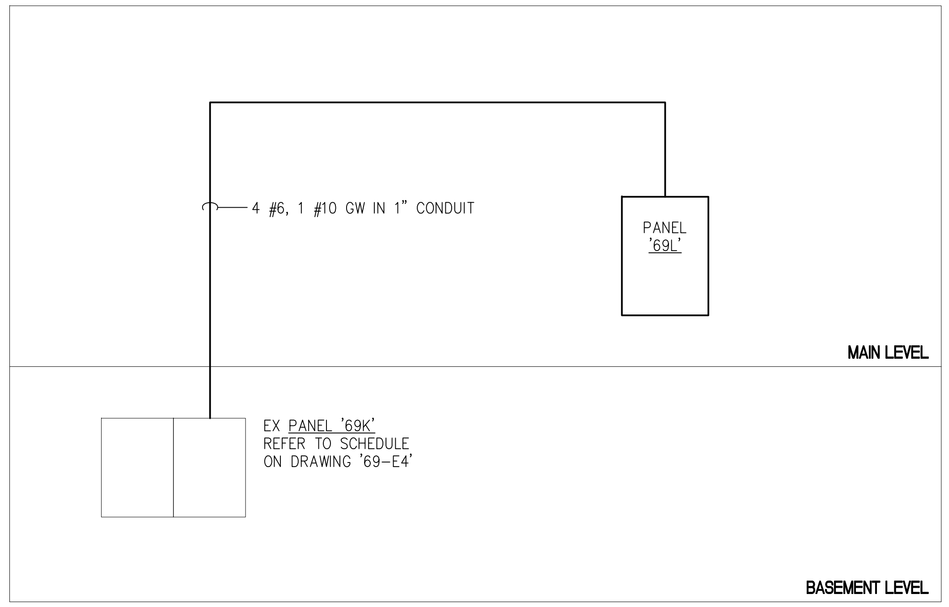

1 / 69-E1 **POWER RISER - ELECTRICAL - NEW WORK**

NOT TO SCALE

CONSTRUCTION GENERAL NOTES:

1. WHERE FEEDERS AND/OR BRANCH CIRCUITS ARE TO BE DEMOLISHED, ALL WIRING MUST BE REMOVED. ALL EXPOSED CONDUIT SHALL BE REMOVED IN ITS ENTIRETY.
2. AT ALL LOCATIONS WHERE A NEW MOTOR STARTER/DISCONNECT IS BEING INSTALLED ADJACENT TO A MOTOR, PROVIDE NEW LIQUIDTIGHT FLEXIBLE CONDUIT BETWEEN THE STARTER DISCONNECT AND THE MOTOR.
3. CONTROLS WORK FOR ANY INDIVIDUAL MOTOR STARTER SHALL BE AS FOLLOWS:
   - A. PRIOR TO START OF WORK, VERIFY CONDITION OF 'AUTOMATIC' AND 'MANUAL/HAND' CONTROL OF EACH MOTOR STARTER. PERFORM VERIFICATION WITH THE VA PRESENT. DOCUMENT ALL FINDINGS IN A REPORT. SUBMIT REPORT TO VA FOR REVIEW AND APPROVAL. REPORT MUST INCLUDE RECOMMENDATIONS FOR REPAIR OF ANY CONTROLS FOUND TO BE INOPERATIVE.
   - B. DISCONNECT EXISTING CONTROL WIRING FROM MOTOR STARTER(S) AND PROTECT FOR REUSE.
   - C. RECONNECT EXISTING CONTROL WIRING TO NEW MOTOR STARTER(S). EXTEND AS REQUIRED. PROVIDE CONDUIT AND WIRE AS NEEDED.
   - D. AFTER COMPLETION OF WORK, VERIFY THAT NEW MOTOR STARTER(S) FUNCTIONS PROPERLY IN THE 'AUTOMATIC' AND 'MANUAL/HAND' MODE OF OPERATION. PERFORM VERIFICATION WITH VA PRESENT. DOCUMENT ALL FINDINGS AND SUBMIT TO THE VA FOR THEIR RECORD. PROVIDE RE-WORK AS REQUIRED.
4. ALL CONDUITS INSTALLED IN OR BELOW SLABS SERVING BRANCH CIRCUITS BEING REMOVED SHALL HAVE CONDUIT REMOVED BELOW FINISHED SURFACE & SLAB PATCHED & FINISHED TO MATCH ADJACENT SURFACES.
5. CONTRACTOR SHALL REMOVE & REINSTALL EXISTING LAY-IN CEILING SYSTEM AS REQUIRED TO REMOVE & INSTALL BRANCH CIRCUITS AND FEEDERS. ANY CEILING SYSTEM EQUIPMENT DAMAGED DURING REMOVAL & REINSTALLATION SHALL BE REPLACED WITH EQUIPMENT TO MATCH EXISTING AT CONTRACTOR'S EXPENSE.

