

REVIEWED FOR COMPLIANCE WITH THE CITY CODE, ADOPTED BUILDING CODES, ZONING ORDINANCE AND DESIGN STANDARDS. THIS REVIEW AND APPROVAL DOES NOT RELIEVE THE DEVELOPER OR HIS AGENTS OF ANY RESPONSIBILITY FOR COMPLIANCE WITH ALL APPLICABLE REQUIREMENTS OR ADDRESS OR OVERRULE THE REQUIREMENTS OF OTHER JURISDICTIONS OR AGENCIES, UNLESS SPECIFICALLY NOTED OTHERWISE.

SIGNATURE: *James R. Davis* DATE: 01/27/23

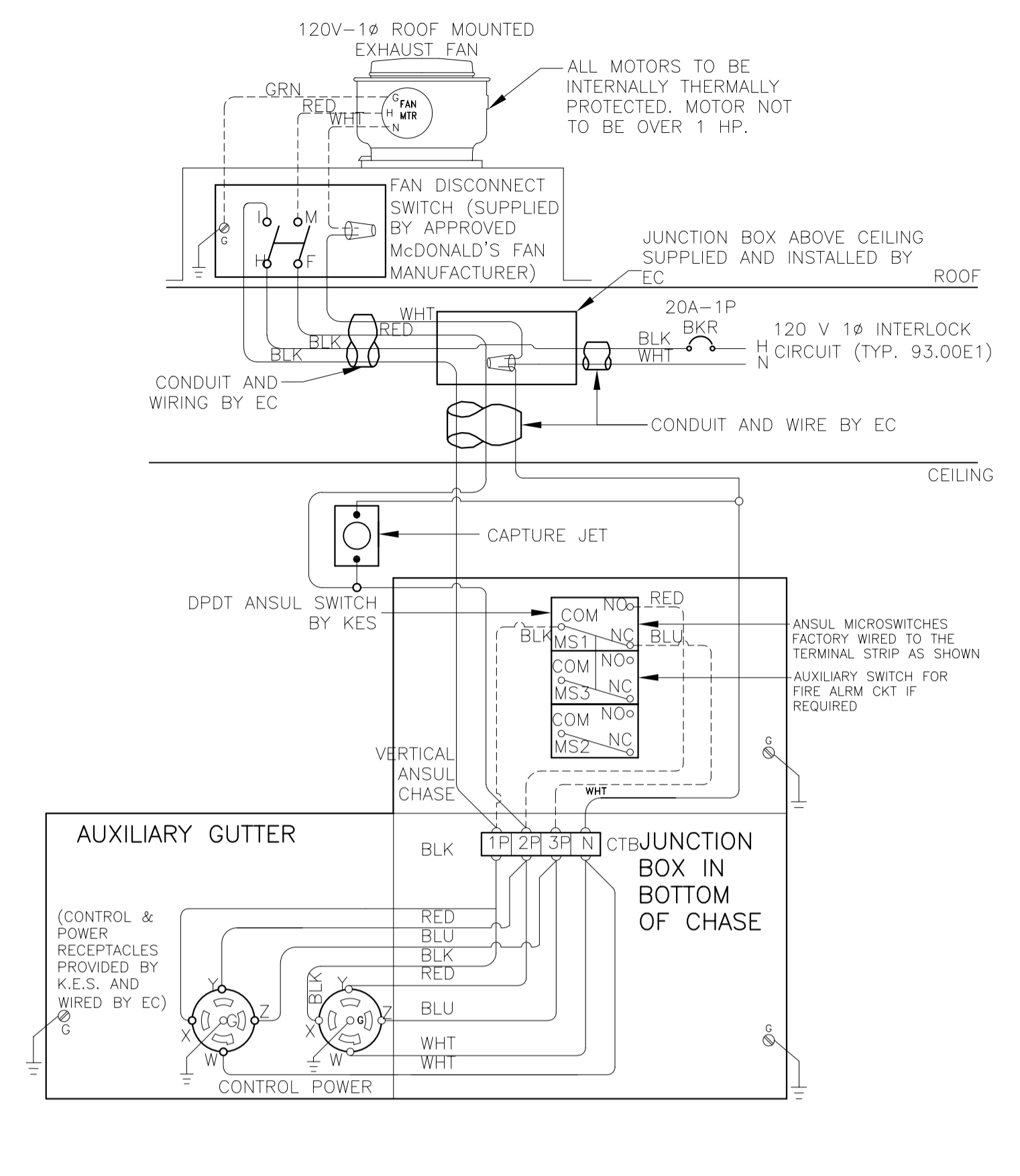
PRJ2023-00032

SEQUENCE OF OPERATION:

1. TURNING "ON" ANY PIECE OF COOKING EQUIPMENT UNDER A HOOD WILL TURN ON THE EXHAUST FAN AND ASSOCIATED RTU PROVIDING MAKEUP AIR FOR THAT HOOD.
2. TURNING "OFF" THE LAST PIECE OF COOKING EQUIPMENT UNDER A HOOD WILL TURN OFF THE EXHAUST FAN FOR THAT HOOD.
3. IF THE ANSUL SYSTEM SHOULD DISCHARGE WHILE THE COOKING EQUIPMENT AND EXHAUST FAN ARE OPERATING, THE COOKING EQUIPMENT WILL BE SHUT OFF, BUT THE EXHAUST FAN WILL CONTINUE TO RUN AND WILL FORCE THE ROOFTOP UNITS INTO A "SCHEDULED" MODE.
4. THE ANSUL SYSTEM MUST BE RECHARGED AND MANUALLY RESET BEFORE THE COOKING EQUIPMENT WILL AGAIN BE ABLE TO OPERATE.
5. THE ON/OFF SWITCH ON THE EXHAUST FAN IS NORMALLY KEPT IN THE "ON" POSITION. IF IT IS TURNED OFF FOR SERVICE, THE COOKING EQUIPMENT WILL TURN OFF AND NOT BE ABLE TO OPERATE UNTIL THE EXHAUST FAN ON/OFF SWITCH IS AGAIN TURNED ON.

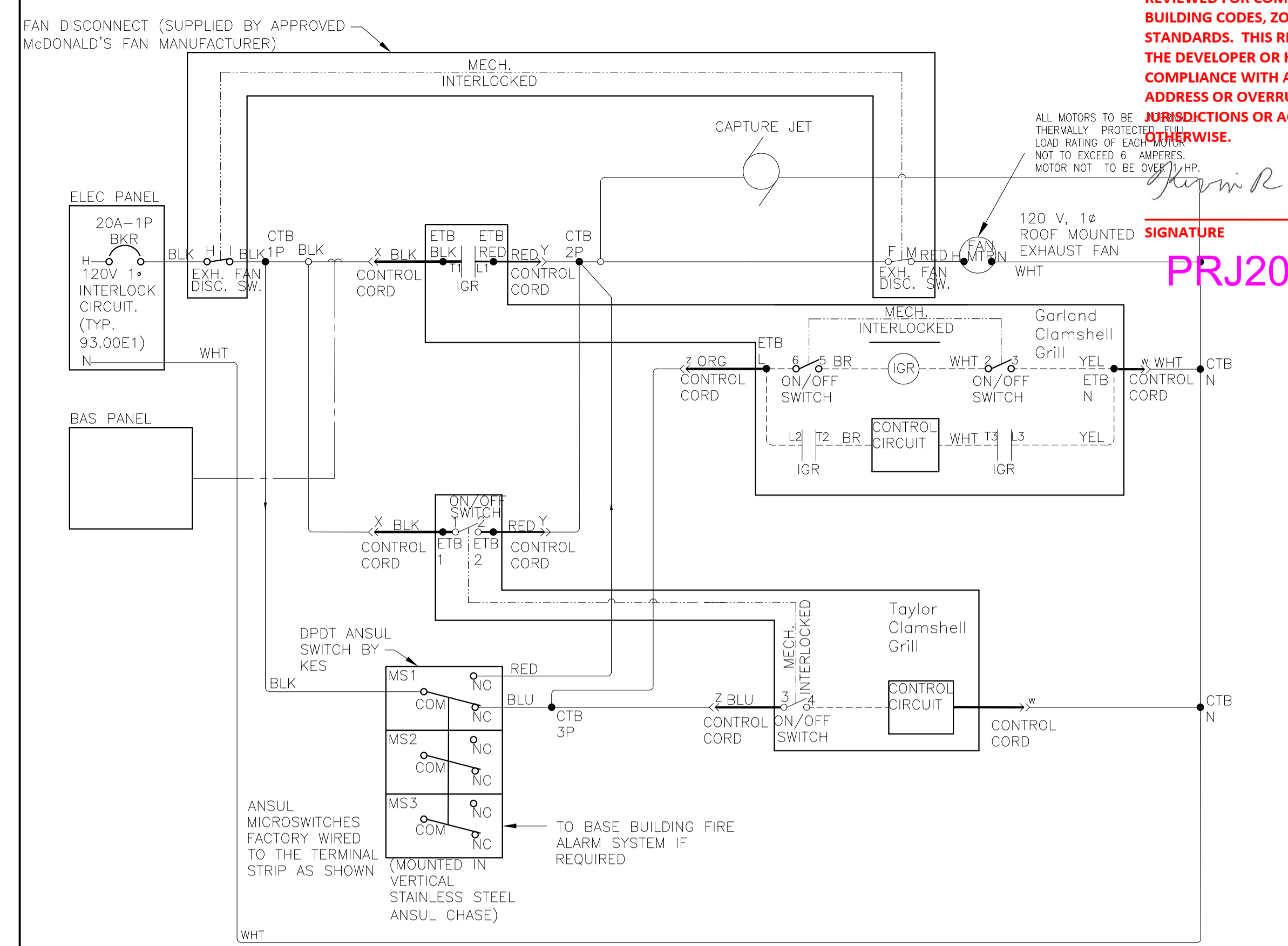
INTERLOCK DIAGRAM LEGEND

- TERMINAL BLOCK IN CHASE
 - CTB - CHASE TERMINAL BLOCK, PROVIDED AND INSTALLED BY KITCHEN EQUIPMENT SUPPLIER
 - ETB - EQUIPMENT TERMINAL BLOCK
 - EFCR - EXHAUST FAN CONTROL RELAY, PROVIDED BY CONTRACTOR.
 - IGR - INTERNAL GRILL RELAY PROVIDED WITHIN GARLAND GRILLS
 - MS - ANSUL MICROSWITCH PROVIDED BY KITCHEN EQUIPMENT SUPPLIER
- >> CONTROL CORD PLUG & RECEPTACLE
- FIELD WIRING
 - CONTROL CORD/INTERNAL WIRING
 - FACTORY WIRING
 - EQUIPMENT OR ENCLOSURE



