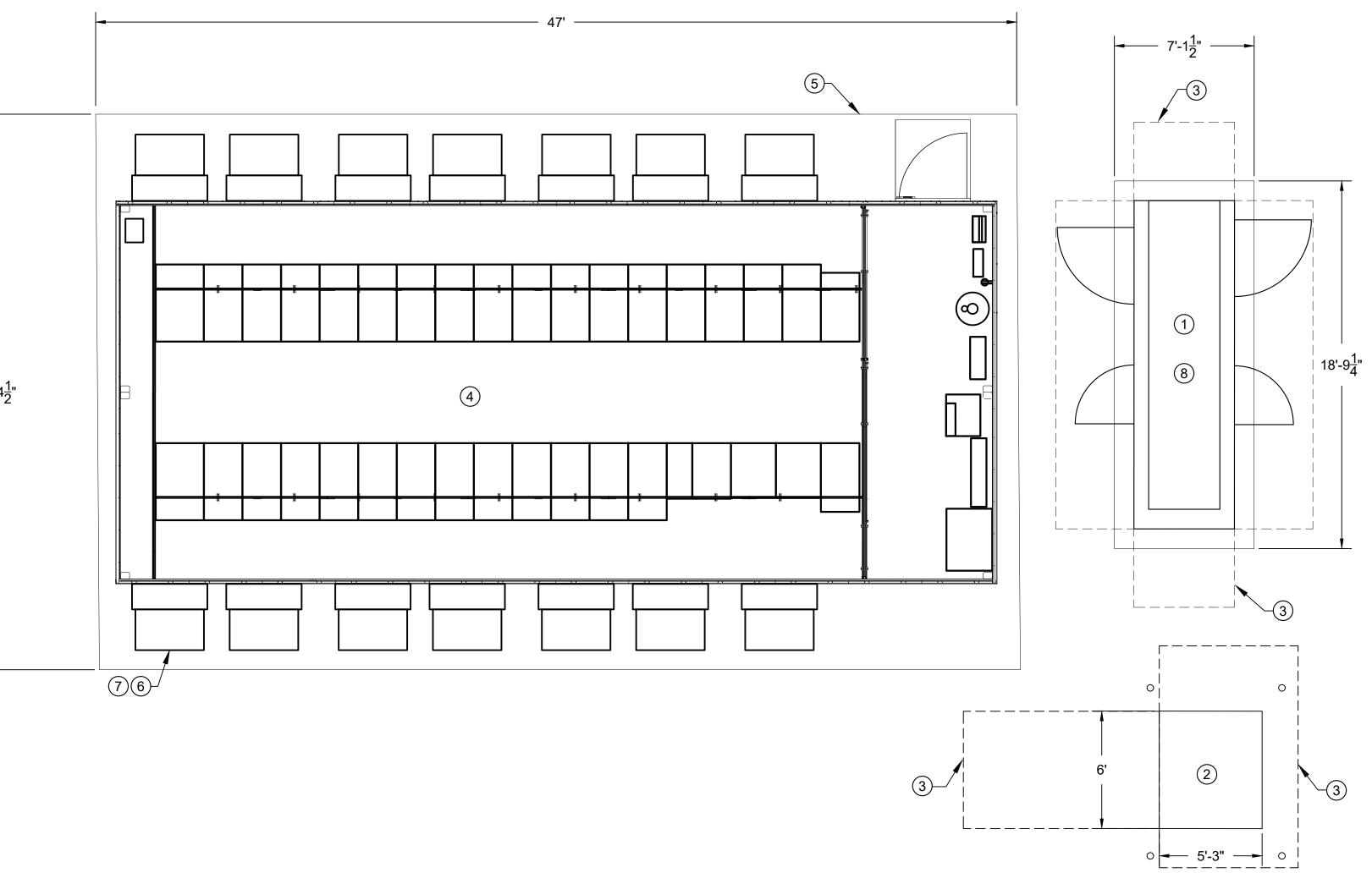
PREFAB FRAME	MAX IT LOAD (KW)	PREFAB MOD	ULE DIMENSIONS (AF	PPROXIMATE)	MDP-100 SYSTEM	UPS SYSTEM	SERVICE ENTRANCE PANEL	SERVICE ENTRANCE	NO. OF WALL MOUNT COOLING	IT RACK (MODEL)/	NO. OF IT	IT RACK DENSITY	NO. OF SINGLE PHASE POLES IN	IT RACK I	DIMENSIONS (APPR	OXIMATE)	IT RACK DISTRIBUTION
SIZE (KVA)		DEPTH (FT)	WIDTH (FT)	HEIGHT (FT)	VOLTAGE LEVEL (V)	MODEL	MODEL	PANEL(A)	UNITS WITH HEATER	NETWORKING IT RACK (MODEL)	RACKS	(KVA/RACK)	PHASE POLES IN PDU	DEPTH (FT)	WIDTH (FT)	HEIGHT (FT)	UNIT (MODEL)
180	162	45	19.5	11	480	GALAXY VM(180KVA)	ASCO-300	800	14	AR3300/ AR3350	30	6	72	4	2	6.5	AP8865



28'-4<u>1</u>"

CONFIGURATION-9 SCALE: 1/4" = 1'-0"

PREFAB CONFIGURATION-9

GENERAL NOTES:

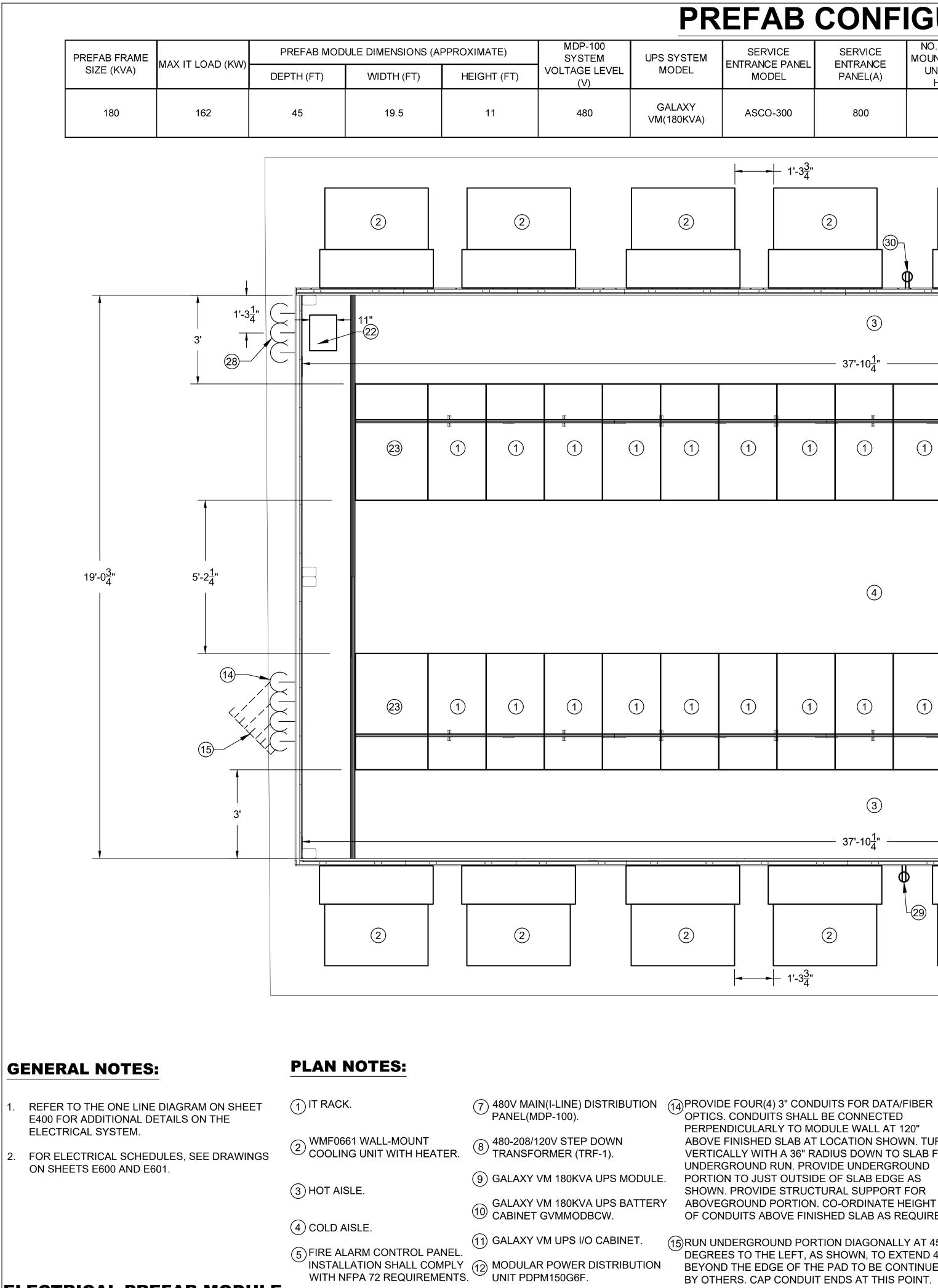
PLAN NOTES:

- 1 500KW/625KVA STANDBY GENERATOR.
- 2 UTILITY TRANSFORMER.
- (4) REFER TO DRAWING E102 FOR PREFAB MODULE DETAILS.
- 5 CONCRETE PAD (TYPICAL).
- 6 WMF0661 WALL MOUNT COOLING UNIT(TYPICAL OF 14 UNITS).
- 3 REQUIRED CLEARANCE (TYPICAL). 7 INSTALL A READILY ACCESSIBLE, LOCAL DISCONNECT NEAR EACH WALL MOUNT COOLING UNIT (TYPICAL OF 14).
- 2. FOR ELECTRICAL SCHEDULES, SEE DRAWINGS ON SHEETS E600 AND E601.

REFER TO ONE LINE DIAGRAM ON SHEET E400 FOR ADDITIONAL DETAILS ON THE ELECTRICAL SYSTEM.

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SEAL:
PROJECT INFORMATION: 160KW DATA CENTER REFERENCE DESIGN PREFAB CONFIGURATION-9
KEYPLAN:
REV. DATE DESCRIPTION 0 06/03/19 CONCEPTUAL DRAWINGS 1
DRAWN BY: GR
DRAWN BY: GR CHECKED BY: MN
PROJECT NUMBER: ENGR18-0024
DRAWING SCALE: NONE
SHEET TITLE: ELECTRICAL SITE LAYOUT PLAN CONFIGURATION-9
DATE: 06/03/19
DRAWING NUMBER:

8 GENERATOR SHALL INCLUDE A BUILT-IN CIRCUIT BREAKER. SEE ONE LINE DRAWING E400 FOR DETAILS.



6 FIRE SUPPRESSION CYLINDER. 13 208/120V DISTRIBUTION PANEL (PDB-200).

SCALE: 1/2" = 1'-0"

ELECTRICAL PREFAB MODULE

DETAILS CONFIGURATION-9

(16) CP-100 CONTROL PANEL.

