

ELECTRICAL GENERAL NOTES:

1. IT IS THE INTENT OF THESE DRAWINGS AND OTHER RELATED DOCUMENTS TO PRODUCE A COMPLETE AND FUNCTIONING ELECTRICAL SYSTEM. THE ELECTRICAL CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS, TESTS, AND OTHER SERVICES AS MAY BE NECESSARY TO ACHIEVE THIS PRODUCT. THE CONTRACTOR SHALL ACKNOWLEDGE ACCEPTANCE OF THE PLANS AS AN ADEQUATE DEFINITION OF THE SCOPE OF WORK AND EXTRA COST CLAIMS BASED ON DISCREPANCIES ON THE PLANS WILL NOT BE CONSIDERED.
2. ALL ELECTRICAL WORK SHALL BE IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE (NEC) AND ALL LOCAL CODES HAVING JURISDICTION. ALL EQUIPMENT, DEVICES, AND MATERIAL SHALL BE LISTED WITH UNDERWRITERS LABORATORIES FOR ITS APPLICATION AS INSTALLED AND SHALL BEAR THE UL LABEL.
3. THE ELECTRICAL CONTRACTOR SHALL OBTAIN ALL PERMITS AND PAY SUCH FEES AS MAY BE NECESSARY FOR INSPECTIONS, TESTS, AND OTHER SERVICES WHICH ARE REQUIRED FOR THE COMPLETION OF HIS WORK.
4. THE CONTRACTOR SHALL VISIT THE SITE AND EXAMINE CONDITIONS OF THE PREMISES AND THE CHARACTER AND EXTENT OF WORK REQUIRED PRIOR TO SUBMISSION OF BIDS. ANY DIFFICULTIES IN COMPLYING WITH THE DRAWINGS AND SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF ARCHITECT BEFORE BIDDING.
5. ELECTRICAL PLANS ARE DIAGRAMMATIC. DO NOT SCALE DRAWINGS.
6. CONSULT PLANS OF ALL OTHER TRADES FOR COORDINATION AND FOR RELATED AND ADJOINING WORK.
7. CONSULT ARCHITECTURAL AND STRUCTURAL PLANS AND DETAILS FOR CONSTRUCTION HEADROOM, ROOM FINISHES, CEILINGS, ETC.
8. SEE REFLECTED CEILING PLAN FOR EXACT LOCATION OF LIGHT FIXTURES.
9. CIRCUIT NUMBERS ARE FOR IDENTIFICATION PURPOSES ONLY. CONTRACTOR SHALL BE RESPONSIBLE FOR CORRECTLY SPACING THE CIRCUITS IN THE PANEL AND BALANCE THE LOAD ON THE PHASES UNDER NORMAL OPERATING CONDITIONS.
10. SHOP DRAWINGS FOR ALL ELECTRICAL EQUIPMENT, FIXTURES, DEVICES AND MATERIALS SHALL BE SUBMITTED TO THE ARCHITECT FOR APPROVAL BEFORE DELIVERY TO THE JOB SITE. EQUIPMENT, FIXTURES, DEVICES, AND MATERIAL DELIVERED TO THE JOB SITE OR INSTALLED PRIOR TO APPROVAL OF THE SHOP DRAWINGS, AND FOR WHICH THE SHOP DRAWINGS ARE SUBSEQUENTLY REJECTED, SHALL BE REPLACED WITH AN APPROVED ITEM AT NO ADDITIONAL COST TO THE OWNER.
11. CONTRACTOR SHALL VERIFY WIRE SIZES, C/B AND FUSE RATINGS FOR ALL HVAC EQUIPMENT, AND BRING TO THE ATTENTION OF THE ARCHITECT ANY DISCREPANCIES AFFECTING THE WORK PRIOR TO PROCEEDING.
