



**LEGEND:-**

S.NO.	DESCRIPTION	SYMBOL
1.	BOUNDARY AREA	[Symbol]
2.	ROAD	[Symbol]
3.	WALL	[Symbol]
4.	WALL	[Symbol]
5.	T.B.M.	[Symbol]
7.	GRADE END TOWER	[Symbol]

**T.B.M. LIST**

T.B.M. NO.	NORTH	EAST	R.L.
1	318265.21	268712.08	100.000
2	318484.32	268720.918	95.507
3	318484.85	268718.072	95.508
4	318371.405	268703.264	100.25

**NOTES:-**

- ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE MENTIONED.
- TURNING RADI OF ROADS SHALL BE DETERMINED & REFLECTED IN CIVIL DRAWING.
- WIDTH OF ENTRANCE ROAD IS 6.0M. AND IN FRONT OF TRANSFORMER IS 5.0M.
- WIDTH OF INSIDE ROAD IS 4.0/3.0M.
- POSITION OF LIGHTNING MASTS (LM) ARE TENTATIVE. IT WILL BE FINALISED AFTER APPROVAL OF DISIP LAYOUT & OCCUPATION.
- ONLY GROUND FLOOR OF CONTROL BUILDING HAS BEEN SHOWN FOR THE SAKE OF CLARITY. FOR DETAILS REFER CONTROL BUILDING LAYOUT DRAWING.
- AC/DC ROOM, BATTERY ROOM, MAINTENANCE ROOM, PANTRY, SMALL STORE & TOILET BLOCK ARE LOCATED IN GROUND FLOOR.
- SCADA, A.M. OFFICE, DE'S OFFICE AND CONFERENCE ROOMS ARE LOCATED IN 1ST FLOOR OF CONTROL ROOM.
- FINISHED GRADE LEVELS OF THE SWITCHYARD ARE AS FOLLOWS :  
 - CONTROL BUILDING, DG ROOM, STORE SHED AREA : RL. 100.5M  
 - 220KV SWITCHYARD AND 220/132KV TRANSFORMER YARD : RL. 100M  
 - 132KV & 33KV SWITCHYARD : RL. 99M

**REVISION DETAILS**

NO.	DATE	DESCRIPTION
1		
2		
3		
4		
5		
6		

**REFERENCE DRAWINGS**

SL.NO.	DRAWING TITLE	SHEET NO.	REV.
1.	TOPOGRAPHICAL SURVEY LAYOUT	1 & 2	0
2.	KEY SINGLE LINE DIAGRAM	FL/JSEB/CHAITRA/E-SLD-01	0

**PROJECT INFORMATION**

<b>PROJECT</b>	DESIGN, ENGINEERING, SUPPLY, ERECTION, TESTING AND COMMISSIONING OF 220/132/33 KV GRID SUB STATION AT CHAITRA
<b>CLIENT</b>	JHARKHAND STATE ELECTRICITY BOARD
<b>CONTRACTOR</b>	SATCON (CONSULTANTS)
<b>DESIGN</b>	SKD
<b>DRAWN</b>	TS
<b>CHECKED</b>	SM
<b>APPROVED</b>	DRG. NO.: FL/JSEB/CHAITRA/E-LAY-18
<b>DATE</b>	07.10.13
<b>SCALE</b>	1 : 750
<b>SHEET NO.</b>	1 OF 1
<b>REV. NO.</b>	0
<b>SUBMITTED FOR APPROVAL</b>	INFORMATION REFERENCE RECORD CONSTRUCTION

**SCOPE OF WORK:-**

- 220KV LINE BAY : 2NOS.
- 150MVA, 220/132/33KV TRFD. BAY(220KV) : 2NOS.
- 220KV BUS TRANSFER BAY : 1NO.
- 220KV BUS COUPLER BAY : 1NO.
- 132KV LINE BAY : 4NOS.
- 50MVA 132/33KV TRFD. BAY(132KV) : 2NOS.
- 132KV BUS TRANSFER BAY : 1NO.
- 150MVA, 220/132/33KV TRFD BAY(132KV) : 2NOS.
- 33KV LINE BAY : 7NOS.
- 50MVA, 132/33KV TRFD BAY(33KV) : 2NOS.
- 132KV BUS TRANSFER BAY : 1NO.
- 315MVA, 33/6.6/33KV STATION SERVICE TRANSFORMER : 2NOS.
- 2NO STORED CONTROL BUILDING (50M X 18M) : 1NO.
- 14-05 ROOM (7M X 7M) : 1NO.
- 15-STORE SHED (25M X 10M) : 1NO.
- 16-PUMP HOUSE (6M X 8M) : 1NO.
- 17-BORWELL : 2NOS.
- 18-SECURITY GROUNDY (4M X 2.5M) : 1NO.
- 19-SWITCHYARD FENCING, BOUNDARY WALL, GATES ETC.
- 20-TOTAL LENGTH OF BOUNDARY WALL : 1291.691 METERS
- 21-TOTAL AREA COVERED BY THE BOUNDARY WALL : 18.80 Acre (APPROX)
- 22-PRE-FABRICATED AC KIOSK FOR 220KV SMD : 2NOS.
- 23-PRE-FABRICATED AC KIOSK FOR 132KV SMD : 2NOS.
- 24-PRE-FABRICATED AC KIOSK FOR 33KV SMD : 2NOS.

**LEGEND:-**

- LIGHTNING ARRESTOR
- POTENTIAL TRANSFORMER / CAPACITIVE VOLTAGE TRANSFORMER
- CENTER ROTATING DOUBLE BREAK ISOLATOR WITH TWO EARTH SWITCH
- CENTER ROTATING DOUBLE BREAK ISOLATOR WITH ONE EARTH SWITCH
- CENTER ROTATING DOUBLE BREAK ISOLATOR WITHOUT EARTH SWITCH / BREAKER
- 220KV CIRCUIT BREAKER
- 132KV CIRCUIT BREAKER
- CURRENT TRANSFORMER
- WAVE TRAP
- POST INSULATOR
- DISC INSULATOR STRING (TENSION)
- DISC INSULATOR STRING (SUSPENSION)