

LEGEND

POWER
NEW INTERIOR WIRING - ABOVE GRADE - CONCEALED OR EXPOSED
HOMERUN - ARROWS INDICATE NUMBER OF CIRCUITS (GND NOT SHOWN) CONDUCTORS ARE #12 UNLESS NOTED OTHERWISE.
CIRCUIT NUMBER DESIGNATION
JUNCTION BOX - SIZE AS INDICATED OR REQUIRED.
PANELBOARD, RECESSED OR SURFACE MOUNT AS SPECIFIED. DESIGNATION PER CLIENT STANDARD
DRY-TYPE TRANSFORMER - KVA AS INDICATED. 'T1' INDICATES DESIGNATION
SAFETY DISCONNECT SWITCH
MAGNETIC MOTOR STARTER - 'PR' INDICATES PROVIDE PHASE PROTECTION RELAY. NUMBER INDICATES NEMA SIZE
COMBINATION TYPE MAGNETIC MOTOR STARTER/DISCONNECT NUMBER INDICATES NEMA SIZE
MANUAL MOTOR STARTER SWITCH WITH THERMAL OVERLOAD PROTECTION
MOTOR - NUMBER INDICATES HORSEPOWER. WIRE COMPLETE WITH DISCONNECT SWITCH AS INDICATED OR REQUIRED, 'M' INDICATES FRACTIONAL HORSEPOWER
DUPLIX RECEPTACLE - 125V, 20A, GROUND TYPE MOUNT 18" AFF UNLESS NOTED OTHERWISE
QUADRAPLEX RECEPTACLE - 125V, 20A, GROUND TYPE - MOUNT 18" AFF UNLESS NOTED OTHERWISE
SINGLE POWER RECEPTACLE - SPECIAL PURPOSE - NEMA CONFIGURATION AS INDICATED
FLOOR BOX WITH POWER AND DATA
ELECTRICAL STRIP MOLD RECEPTACLES ON 2"-0" CENTERS UNLESS OTHERWISE NOTED MOUNT 42" AFF UNLESS OTHERWISE NOTED
EMERGENCY POWER OFF (ABORT) BUTTON MUSHROOM HEAD STYLE
PUSH PLATE (FOR AUTOMATIC DOOR ACTUATION)
VARIABLE FREQUENCY DRIVE
BUS DUCT SEE PLANS FOR FURTHER INFORMATION.
SPD (SURGE PROTECTION DEVICE)

LIGHTING
LED TROFFER LUMINAIRE (LIGHTING FIXTURE) 2X4, 1X4 OR 2X2, SEE LUMINAIRE SCHEDULE FOR DETAILS
UPPERCASE LETTER INDICATES TYPE (TYPICAL)
LOWER CASE LETTER INDICATES SWITCH CONTROL (TYPICAL)
SLASH INDICATES RECESSED MOUNTING
HATCH INDICATES EMERGENCY CIRCUIT 'EM/NL' INDICATES NIGHT LIGHT
LED STRIP / INDUSTRIAL LUMINAIRE (LIGHT FIXTURE) SEE LUMINAIRE SCHEDULE FOR DETAILS
RECESSED DOWNLIGHT LUMINAIRE SEE LUMINAIRE SCHEDULE FOR DETAILS
WALL WASH LUMINAIRE ARROW INDICATES DIRECTION SEE LUMINAIRE SCHEDULE FOR DETAILS
WALL MOUNTED LUMINAIRE SEE LUMINAIRE SCHEDULE FOR DETAILS
EXIT SIGN - DIRECTIONAL ARROWS AS INDICATED. CEILING OR WALL MOUNT AT 7'-6" AFF TO CENTER OR ABOVE DOOR SEE LUMINAIRE SCHEDULE FOR DETAILS
PHOTOELECTRIC CELL
TIME CLOCK
SWITCH MOUNTED 48" AFF UNLESS NOTED OTHERWISE LOWERCASE LETTER INDICATES SWITCH CONTROL
'3' INDICATES THREE-WAY
'4' INDICATES FOUR-WAY
'D' INDICATES DIMMER SWITCH
'T' INDICATES TIMER SWITCH
'WP' INDICATES WEATHERPROOF COVER
CEILING MOUNTED OCCUPANCY SENSOR WITH POWER PACK - BASIS OF DESIGN: HUBBELL #0MNI2T000RP WITH #JVPF OR APPROVED EQUIVALENT
CEILING MOUNTED DAYLIGHT SENSOR
WALL MOUNTED OCCUPANCY SENSOR. REFER TO SPECIFICATIONS FOR DETAILS.

