ABBF	REVIATIONS	WIRING	LIGHTING
A, AMPS AC ADA AFF AFG AHU AIC AL AWG BOCT /C C C AB C C AB C C AB C C AB C C AB C C AB C C AB C C AB C C AB C C AB C C AB C C AB C C AB C C AB C C AB C C AB C C AB C C AB C C AB C C AB C C AB C C AB C C AB C C AB C C AB C C AB C C AB C C AB C C AB C C AB C C AB C C AB C C AB C C AB C C AB C C AB C C AB C C AB C C AB C C AB C C AB C C AB C C AB C C AB C C AB C C AB C C AB C C AB C C AB C C AB C C AB C C AB C C AB C C AB C C AB C C AB C C AB C C AB C C AB C C AB C C AB C C AB C C AB C C AB C C AB C C AB C C AB C C AB C C AB C C AB C C AB C C AB C C AB C C AB C C AB C C AB C C AB C C AB C C AB C C AB C C AB C C AB C C AB C C AB C C A C A	AMPERES ALTERNATING CURRENT OR ABOVE COUNTER, 42" AFF UNLESS OTHERWISE NOTED AMERICANS WITH DISABILITIES ACT ABOVE FINISHED GRADE AR HANDLING UNIT AMPERE INTERRUPTING CURRENT ALUMINUM AMERICAN WIRE GUAGE BOTTOM OF CABLE TRAY ONE CONDUCTOR CONDUIT CABINET CIRCUIT BREAKER CIRCUIT BREAKER CIRCUIT BREAKER COPPER DIRECT CURRENT DIAMETER DISCONNECT DOUBLE-POLE, SINGLE-THROW DOUBLE-POLE, SINGLE-THROW DUBLE-POLE, SINGLE-THROW DUBLE-POLE, SINGLE-THROW DUBLE-POLE, SINGLE-THROW ELECTRICAL METALLIC TUBING ELECTRICAL METALLIC TUBING ELECTRICAL METALLIC TUBING ELECTRIC WATER COOLER FIRE ALARM FIRE ALARM FIRE ALARM FIRE ALARM CONTROL PANEL FULL LOAD AMPS FREQUENCY MODULATION FULL-VOLTAGE, NON-REVERSING GROUND FAULT CIRCUIT INTERRUPTER GOVERNMENT FURNISHED/GOVERNMENT INSTALLED GROUND FAULT RELAY HEATING AIR CONDITIONING REFRIGERATION HIGH INTENSITY DISCHARGE HAND-OFF-AUTOMATIC HORSEPOWER HIGH PRESSURE SODIUM HEIGHT HERTZ HEATING, VENTILATING AND AIR CONDITIONING INTRUSION DETECTION SYSTEM ISOLATED GROUND INCH JUNCTION BOX 1000 CIRCULAR MILS KLOWATT KLOWATT KLOWATT KLOWATT KLOWATT KLOWATT KLOWATT KLOWATT KLOWATT KLOWATT KLOWATT	WIRING A21 EXPOSED UNLESS NOTED OTHERWISE ON PLAN. ARROW INDICATES HOMERUN TO PANEL "A", A21 FLEXIBLE CONDUIT CONNECTION CIRCUIT ABOVE GRADE, 2#12 AND #12 GROUND IN 1/2" CONDUIT, UNLESS NOTED OTHERWISE CIRCUIT BELOW SLAB OR GRADE 2#12 AND #12 GROUND IN 1" CONDUIT, UNLESS NOTED OTHERWISE CONDUIT STUB UP CONDUIT STUB DOWN DIRECT ELECTRICAL CONNECTION TO EQUIPMENT F40N FEEDER DESIGNATION F40N FEEDER DESIGNATION EXTERNIOR SITE CUX EXISTING