"HM" INDICATES CONNECTION TO HUMIDIFIER "MD" INDICATES CONNECTION TO MOTORIZED DAMPER "NM" INDICATES CONNECTION TO NORMAL POWER CIRCUIT AS INDICATED "PS" INDICATES CONNECTION TO MOTORIZED PROJECTION SCREEN "SEC" INDICATES CONNECTION SECURITY DEVICES "T/D" INDICATES TEL/DATA WIRING DRY TYPE TRANSFORMER EGA

EMERGENCY GENERATOR ANNUNCIATOR

TRANSFER SWITCH ANNUNCIATOR

TSA

PB

PULL BOX

WIRING DEVICE LEGEND DUPLEX RECEPTACLE NEMA 5-20R DOUBLE DUPLEX RECEPTACLE NEMA 5-20R SINGLE RECEPTACLE NEMA 5-20R **DUPLEX RECEPTACLE NEMA 5-20R EMERGENCY CRITICAL BRANCH CIRCUIT** DOUBLE DUPLEX RECEPTACLE NEMA 5-20R EMERGENCY CRITICAL BRANCH CIRCUIT SINGLE RECEPTACLE NEMA 5-20R EMERGENCY CRITICAL BRANCH CIRCUIT DUPLEX RECEPTACLE GFI TYPE NEMA 5-20R EMERGENCY CRITICAL BRANCH CIRCUIT SPECIAL PURPOSE RECEPTACLE NEMA TYPE AS INDICATED ON THE PLANS RECEPTACLE TYPE DESIGNATIONS: ALL RECEPTACLES ARE MOUNTED 18" AFF UNLESS OTHERWISE NOTED "C"- DENOTES MOUNTED 8" ABOVE WORK SURFACE OR COUNTER TOP "CM"- DENOTES RECEPTACLE MOUNTED 8" ABOVE WORK SURFACE OR COUNTER TOP FOR COFFEE MACHINE "D"- DENOTES DEVICE FED VIA DEDICATED BRANCH "ICE"- DENOTES RECEPTACLE MOUNTED 8" ABOVE WORK SURFACE OR COUNTER TOP FOR ICE MACHINE "IH"- DENOTES RECEPTACLE MOUNTED IN CASEWORK BELOW SINK FOR INSTANT HOT WATER DISPENSER, COORDINATE EXACT LOCATION AND MOUNTING HEIGHT WITH THE CASEWORK VENDOR AND ARCHITECT PRIOR TO INSTALLATION "MC"- DENOTES RECEPTACLE MOUNTED IN CASEWORK FOR MICROWAVE, COORDINATE EXACT LOCATION AND MOUNTING HEIGHT WITH THE CASEWORK VENDOR AND ARCHITECT PRIOR TO INSTALLATION "REF"- DENOTES RECEPTACLE MOUNTED AT 48" FOR FULL HEIGHT REFRIGERATOR "TS"- DENOTES RECEPTACLE MOUNTED IN CASEWORK FOR TOASTER "UC"- DENOTES RECEPTACLE MOUNTED AT 18" IN CASEWORK FOR UNDERCABINET REFRIGERATOR "WP"- DENOTES WEATHERPROOF TYPE: NEMA 3R MINIMUM "WR"- DENOTES LISTED WEATHER RESISTANT TYPE DEVICE AND IN-USE COVER AS DESCRIBED IN N.E.C. 2011 SECTION 406.8 "TP"- DENOTES TAMPER PROOF TYPE CEILING MOUNTED RECEPTACLE

WIRING METHODS REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION "CP"- DENOTES RECEPTACLE MOUNTED IN CEILING FOR PROJECTOR THHN/THWN/XHHW NORMAL SYSTEM FEEDERS FLOOR MOUNTED DUPLEX RECEPTACLE NEMA 5-20R. PROVIDE CONDUCTORS IN EMT RECTANGULAR METALLIC CAST IRON ADJUSTABLE FLOOR BOX WITH ALUMINUM COVERS. PROVIDE CARPET FLANGES AS EMERGENCY SYSTEM FEEDERS MI CABLE "F" - DENOTES FLUSH FLOOR MOUNTED THHN/THWN/XHHW EQUIPMENT SYSTEM FEEDERS "PT" - DENOTES 2 HOUR FIRE RATED POKE-THROUGH CONDUCTORS IN EMT TRIPLE CHANNEL, SURFACE MOUNTED, ALUMINUM RACEWAY, DUAL THHN/THWN/XHHW CONDUCTORS IN NORMAL BRANCH CIRCUITS COVER WIREMOLD #AL7450 SERIES OR APPROVED EQUAL EMT OR HOSPITAL GRADE AC CABLE RACEWAY TO BE MOUNTED 6" ABOVE WORK SURFACE OR AS DIRECTED BY ARCHITECT AND HOSPITAL REPRESENTATIVE **EMERGENCY SYSTEM (LIFE SAFETY** THHN/THWN/XHHW RACEWAY TO BE FACTORY PRE-WIRED, WITH DUPLEX NEMA 5-20R AND CRITICAL) BRANCH CIRCUITS CONDUCTORS IN EMT RECEPTACLES FOR NORMAL POWER, DUPLEX RED NEMA 5-20R RECEPTACLES FOR EMERGENCY POWER, AND VOICE/DATA CONDUCTORS IN EMT NURSE CALL SYSTEM WIRING PROVISION LOCATIONS. NORMAL POWER DEVICES 24" ON CENTER EMERGENCY POWER DEVICES 48" ON CENTER, AND TELE/DATA LOCATIONS 48" ON CENTER, UNLESS OTHERWISE NOTED. DEVICES FIRE ALARM SYSTEM WIRING CONDUCTORS IN EMT OR MC CABLE WITHIN 6'-0" OF SINKS SHALL BE GFCI PROTECTED.

