

DATA PLAN
SCALE: 1/8" = 1'-0"

- SYMBOLS**
NOTE 1
- [Symbol] LIGHT FIXTURE, CEILING
 - [Symbol] LIGHT FIXTURE, CEILING EMERGENCY
 - [Symbol] SPLIT-WIRED LIGHT FIXTURE
 - [Symbol] LIGHT FIXTURE, WALL
 - [Symbol] SINGLE POLE SWITCH, 48" AFF TO TOB, TYPICAL UNO
 - [Symbol] SINGLE GANG BOX W/BLANK COVER PLATE
 - [Symbol] DOUBLE POLE SWITCH
 - [Symbol] THREE-WAY SWITCH
 - [Symbol] FOUR-WAY SWITCH
 - [Symbol] DIMMER SWITCH
 - [Symbol] OCCUPANCY SENSOR, DUAL TECH.
 - [Symbol] OCCUPANCY SENSOR, 0-10V DIMMING
 - [Symbol] OCCUPANCY SENSOR, DUAL TECH., 2 CIRCUIT
 - [Symbol] OCCUPANCY SENSOR, DUAL TECH., 2 CIRCUIT, PHOTOCELL
 - [Symbol] ELECTRONIC IN WALL TIMER, 5 PRESETS, NON-ADJUSTABLE
 - [Symbol] DUPLEX RECEPTACLE, MOUNT 18" AFF TO COB, TYPICAL UNO
 - [Symbol] MOUNTED ABOVE COUNTER CL - CLOCK HANGER RECEPTACLE
 - [Symbol] SPECIAL PURPOSE RECEPTACLE
 - [Symbol] QUADRUPLEX RECEPTACLE
 - [Symbol] GROUND FAULT INTERRUPTING RECEPTACLE
 - [Symbol] WP - WEATHERPROOF WHILE IN USE
 - [Symbol] ISOLATED GROUND RECEPTACLE
 - [Symbol] TELEPHONE OUTLET - ANALOG, 18" AFF TO COB, TYPICAL UNO
 - [Symbol] W - WALL PHONE OUTLET
 - [Symbol] DATA OUTLET, 4 PORT, 2 ACTIVE, 2 BLANK
 - [Symbol] DATA OUTLET, 4 PORT, 4 ACTIVE
 - [Symbol] MANUAL STARTER WITH THERMAL OVERLOAD & PILOT LIGHT
 - [Symbol] MANUAL STARTER, W/ PILOT LIGHT, W/O THERMAL OVERLOAD
 - [Symbol] DISCONNECT SWITCH
 - [Symbol] DOOR CONTROLLER, COORDINATE W/G.C.
 - [Symbol] CABLE TV OUTLET
 - [Symbol] CCTV CAMERA, POE
 - [Symbol] WFI, PDE
 - [Symbol] TANKLESS WATER HEATER

- ABBREVIATIONS**
WITH OR WITHOUT PERIODS
- A AMPERE
 - AB ABOVE
 - AFD ABOVE FINISHED FLOOR
 - AFG ABOVE FINISHED GRADE
 - ATS AUTOMATIC TRANSFER SWITCH
 - BOB BOTTOM OF BOX
 - C CIRCUIT
 - DKT CIRCUIT
 - COB CENTER OF BOX
 - CPT CONTROL POWER TRANSFORMER
 - CT CURRENT TRANSFORMER
 - CU COPPER
 - C/B CIRCUIT BREAKER
 - DISC DISCONNECT
 - DN DOWN
 - DNW DRAWING
 - EBB ELECTRICAL BASEBOARD
 - EC ELECTRICAL CONTRACTOR
 - EXISTING TO REMAIN
 - EWG ELECTRIC WATER COOLER
 - EWH ELECTRIC WALL HEATER
 - FCWP FIRE ALARM CONTROL PANEL
 - FAFP FIRE ALARM ANNUNCIATOR PANEL (KEYPAD)
 - FACS FIRE ALARM COMMAND SYSTEM/VOICE EVAC
 - FU FUSED
 - FDR FEEDER
 - FDS FUSED DISCONNECT SWITCH
 - FTS FEET
 - FT WITH OUT
 - W/O WITH OUT
 - OC GENERAL CONTRACTOR
 - WP WEATHER-PROOF WHILE IN USE
 - GFI GROUND FAULT INTERRUPTING TRANSFORMER
 - HC HEATING CONTRACTOR

