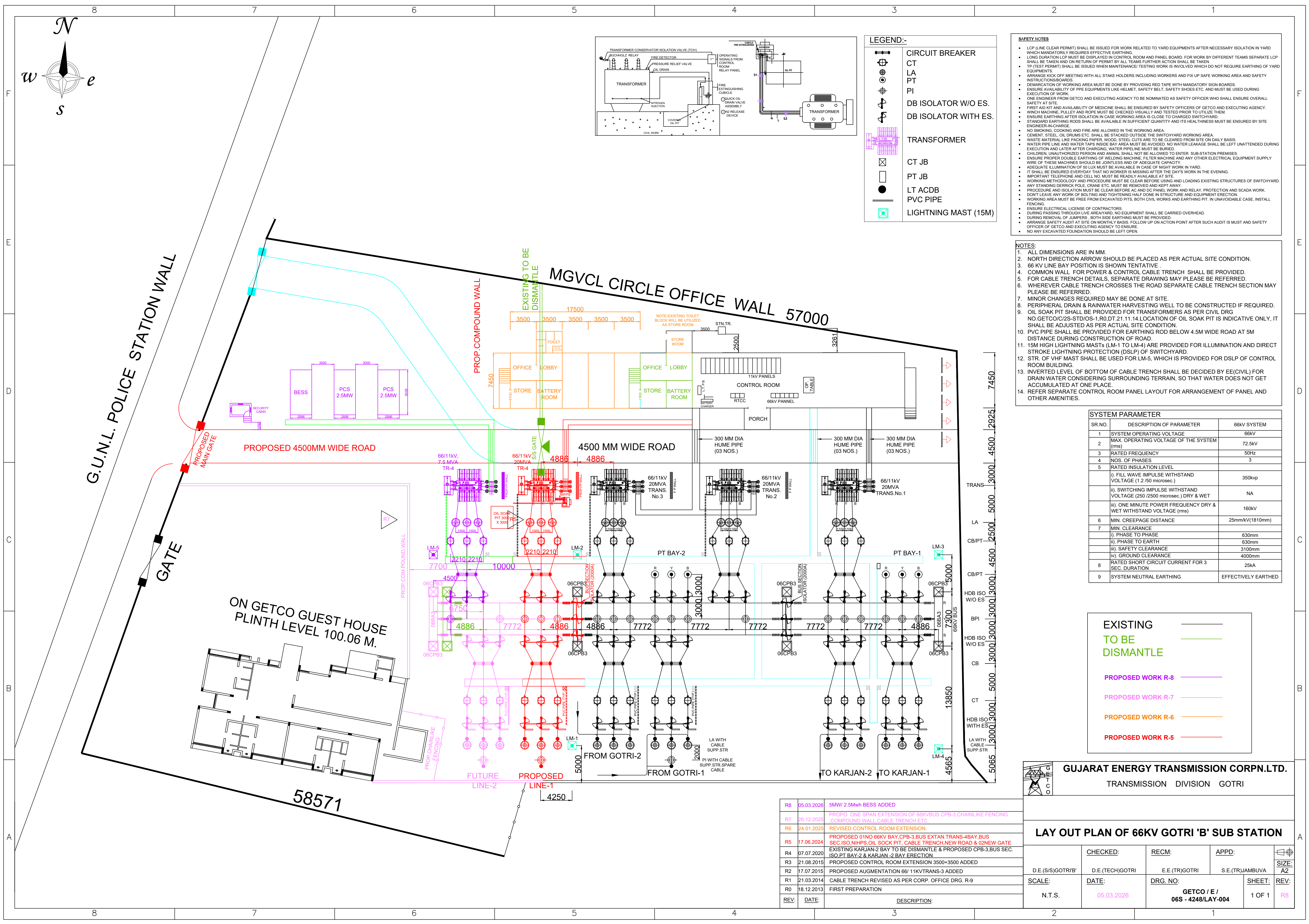




LEGEND:-

CIRCUIT BREAKER

CT

LA

PT

PI

DB ISOLATOR W/O ES.

DB ISOLATOR WITH ES.

TRANSFORMER

CT JB

PT JB

LT ACDB

PVC PIPE

LIGHTNING MAST (15M)