LIGHTING PLAN LEGEND

-LIGHTING FIXTURE AS DESIGNATED ON LIGHTING

"NL" - DENOTES NIGHT LIGHT FIXTURE

"1" - DENOTES PANELBOARD BRANCH CIRCUIT NUMBER

"FR" - DENOTES FIXTURE TYPE AS NOTED ON FIXTURE

- DENOTES LIGHT FIXTURE ON LIFE SAFETY

EXIT SIGN - SHADED AREA INDICATES LOCATION AND

QUANTITY OF FACES; DIRECTIONAL ARROWS AS INDICATED

REMOTE EMERGENCY LIGHTING, SINGLE HEAD MOUNT 7'-6" AFF

REMOTE EMERGENCY LIGHTING, DUAL HEAD MOUNT 7'-6" AFF

EMERGENCY BATTERY UNIT, MOUNT 7'-6" AFF; NO. OF

EMERGENCY LIGHTING HEADS AS INDICATED.

LOCAL SWITCH, SINGLE POLE

DIMMER SWITCH, SINGLE POLE

UNLESS NOTED OTHERWISE.

DIMMER SWITCH, 3-WAY

LOW VOLTAGE SWITCH

NOTED OTHERWISE.

TECHNOLOGY.

PHOTOCELL

ATS O O BP

SWITCHES LEGEND

"a" - DENOTES LIGHT FIXTURE CONTROL

"MS" - DENOTES MASTER STATION OVERRIDE

"a" - DENOTES LOW VOLTAGE SWITCH CIRCUIT

MOUNT 48" AFF UNLESS NOTED OTHERWISE.

CORNER UNIT. DUAL TECHNOLOGY.

LAYOUTS TO DETERMINE EXACT QUANTITY OF POWER SUPPLIES

PANELBOARD "CR43A1"

OCCUPANCY SENSOR, CEILING MOUNTED, DUAL

AND MULTIPLE LEVEL SWITCHING. REFER TO FLOOR PLANS FOR SWITCHING

ONE-LINE DIAGRAM LEGEND

45 KVA DRY-TYPE TRANSFORMER

**AUTOMATIC TRANSFER SWITCH** 

"LS" - DENOTES LIFE SAFETY BRANCH

"3P" - DENOTES NUMBER OF POLES; 3 POLE

"4P" - DENOTES NUMBER OF POLES; 4 POLE

"MTS" - DENOTES MANUAL TRANSFER SWITCH

"BP" - DENOTES BYPASS ISOLATION SWITCH

"X-RAY" - DENOTES X-RAY EQUIPMENT BRANCH

"ATS" - DENOTES AUTOMATIC TRANSFER SWITCH

"ELEV" - DENOTES ELEVATOR BRANCH

"CR" - DENOTES CRITICAL BRANCH

MASTER CLOCK SYSTEM LEGEND

"A" - DENOTES ANALOG SYNCHRONOUS CLOCK

"E" - DENOTES DIGITAL CLOCK/ ELAPSED TIMER COMBINATION

☐ A ☐ CLOCK - CEILING MOUNTED, WALL MOUNTED RESPECTIVELY

"D" - DENOTES DIGITAL CLOCK

MASTER CLOCK SYSTEM CONTROL UNIT

ELAPSED TIMER CONTROL UNIT

GROUND CONNECTION

SURGE PROTECTIVE DEVICE

"EQ" - DENOTES EQUIPMENT BRANCH

OCCUPANCY SENSOR, CEILING PEDESTAL MOUNTED

EMERGENCY LIGHTING SUPERVISORY RELAY - UL 924 LIST

REFER TO ELECTRICAL DETAILS FOR ADDITIONAL INFORMATION

LOCAL SWITCH, 3-WAY, SINGLE POLE DOUBLE THROW

LOCAL SWITCH, 4-WAY, DOUBLE POLE, DOUBLE THROW

OCCUPANCY SENSOR - WALL MOUNTED INTEGRAL, DUAL

OCCUPANCY SENSOR - WALL MOUNTED INTEGRAL, DUAL

OCCUPANCY SENSOR - WALL MOUNTED INTEGRAL, DUAL

TECHNOLOGY, DUAL RELAY SWITCH. MOUNT 48" AFF UNLESS

TECHNOLOGY, DUAL RELAY SWITCH, WITH INTEGRAL PHOTOCELL.

TECHNOLOGY, SINGLE POLE SWITCH. MOUNT 48" AFF

"a" - DENOTES FIXTURE CONTROLLED BY LOCAL SWITCH "a"

- DENOTES LIGHT FIXTURE CONNECTED TO CRITICAL

FIXTURE SCHEDULE

SCHEDULE.

BRANCH CIRCUIT

BRANCH CIRCUITRY

FR<sub>2</sub> 1

20

"TV"- DENOTES RECEPTACLE MOUNTED HIGH ON WALL FOR TELEVISION. COORDINATE EXACT LOCATION AND MOUNTING HEIGHT WITH THE ARCHITECT PRIOR TO INSTALLATION. PROVIDE TAMPERPROOF TYPE DEVICE IN PATIENT

NOTE: ALL RECEPTACLES SHALL BE HOSPITAL GRADE

ACCESSIBLE AREAS DENOTES RECEPTACLE MOUNTED AT HEIGHT AS

DETERMINED BY THE ARCHITECT FOR BLANKET WARMER

"PX"- DENOTES RECEPTACLE MOUNTED AT 48"A.F.F. FOR PYXIS

ALL RECEPTACLES WITHIN PATIENT ACCESSIBLE AREAS SHALL BE

QUANTITIES OF EQUIPMENT RELEASED TO EACH TRADE.

TAMPERPROOF TYPE DEVICES.