2 INTERLOCK WIRING DIAGRAM FOR EXHAUST FAN AND COOKING EQUIPMENT FOR REFERENCE ONLY

REVISED: 6/18



3 INTERLOCK LADDER DIAGRAM FOR REFERENCE ONLY

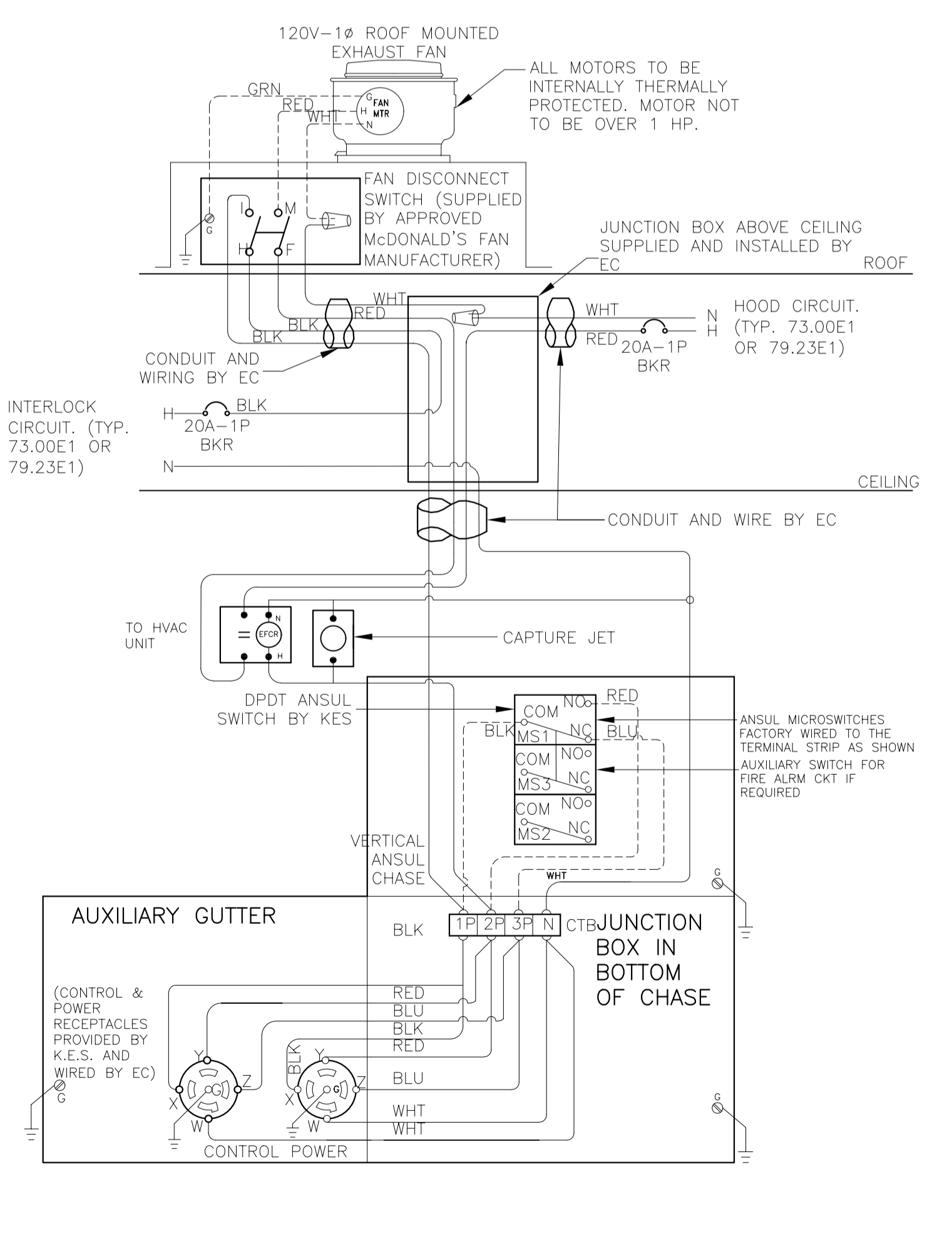
REVISED: 6/18

COOKING EQUIPMENT EXHAUST FAN	MAKE UP PROVIDED BY
EF/1	RTU-3
EF/2	RTU-1
EF/3	RTU-2

NOTE
RTU # ASSOCIATED WITH EACH EXHAUST FAN BASED ON PROTOTYPICAL VALUES ONLY. VERIFY THAT EXHAUST FAN ACTIVATES THE CORRESPONDING RTU TO PROVIDE AN ADEQUATE AMOUNT OF MAKEUP AIR.

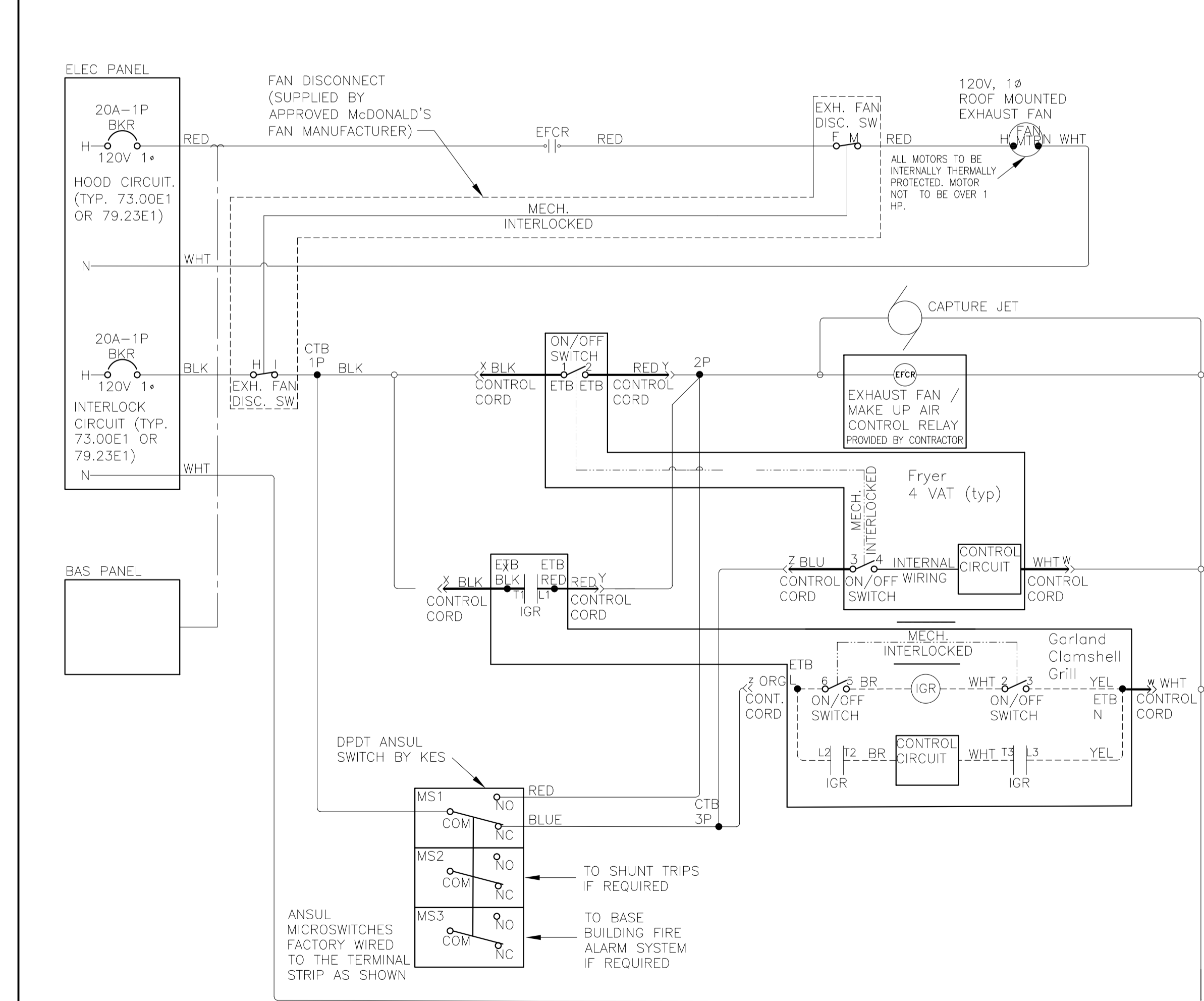
1 TYPICAL MAKEUP AIR RTU EXHAUST FAN SCHEDULE FOR REFERENCE ONLY

REVISED: 6/18



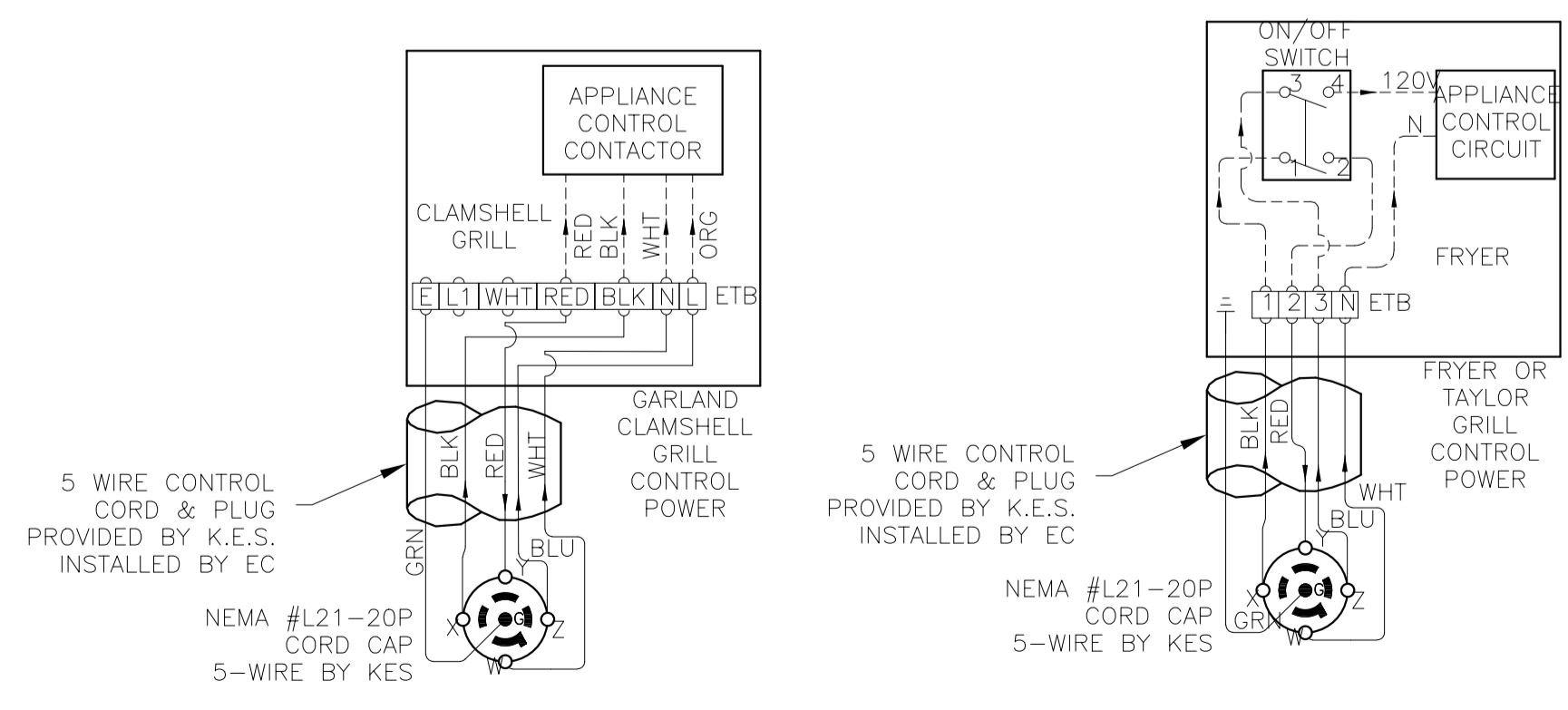
5 INTERLOCK WIRING DIAGRAM FOR EXHAUST FAN AND COOKING EQUIPMENT FOR REFERENCE ONLY

REVISED: 6/18



6 INTERLOCK LADDER DIAGRAM FOR REFERENCE ONLY

REVISED: 6/18



4 CONTROL CORD CONNECTION FOR REFERENCE ONLY

REVISED: 6/18

PREPARED FOR: McDonald's USA, LLC

DATE: 2022-10

REVIEWED BY: RH

DATE ISSUED: 10-04-2022

TITLE: 2022 STANDARD BUILDING - BB20

DESCRIPTION: 4597 - WOOD/WOOD

WOOD BEARING WALLS W/HARDBOARD SIDING

WOOD ROOF TRUSS FRAMING

E.L.F.S./BATTEN/HARDBOARD SIDING EXTERIOR FINISH

SHEET NO: E3.2

INTERLOCK DIAGRAMS

024-1290.00.0

024-1290

3720 W. Sunshine

Springfield, MO

© 2022 McDonald's USA, LLC

These drawings and specifications are the confidential and proprietary property of McDonald's USA, LLC and shall not be copied or reproduced without written authorization. The contract documents were prepared in accordance with the contract documents for use on a different site or at a later time. Use of these drawings for reference or example on another project requires the contractor to obtain the necessary permissions from the contract documents for reuse on another project is not authorized.