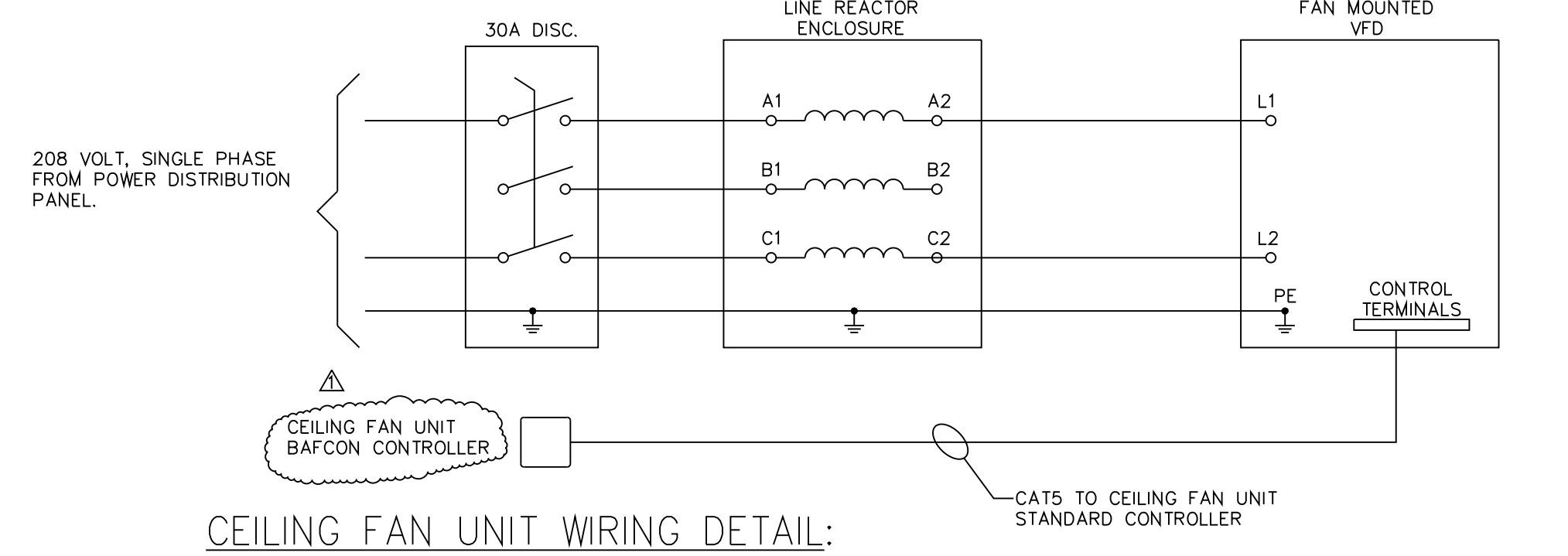
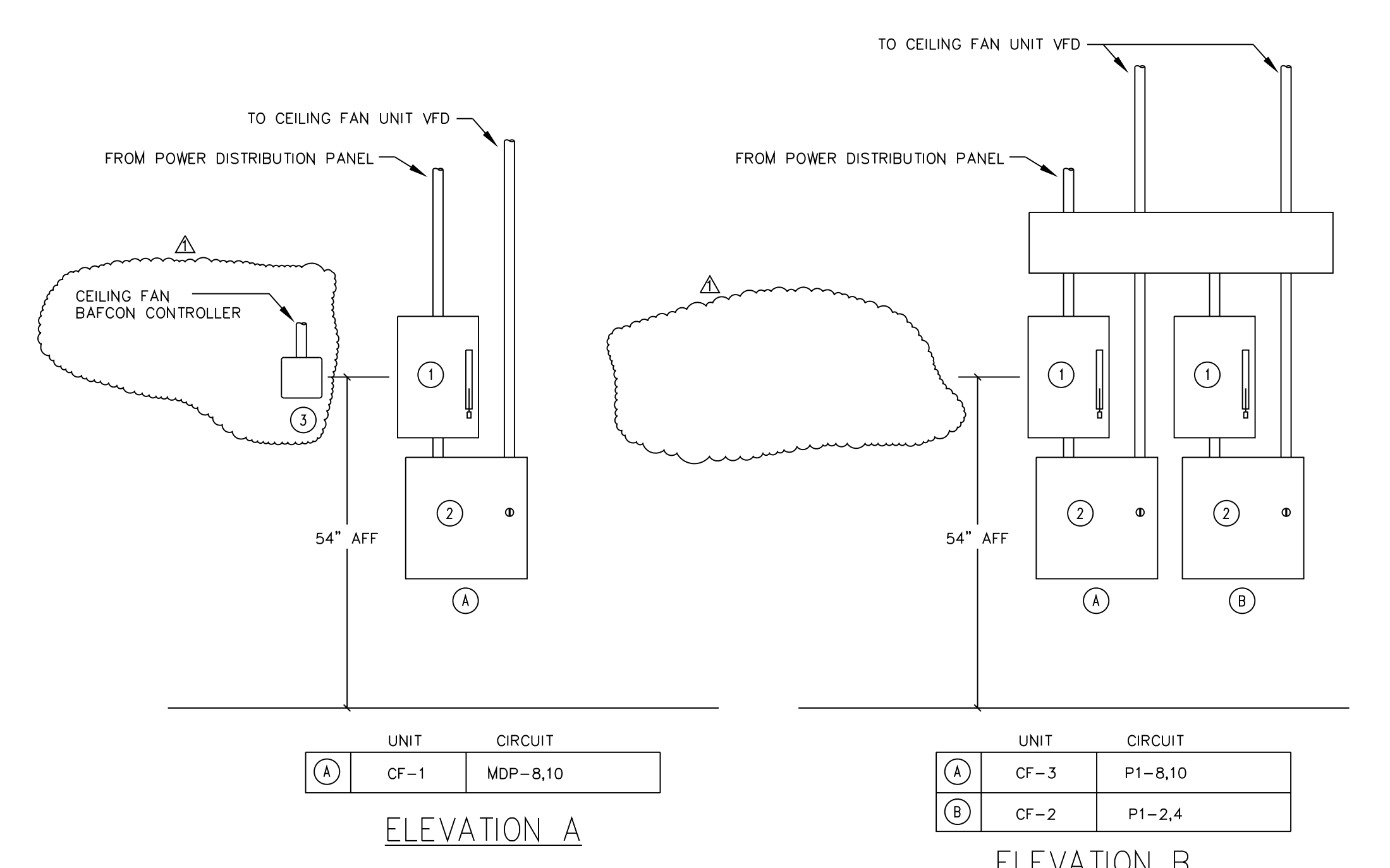
- ABBREVIATIONS**
WITH OR WITHOUT PERIODS
- H-O-A HAND-OFF-AUTO
 - HP HORSEPOWER
 - HTR HEATER
 - HUH HORIZONTAL UNIT HEATER
 - IG ISOLATED GROUND
 - JB JUNCTION BOX
 - KW KILOWATT
 - LTO LIGHTING
 - MC MECHANICAL CONTRACTOR
 - MTO MOUNTED
 - MTR MOTOR
 - M/O MAIN LUG ONLY
 - P PHASE
 - POLE POLE
 - PC PLUMBING CONTRACTOR
 - PMB PANELBOARD
 - PHR POWER
 - PH PHASE
 - RGS RIGID GALVANIZED STEEL CONDUIT
 - SW SWITCH
 - TBB TELEPHONE BACKBOARD
 - TOB TOP OF BOX
 - TV TELEVISION
 - UNO UNLESS NOTED OTHERWISE
 - V VOLT
 - W WATT OR WIRE
 - W/ WITH
 - W/G WITH GROUND
 - W/O WITH OUT
 - WP WEATHER-PROOF WHILE IN USE
 - WFI WEATHER-PROOF WHILE IN USE
 - XFMR TRANSFORMER

