

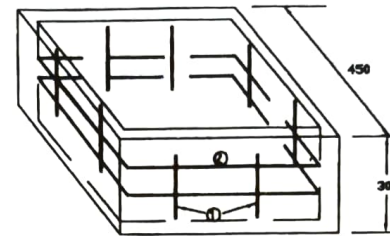
NOTE:

1. All dimensions are in mm.
2. All multiple units, calling-on, shunt, route & screens shall be looped together.
3. Code of practice for earthing as per IS:3043
4. Ⓢ Copper nut & bolt (Hexagonal head) to be provided for fixing copper strip to copper plate.
5. Concrete of M25 grade 1:2:4 with maximum size of stone chips of 10mm.

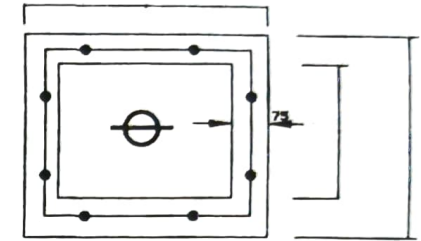
		REVISION	SOUTH WESTERN RAILWAY	
RANRAO		DRAWN	SIGNAL & TELECOMMUNICATION	
604		SSE/DRG	C K D	TYPICAL DRAWING OF COPPER PLATE EARTHING ARRANGEMENT
24.09.19		A.X.S.T.E/D		
24.04.19		X.S.T.E		
24.09.19		Py.CSTE/PLG	NOT TO SCALE	
(S NAGESWARA RAO)				
24.09.19		CSE/SWR		DRG.No. SG/SWR/058
(B S ISAAH)				
			SHEET	SHEETS
			1	1

REINFORCEMENT DETAILS FOR CONCRETE CHAMBER

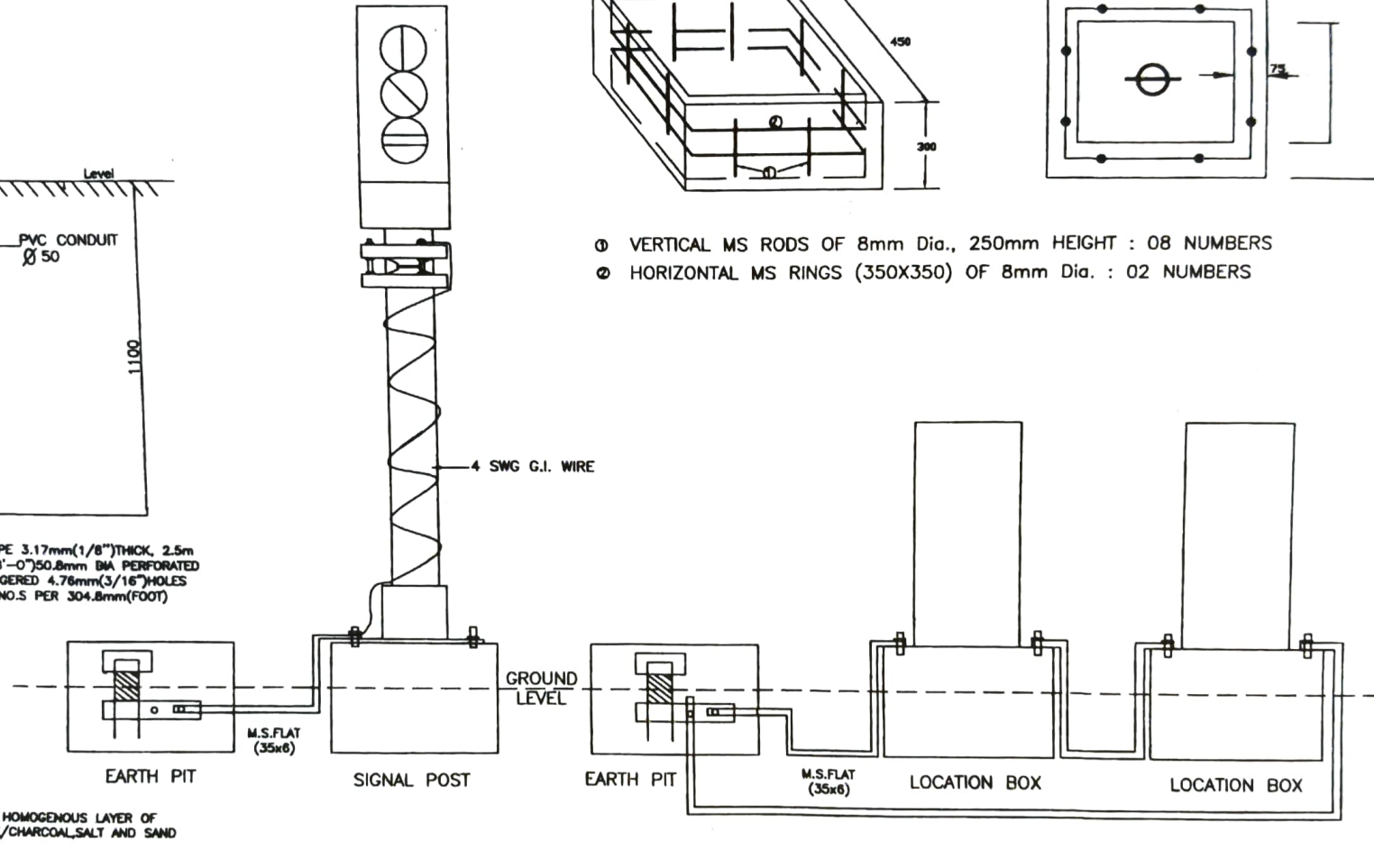
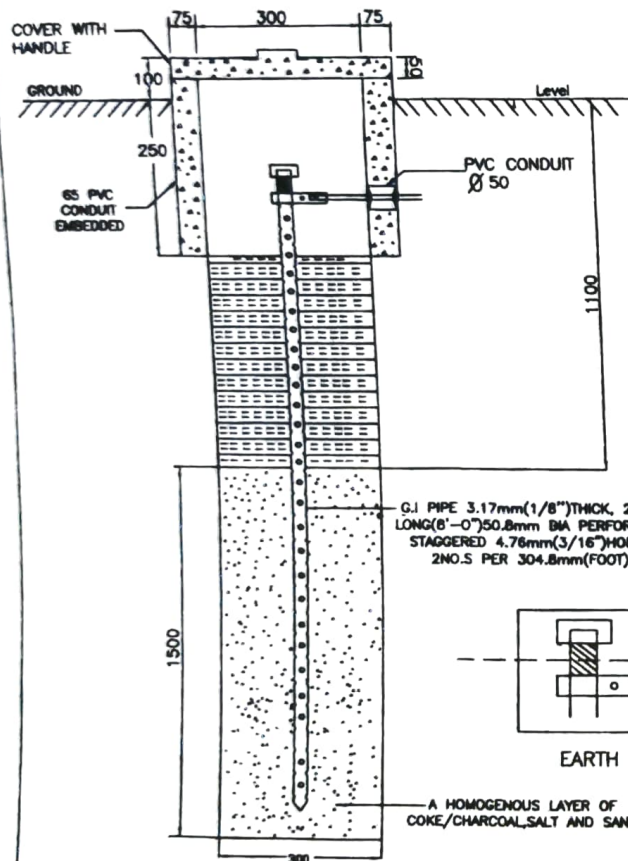
3D VIEW