- SAFETY NOTES**
- LCP (LINE CLEAR PERMIT) SHALL BE ISSUED FOR WORK RELATED TO YARD EQUIPMENTS AFTER NECESSARY ISOLATION IN YARD WHICH MANDATORILY REQUIRES EFFECTIVE EARTHING.
 - LONG DURATION LCP MUST BE DISPLAYED IN CONTROL ROOM AND PANEL BOARD. FOR WORK BY DIFFERENT TEAMS SEPARATE LCP SHALL BE TAKEN AND ON RETURN OF PERMIT BY ALL TEAMS FURTHER ACTION SHALL BE TAKEN.
 - TP (TEST PERMIT) SHALL BE ISSUED WHEN MAINTENANCE/ TESTING WORK IS INVOLVED WHICH DO NOT REQUIRE EARTHING OF YARD EQUIPMENTS.
 - ARRANGE KICK OFF MEETING WITH ALL STAKE HOLDERS INCLUDING WORKERS AND FIX UP SAFE WORKING AREA AND SAFETY INSTRUCTIONS/BOARDS.
 - DEMARICATION OF WORKING AREA MUST BE DONE BY PROVIDING RED TAPE WITH MANDATORY SIGN BOARDS.
 - ENSURE AVAILABILITY OF PPE EQUIPMENTS LIKE HELMET, SAFETY BELT, SAFETY SHOES ETC. AND MUST BE USED DURING EXECUTION OF WORK.
 - ONE ENGINEER FROM GETCO AND EXECUTING AGENCY TO BE NOMINATED AS SAFETY OFFICER WHO SHALL ENSURE OVERALL SAFETY AT SITE.
 - FIRST AID KIT AND AVAILABILITY OF MEDICINE SHALL BE ENSURED BY SAFETY OFFICERS OF GETCO AND EXECUTING AGENCY.
 - WINCH MACHINE, PULLEY AND ROPE MUST BE CHECKED VISUALLY AND TESTED PRIOR TO UTILIZE THEM.
 - ENSURE EARTHING AFTER ISOLATION IN CASE WORKING AREA IS CLOSE TO CHARGED SWITCHYARD.
 - STANDARD EARTHING RODS SHALL BE AVAILABLE IN SUFFICIENT QUANTITY AND ITS HEALTHINESS MUST BE ENSURED BY SITE ENGINEER-IN-CHARGE.
 - NO SMOKING, COOKING AND FIRE ARE ALLOWED IN THE WORKING AREA.
 - CEMENT, STEEL, OIL DRUMS ETC. SHALL BE STACKED OUTSIDE THE SWITCHYARD WORKING AREA.
 - WASTE MATERIAL LIKE PACKING PAPER, WOOD, STEEL CUTS ARE TO BE CLEARED FROM SITE ON DAILY BASIS.
 - WATER PIPE LINE AND WATER TAPS INSIDE BAY AREA MUST BE AVOIDED. NO WATER LEAKAGE SHALL BE LEFT UNATTENDED DURING EXECUTION AND LATER AFTER CHARGING. WATER PIPELINE MUST BE BURIED.
 - CHILDREN UNAUTHORIZED PERSON AND ANIMAL SHALL NOT BE ALLOWED TO ENTER SUB-STATION PREMISES.
 - ENSURE PROPER DOUBLE EARTHING OF WELDING MACHINE, FILTER MACHINE AND ANY OTHER ELECTRICAL EQUIPMENT SUPPLY WIRE OF THESE MACHINES SHOULD BE JOINTLESS AND OF ADEQUATE CAPACITY.
 - ADEQUATE ILLUMINATION OF 50 LUX MUST BE AVAILABLE IN CASE OF NIGHT WORK IN YARD.
 - IT SHALL BE ENSURED EVERYDAY THAT NO WORKER IS MISSING AFTER THE DAY'S WORK IN THE EVENING.
 - IMPORTANT TELEPHONE AND CELL NO MUST BE READILY AVAILABLE AT SITE.
 - WORKING METHODOLOGY AND PROCEDURE MUST BE CLEAR BEFORE USING AND LOADING EXISTING STRUCTURES OF SWITCHYARD.
 - ANY STANDING DERRICK POLE, CRANE ETC. MUST BE REMOVED AND KEPT AWAY.
 - PROCEDURE AND ISOLATION MUST BE CLEAR BEFORE AC AND DC PANEL WORK AND RELAY, PROTECTION AND SCADA WORK.
 - DON'T LEAVE ANY WORK OF BOLTING AND TIGHTENING HALF DONE IN STRUCTURE AND EQUIPMENT ERECTION.
 - WORKING AREA MUST BE FREE FROM EXCAVATED PITS, BOTH CIVIL WORKS AND EARTHING PIT. IN UNAVOIDABLE CASE, INSTALL FENCING.
 - ENSURE ELECTRICAL LICENSE OF CONTRACTORS.
 - DURING PASSING THROUGH LIVE AREAYARD, NO EQUIPMENT SHALL BE CARRIED OVERHEAD.
 - DURING REMOVAL OF JUMPERS, BOTH SIDE EARTHING MUST BE PROVIDED.
 - ARRANGE SAFETY AUDIT AT SITE ON MONTHLY BASIS. FOLLOW UP ON ACTION POINT AFTER SUCH AUDIT IS MUST AND SAFETY OFFICER OF GETCO AND EXECUTING AGENCY TO ENSURE.
 - NO ANY EXCAVATED FOUNDATION SHOULD BE LEFT OPEN.