EM	SERVI ENTRANCE MODI	PANEL	SERVICE ENTRANCE PANEL(A)	MOUNT (UNITS	F WALL COOLING S WITH ATER	IT RACK (MODEL)/ NETWORKING IT RACK (MODEL)	NO. OF RACK		IT RACK DENSITY (KVA/RACK)	NO. OF SI PHASE POI PDU	LES IN 📙	IT RACH DEPTH (FT)	
A)	ASCO-	300	800		14	AR3300/ AR3350	30		6	72		4	
		- 1'-3 3 "	2		2			2)	2'-0 ³ / ₄ "		2		27)
			3) 37'-10 <u>1</u> "										
)	1	1	1 I	1	1	1		(1		1) (12)	
			4										
)	1	1	(1) II	1	1	1		(11)	(9) III	10	10	(12)	
			③ — 37'-10 <u>1</u> " —										
		- 1'-3 <u>3</u> "	2	29	2			2)	2'-0 ³ / ₄ "		2		<u>16,81</u> <u>0</u> 0

PERPENDICULARLY TO MODULE WALL AT 120" ABOVE FINISHED SLAB AT LOCATION SHOWN. TURN VERTICALLY WITH A 36" RADIUS DOWN TO SLAB FOR UNDERGROUND RUN. PROVIDE UNDERGROUND PORTION TO JUST OUTSIDE OF SLAB EDGE AS SHOWN. PROVIDE STRUCTURAL SUPPORT FOR ABOVEGROUND PORTION. CO-ORDINATE HEIGHT OF CONDUITS ABOVE FINISHED SLAB AS REQUIRED.

(15) RUN UNDERGROUND PORTION DIAGONALLY AT 45 DEGREES TO THE LEFT, AS SHOWN, TO EXTEND 48" BEYOND THE EDGE OF THE PAD TO BE CONTINUED BY OTHERS. CAP CONDUIT ENDS AT THIS POINT.

- (17) PROVIDE THREE(3) 3" CONCRETE ENCASED UNDERGROUND PVC SCH-80 CONDUITS FOR POWER FROM UTILITY. CONDUITS SHALL BE CONNECTED PERPENDICULARLY TO MODULE WALL. CO-ORDINATE HEIGHT OF CONDUITS ABOVE FINISHED SLAB AS REQUIRED.
- (18) PROVIDE THREE(3) 3" AND TWO(2) 1-1/2" CONCRETE ENCASED UNDERGROOME SCH-80 CONDUITS FOR POWER AND CONTROLS 24 REQUIRED CLEARANCE(TYPICAL). CONCRETE ENCASED UNDERGROUND PVC CONNECTED PERPENDICULARLY TO MODULE WALL. CO-ORDINATE HEIGHT OF CONDUITS ABOVE FINISHED SLAB AS REQUIRED.

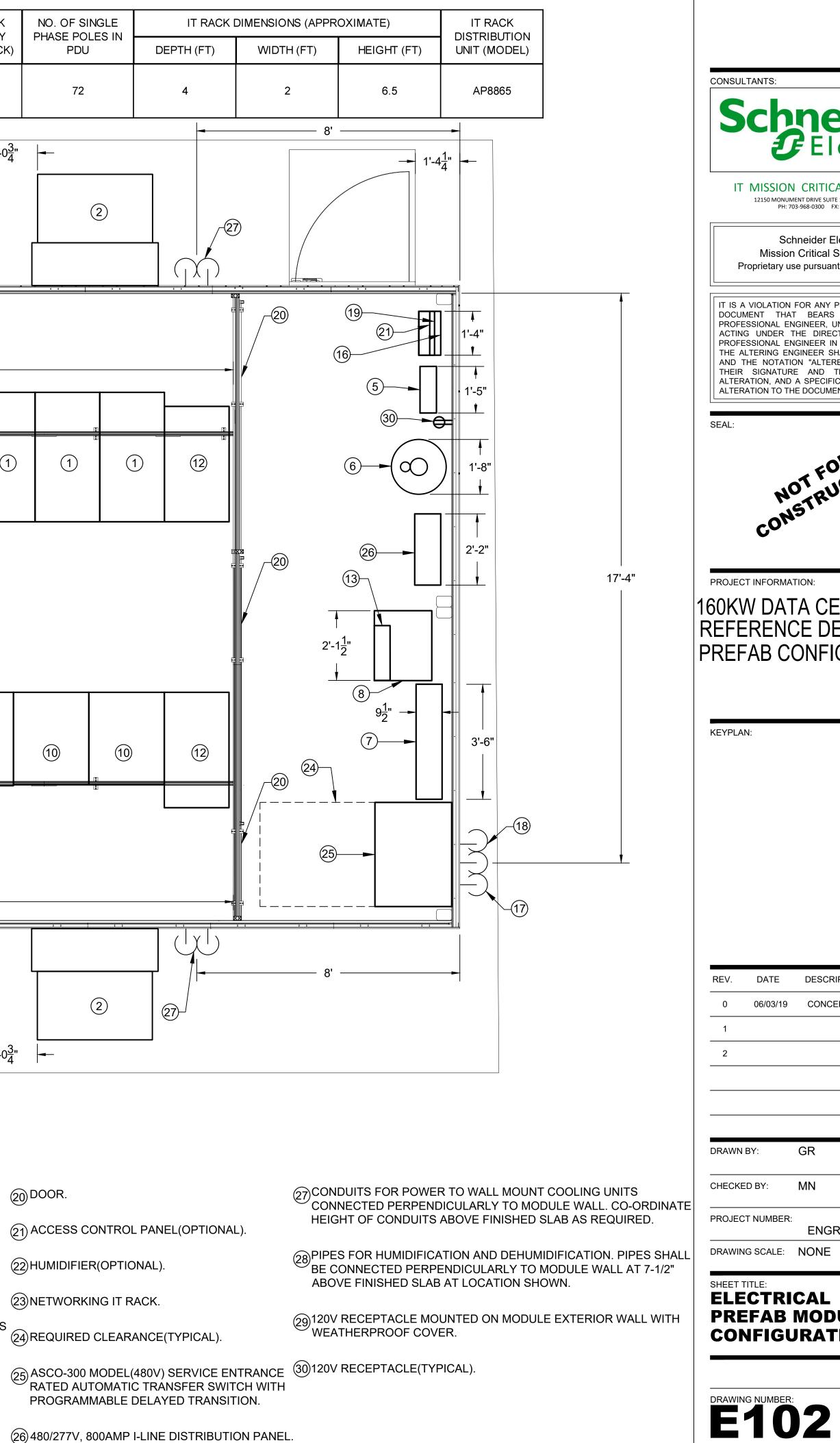
(19) GENERATOR ANNUNCIATOR PANEL (OPTIONAL).

- 20 DOOR.
- (21) ACCESS CONTROL PANEL(OPTIONAL).
- (22) HUMIDIFIER (OPTIONAL).

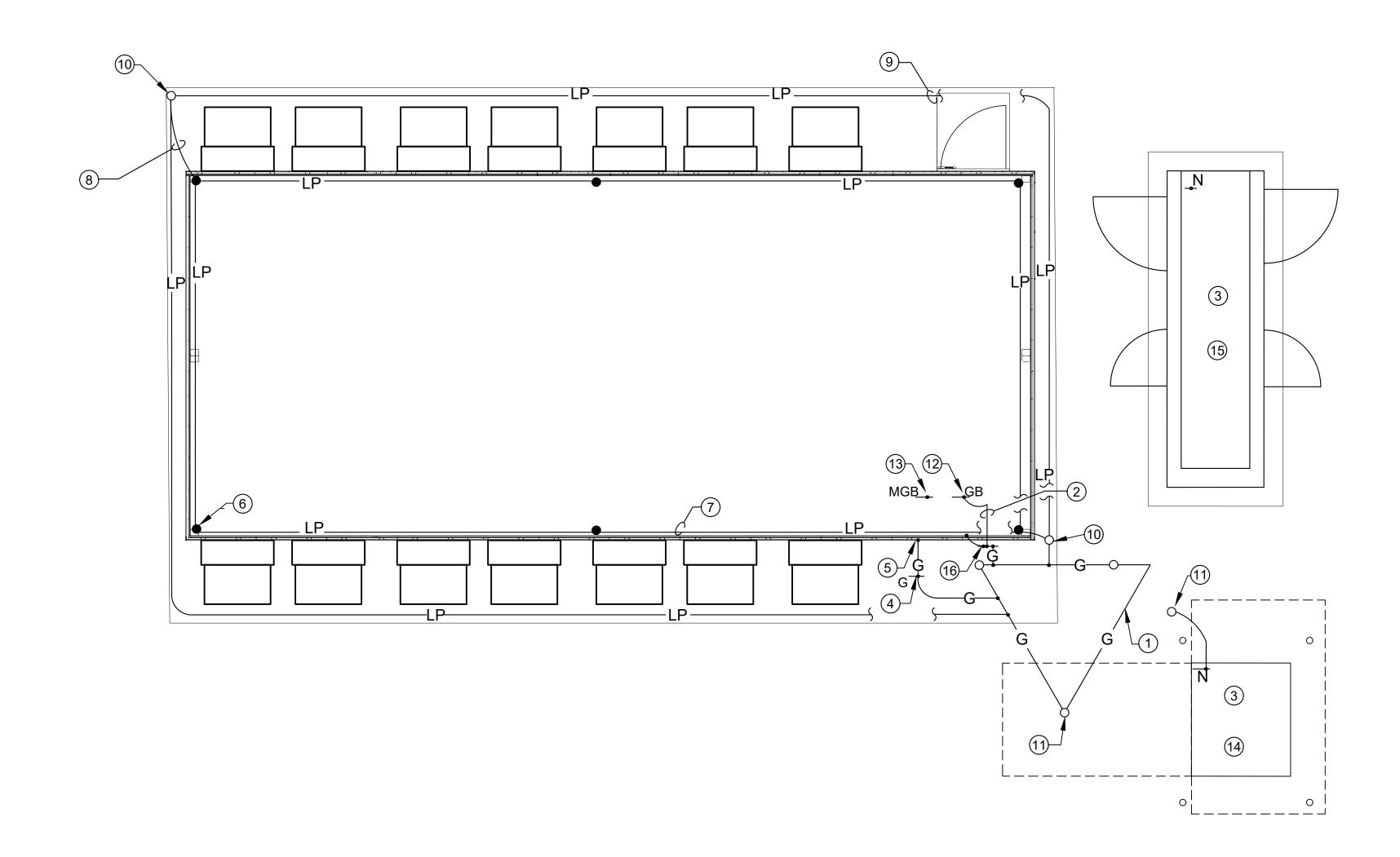
23)NETWORKING IT RACK.

- PROGRAMMABLE DELAYED TRANSITION.

