FIRST ANGLE PROJECTION

ALL DIMENSIONS ARE IN mm

DRG. NO. TB 2 225 316 002

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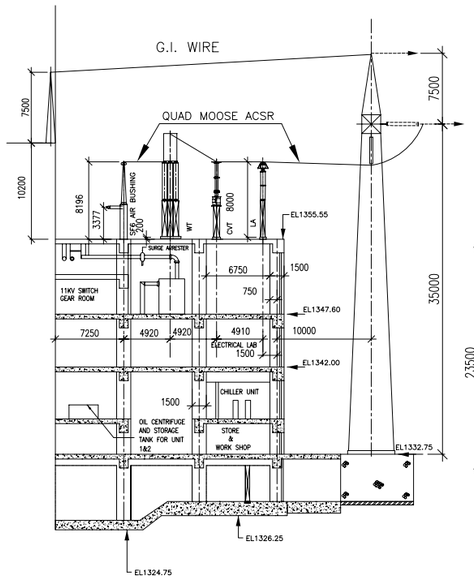
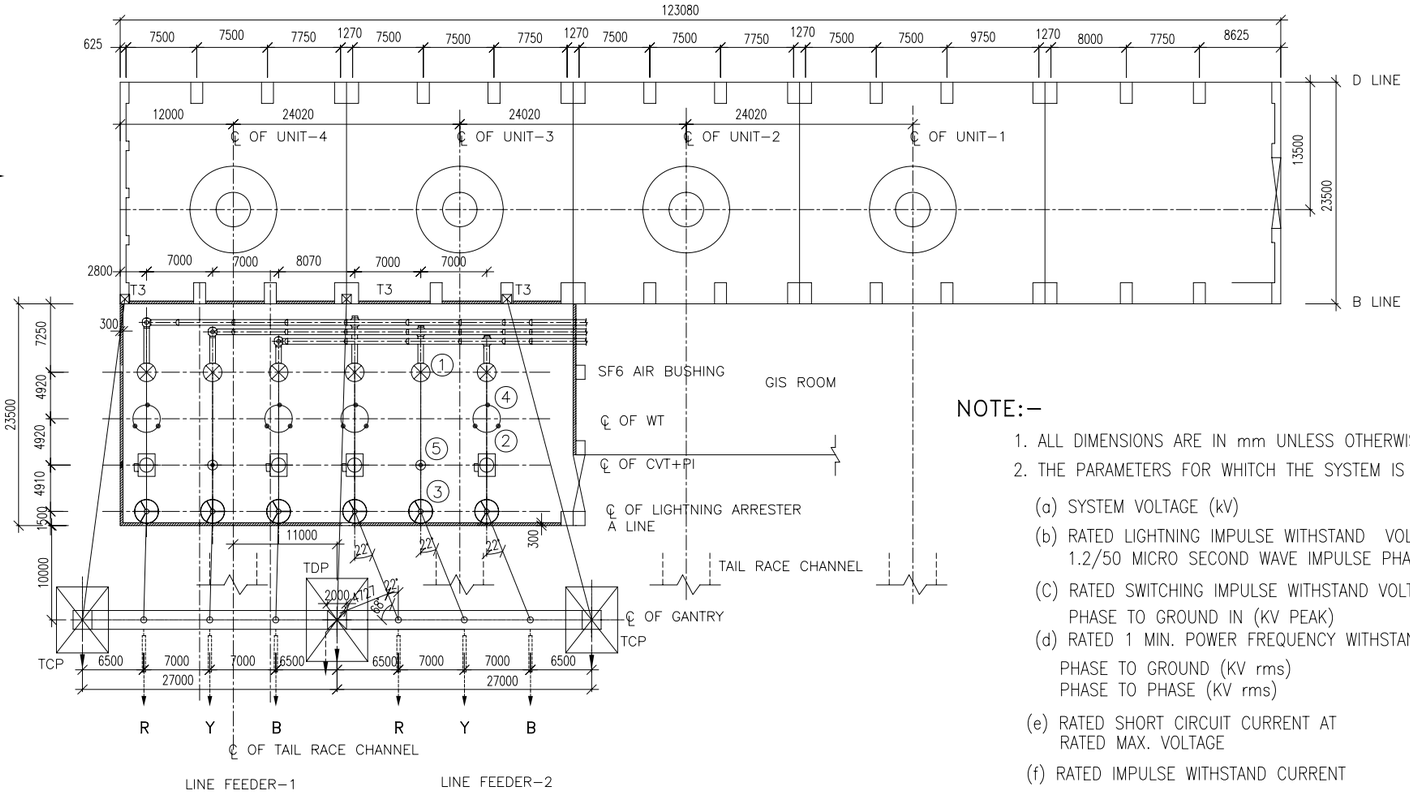


SECTION OF PORTYARD (400kV) PARBATI HYDROELECTRIC PROJECT STAGE –II



LAYOUT PLAN OF PORTYARD (400kV) PARBATI HYDROELECTRIC PROJECT STAGE –II AT EL : 1355.55

NOTE:–

1. ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED.
2. THE PARAMETERS FOR WHITCH THE SYSTEM IS DESIGNED FOR ARE

(a) SYSTEM VOLTAGE (kV)	420
(b) RATED LIGHTNING IMPULSE WITHSTAND VOLTAGE (PEAK) 1.2/50 MICRO SECOND WAVE IMPULSE PHASE TO GROUND (kVp)	1425
(C) RATED SWITCHING IMPULSE WITHSTAND VOLTAGE PHASE TO GROUND IN (KV PEAK)	1050
(d) RATED 1 MIN. POWER FREQUENCY WITHSTAND VOLTAGE	
PHASE TO GROUND (KV rms)	520
PHASE TO PHASE (KV rms)	630
(e) RATED SHORT CIRCUIT CURRENT AT RATED MAX. VOLTAGE	40kA FOR 1SEC
(f) RATED IMPULSE WITHSTAND CURRENT	100kA

