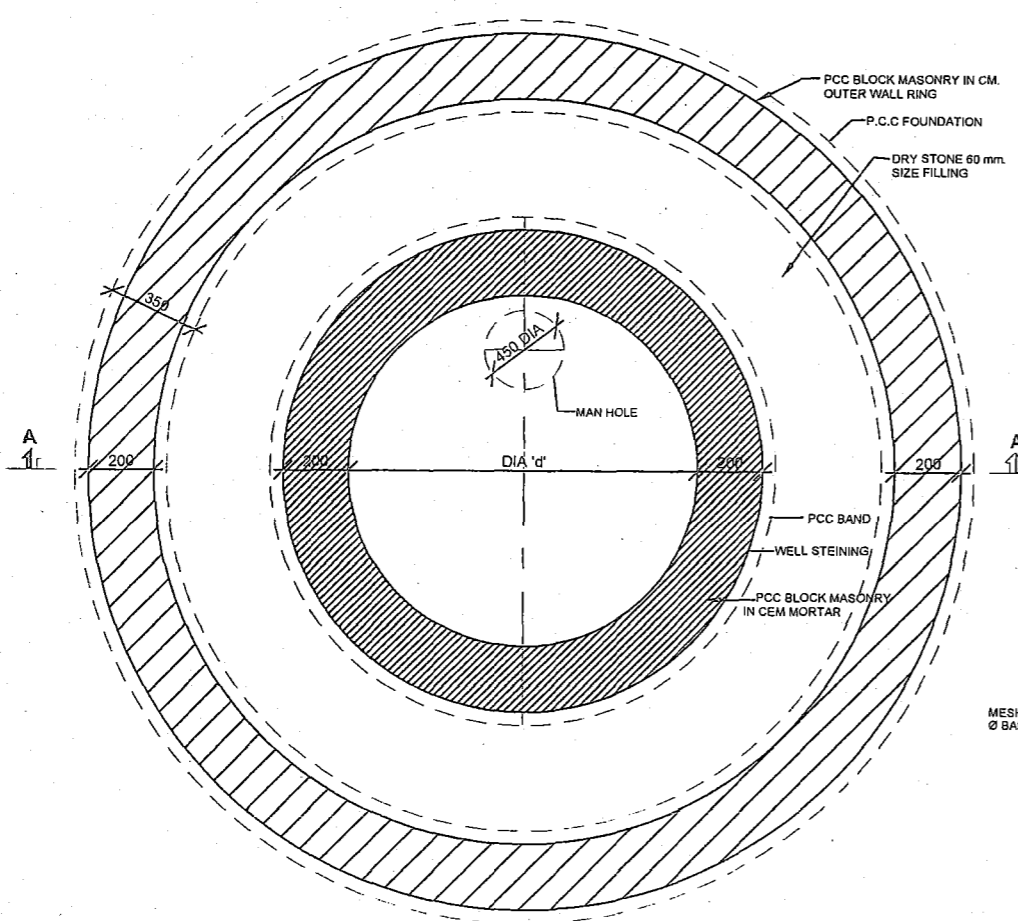
- NOTES :-**
- CONTRACTOR TO CHECK & VERIFY ALL DIMENSIONS BEFORE EXECUTION OF THE WORK.
 - FIGURED DIMENSIONS SHALL BE FOLLOWED.
 - ALL DIMENSIONS ARE IN MM.
 - THE DIAMETER 'd' WILL BE INTERNAL OF THE SOAK WELL. THE EFFECTIVE DIA FOR ABSORPTION WILL BE (d + 0.9 + 2T).
 - HONEY COMB STONE WORK WILL BE 1/3 OF TOTAL SURFACE OF THE WELL.
 - THE SIZE OF THE HONEY COMB HOLES SHOULD BE LESS THAN 50x50 MM & NOT MORE 100x100 MM.



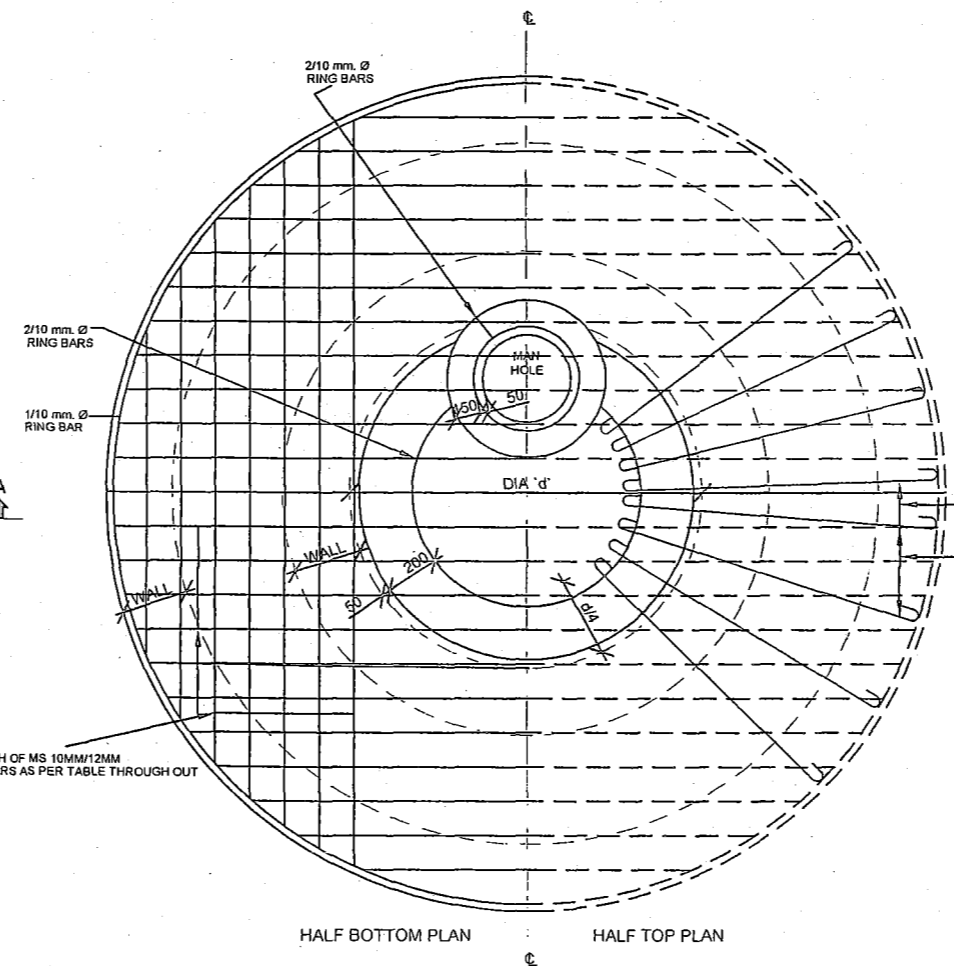
SECTION SHOWING TOP RADIAL REINF IN SLAB
SCALE :- 1:10



FIXING DETAIL OF C.I COVER
SCALE :- 1:10



TYPICAL PLAN OF SOAK WELL
SCALE :- 1:20



TYPICAL PLAN OF SOAK WELL
SCALE :- 1:20

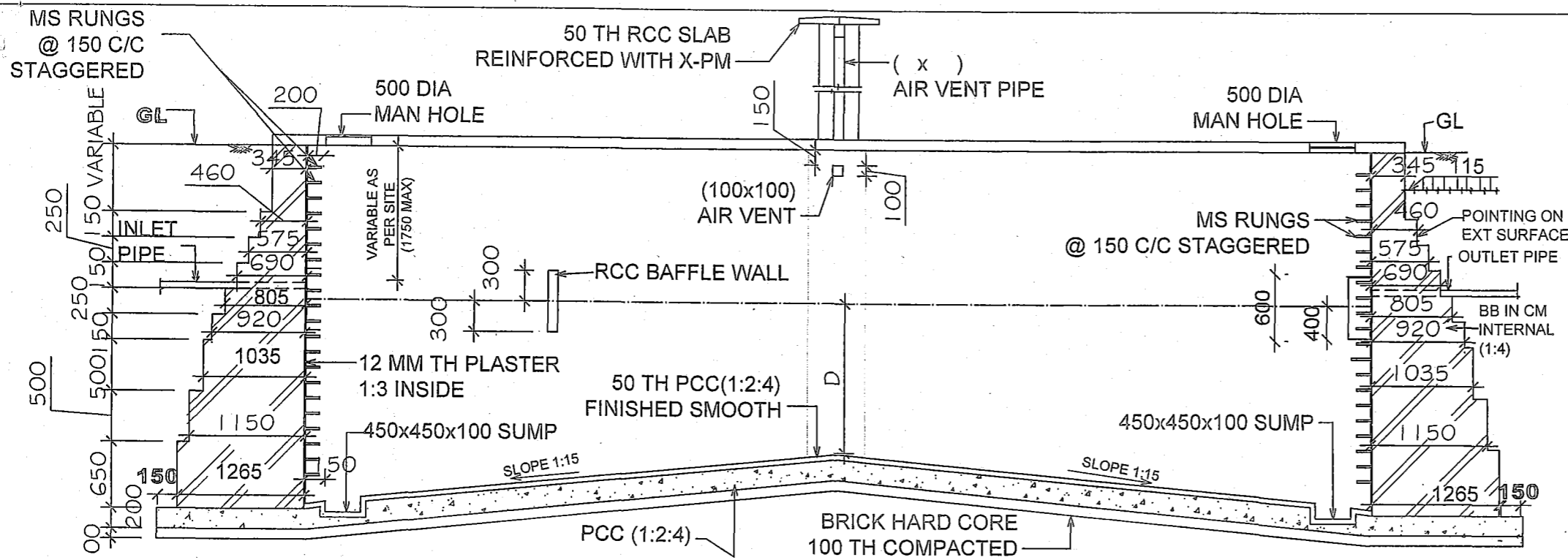
TYPICAL SOAK WELL IN SOLID PCC BLOCK MASONRY (SBPM)

TYPICAL PLAN , SECTION, DETAILS & TABLE FOR SOLID PCC BLOCK MASONRY

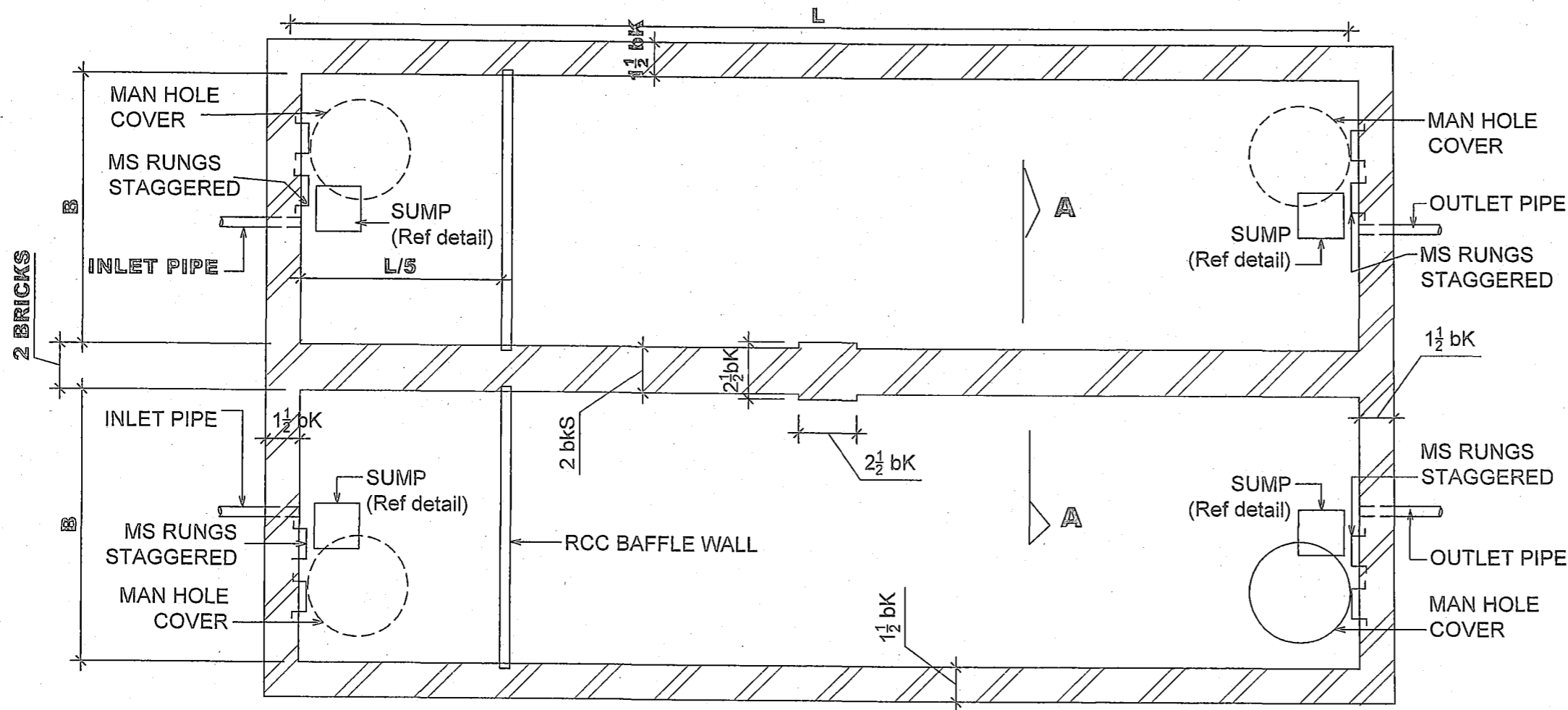
DATE :- 14 DEC 2013	CHIEF ENGINEER JODHPUR ZONE	SHT NO
DRN :- C S ASERI		3/3
TCD :-	DRG NO :- CEJZ / TD / 29	
CKD :-		
SCALE :- AS SHOWN		

SO I (DESIGN)

(R C SWAIN)
LT COL
SR ARCH
FOR CHIEF ENGINEER



SECTIONAL ELEVATION



PLAN OF SEPTIC TANK FOR TWO COMPARTMENT

NOTES

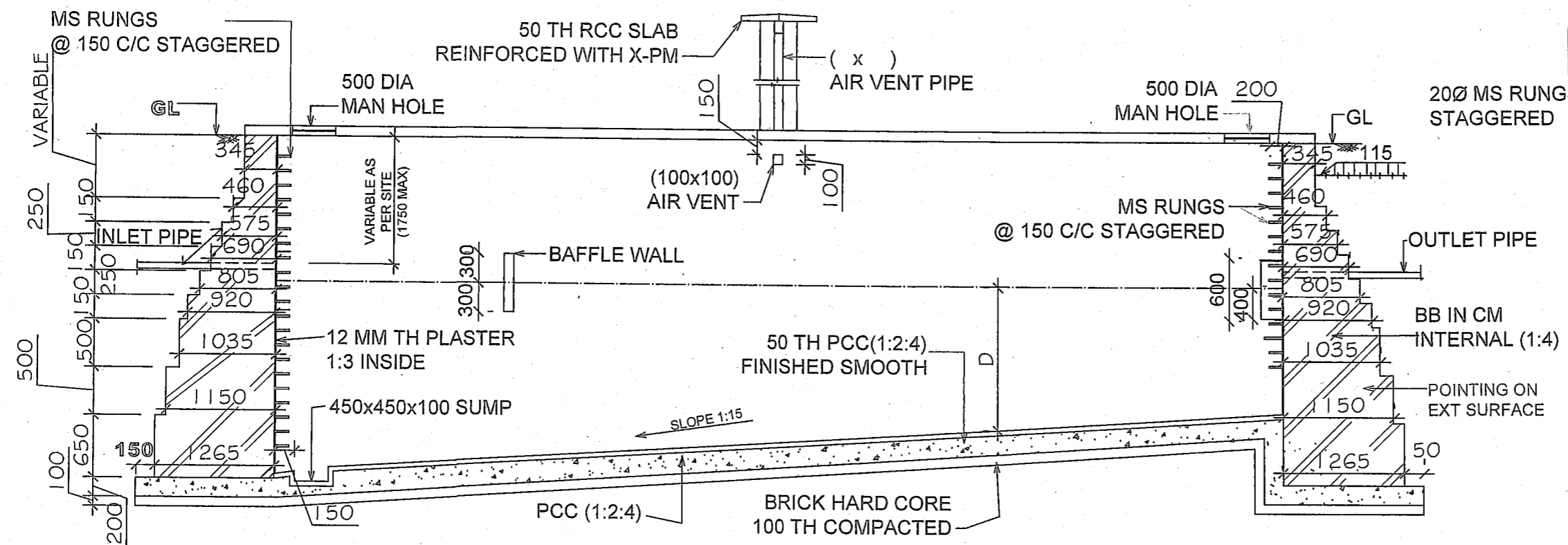
1. CONTRACTOR TO CHECK AND VERIFY ALL THE DIMENSION BEFORE EXECUTION OF THE WORK.
2. FIGURED DIMENSION SHALL BE FOLLOWED.
3. ALL DIMENSIONS ARE GIVEN IN MILLIMETRES UNLESS OTHERWISE SPECIFIED.
4. THE DESIGN OF SEPTIC TANK IS BASED ON IS-2470 (i) 1968 AND (ii) 1976 . THE NUMBER OF USER WILL BE REGULATED AS PER IS-
5. THE CAPACITY HAS BEEN WORKOUT TO CATER FOR SOIL AND WATER DICHARGED FROM BATH ROOM AND KITCHEN. IT SHOULD BE INSURED THAT NO SURFACE (STORM) WATER OR SUB SOIL WATER GET INTO THE SEPTIC TANK. BEFORE COMMENCING, THE SEPTIC TANK WILL BE FILLED WITH WATER UPTO OUT LET LEVEL. SEPTIC TANK SHOULD PREFERABLY SEEDED WITH WELL DIGESTED SLUDGE FROM OTHER SEPTIC TANK OR SLUDGE DIGESTION TANK. A SMALL QUANTITY OF DECAYING ORGANIC MATERIAL SUCH AS DIGESTED COW DUNG MAY BE INTRODUCED IN CASE DIGESTED SLUDGE IS NOT AVAILABLE.
6. AS SHOWN MS RUNGS WILL BE PROVIDED @ 150 C/C STAGGERED. THESE WILL BE PAINTED WITH ANTI CORROSIVE PAINTS.
7. THE SOIL ABSORPTION SYSTEM SHOULD NOT BE CLOSER THAN 18 METER TO ANY SOURCE OF DRINKING WATER & NOT CLOSER THAN 6 METER FROM ANY HABITABLE BUILDING.
8. SLOPE OF BED WILL BE 1: 15 FOR SEPTIC TANK UPTO 50 USERS SLOPE WILL BE TOWARDS THE INLET IN ONE DIRECTION FOR SEPTIC TANK OF 100 USERS AND ABOVE IT WILL BE IN TWO DIRECTIONS.
9. NUMBER OF MANHOLES WILL BE ADJUSTED ACCORDING TO NUMBER OF SUMPS IN MANHOLES.
10. THE SEPTIC TANKS HAVE BEEN DESIGNED DESLUDINGS EVERY TWO YEARS EXCEPT 20 TO 50 USERS WHICH HAVE BEEN DESIGNED FOR DESLUDING EVERY ONE YEAR.
11. 500 DIA MAN HOLE COVER WILL BE 80 TH RCC 8 # BARS @ 150 C/C WITH 8 # DISTRIBUTION BARS @ 150 C/C WILL BE PROVIDED.
12. EARTH FILLING AROUND THE FOUNDATION SHALL BE CARRIED OUT ONLY AFTER CASTING OF ROOF SLAB & FILLING THE WITH THE WATER..
13. STONE WORK SHALL BE IN CEMENT MORTAR 1:4.

CONTD ON SHT 3/3:-

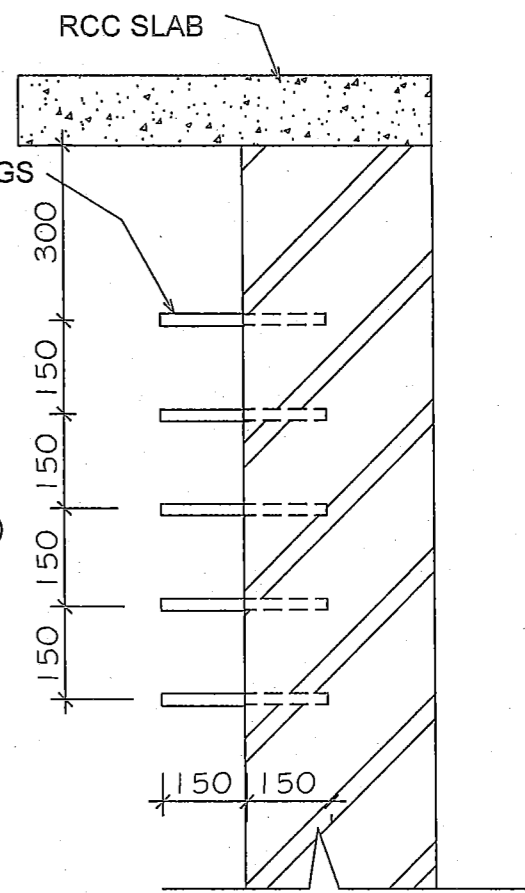
SNO	DATE	DESCRIPTION
REVISIONS		
TYPICAL DETAIL OF SEPTIC TANK (BK MASONRY)		
PLAN OF SEPTIC TANK FOR TWO COMPARTMENT & SECTIONAL ELEVATION		
DATE :-14 DEC 2013	CHIEF ENGINEER JODHPUR ZONE	SHT NO
DRN :- C S ASERI		1/3
TCD :-		
CKD :-		
SCALE :- AS SHOWN	DRG NO :- CEJZ / TD / 30	

[Signature]
SO I (DESIGN)

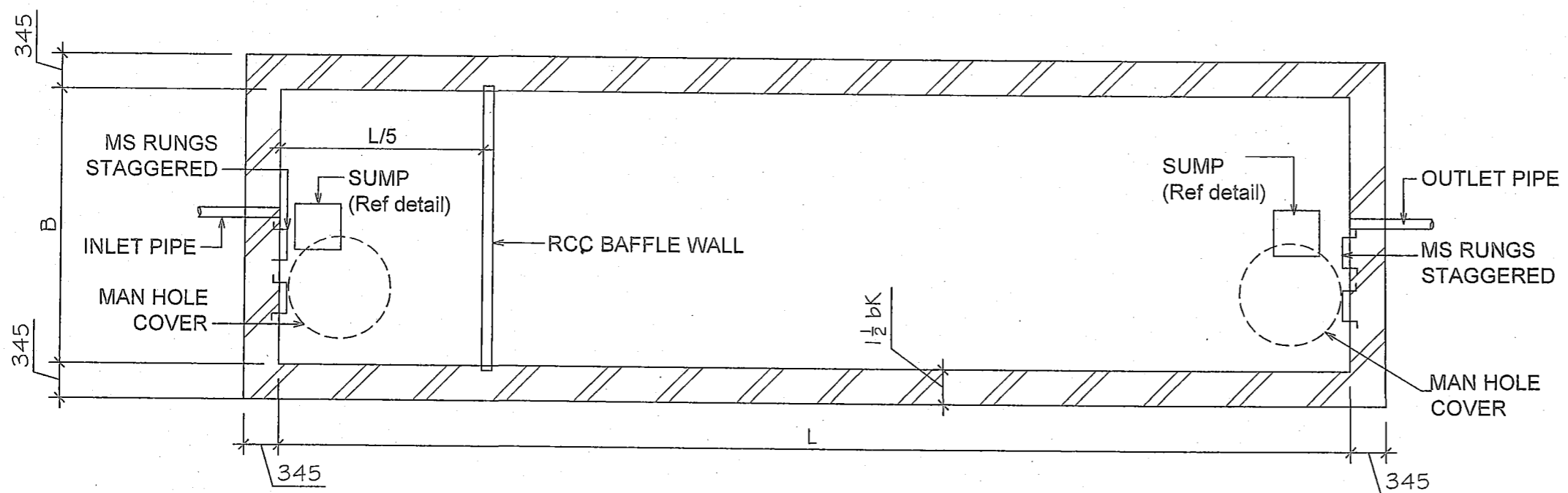
[Signature]
(R C SWAIN)
LT COL
SR ARCH
FOR CHIEF ENGINEER



SECTIONAL ELEVATION



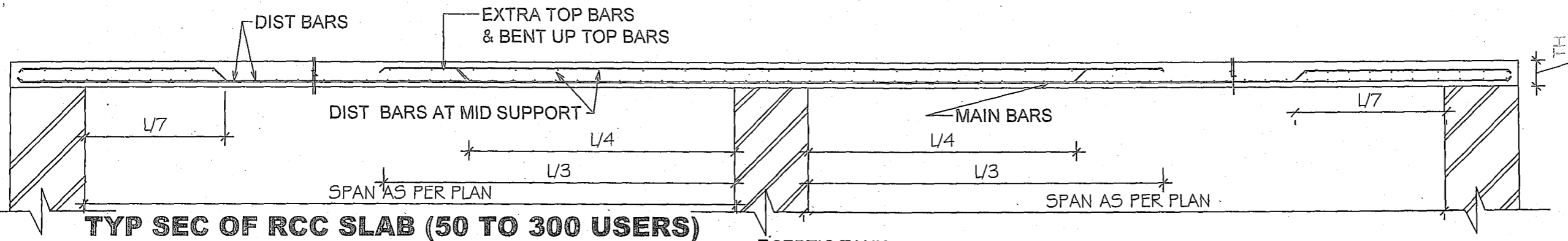
SEC THROUGH MS RUNGS



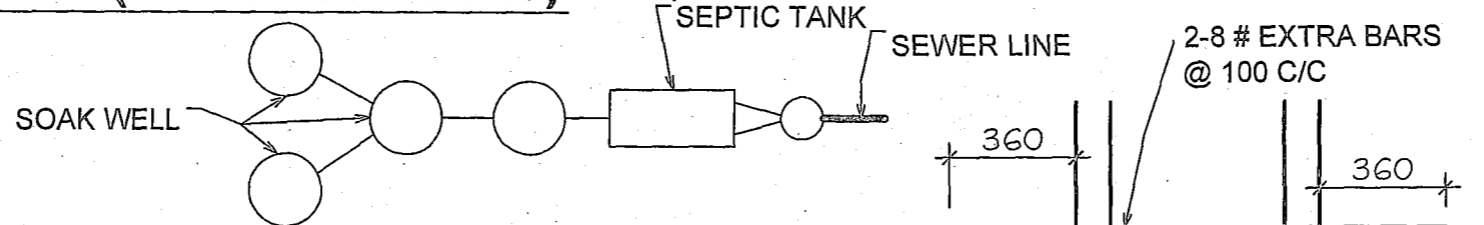
PLAN OF SEPTIC TANK FOR ONE COMPARTMENT

SNO	DATE	DESCRIPTION
REVISIONS		
TYPICAL DETAIL OF SEPTIC TANK (BK MASONRY)		
PLAN OF SEPTIC TANK FOR ONE COMPARTMENT, SECTIONAL ELEVATION & SEC THROUGH MS STEPS		
DATE	14 DEC 2013	CHIEF ENGINEER JODHPUR ZONE
DRN	C S ASERI	
TCD	-	
CKD	-	
SCALE	AS SHOWN	DRG NO :- CEJZ / TD / 30
 SO I (DESIGN)		 (R C SWAIN) LT COL SR ARCH FOR CHIEF ENGINEER

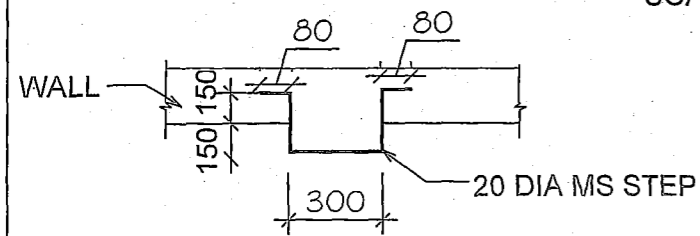
SHT NO
2/3



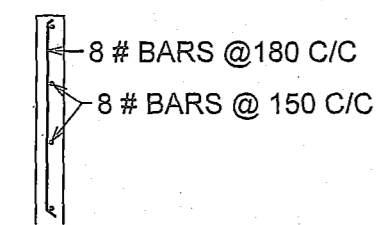
TYP SEC OF RCC SLAB (50 TO 300 USERS)



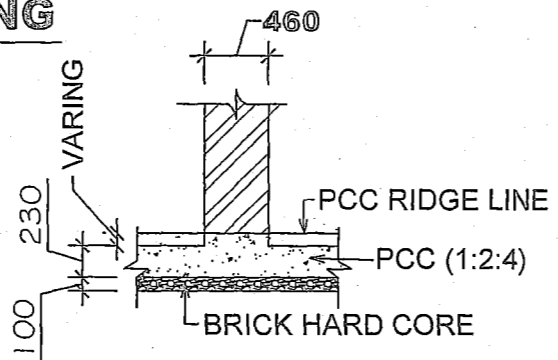
TYPICAL LAYOUT OF SEPTIC TANK SEWER LINE



FIXING DETAIL OF MS RUNG
SCALE-1:5



DETAIL OF RCC BAFFLE WALL



SECTION AT 'AA'
SCALE 1:50

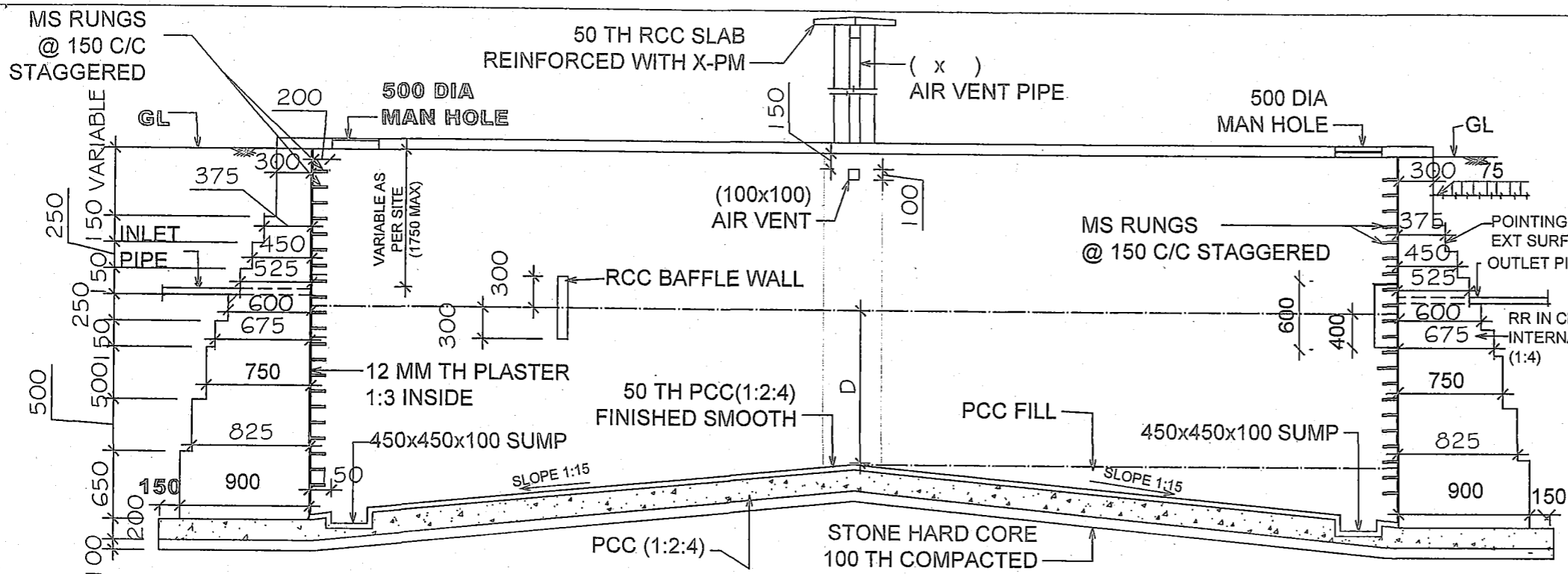
DETAIL OF REINFORCEMENT AROUND MAN HOLE

- NOTES**
- THIS DRAWINGS IS BASED ON THE ASSUMPTION THAT THE WATER TABLE IS BELOW STRUCTURE.
 - FOR JODHPUR, BANAR, JAISALMER, POKARAN, NATCHNA, JALIPA, JASSAI ONLY :- THE LOCAL STONE PATTIS IN SINGLE PIECE NOT LESS THEN 3000mm LONG, 250mm WIDTH & 80mm IN THICKNESS SHALL BE PROVIDED INSTEAD OF RCC SLAB. TWO STONE PATTIS AT ANY END CAN BE LIFFTED FOR CLEANING THE SEPTIC TANK AS AND WHEN REQUIRED AND NO MAN HOLE SHALL BE PROVIDED. THE STONE PATTIS SHALL BE JOINTED & POINTED IN CM 1:4.
 - MINIMUM GRADE OF CONCRETE FOR RCC WORK SHALL BE M-25 DESIGN MIXED AS PER IS- 456 OF 2000
 - ALL RCC WORK SHALL BE CONFORMING TO HIGH STRENGTH DEFORMED TMT BAR Fe - 500 I.S. 1786-85

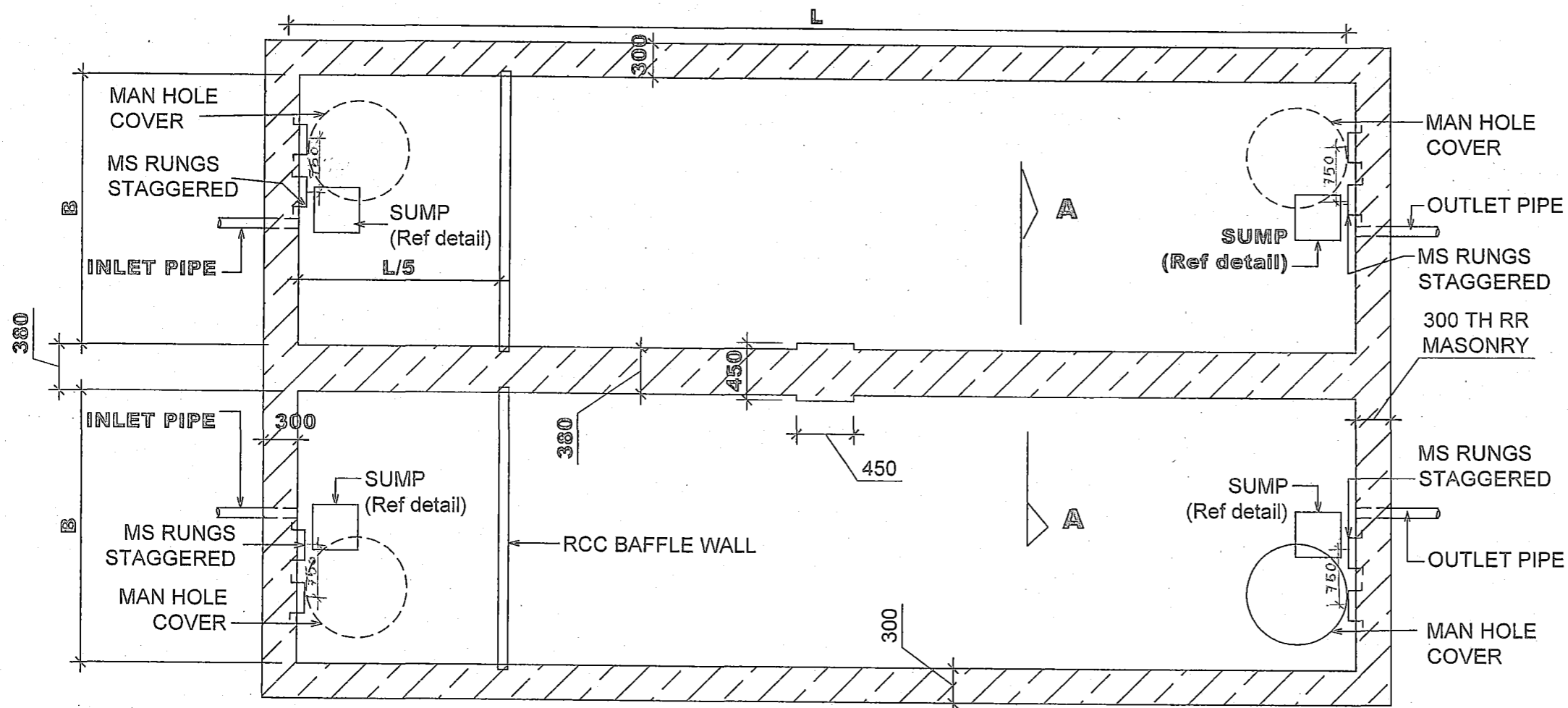
SCHEDULE OF SEPTIC TANK

SL NO	NO OF USERS	LENGTH 'L' IN MM	BREADTH 'B' IN MM	LIQUIDS 'D' IN MM	SLAB DETAILS								BAFFLE WALL				REMARKS		
					TH	MAIN REINF.		DISTR REINF.		EXTRA BARS AT TOP IN MIDDLE SUPPORT		DISTR REINF AT MIDDLE SUPPORT		TH	MAIN REINF.			DISTR REINF.	
						#	C/C	#	C/C	#	C/C	#	C/C		#	C/C		#	C/C
1	10 TO 20	2300	1100	1300	110	8	200	8	200					100	8	150	8	180	SINGLE COMPARTMENT
2	50	4000	1400	1300	110	8	200	8	200					100	8	150	8	180	SINGLE COMPARTMENT
3	100	6600	1700	1300	110	8	200	8	200			8	180	100	8	150	8	180	TWO COMPARTMENT
4	150	7500	1900	1700	110	8	200	8	200			8	180	100	8	150	8	180	TWO COMPARTMENT
5	200	8750	2200	1700	125	8	200	8	200			8	180	125	8	150	8	180	TWO COMPARTMENT
6	250	9550	2500	1700	125	8	200	8	200	8	400	8	180	125	8	150	8	180	TWO COMPARTMENT
7	300	10500	2700	1700	125	8	200	8	200	8	400	8	180	125	8	150	8	180	TWO COMPARTMENT
8																			

SNO	DATE	DESCRIPTION
REVISIONS		
TYPICAL DETAIL OF SEPTIC TANK (BK MASONRY)		
TYPICAL SEC, DETAILS & AND SCHEDULE OF SEPTIC TANK		
DATE :- 14 DEC 2013	CHIEF ENGINEER JODHPUR ZONE	SHT NO
DRN :- C S ASERI		3/3
TCD :-		
CKD :-		
SCALE :- AS SHOWN	DRG NO :- CEJZ / TD / 30	
SO I (DESIGN)	(R C SWAIN) LT COL SR ARCH FOR CHIEF ENGINEER	



SECTIONAL ELEVATION



PLAN OF SEPTIC TANK FOR TWO COMPARTMENT

NOTES

1. CONTRACTOR TO CHECK AND VERIFY ALL THE DIMENSION BEFORE EXECUTION OF THE WORK.
2. FIGURED DIMENSION SHALL BE FOLLOWED.
3. ALL DIMENSIONS ARE GIVEN IN MILLIMETRES UNLESS OTHERWISE SPECIFIED.
4. THE DESIGN OF SEPTIC TANK IS BASED ON IS-2470 (i) 1968 AND (ii) 1976 . THE NUMBER OF USER WILL BE REGULATED AS PER IS-
5. THE CAPACITY HAS BEEN WORKOUT TO CATER FOR SOIL AND WATER DICHARGED FROM BATH ROOM AND KITCHEN. IT SHOULD BE INSURED THAT NO SURFACE (STORM) WATER OR SUB SOIL WATER GET INTO THE SEPTIC TANK.
6. BEFORE COMMENCING, THE SEPTIC TANK WILL BE FILLED WITH WATER UPTO OUT LET LEVEL. SEPTIC TANK SHOULD PREFERABLY SEEDED WITH WELL DIGESTED SLUDGE FROM OTHER SEPTIC TANK OR SLUDGE DIGESTION TANK. A SMALL QUANTITY OF DECAYING ORGANIC MATERIAL SUCH AS DIGESTED COW DUNG MAY BE INTRODUCED IN CASE DIGESTED SLUDGE IS NOT AVAILABLE.
7. AS SHOWN MS RUNGS WILL BE PROVIDED @ 150 C/C STAGGERED. THESE WILL BE PAINTED WITH ANTI CORROSIVE PAINTS.
8. THE SOIL ABSORPTION SYSTEM SHOULD NOT BE CLOSER THAN 18 METER TO ANY SOURCE OF DRINKING WATER & NOT CLOSER THAN 6 METER FROM ANY HABITABLE BUILDING.
9. SLOPE OF BED WILL BE 1: 15 FOR SEPTIC TANK UPTO 50 USERS SLOPE WILL BE TOWARDS THE INLET IN ONE DIRECTION FOR SEPTIC TANK OF 100 USERS AND ABOVE IT WILL BE IN TWO DIRECTIONS.
10. NUMBER OF MANHOLES WILL BE ADJUSTED ACCORDING TO NUMBER OF SUMPS IN MANHOLES.
11. THE SEPTIC TANKS HAVE BEEN DESIGNED DESLUDINGS EVERY TWO YEARS EXCEPT 20 TO 50 USERS WHICH HAVE BEEN DESIGNED FOR DESLUDING EVERY ONE YEAR.
12. 500 DIA MAN HOLE COVER WILL BE 80 TH RCC 8 # BARS @ 150 C/C WITH 8 # DISTRIBUTION BARS @ 150 C/C WILL BE PROVIDED.
13. EARTH FILLING AROUND THE FOUNDATION SHALL BE CARRIED OUT ONLY AFTER CASTING OF ROOF SLAB & FILLING THE WITH THE WATER..
14. STONE WORK SHALL BE IN CEMENT MORTAR 1:4.

CONTD ON SHT 3/3:-

1	25.1.14	DRG CORRECTED UPTO DATE	<i>W</i>
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SNO	DATE	DESCRIPTION	INITIALS
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REVISIONS

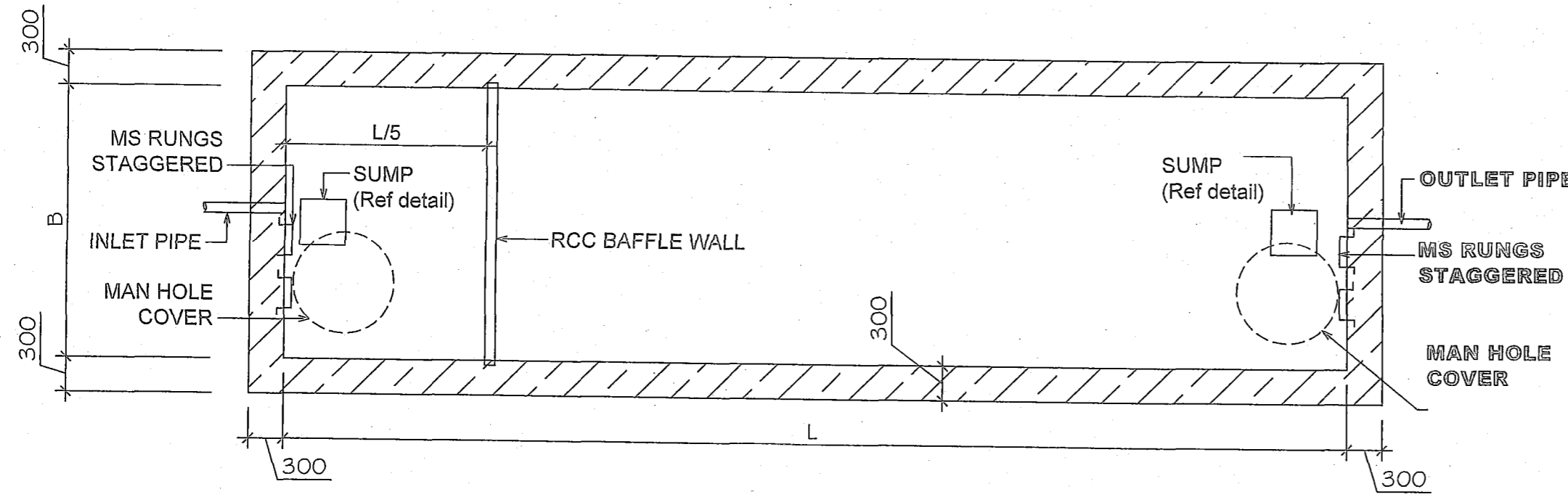
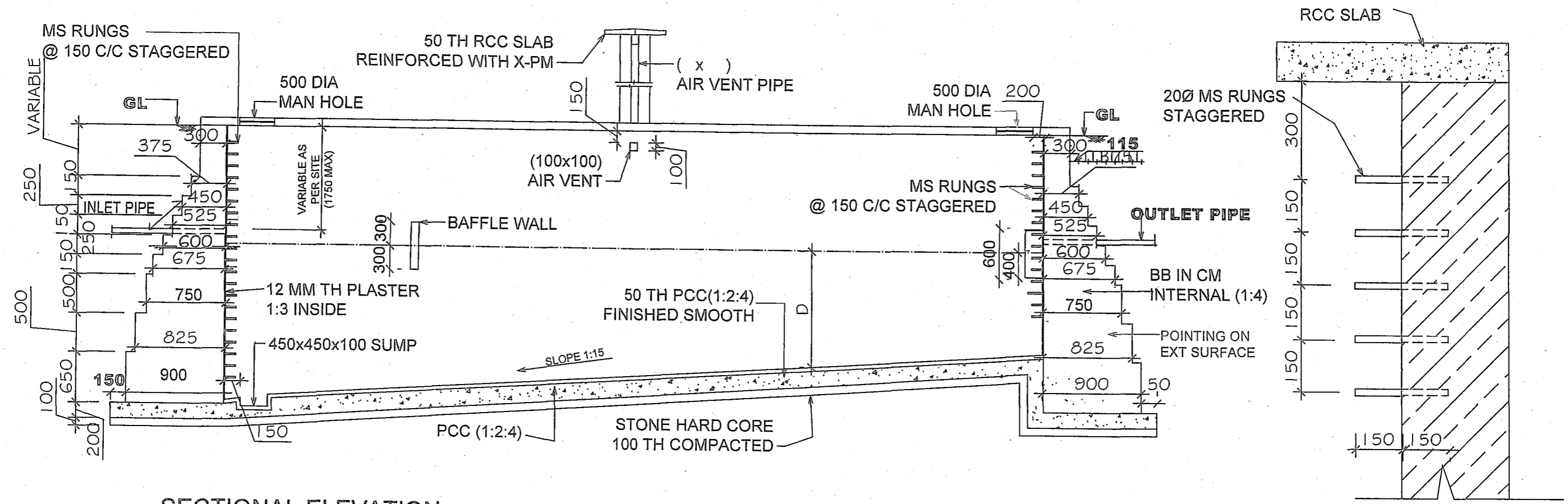
TYPICAL DETAIL OF SEPTIC TANK (STONE MASONRY)

PLAN OF SEPTIC TANK FOR TWO COMPARTMENT & SECTIONAL ELEVATION

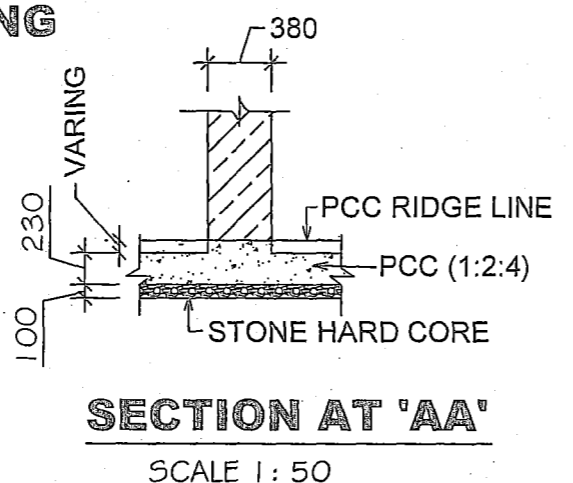
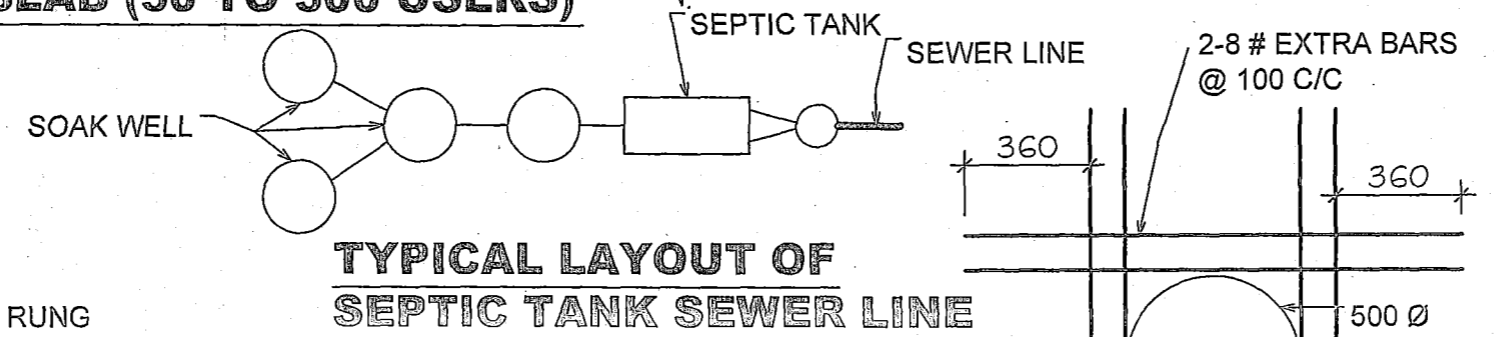
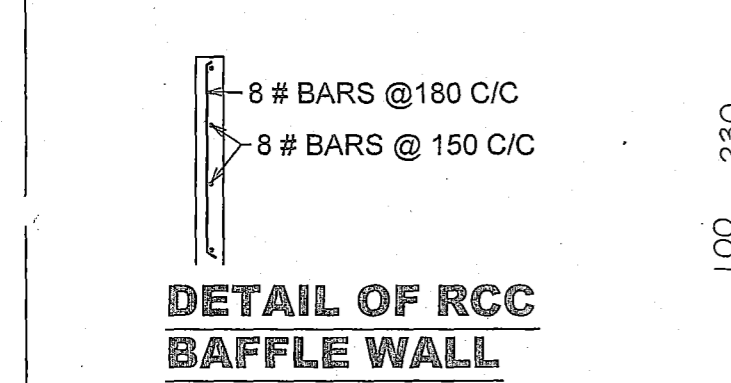
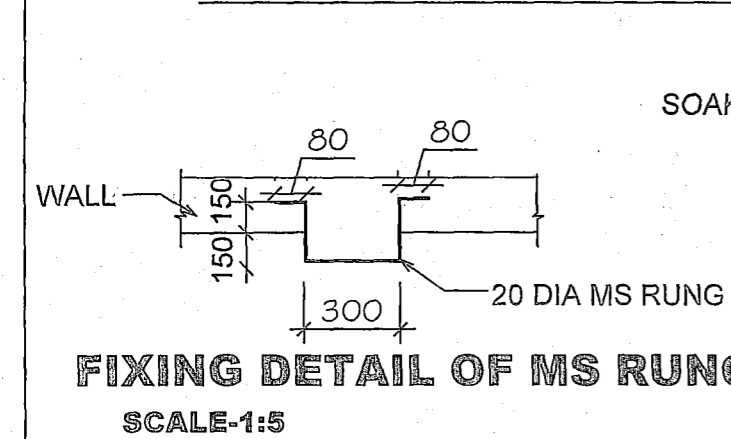
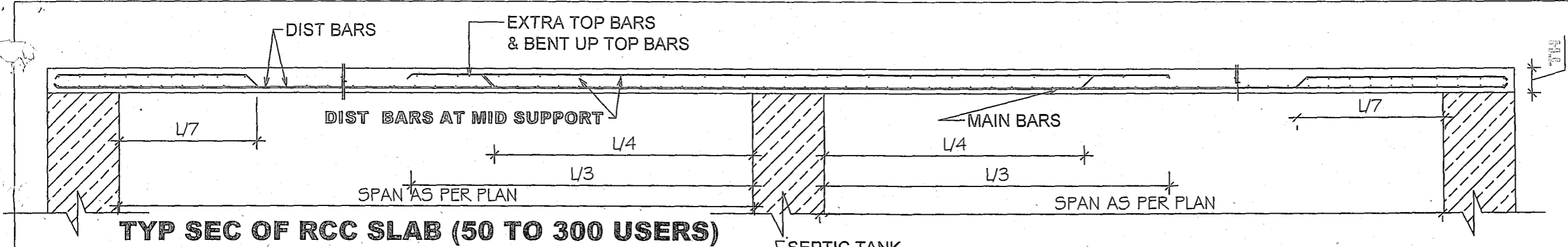
DATE :- 14 DEC 2013	CHIEF ENGINEER JODHPUR ZONE	SHT NO
DRN :- C S ASERI		1/3
TCD :-		
CKD :-		
SCALE :- AS SHOWN	DRG NO :- CEJZ / TD / 31	

(Signature)
SO I (DESIGN)

(Signature)
(R C SWAIN)
LT COL
SR ARCH
FOR CHIEF ENGINEER



SNO	DATE	DESCRIPTION
REVISIONS		
TYPICAL DETAIL OF SEPTIC TANK (STONE MASONRY)		
PLAN OF SEPTIC TANK FOR ONE COMPARTMENT, SECTIONAL ELEVATION & SEC THROUGH MS STEPS		
DATE :- 14 DEC 2013	CHIEF ENGINEER JODHPUR ZONE	SHT NO
DRN :- C S ASERI		2/3
TCD :-		
CKD :-		
SCALE :- AS SHOWN	DRG NO :- CEJZ / TD / 31	
SO 1 (DESIGN)	 (R C SWAIN) LT COL SR ARCH FOR CHIEF ENGINEER	



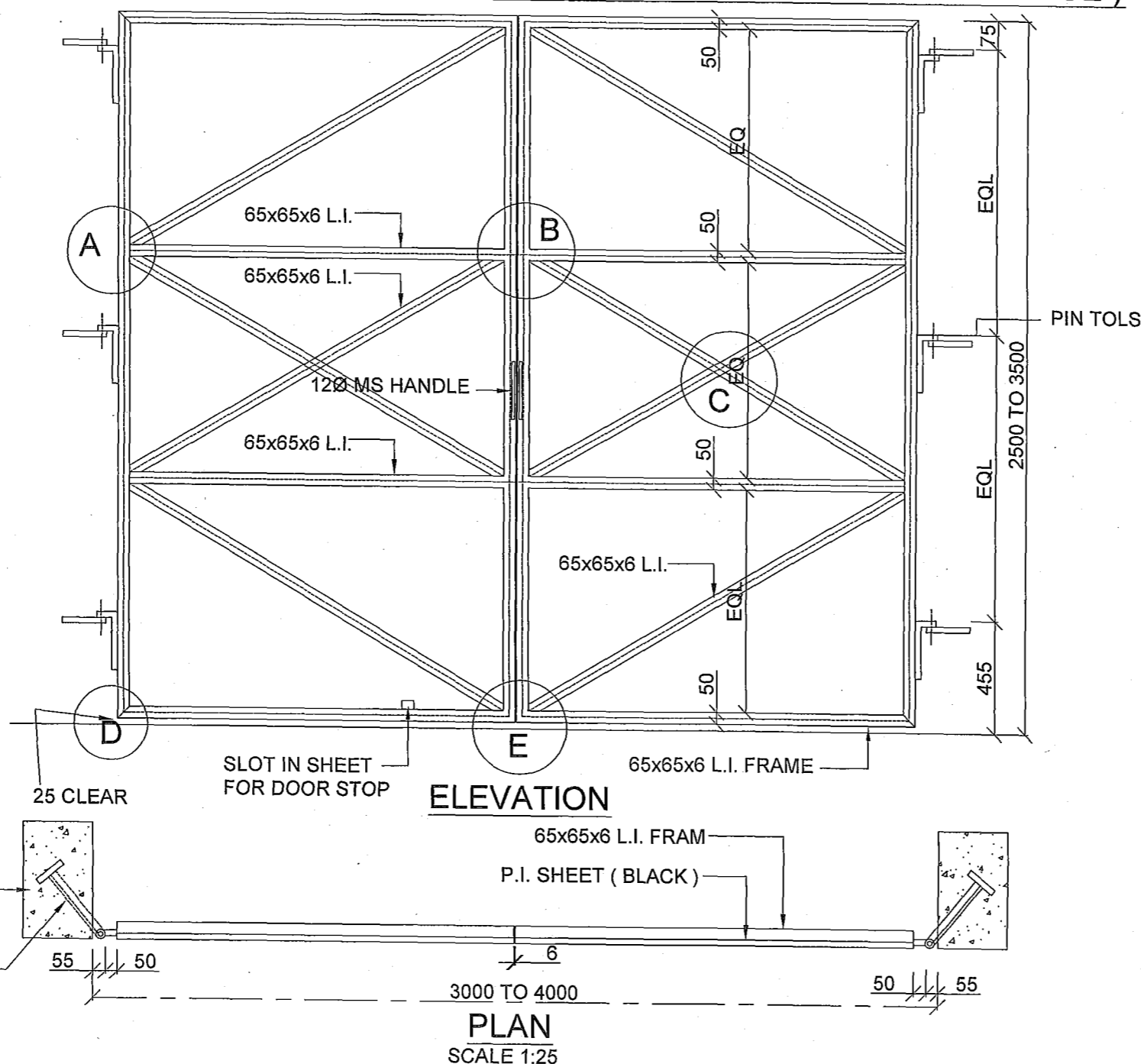
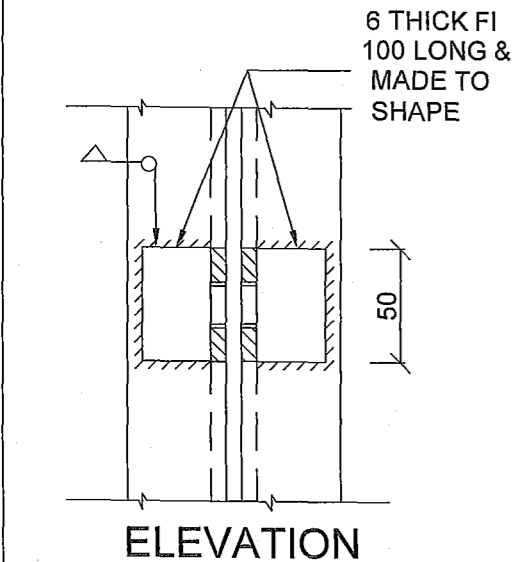
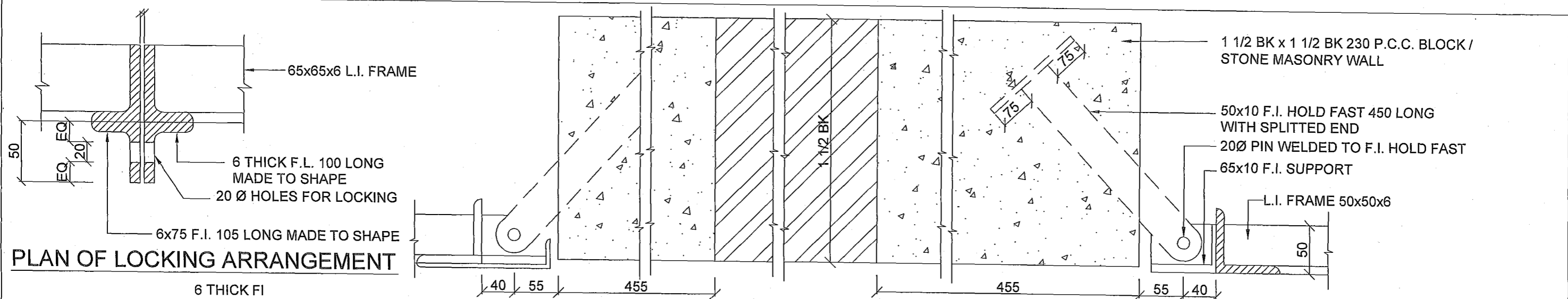
DETAIL OF REINFORCEMENT AROUND MAN HOLE

- NOTES**
- THIS DRAWINGS IS BASED ON THE ASSUMPTION THAT THE WATER TABLE IS BELOW STRUCTURE.
 - FOR JODHPUR, BANAR, JAISALMER, POKARAN, NATCHNA, JALIPA, JASSAI ONLY :- THE LOCAL STONE PATTIS IN SINGLE PIECE NOT LESS THEN 3000mm LONG, 250mm WIDTH & 80mm IN THICKNESS SHALL BE PROVIDED INSTEAD OF RCC SLAB. TWO STONE PATTIS AT ANY END CAN BE LIFFTED FOR CLEANING THE SEPTIC TANK AS AND WHEN REQUIRED AND NO MAN HOLE SHALL BE PROVIDED. THE STONE PATTIS SHALL BE JOINTED & POINTED IN CM 1:4.
 - MINIMUM GRADE OF CONCRETE FOR RCC WORK SHALL BE M-25 DESIGN MIXED AS PER IS- 456 OF 2000
 - ALL RCC WORK SHALL BE CONFORMING TO HIGH STRENGTH DEFORMED TMT BAR Fe - 500 I.S. 1786-85

SCHEDULE OF SEPTIC TANK

SL NO	NO OF USERS	LENGTH 'L' IN MM	BREADTH 'B' IN MM	LIQUIDS 'D' IN MM	SLAB DETAILS								BAFFLE WALL				REMARKS		
					TH	MAIN REINF.		DISTR REINF.		EXTRA BARS AT TOP IN MIDDLE SUPPORT		DISTR REINF AT MIDDLE SUPPORT		TH	MAIN REINF.			DISTR REINF.	
						#	C/C	#	C/C	#	C/C	#	C/C		#	C/C		#	C/C
1	10 TO 20	2300	1100	1300	110	8	200	8	200					100	8	150	8	180	SINGLE COMPARTMENT
2	50	4000	1400	1300	110	8	200	8	200					100	8	150	8	180	SINGLE COMPARTMENT
3	100	6600	1700	1300	110	8	200	8	200			8	180	100	8	150	8	180	TWO COMPARTMENT
4	150	7500	1900	1700	110	8	200	8	200			8	180	100	8	150	8	180	TWO COMPARTMENT
5	200	8750	2200	1700	125	8	200	8	200			8	180	125	8	150	8	180	TWO COMPARTMENT
6	250	9550	2500	1700	125	8	200	8	200	8	400	8	180	125	8	150	8	180	TWO COMPARTMENT
7	300	10500	2700	1700	125	8	200	8	200	8	400	8	180	125	8	150	8	180	TWO COMPARTMENT
8																			

SNO	DATE	DESCRIPTION
REVISIONS		
TYPICAL DETAIL OF SEPTIC TANK (STONE MASONRY)		
TYPICAL SEC, DETAILS & AND SCHEDULE OF SEPTIC TANK		
DATE :- 14 DEC 2013	CHIEF ENGINEER JODHPUR ZONE	SHT NO
DRN :- C S ASERI		3/3
TCD :-		
CKD :-		
SCALE :- AS SHOWN	DRG NO :- CEJZ / TD / 31	
SO I (DESIGN)	<i>(Signature)</i> SR ARCH FOR CHIEF ENGINEER	



- NOTES :-**
1. CONTRACTOR TO CHECK & VERIFY ALL DIMENSIONS BEFORE EXECUTION OF THE WORK.
 2. FIGURED DIMENSIONS SHALL BE FOLLOWED.
 3. ALL DIMENSIONS ARE GIVEN IN mm.
 4. STEEL DOOR SHALL BE PAINTED WITH ALUMINIUM PAINT INT & EXTERNALLY UNLESS OTHER WISE SPECIFIED
 5. PI, BLACK SHEET 20 GAUGE/16 GANGE WHICH EVER IS AVAILABLE MAY BE USED.
 6. MS SHEET SHALL BE SPOT WELDED WITH A SINGLE ROW OF WELD AT 200 C/C MAXIMUM ALONG ALL THE STEEL MEMBERS COMING IN CONTACT WITH SHEET. THE LENGTH OF SPOT WELDS SHALL NOT BE LESS THAN 15MM
 7. ALL STEEL MEMBERS SHALL BE TREATED WITH 2 COATS OF SYNTHETIC ENAMEL PAINT OVER A COAT OF RED OXIDE

- WELDING SYMBOLS**
1. FILLET WELD ALL ROUND.
 2. OPEN SQUARE BUTT JOINT WELDED BOTH SIDES.
 3. SINGLE BUTT JOINT WELDED ONE SIDE.