(26) 480/277V, 800AMP I-LINE DISTRIBUTION PANEL.



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SEAL:
PROJECT INFORMATION: 50KW DATA CENTER 2EFERENCE DESIGN REFAB CONFIGURATION-9
KEYPLAN:
REV. DATE DESCRIPTION
0 06/03/19 CONCEPTUAL DRAWINGS
2
DRAWN BY: GR
CHECKED BY: MN
PROJECT NUMBER: ENGR18-0024
DRAWING SCALE: NONE
SHEET TITLE: ELECTRICAL PREFAB MODULE DETAIL CONFIGURATION-9
DATE: 06/03/19



GROUNDING AND LIGHTNING PROTECTION PLAN, CONFIGURATION-9

SCALE: 1/4" = 1'-0"

GENERAL NOTES:

- 1. REFER TO ELECTRICAL GROUNDING DIAGRAM ON SHEET E410 FOR ADDITIONAL INFORMATION.
- 2. SEE DRAWING E500 FOR DETAILS ON MAIN GROUNDING SYSTEM AND GROUND BUS.
- 3. ALL GROUNDING CONNECTIONS AND BONDINGS SHALL BE BY ARTICLE 250 OF NFPA 70.
- 4. ALL GROUND WIRES SHALL BE #2/0 AWG BARE COPPER, STRANDED.
- 5. ALL LIGHTNING PROTECTION WIRES SHALL BE #2 AWG BARE COPPER, STRANDED.
- 6. ALL LIGHTNING PROTECTION COMPONENTS SHALL BE PROPERLY SUPPORTED TO THE STRUCTURE PER NFPA 780.
- 7. ALL LIGHTNING PROTECTION CONNECTIONS AND BONDINGS SHALL BE PER NFPA 780.

PLAN NOTES:

- 1 MAIN GROUNDING ELECTRODE SYSTEM. SEE GROUNDING DETAIL ON SHEET E500.
- (2) MAIN GROUNDING ELECTRODE CONDUCTOR.
- 3 GENERATOR NEUTRAL AND UTILITY INTERCONNECTED AT THE NEUTRAL BUS OF SERVICE ENTRANCE ATS (SOLID NEUTRAL SYSTEM). MAIN BONDING JUMPER SHALL CONNECT NEUTRAL BUS TO THE GROUND BUS. SEE ELECTRICAL GROUNDING ONE LINE DIAGRAM ON SHEET E410 FOR DETAILS.
- 4 CONNECT STRUCTURAL STEEL TO MAIN GROUNDING ELECTRODE SYSTEM (TYPICAL). CONTRACTOR SHALL ENSURE THAT ALL STRUCTURAL STEEL COMPONENT WITHIN THE SLAB ARE PROPERLY BONDED WITH EACH OTHER.
- 5 CONNECT EQUIPMENT ENCLOSURE TO STRUCTURAL STEEL (TYPICAL).
- 6 LIGHTNING PROTECTION AIR TERMINAL (TYPICAL OF 6).
- 7 LIGHTNING PROTECTION ROOF WIRE.
- 8 (TYPICAL OF 2.)
- 9 LIGHTNING PROTECTION RING WIRE. INSTALL ENCASED IN CONCRETE SLAB, BUT IN DIRECT CONTACT WITH EARTH.
- LIGHTNING PROTECTION GROUNDING (10) ELECTRODE(TYPICAL OF 2). PROVIDE MIN. 8FT X 1/2IN DIAM. COPPER ROD. DRIVE TO A MINIMUM OF 10FT INTO THE EARTH.
- ¬ GROUNDING ELECTRODE(TYP.). PROVIDE (1) MINIMUM 8FT X 3/4IN DIAM. COPPER ROD. DRIVE TO A MINIMUM OF 10FT INTO THE EARTH.
- GROUND BAR AT THE SERVICE ENTRANCE ⁽¹²⁾ ATS. REFER TO ELECTRICAL GROUNDING ONE LINE DIAGRAM ON SHEET E401 FOR DETAILS.
- MAIN GROUNDING BAR. REFER TO ⁽¹³⁾ELECTRICAL GROUNDING DIAGRAM ON SHEET E401 FOR DETAILS.
- (14)UTILITY TRANSFORMER.
- (15)500KW/625KVA STANDBY GENERATOR.
- 16 GROUND BAR LOCATED OUTSIDE AND MOUNTED ON THE MODULE EXTERIOR WALL.

LEGEND:

— G ——	GROUND WIRE.
—LP ———	LIGHTNING PROTECTION WIRE.
GB	GROUND BAR.
MGB	MAIN GROUNDING BUS.

CONSULTANTS: Schneider Electric

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SEAL:



PROJECT INFORMATION:

160KW DATA CENTER REFERENCE DESIGN PREFAB CONFIGURATION-9

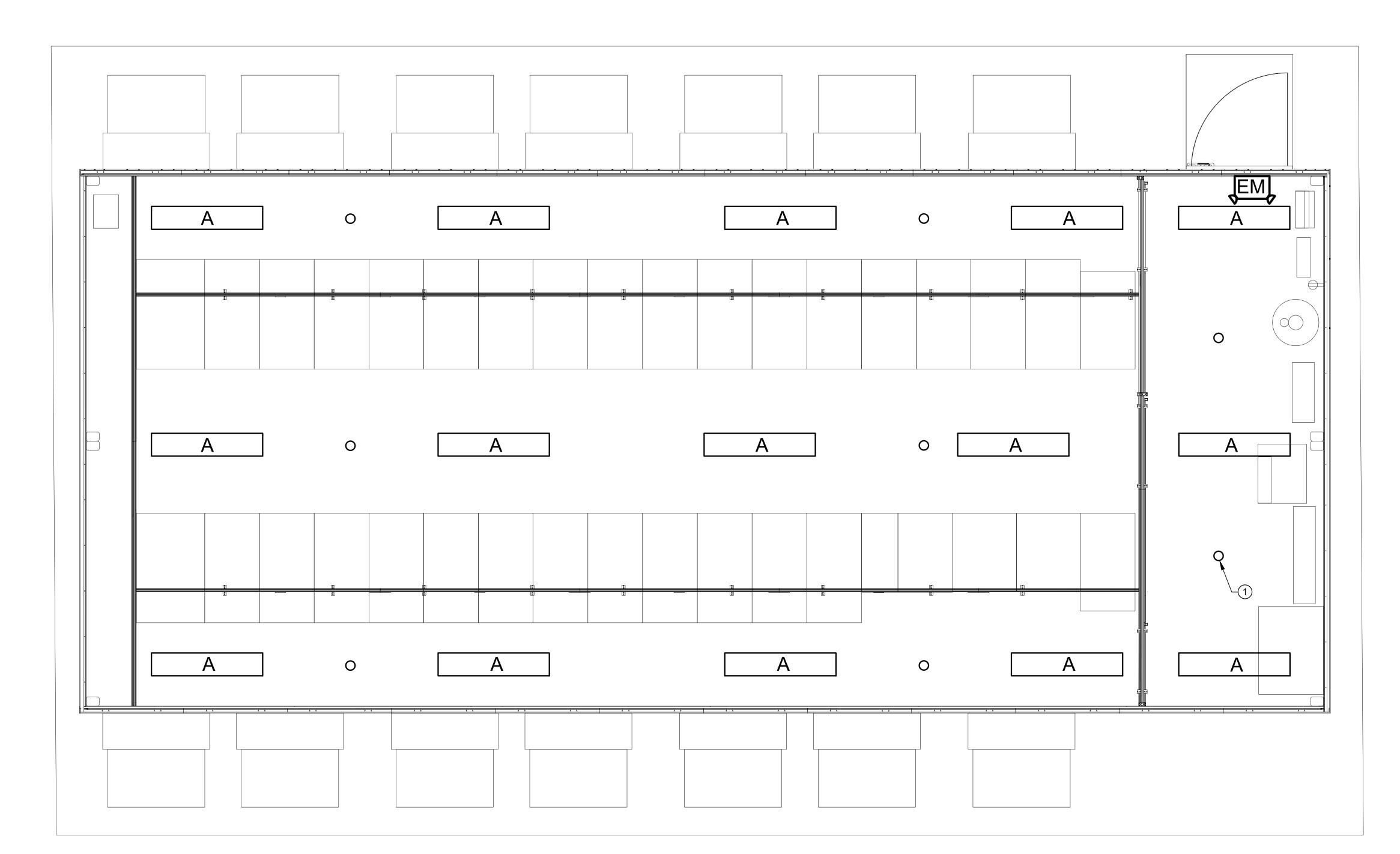
KEYPLAN:

REV.	DATE	DESCRIPTION
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2		
DRAWN	BY:	GR
CHECKE	ED BY:	MN
PROJEC	CT NUMBER:	ENGR18-0024
DRAWIN	IG SCALE:	NONE
SHEET	TITLE:	
		ING AND
_		NG PROTECTION
PLA	N, CO	ONFIGURATION -

DATE:

06/03/19





			LIGH	ITING FIXTUR	E SCHEDULE	E		
	ТҮРЕ	MANUFACTURER PRODUCT #	VOLTAGE	WATTAGE	LAMP	NUMBER OF FIXTURES	MOUNTING	REMARKS
								REWARNS
Δ	LED 4FT	LITHONIA LIGHTING	120V	38W	LED	15	SURFACE	4' LED VAPOR TIGHT FIXTURE
	VAPORTIGHT	4VT2-LD4-4-DR-UNVL840-CD1-WL-U	1200	5677			SON ACE	DIMMABLE
EM	LED COMBO EXIT/EMERGENCY	LITHONIA LIGHTING	120V	4.3W	LED	1	SURFACE	THERMOPLASTIC WHITE
	LIGHTS	LHQM LED R HO M6	1200	4.500			SURFACE	(2) HEAD, BATTERY BACKED EMERGENCY LIGH

ELECTRICAL LIGHTING PLAN **CONFIGURATION-9**

SCALE: 1/2" = 1'-0"

GENERAL NOTES:

- 1. REFER TO ONE LINE DIAGRAMS ON SHEETS E400 AND E401 FOR ADDITIONAL DETAILS ON THE ELECTRICAL SYSTEM.
- 2. FOR ELECTRICAL SCHEDULES, SEE DRAWINGS ON SHEETS E600 AND E601.





PLAN NOTES:

① OCCUPANCY SENSOR(TYP.) MODEL DT-305 OR CX-100-3 OR SIMILAR.