COMMUNICATIONS
DATA OUTLET MOUNTED AT 18" A.F.F. UNLESS NOTED OTHERWISE. INDICATES (4) RJ-45 JACKS. PIPE CAT6E CABLE TO CABLE TRAY.
PHONE OUTLET (RJ-45 JACK) MOUNTED AT 18" A.F.F. UNLESS NOTED OTHERWISE. PIPE CAT6E CABLE TO CABLE TRAY.
CATV OUTLET MOUNTED AS NOTED. HOMERUN COAX CABLE TO VA SELECTED SOURCE. SYSTEM SHALL BE IN EMT.
WIRELESS ACCESS POINT. PROVIDE (1) DATA OUTLET FOR ANTENNA AT ACCESSIBLE LOCATION ABOVE CEILING. PROVIDE (1) LEVEL 6 CABLE BACK TO RACK MOUNTED PATCH PANEL. PROVIDE DUPLIX RECEPTACLE AND CONNECT TO BRANCH CIRCUIT AS INDICATED ON FLOOR PLANS. ALL IN CABLE TRAY.
CEILING MOUNTED PA SPEAKER

NURSE CALL
NURSE CALL STATION
'HW' INDICATES PATIENT HEADWALL NURSE CALL
'D' INDICATES DUTY STATION
'R' INDICATES RESTROOM PULL STATION:
MOUNT 72" AFF FOR SHOWER LOCATION
MOUNT 54" AFF FOR TUB LOCATION
MOUNT 36" AFF FOR TOILET LOCATION
CEILING MOUNTED NURSE CALL LIGHT
'2' INDICATES 2-LAMP DOME LIGHT
'c' INDICATES CORRIDOR DOME LIGHT
'1' INDICATES AUXILIARY INTERSECTIONAL DOME LIGHT
NURSE'S CALL MASTER STATION MOUNTED ON NURSE'S COUNTER TOP UNLESS OTHERWISE NOTED.
NOTE: WIRING SHALL BE IN EMT WITH TAMPER RESISTANT SCREWS.

SECURITY
CARD ACCESS READER; LETTER INDICATES AS FOLLOWS:
M=MOUNT
C=CEILING D=DESK F=FLUSH H=HIDDEN
M=MULLION P=PEDESTAL R=RACK
S=SURFACE W=WALL
T=TECHNOLOGY/TYPE
B=BARCODE F=ELEVATOR FLOOR CALL
H=ELEVATOR HALL CALL M=MAG STRIP
P=PROXIMITY S=SMART CARD T=TOKEN
ELECTRONIC LOCK; LETTER INDICATES AS FOLLOWS:
M=MOUNT
C=CEILING D=DESK F=FLUSH H=HIDDEN M=MULLION
P=PEDESTAL R=RACK S=SURFACE W=WALL
T=TECHNOLOGY/TYPE
D=DEADBOLT H=HYBRID L=LATCH SET
M=MAGNETIC S=STRIKE
SECURITY ACCESS, VIDEO CAMERA WITH LENS
M = MOTION DETECTOR
PZ = MOTION DETECTOR WITH PAN AND ZOOM
PTZ= MOTION DETECTOR WITH PAN, TILT, AND ZOOM
KEYPAD; LETTER INDICATES AS FOLLOWS:
M=MOUNT
C=CEILING D=DESK F=FLUSH H=HIDDEN
M=MULLION P=PEDESTAL R=RACK
S=SURFACE W=WALL
NOTE: WIRING SHALL BE IN EMT WITH TAMPER RESISTANT SCREWS.

