

ELECTRICAL SPECIFICATIONS

GENERAL NOTES

NOTICE
THESE DRAWINGS ARE SUBJECT TO APPROVAL BY THE BUILDING DEPARTMENT, FIRE MARSHAL, UTILITY COMPANY AND OTHER AUTHORITIES HAVING JURISDICTION (AHJ). BY THE ACT OF SUBMITTING A BID PROPOSAL FOR WORK, THE CONTRACTOR INDICATES THAT HE OR SHE HAS REVIEWED THE PLANS THOROUGHLY AND ACCEPTED FULL RESPONSIBILITY OF PLAN CORRECTIONS AND ASSOCIATED CONSTRUCTION COSTS REQUIRED BY AHJ.

PART 1 - GENERAL	
1.01	COORDINATION OF TRADES: SCHEDULE AND COORDINATE WORK WITH THAT OF OTHER DIVISIONS AND SECTIONS.
1.02	GUARANTEE IN WRITING THE ELECTRICAL INSTALLATION, AND ALL WORK UNDER THIS SECTION, FOR A PERIOD OF ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE BY THE OWNER AGAINST ALL EVIDENCE OF IMPERFECT WORKMANSHIP OR FAILURE OR MALFUNCTION OF MATERIALS.
PART 2 - PRODUCTS	
2.01	MATERIALS AND EQUIPMENT
A.	MATERIAL FURNISHED UNDER THIS CONTRACT, UNLESS OTHERWISE NOTED, SHALL BE NEW, FREE FROM DEFECTS AND SHALL CONFORM WITH THE STANDARDS OF UL.
B.	VOLTAGE, AMPERE, AND OTHER RATINGS OF EQUIPMENT SHALL BE SUITABLE FOR USE INTENDED. DISCONNECT SWITCHES SHALL BE PROPERLY HORSEPOWER RATED AND SUITABLE FOR VOLTAGE AND AMPERE RATING OF LOAD.
C.	THE DRAWINGS GENERALLY INDICATES THE RACEWAY SIZE, THE NUMBER, SIZE, AND INSULATION TYPE OF CONDUCTORS TO BE PROVIDED AND INSTALLED, WHERE THESE ITEMS DO NOT MEET MINIMUM APPLICABLE CODES, FOR EQUIPMENT BEING SERVED, COMPLY AS REQUIRED AT NO ADDITIONAL COST.
2.02	RACEWAYS
A.	GALVANIZED RIGID CONDUIT (GRC); INCLUDING ELBOWS AND COUPLINGS.
B.	INTERMEDIATE METAL CONDUIT (IMC); INCLUDING ELBOWS AND COUPLINGS.
C.	ELECTRIC METALLIC TUBING (EMT) WITH FITTINGS OF PRESSED STEEL OR MALLEABLE IRON, COMPRESSION TYPE (IN WET AREAS ONLY) WITH INSULATED THROATS.
D.	RIGID NON-METALLIC CONDUIT: (PVC) U.L. LABELED SCHEDULE 40 P.V.C.
2.03	DEVICE AND JUNCTION BOXES: INCLUDE PLASTER RINGS, COVERS, AND KO SEALS AS REQUIRED.
2.04	WIRE AND CABLE: UNLESS OTHERWISE NOTED, WIRE AND CABLE SHALL BE SOFT DRAWN, ANNEALED COPPER. WIRE SIZES NO. 8 AND LARGER AND CONDUCTORS SERVING MOTORS AND SUBJECT TO VIBRATIONS SHALL BE STRANDED CABLE. INSULATION TO BE THWN/THHN, JACKETED 90C INSULATED WIRE. PROVIDE WIRE COLOR IDENTIFICATION: NEUTRAL WIRE - WHITE, LIVE WIRE - BLACK, RED, BLUE ON 120/208 VOLT SYSTEM, NEUTRAL WIRE - GREY, LIVE WIRE - BROWN ORANGE, YELLOW OR 277/480 VOLT SYSTEM, GROUND - GREEN.
2.05	ADDED PANELS TO BE PANELBOARDS - LOAD CENTERS ARE NOT ACCEPTABLE UNLESS SPECIFICALLY APPROVED.
2.06	SERVICE ENTRANCE AND DISTRIBUTION GEAR BY G.E., SQUARE "D" OR CUTLER HAMMER OR SIEMENS ONLY. INTERIOR PANELBOARDS SHALL BE RECESSED WITH FLANGED/REMOVABLE SCREW-ON COVER. SURFACE MOUNTED PANELBOARDS OR HINGED/FLUSH COVERS ARE NOT ALLOWED.
2.07	SWITCHBOARDS: COPPER BUSSING WITH FULL CAPACITY NEUTRAL.
2.11	120/208 VOLT AND 277/480 VOLT PANELBOARDS: 3 PHASE, 4 WIRE, COPPER BUS, COMPOSED OF AN ASSEMBLY OF BOLT-IN-PLACE MOLDED CASE CIRCUIT BREAKERS WITH THERMAL AND MAGNETIC TRIP AND TRIP FREE POSITION SEPARATE FROM EITHER ON OR OFF POSITIONS.
2.13	SAFETY SWITCHES: FUSED, HEAVY DUTY, HORSEPOWER RATED.
2.14	STARTERS, CONTACTORS AND CONTROL DEVICES: PROVIDE AS SHOWN AND AS REQUIRED BY CODE. FURNISH COMPLETE WITH PILOT LIGHTS, AUXILIARY CONTACTS, PUSH BUTTONS, HAND-OFF-ON SWITCHES, CONTROL DEVICES, AND OVERLOAD RELAYS. THERMAL OVERLOADS TO BE SIZED PER MANUFACTURERS RECOMMENDATIONS. AMBIENTLY COMPENSATE ALL HEATERS EXPOSED TO HIGH TEMPERATURE OR INSTALLED OUTSIDE AS NEEDED.
2.16	NAMEPLATES: PROVIDE BLACK LAMICOID NAMEPLATES WITH 3/16" HIGH WHITE ENGRAVED LETTERS ON PANELS, SWITCHBOARDS, MAINS AND SUBMAINS, DISTRIBUTION EQUIPMENT, REMOTE SAFETY SWITCHES, CIRCUIT BREAKERS, TIME SWITCHES, CONTACTORS, AND STARTERS.
2.17	WIRING DEVICES
A.	HUBBELL OR COMPARABLE LEVITON OR BRYANT: WHITE AND GREY IN COLOR - AS NOTED ON DRAWINGS OR PER ARCHITECT. 15 AMP DEVICES ALLOWED ONLY WHEN SPECIFICALLY DENOTED ON ELECTRICAL CONSTRUCTION DRAWINGS.
B.	TOGGLE SWITCHES: SINGLE POLE - HUBBELL 1221- 20A, 120/277V, THREE WAY - HUBBELL 1223- 20A, 120/277V, FOUR WAY - HUBBELL 1224- 20A, 120/277V.
C.	RECEPTACLES: DUPLEX GROUNDING TYPE, SPECIFICATION GRADE, 125 VOLT, 20 AMPERES, SINGLE PHASE, HUBBELL NO. 5262 OR COMPARABLE.
D.	GROUND FAULT INTERRUPTER TYPE RECEPTACLE: DUPLEX GROUNDING TYPE, SPECIFICATION GRADE, 125 VOLT, 20 AMPERES, SINGLE PHASE, 5 ma GROUND TRIP, FEED THROUGH CONSTRUCTION.
2.18	DEVICE PLATES: LEXAN (STA-KLEEN), SMOOTH FINISH IN STAINLESS STEEL - AS NOTED ON PLANS. MULTI-GANG OUTLET PLATES SHALL BE USED FOR MULTI-GANG BOXES.
2.19	NOT USED
2.20	LIGHTING FIXTURES
A.	ALL INTERIOR / BUILDING MOUNTED LIGHTING PROVIDED BY PX AND INSTALLED BY E.C.
B.	ALL EXTERIOR SITE LIGHTING IS PROVIDED AND INSTALLED BY E.C.
PART 3 - EXECUTION	
3.01	GENERAL INSTALLATION
A.	THE ENTIRE ELECTRICAL INSTALLATION SHALL BE MADE IN A NEAT, APPROVED, FINISHED, AND SAFE MANNER.
B.	INSPECT AND MAKE TIGHT ALL CONNECTIONS FOR ALL EQUIPMENT, INCLUDING FACTORY CONNECTIONS. TORQUE ALL CONNECTIONS PER MANUFACTURER'S RECOMMENDATIONS.
C.	LIGHTING FIXTURES INSTALLED AND USED FOR LIGHTING DURING CONSTRUCTION SHALL BE RELAMPED WITH NEW LAMPS JUST PRIOR TO FINAL ACCEPTANCE OF THE PROJECT.
D.	INSTALL SEISMIC RESTRAINT DEVICES FOR ALL CEILING MOUNTED EQUIPMENT, I.E. LAY-IN FIXTURES. PROVIDE GRID CLIPS AND #12 SLACK WIRES FROM FIXTURE CORNERS TO STRUCTURE.
3.02	RACEWAYS
A.	INSTALL COMPLETE RACEWAY SYSTEMS FOR ALL ELECTRICAL CONDUCTORS INCLUDING TELEPHONE, SIGNAL, CONTROL, AND OTHER SYSTEMS.
B.	UNLESS OTHERWISE NOTED, INSTALL ALL RACEWAYS CONCEALED. WHERE IT IS NOT FEASIBLE TO CONCEAL RACEWAYS, INSTALL AS DIRECTED BY ARCHITECT.
C.	INSTALL EXPOSED RACEWAYS TO RUN PARALLEL OR AT RIGHT ANGLES TO STRUCTURAL BUILDING LINES WITH NEAT BENDS AND NEATLY OFFSET INTO TERMINATIONS.
D.	IN EMPTY RACEWAY PROVIDE AND INSTALL A NO. 14 NYLON DRAG LINE.
E.	INSTALL RACEWAYS WITH APPROVED HEAVY DUTY SUPPORTS, STRAPS, HANGERS, CONNECTORS, AND COUPLINGS AS REQUIRED TO MAINTAIN AN APPROVED INSTALLATION.
F.	NOT USED
H.	MINIMUM CONDUIT SIZE TO BE 3/4" U.N.O.
3.03	GALVANIZED RIGID CONDUIT (GRC): ALL RACEWAYS SHALL BE GRC EXCEPT AS NOTED. CONDUIT, ELBOWS, AND STANDARD COUPLINGS SHALL BE HOT DIPPED GALVANIZED RIGID STEEL. IF PARTITIONS OR WALLS ARE SOLID CONCRETE OR ARE GROUTED SOLID WITH CONCRETE OR MORTAR, RIGID STEEL CONDUIT SHALL BE USED.
3.04	INTERMEDIATE METAL CONDUIT (IMC): IMC RACEWAY AND APPROVED FITTINGS WHERE PERMITTED BY APPLICABLE CODES AND REGULATIONS MAY BE USED FOR RIGID STEEL CONDUIT, WHERE INSTALLED ABOVE FINISH GRADE AND ABOVE CONCRETE SLABS ON GRADE.
3.05	ELECTRIC METALLIC TUBING (EMT): EMT MAY BE USED WHERE CONCEALED IN AREAS ABOVE CEILINGS, FURRED SPACES, PARTITIONS OR WALLS. ALSO MAY BE EXPOSED, WHEN NOT IN HAZARDOUS AREAS, AREAS SUBJECT TO PHYSICAL DAMAGE, OR WHEN DIRECTLY EXPOSED TO RAIN OR WASH-DOWN.
3.06	FLEXIBLE METAL CONDUIT (FLEX): USE FLEXIBLE CONDUITS FOR CONNECTIONS TO MOTORS, WHERE SUBJECT TO MOVEMENT OR VIBRATION, AND LIQUID TIGHT WHERE EXPOSED TO MOISTURE OR OIL.
3.07	RIGID NONMETALLIC CONDUIT PVC SCHEDULE 40 MAY BE INSTALLED FOR DIRECT BURIAL RACEWAYS WHERE INSTALLED WITH MINIMUM COVERAGE PER NEC TABLE 300.5. ALL UNDERGROUND BENDS SHALL BE GRC.
3.08	OUTLET, PULL AND JUNCTION BOXES
A.	UNLESS OTHERWISE SHOWN OR AS DIRECTED PRIOR TO INSTALLATION, OUTLET BOXES SHALL GENERALLY BE PLACED AT THE FOLLOWING HEIGHTS, CENTER OF BOX TO FINISHED FLOOR LEVEL.
B.	WALL SWITCHES: 44".
C.	CONVENIENCE RECEPTACLES: 18" (OR 4" ABOVE COUNTERS) AND/OR AS NOTED. (SIMILAR TYPE OUTLETS SHALL BE MOUNTED AT SAME HEIGHT IN EACH AREA); GROUNDING PIN AT BOTTOM.
D.	OTHER OUTLET TYPES: REFER TO ELECTRICAL SYMBOL LIST ON THIS SHEET.
3.09	CONDUCTORS (COPPER ONLY)
A.	USE SPECIFIED COLOR SCHEDULE FOR ALL WIRING. WHERE LARGE CONDUCTORS ARE NOT AVAILABLE IN COLORS, IDENTIFY WITH PERMANENT COLORED TAPE AT ALL TERMINATIONS, JUNCTION BOXES, ETC. COLOR CODING PER NEC.
B.	MAKE TAPS, JOINTS, SPLICES, AND OTHER CONNECTIONS WITH FIXTURE CONNECTORS.
C.	DO NOT INSTALL WIRING OR PULL WIRES, IN RACEWAYS UNTIL RACEWAY SYSTEM IS COMPLETE, CLEAN, DRY, AND FREE OF ALL FOREIGN MATERIALS. LUBRICATE AS REQUIRED.
D.	MINIMUM CONDUCTOR SIZE TO BE #12 CU. THWN.
3.10	LIGHTING FIXTURES
A.	LEAVE FIXTURES AND LAMPS CLEAN OF ALL DIRT, DUST, GREASE SPOTS AND DEBRIS. ALL GLASS, PLASTIC AND OTHER COMPONENTS SHALL BE UNSCRATCHED AND UNBROKEN.
B.	FIT AND ADJUST ALL FIXTURES, WHERE STRUCTURAL CONDITIONS, PARTITIONS, FURNITURE, SHELVING, AND AIR CONDITIONING DIFFUSERS INTERFERE WITH THE LIGHTING FIXTURES AT LOCATIONS SHOWN, NOTIFY ARCHITECT IN WRITING AND RELOCATE AT NO ADDITIONAL COST AS DIRECTED.
C.	FIXTURES WITH FINISH TRIM OR LENS FRAMES SHALL BE GASKETED AND BAFFLED TO PREVENT LIGHT LEAKS. INSTALL SO THAT NO LIGHT LEAKS EXIST.
D.	FIXTURES MOUNTED DIRECTLY ON COMBUSTIBLE LOW-DENSITY CEILINGS SHALL MEET UL APPROVAL FOR THIS CONDITION AND BE PLAINLY MARKED AS SUCH.
3.11	GROUNDING
A.	GROUNDING FOR DISTRIBUTION EQUIPMENT, EQUIPMENT AND MATERIALS WITH ELECTRICAL CONNECTIONS, ELECTRIC MOTOR FRAMES, ELECTRIC RACEWAY AND RELATED EQUIPMENT, SHALL BE EFFECTIVELY AND PERMANENTLY GROUNDED IN ACCORDANCE WITH PERTINENT SECTIONS OF ARTICLE 250 OF NEC. RESISTANCE TO GROUND SHALL NOT EXCEED 10 OHMS.
B.	ALL RACEWAYS SHALL HAVE AN APPROVED SIZED, INSULATED, STRANDED COPPER GROUNDING CONDUCTOR.
C.	WHERE RACEWAYS CONNECT TO A CONCENTRIC K.O. PROVIDE GROUNDING LOCKNUT OR BUSHING AND BOND WIRE EXTENDED AND BONDED TO ENCLOSURE. SIZE AS PER NEC.
3.12	DITCHING, EXCAVATION AND BACKFILLING: PERFORM ALL DITCHING, EXCAVATION AND BACKFILLING REQUIRED FOR THE ELECTRICAL WORK. PROVIDE AND MAINTAIN ALL SHEATHING, BRACING AND PROPER GUARDS FOR PREVENTION OF ACCIDENTS.
3.13	UTILITY COMPANY SERVICE CONTRACTOR TO BE RESPONSIBLE FOR COORDINATING AND PROVIDING REQUIRED WORK FOR SUPPLYING ELECTRICAL POWER AND COMMUNICATIONS UTILITIES TO THE PROJECT.
3.14	FINAL INSPECTION: TEST SYSTEM FOR SHORTS AND OPENS. FAULTY WIRING SHALL BE REMOVED AND REPLACED. AFTER SYSTEM IS CONNECTED COMPLETELY, TEST FOR INSULATION RESISTANCE. RESISTANCE LOWER THAN OUTLINED IN THE NEC, MANUFACTURERS DATA, ETC., SHALL BE REMOVED AND REPLACED. ANY DEVICE, APPARATUS OR FIXTURE UNDER THIS CONTRACT SHOWING SUBSTANDARD READINGS SHALL BE REMOVED AND REPLACED AS DIRECTED BY THE ARCHITECT.
3.15	LABEL ALL RECEPTACLES WITH 3/16" HIGH BLACK LETTERING ON CLEAR TAPE. IF THE RECEPTACLE IS BLACK OR BROWN, PROVIDE WHITE LETTERING ON CLEAR TAPE. LABEL TO BE NEATLY CENTERED IN THE TOP SPACE OF THE COVERPLATE, AND SHALL INDICATE THE SERVING PANEL AND CIRCUIT ORIGIN.

1.

THE ELECTRICAL DRAWINGS, SPECIFICATIONS AND GENERAL NOTES DESCRIBE THE SCOPE OF WORK AND THE DOCUMENTS SHALL BE USED FOR THE PURPOSE OF BIDDING, BUILDING DEPARTMENT REVIEW, AND TO SECURE THE NECESSARY CONSTRUCTION PERMIT ONLY.
2.

BRANCH CIRCUITING AND WIRE COUNT MAY NOT BE INDICATED ON THESE PLANS. CONTRACTOR IS RESPONSIBLE TO COMPLETE THE BRANCH CIRCUIT WIRING IN ACCORDANCE WITH PLAN NOTES AND AS PERMITTED BY AUTHORITY. CONTRACTOR SHALL SUBMIT AS-BUILT DRAWINGS AS A PART OF RECORD DRAWING SUBMITTAL TO ARCHITECT AND AUTHORITY HAVING JURISDICTION (AHJ).
3.

ELECTRICAL INSTALLATION SHALL BE IN ACCORDANCE WITH BOTH THE NATIONAL ELECTRICAL CODE (NEC) AND ALL LOCAL ORDINANCES / AMENDMENTS. WHERE CONFLICTS ARISE, THE MOST STRINGENT REQUIREMENT SHALL TAKE PRECEDENCE.
4.

ALL ELECTRICAL EQUIPMENT SHOWN IS NEW, CONTRACTOR FURNISHED AND INSTALLED, UNLESS OTHERWISE NOTED. IF CONTRACTOR PROPOSES TO SUBSTITUTE SPECIFIC EQUIPMENT SPECIFIED, A REQUEST FOR CONSIDERATION SHALL BE SUBMITTED TO THE OWNER AND ENGINEER PRIOR TO THE BID IN WRITING. ALL SUBSTITUTIONS MUST BE REVIEWED BY THE ENGINEER. SUCH REVIEW SHALL NOT RELIEVE THE CONTRACTOR FROM COMPLYING WITH THE REQUIREMENTS OF THE DRAWINGS AND SPECIFICATIONS. NO SUBSTITUTIONS SHALL BE IMPLEMENTED WITHOUT THE APPROVAL OF THE ENGINEER OR RECORD. THE CONTRACTOR SHALL BE RESPONSIBLE, AT HIS OWN EXPENSE, FOR ANY CHANGE RESULTING FROM HIS PROPOSED SUBSTITUTIONS WHICH AFFECT OTHER PARTS OF HIS OWN WORK, OR SUBSTITUTIONS WHICH AFFECT THE WORK OF OTHER CONTRACTORS.
5.