# MECHANICAL EQUIPMENT COORDINATION

ELECTRICAL CONTRACTOR SHALL REFER TO THE MECHANICAL, PLUMBING, AND FIRE PROTECTION DRAWINGS AND SPECIFICATIONS FOR LOCATIONS AND

# COMMUNICATIONS LEGEND (NO WIRING)

COMBINATION VOICE/DATA OUTLET DEVICE LOCATION- MOUNTED 18"AFF, UNI ESS NOTED OTHERWISE WITH BACK BOX AND 1"C (WITH PULL STRING) RUN CONCEALED WITHIN WALL TO ABOVE FINISHED CEILING AND TERMINATING WITHIN 6" OF CABLE TRAY.WIRING AND DEVICES BY OTHERS. "C" - DENOTES MOUNTED 8" ABOVE WORK SURFACE "W" - DENOTES MOUNTED 54" AFF THE ARCHITECT PRIOR TO INSTALLATION.

"TV" - DENOTES DEVICE MOUNTED HIGH ON WALL FOR TELEVISION. COORDINATE EXACT LOCATION AND MOUNTING HEIGHT WITH VOICE ONLY OUTLET DEVICE LOCATION- MOUNTED 18"AFF, UNLESS NOTED OTHERWISE WITH BACK BOX AND 1"C (WITH PULL STRING) RUN CONCEALED WITHIN WALL TO ABOVE FINISHED CEILING AND

TERMINATING WITHIN 6" OF CABLE TRAY.WIRING AND DEVICES BY "C" - DENOTES MOUNTED 8" ABOVE WORK SURFACE "W" - DENOTES MOUNTED 54" AFF DATA ONLY OUTLET DEVICE LOCATION- MOUNTED 18"AFF, UNLESS

TERMINATING WITHIN 6" OF CABLE TRAY.WIRING AND DEVICES BY "WAP" - DENOTES WIRELESS ACCESS POINT 1"EMT TO WITHIN 6" OF NEAREST CABLE TRAY "C" - DENOTES MOUNTED 8" ABOVE WORK SURFACE

NOTED OTHERWISE.WITH BACK BOX AND 1"C (WITH PULL STRING)

RUN CONCEALED WITHIN WALL TO ABOVE FINISHED CEILING AND

DATA ONLY OUTLET DEVICE LOCATION- MOUNTED 18"AFF. UNLESS NOTED OTHERWISE.WITH BACK BOX AND 1"C (WITH PULL STRING) RUN IN SLAB TURNING UP CONCEALED WITHIN WALL TO

ABOVE FINISHED CEILING AND TERMINATING WITHIN 6" OF CABLE TRAY.WIRING AND DEVICES BY OTHERS INFORMATION TECHNOLOGY (IT) OUTLET DEVICE LOCATION- MOUNTED 18"AFF, UNLESS NOTED OTHERWISE.WITH BACK BOX AND 1"C (WITH PULL STRING) RUN ABOVE FINISHED CEILING AND TERMINATING WITHIN 6" OF CABLE TRAY. WIRING AND DEVICES BY OTHERS

SECURITY CAMERA. DEVICE TO BE LOCATED ABOVE ACCESSIBLE CEILING. COORDINATE EXACT LOCATION WITH OWNER AND SECURITY VENDOR. "CAP" - DENOTES CEILING MOUNTED WIRELESS ACCESS POINT

"CCTV" - DENOTES DATA DEVICE FOR CONNECTION TO

3/4" THICK x 8'-0" HIGH x LENGTH AS INDICATED ON THE DRAWINGS PLYWOOD. PLYWOOD SHALL BE PAINTED GRAY AND MOUNTED TO WALL. COMBINATION INTERCOM/SPEAKER LOCATION

TELEVISION COAX OUTLET - CEILING OR WALL MOUNTED AS INDICATED ON ARCHITECTURAL DRAWINGS "H" - DENOTES MOUNTED HIGH ON WALL CORDINATE EXACT LOCATION WITH ARCHITETURAL DRAWINGS AND ELEVATIONS -GANG BACKBOX WITH SINGLE GANG PLASTER RING AND

COVERPLATE (TYPE AND MANUFACTURE PER FACILITY STANDARDS) VITH 1"C (EMPTY, WITH PULLSTRING) TERMINATED TI WITHIN 6" OF CABLETRAY WITH BELL END BUSHING, UNLESS OTHER SIZE CONDUIT IS INDICATED ON DRAWINGS. REFER TO SPECIFICATIONS FOR TELE/DATA WIRING REQUIREMENTS, THE ELECTRICAL CONTRACTOR SHALL PROVIDE

# FIRE ALARM SYSTEM LEGEND

DEVICES AND CABLING BACK TO TERMINATION EQUIPMENT.

FIRE ALARM COMMAND CENTER FIRE ALARM CONTROL PANEL FIRE ALARM TERMINAL BOX FIRE ALARM ANNUNCIATOR PANEL

FIRE ALARM MASTERBOX FIRE ALARM WEATHERPROOF EXTERIOR FIRE BEACON

FIRE ALARM KNOX BOX FIRE ALARM ADA COMPATIBLE MANUAL PULL STATION CARBON MONOXIDE ADA COMPATIBLE, WALL MOUNTED HORN/

STROBE COMBINATION UNIT 90db OUTPUT, ADJUSTABLE CANDELA RATING, FACTORY SET AT 75cd, UNLESS NOTED "S" - DENOTES AUDIBLE ONLY DEVICE FIRE ALARM ADA COMPATIBLE, WALL MOUNTED HORN/ STROBE

COMBINATION UNIT 90db OUTPUT, ADJUSTABLE CANDELA RATING,

"C" - DENOTES CEILING MOUNTED "S" - DENOTES AUDIBLE ONLY DEVICE FIRE ALARM ADA COMPATIBLE, WALL MOUNTED SPEAKER/ STROBE

COMBINATION UNIT 90db OUTPUT, ADJUSTABLE CANDELA RATING, FACTORY SET AT 75cd, UNLESS NOTED OTHERWISE "C" - DENOTES CEILING MOUNTED "S" - DENOTES AUDIBLE ONLY DEVICE

