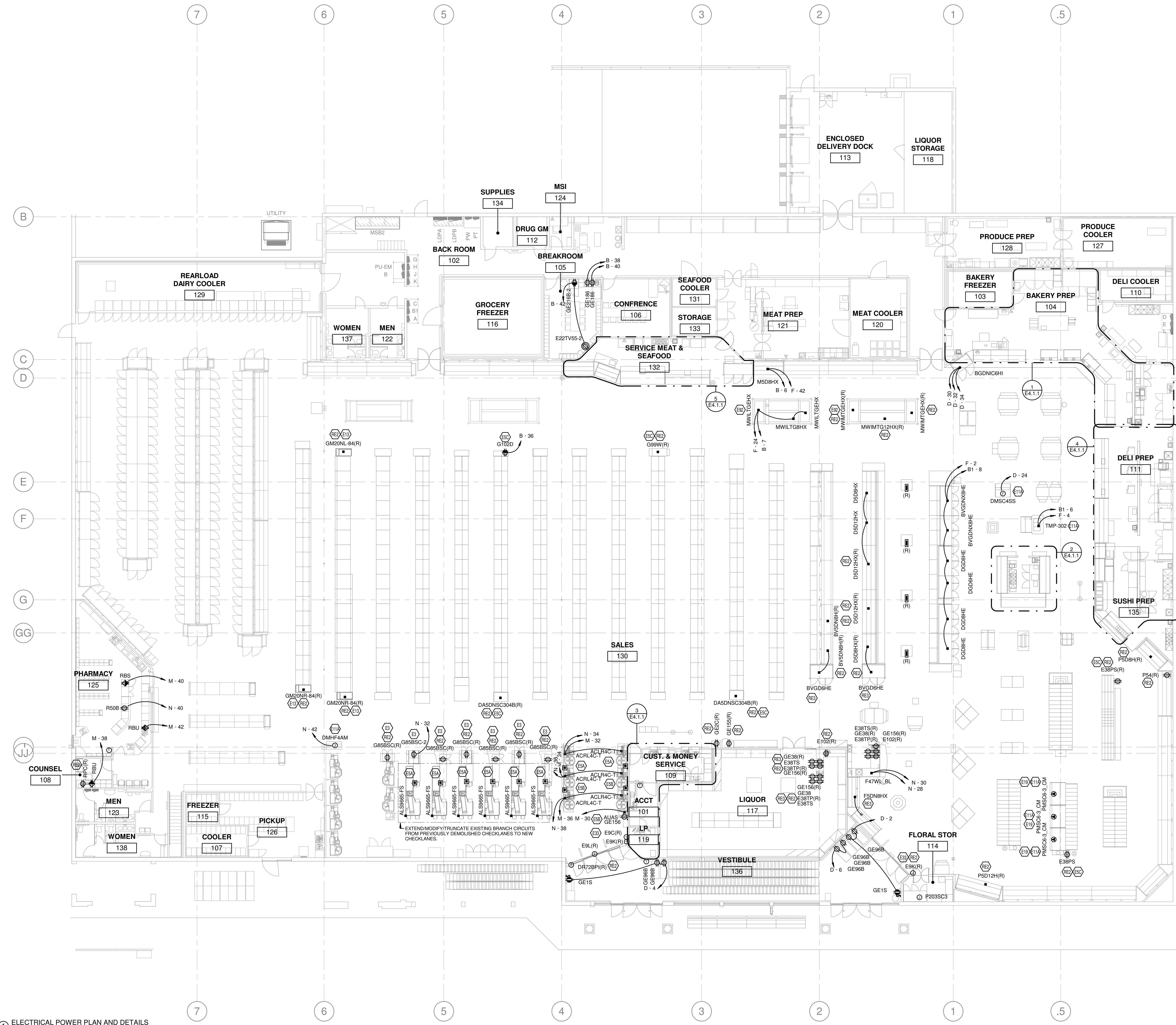


2 ELECTRICAL MEZZANINE PLANS
3/32" = 1'-0"

3 ELECTRICAL MEZZANINE PLANS
3/32" = 1'-0"



1 ELECTRICAL POWER PLAN AND DETAILS
3/32" = 1'-0"

SPARE CIRCUITS, IDF RECEPTACLES AND TV MONITOR RECEPTACLES

- A. IN ADDITION TO ITEM(S) BELOW AND IN ADDITION TO ALL OTHER ELECTRICAL WORK SHOWN ON DRAWINGS, PROVIDE A TOTAL OF TEN (10) SPARE BRANCH CIRCUITS (INCLUDING NEW 1" CONDUIT PER CIRCUIT AND LABOR TO INSTALL CONDUIT, WIRE, AND TO MAKE FINAL CONNECTION), EACH UP TO 100 FEET FROM THE RESPECTIVE SOURCE PANELBOARD FOR FUTURE USE ON ADDITIONAL WORK AS DIRECTED BY KROGER. ASSUME EACH CIRCUIT SHALL BE 120V/20A/1P, BUT FIELD VERIFY EACH.
- B. IN ADDITION TO ALL OTHER ELECTRICAL WORK SHOWN ON DRAWINGS, PROVIDE UP TO A TOTAL OF FOUR (4) DUPLEX ISOLATED GROUND RECEPTACLES FOR