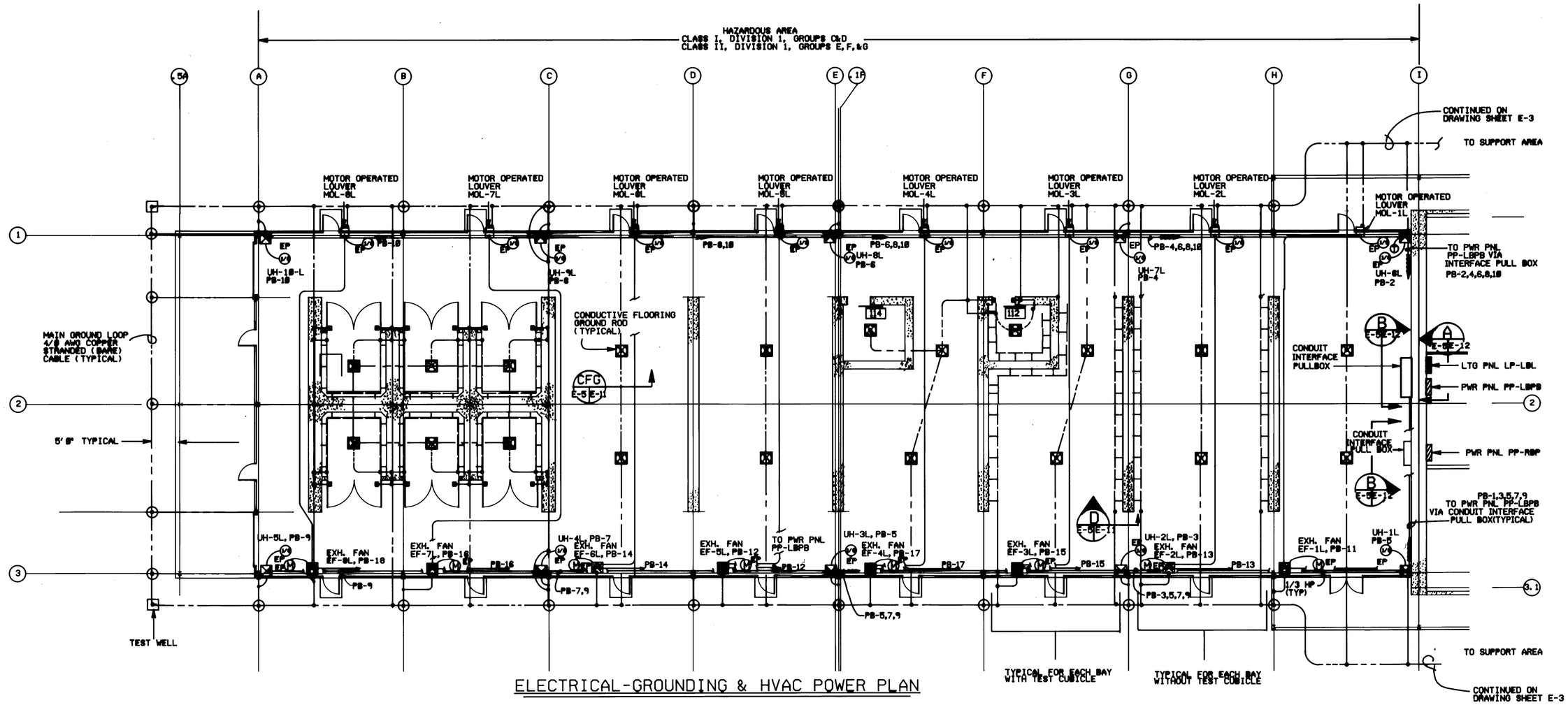


ELECTRICAL-GROUNDING & HVAC POWER PLAN

PANELBOARD PP-LBPB LOCATION SURFACE MOUNTED BOTTOM FEED
POWER 10000 SYM A.I.C. MIN.
CIRCUIT BREAKER TYPE 120/208 VOLTS 3 PHASE 4 WIRE 100 AMP MAIN LUGS ONLY