THE ELECTRICAL DRAWINGS, CONDUIT RUNS, WIRING AND ELECTRICAL INFORMATION ARE DIAGRAMMATIC ONLY. DO NOT SCALE THE ELECTRICAL DRAWINGS TO DETERMINE THE EXACT LOCATION OF EQUIPMENT OR OUTLETS. COORDINATE WITH ARCHITECT/OWNER PRIOR TO ROUGH-IN.
6.

REFER TO THE ARCHITECTURAL REFLECTED CEILING PLAN FOR EXACT LOCATIONS OF ALL LIGHTING FIXTURES, CEILING MOUNTED OUTLETS AND EQUIPMENT.
7.

ALL DEVICE MOUNTING HEIGHTS AND EXACT LOCATIONS SHALL BE COORDINATED WITH ARCHITECTURAL DRAWINGS AND ELEVATIONS PRIOR TO ROUGH-IN.
8.

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY TYPES OF CEILING SYSTEMS LOCATED IN DAMP OR WET LOCATIONS SHALL BE LISTED AND LABELED FOR USE IN SUCH LOCATIONS. CONTRACTOR SHALL PROVIDE ALL REQUIRED TRIMS AND HARDWARE TO ACCOMMODATE CEILING TYPE.
9.

ALL RECESSED LIGHTING FIXTURES, PANELBOARDS, SWITCHES, ETC., MOUNTED IN FIRE RATED STRUCTURES SHALL BE ENCLOSED WITH AN APPROVED ENCLOSURE CARRYING THE SAME FIRE RATING AS THE STRUCTURE. SEAL ALL PENETRATIONS THROUGH FIRE RATED WALLS, CEILINGS, FLOORS, ETC., TO MAINTAIN THE FIRE RATING. FURNISH AND INSTALL FIRE RATED ENCLOSURE FOR ALL EQUIPMENT PENETRATING INTO FIRE RATED ENVELOPS, SPACES ETC.
10.

PORTIONS OF THE CEILING SYSTEMS MAY BE INACCESSIBLE. THEREFORE, THE CONTRACTOR SHALL STRATEGICALLY LOCATE ACCESS BOXES, ETC., WHICH SHALL BE READILY ACCESSIBLE. ALL LIGHTING FIXTURE WIRING, BALLASTS, J-BOXES, ETC. SHALL BE ACCESSIBLE FROM FIXTURE OPENING.
11.

ALL WIRING AND ELECTRICAL EQUIPMENT SERVING MECHANICAL AND PLUMBING SYSTEMS SHALL BE IN ACCORDANCE WITH MECHANICAL AND PLUMBING SPECIFICATIONS AND ASSOCIATED DRAWINGS. CONTRACTOR SHALL OBTAIN THE REQUIRED MECHANICAL AND PLUMBING DRAWINGS AND PROVIDE ALL EQUIPMENT, RACEWAYS, WIRING, FITTINGS, ETC., AS INDICATED ON CONSTRUCTION DOCUMENTS.
12.

ALL FINAL CONNECTIONS TO OWNER FURNISHED EQUIPMENT SHALL BE MADE BY THE CONTRACTOR, UNLESS OTHERWISE NOTED. VERIFY ELECTRICAL CHARACTERISTICS AND U.L. LISTING PRIOR TO CONNECTION.
13.

THE CONTRACTOR SHALL VERIFY THE LOAD AND INPUT VOLTAGE OF ALL PROVIDED EQUIPMENT TO MATCH LOAD INPUT OF ALL EQUIPMENT BEING SUBSTITUTED.
14.

ELECTRICAL OUTLETS ON OPPOSITE SIDES OF FIRE RATED WALLS AND PARTITIONS MUST BE SEPARATED BY DISTANCE OF 24 IN. HORIZONTALLY, IN ACCORDANCE WITH I.B.C. SEC. 711.3.2. OPENINGS IN FIRE RATED WALLS MUST BE FIRE STOPPED.
15.

PROVIDE AN ADDITIONAL JUNCTION BOX EXTENSION RING (SIZE AS REQUIRED) WHERE THE NUMBER OF CONDUCTORS EXCEEDS THE MAXIMUM ALLOWED FOR A GIVEN JUNCTION POINT OR OUTLET.
16.

CONDUCTORS SHALL BE COPPER THHN/THWN 600 VOLT INSULATION UNLESS OTHERWISE NOTED. USE PROPER TEMPERATURE RATINGS OF CONDUCTORS BASED ON THE AMBIENT AIR TEMPERATURE WHERE CONDUCTORS ARE BEING USED. HIGHER AMPACITY CONDUCTOR AND LARGER RACEWAY SHALL BE PROVIDED TO OFFSET THE AMPACITY CORRECTION FACTORS AS INDICATED IN NEC ARTICLE 310 AND ELSEWHERE IN CODE.
17.

ALL LIGHTING FIXTURES PROVIDED BY PANDA EXPRESS INSTALLED BY GC UNLESS NOTED OTHERWISE.
18.

DO ALL DRILLING, CUTTING, AND/OR CHANNELING AS REQUIRED FOR ELECTRICAL WORK INDICATED OR HEREIN SPECIFIED. ALL HOLES, CURBS, ETC., IN FLOORS, CEILINGS AND WALLS SHALL BE PATCHED, UNLESS INDICATED OTHERWISE. PAINT ALL EXPOSED ELECTRICAL RACEWAYS, CABINETS, ENCLOSURES AND FITTING TO MATCH IN COLOR TO ADJACENT SURFACES IN FINISHED AREAS. (PROTECT UL LISTINGS LABELS FROM PAINT).
19.

EMERGENCY LIGHTING SHALL BE PROVIDED PER U.B.C. PROVIDE ADDITIONAL EMERGENCY ILLUMINATION AS REQUIRED BY AUTHORITIES HAVING JURISDICTIONS.
20.

ALL ELECTRICAL EQUIPMENT SHALL BE BRACED OR ANCHORED TO RESIST A HORIZONTAL FORCE ACTING IN ANY DIRECTION USING THE FOLLOWING CRITERIA.
- FIXED EQUIPMENT ON GRADE:

OPERATING WEIGHT33% OF
- FIXED EQUIPMENT ON STRUCTURE:

OPERATING WEIGHT50% OF
- EMERGENCY POWER AND COMMUNICATION & EQUIPMENT ON GRADE:

OPERATING WEIGHT50% OF
- EMERGENCY POWER AND COMMUNICATION ON STRUCTURE:

OPERATING WEIGHT75% OF
- FOR FLEXIBLE MOUNTED EQUIPMENT DOUBLE THE ABOVE VALUES. SIMULTANEOUS VERTICAL FORCE - USE 1/3 HORIZONTAL FORCE. CONDUIT, BUSDUCT, CABLE TRAY, WIREWAYS, ETC., SHALL BE BRACED IN ACCORDANCE WITH "GUIDELINES", PUBLISHED BY SMACNA AND PPIC.

ELECTRICAL SYMBOLS LIST

NOTE: ALL DIMENSIONS GIVEN ARE TO DEVICE CENTERLINES. CONTRACTOR TO COORDINATE ALL INSTALLATIONS.	
POWER DISTRIBUTION	RECEPTACLES & COMMUNICATIONS OUTLETS
SINGLE-POLE SWITCH, MANUAL MOTOR STARTER	DUPLEX CONVENIENCE OUTLET, 20A, 125V, MTD @ 18" A.F.F. U.N.O.
J-BOX (WITH FLEX CONNECTION TO EQUIPMENT.)	SIMPLEX CONVENIENCE OUTLET, 20A, 125V, MTD @ 18" A.F.F. U.N.O.
DISCONNECT SWITCH, WITH RATING AS SHOWN ON PLANS	ISOLATED GROUND SIMPLEX CONVENIENCE OUTLET (ORANGE), 20A, 125V., MTD @ +18" A.F.F.
COMBINATION DISCONNECT SWITCH / MOTOR STARTER FURNISHED BY ELECTRICAL CONTRACTOR.	DUPLEX CONVENIENCE OUTLET MOUNTED 3" ABOVE COUNTERTOP BACKSPLASH OR APPROXIMATELY 44" A.F.F.
BRANCH CIRCUITRY CONCEALED IN WALL OR CEILING WITH ADDITIONAL #12 INSULATED GND. U.N.O. HACHURES INDICATE NUMBER OF CURRENT CARRYING CONDUCTORS. 'X' INDICATES ADDITIONAL INSULATED, ISOLATED GROUND CONDUCTORS.	GFCI DUPLEX CONVENIENCE OUTLET, 20A, 125V, 5 mA TRIP, MTD @ 18" A.F.F. U.N.O.
BRANCH CIRCUITRY HOMERUN TO PANEL AS NOTED ON PLANS	GFCI DUPLEX CONVENIENCE OUTLET MOUNTED 3" ABOVE COUNTERTOP BACKSPLASH OR APPROXIMATELY 44" A.F.F.
INDICATES EXTERIOR UNDERGROUND WIRE RUNS.	TELEPHONE OUTLET. PROVIDE FLUSH J-BOX @ + 18" AFF U.N.O W/ 1" CONDUIT W/ PULL WIRE TO MANAGER'S STATION. 'w' SUBSCRIPT INDICATES WALL PHONE AT 54" AFF.
LIGHTING & LIGHTING CONTROLS	
LIGHTING FIXTURE. SUBSCRIPT LETTER DENOTES FIXTURE TYPE AS DESCRIBED IN LIGHT FIXTURE SCHEDULE.	DATA OUTLET. PROVIDE FLUSH J-BOX @ + 18" A.F.F. U.N.O W/ 1" CONDUIT WITH PULL WIRE TO MANAGER'S STATION.
SINGLE-POLE SWITCH @ 44" A.F.F. U.N.O. LOWER CASE LETTER DENOTES FIXTURE CONTROL. 300V. 20A.	COMBINATION TEL/DATA OUTLET. PROVIDE FLUSH J-BOX @ + 18" AFF U.N.O W/ 1" CONDUIT WITH PULL WIRE TO MANAGER'S STATION.
LEVITON Renoir II WALLBOX DIMMER - SINGLE-POLE SWITCH @ 44" A.F.F. U.N.O. LOWER CASE LETTER DENOTES FIXTURE CONTROL. 120V, BALLAST 0-10V	T.V. SYSTEM DATA OUTLET. PROVIDE FLUSH J-BOX @ + 18" A.F.F. U.N.O W/ 1" CONDUIT WITH PULL WIRE TO MANAGER'S STATION. WHEN SHOWN ADJACENT RECEPTACLE, MOUNT AT RECEPTACLE HEIGHT. REFER TO RECEPTACLE FOR MOUNTING HEIGHT.
OCCUPANCY SENSOR SWITCH WITH OFF CONTROL, AND ADJUSTABLE SETTINGS FOR TIME OFF DELAY, FOOTCANDLE LEVEL, AND MASKING. WATTS/OPPER OR EQUAL, MOUNT AT 44" A.F.F. U.N.O. USE PW-100 FOR OFFICES/CONF/ETC.	SPECIAL PURPOSE RECEPTACLE MTD @ 18" A.F.F. U.N.O., AMPERAGE AND PHASE AS NOTED ON PLANS, NEMA CONFIGURATION AS REQ'D.
LEVITON PROVOLT 05C20-MDWT DIMMING DAYLIGHT SENSOR FOR SIDELIT DAYLIGHTING ZONES. LOCATE AND INSTALL PER MANUFACTURER'S INSTRUCTIONS. ALL CONTROLS SHALL COMPLY WITH LOCAL ENERGY CODE REQUIREMENTS. PROVIDE LOCAL MANUAL SWITCH AS SHOWN IN THE LIGHTING PLAN FOR ON / OFF CONTROL	ISOLATED GROUND DUPLEX CONVENIENCE OUTLET (ORANGE), 20A, 125V., MTD @ +18" A.F.F.
INTERIOR LIGHTING SHUT DOWN OVRRIIDE. 20 AMP 60-MINUTE INDOOR IN-WALL SPRING WOUND COUNTDOWN TIMER, WHITE BY INTERMATIC.	DOUBLE DUPLEX CONVENIENCE OUTLETS UNDER COMMON COVER
FIRE ALARM	
ABBREVIATIONS	
A AMPERES	M.C.B. MAIN CIRCUIT BREAKER
AL ALUMINUM	M.L.O. MOUNTED
A.F.F. ABOVE FINISHED FLOOR	MTD. MOUNTED
A.F.G. ABOVE FINISHED GRADE	P POLE
C CONDUIT	SW. SWITCH
C/B CIRCUIT BREAKER	T.M.B. TELEPHONE MOUNTING BOARD
CU. COPPER	TYP. TYPICAL
DISC. DISCONNECT	U.N.O. UNLESS NOTED OTHERWISE
F FUSE	V VOLTS
GFI GROUND FAULT	W. WIRE
INT. CURRENT INTERRUPTER	W.P. WEATHERPROOF
GND. GROUND	XFMR. TRANSFORMER
H.P. HORSE POWER	Ø PHASE
K 1000	
E.C. ELECTRICAL CONTRACTOR	
G.C. GENERAL CONTRACTOR	
MANUAL PULL STATION WITH KEYED RESET. MOUNT UNIT AT 44" A.F.F. ALIGN WITH LIGHT SWITCH IF APPLICABLE.	
XENON STROBE UNIT MOUNTED AT 80" A.F.F. OR 6" BELOW CEILING (WHICHEVER IS LOWER). MUST MEET OR EXCEED A.D.A. REQUIREMENTS.	
COMBINATION XENON STROBE AND HORN/CHIME UNIT MOUNTED AT 80" A.F.F. OR 6" BELOW CEILING (WHICHEVER IS LOWER). UNIT MUST MEET OR EXCEED A.D.A. REQUIREMENTS.	
FIRE ALARM CONTROL PANEL. MOUNT TOP OF UNIT AT 72" A.F.F.	
FIRE ALARM ANNUNCIATION PANEL. MOUNT TOP OF UNIT AT 72" A.F.F.	
PHOTO ELECTRIC TYPE SMOKE DETECTOR.	
DUCT MOUNTED PHOTO ELECTRIC SMOKE DETECTOR.	
RATE OF RISE HEAT DETECTOR.	



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ELECTRICAL SYMBOLS
SPECIFICATIONS, NOTES

ELECTRICAL SPECIFICATIONS

3

GENERAL NOTES

2

ELECTRICAL SYMBOLS

1

NOT TO SCALE


























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LIGHTING FIXTURE SCHEDULE			PROVIDED FOR INFORMATION ONLY, VERIFY AND INSTALL PER ELECTRICAL DRAWING		01-11-19
ITEM	SYMBOL	DESCRIPTION	QTY.	MFR. & CAT. NO.	REMARK
INTERIOR LIGHTING ITEM					
L1		T-BAR CEILING RECESSED MOUNTED LED LIGHTING FIXTURE, 2' X 4', 120V BAKED-ON WHITE ENAMEL FINISH.	10	LSI FIXTURE: SFP24-LED-FS-UNV-DIM	KITCHEN CEILING LIGHTS, FURNISHED BY OWNER INSTALLED BY GC
L1B		T-BAR CEILING RECESSED MOUNTED LED LIGHTING FIXTURE, 2' X 2', 120V BAKED-ON WHITE ENAMEL FINISH.	1	LSI FIXTURE: ESFP22-LED-FS-UNV-DIM	KITCHEN CEILING LIGHTS, FURNISHED BY OWNER INSTALLED BY GC
L1C		T-BAR CEILING RECESSED MOUNTED LED LIGHTING FIXTURE, 1' X 4', 120V BAKED-ON WHITE ENAMEL FINISH.	2	LSI FIXTURE: SFP14-LED-FS-UNV-DIM	KITCHEN CEILING LIGHTS, FURNISHED BY OWNER INSTALLED BY GC
L1B-EM		T-BAR CEILING RECESSED MOUNTED LED LIGHTING EMERGENCY FIXTURE, 2' X 4', 120V BAKED-ON WHITE ENAMEL FINISH.	4	LSI FIXTURE: SFP24-LED-FS-UNV-DIM-EM	EMERGENCY KITCHEN CEILING LIGHTS FURNISHED BY OWNER INSTALLED BY GC
L4B-6		UNIVERSAL MOUNT EXIT SIGN, LED LIGHTED, 120/277V WITH BATTERY PACK, 2 FACE, GREEN LETTER	4	EXITRONIX GVEX-U-BP-WB-BL-R6	EXIT SIGN FURNISHED BY OWNER, INSTALLED BY GC
L6A		HOOD LIGHT	12	FURNISHED & INSTALLED BY EQUIPMENT SUPPLIER	LIGHTS SUPPLIED & PRE-WIRED BY HOOD VENDOR. ELECTRIC CONTRACTOR TO CONNECT MAIN WIRES TO SHUNT TRIP BREAKER AND HOOD CONTROL PANEL.
L6B		WALK-IN COOLER FLUORESCENT LIGHT, 120 V 48"	3	KASON FIXTURE: # 1810LX4000	FURNISHED BY WIC VENDOR, G.R.E. , INSTALLED BY GC
L18		DOWN LIGHT, RECESSED IN CEILING	45	ELITE HOUSING: LD6IC-AT LED MODULE: ELITE LED LIGHTING RL607-750L-DIMTR-120-30K-SN-SN-90+	FURNISHED BY OWNER, INSTALLED BY GC
L19B		EMERGENCY DOWN LIGHT, RECESSED IN CEILING	6	ELITE HOUSING: LD6IC-AT LED MODULE: ELITE LED LIGHTING RL607-750L-DIMTR-120-30K-SN-SN-90+	EMERGENCY RECESSED DOWN LIGHT - NORMALLY ON INVERTER UNIT - ISOLITE, IM-12-CL-V1 FURNISHED BY OWNER INSTALLED BY GC
L20		3 3/4" ADJUSTABLE MR16 DOWN LIGHT, RECESSED IN CEILING "W" SHALL DESIGNATE WHITE TRIM USED FOR MENU 8D: SOFFIT	10	LIGHTOLIER: LYTECASTER-378WHX FRAME-IN KIT: 302MRSXP BULB: MR16 - GE - PRECISE IR 37 WATT 40 ° BEAM	FURNISHED BY OWNER, INSTALLED BY GC
L20B		3 3/4" ADJUSTABLE MR16 DOWN LIGHT, RECESSED IN CEILING "B" SHALL DESIGNATE BLACK TRIM USED FOR DINING ROOM CEILING GRID	5	LIGHTOLIER: LYTECASTER-378WHX FRAME-IN KIT: 302MRSXP BULB: MR16 - GE - PRECISE IR 37 WATT 40 ° BEAM	FURNISHED BY OWNER, INSTALLED BY GC
L30		WHITE LED AT SERVICE COUNTER SOFFIT & DINING ROOM PARTIAL HEIGHT WALL	50 L.F.	LUXEM BRIGHT FIXTURE: BLAZE LED	FURNISHED BY OWNER, INSTALLED BY GC
L32		WHITE LED AT MURAL LIGHT COVE	60 L.F.	NOVA FLEX - PRO SERIES FIXTURE: BENDABLE 3916	FURNISHED BY OWNER, INSTALLED BY GC
L45		12" DIA. DECORATIVE MORILL PENDANT LF INCANDESCENT	3	LBL LIGHTING: MODEL # 6227801-839 BULB: LED EDISON LAMP,1173467	FURNISHED BY OWNER, INSTALLED BY GC
L100		MICRO INVERTER	1	ISOLITE #IM1 125	FURNISHED BY OWNER, INSTALLED BY GC
L40C-R		17.3" DIA. RED CUPOLA PENDANT	6	HI-LITE, MODEL #H-VLPDM3-RDMIT	FURNISHED BY OWNER, INSTALLED BY GC
S		SPEAKER	-		FURNISHED BY MUSIC VENDOR, INSTALLED BY MUSIC VENDOR
NIGHT LIGHTING REQUIREMENTS: "NL" DESIGNATION INDICATED NIGHT LIGHT ON UNSWITCHED CIRCUIT.					
1. ONE NL BY SERVICE COUNTER, POS / CASHIER					
2. ONE NL BY POS / CASHIER AT DRIVE THRU STATION IF APPLICABLE					
3. ONE NL BY EACH EXIT DOORS IN DINNING ROOM & BACK OF HOUSE					
EXTERIOR LIGHTING					
L40		LINEAR LIGHT AT EXTERIOR STORAGE ROOM	1	COOPER MX-4V12-LD4-D-GR-UNV-L840-CD-1-WL-U	FURNISHED BY OWNER, INSTALLED BY GC
L85		WALL MOUNTED OVER SERVICE DOOR FIXTURE	1	HOWARD VL305 30W LED, BRONZE	OVER EXTERIOR SERVICE DOOR. REFER ELEVATIONS FOR HEIGHT FURNISHED BY OWNER, INSTALLED BY GC
L86		NAVILITE EMERGENCY LIGHT	2	EXITRONIX MLED1-G-WP	OVER EXTERIOR ENTRANCE & SERVICE DOORS. REFER ELEVATIONS FOR HEIGHT. FURNISHED BY OWNER, INSTALLED BY GC
L86-AEM		EXTERIOR RECESS EMERGENCY LIGHT	1	ELITE HOUSING: LD6IC-AT LED MODULE: ELITE LED LIGHTING WET LOCATION: RL607-14W-120-FL-30K-SN-SN -WET LOCATION	EMERGENCY RECESSED DOWN LIGHT - NORMALLY ON INVERTER UNIT - ISOLITE, IM-12-CL-V1 FURNISHED BY OWNER INSTALLED BY GC
L90		DECORATIVE LED WALL SCONCE	2	HINKLEY LIGHTING, ATLANTIS, BRONZE: 1649BZ-LED	AT PORTAL OF ENTRY DOOR. REFER ELEVATIONS FOR HEIGHT FURNISHED BY OWNER, INSTALLED BY GC
L92		WALL MOUNTED OVER SERVICE DOOR FIXTURE	1	HINKLEY LIGHTING, SILO; BRONZE; 13594AZ-LL; LED	OVER DRIVE THRU AREA SERVICE DOOR FURNISHED BY OWNER, INSTALLED BY GC
L97		LED MOTION SECURITY FLOODLIGHT	2	LITHONIA LIGHTING OLF 2RH 40K 120V MO BZ	INTERIOR LIGHTING SENSOR TO BE WALL MOUNTED AT +142" FURNISHED BY OWNER, INSTALLED BY GC
L91		DECORATIVE LED WALL SCONCE	4	HINKLEY LIGHTING, SILO, BRONZE: 13594AZ-LL; LED	ALONG REAR EIFS BAND FURNISHED BY OWNER, INSTALLED BY GC