1/1/2022

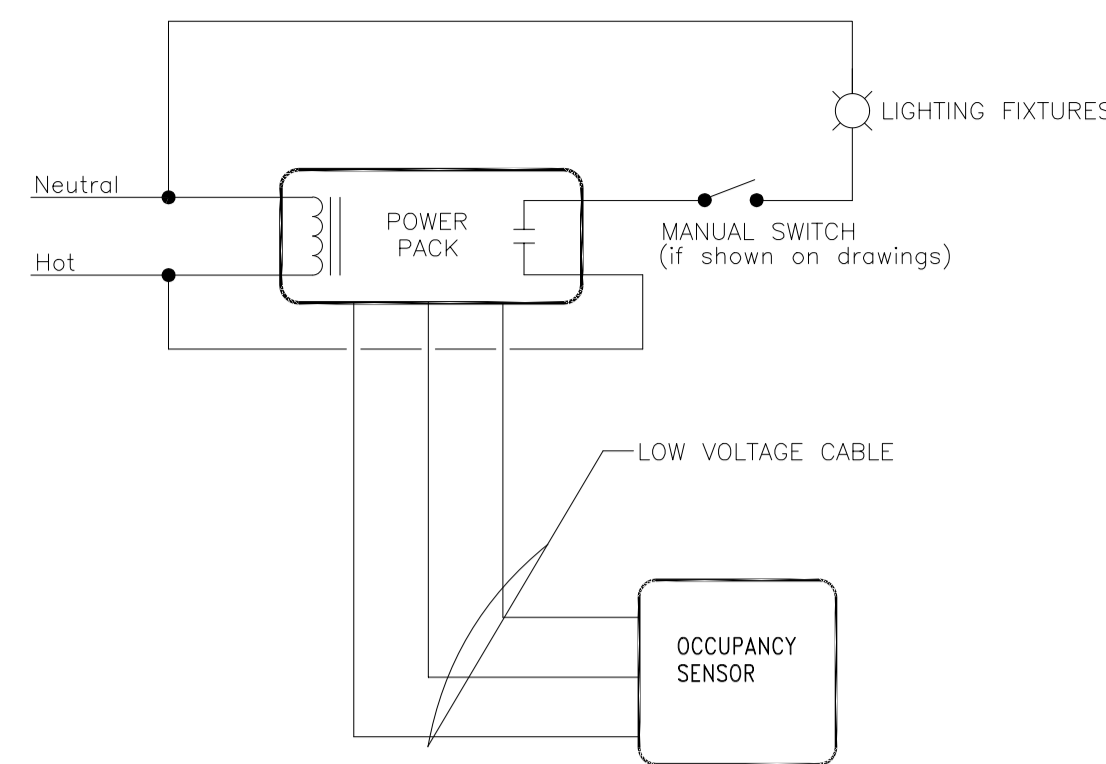
PROFESSIONAL ENGINEER

NUMBER: PE-800014085

JOHN DALE FERGUSON

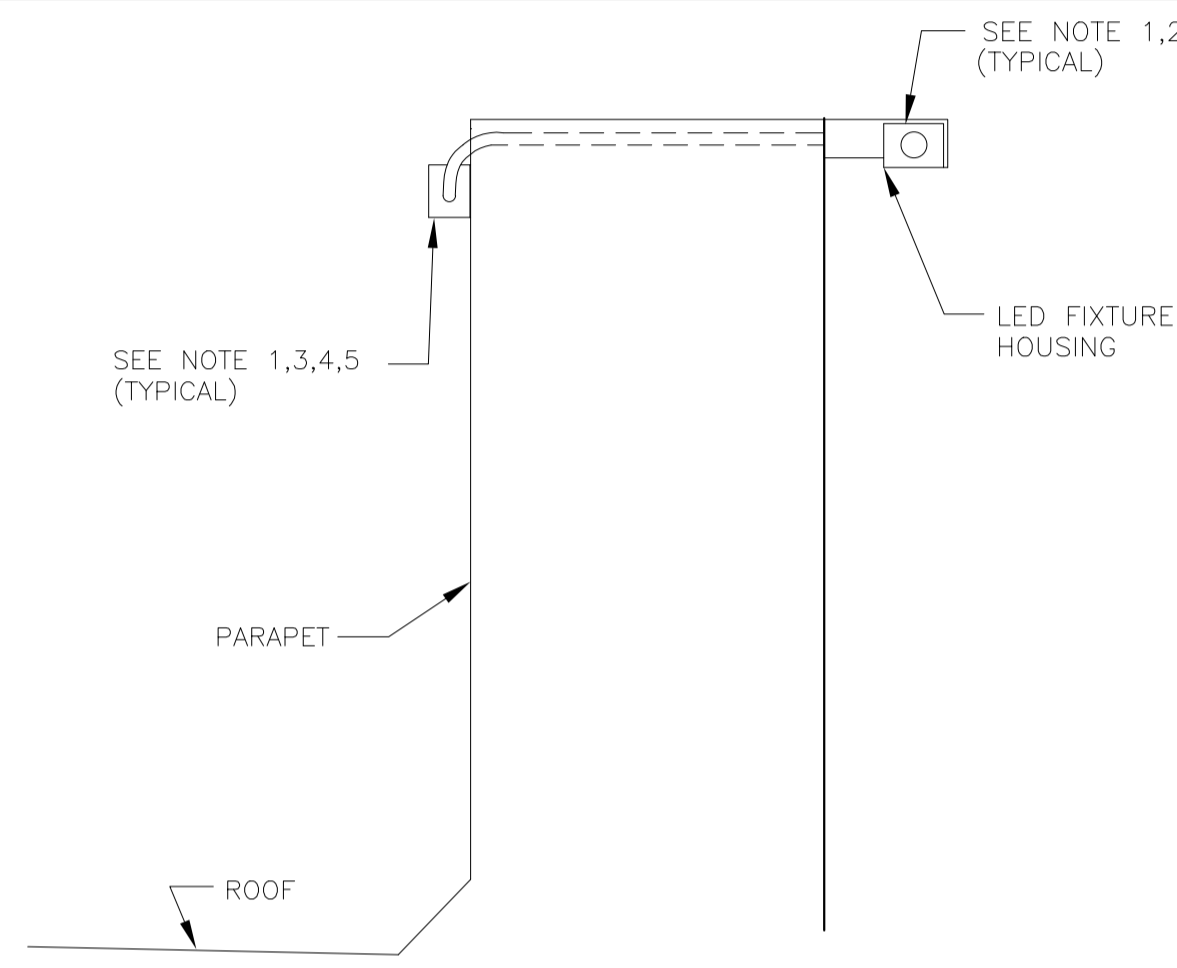
CORE STATES GROUP

REVIEWED FOR COMPLIANCE WITH THE CITY CODE, ADOPTED BUILDING CODES, ZONING ORDINANCE AND DESIGN STANDARDS. THIS REVIEW AND APPROVAL DOES NOT RELIEVE THE DEVELOPER OR HIS AGENTS OF ANY RESPONSIBILITY FOR COMPLIANCE WITH ALL APPLICABLE REQUIREMENTS OR ADDRESS OR OVERRULE THE REQUIREMENTS OF OTHER JURISDICTIONS OR AGENCIES, UNLESS SPECIFICALLY NOTED OTHERWISE.



NOTES:
1. REFER TO LIGHTING PLAN FOR OCCUPANCY SENSOR LOCATIONS AND QUANTITIES.

1 OCCUPANCY SENSOR CONTROL DETAIL
E-4.0 NOT TO SCALE



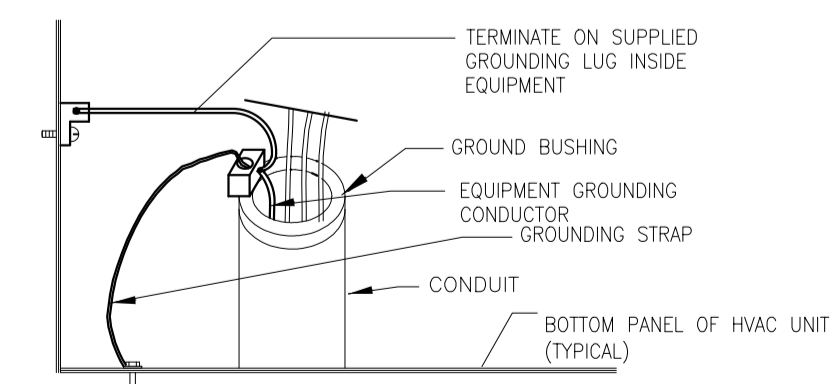
3 BRAND WALL LIGHTING DETAIL
E-4.0 NOT TO SCALE

GENERAL NOTES

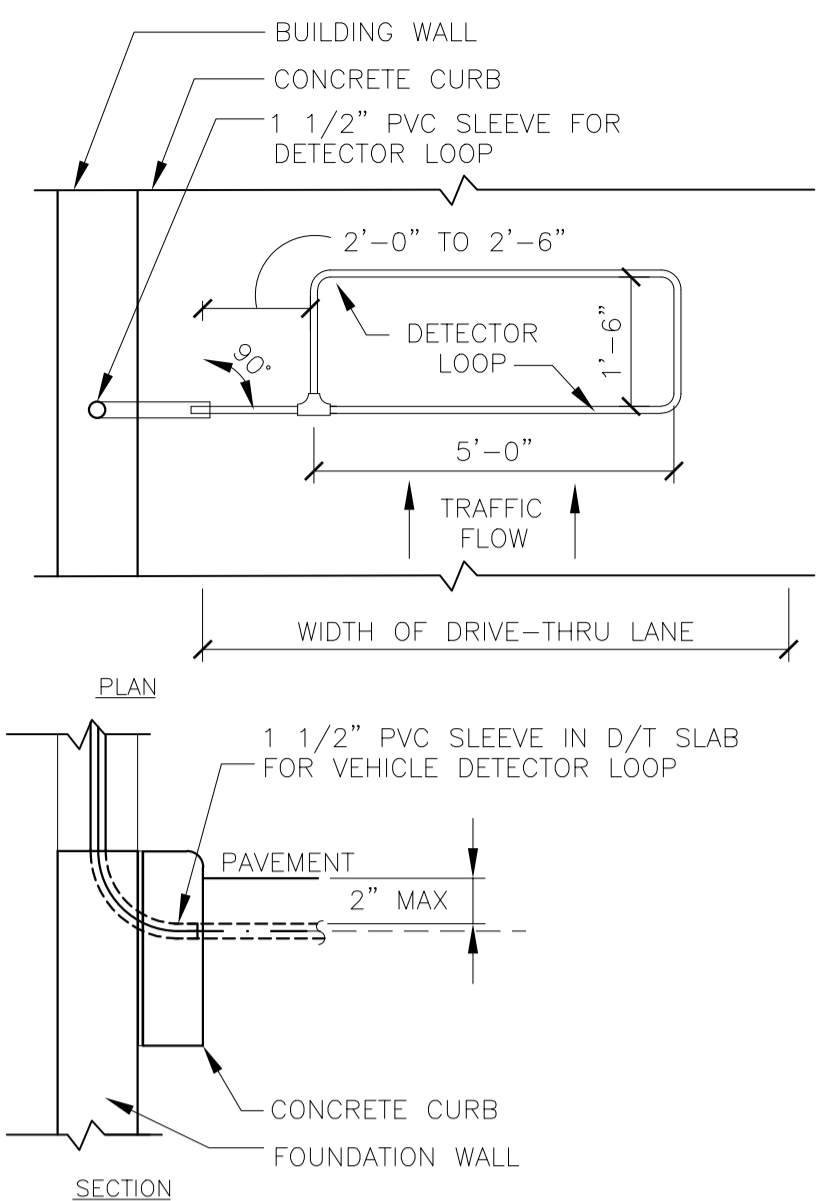
- PLACE LED FIXTURE AT DESIRED LOCATION AND INSTALL FIXTURE FROM LEFT TO RIGHT WHEN FACING ARCADE AND ATTACH POWER SUPPLY AND MOUNTING BRACKET AS RECOMMENDED BY MANUFACTURER.
- EC SHALL CONNECT NEW FIXTURES TO THE NEXT AVAILABLE SPARE 120V CIRCUIT AND MAKE ALL ELECTRICAL CONNECTIONS AS REQUIRED FOR A COMPLETE OPERATING SYSTEM.
- POWER SUPPLY SHALL ALWAYS BE INSTALLED TO THE LEFT SIDE OF FIXTURE WHEN FACING ARCADE.
- OVERALL FIXTURE RUN TO BE CENTERED ON OVERALL LENGTH OF WALL.
- CONNECT NEW LED FIXTURES TO EXISTING LIGHTING CIRCUIT(S) AS REQUIRED. ENSURE THAT CIRCUIT BREAKER AND CONDUCTOR SIZES DO NOT EXCEED 1200 WATTS ON A 15A CIRCUIT AND 1600 WATTS ON A 20A CIRCUIT. VERIFY EXISTING CONDITIONS AND REQUIREMENTS IN FIELD. PROVIDE ADDITIONAL CIRCUITS (C.B., WIRING, CONDUITS) AS REQUIRED.