TOP VIEW



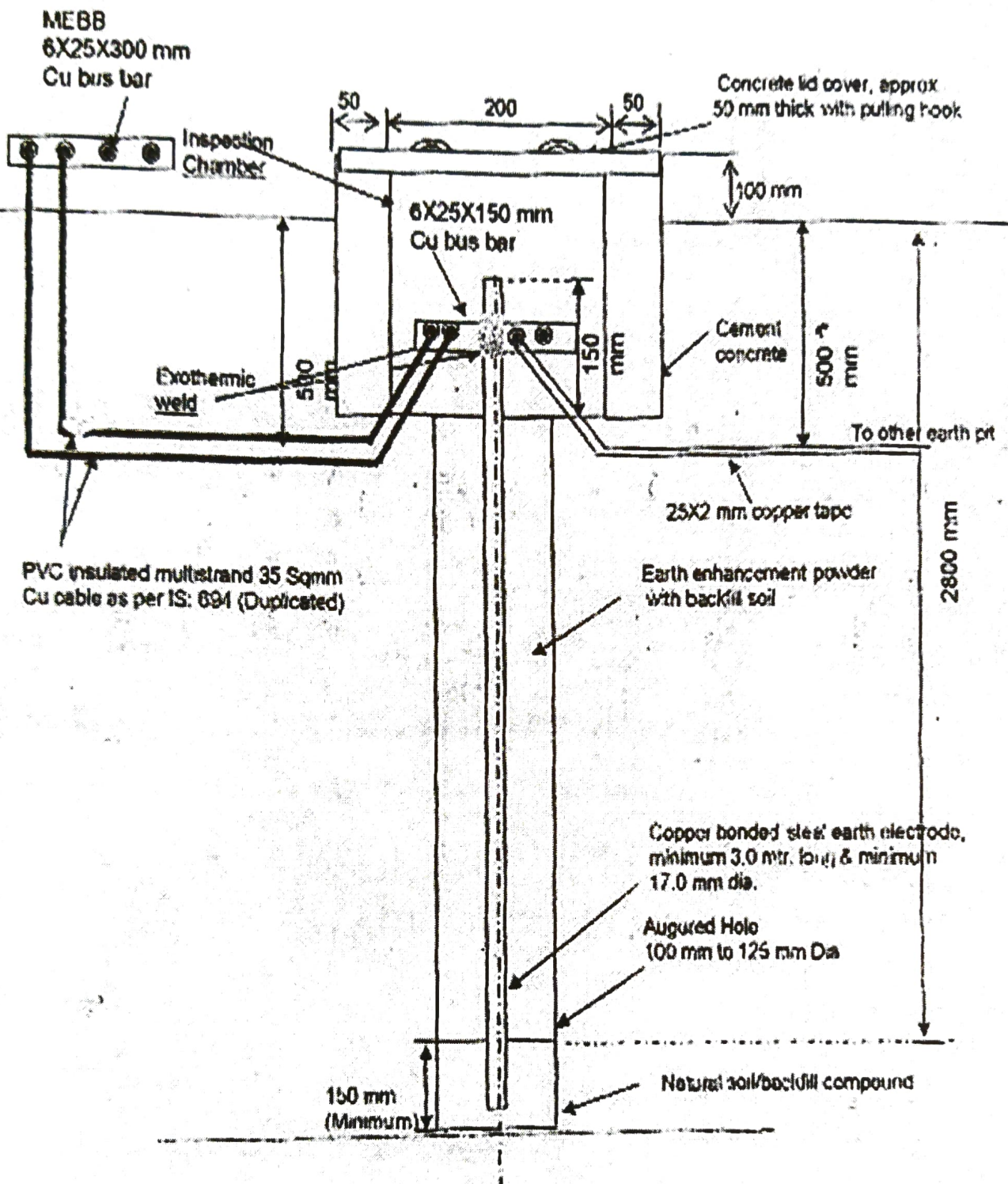
- ① VERTICAL MS RODS OF 8mm Dia., 250mm HEIGHT : 08 NUMBERS
- ② HORIZONTAL MS RINGS (350X350) OF 8mm Dia. : 02 NUMBERS