12. ALL WORK SHALL BE DONE AT SUCH TIMES AND IN SUCH A MANNER AS WILL LEAST INTERFERE WITH THE MAINTENANCE AND OPERATION OF ALL RELATED OR AFFECTED SYSTEMS. ALL POWER OUTAGES, FIRE ALARM SHUT DOWNS, ETC SHALL BE COORDINATED WITH OWNER.
13. CONTRACTOR SHALL VERIFY THAT ALL DOOR SWINGS ARE CORRECT BEFORE INSTALLING LIGHT SWITCH OUTLETS.
14. CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER SIZING OF ALL MOTOR OVERLOAD DEVICES (HEATERS) IN STARTERS BASED ON ACTUAL NAMEPLATE RATINGS ON THE BEING INSTALLED.
15. HORSEPOWER RATINGS INDICATED ON DRAWINGS MAY DIFFER FROM ACTUAL EQUIPMENT FURNISHED. IF FURNISHED EQUIPMENT DIFFERS FROM RATINGS ON DRAWINGS, CONTRACTOR SHALL NOTIFY ARCHITECT/ENGINEER FOR APPROPRIATE ACTION TO BE TAKEN.
16. CONTRACTOR SHALL NOTE U.L. LABELS ON PACKAGED TYPE MECHANICAL EQUIPMENT. IF U.L. LABEL ON MECHANICAL EQUIPMENT TO ACTUALLY BE INSTALLED CALLS FOR THE OVER CURRENT PROTECTIVE DEVICE TO BE FUSES, THE ELECTRICAL CONTRACTOR SHALL PROVIDE A FUSED DISCONNECT SWITCH WITH PROPER SIZE FUSES AT THE SWITCH LOCATION INDICATED ON DWGS AT NO ADDITIONAL CHARGE TO THE OWNER.
17. THE CORRECT NUMBER OF WIRES MAY NOT BE INDICATED FOR ALL CIRCUITS, ONLY THOSE WHERE CLARIFICATION IS NECESSARY. THE ELECTRICAL CONTRACTOR SHALL PROVIDE ALL WIRES NECESSARY FOR THE PROPER FUNCTION OF THE SYSTEM WHETHER INDICATED ON DWGS OR NOT.
18. ALL EMPTY CONDUIT RUNS IN EXCESS OF 10 FT. SHALL BE PROVIDED WITH A PULL WIRE OF FISH TAPE/CORD.
19. ALL CONDUCTORS, RACEWAYS AND CABLES SHALL BE CONCEALED IN CEILING OR WALL UNLESS INDICATED OTHERWISE.
20. OPENINGS IN EXISTING BUILDING STRUCTURE FOR PASSAGE OF CONDUITS/CABLES SHALL NOT BE CUT UNTIL THE CONTRACTOR HAS ASKED FOR AND RECEIVED WRITTEN APPROVAL FROM THE ARCHITECT.
21. SYMBOLS SHOWN ON THIS SHEET ARE STANDARD SYMBOLS AND MAY NOT NECESSARILY ALL BE APPLICABLE TO THIS PROJECT.
22. THE CONTRACTOR SHALL GUARANTEE ALL HIS WORK AND MATERIALS FOR A PERIOD OF ONE YEAR AFTER ACCEPTANCE BY OWNER.
23. ALL PENETRATIONS OF FLOOR AND WALLS SHALL BE FIRE STOPPED IN ACCORDANCE WITH IBC, NEC AND NFPA.
24. CONDUCTORS SHALL BE INSTALLED CONTINUOUS BETWEEN DEVICES, WITH SPLICES LOCATED ONLY IN JUNCTION BOXES OR IN CABINETS. CONDUCTORS SHALL BE OF SUFFICIENT LENGTH TO REACH THE FARTHEST TERMINAL IN PANELS. A MINIMUM OF 6" LOOPS SHALL REMAIN WHERE CONNECTIONS OR TAPS ARE TO BE MADE IN BRANCH CIRCUIT WIRING.
25. PROVIDE AN UPDATED TYPEWRITTEN PANEL DIRECTORY IN EACH PANEL AFTER COMPLETION OF WORK.
26. ELECTRICAL CONTRACTOR SHALL PROVIDE AS BUILT DRAWINGS AND ALL MANUFACTURERS DATA AND WARRANTY LITERATURE AT THE COMPLETION OF THE CONTRACT.

