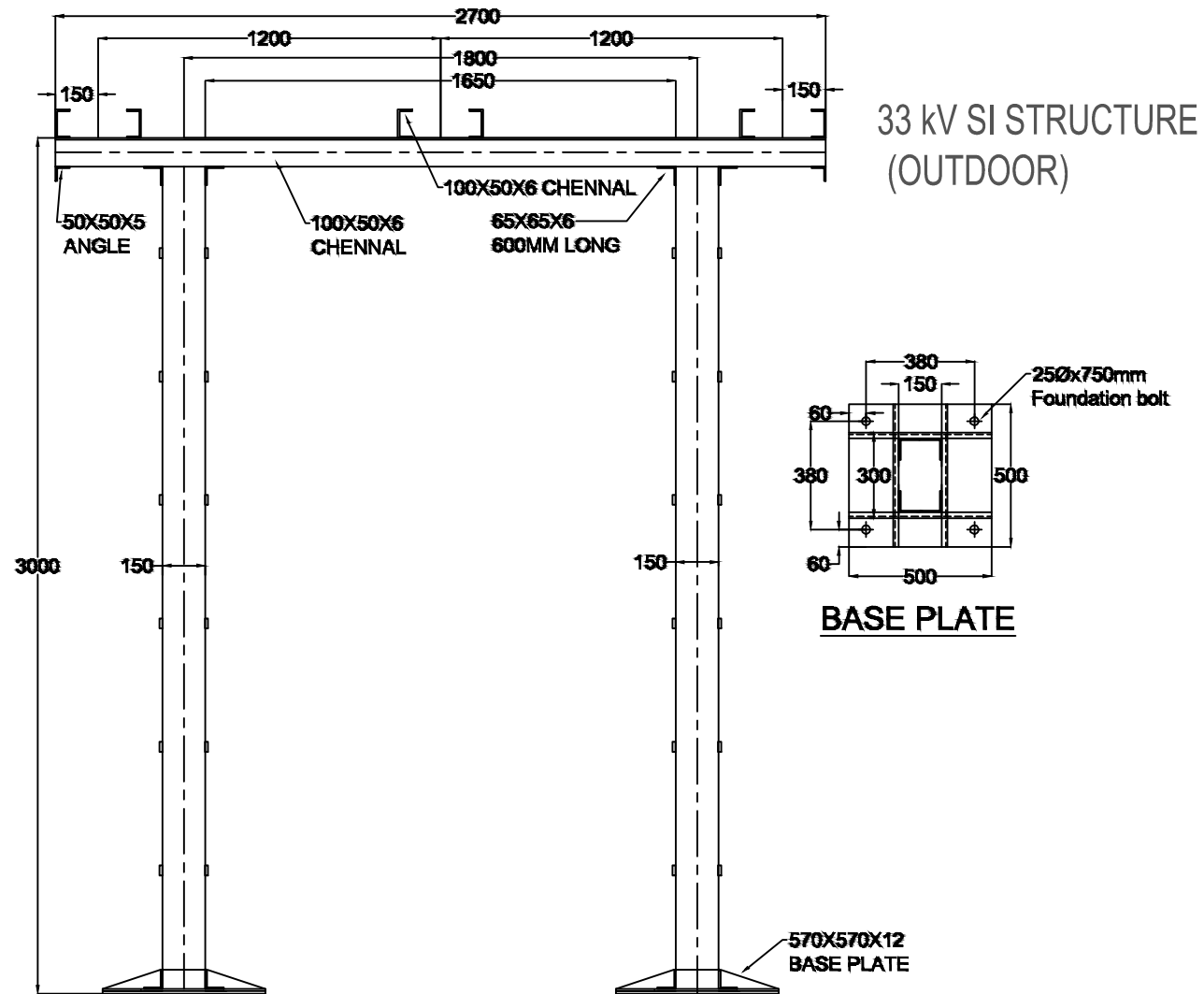


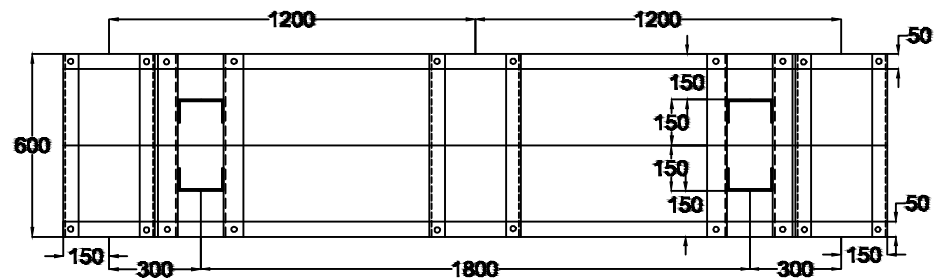
CHAPTER:-E-18

SI No.	Drawing Name	Drawing Number
1	33kV SI Structure (Outdoor)	ODAFFP/ SS /1
2	33kV Outdoor CT Structure (Outdoor)	ODAFFP / SS /2
3	Earthmat Flat Jointing	ODAFFP / SS /3
4	4 Bolted Tension Clamp	ODAFFP / SS /4
5	Cable Trench Layout	ODAFFP / SS /5
6	33kV 1250 A Double Tandem Double Break Center Rotating Isolator with one Earth Switch	ODAFFP / SS /6
7	11kV 1250 A Double Tandem Double Break Center Rotating Isolator with one Earth Switch	ODAFFP / SS /7
8	33kV 1250 A Double Tandem Double Break Center Rotating Isolator without Earth Switch	ODAFFP / SS /8
9	11kV 1250 A Double Tandem Double Break Center Rotating Isolator without Earth Switch	ODAFFP / SS /9
10	DP Structure	ODAFFP /LINE/1
11	400kg 10 Mtr PSC Pole	ODAFFP /LINE/2
12	300kg 10 Mtr PSC Pole	ODAFFP /LINE/3
13	11kV V Cross arm for RS Joist Pole	ODAFFP /LINE/4
14	11kV V Cross arm for PSC Pole	ODAFFP /LINE/5
15	Earthing Device	ODAFFP /LINE/6
16	Tension Assembly for Earthwire	ODAFFP /LINE/7
17	Suspension Assembly for Earthwire	ODAFFP /LINE/8
18	PC+6 Tower Structure	ODAFFP /LINE/9

19	Jointing of GI R.S Joist Pole	ODAFFP /LINE/10
20	Cross Sectional View of 11kV/33kV Cable (1C/3C,Armoured Type)	ODAFFP /LINE/11
21	11 kV Line Conductor Formation & Arrangement of Guys for 60 to 90 Angle Location	ODAFFP /LINE/12
22	Foundation for PSC Pole	ODAFFP / CIVIL /1
23	Foundation for RS Joist Pole	ODAFFP / CIVIL /2
24	Transformer Foundation (3.15 , 5 & 8 MVA)	ODAFFP / CIVIL /3
25	Transformer Foundation for 100 kVA for (Station Transformer)	ODAFFP / CIVIL /4
26	Foundation for 33kV VCB with CT (Outdoor)	ODAFFP / CIVIL /5