FIRE ALARM
FIRE ALARM PULL STATION. MOUNTED 48" AFF TO CENTERLINE OF STATION.
AUDIO/VISUAL ALARM. COMBINATION SPEAKER WITH ADJUSTABLE CANDELA STROBE LIGHT. WALL MOUNTED 90" AFF TO TOP. CEILING MOUNT WHERE INDICATED. NUMBER INDICATES CANDELA RATING OF STROBE. 'WP' INDICATES WEATHERPROOF UNIT.
VISUAL ALARM. ADJUSTABLE CANDELA STROBE LIGHT. WALL MOUNTED 90" AFF TO TOP. CEILING MOUNT WHERE INDICATED. NUMBER INDICATES CANDELA RATING OF STROBE. REFER TO SPECIAL REQUIREMENTS IN SLEEPING AREAS. NS INDICATES NON-SUPERVISED 120 VOLT REMOTE VISUAL SIGNAL, 177 CANDELA, CONNECTED TO NON-SUPERVISED SMOKE DETECTOR.
DETECTOR; LETTER INDICATES AS FOLLOWS:
BLANK = PHOTOELECTRIC SMOKE DETECTOR
H = HEAT SMOKE
I = IONIZATION SMOKE
IH = IONIZATION AND HEAT SMOKE
IP = IONIZATION AND PHOTOELECTRIC SMOKE
PH = PHOTOELECTRIC AND HEAT SMOKE
IPH = IONIZATION, PHOTOELECTRIC, AND HEAT
DUCT MOUNTED SMOKE DETECTOR WITH REMOTE TEST AND RESET STATION. FURNISHED AND WIRED BY ELECTRICAL CONTRACTOR, INSTALLED BY MECHANICAL CONTRACTOR.
'S' INDICATES LOCATED IN SUPPLY AIR DUCT
'R' INDICATES LOCATED IN RETURN AIR DUCT
REMOTE TEST STATION WITH RESET FOR DUCT SMOKE DETECTOR
ELECTROMAGNETIC TYPE DOOR HOLDER OUTLET

ABBREVIATIONS

A AMP
AC ALTERNATING CURRENT
ADA AMERICANS WITH DISABILITIES ACT
AF AMP FRAME
AFCI ARC FAULT CIRCUIT INTERRUPTER
AFF ABOVE FINISHED FLOOR
AFG ABOVE FINISHED GRADE
AIC AMPERES INTERRUPTING CAPACITY
AL ALUMINUM
AT AMP TRIP
ATC AUTOMATIC TEMPERATURE CONTROL
AWG AMERICAN WIRE GAUGE
BLDG BUILDING
CONDUIT CONDUIT
CB CIRCUIT BREAKER
CKT CIRCUIT
CEIL CEILING
CL CENTERLINE
CMU CONCRETE MASONRY UNIT
CONC CONCRETE
CONT'D CONTINUED
CR CRITICAL
CU COPPER
CUH CABINET UNIT HEATER
DC DIRECT CURRENT
DW DISH WASHER
EC ELECTRICAL CONTRACTOR
EF EXHAUST FAN
EGC EQUIPMENT GROUNDING CONDUCTOR
EM EMERGENCY
EUH ELECTRIC UNIT HEATER
EWC ELECTRIC WATER COOLER
FACP FIRE ALARM CONTROL PANEL
GD GARBAGE DISPOSAL
GEC GROUNDING ELECTRODE CONDUCTOR
GFI GROUND FAULT INTERRUPTER
GND GROUND
HID HIGH INTENSITY DISCHARGE
HOA HAND-OFF-AUTOMATIC HORSEPOWER
HP HORSEPOWER
HPS HIGH PRESSURE SODIUM
HZ HERTZ
JB JUNCTION BOX
KAIC THOUSAND AMP INTERRUPTING CAPACITY
KCMIL THOUSAND CIRCULAR MIL
KV THOUSAND VOLTS (KILOVOLT)
KVA THOUSAND VOLT-AMPS
KW THOUSAND WATTS (KILOWATT)
LIGHTING CONTACTORS
LCP LATERAL CONTROL PIT
LED LIGHT EMITTING DIODE
LP LIGHTING PANELBOARD
LTG LIGHTING
MCC MOTOR CONTROL CENTER
MCCB MOLDED CASE CIRCUIT BREAKER
MCB MAIN CIRCUIT BREAKER
MH MANHOLE OR METAL HALIDE
MIC MICROWAVE OR MICROPHONE
MLO MAIN LUGS ONLY
MTS MANUAL TRANSFER SWITCH

