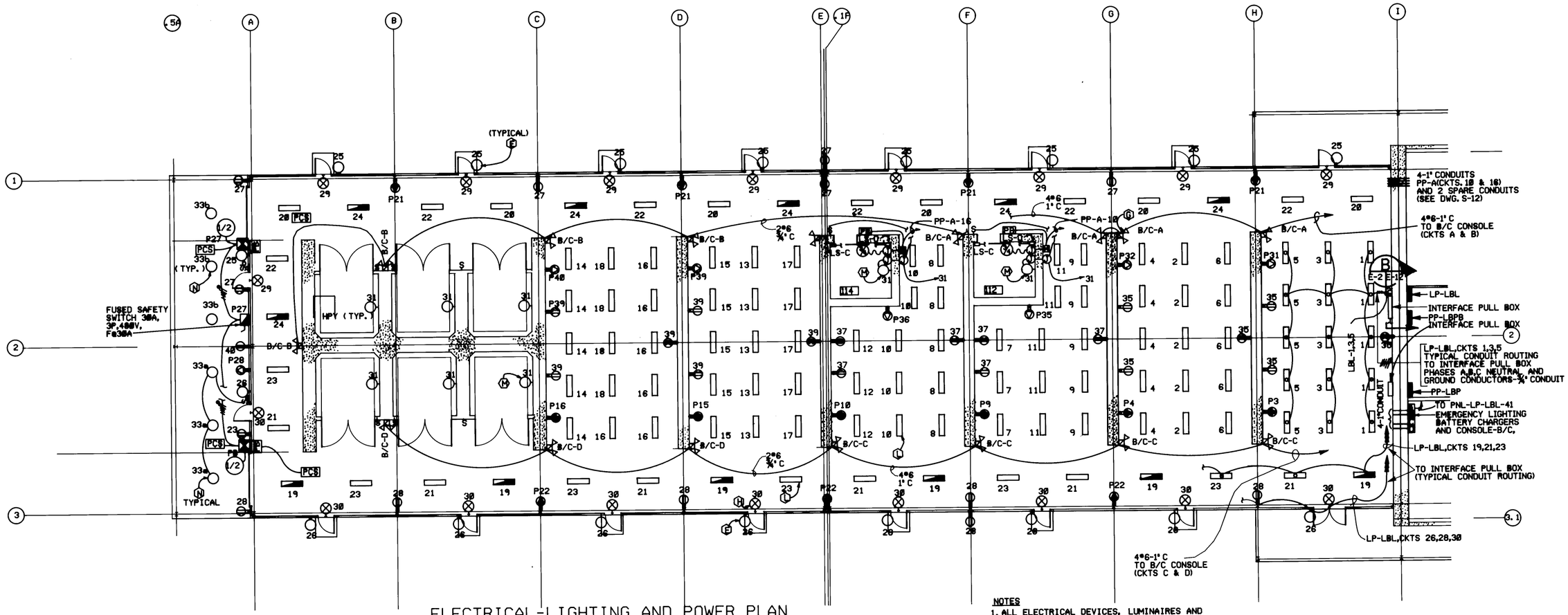
CORPS OF ENGINEERS | U.S. ARMY



ELECTRICAL-LIGHTING AND POWER PLAN

PANELBOARD LP-LBL LOCATION COL I (NON-HAZARDOUS AREA) SURFACE MOUNTED FEED
225 AMP MAIN BREAKER W/200 AMP TRIP 10,000 SYM A.I.C. MIN.
CIRCUIT BREAKER TYPE 200/120 VOLTS 3 PHASE 4WIRE 225 AMP MAINS