UNDERGROUND ELECTRICAL EQ EXISTING UNDERGROUND COMMUNICATION EC EXISTING UNDERGROUND COMMUNICATION HIMHEXTH EXISTING OVERHEAD COMMUNICATION	A A A AE I': A ' FIXTURE. LETTER INDICATES TYPE PER THE FIXTURE SCHEDULE, 'E' INDICATES BATTERY BACK-UP, 'NL' DENOTE NIGHT LIGHT AND IS TO ALWAYS OPERATE 'ON'. A AE ND A VALL MOUNTED FIXTURE. LETTER INDICATES TYPE PER THE FIXTURE ON'. ND A WALL MOUNTED FIXTURE. LETTER INDICATES TYPE PER THE FIXTURE ON'. ND A WALL MOUNTED FIXTURE. LETTER INDICATES TYPE PER THE FIXTURE SCHEDULE, 'E' INDICATES BATTERY BACK-UP, 'NL DENOTES NIGHT LIGHT AND IS TO ALWAYS OPERATE 'ON'. C A A MDUSTRIAL FIXTURE. LETTER INDICATES TYPE PER THE FIXTURE SCHEDULE, 'E' INDICATES BATTERY BACK-UP, 'NL DENOTES NIGHT LIGHT AND IS TO ALWAYS OPERATE 'ON'. C A AE WALL MOUNTED FIXTURE. LETTER INDICATES TYPE PER FIXTURE SCHEDULE, 'E' INDICATES TYPE PER FIXTURE SCHEDULE, 'E' INDICATES TYPE PER FIXTURE SCHEDULE, 'E' INDICATES BATTERY BACK-UP, 'NL DENOTES TYPE PER FIXTURE. SCHEDULE, 'E' INDICATES BATTERY BACK-UP AE WALL MOUNTED ARACHOR ARE ONOTES INDICATEQ, CLONE ON TES TY
LIU LTG MCA MCB MCC MGB MH MIN MLO MTD MTR NC NEC NEMA NFPA NIC NF NO NO. NTS DC DH DS DSP PF PIR QTY RLA RGS RSP SE	LIGHT INTERFACE UNIT LIGHTING MINIMUM CIRCUIT AMPACITY MAIN CIRCUIT BREAKER MOTOR CONTROL CENTER MAIN GROUNDING BAR MANHOLE, METAL HALIDE MINIMUM MAIN LUGS ONLY MOUNTED MAIN TELECOMM ROOM NORMALLY CLOSED NATIONAL ELECTRICAL CODE NATIONAL ELECTRICAL CODE NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION NATIONAL FIRE PROTECTION ASSOCIATION NEUTRAL NOT IN CONTRACT NON FUSED NORMALLY OPEN NUMBER NOT TO SCALE ON CENTER OVERHEAD OCCUPANCY SENSOR OUTSIDE PLANT POWER FACTOR PHASE PASSIVE INFRARED PAIR QUANTITY RUNNING LOAD AMPS RIGID GALVANIZED STEEL REMOTE POWER SUPPLY SERVICE ENTRANCE	UPNEW UNDERGROUND PRIMARYUSNEW UNDERGROUND SECONDARYUCNEW UNDERGROUND COMMUNICATIONSUANEW UNDERGROUND AIRFIELD LIGHTING CIRCUSEXISTING SECTIONALIZER CABINETTEXISTING PAD MOUNTED TRANSFORMERTNEW PAD MOUNTED TRANSFORMERHNEW ELECTRICAL HANDHOLEMCCEXISTING COMMUNICATIONS MANHOLEMCEXISTING POLE MOUNTED LIGHTING FIXTURE-NEW POLE MOUNTED LIGHTING FIXTURE	W CORNER MOUNTED OCCUPANCY SENSOR, DUAL- TECHNOLOGY IT O ID h HANGAR BAY OCCUPANCY SENSOR MOUNTED TO TRUSSES, DUAL-TECHNOLOGY IC LIGHTING CONTACTOR ICR# LIGHTING CONTROL SWITCH DS DAYLIGHT SENSOR POWER E ID FLUSH FLOOR MOUNTED NEMA 5-20 DUPLEX RECEPTACLE ID FLUSH FLOOR MOUNTED NEMA 5-20 QUAD RECEPTACLE ID FLUSH FLOOR MOUNTED NEMA 5-20 QUAD RECEPTACLE ID FLUSH FLOOR MOUNTED NEMA 5-20 QUAD RECEPTACLE
