A	UNDER CABINET LIGHT FIXTURE
B	1x4 FLUORESCENT LIGHT FIXTURE
C	2x4 FLUORESCENT LIGHT FIXTURE
D EL	FLUORESCENT LIGHT FIXTURE WITH EMERGENCY LIGHT (EL) BATTERY PACK, 1400 LUMENS MINIMUM FOR 2 LAMPS
E	2x2 FLUORESCENT LIGHT FIXTURE
F G	RECESSED LIGHT FIXTURE, UNLESS OTHERWISE SHOWN
H	WALL MOUNTED LIGHT FIXTURE, MOUNTING HEIGHT AS INDICATED
X	LED EXIT LIGHT FIXTURE, CEILING MOUNTED, DARKENED AREA INDICATES FACE, ARROWS INDICATE DIRECTION OF EGRESS
EM	BATTERY PACK EMERGENCY LIGHT FIXTURE WITH TWO LAMP HEADS
K	INDUSTRIAL STRIP FLUORESCENT LIGHT FIXTURE
S	LIGHT SWITCH, 120V, 20A, MTD. 4'–0" AFF
S_2	LIGHT SWITCH, 120V, 20A, 2 POLE, MTD. 4'–0" AFF
S_3	LIGHT SWITCH, 120V, 20A, 3–WAY, MTD. 4'–0" AFF
S_4	LIGHT SWITCH, 120V, 20A, 4–WAY, MTD. 4'–0" AFF
S_D	DIMMER SWITCH, 120V, 20A, MTD. 4'–0" AFF
S_P	LIGHT SWITCH WITH PILOT LIGHT, 120V, 20A, MTD. 4'–0" AFF
S_F	MULT–SPEED FAN SWITCH, 120V, 20A, MTD. 4'–0" AFF
S_{OS}	LIGHT SWITCH, 120V, 20A, OCCUPANCY SENSOR TYPE, PASSIVE INFRARED, 3–POSITION, OFF–ON–AUTO, MTD. 4'–0" AFF
OS	CEILING MOUNTED LIGHT SWITCH, 120V, 20A, OCCUPANCY SENSOR TYPE, PASSIVE INFRARED, 3–POSITION, OFF–ON–AUTO, MTD.
S_C	PAGING/INTERCOM SYSTEM CALL SWITCH, 4'–0" AFF
S_M	HP RATED TOGGLE SWITCH, 1 OR 2 POLES AS REQUIRED W/OVERLOADS, SIZE AS REQUIRED
OR	NON–FUSED DISCONNECT SWITCH, SIZE AS NOTED
OR	COMBINATION DISCONNECT AND MOTOR STARTER, SIZE AS NOTED, FUSED TYPE SHOWN
OR	FUSED DISCONNECT SWITCH, SIZE AS NOTED
	PUSHBUTTON STATION, NEMA 4X UNLESS NOTED
	20 AMP SINGLE RECEPTACLE, TYPE, MOUNTING HEIGHT AND RATINGS AS NOTED, "C" INDICATES CLOCK HANGER RECEPTACLE MTD. 12" BELOW CEILING UNLESS NOTED OTHERWISE
	20 AMP DUPLEX RECEPTACLE, MTD. 18" AFF, WITH #12 GROUND WIRE, "GFCI" INDICATES GROUND FAULT CIRCUIT INTERRUPTER, "WP" INDICATES WEATHERPROOF WHILE–IN–USE ENCLOSURE AND COVER, "TR" INDICATES TAMPER–RESISTANT DEVICE, BOX INDICATES FLOOR OUTLET WITH RECESSED CAST JUNCTION BOX
	20 AMP DUPLEX RECEPTACLE, MTD. 48" AFF
	20 AMP DUPLEX RECEPTACLE MTD. HORIZ. 6" ABOVE COUNTER TOP UNLESS OTHERWISE SHOWN
	20 AMP QUADPLEX RECEPTACLE, MTD. 18" AFF
	SPECIAL RECEPTACLE, TYPE, MOUNTING HEIGHT AND RATINGS AS NOTED
	250V, 50 AMP, WELDING RECEPTACLE
	ELECTRICAL PANEL OR EQUIPMENT CABINET, SURFACE MOUNTED, 5'–6" TO TOP OF ENCLOSURE
	ELECTRICAL PANEL OR EQUIPMENT CABINET, RECESSED MOUNTED, 5'–6" TO TOP OF ENCLOSURE
#	HOME RUN TO PANEL IN DEDICATED CONDUIT, RECEPTACLES AND EQUIPMENT SHALL HAVE DEDICATED GREEN GROUND WIRE. NUMBER OF ARROWS INDICATES NUMBER OF PHASE CONDUCTORS, LETTER(S) INDICATE NAME OF PANEL, NUMBER(S) INDICATE CIRCUIT NUMBERS
	BRANCH CIRCUIT WITH PHASE, NEUTRAL, SWITCHED PHASE AND EQUIPMENT GROUNDING CONDUCTORS
W	TELEPHONE OUTLET, SINGLE GANG BOX MTD. 18" AFF WITH 3/4"C STUB TO ABOVE LAY–IN CEILING, "W" INDICATES 4'–6" MTD. HEIGHT FOR WALL PHONE.
	INFORMATION OUTLET, 18"AFF UNLESS NOTED OTHERWISE, JACK CONFIGURATION, 3 DATA AND 1 TELEPHONE, BOX INDICATES FLOOR OUTLET WITH RECESSED CAST JUNCTION BOX
	TELEVISION OUTLET, SINGLE GANG BOX MTD. 18" AFF WITH 3/4"C STUB TO ABOVE LAY–IN CEILING UNLESS NOTED OTHERWISE, SEE DETAIL FOR CONFIGURATION
	CCTV CAMERA
	GROUND
OR OR	3/4" x 10' COPPER CLAD GROUND ROD
	3/4" PLYWOOD TELEPHONE BACKBOARD, SIZE AS NOTED, MTD. 5'–6" TO TOP