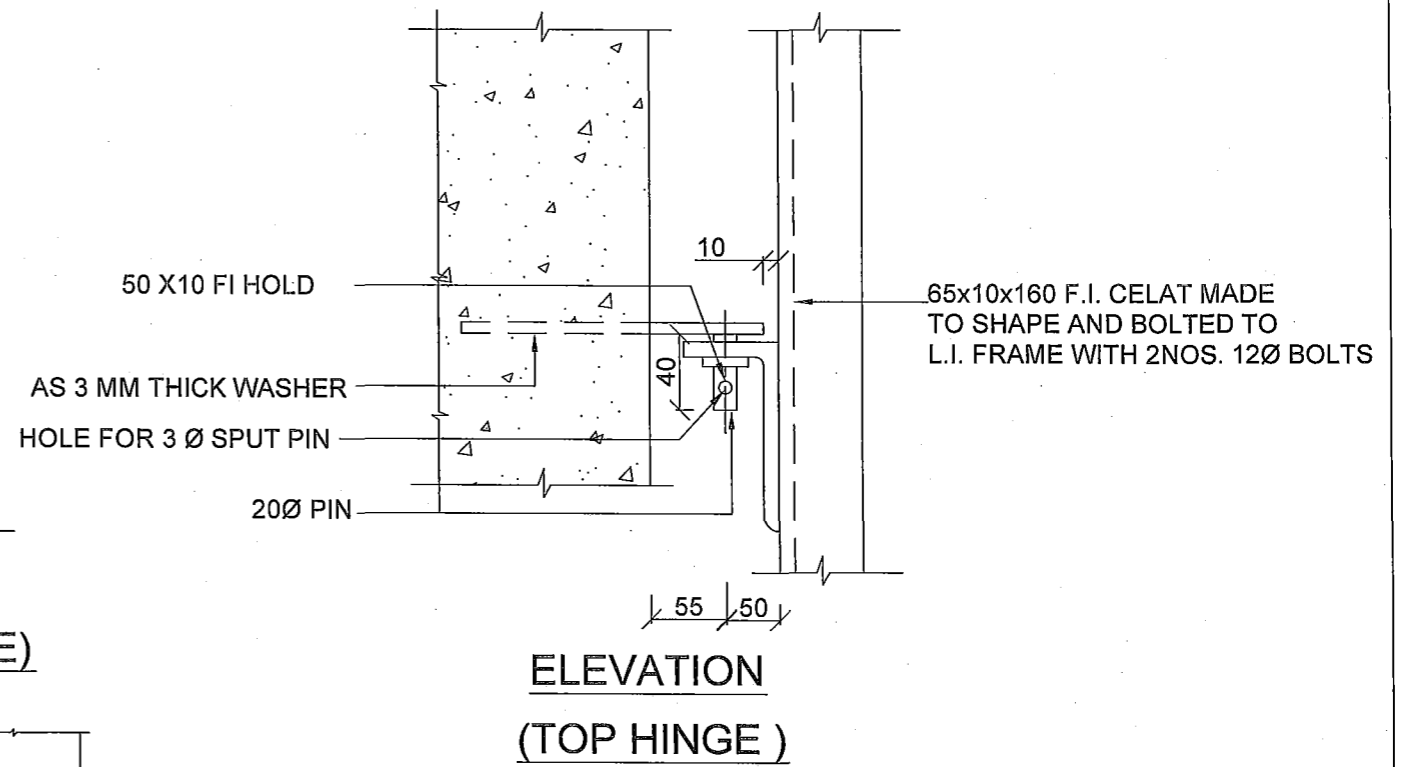
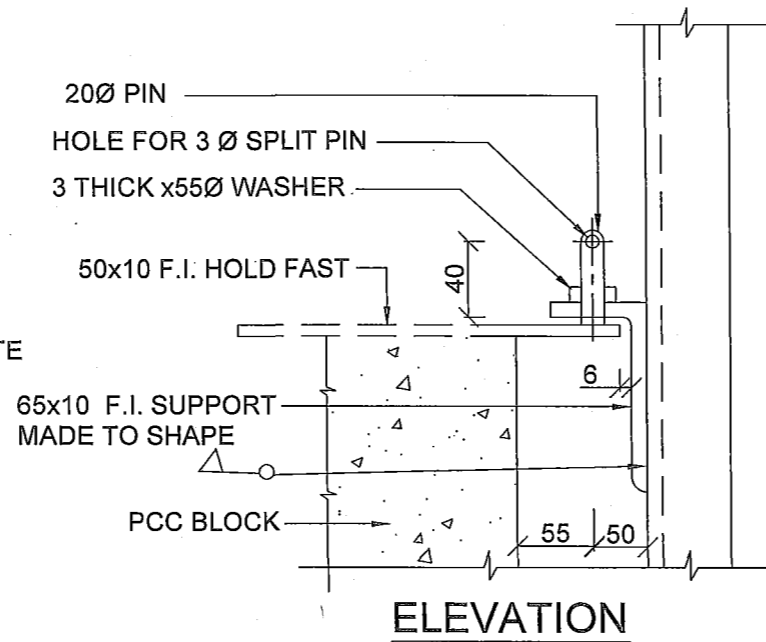
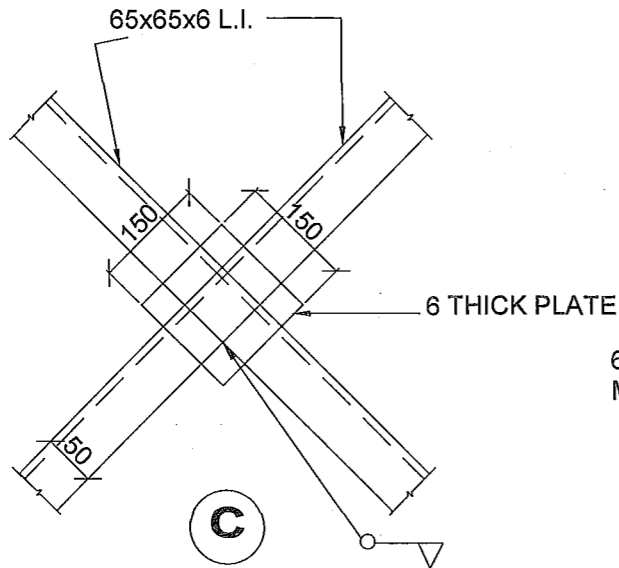
SR NO	DATE	DESCRIPTION	INITIAL
REVISION			

**TYPICAL DETAILS OF GARAGE DOOR (GD)
 3000 TO 4000 MM WIDE**

DATE	09/05/2014	CHIEF ENGINEER JODHPUR ZONE JODHPUR	SHEET NO
DRAWN	C S ASERI		1/3
TCD			
CKD		REF DRG NO : CEJZ /TD/ 32	
SCALE	AS SHOWN		

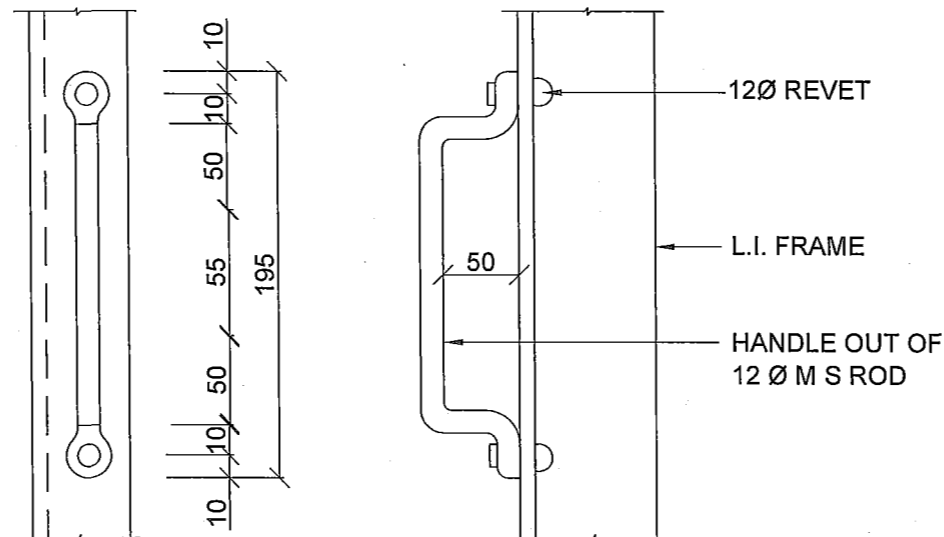
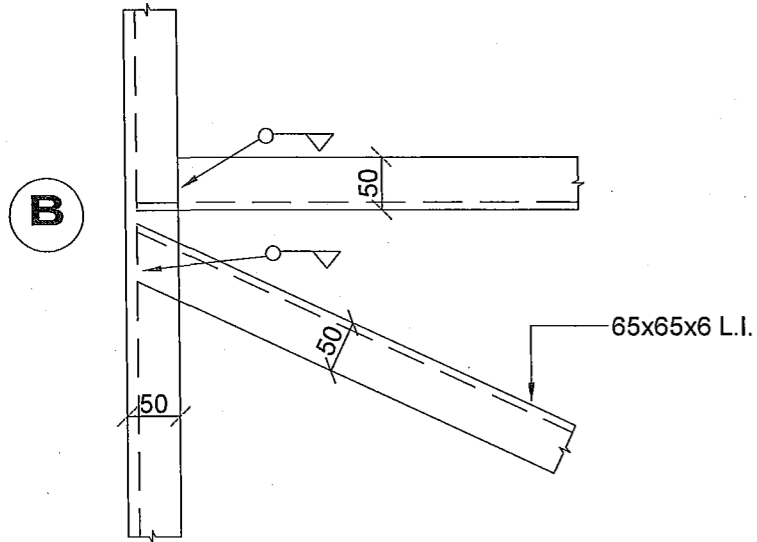
(Signature)
 (R C SWAIN)
 LT COL
 SR ARCH

(Signature)
 (VINOD SASALATI)
 COL
 SO-(D)
 FOR CHIEF ENGINEER

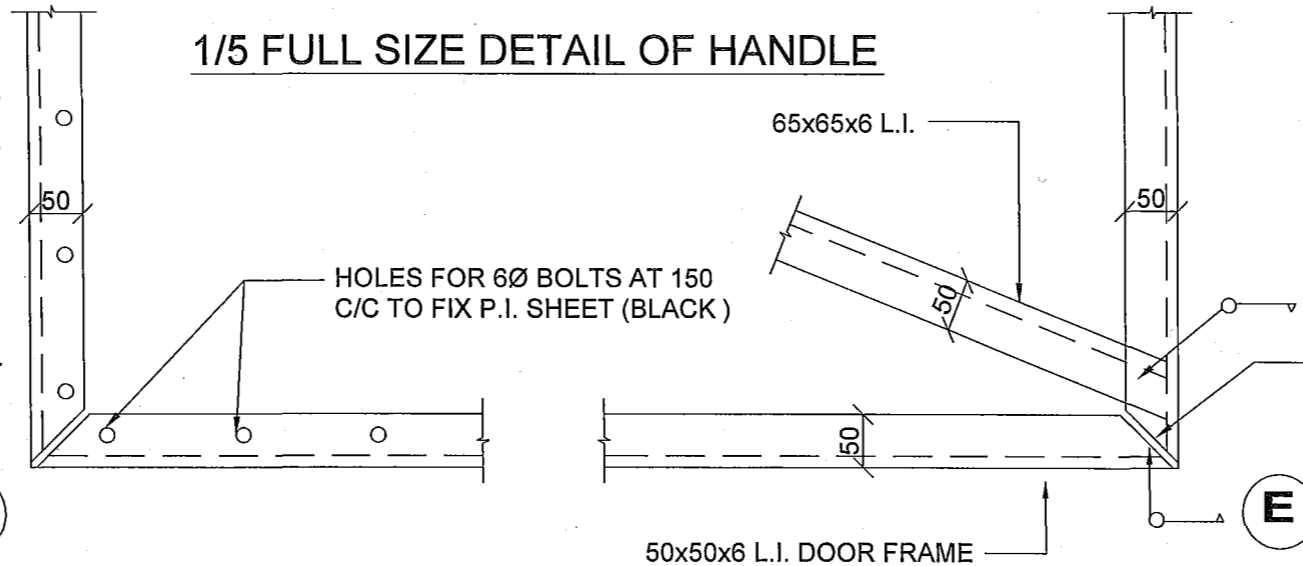
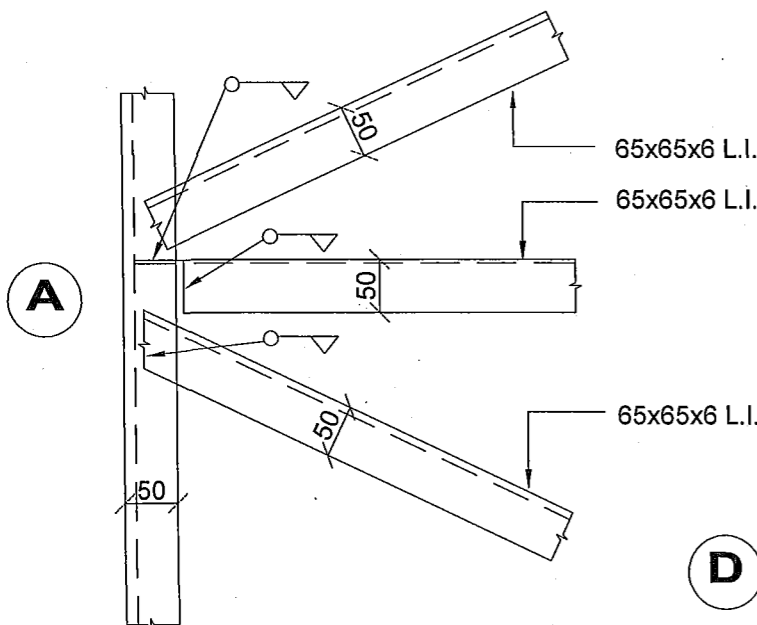


**ELEVATION
(BOTTOM & MIDDLE HINGE)**

**ELEVATION
(TOP HINGE)**



1/5 FULL SIZE DETAIL OF HANDLE



1/5 F.S. DETAILS OF DOOR FRAME

**TYPICAL DETAILS OF GARAGE DOOR (GD)
3000 TO 4000 MM WIDE**

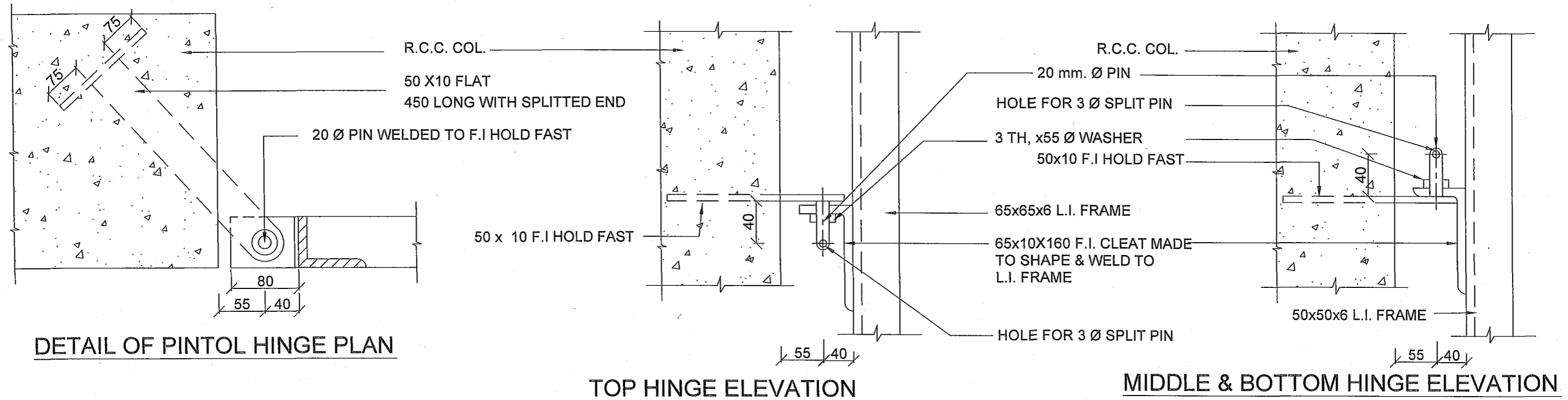
DATE	09/05/2014	CHIEF ENGINEER	SHEET NO
DRAWN	C S ASERI		
TCD		JODHPUR ZONE	2/3
CKD			
SCALE	AS SHOWN	REF DRG NO : CEJZ /TD/ 32	

(Signature)

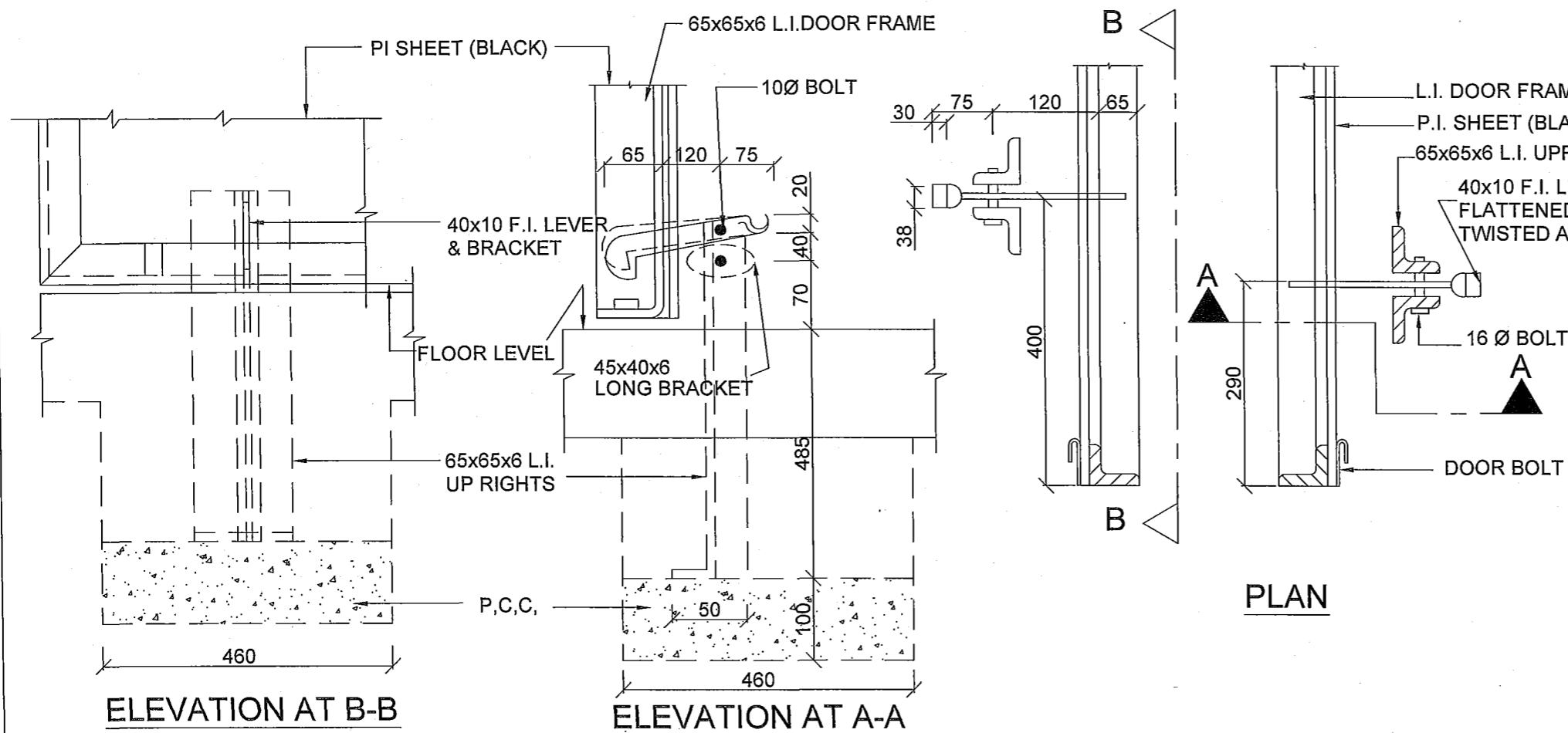
(R C SWAIN)
LT COL
SR ARCH

(Signature)

(VINOD SASALATI)
COL
SO-(D)
FOR CHIEF ENGINEER



1/5 F.S. FIXING DETAILS OF STEEL DOOR WITH R.C.C. COLUMN



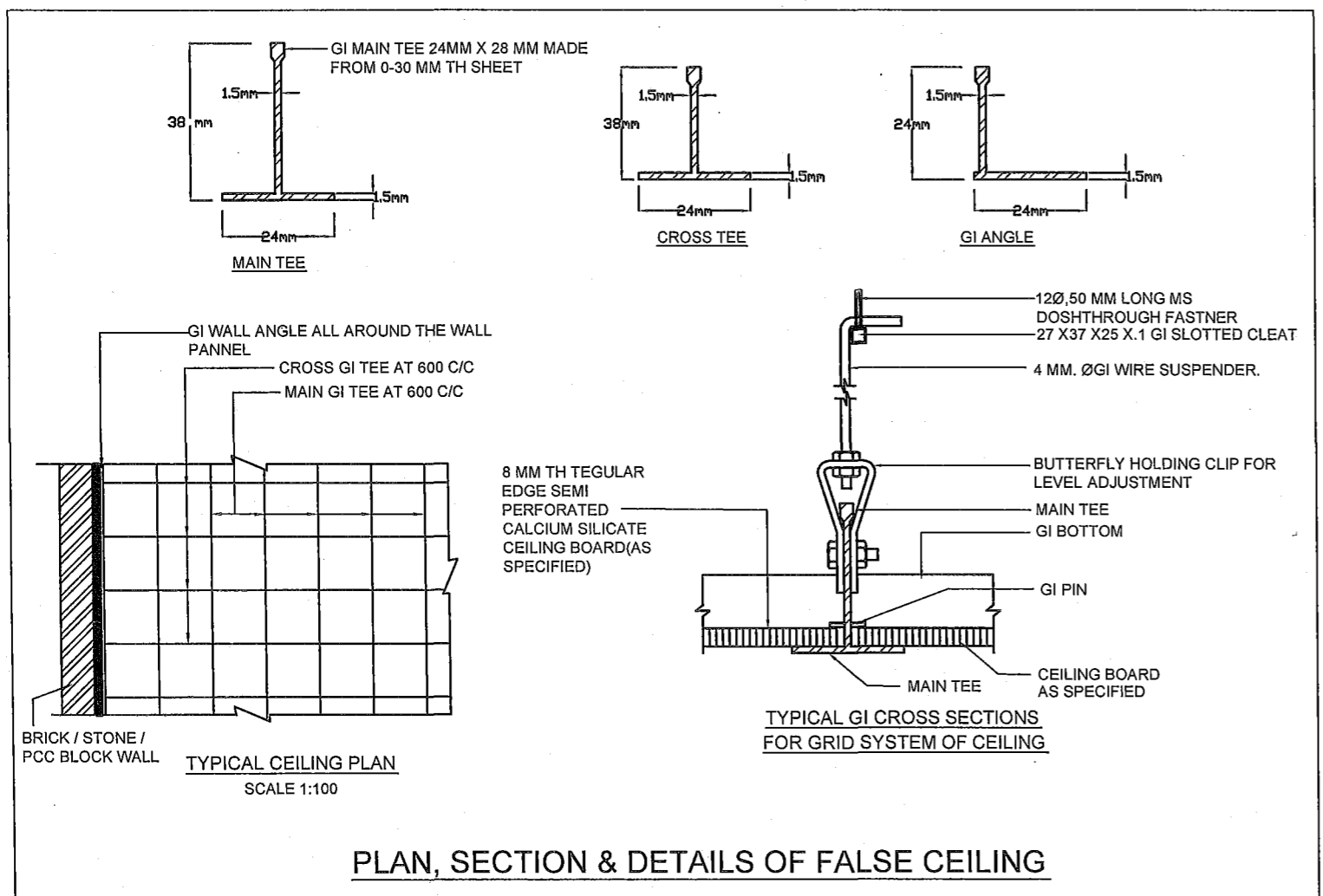
1/10 F.S. DETAIL OF AUTOMATIC DOOR STOP

TYPICAL DETAILS OF GARAGE DOOR (GD) 3000 TO 4000 MM WIDE

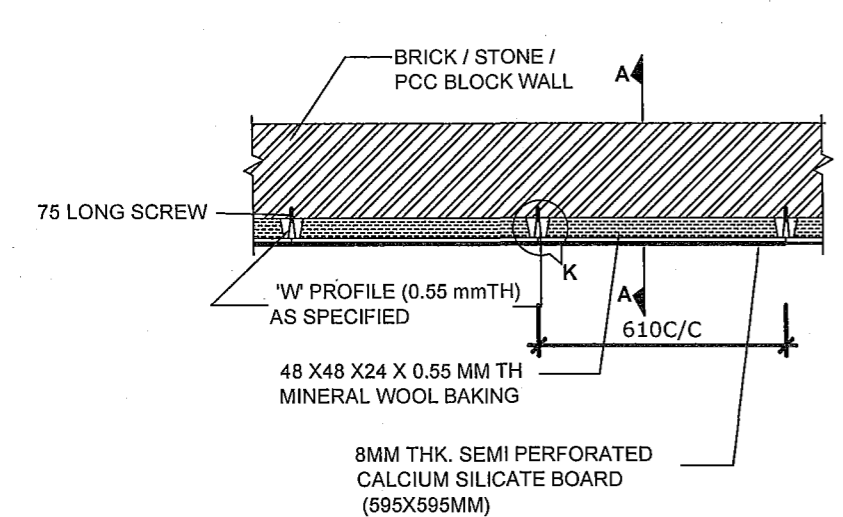
DATE	09/05/2014	CHIEF ENGINEER JODHPUR ZONE JODHPUR	SHEET NO 3/3
DRAWN	C S ASERI		
TCD			
CKD		REF DRG NO : CEJZ /TD/ 32	
SCALE	AS SHOWN		

(Signature)
R C SWAIN
LT COL
SR ARCH

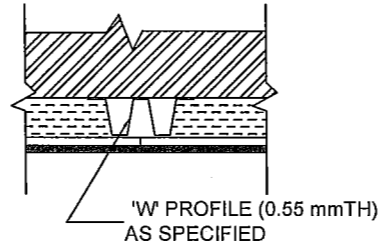
(Signature)
(VINOD SASALATI)
COL
SO-(D)
FOR CHIEF ENGINEER



PLAN, SECTION & DETAILS OF FALSE CEILING

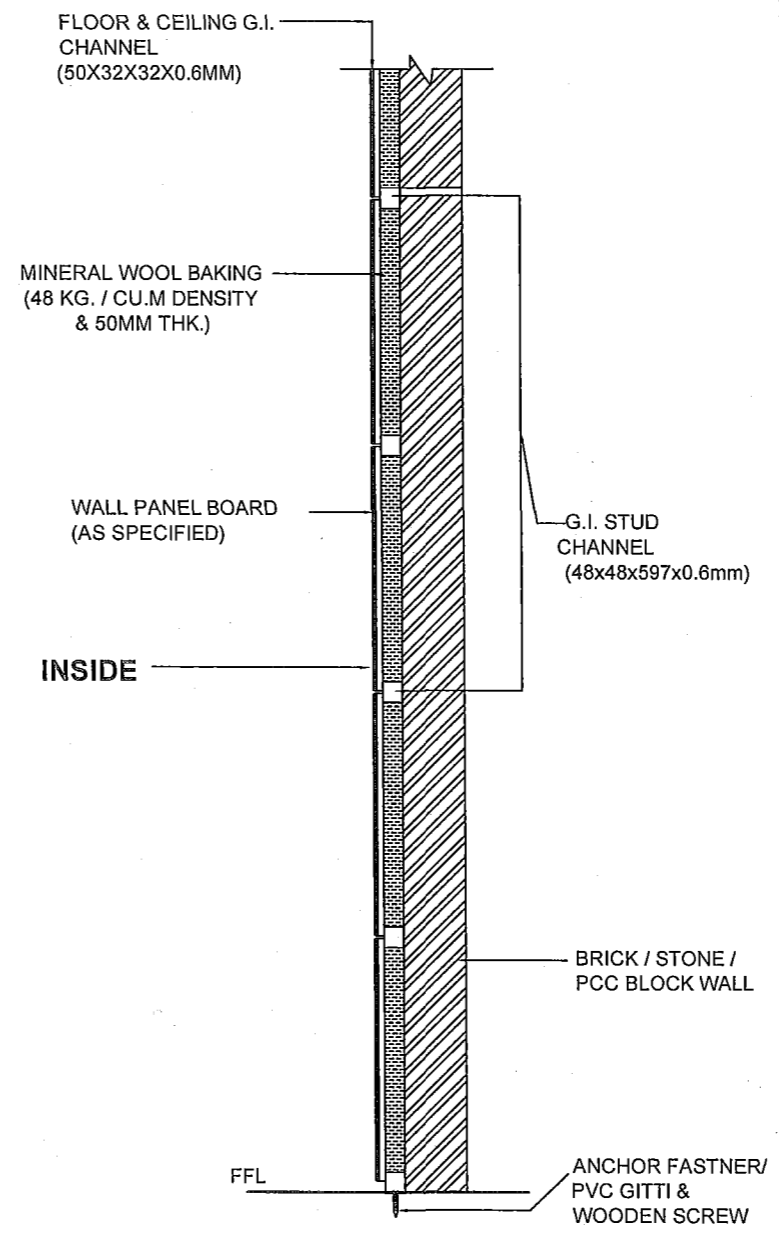


PLAN OF WALL PANNELLING



SPECIFICATION FOR WALL PANNELLING:-

- 'W' PROFILE :-** "W" PROFILE (0.55 MM TH) HAVING A KNURLED WEB OF 51.55 MM & TWO FLENGES OF 26 MM EACH WITH LIPS OF 10.55 MM, PLACED @ 610 MM C/C
- PERIMETER CHANNEL :-** PERIMETER CHANNEL HAVING ONE FLENGE OF 20 MM & ANOTHER FLENGE OF 30 MM THICKNESS OF 0.55 MM & WEB OF LENGTH 27 MM. PERIMETER CHANNEL IS FIXED ON THE FLOOR & CEILING WITH NYLON SLEEVES @ OF 610 MM C/C
- WALL PANEL BOARD :-** 12 mm THICK TAPPED EDGE CLACIUM SILICATE BOARD OF SIZE 595x595mm HAVING SEMI PERFORATION OF DIA 10mm @ 20mm C/C WITH CENTER BORDER OF 50mm AND SIDE BORDER OF 22mm, BACKED WITH WOVEN TISSUE ON THE BACK SIDE HAVING A NRC (NOISE REDUCTION COEFFICIENT) OF 0.85mm, WITH 50mm RESIN BONDED MINERAL WOOL BACKING.



- NOTES :-**
- CONTRACTOR TO CHECK & VERIFY ALL DIMENSIONS BEFORE EXECUTION OF THE WORK
 - FIGURED DIMENSIONS SHALL BE FOLLOWED
 - ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE STATED
 - SPACING OF F.I. SUSPENDER / SUSPENSION ROD FOR FALSE CEILING SHALL BE 600 C/C OF MAIN 'T' OR AS PER MANUFACTURERS INSTRUCTION.
 - FOR AIR CONDITIONED AREA FALSE CEILING SHALL BE PROVIDED WITH ALUMINIUM TEE SECTION FRAMING & PREFURATED SINTEX CEILING / PVC CEILING BOARD OR AS SPECIFIED.

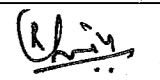
SPECIFICATION FOR CEILING BOARD

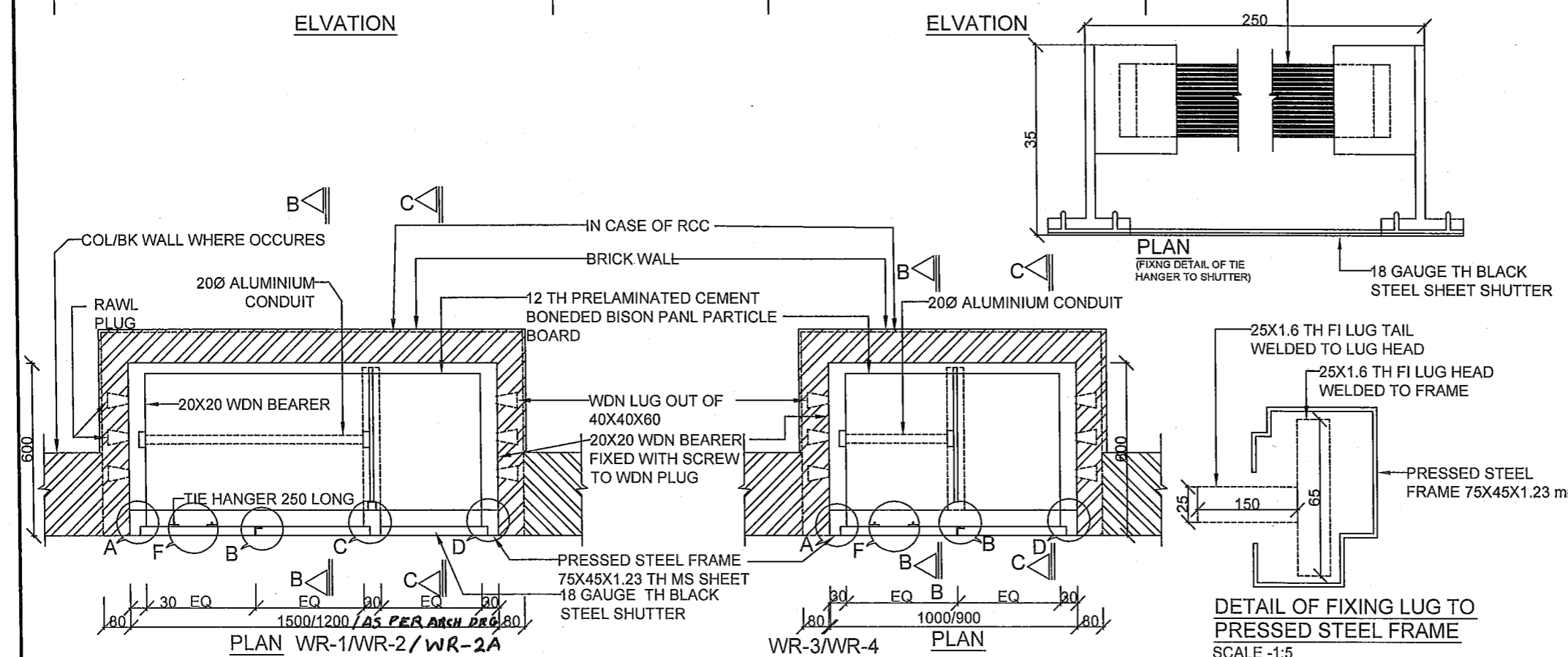
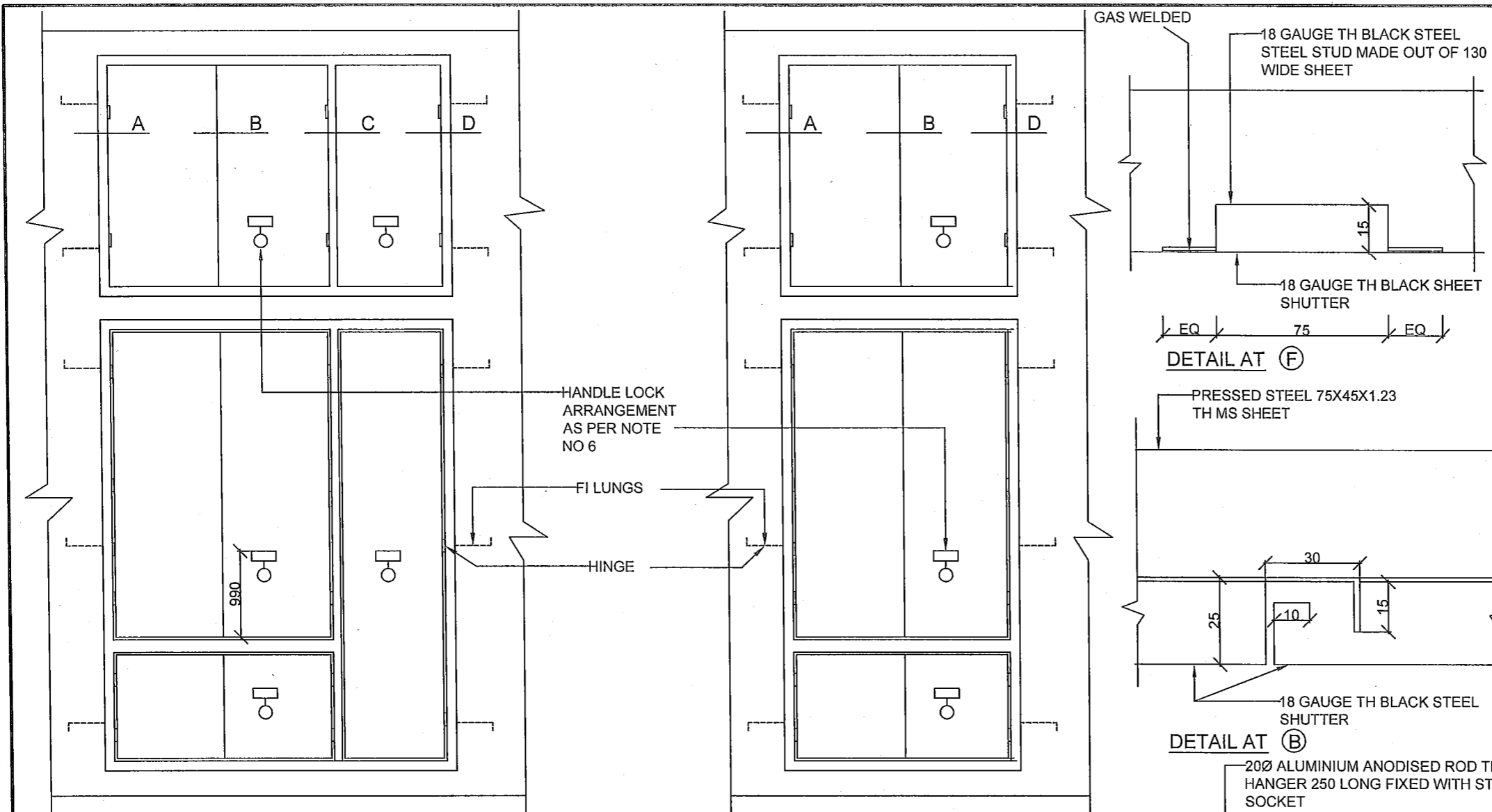
8mm th Tegular edge semi perforated calsium silicate board made with calcarous and siliceous material reinforced with cellulose fiber manufactured throught out claving process (Density not less then 900 kg/cu.m, water resistant, non combustibile as per B.S 476 part-iv, termite resistant and thermal conductivity 0.15 w/m OKC with compressive strength 225 kg/sq cm, bending strength 100 kg/sq cm, of size 595X595 mm having semi-perforation of dia 10mm at 20mm c/c) with center border of 50mm & the side border of 22mm, backed with woven tissue on the back side, having a NRC (noise reduction coefficient) of 0.85, with 50mm resin bonded mineral wool backing.

S.NO	DATE	DESCRIPTIONS	SIGN
		REVISION	

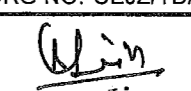
TYPICAL DETAIL FOR FALSE CEILING & WALL PANNELLING

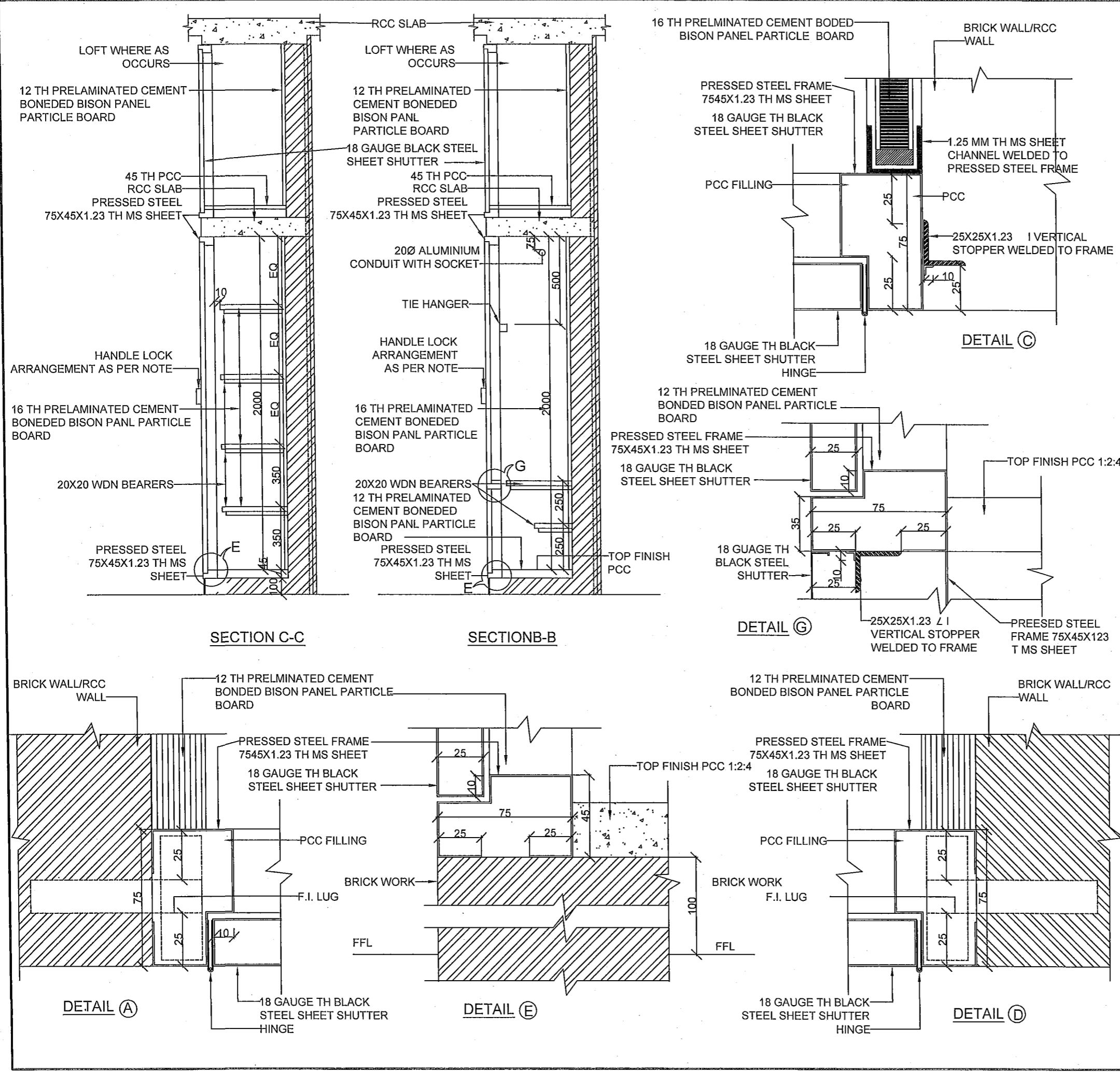
DATE 15/07/2014	CHIEF ENGINEER JODHPUR ZONE	SHT NO.
DRN C S ASERI		1 / 1
TCD -		
CKD -		
SCALE - AS SHOWN	REF. DRG NO. CEJZ/ TD / 33	


 (R C SWAIN)
 LT COL
 SR ARCHITECT
 FOR CE JODHPUR ZONE



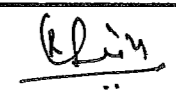
- NOTES**
1. CONTRACTOR TO CHECK AND VERIFY ALL DIMENSIONS BEFORE EXECUTION OF WORK.
 2. FIGURDE DIMENSIONS SHALL BE FOLLOWED.
 3. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE SHOWN.
 4. ALL SIZE GIVEN FOR WOOD ARE FINISHED SIZES.
 5. PLASTER SURFACE INSIDE WARDROBE SHALL BE FINISHED WITH OIL BOUND DISTAMBER.
 6. HANDLES AND LOCKING ARRANGEMENT & HINGES SHALL BE AS STANDARD MANUFACTURED ie GODREJ OR EQUIVALANT.
 7. 19 NOs HINGES 75 LONG SHALL BE PROVIDED FOR WR-1 & WR-2.
 8. 14 NOs HINGES 75 LONG SHALL BE PROVIDED FOR WR-3 & WR-4.
 9. IN CASE OF RCC WALL WDN MEMBERS SHALL BE FIXED WITH 50 LONG RAWL PLUG INSTEAD OF WDN PLUG.
 10. PARTICLE BOARD SHALL BE PRELAMINATED CEMENT BONDED BISON PANEL OF 16/12 mm TH AS SHOWN IN DRG.
 11. ALL STEEL SHUTTER INCLUDING FRAME ETC SHALL BE SYNTHETIC ENAMEL SPRAY PAINTED AS SPECIFIED.

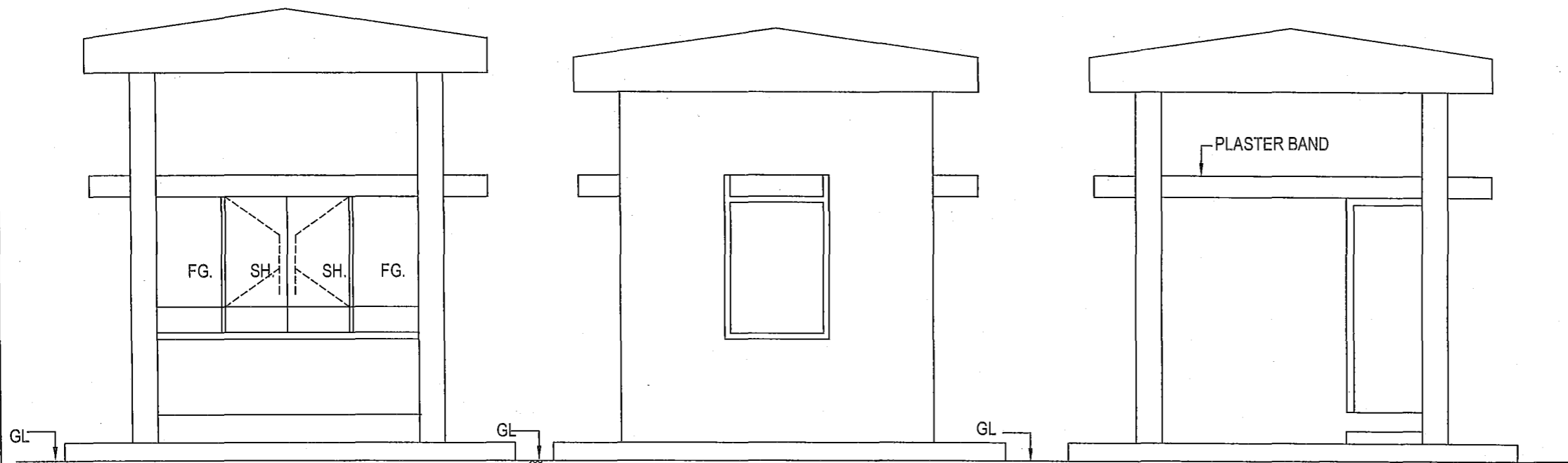
S.NO	DATE	DESCRIPTIONS	SIGN
REVISION			
BUILT IN WARDROBES WITH PRESSED STEEL FRAME & STEEL SHUTTER			
PLAN, ELEVATIONS, SECTIONS AND DETAILS			
DATE	15 JULY 2014	CHIEF ENGINEER JODHPUR ZONE	SHT NO
DRN	C S ASERI		1
TCD			2
CKD			
SCALE	1:20	DRG NO: CEJZ/TD/ 34	
 SR ARCH FOR CHIEF ENGINEER			



- NOTES**
1. CONTRACTOR TO BE CHECK AND VERIFY ALL DIMENSIONS BEFORE EXECUTION OF WORK.
 2. FIGURDE DIMENSION SHALL BE FOOLLOWED.
 3. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE SHOWN.
 4. ALL SIZE GIVEN FOR WOOD ARE FINISHED SIZES.
 5. FOR OTHER DET AND NOTE REF SHEET NO 1/2

S.NO	DATE	DESCRIPTIONS	SIGN
REVISION			
BUILT IN WARDROBES WITH PRESSED STEEL FRAME & STEEL SHUTTER			
SECTIONS AND DETAILS			
DATE	15 JULY 2014	CHIEF ENGINEER	SHT NO
DRN	C S ASERI	JODHPUR	2
TCD		ZONE	2
CKD			
SCALE	1:20	DRG NO: CEJZ/TD/ 34	


 SR ARCH FOR CHIEF ENGINEER

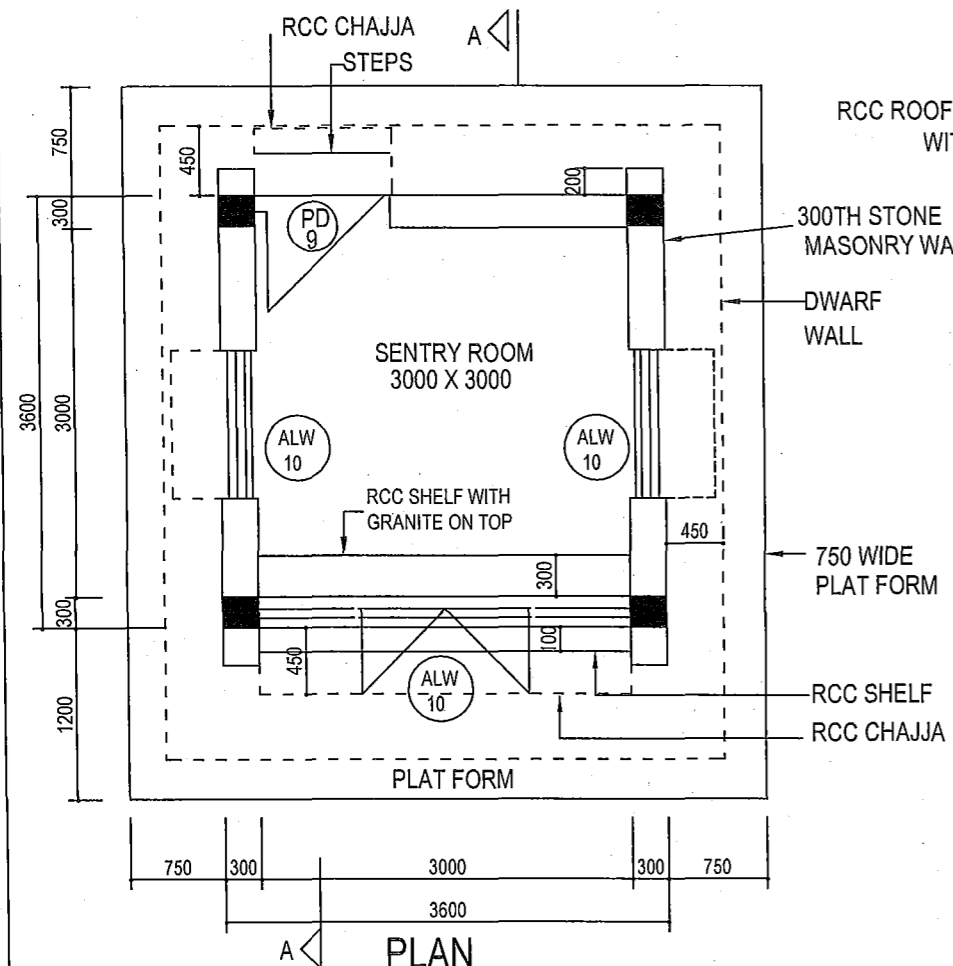


FRONT ELEVATION

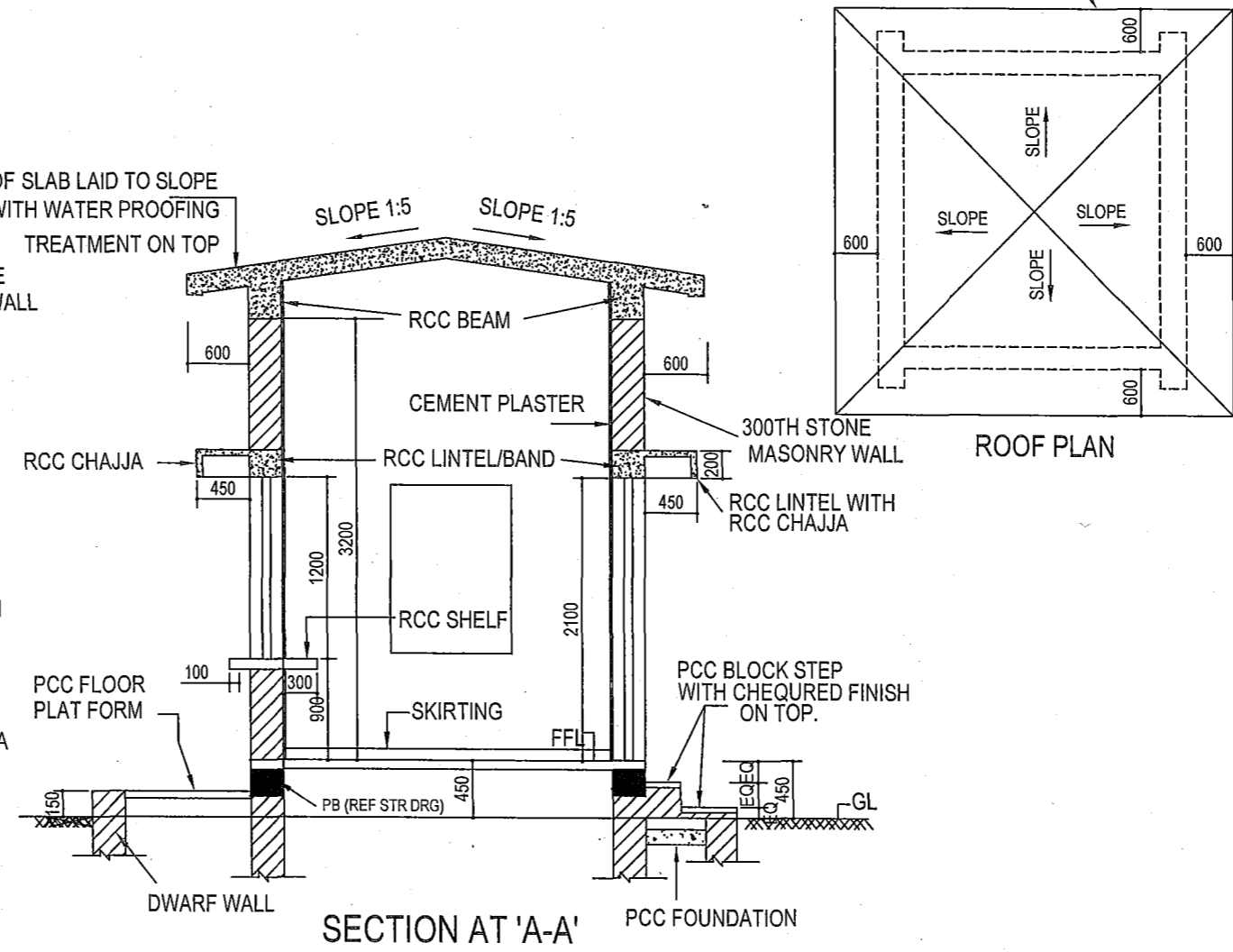
RIGHT SIDE ELEVATION

REAR ELEVATION

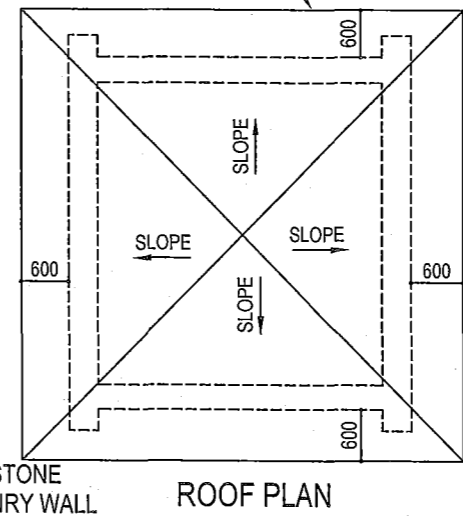
RCC ROOF PROJECTION
600 WIDE AROUND



PLAN



SECTION AT 'A-A'



ROOF PLAN

NOTES

- CONTRACTOR TO CHECK & VERIFY ALL DIMENSIONS BEFORE EXECUTION OF THE WORK.
- FIGURED DIMENSIONS SHALL BE FOLLOWED.
- ALL DIMENSIONS ARE GIVEN IN MILLIMETERS UNLESS OTHERWISE STATED.

REFERENCES TO TD DRGS

S.NO	DESCRIPTION	DRG NO	SHT NO
1.	PANEL DOORS WITH PRESSED STEEL FRAME	CEJZ/TD/01	1/4 to 4/4
2.	TYPICAL DETAILS OF ALUMINIUM WINDOWS & VENTILATORS	CEJZ/TD/12	1/2 to 2/2
3.	MISC TYPICAL DETAILS	CEJZ/TD/04	1/3 to 3/3

SENTRY POST

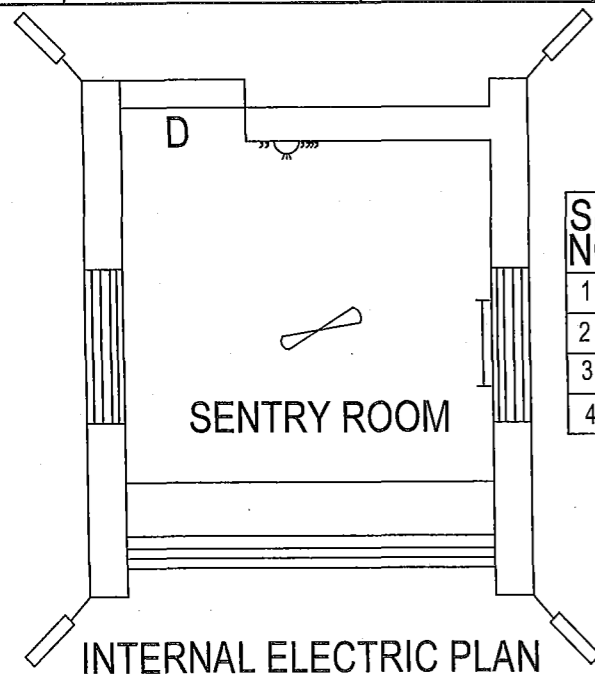
PLAN, ELEVATION, SECTION, INTERNAL ELECTRIFICATION PLAN

DATE	12 SEP 2014	CHIEF ENGINEER	SHT NO
DRN	C S ASERI		
TCD		JODHPUR ZONE	1
CKD			2
SCALE	AS SHOWN	DRG NO: CEJZ/TD/ 35	

(Signature)
(R C SWAIN)
LT COL
SR ARCHITECT
FOR CHIEF ENGINEER

SCHEDULE OF FINISHES

SERIAL NUMBER	DESCRIPTION	FLOORS		WALLS		SKIRTING	DADO	CEILING	ROOF	SURFACE FINISHES													
													CEILING	WALLS		DOORS/ WARDROBE		WINDOWS/ VENTS					
														INTERNAL	EXTERNAL	WOODEN SURFACE.	STEEL SURFACE.	WOODEN SURFACE.	STEEL SURFACE.	SOFFIT SLAB	EXTERNAL FACE OF SLAB/CHAJJAS	MS GRILL ETC	
1	2	3	4	11	12	13	14	19	20	21	22	23	24	25	26	27	28	29	30	29	30	31	
1	SENTRY ROOM		X	X	X		X		X		X	T-1	T-2	T-5	T-3	T-4	T-3	T-4	T-1	T-5	-		
2	PLATFORM		X	X	X		X					-	T-2	T-5	T-3	T-4	T-3	T-4	T-1	T-5	-		

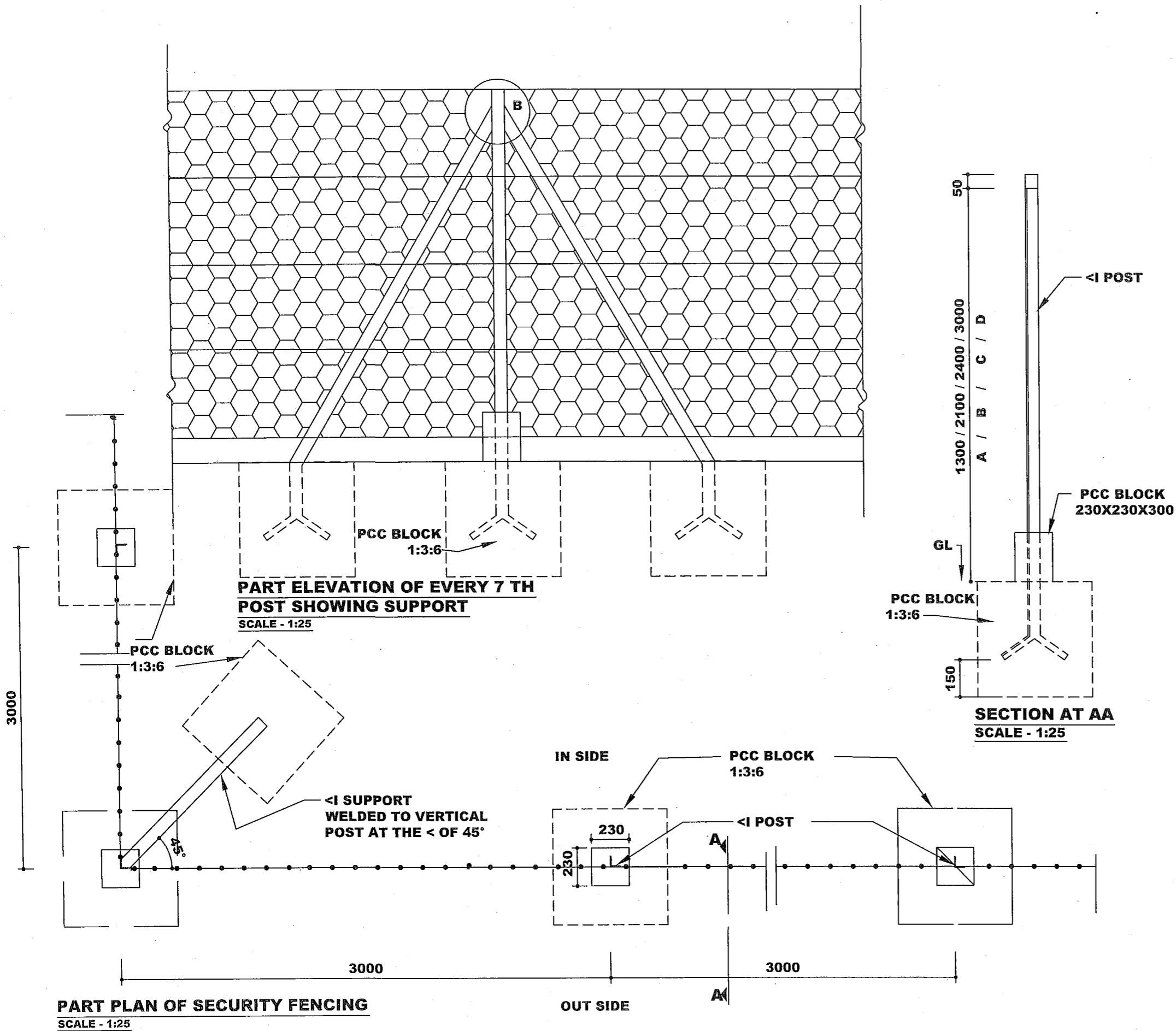


LEGEND		
SL NO	DESCRIPTIONS	SYMBOL
1	TUBE LIGHT FITTING T-5 1 X 28W	
2	CEILING FAN WITH REGULATOR	∞
3	3 PIN 5 AMP SOCKET	⊕
4		

SURFACE FINISHES

SR. NO	SYMBOL	DESCRIPTION
1	X	INDICATES MATERIAL TO BE USED.
2	T-1	THREE COATS OF WHITE WASH WITH LIME.
3	T-2	TWO COATS OF OIL BOUND DISTEMPER.
4	T-3	TWO COATS OF SYNTHETIC ENAMEL PAINT OF APPROVED SHADE OVER ONE COAT OF WOOD PRIMER ON WDN SURFACE.
5	T-4	TWO COATS OF SYNTHETIC ENAMEL PAINT OF APPROVED SHADE OVER ONE COAT OF RED OXIDE ON STEEL SURFACE.
6	T-5	TWO COATS OF CEMENT BASED PAINT OVER EXTERNAL SURFACE WITH ONE COAT OF PRIMER AS PER CAMOFLAGING PATTERN.