SM SPD SPEC SS TB TB TO TP TO GB J/F J/G J/F J/G J/F J/G J/F J/G J/F J/G J/F J/S JH JL JNO JTP JPS (/A (FD /VD V V V V SF/CI SF/CI	SINGLE MODE SURGE PROTECTION DEVICE SPECIFICATION STAINLESS STEEL, SANITARY TELEPHONE TERMINAL BOARD TELECOMM ROOM TELECOMM ROOM TELECOMMUNICATION MAIN GROUNDING BAR TELECOMMUNICATIONS GROUNDING BAR TELECOMMUNICATIONS GROUNDING BAR UNDERFLOOR UNDERGROUND UNDERGROUND UNDERSLAB UNIT HEATER UNDERWRITERS LABORATORIES, INC. UNLESS NOTED OTHERWISE UNSHIELDED TWISTED PAIR UNINTERRUPTIBLE POWER SUPPLY VOLTS VOLT-AMPERE VARIABLE FREQUENCY DRIVE VARIABLE FREQUENCY DRIVE VARIABLE FREQUENCY DRIVE VARIABLE VOLUME DAMPER WATT, WIDTH WEATHER PROOF TRANSFORMER GOVERNMENT FURNISHED GOVERNMENT INSTALLED GOVERNMENT FURNISHED CONTRACTOR INSTALLED	Image: Second state in the second s	 WALL MOUNTED SIMPLEX RECEPTACLE, VERTICALLY MOUNTED 18' AFF, UNLESS OTHERWISE NOTED. NEMA 5-20R, 20A, 125V NEMA 5-20 DUPLEX RECEPTACLE MOUNTED 18' AFF UNLESS NOTED OTHERWISE. (AC INDICATES ABOVE COUNTER) DENOTES RECEPTACLE HORIZONTALLY MOUNTED 6'' ABOVE COUNTERTOP OR BACKSPLASH GFI WP WALL MOUNTED DUPLEX RECEPTACLE, VERTICALLY MOUNTED 18'' AFF, UNLESS OTHERWISE NOTED. "WP' DENOTES WEATHERPROOF, "GFI' DENOTES GROUND FAULT INTERRUPTING. NEMA 5-20R, 20A, 125V JUNCTION BOX WALL MOUNTED 48'' AFF. OCR CORD REEL, MOUNTED TO EXPOSED STRUCTURE OR CEILING. ■ ELECTRONIC BIRD EXPELLER, MOUNTED TO EXPOSED STRUCTURE ■ 28VDC RECEPTACLE WITH BUILT IN RECTIFIER. VOLTEQ MODEL HY3050EX OR APPROVED EQUAL. PROVIDE INPUT POWER VIA WALL MOUNTED DEDICATED RECEPTACLE. 28V DC RECEPTACLE ■ 28V DC RECEPTACLE ■ 120VAC MULTIOUTLET SURFACE RACEWAY WITH SIX (6) DUPLEX OUTLETS PER DESK OR WORKSTATION. PROVIDE DY FURNITURE MANUFACTURER AND WITH HINAL FURNITURE LAYOUT. ■ 120VAC MULTIOUTLET SURFACE RACEWAY WITH SIX (6) DUPLEX OUTLETS PER DESK OR WORKSTATION. PROVIDE DY FURNITURE MANUFACTURER AND WITH HINAL FURNITURE LAYOUT. ■ DUPLEX RECEPTACLE