J J J	JUNCTION BOX, 42 CUBIC INCH MINIMUM CAPACITY
FS	FIRE ALARM SMOKE DETECTOR, COMBINATION TYPE, PHOTOELECTRIC AND HEAT
F	FIRE ALARM DOUBLE ACTION, MANUAL PULL STATION, 4'–0" AFF TO CENTERLINE
FD	FIRE ALARM DUCT SMOKE DETECTOR WITH AUXILIARY CONTACTS TO SHUT OFF SUPPLY FAN
F 135°	FIRE ALARM HEAT DETECTOR (TEMPERATURE AS INDICATED)
F CD	FIRE ALARM HORN AND STROBE LIGHT COMBINATION DEVICE, 80" AFF TO BOTTOM (CANDELA AS INDICATED)
F CD	CEILING–MOUNTED FIRE ALARM HORN AND STROBE LIGHT COMBINATION DEVICE, 80" AFF TO BOTTOM (CANDELA AS INDICATED)
F CD	FIRE ALARM STROBE LIGHT DEVICE, 80" AFF TO BOTTOM (CANDELA AS INDICATED)
F CD	CEILING–MOUNTED FIRE ALARM STROBE LIGHT DEVICE, 80" AFF TO BOTTOM (CANDELA AS INDICATED)
F	CEILING–MOUNTED FIRE ALARM SPEAKER DEVICE, 80" AFF TO BOTTOM
FS	FIRE–RATED SPRINKLER FLOW SWITCH
TS	FIRE–RATED TAMPER SWITCH
PS	FIRE–RATED PRESSURE SWITCH
S OR S	PAGING/INTERCOM SYSTEM SPEAKER, CEILING MOUNTED UNLESS OTHERWISE NOTED
M	CEILING MOUNTED MICROPHONE DEVICE
	CLASS PERIOD BELL RINGER
	DOOR BUTTON WEATHER PROOF, 50" AFF
B	DOOR BUZZER MTD 7'–0" AFF
S	DOOR SWITCH MOUNTED IN DOOR JAMB
M	MICROPHONE OUTLET, SEE DETAIL FOR CONFIGURATION
T T1	TRANSFORMER, IDENTIFIER SHOWN, REFER TO SCHEDULE FOR SIZE
* * *	TRANSFORMER, RATINGS AS SHOWN
H H1	HANDHOLE, IDENTIFIER SHOWN, REFER TO HANDHOLE SCHEDULE FOR SIZE
M 20 HP	ELECTRIC MOTOR, HORSEPOWER AS SHOWN
	MOTOR OVERLOAD
1	MOTOR STARTER, SIZE AS SHOWN OR REQUIRED, FVNR UNLESS NOTED
20A/3P	CIRCUIT BREAKER, TRIP RATING SHOWN, 3–POLE UNLESS NOTED OTHERWISE
	VARIABLE FREQUENCY DRIVE
20A	FUSE, CURRENT LIMITING, AMPERE RATING AS SHOWN OR REQUIRED, "BFI" INDICATES "BLOWN FUSE INDICATOR" TYPE
D1	DUCT BANK, IDENTIFIER SHOWN, REFER TO DUCT BANK SCHEDULE FOR SIZE AND CONFIGURATION
TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSOR WITH INDICATING LIGHTS
G 100 kW	GENERATOR, RATINGS AS SHOWN
400A/3P	ATS, RATINGS AS SHOWN
	CABLE TRAY SYSTEM, LADDER TYPE, SIZE AS NOTED
	WEATHERHEAD
	CABLE CONNECTION
	CAPACITOR, kVAR AS SHOWN
	DEFLECTION AND EXPANSION CONDUIT FITTING