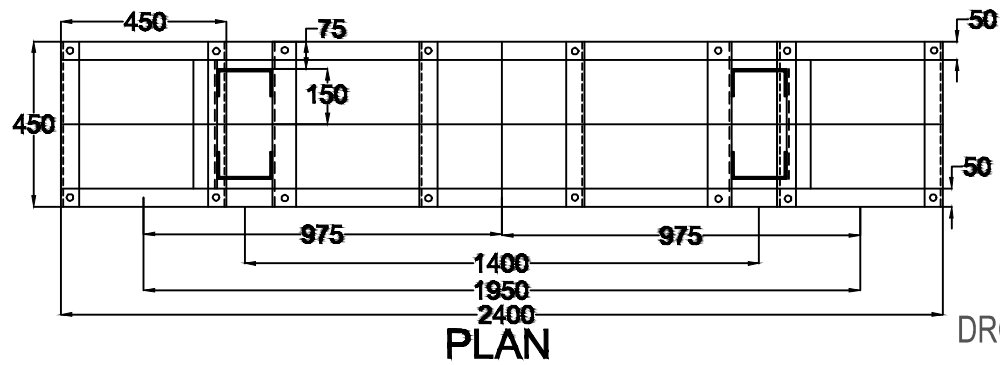
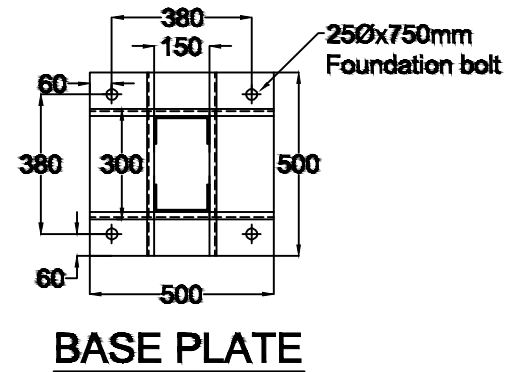
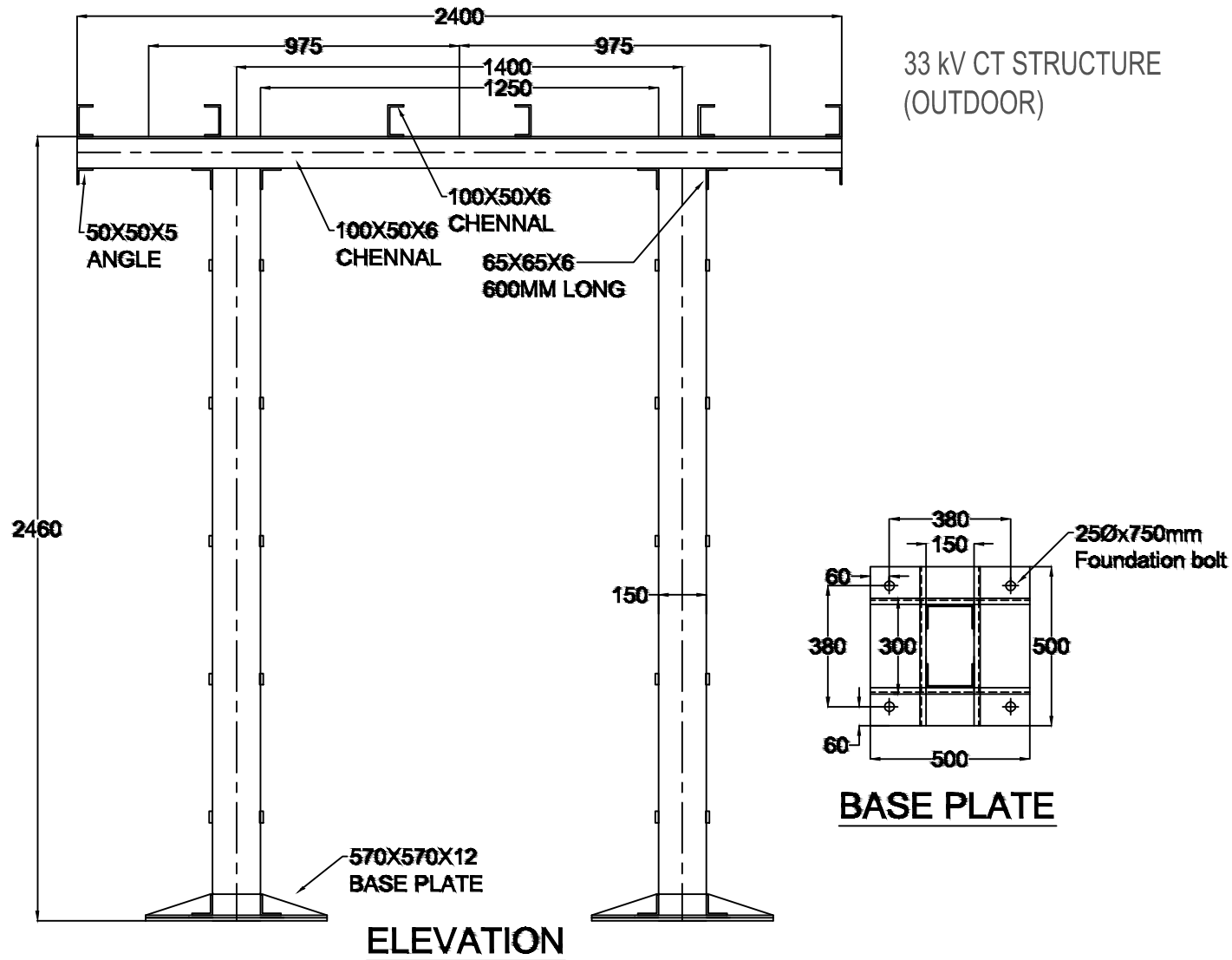
ELEVATION



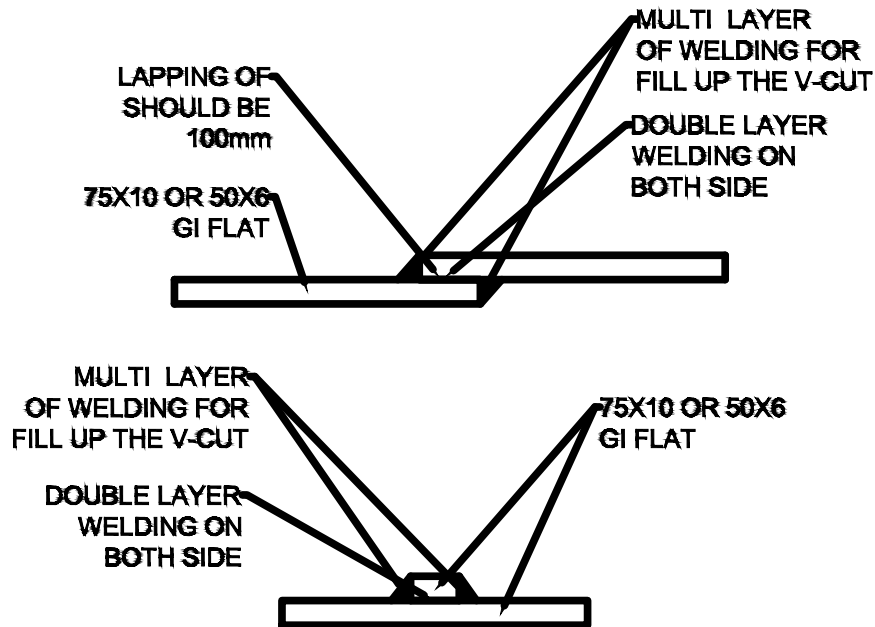
PLAN

DRG NO .- ODAFFP / SS / 1

33 kV CT STRUCTURE (OUTDOOR)