CONDUIT, WIRE SIZE AND GROUNDING FOR HVAC UNITS

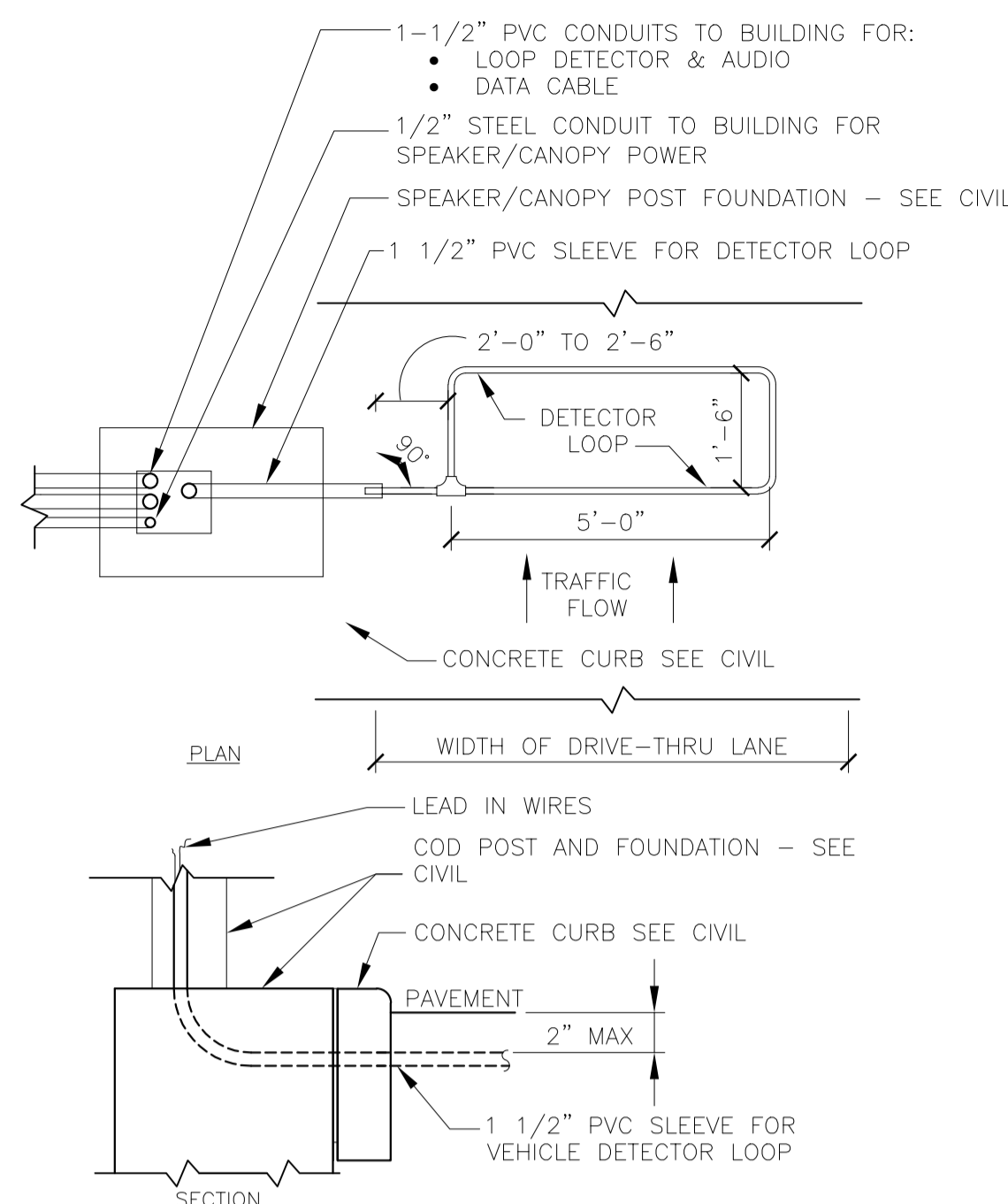
HACR BRKR SIZE	CONDUIT & WIRE SIZE
40A	1" C-3#8
45A	1" C-3#6
50A	1" C-3#6
60A	1" C-3#6
70A	1-1/4" C-3#4
80A	1-1/4" C-3#3
90A	1-1/4" C-3#3
100A	1-1/4" C-3#2
125A	1-1/2" C-3#1
150A	1-1/2" C-3#1/0
175A	2" C-3#2/0
200A	2" C-3#3/0
225A	2" C-3#4/0
250A	2-1/2" C-3#250



4 HVAC GROUNDING DETAIL
E-4.0 NOT TO SCALE



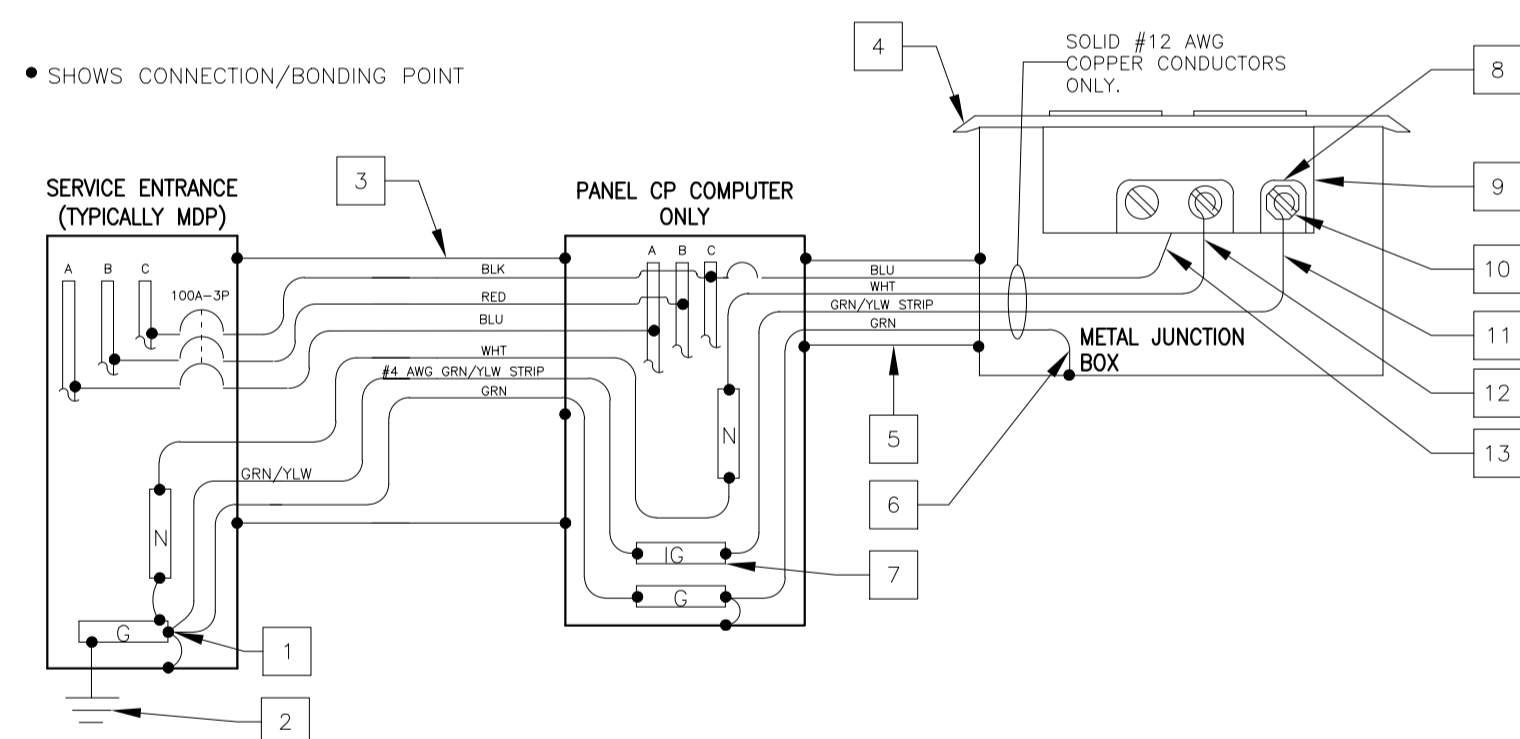
B - DT WINDOW DETECTOR LOOP



A - SPEAKER CANOPY DETECTOR LOOP

2 DETECTOR LOOP DETAILS
E-4.0 NOT TO SCALE

• SHOWS CONNECTION/BONDING POINT



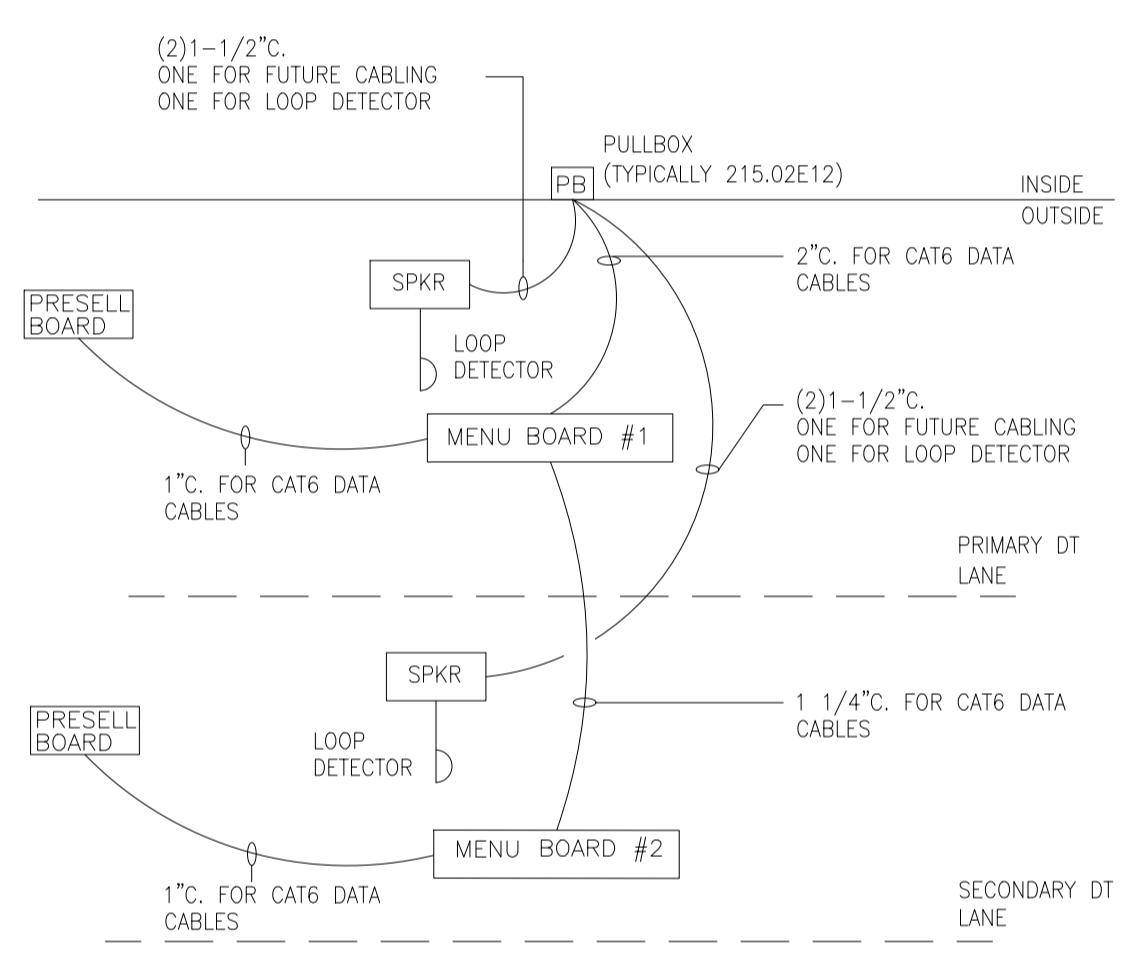
NOTES

- ALL P.O.S. EQUIPMENT (COMPUTERS, PRINTERS, MONITORS, KVS, MODEM, HUB & COO) SHALL BE POWERED FROM THE COMPUTER PANEL.
- ALL OTHER COMPUTER/DIGITAL EQUIPMENT SHALL BE POWERED FROM PHASE "A" IN THE COMPUTER PANEL.
- ISOLATED GROUND INSTALLATION SHALL COMPLY WITH THE REQUIREMENTS OF NEC SECTION 250.
- EACH 20 AMP CIRCUIT SHALL HAVE ITS OWN ISOLATED EQUIPMENT GROUNDING CONDUCTOR.
- ENTIRE GROUNDING SYSTEM SHALL COMPLY WITH NEC ARTICLE 250 AND MCDONALD'S BUILDING GROUNDING DETAIL.
- EC SHALL VERIFY CORRECT POLARITY AT RECEPTACLE.
- EC SHALL VERIFY THAT SUBPANEL CP DOES NOT CONTAIN ANY ILLEGAL NEUTRAL TO GROUND BONDS.
- PANEL CP SHALL ONLY BE USED TO POWER SENSITIVE ELECTRONIC EQUIPMENT, AS OUTLINED IN NOTE #1. IT SHALL NOT BE USED TO POWER ANY OTHER LOADS.
- IT IS A SAFETY HAZARD AND AN NEC VIOLATION FOR THE POS SYSTEM TO HAVE ITS OWN INDEPENDENT GROUNDING ROD. IF AN INDEPENDENT GROUND ROD IS FOUND FOR THE POS SYSTEM, IT SHALL BE BONDED TO THE BUILDING GROUNDING SYSTEM.