NC NORMALLY CLOSED OR NURSE CALL
NEC NATIONAL ELECTRICAL CODE
NFPA NATIONAL FIRE PROTECTION ASSOCIATION
NO NORMALLY OPEN
NO. NUMBER
OL OVERLOAD
POLE
PA PUBLIC ADDRESS
PB PUSH BUTTON
PC PHOTOELECTRIC CELL
PF POWER FACTOR
PH PHASE
PNL PANEL
PT POTENTIAL TRANSFORMER
PVC POLYVINYL CHLORIDE
REF REFRIGERATOR
RSC RIGID STEEL CONDUIT
RTU ROOF TOP UNIT
SCCR SHORT CIRCUIT CURRENT RATING
SF SUPPLY FAN
SLD SINGLE LINE DIAGRAM
SPD SURGE PROTECTION DEVICE
SS SOLID STATE
SWBD1 SWITCHBOARD, NUMBER AS INDICATED
TC TIME CLOCK
TELCOM TELECOMMUNICATIONS
TS TRANSFER SWITCH
T&B TOP AND BOTTOM
TYP TYPICAL
TV TELEVISION
UC UNDER COUNTER
UG UNDERGROUND
V VOLT
VA DEPARTMENT OF VETERAN AFFAIRS
VA VOLT-AMPERE
VAMC VA MEDICAL CENTER
VFD VARIABLE FREQUENCY DRIVE
VOIP VOICE OVER INTERNET PROTOCOL (PHONE)
W WATT
W/ WITH
WP WEATHERPROOF
WRG WIRING
XFMR TRANSFORMER
XP EXPLOSION-PROOF
3PH THREE PHASE (Ø)
3W THREE WIRE
4W FOUR WIRE
(R) LOCATION OF RELOCATED DEVICE OR EQUIPMENT
(RR) REMOVE AND RELOCATE EXISTING DEVICE OR EQUIPMENT
(RX) REMOVE EXISTING DEVICE OR EQUIPMENT
(X) EXISTING DEVICE OR EQUIPMENT TO REMAIN
(XR) EXISTING DEVICE OR EQUIPMENT TO BE REMOVED AND REPLACED AT SAME LOCATION