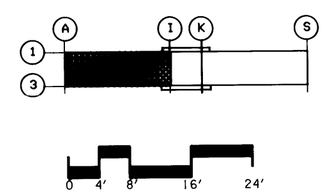
CKT. NO.	TRIP AMPS	NO. POLES	WIRE SIZE	LOAD SERVED	LOAD V-A	PHASE LOAD, V-A ø A	ø B	ø C	LOAD V-A	LOAD SERVED	WIRE SIZE	NO. POLES	TRIP AMPS	CKT. NO.
1	20	1	•12	INSP BAY(H-I) LIGHTING	600	1200	-	-	600	INSP BAY(G-H) LIGHTING	•12	1	20	2
3	20	1	•12	INSP BAY(H-I) LIGHTING	600	-	1200	-	600	INSP BAY(G-H) LIGHTING	•12	1	20	4
5	20	1	•12	INSP BAY(H-I) LIGHTING	600	-	-	1200	600	INSP BAY(G-H) LIGHTING	•12	1	20	6
7	20	1	•12	INSP BAY(F-G) LIGHTING	600	1200	-	-	600	INSP BAY(E-F) LIGHTING	•12	1	20	8
9	20	1	•12	INSP BAY(F-G) LIGHTING	600	-	1200		600	INSP BAY(E-F) LIGHTING	•12	1	20	10
11	20	1	•12	INSP BAY(F-G) LIGHTING	600	-	-	1200	600	INSP BAY(E-F) LIGHTING	•12	1	20	12
13	20	1	•12	INSP BAY(D-E) LIGHTING	600	1200	-	-	600	INSP BAY(C-D) LIGHTING	•12	1	20	14
15	20	1	•12	INSP BAY(D-E) LIGHTING	600	-	1200	-	600	INSP BAY(C-D) LIGHTING	•12	1	20	16
17	20	1	•12	INSP BAY(D-E) LIGHTING	600	-	-	1200	600	INSP BAY(C-D) LIGHTING	•12	1	20	18
19	20	*1	•12	INSP BAY ACCESS AISLE COL. 1	800	1550	-	-	750	INSP BAY ACCESS AISLE COL. 1	•12	1	20	20
21	20	1	•12	INSP BAY ACCESS AISLE COL. 1	750	-	1500	-	750	INSP BAY ACCESS AISLE COL. 1	•12	1	20	22
23	20	1	•12	INSP BAY ACCESS AISLE COL. 1	750	-	-	1550	800	INSP BAY ACCESS AISLE COL. 1	•12	*1	20	24
25	20	1	•12	COL. NO. 3 EXT. LIGHTS(•270 WATTS)	800	1600	-	-	800	COL. NO. 3 EXTERNAL LIGHTS	•12	*1	20	26
27	20	1	•12	COL. NO. 1 RECPTS (•150 WATTS)	1350	-	2700	-	1350	COL. NO. 3 RECEPTACLES	•12	1	20	28
29	20	*1	•12	COL. NO. 3 EXIT LIGHTS(•40 WATT)	450	-	-	900	450	COL. NO. 3 EXIT LIGHTS	•12	1	20	30
31	20	1	•12	INST. AND STORAGE CONSOLE LIGHTING	1000	9000	-	-	8000	PANEL PP-LBPB	•2	3	60	34
33	20	1	•12	LOADING DOCK LIGHTING	750	-	8750	-	8000					
35	20	1	•12	BAYS G-H AND H-I RECPTS(EX)	1350	-	-	9350	8000					
37	20	1	•12	BAYS E-F AND F-G RECPTS(EX)	1350	4470	-	-	3120	LOADING DOCK 208/120V 3 PHASE 4 WIRE RECEPTACLE	•8	3	30	40
39	20	1	•12	BAYS C-D AND D-E RECPTS(EX)	1350	-	4470	-	3120					
41	20	1	•12	EMERGENCY LIGHTING B/C	875	-	-	3990	3120					
SUPPLIED FROM				TOTAL	20220	21020	19395		TOTAL CONNECTED LOAD 60.635 kVA					
•BREAKER SHALL BE LOCKED "ON"									60% DEMAND EST., DEMAND LOAD 36.381 kVA					