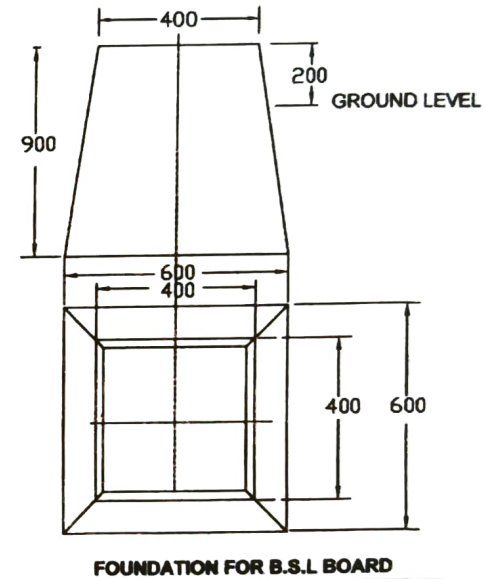
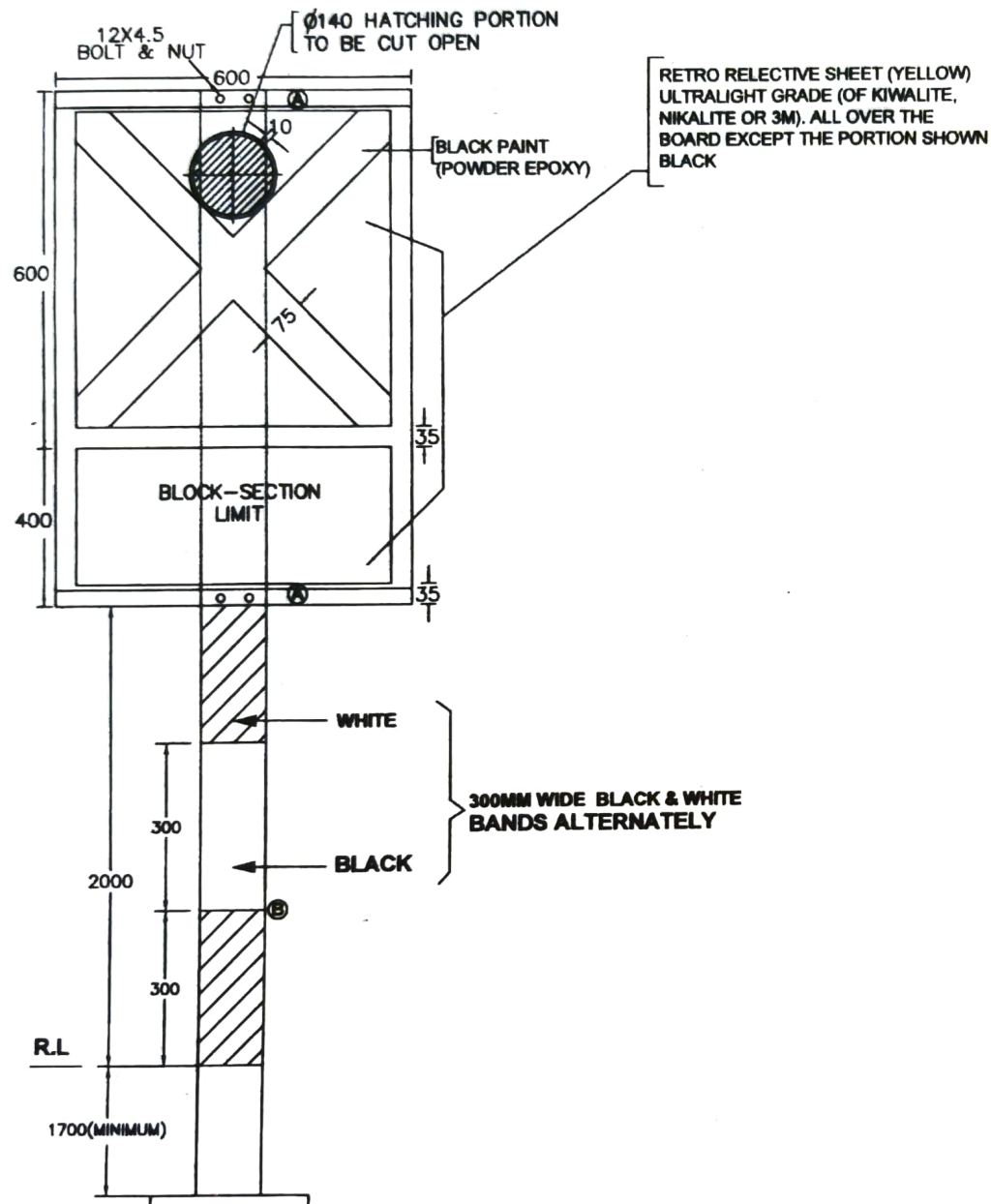
NOTE:

1. All dimensions are in mm.
2. All multiple units, calling-on, shunt, route & screens shall be looped together.
3. Code of practice for earthing as per IS:3043
4. Concrete of M25 grade 1:2:4 with maximum size of stone chips of 10mm.



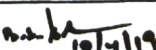
REVISION		SOUTH WESTERN RAILWAY		
DRAWN		SIGNAL & TELECOMMUNICATION		
SSE/DRG		C K D	TYPICAL DRAWING OF COVENTIONAL EARTHING ARRANGEMENT	
A.X.S.T.E/D				
X.S.T.E				
CSE/PLG		NOT TO SCALE		
CSE/SWR		DRG.No. SG/SWR/057		
		SHEET SHEETS		
		1 1		