- NOTES:**
- ALL DIMENSIONS ARE IN MM.
 - NORTH DIRECTION ARROW SHOULD BE PLACED AS PER ACTUAL SITE CONDITION.
 - 66 KV LINE BAY POSITION IS SHOWN TENTATIVE.
 - COMMON WALL FOR POWER & CONTROL CABLE TRENCH SHALL BE PROVIDED.
 - FOR CABLE TRENCH DETAILS, SEPARATE DRAWING MAY PLEASE BE REFERRED.
 - WHEREVER CABLE TRENCH CROSSES THE ROAD SEPARATE CABLE TRENCH SECTION MAY PLEASE BE REFERRED.
 - MINOR CHANGES REQUIRED MAY BE DONE AT SITE.
 - PERIPHERAL DRAIN & RAINWATER HARVESTING WELL TO BE CONSTRUCTED IF REQUIRED.
 - OIL SOAK PIT SHALL BE PROVIDED FOR TRANSFORMERS AS PER CIVIL DRG. NO GETCO/C/2S-STD/OS-1.R0.DT.21.11.14 LOCATION OF OIL SOAK PIT IS INDICATIVE ONLY, IT SHALL BE ADJUSTED AS PER ACTUAL SITE CONDITION.
 - PVC PIPE SHALL BE PROVIDED FOR EARTHING ROD BELOW 4.5M WIDE ROAD AT 5M DISTANCE DURING CONSTRUCTION OF ROAD.
 - 15M HIGH LIGHTNING MASTS (LM-1 TO LM-4) ARE PROVIDED FOR ILLUMINATION AND DIRECT STROKE LIGHTNING PROTECTION (DSLPT) OF SWITCHYARD.
 - STR. OF VHF MAST SHALL BE USED FOR LM-5, WHICH IS PROVIDED FOR DSLPT OF CONTROL ROOM BUILDING.
 - INVERTED LEVEL OF BOTTOM OF CABLE TRENCH SHALL BE DECIDED BY EE(CIVIL) FOR DRAIN WATER CONSIDERING SURROUNDING TERRAIN, SO THAT WATER DOES NOT GET ACCUMULATED AT ONE PLACE.
 - REFER SEPARATE CONTROL ROOM PANEL LAYOUT FOR ARRANGEMENT OF PANEL AND OTHER AMENITIES.

SYSTEM PARAMETER		
SR.NO.	DESCRIPTION OF PARAMETER	66kV SYSTEM
1	SYSTEM OPERATING VOLTAGE	66kV
2	MAX. OPERATING VOLTAGE OF THE SYSTEM (rms)	72.5kV
3	RATED FREQUENCY	50Hz
4	NOS. OF PHASES	3
5	RATED INSULATION LEVEL	
i). FILL WAVE IMPULSE WITHSTAND VOLTAGE (1.2/50 microsec.)		350kvp
ii). SWITCHING IMPULSE WITHSTAND VOLTAGE (250/2500 microsec.) DRY & WET		NA
iii). ONE MINUTE POWER FREQUENCY DRY & WET WITHSTAND VOLTAGE (rms)		160kV
6	MIN. CREEPAGE DISTANCE	25mm/kV(1810mm)
7	MIN. CLEARANCE	
i). PHASE TO PHASE		630mm
ii). PHASE TO EARTH		630mm
iii). SAFETY CLEARANCE		3100mm
iv). GROUND CLEARANCE		4000mm
8	RATED SHORT CIRCUIT CURRENT FOR 3 SEC. DURATION	25kA
9	SYSTEM NEUTRAL EARTHING	EFFECTIVELY EARTHED

EXISTING ———

TO BE ———

DISMANTLE ———

PROPOSED WORK R-8 ———

PROPOSED WORK R-7 ———

PROPOSED WORK R-6 ———

PROPOSED WORK R-5 ———

R8	05.03.2026	5MW/ 2.5Mwh BESS ADDED
R7	26.12.2025	PROPO. ONE SPAN EXTENSION OF 66KV BUS CPB-3, CHAINLIKE FENCING, COMPOUND WALL, CABLE TRENCH ETC.
R6	24.01.2025	REVISED CONTROL ROOM EXTENSION.
R5	17.06.2024	PROPOSED 01NO 66KV BAY, CPB-3 BUS EXTAN TRANS-4BAY BUS SEC.ISO, NHPS, OIL SOCK PIT, CABLE TRENCH, NEW ROAD & 02NEW GATE
R4	07.07.2020	EXISTING KARJAN-2 BAY TO BE DISMANTLE & PROPOSED CPB-3 BUS SEC. ISO, PT BAY-2 & KARJAN -2 BAY ERECTION
R3	21.08.2015	PROPOSED CONTROL ROOM EXTENSION 3500*3500 ADDED
R2	17.07.2015	PROPOSED AUGMENTATION 66/ 11KV TRANS-3 ADDED
R1	21.03.2014	CABLE TRENCH REVISED AS PER CORP. OFFICE DRG. R-9
R0	18.12.2013	FIRST PREPARATION
REV.	DATE:	DESCRIPTION:

GUJARAT ENERGY TRANSMISSION CORPN.LTD.

TRANSMISSION DIVISION GOTRI

LAY OUT PLAN OF 66KV GOTRI 'B' SUB STATION

D.E.(S/S)GOTRI'B'	CHECKED: D.E.(TECH)GOTRI	REC'D: E.E.(TR)GOTRI	APP'D: S.E.(TR)JAMBUVA	SIZE: A2
SCALE: N.T.S.	DATE: 05.03.2026	DRG. NO: GETCO / E / 06S - 4246/LAY-004	SHEET: 1 OF 1	REV: R8