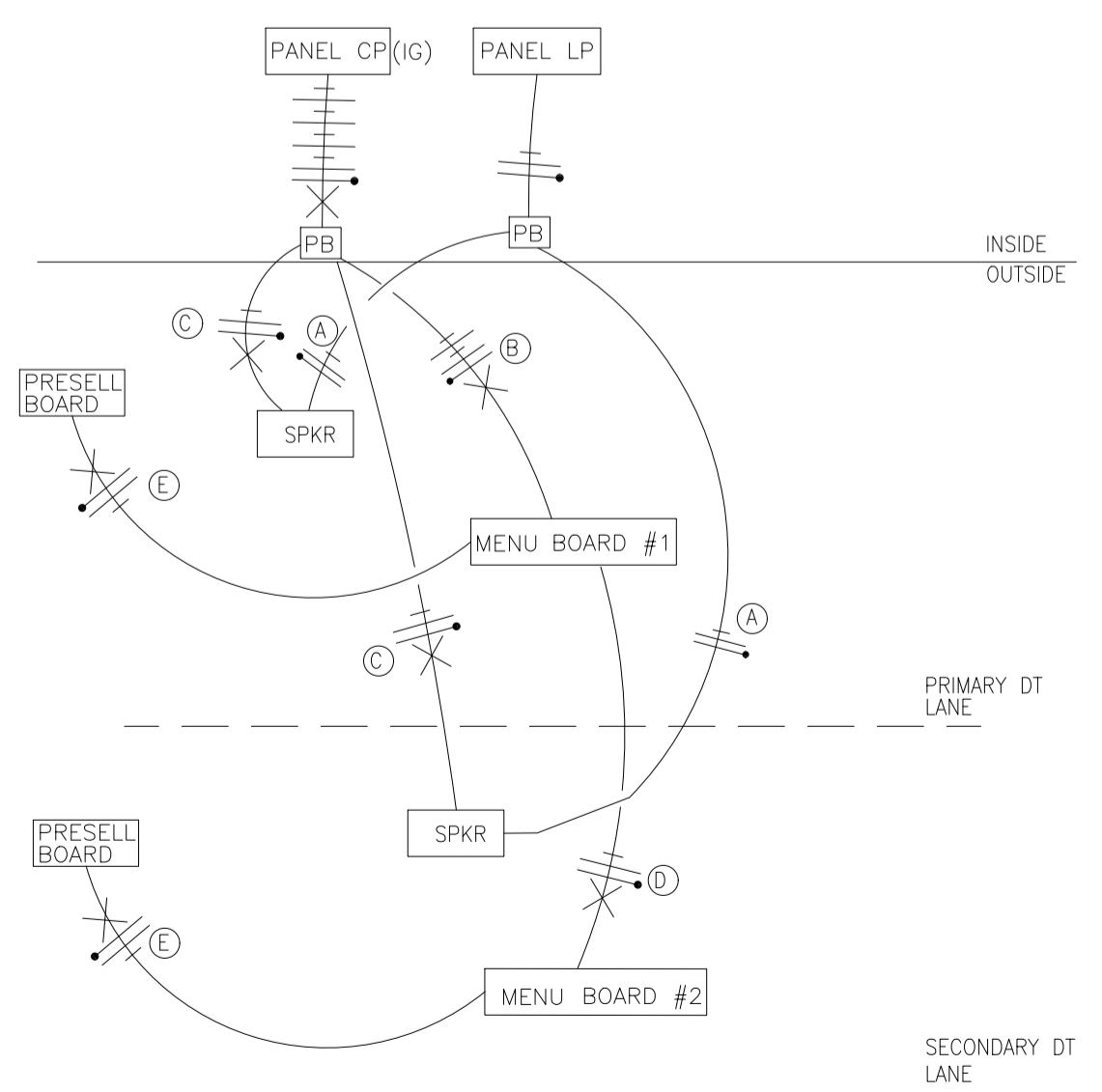
KEY NOTES

- THIS IS THE ONLY POINT WHERE THE ISOLATED EQUIPMENT GROUNDING CONDUCTOR SHALL BE CONNECTED TO THE BUILDING'S GROUNDING SYSTEM.
- SEE BUILDING GROUNDING DETAIL SHEET E4.2.
- 1 1/2" METAL CONDUIT: 4-#1 CU + 1-#6 CU EQUIP GND + 1-#4 CU ISOLATED GND.
- ALL ISOLATED GROUND/DEDICATED CIRCUIT RECEPTACLE COVER PLATES SHALL BE ORANGE HUBBELL PJ700 (SINGLE), PJ800 (ONE DUPLEX) OR PJ8200 (TWO DUPLEX) MARKED "COMPUTER ONLY".
- METAL CONDUIT SHALL CONTAIN ONLY P.O.S. CIRCUIT CONDUCTORS (DEDICATED CIRCUIT). ONLY USE RIGID NON-METALLIC CONDUIT BELOW GRADE WHEN REQUIRED BY LOCAL CODE.
- EQUIPMENT GROUNDING BONDING CONDUCTOR (TYPICAL)
- ISOLATED GROUND BUS, ELECTRICALLY INSULATED FROM PANEL ENCLOSURE USED TO TERMINATE ONLY ISOLATED EQUIPMENT GROUNDING CONDUCTORS.
- ALL CONDUCTORS SHALL BE SOLID COPPER AND TERMINATED TO THEIR APPROPRIATE TERMINAL SCREWS BY WRAPPING THE CONDUCTOR COMPLETELY AROUND THE SCREW BARREL AND TIGHTENING THE SCREW PER MANUFACTURER'S TORQUE SPECIFICATIONS.
- ISOLATED GROUND RECEPTACLE HUBBELL-104700/104710/105262 OR 105261. SEE ROUGH IN SCHEDULE FOR THE APPROPRIATE RECEPTACLE TO USE.
- ISOLATED GREEN GROUND SCREW.
- ISOLATED EQUIPMENT GROUNDING CONDUCTOR (GRN W/YLW STRIP)
- NEUTRAL CONDUCTOR TERMINATED ON SILVER SCREW.
- PHASE CONDUCTOR TERMINATED ON BRASS SCREW

5 POS & COD ISOLATED GROUND/DEDICATED CIRCUIT
E-4.0 NOT TO SCALE



DT LOW VOLTAGE CONDUIT DIAGRAM
NOT TO SCALE



6 DRIVE THRU POWER DIAGRAM
E-4.0 NOT TO SCALE

NOTE:

- VERIFY EXACT CIRCUITS & QUANTITIES OF CIRCUITS WITH PANEL SCHEDULES AND MANUFACTURERS INSTALLATION INSTRUCTIONS.
- 2#12 & 1#12 GND. TO LP-1 FOR COD CANOPY LIGHTING.
- 4#12 & 1#12 GND & 1#12 ISOLATED GND. TO CP FOR ISOLATED GROUND POWER TO MENUBOARDS AND MEDIA PLAYERS.
- 2#12 & 1#12 GND & 1#12 ISOLATED GND. TO CP FOR ISOLATED GROUND POWER TO SPEAKER CANOPY/STAND. EACH CANOPY/STAND SHALL BE ON ITS OWN SEPARATE CIRCUIT.
- 2#12 & 1#12 GND & 1#12 ISOLATED GND. TO CP FOR ISOLATED GROUND POWER TO MENUBOARDS AND MEDIA PLAYERS.
- 2#12 & 1#12 GND & 1#12 ISOLATED GND. TO CP FOR ISOLATED GROUND POWER TO FOR PRESELL BOARDS AND MEDIA PLAYER.

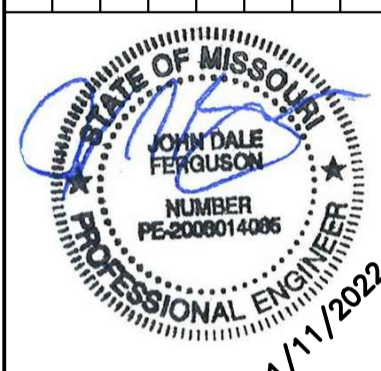
NOTES

- VERIFY CONDUIT SIZES AND LAYOUT WITH DETECTOR LOOP MANUFACTURER.
- CENTER VEHICLE DETECTOR LOOP (ITEM # 217.11E1) IN DRIVE THRU LANE. INSTALL RECOMMENDATIONS.
- SEE CIVIL FOR DIMENSIONS OF DRIVE-THRU LANE CONCRETE PAD FOR DETECTOR LOOP.
- NO STEEL (REBAR OR ELECTRICAL WIRE) SHALL BE USED WITHIN 2" OF LOOP.
- DETECTOR LOOP MANUFACTURERS: DETECTOR LOOPS MAY BE BY ONE OF THE FOLLOWINGS COMPANIES OR EQUAL.
3M: 1-800-328-0033
HME: 1-800-848-4468
- DETECTOR LOOP MATERIAL: PVC TUBING 1/2" I.D. 100 PSI LOOP MADE FROM ONE LENGTH OF THIN FOURTEEN GAUGE STRANDED WIRE. LEAD-IN IS PRE-TWISTED AT FACTORY.
- DETECTOR LOOP CONSTRUCTION: FORMED WITH ONE CONTINUOUS LENGTH OF PVC WITH NO SHARP CORNERS AS DETAILED. WIRE LOOPED, FORMED, & PIGTAILED AS DETAILED.

Signature: *Kevin R. Davis*

DATE: 01/27/23

PRJ2023-00032



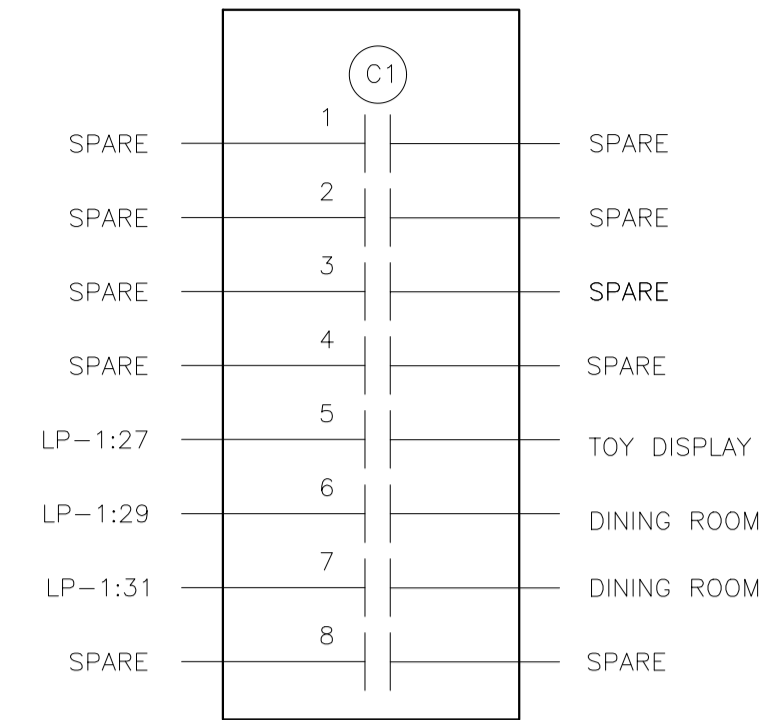
McDonald's USA, LLC
These drawings and specifications are the confidential and proprietary property of McDonald's USA, LLC and shall not be copied or reproduced without written authorization. The contract documents were prepared not suitable for use on a different site or at a later time. Use of these drawings for reference or example on another project requires the contract documents for use on another project is not authorized.

DATE	ISSUE	DESCRIPTION
2022-10	10	4597 - WOOD/WOOD
2022-10	10	4597 - WOOD/WOOD

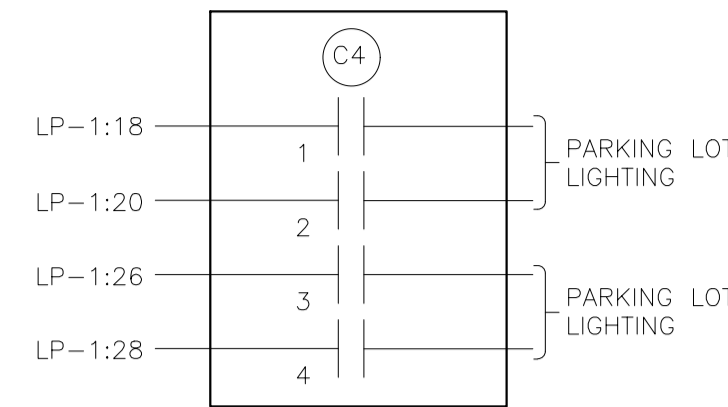
2022 STANDARD BUILDING - BB20
4597 - WOOD/WOOD
DESCRIPTION: WOOD BEARING WALLS W/HAROE BOARD SIDING, WOOD ROOF TRUSS FRAMING, E.L.F.S./BATTEN/HAROE BOARD SIDING EXTERIOR FINISH
SITE ADDRESS: 3720 W. Sunshine
Springfield, MO 65804
024-1290.00.0
E4.0
WIRING DETAILS