FIRE ALARM ADA COMPATIBLE, WALL MOUNTED STROBE UNIT ADJUSTABLE CANDELA RATING FIRE ALARM SMOKE DETECTOR, CEILING MOUNTED UNLESS

> NOTED OTHERWISE. "D" - DENOTES DUCT SMOKE DETECTOR "ER" - DENOTES ELEVATOR RECALL

"HT" - DENOTES SMOKE/ HEAT DETECTOR COMBINATION UNIT "CO" - DENOTES SMOKE/ CO DETECTOR COMBINATION UNIT

"S" - DENOTES SINGLE STATION SMOKE DETECTOR WITH INTEGRAL AUDIBLE SIGNALS "H" - DENOTES HOSTILE ENVIRONMENT

FIRE SMOKE DAMPER

FIRE ALARM REMOTE LED INDICATOR FIRE ALARM REMOTE TEST STATION

FIRE ALARM HEAT DETECTOR; CEILING MOUNTED, 135° FIXED TEMPERATURE UNLESS NOTED OTHERWISE.

"R" - DENOTES RATE OF RISE FIRE ALARM CONTROL MODULE

FIRE ALARM MONITORING MODULE FIRE ALARM INTERFACE RELAY

FIRE ALARM ELECTRO-MAGNETIC DOOR HOLDER FIREFIGHTER'S PHONE, FLUSH CABINET MOUNTED, UNLESS

NOTED OTHERWISE "CS" - DENOTES CABINET MOUNTED PHONE, SURFACE MOUNT "R" - DENOTES REMOTE PHONE JACK STATION

ALARM BEL ALARM SWITCH FLOW SWITCH PRESSURE SWITCH

TAMPER SWITCH

EQUIPMENT FURNISHED BY OTHERS, WIRED BY **CONTRACTOR** 

# WIRING METHODS LEGEND

\_\_\_\_\_\_\_ J-HOOK CABLE MANAGEMENT TYPICALLY MOUNTED 6" ABOVE FINISHED CEILING BASKET STYLE CABLE TRAY ELEVATION TRANSITION FITTING CONDUIT TURNING UP ——— O CONDUIT TURNING DOWN CONDUIT STUBBED 6" ABOVE ACCESSIBLE CEILING

FLEXIBLE RACEWAY HOMERUN TO PANELBOARD "L4GA"; BRANCH CIRCUIT No. L4GA-5 5; NO SLASH LINES INDICATE 2#12 & 1#12G., 3/4"C. UNLESS

THERWISE NOTED: MINIMUM SIZE CONDUCTOR #12 AWG/

AT 90° ANGLE WITH BUSHED END

MINIMUM SIZE CONDUIT 3/4"C.

# ABBREVIATIONS

**AMPERES** JUNCTION BOX THOUSAND AMPERES ACT ACOUSTICAL CEILING TILE INTERRUPTING CAPACITY AMPERE FRAME KCMIL THOUSAND CIRCULAR MILS AFCI ARC-FAULT CIRCUIT KEC KITCHEN EQUIPMENT INTERRUPTER CONTRACTOR ABOVE FINISHED FLOOR KV KILOVOLTS AFG ABOVE FINISHED GRADE AMPERE INTERRUPTING CAPACITY KILOVOLT AMPERES kvar Kilovolt amperes reactive ALUMINUM kW KILOWATTS ANN ANNUNCIATOR kWH KILOWATTS HOURS ANSI AMERICAN NATIONAL LTG LIGHTING STANDARDS INSTITUTE MAXIMUM METAL CLAD CABLE ARCH ARCHITECT MCB MAIN CIRCUIT BREAKER AMPERE TRIP ATC AUTOMATIC TEMPERATURE MCC MOTOR CONTROL CENTER MOTOR CIRCUIT PROTECTOR CONTROL MCSW MOLDED CASE SWITCH ATS AUTOMATIC TRANSFER SWITC MDP MAIN DISTRIBUTION PANEL AWG AMERICAN WIRE GAUGE MECH MECHANICAL BLDG BUILDING MIN MINIMUM BOND BONDING JUMPER MISC MISCELLANEOUS BR BRANCH MTD MOUNTED CONDUIT - RACEWAY MTG MOUNTING CAT CATALOG MEDIUM VOLTAGE CB CIRCUIT BREAKER MLO MAIN LUGS ONLY

NEUTRAL (GROUNDED CANDELA CONDUCTOR) CKT CIRCUIT NOT APPLICABLE CMS CABLE MANAGEMENT SYSTEM NORMALLY CLOSED CLG CEILING NATIONAL ELECTRICAL CODE COL COLUMN NEMA NATIONAL ELECTRICAL CMU CONCRETE MASONRY UNIT MANUFACTURERS CURRENT TRANSFORMER OR ASSOCIATION CABLE TRAY NFPA NATIONAL FIRE PROTECTION COPPER ASSOCIATION CWS CONDUIT WALL SEAL NOT IN CONTRACT DETD DUAL ELEMENT TIME DELAY

NIGHT LIGHT DIA DIAMETER NORMALLY OPEN DP DISTRIBUTION PANEL NOT TO SCALE DWG DRAWING OCPD OVER CURRENT PROTECTION FA FACH DEVICE ELECTRICAL CONTRACTOR EGC EQUIPMENT GROUND PHASE CONDUCTOR PNLBD PANEL BOARD ELEC ELECTRICAL POS PROVIDED UNDER OTHER ELEV ELEVATOR

SECTIONS EM EMERGENCY EMS ENERGY MANAGEMENT SYSTEM PT POTENTIAL TRANSFORMER EMT ELECTRICAL METALLIC TUBING PVC POLYVINYL CHLORIDE, RACEWAY EO ELECTRICALLY OPERATED EQUIP EQUIPMENT RGS GALVANIZED RIGID STEEL EWC ELECTRIC WATER COOLER FXP EXPLOSION PROOF CONDUIT RMC RIGID METAL CONDUIT FIRE ALARM FIRE ALARM ANNUNCIATOR RNC RIGID NON-METAL CONDUIT RSC RIGID STEEL CONDUIT SATS STANDBY AUTOMATIC