SENTRY POST			
SCHEDULE OF FINISHES & E/M PLAN			
DATE	12 SEP 2014	CHIEF ENGINEER JODHPUR ZONE	SHT NO
DRN	C S ASERI		2
TCD			2
CKD			
SCALE	AS SHOWN	DRG NO: CEJZ/TD/35	
 JT DIR / AAD (E/M)		 JT DIR / AAD (B/R) FOR CHIEF ENGINEER	



NOTE:-

1. CONTRACTOR TO CHECK & VERIFY ALL DIMENSIONS BEFORE TAKING EXECUTION IN HAND
2. FIGURED DIMENSIONS SHALL BE FOLLOWED
3. ALL DIMENSIONS ARE GIVEN IN MILLIMETERS UNLESS OTHERWISE SPECIFIED
4. ALL <I> POST / SUPPORT SHALL BE PAINTED WITH ONE COAT OF RED OXIDE & TWO COATS OF SYNTHETIC ENAMEL PAINT ABOVE GL & TWO COATS OF BITUMEN BELOW GL
5. 10 Ø MS BARS PASSING THROUGH CHAIN LINK FENCING SHOULD BE CURTAILED AT <I> POST WITH HOOK OF SUFFICIENT LENGTH
6. ALL STRUCTURAL MEMBERS SHALL CONFORM TO I.S. 2062
7. MS BAR SHALL BE GRADE -1 QUALITY AS PER I.S. 432 PART-1
8. IF ANY I.S. CODE GOT REVISED THE LATEST I.S. CODES ARE TO BE FOLLOWED
9. SIZE AND SECTION OF <I> POST & <I> SUPPORT POST SHALL BE PROVIDED AS PER TABLE BELOW
10. NO OF 10 DIA MS BARS PASSING THROUGH CHAIN LINK FENCING FOR VERIOUSE HEIGHTS SHALL BE AS UNDER IRRESPECTIVE OF WHATEVER SHOWN IN ELEVATIONS :-
 - (I) FOR TYPE 'A' (1.3 m) - 04 BARS
 - (II) FOR TYPE 'B' (2.1 m) - 06 BARS
 - (III) FOR TYPE 'C' (2.4 m) - 07 BARS
 - (IV) FOR TYPE 'D' (3.0 m) - 08 BARS

TABLE FOR SIZE OF <I> SECTION (POST & SUPPORT POST) AND SIZE OF PCC BLOCK

HT OF <I> POST	<I> SECTION	SIZE OF PCC BLOCK
1300 (TYPE 'A')	65X65X6	600X600X750
2100 (TYPE 'B')	65X65X8	700X700X750
2400 (TYPE 'C')	75X75X10	750X750X750
3000 (TYPE 'D')	75X75X10	900X900X850

SNO	DATE	DESCRIPTION	INITIAL

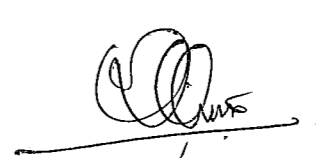
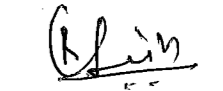
REVISIONS

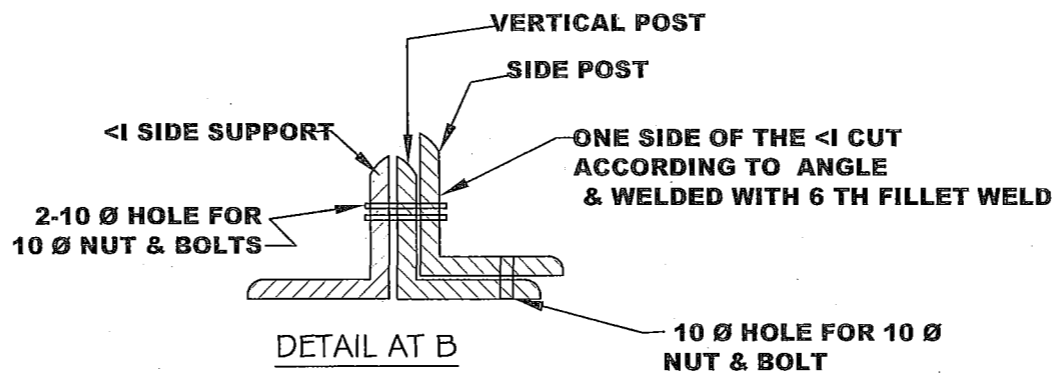
DETAIL OF CHAIN LINK FENCING WITH <I> POST SUPPORT

HT - 1300 / 2100 / 2400 / 3000 MM

DATE	17-09-2014	CHIEF ENGINEER JODHPUR ZONE	SHEET NO
DRN	C S ASERI		1/2
TCD			
CKD			
SCALE	AS SHOWN		

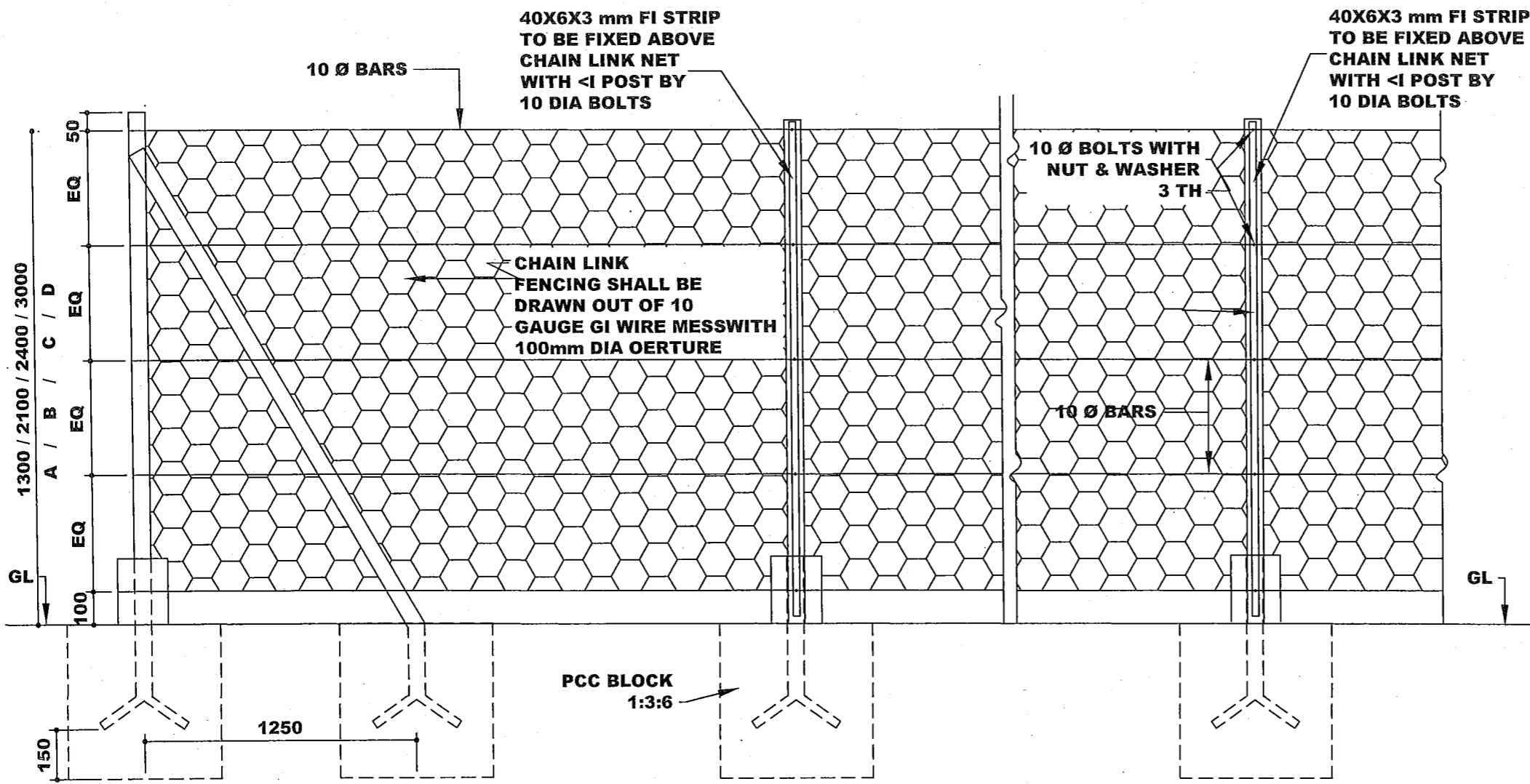
DRG.NO: CEJZ/TD/36

 SOI (DESIGN)	 (RC SWAIN) LT COL SR ARCH FOR CHIEF ENGINEER
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NOTE

1. ALL OTHER NOTES REF SHT NO 1/2 OF THIS DRG

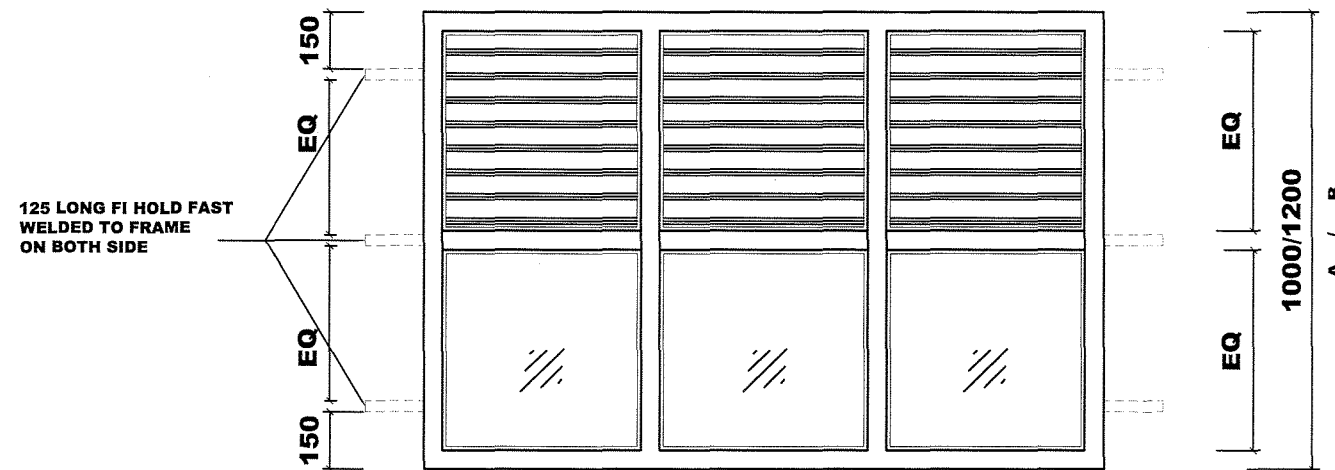


PART ELEVATION FROM IN SIDE
SCALE - 1:25

SNO	DATE	DESCRIPTION	INITIAL
REVISIONS			
DETAIL OF CHAIN LINK FENCING WITH <I POST SUPPORT			
HT - 1300 / 2100 / 2400 / 3000 MM			
DATE	9-12-2013	CHIEF ENGINEER JODHPUR ZONE	SHEET NO 2/2
DRN			
TCD			
CKD			
SCALE	AS SHOWN		
		DRG.NO: CEJZ/TD/36	

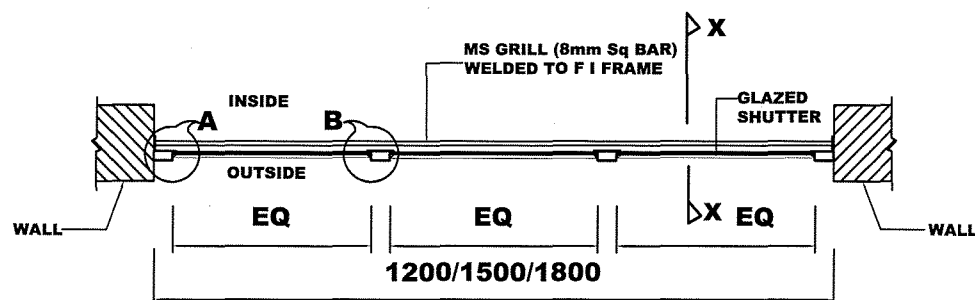
[Signature]
SO I (DESIGN)

[Signature]
**(RC SWAIN)
LT COL
SR ARCH
FOR CHIEF ENGINEER**



ELEVATION

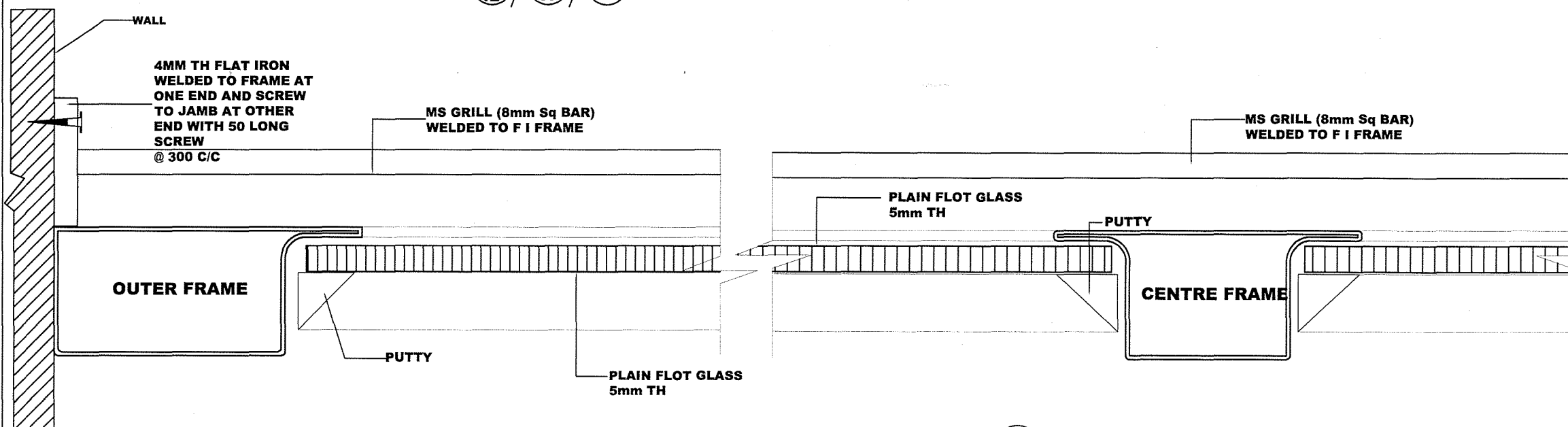
(OUT SIDE)
SCALE 1:50



PLAN (HALF FIXED GLAZING & HALF LOUVERED)

SCALE 1:50

SLV 12 / SLV 15 / SLV 18



DETAIL AT A

SCALE 1:10

DETAIL AT B

(AT MID LEVEL)

SCALE 1:10

NOTES

- CONTRACTOR TO CHECK & VERIFY ALL THE DIMENSIONS BEFORE EXECUTION OF THE WORK.
- FIGURED DIMENSIONS SHALL BE FOLLOWED.
- ALL DIMENSIONS GIVEN IN THIS DRG. AR IN MILLIMETERS UNLESS OTHER WISE SHOWN.
- SIZE OF VENTS MENTIONED HERE ARE CLEAR SIZE OF MASONRY OPENING. A TOLERANCE OF 10 mm ON EITHER SIDE SHALL BE ALLOWED WHEN THE VENTS ARE FITTED IN TO BUILT IN OPENING.
- 5mm TH PLAIN FLOT GLASS PANES SHALL BE PROVIDED TO ALL VENTILATOR UNLESS OTHERWISE SPECIFIED.
- THE HOLDFAST/LUGS OF VENTILATORS SHALL BE EMBEDDED IN PCC 1:3:6 OF SIZE 150X 150X TH OF WALL.
- ALL FRAMES USED ARE BOX STEEL SECTIONS.
- 'SLV' STANDS FOR "STEEL LOUVERED VENTILATOR"
- IN CASE OF R.C.C COL/R.C.C WALL THE VENTILATOR FRAME SHALL BE FIXED WITH DASH THRU BOLTS OF STANDARD QUALITY AND SIZE AT 300MM C/C.
- PIN HOLE @ 300 C/C TO BE PROVIDED FOR SUPPORTING GLASS WITH G.I CLIPS / WIRE IN CASE OF GLAZED SHUTTERS.
- MS GRILL (8mm Sq BAR) WELDED TO F I FRAME @ 100 C/C.
- ALL EXPOSED STEEL SURFACES SHALL BE TREATED WITH TWO COAT OF ENAMEL PAINTS OF APPROVED COLOUR OVER ONE COAT OF METEL PRIMER.
- ALL WELDING AND FINISHING WORKS OF STEEL MEMBERS SHALL BE AS PER STANDARD WORKMESHIP PRACTICE / MANUFACTURER'S INSTRUCTION.
- ALL FRAMES OF BOX TYPE MILD STEEL VENTS SHALL BE MADE WITH ERW SECTION HAVING WALL THICKNESS 1.25mm (i.e 18 GAUGE).
- FOR WIDTH & HEIGHT OF A PARTICULAR VENT, THE NOTATION SHALL BE NOMENCLATURE OF VENT FOLLOWED WITH NOMENCLATURE OF HEIGHT . FOR EXAMPLE FOR A VENT OF SIZE 1500x1200 THE NOTATION SHALL BE **SLV 15B**.

S NO	DATE	DESCRIPTION	INITIALS
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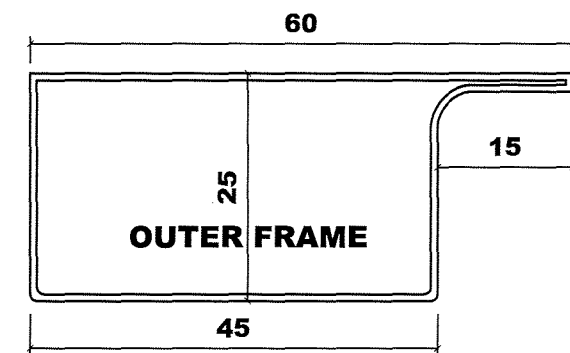
REVISIONS

TYPICAL DETAIL OF HALF LOUVERED AND HALF FIXED GLAZED VENTILATORS (STEEL)

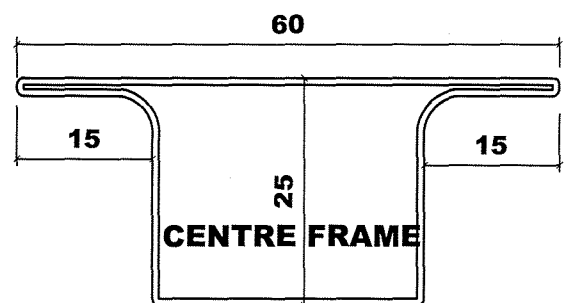
DATE 07.01.2015	CHIEF ENGINEER	SHT NO
DRN C S ASERI	JODHPUR ZONE	1/2
CKD		
SCALE AS SHOWN	DRG NO : CEJZ/TD/37	

Blin

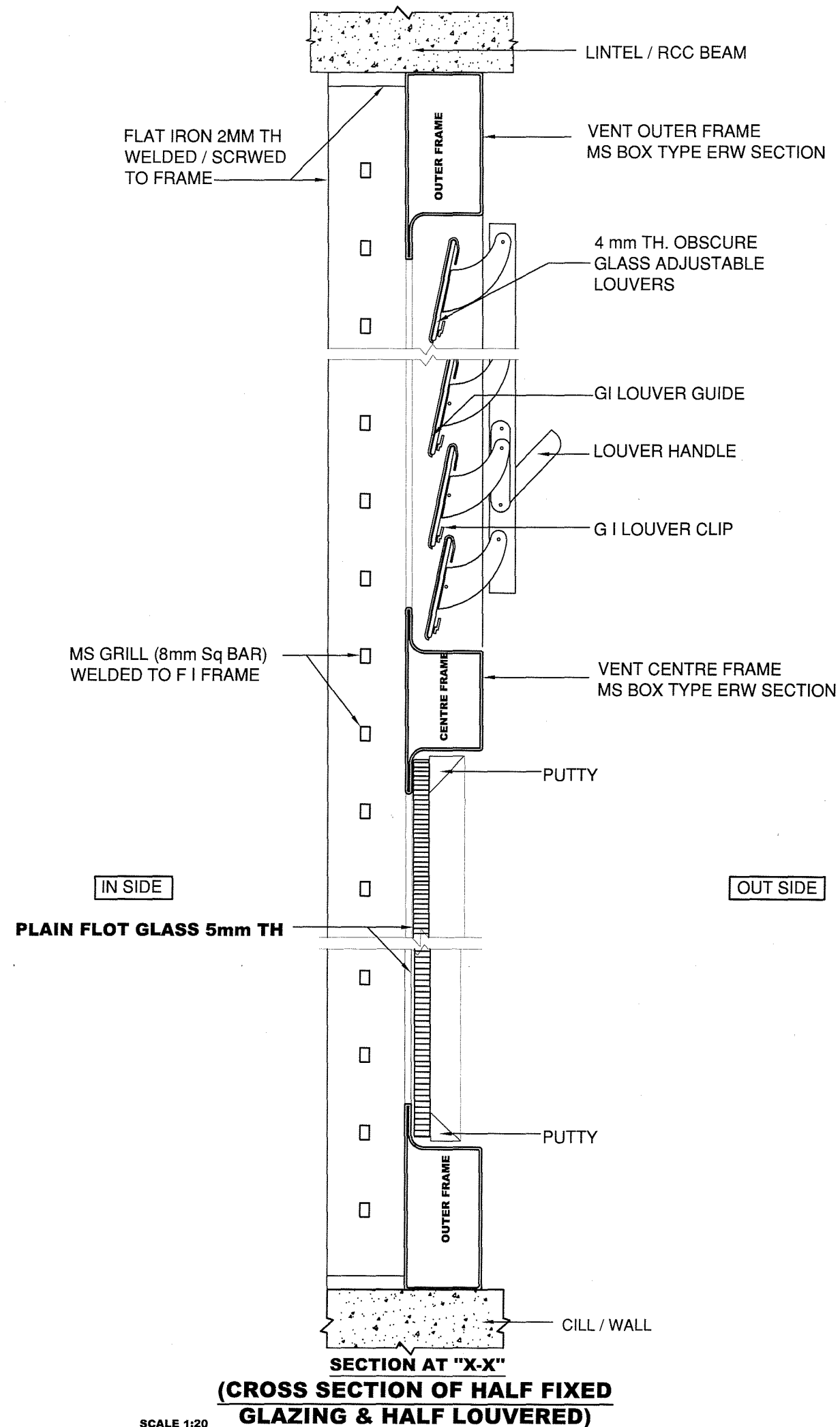
(R C SWAIN)
LT COL
SR ARCHITECT
FOR CE JODHPUR ZONE



**DETAIL OF OUTER SHUTTER FRAME
MADE OF ERW TUBE 'P' SECTION**
SCALE 1:10



**DETAIL OF CENTRE SHUTTER FRAME
MADE OF ERW TUBE SECTION**
SCALE 1:10



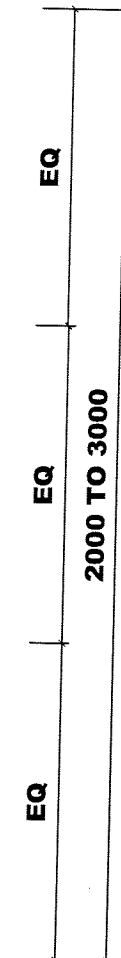
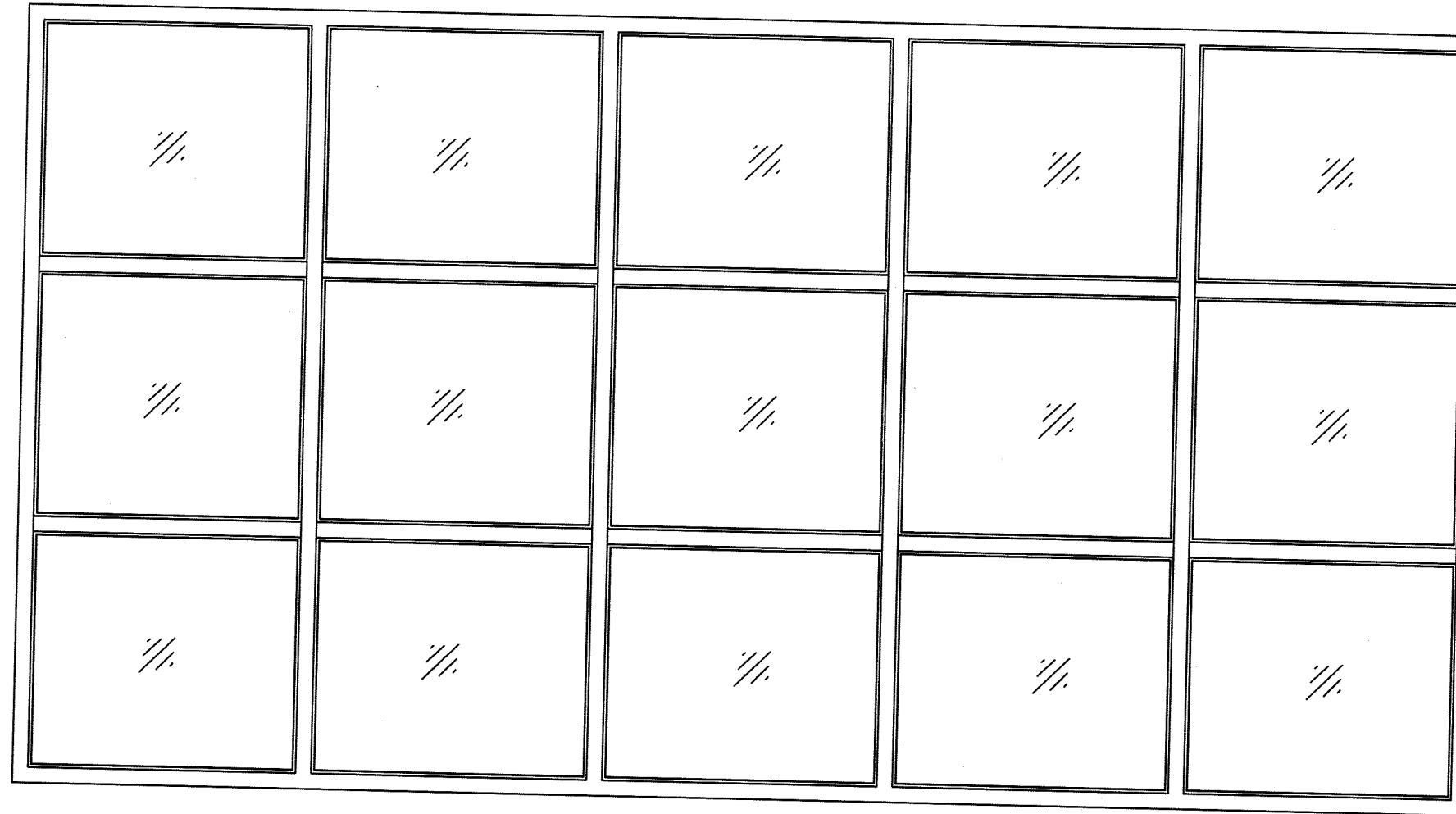
**SECTION AT "X-X"
(CROSS SECTION OF HALF FIXED
GLAZING & HALF LOUVERED)**
SCALE 1:20

NOTES
1. ALL OTHER NOTES & REFERENCES REF SHT NO 1/2 OF THIS DRG.

S NO	DATE	DESCRIPTION	INITIALS
REVISIONS			
TYPICAL DETAIL OF HALF LOUVERED AND HALF FIXED GLAZED VENTILATORS (STEEL)			
DATE	07.01.2015	CHIEF ENGINEER	SHEET NO
DRN	C S ASERI	JODHPUR ZONE	2/2
CKD			
SCALE AS SHOWN		DRG NO : CEJZ/TD/37	

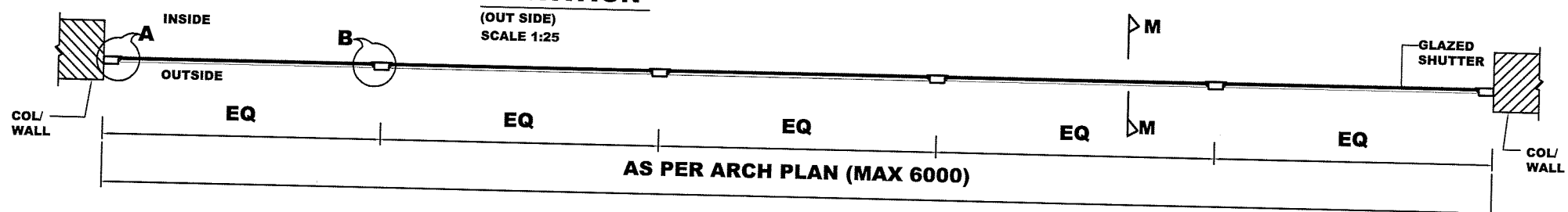
(Signature)

(R C SWAIN)
LT COL
SR ARCHITECT
FOR CE JODHPUR ZONE

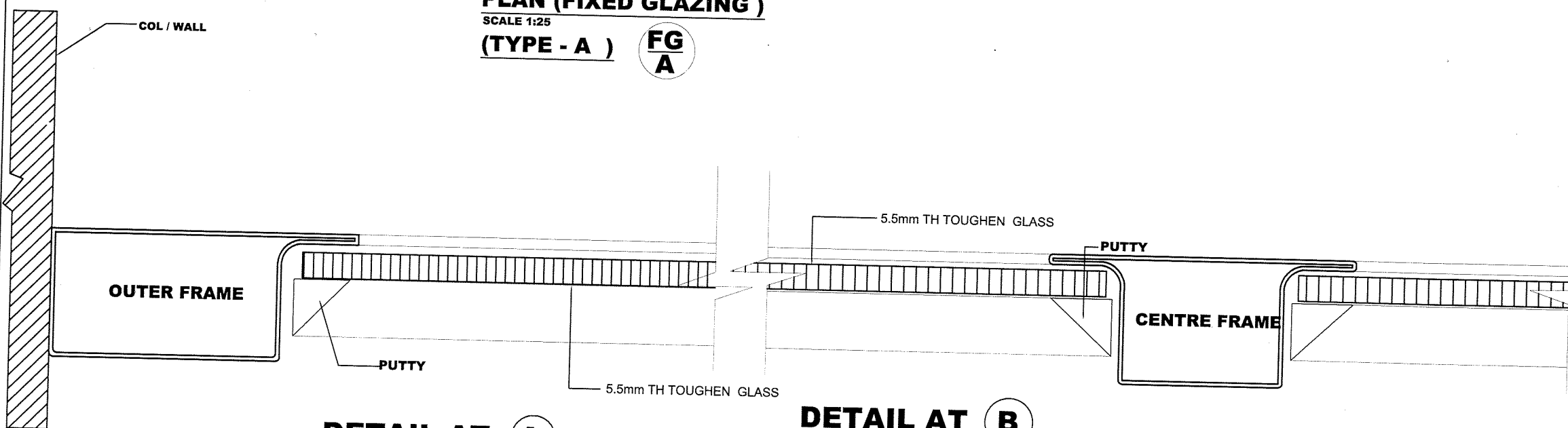


- NOTES**
1. CONTRACTOR TO CHECK & VERIFY ALL THE DIMENSIONS BEFORE EXECUTION OF THE WORK.
 2. FIGURED DIMENSIONS SHALL BE FOLLOWED.
 3. ALL DIMENSIONS GIVEN IN THIS DRG. AR IN MILLIMETERS UNLESS OTHER WISE SHOWN.
 4. SIZE OF NORTH LIGHT GLAZING MENTIONED HERE ARE CLEAR SIZE OF MASONRY OPENING. A TOLERANCE OF 10 mm ON EITHER SIDE SHALL BE ALLOWED WHEN THE NORTH LIGHT GLAZING ARE FITTED IN TO BUILT IN OPENING.
 5. 5.5mm TH TOUGHEN GLASS PANES SHALL BE PROVIDED TO ALL FIXED GLAZING UNLESS OTHERWISE SPECIFIED.
 6. THE HOLDFAST/LUGS OF FIXED GLAZING SHALL BE EMBEDDED IN PCC 1:3:6 OF SIZE 150X 150X TH OF WALL.
 7. ALL FRAMES USED ARE BOX STEEL SECTIONS.
 8. IN CASE OF R.C.C COL/R.C.C WALL THE NORTH LIGHT GLAZING FRAME SHALL BE FIXED WITH DASH THRU BOLTS OF STANDARD QUALITY AND SIZE AT 300MM C/C.
 9. PIN HOLE @ 300 C/C TO BE PROVISIONED FOR SUPPORTING GLASS WITH G.I CLIPS / WIRE IN CASE OF GLAZED SHUTTERS.
 10. ALL EXPOSED STEEL SURFACES SHALL BE TREATED WITH TWO COAT OF ENAMEL PAINTS OF APPROVED COLOUR OVER ONE COAT OF METEL PRIMER.
 11. ALL WELDING AND FINISHING WORKS OF STEEL MEMBERS SHALL BE AS PER STANDARD WORKMENSHIP PRACTICE / MANUFACTURER'S INSTRUCTION.
 12. ALL FRAMES OF BOX TYPE MILD STEEL SHALL BE MADE WITH ERW SECTION HAVING WALL THICKNESS 1.25mm (i.e 18 GAUGE).
 13. FG STANDS FOR FIXED GLAZING.

ELEVATION
(OUT SIDE)
SCALE 1:25



PLAN (FIXED GLAZING)
SCALE 1:25
(TYPE - A) **FG**
A

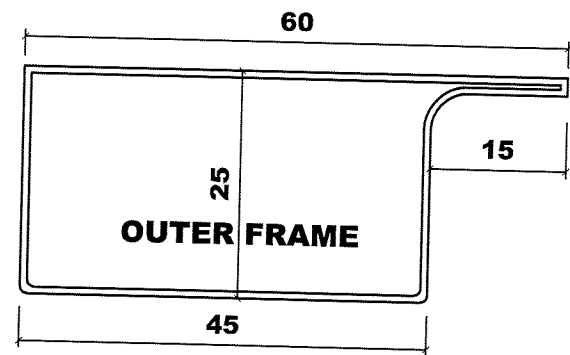


DETAIL AT A
SCALE 1:10

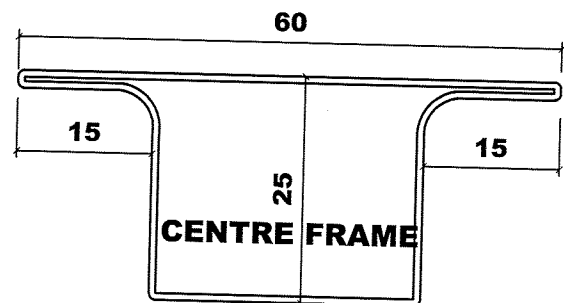
DETAIL AT B
(AT MID LEVEL)
SCALE 1:10

S NO	DATE	DESCRIPTION	INITIALS
REVISIONS			
TYPICAL DETAIL OF FIXED GLAZING (STEEL) (TYPE - A & B)			
DATE	07.01.2015	CHIEF ENGINEER	SHT NO
DRN	C S ASERI	JODHPUR ZONE	1/4
CKD			
SCALE	AS SHOWN	DRG NO : CEJZ/TD/38	

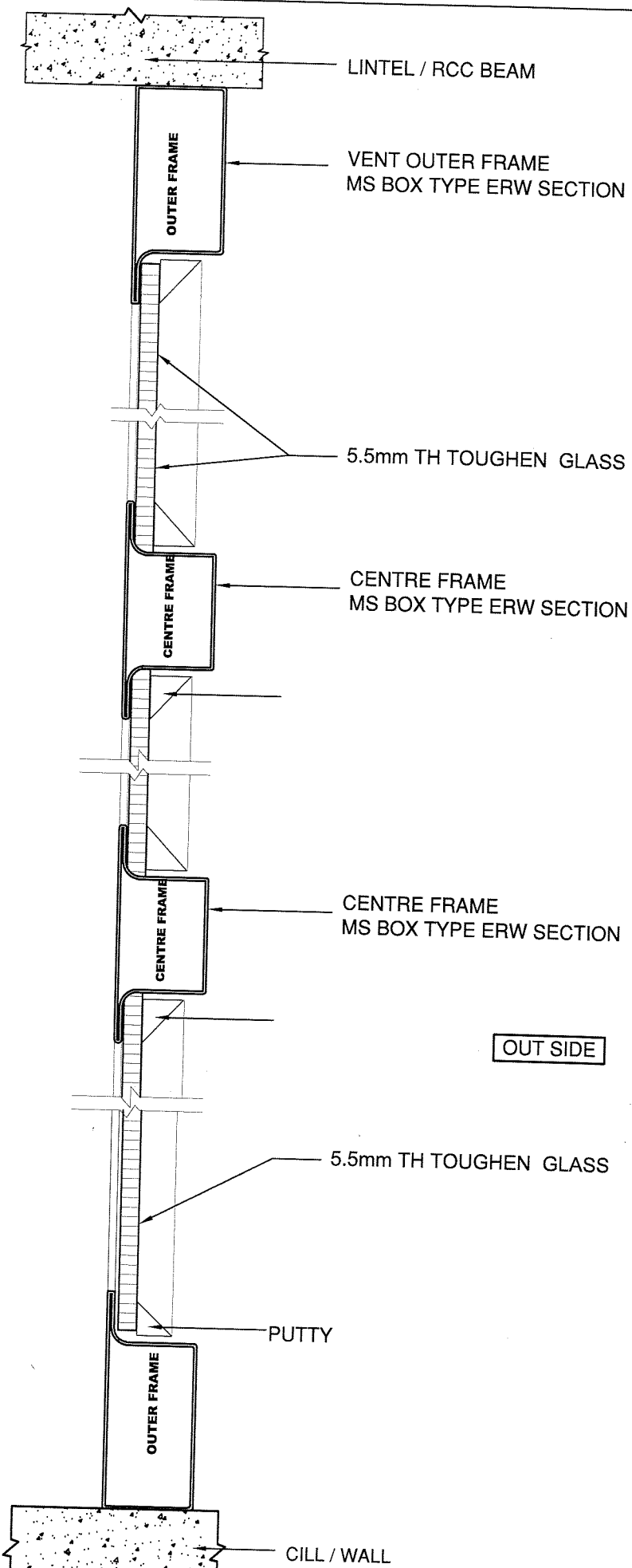
(Signature)
 (R C SWAIN)
 LT COL
 SR ARCHITECT
 FOR CE JODHPUR ZONE



**DETAIL OF OUTER SHUTTER FRAME
MADE OF ERW TUBE 'P' SECTION**
SCALE 1:10



**DETAIL OF CENTRE SHUTTER FRAME
MADE OF ERW TUBE SECTION**
SCALE 1:10

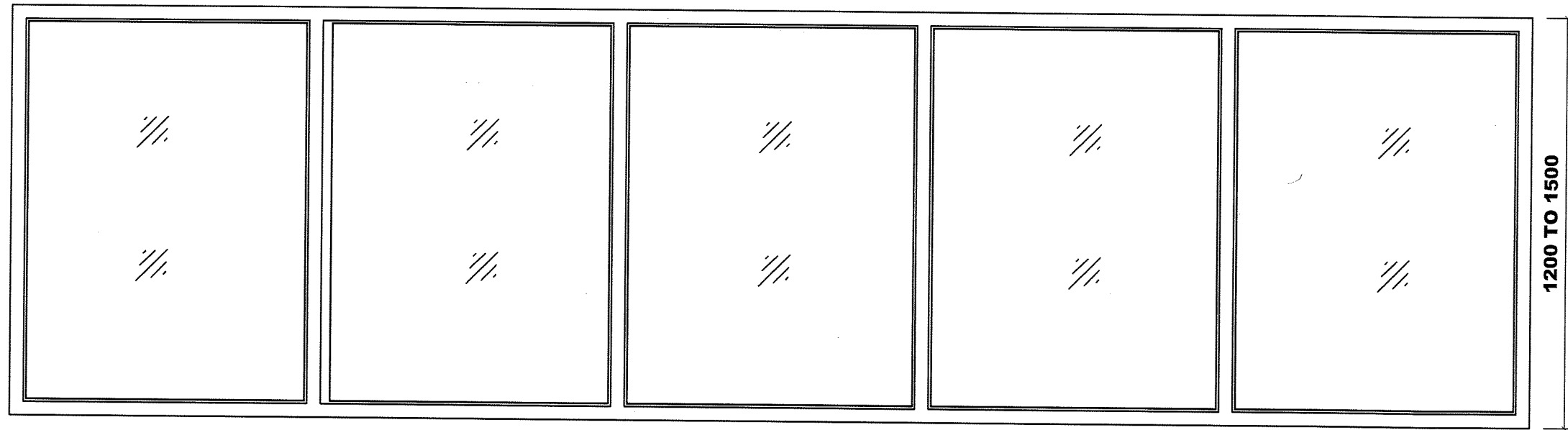


**SECTION AT "M-M"
(CROSS SECTION OF (FIXED GLAZING)
(TYPE-A))**
SCALE 1:20

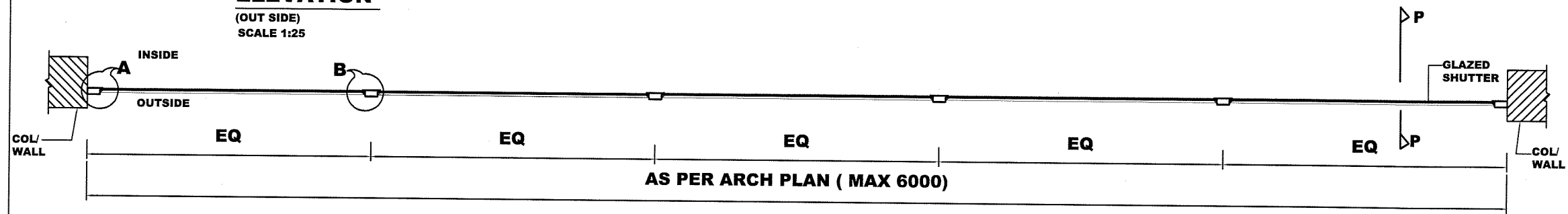
NOTES
1. FOR ALL NOTES & REF SHT NO 1/4 OF THIS DRG.

S NO	DATE	DESCRIPTION	INITIALS
REVISIONS			
TYPICAL DETAIL OF FIXED GLAZING (STEEL) (TYPE - A & B)			
DATE	DRN	CKD	SHEET NO
07.01.2015	C S ASERI		2/4
SCALE AS SHOWN		DRG NO : CEJZ/TD/38	

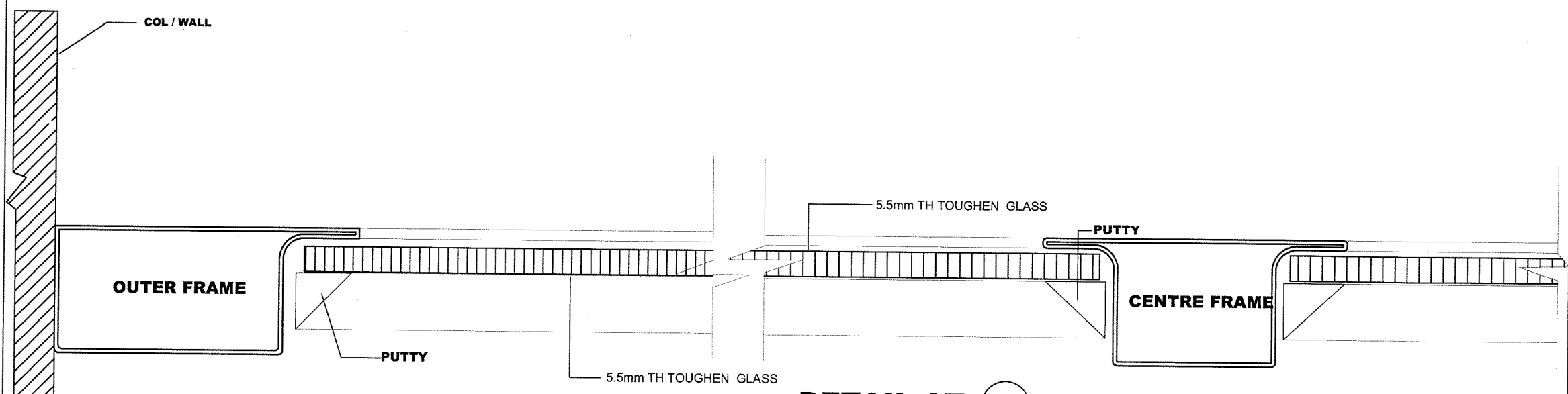
(Signature)
(R C SWAIN)
LT COL
SR ARCHITECT
FOR CE JODHPUR ZONE



ELEVATION
(OUT SIDE)
SCALE 1:25



PLAN (FIXED GLAZING)
SCALE 1:25
TYPE - B **FG**
B



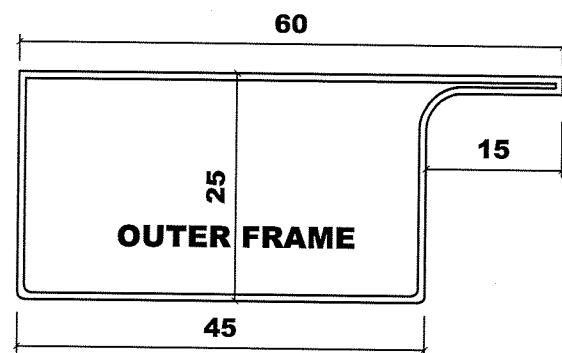
DETAIL AT A
SCALE 1:10

DETAIL AT B
(AT MID LEVEL)
SCALE 1:10

NOTES
1. FOR ALL NOTES & REF SHT NO 1/4 OF THIS DRG.

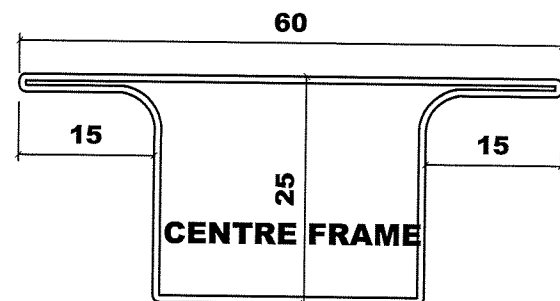
S NO	DATE	DESCRIPTION	INITIALS
REVISIONS			
TYPICAL DETAIL OF FIXED GLAZING (STEEL) (TYPE - A & B)			
DATE	07.01.2015	CHIEF ENGINEER	SHT NO
DRN	C S ASERI	JODHPUR ZONE	3/4
CKD			
SCALE	AS SHOWN	DRG NO : CEJZ/TD/38	

(Signature)
(R C SWAIN)
LT COL
SR ARCHITECT
FOR CE JODHPUR ZONE



**DETAIL OF OUTER SHUTTER FRAME
MADE OF ERW TUBE 'P' SECTION**

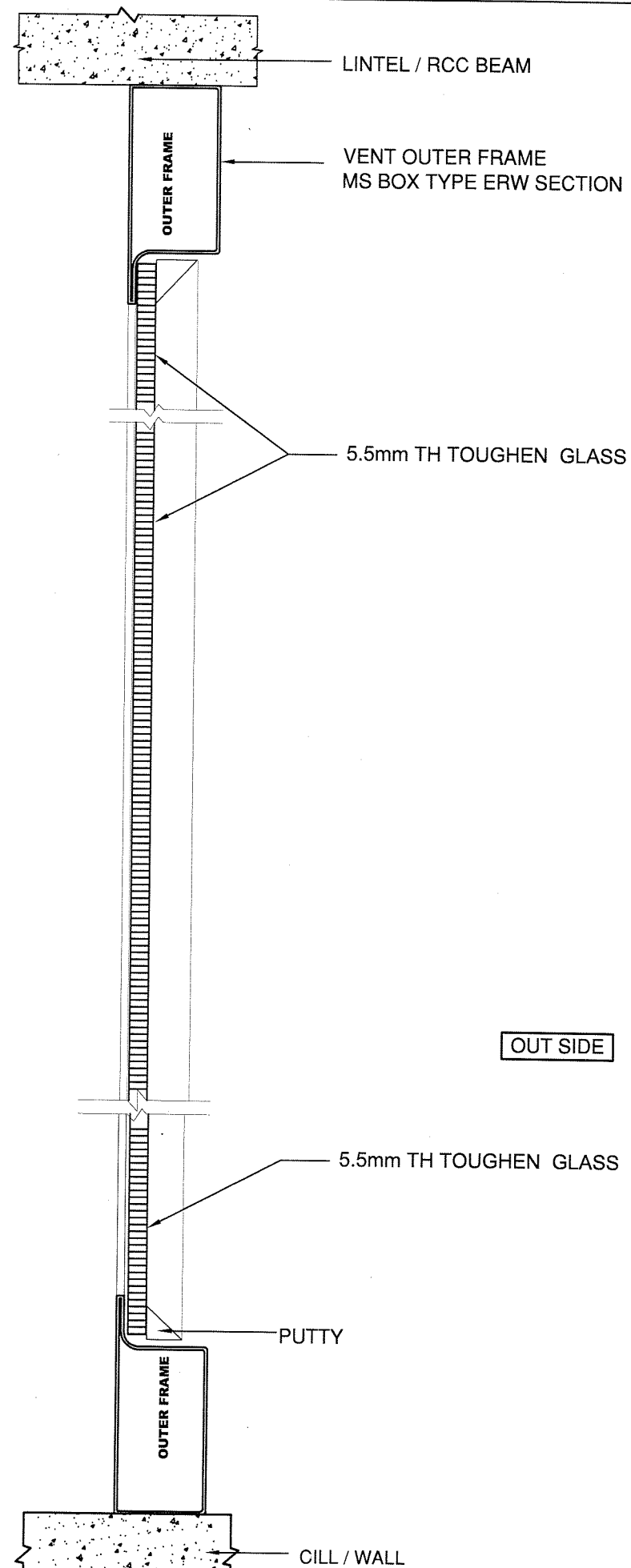
SCALE 1:10



**DETAIL OF CENTRE SHUTTER FRAME
MADE OF ERW TUBE SECTION**

SCALE 1:10

SCALE 1:20



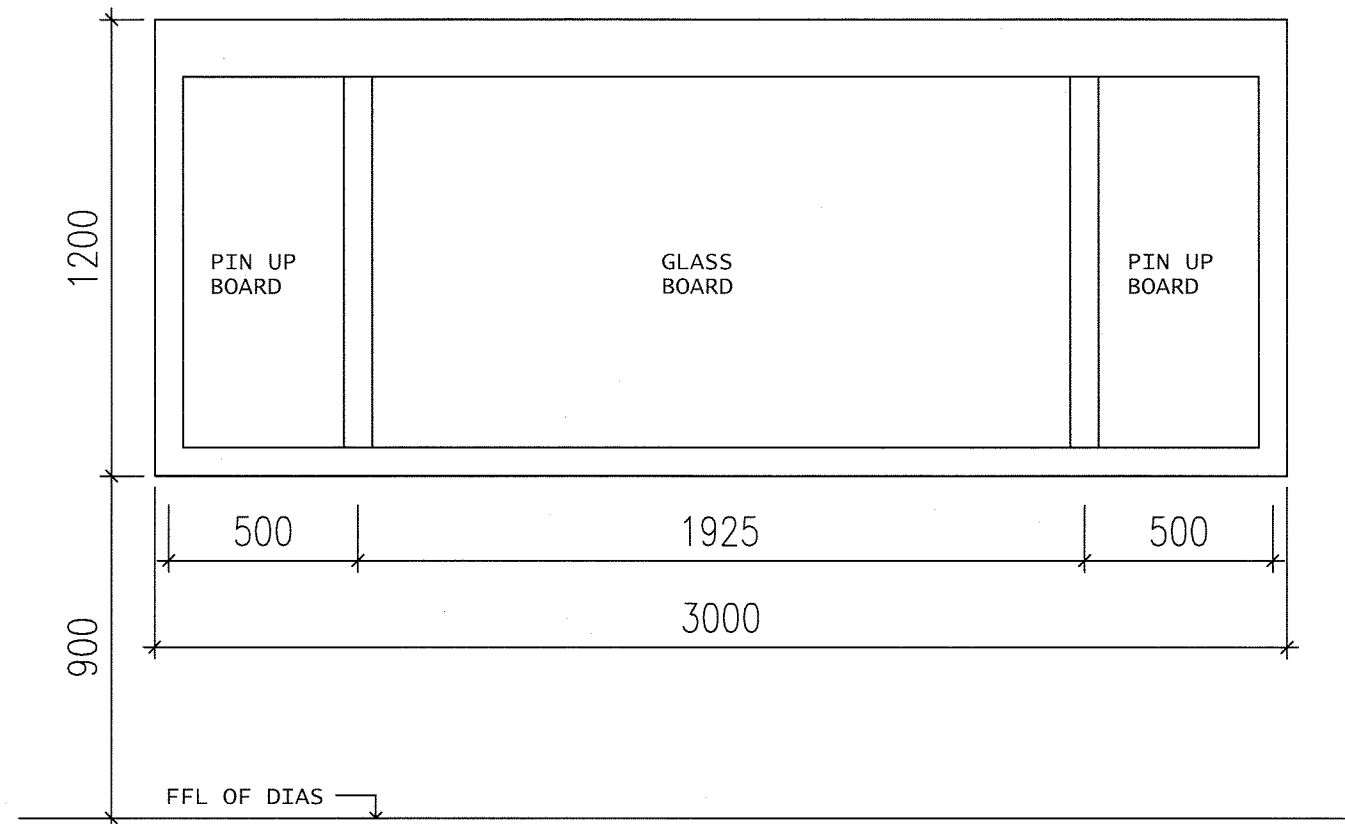
**SECTION AT "P-P"
(CROSS SECTION OF NORTH LIGHT
FIXED GLAZING)**

NOTES

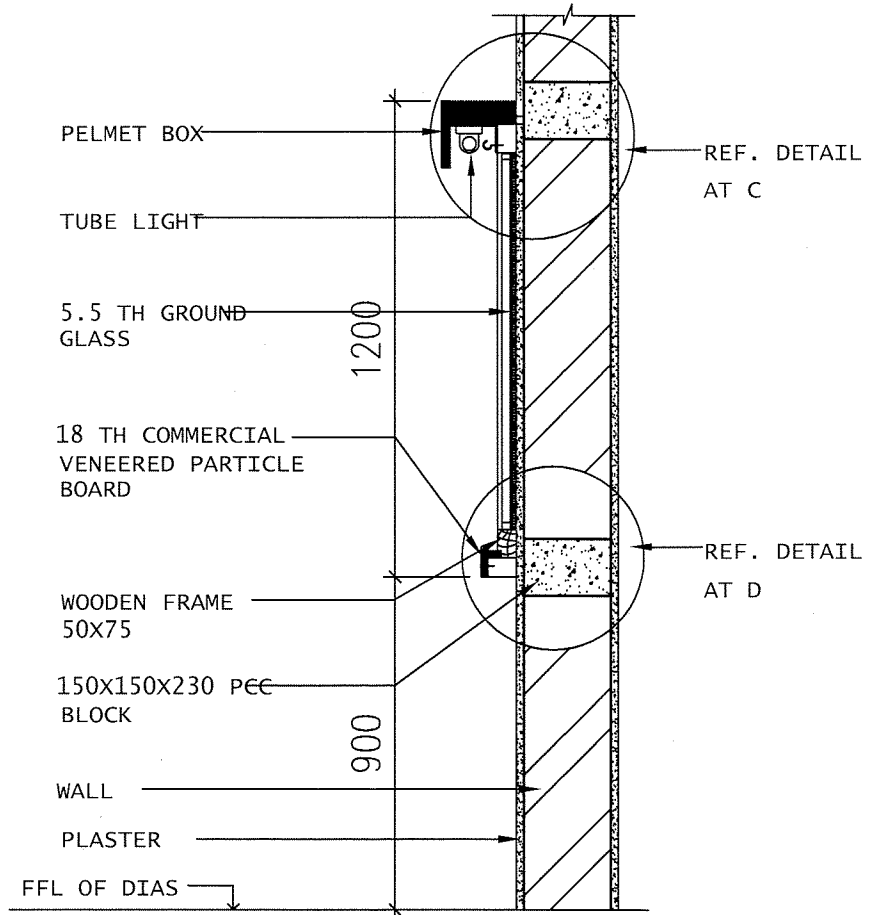
1. FOR ALL NOTES & REF SHT NO 1/4 OF THIS DRG.

S NO	DATE	DESCRIPTION	INITIALS
REVISIONS			
TYPICAL DETAIL OF FIXED GLAZING (STEEL) (TYPE - A & B)			
DATE	07.01.2015	CHIEF ENGINEER	SHEET NO
DRN	C S ASERI	JODHPUR ZONE	4/4
CKD			
SCALE	AS SHOWN	DRG NO : CEJZ/TD/38	

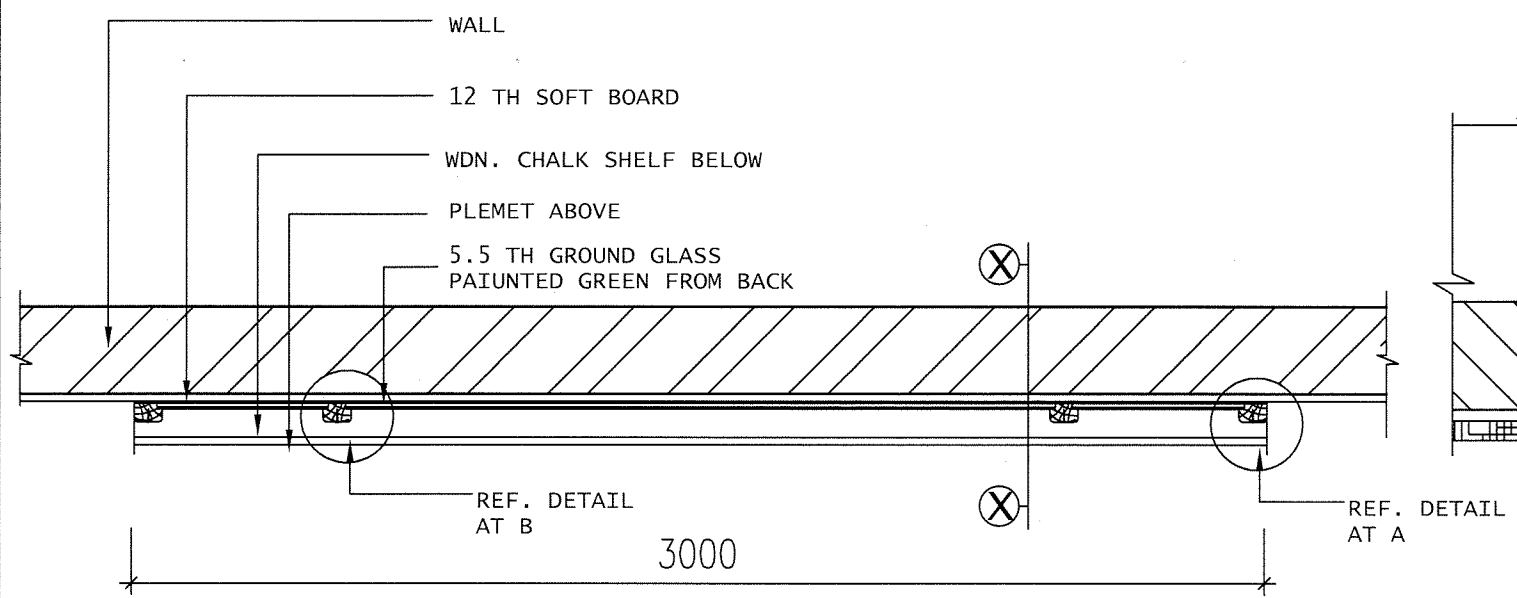
R C Swain
(R C SWAIN)
LT COL
SR ARCHITECT
FOR CE JODHPUR ZONE



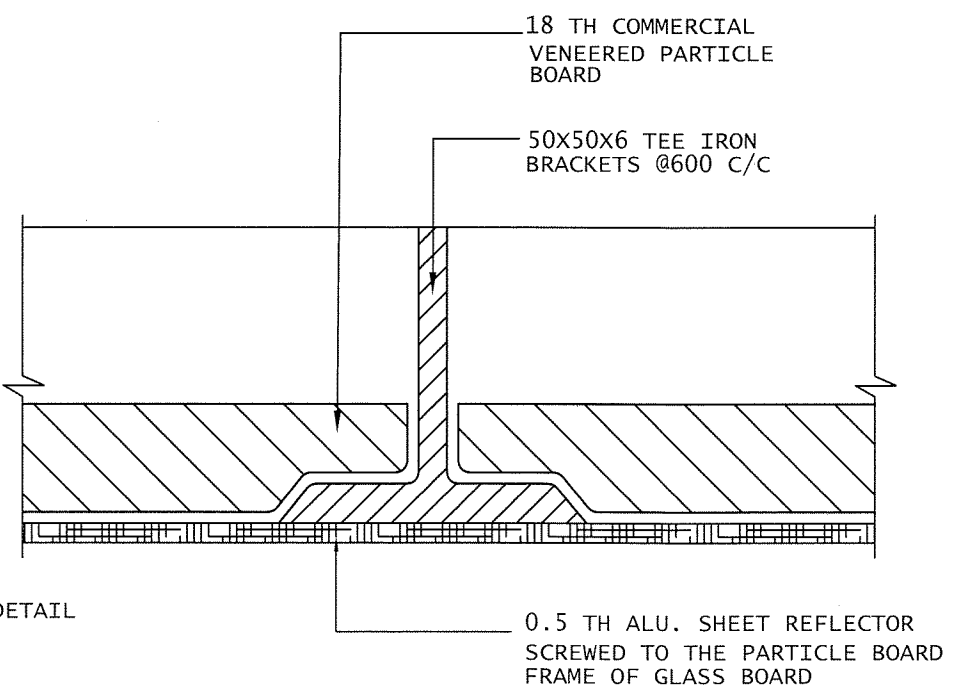
ELEVATION
SCALE :- 1:20



SECTION AT X-X
SCALE :- 1:20



PLAN
SCALE :- 1:20



SECTION AT M-M

NOTES

1. CONTRACTOR TO CHECK AND VERIFY ALL DIMENSIONS BEFORE EXECUTION OF THE WORK
2. ALL DIMENSIONS ARE GIVEN IN MILLIMETRE UNLESS OTHERWISE SPECIFIED
3. FIGURED DIMENSIONS ARE FOLLOWED
4. EXECUTION AUTHORITY SHALL CHECK ALL DRAWINGS BEFORE EXECUTING THE WORK

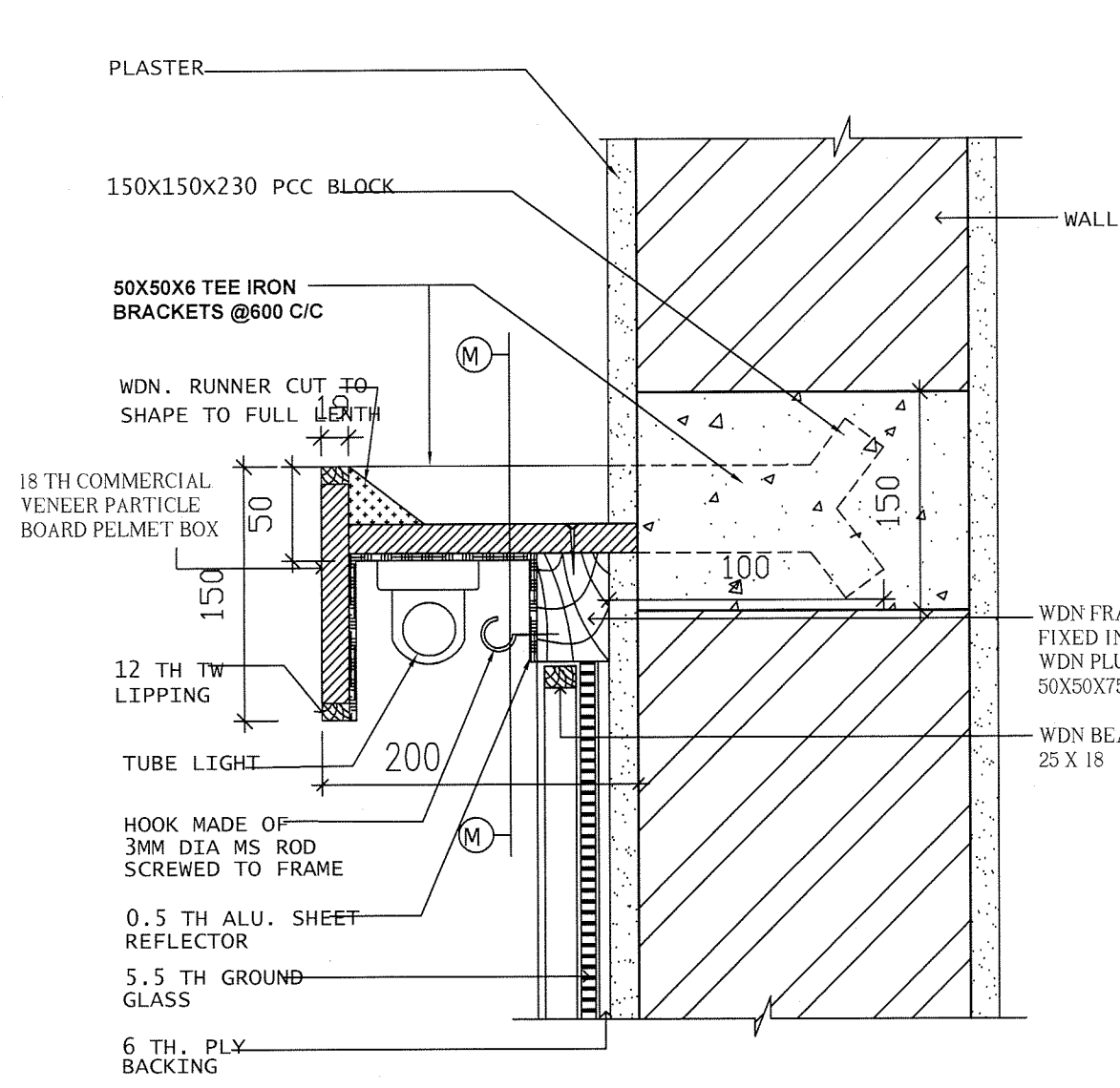
S NO	DATE	DESCRIPTION	INITIALS
REVISIONS			
DETAILS OF GLASS BOARD WITH PIN UP BOARD			
DATE	07.01.2015	CHIEF ENGINEER	SHT NO 1/2
DRN	C S ASERI		
CKD		JODHPUR ZONE	
SCALE	AS SHOWN	DRG NO : CEJZ/TD/39	

(Signature)

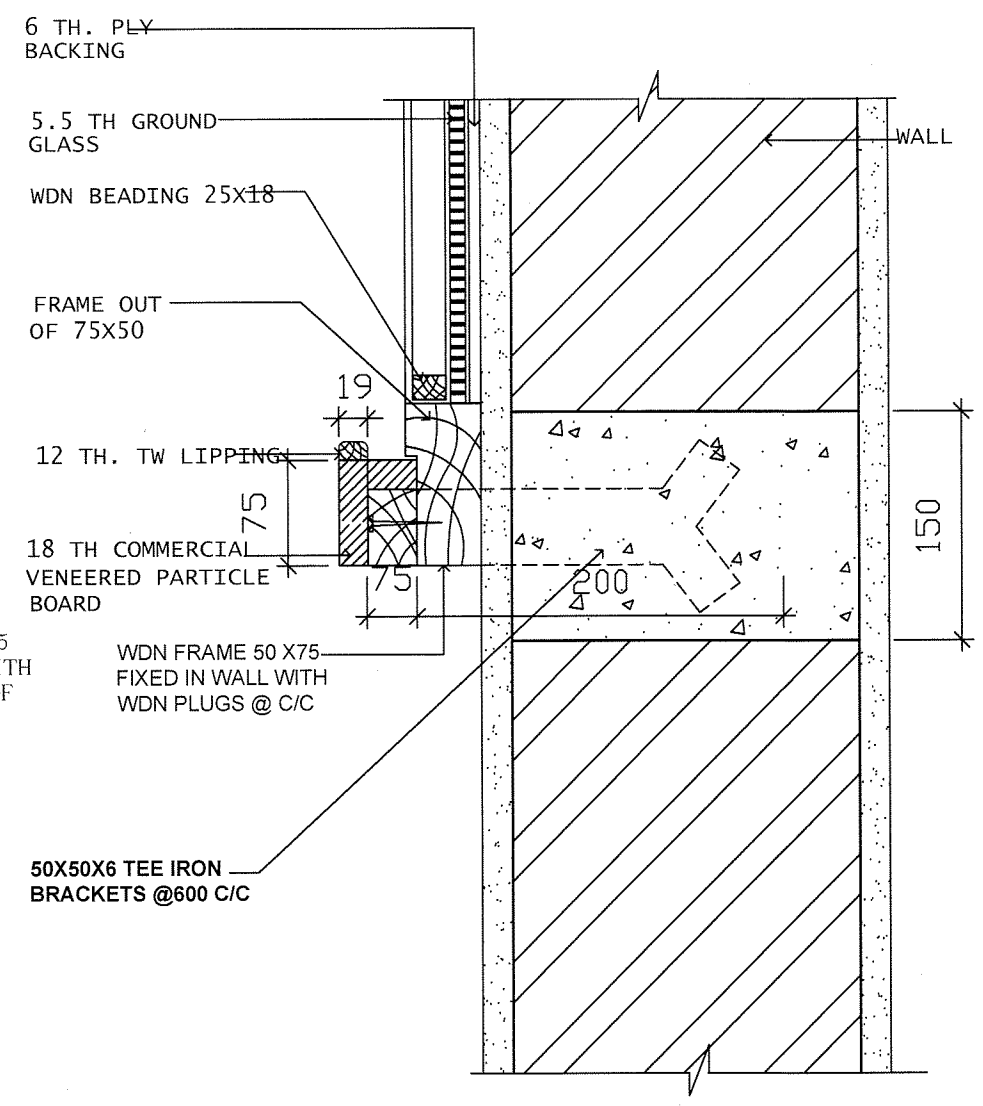
(R C SWAIN)
LT COL
SR ARCHITECT
FOR CE JODHPUR ZONE

NOTES

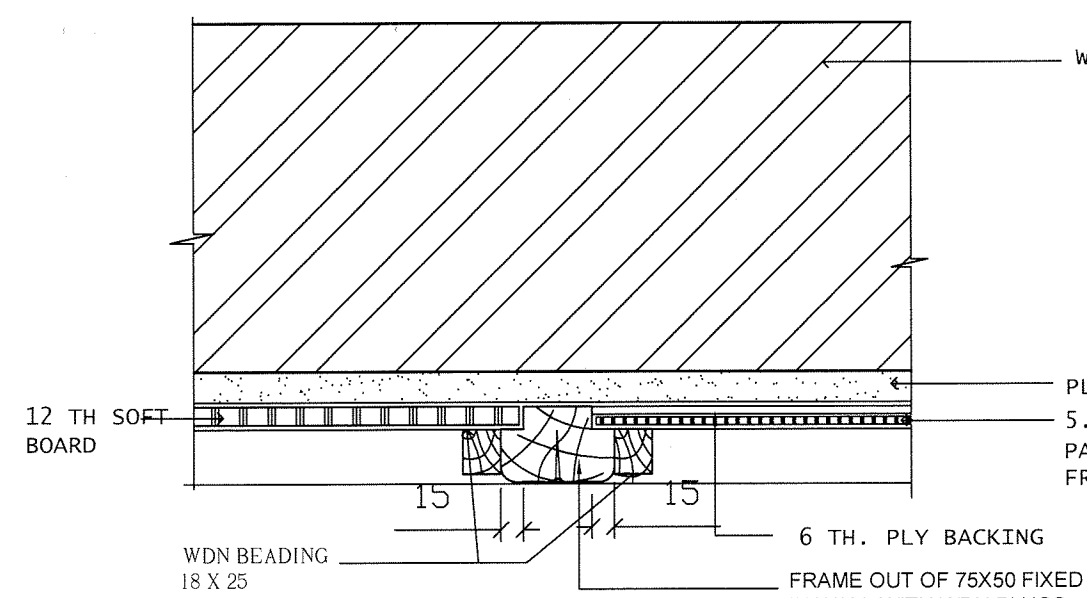
1. CONTRACTOR TO CHECK AND VERIFY ALL DIMENSIONS BEFORE EXECUTION OF THE WORK
2. ALL DIMENSIONS ARE GIVEN IN MILLIMETRE UNLESS OTHERWISE SPECIFIED
3. FIGURED DIMENSIONS ARE FOLLOWED
4. EXECUTION AUTHORITY SHALL CHECK ALL DRAWINGS BEFORE EXECUTING THE WORK