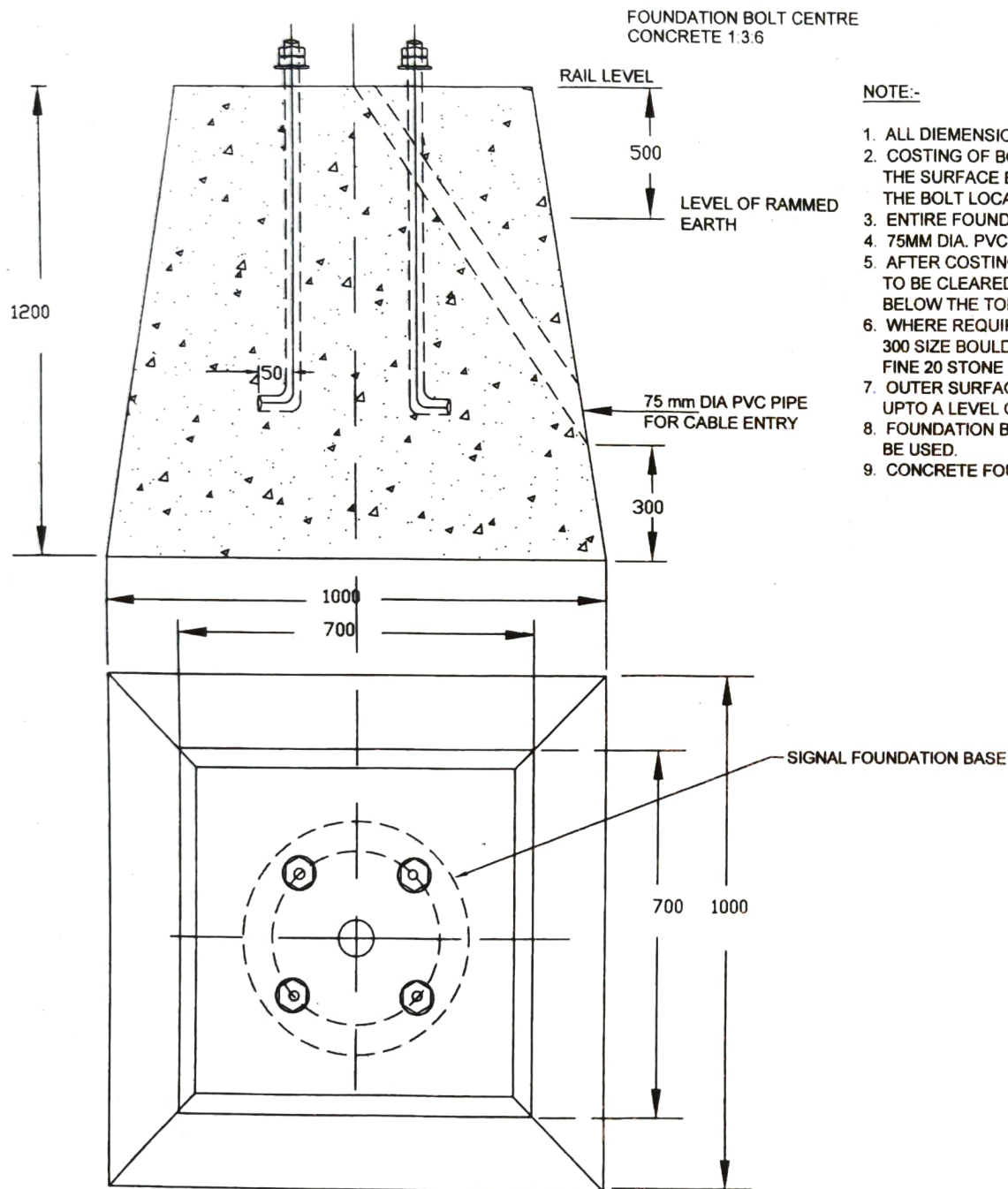


RDSO			Typical installation of earth for S&T installations	
JE/SE/Sig	ADE/Sig	For DG/Sig	Org. No. SDQ / RDSO/ E&B/001	Sheet No: 1 of 1
			Date: 19.09.08	



NOTE:
 ALL DIMENTIONS ARE IN MM.
 THICKNESS OF THE BOARD 3MM
 TO BE FILLED WITH CEMENT MORTAR.
 Ⓐ M.S.FLAT 5X25 WELDED TO THE BOARD
 Ⓑ M.S.ANGLE 75X75X10
 CONCRETE 1: 3: 6

—	REVISION	SOUTH WESTERN RAILWAY		
R.A.N.RAO	DRAWN	SIGNAL & TELECOMMUNICATION		
	SSE/DRG	C K D	TYPICAL DRAWING OF BLOCK SECTION LIMIT BOARD	
M. S. 27.02.19	A.X.S.T.E/D			
27.04.19	X.S.T.E			
	Dy.CSTE/PLG	NOT TO SCALE		
S.NAGESWARA RAO		DRG.No.SG/SWR/051		
	CSE/SWR	SHEET		SHEETS
		1	1	

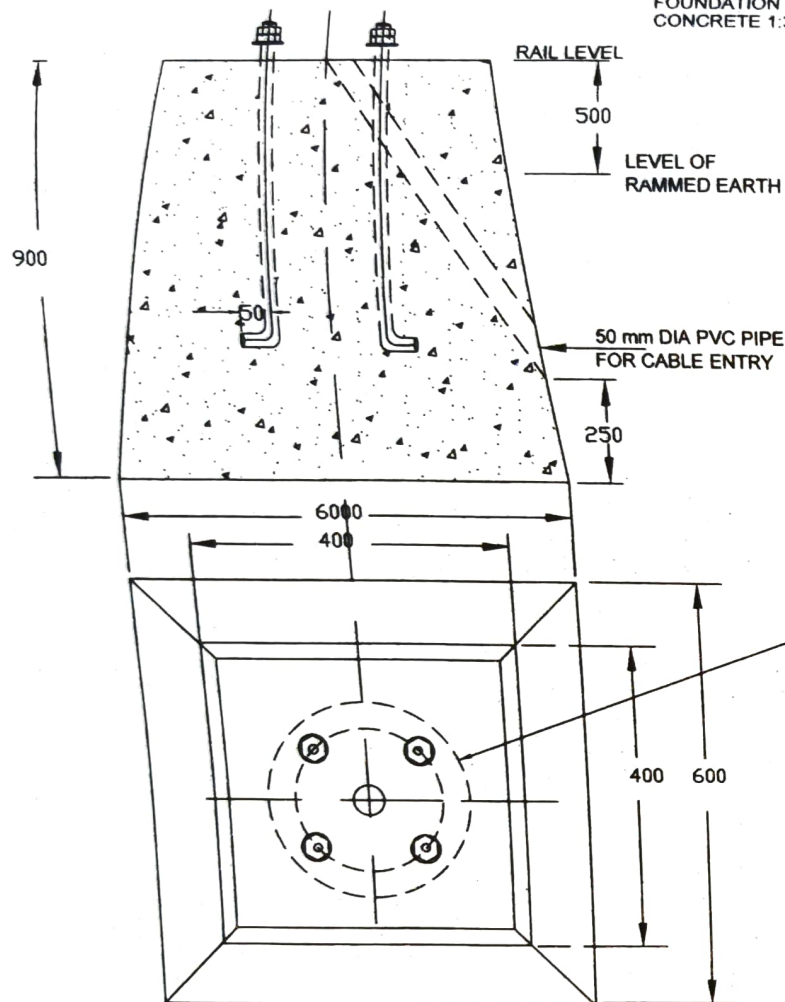


NOTE:-

1. ALL DIEMENSIONS ARE IN MM.
2. COSTING OF BOLTS TO BE DONE IN THE CONCRETE BASE DULY TAKING HE MEASUREMENTS OF THE SURFACE BASE AND CIRCLE ALSO ALIGNING THE FOUR HOLES OF THE SURFACE BASE WITH THE BOLT LOCATION 1, 2, 3 & 4 BY PROVIDING TEMPLATE.
3. ENTIRE FOUNDATION SHOULD BE CAST IN ONE STRETCH AND WITH BOLT ONLY.
4. 75MM DIA. PVC PIPE TO BE EMBEDDED DURING CASTING ITSELF (AND NOT LATER ON).
5. AFTER COSTING OF BASE AND CURING OF THE SAME IS OVER THE FOUR SIDES OF THE BASE TO BE CLEARED OF ALL LEFT OVER CONCRETE AND SIDES DULY RAMMED WITH EARTH UPTO 500 BELOW THE TOP OF THE BASE.
6. WHERE REQUIRED PITCHING ON THE RELEVANT SIDES OF THE RAMMED SURFACE WITH 225 TO 300 SIZE BOULDERS SHALL BE DONE AND FILLING THE CREVICES WITH 10:6:12 CONCRETE WITH FINE 20 STONE CHIPS. PITCHING WILL BE TO THE FULL HEIGHT OF THE RAMMED EARTH.
7. OUTER SURFACE SHOULD BE PLASTERED FROM TOP OF FOUNDATION WITH 1:2 CEMENT AND SAND UPTO A LEVEL OF 500MM.
8. FOUNDATION BOLT OF SIZE 30MM DIA 750MM LONG WITH 2 FLAT WASHERS & 2 NUTS ARE TO BE USED.
9. CONCRETE FOUNDATION WITH RATIO 1:3:6.