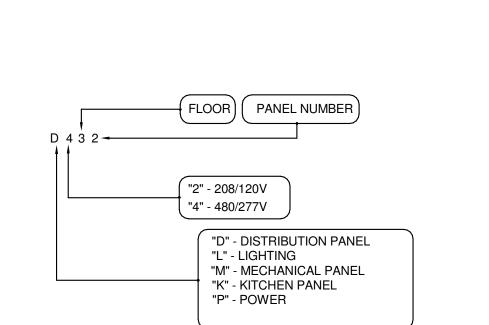
FLUOR FLUORESCENT FMS FACILITIES MANAGEMENT TRANSFER SWITCH SERVICE ENTRANCE FUSE SPARE GROUND SWITCH GAUGE SWBD SWITCHBOARD GENERAL CONTRACTOR GENERATOR GROUND FAULT GROUND FAULT INTERRUPTER

SWGR SWITCH GEAR TEL TELEPHONE TWIST LOCK GROUND FAULT CIRCUIT TWISTED PAIR INTERRUPTER TRANS TRANSFORMER GROUND TSP TWISTED SHIELDED PAIR GYPSUM WALL BOARD UNDERGROUND OR UNDER HIGH INTENSITY DISCHARGE HAND-OFF-AUTO

UNDERWRITER'S HORSE POWER LABORATORIES HOUR UNO UNLESS NOTED OTHERWISE HVAC HEATING, VENTILATION & AIR CONDITIONING INTERRUPTING CAPACITY

WEATHERPROOF INCANDESCENT DELTA IMC INTERMEDIATE METAL CONDUIT

# PANEL DESIGNATION LEGEND



# DEMOLITION LEGEND

"X" EXISTING ELECTRICAL DEVICE SHALL BE REMOVED

RACEWAY AND WIRING.

#### PROJECT GENERAL NOTES

1. THE CONTRACTOR SHALL FURNISH LABOR, MATERIALS, TOOLS AND OTHER EQUIPMENT REQUIRED TO INSTALL THE WORK SHOWN AND SPECIFIED. THE CONTRACTOR SHALL FURNISH AND INSTALL ITEMS NECESSARY FOR A COMPLETE ELECTRICAL SYSTEM. MATERIALS SHALL BE NEW AND SHALL BEAR THE REGISTERED UL MARK. WORK SHALL CONFORM WITH THE NATIONAL FIRE PROTECTION ASSOCIATION STANDARD 70 (NEC). THE NATIONAL ELECTRICAL CODE (NEC), AND APPLICABLE FEDERAL, STATE AND LOCAL CODES. CONTRACTOR SHALL SECURE PERMITS AND PAY THE FEES REQUIRED TO CARRY OUT HIS WORK. THE CONTRACTOR SHALL FURNISH COPIES OF CERTIFICATES AND PERMITS TO THE ARCHITECT.

THE DRAWINGS AND SPECIFICATIONS INDICATE THE INTENT OF THE DESIGN AND SHALL BE CONSIDERED AS DIAGRAMMATIC ONLY. EXACT LOCATIONS FOF OUTLETS AND EQUIPMENT SHALL BE DETERMINED AT THE SITE AS WORK PROGRESSES. DIMENSIONS AND CONDITIONS SHALL BE CHECKED AND VERIFIED BY THE CONTRACTOR AT THE SITE. FINAL WORK SHALL BE DOCUMENTED ON AS

BUILT RECORD DRAWINGS. 3. PIPING, CONDUITS AND EQUIPMENT OF ALL TRADES SHALL BE PROPERLY COORDINATED AND SET TO MAINTAIN THE CLEARANCES REQUIRED BY APPLICABLE FEDERAL, STATE AND LOCAL CODES.

4. CONDUIT RUNS CROSSING EXPANSION JOINTS SHALL HAVE EXPANSION OR EXPANSION DEFLECTION TYPE FITTINGS AS REQUIRED. VERIFY EXISTING JOINTS BY FIELD MEASUREMENTS. 5. RACEWAYS AND CABLE SHALL BE RUN CONCEALED IN FINISHED SPACES UNLESS OTHERWISE NOTED.

6. LOAD CENTERS, PANELBOARDS AND SWITCHBOARDS SHALL BE PROVIDED WITH DEDICATED SPACE EXTENDING FROM THE FLOOR TO THE STRUCTURAL CEILING WITH A WIDTH AND DEPTH THAT OF THE EQUIPMENT INCLUDING ANY ADDITIONAL SPACE DESCRIBED IN OF THE NEC. NO PIPING, DUCTS OR EQUIPMENT FOREIGN TO THE ELECTRICAL EQUIPMENT OR ARCHITECTURAL APPURTENANCES SHALL BE PERMITTED TO BE INSTALLED IN, ENTER OR PASS THROUGH SUCH SPACE.

7. WIRING DEVICES SHALL BE MOUNTED IN ACCORDANCE WITH THE LATEST REQUIREMENTS OF THE ARCHITECTURAL BARRIERS BOARD. 8. PANELBOARD SHALL BE MOUNTED SO THAT THE DISTANCE FROM THE TOP CIRCUIT BREAKER OPERATING HANDLE TO THE FLOOR SHALL NOT

9. ALL RECEPTACLES INSTALLED IN UNFINISHED AREAS SHALL BE GFI TYPE, MOUNTED 4'-0" ABOVE FINISHED FLOOR. 10. EXIT SIGNS SHALL BE UNSWITCHED.