CKT. NO.	TRIP AMPS	NO. POLES	WIRE SIZE	LOAD SERVED	LOAD V-A	PHASE LOAD, V-A ø A	ø B	ø C	LOAD V-A	LOAD SERVED	WIRE SIZE	NO. POLES	TRIP AMPS	CKT. NO.
1	20	1	#12	UNIT HEATER-1L	600	1200			600	UNIT HEATER-6L	#12	1	20	2
3	20	1	#12	UNIT HEATER-2L	600		1200		600	UNIT HEATER-7L	#12	1	20	4
5	20	1	#12	UNIT HEATER-3L	600			1200	600	UNIT HEATER-8L	#12	1	20	6
7	20	1	#12	UNIT HEATER-4L	600	1200			600	UNIT HEATER-9L	#12	1	20	8
9	20	1	#12	UNIT HEATER-5L	600		1200		600	UNIT HEATER-10L	#12	1	20	10
11	20	1	#12	MOL AND EXHAUST FAN-1L	1200			2520	1200	MOL AND EXHAUST FAN-5L	#12	1	20	12
13	20	1	#12	MOL AND EXHAUST FAN-2L	1200	2520			1200	MOL AND EXHAUST FAN-6L	#12	1	20	14
15	20	1	#12	MOL AND EXHAUST FAN-3L	1200		2520		1200	MOL AND EXHAUST FAN-7L	#12	1	20	16
17	20	1	#12	MOL AND EXHAUST FAN-4L	1200			2520	1200	MOL AND EXHAUST FAN-8L	#12	1	20	18
19	20	1	#12	SPARE	1000	2000			1000	SPARE	#12	1	20	20
21	20	1	#12	SPARE	1000		2000		1000	SPARE	#12	1	20	22
23	20	1	#12	SPARE	1000			2000	1000	SPARE	#12	1	20	24
				TOTAL		6920	6920	6240						

SUPPLIED FROM CKT 34 PNL LP-LBL

TOTAL CONNECTED LOAD 22.080 KVA
80% DEMAND EST., DEMAND LOAD 13.248KVA

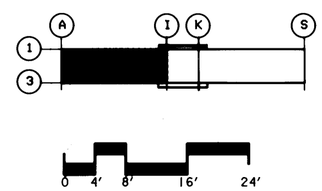
NOTES:

1. ALL CONDUIT SYSTEMS WITHIN THE HAZARDOUS AREAS SHALL BE SEALED AS REQUIRED BY N.E.C.

LIGHTNING PROTECTION:

LIGHTNING PROTECTION SHALL BE IN ACCORDANCE WITH THE LIGHTNING PROTECTION CODE (1983), NFPA 78, CHAPTER 6 AND BE IMPLEMENTED BY THE SITE ADAPTION DESIGNER. PROTECTIVE, OVERHEAD GROUND CONDUCTORS SHALL BE CONFIGURED PURSUANT TO FIGURES 6-3.3.1. AND 6-3.3.2. OF THE CODE, WITH THE ASSOCIATED CONDUCTOR SUPPORTING MASTS POSITIONED OUTSIDE THE STANDARD DESIGN BUILDING LIMIT. MAST LOCATIONS SHALL NOT BE LESS THAN 10 FEET FROM BUILDING WALL OR BUILDING EXTENSIONS (CANOPY OR OVERHANGING STRUCTURES) TO PRECLUDE LIGHTNING DAMAGE FROM "SIDE FLASHES" TO BUILDING CONDUCTORS. THE OVERHEAD SHIELD CONDUCTORS SHALL BE BROUGHT DOWN THE MAST(S) AND DIRECTLY CONNECTED TO THE GROUNDING COUNTERPOISE SYSTEM IN NO LESS THAN TWO (2) LOCATIONS EACH MAST. FURTHER, THE SITE ADAPTION DESIGNER SHALL REFER TO AND INCLUDE THE LIGHTNING PROTECTION APPLICABLE PORTIONS OF DARCOM-R-385-100 OVERHEAD GROUND WIRE SHIELDS SHALL BE AT LEAST 15' ABOVE THE TOP OF THE EXHAUST STACKS FROM THE TEST CUBICLES.

USE WHITE PAPER TO BLACK SPOTS



Symbol	Description	Date	Approved
	Revisions		

US ARMY ENGINEER DIVISION HUNTSVILLE
CORPS OF ENGINEERS
HUNTSVILLE, ALABAMA

Site adapt A/E :

US Army Corps of Engineers

STANDARD DESIGN
AMMUNITION SURVEILLANCE FACILITY
GROUNDING AND POWER PLAN L.H.

Dwn. by : CG/TT
Ckd by :
Reviewed by :
Date :
Sheet reference number : E - 5
Design file no. :
Rev.
Approved by :
Drawing code : STD 216-12-02
Sheet of