		REVISION		SOUTH WESTERN RAILWAY			
R.A.N.RAO		DRAWN		SIGNAL & TELECOMMUNICATION			
Cov		SSE/DRG		C K D	TYPICAL DRAWING OF ROAD WARNING SIGNAL FOUNDATION		
M. S. 09.04.19		A.X.S.T.E/D					
S. N. 9.4.19		X.S.T.E					
S. NAGESWARA RAO		Dy. CSTE/PLG		NOT TO SCALE			
B. S. ISAIAH		CSE/SWR		DRG.No.		SHEET	SHEETS
(B.S.ISAIAH)				SG/SWR/054		1	1

FOUNDATION BOLT CENTRE
CONCRETE 1:3:6



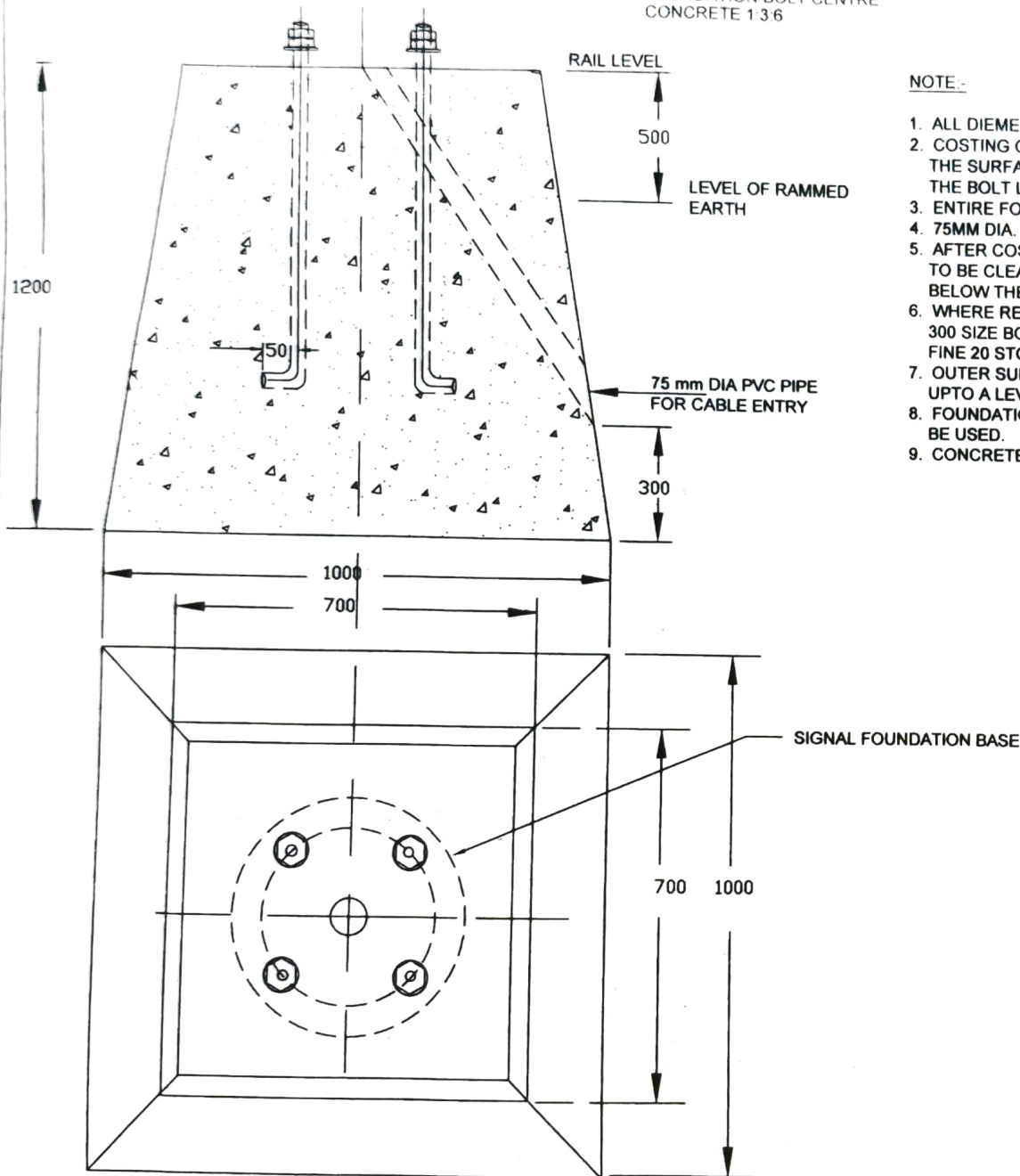
NOTE:-

1. ALL DIEMENSIONS ARE IN MM.
2. COSTING OF BOLTS TO BE DONE IN THE CONCRETE BASE DULY TAKING HE MEASUREMENTS OF THE SURFACE BASE AND CIRCLE ALSO ALIGNING THE FOUR HOLES OF THE SURFACE BASE WITH THE BOLT LOCATION 1, 2, 3 & 4 BY PROVIDING TEMPLATE.
3. ENTIRE FOUNDATIONS SHOULD BE CAST IN ONE STRETCH AND WITH BOLT ONLY.
4. 50MM DIA. PVC PIPE TO BE EMBEDDED DURING CASTING ITSELF (AND NOT LATER ON).
5. AFTER COSTING OF BASE AND CURING OF THE SAME IS OVER THE FOUR SIDES OF THE BASE TO BE CLEARED OF ALL LEFT OVER CONCRETE AND SIDES DULY RAMMED WITH EARTH UPTO 500 BELOW THE TOP OF THE BASE.
6. WHERE REQUIRED PITCHING ON THE RELEVANT SIDES OF THE RAMMED SURFACE WITH 225 TO 300 SIZE BOULDERS SHALL BE DONE AND FILLING THE CREVICES WITH 10:6:12 CONCRETE WITH FINE 20 STONE CHIPS. PITCHING WILL BE TO THE FULL HEIGHT OF THE RAMMED EARTH.
7. OUTER SURFACE SHOULD BE PLASTERED FROM TOP OF FOUNDATION WITH 1:2 CEMENT AND SAND UPTO A LEVEL OF 500MM.
8. FOUNDATION BOLT OF SIZE 22MM DIA 450MM LONG WITH 2 FLAT WASHERS & 2 NUTS ARE TO BE USED.
9. CONCRETE FOUNDATION WITH RATIO 1:3:6.
10. SAME DRAWING CAN BE ADOPTED FOR GWB, BSLB, CALLING-ON LEGEND BOARD OR ANY OTHER BOARDS OF SPECIFIED IN SIP.