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E104

ELECTRICAL ONE LINE DIAGRAM:

GENERATOR

STANDBY

480V,3P,4W

500KW/625KVA

G

760AT 800AF 6 LSI, SH TRIP

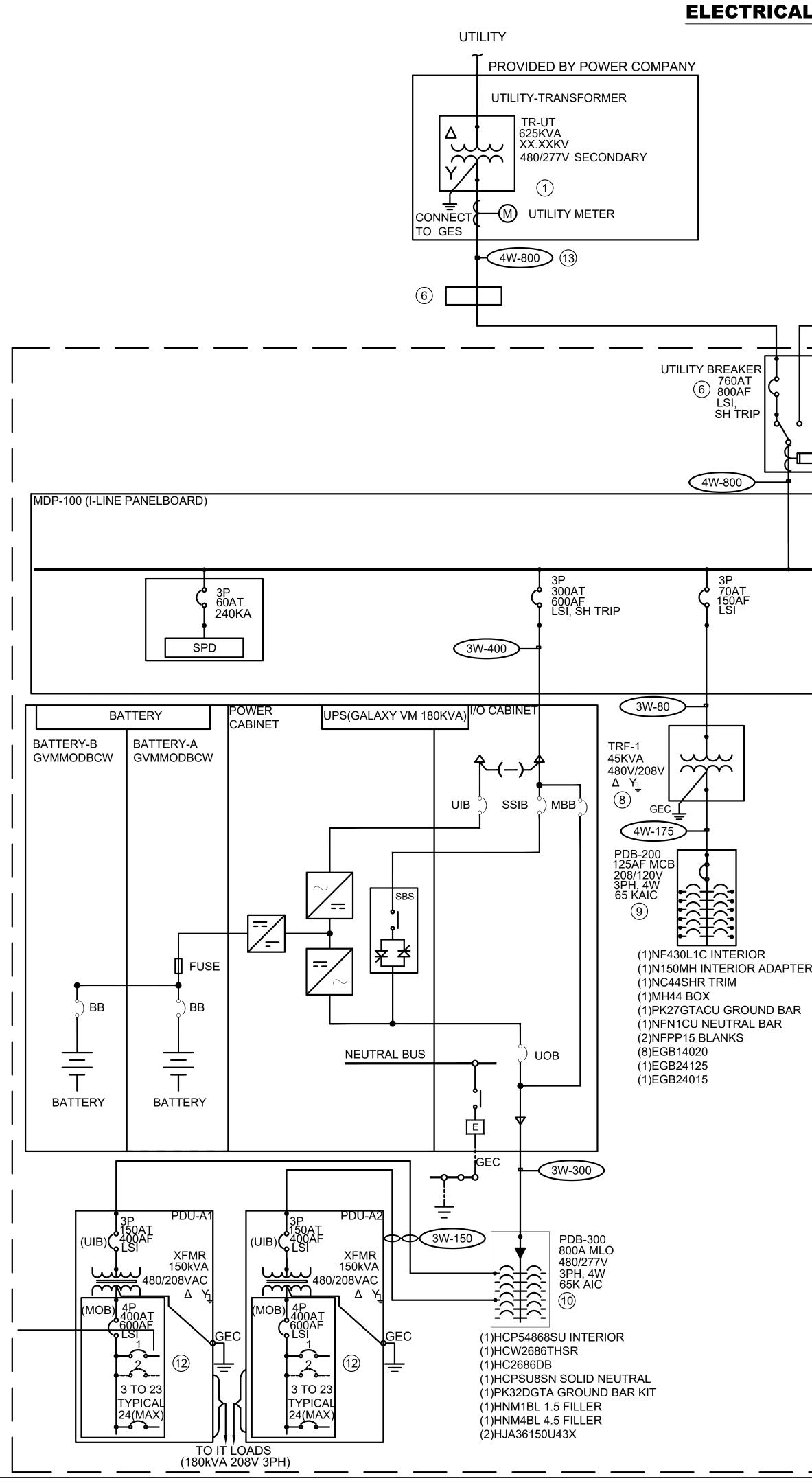
3P

2

GEN

PWR

PNL



GENERAL NOTES:

CONTROLS NOTES:

PLAN NOTES:

48 800 3P	0V 0A, 3 H, 4\	POLES	_ 11)							3							DA	TA C	ENT	ER PR	E-FAB	MODULE
		(1 (1)HCV)HC4	W86T 1286E	8 INTI SD TF B BO2 I SOLI	RIM X		(1) (1)	HNM	1BL	TA GROU 1.5 FILL 4.5 FILL	ER	BAF	R KIT (14 (1)			045 50U43X	(1)⊢	1L411	MA24C		AE (4) 65 kAIC
	Ç	зр 45ат С	3P 45AT	- C ^{3F} 45	SAT C	3P 45A1		вр 5ат (•3P •45A	τC	ЗР 45АТ (3P 45A	τC	ЗР 45АТ С	3P 45A	τĊ	ЗР 45АТ (3P 45AT	
Γ			 >	0			-0		-		 >		_<			_			-¢			3W-50
			MOP=50A			MOP=50A			MOP=50A			MOP=50A			MOP=50A			MOP=50A			MOP=50A	
		HVAC-101 / WMF0661 480V-3Ph-60Hz	4=29.5A MCA=35A, MOP=50A		HVAC-102 / WMF0661 480V-3Ph-60Hz	4=29.5A MCA=35A, MOP=50A		HVAC-103 / WMF0661	400V-3FII-00HZ FLA=29.5A MCA=35A, MOP=50A		HVAC-104 / WMF0661 480V-3Ph-60Hz	4=29.5A MCA=35A, MOP=50A		HVAC-105 / WMF0661 480V-3Ph-60Hz	4=29.5A MCA=35A, MOP=50A		HVAC-106 / WMF0661 480V-3Ph-60Hz	A=29.5A MCA=35A, MOP=50A		HVAC-107 / WMF0661	480V-3Ph-60Hz FLA=29.5A MCA=35A, MOP=50A	
		HV. 480	FLA=2		HV. 480	LA=2						FLA=2			FLA=2						L 480V-3 FLA=2	
	-0661	480V-3Ph-60Hz FLA=29.5A MCA=35A, MOP=50A		-0661	FLA=29.5A MCA=35A, MOP=50A		-0661	480V-3Pn-60Hz FLA=29.5A MCA=35A, MOP=50A		-0661	480V-3Ph-60Hz FLA=29.5A MCA=35A, MOP=50A		-0661	480V-3Ph-60Hz FLA=29.5A MCA=35A, MOP=50A		-0661	480V-3Ph-60Hz FLA=29.5A MCA=35A, MOP=50A		-0661	=35A, MOP=50/		
	HVAC-108 / WMF0661	480V-3Ph-60Hz FLA=29.5A MCA=		HVAC-109 / WMF0661 480V-3Ph-60Hz	A=29.5A MCA=		HVAC-110 / WMF0661	480V-3Pn-60Hz FLA=29.5A MCA=		HVAC-111 / WMF0661	480V-3Ph-60Hz FLA=29.5A MCA=		HVAC-112 / WMF0661	480V-3Ph-60Hz FLA=29.5A MCA=		HVAC-113 / WMF0661	30V-3Ph-60Hz _A=29.5A MCA=		HVAC-114 / WMF0661	480V-3Ph-60Hz FLA=29.5A MCA=35A, MOP=50A		

• SEE DRAWING E001 FOR ABBREVIATIONS AND SYMBOLS.

SEE DRAWING E002 AND E003 FOR ELECTRICAL SPECIFICATIONS.

SEE DRAWINGS E600 AND E601 FOR ELECTRICAL SCHEDULES.

 SUPPLY OF CONTROL PANELS ALONG WITH THEIR INTEGRATION SERVICES WITH THE DATA CENTER SYSTEM SHALL BE PROVIDED BY SCHNEIDER EPMS DIVISION.

 PROVIDE A SEPARATE CONDUIT FOR CONNECTING THE SPD WITH PM8000 FOR SPD FAILURE MONITORING.

 PROVIDE A 1KVA 208V/120V CPT FOR PROVIDING 120V CONTROL POWER TO CONTROL EQUIPMENT ON 120V AC SUPPLY.

PROVIDE A 120V AC TO 24V DC POWER SUPPLY FOR 24V DC CONTROL POWER REQUIREMENTS.

THE CIRCUIT BREAKER INSIDE THE GENERATOR ENCLOSURE SHALL BE EQUIPPED WITH A 24V DC SHUNT TRIP UNIT. SHUNT TRIPS ARE TO BE WIRED TO EPO PANEL.

PROVIDE AN ETHERNET SWITCH WITH SUFFICIENT PORTS FOR CONNECTING THE PM8000, UPS SYSTEM COMPONENTS AND ALL OTHER COMPONENTS THAT REQUIRE REMOTE MONITORING AND CONFIGURATION

(1) UTILITY METER (TO BE PROVIDED BY POWER COMPANY).

(2) 500KW/625KVA STANDBY GENERATOR.

(3) RUN TWO PHASE WIRES, A NEUTRAL WIRE AND A GROUND WIRE IN A 1-1/2" CONDUIT FROM PDB-200 PANEL TO GENERATOR POWER PANEL. REFER TO PANEL SCHEDULE ON DRAWING E-601 FOR DETAILS.

(4) 480V, 800AMP I-LINE DISTRIBUTION PANELBOARD.

OPTIONAL 800A SERVICE ENTRANCE RATED DISCONNECT SWITCH (PROVIDED BY OTHERS).

6 CIRCUIT BREAKER WILL BE EQUIPPED WITH A MICROLOGIC 5.0 POWER TRIP UN ´AND A SHUNT TRIP UNIT. SHUNT TRIPS SHALL BE WIRED TO EPO PANEL.

(7) ASCO-5210 POWER METER(OPTIONAL).

(8) 45KVA TRANSFORMER MODEL EX45T3H.

(9) 208/120V, 125AMP NF DISTRIBUTION PANEL. SEE DRAWING E-601 FOR DETAILS.

(10) 480/277V, 800AMP HCP-SU I-LINE PANEL. SEE DRAWING E-600 FOR DETAILS.

(11) ASCO-300 MODEL(480V) SERVICE ENTRANCE RATED AUTOMATIC TRANSFER SWITCH WITH PROGRAMMABLE DELAYED TRANSITION.

12 MODULAR POWER DISTRIBUTION UNIT PDPM150G6F. SEE DRAWING E-601 FOR DISTRIBUTION PANEL SCHEDULES WITHIN PDU-A1 AND PDU-A2 FOR DETAILS.

(13) CONDUCTORS FROM UTILITY AND GENERATOR SHOWN AS PER WIRE SCHEDULE SHALL BE RUN IN 3" PVC SCH-80 CONDUITS.