ELECTRICAL SYMBOLS

NOTE: THESE SYMBOLS ARE STANDARD AND ALL MAY NOT BE APPLICABLE TO THIS JOB. ALL MOUNTING HEIGHTS ARE STANDARD UNLESS NOTED OTHERWISE ON THE DRAWINGS.

FLUORESCENT LIGHTING FIXTURE. SEE LIGHTING FIXTURE SCHEDULE.

LIGHTING FIXTURE ON EMERGENCY CIRCUIT.

CEILING MOUNTED LIGHTING FIXTURE.

WALL MOUNTED LIGHTING FIXTURE.

EXIT SIGN. CONNECT TO UNSWITCHED HOT-LEG OF CIRCUIT INDICATED.

NURSE CALL EMERGENCY

NURSE CALL ZONE LIGHT

NURSE CALL DUTY STATION

NURSE CALL MASTER STATION

BRANCH CIRCUIT WIRING CONCEALED IN WALLS OR CEILING. NUMBER OF HASHES INDICATES NUMBER OF WIRES AND SHOWN ONLY WHERE REQUIRED FOR CLARITY.

BRANCH CIRCUIT WIRING RUN UNDER GROUND OR UNDER SLAB.

HOME RUN TO PANELBOARD. NUMBER OF ARROWS INDICATE NUMBER OF CIRCUITS IN HOME RUN.

FLUSH MOUNTED SWITCH, 48" AFF.

3 WAY OR 4 WAY FLUSH MOUNTED SWITCH, 48" AFF.

FLUSH MOUNTED DIMMER SWITCH, 48" AFF. LUTRON NOVA SERIES OR EQUAL. SIZE AS REQUIRED.

BOILER PLANT INSTRUMENTATION PANEL

MOTION SENSOR OCCUPANCY SWITCH.

MOTOR RATED SWITCH WITH THERMAL OVERLOAD PROTECTION.

FLUSH MOUNTED SWITCH WITH OCCUPANCY SENSOR, 48" AFF.

FLUSH MOUNTED SWITCH WITH PILOT LIGHT, 48" AFF.

JUNCTION BOX, SIZE AS REQUIRED.

JUNCTION BOX, MEDICAL GAS ALARM

DUPLEX RECEPTACLE, NEMA 5-20R, 18" AFF, U.O.N.

DUPLEX RECEPTACLE, BARIATRIC POWER

DUPLEX RECEPTACLE, COMPUTER

DUPLEX RECEPTACLE, REFRIGERATOR

DUPLEX RECEPTACLE, WEATHER PROOF

DUPLEX RECEPTACLE, GROUND FAULT INTERRUPT

DUPLEX RECEPTACLE, NEMA 5-20R, GROUND FAULT INTERRUPT, 44" AFF, U.O.N.

DOUBLE DUPLEX (QUAD) RECEPTACLE, NEMA 5-20R, 18" AFF.

DUPLEX RECEPTACLE WITH ISOLATED GROUND, NEMA 5-20R, 18" AFF, U.O.N.

DUPLEX RECEPTACLE, NEMA 5-20R, 18" AFF, U.O.N. SPLIT-WIRED WITH TOP HALF ON SWITCH LEG.

SINGLE RECEPTACLE, NEMA CONFIGURATION AS NOTED, 18" AFF.

COMBINATION TV OUTLET AND DUPLEX RECEPTACLE, NEMA 5-20R, +18" A.F.F. TV OUTLET WITH 1" EC TO ACCESSIBLE CEILING SPACE.

DATA/TELEPHONE OUTLET, 18" AFF. PROVIDE 1" EC TO ACCESSIBLE CEILING SPACE.

DATA/TELEPHONE OUTLET. FLOOR MOUNTED. PROVIDE 1" EC TO ACCESSIBLE CEILING SPACE.

DATA OUTLET, 18" AFF. PROVIDE 1" EC TO ACCESSIBLE CEILING SPACE.

DATA OUTLET. FLOOR MOUNTED. PROVIDE 1" EC TO ACCESSIBLE CEILING SPACE.