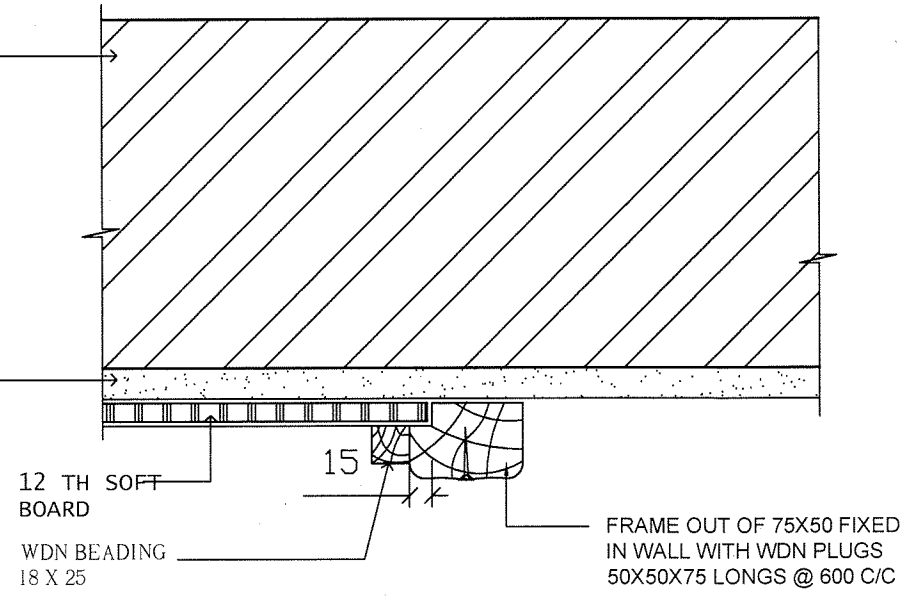
DETAIL AT C
SCALE :- 1:5



DETAIL AT D
SCALE :- 1:5

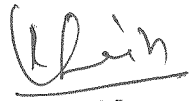


DETAIL AT B
SCALE :- 1:5



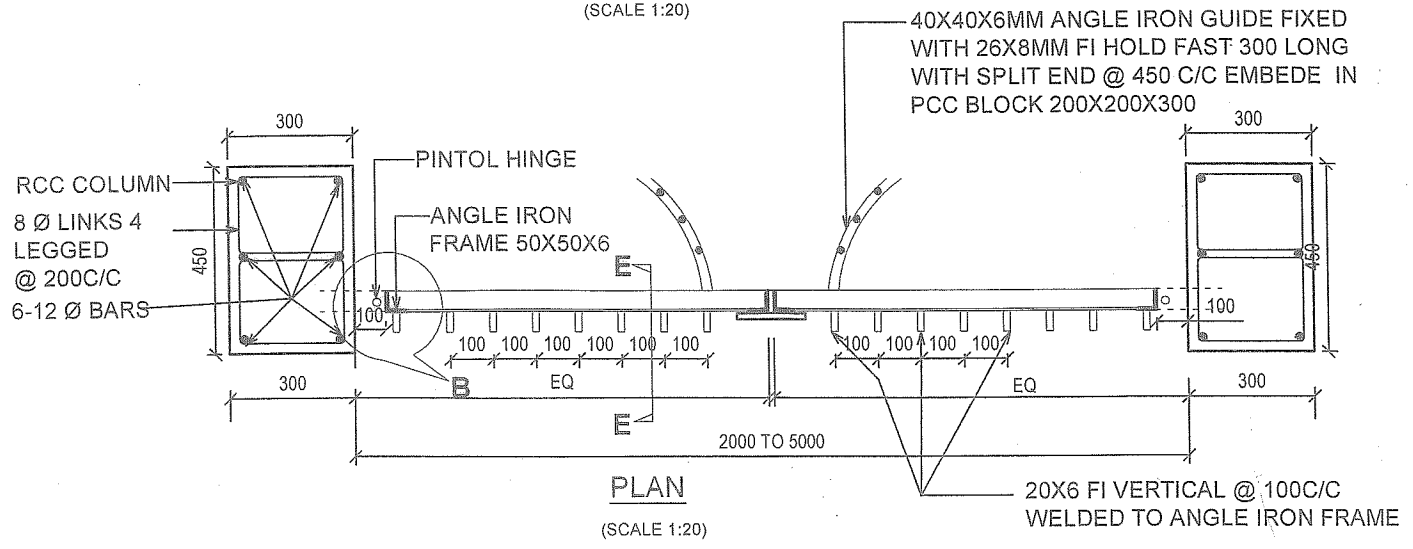
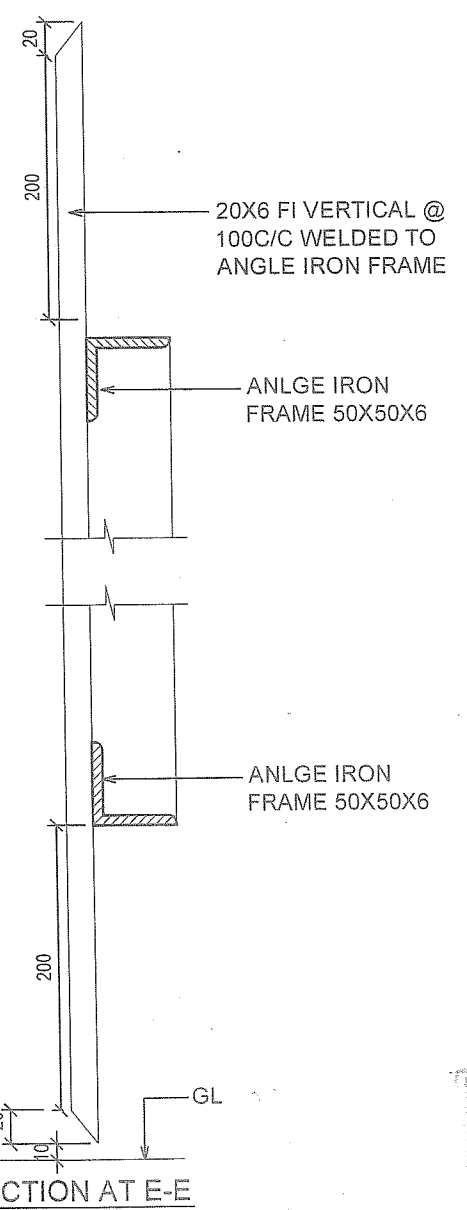
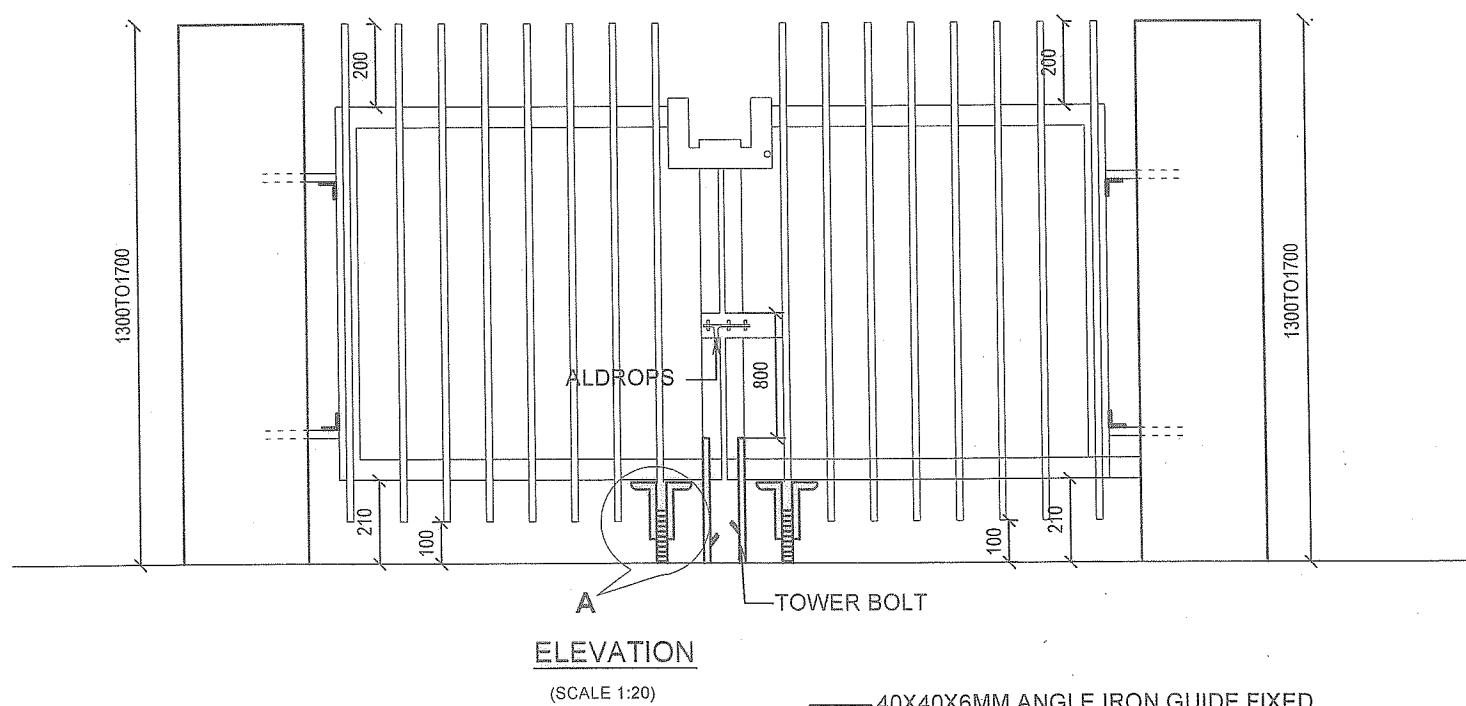
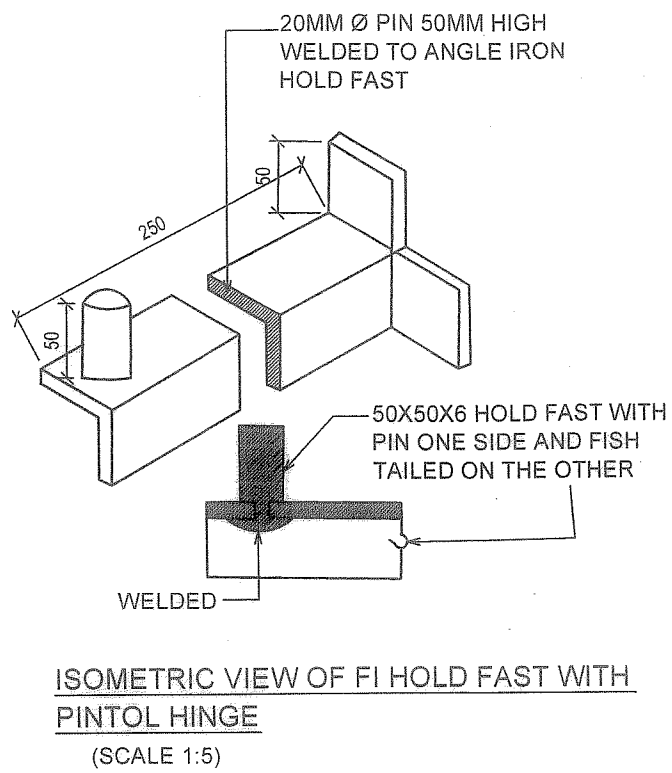
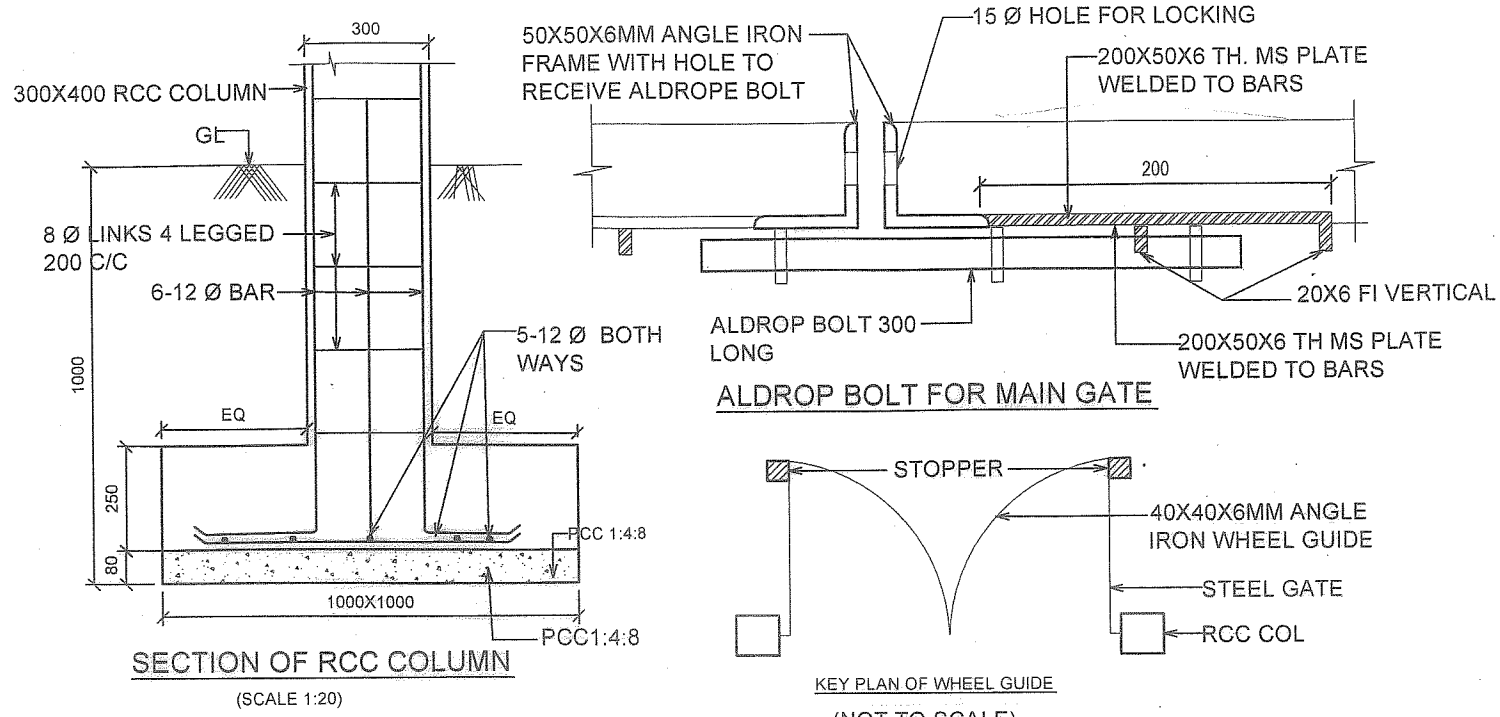
DETAIL AT A
SCALE :- 1:5

S NO	DATE	DESCRIPTION	INITIALS
REVISIONS			
DETAILS OF GLASS BOARD WITH PIN UP BOARD			
DATE	07.01.2015	CHIEF ENGINEER	SHT NO
DRN	C S ASERI	JODHPUR ZONE	2/2
CKD			
SCALE	AS SHOWN	DRG NO : CEJZ/TD/39	


 (R C SWAIN)
 LT COL
 SR ARCHITECT
 FOR CE JODHPUR ZONE

NOTES

1. CONTRACTOR TO CHECK AND VERIFY ALL DIMENSIONS BEFORE EXECUTION OF THE WORK
2. FIGURED DIMENSIONS SHALL BE FOLLOWED.
3. ALL DIMENSIONS ARE GIVEN IN MILLIMETRES UNLESS OTHERWISE SPECIFIED
4. ALL STEEL WORK SHALL BE PAINTED WITH SYNTHETIC ENAMEL OVER A COAT OF PRIMER.
5. HOLD FAST SHOULD BE EMBEDDED IN RCC COLUMN.
6. ALL THE WELDING SHALL CONFORM TO IS-3162 & 1024.
7. THE FOUNDATION SHOULD BE DESIGNED AS/SOIL CONDITION.



SL NO.	DATE	DESCRIPTION	INITIAL
REVISION			

STEEL GATE (2000-5000) & WICKET GATE (900-1500)

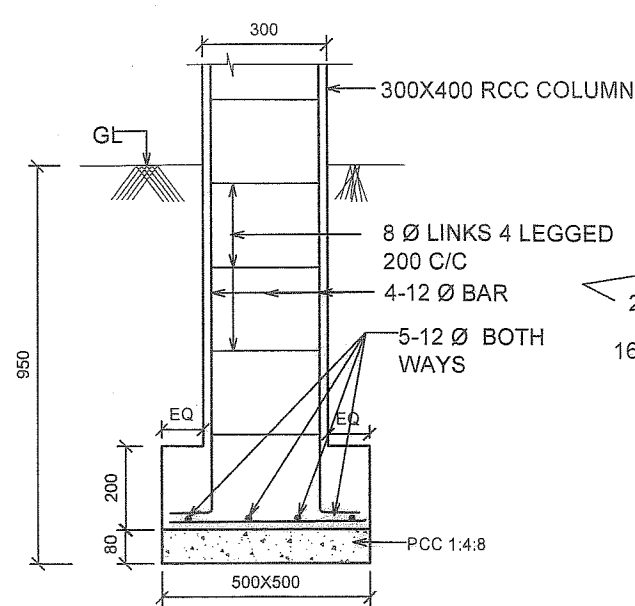
PLAN, ELEVATION, SECTION & DEALS

DATE	16 JAN 2015	CHIEF ENGINEER JODHPUR ZONE JODHPUR	SHT 1/2
DRN			
TCD			
CKD			
SCALE	AS SHOWN	DRG. NO. CEJZ/107 TD	

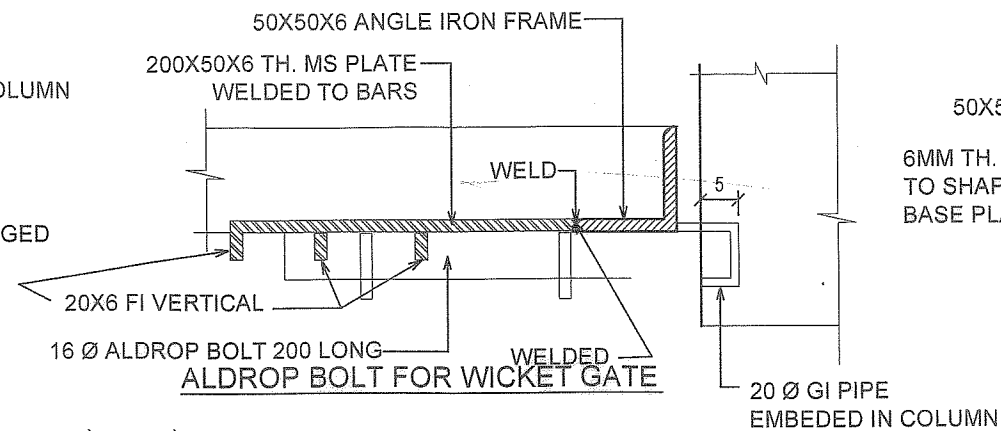
(Signature)
SO I (DEL)

AAD (ARCH)
(Signature)
JT DIR (ARCH)

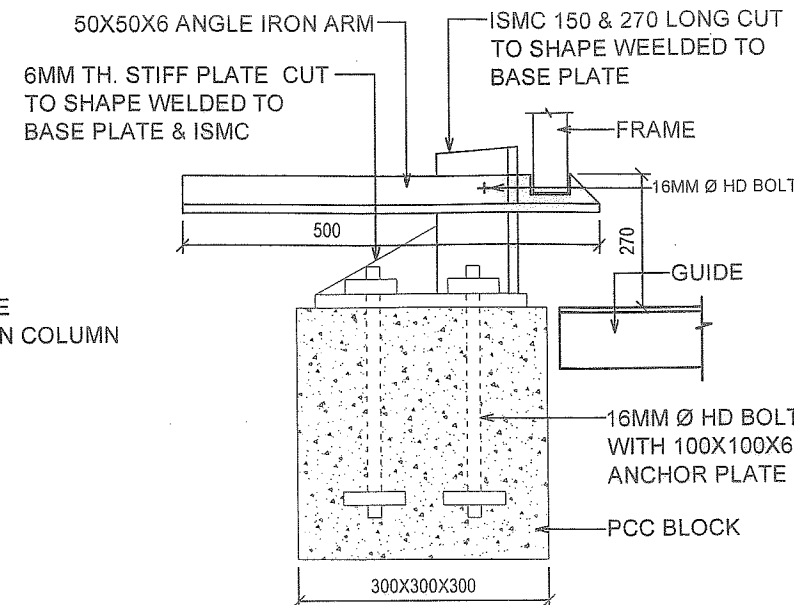
(Signature)
SR ARCH
FOR CHIEF ENGINEER



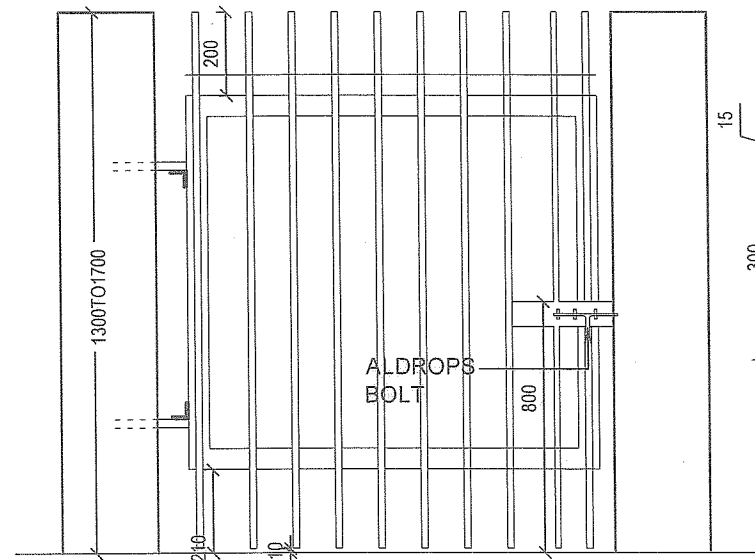
SECTION OF RCC COLUMN
(SCALE 1:20)



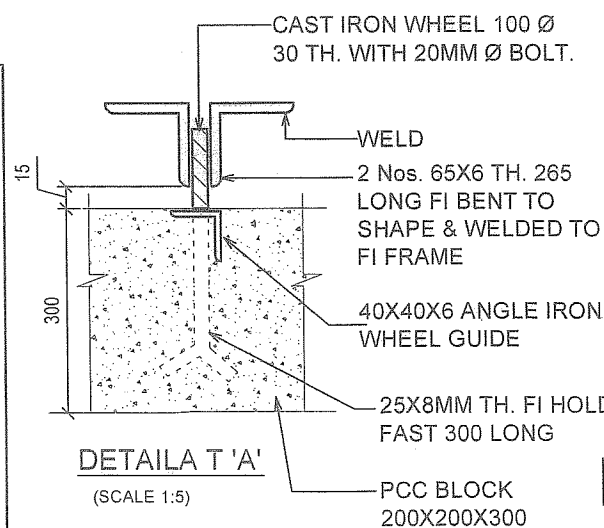
SIDE ELEVATION OF MS PLATE
(SCALE 1:2)



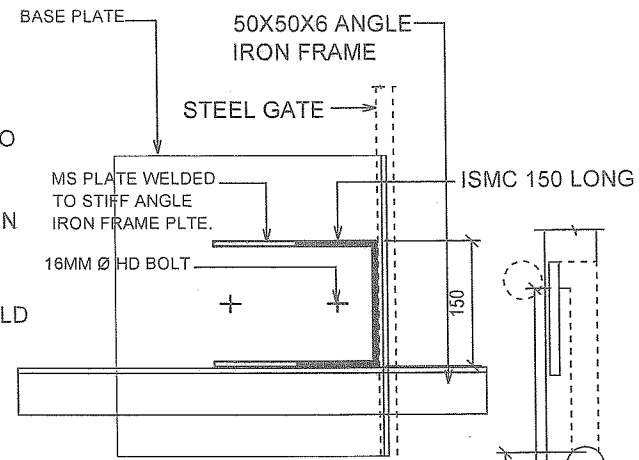
SECTION



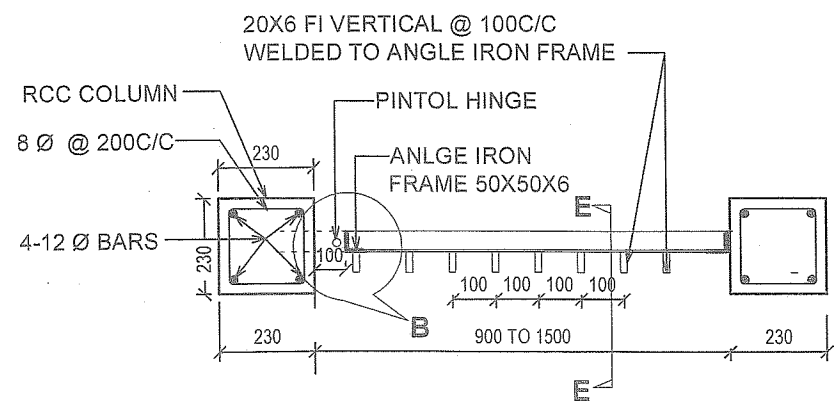
A
ELEVATION
(SCALE 1:20)



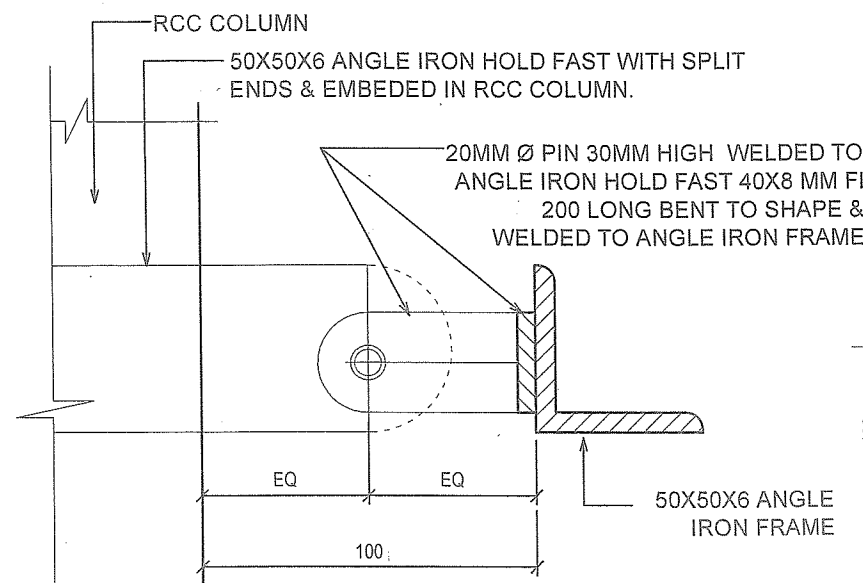
DETAIL A T 'A'
(SCALE 1:5)



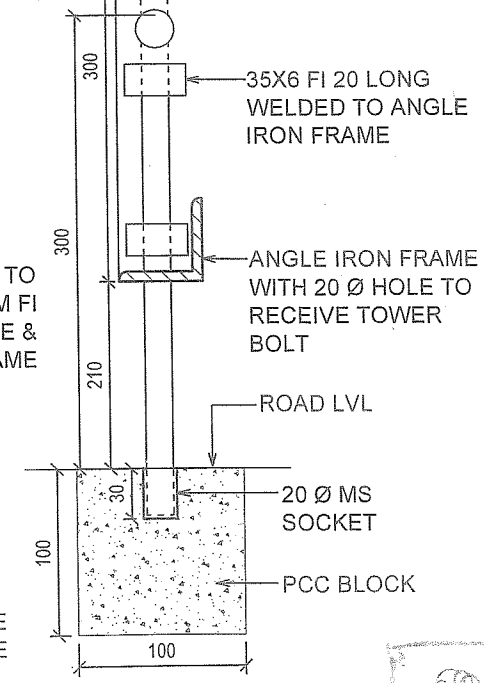
PLAN
TYPICAL DETAIL OF STOPPER



PLAN
(SCALE 1:20)



DETAIL AT 'B'
(SCALE 1:5)



DETAIL OF TOWER BOLT
(SCALE 1:5)

NOTES

1. CONTRACTOR TO CHECK AND VERIFY ALL DIMENSIONS BEFORE EXECUTION OF THE WORK
2. FIGURED DIMENSIONS SHALL BE FOLLOWED.
3. ALL DIMENSIONS ARE GIVEN IN MILLIMETRES UNLESS OTHERWISE SPECIFIED
4. ALL STEEL WORK SHALL BE PAINTED WITH SYNTHETIC ENAMEL OVER A COAT OF PRIMER.
5. HOLD FAST SHOULD BE EMBEDDED IN RCC COLUMN.
6. ALL THE WELDING SHALL CONFORM TO IS-3162 & 1024.
7. THE FOUNDATION SHOULD BE DESIGNED AS/SOIL CONDITION.

SL. NO.	DATE	DESCRIPTION	INITIAL
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REVISION

STEEL GATE (2000-5000) & WICKET GATE (900-1500)

PLAN, ELEVATION, SECTION & DETAILS

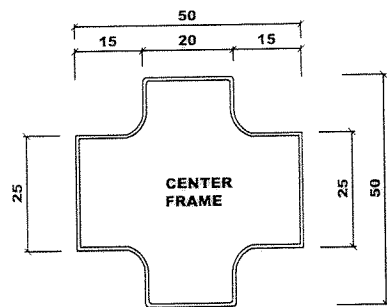
DATE	16 JAN 2015	CHIEF ENGINEER JODHPUR ZONE JODHPUR	SHT 2/2
DRN			
TCD			
CKD			
SCALE	AS SHOWN	DRG. NO. CEJZ/MTD	

AAD (ARCH)

SR ARCH
JT DIR (ARCH)

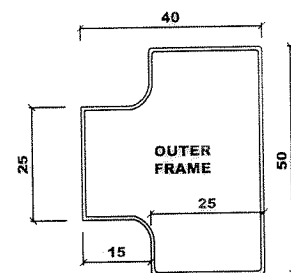
SR ARCH
FOR CHIEF ENGINEER

502 (DES)



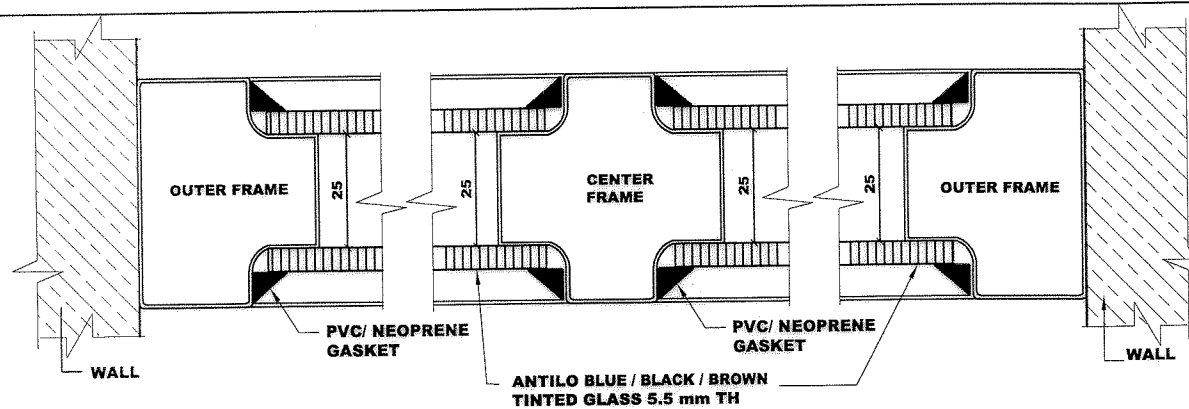
**DETAIL OF MULLION
(MADE OF ERW TUBE SECTION)**

SCALE 1:2



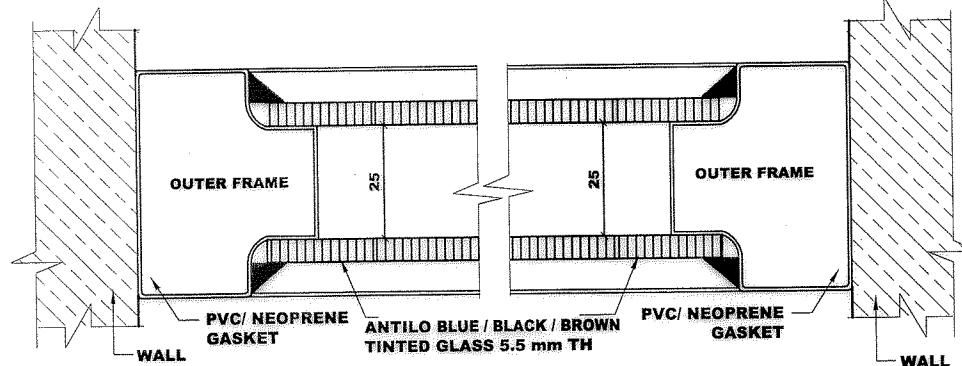
**DETAIL OF OUTER SHUTTER FRAME
(MADE OF ERW TUBE SECTION)**

SCALE 1:2



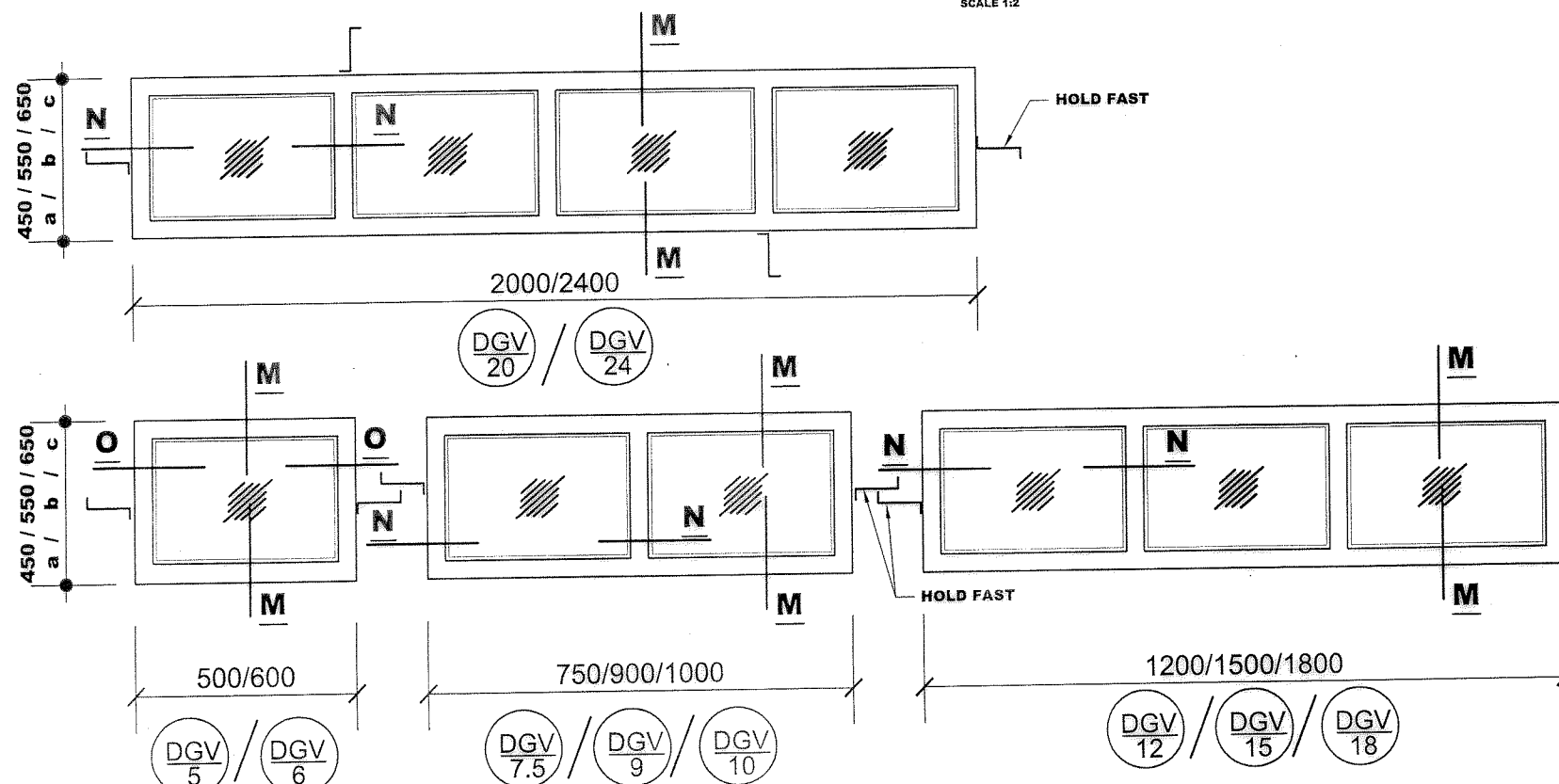
SECTION AT "N-N"

SCALE 1:2



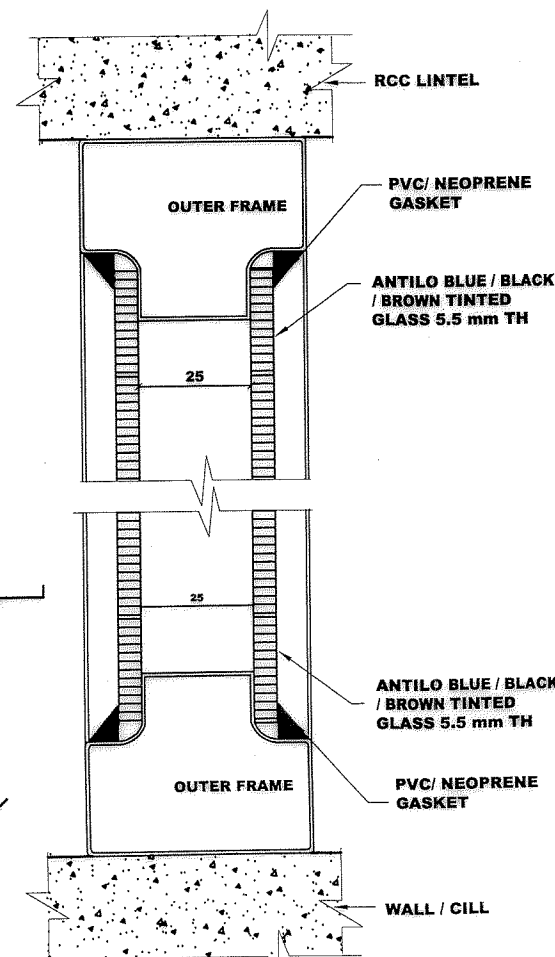
SECTION AT "O-O"

SCALE 1:2



**ELEVATIONS OF DOUBLE
GLAZED VENTILATORS
(FOR A/C ROOM)**

SCALE 1:20



SECTION AT "M-M"

SCALE 1:2

NOTES

1. CONTRACTOR TO CHECK & VERIFY ALL THE DIMENSIONS BEFORE EXECUTION OF THE WORK.
2. FIGURED DIMENSIONS SHALL BE FOLLOWED.
3. ALL DIMENSIONS GIVEN IN THIS DRG. ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.
4. SIZE OF VENTS MENTIONED HERE ARE CLEAR SIZE OF MASONRY OPENING. A TOLERANCE OF 10 mm ON EITHER SIDE SHALL BE ALLOWED WHEN THE VENTS ARE FITTED IN TO BUILT IN OPENING.
5. ANTILO BLUE / BLACK / BROWN TINTED GLASS 5.5 mm TH SHALL BE PROVIDED TO ALL VENTILATORS UNLESS OTHERWISE SPECIFIED.
6. THE HOLDFAST/LUGS VENTILATORS SHALL BE EMBEDDED IN PCC 1:3:6 OF SIZE 150X 150X TH OF WALL
7. ALL FRAMES USED ARE BOX STEEL SECTIONS.
8. 'DGV' STANDS FOR BOX VENTILATORS STEEL WITH DOUBLE GLAZED SHUTTER/PANNEL. a / b / c STAND FOR HEIGHT AS 450 / 550 / 650 mm RESPECTIVELY
9. IN CASE OF R.C.C COL/R.C.C WALL THE VENTILATOR FRAME SHALL BE FIXED WITH DASH THRU BOLTS OF STANDARD QUALITY.
10. FOR WIDTH & HEIGHT OF A PARTICULAR VENTILATOR, THE NOTATION SHALL BE NOMENCLATURE OF VENTILATOR FOLLOWED WITH NOMENCLATURE OF HEIGHT. FOR EXAMPLE FOR A VENTILATOR OF SIZE 500x450 THE NOTATION SHALL BE DGV₅₀.
11. PIN HOLE @ 300 C/C TO BE PROVIDED FOR SUPPORTING GLASS WITH G.I CLIPS / WIRE IN CASE OF GLAZED SHUTTERS.
12. 02/04 NOS, 150 LONG, 40x3 FI HOLD FAST MADE OUT OF 200 LONG FI WELD TO VENTILATORS FRAME AND EMBEDDED INTO PCC BLOCK IN WALL / LINTEL / CILL.
13. ALL EXPOSED STEEL SURFACES SHALL BE TREATED WITH TWO COAT OF ENAMEL PAINTS OF APPROVED COLOUR OVER ONE COAT OF METAL PRIMER.
14. ALL WELDING AND FINISHING WORKS OF STEEL MEMBERS SHALL BE AS PER STANDARD WORKMANSHIP PRACTICE / MANUFACTURER'S INSTRUCTION.
15. ALL FRAMES OF BOX TYPE MILD STEEL VENTS SHALL BE MADE WITH ERW SECTION HAVING WALL THICKNESS 1.25mm (i.e 18 GAUGE).

S NO	DATE	DESCRIPTION	INITIALS
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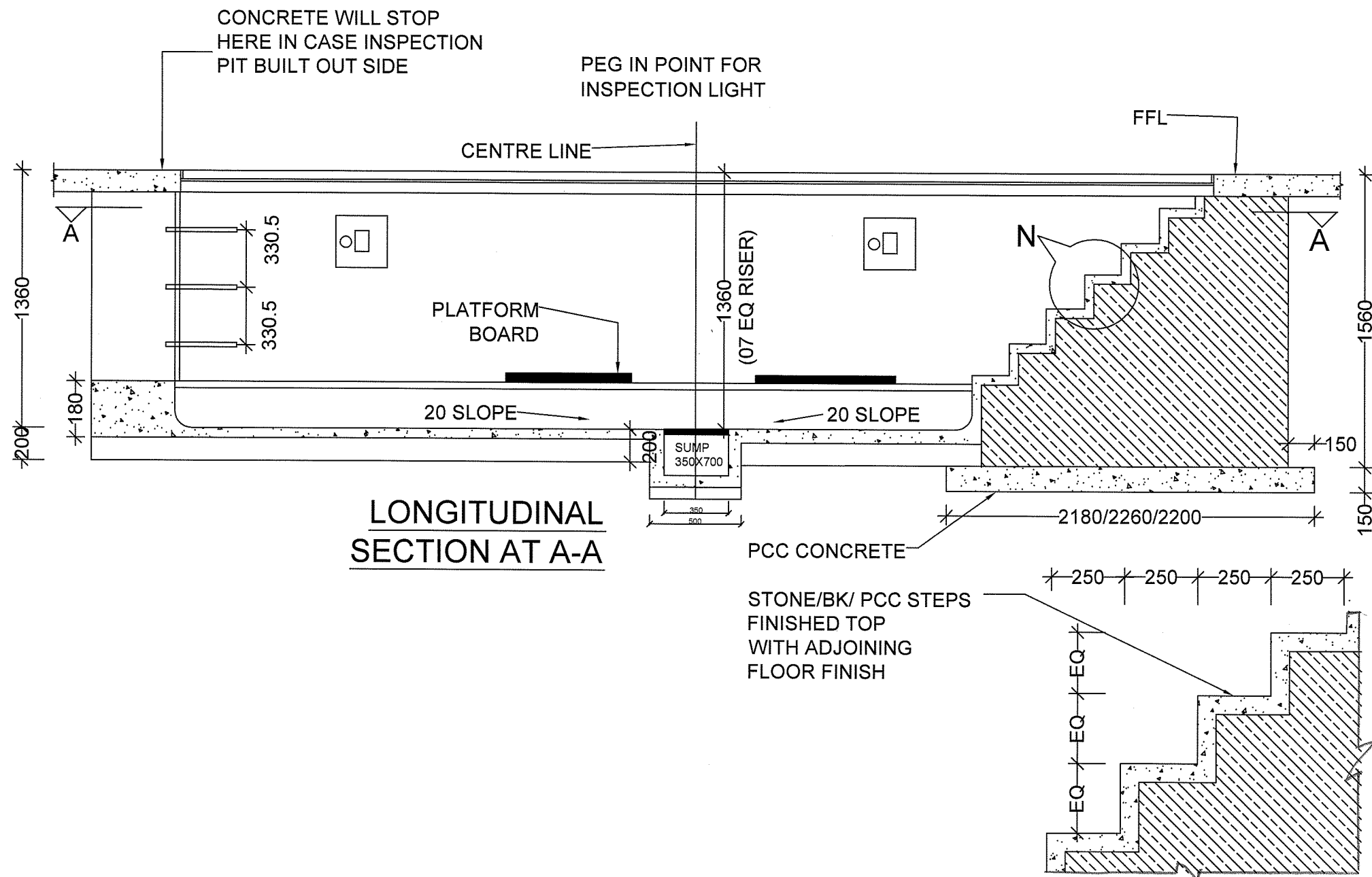
REVISIONS

**TYPICAL DETAIL OF DOUBLE GLAZED
BOX VENTILATORS (STEEL) FOR
A/C ROOM**

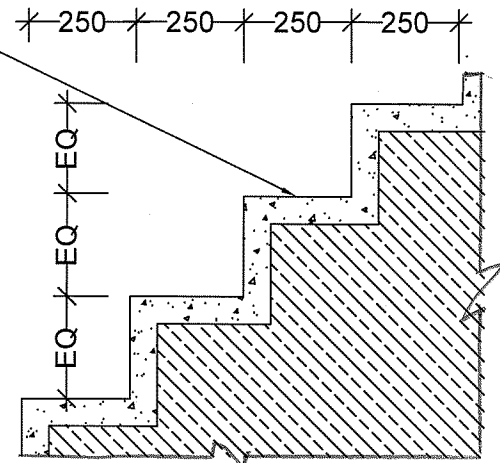
DATE	DRN	CKD	SCALE	DESCRIPTION	SHT NO
10.02.2015	C S ASERI		AS SHOWN	CHIEF ENGINEER JODHPUR ZONE	1/1
DRG NO : CEJZ / TD / 41					

(Signature)

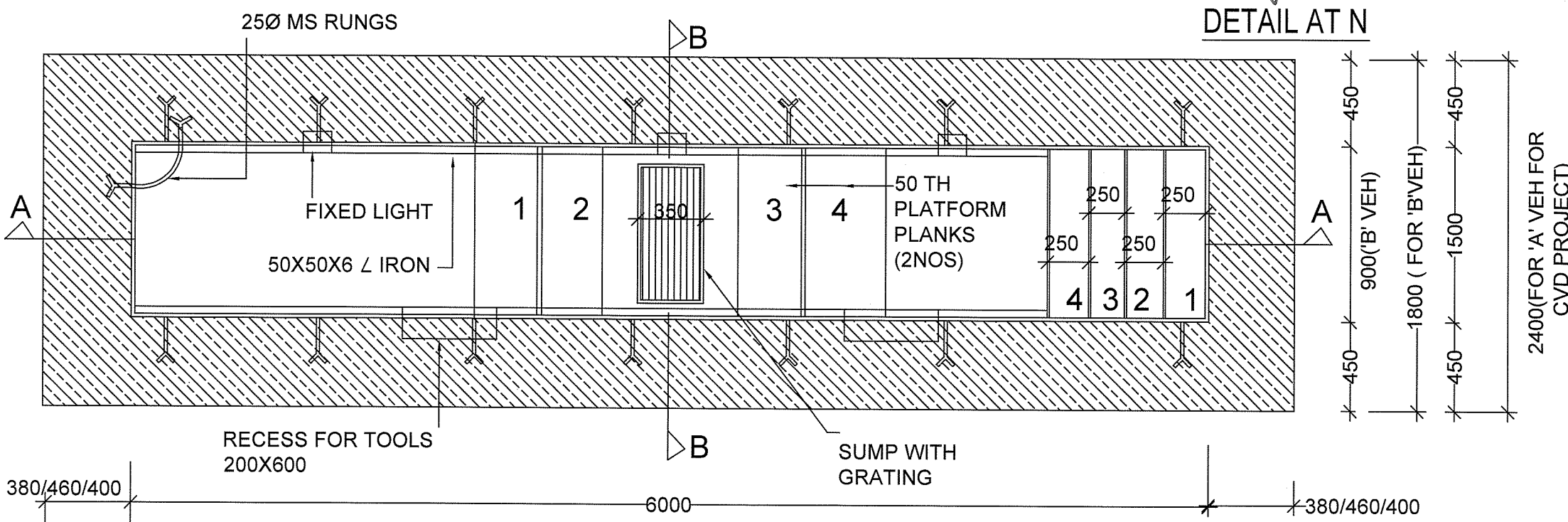
(R C SWAIN)
LT COL
SR ARCHITECT
FOR CE JODHPUR ZONE



LONGITUDINAL SECTION AT A-A



DETAIL AT N



PLAN


NOTE:-

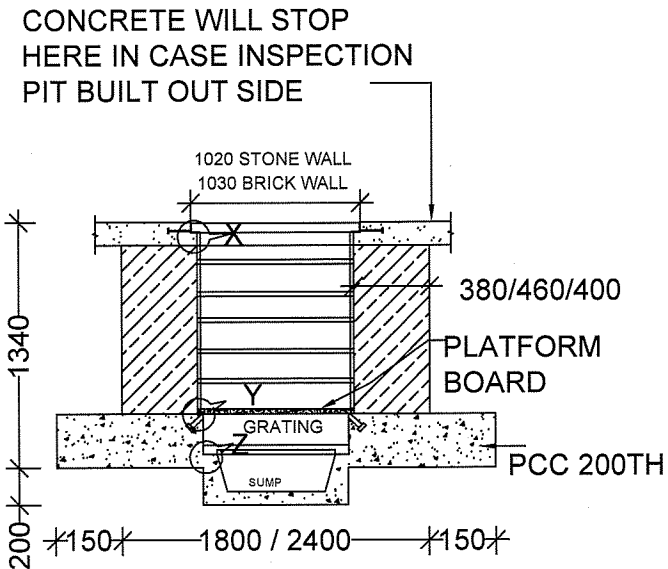
1. CONTRACTOR TO CHECK & VERIFY ALL DIMENSIONS BEFORE EXECUTION OF THE WORK.
2. FIGURED DIMENSIONS SHALL BE FOLLOWED.
3. ALL DIMENSIONS ARE GIVEN IN MILLIMETRES
4. ALL STEEL WORK SHALL BE TREATED WITH TWO COATS OF SYNTHETIC ENAMEL PAINT (OF APPROVED SHADE) OVER A COAT OF PRIMER.
5. 10 MM TH WITH SMOOTH FINISH SHALL BE TREATED IN SIDE THE PIT ON WALLS.
6. HARD WOODEN PLANKS SHALL BE AS SPECIFIED IN THE CONTRACT & TREATED WITH 2 COATS OF LINSEED OIL.
7. ALL EXPOSED STEEL WORK SHALL BE TREATED TWO COATS OF SYNTHETIC ANAMEL PAINT OVER TWO COAT OF ZINK CHROMATE.
8. 10mm TH. CEMENT PLASTER WITH SMOOTH FINISH SHALL BE TREATED INSIDE THE PIT ON WALLS.

S. NO.	DATE	DESCRIPTIONS	INITIALS
REVISIONS			

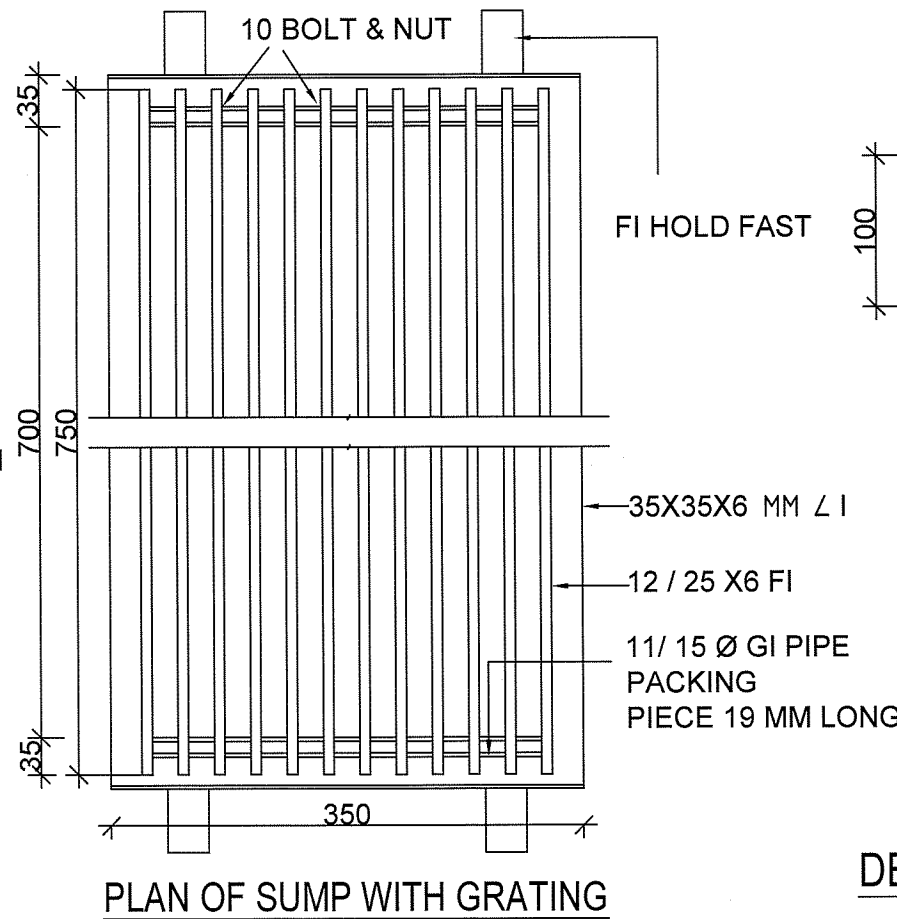
INSPECTION PIT (STONE / BK CONST / PCC BLOCK)

PLAN & SECTION			
DATE	12 FEB 2015	CHIEF ENGINEER JODHPUR ZONE	SHT NO
DRN			1 2
TCD			
CKD			
SCALE	N T S	DRG NO: CEJZ / TD / 42	

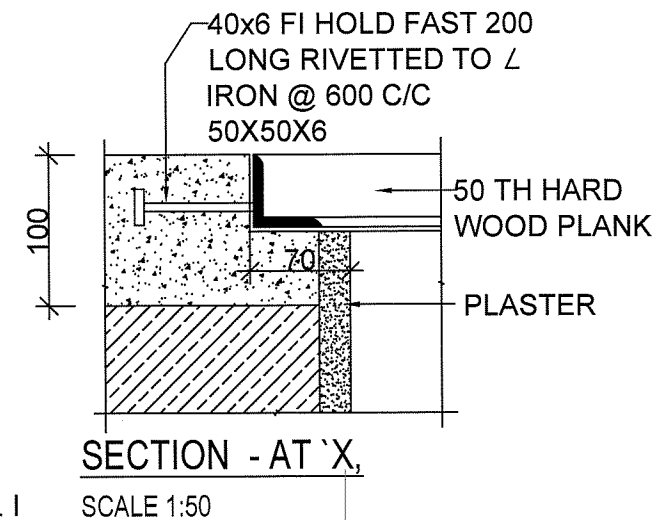

 (R C SWAN)
 LT COL
 SR ARCHITECT
 FOR CE JODHPUR ZONE



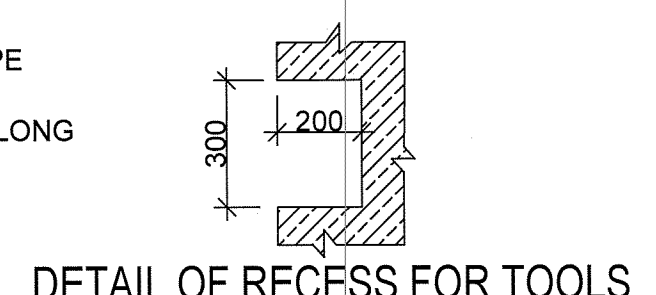
SECTION AT B-B



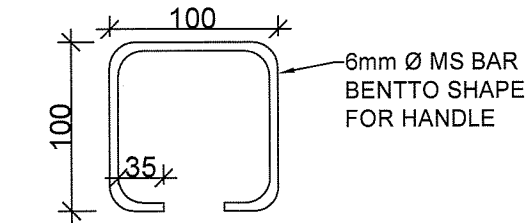
PLAN OF SUMP WITH GRATING



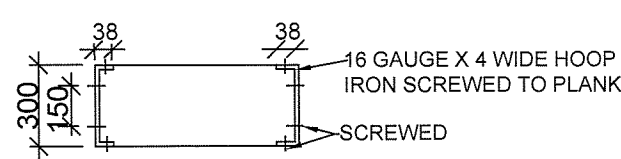
SECTION - AT 'X'
SCALE 1:50



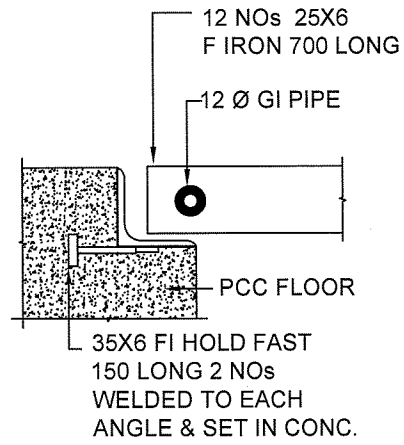
DETAIL OF RECESS FOR TOOLS



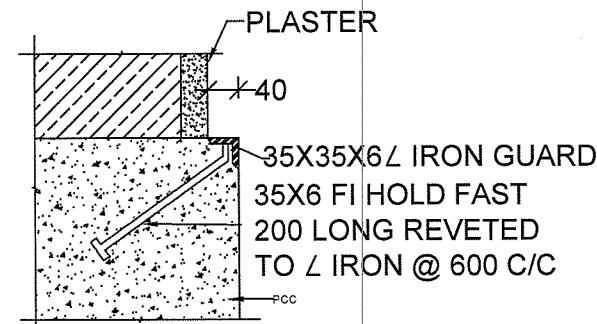
DETAIL OF LIFTING HANDLE



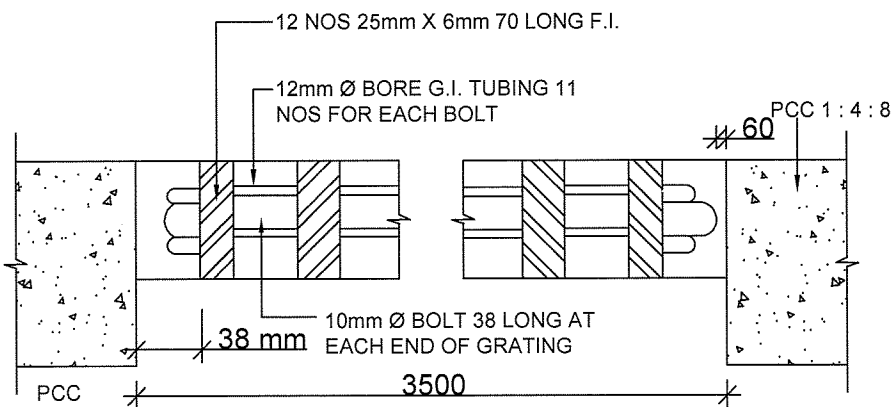
DETAIL OF COVER PLANK
SCALE 1:25



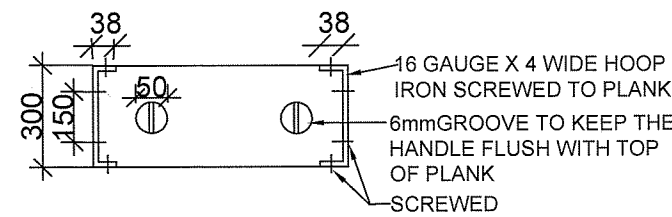
DETAIL AT Z



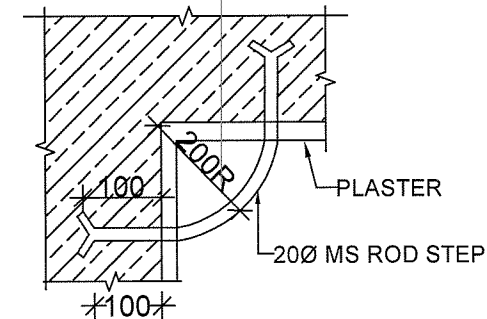
DETAIL AT Y
SCALE 1:50



SECTIONAL DETAIL OF GRATING TO SUMP



DETAIL OF COVER PLANK
SCALE 1:20



DETAIL OF MS RUNGS
SCALE 1:10

NOTE:-


1. CONTRACTOR TO CHECK & VERIFY ALL DIMENSIONS BEFORE EXECUTION OF THE WORK.
2. FIGURED DIMENSIONS SHALL BE FOLLOWED.
3. ALL DIMENSIONS ARE GIVEN IN MILLIMETRES
4. ALL STEEL WORK SHALL BE TREATED WITH TWO COATS OF SYNTHETIC ENAMEL PAINT (OF APPROVED SHADE) OVER A COAT OF PRIMER.
5. 10 MM TH WITH SMOOTH FINISH SHALL BE TREATED IN SIDE THE PIT ON WALLS.
6. HARD WOODEN PLANKS SHALL BE AS SPECIFIED IN THE CONTRACT & TREATED WITH 2 COATS OF LINSEED OIL.
7. ALL EXPOSED STEEL WORK SHALL BE TREATED TWO COATS OF SYNTHETIC ANAMEL PAINT OVER TWO COAT OF ZINK CHROMATE.
8. 10mm TH. CEMENT PLASTER WITH SMOOTH FINISH SHALL BE TREATED INSIDE THE PIT ON WALLS.

S. NO.	DATE	DESCRIPTIONS	INITIALS
REVISIONS			

INSPECTION PIT (STONE / BK CONST / PCC BLOCK)

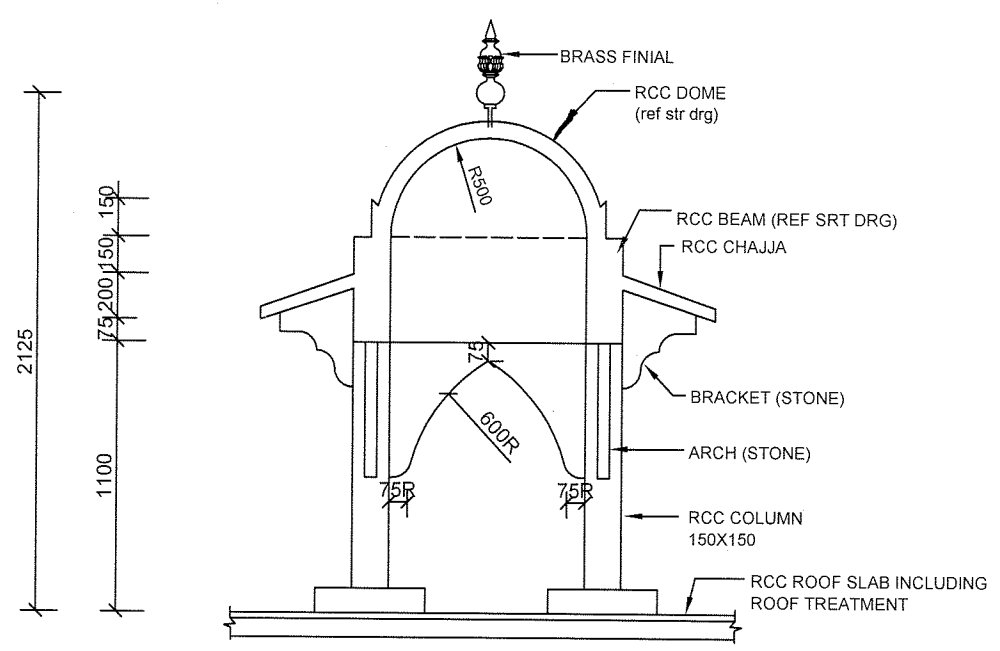
SECTION & DETAILS

DATE	12 FEB 2015	CHIEF ENGINEER JODHPUR ZONE	SHT NO
DRN			2 2
TCD			
CKD			
SCALE	N T S	DRG NO: CEJZ / TD / 42	

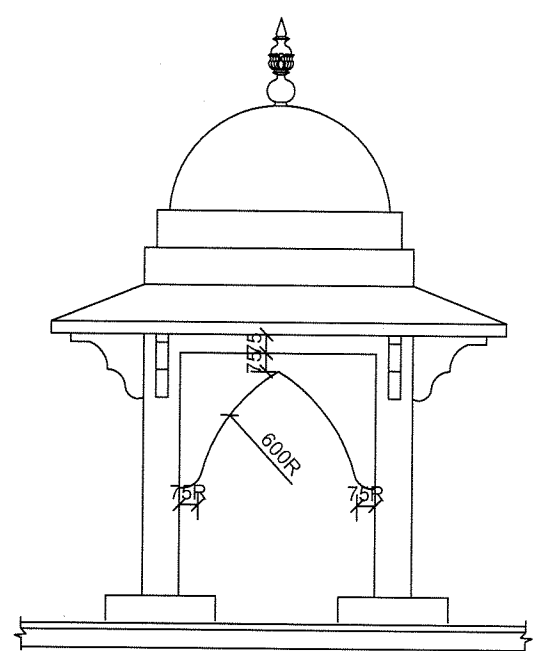

 (R C SWAN)
 LT COL
 SR ARCHITECT
 FOR CE JODHPUR ZONE

NOTES

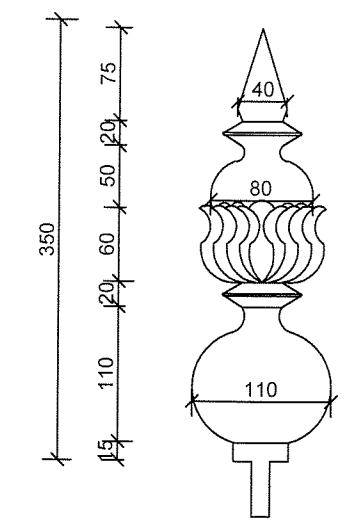
1. CONTRACTOR TO CHECK & VERIFY ALL DIMENSIONS BEFORE EXECUTION OF THE WORK.
2. FIGURED DIMENSIONS SHALL BE FOLLOWED
3. ALL DIMENSIONS ARE GIVEN IN MILLIMETRES, UNLESS OTHERWISE AS SHOWN IN DRG..
4. EXECUTIVE AUTHORITY SHALL CHECK & VERIFY THE DRGS BEFORE TAKING EXECUTION IN HAND.
5. EXPOSED SURFACES OF RCC WORK SHALL BE PLASTERED 5 mm THICK IN CEMENT MORTAR (1:3) FINISHED EVEN AND FAIR AS SPECIFIED.
6. INTERNAL PLASTERED SURFACES OF CHAT-TRI SHALL BE FINISHED WITH THREE COATS OF WHITE WASH WITH LIME AS SPECIFIED.
7. EXTERNAL PLASTERED SURFACES OF RCC CHATTRI, CHAJJA, RCC COLUMNS SHALL BE FINISHED WITH TWO COATS OF CEMENT BASE PAINT AS SPECIFIED.
8. ALL STONE SURFACES SHALL BE PUNCHED DRESSED.
9. THICKNESS OF BRASS SHEET USED IN FINIAL SHALL BE 1 mm (MINIMUM).