LIGHTING CONTROL SYSTEM

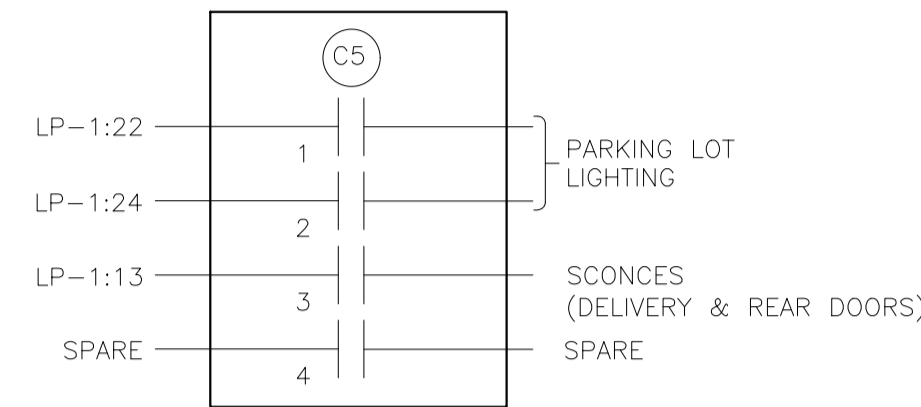
INTERIOR CUSTOMER LIGHTING



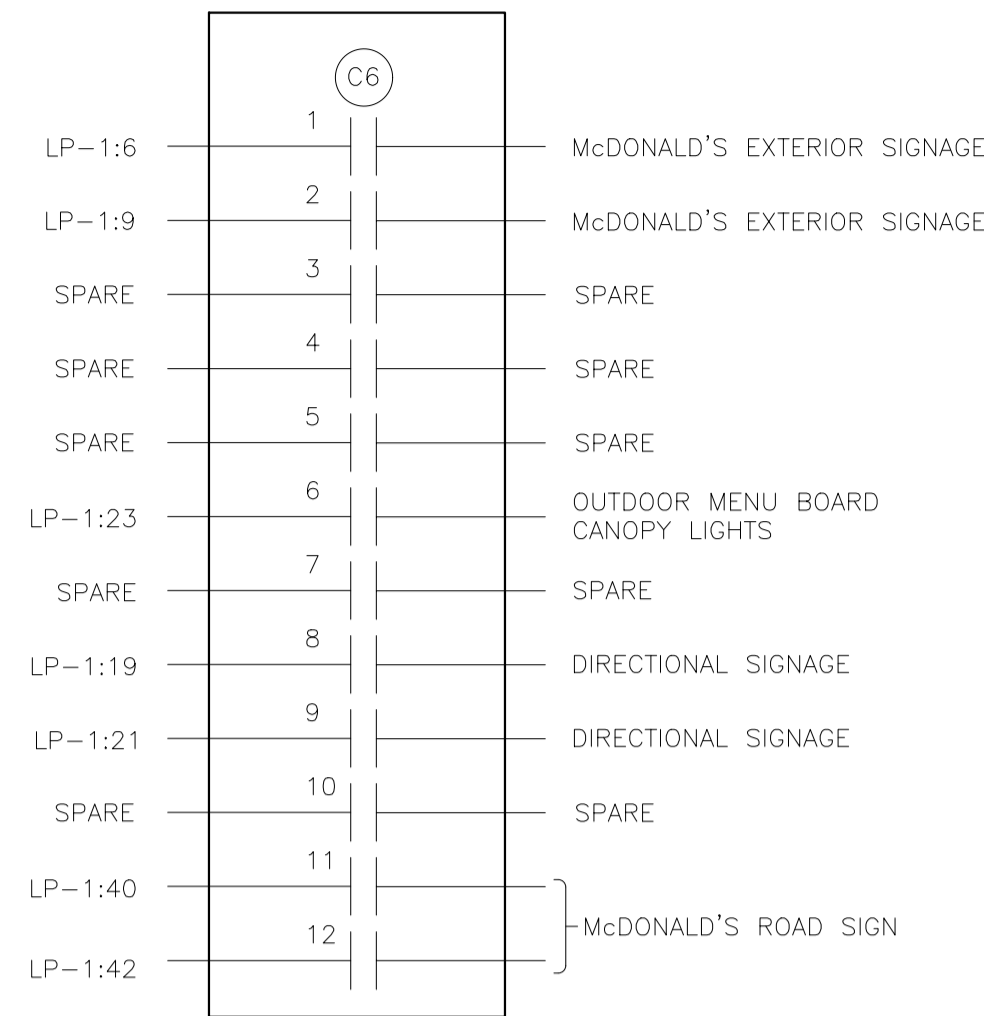
EXTERIOR LIGHTING



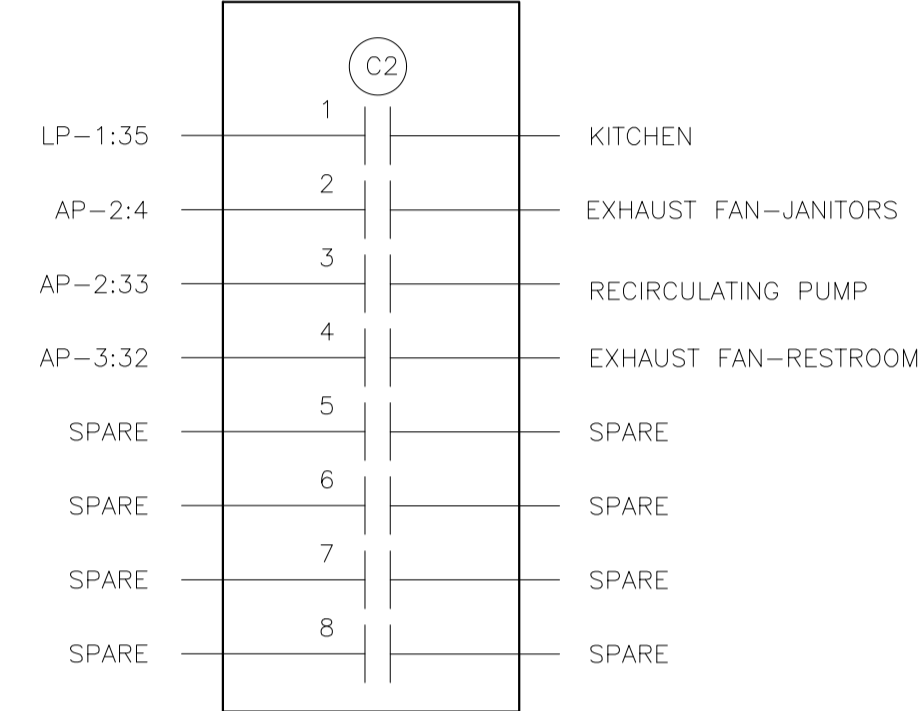
EXTERIOR LIGHTING



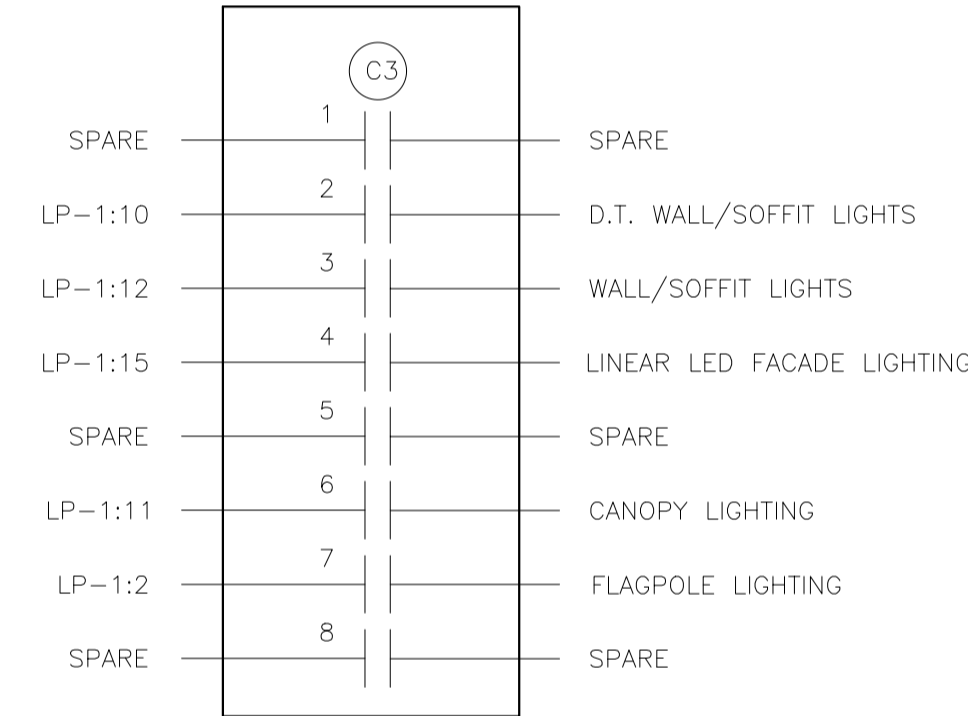
EXTERIOR SIGNAGE



INTERIOR CREW LIGHTING



BUILDING FACADE



LIGHTING CONTROL NOTES:

LIGHTING CONTROL NOTES

- LC1. CONTACTOR DETAILS ARE DIAGRAMMATIC ONLY AND ARE SHOWN WITH TYPICAL LOADS AND CIRCUIT ASSIGNMENTS. LOADS, CIRCUIT ASSIGNMENTS AND NUMBER OF CONTACTORS MAY VARY BY RESTAURANT LOCATION AND PER BAS SUPPLIERS SYSTEMS. VERIFY EXACT REQUIREMENTS WITH BAS INSTALLATION DETAILS, SITE PLANS, ELECTRICAL PANEL SCHEDULES AND ACM. EC SHALL MAKE ALL MODIFICATIONS AS REQUIRED. FINAL INSTALLATION SHALL BE FULLY NEC AND ENERGY CODE COMPLIANT.
- LC2. ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL ALL WIRING, CONNECTIONS, TERMINATIONS, ETC. THAT ARE NOT PROVIDED BY THE BAS SUPPLIER FOR A COMPLETE, FULLY OPERATIONAL AND CODE COMPLIANT LIGHTING CONTROL SYSTEM.

- LC3. ALL COMPONENTS FOR THIS LIGHTING CONTROL SYSTEM SHALL BE INSTALLED BY THE ELECTRICAL CONTRACTOR. SEE BOXED NOTE BELOW FOR OPTIONS.
- LC4. ALL COMPONENTS SHALL BE UL LISTED AND LABELED AND THE SYSTEM SHALL COMPLY WITH ALL LOCAL, STATE AND FEDERAL ENERGY CODE REQUIREMENTS.
- LC5. ALL CONTACTORS SHALL BE LOCATED IN A NEMA 1 ENCLOSURE WITH SCREW TYPE COVER MOUNTED DIRECTLY ABOVE LIGHTING PANEL OR SWITCHGEAR SO AS TO BE ACCESSIBLE.
- LC6. ALL CONTACTORS SHALL BE RATED FOR 30 AMP LOADS UNLESS NOTED OTHERWISE AND SHALL BE HID RATED WHERE REQUIRED.
- LC7. COIL VOLTAGES FOR ALL CONTACTORS SHALL BE 120 VOLT UNLESS NOTED OTHERWISE.
- LC8. CONTACTOR C5 IS INTENDED TO CONTROL PARKING LOT LIGHTS NEAR TRASH CORRAL, DELIVERY DOORS, AND EMPLOYEE PARKING, THUS ALLOWING A DIFFERENT LIGHTING SCHEDULE TO BE USED IN THOSE AREAS.

LIGHTING CONTROL INSTALLATION OPTIONS

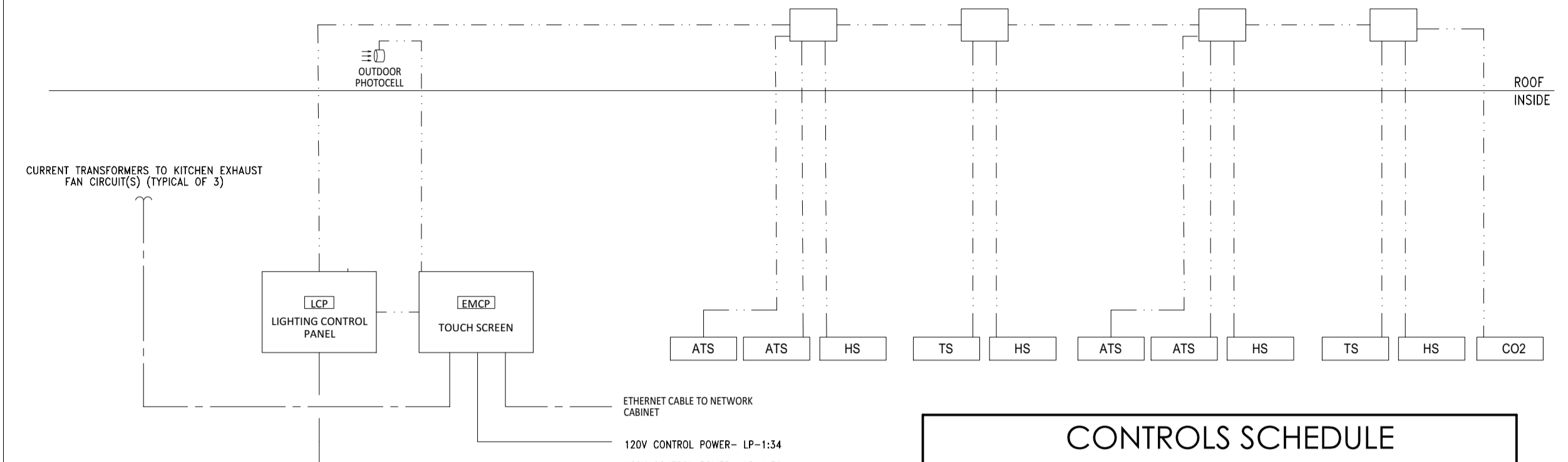
- OPTION 1 (STANDARD) CONTACTORS AND CONTACTOR ENCLOSURE FOR THIS LIGHTING CONTROL SYSTEM SHALL BE FURNISHED BY THE BAS SUPPLIER AND INSTALLED BY THE ELECTRICAL CONTRACTOR ON SITE FOR A COMPLETE AND FULLY FUNCTIONAL SYSTEM.
- OPTION 2 (OPTIONAL) LIGHTING CONTROL CAN BE ACCOMPLISHED VIA UTILIZATION OF A SMART TYPE BREAKER PANEL REPLACING STANDARD PANEL LP-1. PANEL SHALL UTILIZE AN INTEGRAL MOTOR OPERATED CIRCUIT BREAKERS OR AN INTEGRAL CIRCUIT BREAKER/CONTACTOR TYPE COMBINATION DEVICE WITH AN INTEGRAL PROGRAMMING CONTROL MODULE AND SHALL BE ORDERED THROUGH OUR ELECTRICAL EQUIPMENT NATIONAL ACCOUNT PROGRAM (SQUARE-D) THROUGH OUR CONSTRUCTION PURCHASING TEAM.