GENERAL NOTE FOR PANELBOARD SCHEDULES

ALL WIRING FOR 120 VOLTS 20 AMP BRANCH CIRCUITS INCLUDING GROUNDING CONDUCTORS SHALL BE SIZED AS FOLLOWS:

HOME RUN LENGTH	WIRE SIZE
0 - 75'	#12
75 - 150'	#10
OVER 150'	#8

CIRCUIT LENGTH	WIRE SIZE
0 - 100'	#12
OVER 100'	#10

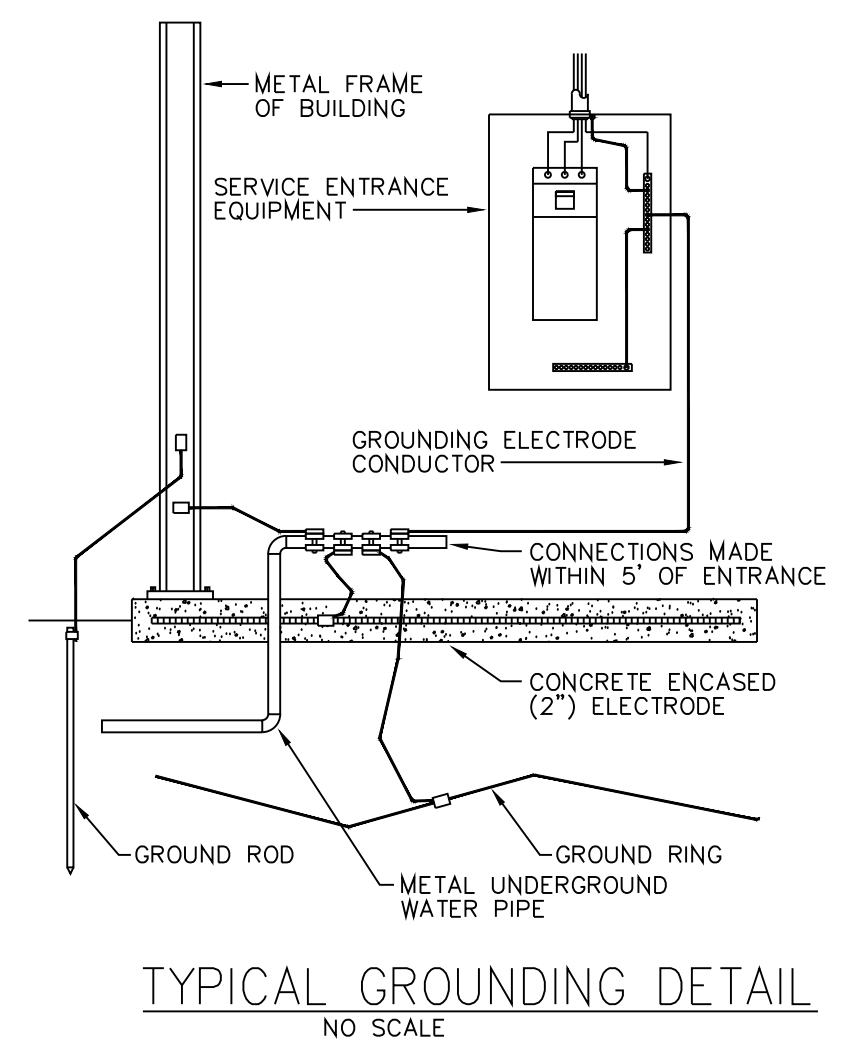


CEILING FAN UNIT POWER NOTES:

- PROVIDE AND INSTALL A 30 AMP, 3 PHASE, NON-FUSIBLE, LOCKABLE DISCONNECT, MOUNT UNITS 54" AFF TO CENTER OF DISCONNECT.
- PROVIDE AND INSTALL A 12"x12"x6" HINGED ENCLOSURE WITH A 2.5MM LINE REACTOR INSTALLED (MTE PART NO. RL-0202 OR EQUIVALENT). WIRE PHASES "A" AND "C" - SEE CEILING FAN UNIT WIRING DETAIL ON THIS SHEET.
- ALL CEILING FAN UNITS SHALL BE CONTROLLED USING A SINGLE BAFCON UNIT FROM THE MANUFACTURER. FOR CEILING FAN UNIT CONTROL PANELS SEE TECHNOLOGY PLAN ON THIS SHEET.

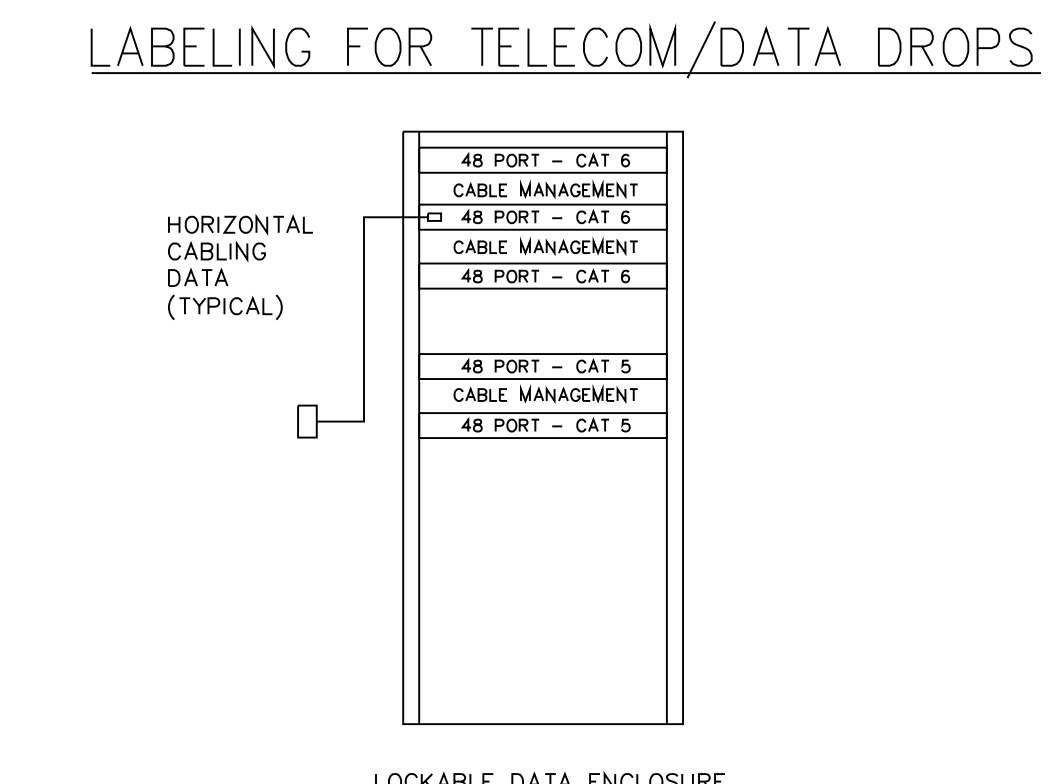
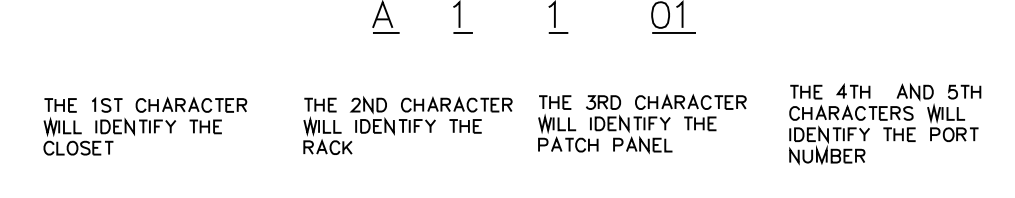
FEEDER SIZE SCHEDULE