PANELBOARD PP-LBP LOCATION COL I (NON-HAZARDOUS AREA) MOUNTED TOP FEED
100 AMP MAIN BREAKER W/90 AMP TRIP 14,000 SYM A.I.C. MIN.
CIRCUIT BREAKER TYPE 480/277 VOLTS 3 PHASE 4 WIRE 225 AMP MAINS

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.
3	30	3	•10	INSP BAY(H-I) 480/277V POWER						INSP BAY(G-H) 480/277V POWER	•10	3	30	4
9	30	3	•10	INSP BAY(F-G) 480/277V POWER						INSP BAY(E-F) 480/277V POWER	•10	3	30	10
15	30	3	•8	INSP BAY(D-E) 480/277V POWER						INSP BAY(C-D) 480/277V POWER	•8	3	30	16
21	30	3	•8	INSP BAY ACCESS AISLE COL. 1 480/277V POWER						INSP BAY ACCESS AISLE COL. 3 480/277V POWER	•8	3	30	22
										SPACE				26
27	30	3	•8	FUSED DISC SWITCH FOR LOADING DOCK MOTOR OPERATED ROLL-UP DOORS-TWO						LOADING DOCK 480V SINGLE PHASE POWER	•8	2	20	28
31	20	2	•10	INSP BAY(H-I) 480V SINGLE PHASE POWER						INSP BAY(G-H) 480V SINGLE PHASE POWER	•10	2	20	32
35	20	2	•10	INSP BAY(F-G) 480V SINGLE PHASE POWER						INSP BAY(E-F) 480V SINGLE PHASE POWER	•10	2	20	36
39	20	2	•10	INSP BAY(D-E) 480V 1 A SINGLE PHASE POWER						INSP BAY(C-D) 480V SINGLE PHASE POWER	•10	2	20	40
NOTE: BRANCH CIRCUITS TO BE VERIFIED BY SITE ADAPTION DESIGNER				TOTAL					TOTAL CONNECTED LOAD ~200 kVA 25% DEMAND EST., DEMAND LOAD ~50 kVA					

NOTES

1. ALL ELECTRICAL DEVICES, LUMINAIRES AND WIRING SHALL BE RATED FOR THE NATIONAL ELECTRICAL CODE HAZARD CLASSIFICATION: CLASS I, DIVISION 1, GROUPS C&D, CLASS II, DIVISION 1, GROUPS E,F,&G (EXCEPT AS INDICATED BY NOTE 3)
2. LIGHTING CIRCUITRY SHOWN ATTENUATES LTG. STROBICAL EFFECTS, PERMITS SWITCHING TO VARY LIGHTING LEVELS AND PROVIDES FUTURE ALTERATION FLEXIBILITY WITH MAXIMIZED FAULT SEGREGATION OF BRANCH CIRCUITRY.
3. NEMA 4 OR (UL57 & UL1572) EQUIPMENT SHALL BE UTILIZED ON THE EXTERIOR OF THE FACILITY (TRUCK LOADING/UNLOADING AREA AND ALL EXTERIOR DOOR LUMINAIRES) SUPPORT BAY IS A NON-HAZARDOUS AREA.
4. EXTERIOR LIGHTING CKTS 25 AND 26 SHALL BE PHOTO-CELL CONTROLLED.
5. CIRCUIT NUMBERS WITHOUT A PREFIX ARE FOR PANEL LP-LBL. CIRCUIT NUMBERS WITH A PREFIX "P" ARE FOR PANEL PP-LBP.
6. POWER RECEPTACLES SHALL BE MOUNTED 4'-6" A.F.F. UNLESS OTHERWISE NOTED.



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
LIGHTING & POWER PLAN
L.H. INSPECTION BAYS

Dwn. by : CG/TT
Ckd. by :
Reviewed by :
Approved by :
Date :
Drawing code : STD 216-12-02
Sheet reference number : E - 2
Design file no. :
Rev.
Sheet of