3. CONDUCTOR DETAIL OF SWITCHYARD.

EQUIPMENT INTERCONNECTION	QUAD MOOSE ACSR
DROPPERS	QUAD MOOSE ACSR
EARTHWIRE	7/3.66 mm GI WIRE (10.98 mm DIA)

4. PHASE LOCATION OF WAVE TRAP & CVT SHOWN ARE INDICATIVE ONLY ACTUAL LOCATION WILL BE DECIDED LATER BASED UPON THE PLCC REQUIREMENTS.
5. PROTECTION AGAINST DIRECT LIGHTNING STROKE FOR PORTYARD AREA SHALL BE BY SHIELD WIRE. (THE LIGHTNING PROTECTION OF POWER HOUSE BUILDING SHALL BE DONE ALONG WITH EARTHING WORK)

LEGENDS:–

1. ———————— PROPOSED SCOPE
2. ---------- PROPOSED (BY OTHERS)

BILL OF QUANTITY

S.N.	DESCRIPTION	SYMBOL	KV	QTY.	REMARKS
1.	SF6 AIR BUSHING	⊗	420	6	GIS SCOPE
2.	CAPACITOR VOLTAGE TRANSFORMER (1–PH, 8800pF)		420	4	
3.	336 KV SURGE ARRESTER (1–PH)		420	6	
4.	1.0mH, 3150A WAVE TRAP	○	420	4	
5.	POST INSULATOR		420	2	
6.	LMU		–	2	–

MINIMUM CLEARANCE TABLE AS PER "MANUAL ON SUBSTATION– EQUIPMENTS, ILLUMINATION AND LAYOUTS, TECHNICAL REPORT NO. –3 (RE– REVISED–DECEMBER 1996) CENTRAL BOARD OF IRRIGATION & POWER". (MODIFIED FOR THE ALTITUDE 1355.55 M)	400kV
PHASE TO PHASE (PP)	4387
PHASE TO EARTH (PE)	3551
SECTION CLEARANCE (SC)	6789
HEIGHT OF COND. CENTER LINE OF FIRST LEVEL FROM EL 1355.55	8000
GROUND CLEARANCE TO NEAREST PART NOT AT EARTH POTENTIOAL OF AN INSULATOR SUPPORTING LIVE CONDUCTOR	2550

REV.	DATE	ALTERED	CHECKED	APPROVED	REMARKS
06	01.09.05	VIRENDRA	SK/MK Sd/–	GPC Sd/–	DRAWING REVISED TO MEET THE MINIMUM PHASE TO EARTH CLEARANCE BETWEEN SF6 AIR BUSHING & SF6 BUS DUCT.
05	29.06.05	VIRENDRA Sd/–	SK/MK Sd/–	GPC Sd/–	REVISED AS PER NHPC COMMENTS DATED 13.06.05
04	12.02.05	VIRENDRA Sd/–	SK/MK Sd/–	GPC Sd/–	REVISED AS PER NHPC COMMENTS DATED 02.02.05
03	15.04.04	VIRENDRA Sd/–	SK/MK Sd/–	GPC Sd/–	REVISED AS PER NHPC COMMENTS IN DRAWING NO. TB–2–225–316–002 REV. 02
02	20.02.04	Sd/–	Sd/–	Sd/–	REVISED AS PER DISCUSSION HELD ON 10/11–FEB. 2004 IN 6TH DRM
01	02.02.04	Sd/–	Sd/–	Sd/–	REVISED AS PER DISCUSSION HELD ON 11/12–DEC. 2003 IN 5TH DRM

NATIONAL HYDROELECTRIC POWER CORPORATION LTD.
(A Govt. of India Enterprise)

LOT–5:ELECTRICAL & MECHANICAL WORKS
PBTII–PYD01GA002–06

ADDITIONAL INFORMATION
W.O. No. 82012

STATUS OF DRAWING
CONTRACT

DISTRIBUTION OF PRINTS

PARBATI HYDROELECTRIC PROJECT STAGE–II (H.P.) INDIA

भारत हेवी इलेक्ट्रिकल्स लिमिटेड
ट्रांसमिशन परियोजना विभाग, भोपाल
BHARAT HEAVY ELECTRICALS LTD.
TRANSMISSION PROJECTS DIVISION, BHOPAL

	नाम/ NAME	हस्ता/ SIGN	दिनांक/DATE	पे.रि. की संख्या NO. OF VAR
बनाया DRN	SDIS	Sd/–	14.06.03	
जाँचा CKD	SK/MK	Sd/–	14.06.03	
स्वीकृत APPD	GPC	Sd/–	14.06.03	

विभाग DEPT TBEM	उन. टा. नाप की श्रेणी UNTOL.DIMS. GR.	उपपात SCALE 1:400	भार कि.ग्रा. WEIGHT (K.G.)	उसे. ड्राईंग का संदर्भ REF. TO ASSY. DRG.	मद क. ITEM NO.	मद संख्या NO. OF ITEM
कोड CODE 422						

शीर्षक/ TITLE
LAYOUT PLAN & ELEVATION OF PORTYARD (400kV)
PARBATI HYDROELECTRIC PROJECT STAGE – II

ड्राईंग क./DRAWING NO. TB 2 225 316 002

पुन./REV 06

पृष्ठ क./SHT. No. 1 पृष्ठों की संख्या/NO. OF SHT. 1

REF. DRG. NO. | SIGN AND DATE | INVENTORY NO.

A2