4 WIRE FEEDERS WITH GROUND	AMP	WIRE SIZE ANG. OR MCW	3 WIRE FEEDERS WITH GROUND	AMP
A	30	12	20	3/4"
B	30	10	30	3/4"
C	40	8	40	3/4"
D	55	6	55	1"
E	70	4	70	1 1/4"
F	95	2	95	1 1/4"
G	110	1	110	1 1/2"
H	150	1/0	150	1 1/2"
J	175	2/0	175	2"
K	200	3/0	200	2"
L	225	4/0	225	2"
M	250	250	250	2 1/2"
N	300	350	4	300
Q	350	500	2	350
P	400	500	2	400
O	(2) 2 1/2"	450	2-4/0	450
R	(2) 2 1/2"	500	2-250	500
S	(2) 3"	550	2-300	550
T	(2) 3"	600	2-350	600
U	(2) 4"	800	2-600	800
V	(3) 3"	1000	3-400	1000
W	(3) 4"	1200	3-600	1200



- GROUNDING DETAIL NOTES:**
- GROUNDING ELECTRODE CONDUCTOR SHALL BE #2/0 COPPER.
 - REFER TO SPECIFICATIONS FOR THE SIZE AND TYPE OF CONDUCTORS TO BE USED FOR ALL BONDING CONDUCTORS, BONDING JUMPERS, AND GROUND RING CONDUCTORS.
 - REFER TO THE SPECIFICATIONS FOR ALL CONNECTORS AND THEIR APPLICATIONS.
 - PROVIDE ALL GROUNDING COUNTERPOSES, GROUND RODS, AND GROUND RINGS AS PER THE SPECIFICATION.
 - PROVIDE GROUNDING ELECTRODE CONDUCTORS FOR ALL GROUNDING ELECTRODES AVAILABLE AS PER NEC 2008, 250.50.
 - NOT ALL GROUNDING CONNECTIONS MAY APPLY TO THIS BUILDING.

THE CONTRACTOR SHALL PROVIDE A PATCH CORD FOR EACH PORT IN PATCH PANELS



EXISTING PANEL: MDP 22K AIC VOLTAGE: 208/120V-3ø-4W

NOTE	CIRCUIT	EQUIPMENT	BREAKER	FEEDER	#A Amps	#B Amps	#C Amps	FEEDER	BREAKER	EQUIPMENT	CIRCUIT	NOTE
1	LTC ROOMS 105, 106	20-1P	2#12 W/G	3.5	58.5					PANEL P-1, RM. 110	2	
3	LTC ROOMS 101, 102, 103, 104	20-1P	2#12 W/G						100-3P		4	
5	LTC. DRILL HALL RM. 111	20-1P	2#12 W/G								6	
7	LTC. DRILL HALL RM. 111	20-1P	2#12 W/G	4.0	14.7					CU-1	8	
9	LTC. DRILL HALL RM. 111	20-1P	2#12 W/G				6.0	14.7	2#10 W/G	25-2P	10	
11	RPT. DRILL HALL RM. 111	20-1P	2#12 W/G					4.5	2#12 W/G	20-2P	12	
13	RPT. RM. 101, 102	20-1P	2#12 W/G	6.0	3.0				2#12 W/G	20-2P	14	
15	RPT. RM. 102	20-1P	2#12 W/G				6.0	12.0			16	
17	IT RPT. RM. 103	15-1P	2#12 W/G				3.0	12.0	2#12 W/G	20-2P	18	
19	RPT. RM. 103	20-1P	2#12 W/G	1.5							20	
21	SPARE	20-1P									22	
23	SPARE	20-1P						4.8	2#12 W/G	WH-1	24	
25	RPT. RM. 104, 105	20-1P	2#12 W/G	7.5							26	
27	SPARE	20-1P									28	
29	IH-1	15-1P	2#12 W/G				3.3	4.8	2#12 W/G	WH-3	30	
31	IH-5	20-1P	2#12 W/G	4.8							32	
33	SPACE										34	
35	SPACE										36	
37	POWER METER	15		1.0							38	
39	POWER METER	15		1.0							40	
41	POWER METER	15		1.0							42	