GENERAL NOTES

A. NOT ALL SYMBOLS INDICATED IN THE LEGEND, OR LISTED ABBREVIATIONS, APPEAR ON THE DRAWINGS. COORDINATE WORK ACCORDINGLY. COMPLY WITH SPECIFICATIONS AND NOTES BELOW AS APPLICABLE.
B. ALL RECEPTACLES SHALL BE INSTALLED 18" AFF UNLESS NOTED OTHERWISE.
C. ALL WIRING SHALL BE COPPER. ALUMINUM WIRING IS NOT ALLOWED. UNLESS OTHERWISE NOTED, ALL WIRING SHALL BE 2#12 AWG AND 1#12 AWG EQUIPMENT GROUNDING CONDUCTOR IN EMT. HOMERUNS FED FROM A 20A-1P, 120V CIRCUIT IN EXCESS OF 70' SHALL BE #10 AWG SOLID. THERE SHALL BE NO SHARED NEUTRALS.
D. CONDUCTORS SHALL BE SOLID AND #8 OR SMALLER.
E. SEE MECHANICAL PLANS FOR HVAC UNITS, PUMPS AND FANS CONTROLLED BY THERMOSTATS AND OVERRIDE SWITCHES (PROVIDED BY ATC CONTRACTOR).
F. FUSES AND OVERLOAD UNITS FOR MOTORS SHALL BE SIZED BASED ON ACTUAL MOTOR NAMEPLATE DATA AND IN ACCORDANCE WITH NEC.
G. ALL WORK SHALL COMPLY WITH LATEST EDITION OF NFPA70, NFPA72, NFPA99, NFPA101, NEC & ALL FEDERAL, STATE & LOCAL REGULATIONS.
H. ALL PENETRATIONS THROUGH FLOORS, RATED WALLS AND PARTITIONS SHALL BE SEALED WITH UL APPROVED FIRE SEALANT MATERIAL TO MAINTAIN FIRE RATING FOR THE SEPARATION.
I. AN EQUIPMENT GROUNDING CONDUCTOR SHALL BE INSTALLED WITH ALL FEEDER AND BRANCH CIRCUITS. SIZE IN ACCORDANCE WITH NFPA 70 ARTICLE 250.
J. FLEXIBLE CONNECTIONS TO MOTORS SHALL BE LIQUID TIGHT FLEXIBLE METAL CONDUIT IN A 360° LOOP EXCEPT AS NOTED OTHERWISE.
K. COORDINATE INSTALLATION OF COMMUNICATION OUTLETS WITH THE VA.
L. LOCATE DISCONNECTS AT EQUIPMENT AS REQUIRED BY MANUFACTURER. LOCATIONS ON DRAWINGS ARE APPROXIMATE.
M. IDENTIFICATION: RECEPTACLES CONNECTED TO THE ESSENTIAL ELECTRICAL SYSTEM SHALL BE RED WITH A WHITE LABEL CONTAINING THE WORD "EMERGENCY" IN BLACK ON THE TOP OF THE PLATE AND A WHITE LABEL WITH THE CIRCUIT NUMBER IN BLACK ON THE BOTTOM. "NORMAL" RECEPTACLES SHALL HAVE A WHITE LABEL WITH THE CIRCUIT NUMBER IN BLACK AT THE BOTTOM OF THE PLATE.
N. PROVIDE WIRE MARKERS TO IDENTIFY CABLES FOR ALL SYSTEMS AT THE ORIGIN, PULL BOXES, AND TERMINATION POINTS. LABELS SHALL BE SELF ADHESIVE OR HEAT SHRINK TYPE.
O. NO LIVE WORK SHALL BE PERMITTED. EVERY CIRCUIT SHALL BE LOCKED-OUT AND TAGGED-OUT BEFORE COMMENCING WORK.
P. ALL WIRING SHALL BE IN RACEWAY. -CONTROL SYSTEMS SHALL BE IN BLUE EMT. -CONTROL SYSTEMS OUTSIDE SHALL BE IN RIGID STEEL.
Q. SECURITY WIRING SHALL BE INSTALLED EMT CONDUIT WITH TAMPER RESISTANT SCREWS.
R. ALL CONDUIT SHALL BE 3/4" UNLESS NOTED OTHERWISE.

one eighth inch = one foot
one quarter inch = one foot
one half inch = one foot
one inch = one foot
one and one half inches = one foot
two inches = one foot
three inches = one foot
three quarters inch = one foot
three eighths inch = one foot

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CONSULTANTS:

ARCHITECT/ENGINEERS: paradigm Architecture | Engineering | Design-Build



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