UP TO A TOTAL OF FOUR (4) VOICEDATA IDF CABINETS THAT WILL BE INSTALLED REMOTE FROM THE ECR/DATA CENTER ROOM. PROVIDE DEDICATED 20A/120V BRANCH CIRCUIT HOME-RUN FROM EACH UP TO FOUR CIRCUITS TOTAL TO EMERGENCY STANDBY POWER PANELBOARD EIA. CONTACT VOICEDATA CABLE PLANT INSTALLATION CONTRACTOR IN FIELD TO DETERMINE ALL IDF CABINET LOCATIONS.
- C. IN ADDITION TO ALL OTHER ELECTRICAL WORK SHOWN ON DRAWINGS, PROVIDE ONE (1) DUPLEX RECEPTACLE EACH, FOR UP TO EIGHT (8) TELEVISION MONITORS THAT WILL BE INSTALLED AT VARIOUS LOCATIONS THROUGHOUT THE FACILITY AS REQUIRED. PROVIDE 20A/120V BRANCH CIRCUIT CONDUIT, WIRING AND HOME-RUNS TO NEAREST NORMAL GENERAL POWER PANELBOARD THAT HAS AVAILABLE POLE SPACE & BREAKERS. UP TO FOUR (4) MONITORS MAY BE CONNECTED TO THE SAME CIRCUIT. DETERMINE EXACT LOCATIONS IN FIELD.