[illegible]

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2	SOLUTION F.2	09.30.21
3	OWNER REVISIONS	01-27-21

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PANDA PROJECT #: D8164

PANDA STORE #: -

ARCH PROJECT #: 261-321

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PANDA EXPRESS

TRUE WARM & WELCOME
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E-001

ELECTRICAL SCHEDULES

TRUE WARM & WELCOME 2300 R6



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E-100

POWER FLOOR PLAN

TRUE WARM & WELCOME 2300 R6

- ALL CIRCUITRY/CONDUIT FOR FRONT LINE EQUIPMENT TO BE ROUTED IN CASEWORK TO J-BOX IN WALL AND CONCEALED IN WALL.
- PROVIDE SEALS AND EXPANSION COUPLINGS ON ALL CONDUITS ENTERING OR LEAVING AREA OF TEMPERATURE DIFFERENCE. REFER TO WIRING NOTES 6/E-400 FOR ADDITIONAL INFORMATION.
- PROVIDE (2) 1-1/2" CONDUITS WITH PULL STRINGS FROM CASH REGISTER TO MANAGER STATION. SEE P.O.S. AND SERVICE LINE ELEVATIONS, 3/E-200.
- SEE 'MANAGER STATION ELEVATION' 1/E-200 FOR ADDITIONAL OUTLETS AND J-BOXES.
- ANSUL PULL STATION. REFER TO DETAIL, 2/E-400.
- REFER TO 'LTG AND DOOR HEATER' WIRING DIAGRAM, 10/E-400.
- REFER TO 'COOLER EVAPORATOR COIL' WIRING DIAGRAM, 8/E-400.
- SHOW WINDOW RECEPTACLE SHALL BE CONTROLLED VIA SWITCH "b". REFER TO LIGHTING SWITCHBANK SCHEDULE, SHEET 4/E101. RECEPTACLE SHALL BE MOUNTED IN WALL AS CLOSE TO TOP OF STRUCTURAL HEADER AS POSSIBLE.
- BUILDING SIGNAGE/LOGO DEDICATED/PROPOSED W.P. J-BOX FOR SIGNAGE. COORDINATE LOCATION WITH ARCHITECT / OWNER / SIGN PACKAGE PRIOR TO ROUGH-IN. SIGN DISCONNECT PROVIDED BY SIGN CONTRACTOR.
- REFER TO 'FREEZER EVAPORATOR COIL' WIRING DIAGRAM, 9/E-400. THE FAN COIL UNIT IS POWERED FROM THE CONDENSER UNIT VIA DISCONNECT CONNECTION. HEAT TAPE PROVIDED AND INSTALLED BY ELECTRICIAN.
- NOT USED.
- NOT USED.
- HOOD CONTROL PANEL/ANSUL SYSTEM CABINET. MOUNT CABINET DIRECTLY BELOW T-BAR CEILING.
- PROVIDE 2-GANG J-BOX @ 48" AFF FOR HOOD CONTROL SWITCHES. REFER TO M-400 AND M-401.
- 1" CONDUIT STUB UP LOCATION IN STAINLESS STEEL POWER PANEL FOR ISLAND KITCHEN EQUIPMENT CONNECTION. REFER TO DETAIL 2/A-109. COORDINATE LOCATION WITH ARCHITECT / OWNER.
- ROUTE CABLING / CIRCUITRY THROUGH 1" CONDUIT IN SLAB.
- UTILIZE SEAL TIGHT CONDUIT FOR ALL WIRING INCLUDED ALONG LOW WALL PANEL.
- ALL DEVICES UNDER HOOD TO BE PROVIDED AND INSTALLED WITH GROUND FAULT CIRCUIT BREAKER AND WATERPROOFING BOX (RED DOT #CKSUV). REFER TO COOKLINE ELECTRICAL ELEVATIONS, 6/E-200. ROUTE HOMERUN THROUGH CONTRACTOR INTERFACED WITH THE HOOD FIRE SUPPRESSION SYSTEM. REFERENCE 13/E-400 FOR ADDITIONAL INFORMATION.
- SIMPLEX RECEPTACLE TO BE CONNECTED TO BACK-OF-HOUSE LIGHTING CIRCUITRY/CONTROL. CONTRACTOR TO PROVIDE PIGTAIL FROM CIRCULATION PUMP.
- PROVIDE WEATHERPROOF RECEPTACLE FOR HEAT TAPE. COORDINATE FINAL LOCATION WITH REFRIGERATION INSTALLER.
- ELECTRIC GRIDDLE '23E': FEED WITH (2) #6, (1) #10 GROUND, 3/4" CONDUIT. REFER TO 4/E-200.
- SEE DRIVE THRU ELEVATION 2/E-200 FOR CONDUIT SIZES AND CONFIGURATIONS.
- SEE TICKET PRINTER ELEVATIONS, 7/E-200.
- PROVIDE WATERPROOFING, COVER, IN-USE RED DOT (#CKSUV).
- SEE FOR DRIVE-THRU ELEVATIONS, 2/E-200.
- SEE DRINK STATION ELEVATIONS, 5/E-200.
- SEE 3/E-200 FOR SERVICE LINE ELEVATIONS.
- SEE DEVICE / RECEPTACLE SCHEDULE 3/E400.
- SEE DINING ROOM MONITOR ELEVATION, DETAIL 8/E-200.
- PROVIDE AND INSTALL 3/4" CONDUIT AND PULL STRING FROM CLOSEST LANDSCAPE AREA, THROUGH WALL UP TO EMPTY FLUSH MOUNTED JUNCTION BOX @ 54" A.F.F. (FOR IRRIGATION CONTROLS). CLOSE OFF CONDUIT IN LANDSCAPE AREA WITH REMOVABLE CAP. UTILIZE WP CIRCUIT A-53 NEAR ENTRY POINT.
- REFER TO 9/E-200 FOR LOCATION/INSTALLATION OF C02 DEVICE.
- SEE SWITCH BANK ELEVATION , DETAIL 7/E-200.
- FLY LIGHT RECEPTACLE SHALL BE INSTALLED WITH A RECESSED CLOCK SIMPLEX OUTLET. TYP OF ALL LOCATIONS.
- SEE SECURITY KEY PAD ELEVATION 1/E200.
- CONNECT HEAT LAMPS TO COUNTER-MOUNTED SWITCH PROVIDED AND INSTALLED BY CONTRACTOR. COORDINATE EXACT LOCATION WITH KITCHEN EQUIPMENT PROVIDER.
- PANDA EXPRESS TO PROVIDE C02 MONITOR, E.C. TO MOUNT OVER J-BOX WITH WIRING THROUGH WALL CONDUIT FOR CLEAN INSTALLATION. PROVIDE ALL OTHER REQUIRED CONNECTIONS AND COMPONENTS FOR FULLY WORKING SYSTEM.
- PROVIDE IN-GRADE QUAZITE 8"X8" PC STYLE POLYMER CONCRETE BOX OR EQUAL FOR UNDERGROUND CABLE REQUIRED FOR THE STORE. PART NO. PC081XXXXX OR SIMILAR. REFER TO ELECTRICAL SITE PLAN 1/E105.
- PROVIDE 1" CONDUIT FOR CABLE DEDICATED FOR ENTIRE STORE FROM IN-GRADE 8X8 QUAZITE BOX TO EXTERIOR CLOSET 6X6 FLUSH MOUNTED JUNCTION BOX. TERMINATE INTERIOR ABOVE CEILING.
- PROVIDE FLUSH MOUNTED NEMA 1 6X6 JUNCTION/PULL BOX AT +48" - HUBBELL OR EQUAL. ROUTE CABLE FROM EXTERIOR 6X6 IN 1" CONDUIT THROUGH BUILDING. TERMINATE INTERIOR ABOVE CEILING.
- PROVIDE A 1" CONDUIT FOR CIRCUIT 'A' 69 FOR POWER SUPPLY TO THE DRIVE THRU HOT WELL CABINET. PROVIDE A 3/2" CONDUIT FROM THE THIS LOCATION TO ABOVE CEILING NEAR THE MANAGER CABINET FOR LOW VOLTAGE WIRING.
- FIRE SUPPRESSION SHUTDOWN CONTACTOR LOCATED ABOVE CEILING , REFER TO 13/E-400.
- ELECTRICIAN TO WALL MOUNT A NEMA ELECTRICAL DISCONNECT BOX. ELECTRICIAN TO SUPPLY A WIRE WHIP FROM BOX TO MACHINE, FINAL CONNECTIONS BY HOBART SERVICE.
- PROVIDE J-BOX FOR DOOR RELEASE BUTTON.

POWER PLAN KEYED NOTES

3

NOT TO SCALE

POWER PLAN GENERAL NOTES

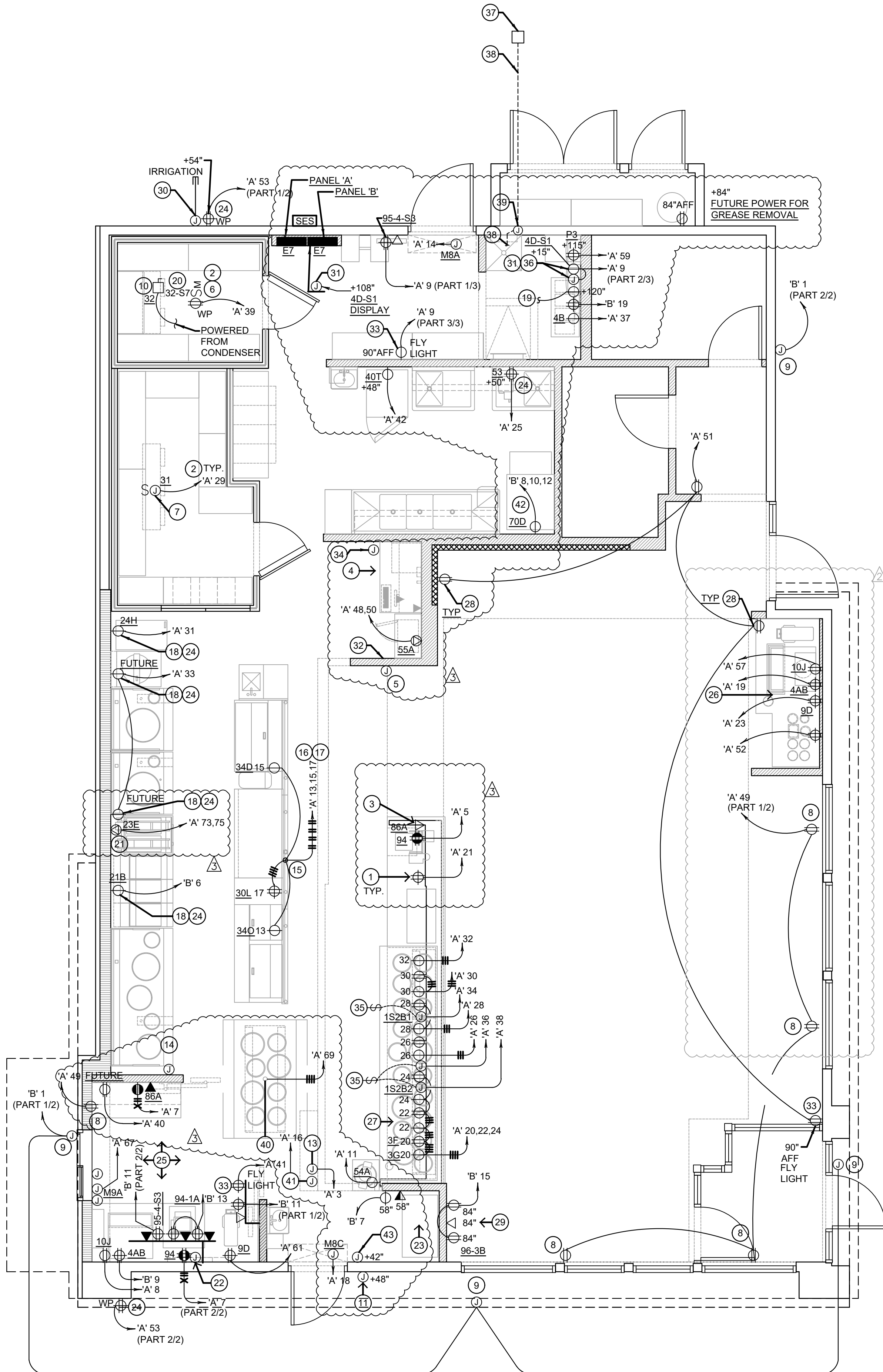
2

NOT TO SCALE

POWER FLOOR PLAN

1

Scale: 1/4"=1'-0"



- VERIFY QUANTITIES AND REQUIREMENTS OF ALL HVAC & KITCHEN EQUIPMENT PRIOR TO ROUGH IN.
- ALL TELEPHONE/DATA/TV CABLES AND WIRES, AND TERMINATIONS OF ALL REQUIRED CABLE AND JACKS WILL BE INSTALLED BY THIRD PARTY.
- POWER SUPPLY FOR COMPUTER AND CASH REGISTER (86A & 94) SHALL BE ON THE SAME CIRCUIT BREAKER, W/ISOLATED GROUND & ORANGE RECEPTACLE.
- ALL CIRCUITRY SHOWN WITHOUT TICKS SHALL HAVE (2) WIRES PLUS EQUIPMENT GROUNDING CONDUCTOR.
- WHEN WORKING IN JURISDICTIONS WHICH HAVE ADOPTED THE 2017 NEC OR LATER, ALL MULTI-WIRE BRANCH CIRCUITS SHALL HAVE SEPARATE NEUTRALS TO MEET THE REQUIREMENTS OF 2017 NEC 210.4(B).
- TRANSFORMERS SHALL BE MOUNTED ABOVE CEILING BELOW TRUSSES WITH LOW VOLTAGE WIRING FEEDING TO ALL EXTERIOR LIGHTS.
- ALL UNDERGROUND CONDUIT SHALL BE 12" BELOW F.F.



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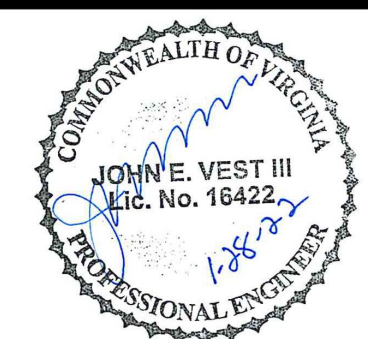
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E-101
LIGHTING FLOOR PLAN

TRUE WARM & WELCOME 2300 R6

- SWITCHBANK 'A'. REFER TO SCHEDULE 4/E-101.
- ROUTE HOMERUN THROUGH LIGHTING SWITCHBANK 'A' (SWITCHES AS NOTED IN LOWER CASE). REFER TO SCHEDULE 4/E-101 FOR MORE INFORMATION.
- ROUTE THROUGH CONTACTS IN HOOD CONTROL PANEL 'M4' FOR CIRCUIT POWER. REFER TO 3/E-401.
- PROVIDE SEPARATE UNSWITCHED HOT CONDUCTOR (SAME CIRCUIT, NOT CONTROLLED BY SWITCH IN SWITCHBANK) TO LOCALLY SWITCHED FIXTURES AND EMERGENCY FIXTURE BATTERY TRIGGER LEADS.
- DUPLEX RECEPTACLE FOR LED ROPE. INSTALL ABOVE CEILING AT +128". REFER TO 8&9/A-402 FOR MORE INFORMATION.
- WALK-IN COOLER LIGHT FIXTURES AND PILOT LIGHT SWITCH PROVIDED WITH COOLER INSTALLED BY E.C. REFER TO 'COOLER EVAPORATOR COIL' WIRING DIAGRAM, 8/E-400.
- WALK-IN FREEZER LIGHT FIXTURE AND PILOT LIGHT SWITCH PROVIDED WITH FREEZER INSTALLED BY E.C. REFER TO 'FREEZER LTG AND DOOR HEATER WIRING DIAGRAM', 10/E-400.
- NOT USED.
- FIXTURES IN THIS ROOM SHALL BE LOCALLY SWITCHED.
- LIGHTING INVERTER FOR EMERGENCY LIGHTING TO BE MOUNTED TO BULKHEAD. RE: 9/E200.
- LED TRANSFORMER FOR LED ROPE LIGHTING LOCATION, MOUNT ABOVE CEILING.
- DUPLEX RECEPTACLE FOR LED ROPE. INSTALL ABOVE CEILING AT +150".
- PROVIDE JUNCTION BOX ABOVE CEILING FOR THE BZ-150 UNIVERSAL POWER PACK REQUIRED FOR EXTERIOR MOTION CONTROL LED FIXTURES. PROVIDE LOW VOLTAGE CONNECTIONS AS REQUIRED TO LIGHTSAVER LS-102 SWITCHING PHOTOSENSOR SO THAT WHEN STORE OPERATIONS ARE OFF THIS EXTERIOR SECURITY LIGHT IS ACTIVATED BY EXTERIOR MOTION ONLY. VERIFY WITH MANUFACTURER'S RECOMMENDATIONS FOR WIRING DIAGRAM. VERIFY LOCATIONS WITH OWNER PRIOR TO INSTALLATION.
- PROVIDE WALL MOUNTED JUNCTION BOX AT +142" FOR INSTALLATION. INSTALL LIGHTSAVER LS-102 SWITCHING PHOTOSENSOR FOR EXTERIOR MOTION CONTROL SECURITY FIXTURES TYP OF 2 LOCATIONS. CONTROL TIMES OF CONTROL SO THAT WHEN STORE OPERATIONS ARE OFF INTERIOR LIGHTS GO OFF AND THE EXTERIOR MOTION LIGHTS ARE ACTIVATED WITH ANY MOTION DETECTED AFTER STORE HOURS. VERIFY WITH MANUFACTURER'S RECOMMENDATIONS FOR WIRING DIAGRAM. VERIFY LOCATIONS WITH OWNER PRIOR TO INSTALLATION.
- ROUTE HOMERUN THROUGH LIGHTING SWITCHBANK 'A' (SWITCH AS NOTED IN LOWER CASE). REFER TO SCHEDULE, SHEET 4/E-101, FOR MORE INFORMATION.
- CONNECT TO VEGETABLE DISPLAY LIGHTING PROVIDED WITH WALK-IN COOLER.
- PROVIDE SEALS AND EXPANSION COUPLINGS ON ALL CONDUITS ENTERING OR LEAVING AREA OF TEMPERATURE DIFFERENCE. REFER TO WIRING NOTES 6/E-400 FOR ADDITIONAL INFORMATION.