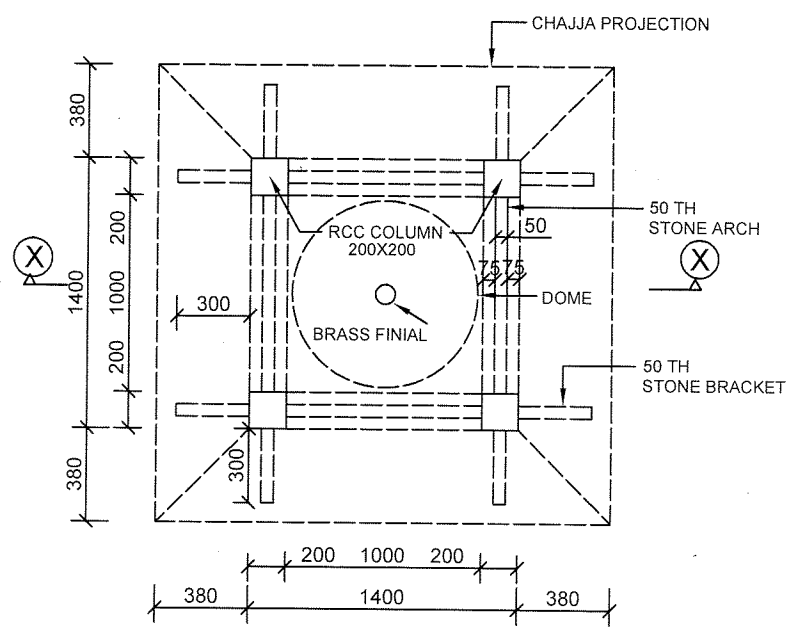
SECTION AT X-X



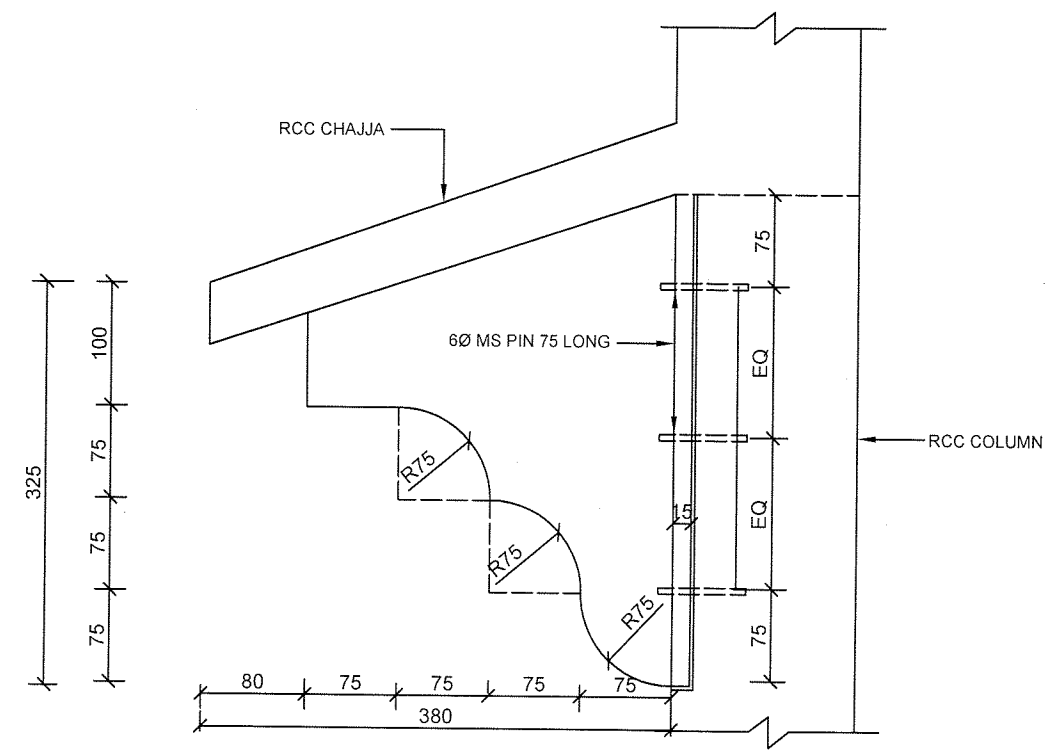
ELEVATION



DETAIL OF BRASS FINIAL



PLAN



DETAIL OF BRACKET

S. NO.	DATE	DESCRIPTIONS	INITIALS
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REVISIONS

DETAILS OF RCC CHATTRI

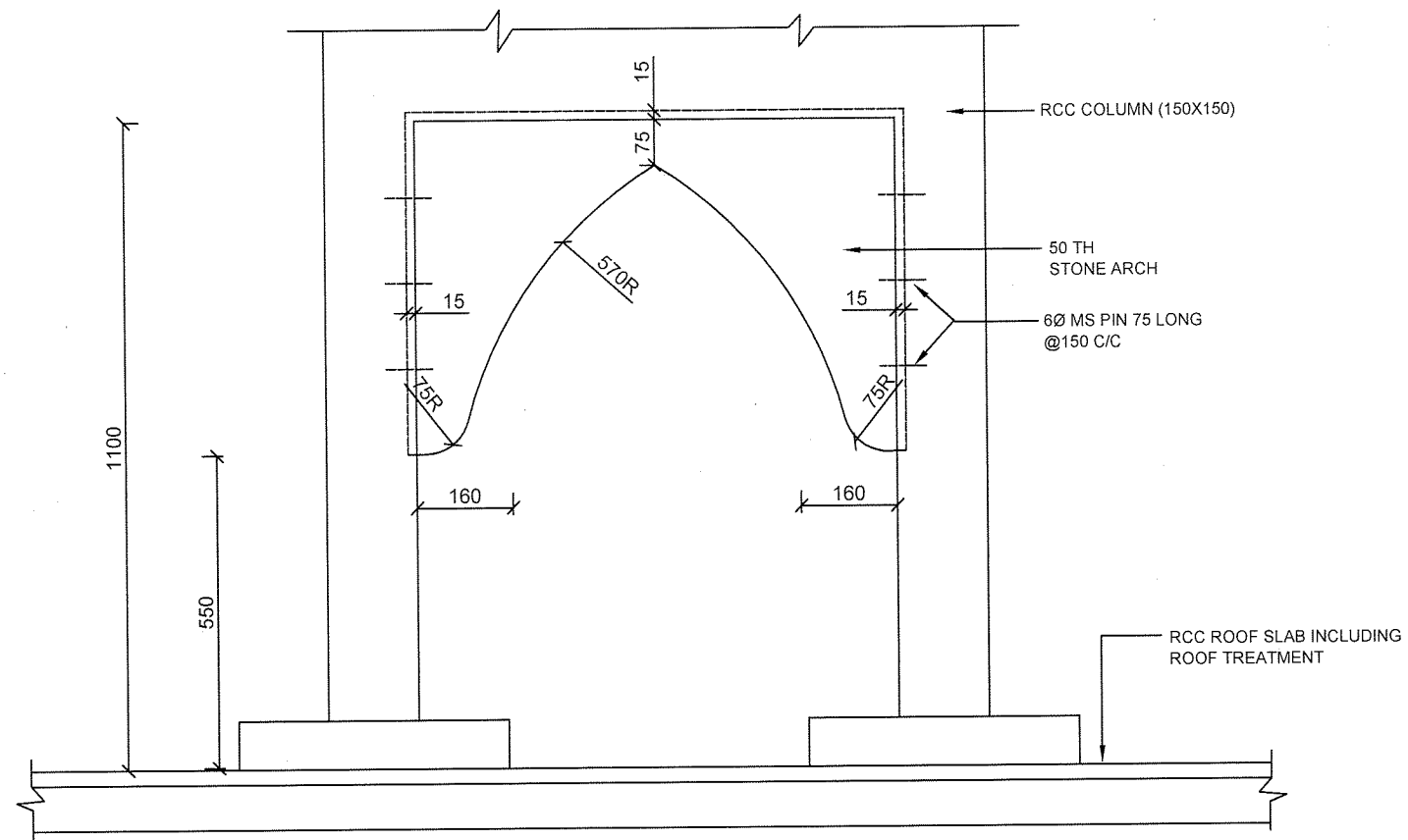
PLAN, ELEVATION & SECTIONS

DATE	12 FEB 2015	CHIEF ENGINEER JODHPUR ZONE	SHT NO 1/4
DRN			
TCD			
CKD			
SCALE	N T S	DRG NO: CEJZ / TD / 43	

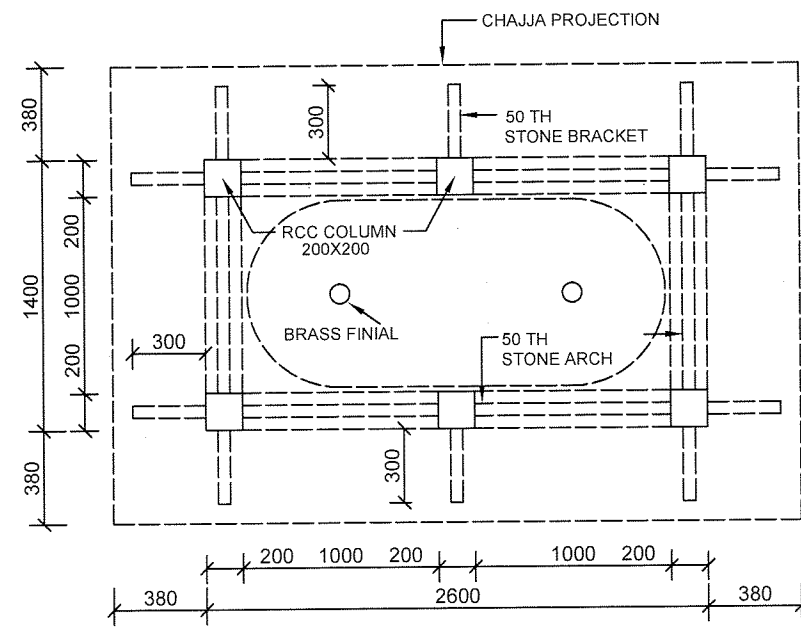
R C Swan
R C SWAN
LT COL
SR ARCHITECT
FOR CE JODHPUR ZONE

NOTES

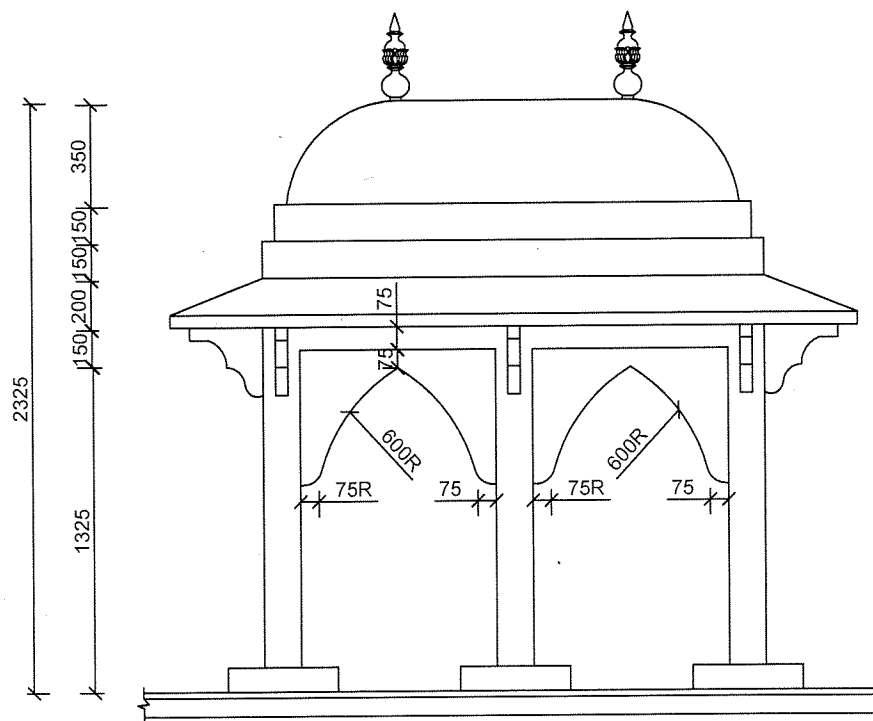
1 FOR NOTES AND ALL OTHER DETAILS REFER SHT. NO. 1/4 OF THIS DRG.



DETAIL OF STONE ARCH



PLAN



FRONT ELEVATION

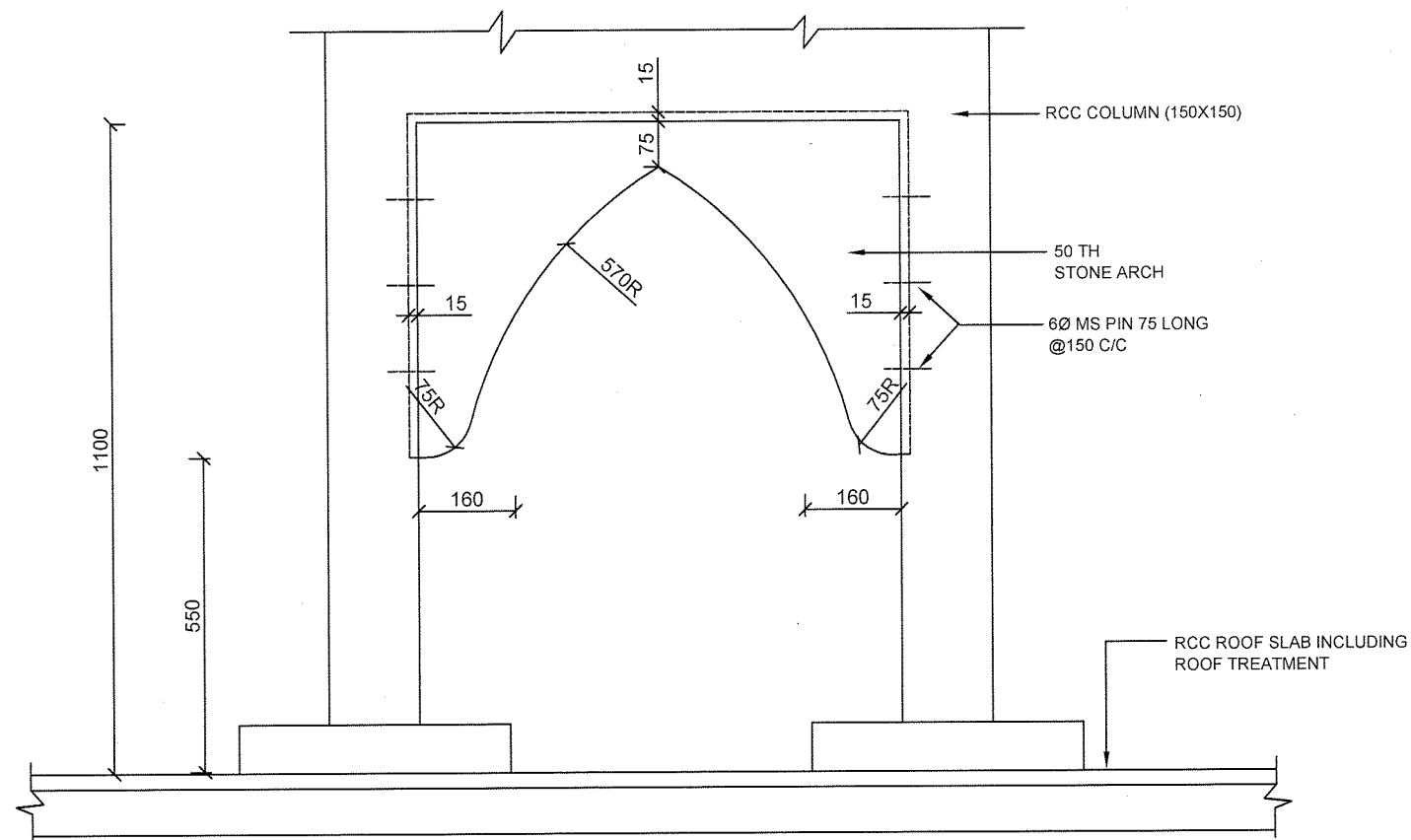
S. NO.	DATE	DESCRIPTIONS	INITIALS
REVISIONS			
DETAILS OF RCC CHATTRI			
PLAN, ELEVATION & SECTIONS			
DATE	12 FEB 2015	CHIEF ENGINEER JODHPUR ZONE	SHT NO 2/4
DRN			
TCD			
CKD			
SCALE	N T S	DRG NO: CEJZ / TD / 43	

R C Swan

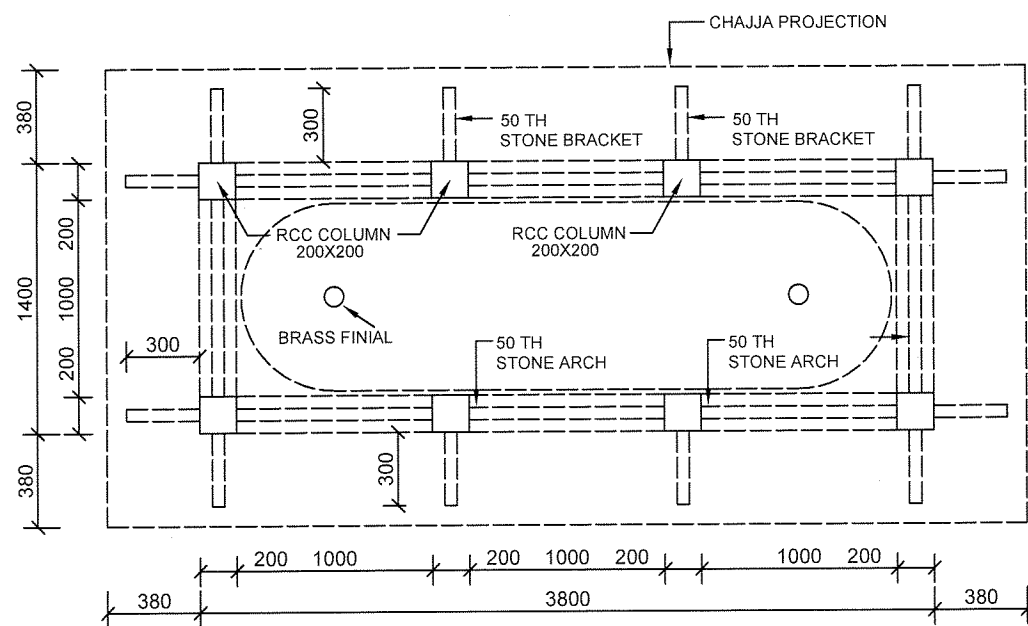
R C SWAN
LT COL
SR ARCHITECT
FOR CE JODHPUR ZONE

NOTES

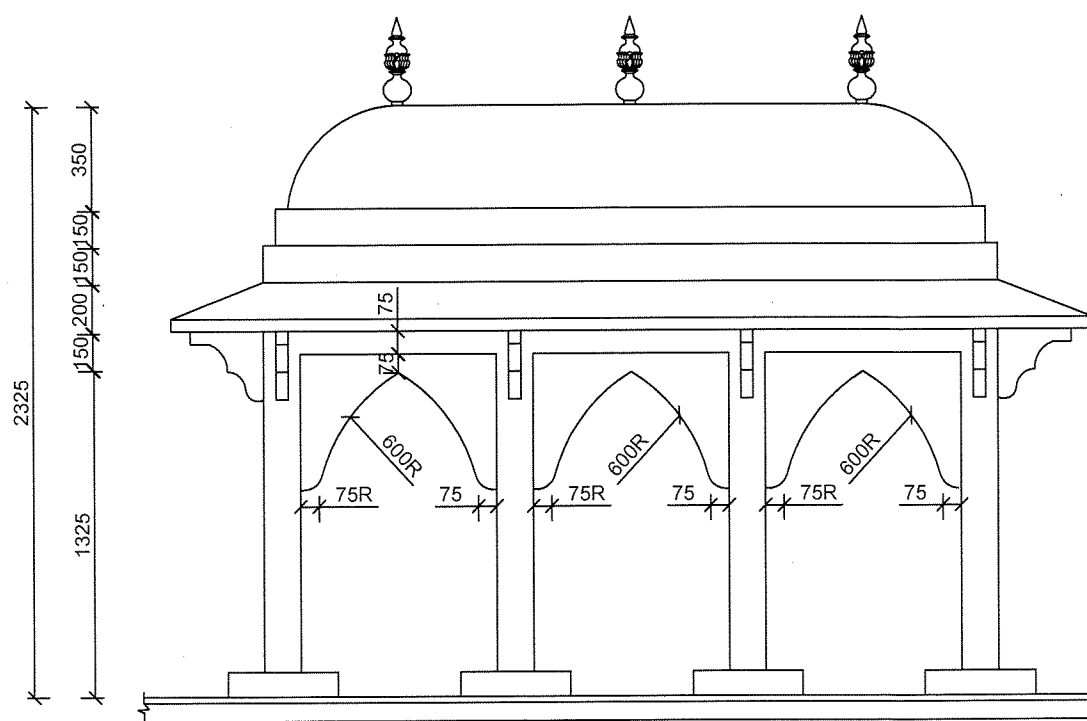
- FOR NOTES AND ALL OTHER DETAILS REFER SHT. NO. 1/4 OF THIS DRG.



DETAIL OF STONE ARCH



PLAN



FRONT ELEVATION

S. NO.	DATE	DESCRIPTIONS	INITIALS
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REVISIONS

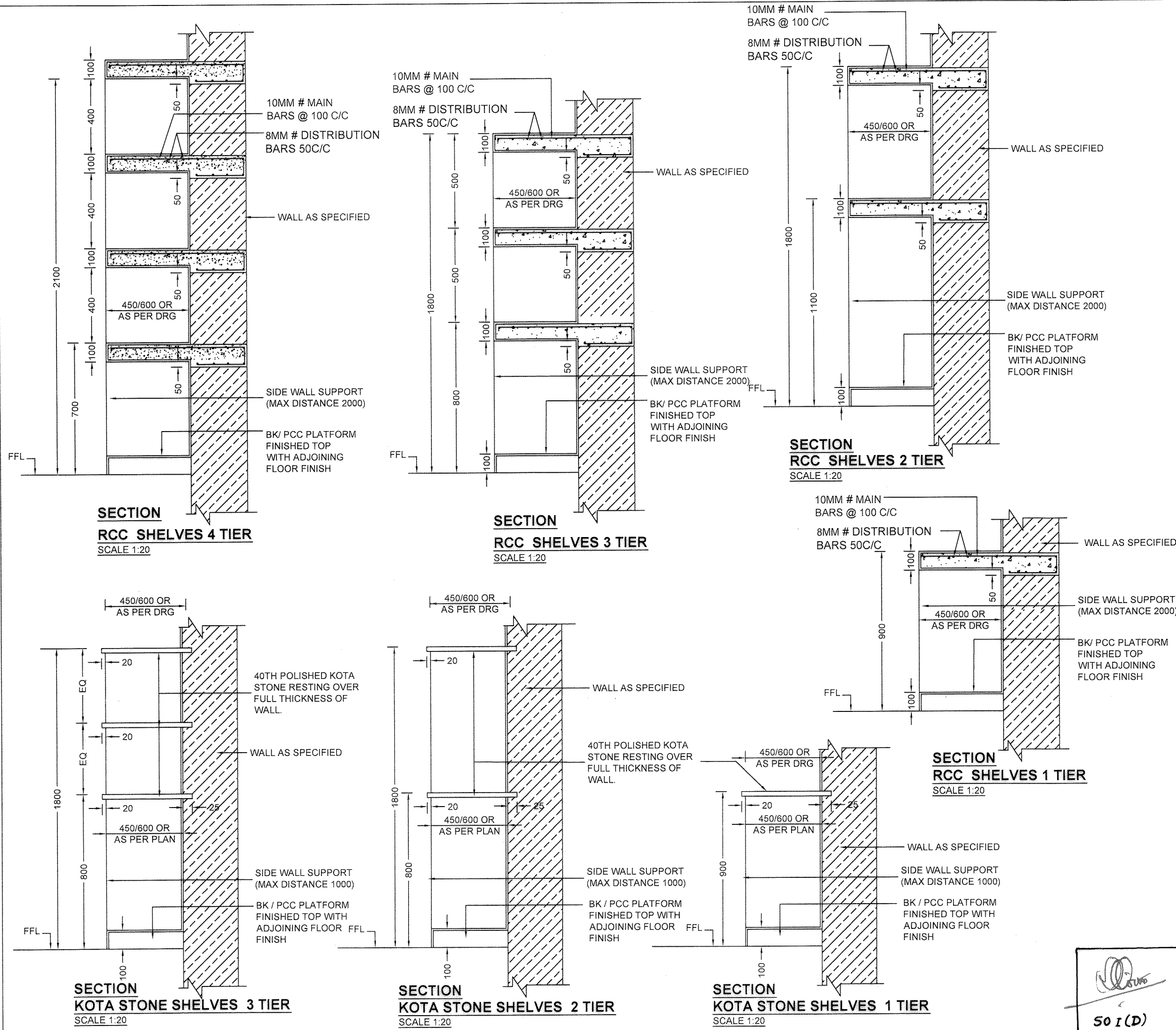
DETAILS OF RCC CHATTRI

PLAN, ELEVATION & SECTIONS

DATE	12 FEB 2015	CHIEF ENGINEER JODHPUR ZONE	SHT NO 3/4
DRN			
TCD			
CKD			
SCALE	N T S	DRG NO: CEJZ / TD / 43	

R C Swan

R C SWAN
 LT COL
 SR ARCHITECT
 FOR CE JODHPUR ZONE



NOTES

- ALL DIMENSIONS ARE GIVEN IN MILLIMETRES UNLESS OTHERWISE SHOWN IN DRAWING.
- FIGURED DIMENSIONS SHALL BE FOLLOWED.
- EXECUTIVE AUTHORITY SHALL CHECK & VERIFY THE DRAWING BEFORE TAKING EXECUTION IN HAND.
- WALL THICKNESS SHALL BE AS INDICATED ON MAIN DRAWINGS OR AS SPECIFIED.
- REFER TYPICAL DETAILS SHOWN IN THIS DRG AS APPLICABLE WHEN NOT SHOWN IN THE MAIN DRG.
- THE DETAILS / SPECIFICATION SHOWN IN THE MAIN DRGS SHALL SUPERSEDE THE DETAILS/SPECIFICATION SHOWN IN THIS DRG.

DETAILS OF SHELVING, RCC 4,3,2,1 TIER SHELVING, KOTA STONE SHELVES 3,2,1TIER

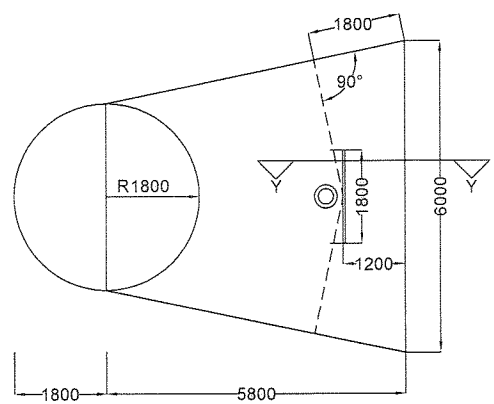
DATE	09-03-2015	CHIEF ENGINEER JODHPUR ZONE	SHT NO
DRN			1/1
TCD			
CKD			
SCALE AS SHOWN		REF DRG NO : CEJZ / TD / 45	

AAD (ARCH)

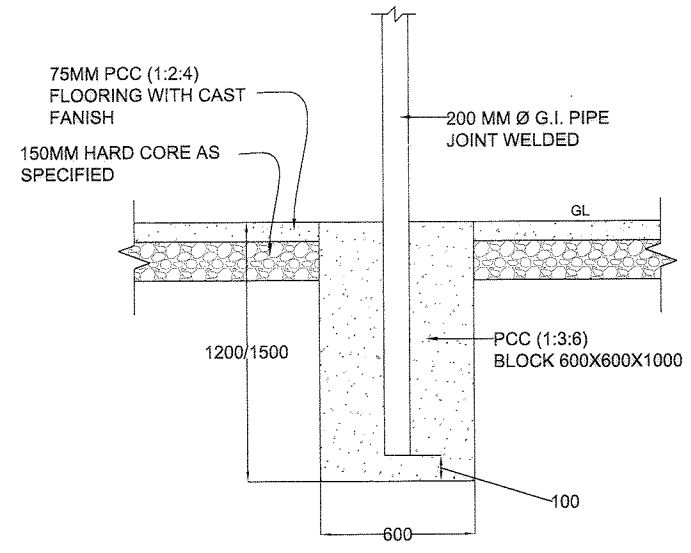
(LATHA P NAIR)
JT DIR (ARCH)

(RC SWAIN)
LT COL
SR ARCH
FOR CHIEF ENGINEER

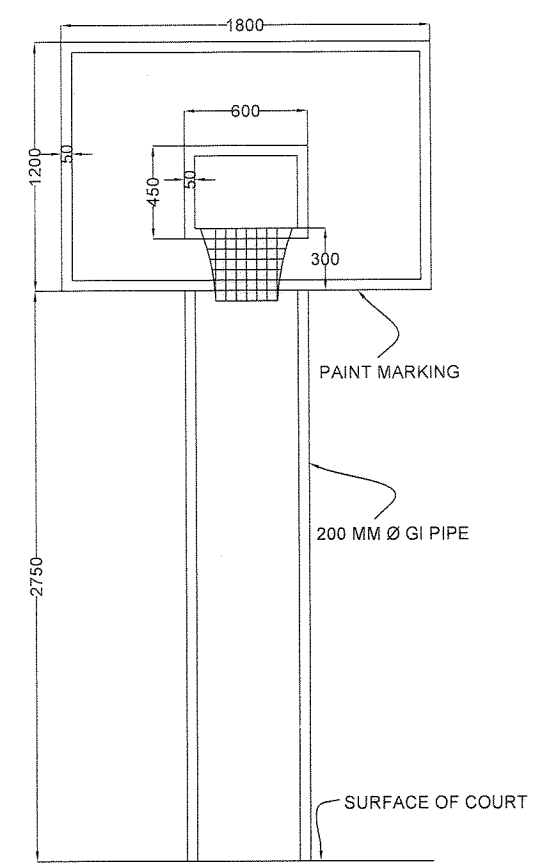
50 I (D)



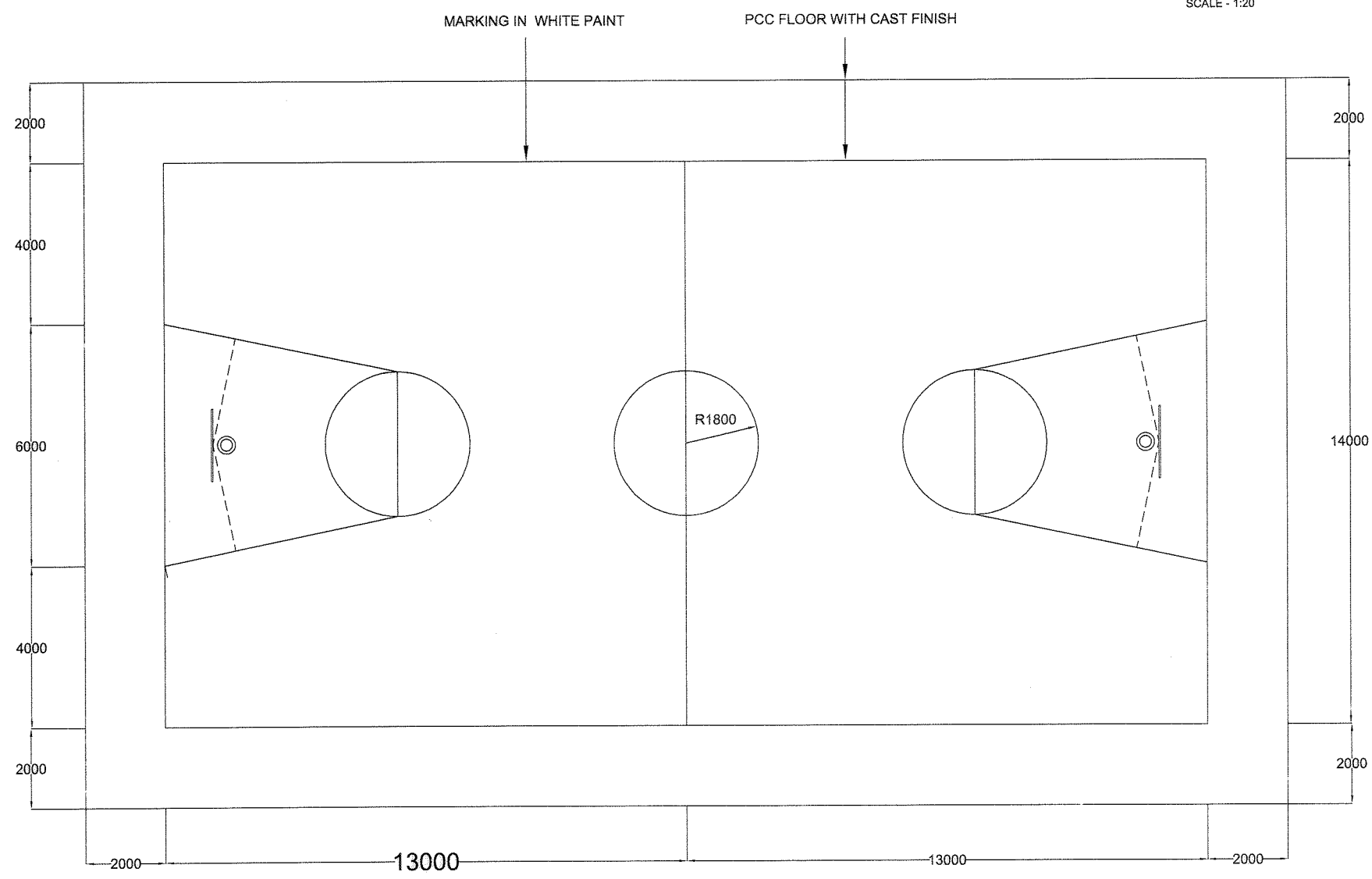
DETAIL OF BASKETBALL GROUND
SCALE - 1:100



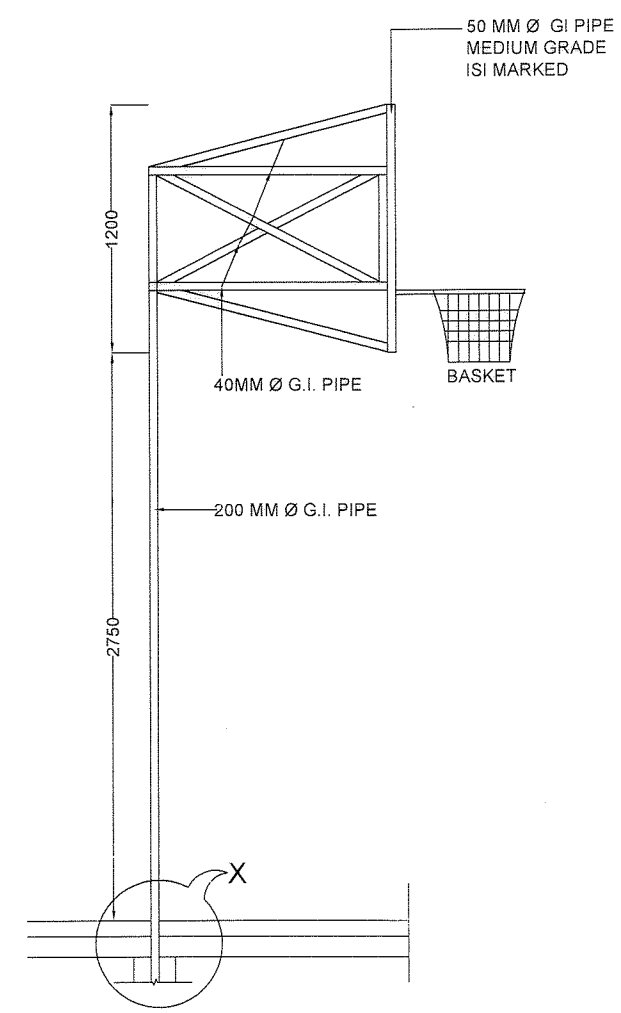
DETAIL AT -X
SCALE - 1:20



ELEVATION OF BASKET
SCALE - 1:100

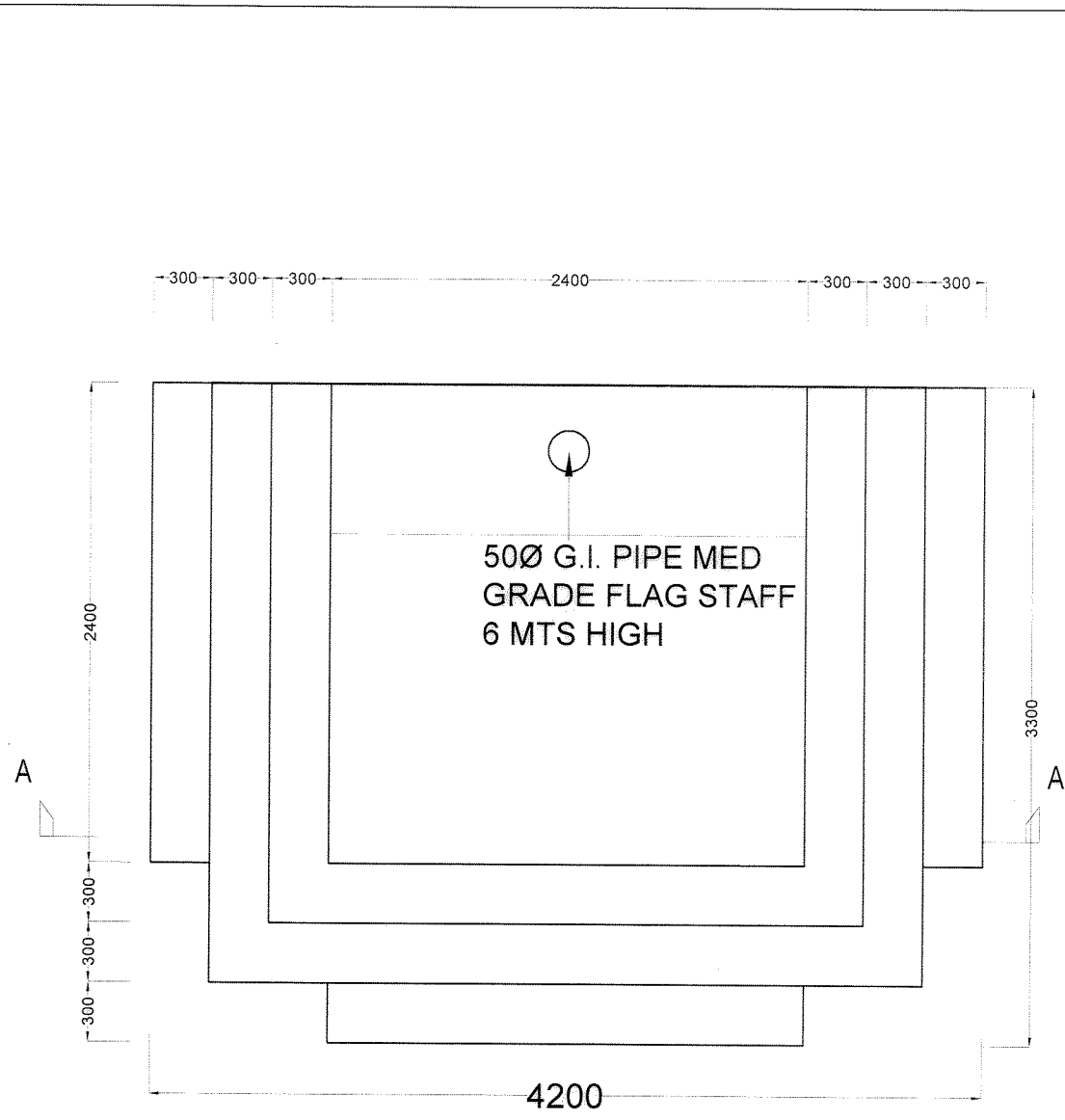


PLAN OF BASKET BALL GROUND
Scale - 1:100

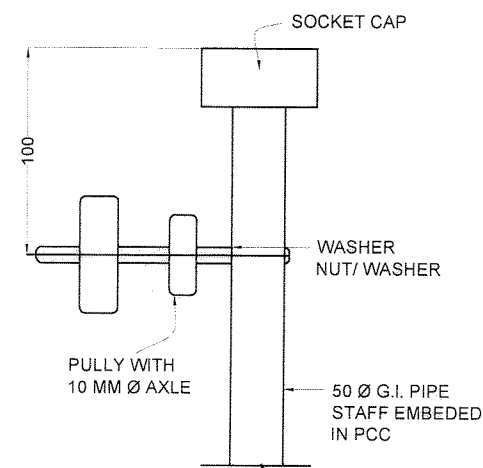


SECTION AT Y-Y
SCALE - 1:25

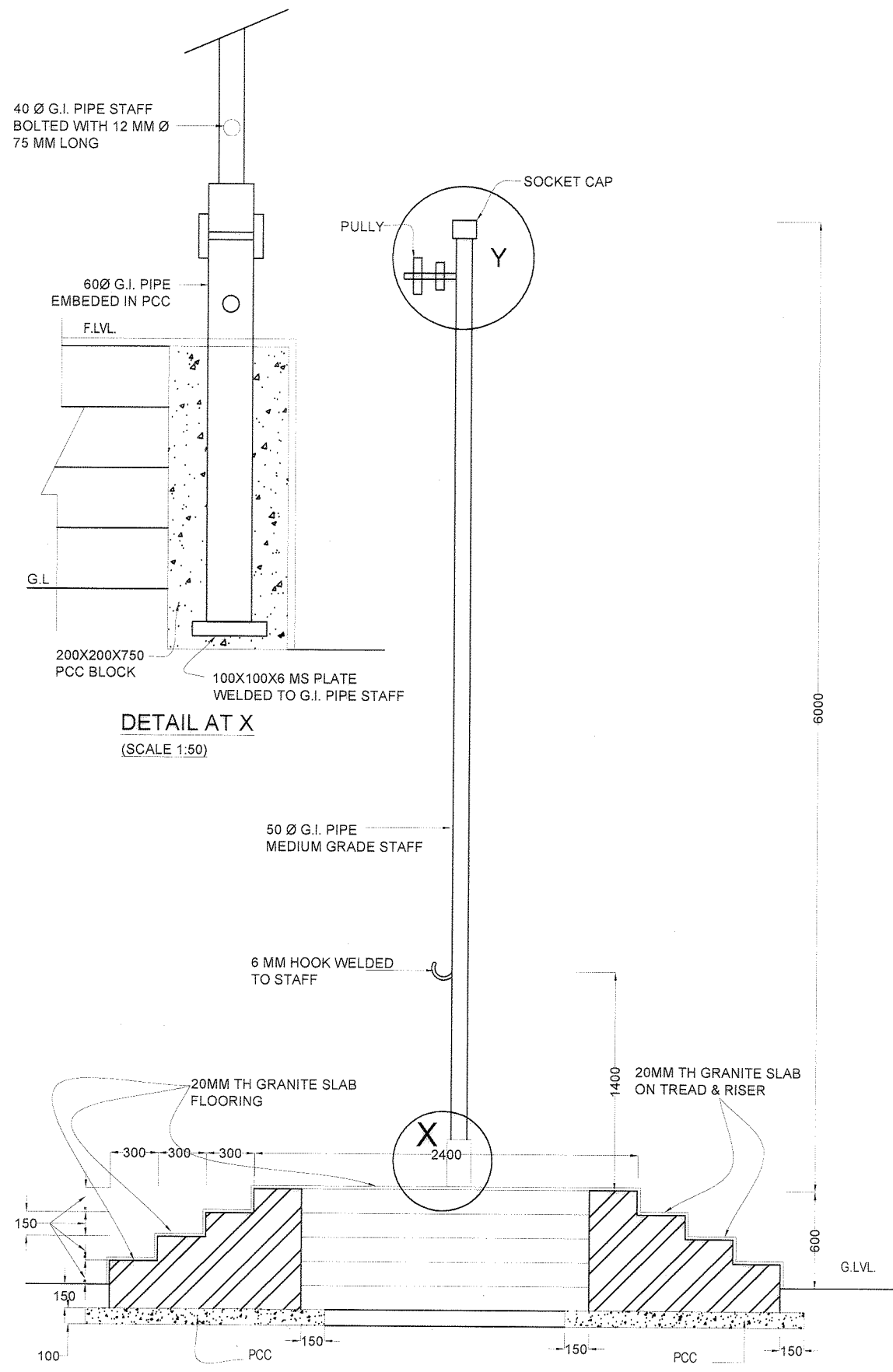
S. NO.	DATE	DESCRIPTIONS	INITIALS
REVISIONS			
BASKET BALL GROUND			
PLAN, ELEVATIONS, SECTION & DETAILS			
DATE	09.03.2015	CHIEF ENGINEER JODHPUR ZONE	SHT NO
DRN			1
TCD			1
CKD			
SCALE	N T S	DRG NO: CEJZ / TD / 47	
 (LATHA P. NAIR) JT DIR (ARCH)		 (RC SWAIN) LT COL SR ARCH FOR CHIEF ENGINEER	



PLAN
(SCALE 1:50)



DETAIL AT Y
(SCALE 1:50)



SECTION AT A-A
(SCALE 1:50)

NOTES

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- 3 ALL DIMENSIONS ARE GIVEN IN MILLIMETERS UNLESS SPECIFIED.

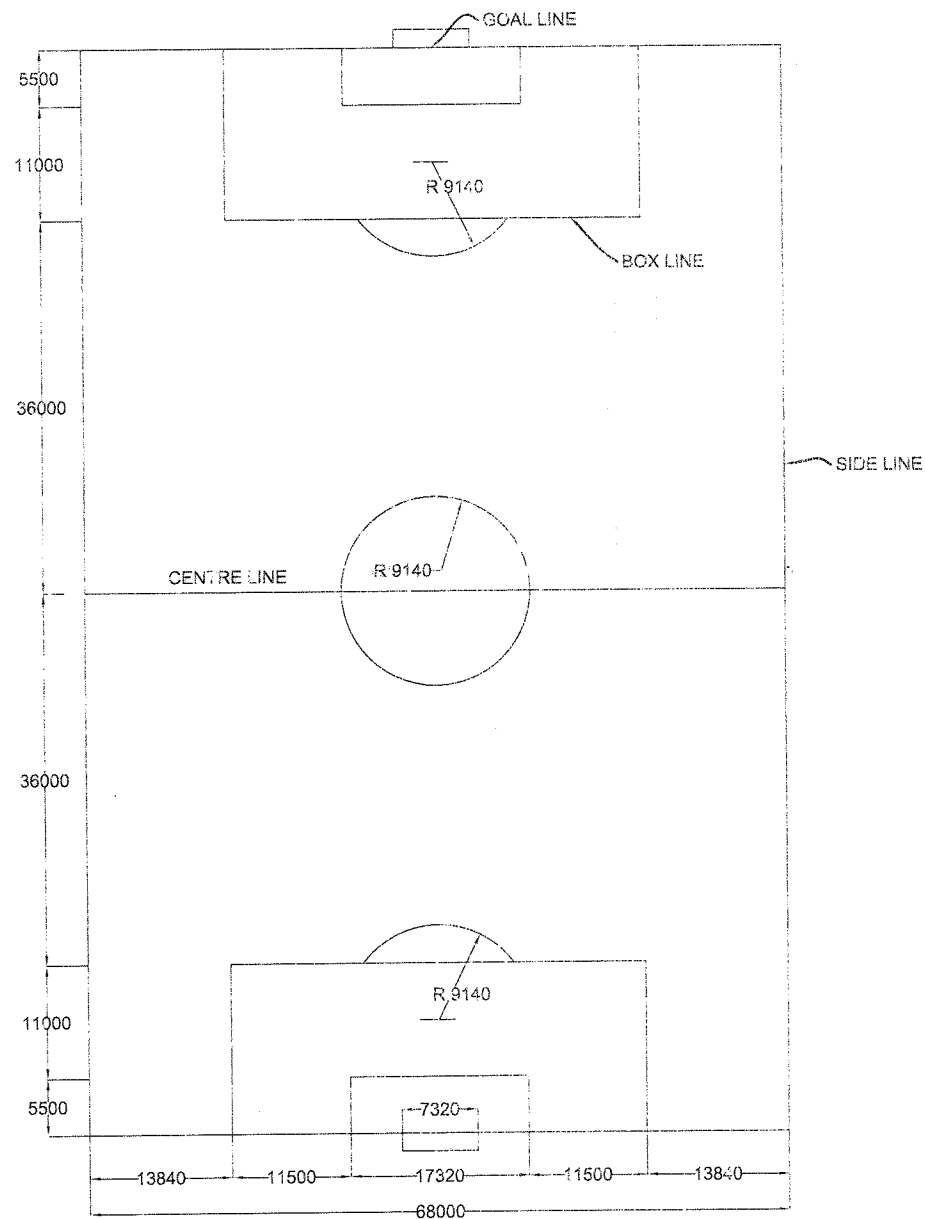
SNO	DATE	DESCRIPTION	INITIAL
REVISION			

FLAG STAFF

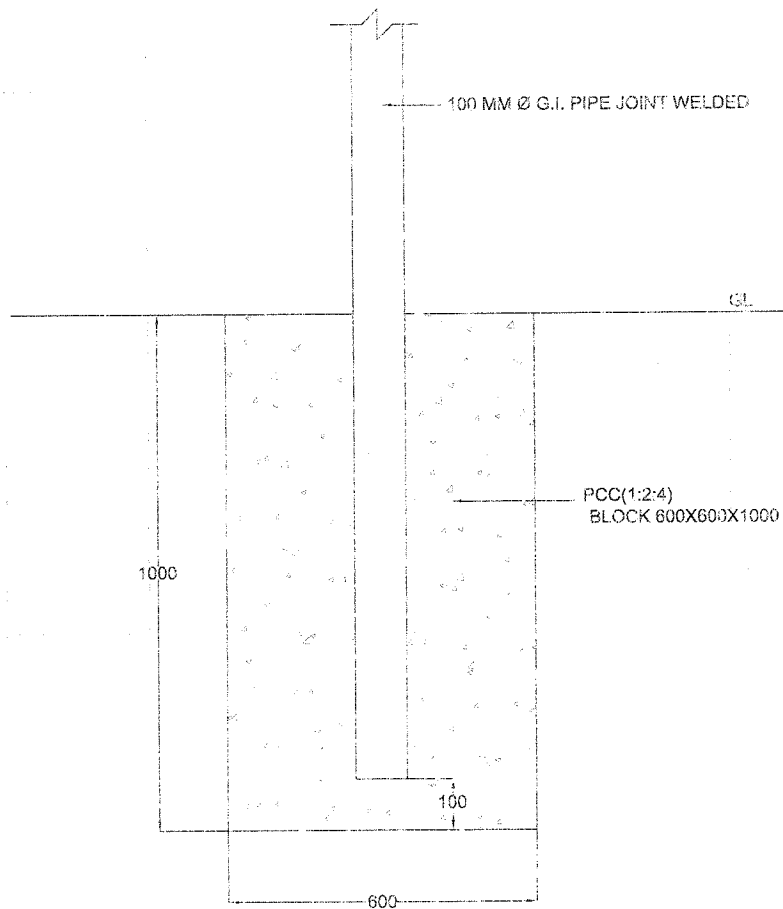
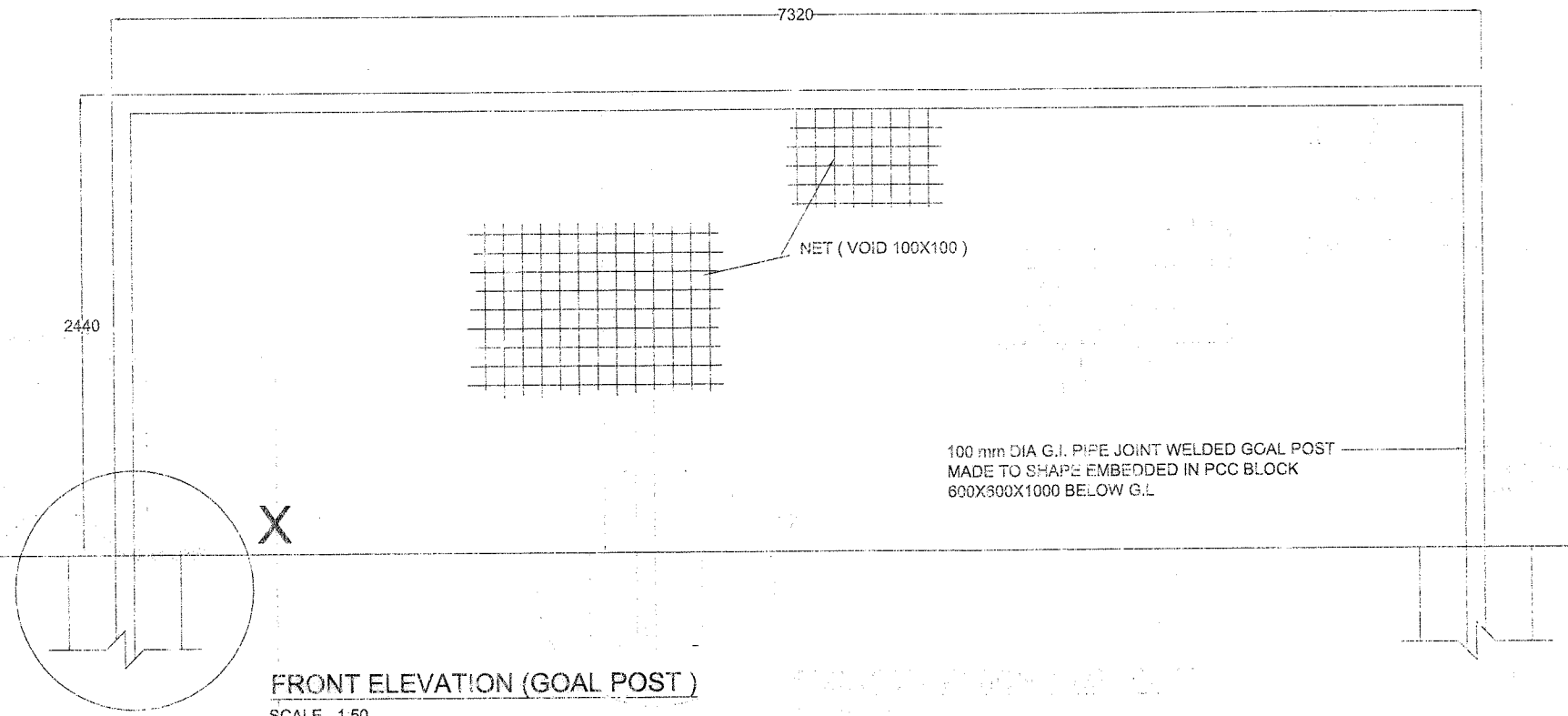
PLAN, SECTION AT 'A-A' & DETAIL AT 'Y' & 'X'

DATE	09-03-2015	CHIEF ENGINEER JODHPUR ZONE	SHT NO
DRN			1
TCD			1
CKD			
SCALE AS SHOWN/REF DRG NO : CEJZ / TD / 48			

 AAD (ARCH)	 (RC SWAIN) LT COL SR ARCH FOR CHIEF ENGINEER
 (LATHA P NAIR) JT DIR (ARCH)	

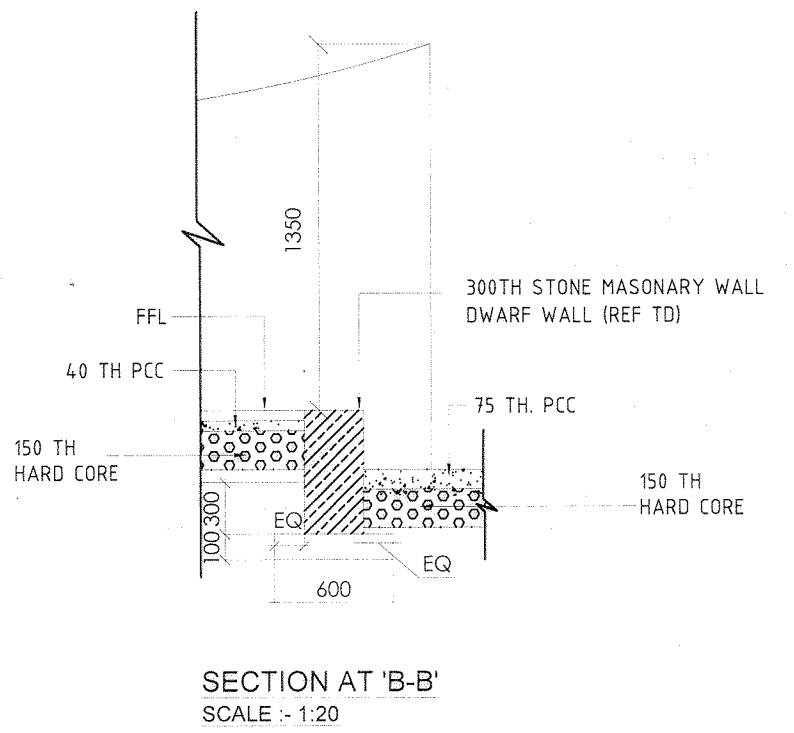
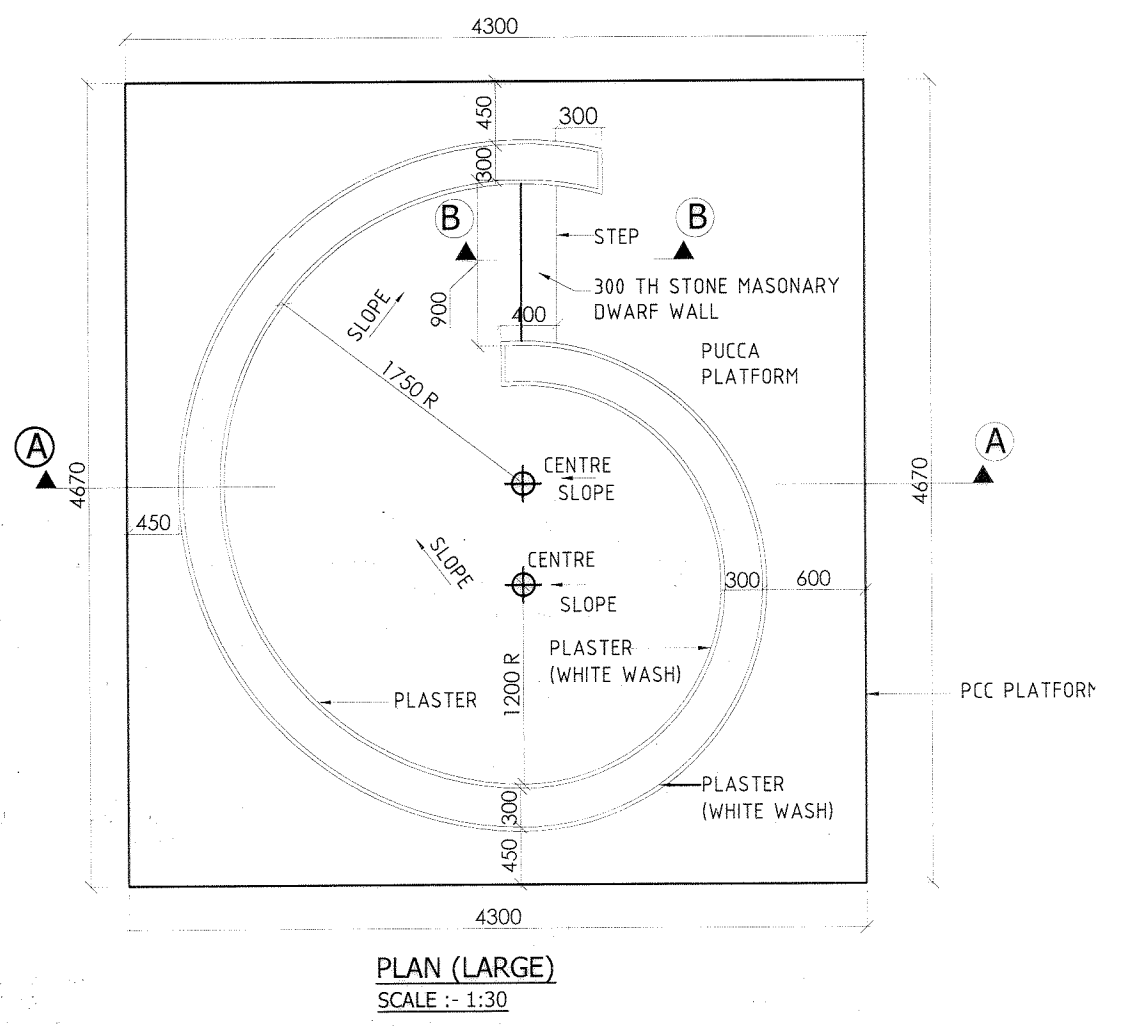
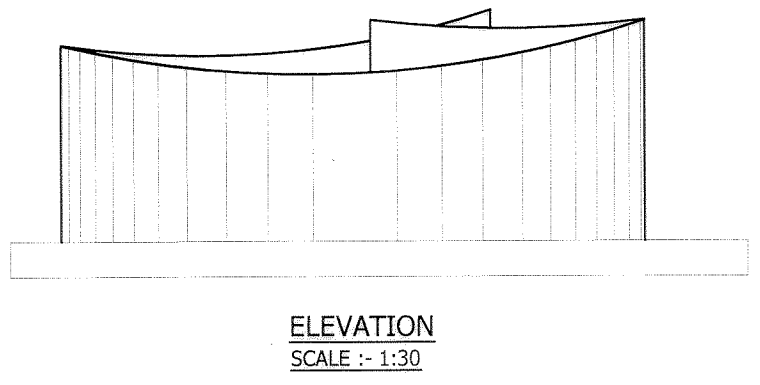
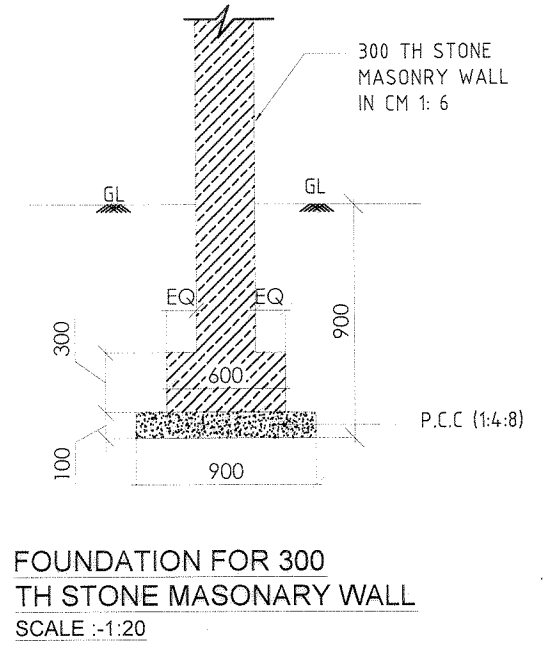
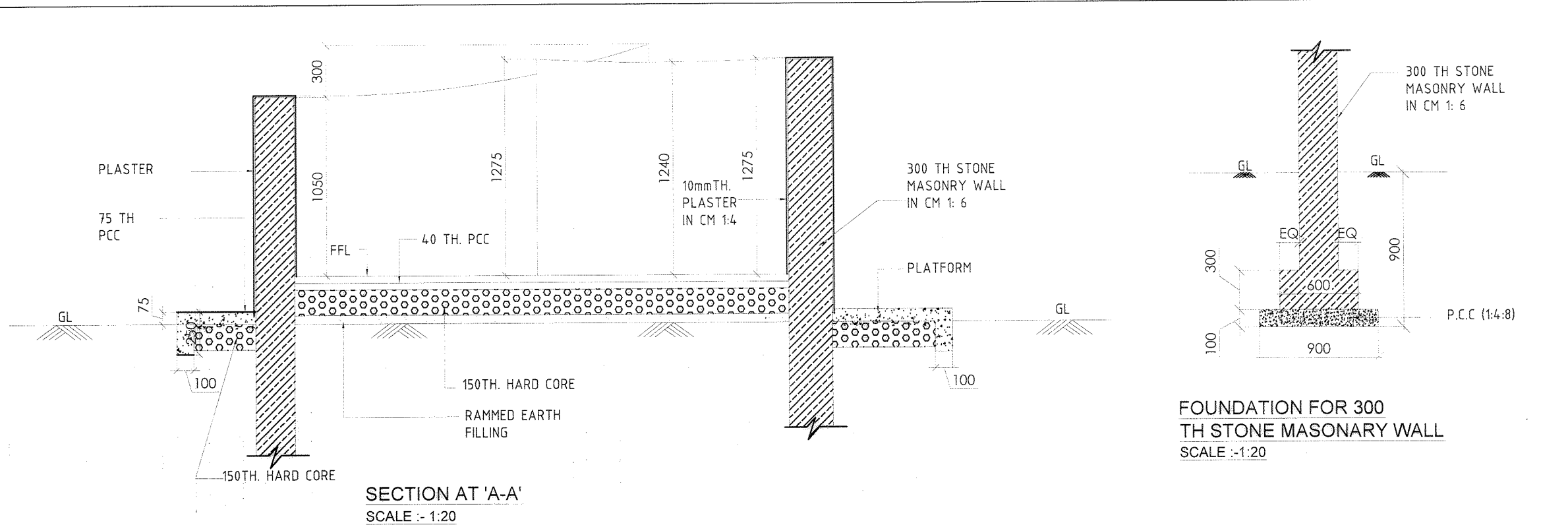


PLAN (FOOTBALL GROUND)
SCALE - 1:100



DETAIL AT -X
SCALE - 1:50

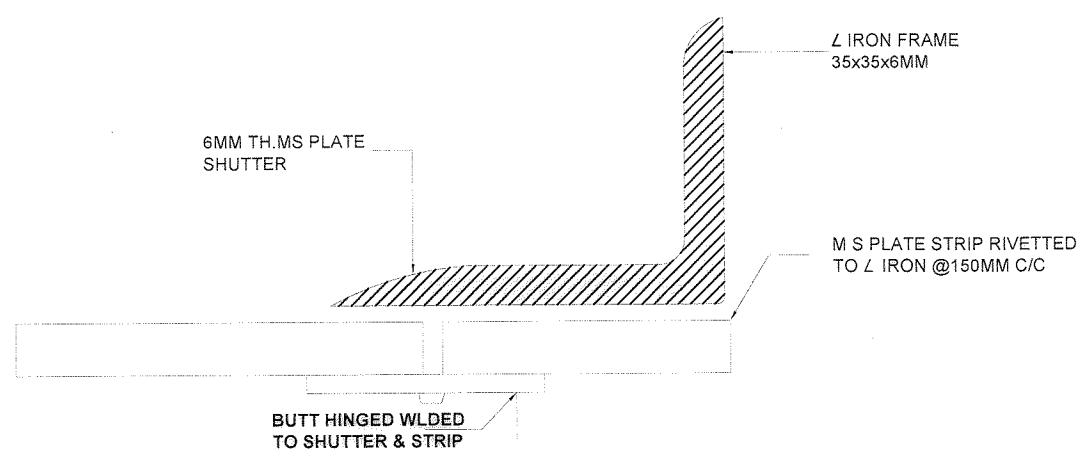
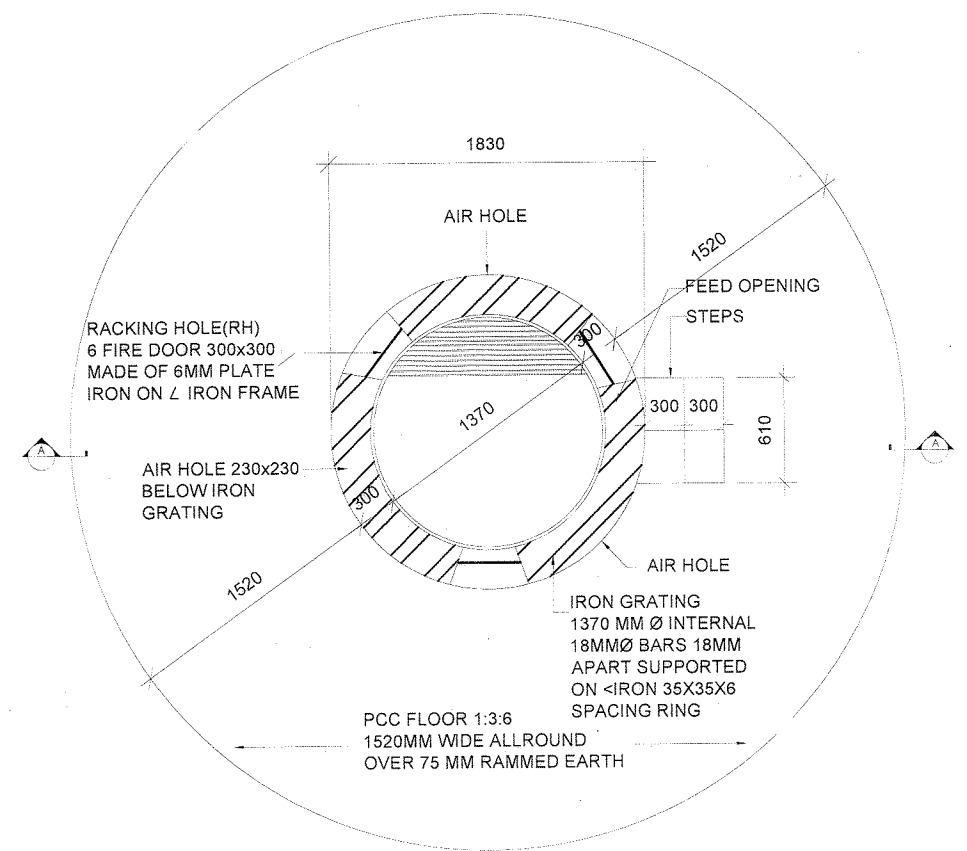
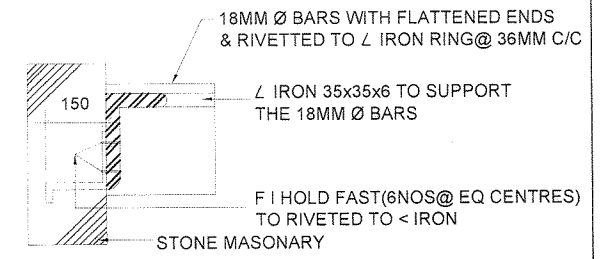
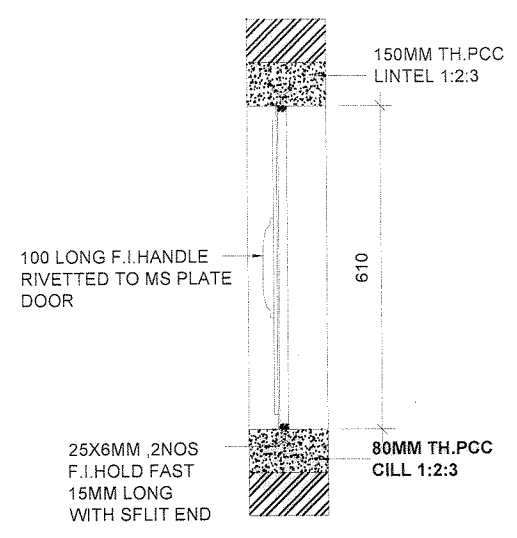
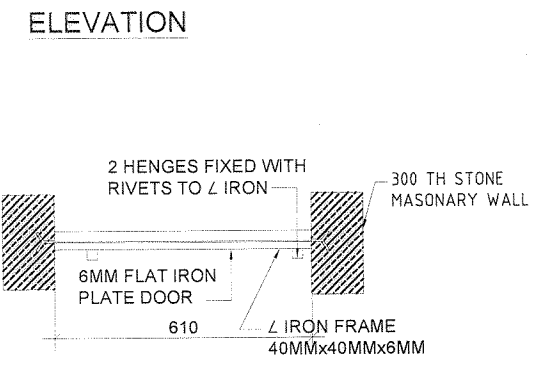
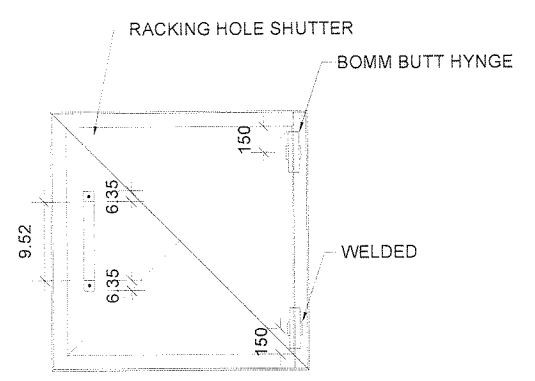
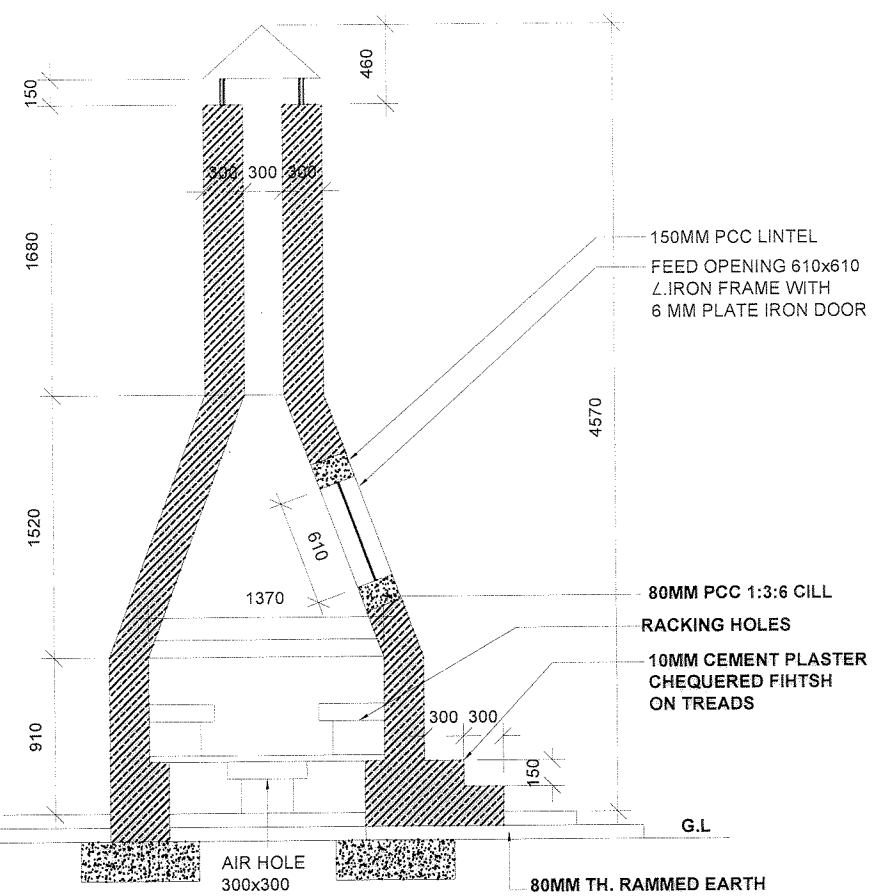
S. NO.	DATE	DESCRIPTIONS	INITIALS
REVISIONS			
FOOTBALL GROUND			
PLAN, ELEVATION & DETAILS			
DATE	09.03.2015	CHIEF ENGINEER JODHPUR ZONE	SHT NO
DRN			1
TCD			1
CKD			
SCALE	N T S	DRG NO: CEJZ / TD / 49	
<i>(Signature)</i> (LATHA SINGH) JT DIR. (ARCH)		<i>(Signature)</i> (R.C. SWAIN) LT. CIVIL SR. ARCH FOR CHIEF ENGINEER	



NOTE:
1. CONTRACTOR TO CHECK & VERIFY ALL DIMENSIONS BEFORE TAKING EXECUTION IN HAND.
2. FIGURED DIMENSIONS SHALL BE FOLLOWED.
3. ALL DIMENSIONS ARE GIVEN IN MILLIMETERS UNLESS OTHERWISE SPECIFIED.