BUILDING AUTOMATION SYSTEM NOTES

- BAS1. THE DIAGRAM SHOWN ABOVE IS SCHEMATIC IN NATURE AND SHOWS THE GENERAL REQUIREMENTS FOR THE INSTALLATION OF THE BUILDING AUTOMATION SYSTEM. EXACT EQUIPMENT REQUIREMENTS AND QUANTITIES WILL VARY PER SITE. G.C., M.C., T.C.C. AND E.C. SHALL COORDINATE ALL EXACT EQUIPMENT AND INSTALLATION REQUIREMENTS WITH SUPPLIER PRIOR TO SUBMITTING BID FOR A COMPLETE AND FULLY FUNCTIONAL SYSTEM.
- BAS2. THE BUILDING AUTOMATION SYSTEM ALSO HAS ADDITIONAL OPTIONS AVAILABLE SUCH AS MONITORING DOOR CONTACTS (RESTROOM & COOLER FREEZER), ENERGY METER, COOLER/FREEZER TEMP. ADDITIONAL OPTIONS MAY BE SELECTED ON CENTRAL PURCHASING PROJECT DETAIL FORM. G.C., M.C., T.C.C. AND E.C. SHALL COORDINATE ALL EXACT INSTALLATION REQUIREMENTS WITH SUPPLIER PRIOR TO SUBMITTING BID FOR A COMPLETE AND FULLY FUNCTIONAL SYSTEM.
- BAS3. ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL ALL LINE AND LOW VOLTAGE WIRING AND CONNECTIONS, INCLUDING BUT NOT LIMITED TO CONTROL POWER TO ALL BAS COMPONENTS AND POWER CIRCUITRY WIRING OF ALL LIGHTING CONTACTORS. COORDINATE INSTALLATION WITH SITE SPECIFIC BAS INSTALLATION DETAILS PROVIDED BY SUPPLIER.

BUILDING AUTOMATION SYSTEM

INSTALLATION & TECHNICAL ASSISTANCE INFORMATION:
LENNOX BAS: McD@CCBAC.com



PROVIDE AND INSTALL DATA OUTLET NEXT TO BAS PANEL. REMOTE COMMISSIONING IS NOT POSSIBLE WITHOUT DATA CONNECTION.

INSTALLATION NOTES:

- PROVIDE, INSTALL AND SECURE ALL NECESSARY CABLE & CONDUIT PER BAS DRAWINGS AND SPECIFICATIONS.
- MOUNT ALL BAS CONTROL ENCLOSURES.
- PERFORM ALL LOW VOLTAGE TERMINATIONS.
- ROUGH-IN, INSTALLATION AND WIRING FOR TEMPERATURE SENSORS AND TOUCHSCREEN PER PLAN LOCATIONS.
- PROVIDE POWER CIRCUITS INTO CONTROL CANS PER BAS DETAILS.
- COORDINATE WITH SUPPLIER TO SCHEDULE REMOTE COMMISSIONING.
- CORRECT ALL PUNCH LIST ITEMS FOUND DURING REMOTE COMMISSIONING.

CONTROLS SCHEDULE

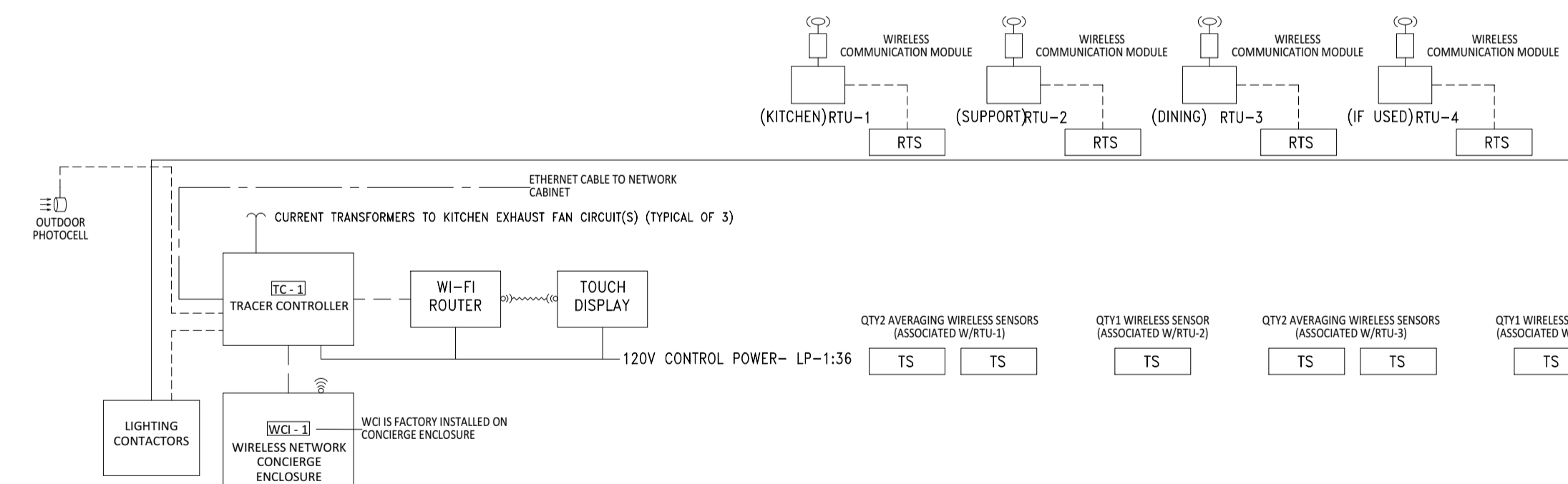
MARK	DESCRIPTION	MANUFACTURER	MODEL
TS	TEMPERATURE SENSOR	*PROVIDED WITH BAS	
ATS	AVERAGING TEMPERATURE SENSOR	*PROVIDED WITH BAS	
HS	HUMIDITY SENSOR	*PROVIDED WITH BAS	

NOTES:
1. FOR TS, HS AND ATS LOCATIONS, REFER TO M1.2

WIRE LEGEND

MARK	WIRE/CABLE TYPE
---	CAT 5E
---	18 AWG CONDUCTORS

INSTALLATION & TECHNICAL ASSISTANCE INFORMATION:
TRANE BAS: McDcontrols@Trane.com



PROVIDE AND INSTALL DATA OUTLET NEXT TO BAS PANEL. REMOTE COMMISSIONING IS NOT POSSIBLE WITHOUT DATA CONNECTION.

INSTALLATION NOTES:

- PROVIDE, INSTALL AND SECURE ALL NECESSARY CABLE & CONDUIT PER BAS DRAWINGS AND SPECIFICATIONS.
- MOUNT ALL BAS CONTROL ENCLOSURES.
- PERFORM ALL LOW VOLTAGE TERMINATIONS.
- ROUGH-IN, INSTALLATION AND WIRING FOR TEMPERATURE SENSORS AND TOUCHSCREEN PER PLAN LOCATIONS.
- PROVIDE POWER CIRCUITS INTO CONTROL CANS PER BAS DETAILS.
- COORDINATE WITH SUPPLIER TO SCHEDULE REMOTE COMMISSIONING.
- CORRECT ALL PUNCH LIST ITEMS FOUND DURING REMOTE COMMISSIONING.

CONTROLS SCHEDULE

MARK	DESCRIPTION	MANUFACTURER	MODEL
TS	WIRELESS SPACE TEMPERATURE SENSOR	*PROVIDED WITH BAS	
RTS	RETURN TEMPERATURE SENSOR	*PROVIDED WITH BAS	
HS	OUTDOOR TEMPHUMIDITY SENSOR	FACTORY FURNISHED AND INSTALLED W/EACH RTU	

NOTES:
1. FOR TS LOCATIONS, REFER TO M1.2
2. RTS TO BE MOUNTED IN RETURN AIR DUCT OF RTU

WIRE LEGEND

MARK	WIRE/CABLE TYPE
---	CAT 5E
---	18 AWG CONDUCTORS

APPROVED FOR CONSTRUCTION BY THE CITY OF SPRINGFIELD, MO BUILDING OFFICIAL

REVIEWED FOR COMPLIANCE WITH THE CITY CODE, ADOPTED BUILDING CODES, ZONING ORDINANCE AND DESIGN STANDARDS. THIS REVIEW AND APPROVAL DOES NOT RELIEVE THE DEVELOPER OR HIS AGENTS OF ANY RESPONSIBILITY FOR COMPLIANCE WITH ALL APPLICABLE REQUIREMENTS OR ADDRESS OR OVERRULE THE REQUIREMENTS OF OTHER JURISDICTIONS OR AGENCIES, UNLESS SPECIFICALLY NOTED OTHERWISE.

SIGNATURE: *Kevin R. Davis* DATE: 01/27/23

PRJ2023-00032



© 2022 McDonald's USA, LLC
McDonald's USA, LLC
These drawings and specifications are the confidential and proprietary property of McDonald's USA, LLC and shall not be copied or reproduced without written authorization. The contract documents were prepared for use on a different site or at a later time. Use of these drawings for reference or example on another project requires the contractor to obtain the necessary permission from McDonald's USA, LLC. The contractor shall be responsible for obtaining the necessary permission from McDonald's USA, LLC for the use of these drawings for reference or example on another project. Use of these drawings for reference or example on another project requires the contractor to obtain the necessary permission from McDonald's USA, LLC.

TITLE: 2022 STANDARD BUILDING - BB20
4597 - WOOD/WOOD
DESCRIPTION: WOOD BEARING WALLS W/HARDBOARD SIDING, WOOD ROOF TRUSS FRAMING, E.I.F.S./BATTEN/HARDBOARD SIDING EXTERIOR FINISH
SITE ADDRESS: 3720 W. Sunshine
Springfield, MO
024-1290.00.0
E4.1
LIGHTING CONTROLS

REVIEWED FOR COMPLIANCE WITH THE CITY CODE, ADOPTED BUILDING CODES, ZONING ORDINANCE AND DESIGN STANDARDS. THIS REVIEW AND APPROVAL DOES NOT RELIEVE THE DEVELOPER OR HIS AGENTS OF ANY RESPONSIBILITY FOR COMPLIANCE WITH ALL APPLICABLE REQUIREMENTS OR ADDRESS OR OVERRULE THE REQUIREMENTS OF OTHER JURISDICTIONS OR AGENCIES, UNLESS SPECIFICALLY NOTED OTHERWISE.

SIGNATURE: *Shawn R. Davis* DATE: 01/27/23

PROJECT NUMBER: PRJ2023-00032

Table with columns: REV, DATE, DESCRIPTION

Table: MLO, AIC, NOTES D6,D7,&D8, Mounting: Flush, NEMA 1. PANEL LP-1. Columns: WATTS, BRKR, TRIP, CCT, TRIP, BRKR, DESCRIPTION, A, B, C.

Table: MLO, AIC, NOTES D6,D7,&D8, Mounting: MDP, NEMA 1. PANEL AP-4. Columns: WATTS, BRKR, TRIP, CCT, TRIP, BRKR, DESCRIPTION, A, B, C.