EARTHMAT FLAT JOINTING

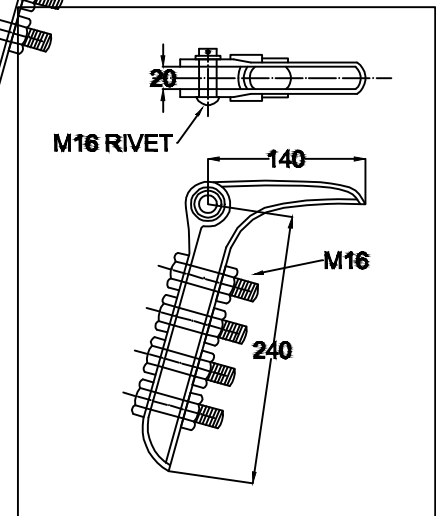
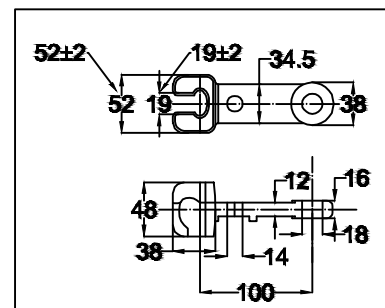
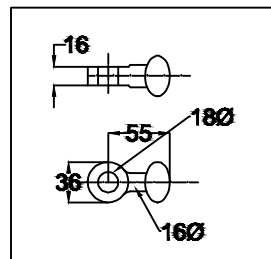
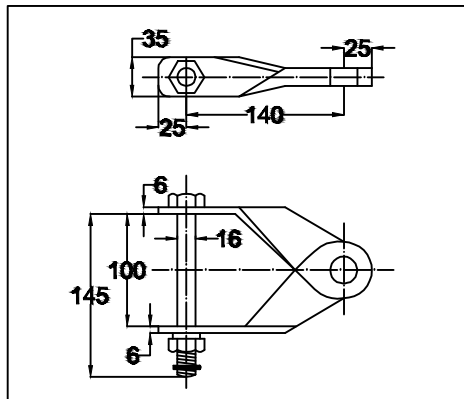
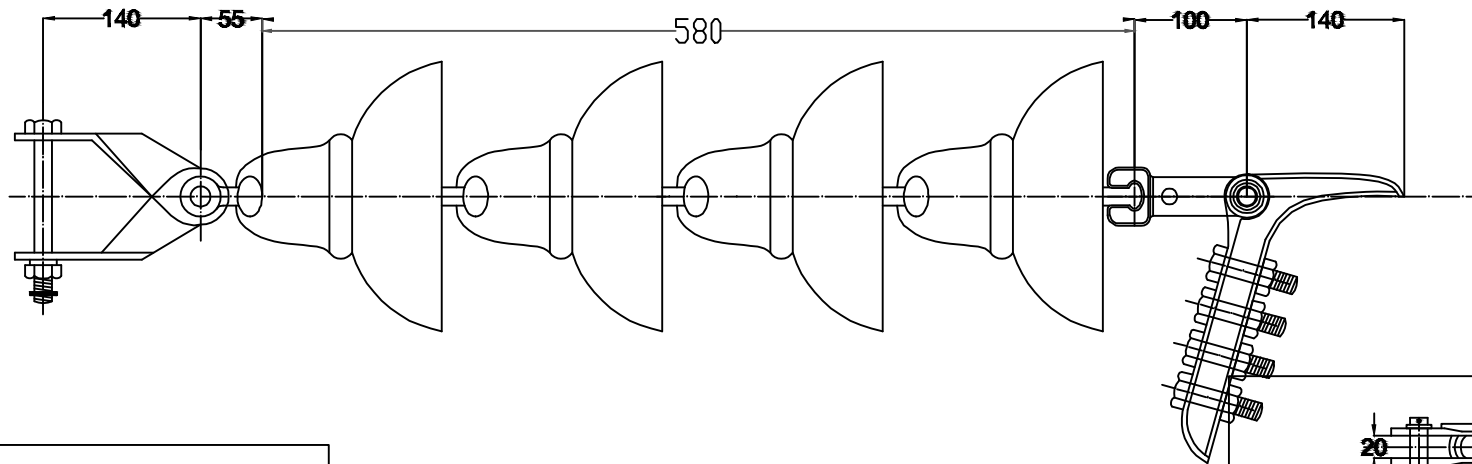


NOTE:

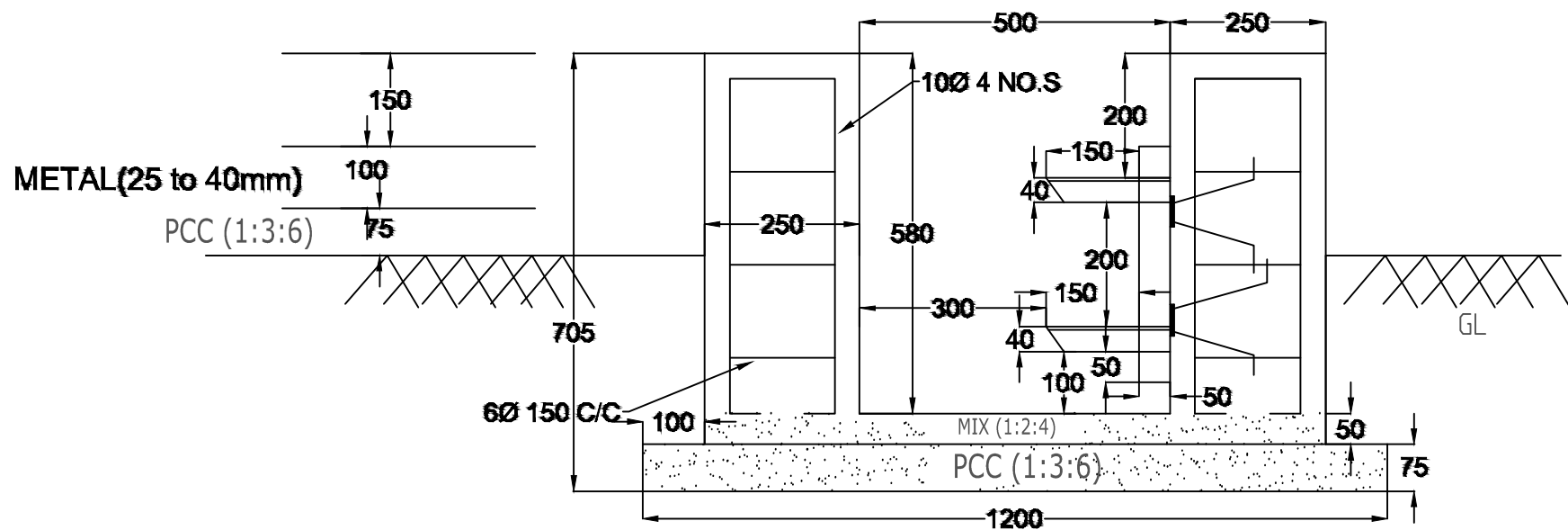
DRG NO .- ODAFFP / SS / 3

1. ZINC TO BE REMOVED (THE JOINTING PORTION OF THE FLAT) PRIOR TO WELDING OF JOINT.
2. AFTER REMOVAL OF ZINC THE JOINTING PORTION SHOULD BE RIGIDLY HOLD BY USING "C" CLAMP THEN ONLY THE WELDING WAS SHOULD BE TAKEN UP.
3. THE FLUX SHOULD BE REMOVE BEFORE PUTTING THE SUCCESSIVE LAYERS OF THE WELDING.
4. AFTER COMPLETION OF WELDING WORK THE "C" CLAMP SHOULD BE REMOVED.
5. JUST AFTER COMPLETION OF WELDING WORK TWO LAYER OF ANTICORROSION PAINT SHOULD BE APPLIED IMMEDIATELY.
6. THEN DOUBLE LAYER OF BLACK BITUMINOUS PAINT SHOULD BE APPLIED OVER THE WELDING PORTION.
7. BEFORE BURRING THE FLAT INSIDE THE TRENCH EACH JOINT SHOULD BE COVERED WITH BLACK TAPE.
8. EACH JOINTING PORTION COVERED WITH CONCRETE MIX(1:2:4) ALL AROUND BEFORE FILLING OF SOIL.

