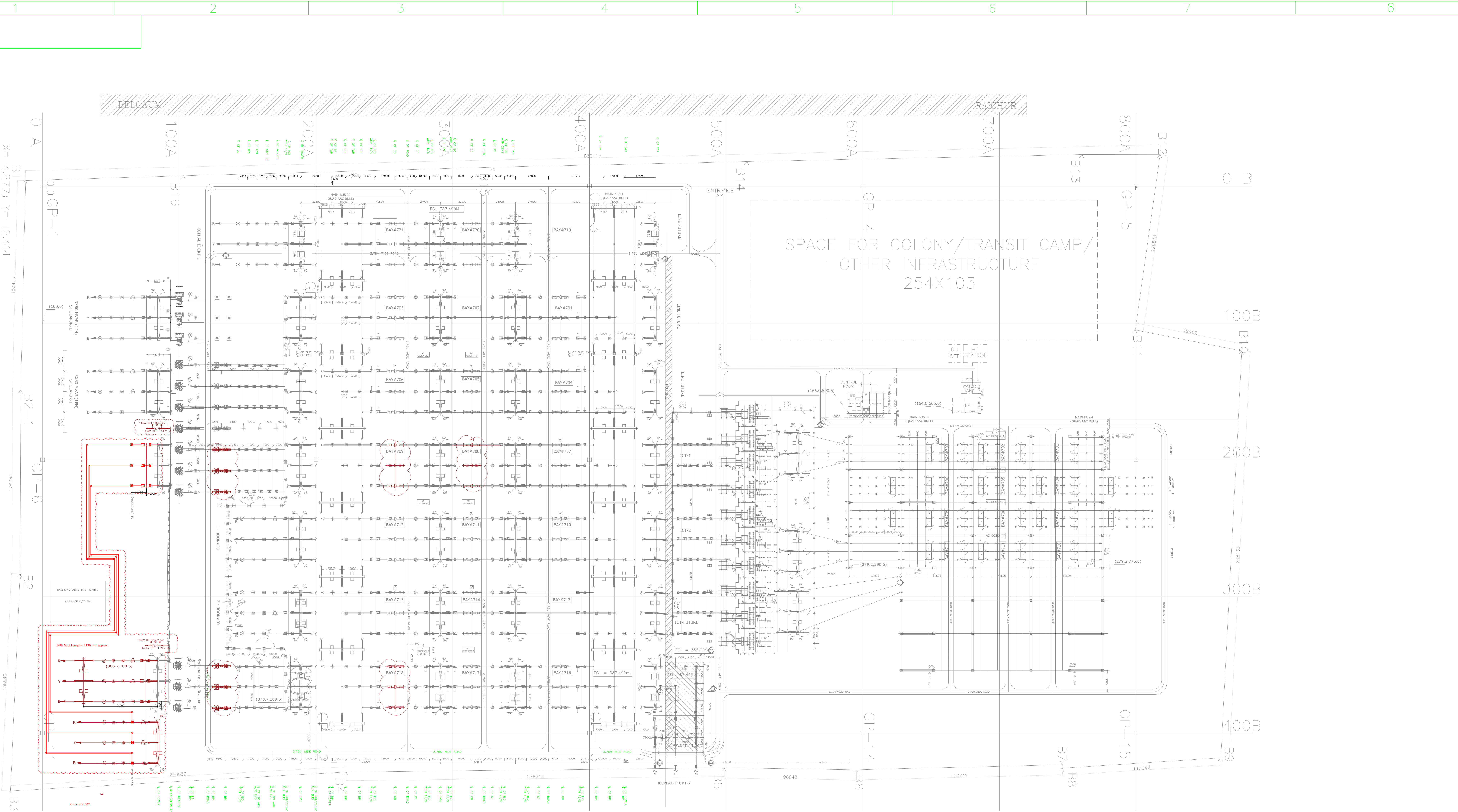




SYSTEM PARTICULARS:-		
(A) NOMINAL VOLTAGE	765KV	
(B) FREQUENCY	50 HZ	
(C) ONE MINUTE POWER FREQUENCY DRY WITHSTAND VOLTAGE (RMS)	800KV	
(D) ONE MINUTE POWER FREQUENCY WET WITHSTAND VOLTAGE (RMS)	830KV	
(E) FALL IMPULSE WITHSTAND VOLTAGE (1.2/50 MICRO SEC)	2100KV	
(F) RISING IMPULSE WITHSTAND VOLTAGE (2/2000 MICRO SEC) DRY & WET	1200KV	
(G) SHORT CIRCUIT LEVEL (KA)	50KA FOR 1 SEC	
(H) MINIMUM CLEARANCE (25mm/KV)	2000MM	
(I) MINIMUM CLEARANCE AS PER POCL TECHNICAL SPECIFICATION	7650MM	
(J) PHASE TO PHASE	4800MM	
(K) PHASE TO EARTH	10500MM	
(L) SECTIONAL CLEARANCE	10500MM	

CONDUCTOR & STRINGING DETAILS - 765KV		
S.NO.	DESCRIPTION	BUS-CONDUCTOR
1	MAIN BUS/MAIN BUS-1 & 2 (AT 30M HEIGHT)	QUAD ARC BIL-1 CONDUCTOR WITH 400MM SUB-CONDUCTOR SPACING
2	DROPPERS/CUMBERING	QUAD ARC BIL-1 CONDUCTOR WITH 400MM SUB-CONDUCTOR SPACING
3	EQUIPMENT INTERCONNECTION (AT 14M HEIGHT)	2.5" IPS AL TUBE/QUAD ARC BIL CONDUCTOR WITH 450 SECTIONS
4	765KV SPARE AUXILIARY BUS (AT 12M HEIGHT)	4.5" IPS AL TUBE
5	EARTHING (AT 45M HEIGHT)	7/3.66mm GI WIRE (10.88mm DIA)

- NOTES:-
- ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE SPECIFIED.
 - ALL THE BUS HEIGHTS ARE REFERRED FROM TOP OF PLUMB LEVEL.
 - R/V/B PHASE SEQUENCE OF 765KV SHALL BE VERIFIED AT SITE DURING EXECUTION.
 - FOR DETAILS OF BAY MANIPULATING HIGH CT & OPT ANCHOR BOX LOCATION, REF. CABLE TRENCH LAYOUT DRAWING.
 - LOCATION OF PROPOSED SPR SHALL BE MATCH WITH EXISTING SPR.
 - FOR TYPE OF STRUCTURES REFER APPROVED STRUCTURAL LAYOUT DRAWING.
 - PLUMB HEIGHTS OF EQUIPMENTS AND TOWER WILL BE 300MM ABOVE FGL & THAT OF GRAVEL FILLING SHALL MATCH WITH THE EXISTING SWITCHYARD.
 - 765KV MAIN TRAY SHALL BE PLACED IN R AND Y PHASE. POWER FOUNDATION SHALL BE CONSTRUCTED IN ALL PHASES.

LEGENDS

PRESENT SCOPE

EXISTING/FUTURE

POWER GRID CORPORATION OF INDIA LIMITED

(A GOVERNMENT OF INDIA ENTERPRISE)

PROJECT: TRANSMISSION SYSTEM FOR INTEGRATION OF KURNOL-V REZ PHASE-I- UPGRADATION WORKS AT NAGARJUNASAGAR AND RAICHUR

SUBSTATION: EXTENSION OF 765KV RAICHUR SUBSTATION

TITLE: GENERAL ARRANGEMENT

DATE	DRAWN	DRG.NO.	REV
DEC 2025		C/ENGG/RTM/KURNOL-V UPGRAD/RAICHUR/GA/01	0