TELEPHONE OUTLET, 18" AFF. PROVIDE 1" EC TO ACCESSIBLE CEILING SPACE.

PHOTO-CELL, WALL MOUNT +10'0" A.F.F.

120/208 VOLT FAN.

277/480 VOLT DISCONNECT SWITCH.

MOTOR STARTER.

DISCONNECT SWITCH. 600V, POLES, AMPS, AND FUSING TO MATCH CIRCUIT BREAKER.

ELECTRIC PANEL.

CEILING MOUNTED MOTION SENSOR.

CORRIDOR CEILING MOUNTED MOTION SENSOR.

ELECTRICAL ABBREVIATIONS

1PH	SINGLE-PHASE	FA	FIRE ALARM
1P	SINGLE POLE	FAAP	FIRE ALARM ANNUNCIATOR PANEL
2/C	TWO-CONDUCTOR	FABL	FIRE ALARM BELL
3/C	THREE-CONDUCTOR	FABX	FIRE ALARM BOX
3PH	THREE-PHASE	FACP	FIRE ALARM CONTROL PANEL
4/C	FOUR-CONDUCTOR	FLA	FULL LOAD AMPS
4W	FOUR-WIRE	FLEX	FLEXIBLE METALLIC CONDUIT
18" AFF	18" ABOVE FINISHED FLOOR	FLUOR FIX	FLUORESCENT FIXTURE
A/C UNIT	AIR CONDITIONING UNIT	FP	FIRE PROTECTION
A/E	ARCHITECT/ENGINEER	FT	FEET OR FOOT
AP	ALARM ANNUNCIATOR PANEL	FU SW	FUSED SWITCH
AC	ALTERNATING CURRENT OR ARMORED CABLE	G OR GND	GROUND OR GENERATOR
ADJ	ADJACENT, ADJOINING	GEN	GENERATOR
ADO	AUTOMATIC DOOR OPENER	GFCI	GROUND FAULT CIRCUIT
AF	AMPERE FRAME OR AMP FUSE		INTERRUPTER
AFC	ABOVE FINISHED COUNTER, AUTOMATIC FREQUENCY CONTROL, OR AVAILABLE FAULT CURRENT	GTB	GROUND TERMINAL BOX
	ABOVE FINISHED FLOOR	HP	HORSEPOWER
	ABOVE FINISHED GRADE	IESNA	ILLUMINATION ENGINEERING SOCIETY OF NORTH AMERICA
AFF	AMPERE HOUR		INTERMEDIATE METAL CONDUIT
AFG	AUTHORITY HAVING JURISDICTION	J--BOX	JUNCTION BOX
AH	AMPERE INTERRUPTING CAPACITY		
AHJ	AMPS SHORT CIRCUIT		
AIC	AMPERE TRIP	kV	KILOVOLT
ASC	AUTOMATIC TRANSFER SWITCH	kVA	KILOVOLT AMPERE
AT	BATTERY	kW	KILOWATT
BAT	BARE COPPER	kWH	KILOWATT HOUR
BC	BOARD	LT	LIGHT
BD	BELOW FINISH FLOOR	LTG	LIGHTING
BFF	BASIC INSULATION LEVEL	LTG PNL	LIGHTING PANEL
BIL	BUILDING	LTNG	LIGHTNING
BLDG	BOILER PLANT INSTRUMENTATION PANEL		
BP	BREAKER	MAX	MAXIMUM
BRKR	CONDUIT	MC	METAL-CLAD
C	CABINET	MCA	MINIMUM CIRCUIT AMPS
CAB	CATALOG	MCB	MAIN CIRCUIT BREAKER
CAT	COMMUNITY ANTENNA TELEVISION	MCC	MOTOR CONTROL CENTER
CATV	CONTROL CONTACTOR	MDP	MAIN DISTRIBUTION PANEL
CCR	CLOSED CIRCUIT TELEVISION	MECH	MECHANICAL
CCTV	CANDELA	MG	MOTOR GENERATOR
cd	CONSTRUCTION DOCUMENTS	MH	MANHOLE
CD	CONTRACTOR FURNISHED	MIN	MINIMUM
CF	CONTRACTOR FURNISHED/CONTRACTOR INSTALLED	MOCP	MAXIMUM OVERCURRENT PROTECTION
