



**BILL OF QUANTITY:-**

Piece mark	Size/description	Quantity (nos.)	Length mm	Unit wt. kg/m <sup>2</sup> or kg/m	Weight per piece kg	Total Weight kg
1,1A,2,2A,3,3A	250 NB PIPE	6	2964	38.9	115.30	691.80
4	12 thk. Plate	6	450 x 450	94.2	19.08	114.46
4A	12 thk. Plate	6	450 x 450	94.2	19.08	114.46
5	6 thk. Plate	48	113 x 150	47.1	0.80	38.30
6	L 75x75x6	48	100	6.8	0.68	32.64
7	12 thk. Plate	6	450 x 450	94.2	19.08	114.46
8	6 thk. Plate	36	113 x 200	47.1	1.06	38.30
9	6 thk. Plate	12	113 x 200	47.1	1.06	12.77
10	ISMC 100x50	12	450	9.56	4.30	51.62
11	12 thk. Plate	3	243 x 390	94.2	8.93	26.78
12	12 thk. Plate	3	243 x 540	94.2	12.36	37.08
					<b>Sub total</b>	<b>1272.67</b>

**HARDWARES:-**

Hardware name	Unit wt.	Quantity ( nos. )	Total wt. (kg)
M12 dia x 40 LG (for earth flat fixing)	0.066	48 + 5	3.498
M16 dia x 45 LG	0.133	144 + 14	21.014
M12 dia x 2.5thk sp.washer	0.006	48 + 5	0.318
M16 dia x 3.5 thk sp. washer	0.009	144 + 14	1.4078
<b>Total</b>			<b>26.238</b>

**FOUNDATION BOLT DETAILS:-**

Hardware name - M24X80MM LG	Unit wt.(kg)	Quantity ( nos. )	Total wt. (kg)
M.S Round bolt	2.845	1	2.845
Standard nut	0.105	2	0.210
Lock nut	0.010	1	0.010
Washer	0.244	1	0.244
Anchor plate	0.32	1	0.320
<b>Total weight (1 NO)</b>			<b>3.63</b>
<b>Total weight (6 PIPE STRUCTURES X 4 NO. OF BOLTS)</b>			<b>87.096</b>

**Summary of weights:-**

Weight of Structure:	1272.67 kg
Weight of Hardware:	26.24 kg
Weight of Foundation bolts:	87.10 kg
<b>Total Weight:</b>	<b>1386.01 kg</b>

**SUMMARY OF WEIGHTS**

WEIGHT OF STRUCTURE =	1272.67
WEIGHT OF HARDWARES =	26.24
WEIGHT OF FOUNDATION BOLTS =	87.10
TOTAL WT.	1386.01 Kg.

**NOTES:-**

1. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED.
2. THE STRUCTURAL PIPE SHALL CONFORM TO IS: 1161-1998 (YST = 210N/mm)
3. ALL WELDS ARE 6MM FILLET CONTINUOUS WELD UNLESS OTHERWISE SPECIFIED.
4. WELDING SHALL BE DONE AS PER IS : 816 (LATEST REVISION) OR ELECTRIC WELD.
5. ALL FABRICATION MATERIALS INCLUDING BOLTS, NUTS AND WASHERS SHALL BE GALVANISED AS PER SPECIFICATION. MIN. COATING THICKNESS SHALL BE 610 g/m<sup>2</sup> FOR PIPE STRUCTURES AND 300 g/m<sup>2</sup> FOR FASTENERS SPRING WASHER SHALL BE ELECTRO GALVANISED AS PER IS:1573-1986 SERVICE GRADE 2.
6. ALL BOLTS NUTS AND LOCK NUTS SHALL CONFORM TO REQUIREMENTS OF INDIAN STANDARD SPECIFICATION IS : 1363/1367 (LATEST REVISION)
7. ALL BOLT HOLES ARE 17.5φ FOR M16 BOLTS UNLESS NOTED OTHERWISE.

THE FABRICATION DRAWING IS ONLY TYPICAL & THE HEIGHT/MOUNTING & OTHER DETAILS SHALL BE MATCHED AS PER REQUIREMENT OF EQUIPMENT.

BUS HEIGHT FROM PL	5900
EQUIPMENT HEIGHT UP TO C.L. OF BUS	2800(2685+115)
HENCE, SUPPORTING STRUCTURE HEIGHT	3100
EQUIPMENT MAKE	SIEMENS HYDERABAD LTD.
EQUIPMENT DRG No.	(3)G71BSC-E0082-2003-0
EQUIPMENT DRG No. (WITH ONE E/S)	(3)G71BSC-E0082-2003-0

<b>BIHAR STATE POWER TRANSMISSION CO. LTD.</b>	
DRG. TITLE	GA OF STRUCTURE FOR 220KV EQUIPMENT-ISO(1E/S)
DRG. NO.	BSPTCL-SUBS-SWYD-S-STD-DRG-220KV EQUIPMENT-ISO(1E/S)
SCALE	AS MENTIONED
SHEET	1 OF 3