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SEAL:



PROJECT INFORMATION:

160KW DATA CENTER REFERENCE DESIGN PREFAB CONFIGURATION-9

KEYPLAN:

REV.	DATE	DESCRIPTION
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1		
2		
DRAWN	BY:	GR
CHECKE	ED BY:	MN
PROJEC	T NUMBER:	ENGR18-0024
DRAWIN	IG SCALE:	NONE
SHEET		
_	E LIN	CAL E DIAGRAM
		JRATION-9

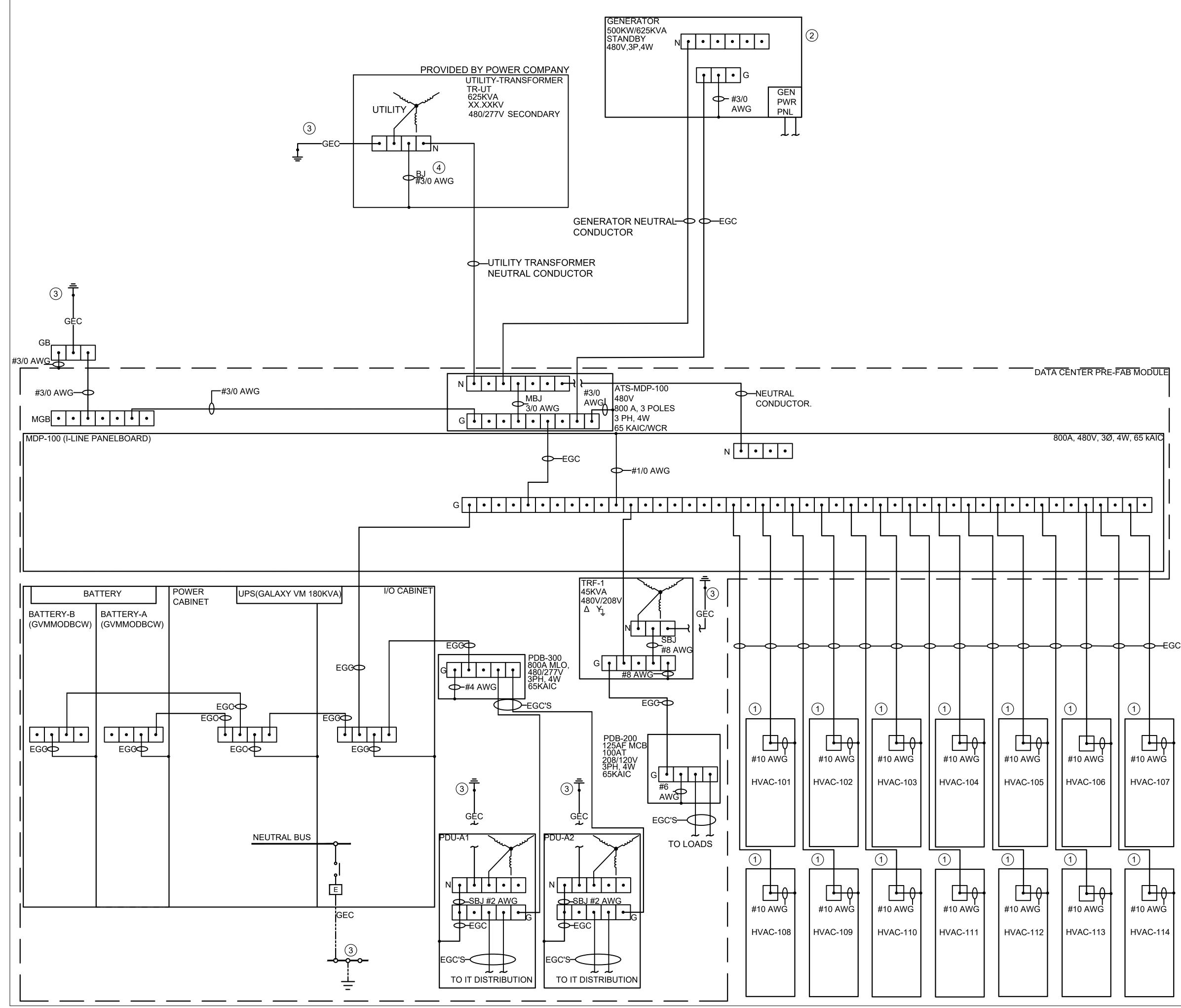
DATE:

DRAWING NUMBER:

E400

06/03/19

ELECTRICAL GROUNDING DIAGRAM:



GENERAL NOTES:

- SEE DRAWING E001 FOR ABBREVIATIONS AND SYMBOLS.
- SEE DRAWING E002 AND E003 FOR ELECTRICAL SPECIFICATIONS.
- SEE DRAWINGS E400 FOR ELECTRICAL ONE LINE DIAGRAMS.
- SEE DRAWING E500 FOR ELECTRICAL DETAILS.
- SEE DRAWING E600 AND E601 FOR ELECTRICAL SCHEDULES.
- ALL GROUNDING CONNECTIONS AND BONDINGS SHALL BE BY ARTICLE 250 OF NFPA 70. EQUIPMENT GROUNDING CONDUCTORS ARE NORMALLY RUN WITH CIRCUIT CONDUCTORS. SEE DRAWING E400 AND E401 FOR ONE LINE DIAGRAMS AND E600 ELECTRICAL SCHEDULES FOR EGC SIZING DETAILS.
- REFER TO ELECTRICAL GROUNDING AND LIGHTNING PROTECTION DRAWING ON SHEET E103 FOR ADDITIONAL DETAILS.

PLAN NOTES:

- (1) WALL MOUNT COOLING UNIT WITH HEATER(TYP.).
- 2 GENERATOR GROUNDING SYSTEM IS BASED ON A NON-SEPERATELY DERIVED SYSTEM.
- 3 SEE DRAWING E103 GROUNDING AND LIGHTNING PROTECTION FOR DETAILS.
- BONDING JUMPER(PROVIDED BY OTHERS) TO BE INSTALLED AS ² REQUIRED. ALL GROUNDING CONNECTIONS AND BONDINGS SHALL BE AS PER ARTICLE 250 AND 450 OF NFPA 70 AND SHALL MEET ALL STATE AND LOCAL CODE REQUIREMENTS.

LEGEND:

EGC	EQUIPMENT GROUNDING CONDUCTOR NORMALLY RUN IN RACEWAYS WITH CIRCUIT CONDUCTORS. SIZE PER NEC.
——GEC——	GROUNDING ELECTRODE CONDUCTOR.
—— BJ ——	BONDING JUMPER. SIZE PER NEC.
MBJ	MAIN BONDING JUMPER.
SBJ	SYSTEM BONDING JUMPER.
MGB	MAIN GROUNDING BAR.
Ν	NEUTRAL BAR.
G	GROUND BAR.



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SEAL:

NOT FOR ION CONSTRUCTION

PROJECT INFORMATION:

160KW DATA CENTER REFERENCE DESIGN PREFAB CONFIGURATION-9

KEYPLAN:

REV. DATE DESCRIPTION 06/03/19 CONCEPTUAL DRAWINGS 2 GR DRAWN BY: CHECKED BY: ET

PROJECT NUMBER:

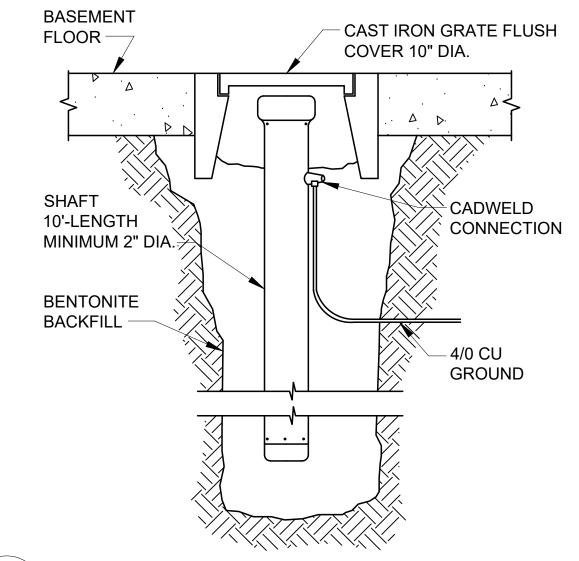
DRAWING SCALE: NONE

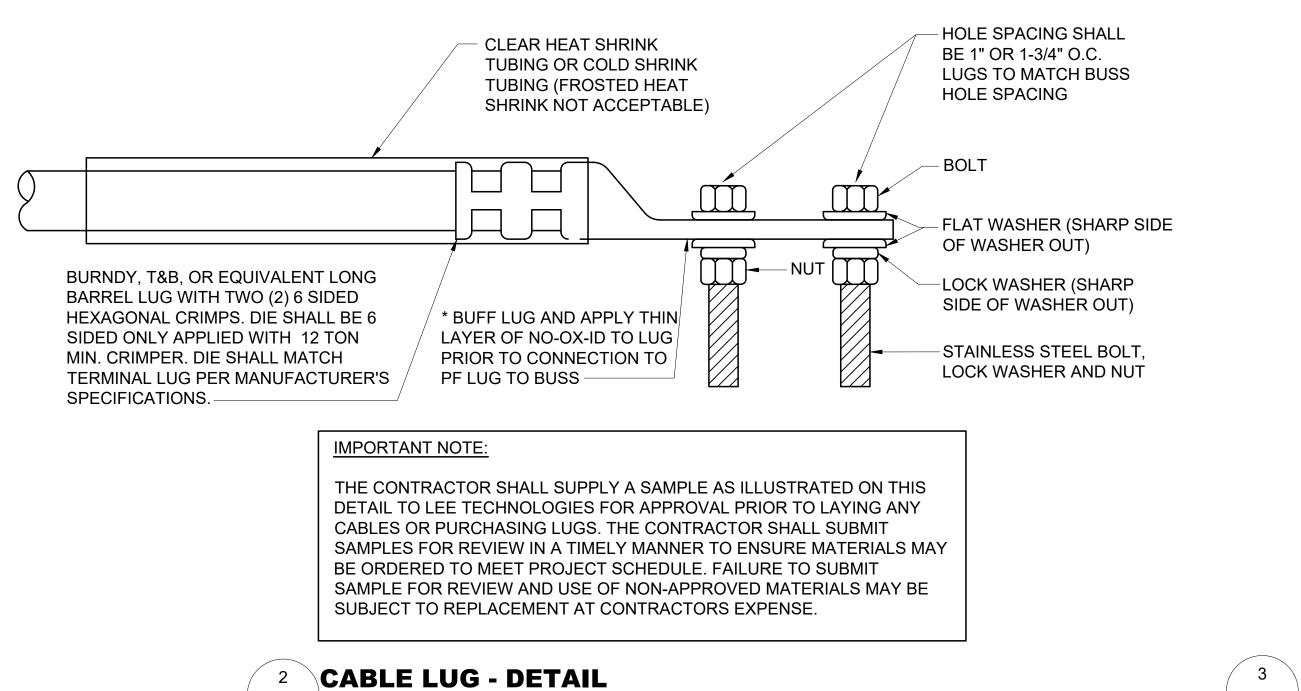
SHEET TITLE: ELECTRICAL GROUNDING DIAGRAM CONFIGURATION-9

ENGR18-0024

DRAWING NUMBER:

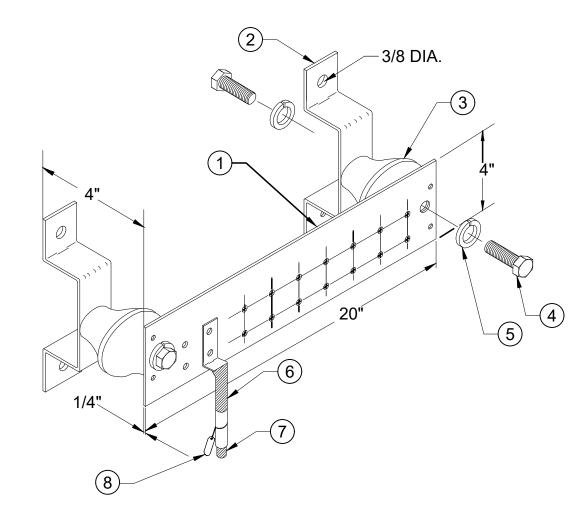
DATE: 06/03/19





MAIN GROUNDING ROD SYSTEM - DETAIL

E500 NOT TO SCALE



ITEM NO.	REQ.	DESCRIPTION
1	1	GROUND BAR
2	2	WALL MTG. BRKT.(OR FLOOR)
3	2	INSULATORS
4	4	5/8"-11 X 1 H.H.C.S.
5	4	5/8" LOCKWASHER
6	1	SEE DETAIL #1 IN THIS SHEET
7	1	GREEN INSULATED GROUND CONDUCTOR
8	1	DESTINATION LABEL TAG DO NOT REMOVE

• BELOW RAISED FLOOR AGB +12" A.F.F. PROVIDE INSULATORS 24" ON CENTER ACROSS LENGTH

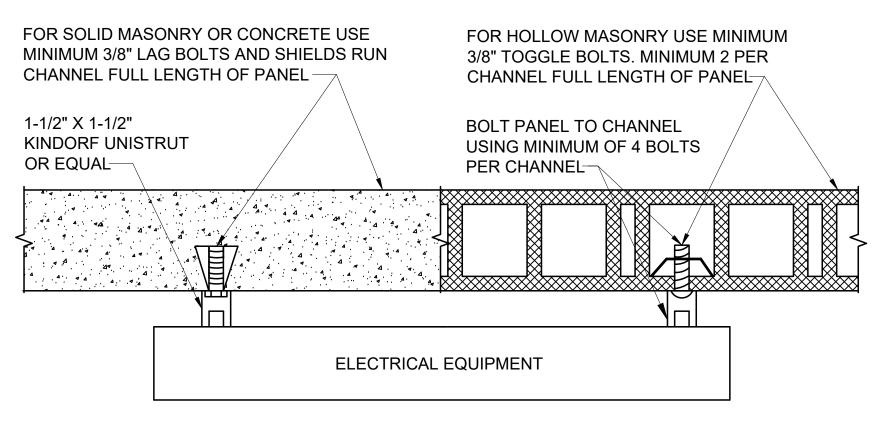
OF GROUND BAR. • ALL CONNECTIONS SHALL BE MADE WITH STAINLESS

STEEL TAMPER PROOF HARDWARE OR EXOTHERMIC WELD.

INSULATED GROUND BAR - DETAIL

E500 NOT TO SCALE

E500 NOT TO SCALE



WATER MAIN —

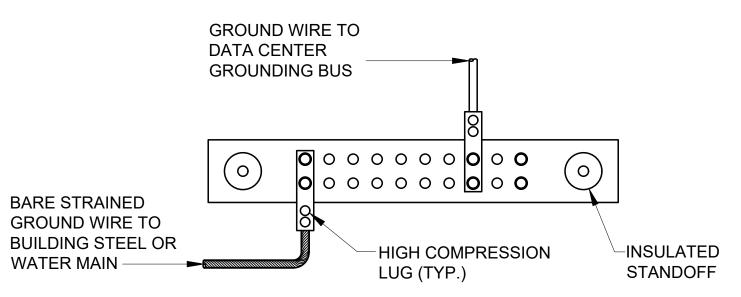
E500 / NOT TO SCALE

NOTE:

ALL SAFETY SWITCHES, 60A AND LARGER; ALL STARTERS AND CONTROLLERS, 3 H.P. AND LARGER; ALL SURFACE MOUNTED PA-NELS AND ALL EQUIPMENT MOUNTED ON OUTSIDE WALLS, SHALL BE MOUNTED IN THIS MANNER.



MAIN GROUNDING BUS - DETAIL



PROFESSIONAL ENGINEER UNLESS THE PERSON ACTING UNDER THE DIRECTION OF A LICENSET PROFESSIONAL ENGINEER IN THE STATE OF WORK THE ALTERING ENGINEER IN THE DATE OF SUCI AND THE NOTATION 'ALTERED BY FOLLOWED B ALTERATION TO THE DOCUMENT. SEAL: ROJECT INFORMATION: GOMESTIC: CONSTRUCTION SOURCE TIMEORATION TO THE DOCUMENT. SEAL: SEAL: REPEAB CONFIGURATION OF CONFIGURATION SOURCE DESIGN PROJECT INFORMATION: SEAL: SOURCE DESIGN PROJECT INFORMATION: SEAL: SOURCE DESIGN ORGER FAB CONFIGURATION REFAB CONFIGURATION REFORE DESIGN ORGER FAB CONFIGURATION REVENDER DATE DATE DESCRIPTION 0 06/03/19 CONCEPTUAL DRAWINGS 1 2 CONCEPTUAL DRAWINGS	Sc.	_	• •	
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PROJECT NUMBER: ENGR18-0024 DRAWING SCALE: NONE	0 (1 2 DRAWN BY	26/03/19	GR	IGS
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SHEET TITLE: ELECTRICAL DETAILS CONFIGURATION-9	0 0 1 2 DRAWN BY CHECKED I PROJECT N DRAWING S SHEET TITL	D6/03/19	CONCEPTUAL DRAWIN	IGS

						ION			ARD		-100	<u> </u>					
VOLTAGE		MCB	5 (A)		D (A)	AIC		NTING		TION				PANEL C	ATALOG	NUMBER :	
77 / 480	<u>3 4</u> ITEM					65,000		FACE		DULE					T BRKR	ITEM	
KT #	SERVED			T BRKR		COND. SIZE	LOAD (KVA)	A	PHASE B	С	LOAD (KVA)	COND. SIZE	WIRE SIZE			SERVED	
1								67.62					UIZE				+
3	UPS		300	3	2 #3/0	2"	180.00		67.62	\geq	22.85	1"	4	3	70	TRF-1	
5								16.35	$\left \right>$	67.62							
9	HVAC-101		45	3	8	3/4"	24.52	10.35	16.35		24.52	3/4"	8	3	45	HVAC-108	\vdash
11							21.02	\bigcirc		16.35	202		Ũ	Ũ			
13								16.35		\geq				_			
15 17	HVAC-102		45	3	8	3/4"	24.52	>	16.35	16.35	24.52	3/4"	8	3	45	HVAC-109	
19								16.35	>	10.35							
21	HVAC-103		45	3	8	3/4"	24.52		16.35	\leq	24.52	3/4"	8	3	45	HVAC-110	
23								\ge		16.35							
25						0.4	04.50	16.35			o / 50	0.44	•	•			
27	HVAC-104		45	3	8	3/4"	24.52		16.35	16.25	24.52	3/4"	8	3	45	HVAC-111	
29 31								16.35		16.35							
33	HVAC-105		45	3	8	3/4"	24.52		16.35	\leq	24.52	3/4"	8	3	45	HVAC-112	
35										16.35							
37				-			0 • - -	16.35			o /	<u></u>		•			
39	HVAC-106		45	3	8	3/4"	24.52	\mid	16.35	16.25	24.52	3/4"	8	3	45	HVAC-113	
41 43								8.17	\bowtie	16.35							
45	HVAC-107		45	3	8	3/4"	24.52		8.17	\leq	0.00	3/4"	8	3	45	HVAC-114(REDUNDANT)	
47								\leq		8.17							
49								0.00									
51	SPACE							\langle	0.00							SPACE	_
53 55								0.00	$ \triangleright$	0.00							
57	SPACE								0.00	\leq						SPACE	
59								\geq		0.00							_
61								0.00									
63 65	SPD BREAKER		60	3	6	3/4"	0.00	\bowtie	0.00	0.00							
00								173 87	173.87	173.87							
.OAD		LOAD				•	SUBLOA						TOTAL	DEM	DEM	NOTES	
YPE		(KVA)	PNL	PNL	PNL	PNL	PNL	PNL	PNL	PNL	PNL	PNL	(KVA)	FAC	LD		
JPS TRF-1		180.00 22.85	-	-	-	-	-	-	-	-	-	-	180.00 22.85	<u>1.00</u> 1.00	180.00 22.85		
		22.03		-	-	-	_	_	-	_	_	_	22.03	1.00	24.52		
-IVAC-102		24.52	-	-	-	-	-	-	-	_	_	-	24.52	1.00	24.52		
IVAC-103		24.52	-	-	-	-	-	-	-	-	-	-	24.52	1.00	24.52		
IVAC-104		24.52	-	-	-	-	-	-	-	-	-	-	24.52	1.00	24.52		
IVAC-105		24.52 24.52	-	-	-	-	-	-	-	-	-	-	24.52 24.52	<u>1.00</u> 1.00	24.52 24.52		
IVAC-100 IVAC-107		24.52	-	-	-	-	-	-	-	_	-	-	24.52	1.00	24.52	1	
-VAC-108		24.52	_	-	-	-	-	-	_	_	-	-	24.52	1.00	24.52]	
HVAC-109		24.52	-	-	-	-	-	-	-	-	-	-	24.52	1.00	24.52		
-IVAC-110		24.52	-	-	-	-	-	-	-	-	-	-	24.52	1.00	24.52		
		24.52 24.52	-	-	-	-	-	-	-	-	-	-	24.52 24.52	<u>1.00</u> 1.00	24.52 24.52		
IVAC-111		24.52	-	-	-	-	-	-	-	_	-	-	24.52	1.00	24.52		
IVAC-112	(REDUNDANT)	0.00	-	-	-	-	-	-	-	_	-	-	0.00	0.00	0.00		
IVAC-112 IVAC-113													521.61			TOTAL KVA	
IVAC-112 IVAC-113 IVAC-114(6.13	-	-	-	-	-	-	-	-	-	-	6.13	1.00	6.13		
IVAC-112 IVAC-113 IVAC-114(25 % OF La	argest Motor Load		-	-	-	-	-	-	-	-	-	-	70.00	1.00	70.00		
IVAC-112 IVAC-113 IVAC-114(5 % OF La	JPS Continuous Load plus	70.00		1 -	ı –		<u> </u>	<u> </u>			_	-	4.91	1.00	4.91		
VAC-112 VAC-113 VAC-114(5 % OF La 5 % OF U attery Cha	JPS Continuous Load plus		-	-	-	-	-	-	-	-	-				1 4.01		
NAC-112 NAC-113 NAC-114(5 % OF La 5 % OF U attery Cha 5 % OF T	JPS Continuous Load plus arging		-	-	-	-	-	_	-		<u> </u>					SUM TOTAL KVA(125% CONTINUOUS LOAD+ 100% CONTINUOUS LOAD+100% MOTOR LOADS+ 25% LARC MOTOR LOAD)	
/AC-112 /AC-113 /AC-114(5 % OF L 5 % OF U attery Cha 5 % OF T	JPS Continuous Load plus arging	5.06	-	-	-	_	_	-	-	_	<u> </u>				602.65	CONTINUOUS LOAD+ 100% CONTINUOUS LOAD+100%	