4 BOLTED TENSION CLAMP

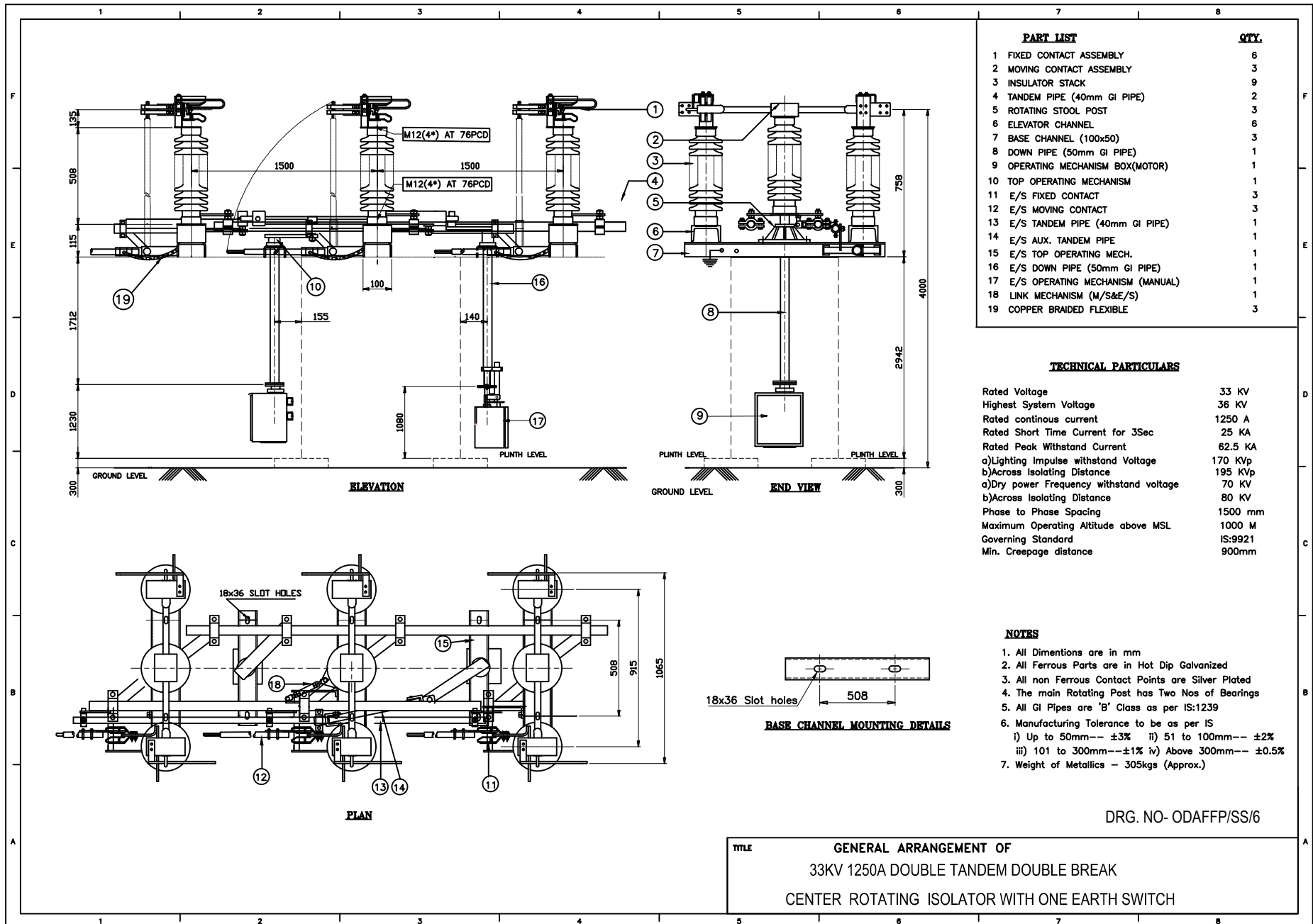


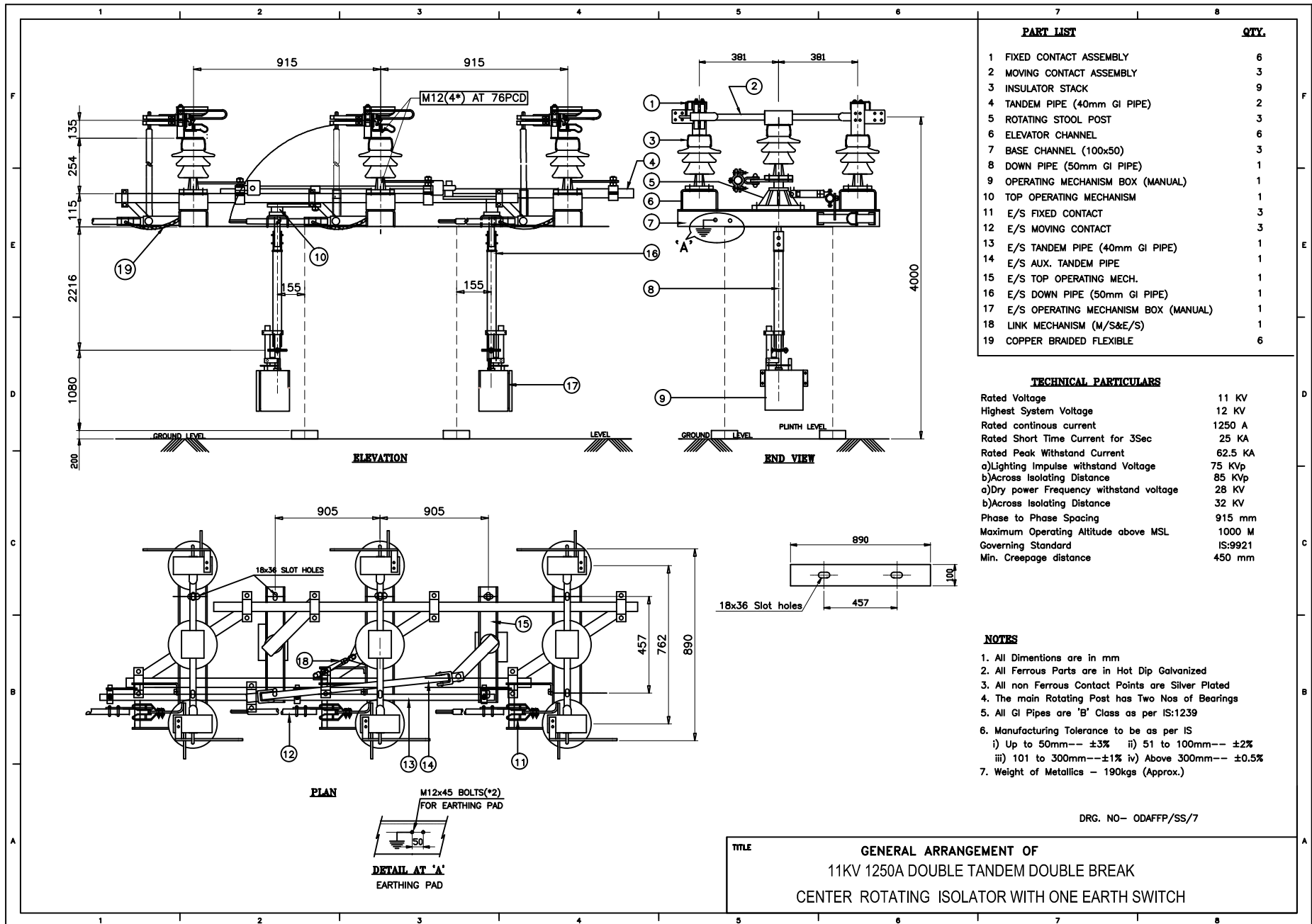
CABLE TRENCH LAYOUT



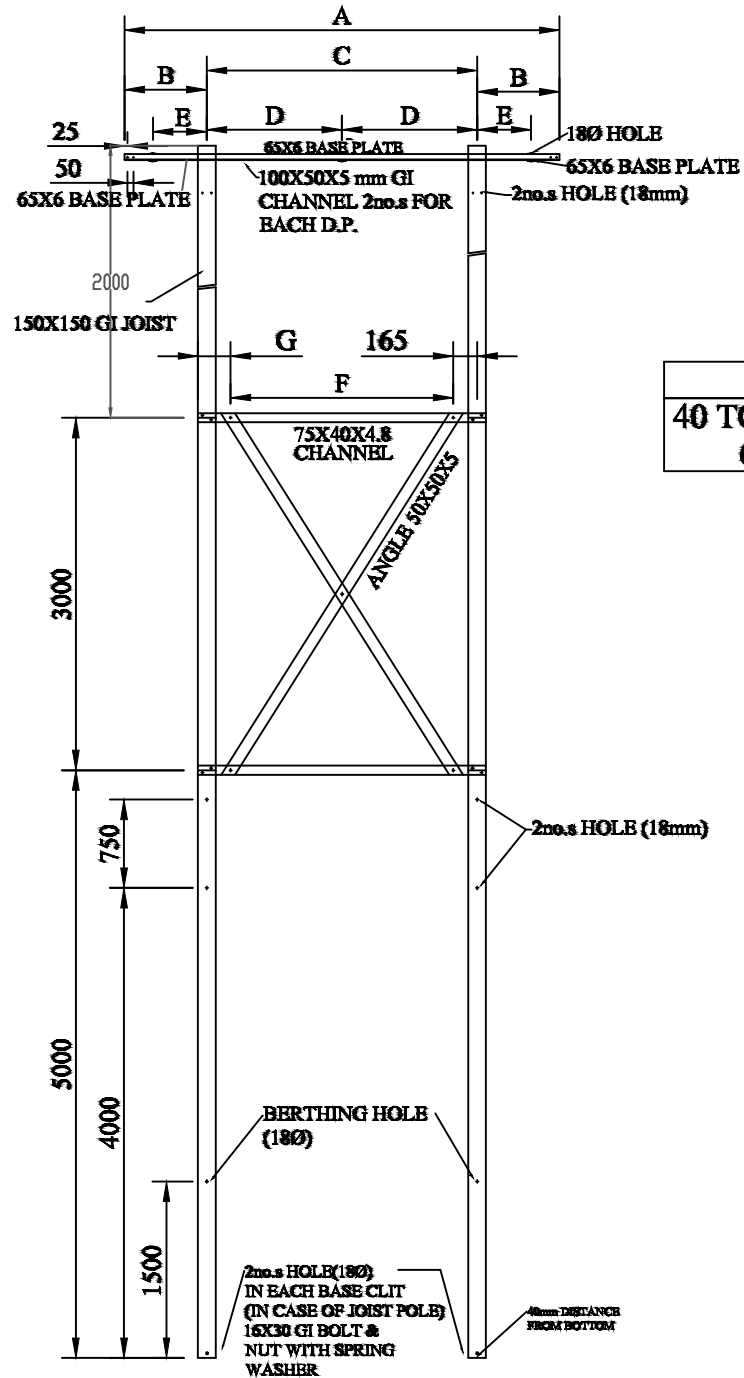
CABLE TRENCH
WIDTH 500mm

DRG. NO.-ODAFFP/SS/5





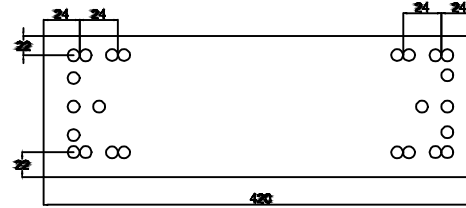
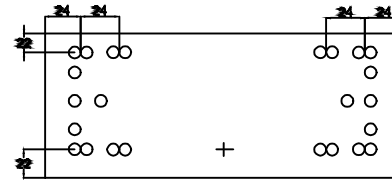
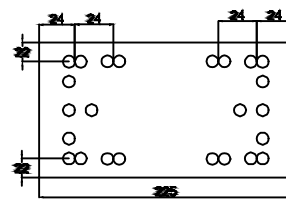
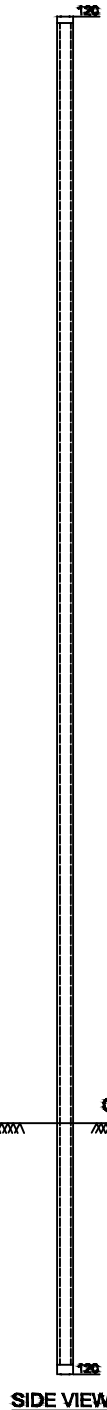
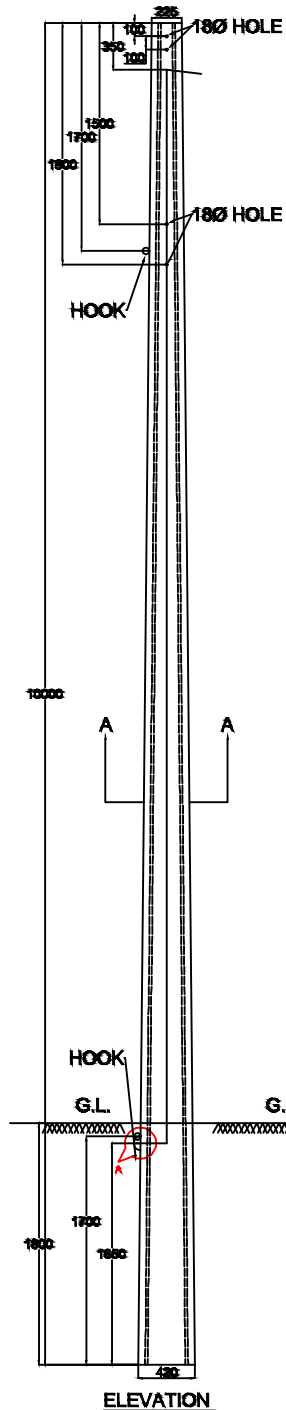
DP STRUCTURE FOR 11/kv(JOIST)