11. ALL BRANCH CIRCUITS (LIGHTING AND POWER) SHALL HAVE A DEDICATED NEUTRAL CONDUCTOR. COMMON NEUTRALS WILL NOT BE ALLOWED.

12. RECEPTACLES, SWITCHES, LIGHTING FIXTURES, SMOKE DETECTORS, ETC. INDICATE QUANTITY, EXACT LOCATIONS OF DEVICES SHALL BE DETERMINED IN THE FIELD AND COORDINATE WITH ARCHITECTURAL DRAWINGS. 13. OUTDOOR ELECTRICAL EQUIPMENT SHALL BE NEMA 3R TYPE, UNLESS OTHERWISE NOTED.

14. MOUNTING HEIGHTS SHALL BE AS INDICATED ON MOUNTING HEIGHT DETAIL 15. CONTRACTOR SHALL VERIFY ALL DOORS SWINGS BEFORE INSTALLING 16. FOR EXACT LOCATION OF LIGHTING FIXTURES SEE REFLECTED CEILING PLAN DRAWINGS. FOR MOUNTING HEIGHT OF UNDER-COUNTER LIGHTING

FIXTURES AND OTHER TASK LIGHTING, REFER TO ARCHITECTURAL ELEVATION DRAWINGS. 17. ELECTRICAL CONTRACTOR IS TO COORDINATE THE EXACT LOCATION OF LIGHTING FIXTURES IN MECHANICAL AND STORAGE AREAS WITH OTHER

18. FOR EXACT LOCATION OF MECHANICAL EQUIPMENT (AC UNITS, FANS, PUMPS, ETC.) REFER TO RESPECTIVE TRADES DRAWINGS. FOR ELECTRICAL INFORMATION, REFER TO MEP COORDINATION SCHEDULE 19. CURRENT CARRYING MATERIAL USED SHALL BE COPPER, INCLUDING PANELBOARD BUS MATERIALS AND TRANSFORMER WINDINGS. 20. FURNISH GROUNDING/ BONDING BUSHINGS ONTO ALL CONDUIT

21. ALL GROUND CONDUCTORS SHALL BE GREEN, ISOLATED GROUND CONDUCTORS SHALL BE GREEN/ YELLOW STRIPPED, AND NEUTRAL

ENTERING/LEAVING BOXES.

22. UNLESS NOTED OTHERWISE, ALL DATA AND TELEPHONE CABLING IS BY OTHERS. ELECTRICAL DRAWINGS PROVIDE RACEWAY SYSTEMS ONLY AND INDICATE TEL/DATA OUTLET CONFIGURATIONS FOR REFERENCE ONLY. 23. MODIFICATIONS TO THE EXISTING FIRE ALARM SYSTEM SHALL BE COORDINATED WITH THE FIRM WHO HOLDS THE EXISTING SYSTEM MAINTENANCE CONTRACT. THE FIRM WHO HOLDS THE EXISTING SYSTEM MAINTENANCE CONTRACT SHALL MAKE ALL FINAL CONNECTIONS. AND PERFORM ALL PROGRAMMING AND TESTING. ALL COSTS ASSOCIATED WITH FINAL CONNECTIONS, PROGRAMMING AND TESTING SHALL BE INCLUDED UNDER THIS CONTRACT AND SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR.

24. THE ELECTRICAL CONTRACTOR SHALL CARRY ALL COSTS ASSOCIATED WITH DISABLING THE CONNECTIONS TO THE EXISTIGN MUNICIPAL LOOP DURING FINAL CONNECTIONS AND TESTING AND SHALL CARRY COSTS FOR RECONNECTION OF LOOP.

25. WHERE PANELS ARE INDICATED TO BE RELOCATED, THE ELECTRICAL CONTRACTOR SHALL TRACE OUT EACH CIRCUIT TO DETERMINE WHAT CIRCUITS FEED AREAS OUTSIDE THE SCOPE OF WORK. CIRCUITS WHICH MUST BE MAINTAINED ARE TO BE RE-ROUTED TO THE NEW PANEL LOCATION BY PROVIDING AN ADEQUATELY SIZED PULL BOX AND SPLICING AND EXTENDING THE CONDUCTORS

## PUBLIC ADDRESS SYSTEM LEGEND

SPEAKER - CEILING OR WALL MOUNTED RESPECTIVELY SPEAKER - BI-DIRECTIONAL WALL MOUNTED VOLUME CONTROL UNIT -WALL MOUNTED 48" AFF

MICROPHONE OUTLET - WALL MOUNTED 18" AFF, UNLESS NOTED OTHERWISE

"C" - DENOTES FLUSH CEILING MOUNTED "F" - DENOTES FLUSH FLOOR MOUNTED PUBLIC ADDRESS SYSTEM AMPLIFIER "BA" - DENOTES BOOSTER AMPLIFIER

# **ELECTRICAL DRAWING LIST**

GROUNDING LEGEND

GROUNDING COUNTERPOISE - (3) COPPER GROUND RODSAT

GROUNDING CONDUCTOR; 1/0 CU GND MINIMUM - UNLESS

GROUND BAR - 2"H x 1/4" THICK x 18"L. MOUNTED 24" AFF WITH 2" SPACE BETWEEN GROUND BUS AND WALL

GROUNDING ELECTRODE CONDUCTOR OF SEPARATELY

DRAWING TITLE E000 ELECTRICAL LEGEND E102 ELECTRICAL DEMOLITION PLAN E202 ELECTRICAL LIGHTING PLAN E302 ELECTRICAL POWER PLAN

E402 ELECTRICAL FIRE ALARM PLAN

NOTED OTHERWISE

DERIVED SYSTEM.