A	AMP
ABC	ABOVE COUNTER
ACS	ACCESS CONTROL SYSTEM
ACU	AIR CONDITIONING UNIT
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AIC	AMPS INTERRUPTING CAPACITY
AM	AMP–METER
ANN	ANNUNCIATOR
AP	AERIAL PRIMARY
AS	AERIAL SECONDARY
ATS	AUTOMATIC TRANSFER SWITCH
AUX	AUXILIARY
BFI	BLOWN FUSE INDICATOR
BI	BYPASS ISOLATION
BKR	BREAKER
C	CONDUIT
CB	CIRCUIT BREAKER
CCTV	CLOSED CIRCUIT TELEVISION
CGRS	PVC COATED GALVANIZED RIGID STEEL
CFCI	CONTRACTOR FURNISHED/ CONTRACTOR INSTALLED
CKT	CIRCUIT
CL	CENTERLINE
COM	COMMON
CONT	CONTINUOUS
CP	CONTROL PANEL
CPT	CONTROL POWER TRANSFORMER
CR	CONTROL RELAY
CRI	COLOR RENDERING INDEX
CS	CORD SET
CU	COEFFICIENT OF UTILIZATION
DEB	DIRECT EARTH BURIED
EC	EMPTY OR EMBEDDED CONDUIT
EF	EXHAUST FAN
EG	EQUIPMENT GROUND
EL	ELEVATION
EMT	ELECTRICAL METALLIC TUBING
ETM	ELASPED TIME METER
FA	FIRE ALARM
FACP	FIRE ALARM CONTROL PANEL
FC	FAN COIL
FDS	FUSED DISCONNECT SWITCH
FLR	FLOOR
FOC	FIBER OPTIC CABLE
FS	FLOAT SWITCH
FT	FEET
FVNR	FULL VOLTAGE NON–REVERSING STARTER
FVR	FULL VOLTAGE REVERSING STARTER
GFCI	GROUND FAULT CIRCUIT INTERRUPTER
GND	GROUND
GRS	GALVANIZED RIGID STEEL
HID	HIGH INTENSITY DISCHARGE
HOA	HAND–OFF–AUTO
HP	HORSEPOWER OR HEAT PUMP
IDS	INTRUSION DETECTION SYSTEM
HR	HOUR
IG	ISOLATED GROUND
ISP	INDIVIDUALLY SHIELDED PAIR
JB	JUNCTION BOX
kVA	KILOVOLT–AMPERE
kVAR	KILOVOLT–AMPERE, REACTIVE
kW	KILOWATT
LA	LIGHTNING ARRESTER
LLF	LIGHT LOSS FACTOR
LO	LUGS ONLY
LOR	LOCAL–OFF–REMOTE
LV	LOW VOLTAGE
MCB	MAIN CIRCUIT BREAKER
MCC	MOTOR CONTROL CENTER
MCP	MOTOR CIRCUIT PROTECTOR
MFR	MANUFACTURER
MIN	MINIMUM
MLO	MAIN LUGS ONLY
MS	MOTOR STARTER
MTD	MOUNTED
N	NEUTRAL
NFDS	NON–FUSED DISCONNECT SWITCH
NL	NIGHT LIGHT
NTS	NOT TO SCALE
OC	ON CENTER
OFCI	OWNER FURNISHED/ CONTRACTOR INSTALLED
OH	OVERHEAD
OHP	OVERHEAD PRIMARY
OHS	OVERHEAD SECONDARY
OL	OVERLOAD
PB	PUSH BUTTON
PEC	PHOTO ELECTRIC CELL
PF	POWER FACTOR
PFCC	POWER FACTOR CORRECTION CAPACITOR
PL	PILOT LIGHT
PMR	PHASE MONITOR RELAY
PNL	PANEL
PTT	PUSH–TO–TEST
PTZ	PAN–TILT–ZOOM
PVC	SCHEDULE 40 POLYVINYL CONDUIT
RECPT	RECEPTACLE
RM	ROOM
RVAT	REDUCED VOLTAGE AUTO–TRANSFORMER STARTER
S	SECOND
SA	SURGE ARRESTER
SDBC	SOFT DRAWN BARE COPPER
SE	SERVICE ENTRANCE
SHT	SHEET
SN	SOLID NEUTRAL
SS	STAINLESS STEEL
STA	STATION
SW	SWITCH
TEL	TELEPHONE
TD	TIME DELAY
TDD	TIME DELAY ON DE–ENERGIZATION
TDE	TIME DELAY ON ENERGIZATION
THD	TOTAL HARMONIC DISTORTION
TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSOR
TYP	TYPICAL
TC	TIME CLOCK
UG	UNDER GROUND
UGE	UNDER GROUND ELECTRIC
UGP	UNDERGROUND PRIMARY
UGS	UNDERGROUND SECONDARY
UH	UNIT HEATER
UNO	UNLESS NOTED OTHERWISE
UTP	UNSHIELDED TWISTED PAIR
V	VOLT
VA	VOLT–AMP
VFD	VARIABLE FREQUENCY DRIVE
VM	VOLT–METER
W	WATT OR WIRE
WH	WEATHER HEAD
WM	WATT METER
WP	WEATHERPROOF
W/	WITH
XFMR	TRANSFORMER