S. NO.	DATE	DESCRIPTIONS	INITIALS
REVISIONS			
GARBAGE BIN			
PLAN, ELEVATION, SECTION & DETAILS			
DATE	09. 03. 2015	CHIEF ENGINEER JODHPUR ZONE	SHT NO
DRN			1
TCD			1
CKD			
SCALE	N T S	DRG NO: CEJZ / TD / 50	
 AAD (ARCH)		 (RC SWAIN) LT COL SR ARCH FOR CHIEF ENGINEER	
 (LATHA P NAIR) JT DIR (ARCH)			

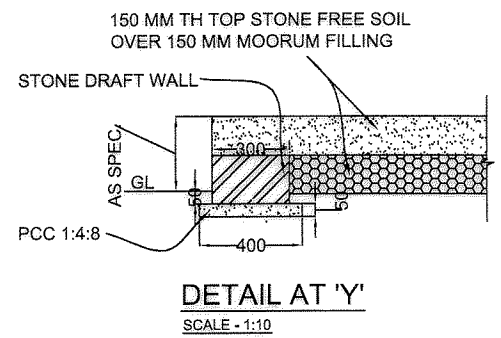
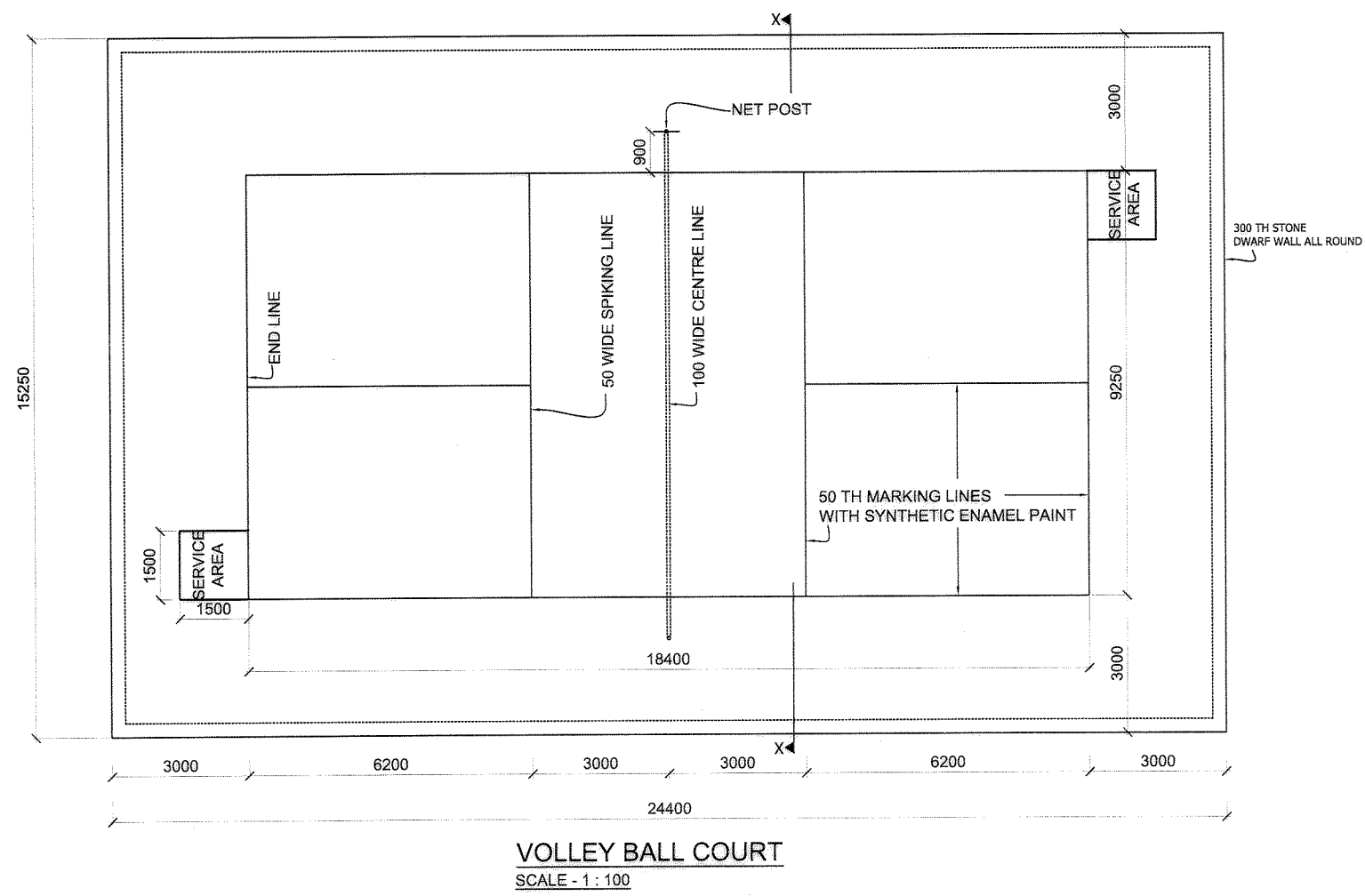
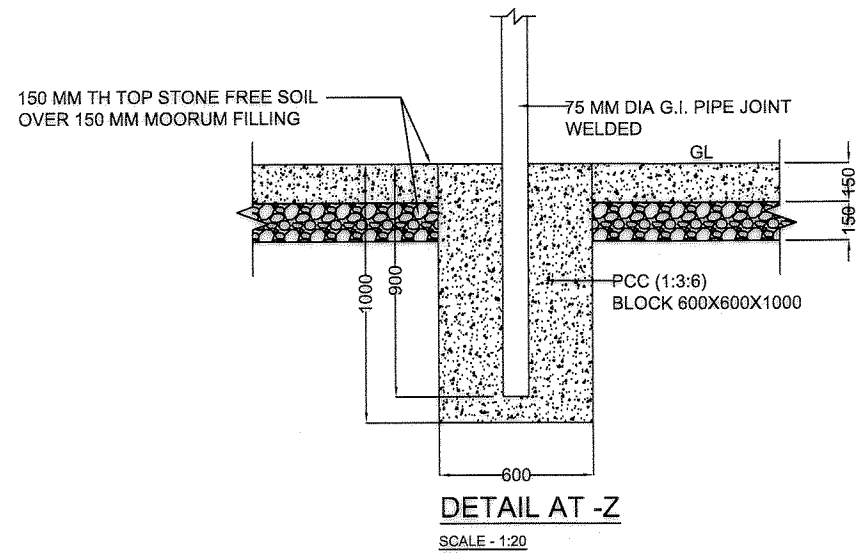
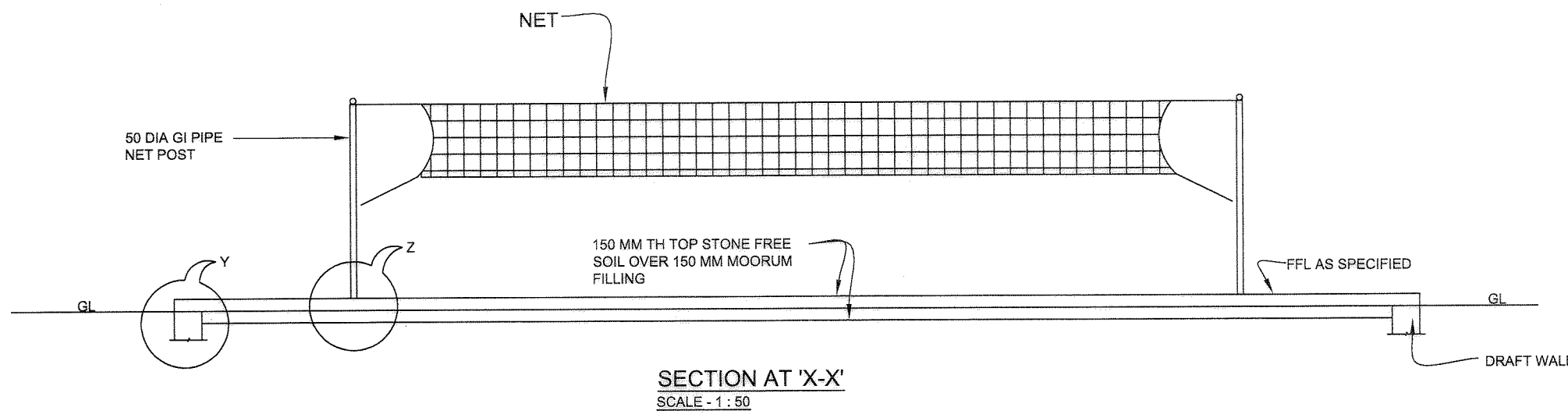
- NOTE:
1. CONTRACTOR TO CHECK & VERIFY ALL DIMENSIONS BEFORE TAKING EXECUTION IN HAND.
 2. FIGURED DIMENSIONS SHALL BE FOLLOWED.
 3. ALL DIMENSIONS ARE GIVEN IN MILLIMETERS UNLESS OTHERWISE SPECIFIED.



S. NO.	DATE	DESCRIPTIONS	INITIALS
REVISIONS			
INCINERATOR			
PLAN, ELEVATIONS & OTHER DETAILS			
DATE	09.03.2015	CHIEF ENGINEER	SHT NO
DRN		JODHPUR	1
TCD		ZONE	1
CKD			
SCALE	N T S	DRG NO: CEJZ / TD / 51	

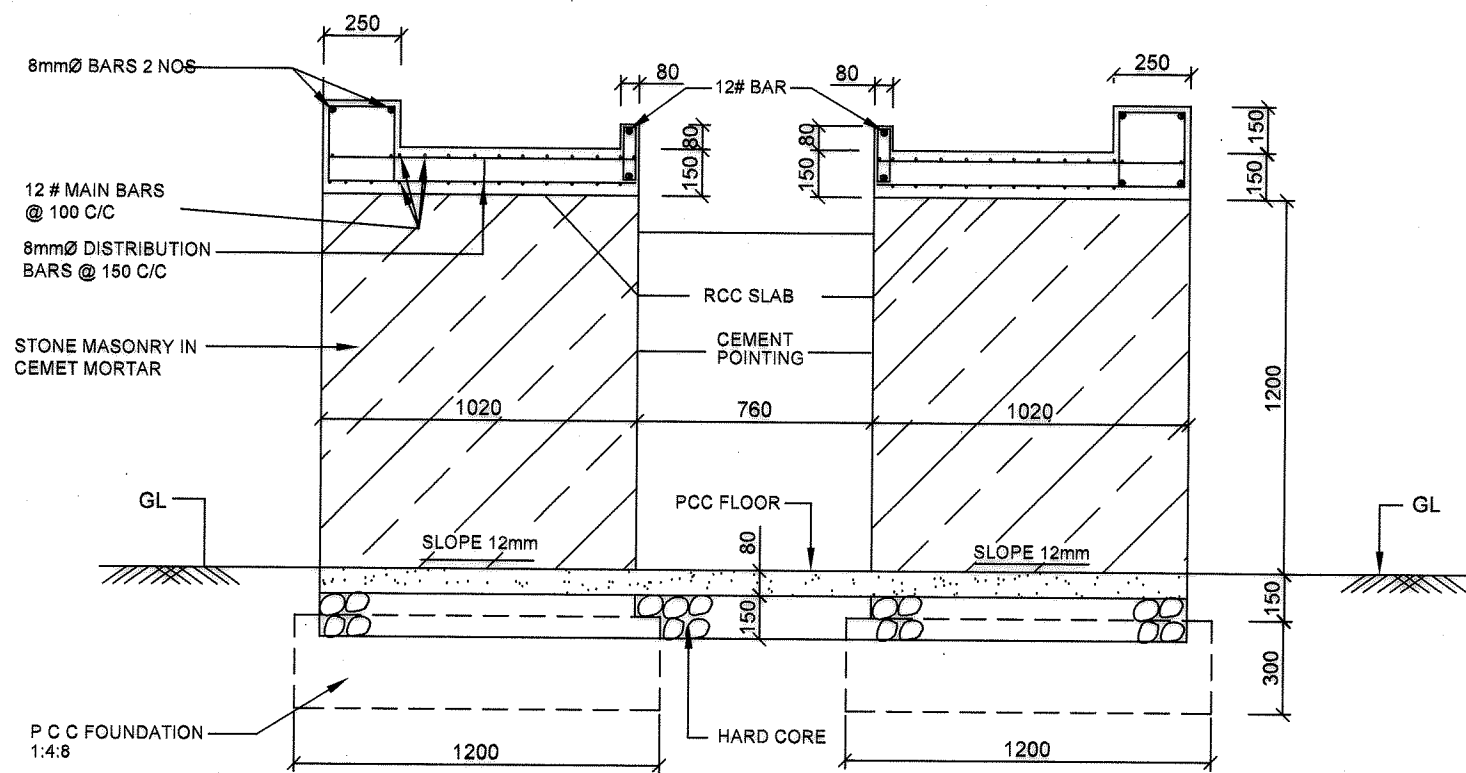
AAD (ARCH)

(RC SWAIN)
 LT COL
 SR ARCH
 FOR CHIEF ENGINEER

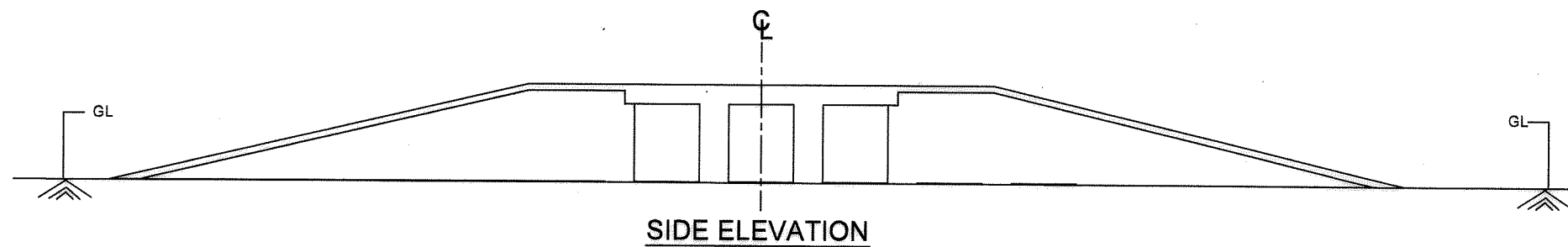


- NOTE :-
1. CONTRACTOR TO CHECK & VERIFY ALL DIMENSIONS BEFORE TAKING EXECUTION IN HAND.
 2. FIGURED DIMENSIONS SHALL BE FOLLOWED.
 3. ALL DIMENSIONS ARE GIVEN IN MILLIMETERS UNLESS OTHERWISE SPECIFIED.

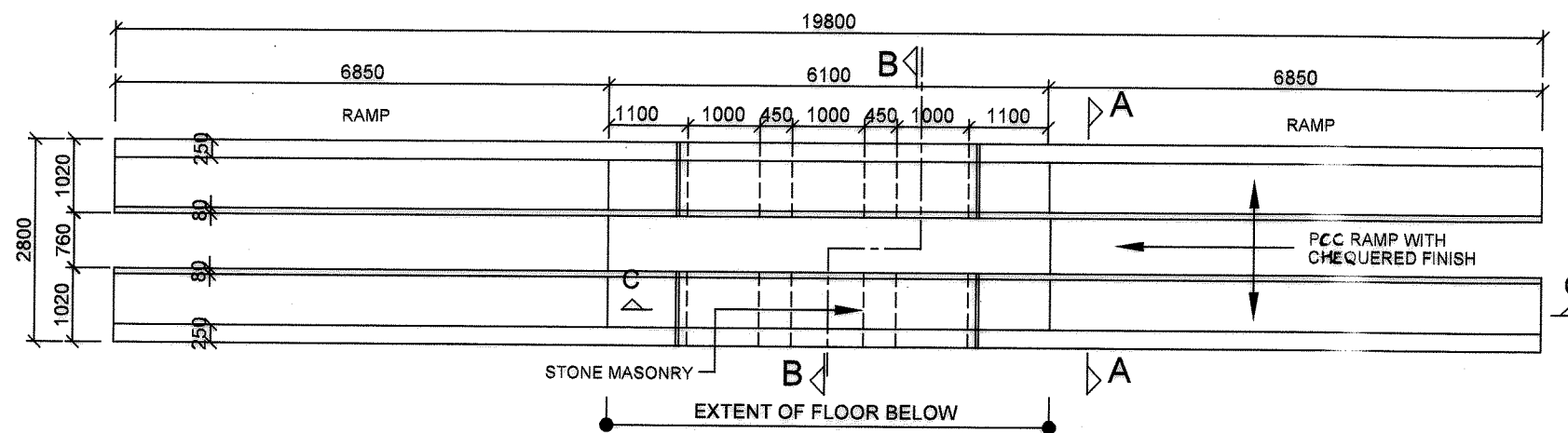
S. NO.	DATE	DESCRIPTIONS	INITIALS
REVISIONS			
VOLLEY BALL GROUND			
PLAN, SECTION & DETAILS			
DATE	09.03.2015	CHIEF ENGINEER	SHT NO
DRN		JODHPUR	1
TCD		ZONE	1
CKD			
SCALE	N T S	DRG NO: CEJZ / TD / 52	
 AAD (ARCH)		 (RC SWAIN) LT COL SR ARCH FOR CHIEF ENGINEER	
 (LATHA P NAIR) JT DIR (ARCH)			



SECTION ON 'B-B'



SIDE ELEVATION

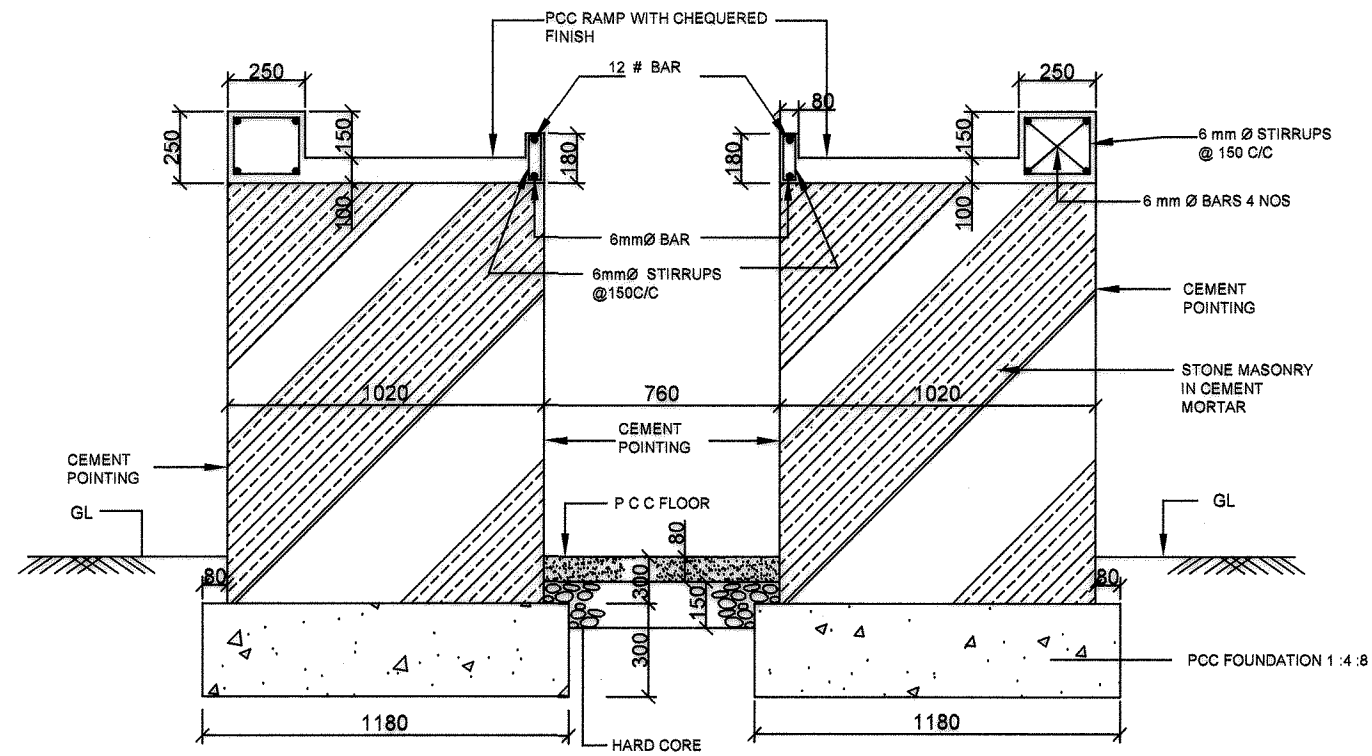


PLAN

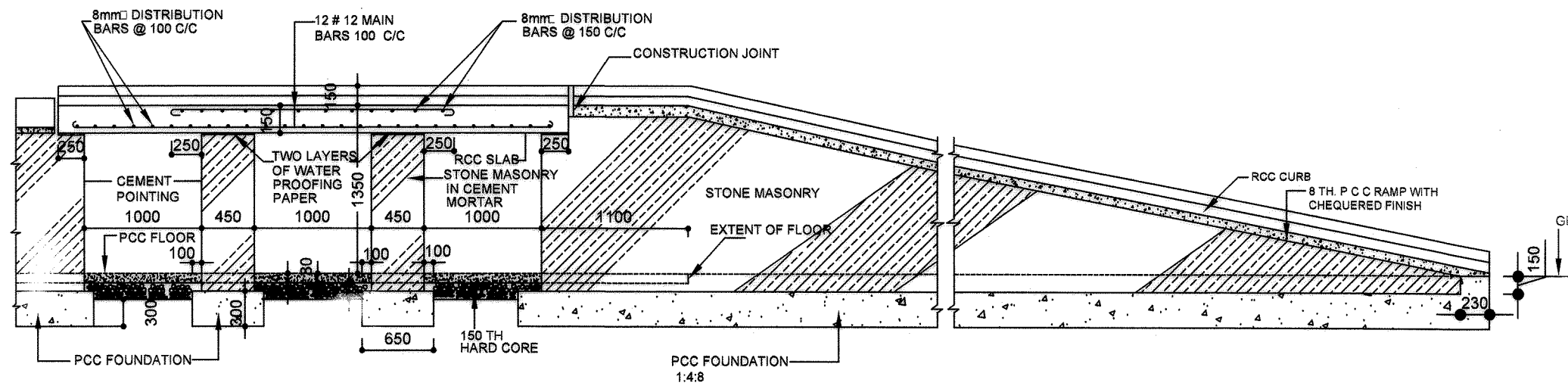
NOTES

- 1 CONTRACTOR TO CHECK & VERIFY ALL DIMENSIONS BEFORE TAKING EXECUTION OF THE WORK.
- 2 DIMENSIONS GIVEN ARE IN MILLIMETERES UNLESS OTHERWISE STATED
- 3 FIGURED DIMENSIONS SHALL BE FOLLOWED.
- 4 19 MM TH SMOOTH CEMENT PLASTER WITH TWO LAYERS OF PROOFING PAPER ABOVE SHALL BE PROVIDED ON WALL UNDER THE BEARING OF THE SLABS
- 5 12 MM CLEAR COVER FROM THE BOTTOM MAIN REINF. AND 25 MM CLEAR COVER OVER OF TOP OF MAIN REINF. TO BE PROVIDED
- 6 CURBS INTERNAL PORTION TO BE CAST MONOLITHIC WITH RCC SLABS AND CURBS IN SLOPING PORTIONS TO BE CAST MONOLITHIC WITH THE PCC ON SLOPING PORTION OF RAMP
- 7 THE CONSTRUCTION JOINT TO BE PROVIDED WITH TWO LAYERS OF WATER PROOFING PAPER

S. NO	DATE	DESCRIPTIONS	INITIALS
REVISIONS			
MASONRY RAMP (SINGLE)			
(STONE MASONRY)			
PLAN, ELEVATION & SECTION			
DATE	09 MAR 2015	CHIEF ENGINEER	SHT NO
DRN		JODHPUR	1
TCD		ZONE	4
CKD			
SCALE	N T S	DRG NO: CEJZ / TD / 53	
 (LATHA P NAIR) JT DIR (ARCH)		 (RC SWAIN) LT COL SR ARCH FOR CHIEF ENGINEER	



SECTION ON 'A-A'



LONGITUDINAL SECTION OF RAMP ON 'C-C'

NOTES

1. FOR NOTES REFER SHT. NO. 1/4 OF THIS DRG.

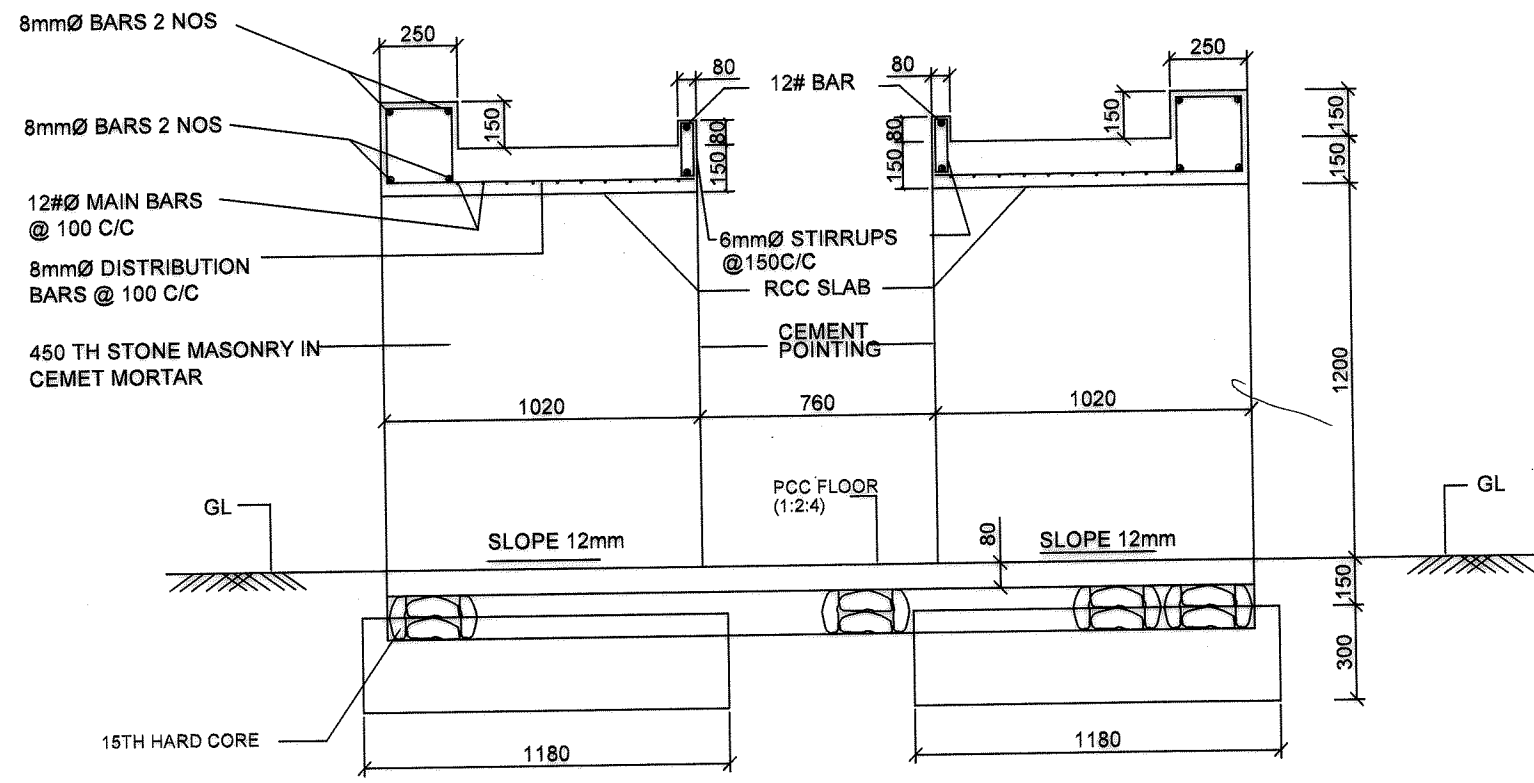
S. NO.	DATE	DESCRIPTIONS	INITIALS
REVISIONS			

**MASONRY RAMP (SINGLE)
(STONE MASONRY)**

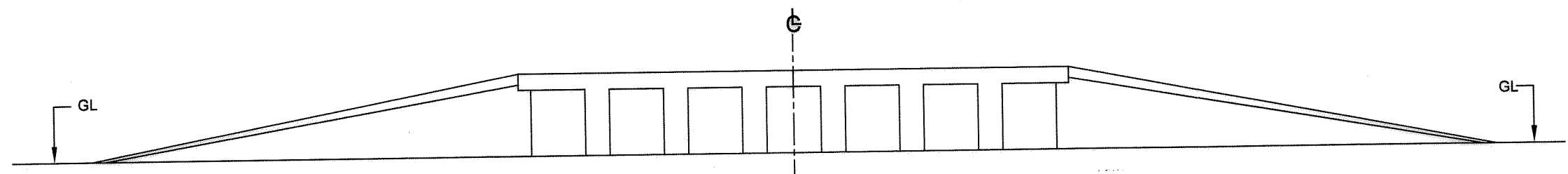
SECTIONS

DATE	9 MAR 2015	CHIEF ENGINEER	SHT NO
DRN		JODHPUR	2
TCD		ZONE	4
CKD			
SCALE	N T S	DRG NO: CEJZ / TD / 53	

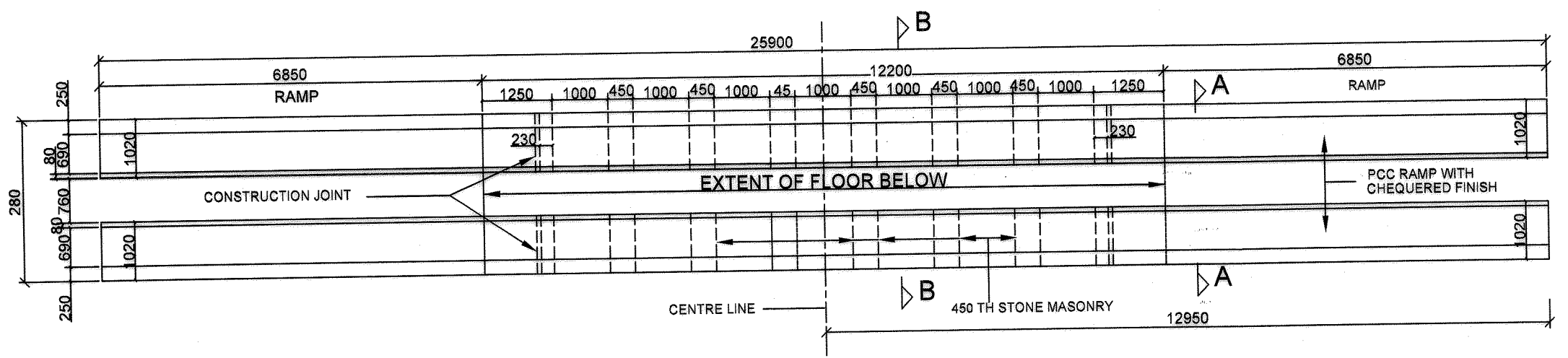
<i>(Signature)</i> AAD (ARCH)	<i>(Signature)</i> SO I (DESIGN)	<i>(Signature)</i> (RC SWAIN) LT COL SR ARCH FOR CHIEF ENGINEER
(LATHA P NAIR) JT DIR. (ARCH)		



SECTION B-B



SIDE ELEVATION

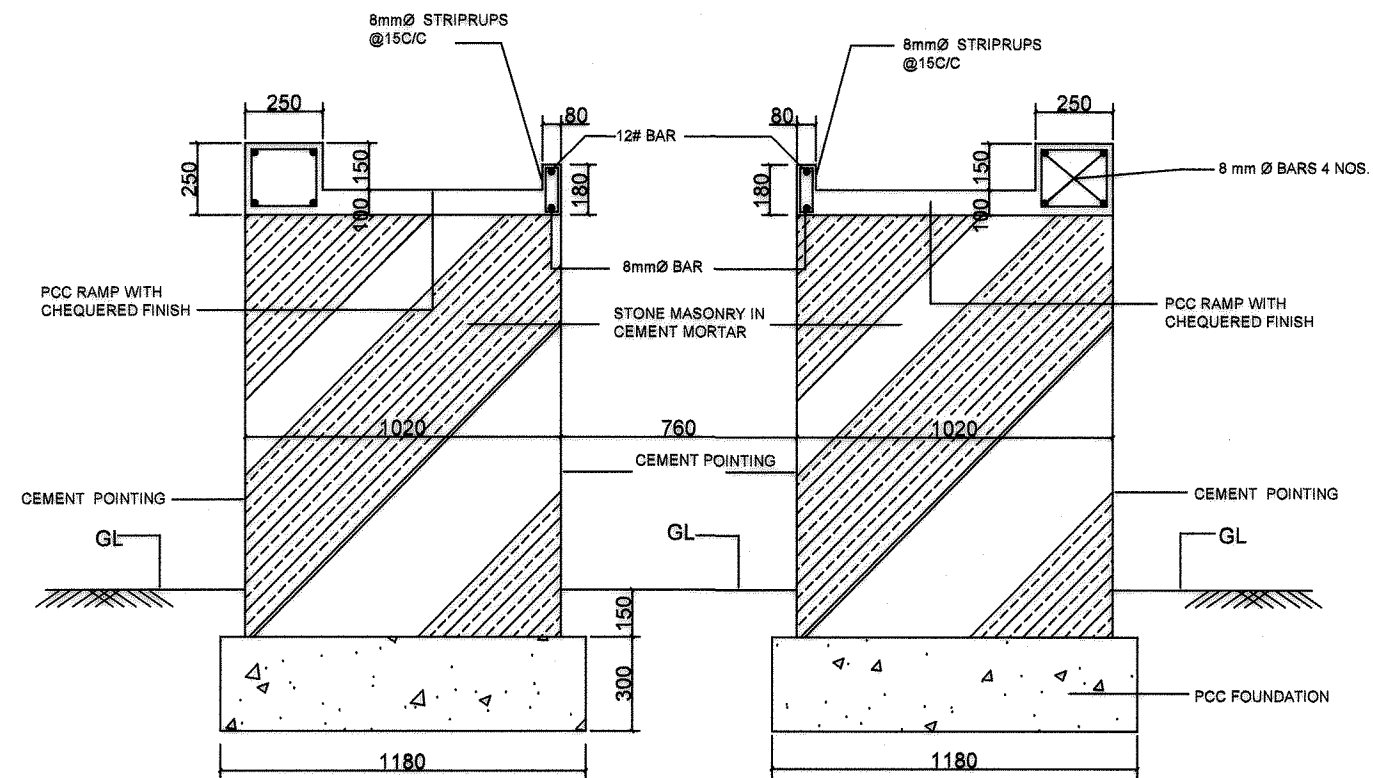


PLAN

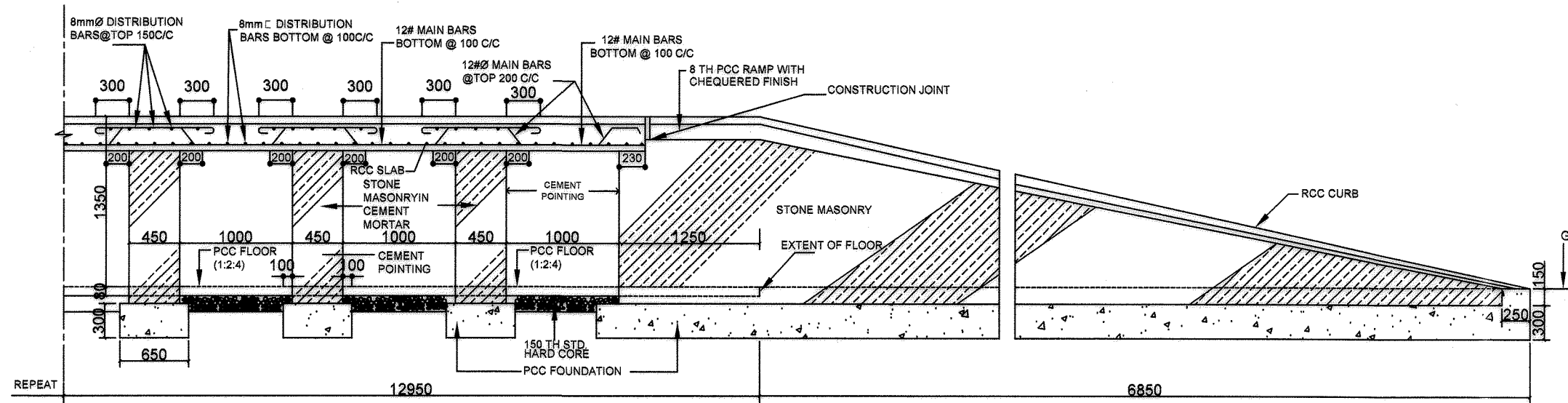
NOTES

- 1 CONTRACTOR TO CHECK & VERIFY ALL DIMENSIONS BEFORE EXECUTION OF THE WORK.
- 2 DIMENSIONS GIVEN ARE IN CENTIMETERS UNLESS OTHERWISE STATED.
- 3 FIGURED DIMENSIONS SHALL BE FOLLOWED
- 4 ALL EXPOSED STONE MASONRY WORK IN PILLARS / WALLS SHALL BE FINISHED WITH KEYS POINTING .
- 5 ALL EXPOSED RCC WORK IN SLABS, PLANS SHALL BE FAIR FINISHED IN CM NOT EXCEEDING 5 MM THICK .

S. NO.	DATE	DESCRIPTIONS	INITIALS
REVISIONS			
MASONRY RAMP (DOUBLE) (STONE MASONRY)			
PLAN, ELEVATION & SECTION			
DATE	9 MAR 2015	CHIEF ENGINEER	SHT NO
DRN		JODHPUR	3
TCD		ZONE	4
CKD			
SCALE	N T S	DRG NO: CEJZ / TD / 53	
 (LATHA P. NAIR) JT DIR. (ARCH)		 (RC SWAIN) LT COL SR ARCH FOR CHIEF ENGINEER	



SECTION A-A



LONGITUDINAL SECTION OF HALF RAMP

NOTES

- 1 CONTRACTOR TO CHECK & VERIFY ALL DIMENSIONS BEFORE EXECUTION OF THE WORK.
- 2 DIMENSIONS GIVEN ARE IN CENTIMETERS UNLESS OTHERWISE STATED.
- 3 FIGURED DIMENSIONS SHALL BE FOLLOWED
- 4 ALL EXPOSED STONE MASONRY WORK IN PILLARS / WALLS SHALL BE FINISHED WITH KEYS POINTING .
- 5 ALL EXPOSED RCC WORK IN SLABS, PLANS SHALL BE FAIR FINISHED IN CM NOT EXCEEDING 5 MM THICK .

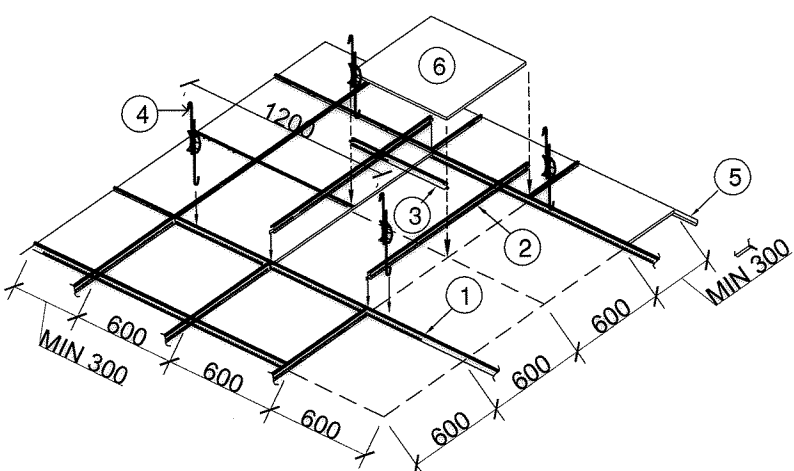
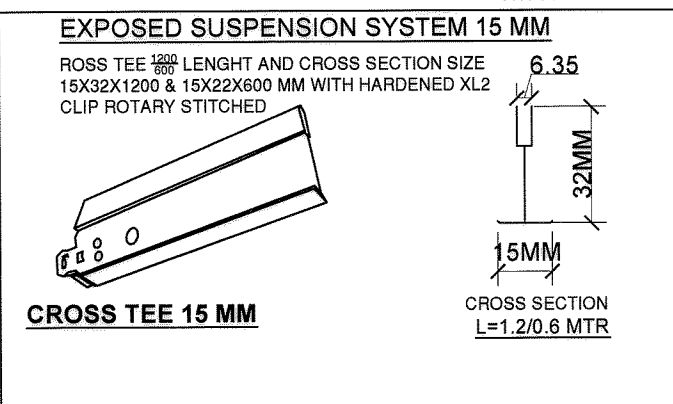
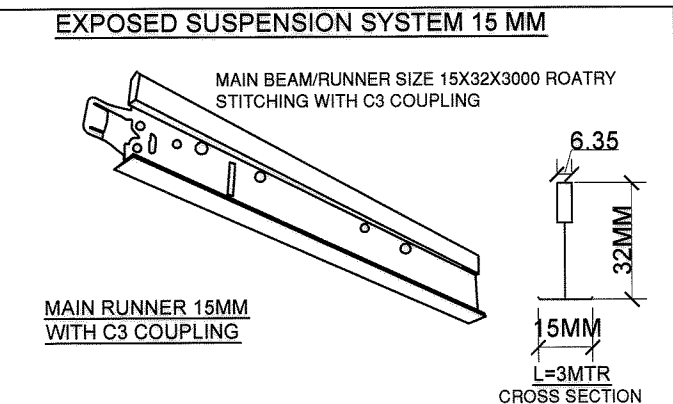
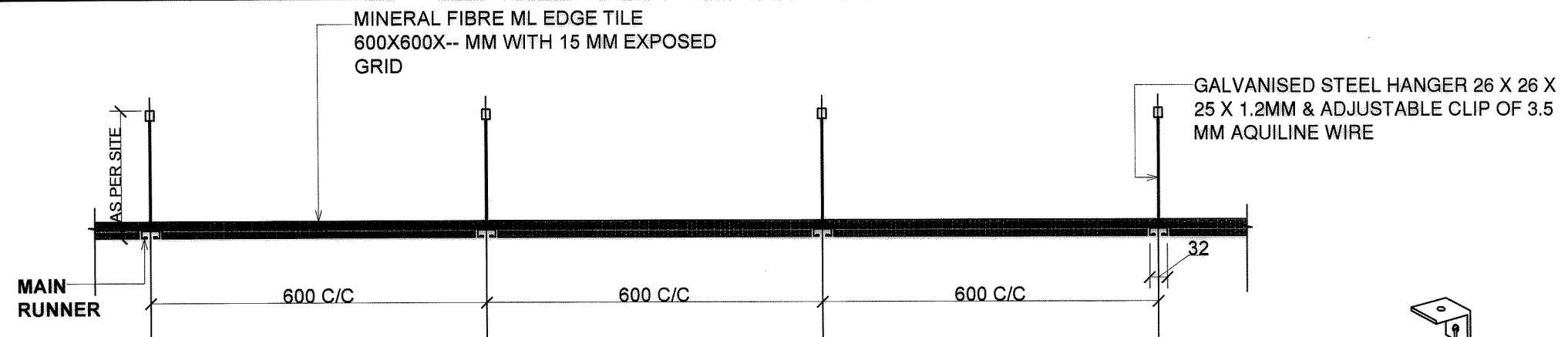
S. NO	DATE	DESCRIPTIONS	INITIALS
REVISIONS			

**MASONRY RAMP (DOUBLE)
(STONE MASONRY)**

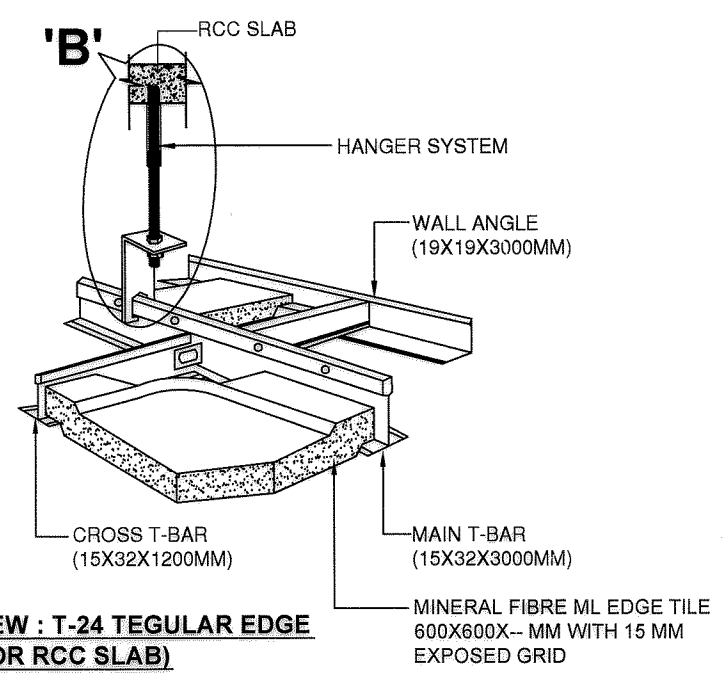
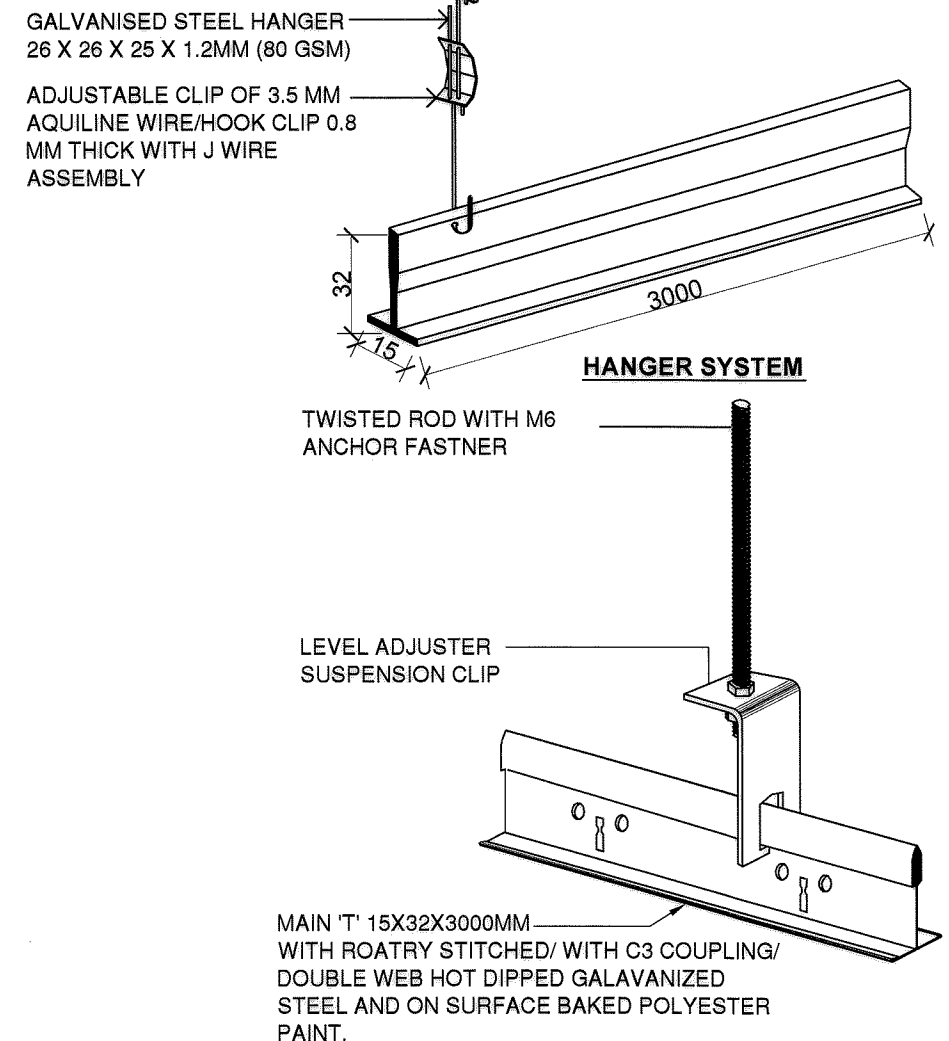
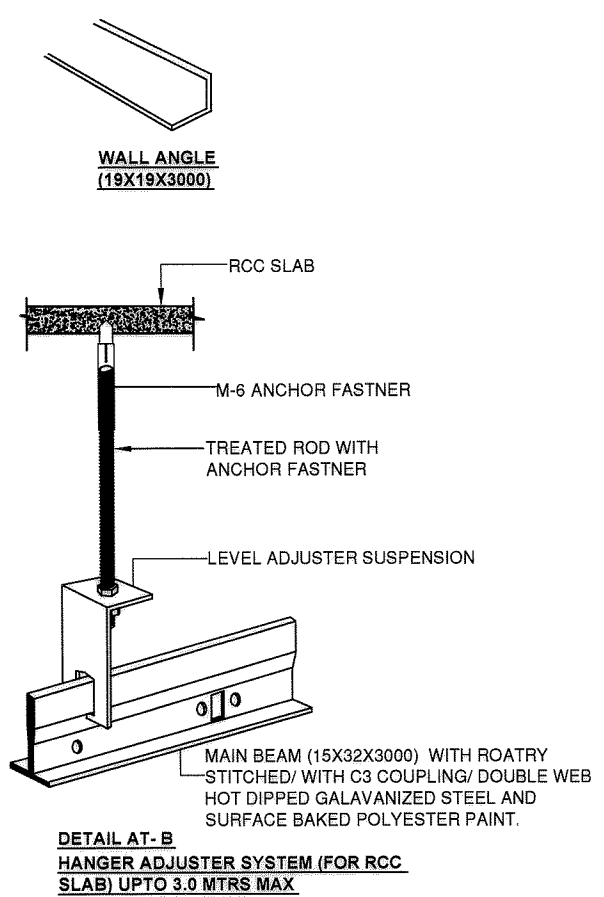
SECTIONS

DATE	9 MAR 2015	CHIEF ENGINEER	SHT NO
DRN		JODHPUR	4
TCD		ZONE	4
CKD			
SCALE	N T S	DRG NO: CEJZ / TD / 53	

(LATHA P WAIR) JT DIR (ARCH)	SO I (DESIGN)	(RC SWAIN) LT COL SR ARCH FOR CHIEF ENGINEER



- 1= MAIN RUNNER
- 2= LONG CROSS TEE 1200
- 3= SHORT CROSS TEE 600
- 4= HANGER
- 5= PERIMETER
- 6= MINERAL FIBRE ML EDGE TILE 600X600X-- MM WITH 15 MM EXPOSED GRID



NOTES:-

1. CONTRACTOR TO CHECK AND VERIFY ALL DIMENSIONS BEFORE EXECUTION OF THE WORK.
2. FIGURED DIMENSIONS SHALL BE FOLLOWED.
3. ALL DIMENSIONS ARE GIVEN IN MILLIMETRES UNLESS OTHERWISE SPECIFIED.
4. PROVIDING & FIXING OF MINERAL FIBRE ACOUSTICAL SUSPENDED CEILING SYSTEM WITH MINERAL FIBRE (MICROLOOK) EDGE TILES WITH 15MM EXPOSED GRID.

THE TILES SHOULD HAVE HUMIDITY RESISTANCE (RH) OF 99%, LIGHT REFLECTANCE ≥84%, THERMAL CONDUCTIVITY K = 0.052 - 0.057 W/M K, COLOUR WHITE, FIRE PERFORMANCE UK CLASS 0 / CLASS 1 (BS 476 PT - 6 & 7) IN MODULE SIZE OF 600 X 600MM (THICKNESS AND NRC (SOUND ABSORPTION) AS PER APPROVAL) WITH BIO BLOCK COATING ON THE FACE OF THE TILE, SUITABLE FOR GREEN BUILDING APPLICATION, WITH RECYCLED CONTENT OF 35 - 38%. THE TILE SHALL BE LAID ON GRID SYSTEM WITH WAB HEIGHT 38MM AND 15 MM WIDE T - SECTION FLANGES COLOUR WHITE HAVING ROTARY STITCHING ON ALL T SECTIONS I.E. THE MAIN RUNNER, 1200 MM & 600 MM CROSS TEES WITH A WEB HEIGHT OF 38MM AND A LOAD CARRYING CAPACITY OF 14 KGS/M2. THE T SECTIONS HAVE A GALVANIZING OF 90 GRAMS PER M2 .THE TILE & GRID SYSTEM USED TOGETHER SHOULD CARRY A 15 YEAR WARRANTY.

INSTALLATION: TO COMPRISE MAIN RUNNER SPACED AT 1200MM CENTRES SECURELY FIXED TO THE STRUCTURAL SOFFIT USING SUSPENSION SYSTEM (SPECIFICATIONS BELOW) AT 1200MM MAXIMUM CENTRE. THE FIRST/LAST SUSPENSION SYSTEM AT THE END OF EACH MAIN RUNNER SHOULD NOT BE GREATER THAN 450MM FROM THE ADJACENT WALL. FLUSH FITTING 1200MM LONG CROSS TEES TO BE INTERLOCKED BETWEEN MAIN RUNNERS AT 600MM CENTRE TO FORM 1200 X 600 MM MODULE. CUT CROSS TEES LONGER THAN 600MM REQUIRE INDEPENDENT SUPPORT. 600 X 600MM MODULE TO BE FORMED BY FITTING 600MM LONG FLUSH FITTING CROSS TEES CENTRALLY BETWEEN THE 1200 MM CROSS TEES. PERIMETER TRIM TO BE WALL ANGLES OF SIZE 3000X19X19MM, SECURED TO WALLS AT 450 MM MAXIMUM CENTRES.

SUSPENSION SYSTEM ACCESSORIES CONSISTING OF M6 ANCHOR FASTENERS WITH VERTICAL HANGERS MADE OF GALVANISED STEEL OF SIZE 26 X 26 X 25 X 1.2MM WITH A GALVANISED THICKNESS OF 80GSM, A PRE STRAIGHTENED HANGER WIRE OF DIA - 2.88 MM OF 1.83 M LENGTH, THICKNESS OF 80GSM AND A TENSILE STRENGTH OF 344-413 MPA, ALONG WITH ADJUSTABLE HOOK CLIPS OF 0.8MM THICK, GALVANISED SPRING STEEL FOR 2.88 MM WITH A MINIMUM PULL STRENGTH OF 110 KG. THE ADJUSTABLE CLIP ALSO CONSISTS OF A 3.5 MM AQUILINE WIRE TO BE USED WITH THE MAIN RUNNER.

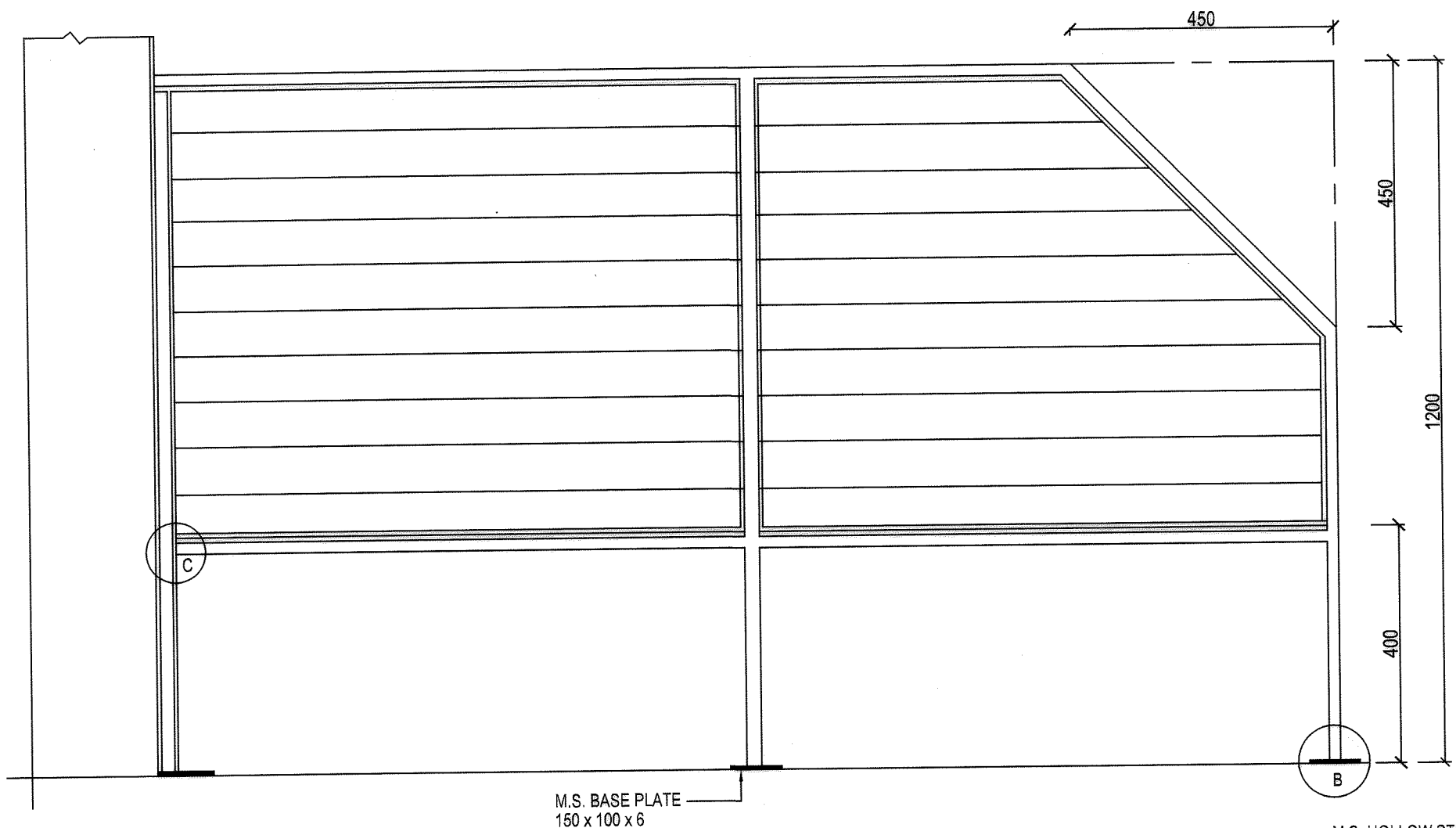
NOISE REDUCTION COEFFICIENT (NRC)		
NRC	THICKNESS	APPLICATION AREA
0.5	16 mm	CORRIDORS, OFFICES, CLASSROOMS, WAITING AREA, ETC
0.6	16 mm	CORRIDORS, OFFICES, CLASSROOMS, WAITING AREA, ETC
0.7	20 mm	BIG OFFICES AND CLASSROOMS, RECEPTION AREA, ETC
BIOGUARD	15 mm	CLEANROOM APPLICATION, ICU, BLOOD BANK, PATIENT ROOM, ETC

SL NO	DATE	DESCRIPTION	SIGN
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FIXING DETAIL OF MINERAL FIBRE FALSE CEILING

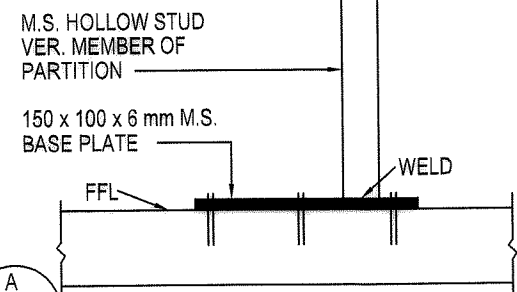
DATE	17-3-15	CHIEF ENGINEER JODHPUR ZONE	1/1
DRN			
TCD			
CKD			
SCALE	AS SHOWN	Ref drg NOs: CEJZ/TD/ 55	

(Signature)
 (R C SWAIN)
 LT COL
 SR ARCH
 FOR CHIEF ENGINEER

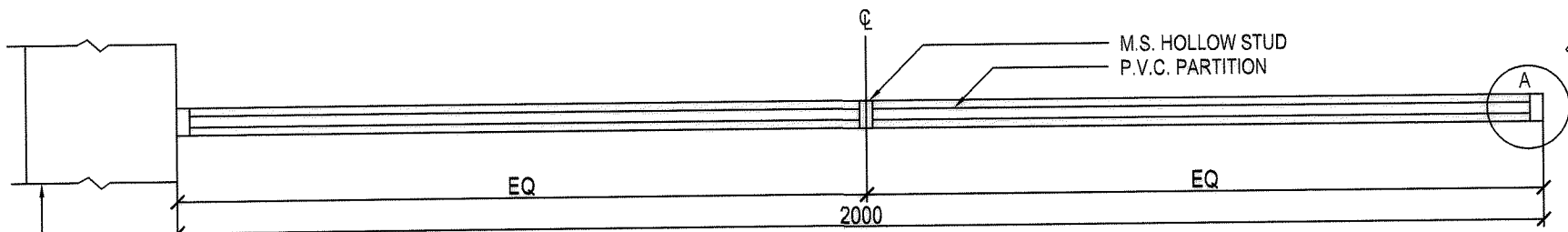


ELEVATION
SCALE :- 1 : 20

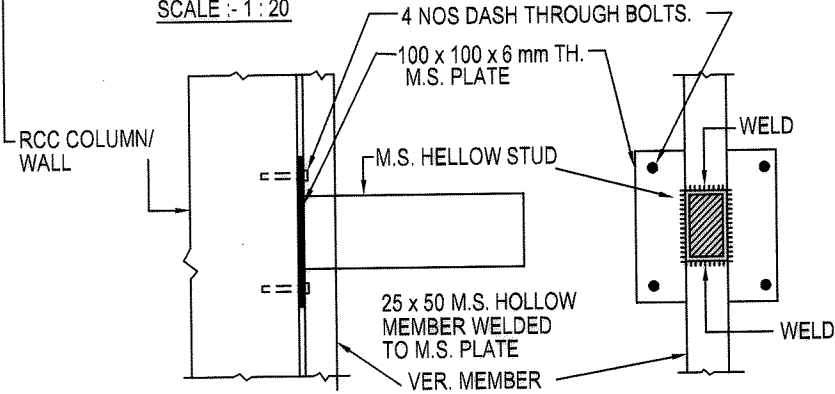
M.S. BASE PLATE
150 x 100 x 6



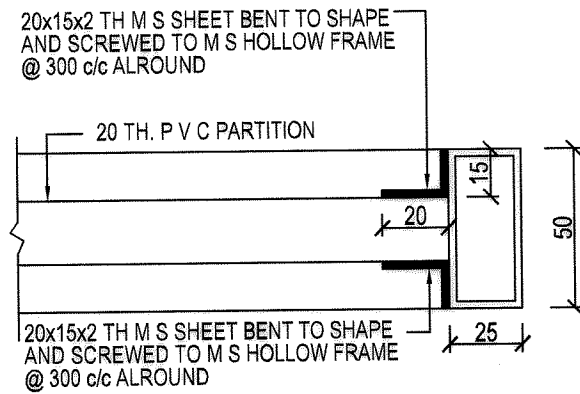
SECTION DETAIL - B
SCALE :- 1 : 5



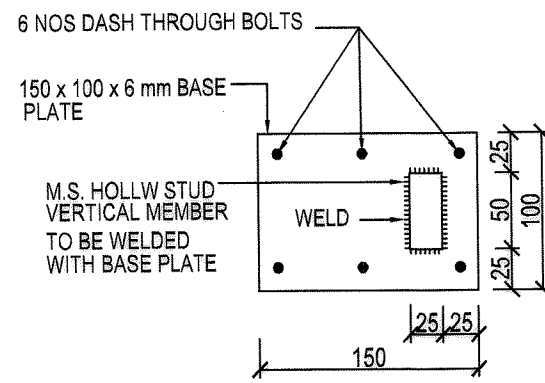
PLAN
SCALE :- 1 : 20



SECTION DETAIL AT - C
SCALE :- 1 : 5



PLAN DETAIL AT - A
SCALE :- 1 : 5



PLAN DETAIL AT - B
SCALE :- 1 : 5

SL. NO.

- NOTES**
1. CONTRACTOR TO CHECK AND VERIFY ALL DIMENSIONS BEFORE EXECUTION OF THE WORK.
 2. FIGURED DIMENSIONS SHALL BE FOLLOWED.
 3. ALL DIMENSIONS ARE GIVEN IN MILLIMETRES UNLESS OTHERWISE STATED.
 4. P V C PARTITION SHALL BE OF LIGHT CREAM COLOUR EITH FRAMES TO BE PAINTED IN DARK BROWN.
 5. FOR PVC PARTITION " SPUF-101 MULTI CHAMBER HOLLOW SECTION " OF ' SINTEX ' OR EQUIVALENT MAY BE USED.