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POWER (CONTINUED) ELECTRICAL EQUIPMENT FLOOR MOUNT SWITCHBOARD HATCH PATTERN INDICATES CLEAR SPACE IN FRONT OF PANEL OR SWITCHBOARD LADDER STYLE CABLE TRAY VFD VARIABLE FREQUENCY DRIVE SURFACE MOUNTED PANELBOARD RECESSED MOUNTED PANELBOARD | T | DRY-TYPE TRANSFORMER PC PHOTOCONTROL тс TIMECLOCK MOTORS AND CONTROLS (M)MOTOR, SIZE AS SHOWN. UNFUSED DISCONNECT SWITCH. 30/3/NF UNO. UNFUSED DISCONNECT SWITCH WITH LOCKING PLUG/RECEPTACLE. SIZE AS SHOWN FUSED DISCONNECT SWITCH. SIZE FUSES FOR EQUIPMENT BASED ON MANUFACTURERS RECOMMENDATIONS COMBINATION MOTOR CIRCUIT PROTECTION SWITCH AND MOTOR

- STARTER, NEMA STARTER SIZE AS NOTED
- $\$ Motor Rated, 20 AMP, 125 Volt toggle switch

GENERAL NOTES

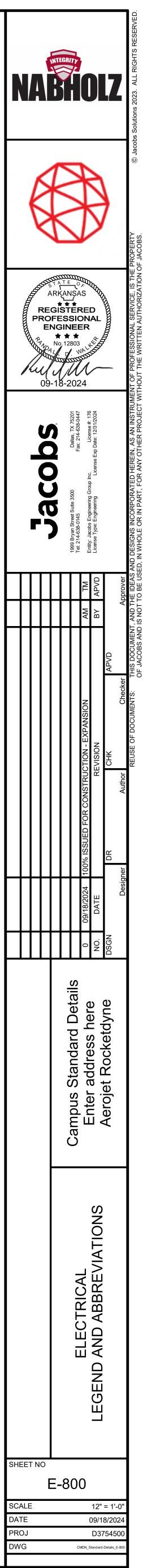
- A. PROVIDE CIRCUITS SIZED AS 2#12 AWG, 1#12 GROUND, 1/2" CONDUIT FOR SINGLE PHASE LOADS, AND 3#12 AWG, 1#12 AWG GROUND, 1/2" CONDUIT FOR THREE PHASE LOADS UNLESS NOTED OTHERWISE.
- UNLESS NOTED OTHERWISE, ALL CONDUCTORS ARE TYPE THWN, THHN, RATED FOR 75 В. DEGREE C. PROVIDE ALL CIRCUIT BREAKERS AND ELECTRICAL EQUIPMENT TERMINATIONS RATED FOR 75 DEGREES C.
- THREE PHASE CONDUCTORS (CONNECTED TO DIFFERENT PHASES) MAY SHARE A SINGLE NEUTRAL FOR LIGHTING CIRCUITS ONLY; PROVIDED THAT THEY HAVE A COMMON TRIP. PROVIDE ALL OTHER SINGLE PHASE CIRCUITS WITH A SEPARATE NEUTRAL FOR EACH PHASE CONDUCTOR.
- CIRCUITS ARE SIZED ASSUMING NO MORE THAN THREE CURRENT CARRYING CONDUCTORS IN A SINGLE CONDUIT. FOR CONDUITS CONTAINING MORE THAN THREE, D. PROVIDE APPROPRIATE DERATING OF CONDUCTORS PER NEC. E. REFER TO ARCHITECTURE FOR PENETRATION DETAIL THROUGH THE BUILDING ENVELOPE.
- PROVIDE U.L. RATED THROUGH-PENETRATION FIRE STOP SYSTEMS AT ALL PENETRATIONS BETWEEN THE OFFICE AND INDUSTRIAL SHOP AREA.
- PROVIDE ALL POWER WIRING UP TO AND INCLUDING ALL FREESTANDING AND/OR SYSTEMS G FURNITURE DESKTOPS AS APPLICABLE, THE SERVICES TO INSTALL THE CABLE AND FACEPLATES IN THE FURNITURE, THE COORDINATION WITH THE FURNITURE VENDOR/INSTALLER TO ACCOMPLISH THE INSTALLATION AT THE APPROPRIATE TIME, AND ALL THE FINAL POWER CONNECTIONS TO THE BUILDING UNDER THIS CONTRACT.
- PROVIDE CONDUITS INTO HAZARDOUS AREAS IN ACCORDANCE WITH NFPA 70, NFPA 495, AND DOD 4145.26M REQUIREMENTS FOR EQUIPMENT AND CONDUIT INSTALLATION.
- PROVIDE IDENTIFICATION LABELS WITH CIRCUIT NUMBER AND PANEL NAME FOR JUNCTION BOXES, RECEPTACLES, LIGHT SWITCHES, DISCONNECTS, CONTROLLERS, FIRE ALARM, SECURITY, AND OTHER EQUIPMENT WITH ELECTRICAL CIRCUIT CONNECTION.

ONE-LINE AND RISER DIAGRAMS

T1

тт 45КVA	TRANSFORMER, DESIGNATION AND RATINGS AS NOTED (DELTA- CONNECTED PRIMARY AND WYE-CONNECTED SECONDARY) UNLESS OTHERWISE NOTED.			
800A	SWITCH, RATINGS AS SHOWN, 3 POLE UNLESS OTHERWISE NOTED			
<u>100A</u> 3P	CIRCUIT BREAKER, TRIP RATING AS SHOWN, 3 POLE UNLESS OTHERWISE NOTED			
(L,S,I,G)	DENOTES CIRCUIT BREAKER WITH ADJUSTABLE TRIPPING CHARACTERISTICS AS NOTED BELOW: L=LONG, S=SHORT, I=INSTANTENOUS, G=GROUND FAULT			
ST	SHUNT TRIP			
M	ELECTRONIC POWER METER			
	GROUND CONNECTION			
• • 1 ^{800A}	LIGHTNING ARRESTOR			
O HOA	HAND OFF AUTO CONTROL			
SPD	SURGE PROTECTION DEVICE			
REFERENCE KEY				
RE:2/EP101	— REFER TO — DRAWING/DETAIL NUMBER 2			

SHEET NUMBER ON WHICH DETAIL IS -DRAWN



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