SIGNAL FOUNDATION BASE

REVISION		SOUTH WESTERN RAILWAY	
DRAWN		SIGNAL & TELECOMMUNICATION	
SSE/DRG	C K D	TYPICAL DRAWING OF SHUNT SIGNAL FOUNDATION	
A.X.S.T.E/D			
X.S.T.E			
Dy.CSTE/PLG		NOT TO SCALE	
CSE/SWR		DRG.No. SG/SWR/053	SHEET 1
			SHEETS 1

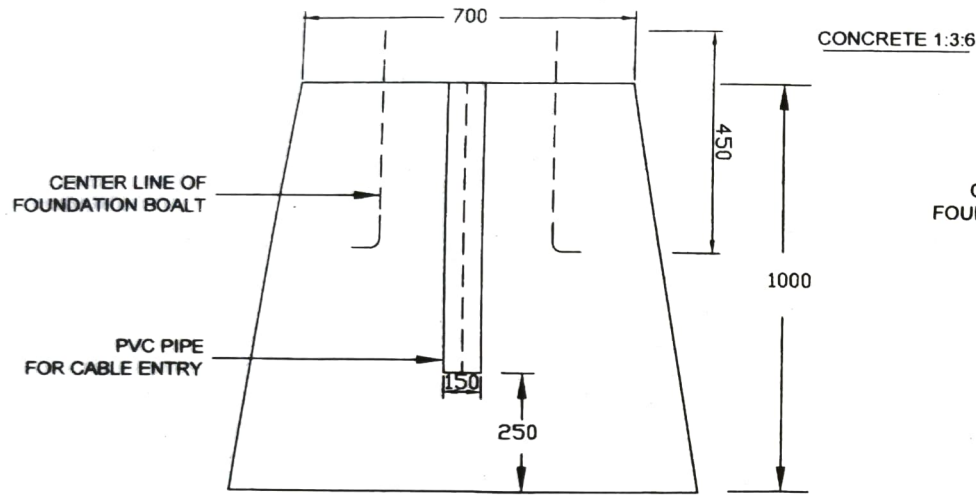
FOUNDATION BOLT CENTRE
CONCRETE 1:3:6



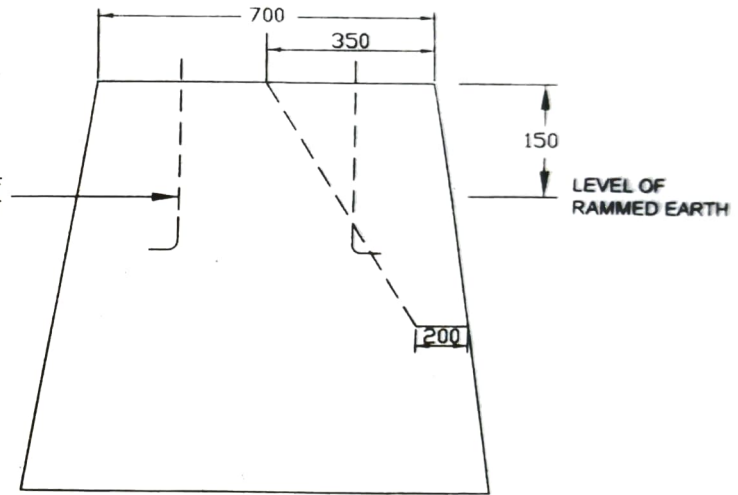
NOTE:-

1. ALL DIEMENSIONS ARE IN MM.
2. COSTING OF BOLTS TO BE DONE IN THE CONCRETE BASE DULY TAKING HE MEASUREMENTS OF THE SURFACE BASE AND CIRCLE ALSO ALIGNING THE FOUR HOLES OF THE SURFACE BASE WITH THE BOLT LOCATION 1, 2, 3 & 4 BY PROVIDING TEMPLATE.
3. ENTIRE FOUNDATION SHOULD BE CAST IN ONE STRETCH AND WITH BOLT ONLY
4. 75MM DIA. PVC PIPE TO BE EMBEDDED DURING CASTING ITSELF (AND NOT LATER ON).
5. AFTER COSTING OF BASE AND CURING OF THE SAME IS OVER THE FOUR SIDES OF THE BASE TO BE CLEARED OF ALL LEFT OVER CONCRETE AND SIDES DULY RAMMED WITH EARTH UPTO 500 BELOW THE TOP OF THE BASE.
6. WHERE REQUIRED PITCHING ON THE RELEVANT SIDES OF THE RAMMED SURFACE WITH 225 TO 300 SIZE BOULDERS SHALL BE DONE AND FILLING THE CREVICES WITH 10:6:12 CONCRETE WITH FINE 20 STONE CHIPS. PITCHING WILL BE TO THE FULL HEIGHT OF THE RAMMED EARTH.
7. OUTER SURFACE SHOULD BE PLASTERED FROM TOP OF FOUNDATION WITH 1:2 CEMENT AND SAND UPTO A LEVEL OF 500MM.
8. FOUNDATION BOLT OF SIZE 30MM DIA 750MM LONG WITH 2 FLAT WASHERS & 2 NUTS ARE TO BE USED.
9. CONCRETE FOUNDATION WITH RATIO 1:3:6.