	A	B	C	D	E	F	G
40 TO 60	4200		2500		600		240
		850		1250			

DRG NO. - ODAFFP / LINE / 1

10Mtrs/400 Kg PSC POLE



Note:- FACTOR OF SAFETY 2.5

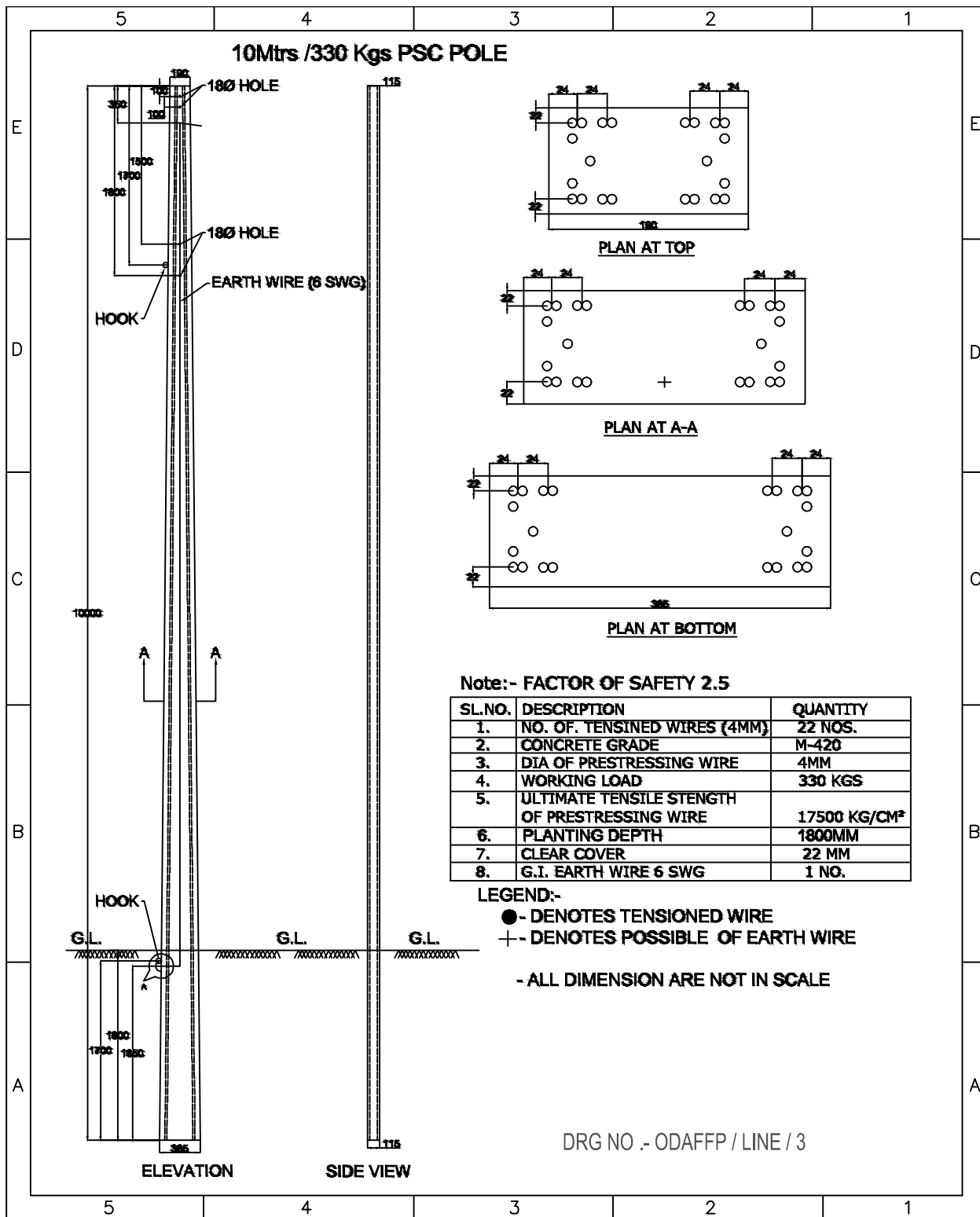
SL.NO.	DESCRIPTION	QUANTITY
1.	NO. OF. TENSINED WIRES (4MM)	24 NOS.
2.	CONCRETE GRADE	M-420
3.	DIA OF PRESTRESSING WIRE	4MM
4.	WORKING LOAD	400 KGS
5.	ULTIMATE TENSILE STRENGTH OF PRESTRESSING WIRE	17500 KG/CM ²
6.	PLANTING DEPTH	1800MM
7.	CLEAR COVER	22 MM
8.	G.I. EARTH WIRE 6 SWG	1 NO.