GENERAL NOTES:

1. SOME SYMBOLS OR ABBREVIATIONS MAY APPEAR ON THIS SHEET BUT NOT BE UTILIZED ON THE PROJECT.
2. LIGHTING LEGEND SHOWS EXAMPLE IDENTIFIERS, REFER TO LIGHT FIXTURE SCHEDULE FOR SPECIFIC REQUIREMENTS.

EQUIPMENT LINE TYPES

————	NEW EQUIPMENT
.....	EXISTING EQUIPMENT
——— – ———	EQUIPMENT PACKAGE

CONTROL SCHEMATIC LEGEND

————	WIRING WITHIN PANEL
– – – – – –	WIRING TO FIELD DEVICE
	PUSHBUTTON SWITCH, NORMALLY OPEN
	PUSHBUTTON SWITCH, NORMALLY CLOSED
	SELECTOR SWITCH, NUMBER OF POSITIONS AND CONTACTS AS SHOWN
	RELAY CONTACT, NORMALLY OPEN
	RELAY CONTACT, NORMALLY CLOSED
	TIME DELAY CONTACT, CLOSE ON ENERGIZATION
	TIME DELAY CONTACT, OPEN ON ENERGIZATION
	TIME DELAY CONTACT, OPEN ON DE–ENERGIZATION
	TIME DELAY CONTACT, CLOSE ON DE–ENERGIZATION
	LEVEL SWITCH
	PRESSURE SWITCH
	LIMIT SWITCH CONTACT, NORMALLY OPEN
	LIMIT SWITCH CONTACT, NORMALLY CLOSED
	LIMIT SWITCH CONTACT, HELD OPEN
	LIMIT SWITCH CONTACT, HELD CLOSED
	RELAY COIL, "TR" INDICATES "TIMING RELAY"
	PILOT LIGHT; "A" INDICATES "AMBER LENS" "G" INDICATES "GREEN LENS" "R" INDICATES "RED LENS"
	SOLENOID
ETM	ELAPSED TIME METER
	TERMINAL BLOCK
	ELECTRICAL CONNECTION
	GROUND CONNECTION TO ENCLOSURE GROUND BAR

2 SETS [(3#8 + 1#8N + 1#10EG) 1" GRS]

- 2 SETS
- (3#8 + 1#8N + 1#10EG)
- 1" GRS
- CONDUIT TYPE (SEE ABBREVIATIONS) REFER TO SPECIFICATIONS IF NOT SHOWN
- CONDUIT SIZE
- GROUNDING (GROUND) CONDUCTOR, NUMBER AND SIZE
- GROUNDED (NEUTRAL) CONDUCTOR, NUMBER AND SIZE
- PHASE (HOT) CONDUCTOR, NUMBER AND SIZE
- NUMBER OF SETS

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No.	Revision/Issue	Date	BY	APP'D

PROJECT TITLE
REPAIR & RENOVATE MEDICAL CLINIC PH IV
LITTLE ROCK AIR FORCE BASE
JACKSONVILLE, ARKANSAS
100% SUBMITTAL

SHEET TITLE
ELECTRICAL LEGEND

DRAWN BY	LEAD DESIGNER
MCL	ECF
TECH REVIEWER	PROJECT NUMBER
CAG	NKAK#06-8006-4
DESIGNED BY	SHEET
DATE: JULY 1, 2008	E-001
SCALE: AS NOTED	35 OF