S.NO	DATE	DESCRIPTIONS	SIGN
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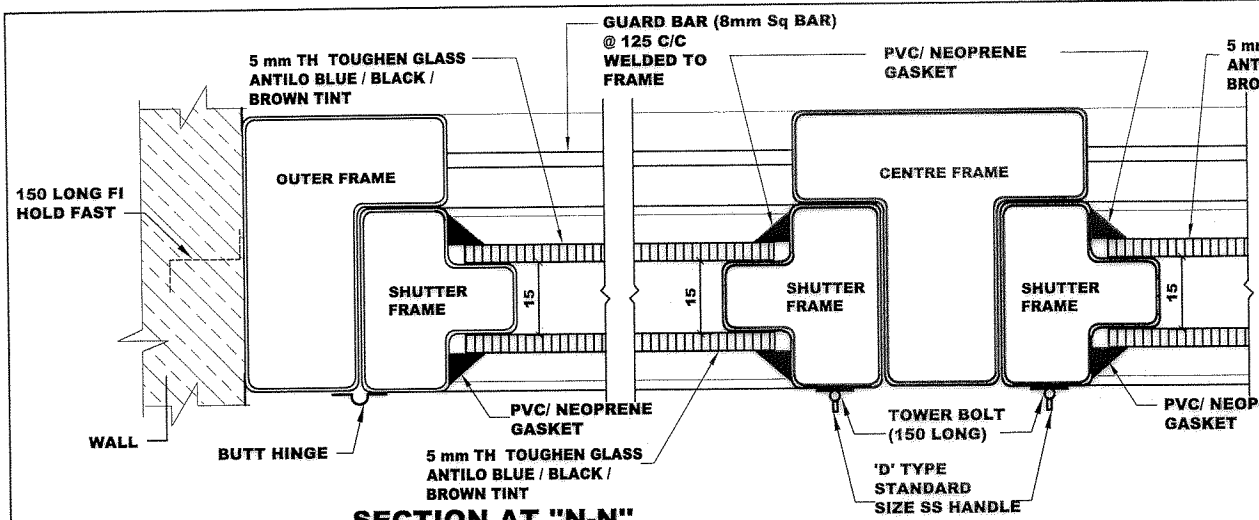
REVISION

DETAIL OF PVC PARTITION IN SM BARRACK

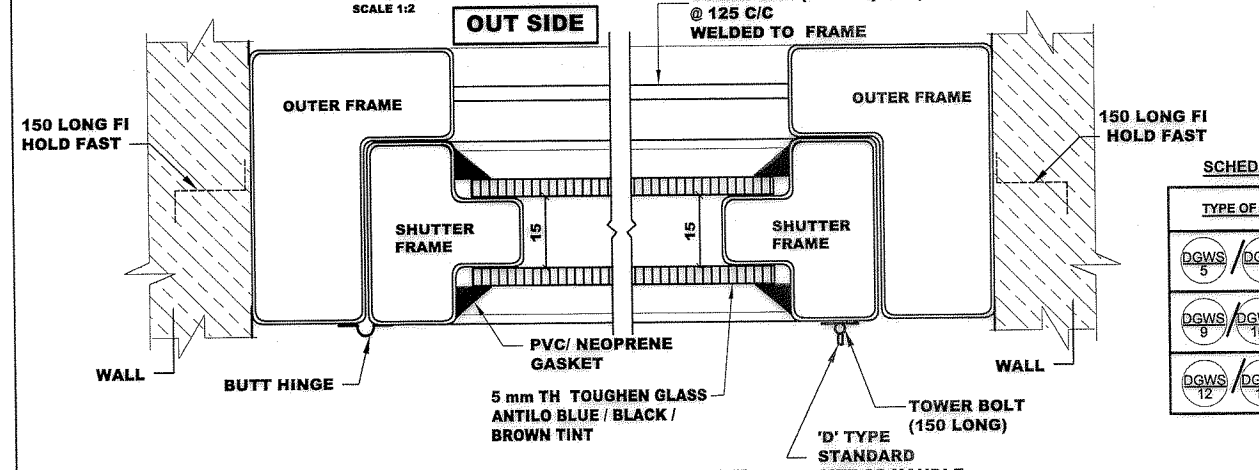
PLAN , ELEVATIONS, SECTIONS AND DETAILS

DATE	17 MAR 2015	CHIEF ENGINEER	SHT NO	
DRN	C S ASERI			1
TCD				
CKD				
SCALE	AS SHOWN	DRG NO: CEJZ/TD/ 58		

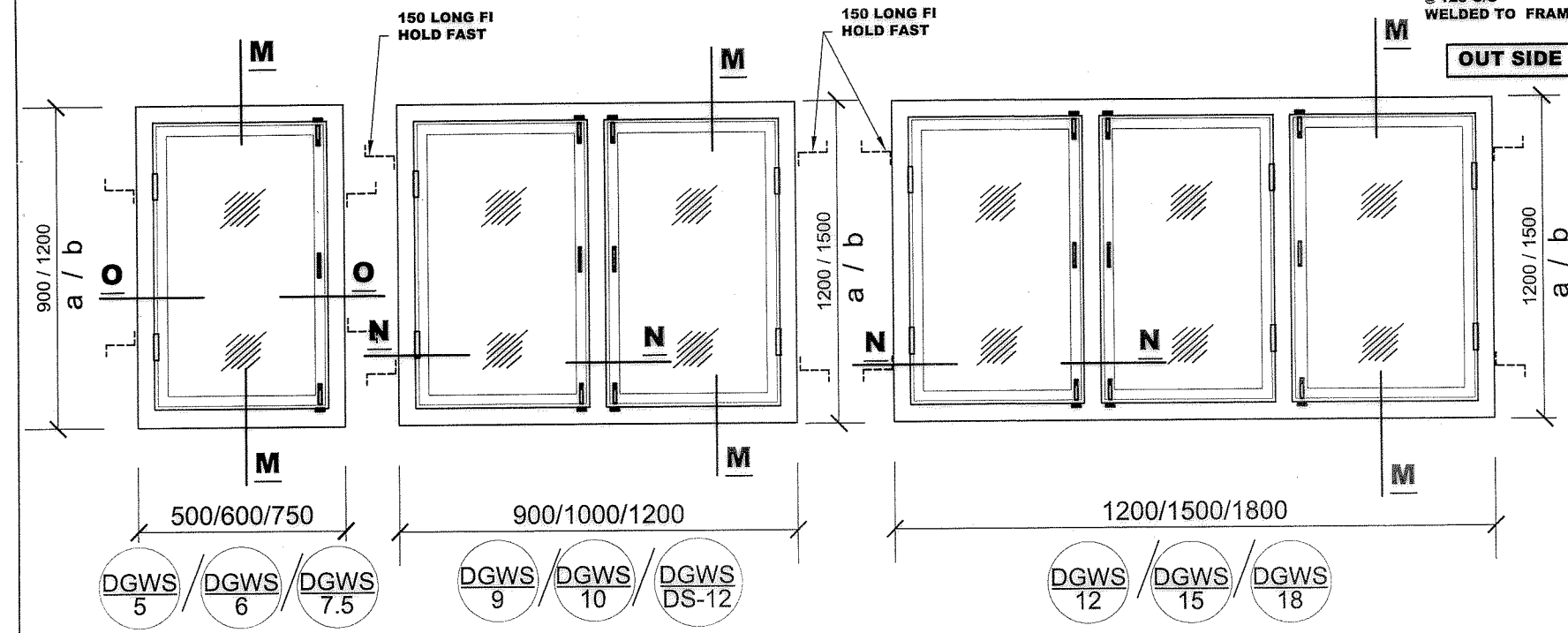
(Signature)
SR ARCH
FOR CHIEF ENGINEER



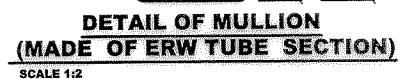
SECTION AT "N-N"
SCALE 1:2



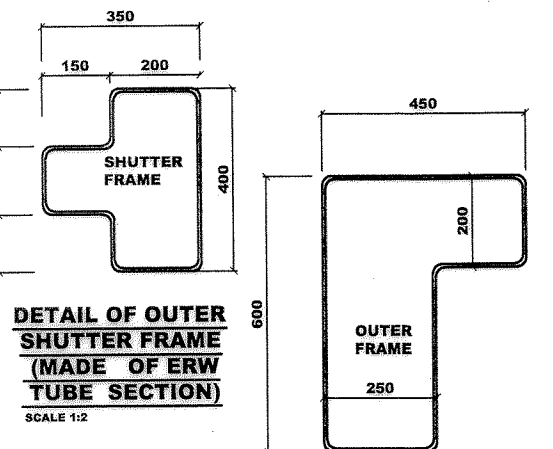
SECTION AT "O-O"
SCALE 1:2



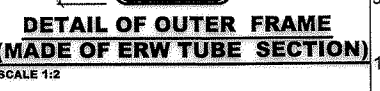
ELEVATIONS
SCALE 1:50



DETAIL OF MULLION (MADE OF ERW TUBE SECTION)
SCALE 1:2



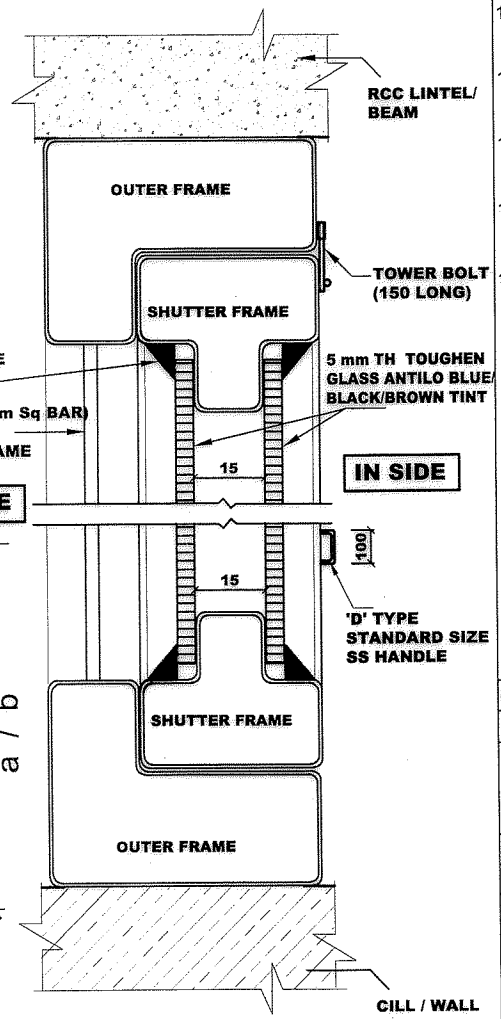
DETAIL OF OUTER SHUTTER FRAME (MADE OF ERW TUBE SECTION)
SCALE 1:2



DETAIL OF OUTER FRAME (MADE OF ERW TUBE SECTION)
SCALE 1:2

SCHEDULE OF FITTING FOR FRAME & SHUTTER OF WINDOW

TYPE OF WINDOW	NO OF "D" TYPE SS HANDLE	NO OF BUTT HINGE	NO OF TOWER BOLT	NO OF FI HOLD FAST
DGWS 5 / DGWS 6 / DGWS 7.5	01	02	02	04
DGWS 9 / DGWS 10 / DGWS DS-12	02	04	04	04
DGWS 12 / DGWS 15 / DGWS 18	03	06	06	04



SECTION AT "M-M"
SCALE 1:2

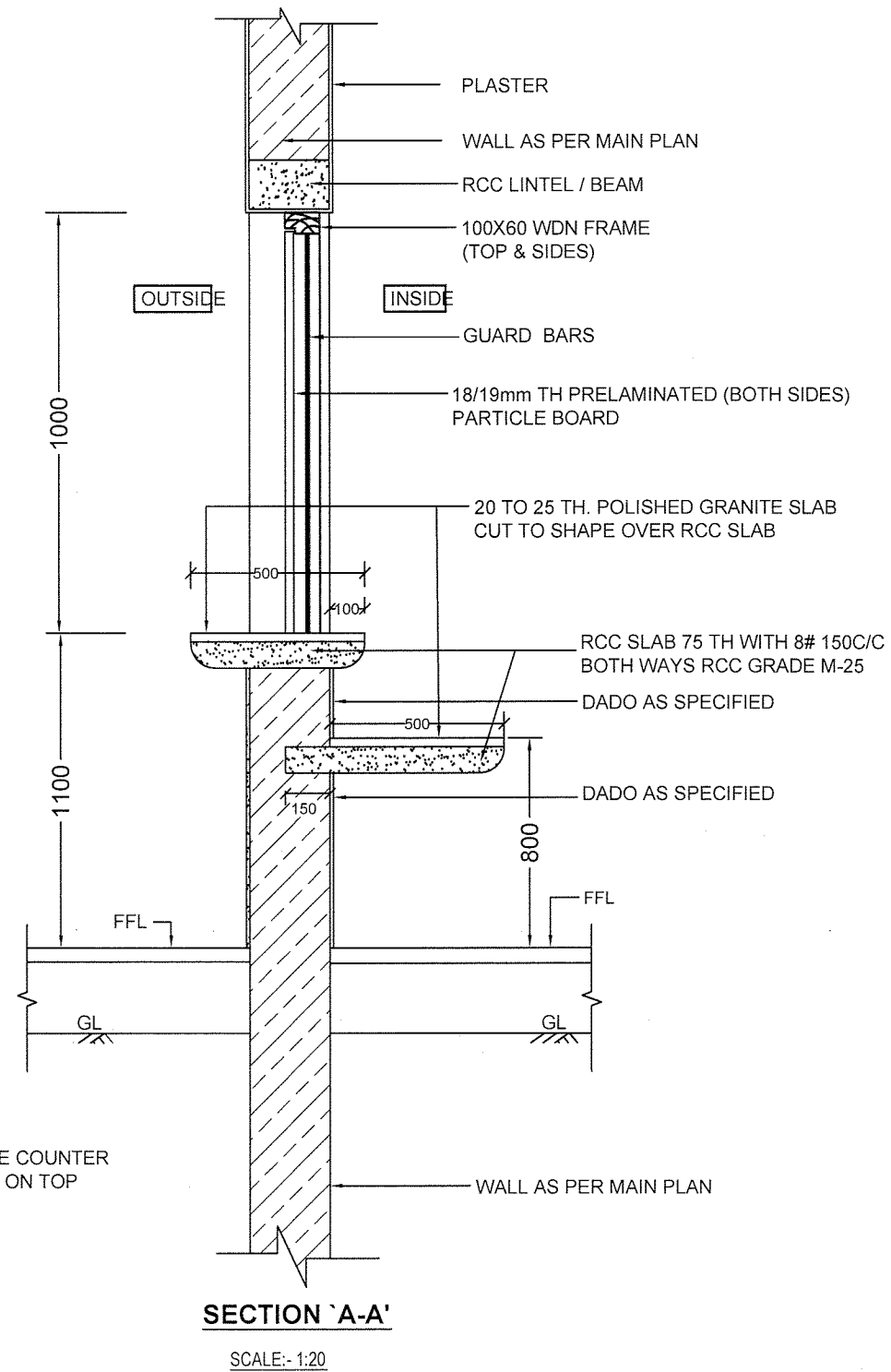
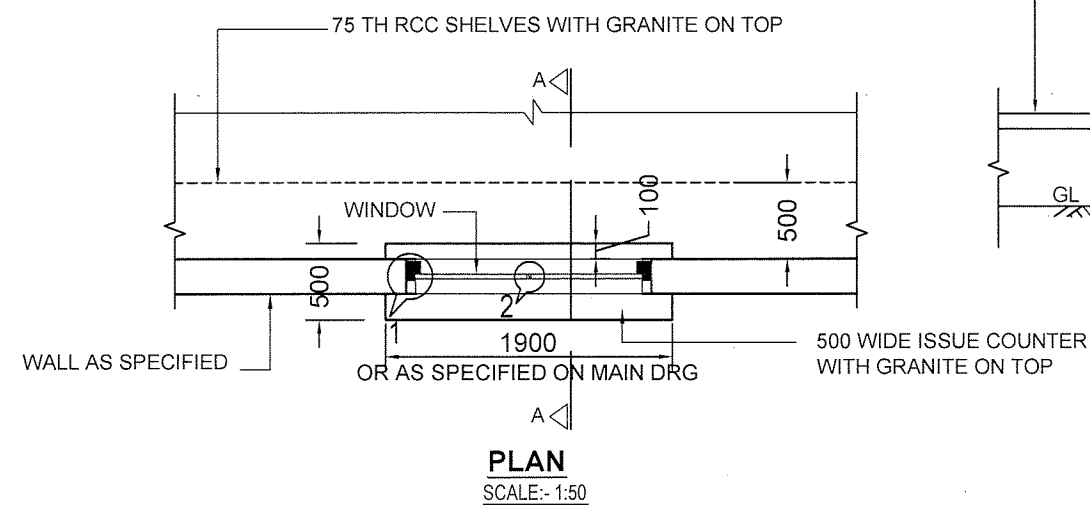
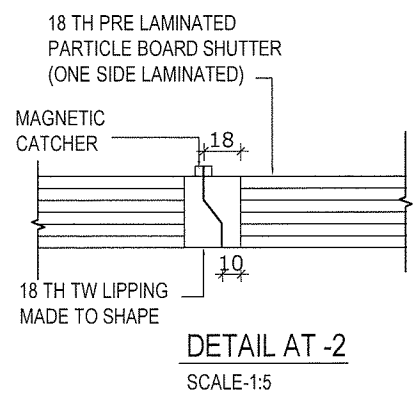
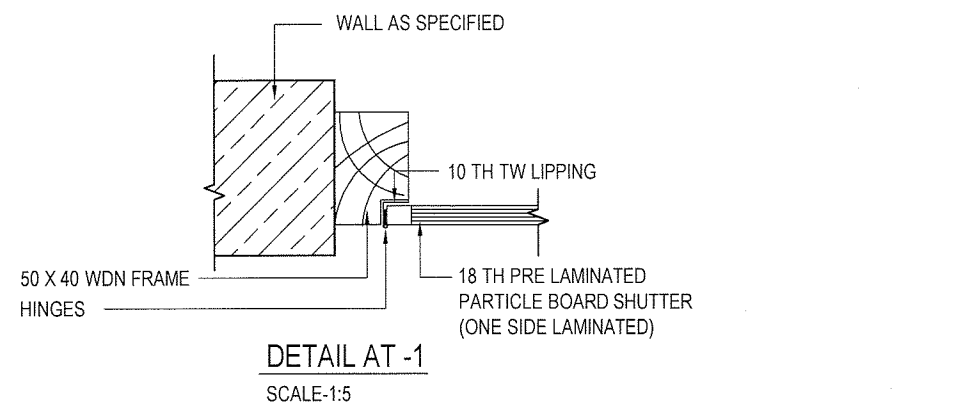
NOTES

- CONTRACTOR TO CHECK & VERIFY ALL THE DIMENSIONS BEFORE EXECUTION OF THE WORK.
- FIGURED DIMENSIONS SHALL BE FOLLOWED.
- ALL DIMENSIONS GIVEN IN THIS DRG. AR IN MILLIMETERS UNLESS OTHERWISE SHOWN.
- SIZE OF WINDOWS MENTIONED HERE ARE CLEAR SIZE OF MASONRY OPENING. A TOLERANCE OF 10 mm ON EITHER SIDE SHALL BE ALLOWED WHEN THE VENTS ARE FITTED IN TO BUILT IN OPENING.
- 5 mm TH TOUGHEN GLASS ANTILO BLUE / BLACK / BROWN TINT SHALL BE PROVIDED TO ALL WINDOWS UNLESS OTHERWISE SPECIFIED.
- THE HOLDFAST/LUGS WINDOWS SHALL BE EMBEDDED IN PCC 1:3:6 OF SIZE 150X 150X TH OF WALL
- ALL FRAMES USED ARE BOX STEEL SECTIONS.
- 'DGWS' STANDS FOR BOX WINDOWS STEEL WITH DOUBLE GLAZED SHUTTER / PANEL. a / b STAND FOR HEIGHT AS 900 / 1200 / 1500 mm RESPECTIVELY
- IN CASE OF R.C.C COL / R.C.C WALL THE WINDOWS FRAME SHALL BE FIXED WITH DASH THRU BOLTS OF STANDARD QUALITY.
- FOR WIDTH & HEIGHT OF A PARTICULAR WINDOW, THE NOTATION SHALL BE NOMENCLATURE OF WINDOW FOLLOWED WITH NOMENCLATURE OF HEIGHT. FOR EXAMPLE FOR A WINDOW OF SIZE 1500x1200 THE NOTATION SHALL BE $\frac{DGWS}{150}$.
- PIN HOLE @ 300 C/C TO BE PROVIDED FOR SUPPORTING GLASS WITH G.I CLIPS / WIRE IN CASE OF GLAZED SHUTTERS.
- 150 LONG, 40x3 FI HOLD FAST MADE OUT OF 200 LONG FI WELD TO WINDOWS FRAME AND EMBEDDED INTO PCC BLOCK IN WALL / COLUMN.
- ALL EXPOSED STEEL SURFACES SHALL BE TREATED WITH TWO COAT OF ENAMEL PAINTS OF APPROVED COLOUR OVER ONE COAT OF METAL PRIMER.
- ALL WELDING AND FINISHING WORKS OF STEEL MEMBERS SHALL BE #3 PER STANDARD WORKMANSHIP PRACTICE / MANUFACTURER'S INSTRUCTION.
- ALL FRAMES OF BOX TYPE STEEL WINDOWS SHALL BE MADE WITH ERW SECTION HAVING WALL THICKNESS 1.25mm (i.e 18 GAUGE).

S NO	DATE	DESCRIPTION	INITIALS
REVISIONS			
TYPICAL DETAIL OF DOUBLE GLAZED WINDOWS (STEEL) FOR A/C ROOM			
DATE	28.03.2015	CHIEF ENGINEER	SHT NO
DRN	C S ASERI	JODHPUR	1
TCD		ZONE	/1
CKD			
SCALE	AS SHOWN	DRG NO : CEJZ / TD / 59	

(Signature)

(R C SWAIN)
LT COL
SR ARCHITECT
FOR CE JODHPUR ZONE



NOTES


- 1 CONTRACTOR TO CHECK AND VERIFY ALL DIMENSIONS BEFORE EXECUTION OF WORK.
- 2 ALL DIMENSIONS ARE GIVEN IN MILLIMETERS UNLESS OTHERWISE SPECIFIED.
- 3 FIGURE DIMENSIONS SHALL BE FOLLOWED.
- 4 ALL WOODEN MEMBERS SHALL BE TREATED WITH TWO COATS OF SYNTHETIC ENAMEL PAINT OVER ONE COAT OF PRIMER.

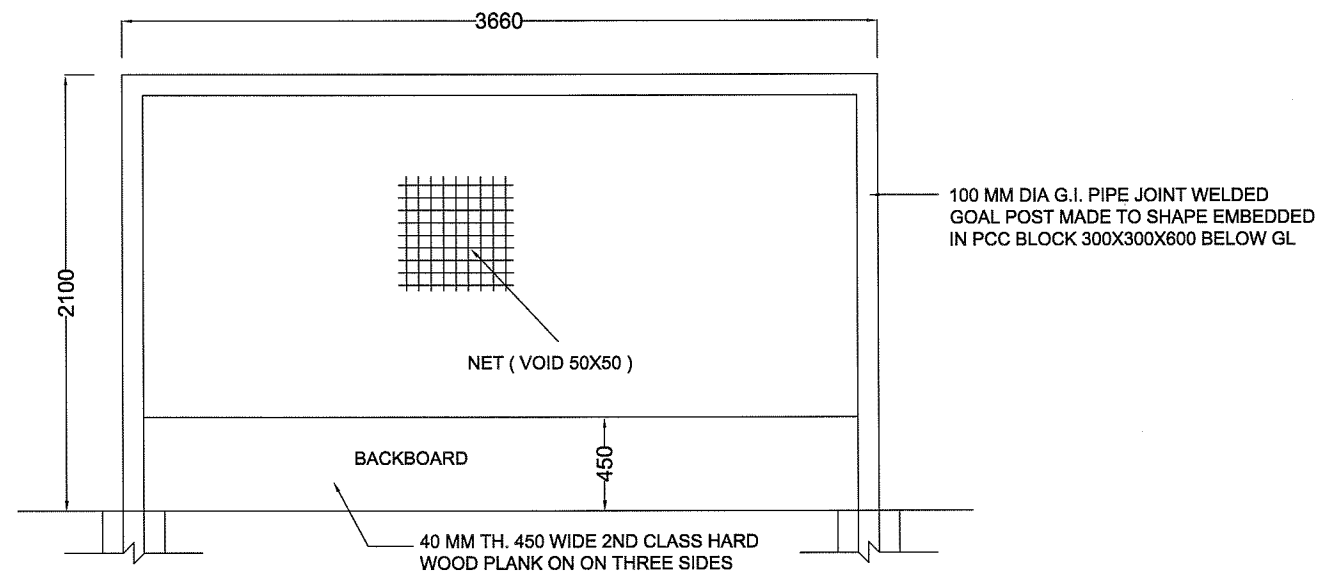
S NO	DATE	DESCRIPTION	INITIALS
REVISIONS			

DETAIL OF ISSUE COUNTER

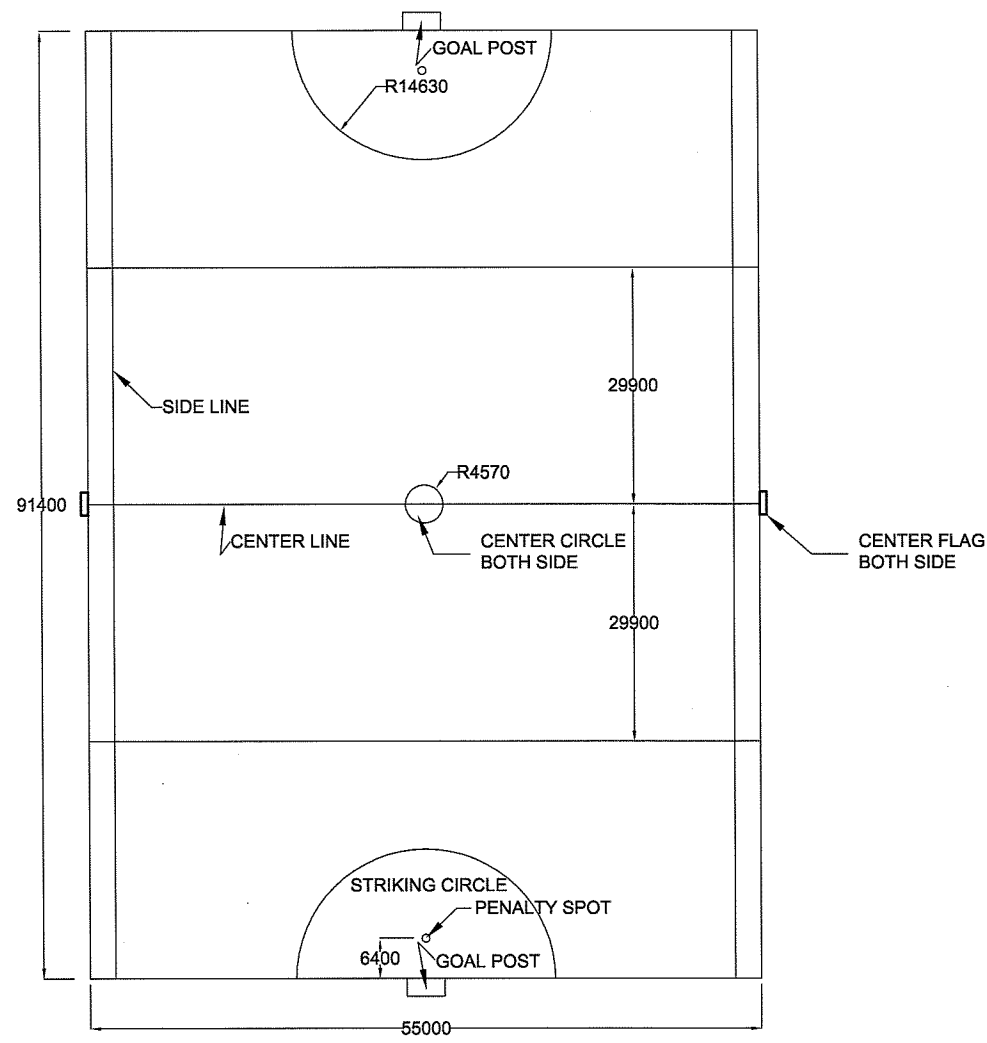
APLAN, ELEVATION, SECTION-A-A & DETAIL

DATE	08.05.2015	CHIEF ENGINEER JODHPUR ZONE	SHT NO
DRN	C S ASERI		1
TCD			/1
CKD			
SCALE	AS SHOWN	DRG NO : CEJZ / TD / 60	

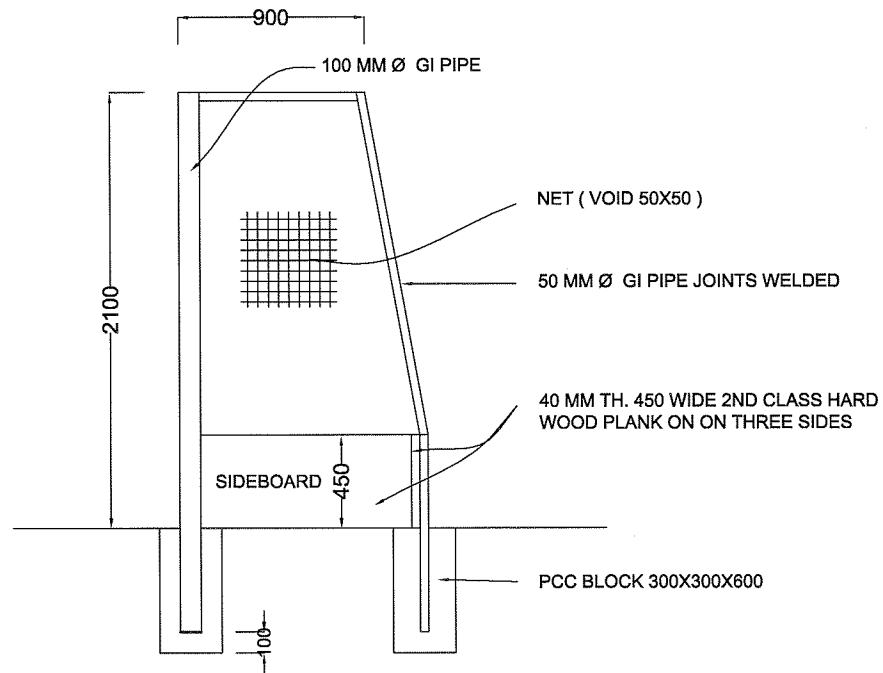

 LATHA P NAIR
 JT DIR (ARCH)
 FOR CE JODHPUR ZONE



FRONT ELEVATION (GOAL POST) HOCKEY
SCALE - 1:50



PLAN (HOCKEY GROUND)
SCALE - 1:100



SIDE ELEVATION (GOAL POST) HOCKEY
SCALE :- 1:50


NOTES

1. CONTRACTOR TO CHECK AND VERIFY ALL DIMENSIONS BEFORE EXECUTION OF THE WORK.
2. FIGURED DIMENSIONS SHALL BE FOLLOWED
3. ALL DIMENSIONS ARE GIVEN IN MILLIMETRES UNLESS OTHERWISE STATED
4. THE DRG IS TO BE USED AS A GUIDE LINE ONLY.

S. NO.	DATE	DESCRIPTIONS	INITIALS
REVISIONS			

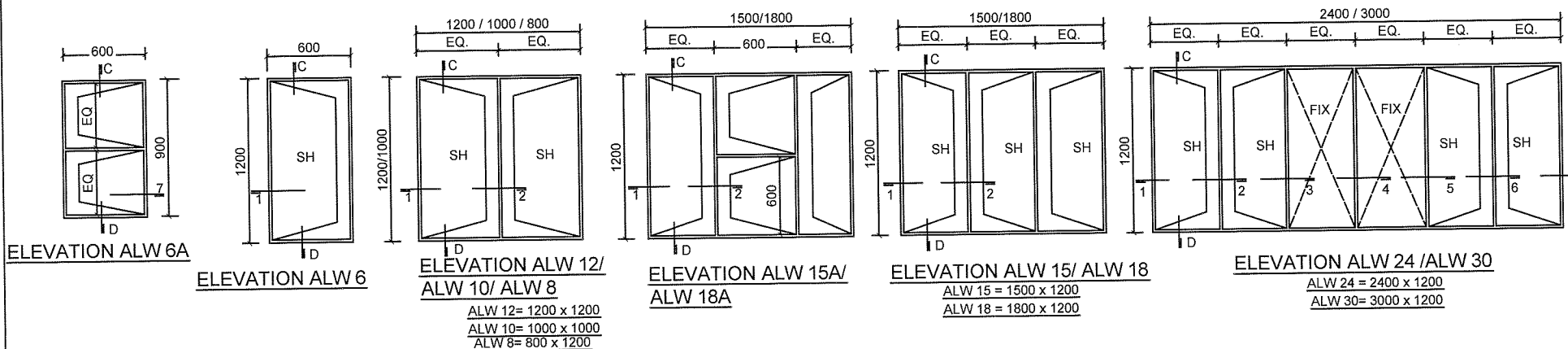
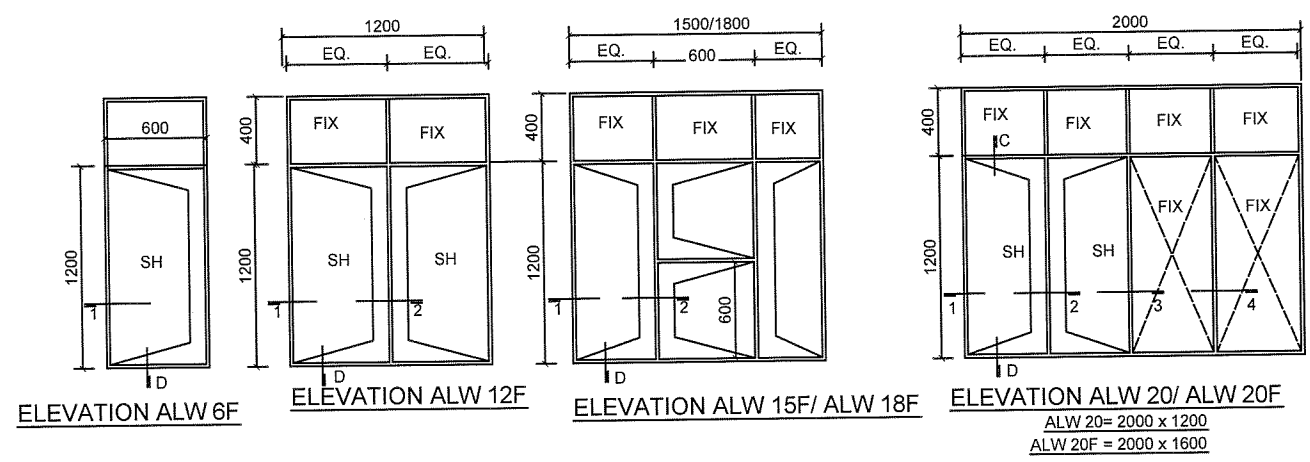
HOCKEY GROUND
PLAN, ELEVATIONS

DATE	08.05. 2015	CHIEF ENGINEER JODHPUR ZONE	SHT NO
DRN			1/1
TCD			
CKD			
SCALE	N T S	DRG NO: CEJZ / TD / 61	


 LATHA P NAIR
 JT DIR (ARCH)
 FOR CE JODHPUR ZONE

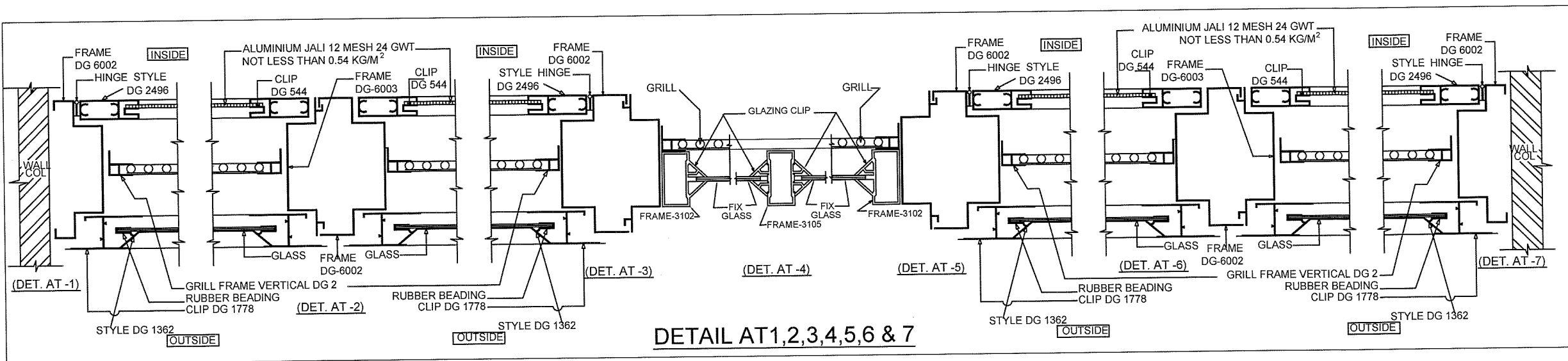
PRODUCED BY AN AUTODESK EDUCATIONAL PRODUCT

PRODUCED BY AN AUTODESK EDUCATIONAL PRODUCT



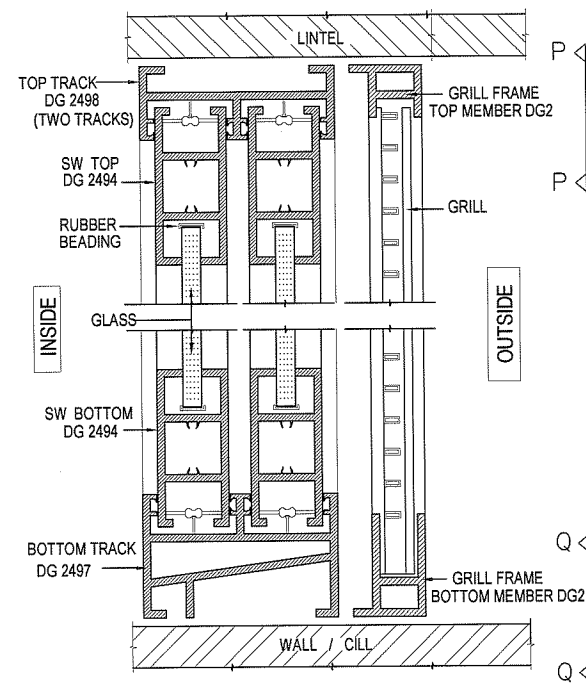
SECTION CODE	SIZE (OUT OF)	THICKNESS	WEIGHT KG/MT
DG 1778	17.15X17.27	1.50	0.175
DG 8	42.40X10.00	1.20	0.325
DG 544	12.70X12.70	1.25	0.119
DG 1362	30.00X38.00	2.00	0.435
DG 2496	39.40X17.70	1.20	0.431
DG 6002	91.00X43.00	1.50	0.903
DG 6003	91.00X19.50	1.50	0.627
-3102	50.80X25.40	0.85	1.600 TO 1.800
-3105	50.80X25.40	0.65	1.600 TO 1.800
-3156	19.00X17.00	0.65	0.325 TO 0.360

- NOTES**
- CONTRACTOR TO CHECK & VERIFY ALL DIMENSIONS BEFORE TAKING EXECUTION OF THE WORK.
 - FIGURED DIMENSIONS SHALL BE FOLLOWED.
 - ALL DIMENSION ARE GIVEN IN MILIMETERES UNLESS OTHERWISE STATED.
 - THE ALUMINIUM SECTIONS SHALL BE ANODISED IN NATURAL MATT FINISH , THE THICKNESS OF ANODIC FILM SHALL BE MINIMUM 15 MICRONS.
 - ALL EXTERNAL WINDOWS SHALLBE PROVIDED WITH ALUMINIUM GRILL.
 - THE ALUMINIUM GRILL PATTERN ARE TAKEN FROM DECOGRILLE MAKE.
 - ALL FITTINGS AND FIXTURES (HINGES,STAY &HANDLES EXC.)SHALL BE PROVIDED AS PER MANUFACTORES INSTRUCTIONS.
 - RUBBER GASKET SHALL BE PROVIDED TO WINDOWS IN ALL A/C ROOMS.
 - SH. DENOTES SIDE HUNG.
 - F DENOTES FIXED SHUTTER.
 - ALL OPENABLE WINDOW SHALL HAVE MOSQUITO PROOFING SHUTTER.
 - FIXING DETAILS OF LOUVRES SHALL BE AS PER MANUFACTURES INSTRUCTIONS.



S. NO.	DATE	DESCRIPTIONS	INITIALS
REVISIONS			
DETAIL OF ALUMINIUM WINDOWS			
PLAN, ELEVATION & DETAILS			
DATE	10.05.2015	CHIEF ENGINEER	SHT NO
DRN		JODHPUR	1
TCD		ZONE	1
CKD			
SCALE	N T S	DRG NO:CEJZ / TD / 62 / 2015	

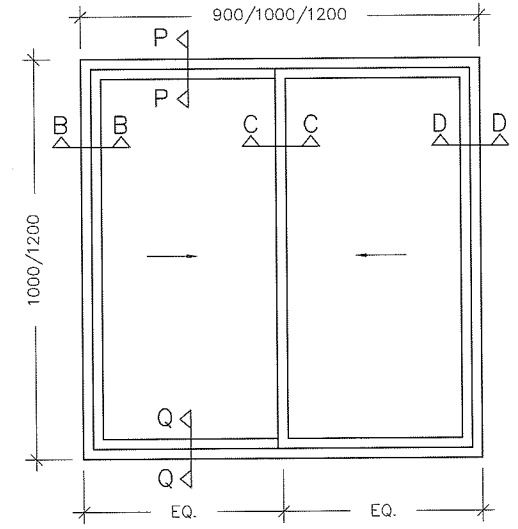
Sanjay Kumar
SANJAY KUMAR
DY. DIR ARCH
FOR CHIEF ENGINEER



SECTION

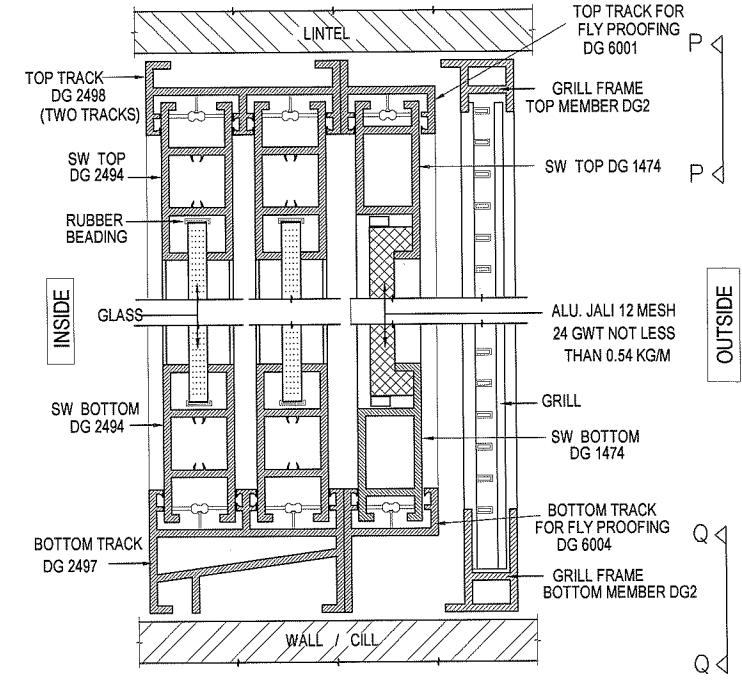
(WITHOUT FLY PROOFING)

ALSW 9/ ALSW 10/ ALSW 12 & ALSW 9A/ ALSW 10A/ ALSW 12A



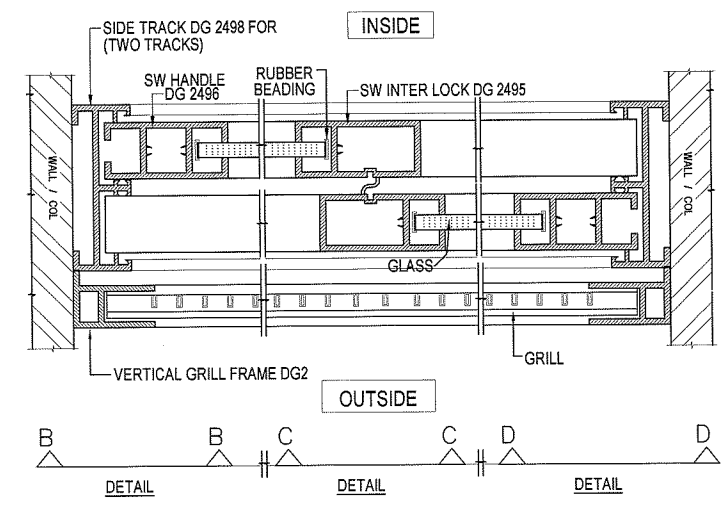
ELEVATION

ALSW 9 / 9A = 900 X1000 / 900 X1200
 ALSW 10 / 10A = 1000 X1000 / 1000 X1200
 ALSW 12 / 12A = 1200 X 1000 / 1200 X1200



SECTION (WITH FLY PROOFING)

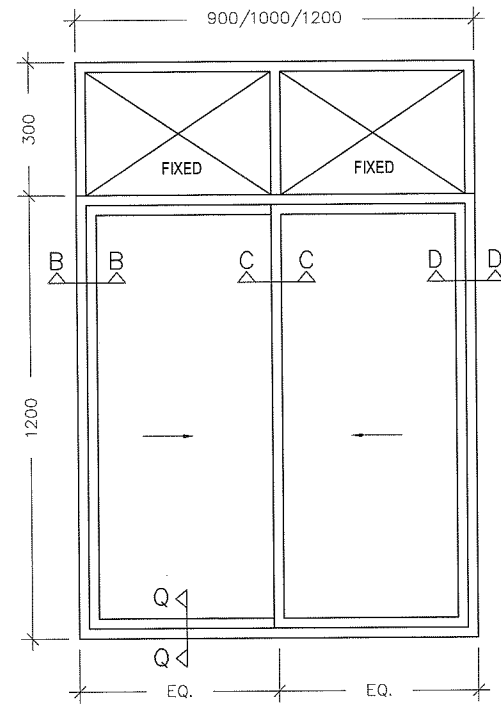
ALSW 9/ ALSW 10/ ALSW 12 & ALSW 9A/ ALSW 10A/ ALSW 12A
 (ONLY ONE SLIDING FLY PROOF SHUTTER SHALL BE PROVIDED)



PLAN

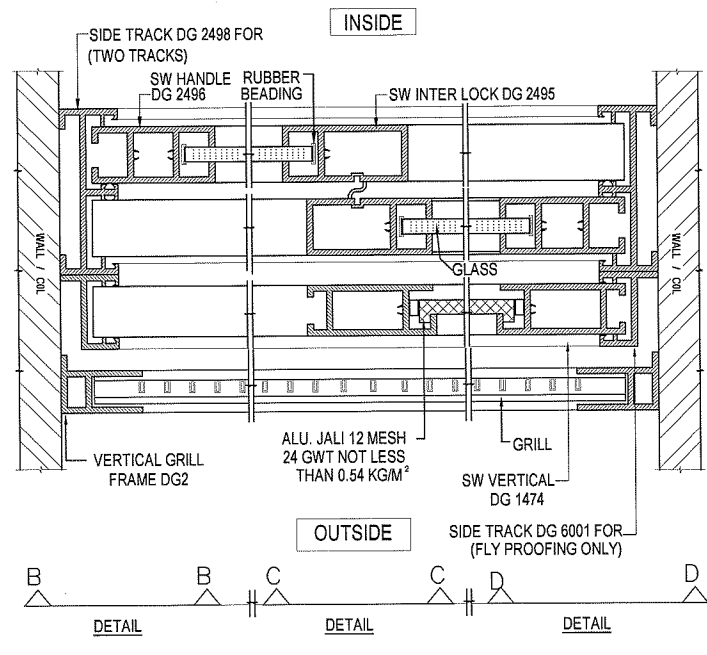
(WITHOUT FLY PROOFING)

ALSW 9/ ALSW 10/ ALSW 12 & ALSW 9A/ ALSW 10A/ ALSW 12A



ELEVATION

ALSW - 9B/10B/12B9 / 9A
 (WITH GRILL WITHOUT FLY PROOF)



PLAN (WITH FLY PROOFING)

ALSW 9/ ALSW 10/ ALSW 12 & ALSW 9A/ ALSW 10A/ ALSW 12A
 (ONLY ONE SLIDING FLY PROOF SHUTTER SHALL BE PROVIDED)


NOTES

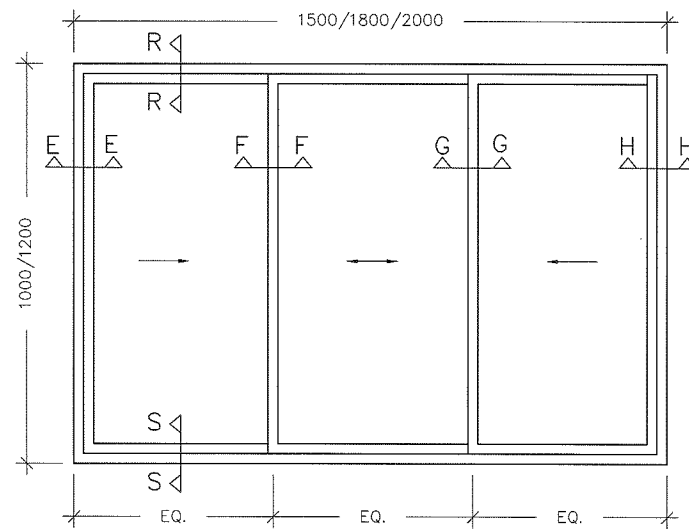
- 1 CONTRACTOR TO CHECK & VERIFY ALL DIMENSIONS BEFORE EXECUTION OF THE WORK.
- 2 FIGURED DIMENSIONS SHALL BE FOLLOWED.
- 3 ALL DIMENSIONS ARE GIVEN IN MILLIMETERS UNLESS OTHERWISE STATED.
- 4 5 MM.THICK GLASS SHALL BE PROVIDED.
- 5 ALL WORKS SHALL BE CARRIED OUT AS PER MANUFACTURERS INSTRUCTIONS.
- 6 ALL ALUMINIUM SECTIONS SHALL BE OF "JINDAL ALUMINIUM LTD" OR EQUIVALENT
- 7 THE TWO NYLON ROLLERS ALU SPL LOC-CUM-HANDLE, SOFT PVC GASKET,SOFT RUBBER BLIND/SOLID RIVETS, NICKLE PLATED METAL SCREW,ALU HINGES,ALU HANDLE, ALU PEGS STAY,PVC WEATHER STRIP ETC SHALL BE PROVIDED TO ALU. SHUTTERS AS PER MANUFACTURERS INSTRUCTIONS.
- 8 THE ALUMINIUM SECTIONS SHALL BE ANODISED IN NATURAL MAT FINISH. THE THICKNESS OF ANODIC FILM SHALL BE MINIMUM 15 MICRONS.
- 9 FROSTED GLASS SHALL BE PROVIDED TO WINDOWS/ VENTS OF TOILETS ,BATH &WC ON ALL FLOORS.
- 10 ALL FITTINGS SHALL BE PROVIDED AS PER MANUFACTURERS INSTRUCTIONS.
- 11 ALL ALUMINIUM SECTIONS OF WINDOWS SHALL BE AS PER AA 6063 7/6 CONFIRMING TO 63400 WP OF IS 733.
- 12 NEAREST HIGHER SIZE, THICKNESS & WEIGHT OF ALUMINUM SECTION SHALL BE PROVIDED IF AS PER THIS DRG SECTIONS ARE NOT AVAILABLE.
13. 4 NOS OF ALUMINUM LUGS SHALL BE PROVIDED FOR EACH WINDOW ?&EMBEDDED TO WALL WITH PCC (100X100X100)

S NO	DATE	DESCRIPTION	SIGN
REVISION NOTE			

ALUMINUM SLIDING WINDOWS

DATE	18/05/2015	CHIEF ENGINEER JODHPUR ZONE	SHEET NO
DRN			1/3
TCD			
CKD			
SCALE	AS SHOWN	DRG. NO.	CEJZ / TD / 63


 (R C SWAIN)
 LT COL
 SR ARCH
 FOR CE JODHPUR ZONE



ELEVATION

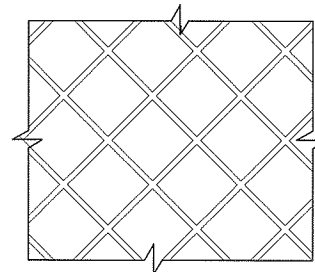
ALSW 15/ 15A = 1500 X1000 / 1500 X1200
F

ALSW 18/ 18A = 1800X1000 / 1800 X1200
F

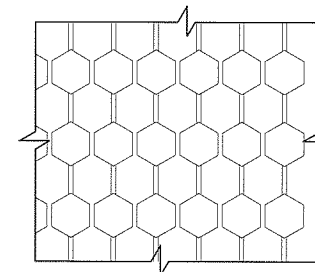
ALSW 20/ 20A = 2000 X 1000 / 2000 X1200
F

SECTION CODE, SIZE, THICKNESS & WEIGHT FOR WINDOWS

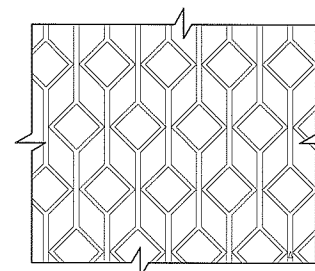
SECTION CODE	SIZE (OUT OF)	THICKNESS	WEIGHT KG/MT
DG2	25.00X27.00	1.20	0.276
DG8	42.40X10.00	1.20	0.325
DG544	12.70X12.70	1.25	0.119
DG1362	30.00X38.00	2.00	0.435
DG1474	43.00X14.00	1.50	0.450
DG1645	21.00X15.40	1.22	0.180
DG1647	44.00X44.00	1.60	0.670
DG1778	17.15X17.27	1.50	0.175
DG2205	38.00X63.50	2.00	1.200
DG2206	38.00X63.50	2.00	1.121
DG2392	44.00X44.00	1.60	0.710
DG2494	39.40X17.70	1.20	0.420
DG2495	39.40X17.70	1.20	0.480
DG2496	39.40X17.70	1.20	0.431
DG2497	31.75X61.60	1.20	0.718
DG2498	31.75X61.60	1.20	0.630
DG2544	91.80X31.75	1.20	0.848
DG2545	91.80X45.00	1.50	1.577
DG2546	17.27X17.15	1.22	0.124
DG2762	40.00X32.00	1.50	0.668
DG2763	40.00X32.00	1.50	0.654
DG2765	17.50X14.80	1.10	0.168
DG3546	59.00X38.00	1.60	0.850
DG6001	19.00X31.00	1.50	0.300
DG6002	91.00X43.00	1.50	0.903
DG6003	91.00X19.50	1.50	0.627
DG6004	19.00X31.00	1.50	0.316



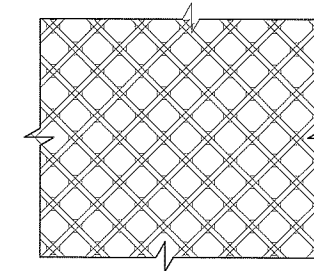
TYPE -A
2.507Kg/sqm
(WITHOUT FRAME)



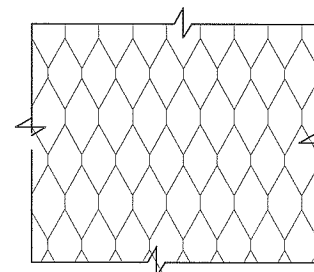
TYPE -B
3.13Kg/sqm
(WITHOUT FRAME)



TYPE -C
3.766Kg/sqm
(WITHOUT FRAME)



TYPE -D
2.625Kg/sqm
(WITHOUT FRAME)



TYPE -E
3.766Kg/sqm
(WITHOUT FRAME)

NOTES

1 FOR NOTES REFER SHT NO 1/3 OF THIS DRG.

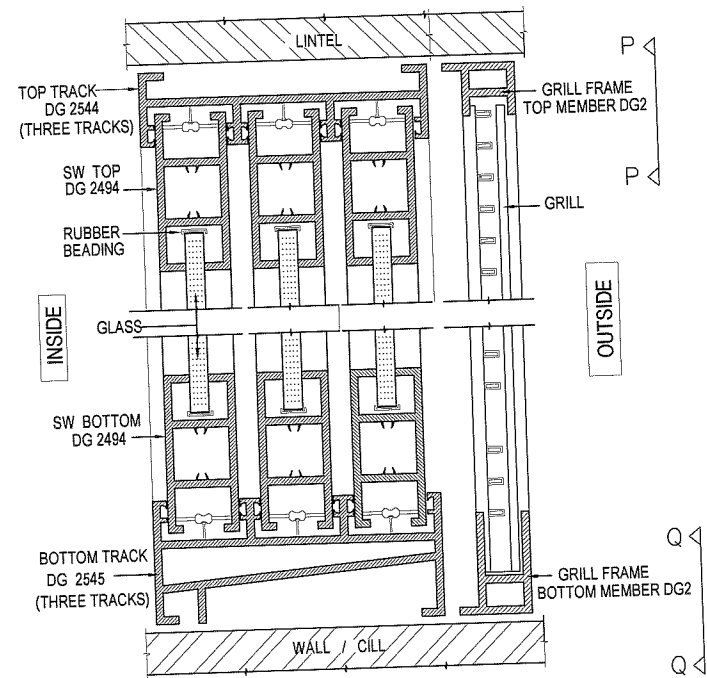
S NO	DATE	DESCRIPTION	SIGN
REVISION NOTE			

ALUMINIUM SLIDING WINDOWS

DATE	18/05/2015	CHIEF ENGINEER JODHPUR ZONE	SHEET NO 2/3
DRN			
TCD			
CKD			
SCALE	AS SHOWN	DRG. NO.	CEJZ / TD / 63

(Signature)

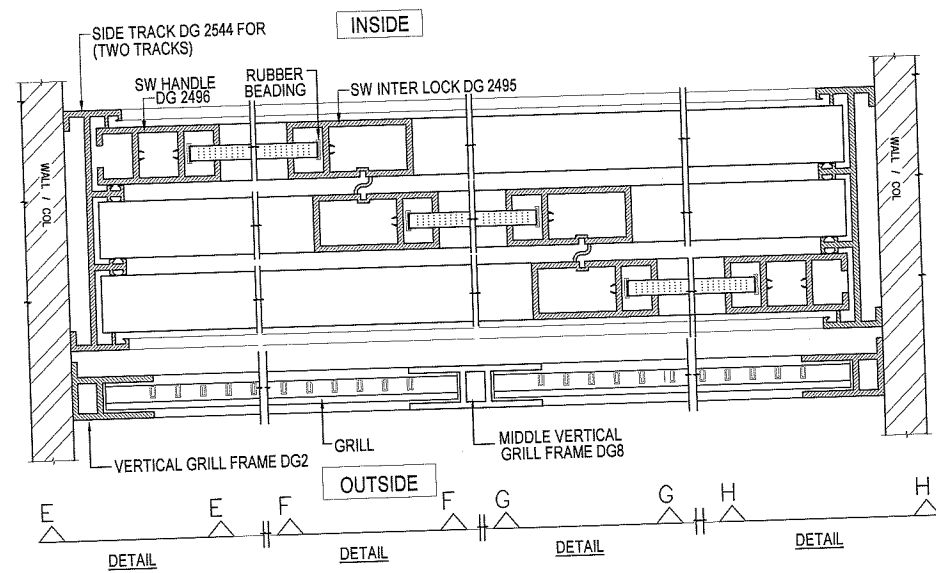
(R C SWAIN)
LT COL
SR ARCH
FOR CE JODHPUR ZONE



SECTION

(WITHOUT FLY PROOFING)

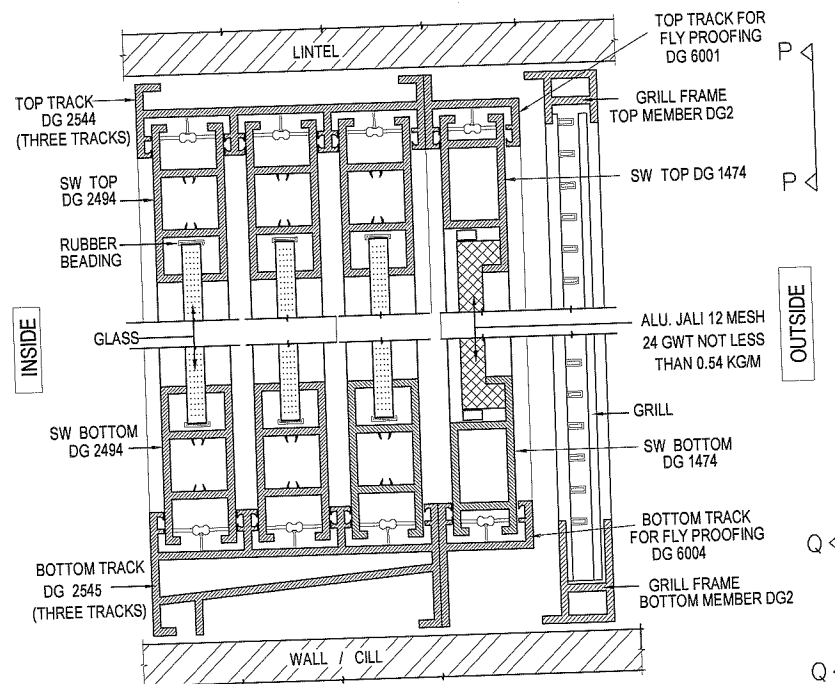
ALSW 15/ ALSW 18/ ALSW 20 & ALSW 15A/ ALSW 18A/ ALSW 20A



PLAN

(WITHOUT FLY PROOFING)

ALSW 15/ ALSW 18/ ALSW 20 & ALSW 15A/ ALSW 18A/ ALSW 20A

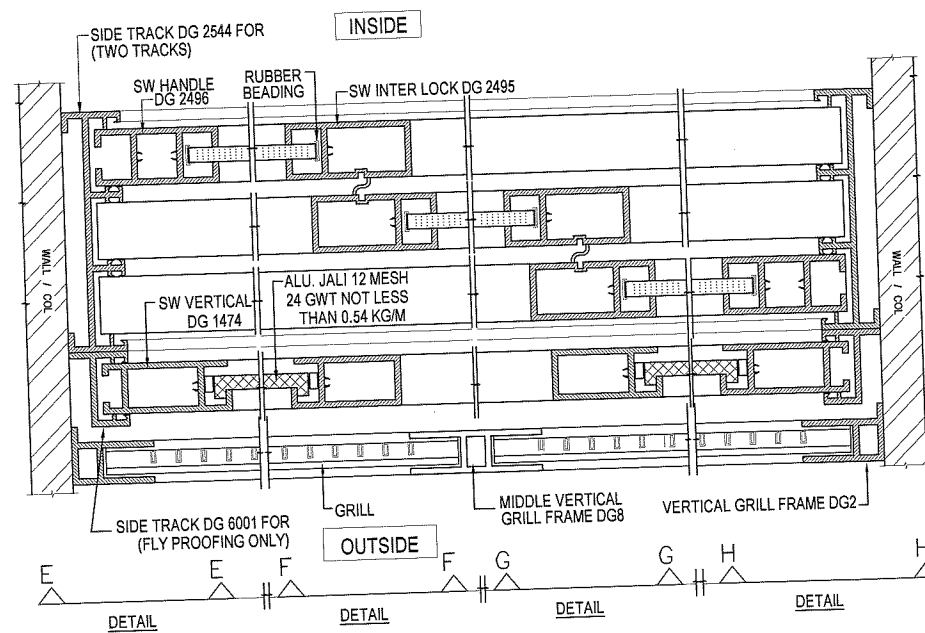


SECTION

(WITH FLY PROOFING)

ALSW 15/ ALSW 18/ ALSW 20 & ALSW 15A/ ALSW 18A/ ALSW 20A

(ONLY TWO SLIDING FLY PROOF SHUTTER SHALL BE PROVIDED)



PLAN

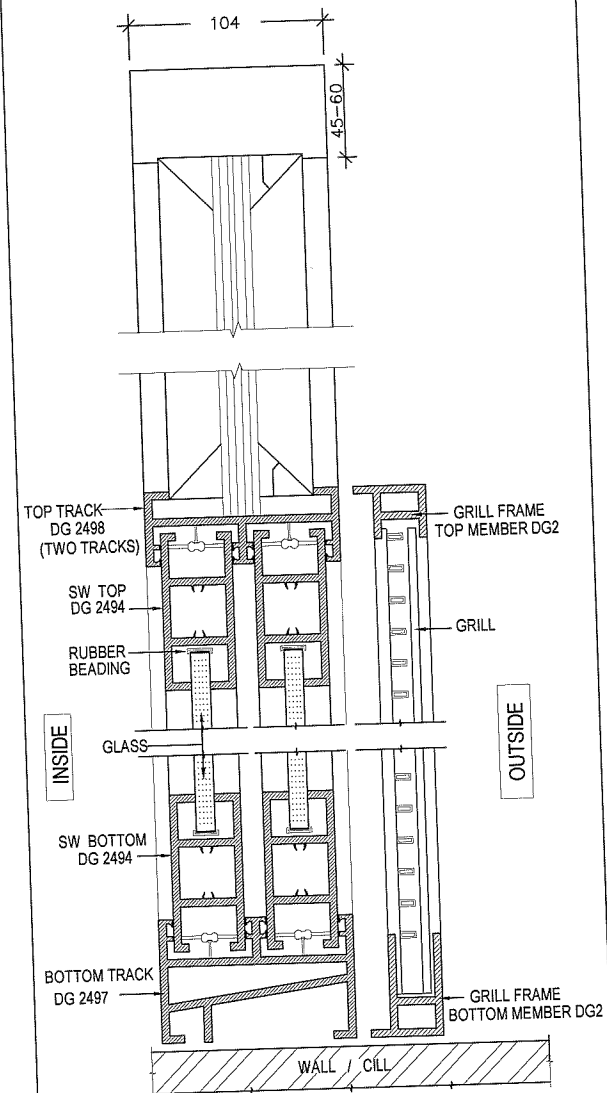
(WITH FLY PROOFING)

ALSW 15/ ALSW 18/ ALSW 20 & ALSW 15A/ ALSW 18A/ ALSW 20A

(ONLY TWO SLIDING FLY PROOF SHUTTER SHALL BE PROVIDED)

NOTES

1 FOR NOTES REFER SHT NO 1/3 OF THIS DRG.



SECTION

ALSW-9B/10B/12B

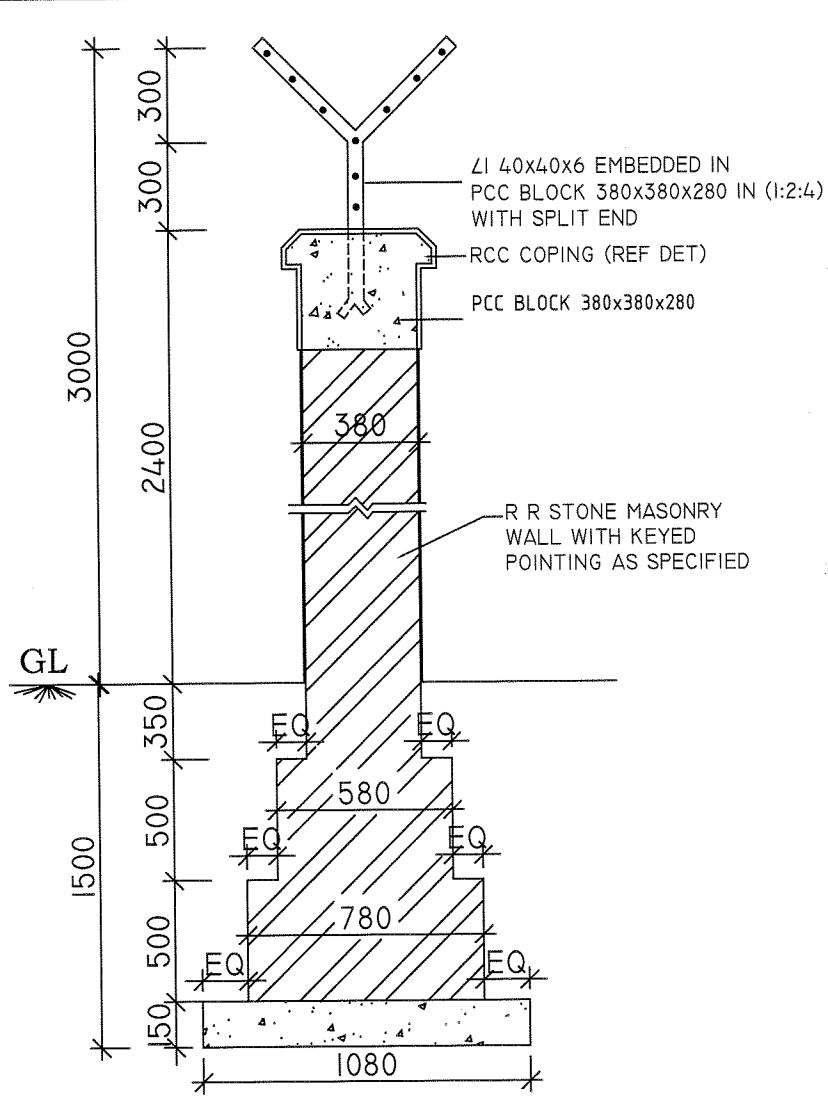
S NO	DATE	DESCRIPTION	SIGN
		REVISION NOTE	

ALUMINUM SLIDING WINDOWS

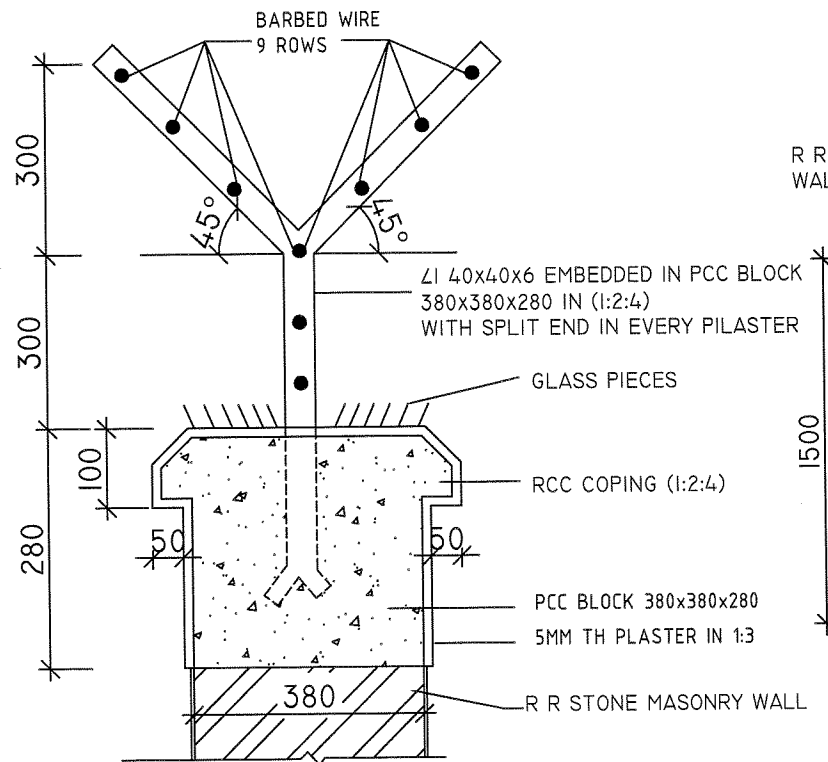
DATE	18/05/2015	CHIEF ENGINEER JODHPUR ZONE	SHEET NO 3/3
DRN			
TCD			
CKD			
SCALE	AS SHOWN	DRG. NO.	CEJZ / TD / 63