LEGEND:-

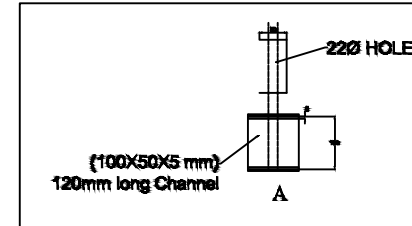
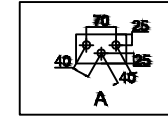
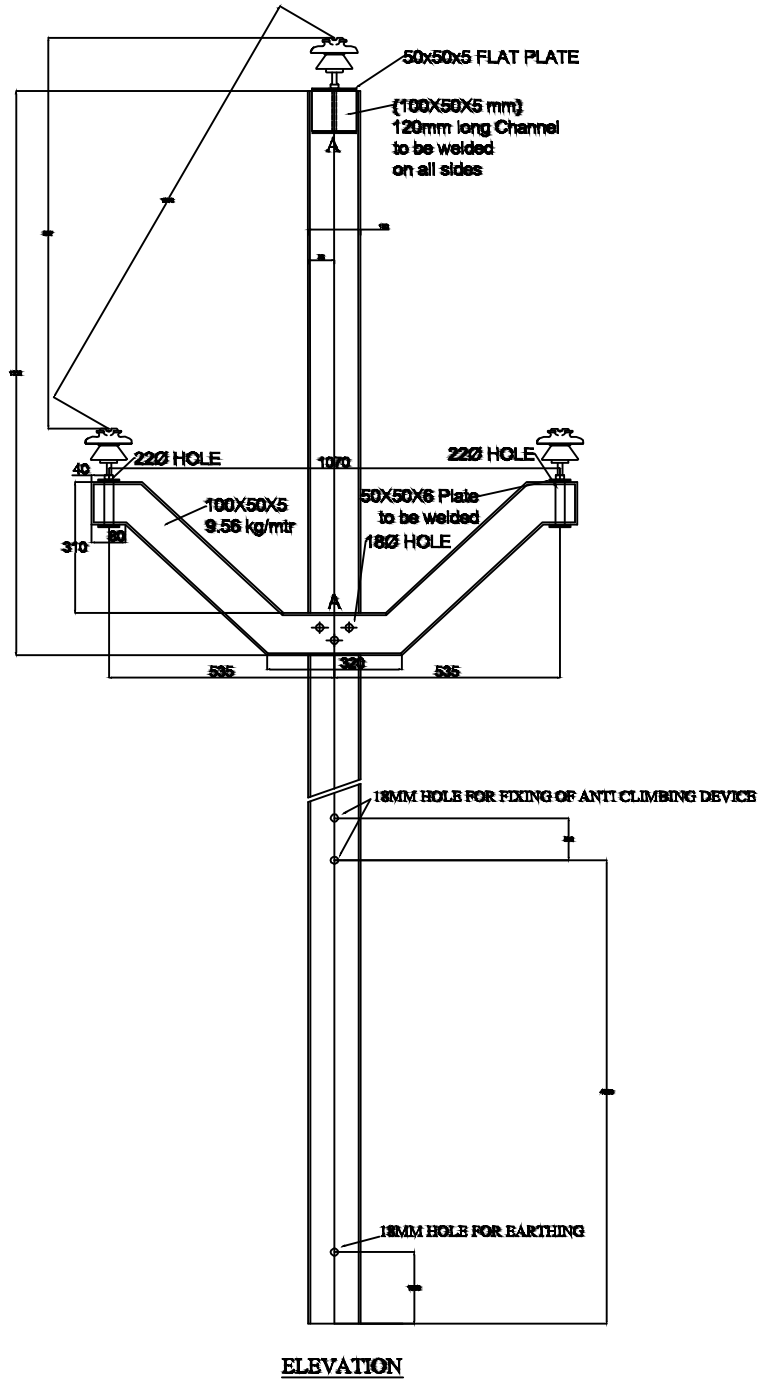
- - DENOTES TENSIONED WIRE
- + - DENOTES POSSIBLE OF EARTH WIRE

-ALL DIMENSION ARE NOT IN SCALE

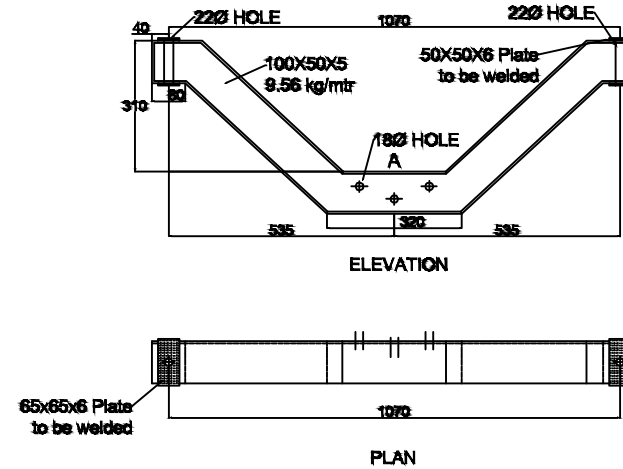
DRG NO. - ODAFFP / LINE / 2



11Kv V-CROSS ARM FOR RS JOIST



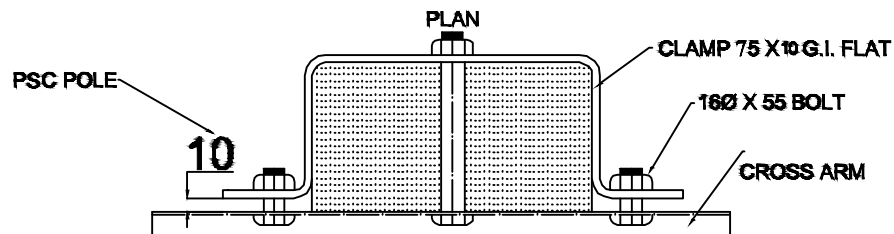
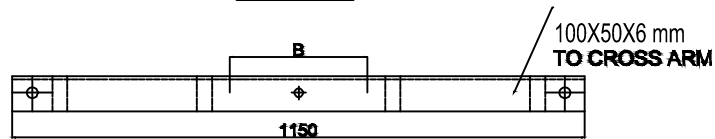
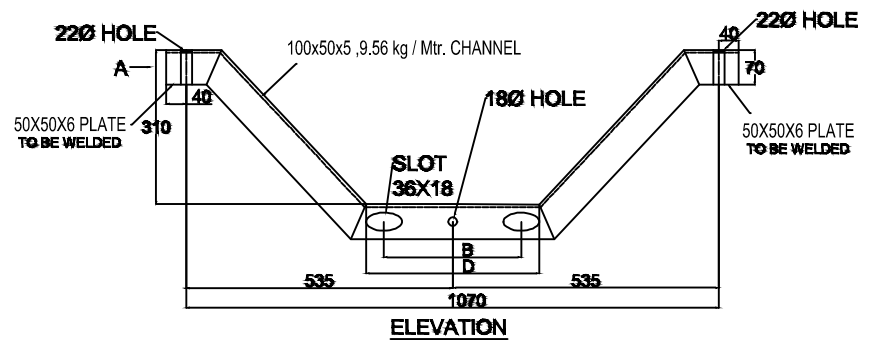
11Kv V-CROSS ARM FOR RS JOIST