CF/CI	CONTRACTOR FURNISHED/OWNER INSTALLED	MLO	MAIN LUGS ONLY
CF/OI	CONTRACTOR FURNISHED EQUIPMENT	MT	MOUNT
CFC	CHILLED WATER	MTD	MOUNTED
CHW	CHILLED WATER PUMP	MTG	MOUNTING
CHWP	CIRCUIT	MTS	MANUAL TRANSFER SWITCH
CKT	CIRCUIT BREAKER	MV	MEDIUM VOLTAGE
CKT BRKR	CURRENT LIMITING FUSE	MVA	MEGAVOLT-AMPERE
CLF	CEILING	MW	MEGAWATT MICROWAVE
CLG	CONCRETE MASONRY UNIT	NA	NOT APPLICABLE
CMU	COAX CABLE	NEC	NATIONAL ELECTRICAL CODE
COAX	COMMUNICATION	NEMA	NATIONAL ELECTRICAL MANUFACTURERS
COMM	COMPARTMENT	NEUT OR N	NEUTRAL
COMPT	CONTRACTOR	NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
CONTR	CONTROL POWER TRANSFORMER	NIC	NOT IN CONTRACT
CPT	CURRENT TRANSFORMER	NL	NIGHT LIGHT
CT	CABLE TELEVISION	NO	NORMALLY OPEN
CTV	COPPER	NS	NO SCALE
CU	CUBIC FEET	NTS	NOT TO SCALE
CU FT	CURRENT	P	POLE
CUR	DECIBEL OR DIRECT BURIAL	PA	PUBLIC ADDRESS
DB	DIMMER CONTROL PANEL	PB	PANELBOARD, PULL BOX, OR PUSHBUTTON
DCP	DEGREES CELSIUS		
DEG C	DEGREES FAHRENHEIT	PBPU	PREFABRICATED BEDSIDE PATIENT UNIT
DEG F	DEMOLITION		
DEMO	DIAGRAM	PCB	POLYCHLORINATED BIPHENYL
DIAG	DISCONNECT	PEC	PHOTOELECTRIC CELL
DISC	DISTRIBUTION	PED	PEDESTAL
DISTR	DISTRIBUTION PANEL	PEND	PENDANT
DISTR PNL	DIMMER SWITCH	PH	PHASE
DMR SW	DOWN	PNL	PANEL
DN	DOUBLE POLE, DOUBLE THROW	PWR	POWER
DPDT	DOUBLE POLE, SINGLE THROW	RCP	REFLECTED CEILING PLAN
DPST	DISCONNECT SWITCH	REC	RECESSED
DRSW	DRAWING	RECPT	RECEPTACLE
DS	EMPTY CONDUIT	RGS	RIGID GALVANIZED STEEL
DWG	EQUIPMENT GROUND	SW	SWITCH
EC	ELECTRIC OR ELECTRICAL	SWBD	SWITCHBOARD
ELEG	ELEVATOR	SWGR	SWITCHGEAR
ELEC	EMERGENCY MONITORING CONTROL PANEL	UON	UNLESS OTHERWISE NOTED
ELEV	EMERGENCY	V	VOLT
EMCP	ELECTRICAL METALLIC TUBING	VA	VOLT AMPERE
EMER	ENCLOSURE	V	VOLTAGE
EMT	ELECTRIC WATER HEATER	WP	WEATHERPROOF
ENCL	EXISTING	XFER	TRANSFER
ENH		XFMR	TRANSFORMER
EXIST			

* SOME NOTES/ABBREVIATIONS MAY BE COMBINED SUCH AS: 18" AFF UON- WHICH WOULD BE 18" ABOVE FINISHED FLOOR, UNLESS OTHERWISE NOTED.

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				NOTES, ABBREVIATIONS AND SYMBOLS		BALTIMORE VA MEDICAL CENTER MANAGED CARE / ED IMPROVEMENTS AND ENROLLMENT CENTER		512-511			
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