MASTER ELECTRICAL LEGEND NOTES:

1. WHERE CIRCUIT BREAKERS AND/OR DEVICES ARE INDICATED TO BE COMPATIBLE WITH AN EXISTING SYSTEM, THE CONTRACTOR SHALL PROVIDE DEVICE(S) MANUFACTURED BY THE EXISTING SYSTEM MANUFACTURER.

ELECTRICAL LEGEND AND ABBREVIATIONS

(#)	DRAWING NOTE
	EXISTING EQUIPMENT.
	EQUIPMENT TO BE REMOVED, U.O.N.
	NEW EQUIPMENT.
	CONDUIT TURNING UP
	CONDUIT TURNING DOWN
	RACEWAY – 2 #12, 1 #12 GW IN 3/4" CONDUIT, U.O.N.
	HOMERUN TO PANELBOARD ARROWS INDICATE NUMBER OF CIRCUITS, SLASHES INDICATE CIRCUIT CONDUCTORS, NO SLASH INDICATES TWO CIRCUIT CONDUCTORS, PROVIDE GROUNDING CONDUCTOR, NOT SHOWN
	PANELBOARD SURFACE MOUNTED ON WALL.
F	FUSED DISCONNECT SWITCH.
	COMBINATION STARTER/DISCONNECT SWITCH WITH MOTOR CIRCUIT PROTECTOR IN NEMA 1 ENCLOSURE
	MAGNETIC MOTOR STARTER
	NON-FUSED DISCONNECT SWITCH
	ELECTRICAL MOTOR
S_M	MOTOR SWITCH WITH THERMAL OVERLOAD
	JUNCTION BOX
T	DRY TYPE TRANSFORMER
VFD	VARIABLE FREQUENCY DRIVE

A	AMPERE
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AHU	AIR HANDLING UNIT
AIC	AMPERE INTERRUPTING CAPACITY
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE
AT	AMPERE TRIP
ATC	AUTOMATIC TEMPERATURE CONTROL
AWG	AMERICAN WIRE GAUGE
C	CONDUIT
CB, CKT BKR	CIRCUIT BREAKER
CKT	CIRCUIT
CLG	CEILING
CX	CONNECT TO EXISTING
DIA	DIAMETER
DISTR	DISTRIBUTION
DN	DOWN
DWG	DRAWING
EC	EMPTY CONDUIT
ECB	ENCLOSED CIRCUIT BREAKER
EF	EXHAUST FAN
EG	EQUIPMENT GROUND
ELEC	ELECTRIC
EMT	ELECTRICAL METALLIC TUBING
EQUIP	EQUIPMENT
ETR	EXISTING TO REMAIN
EX / EXIST	EXISTING
FA	FIRE ALARM
FACP, FCP	FIRE ALARM CONTROL PANEL
FATC	FIRE ALARM TERMINAL CABINET
FCU	FAN COIL UNIT
FLA	FULL LOAD AMPERES
FLR	FLOOR
FSS	FUSED SAFETY SWITCH
FT	FEET
G, GND	GROUND
GFI	GROUND FAULT INTERRUPTER
GW	GROUND WIRE
HOA	HAND OFF AUTOMATIC
HP	HORSEPOWER
HW	HOT WATER
HZ	HERTZ
JB	JUNCTION BOX