DRG NO .- ODAFFP / LINE / 4

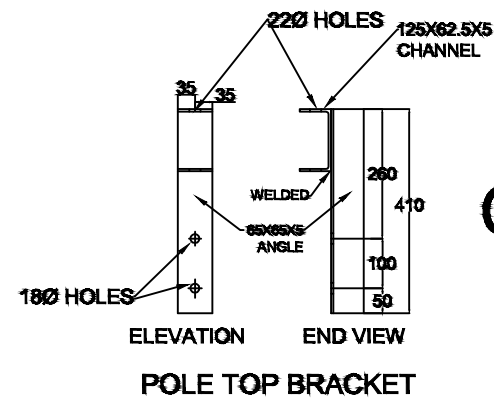
11 KV V-CROSS ARMS WITH TOP BRACKET & BACK CLAMP FOR PSC POLE

100x50x5 ,9.56 kg / Mtr. CHANNEL

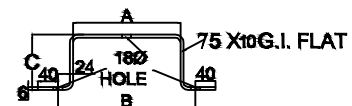
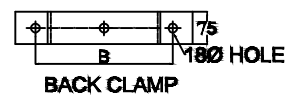
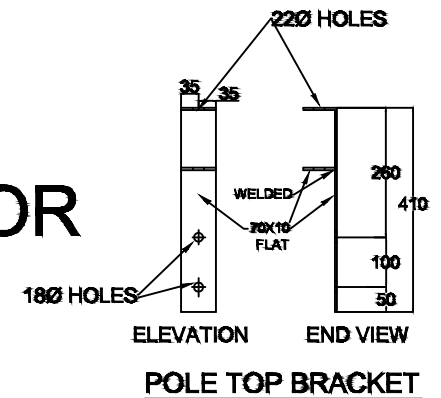


BACK CLAMPS & CROSS ARM ASSEMBLY

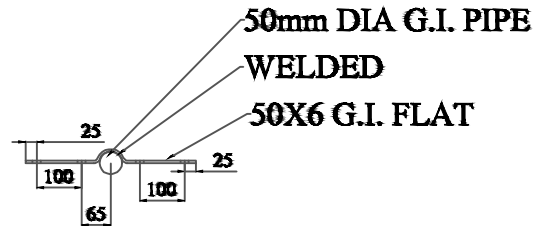
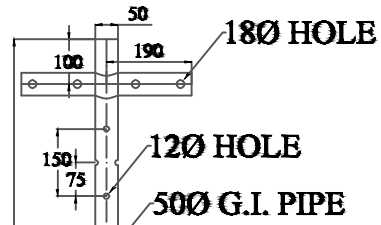
LENGTH OF POLE (L)	LOAD(KG)	A	B	C	D	BOTTOM LINE OF X-ARM FROM TOP OF THE POLE IN mm
10000 mm minimum	300	216	276	111	362	1170



OR



**EARTHING DEVICE
HEAVY GAUGE (TATA/GINDL)**



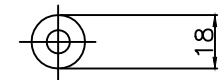
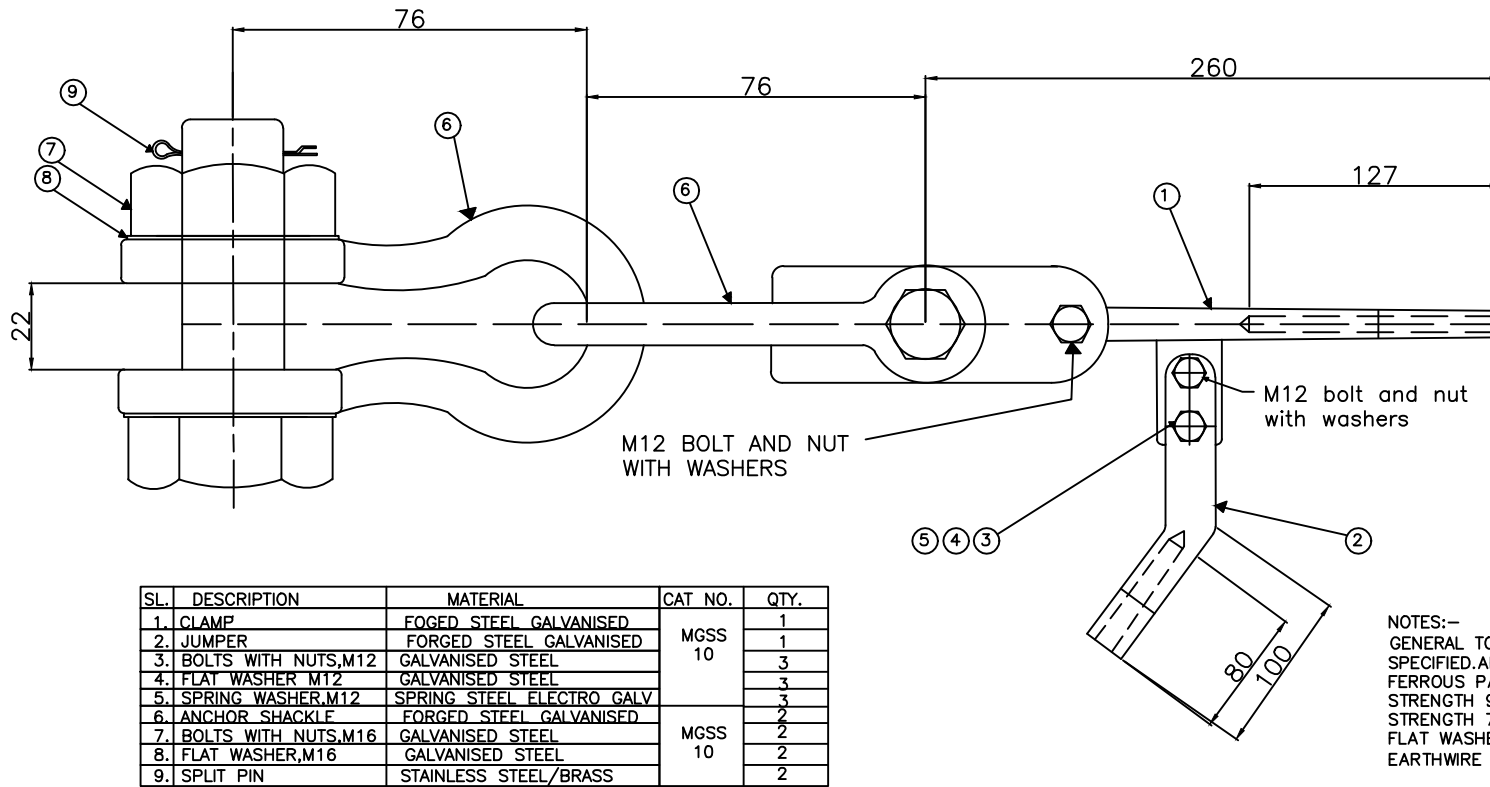
3000

100

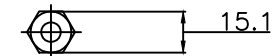
NOTE:-
1.50 mm DIA GI PIPE FOR S/S
2. 40 mm DIA GI PIPE FOR LINE

DRG NO .- ODAFFP/ LINE / 6

TENSION ASSEMBLY FOR EART WIRE



BEFORE COMP.



AFTER COMP.

NOTES:-
 GENERAL TOLERANCE $\pm 2\%$ UNLESS OTHERWISE SPECIFIED. APPLICABLE STANDARD IS: 2486 PART-I
 FERROUS PART IS HOT DIP GALVANISED AS PER IS: 2629 SLIP
 STRENGTH 95 OF UTS OF EARTH WIRE MINIMUM BREAKING
 STRENGTH 7000 KG SPRING WASHER ARE ELECTRO GALVANISED
 FLAT WASHER ARE HOT DIP GALVANISED SUITABLE FOR
 EARTH WIRE 7/3.15 MM.

Drg No-ODAFFP/LINE/7