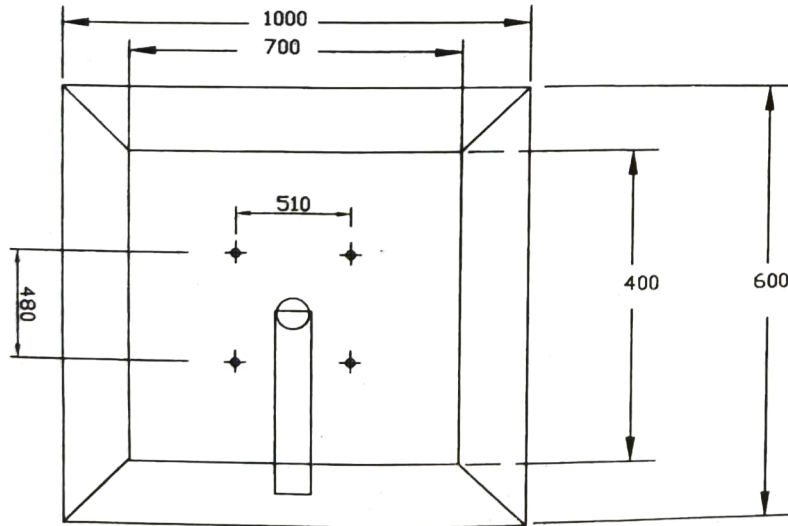
REVISION		SOUTH WESTERN RAILWAY		
R.A.N.RAO	DRAWN	SIGNAL & TELECOMMUNICATION		
602	SSE/DRG	C K D	TYPICAL DRAWING OF MAIN SIGNAL POST FOUNDATION	
09.04.19	A.X.S.T.E/D			
09.04.19	X.S.T.E			
22/04/19	Dy.CSTE/PLG	NOT TO SCALE		
(S.NAGESWARA RAO)		DRG.No.		SHEET
09/04/19	CSE/SWR	SG/SWR/052	1	1
(B.S.ISAIAH)				



SECTION VIEW



SIDE VIEW



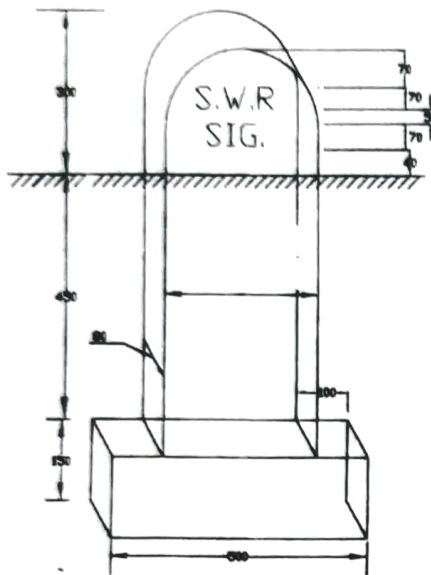
PLAN

NOTE:-

1. ALL DIEMENSIONS ARE IN MM.
2. CONCRETE FOUNDATION WITH MIXTURE OF CEMENT, SAND AND JELLY CHIPS, SIZE:20, WITH RATIO 1:3:6.
3. OUTER SURFACE SHOULD BE PLASTERED WITH 1:4 CEMENT AND SAND.
4. ON ALL SIDES OF THE EARTH SHOULD BE RAMMED INTO THE LEVEL AS SHOWN IN THE SKETCH.
5. FOUNDATION BOLT OF SIZE 22MM DIA., 450MM LONG WITH 2 FLAT WASHERS & ONE NUT IS TO BE USED.

REVISION		SOUTH WESTERN RAILWAY	
DRAWN		SIGNAL & TELECOMMUNICATION	
SSE/DRG		C K D	TYPICAL DRAWING OF APPARATUS CASE (HALF/QUARTER SIZE) FOUNDATION
A.X.S.T.E/D			
X.S.T.E			
Py.CSTE/PLG		NOT TO SCALE	
CSE/SWR		DRG.No. SG/SWR/056	SHEET SHEETS 1 1

REINFORCEMENT DETAILS FOR RCC CABLE MARKER

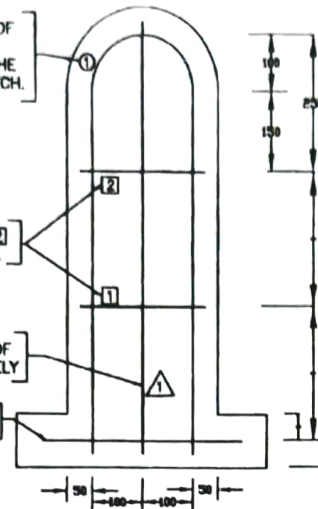


6mm DIA M.S. ROD ① No. OF LENGTH 1650mm APPROXIMATELY BENT AT THE TOP AS SHOWN IN THE SKECH.

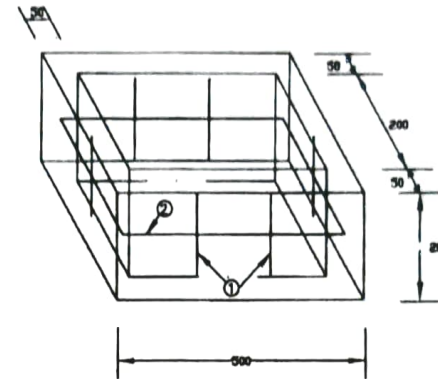
4mm DIA M.S. TIE ROD ② Nos. OF LENGTH 250mm.

6mm DIA M.S. ROD ③ No. OF LENGTH 800mm APPROXIMATELY

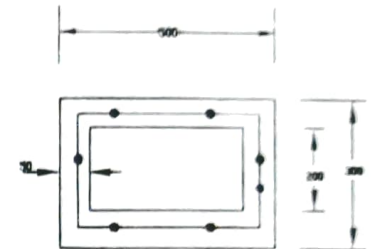
6mm DIA M.S. ROD OF LENGTH 450mm



3D VIEW

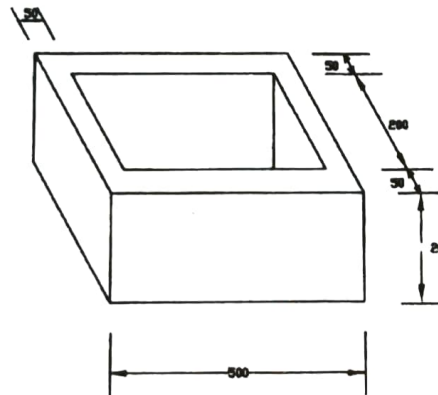
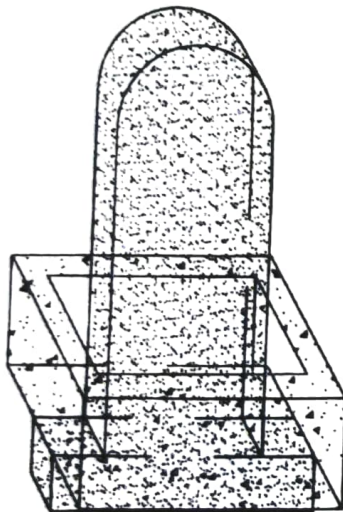