- CONTRACTOR SHALL PROVIDE ALL REQUIRED HARDWARES, BRACKETS, ETC. FOR A COMPLETE LIGHTING FIXTURE INSTALLATION.
- FIXTURES THAT ARE TO BE ROUTED VIA TIMECLOCKS ARE SHOWN ON DETAIL 11/E400. SEQUENCE OF OPERATION: TIMECLOCKS WIRED FIRST FOR DESIGNATED CONTROL. SWITCHES ARE SERIES WIRED WITH THE CONTACTORS. UTILIZE DIGITAL OVERRIDE TIMER SWITCH (DOTS) TO OVER-RIDE THE TIMECLOCKS FOR CLEANING AND AFTER HOURS AS NEEDED. SEE DETAIL 11/E400
- ALL LIGHTING FIXTURES SHALL BE SUPPORTED PER N.E.C. 410-16(C). SEE DETAIL, 4/E400.
- CONTRACTOR SHALL INSTALL ALL LIGHTING FIXTURES INCLUDING OWNER-FURNISHED FIXTURES.
- ALL FIXTURE BALLASTS SHALL BE U.L. LISTED.
- E.C. SHALL INSTALL OWNER SUPPLIED LED STRIP LIGHTING & CUT TO PROPER LENGTH. COORDINATE WITH OWNER FOR EXACT LENGTHS AND FINAL LOCATIONS.
- WHEN WORKING IN JURISDICTIONS WHICH HAVE ADOPTED THE 2008 NEC OR LATER, ALL MULTI-WIRE BRANCH CIRCUITS TO HAVE SEPARATE NEUTRALS TO MEET THE REQUIREMENTS OF 2008 NEC 210.4(B).
- ALL CIRCUITRY SHOWN WITHOUT TICKS SHALL HAVE (2) WIRES PLUS EQUIPMENT GROUNDING CONDUCTOR.
- 'N.L.' DESIGNATION INDICATES NIGHT LIGHT ON UNSWITCHED CIRCUIT.

LIGHTING GENERAL NOTES	2	#	LIGHTING KEYED NOTES	3
NOT TO SCALE	E-101		NOT TO SCALE	E-101

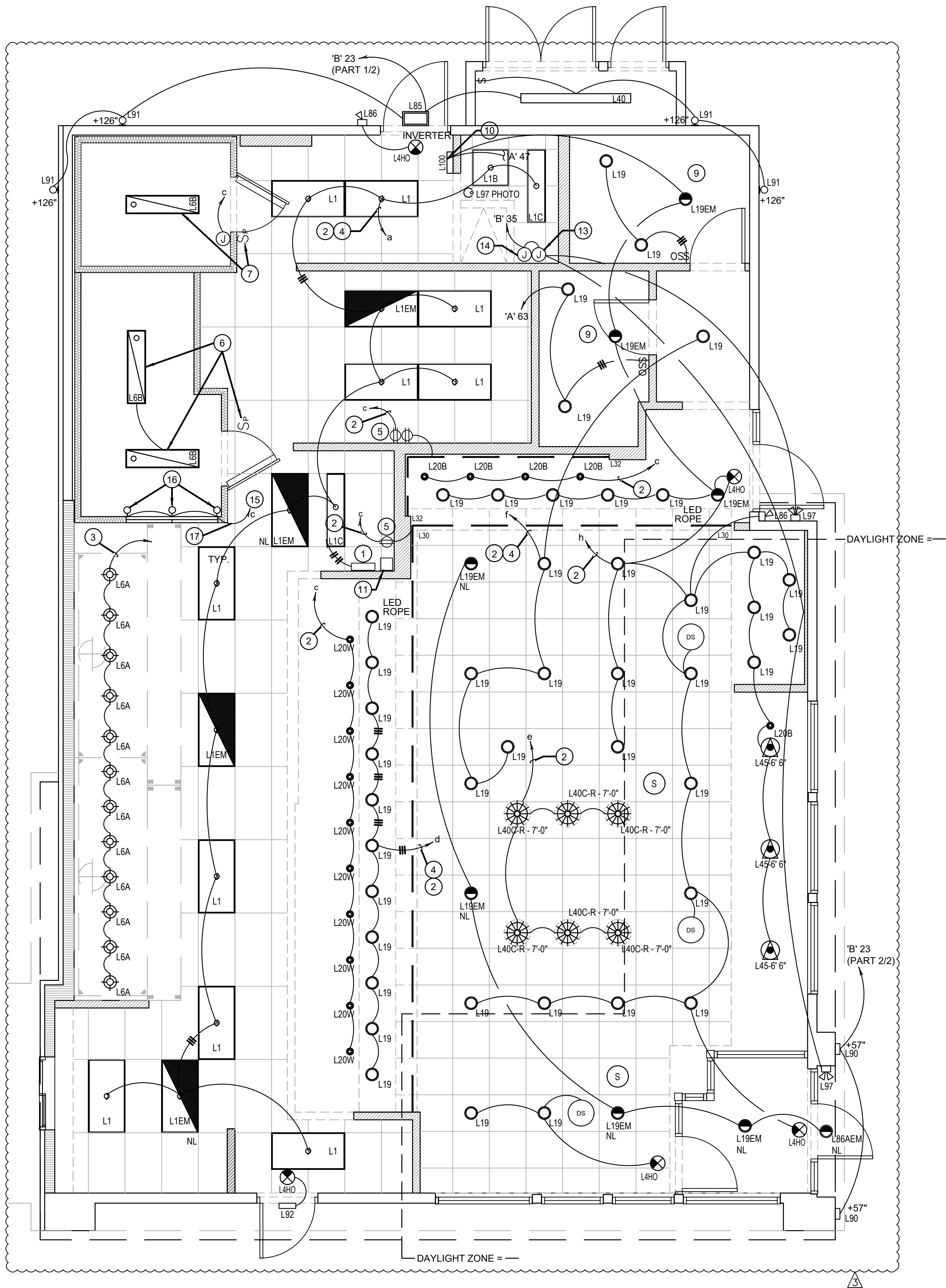
NOTE:
FIXTURES TO BE ROUTED VIA TIME TIMECLOCKS ARE SHOWN ON DETAIL 11/E400.

NOTE:
CONTRACTOR TO INSTALL (2) 5 GANG SWITCH BOXES AS SHOWN BELOW. DO NOT INSTALL SEPERATE/INDIVIDUAL BOXES FOR EACH SWITCH

(a)	(b)	(c)	(d)	(e)
\$	\$	\$	\$	\$
BACK OF HOUSE LTG & EX. FAN & RECIRC PUMP	SHOW WINDOW RECEPS	WALK-IN, MENU LED ACCENTS	SERVING LINE SOFFIT	DINING PENDANTS
(f)	(g)	(h)	(i)	(j)
\$	\$	\$	\$	[60:00]
INTERIOR DINING	BEV. COUNTER	DAYLIGHT HARVEST	SPARE	INTERIOR LIGHTING SHUT DOWN OVERRIDE

SWITCHBANK SCHEDULE 'A'				
TAG	SWITCH TYPE	AREA SERVED / SWITCH LABEL	CIRCUIT	LOAD
a	TOGGLE SWITCH	BACK-OF-HOUSE / RR FANS	'A' 45	530 VA
b	TOGGLE SWITCH	SHOW WINDOW RECEP	'A' 49	720 VA
c	TOGGLE SWITCH	WALK-INS, MENU, LED ACCENTS	'A' 1	275 VA
d	TOGGLE SWITCH	SERVING LINE SOFFIT	'A' 45	140 VA
e	TOGGLE SWITCH	DINING PENDANTS	'A' 47	24 VA
f	TOGGLE SWITCH	INTERIOR DINING	'A' 47	118 VA
g	TOGGLE SWITCH	BEVERAGE COUNTER	'A' 47	16 VA
h	TOGGLE SWITCH	DAYLIGHT HARVESTING ZONE	'A' 47	219 VA
i	SPARE			
j	COUNTDOWN TIMER	INTERIOR LIGHTING	'A' 47	118 VA

INTERIOR / EXTERIOR LTG CONTACTORS SCHEDULE	4
NOT TO SCALE	E-101





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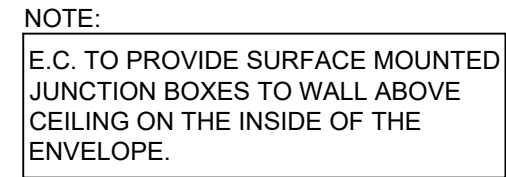
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	ISSUE FOR PERMIT	01-29-2
	ISSUE FOR BID	04-30-2
	ISSUE FOR BID 2	11-02-2
	SSUE FOR BID (DT)	02-04-22

ARCH PROJECT #: 261-321



TRUE WARM & WELCOME 2300 R6



- NOT TO SCALE E-101.1

Scale: 1/4"=1'-0" E-10

ISSUE FOR PERMIT 11-02-21



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REVISIONS:

OWNER REVISIONS 01-27-22

ISSUE DATE:

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PANDA PROJECT #: D8164

PANDA STORE #: -

ARCH PROJECT #: 261-321



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JEFFERSON AVE. & MORRIS DR.
NEWPORT NEWS, VA 23605

E-102

SECURITY CAMERA PLAN

Scale= 1/4" = 1'-0"

TRUE WARM & WELCOME 2300 R6

NOTE:
G.C./ELECTRICAL SUB TO
COORDINATE WITH PANDA
RESTAURANT PROJECT MANAGER
ON ANY CAMERA LOCATIONS TO BE
ADDED AND/OR OMITTED.

ACTUAL QUANTITY OF CAMERAS TO
BE VERIFIED BY G.C./ELECTRICAL
SUB WITH THE FOLLOWING CAMERA
VENDOR CONTACT.

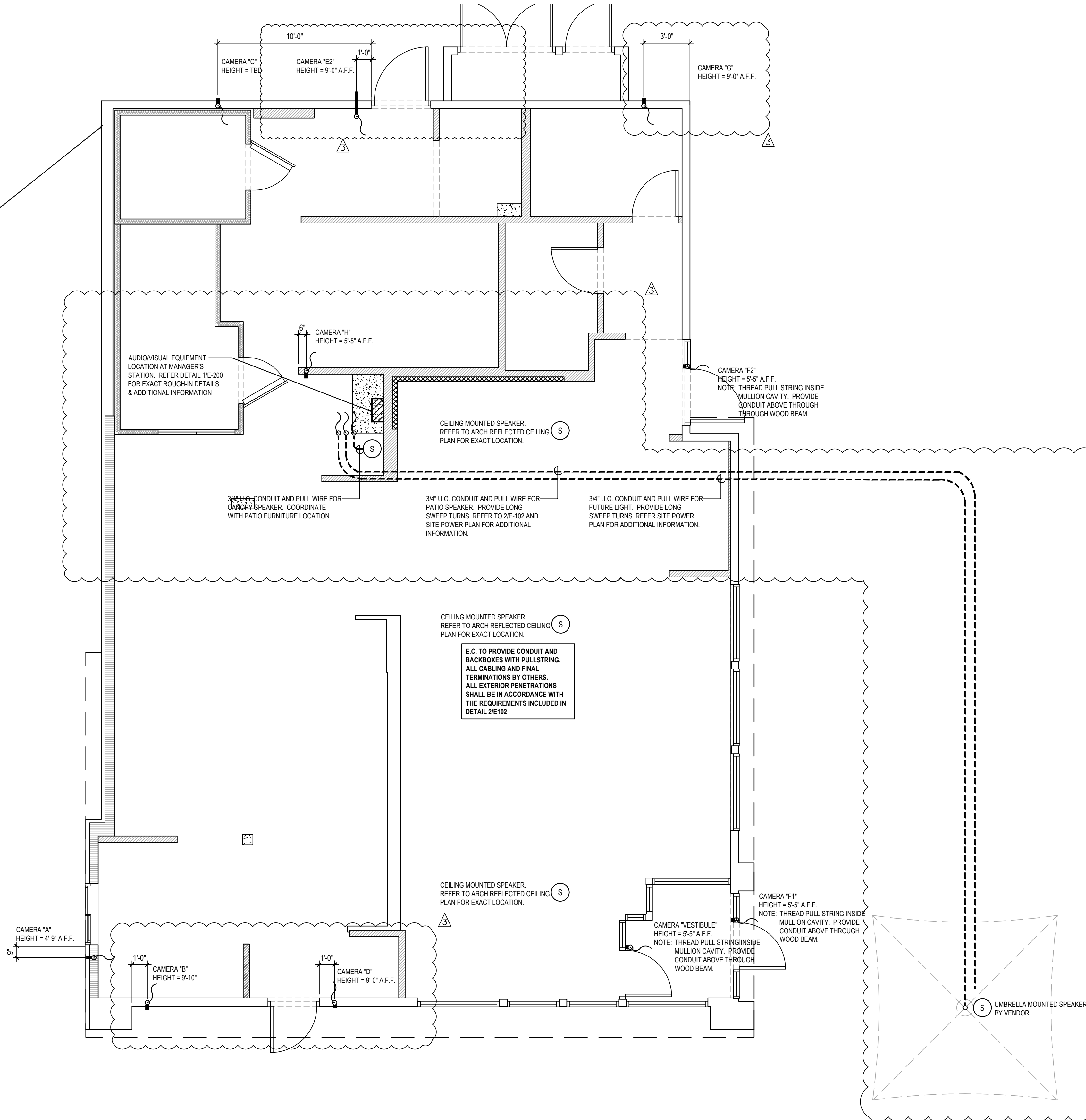
JOHN STRAIN
INTERFACE SECURITY SYSTEMS
PHONE: 314-708-9878
EMAIL: john.strain@interfacesys.com

PULL STRING/WIRE.
TEMPORILY TIE STRING OFF TO
STRUCTURE FOR FUTURE
CABLE VENDOR.

1/2" CONDUIT. ANCHOR TO
STUD/FRAMING MEMBER WITH
CONDUIT CLAMP. STUB UP
TO A MINIMUM OF 6" ABOVE
ADJACENT CEILING - U.N.O.

STUB CONDUIT THROUGH
EXTERIOR WALL. END OF
CONDUIT TO BE FLUSH WITH
ARCHITECTURAL FINISH.
CONDUIT STUB ONLY - DO NOT
PROVIDE JUNCTION BOX ON
EXTERIOR OF BUILDING.

REFER PLAN



CONDUIT ROUGH-IN DETAIL

2

NOT TO SCALE

E-102

SECURITY CAMERA PLAN

1

E-102



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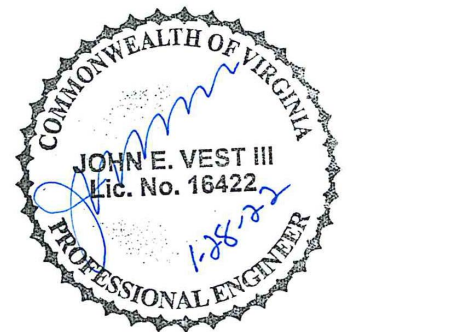
PANDA PROJECT #: D8164

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E-104

ROOF POWER PLAN

TRUE WARM & WELCOME 2300 R6

- ALL ROOF MOUNTED EQUIPMENT SHALL BE IN NEMA-3R ENCLOSURES.
- ALL CONDUIT RUNS SHOWN ON THE ROOF SHALL BE RUN BELOW IN THE CEILING SPACE WHERE AMBIENT TEMPERATURE WILL BE BELOW 30° C. FINAL CONNECTIONS TO THE ROOF EQUIPMENT IS LIMITED TO 5'-0" OF DIRECT SOLAR EXPOSURE.
- VERIFY ALL FUSE SIZES AND TYPES WITH THE MECHANICAL EQUIPMENT MANUFACTURER PRIOR TO INSTALLATION.
- REVIEW THE MECHANICAL PLANS FOR HVAC CONTROL REQUIREMENTS AND SCOPE OF WORK PRIOR TO BIDDING AND INCLUDE ALL COSTS IN BID.
- VERIFY CONNECTION POINTS OF ALL HVAC EQUIPMENT PRIOR TO INSTALLATION. PROVIDE CONTROL VOLTAGE CONNECTION TO DUCT MTD. SMOKE DETECTOR AS REQUIRED BY MECHANICAL DRAWING M-100 AND INTERLOCK WITH FIREALARM.
- SEE MECHANICAL DRAWINGS FOR EXACT LOCATIONS OF MECHANICAL EQUIPMENT AND THERMOSTATS. PROVIDE RACEWAY SYSTEM FOR ALL CONTROL WIRING AS REQUIRED BY MECHANICAL DRAWING M-100.
- E.C. COORDINATE ELECTRICAL, MECHANICAL, FIRE ALARM (IF REQUIRED) FOR INTERLOCK SEQUENCE FOR FIRE SUPPRESSION.
- RESTROOM EXHAUST FAN TO BE POWERED FROM BACK OF HOUSE LIGHTING CIRCUIT. SEE DETAIL 5/E400 FOR ADDITIONAL INFORMATION.

ROOF PLAN GENERAL NOTES 2

NOT TO SCALE E-104

- ROUTE HOMERUN THROUGH BACK OF HOUSE LIGHTING CIRCUIT. REFER TO LIGHTING CONTACTOR SCHEDULE. 4/E-101. FAN TO BE CONTROLLED BY SWITCH FOR BACK OF HOUSE LIGHTING.
- DUCT SMOKE DETECTOR. FURNISHED BY MECHANICAL/FACTORY. WIRED BY ELECTRICAL / FIRE ALARM CONTRACTOR. FURNISH AND INSTALL ALL RACEWAY, WIRING, AND ADDITIONAL ACCESSORIES REQUIRED FOR CODE COMPLIANCE AND UNIT SHUTDOWN.
- CIRCUIT FEEDS FROM PANELBOARD - THROUGH HOOD CONTROL PANEL - UP TO ROOF. REFER TO DETAIL, SHEET 3/E-401 & KITCHEN HOOD SUBMITTAL DATA.
- REFER TO CONDENSING UNIT WIRING DIAGRAM, 7/E-400.
- STRUT RACK SUPPORT FOR EQUIPMENT DISCONNECT SWITCHES. REFER TO DETAIL, SHEET 2/E-401.
- NOT USED.
- DO NOT INSTALL UNTIL BACK DRAFT DAMPER INSTALLATION IS COMPLETE. UTILIZE FACTORY KNOCKOUTS FOR ELECTRICAL RUN FOR THIS FAN. REFER TO SHEET M-402.
- MOUNT PHOTOCELL AS DETAILED ON EQUIPMENT DISCONNECT SWITCH SUPPORT DETAIL 2/E401 ON CONDENSER RACK.
- STUB ELECTRICAL FEED FOR EF-1 & EF-2, THROUGH ROOF ON HINGE SIDE OF EXHAUST FANS, IN LOCATION AS SHOWN ON POWER ROOF PLAN. REFER TO DETAIL 3/M-501 FOR ADDITIONAL DETAILS.
- ROUTE POWER FEEDS VIA FACTORY PROVIDED THRU-BASE CONNECTION AREA. COORDINATE WITH MECHANICAL.
- UNIT INCLUDES FACTORY MOLDED CASE DISCONNECT SWITCH (NO OCP). VERIFY WITH MECHANICAL SUBMITTAL DATA. PROVIDE DISCONNECT IF / AS REQUIRED.