	DISTRIBUTION PANELBOARD 'PDB-300' SCHEDULE																	
VOLTAGE	PH	WIRE	MCB	(A)	MLC) (A)	AIC	MOUI	NTING	LOCA	TION				PANEL	CATALOG	G NUMBER	
277 480	3	4			80	00	65,000	SUR	FACE	MOE	DULE							
СКТ		ITEM		CKT.	BRK	WIRE	COND.	LOAD		PHASE		LOAD	COND.	WIRE	CKT	. BRK	ITEM	CKT
#		SERVED		TRIP	Р	SIZE	SIZE	(KVA)	A	В	С	(KVA)	SIZE	SIZE	Р	TRIP	SERVED	#
1		PDU-A1		150	3	1/0		90.00	60.40	60.40	$\left \right\rangle$	91.20		1/0	3	150	PDU-A2	2
5		10074		100	•			00.00			60.40	01.20			0			6
7 9 11		SPACE							0.00	0.00	0.00						SPACE	8 10 12
							•		60.40	60.40	60.40							•
NOTES:																181.20	TOTAL KVA	

DEMAND FACTOR IN ACCORANCE WITH NEC.

PLAN NOTES:

1 POWER SHALL BE DISTRIBUTED FROM PDB-300 PANEL TO THE TWO PDPM150G6F PDU'S PDU-A1 AND PDU-A2 THROUGH CABLE TRAYS.

3-WIRE FEEDER SIZING
SCHEDULE

SCHEDULE											
SYMBOL	# OF SETS	CONDUCTORS (COPPER)	GND.	CONDUIT							
3W-15	1	3 #12	#12	3/4"							
3W-20	1	3 #12	#12	3/4"							
3W-25	1	3 #10	#12	3/4"							
3W-30	1	3 #10	#10	3/4"							
3W-35	1	3 #8	#10	3/4"							
3W-40	1	3 #8	#10	3/4"							
3W-45	1	3 #8	#10	3/4"							
3W-50	1	3 #8	#10	3/4"							
3W-60	1	3 #6	#10	3/4"							
3W-70	1	3 #4	#8	1"							
3W-80	1	3 #4	#8	1"							
3W-90	1	3 #3	#8	1-1/4"							
3W-100	1	3 #3	#8	1-1/4"							
3W-110	1	3 #2	#6	1-1/4"							
3W-125	1	3 #1	#6	1-1/4"							
3W-150	1	3 1/0	#6	1-1/2"							
3W-175	1	3 2/0	#6	2"							
3W-200	1	3 3/0	#6	2"							
3W-225	1	3 4/0	#4	2"							
3W-250	1	3 250 MCM	#4	2-1/2"							
3W-300	1	3 350 MCM	#4	2-1/2"							
3W-350	1	3 500 MCM	#3	3"							
3W-400	2	3 3/0	#3	2"							
3W-450	2	3 4/0	#2	2"							
3W-500	2	3 250 MCM	#2	2-1/2"							
3W-600	2	3 350 MCM	#1	2-1/2"							
3W-700	2	3 500 MCM	1/0	3"							
3W-800	3	3 300 MCM	1/0	2-1/2"							
3W-1000	3	3 400 MCM	2/0	2-1/2"							
3W-1200	4	3 350 MCM	3/0	2-1/2"							
3W-1600	5	3 400 MCM	4/0	2-1/2"							
3W-2000	6	3 400 MCM	250 MCM	2-1/2"							
3W-2500	7	3 500 MCM	350 MCM	3"							
3W-3000	8	3 500 MCM	400 MCM	3"							
3W-4000	11	3 500 MCM	500 MCM	3"							
3W-5000	11	3 700 MCM	700 MCM	3-1/2"							
3W-6000	13	3 750 MCM	800 MCM	3-1/2"							

+ WHERE THE FEEDER SYMBOL IS SHOWN WITH A SUBSCIPT 'IG', THE FEEDER SHALL BE PROVIDED WITH A SEPERATE ISOLATED GROUND CONDUCTOR SIZED TO MATCH THE EQUIPMENT GROUND.

-CONDUCTOR SIZING BASED ON NEC TABLE 310.15(B)(16) FOR COPPER CONDUCTORS RATED AT 75°C.

-EQUIPMENT GROUNDING CONDUCTOR SIZING BASED ON NEC TABLE 250.122 FOR COPPER CONDUCTORS.

-CONDUIT SIZING BASED ON NEC TABLE C.1 FOR TYPE THHN, THWN, THWN-2 CONDUCTORS IN ELECTRICAL METALLIC TUBING.

217.95 TOTAL AMPS

	,,									
SYMBOL	# OF SETS	CONDUCTORS (COPPER)	GND.							
4W-15	1	4 #12	#12							
4W-20	1	4 #12	#12							
4W-25	1	4 #10	#12							
4W-30	1	4 #10	#10							
4W-35	1	4 #8	#10							
4W-40	1	4 #8	#10							
4W-45	1	4 #8	#10							
4W-50	1	4 #8	#10							
4W-60	1	4 #6	#10							
4W-70	1	4 #4	#8							
4W-80	1	4 #4	#8							
4W-90	1	4 #3	#8							
4W-100	1	4 #3	#8							
4W-100 4W-110										
	1	4 #2	#6							
4W-125	1	4 #1	#6							
4W-150	1	4 1/0	#6							
4W-175	1	4 2/0	#6							
4W-200	1	4 3/0	#6							
4W-225	1	4 4/0	#4							
4W-250	1	4 250 MCM	#4							
4W-300	1	4 350 MCM	#4							
4W-350	1	4 500 MCM	#3							
4W-400	2	4 3/0	#3							
4W-450	2	4 4/0	#2							
4W-500	2	4 250 MCM	#2							
4W-600	2	4 350 MCM	#1							
4W-700	2	4 500 MCM	1/0							
4W-800	3	4 300 MCM	1/0							
4W-1000	3	4 400 MCM	2/0							
4W-1200	4	4 350 MCM	3/0							
4W-1600	5	4 400 MCM	4/0							
4W-2000	6	4 400 MCM	250 MCM							
4W-2500	7	4 500 MCM	350 MCM							
4W-3000	8	4 500 MCM	400 MCM							
4W-4000	11	4 500 MCM	500 MCM							
4W-5000	11	4 500 MCM 4 700 MCM	700 MCM							
4W-6000134 750 MCM800 MCM4"+ WHERE THE FEEDER SYMBOL IS SHOWN WITH A SUBSCIE 'IG', THE FEEDER SHALL BE PROVIDED WITH A SEPERATE ISOLATED GROUND CONDUCTOR SIZED TO MATCH THE EQUIPMENT GROUND.										
OR COPPER (EQUIPMENT (CONDUC GROUND	BASED ON NEC T TORS RATED AT ING CONDUCTOF R COPPER CONE	75°C. R SIZING BA							

CONTRACTORY OF CONTRA	R, UNLESS THE PERSON IS RECTION OF A LICENSED R IN THE STATE OF WORK. R SHALL AFFIX THEIR SEAL TERED BY" FOLLOWED BY D THE DATE OF SUCH CIFIC DESCRIPTION OF THE JMENT.
12150 MONUMENT DRIVE PH: 703-968-030 Schneide Mission Critic Proprietary use purs T IS A VIOLATION FOR AL DOCUMENT THAT BEA PROFESSIONAL ENGINEED ACTING UNDER THE DI PROFESSIONAL ENGINEED ACTIRG UNDER THE DI PROFESSIONAL ENGINEED ACTIRG UNDER THE DOL PROFESSIONAL ENGINEED ACTIRG UNDER THE DI PROFESSIONAL ENGINEED ACTIRG UNDER THE DOL ALTERATION TO THE DOC AL: OJECT INFORMATION: COJECT INFORMATION: COTESSIONAL ENGINEED PROFESSIONAL ENGINEED CONSTRUCTION THE DOCI AL: OJECT INFORMATION: COTESSIONAL ENGINEED CONSTRUCTION COJECT INFORMATION: CONSTRUCTION COVERTION TO THE DOC COVERTION COVERTION TO THE DOC COVERTION COVERTION TO THE DOC COVERTION TO THE DOC <td< th=""><th>SUITE 150 FAIRFAX, VA. 22033 Tr Electric IT al Services, Inc. uant to company policy NY PERSON TO ALTER THIS ARS THE SEAL OF A R, UNLESS THE PERSON IS RECTION OF A LICENSED R IN THE STATE OF WORK. R SHALL AFFIX THEIR SEAL TERED BY" FOLLOWED BY D THE DATE OF SUCH CIFIC DESCRIPTION OF THE JMENT.</br></br></br></br></br></br></br></th></td<>	SUITE 150 FAIRFAX, VA. 22033 Tr Electric IT al Services, Inc. uant to company policy
Mission Critic Proprietary use purs	al Services, Inc. uant to company policy
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ECKED BY: MN	
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AWING SCALE: NON	IGR18-0024
EET TITLE:	IGR18-0024 IE
LECTRICA CHEDULES	
ONFIGURA	IE

		DI	STRI	BUT	<u>ION</u>	PAN	ELBC	DARD 'PD	<u>U-A1'</u>	<u>' SCH</u>	IEDUL	.E			
VOLTAGE	PH WIRE	MCB (A)	MLC	D (A)	AIC		NTING	LOCATION				PANEL	CATALO	g NUMBER	
120/ 208	3 4	600		1	65,000		FACE	MODULE	_						
CKT	ITEM		BRK	WIRE	COND.	LOAD		PHASE	LOAD		WIRE		BRK	ITEM	CK
#	SERVED	TRIP	Р	SIZE	SIZE	(KVA)	A	B C	(KVA)	SIZE	SIZE	Р	TRIP	SERVED	#
3	RACK#1	30	3	10		6.00	4.00	4.00	6.00		10	2	20		
5		50	3	10		6.00	>	4.00			10	3	30	RACK#10	
7							4.00								
9	RACK#2	30	3	10		6.00	\geq	4.00	6.00		10	3	30	RACK#11	
11							\geq	4.00							
13							4.00		>						
15	RACK#3	30	3	10		6.00	>	4.00	6.00		10	3	30	RACK#12	
17							4.00	4.00							
19 21	RACK#4	30	3	10		6.00	4.00	4.00	6.00		10	3	30	RACK#13	4
23		50	5			0.00		4.00				5	50		
25							4.00								2
27	RACK#5	30	3	10		6.00	\sim	4.00	6.00		10	3	30	RACK#14	
29							\sim	4.00	_						
31							4.00	\square							3
33	RACK#6	30	3	10		6.00	\geq	4.00	6.00		10	3	30	RACK#15	
35							\geq	4.00							
37							2.00	\geq	>						3
39	RACK#7	30	3	10		6.00	\geq	2.00	_					SPACE	
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45 47	RACK#8	30	3	10		6.00	\bigotimes	2.00 2.00	_					SPACE	
49							2.00	2.00							
51	RACK#9	30	3	10		6.00	2.00	2.00	>					SPACE	į
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55 57	SPACE						\geq	0.00	>					SPACE	Į Į
59							\sim	0.00							6
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69	SPACE						\mid	0.00	_					SPACE	
71								0.00							-
							30.00	30.00 30.00					1	Г	
<u>IOTES:</u> DEMAND FAC	CTOR IN ACCORANCE												90.00	TOTAL KVA	
	L HAVE (N) DISTRIBU												L	TOTAL AMPS	

