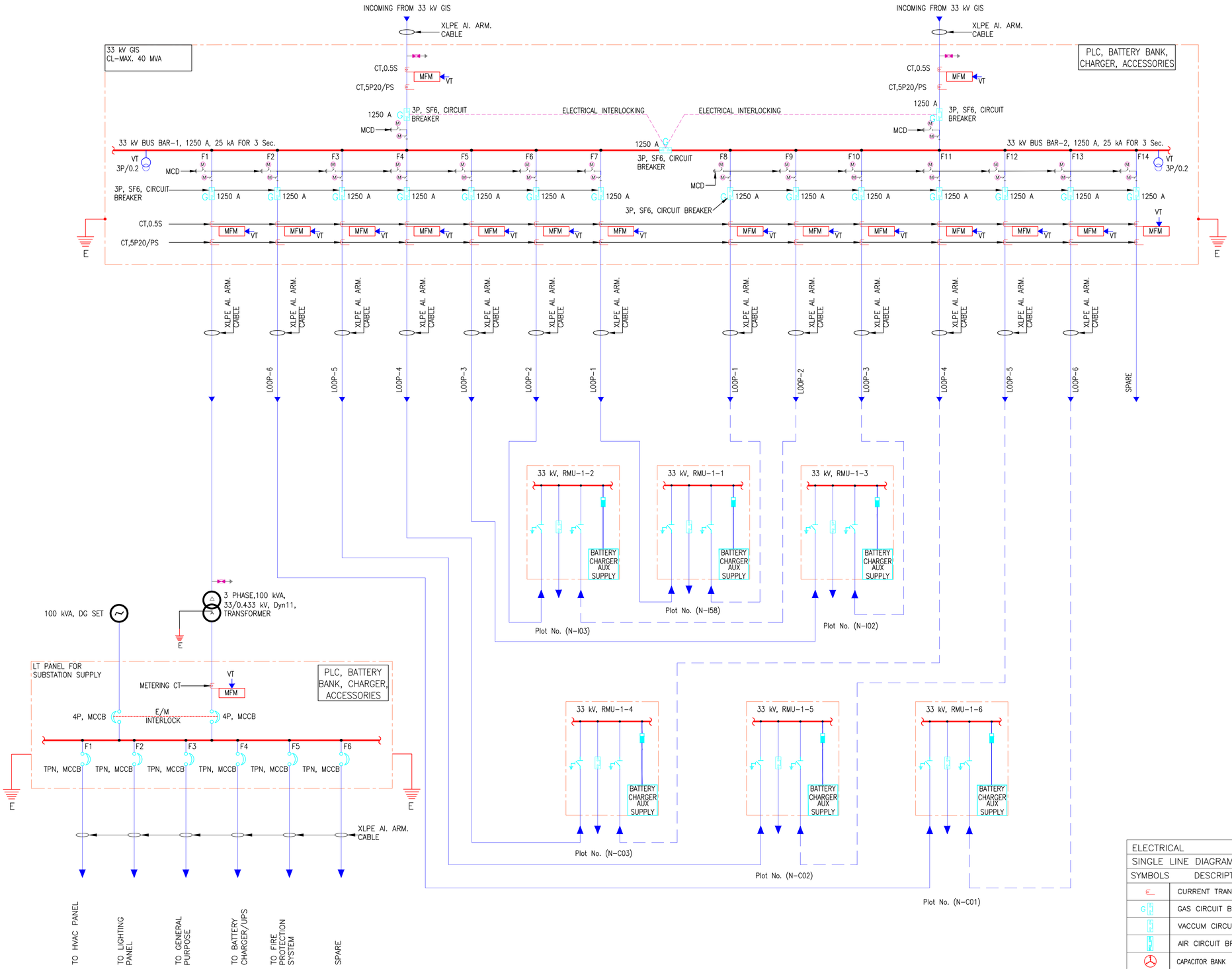

NOTE

1. ALL DIMENSIONS ARE IN MM UNLESS MENTIONED OTHERWISE.
2. NO DIMENSIONS ARE TO BE SCALED FROM THIS DRAWING.
3. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH RELEVANT ARCHITECTURAL AND STRUCTURAL DRAWINGS.
4. ALL DIMENSIONS MUST BE VERIFIED ON SITE BEFORE COMMENCING ANY WORK OR PREPARING ANY SHOP DRAWINGS. IN CASE OF ANY DISCREPANCY, THE SAME SHOULD BE BROUGHT TO THE NOTICE OF THE ARCHITECT & GOT CLARIFIED BEFORE EXECUTION OF WORK.
5. THIS DRAWING IS THE PROPERTY OF EGIS INDIA CONSULTING ENGINEERS PVT. LTD. AND MUST NOT BE PASSED TO ANY PERSON OR BODY NOT AUTHORIZED BY US TO RECEIVE IT NOT BE COPIED OR OTHERWISE MADE USE EITHER IN FULL OR IN PARTY BY SUCH PERSON OR BODY WITHOUT OUR PRIOR PERMISSION IN WRITING.
6. RATINGS OF POWER TRANSFORMERS SHALL BE CONSIDERED BASED ON THE ACTUAL LOAD REQUIREMENT.
7. MAXIMUM DEMAND INDICATED ON SWITCHING STATION AND DISTRIBUTUION SUBSTATION IS TENTATIVE ONLY.
8. POWER SUPPLY AT 33 KV & 11 KV VOLTAGE LEVEL SHALL BE TRANSMITTED TO HT CONSUMERS THROUGH 33 KV SWITCHING SUBSTATION AND 33/11 KV DISTRIBUTION SUBSTATIONS RESPECTIVELY. EACH 33 KV SWITCHING SUBSTATION SHALL BE CAPABLE OF TRANSMITTING MAXIMUM POWER OF 40 MVA AND EACH 33/11 KV DISTRIBUTION SUBSTATION SHALL BE CAPABLE OF TRANSMITTING MAXIMUM POWER OF 30 MVA.
9. ALL OUTGOING FEEDERS SHALL BE PLC/SCADA COMPATIBLE.

NOTES:-

1. ALL THE CT RATINGS WITH BURDEN SHALL BE CONSIDERED AS PER THE SYSTEM REQUIREMENT.
2. FINAL SWITCHGEARS RATING SHALL BE CONSIDERED BASED ON THE ACTUAL LOAD REQUIREMENT & AS PER THE ELECTRICAL DISTRIBUTION SCHEME.