**GROUND ROD** 

E600 ELECTRICAL DETAILS

—GND—

E500 ELECTRICAL RISERS AND SCHEDULES

"XR" EXISTING ELECTRICAL DEVICE SHALL BE REMOVED AND RELOCATED

"XL" EXISTING ELECTRICAL DEVICE INDICATED IN NEW LOCATION EXISTING ELECTRICAL DEVICE AND COVER PLATE ONLY SHALL BE REMOVED AND REPLACED WITH NEW; MAINTAIN EXISTING BOX,

EXISTING ELECTRICAL DEVICE SHALL BE MAINTAINED

X XR XL XN E

. REFER TO THE ARCHITECTURAL DRAWINGS FOR THE FULL EXTENT OF THE SCOPE OF DEMOLITION. DISCONNECT AND MAKE SAFE ALL ELECTRICAL EQUIPMENT IDENTIFIED FOR REMOVAL ON THE ARCHITECTURAL, HVAC, PLUMBING AND FIRE PROTECTION PLANS, THE ELECTRICAL SCOPE MAY EXTEND BEYOND THE AREA DEFINED BY THE ARCHITECTURAL DEMOLITION LIMITS TO FULLY COMPLY WITH THE VARIOUS REQUIREMENTS DEFINED BY THESE NOTES.

2. THE ELECTRICAL DEMOLITION PLANS INDICATE THE GENERAL INTENT AND ARE NOT INTENDED TO SHOW ALL COMPONENTS AND ITEMS TO BE REMOVED OR RETAINED. THE ELECTRICAL CONTRACTOR SHALL VISIT THE SITE PRIOR TO SUBMISSION OF THIER BID TO BECOME FAMILIAR WITH THE ACTUAL WORKING CONDITIONS AND EXTENT OF WORK. DEVICES AND EQUIPMENT LOCATED ON WALLS AND/OR CEILINGS DESIGNATED TO BE REMOVED SHALL BE DISCONNECTED AND MADE SAFE. THE ELECTRICAL CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER'S REPRESENTATIVE OF ANY UNANTICIPATED OR HIDDEN CONDITIONS ENCOUNTERED DURING DEMOLITION.

. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR OF ALL SYSTEMS OR BUILDING COMPONENTS DAMAGED DURING THE EXECUTION OF THE WORK. DAMAGE SHALL INCLUDE, BUT NOT BE LIMITED TO THE DESTRUCTION OR DISPOSAL OF ITEMS INTENDED TO REMAIN OR BE

**DEMOLITION GENERAL NOTES** 

4. THE ELECTRICAL CONTRACTOR SHALL CIRCUIT TRACE AND LABEL ALL EXISTING BRANCH CIRCUITS AND FEEDERS WITHIN OR ASSOCIATED WITH THE AREA OF DEMOLITION SCOPE PRIOR TO DE-ENERGIZING AND DISCONNECTION. ALL CIRCUITS WITHIN PANELBOARDS IDENTIFIED FOR REMOVAL SHALL BE TRACED AND LABELED TO ENSURE THAT NO AREA OUTSIDE THE DEMOLITION SCOPE LIMIT IS AFFECTED.

5. THE ELECTRICAL CONTRACTOR SHALL IDENTIFY ALL BRANCH CIRCUITS FEEDERS AND SYSTEM COMPONENTS WHICH ARE TO REMAIN WITHIN THE AREA OF DEMOLITION SCOPE. THERE SHALL BE NO INTERRUPTION OF SERVICE TO ANY AREA OUTSIDE THE SCOPE LIMITS WITHOUT APPROVAL FROM THE OWNER'S REPRESENTATIVE. EXISTING EQUIPMENT TO REMAIN SHALL BE LEFT IN A CODE COMPLIANT CONDITION.

S. THE ELECTRICAL CONTRACTOR SHALL DE-ENERGIZE AND REMOVE ALL CONDUCTORS AND RACEWAYS TO THEIR POINTS OF ORIGIN WITHIN THE AREA OF DEMOLITION SCOPE. ITEMS IDENTIFIED FOR DEMOLITION SHALL NOT BE ABANDONED IN PLACE. RACEWAYS THAT ENTER MASONRY WALLS AND FLOORS SHALL BE CUT FLUSH AT THE SURFACE FOR PATCHING BY OTHERS. ALL CIRCUIT BREAKERS ASSOCIATED WITH THE DEMOLITION SHALL BE DE-ENERGIZED AND LABELED SPARE.

. THE ELECTRICAL CONTRACTOR SHALL TEMPORARILY SUPPORT ALL ITEMS TO REMAIN THAT ARE AFFECTED BY THE DEMOLITION OF BUILDING STRUCTURAL COMPONENTS (WALLS, CEILINGS, ETC.). TEMPORARILY SUPPORTED ITEMS SHALL BE PERMANENTLY SUPPORTED AND INSTALLED WHEN FINALIZED STRUCTURES ARE IN PLACE.

8. ALL REMOVED ITEMS SHALL BE LEGALLY DISPOSED OF UNLESS IDENTIFIED FOR REUSE. THE OWNER'S REPRESENTATIVE SHALL INSPECT ALL RETAINED ITEMS PRIOR TO PLACEMENT IN THE INDENTIFIED STORAGE LOCATION BY THE ELECTRICAL CONTRACTOR.

9. THE EXISTING FIRE ALARM SYSTEM SHALL REMAIN FULLY FUNCTIONAL DURING THE ENTIRE DEMOLITION AND CONSTRUCTION PERIOD. REUSE OF EXISTING FIRE ALARM RACEWAYS SHALL NOT BE ALLOWED. ALL REQUIRED SYSTEM SHUTDOWNS SHALL BE COORDINATED WITH AND APPROVED BY THE OWNER'S REPRESENTATIVE AND THE AUTHORITY HAVING JURISDICTION. DEMOLITION OF THE EXISITING SYSTEM SHALL NOT COMMENCE UNTIL THE NEW SYSTEM HAS BEEN COMPLETELY INSTALLED, TESTED AND APPROVED BY THE AUTHORITY HAVING JURISDICTION.

