

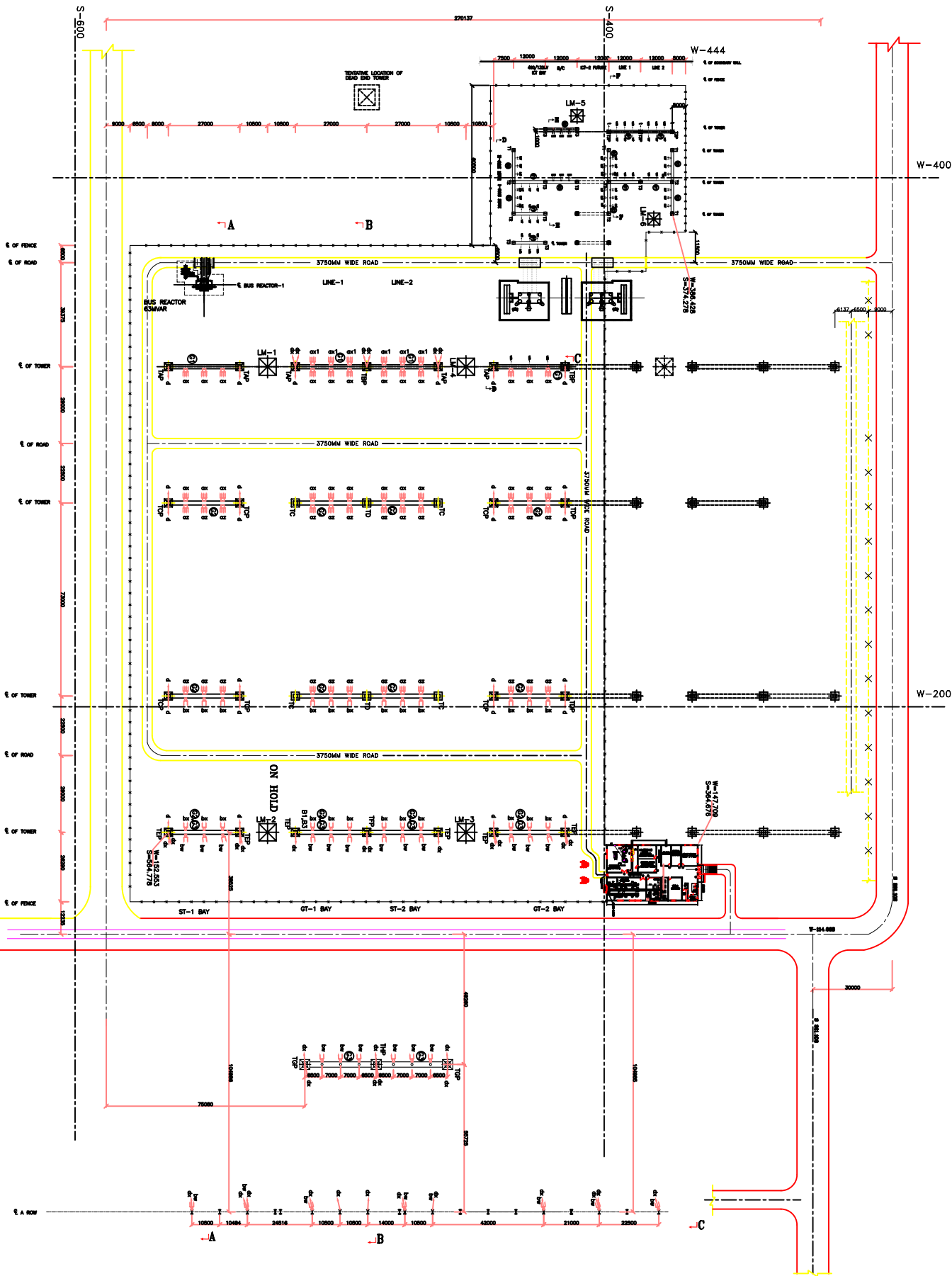


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INVENTORY NO. SIGN & DATE

COMPUTER DRG. PATH NAME :



132KV TOWER DETAIL :-

TOWERS DESIGNATION	STR. HEIGHT DETAIL FROM PLINTH TOP (m)	QUANTITY (NOS.)
T1	8.0M	04
T2	8.0M+4.0M	05
T3	12.0M	08
T3P	12.0+5.0MP	03
LM-5 & LM-6	37.5+2.5MP	02
TOTAL NOS. OF TOWER & LMS		22