ROOF PLAN KEYED NOTES 3

NOT TO SCALE E-104

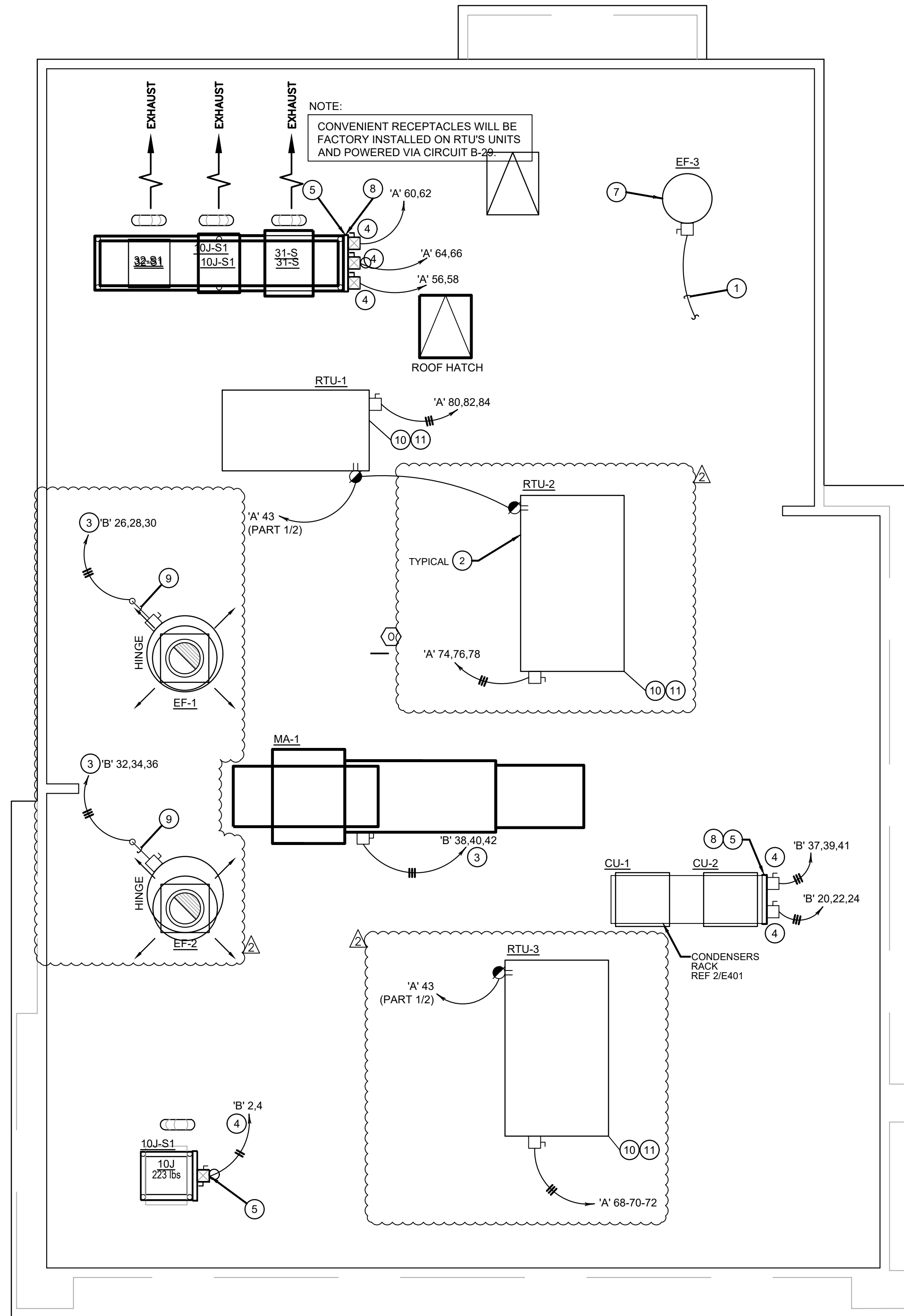
ROOFTOP EQUIPMENT SCHEDULE

TAG	DESCRIPTION	KW	H.P.	FLA	VOLT/Ø	WIRE, CONDUIT	CONN	MOUNT HEIGHT	DISC. SW. WITH RK1 FUSES PER MFR'S REQ'S. AND/OR REMARKS
RTU1	A/C UNIT (LENNOX)			33.0	208V.3Ø	3 #8, #10 GND., 1" C.	□	AT UNIT	60A. 3P. 3F. WP (1) (4)
RTU2	A/C UNIT (LENNOX)			46.0	208V.3Ø	3 #6, #10 GND., 1" C.	□	AT UNIT	60A. 3P. 3F. WP (1) (4)
RTU3	A/C UNIT (LENNOX)			46.0	208V.3Ø	3 #6, #10 GND., 1" C.	□	AT UNIT	60A. 3P. 3F. WP (1) (4)
CU-1	CONDENSING UNIT			21.4	208V.3Ø	3 #10, #10 GND., 1" C.	□	AT UNIT	30A. 3P. 3F. WP (1)
CU-2	CONDENSING UNIT			21.4	208V.3Ø	3 #10, #10 GND., 1" C.	□	AT UNIT	30A. 3P. 3F. WP (1)
MA-1	MAKE-UP AIR UNIT	5.0	15.0	208V.3Ø	3 #12, #12 GND., 3/4" C.	□	AT UNIT		(1) (4)
EF-1	EXHAUST FAN	2.0	5.9	208V.3Ø	3 #12, #12 GND., 3/4" C.	□	AT UNIT		(1)
EF-2	EXHAUST FAN	2.0	5.9	208V.3Ø	3 #12, #12 GND., 3/4" C.	□	AT UNIT		(1)
EF-3	EXHAUST FAN	1/4	4.8	120V.1Ø	2 #12, #12 GND., 3/4" C.	□	AT UNIT	30A. 2P. 1F. WP	(1) (4)
31-S	W/ COOLER COND.			27.0	208V.1Ø	2 #10, #10 GND., 3/4" C.	☒	AT UNIT	(2) (3)
32-S1	W/ FREEZER COND.			32.0	208V.1Ø	2 #8, #8 GND., 3/4" C.	☒	AT UNIT	30A. 2P. 2F. WP (3)
10J-S1	ICE MACHINE COND.			11.7	208V.1Ø	2 #12, #12 GND., 3/4" C.	☒	AT UNIT	(2) (3)

- (1) DISCONNECT SWITCH PROVIDED WITH UNIT.
- (2) COMBINATION 30A. 2P. 2F. WP DISCONNECT SWITCH WITH RK5 FUSES PER MANUFACTURER RECOMMENDATION.
- (3) COMBINE CIRCUITRY IN 1" CONDUIT FROM J-BOX ON EQUIPMENT DISCONNECT SWITCH SUPPORT. REFER TO DETAIL THIS SHEET, 1 / E-104.
- (4) ELECTRICAL FEEDS ARE TO BE ROUTED FROM PLENUM SPACE. UP THROUGH EQUIPMENT CURB, INTO BOTTOM OF EQUIPMENT, THROUGH FACTORY INSTALLED WATER TIGHT CONNECTIONS.

HVAC EQUIPMENT SCHEDULE 4

NOT TO SCALE E-104



ROOF POWER PLAN 1

1/4" = 1'-0" E-104

ISSUE FOR PERMIT 11-02-21

- COORDINATE SERVICE ENTRANCE SECTION, TRANSFORMER, PRIMARY SERVICE, SECONDARY SERVICE, AND SWITCHING CABINET OR POWER POLE LOCATIONS WITH SERVING UTILITY COMPANY AND COMPLY AS REQUIRED.
- CONTRACTOR TO BE RESPONSIBLE FOR COORDINATING AND PROVIDING REQUIRED WORK FOR SUPPLYING ELECTRICAL POWER AND TELEPHONE UTILITIES TO THE BUILDING.
- CONTRACTOR SHALL HAVE ALL EXISTING UNDERGROUND UTILITIES LOCATED PRIOR TO TRENCHING. ALL UNDERGROUND UTILITIES DAMAGED DURING TRENCHING SHALL BE REPAIRED TO THE SATISFACTION OF INVOLVED UTILITY AT CONTRACTOR'S EXPENSE.
- MINIMUM CONDUCTOR SIZE THIS SHEET TO BE #10 CU, 1" CONDUIT.

SITE PLAN GENERAL NOTES

2

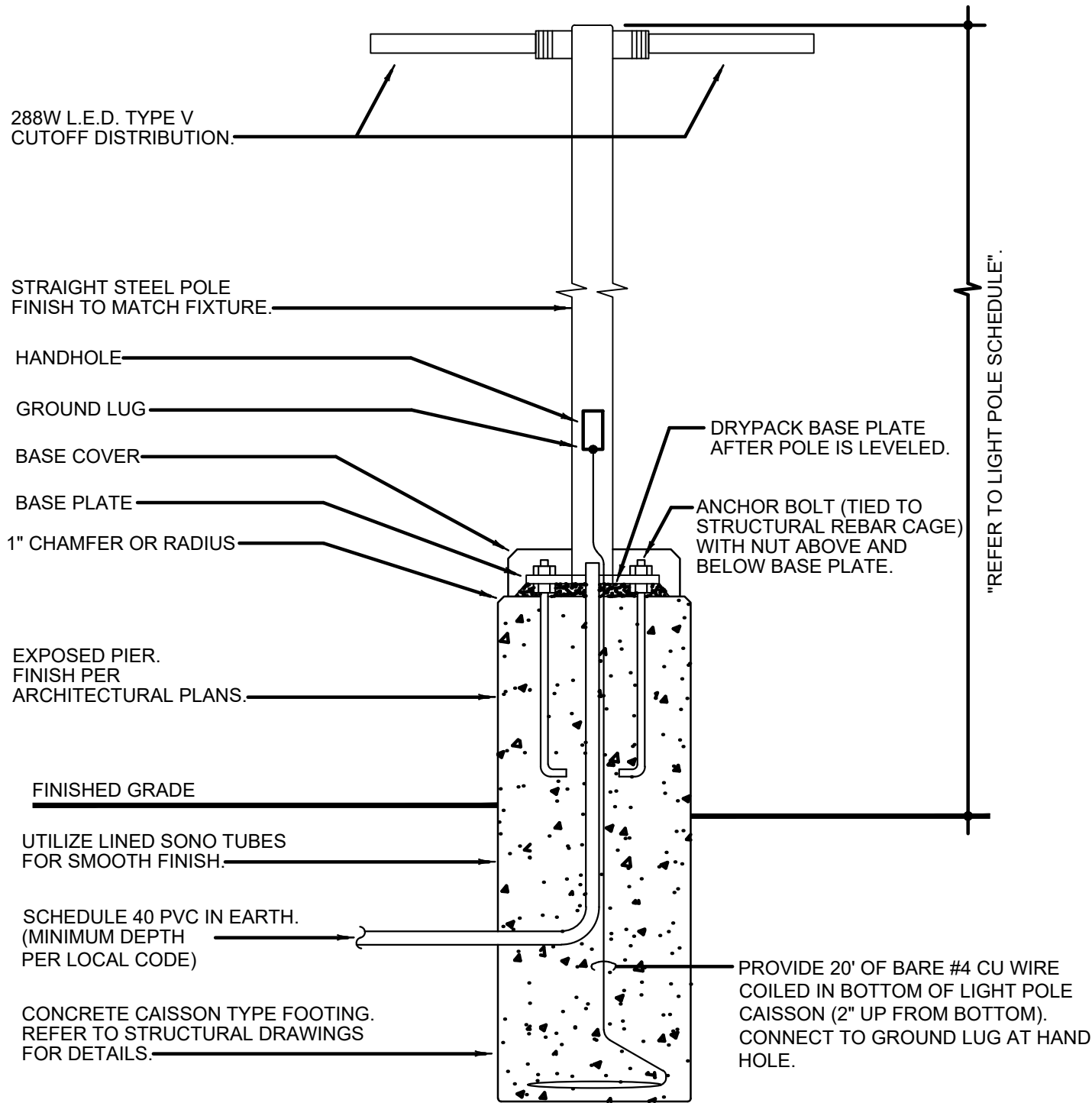
E-105

- FEED THROUGH LIGHTING CONTACTOR. REF: 11/E400.
- STUB UP LOCATION FOR (3) 3/4" CONDUITS & PULL STRINGS, TO ENTER BUILDING & UP TO 6" ABOVE CEILING. REFER TO SHEET 1/E401.
- STUB-UP LOCATION FOR MENU BOARD. SIGN DISCONNECT PROVIDED BY SIGN CONTRACTOR. COORDINATE PRECISE LOCATION WITH ARCHITECT / OWNER.
- DRIVE-THRU SENSOR LOOP. COORDINATE LOCATION. REFER TO DETAIL 1 / E401.
- STUB-UP FOR DRIVE-THRU ORDER CONFIRMATION MONITOR. COORDINATE LOCATION WITH ARCHITECT / OWNER.
- STUB UP LOCATION FOR PYLON SIGN OR MONUMENT SIGN. ELECTRICAL CONTRACTOR TO PROVIDE NON-FUSED DISCONNECT AT BASE OF SIGN. COORDINATE EXACT LOCATION WITH ARCHITECT/OWNER. CONNECT TO EXTERIOR BUILDING SIGN TIMER CONTROL. REFERENCE 11/E400.
- SEE POLE MOUNTING DETAIL. REFER TO 4/E105.
- CABLE PULL BOX; REFERENCE 1/E100. INSTALL MINIMUM 3' FROM SIDEWALK. DO NOT INSTALL IN SIDEWALK CONCRETE.
- REF: 1/E400 FOR SES GROUNDING DETAIL.

SITE PLAN KEYED NOTES

3

E-105



NOTE: THIS DETAIL IS FOR ELECTRICAL INSTALLATION ONLY. REFER TO STRUCTURAL DRAWINGS FOR MORE INFORMATION.

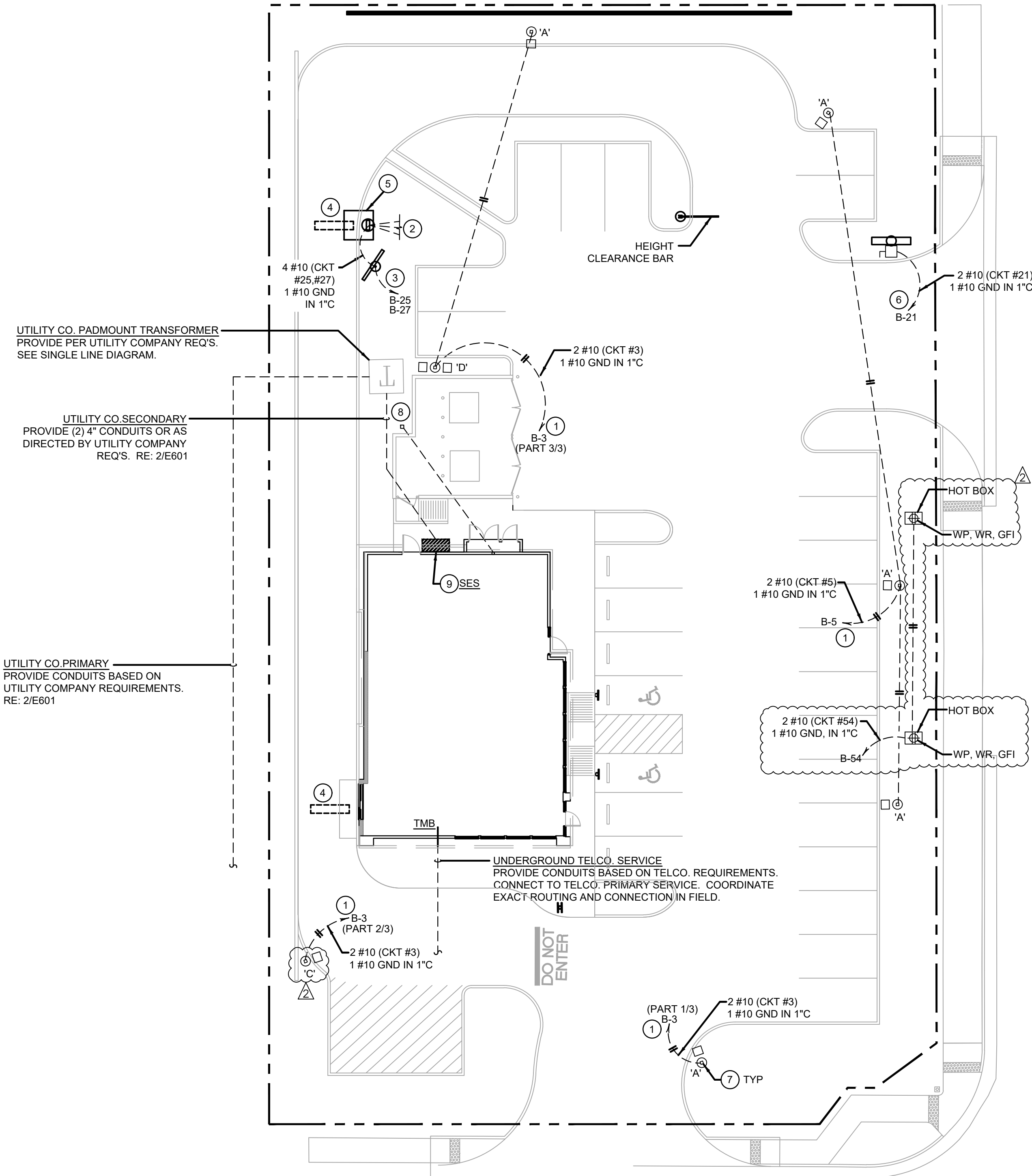
POLE MOUNTING DETAILS

4

E-105

NO SCALE

LIGHT POLE FIXTURE LEGEND								
SYMBOL	MANUFACTURER	CATALOG NUMBER	DESCRIPTION	FIXTURE QTY	COLOR	REMARKS	POLE	POLE QTY
	LSI	SLMLED	SITE LIGHTING	8	DARK BRONZE	MOUNT ON 20' 0" SQUARE STRAIGHT POLE 22' 0" OVERALL HEIGHT WITH 2' 0" BASE	45QBS-8110-20-X-BR2-48C-AB03.TS	7
NOTE: REFER TO PHOTOMETRIC STUDY FOR EXACT CATALOG SPECIFICATIONS OF LIGHT POLE FIXTURES. No substitutions accepted. Contact: Ryan Zinsmeister for pricing ryan.zinsmeister@valighting.com 314.631.2600								



SITE & EXTERIOR LIGHTING PLAN

1

E-105

1" = 16'-0"



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REVISIONS:

AREA PLAN UPDATE	11-08-21

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ISSUE FOR BID (DT)	02-04-22

DRAWN BY: AE

PANDA PROJECT #: D8164

PANDA STORE #: -

ARCH PROJECT #: 261-321



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


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NEWPORT NEWS, VA 23605

E-105

SITE & EXTERIOR LIGHTING PLAN

TRUE WARM & WELCOME 2300 R6

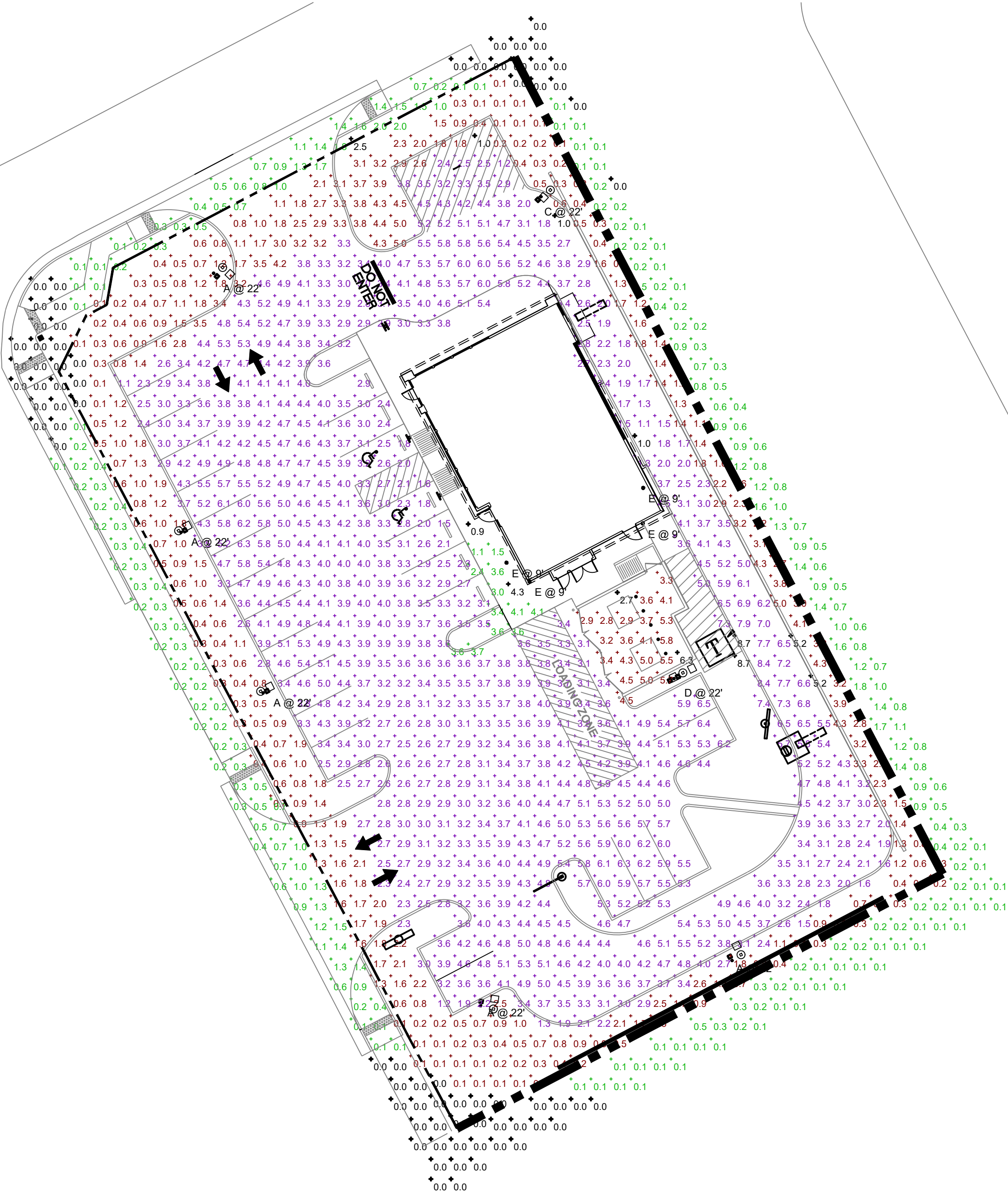
Schedule								
Symbol	Label	Quantity	Catalog Number	Description	Filename	Lumens Per Lamp	Light Loss Factor	Wattage
	A	5	SLM-LED-18L-SIL-FT-40-70CRI-IL- 5 DEGREE TILT	CONTACT RYAN ZINSELMEIER-314-531-2600	SLM-LED-18L-SIL-FT-40-70CRI-IL.ies	12046	1	148.5
	C	1	SLM-LED-18L-SIL-3-40-70CRI-IL	CONTACT RYAN ZINSELMEIER-314-531-2600	SLM-LED-18L-SIL-3-40-70CRI-IL.ies	13767	1	148.5
	D	1	[...]	[...]	[...]	[...]	1	297
	E	4	BUSW	LED Indirect Wall Pack	BUSW-LED.ies	432	1	10.5

Statistics						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
OPEN WALKWAY	+	3.1 fc	4.3 fc	0.9 fc	4.8:1	3.4:1
PARKING/DRIVING AISLES	+	3.9 fc	8.7 fc	1.0 fc	8.7:1	3.9:1
SPILLAGE	+	0.4 fc	2.5 fc	0.0 fc	N/A	N/A
TRASH ENCLOSURE	+	4.2 fc	6.3 fc	2.7 fc	2.3:1	1.6:1
WHOLE SITE	+	1.3 fc	5.2 fc	0.0 fc	N/A	N/A

Note

1. MOUNTING HEIGHT OF 22' (20'POLE)
2. CALCULATIONS TAKEN AT GROUND LEVEL
3.CONTACT VILLA LIGHTING- RYAN ZINSELMEIER- RYAN.ZINSELMEIER@VILLALIGHTING.COM- 314-531-2600

SITE LIGHTING FIXTURE SCHEDULE			3	PANDA SITE LIGHTING DESIGN CRITERIA			2
			E-106	NO SCALE			E-106



SITE PHOTOMETRIC PLAN		1
N.T.S.		E-106



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REVISIONS:

Δ	SITE LIGHTING UPDATE	11-08-21
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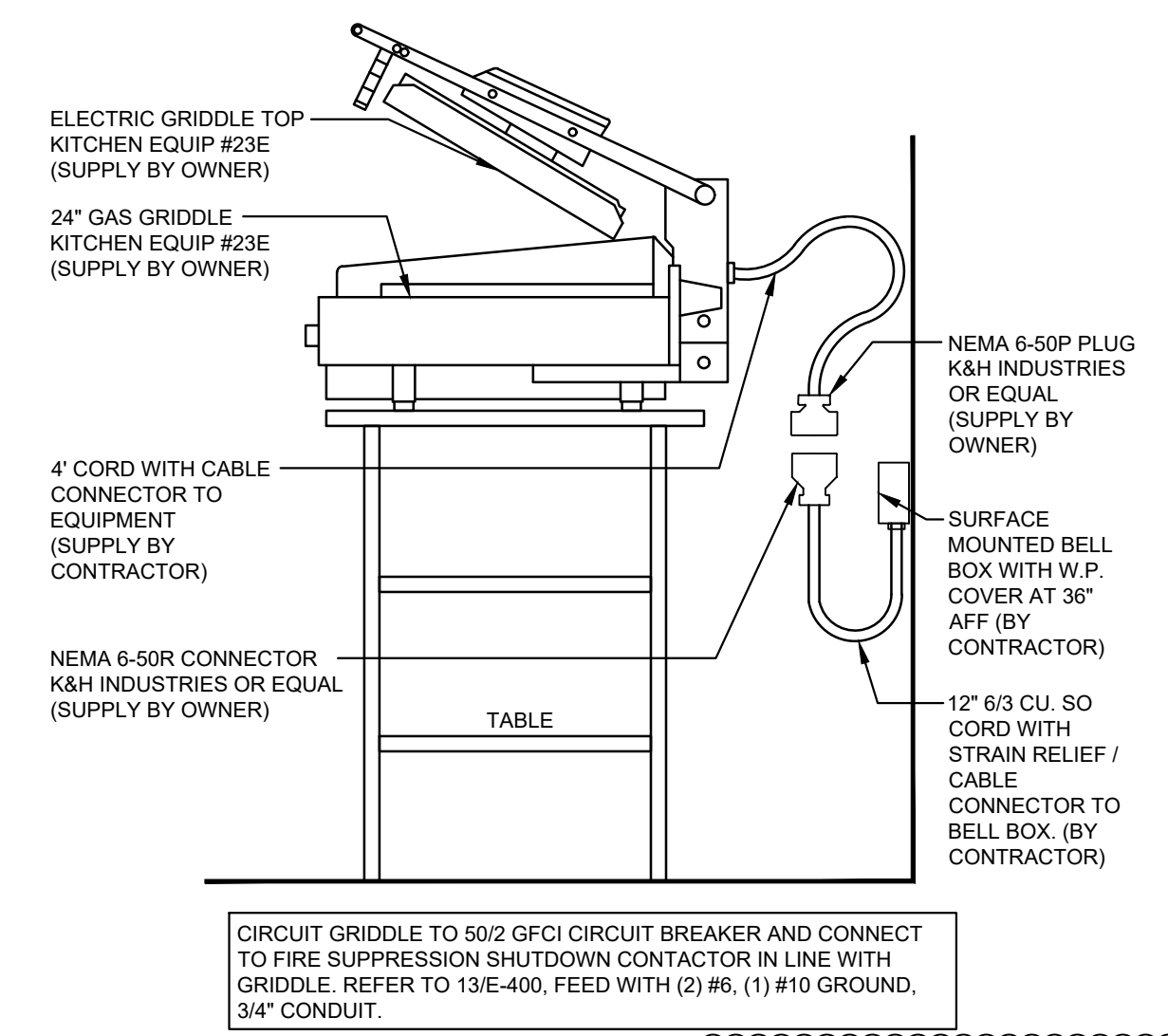
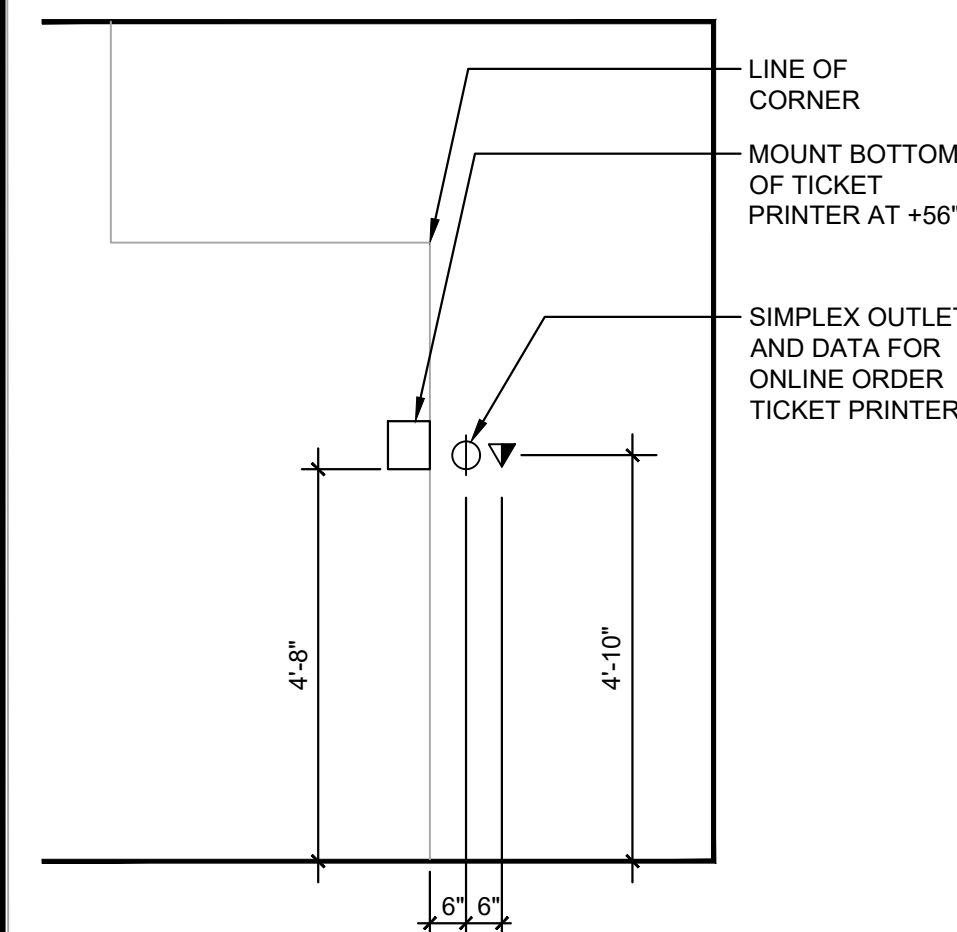
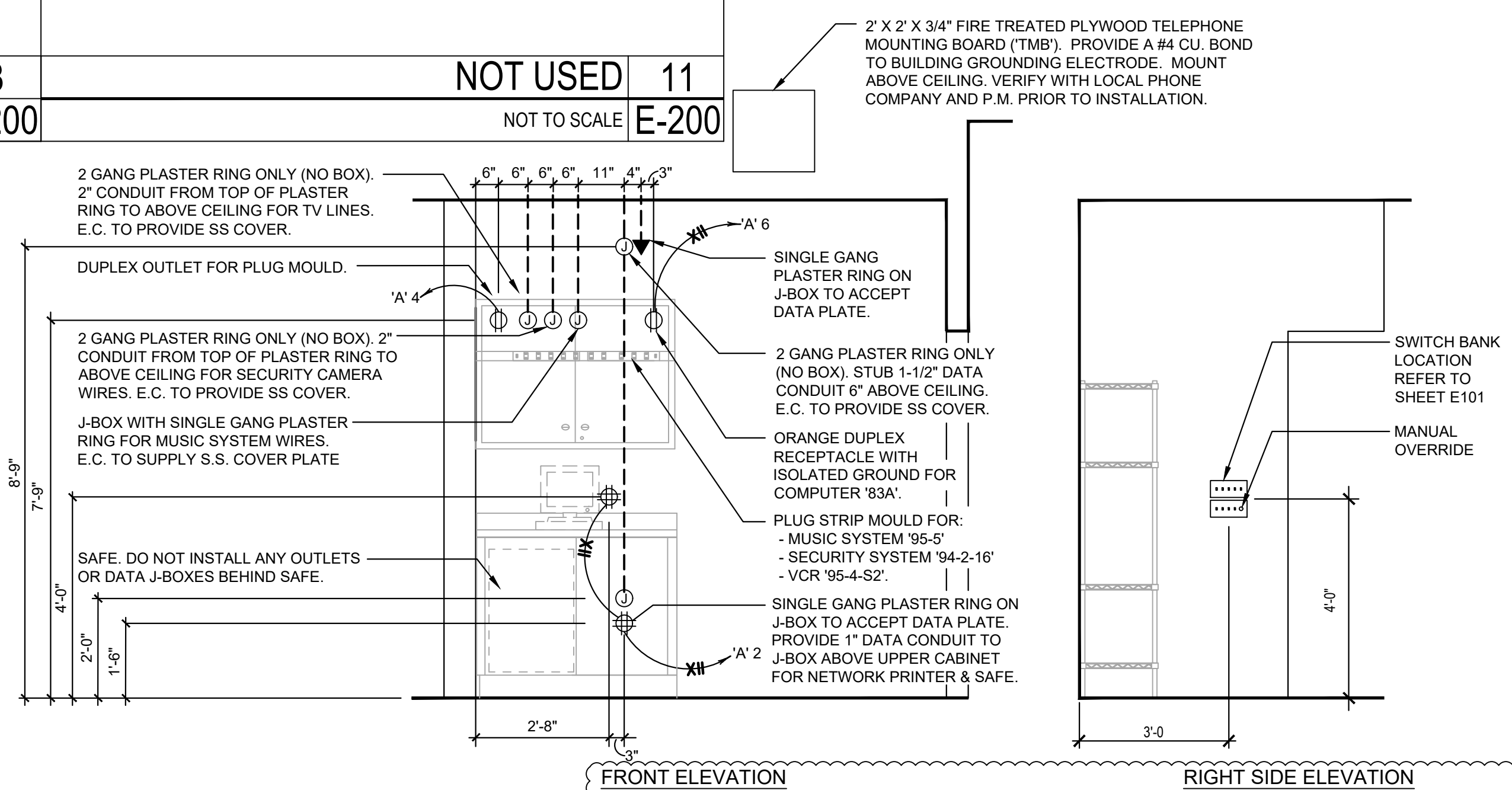
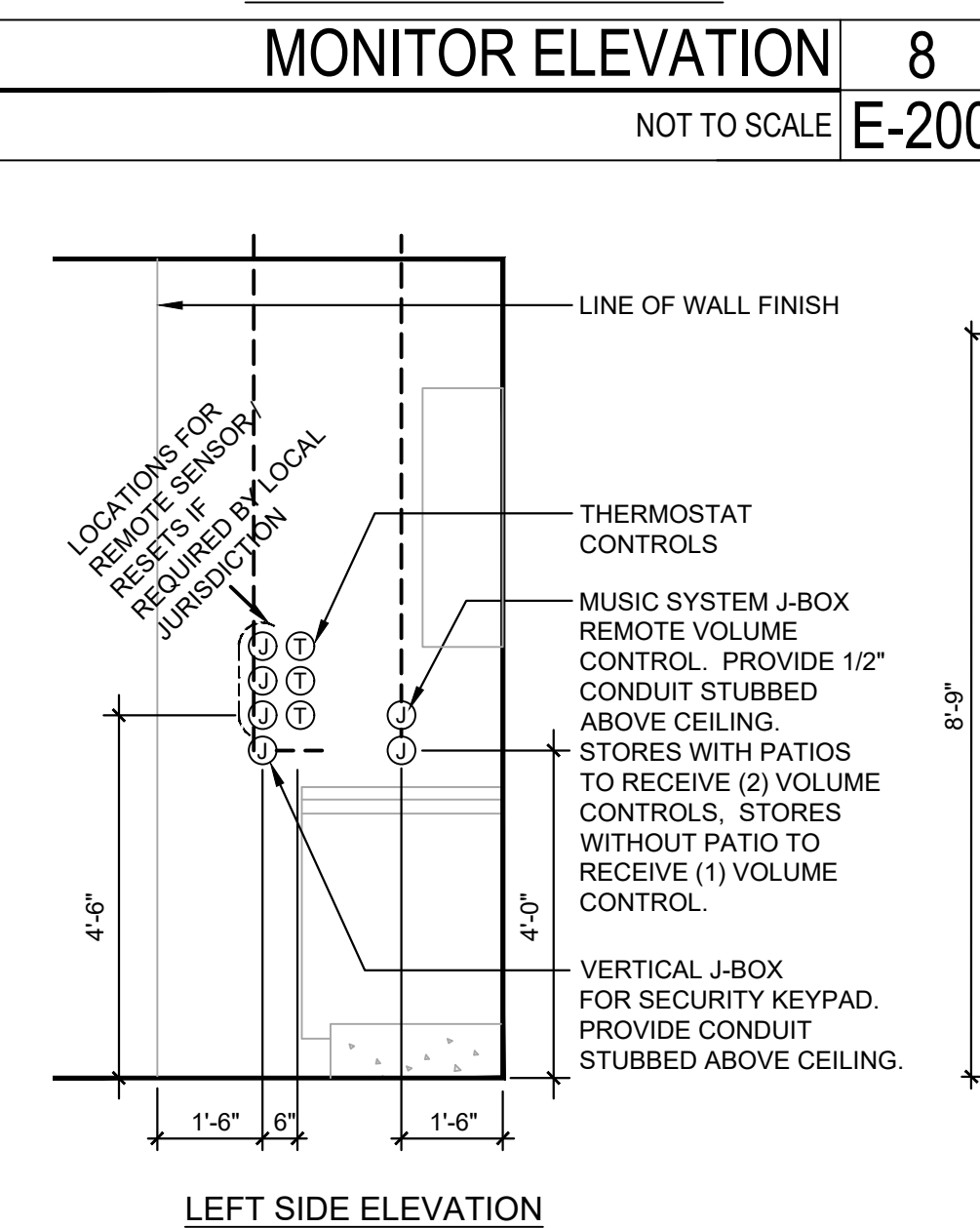
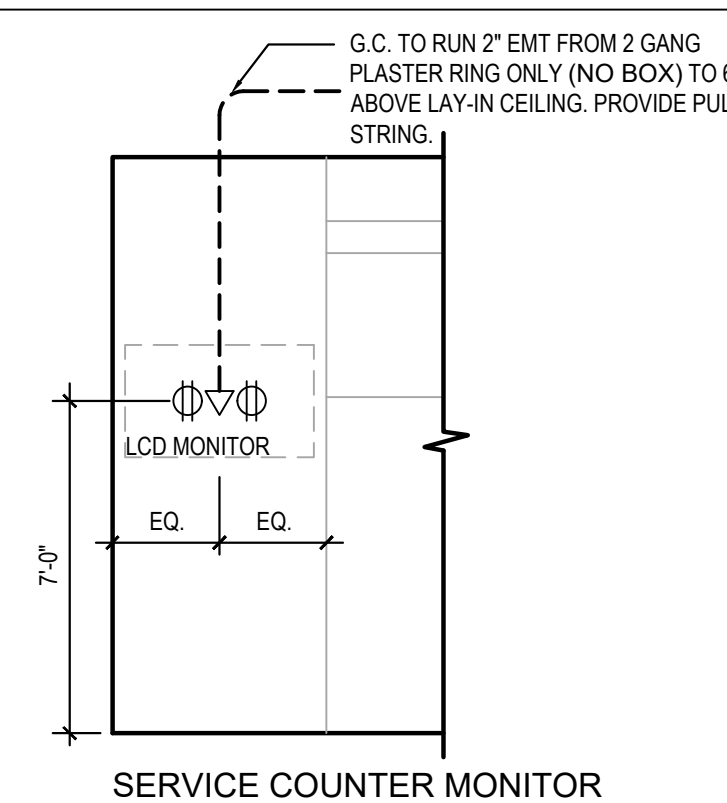
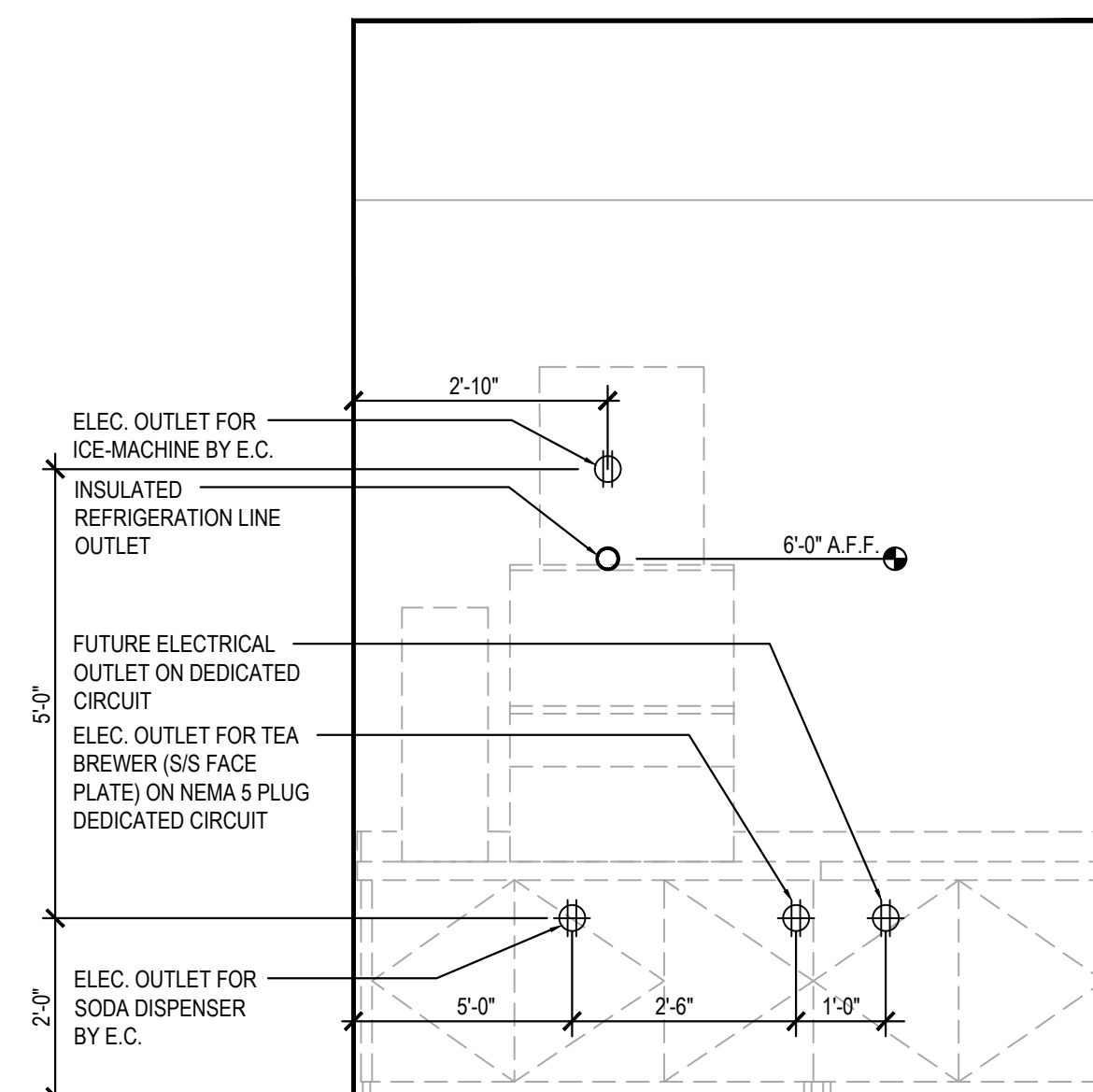
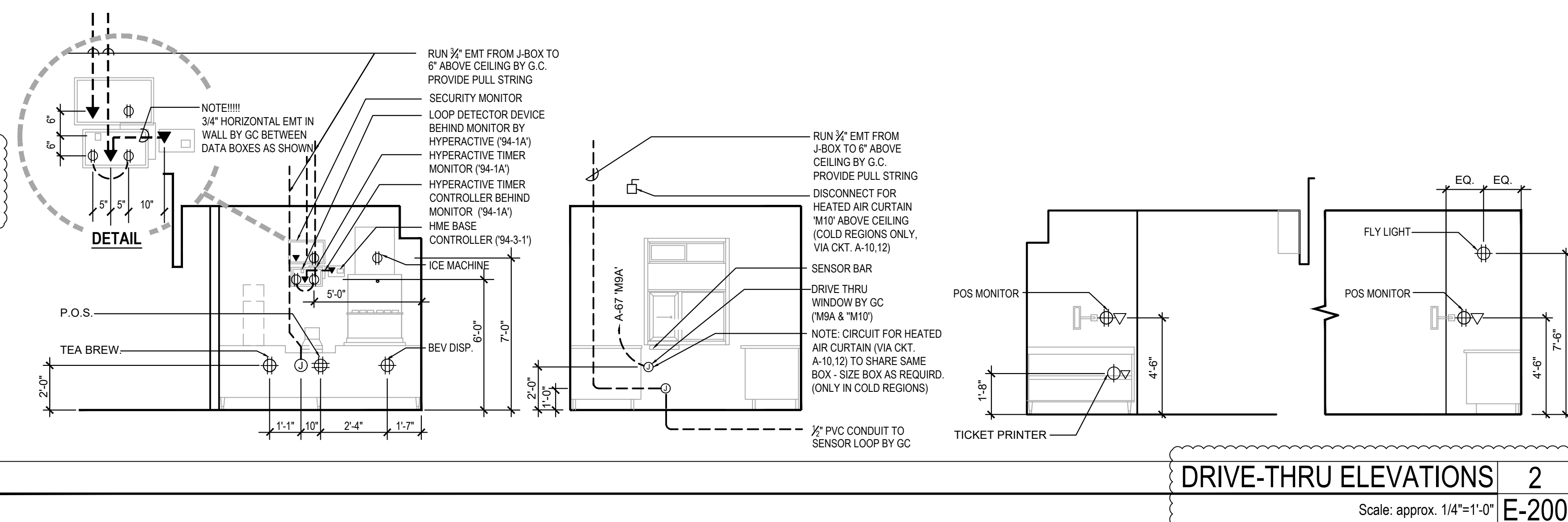
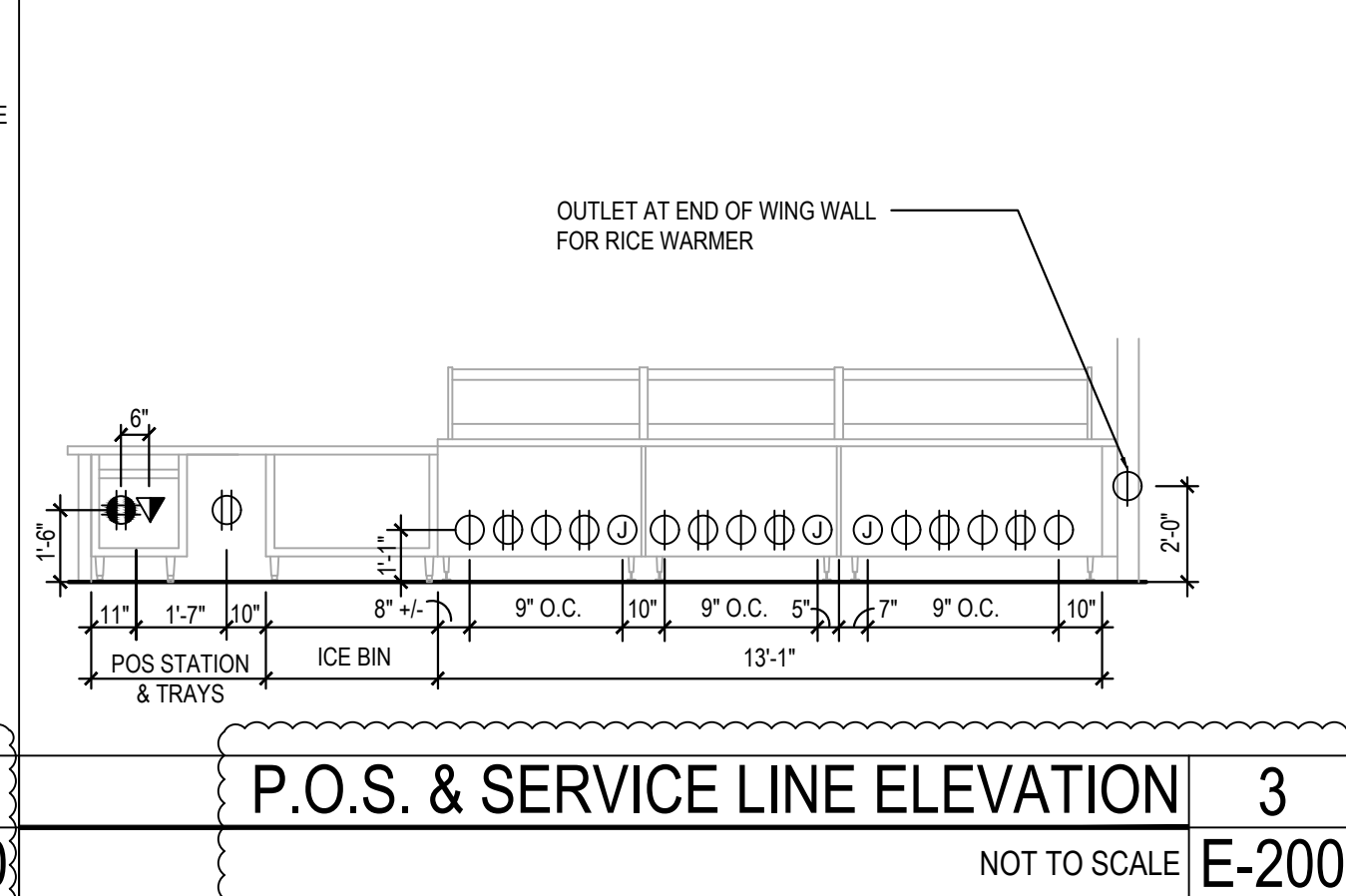
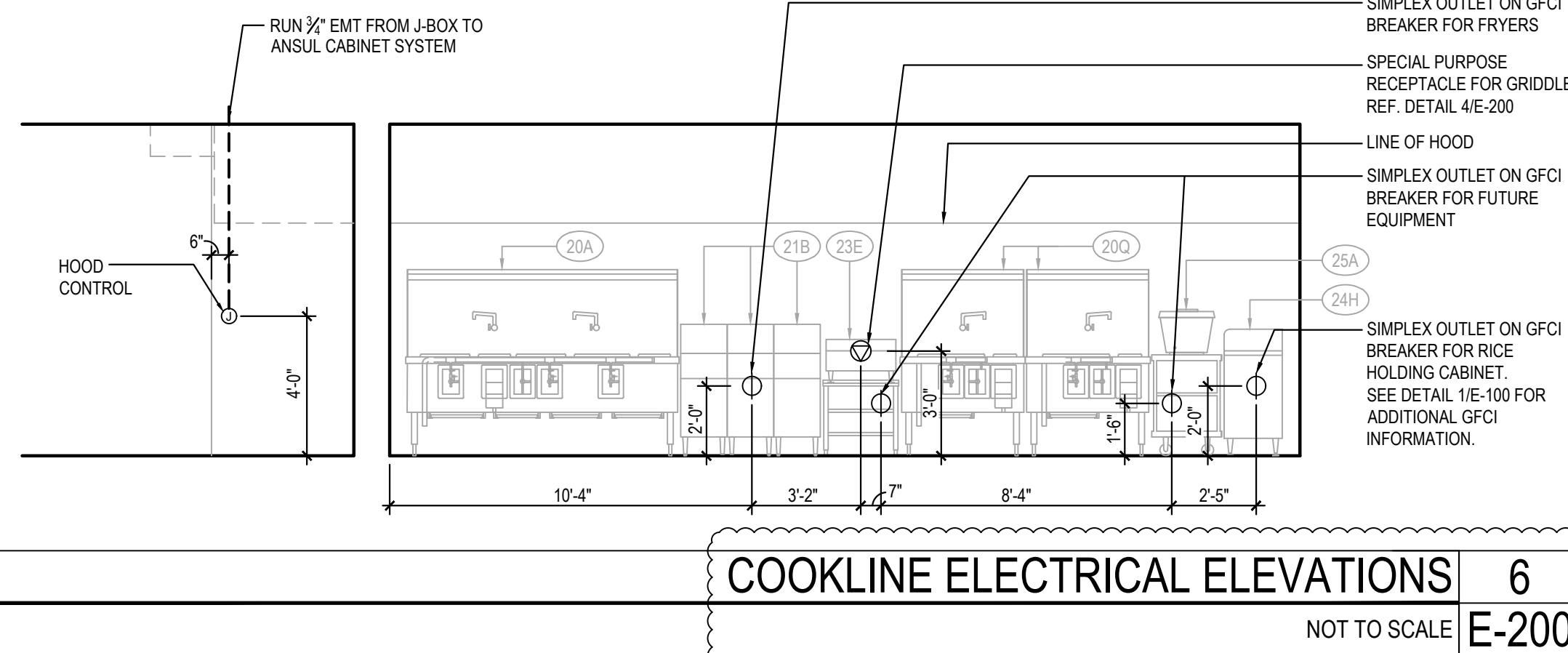
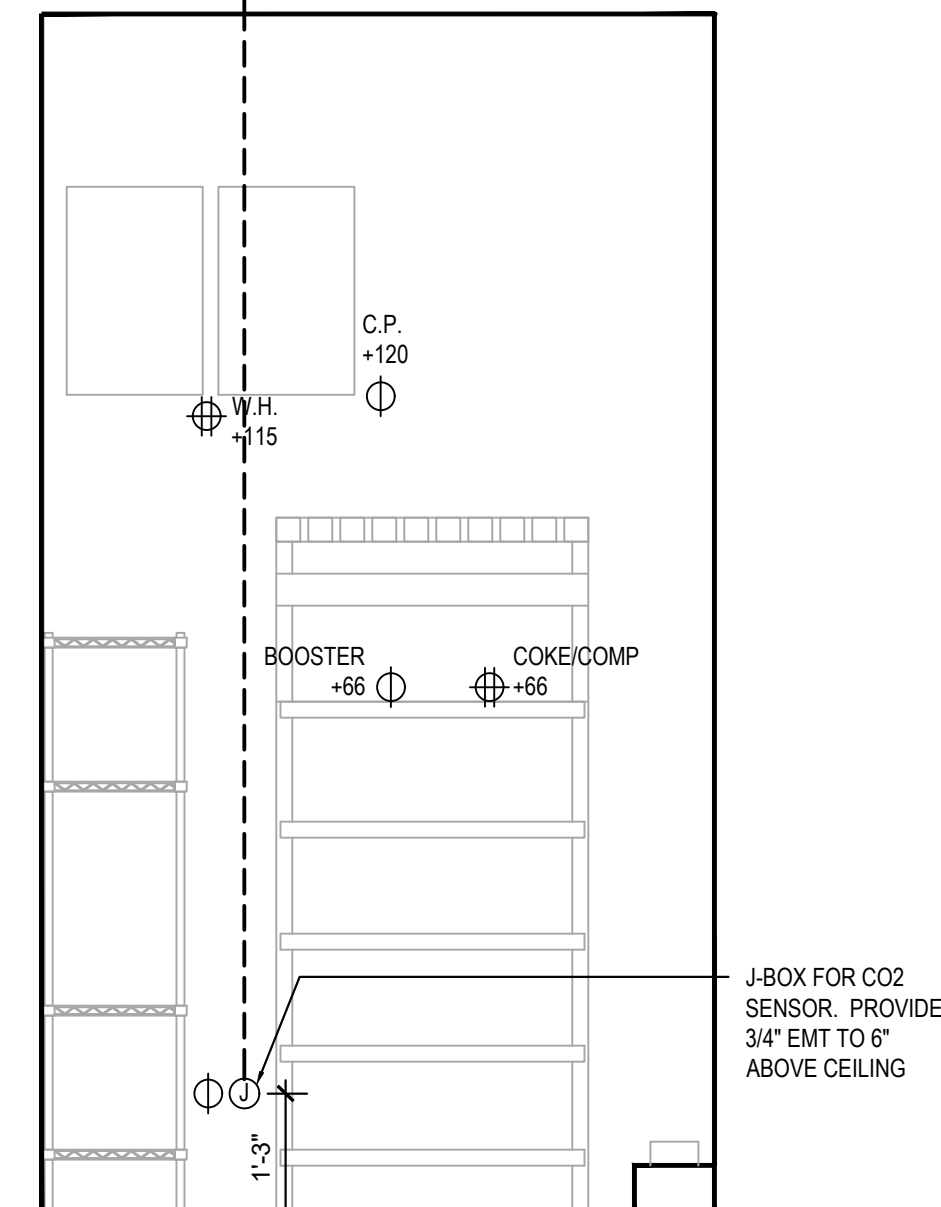
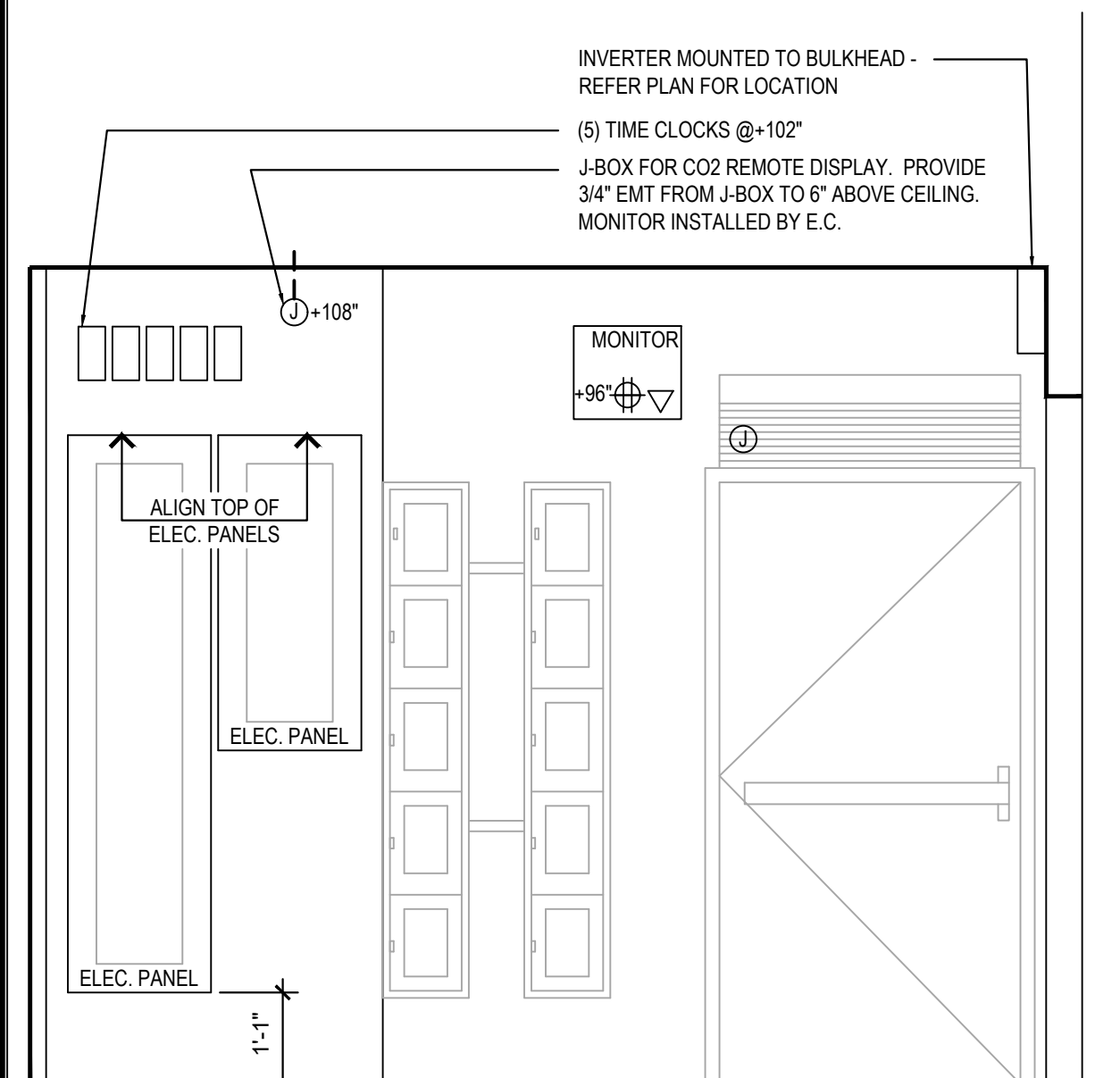
E-106