3. SHORT CIRCUIT CURRENT RATING OF THE SWITCHGEARS & BUS BAR SHALL BE AS PER SYSTEM DESIGN REQUIREMENTS.
4. FRLS COPPER CONTROL WIRING WITH SPACE HEATER, THERMOSTAT AND CONTROL MCB'S ETC. SHALL BE PROVIDED IN ALL THE ELECTRICAL PANELS AS REQUIRED.
5. FINAL CABLE SIZES SHALL BE CONSIDERED BASED ON THE ACTUAL LOAD REQUIREMENT & AS PER THE ELECTRICAL DISTRIBUTION SCHEME.

SYSTEM PARAMETERS

RATED VOLTAGE	33 KV	11 KV
MAXIMUM VOLTAGE	36 KV	12 KV
RATED FREQUENCY	50 Hz	50 Hz
RATED POWER FREQUENCY WITHSTAND VOLTAGE (1 MIN)	70 KV	28 KV
RATED LIGHTNING IMPULSE WITHSTAND VOLTAGE (1.2/50 MICRO SEC)	170 KVp	75 KVp
RATED SHORT BREAKING CURRENT	25 KA	25 KA
RATED SHORT TIME WITHSTAND DURATION	3 Sec.	3 Sec.
DRIVING MECHANISM OF CIRCUIT BREAKER	STORED ENERGY SPRING	STORED ENERGY SPRING
DRIVING OPERATING SEQUENCE	O-0.3S-CO-3 MIN-CO	O-0.3S-CO-3 MIN-CO

ELECTRICAL SINGLE LINE DIAGRAM

SYMBOLS	DESCRIPTION
	CURRENT TRANSFORMER
	GAS CIRCUIT BREAKER
	VACCUM CIRCUIT BREAKER
	AIR CIRCUIT BREAKER
	CAPACITOR BANK
	MOTORISED ISOLATOR
	POTENTIAL TRANSFORMER
	FUSE
ES	HIGH SPEED EARTHING SWITCH
	LIGHTNING ARRESRTER
	MOTORISED EARTH SWITCH
	MOTORISED COMBINED DISCONNECTOR WITH EARTH SWITCH (MCD)
	EARTHING

FOR TENDER

CLIENT

MAHARASHTRA INDUSTRIAL TOWNSHIP LTD (MITL)

PROJECT

DESIGN, CONSTRUCTION, TESTING, COMMISSIONING AND OPERATION & MAINTENANCE OF INFRASTRUCTURE WORKS AT DIGHI PORT INDUSTRIAL AREA (DPIA)- PHASE 1 UNDER DELHI MUMBAI INDUSTRIAL CORRIDOR (DMIC) ON EPC BASIS

TITLE

SINGLE LINE DIAGRAM FOR 33/11 KV SUB STATION-1

PROJECT CODE: DI1628	STATUS: ISSUED FOR TENDER		DATE: 18.12.2024
SHEET NO: 01 OF 01	SCALE: NTS	DWG SIZE: A1	REV NO: R0

DRAWING NO:

MITL-DPIA-PKG1-EL-04