10. ALL DEMOLITION SCOPE ASSOCIATED WITH LOW VOLTAGE SYSTEMS INCLUDING BUT NOT LIMITED TO TELEPHONE, DATA, SECURITY, PAGING, CCTV, ETC. SHALL BE INCLUDED IN THIS CONTRACT.

I1. REMOVED FLUORESCENT AND HID LAMPS AND BATTERIES SHALL BE RECYCLED BY A FACILITY APPROVED BY THE OWNER'S REPRESENTATIVE. A UNIFORM HAZARDOUS WASTE MANIFEST SHALL BE PREPARED FOR ALL DISPOSALS AND RETURNED WITH ALL APPLICABLE SIGN-OFFS PRIOR TO APPLICATION FOR FINAL PAYMENT.

12. ALL BALLASTS IN LIGHTING FIXTURES TO BE DISPOSED SHALL BE VERIFIED TO BE PCB FREE. ALL BALLASTS MANUFACTURED PRIOR TO 1979 AND NOT LABELED AS PCB FREE SHALL BE CONSIDERED TO CONTAIN PCBs. PROVIDE WRITTEN REPRESENTATION TO THE OWNER'S REPRESENTATIVE THAT CONFIRMS PCB FREE WASTE. WHERE PCB FREE WASTE CANNOT BE VERIFIED, BALLASTS SHALL BE RECYCLED BY A FACILITY APPROVED BY THE OWNER'S REPRESENTATIVE, WITH PCB COMPONENTS ELIMINATED BY A HIGH TEMPERATURE INCINERATION. A UNIFORM HAZARDOUS WASTE MANIFEST SHALL BE PREPARED FOR ALL DISPOSALS AND RETURNED WITH ALL APPLICABLE SIGNOFFS PRIOR TO APPLICATION FOR FINAL PAYMENT. ALL HANDLING SHALL CONFORM TO EPA REQUIREMENTS. PROVIDE BREAKOUT COST FOR THIS

### NURSE CALL SYSTEM LEGEND

NURSE CALL

"1B"- DENOTES SINGLE BED STATION WITH WALL SPEAKER AND PATIENT CONTROL UNIT.

"T"- DENOTES TOILET/ DRESSING ROOM STATION, WALL MOUNTED WITH PULLCORD. "S"- DENOTES SHOWER STATION, WALL MOUNTED

WITH PULLCORD. "PB"- DENOTES PULL CORD TYPE PATIENT BED STATION

"SD"- DENOTES STAFF/DUTY STATION "SA"- DENOTES NURSE CALL STAFF ASSIST STATION "PFH"- DENOTES PUSH FOR HELP STATION "CB"- DENOTES CODE BLUE STATION

"EC"- DENOTES NURSE CALL EQUIPMENT CABINET "MS"- DENOTES NURSE CALL MASTER STATION

"A"- DENOTES NURSE CALL ANNUNCIATOR STATION "CBA"- DENOTES CODE BLUE ANNUNCIATOR "P"- DENOTES PSYCHIATRIC PATIENT STATION

CEILING MOUNTED "PS"- DENOTES PSYCHIATRIC BATH/ SHOWER STATION "PT"- DENOTES PSYCHIATRIC TOILET/ DRESSING STATION

"PA"- DENOTES PSYCHIATRIC SPEAKER/MICROPHONE,

DOME LIGHT - CEILING OR WALL MOUNTED RESPECTIVELY "CB"- DENOTES CODE BLUE DOME LIGHT

# SECURITY SYSTEMS LEGEND

"Z"- DENOTES ZONE DOME LIGHT

(J)<sub>CCTV</sub> CLOSED CIRCUIT TELEVISION CAMERA JUNCTION BOX M CCTV CLOSED CIRCUIT TELEVISION MONITOR JUNCTION BOX CARD READER OUTLET BOX

ELECTRO-MAGNETIC DOOR LOCK CONNECTION/ LOCATION ELECTRIC DOOR STRIKE CONNECTION/ LOCATION

DURESS BUTTON LOCATION DOOR SWITCH/ CONTACT CONNECTION/ LOCATION

DOOR RELEASE PUSHBUTTON LOCATION **KEY PAD LOCATION** 

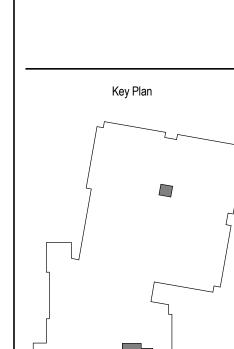
MOTION DETECTOR LOCATION CCTV CAMERA GLASS BREAK DETECTOR CONNECTION/LOCATION

SECURITY INTERCOM LOCATION ALL DOOR CONTROL LOCATIONS SHALL BE COORDINATED WITH FACILITY REPRESENTATIVE PRIOR TO INSTALLATION.

WINDOW CONTACTS CONNECTION/ LOCATION

TYPICAL SECURITY DEVICE NOTE:
MINIMUM REQUIREMENTS FOR EACH DEVICE SHALL BE A BACKBOX AND 3/4"C (EMPTY WITH PULLSTRING) RUN CONCEALED IN WALL INTO CEILING SPACE ABOVE AND TERMINATING ABOVE ACCESSIBLE CEILING. TERMINATE WITH BELL END BUSHING. REFER TO FLOOR PLANS AND DETAILS FOR ADDITIONAL REQUIREMENTS. COORDINATE EXACT REQUIREMENTS WITH SECURITY AND HARDWARE VENDORS.

THIS IS A STANDARD SYMBOL LIST. ALL DEVICE SYMBOLS AND ABBREVIATIONS MAY NOT NECESSARILY APPEAR ON THE FLOOR PLANS OR DETAIL SHEET. ONLY THOSE SYMBOLS INDICATED ON THE FLOORS PLANS ARE USED AND OTHERS SHOULD BE DISREGARDED.



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DESCRIPTION PERMIT SET



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**ELECTRICAL LEGEND**