HOT - MEDIUM
SITE PHOTOMETRIC PLAN

TRUE WARM & WELCOME 2300 R6

ISSUE FOR PERMIT 11-02-21

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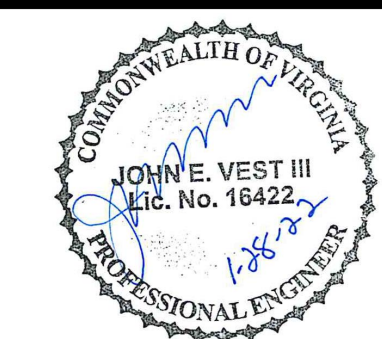


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	ISSUE FOR BID	04-30-2
	ISSUE FOR BID 2	11-02-2
	ISSUE FOR BID (DT)	02-04-22

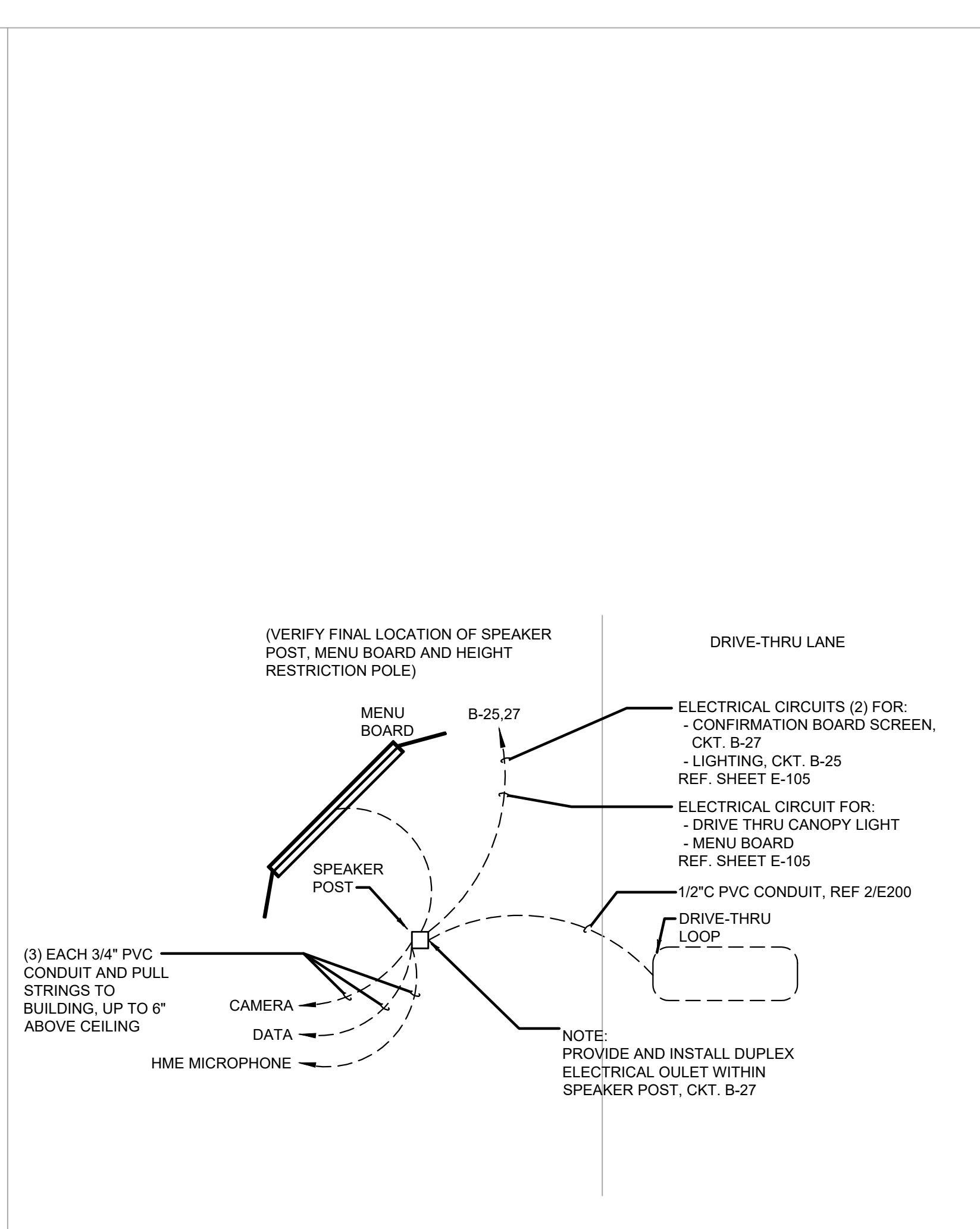
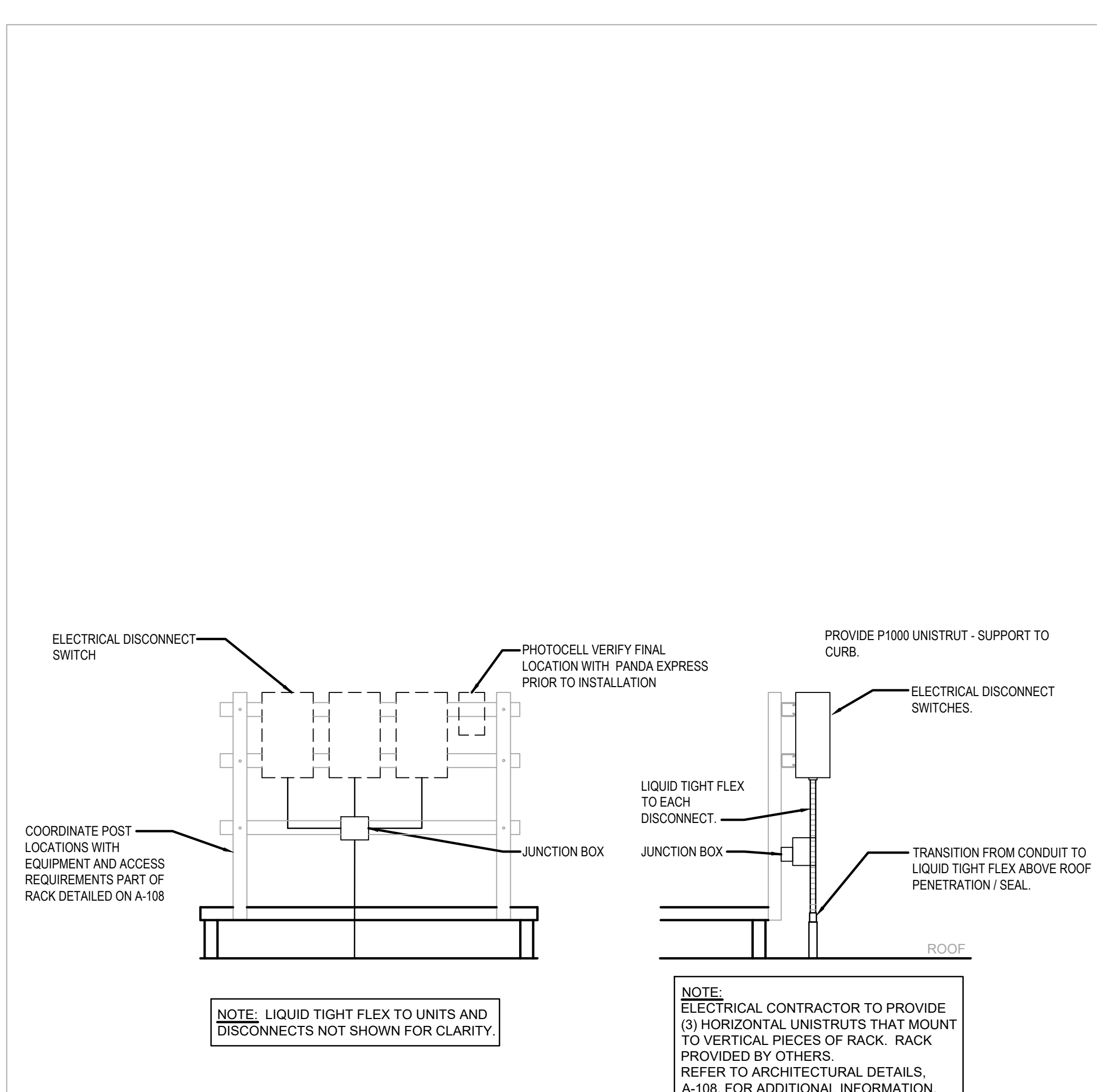
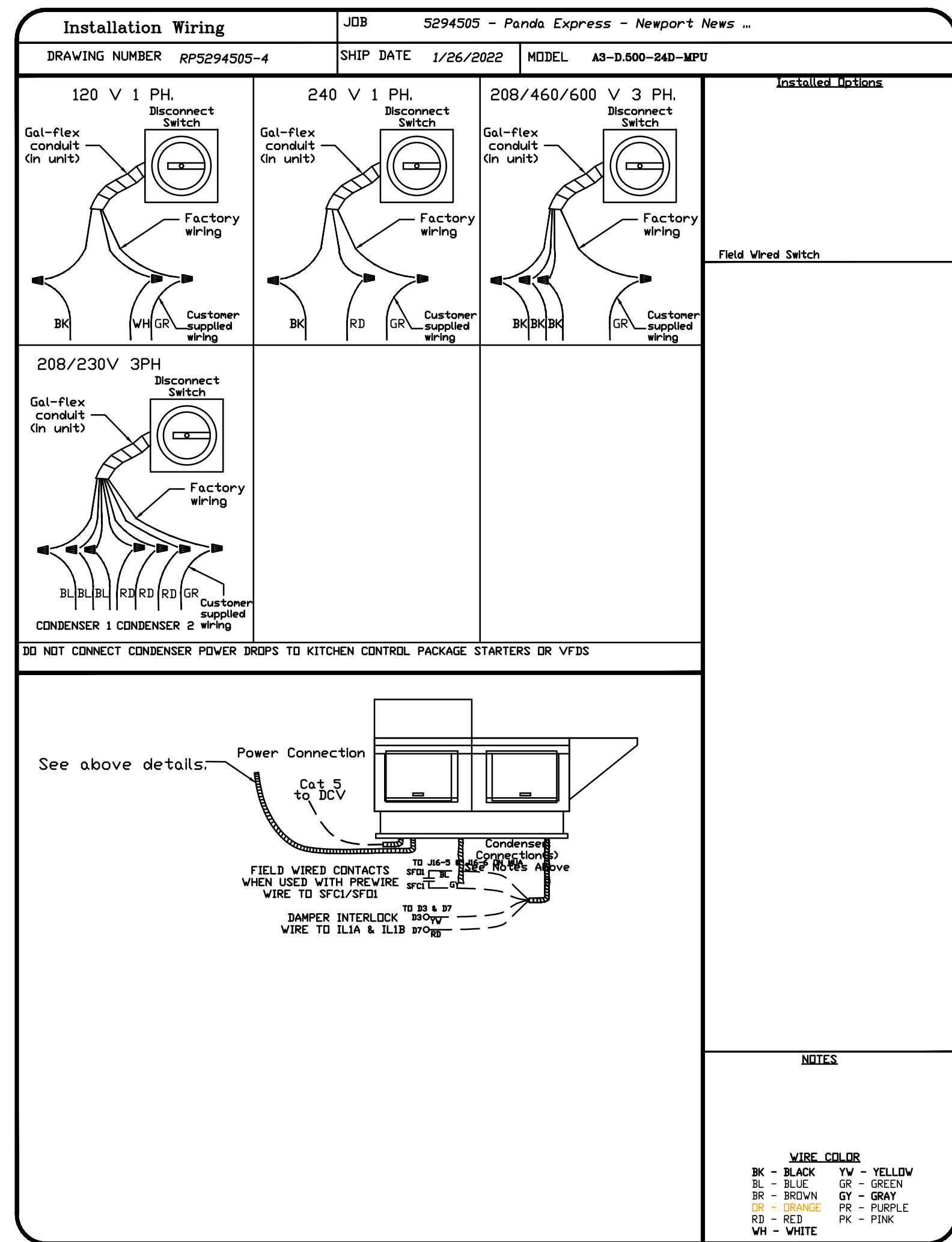
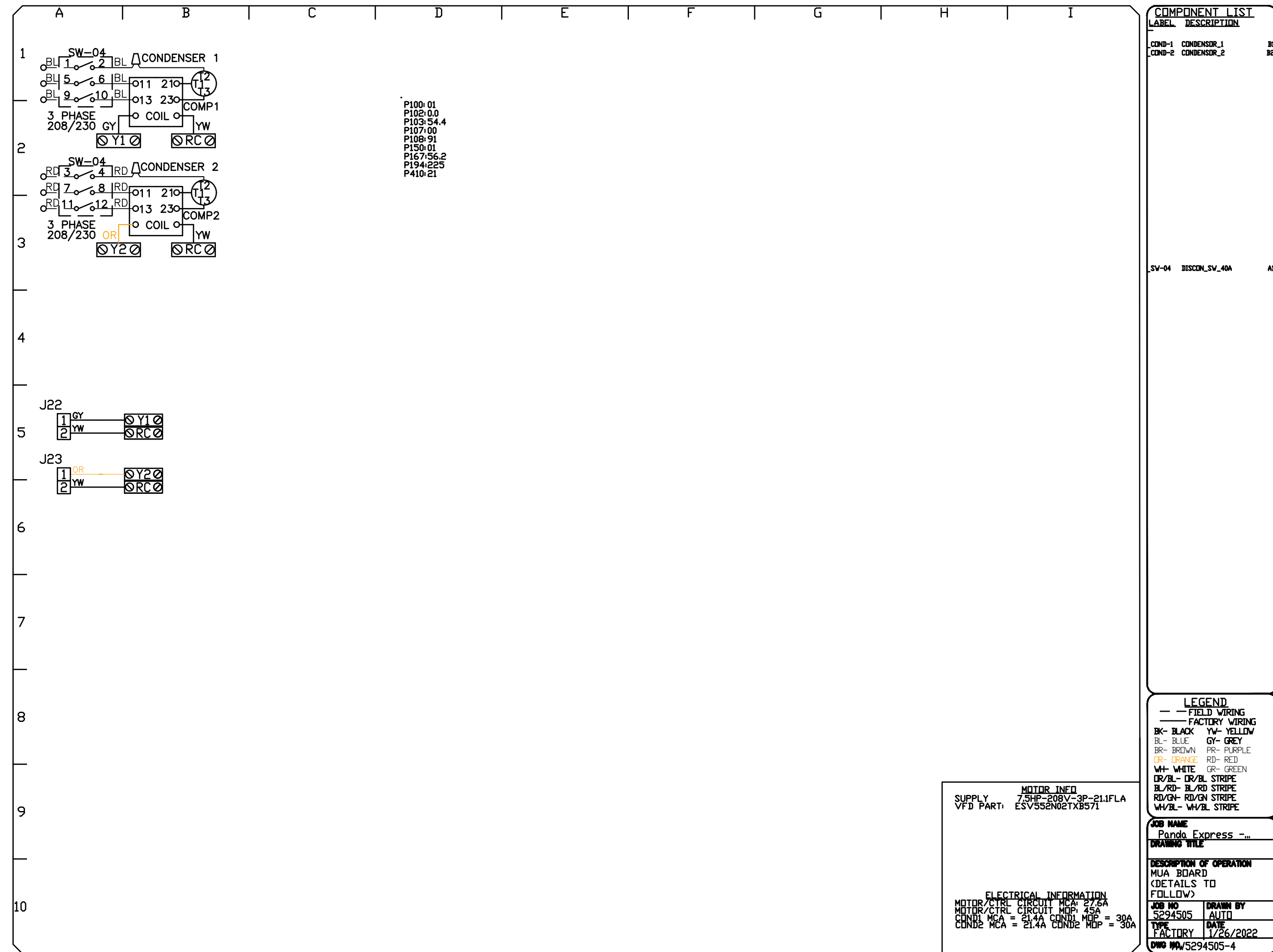
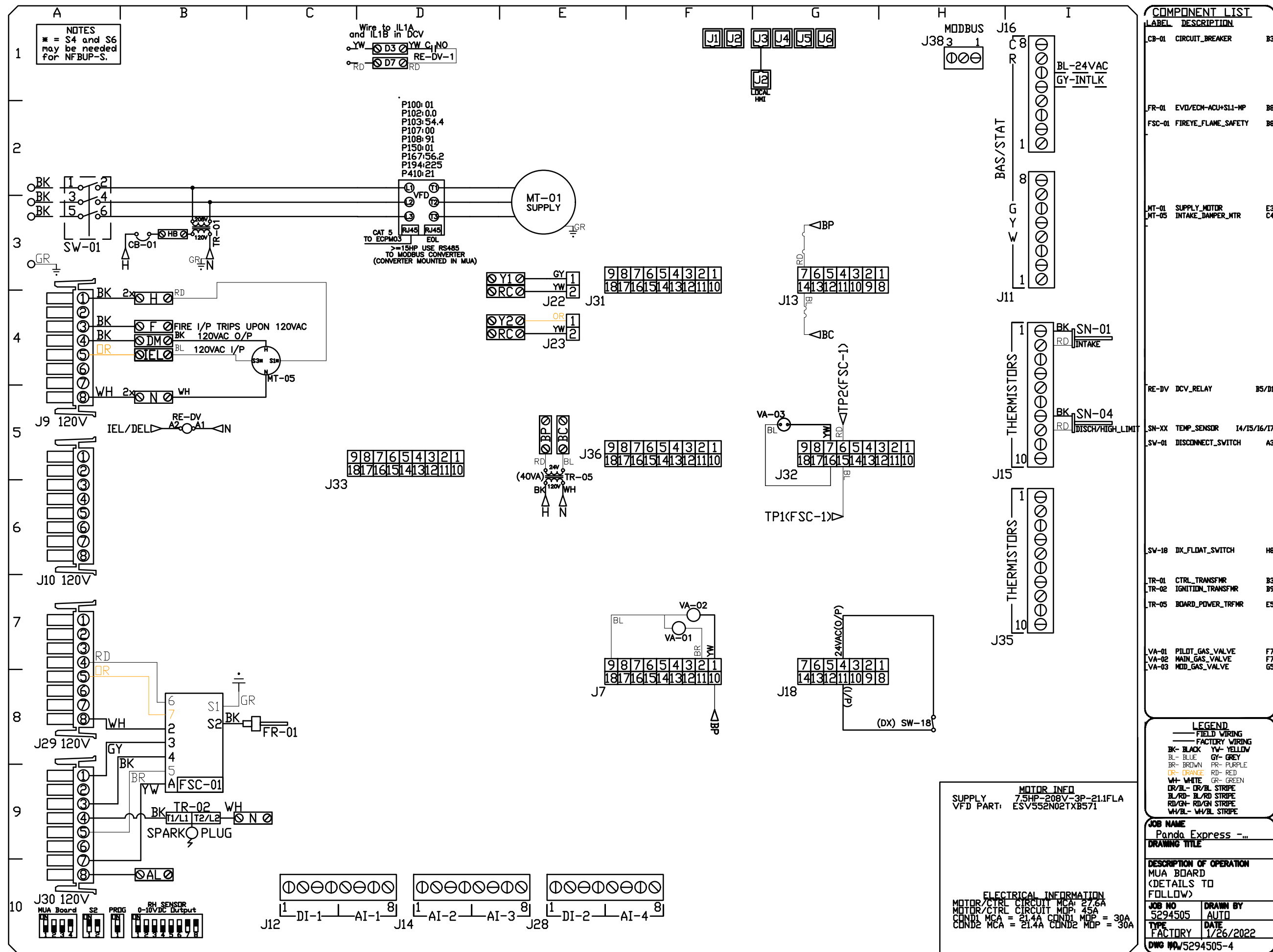
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ISSUE FOR BID 04-30-21
ISSUE FOR BID 2 11-02-21
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