(Signature)

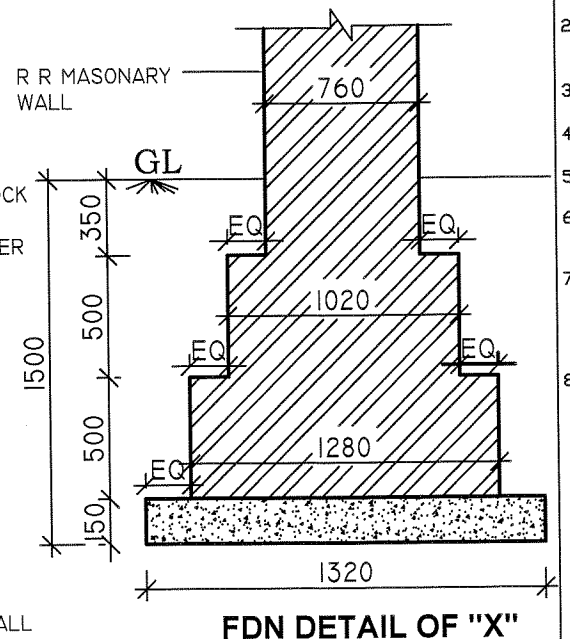
(R C SWAIN)
LT COL
SR ARCH
FOR CE JODHPUR ZONE



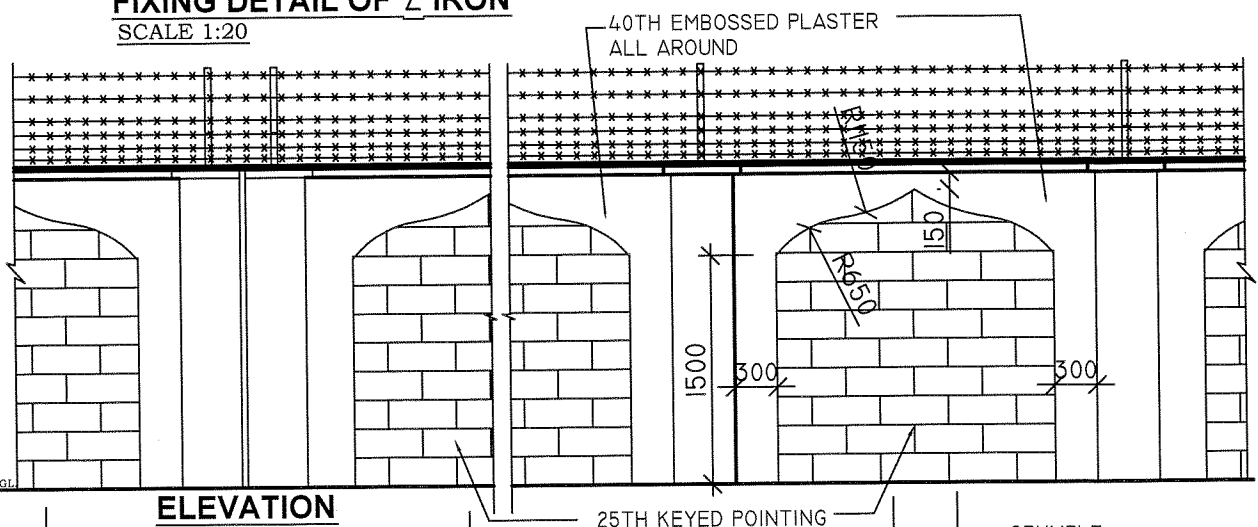
SECTION AT "A-A"
SCALE 1:20



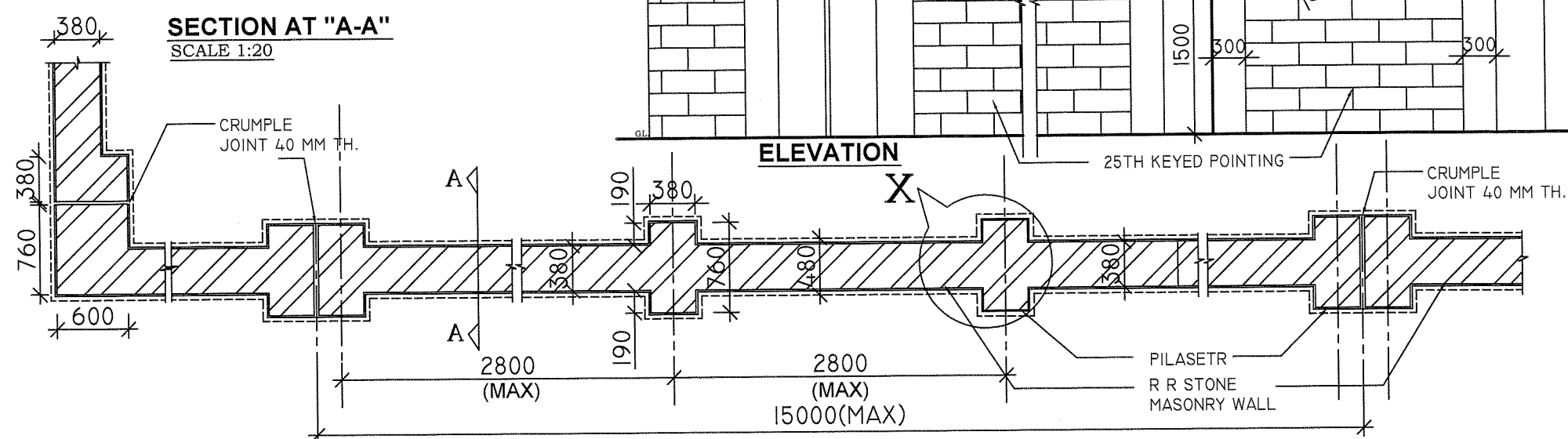
FIXING DETAIL OF L IRON
SCALE 1:20



FDN DETAIL OF "X"



ELEVATION




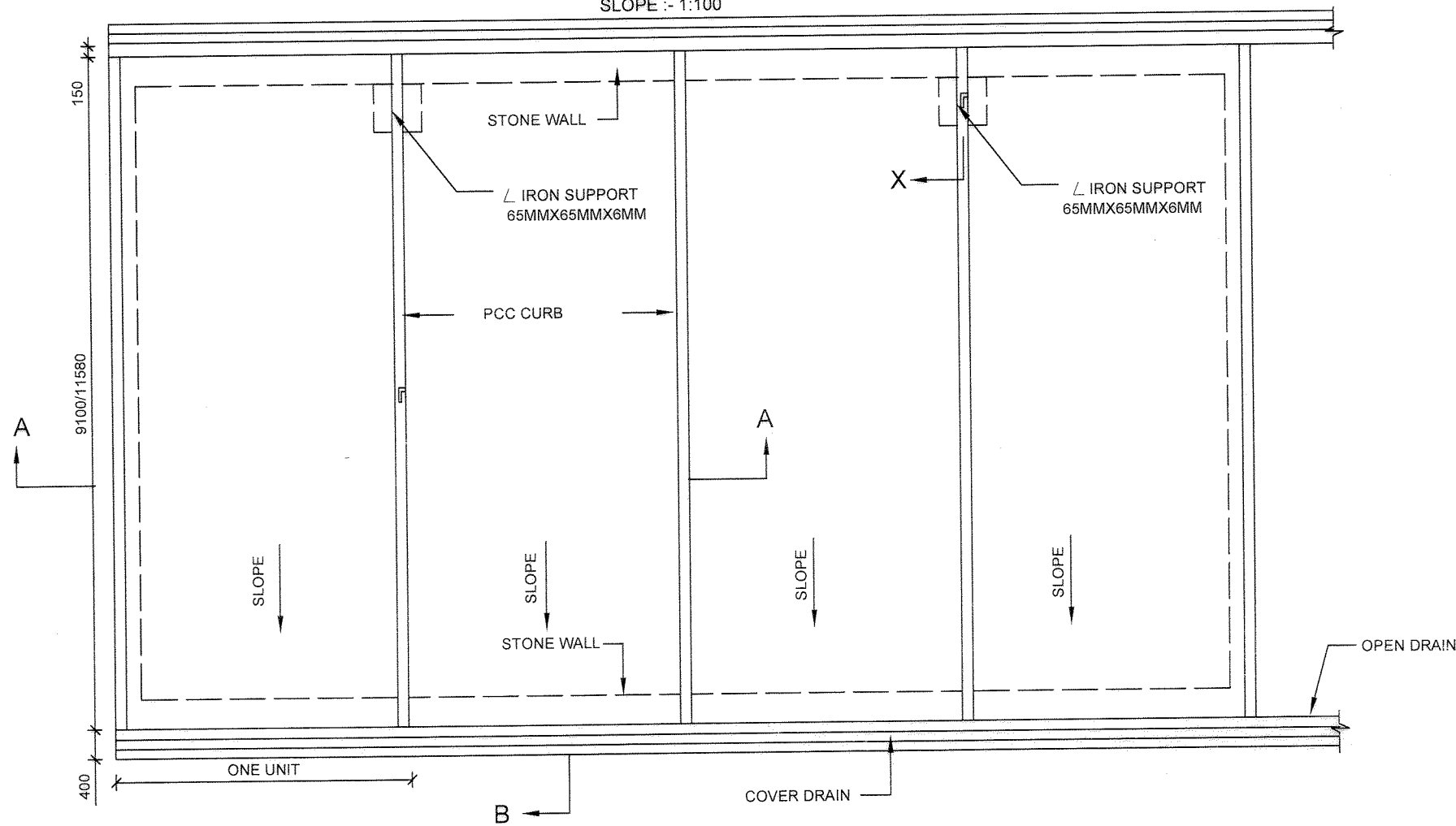
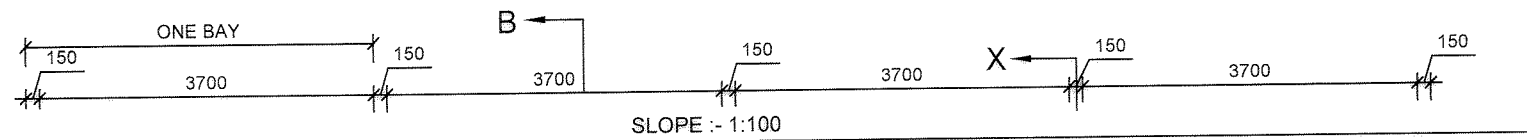
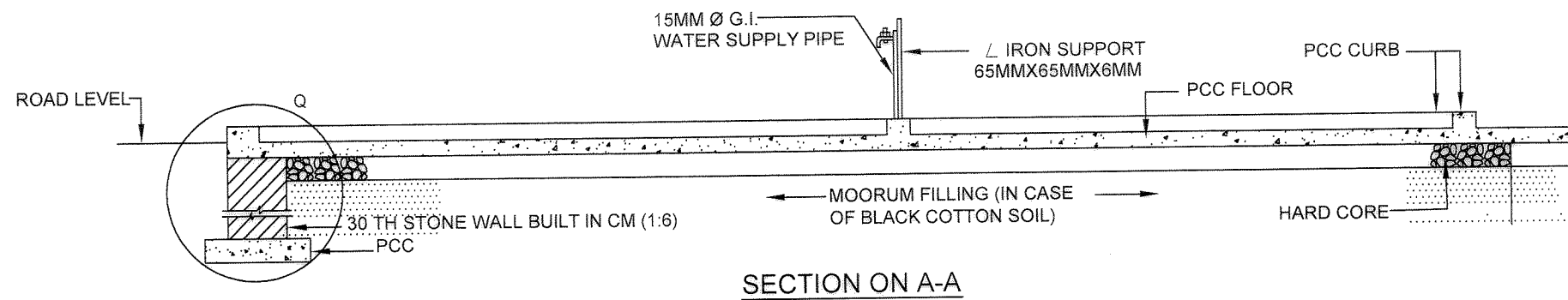
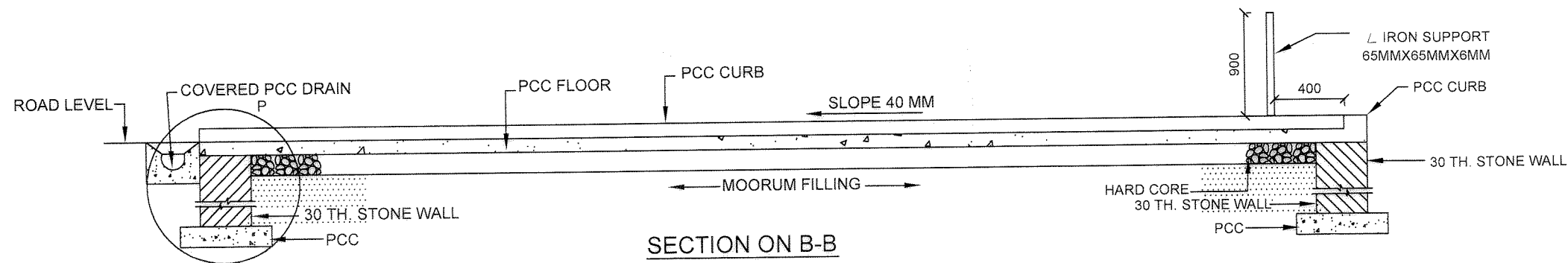
PART LAYOUT PLAN OF SECURITY WALL
SCALE :- 1:50

NOTES

1. CONTRACTOR TO CHECK AND VERIFY ALL DIMENSIONS BEFORE EXECUTION
2. ALL DIMENSIONS ARE GIVEN IN MILLIMETER UNLESS OTHERWISE SPECIFIED FIGURED DIMENSIONS ARE FOLLOWED
3. EXECUTION AUTHORITY SHALL CHECK ALL DRAWINGS BEFORE EXECUTING OF THE WORK
4. CRUMPLE JOINT SHALL BE PROVIDED AT EVERY 20-26M INTERVAL.
5. CONC. MIX FOR RCC WORK SHALL BE M-20 UNLESS OTHERWISE SPECIFIED.
6. FDN ARE DESIGNED FOR NON EXPANSIVE SOIL HAVING NET BEARING CAPACITY MORE THAN 10 T/SQM AT 1 M DEPTH.
7. BOTH SIDE WALLS OF SECURITY WALL SHALL BE FINISHED WITH TWO COATS OF CEMENT BASED PAINT OVER ONE COAT OF CEMENT BASED PRIMER INCLUDING PREPARATION OF NEW SURFACE.
8. TWO COATS OF SYNTHETIC ENAMEL PAINT OVER ONE COAT OF ZINK CROME PRIMER OVER STEEL SURFACES AND INCLUDING PREPARATION OF NEW SURFACE.

S.No.	DATE	DESCRIPTION	CHKD.
REVISIONS			
STONE MASONRY SECURITY WALL 3M HT (INCLUDING L I POST WITH BARBED WIRE FENCING)			
PLAN, ELEVATION, SECTION & DETAILS			
DATE:	21/05/2015	CHIEF ENGINEER	SHEET NO.
DRAWN:	C S ASERI	JODHPUR ZONE	1/1
CHKD:		JODHPUR	
SCALE:	AS SHOWN	REF DRG. NO : CEJZ /TD/ 64	


 (R. C. SWAIN)
 LT COL.
 SR ARCH.
 FOR CHIEF ENGINEER



NOTES

- 1 CONTRACTOR TO CHECK & VERIFY ALL DIMENSIONS BEFORE EXECUTION OF THE WORK.
- 2 FIGURED DIMENSIONS SHALL BE FOLLOWED.
- 3 ALL DIMENSIONS ARE GIVEN IN MILLIMETERS UNLESS SPECIFIED.

DETAILS OF WASHING PLATFORM 'A' & 'B'

PLAN & SECTIONS

DATE	09-03-2015	CHIEF ENGINEER JODHPUR ZONE	SHT NO
DRN			1 3
TCD			
CKD			
SCALE AS SHOWN		REF DRG NO: CEJZ / TD / 44	

[Signature]
AAD (ARCH)

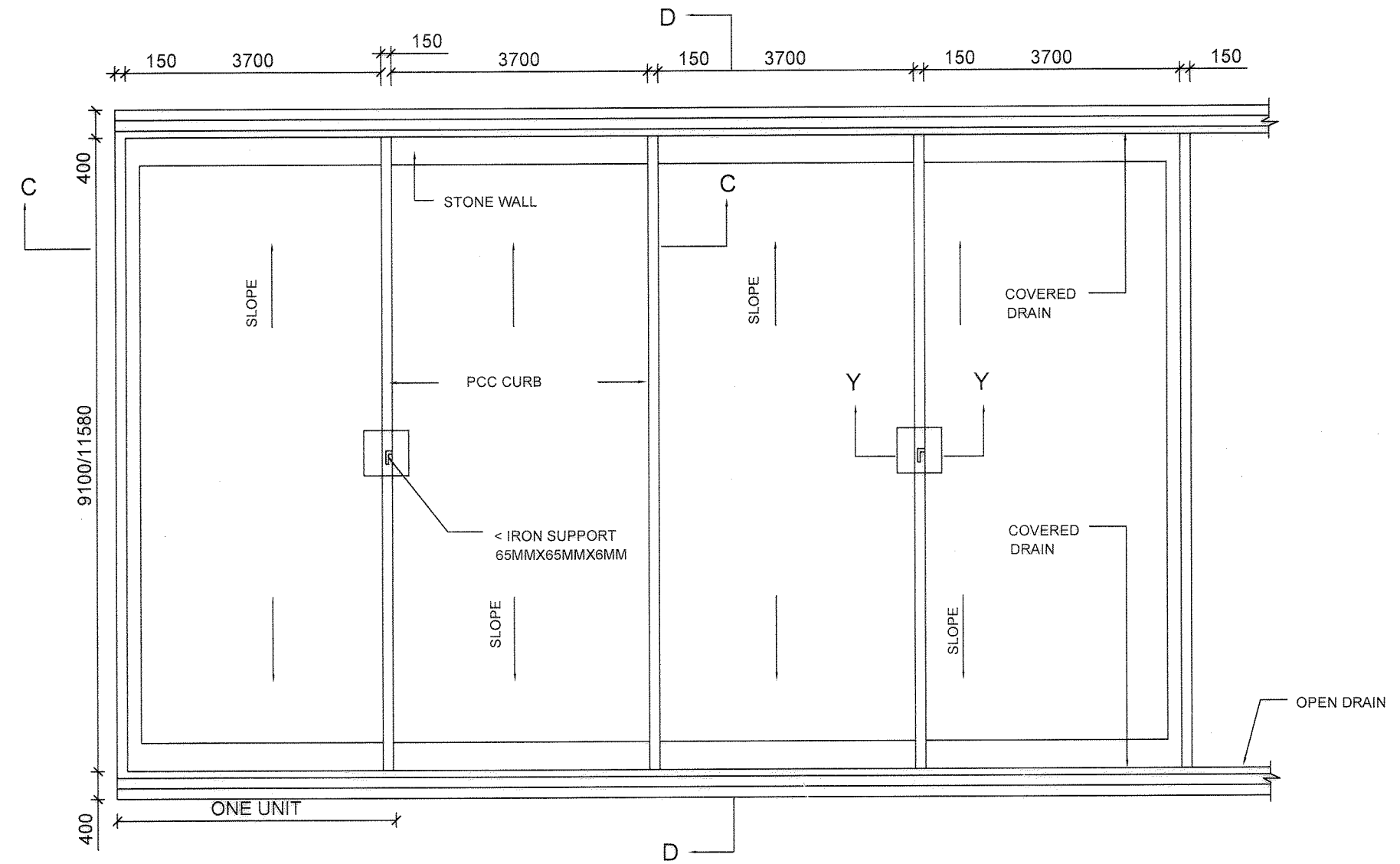
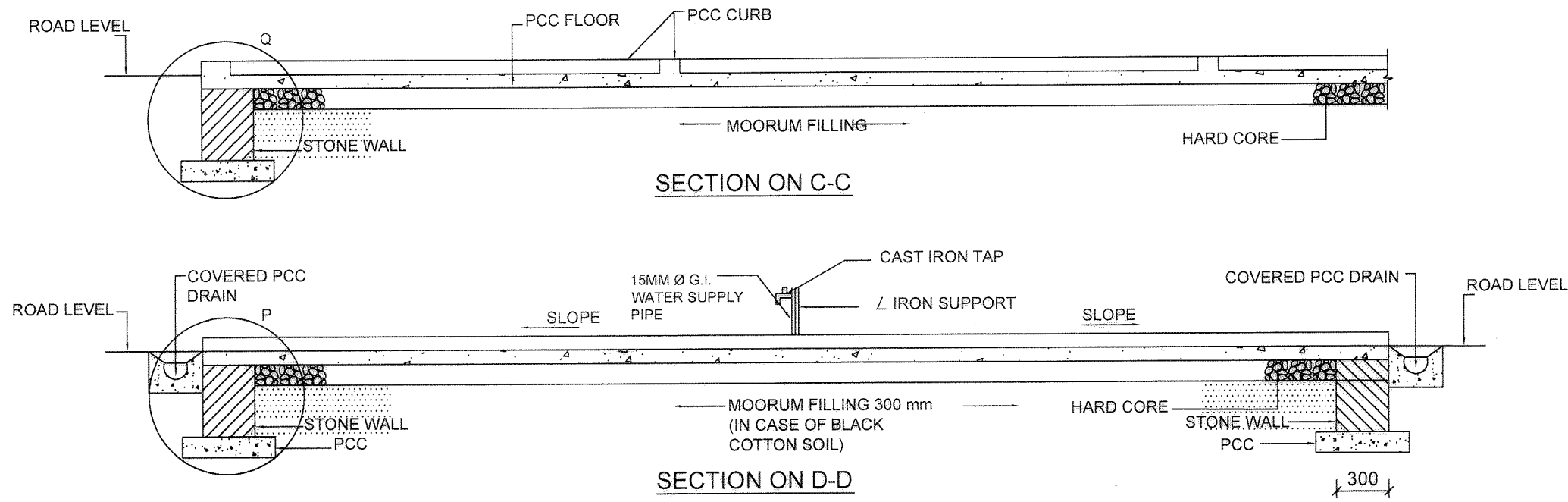
[Signature]
(LATHA P NAIR)
JT DIR (ARCH)

[Signature]

(RC SWAIN)
LT COL
SR ARCH
FOR CHIEF ENGINEER

NOTES

FOR ALL OTHER NOTES REFER SHT NO. 1/3 OF THIS DRG



DETAIL OF WASHING PLATFORM TYPE B

DETAIL OF WASHING PLATFORM 'A' & 'B'

PLAN & SECTIONS

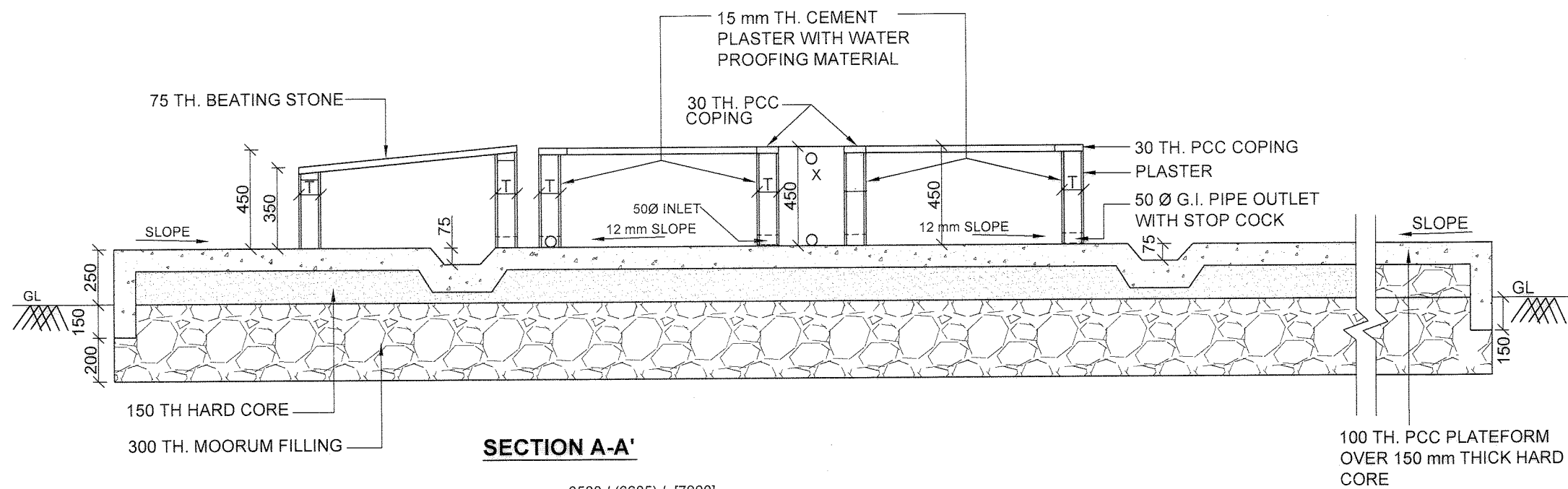
DATE	09-03-2015	CHIEF ENGINEER JODHPUR ZONE	SHT NO
DRN			2/3
TCD			
CKD			
SCALE AS SHOWN REF DRG NO : CEJZ / TD / 44 ' 1515			

(Signature)
AAD (ARCH)

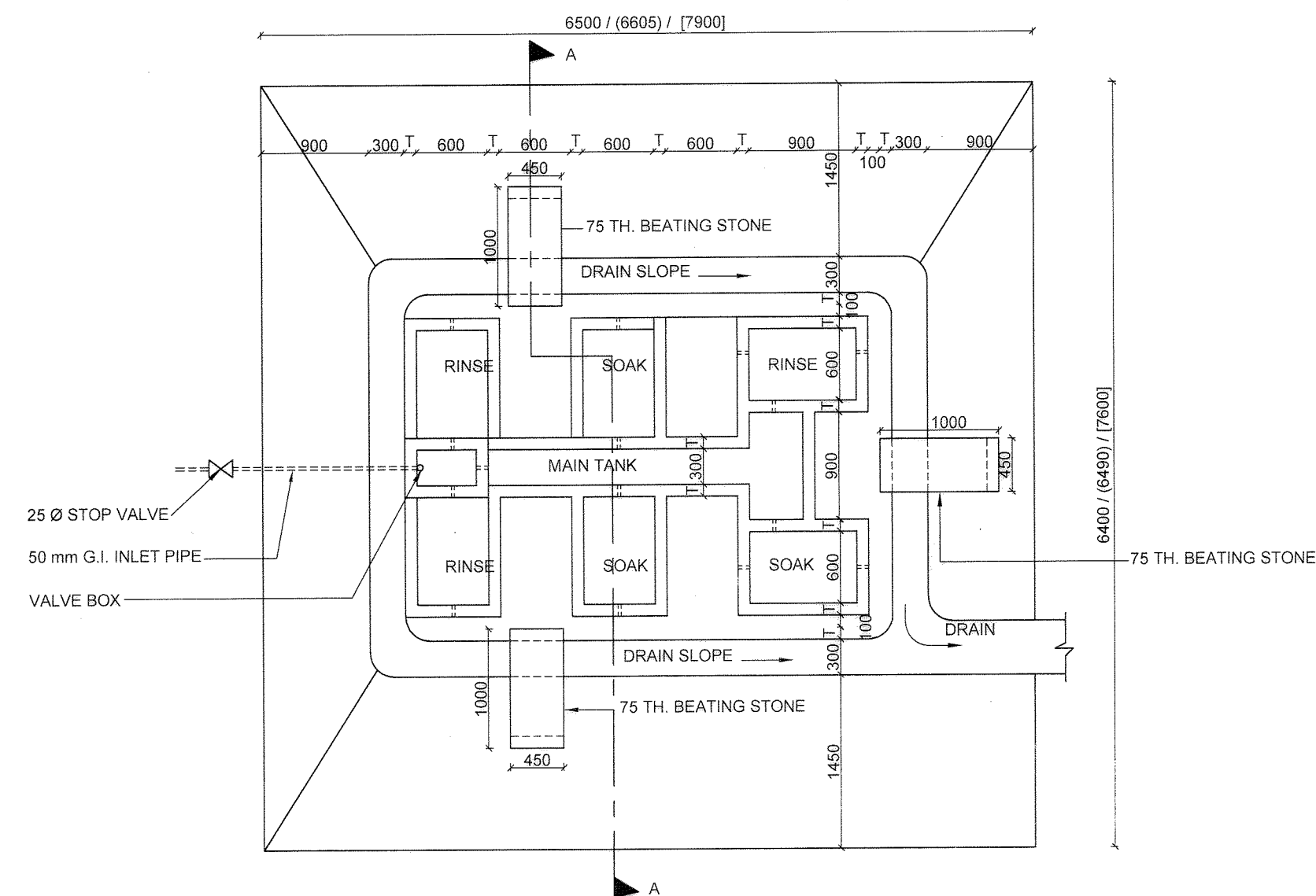
(Signature)

(Signature)
(LATHA P NAIR)
JT DIR (ARCH)

(RC SWAIN)
LT COL
SR ARCH
FOR CHIEF ENGINEER



SECTION A-A'



PLAN OF DHOBI GHAT (THREE STONE)

NOTES

- 1 CONTRACTOR TO CHECK & VERIFY ALL THE DIMENSIONS BEFORE EXECUTION OF THE WORK
- 2 FIGURED DIMENSIONS SHALL BE FOLLOWED
- 3 ALL DIMENSIONS ARE GIVEN IN MM UNLESS OTHERWISE STATED.
- 4 EXECUTIVE AUTHORITY SHALL CHECK THIS DRG. BEFORE TAKING EXECUTION IN HAND
- 5 T-DENOTES THE THICKNESS OF WALL-100 TH.FOR PCC BLOCK WALL 115TH.FOR BK AND 300 FOR STONE WALL.
- 6 THE OVERALL DIMENSIONS WRITTEN (i) WITHOUT BRACKET ARE APPLICABLE WHEN T=100 (PCC BLOCK WALL) (ii) 1N() BRACKETS ARE APPLICABLE WHEN T=115 (BK WALL) (iii) IN [] BRACKET ARE APPLICABLE WHEN T=300 (STONE WALL)
- 7 MOORUM FILLING SHALL BE PROVIDED WHERE BLACK COTTON SOIL MET AT SITE.

S. NO.	DATE	DESCRIPTIONS	INITIALS
REVISIONS			

DETAILS OF DHOBI GHAT THREE STONE

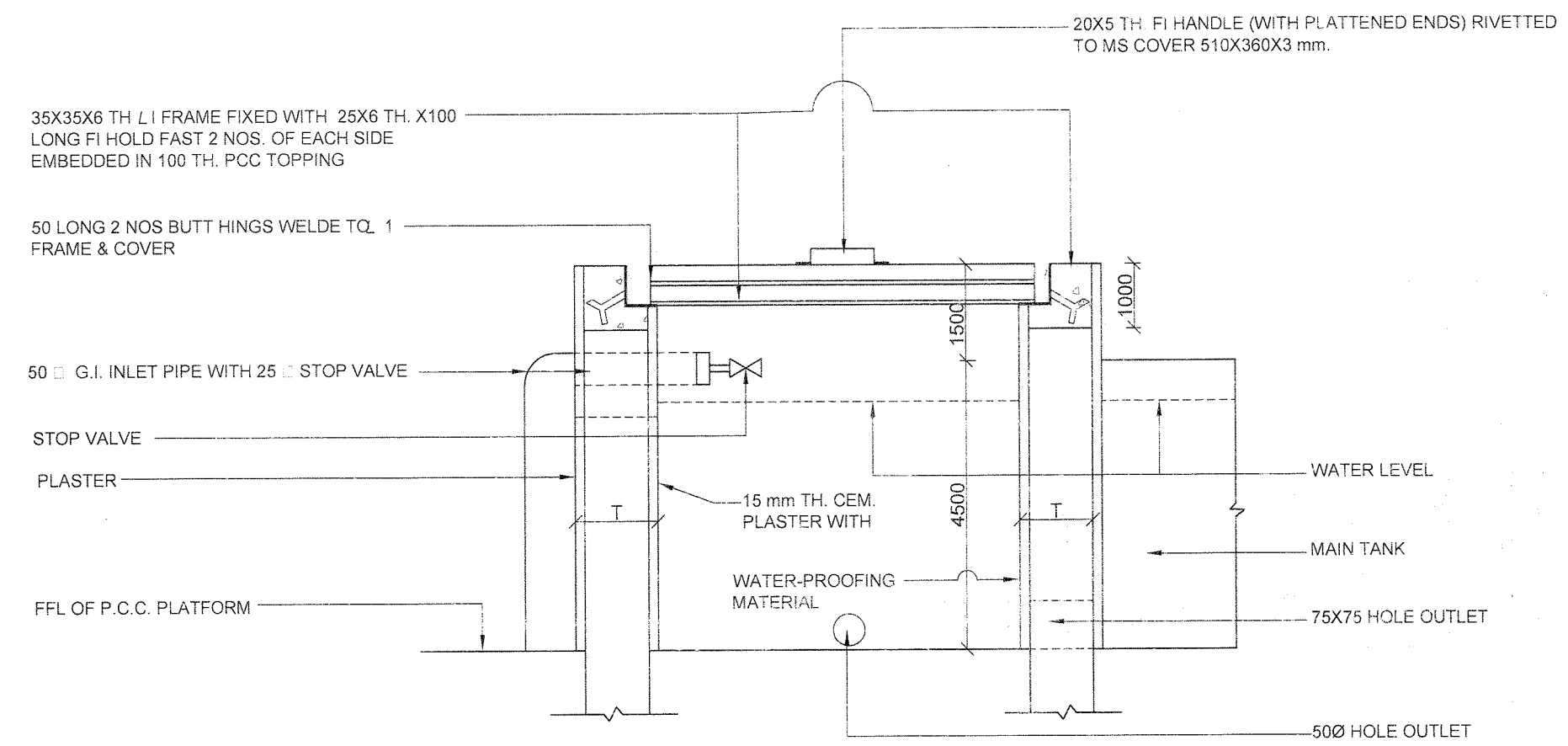
PLAN & SECTION

DATE	09.03.2015	CHIEF ENGINEER JODHPUR ZONE	SHT NO
DRN			1 2
TCD			
CKD			
SCALE	N T S	DRG NO: CEJZ / TD / 46	

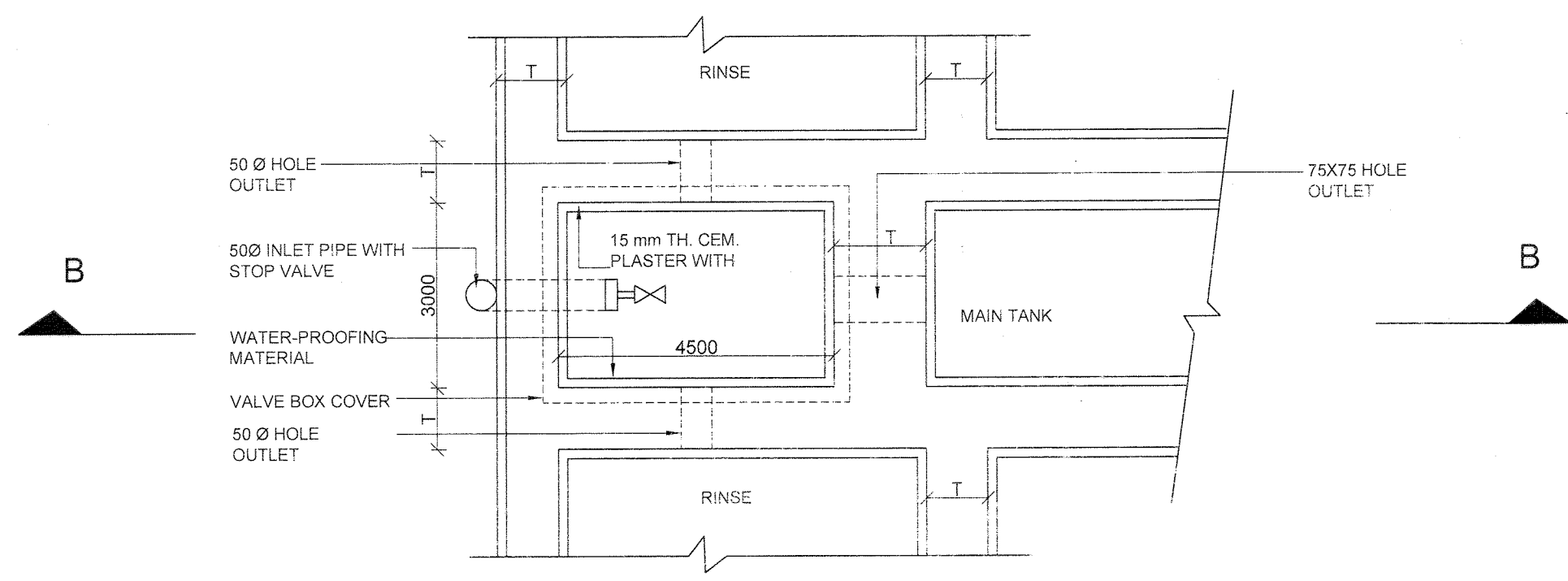
 (LATHA P NAIR) JT DIR (ARCH)	 (RC SWAIN) LT COL SR ARCH FOR CHIEF ENGINEER
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NOTES


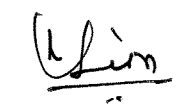
1. FOR ALL OTHER NOTES REFER SHEET 1/2 OF THIS DRG.

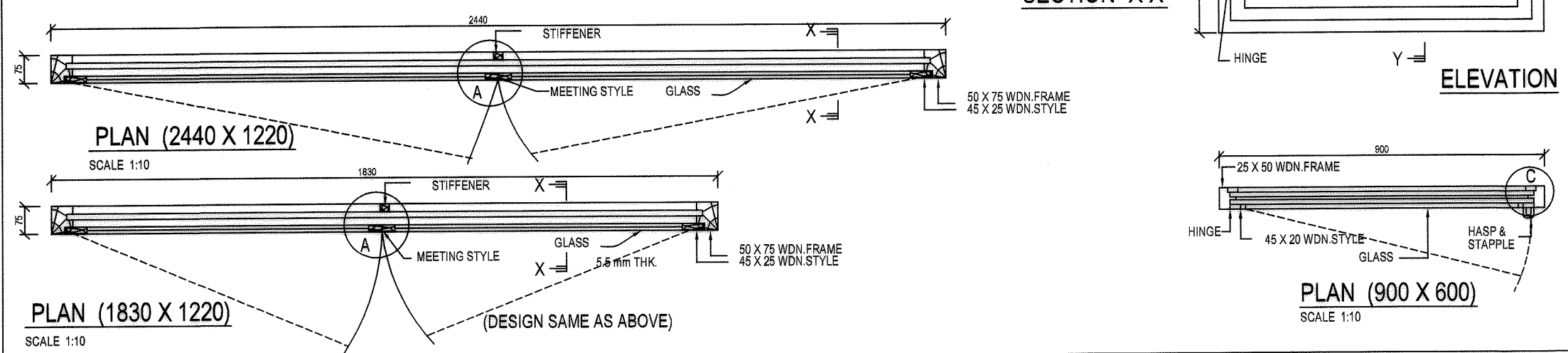
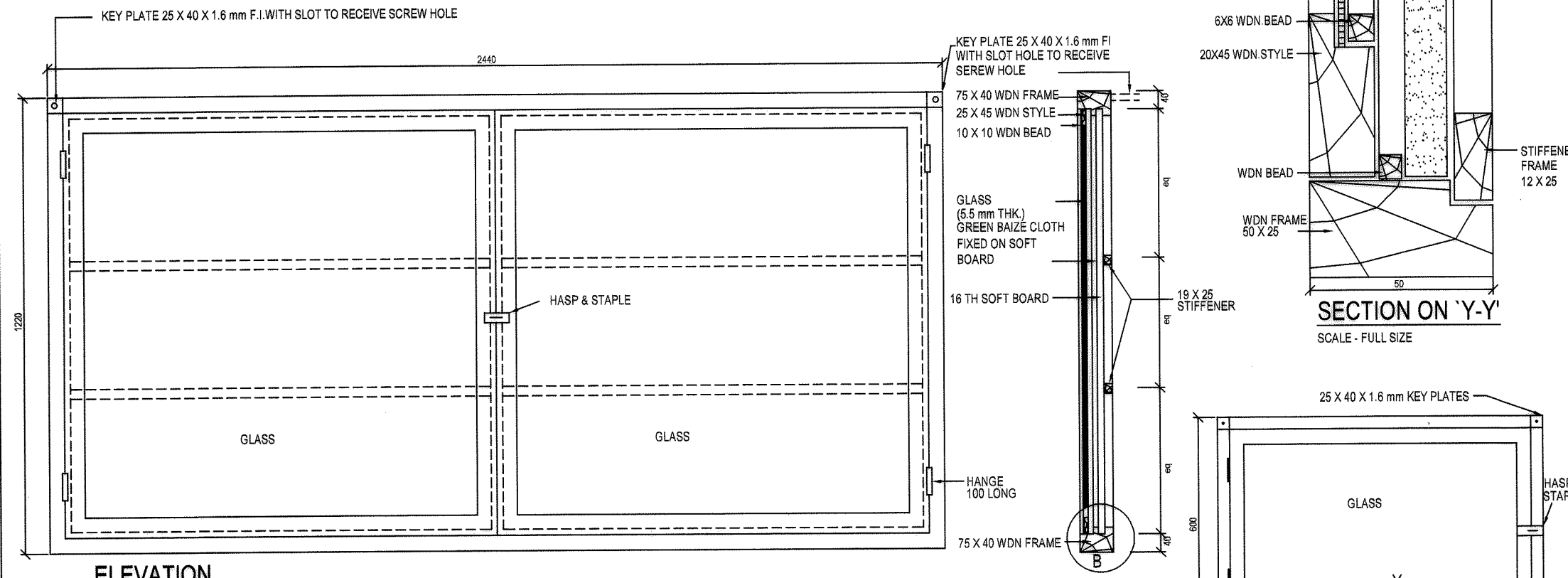
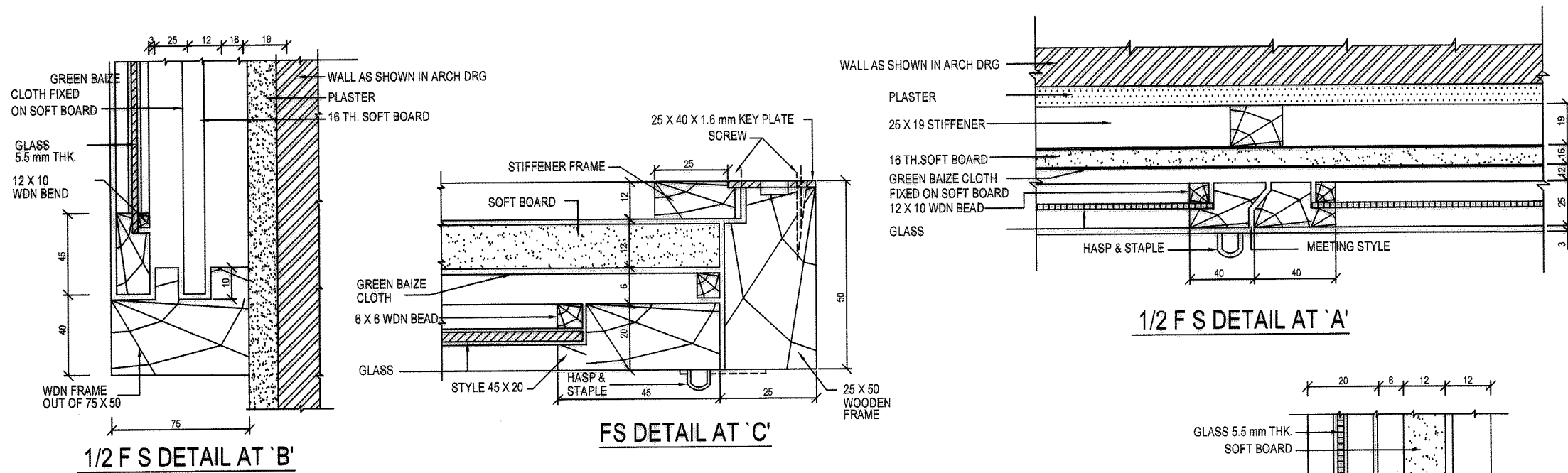


SECTION B-B



DETAIL PLAN OF VALVE BOX

S. NO.	DATE	DESCRIPTIONS	INITIALS
REVISIONS			
DETAILS OF DHOBI GHAT VALVE BOX			
SECTION & DETAIL PLAN			
DATE	09.03.2015	CHIEF ENGINEER	SHT NO
DRN		JODHPUR	2
TCD		ZONE	2
CKD			
SCALE	N T S	DRG NO: CEJZ / TD /46	
 (LATHA P WAIR) JT DIR (ARCH)		 (RC SWAIN) LT COL SR ARCH FOR CHIEF ENGINEER	



- NOTES**
1. CONTRACTOR TO CHECK AND VERIFY ALL DIMENSIONS BEFORE EXECUTION OF THE WORK.
 2. FIGURED DIMENSIONS SHALL BE FOLLOWED.
 3. ALL DIMENSIONS ARE GIVEN IN MILLIMETRES UNLESS OTHERWISE STATED.
 4. ALL SIZES GIVEN FOR WOOD WORK ARE FINISHED SIZES
 5. ALL SECOND CLASS SEASONED TEAK WOOD OR ITS EQUIVALENT SUBSTITUTE SHALL BE USED UNLESS OTHERWISE SPECIFIED.
 6. HIGH CLASS FINISH WITH FRENCH POLISH SHALL BE PROVIDED.
 7. ALL JOINTS & FIXING SHALL BE DONE IN ACCORDANCE WITH THE STANDARD WORKMAN SHIP / SPECIFICATIONS.
 8. THIS DRG. IS BASED ON E-IN-C'S DRG. NO. FD-99 SHT 1/1 & FD -117 SHT. 1/1.

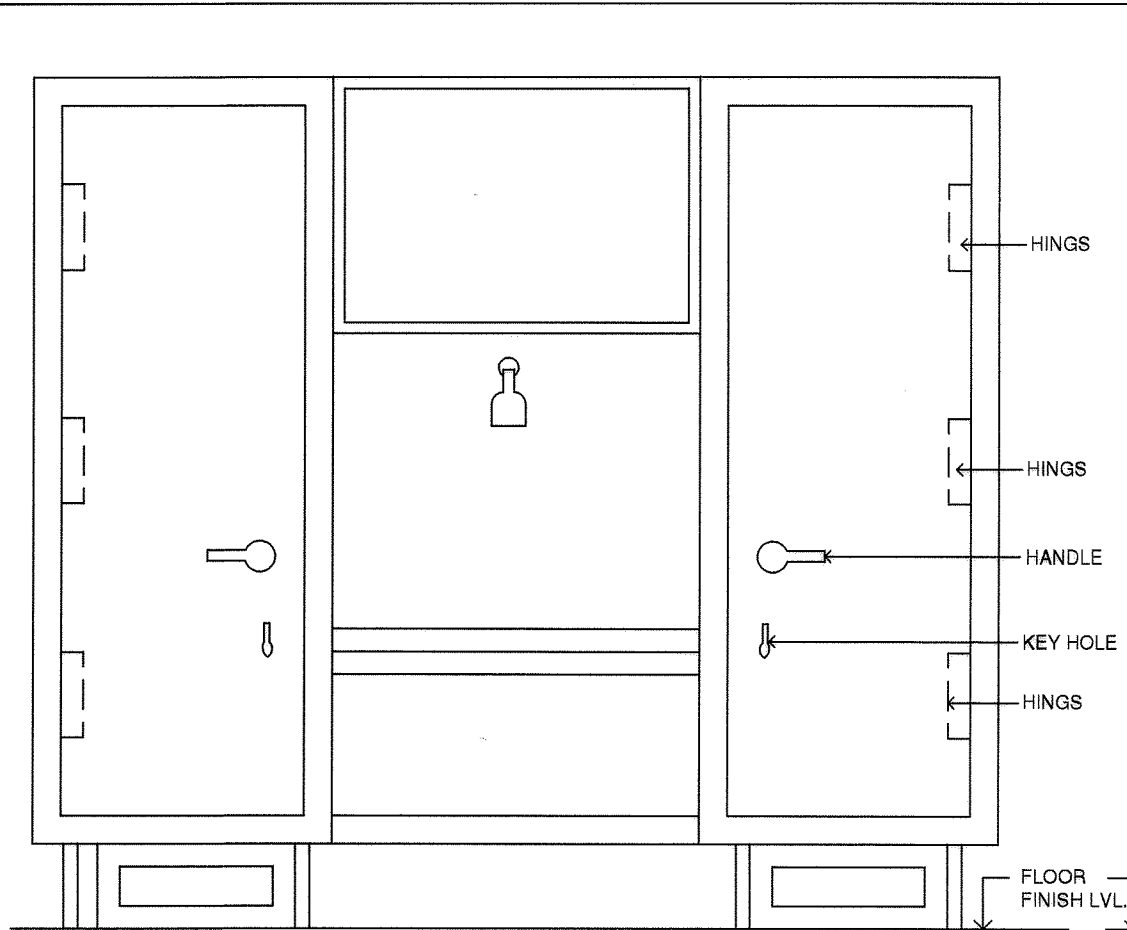
DETAILS OF NOTICE BOARD 1830 X 1220, 2440 X 1220 AND 900 X 600

DATE	09.03.2015	CHIEF ENGINEER JODHPUR ZONE	SHT NO
DRN			1
TCD			1
CKD			
SCALE	AS SHOWN	DRG. NO.- CEJZ / TD / 54	

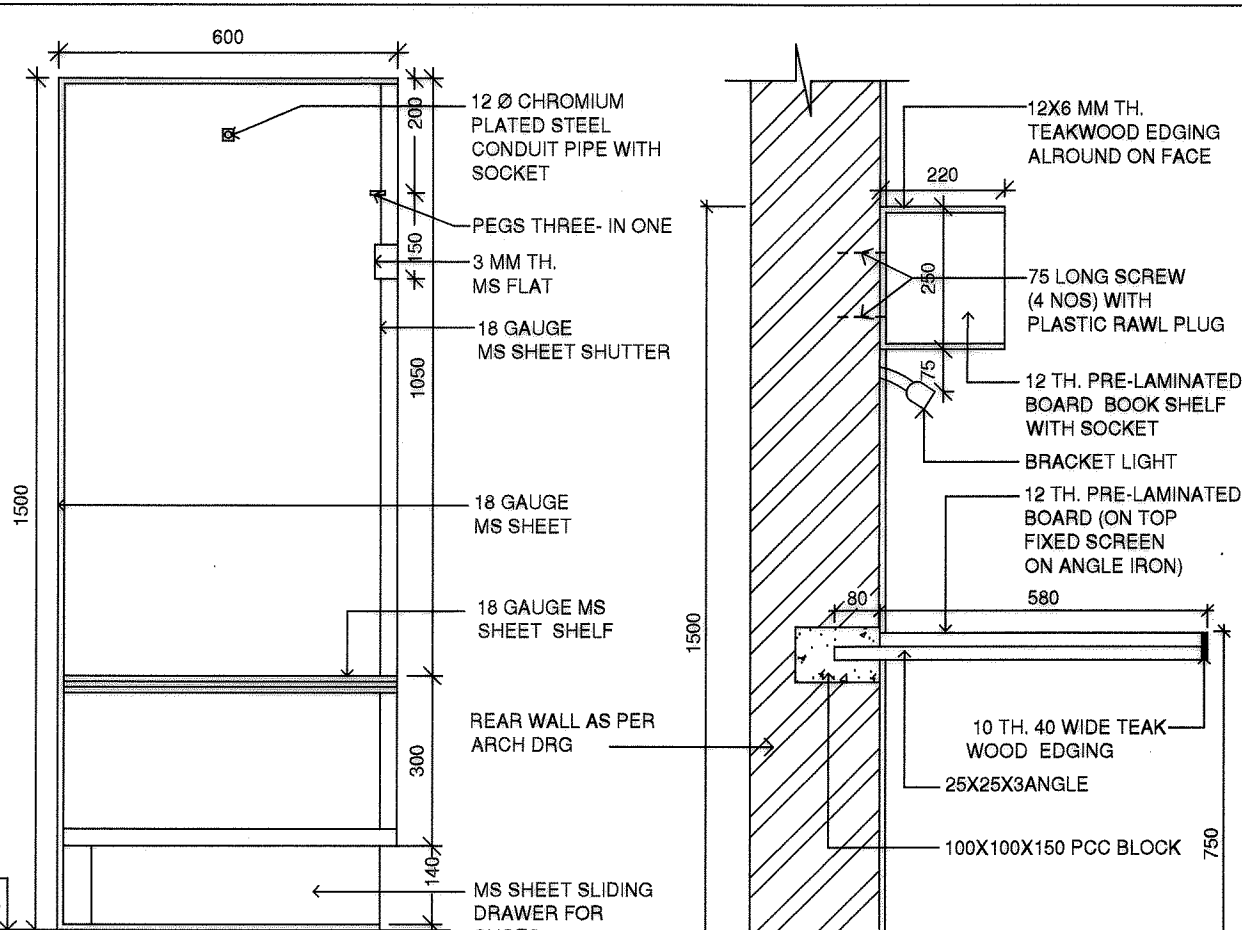
(Signature)
AAD (ARCH)

(Signature)
(LATHA P NAIR)
JT DIR (ARCH)

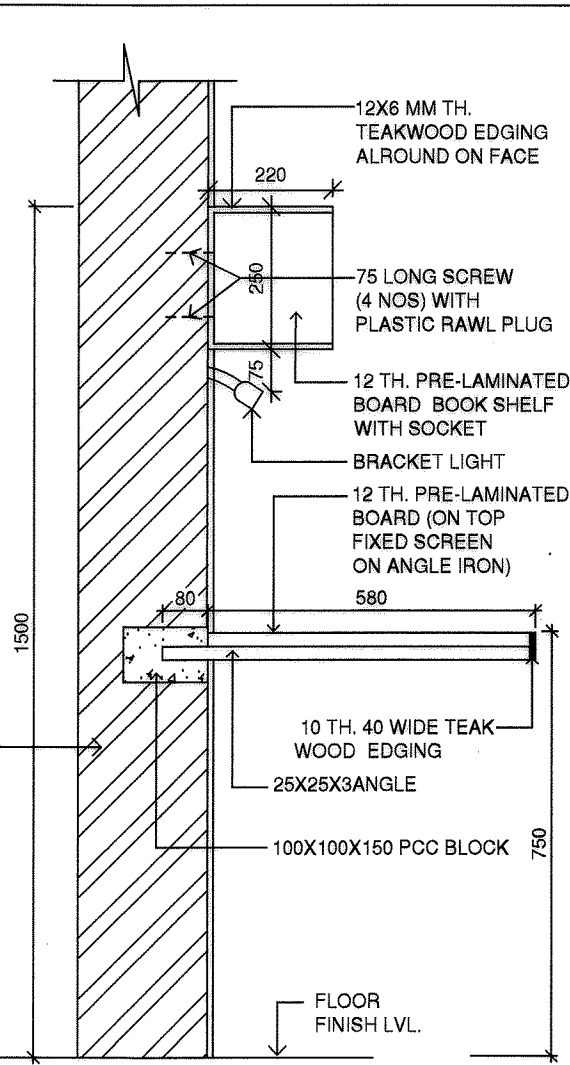
(Signature)
(RC SWAIN)
LT COL
SR ARCH
FOR CHIEF ENGINEER



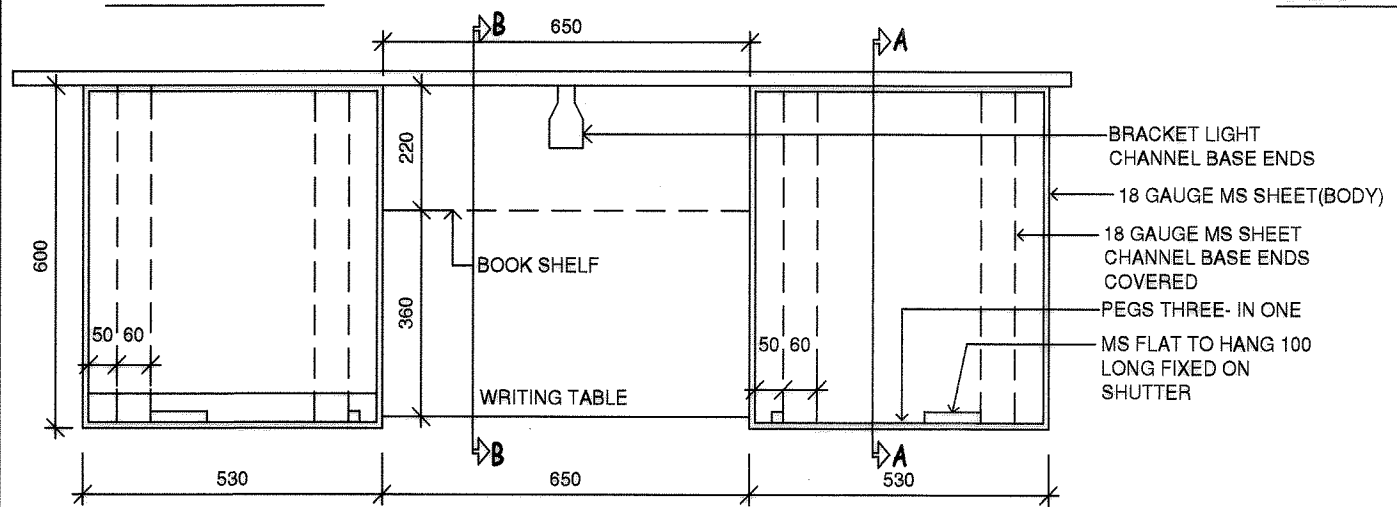
ELEVATION



SECTION A-A



SECTION B-B



PLAN DETAIL OF STEEL LOCKER & SHELVES

NOTES:-

1. CONTRACTOR TO CHECK AND VERIFY ALL DIMENSIONS BEFORE EXECUTION OF THE WORK.
2. FIGURED DIMENSIONS SHALL BE FOLLOWED.
3. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED
4. ALL JOINTS/ WELDING/ FIXING SHALL BE DONE IN ACCORDANCE WITH THE STD WORKMANSHIP AND SPECIFICATIONS
5. ALL WELDED CONSTRUCTIONS & STEEL WORK SHALL BE SPRAY PAINTED INTERNALLY & EXTERNALLY WITH OLIVE GREEN OR SILVER GRAY OVER A COAT OF PRIMER

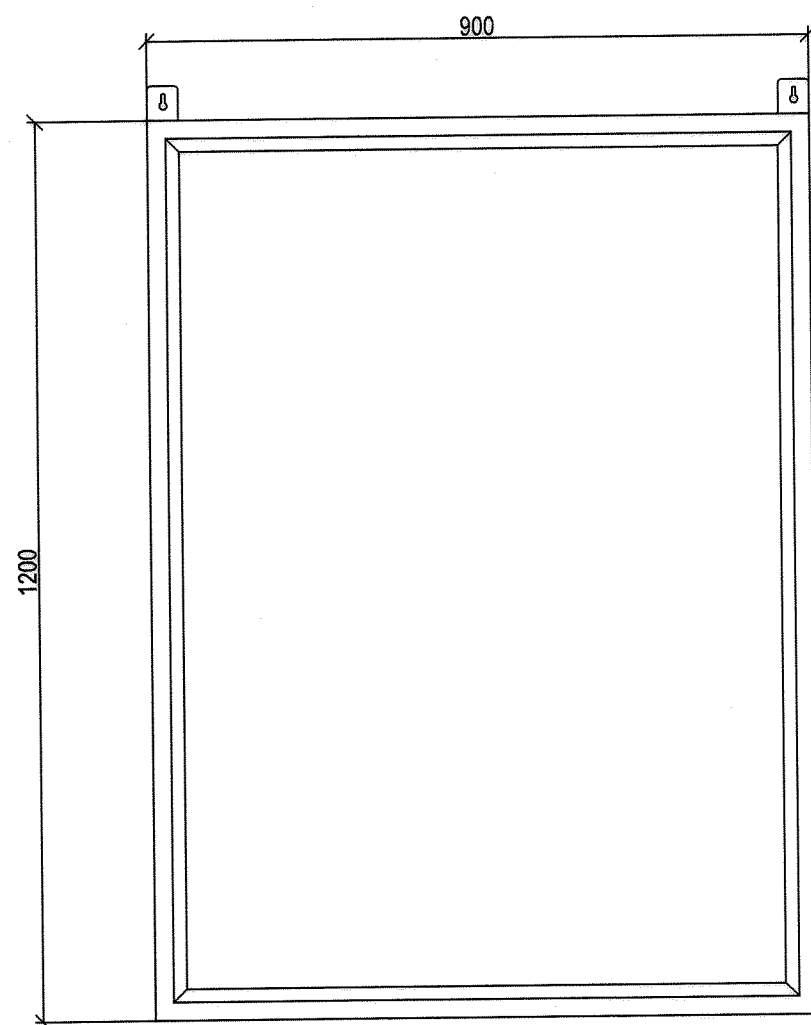
S.NO	DATE	DESCRIPTIONS	SIGN
REVISION			

DETAILS OF LOCKERS, BOOK SELF & TABLE WRITING FOR SM BARRACKS

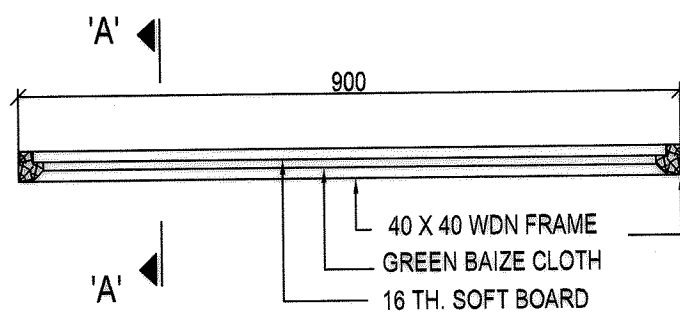
PLAN , ELEVATIONS, SECTIONS

DATE	17 MAR 2015	CHIEF ENGINEER JODHPUR ZONE	SHT NO
DRN	C S ASERI		1/1
TCD			
CKD			
SCALE	AS SHOWN	DRG NO: CEJZ/TD/56	

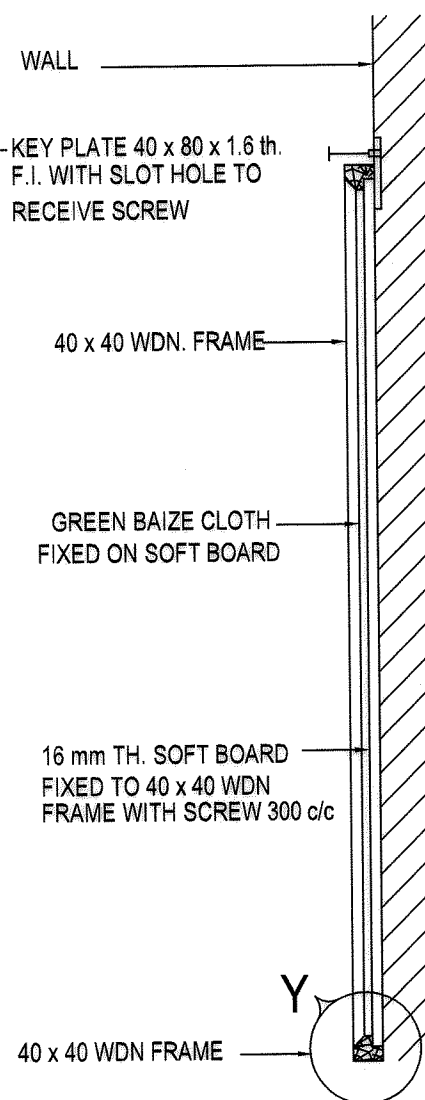

 SR ARCH
 FOR CHIEF ENGINEER



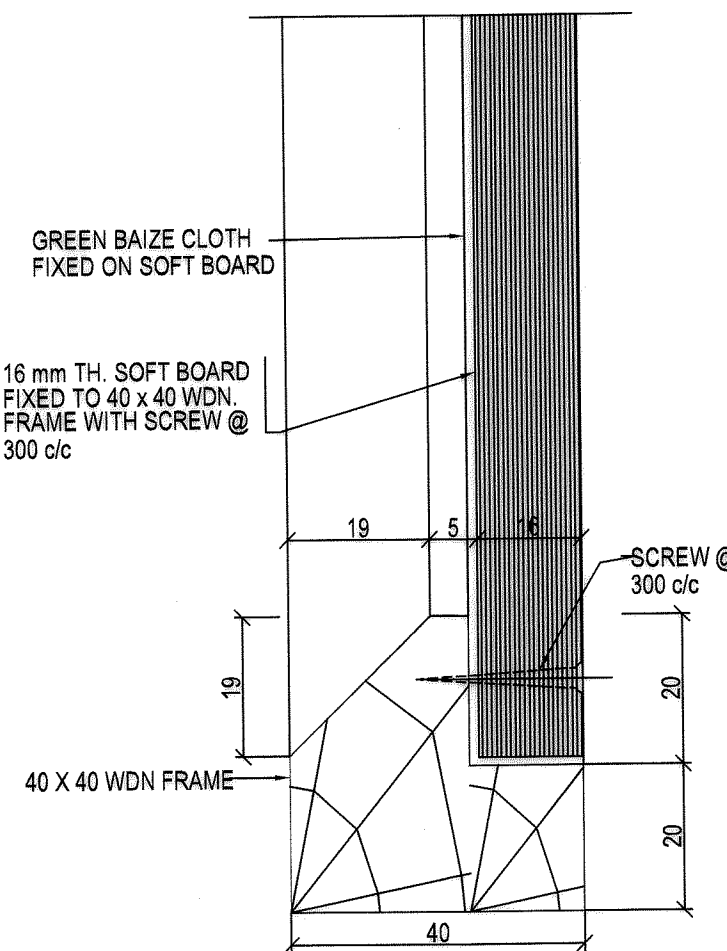
ELEVATION
SCALE - 1:10



PLAN
SCALE - 1:10



SECTION 'A-A'
SCALE - 1:1



DETAIL AT 'Y'
SCALE - 1:1

NOTES

1. CONTRACTOR TO CHECK AND VERIFY ALL DIMENSIONS BEFORE EXECUTION OF THE WORK.
2. FIGURED DIMENSIONS SHALL BE FOLLOWED
3. ALL DIMENSIONS ARE GIVEN IN MILLIMETRES UNLESS OTHERWISE STATED
4. ALL SIZES GIVEN FOR WOOD WORK ARE FINISHED SIZES.
5. ALL FIRST CLASS SEASONED TEAK WOOD OR ITS EQUIVALENT SHALL BE USED UNLESS OTHERWISE SPECIFIED.
6. ALL JOINTS & FIXING SHALL BE DONE IN ACCORDANCE WITH THE STANDARD WORKMANSHIP / SPECIFICATIONS.
7. HIGH GLOSS FINISH WITH FRENCH POLISH SHALL BE PROVIDED.

S.NO	DATE	DESCRIPTIONS	SIGN
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REVISION

**DETAIL OF DISPLY BOARD
(900 x 1200)**

**PLAN , ELEVATIONS, SECTIONS AND
DETAILS**

DATE	17 MAR 2015	CHIEF ENGINEER	SHT NO	
DRN	C S ASERI			1
TCD				
CKD				1
SCALE	AS SHOWN	DRG NO: CEJZ/TD/ 57		

SR ARCH
FOR CHIEF ENGINEER