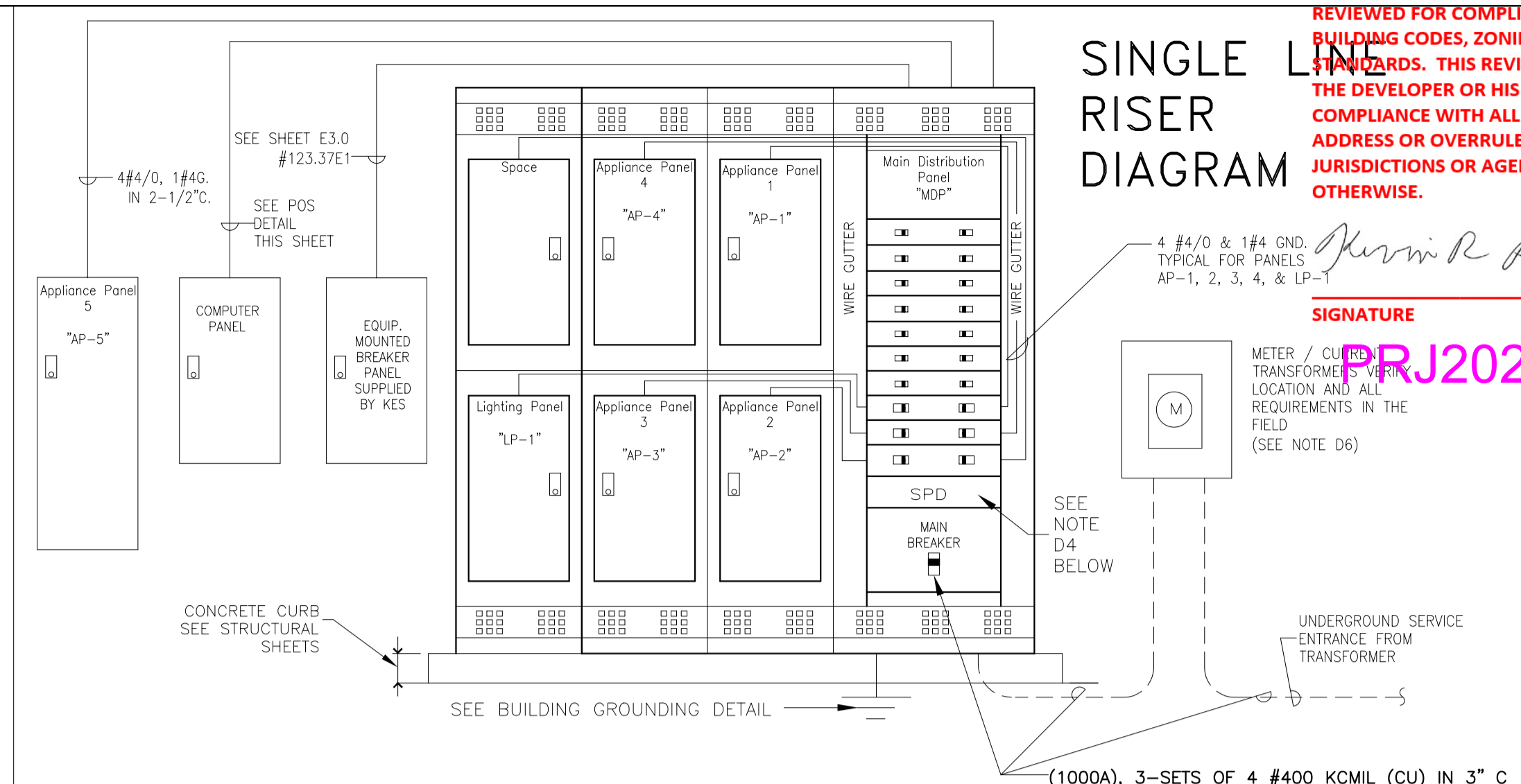
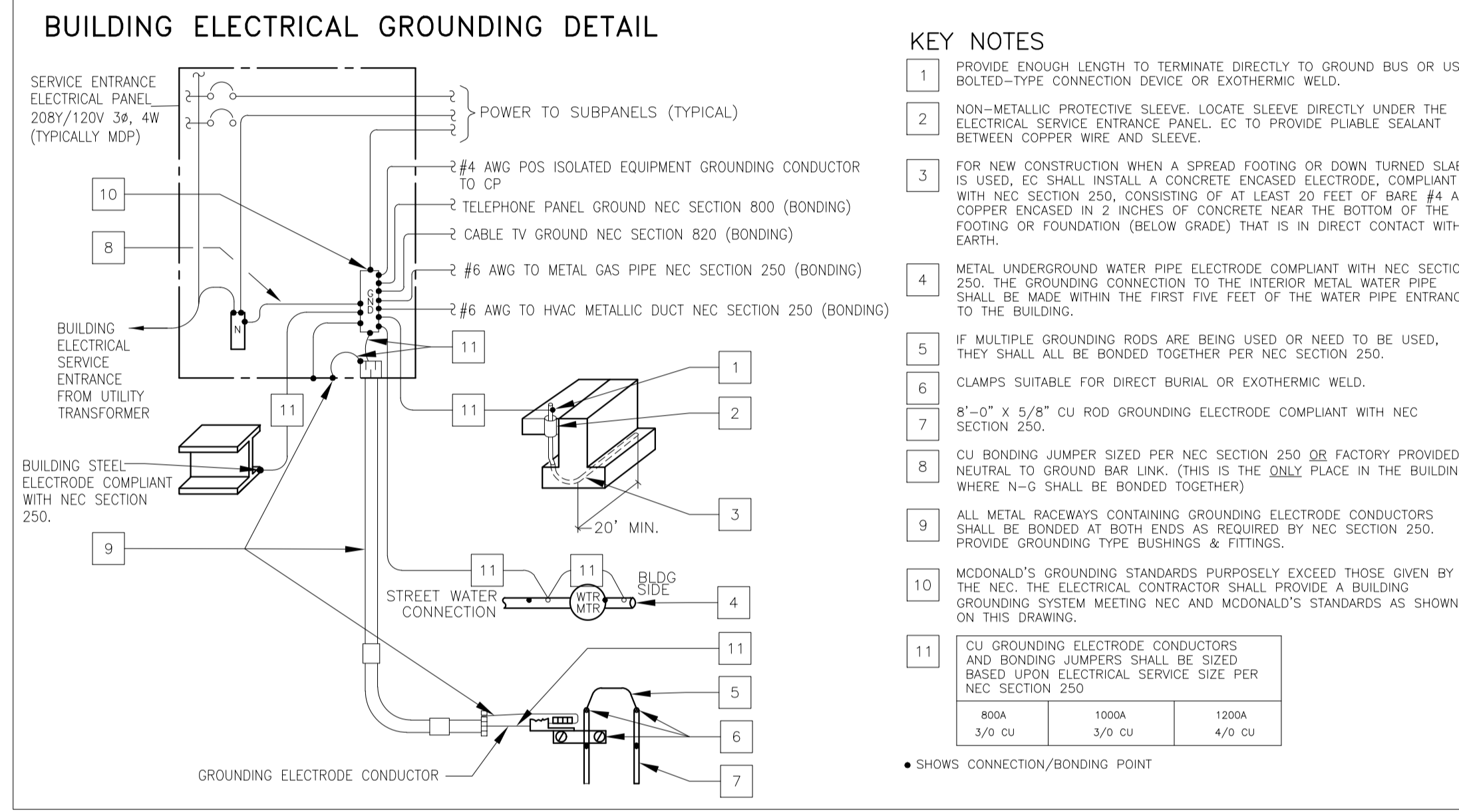


Table: MLO, AIC, NOTES D6, D7, & D8, Mounting: MDP, NEMA 1. PANEL AP-1. Columns: WATTS, BRKR, TRIP, CCT, TRIP, BRKR, DESCRIPTION, A, B, C.

Table: MLO, AIC, NOTES D6,D7,&D8, Mounting: Flush, NEMA 1. PANEL AP-5. Columns: WATTS, BRKR, TRIP, CCT, TRIP, BRKR, DESCRIPTION, A, B, C.



- KEY NOTES: 1. PROVIDE ENOUGH LENGTH TO TERMINATE DIRECTLY TO GROUND BUS OR USE BOLTED-TYPE CONNECTION DEVICE OR EXOTHERMIC WELD. 2. NON-METALLIC PROTECTIVE SLEEVE LOCATED DIRECTLY UNDER THE ELECTRICAL SERVICE ENTRANCE PANEL EC TO PROVIDE PLIABLE SEALANT BETWEEN COPPER WIRE AND LOCATE. 3. FOR NEW CONSTRUCTION WHEN A SPREAD FOOTING OR DOWN TURNED SLAB IS USED, EC SHALL INSTALL A CONCRETE ENCASED ELECTRODE, COMPLIANT WITH NEC SECTION 250, CONSISTING OF AT LEAST 20 FEET OF BARE #4 AWG COPPER ENCASED IN 2 INCHES OF CONCRETE...

Table: MLO, AIC, NOTES D6,D7,&D8, Mounting: MDP, NEMA 1. PANEL AP-2. Columns: WATTS, BRKR, TRIP, CCT, TRIP, BRKR, DESCRIPTION, A, B, C.

Table: MLO, AIC, NOTES D6, D7, & D8, Mounting: MDP, NEMA 1. COMPUTER PANEL. Columns: WATTS, BRKR, TRIP, CCT, TRIP, BRKR, DESCRIPTION, A, B, C.

DISTRIBUTION EQUIPMENT NOTES:

- D1. ALL ELECTRICAL MATERIAL USED ON THIS PROJECT SHALL BE "UL" LISTED AND LABELED. D2. THE EC/GC/AREA CONSTRUCTION MANAGER WHEN ORDERING PANELBOARDS, SHALL DETERMINE THE NUMBER OF SERVICE ENTRANCE CONDUCTORS, SIZE AND MATERIAL TYPE, AND SHALL PROVIDE THIS INFORMATION TO THE PANELBOARD SUPPLIER SO THAT THE APPROPRIATE LUGS CAN BE PROVIDED FROM THE FACTORY. D3. ALUMINUM SERVICE ENTRANCE CONDUCTORS SHALL ONLY BE USED WHEN THEY ARE TERMINATED DIRECTLY TO THE LINE LUGS ON A C/T AND METERING CABINET, THE LINE LUGS OF A FUSIBLE DISCONNECT SWITCH OR TO THE LINE LUGS OF A MAIN LUG ONLY (6 HANDLE RULE) SERVICE ENTRANCE PANEL. ALUMINUM SERVICE ENTRANCE CONDUCTORS SHALL NOT BE TERMINATED TO THE LINE LUGS OF ANY MAIN BREAKER SINCE DOING SO WILL VIOLATE IT'S 100% UL RATING...

Table: MLO, AIC, NOTES D6,D7,&D8, Mounting: MDP, NEMA 1. PANEL AP-3. Columns: WATTS, BRKR, TRIP, CCT, TRIP, BRKR, DESCRIPTION, A, B, C.

Table: MLO, AIC, NOTES D6, D7, & D8, Mounting: Free Standing, NEMA 1. PANEL MDP. Columns: WATTS, BRKR, TRIP, CCT, TRIP, BRKR, DESCRIPTION, A, B, C.

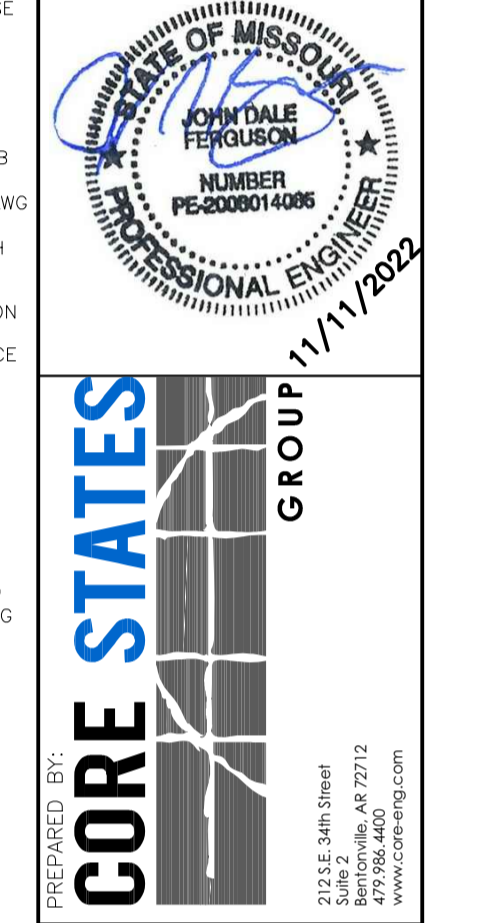
SEE SHEET E3.1 FOR GENERAL ELECTRICAL NOTES

SPLIT UTILITIES CALC

Table: BREAKER MODIFICATIONS: G - GFCI PERSONNEL PROTECTION (5MA), HID - HID & SWD RATED, L - HANDLE LOCK, H - HACR RATED, S - SWITCH DUTY RATED, SHT - SHUNT TRIP

Table: NEC Optional Method (kW) (A). 1. Continuous Loads: 42 117, 2. Kitchen Loads: 325 903, 3. HVAC Loads: 93 257, 4. Cooling: 0 0, 5. Total (1+2+3+4): 460 1276, 6. Base Value (See 220.88): 325 902, 7. Amount Over Base Value (5-6): 135 374, 8. Demand Factor: 0.45, 9. Adjusted Value (8*7): 61 168, 10. Adjusted Base Value (220.88): 262.5 729, 11. Demand (9+10): 323 897

TOTAL BUILDING 208Y/120V, 3 PHASE, 4-WIRE GENERAL SERVICE POWER BASED ON NEC 220.88 FOR A "NOT ALL ELECTRIC" NEW RESTAURANT.



McDonald's USA, LLC. These drawings and specifications are the confidential and proprietary property of McDonald's USA, LLC and shall not be copied or reproduced without written authorization. The contract documents are prepared and shall be used on a different site or at a later time. Use of these drawings for reference or example on another project requires the contract documents for that project to be used.

Table: SHEET NO. 2022 STANDARD BUILDING - BBZ0, 4597 - WOOD/WOOD, 2022 STANDARD BUILDING - BBZ0, 4597 - WOOD/WOOD, 4-WIRE GENERAL SERVICE POWER BASED ON NEC 220.88 FOR A "NOT ALL ELECTRIC" NEW RESTAURANT. E4.2 SPLIT UTIL. DIST.