132KV BEAM DETAIL :-

BEAM TYPE	HEIGHT /SPAN (m)	QUANTITY (NOS.)
①	12M	07
②	12M	08
TOTAL NO. OF 132KV BEAMS		15

132KV LOADING DETAILS :-

NOTATION	No. & Type of Cond./ Shield Wire per Phase	Normal Tension Per Phase (kg)	S/C Tension Per Phase(kg)
← 2.0T	TWIN ACSR MOOSE	2000	2709.0
← 2.0T	TWIN ACSR MOOSE	2000	2553.4
← 1.0T	SINGLE ACSR MOOSE	1000	1264.0
← 1.0T	SINGLE ACSR MOOSE	1000	2100.0
← 1.0T	SINGLE ACSR MOOSE WITH 30° DEVIATION (MAX) IN HORIZONTAL DIRECTION & + 20° DEVIATION (MAX) IN VERTICAL DIRECTION		1264.0
← t	SHIELD WIRE 800 with 30° deviation		Not Applicable

400KV LOADING DETAILS :-

NOTATION	NO. & TYPE OF COND./ SHIELD WIRE PER PHASE	NORMAL TENSION PER PHASE	SPACER (mm)	S/C TENSION PER PHASE (kg. NOTE-6)
← 2.0T	QUAD ACSR MOOSE STACK SPAN = 220 M (MAX) WITH 30° DEVIATION (MAX) IN HORIZONTAL DIRECTION & ± 20° DEVIATION (MAX) IN VERTICAL DIRECTION	6000 KG	-	6672.0 KG
← 2.0T	QUAD ACSR MOOSE SPAN = 51900 MM	6000 KG	4 m	6672.0 KG
← 2.0T	QUAD ACSR MOOSE SPAN = 73000 MM	6000 KG	4 m	7050.0 KG
← 2.0T	TWIN ACSR MOOSE SPAN = 51900 MM	4000 KG	4 m	5025.0 KG
← 2.0T	TWIN ACSR MOOSE SPAN = 45000 MM WITH 30° DEVIATION (MAX) IN HORIZONTAL DIRECTION & ± 20° DEVIATION (MAX) IN VERTICAL DIRECTION	4000 KG	5 m	8055.0 KG
← d	SHIELD WIRE 800 KG	800 KG	-	-
← dc	SHIELD WIRE WITH 30 DEVIATION (MAX)	800 KG	-	-

400KV TOWER DETAIL :-

TOWERS DESIGNATION	STR. HEIGHT DETAIL FROM PLINTH TOP (m)	QUANTITY (NOS.)
T1P	16.0+7.0MP	05
T1P	16.0+7.0MP	02
T1C	16.0M	04
T1P	16.0+7.0MP	06
T1D	16.0M	02
T1P	16.0+7.0MP	02
T1P	16.0+7.0MP	06
T1P	16.0+7.0MP	01
T1P	23+7.0MP	02
T1P	23+7.0MP	01
LM-1 to LM-4	50+5MP	04
NO. OF TOWERS & LMS		35

400KV BEAM DETAIL :-

BEAM TYPE	HEIGHT/SPAN (m)	QUANTITY (NOS.)
①	16/27	04
②	16/27	12
③	23/27	06
NO. OF BEAMS		22

NOTE :-

- ALL DIMENSIONS ARE IN MM
- THE STRUCTURE SHALL BE DESIGNED FOR A FACTOR OF SAFETY OF 2 FOR NORMAL / BROKEN WIRE CONDITION & 1.5 FOR SHORT CIRCUIT FORCES CONDITION.
- THE TRANSVERSE, VERTICAL, LONGITUDINAL LOADS SHALL BE CONSIDERED AS PER IS 802: 1995
- WEIGHT OF THE MAN WITH TOOLS AT ANY POINT OF TIME SHALL BE CONSIDERED ON BEAM AS 150 KG.
- ALL HEIGHTS ARE WITH REFERENCE TO PLINTH LEVEL. PLINTH LEVEL IS 300 MM ABOVE FINISH GROUND LEVEL.
- FIFTH COLUMN OF THE TABLE FOR "LOADING DETAILS" SHOWS MAXIMUM SHORT CIRCUIT FORCE IN KG. UNDER MINIMUM TEMPERATURE AND MAXIMUM WIND CONDITIONS.
- FOR ENLARGED VIEW OF 132KV SUBSTATION REFER SHEET 3 OF 3.