TOP VIEW



- ① VERTICAL MS RODS OF 8mm Dia., 150mm HEIGHT : 08 NUMBERS
- ② HORIZONTAL MS RINGS (350X350) OF 8mm Dia. : 01 NUMBERS

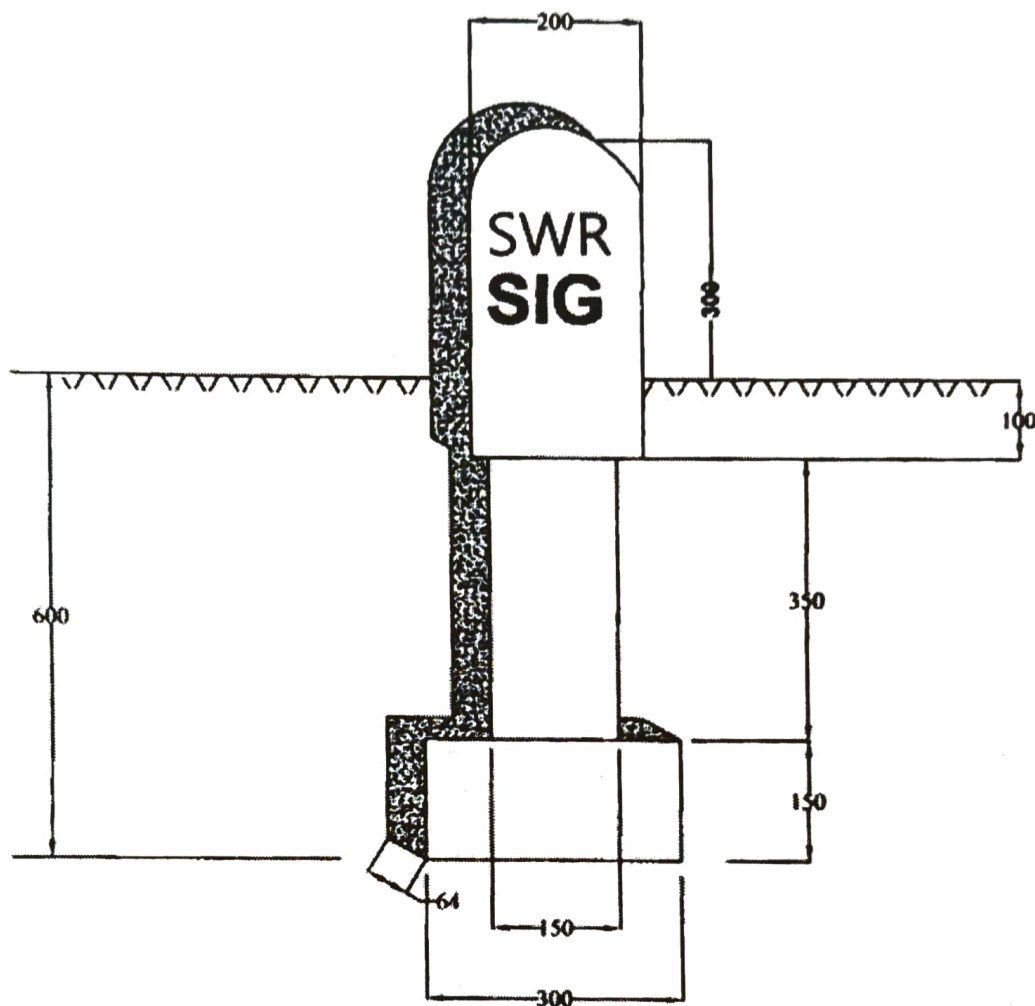
CONCRETE SKIRTING FOR PLACING ON CABLE MARKER



NOTE:-

- ALL DIEMENSIONS ARE IN MM.
- CABLE MARKER SHALL BE ENGRAVED WITH SWR SIG/SWR QUAD/SWR OFC AS THE CASE MAY BE OF 2.8" (70MM) HEIGHT.
- CABLE MARKERS SHALL BE PAINTED IN RED COLOR CEMENT PAINT FOR SIGNALLING CABLES AND IN ORANGE COLOR CEMENT PAINT FOR TELECOM CABLES. ENGRAVED LETTERS SHALL BE PAINTED IN WHITE COLOR CEMENT PAINT.
- AFTER PLACING PRECAST RCC SKIRTING ON THE PRECAST RCC MARKER AS SHOWN, GAP BETWEEN THE CABLE MARKER AND SKIRTING SHALL BE FILLED WITH RICH MORTAR.
- THE PROPORTION FOR CEMENT, SAND & JELLY SHALL BE 1:2:4 WITH 6mm TO 10mm GRANITE METAL.
- FOR MILD STEEL THE SPECIFICATION IS IS:432.
- CABLE MARKERS SHALL BE PLACED AT AN INTERVAL OF 20M WITH IN STATION SECTION AND 50M IN BLOCK SECTION.

REVISION	SOUTH WESTERN RAILWAY		
R.A.N.RAO	DRAWN		
SSE/DRG	C K D	TYPICAL DRAWING FOR RCC CABLE MARKER	
A.X.S.T.E/D			
X.S.T.E			
Dy.CSTE/PLG			
(S.NAGESWARA RAO)	NOT TO SCALE		
CSE/SWR	DRG.No. SG/SWR/067		SHEET
			SHEETS
			1
			1



NOTE:-

1. ALL DIMENTIONS ARE IN MILLIMETER
2. PAINTED WHITE LETTERS ON RED BACKGROUND.
3. FOUNDATION CONCRETE OF 300 mm FROM THE BASE OF THE MARKER SHALL BE DONE AT SITE AT ALL PLACES WITH MIX 1:3:5.
4. COMPONENT CONCRETE SHALL BE OF M25 MIX AND WIRE MESH OF 1.5MM THICKNESS SHALL BE USED.
5. THE ENGRAVING OF "RLY" & "SIG" SHALL BE DONE ON BOTH SIDES OF THE MARKER.

CHECKED BY	JE/SE/SSE	CONCRETE CABLE MARKER	SDO/CABLE LAYING/020
APPROVED BY	ADE	R.D.S.O.	DATE :- 31-10-2011

NOT TO SCALE