NOTES:
1. SEE POWER PLAN NOTE 7
2. CIRCUIT BREAKER SHALL BE GROUND FAULT CIRCUIT INTERRUPTER (GFCI) RATED.

NEW PANEL: P1 10K AIC VOLTAGE: 208/120V-3ø-4W

NOTE	CIRCUIT	EQUIPMENT	BREAKER	FEEDER	#A Amps	#B Amps	#C Amps	FEEDER	BREAKER	EQUIPMENT	CIRCUIT	NOTE	
1	IH-2	20-1P	2#12 W/G					7.2		2#10 W/G	25-2P	CF-2	
3	SPARE	20-1P						7.2			4		
5	LTC ROOMS 107, 108, 109, 110	15-1P	2#12 W/G					4.5		20-1P	6		
7	IH-4	20-1P	2#12 W/G					4.8	7.2		8		
9	SPARE	20-1P							7.2		10		
11	WATER DISPENSER	20-1P	2#12 W/G					1.5			12		
13	RPT. RM. 107, 108, 109, 110	20-1P	2#12 W/G	9.0	6.5				2#12 W/G	20-1P	14		
15	RPT. DRILL HALL 111	20-1P	2#12 W/G				9.0	6.5		2#12 W/G	20-1P	16	
17	RPT. DRILL HALL 111	20-1P	2#12 W/G					4.5	6.5	2#12 W/G	20-1P	18	
19	IH-2	15-1P	2#12 W/G	4.3							20		
21	SPACE							36.0			22		
23	SPACE								36.0	2#8 W/G	40-2P	24	
25	SPACE										26		
27	SEWERAGE LIFT PUMP	20-3P	3#12 W/G		6.0	2.5				3#12 W/G	20-3P	OVERHEAD DOOR MOTOR	
29	SPACE								6.0	2.5	30		

NOTES:
1. SEE POWER PLAN NOTE 7
2. CIRCUIT BREAKER SHALL BE GROUND FAULT CIRCUIT INTERRUPTER (GFCI) RATED.

VERIFY SCALE

BAR IS ONE (1) INCH LONG ON ORIGINAL DRAWING.
IF BAR IS NOT ONE (1) INCH LONG, ADJUST SCALE ACCORDINGLY.

REVISIONS

NO.	DESCRIPTION	DATE
	ADDITION OF UNIT AND INFRARED HEATERS	02MAY23

COMMONWEALTH OF PENNSYLVANIA
DEPT. OF MILITARY & VETERAN'S AFFAIRS
ANNVILLE, PENNSYLVANIA

DESIGN PROFESSIONALS:
OFFICE OF FACILITIES AND ENGINEERING
BUREAU OF DESIGN AND PROJECT MANAGEMENT
BLDG. 0-10, FORT INDIANTOWN GAP
ANNVILLE, LEBANON COUNTY, PENNSYLVANIA

PROJECT NO.: 42190067

RENOVATIONS TO
FT. MIFFLIN BLDG. 57
PHILADELPHIA
PHILADELPHIA COUNTY, PENNSYLVANIA

TECH PLAN, NOTES AND SYM

CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS. VARIANCE FROM CONTRACT DOCUMENTS NOT PERMITTED WITHOUT BUREAU OF ENGINEERING AND ARCHITECTURE APPROVAL.

DRAWN BY: D. HEALEY
CHECKED BY: B. BARGER

DATE: 31 MAR 2022
SCALE: AS NOTED

DRAWING NO.: E.3.1