REV.	DATE	ALTERED	BY	DATE	REV.	DATE	ALTERED	BY	DATE
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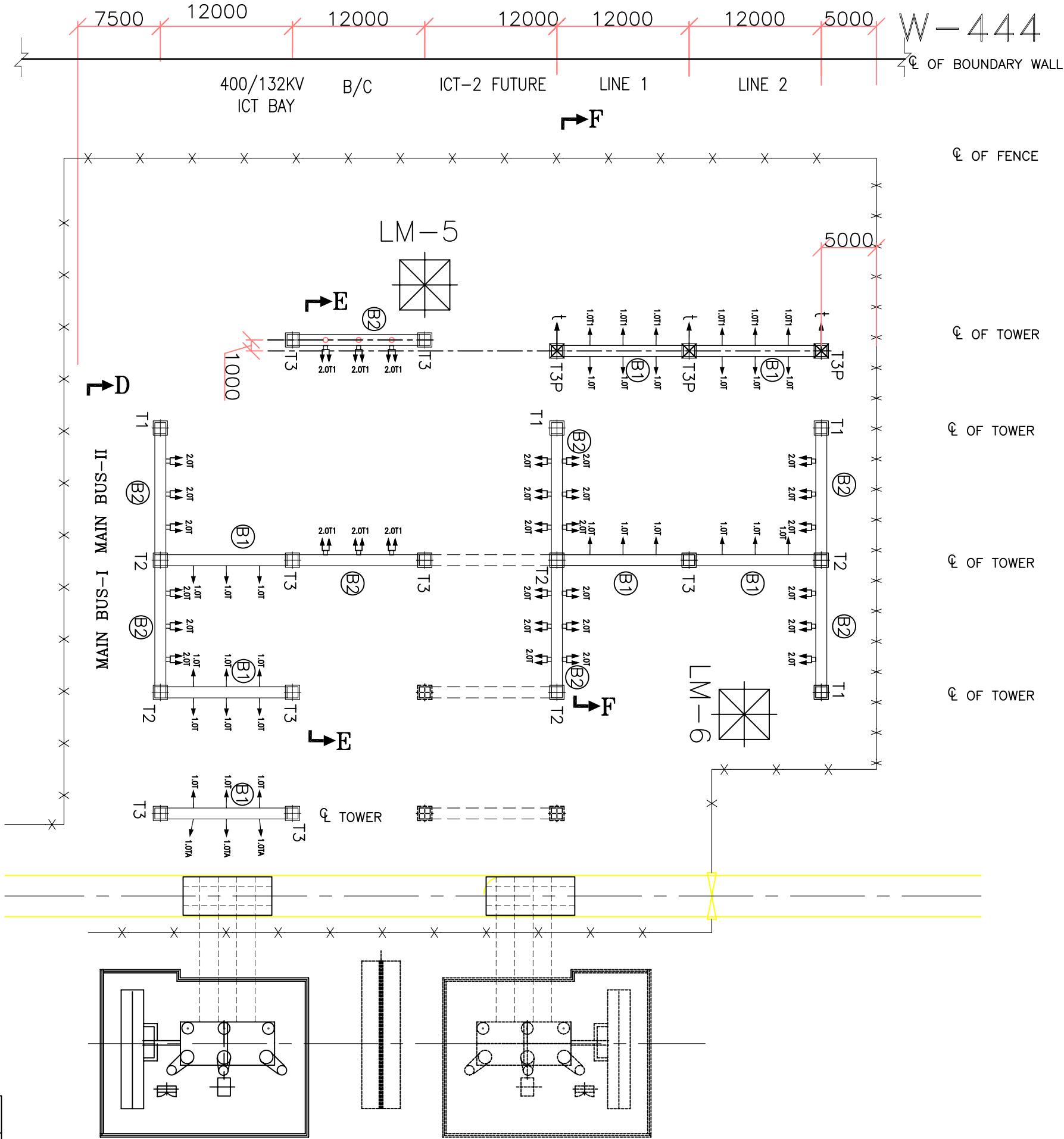
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COMPUTER DRG. PATH NAME :

INVENTORY NO. SIGN & DATE

W.O. No. DEPT.

BOILER TURBINE GENERATOR PACKAGE
BHARAT HEAVY ELECTRICALS LTD.
TRANSMISSION PROJECTS DIVISION
NEW DELHI

OWNER : THE SINGARENI COLLIERIES COMPANY LTD.
CONSULTANT : NTPC Limited
PROJECT : SCCL COAL BASED THERMAL POWER PLANT
(2 X 800MW)

STRUCTURAL ARRANGEMENT & LOADING DRAWING

DATE: 02/07/14
SCALE: 1:600
SHEET: 2 OF 3
REV: 02