VOLTAGE	PH	WIRE	MCB ((A)	MLC	D (A)	AIC	MOU	NTING	LOCATION				PANEL (CATALOG	NUMBER	
120/ 208	3	4	600	()			65,000	SUR	FACE	MODULE							
СКТ		ITEM		CKT.	BRK	WIRE	COND.	LOAD		PHASE	LOAD	COND.	WIRE	CKT.	BRK	ITEM	С
#		SERVED		TRIP	P	SIZE	SIZE	(KVA)	Α	B C	(KVA)	SIZE	SIZE	Р	TRIP	SERVED	:
1									4.00								
3		RACK#16		30	3	10		6.00	>	4.00	6.00		10	3	30	RACK#25	
5									4.00	4.00							
9		RACK#17		30	3	10		6.00		4.00	6.00		10	3	30	RACK#26	
11				00				0.00	\leq	4.00	0.00			Ū			
13									4.00	\leq							
15		RACK#18		30	3	10		6.00	\geq	4.00	6.00		10	3	30	RACK#27	
17										4.00							
19 21				20		10		0.00	4.00	4.00	<u> </u>		10	0			
23		RACK#19		30	3	10		6.00	\bigcirc	4.00	6.00		10	3	30	RACK#28	
									4.00	4.00							
25 27		RACK#20		30	3	10		6.00		4.00	6.00		10	3	30	RACK#29	
29									\leq	4.00				-			
31									4.00	\boxtimes							
33		RACK#21		30	3	10		6.00	\geq	4.00	6.00		10	3	30	RACK#30	
35										4.00							
37									2.00								
39		RACK#22		30	3	10		6.00	>	2.00						SPACE	
41						-				2.00							
43 45		RACK#23		30	3	10		6.00	2.00	2.00						SPACE	
45		RAGR#23		30	3			0.00	>	2.00 2.00						SFACE	
49									2.00								
51		RACK#24		30	3	10		6.00		2.00						SPACE	
53										2.00							
55									0.00	\square							
57		SPACE							\ge	0.00						SPACE	
59										0.00							
61									0.00								
63		SPACE							$\left \right\rangle$	0.00						SPACE	
65				4 5				4.00		0.00				4			
67		CP-100 SPARE		15	1	12		1.00	1.00	0.00	0.00			1	15	SPARE	
69 71		SFARE		15		+		0.00		0.00					├		-+
/ 1]									31.00	30.00 30.00							
OTES:									1 31.00	30.00 30.00					Г		
	CTOR II	N ACCORANCE		2											91.00	TOTAL KVA	
		E (N) DISTRIBU														TOTAL AMPS	

SYSTEM LOAD CA	LCULATI	ON			
ITEM	LOAD	UNIT			
CRITICAL LOAD	180.000	KVA			
HVAC-101	24.520	KVA			
HVAC-102	24.520	KVA			
HVAC-103	24.520	KVA			
HVAC-104	24.520	KVA			
HVAC-105	24.520	KVA			
HVAC-106	24.520	KVA			
HVAC-107	24.520	KVA			
HVAC-108	24.520	KVA			
HVAC-109	24.520	KVA			
HVAC-110	24.520	KVA			
HVAC-111	24.520	KVA			
HVAC-112	24.520	KVA			
HVAC-113	24.520	KVA			
HVAC-114(REDUNDANT)	0.000	KVA			
ERV & DAMPER SYSTEM	0.600	KVA			
FIRE SUPPRESSION	2.000	KVA			
RECEPTACLES	2.000	KVA			
GENERATOR POWER PANEL	15.000	KVA			
CONTROLS POWER	1.000	KVA			
INTERIOR LIGHTING	0.65	KVA			
HUMIDIFIER(OPTIONAL)	0.6	KVA			
EXTERIOR LIGHTING	1 KV/				
TOTAL KVA	521.610	KVA			

VOLT		PH	WIRE	MCB	. ,	ML	O (A)	AIC		NTING						PANEL C	ATALOC	BINUMBER :	_
$\frac{120}{2}$	808	3		12				65,000		FACE		DULE							
						BRK	WIRE	COND.	LOAD		PHASE	0		COND.	WIRE		BRK		
#			SERVED		TRIP	P	SIZE	SIZE	(KVA)	A	В	C	(KVA)	SIZE	SIZE	P	TRIP	SERVED	#
1			DAMPER SYST	EM	20	1	12	3/4"	0.60	2.40		$\langle \rangle$	1.80	3/4"	12	1	20	FIRE SUPPRESSION	_
3		R	ECEPTACLES		20	, I	12	3/4"	1.80	$\langle \rangle$	2.80	0.50	1.00	3/4"	12	1	20		
5	G	ENERA	TOR POWER P	ANEL	125	2	1	1-1/2"	15.00	>	7.50	8.50	1.00	3/4"	12	1	20	CONTROLS POWER	_
9					20	1	12	3/4"	0.65	0.65	7.50		0.00			1	20 20	SPARE SPARE	
11				3	20	1		3/4	0.05	0.65	\bowtie		0.00			1	20	JFARE	
13			SPACE							0.55	>	0.55	1.10	3/4"	12	2	15	HUMIDIFIER(OPTIONAL)	
15										>	>	0.55						SPACE	
17			SPACE							>	\Leftrightarrow		~					SPACE	
19			SPACE							>	\triangleleft	\triangleleft						SPACE	
21			SPACE								\triangleleft	\triangleleft						SPACE	
23			SPACE							\leq	\bowtie							SPACE	
25			SPACE							\triangleleft	\triangleleft	\bowtie						SPACE	
27			SPACE							\sim	\searrow	\sim						SPACE	
29			SPACE							\sim	\sim	\sim						SPACE	
					1	1	-	1	1	3.60	10.30	9.05					1		
OAD				LOAD		1			SUBLOA	ADS (KV/	Á)				TOTAL	DEM	DEM	NOTES	
YPE				(KVA)	PNL	PNL	PNL	PNL	PNL	PNL	PNL	PNL	PNL	PNL	(KVA)	FAC	LD	4	
RV &	DAMF	PER SY	STEM	0.60	-	-	-	-	-	-	-	-	-	-	0.60	1.00	0.60		
IRE S	UPPR	ESSIO	N	1.80	-	-	-	-	-	-	-	-	-	-	1.80	1.00	1.80		
ECEP	TACL	ES		1.80	_	_	_	_	_	_	_	_	_	_	1.80	1.00	1.80	1	
		IGHTIN		1.00	_	_	_	_	_		_	_	_	_	1.00	1.00	1.00	1	
						_		_		_		_		_				-	
			ER PANEL	15.00	-	-	-	-	-	-	-	-	-	-	15.00	1.00	15.00	-	
		POWE		1.00	-	-	-	-	-	-	-	-	-	-	1.00	1.00	1.00	-	
NTERI	OR LI	GHTIN	G	0.65	-	-	-	-	-	-	-	-	-	-	0.65	1.00	0.65	4	
UMID	FIER(NAL)	1.10	-	-	-	-	-	-	-	-	-	-	1.10	1.00	1.10		
PARE				0.00	-	-	-	-	_	-	-	-	-	-	0.00	1.00	0.00		
PARE				0.00	_	_	_	_	_	_	_	_	_	_	0.00	1.00	0.00	1	
				0.00													22.95	TOTAL KVA	
5% Of	Large	est Mot	or Load	0.15	-	-	_	_	_	_	-	_	-	-	0.15	1.00	0.15		
			Non Motor Loads	4.86	-	-	-	-	-	-	-	-	-	-	4.86	1.00	4.86		
							·										27.96	SUM TOTAL KVA(125% CONTINUOUS LOAD+ 100%	NON
IOTES	_																	CONTINUOUS LOAD)	
FMAN	ID FA	CTOR I	N ACCORANCE		2												77 62	TOTAL AMPS	

PLAN NOTES:

\odot	POWER SHALL BE DISTRIBUTED TO IT RACH AND CONTROL PANEL LOAD THROUGH CAE TRAYS.	
		Scheider Electric
		IT MISSION CRITICAL SERVICES, INC.
		12150 MONUMENT DRIVE SUITE 150 FAIRFAX, VA. 22033 PH: 703-968-0300 FX: 703-654-3680 Schneider Electric IT
		Mission Critical Services, Inc. Proprietary use pursuant to company policy
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		SEAL:
		PROJECT INFORMATION: 160KW DATA CENTER REFERENCE DESIGN PREFAB CONFIGURATION-9
		KEYPLAN:
ralo@	G NUMBER :	
RK	ITEM CKT	
TRIP 20	SERVED#FIRE SUPPRESSION2	
20 20	EXTERIOR LIGHTING 4 CONTROLS POWER 6	
20	SPARE 8	
20	SPARE 10	
15	HUMIDIFIER(OPTIONAL) 14	REV. DATE DESCRIPTION
	SPACE 16 SPACE 18	0 06/03/19 CONCEPTUAL DRAWINGS
	SPACE 20	1
	SPACE 22 SPACE 24	2
	SPACE 26	
	SPACE 28 SPACE 30	
	· · · · · · · · · · · · · · · · · · ·	
DEM LD	NOTES	
0.60]	DRAWN BY: GR
1.80		CHECKED BY: MN
1.80	-	
1.00 5.00	-	PROJECT NUMBER: ENGR18-0024
1.00]	DRAWING SCALE: NONE
0.65		
1.10	4	SHEET TITLE:
0.00	4	ELECTRICAL
0.00 22.95	TOTAL KVA	SCHEDULES CONFIGURATION O
0.15		CONFIGURATION-9
4.86	SUM TOTAL KVA(125%	DATE:
27.96	CONTINUOUS LOAD+ 100% NON	06/03/19
77.62	CONTINUOUS LOAD) TOTAL AMPS	DRAWING NUMBER:
	<u> </u>	E601