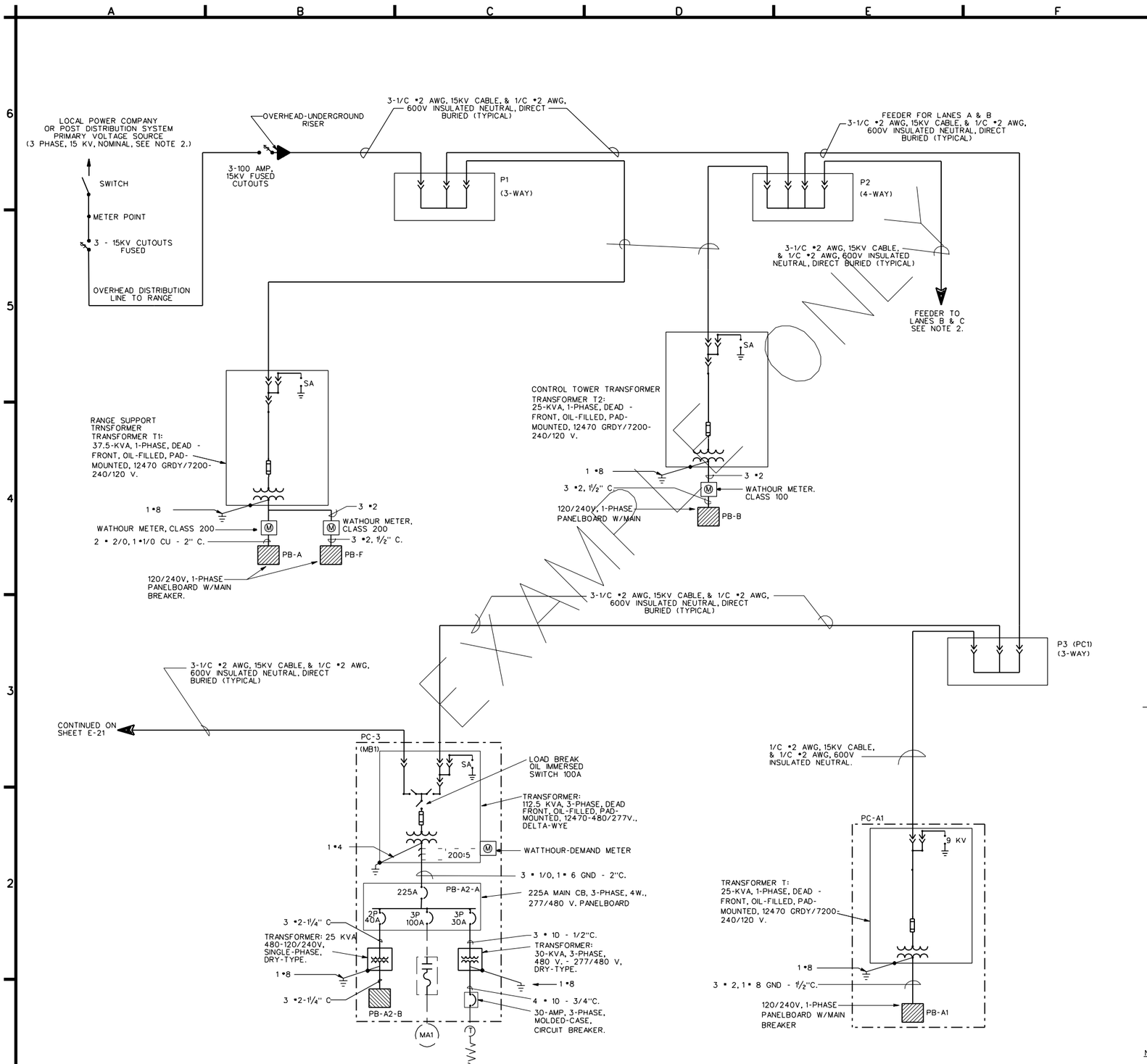

ELECTRICAL LEGEND - ONE LINE DIAGRAM:

	FUSE
SA	SURGE ARRESTER-9KV, MOV, DEAD-FRONT ELBOW
	POWER TRANSFORMER
	MOLDED CASE CIRCUIT BREAKER
MAX	ARMOR MOVING TARGET CARRIER POWER BUS (INSTALLATION BY TARGET CONTRACTOR)
	ARMOR MOVING TARGET CARRIER POWER BUS-BAR HEATERS (INSTALLATION BY TARGET CONTRACTOR)
T	THERMOSTAT - POWER BUS-BAR HEATER (INSTALLATION BY TARGET CONTRACTOR)
	GROUND CONNECTION
	MOTOR CONTROL / STARTER (INSTALLATION BY TARGET CONTRACTOR)
PC	POWER CENTER
— — -	INSTALLATION BY TARGET CONTRACTOR
———	INSTALLATION UNDER THIS CONTRACT
	LOAD BREAK CONNECTOR
PB-XX	120/240V. PANELBOARD W/ MAIN BREAKER PB-XX DENOTES PANELBOARD NAME
	FUSED CUTOUT
	SWITCH, 3 PHASE, GANG-OPERATED OIL-INSULATED (TWO-POSITION)
	SWITCH, 3 PHASE, GANG-OPERATED OIL-INSULATED (FOUR POSITION)
	CURRENT TRANSFORMER: RATIO AS INDICATED
O.H.	OVERHEAD
U.G.	UNDERGROUND
PC-XX (SXXX) / PB-XX	COMBINATION DRY-TYPE TRANSFORMER AND PANELBOARD IN NEMA 3R ENCLOSURE (MINI-POWER PANEL) - PC-XX DENOTES POWER CENTER NUMBER, (SXXX) DENOTES TARGET EMPLACEMENT LOCATION.
M	METER
	SWITCH
PX	PRIMARY CABLE TERMINATING/SECTIONALIZING ENCLOSURE, THREE-PHASE, 3-WAY OR 4-WAY (AS INDICATED), PAD-MOUNTED, DEAD-FRONT, WITH 15 KV CLASS, LOAD-BREAK-ELBOW TERMINATIONS.

NOTES:

1. PRIMARY SURGE ARRESTERS SHALL BE PROVIDED BY USE OF 200 AMP, 15 KV CLASS, LOADBREAK, FEED THRU BUSHING INSERTS.
2. LANE A & B MEDIUM VOLTAGE DISTRIBUTION IS DEPICTED AS TYPICAL FOR RANGES WHICH EMPLOY RETS ARMOR MOVING TARGET CARRIERS (HARDWIRED) DISTRIBUTION SYSTEM FOR LANES B & C IS SIMILAR. MEDIUM VOLTAGE DISTRIBUTION IS REQUIRED FOR ARMOR RANGES DUE TO POWER REQUIREMENTS AND TARGET SPACING. 12.47 KV IS USED IN THIS EXAMPLE.
3. TRANSFORMER FUSES SHALL BE MANUFACTURER'S STANDARD SIZE AND TYPE.

US Army Corps of Engineers

Symbol	Description	Date	Approved	Symbol	Description	Date	Approved

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U.S. ARMY ENGINEERING AND SUPPORT CENTER, HUNTSVILLE
HUNTSVILLE, ALABAMA

FORCE XXI/FORCE MODERNIZATION PROGRAM
STANDARD DESIGN

ARMOR RANGE EXAMPLE PRIMARY POWER SINGLE LINE DIAGRAM

Sheet reference number:
E-20