KAIC	AMPERE INTERRUPTING CAPACITY (IN THOUSAND)
KCMIL	THOUSAND CIRCULAR MILS
KVA	KILO VOLT – AMPERE
KW	KILO WATT
LTG	LIGHTING
MCB	MAIN CIRCUIT BREAKER
MCP	MOTOR CIRCUIT PROTECTOR
MDP	MAIN DISTRIBUTION PANEL
MECH	MECHANICAL
MLO	MAIN LUGS ONLY
MTD	MOUNTED
MOD	MOTOR OPERATED DAMPER
NEC	NATIONAL ELECTRICAL CODE
NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
NFSS	NON-FUSED SAFETY SWITCH
NIC	NOT IN CONTRACT
NTS	NOT TO SCALE
P	POLE
PB	PULL BOX
PH	PHASE
PNL	PANEL
PWR	POWER
RGS	RIGID GALVANIZED STEEL
RM	ROOM
RX	REMOVE EXISTING
SEC	SECONDARY
SS	SAFETY SWITCH
TEL	TELEPHONE
TTB	TELEPHONE TERMINAL BOARD
TYP	TYPICAL
UH	UNIT HEATER
U.O.N	UNLESS OTHERWISE NOTED
V	VOLTAGE, VOLTS
W	WIRE
WP	WEATHERPROOF
XFMR	TRANSFORMER

PANEL: 69L **RATING:** 100 **AMPS** **MAIN:** MLO **VOLTAGE:** 480 Y/ 277 V 3 PH, 4 W
AIC: 14K **MOUNTING:** SURFACE **NOTE:** –
LOCATION: ROOM 115A

CKT	EQUIPMENT SERVED	LOAD (KVA) AØ	BØ	CØ	CB	BUS A B C	CB	LOAD (KVA) AØ	BØ	CØ	EQUIPMENT SERVED	CKT
1	FCU – 100 TO 109	1.6			20		20	2.3			FCU – 113 TO 116, 120 & 121	2
3	FCU – 122 & 124		1.9		20		20		1.3		FCU – 125, 128 & 130	4
5	FCU – MISC ROOMS			1.9	20		20			–	SPARE	6
7	SPACE	–					20	–			SPARE	8
9			–						–		SPACE	10
11				–						–		12
13		–						–				14
15			–						–			16
17				–						–		18
19		–						–				20
21			–						–			22
23				–						–		24
25		–						–				26
27			–						–			28
29				–						–		30
		1.6	1.9	1.9		SUB–TOTALS		2.3	1.3	0		

CONNECTED LOAD:
AØ: 3.9 KVA= 14 A
BØ: 3.2 KVA= 12 A
CØ: 1.9 KVA= 7 A

FAN COIL UNIT SCHEDULE

FAN COIL UNIT DESIGNATION (FCU)	RUNNING AMPS	WATTS	VOLTAGE	NOTES
FCU–1	0.2	44	277	
FCU–2	0.26	56	277	
FCU–3	0.31	68	277	
FCU–4	0.37	82	277	
FCU–5	0.56	124	277	
FCU–6	0.62	138	277	
FCU–7	0.62	138	277	
FCU–8	0.45	100	277	
FCU–9	0.77	170	277	
FCU–10	1.1	240	277	

Revisions | Date

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Drawing Title: ELECTRICAL LEGEND, ABBREVIATION & SCHEDULES
Project Title: BUILDING 69 HVAC UPGRADE
Date: MARCH 14, 2012
Project No.: 542–09–102
Approved: Facilities Engineering Service Chief
Building Number: 69
Checked: LSF
Drawn: IP
Approved: Medical Center Director
Location: COATESVILLE, PENNSYLVANIA
DRAWING NO.: 69-E1
Dwg. 18 Of 22

DEPARTMENT OF VETERANS AFFAIRS

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