GENERAL POWER NOTES

- A. REFER TO EQUIPMENT SCHEDULES ON SHEET E6.1 FOR MOUNTING HEIGHTS AND ADDITIONAL INFORMATION. SEE DETAILS ON ES-SERIES DRAWINGS WHERE APPLICABLE.
- B. INSTALL ELECTRICAL OUTLETS FOR REFRIGERATION ISLAND CASES IN A STRAIGHT LINE ALIGNED WITH THE HUB DRAWING COORDINATE W/PLB. DIMENSIONS SIGNED PLAN.
- C. ALL CONDUITS FOR COOLERS, FREEZERS, PREP ROOM EQUIPMENT FEED FROM ABOVE SHALL BE RUN ON TOP OF INSULATED ROOF PANEL AND STUBBED THRU PANEL INTO PREP ROOM AT EQUIPMENT LOCATION(S) SHOWN. SEE ESD-28 ON ES-SERIES DRAWINGS.
- D. FIELD COORDINATE UNDER-SLAB CONDUIT AND RACEWAY LAYOUTS WITH ALL AFFECTED PARTIES PRIOR TO SLAB PLACEMENT.
- E. PROVIDE 10 FEET OF FLEXIBLE CONDUIT FOR REFRIGERATED CASES SERVED FROM WALL JUNCTION BOXES. 6 FEET FOR ISLAND REFRIGERATED CASES FOR CONNECTION TO CASES BY THE FIXTURING ELECTRICAL CONTRACTOR.
- F. ALL WALL MOUNTED OUTLETS SERVING REFRIGERATED CASES WITH RETURN AIR PLENUM ABOVE SHALL BE ACCESSIBLE WITH ALL WIRING PLENUM RATED AS IF APPLICABLE.
- G. REFER TO ELECTRICAL DIMENSION PLANS FOR GENERAL DIMENSIONAL INFORMATION THAT SHALL ALSO SCHEDULED APPLY FOR CORRESPONDING SYSTEMS WORK.
- H. CIRCUITS PULLED THRU RACEWAYS SHALL BE 120V UNLESS INDICATED OTHERWISE.
- I. WIRE CASH REGISTERS (CRS) WITH SEPARATE AND INDEPENDENT CIRCUITS. CIRCUITS SHALL HAVE A SEPARATE AND INDEPENDENT GROUND WIRE, AND SEPARATE AND INDEPENDENT NEUTRAL WIRE (CAN NOT BE PHASED OUT AT THE PANEL). EACH BRANCH CIRCUIT FOR CASH REGISTERS SHALL BE AS FOLLOWS: (2) #12 AWG WIRES EACH CASH REGISTER, (1) HOT, (1) NEUTRAL, AND (1) INSULATED ISOLATED GROUND (PLUS EQUIPMENT GROUND).
- J. WHERE MORE THAN (1) ELECTRICAL LOAD IS INDICATED AT AN OUTLET, PROVIDE A SEPARATE CIRCUIT FROM THE ELECTRICAL PANEL FOR EACH LOAD.
- K. DEDICATED ELECTRICAL ISOLATED GROUND (ISOLATED) SHALL BE USED EXCLUSIVELY FOR ITEMS SO SPECIFIED. OTHER CIRCUITRY WILL NOT BE PERMITTED IN THIS PANEL. THESE PANELS SHALL BE 208Y/120V, 3-PHASE, 5 WIRE WITH FEEDERS CONSISTING OF (3) HOTS, (1) INSULATED NEUTRAL, AND (1) INSULATED AND ISOLATED GROUND (PLUS EQUIPMENT GROUND), WITH GROUND AND NEUTRAL BUSSES INSULATED AND ISOLATED FROM THE PANEL. ALL WIRING DEVICES SERVED BY THE DEDICATED ELECTRICAL PANEL SHALL BE EQUIPPED AND WIRED FOR ISOLATED GROUND.
- L. ALL ELECTRICAL AND COMMUNICATION JUNCTION/OUTLET BOXES SHOWN AGAINST THE WALL SHALL BE MOUNTED IN THE WALL. REFER TO THE ELECTRICAL EQUIPMENT SCHEDULE FOR MOUNTING INFORMATION.
- M. ROUTE ALL GLASS DOOR ANTI-SWEAT CIRCUIT HOME-RUNS THROUGH THE PMAC PANEL LOCATED AT THE SOURCE PANELBOARD. ORIGINATE ALL CASE ANTI-SWEAT HEATER CIRCUITS AND NOT REQUIRING ACCESS BY STORE PERSONNEL.
- N. PROVIDE NEMA 1-15-30R TYPE RECEPTACLE FOR ALL MIXERS AND GRINDERS.
- O. ORIGINATE THE FOLLOWING CIRCUITS FROM PANELBOARDS NOT REQUIRING ACCESS BY STORE PERSONNEL: COOLING COILS (COOLERS, FREEZERS, RETARDER, PRODUCE PREP & MEAT PREP), CASE FANS AND COMBINATION CASE FANS (ANTI-SWEAT HEATER).
- P. E.C. SHALL MAKE FINAL TERMINATIONS AT BOTH ENDS OF EACH WIRE/CABLE AS APPLICABLE FOR DEFROST AND DRW COOLING COILS. PROVIDE SUFFICIENT SLACK AT BOTH ENDS TO ALLOW FOR SERVICE LOOPS AND TO FACILITATE PROPER TERMINATIONS. ELSEWHERE, INCLUDING POWER WIRING SHOWN ON OTHER DRAWING SHEETS, ELECTRICAL CONTRACTOR SHALL MAKE ALL REQUIRED TERMINATIONS.
- Q. ALL EXTERIOR SIGN CIRCUITS AND SITE LIGHTING CIRCUITS WITH THE EXCEPTION OF EMERGENCY LIGHTING SHALL ORIGINATE FROM ONE ELECTRICAL PANEL THAT SHALL BE USED EXCLUSIVELY FOR SIGNAGE AND SITE LIGHTING REQUIREMENTS. PANEL SHALL BE PROGRAMMED BY A LIGHTING CONTROLLER (LCI). SEE SPECS AND ESD DETAILS FOR MORE INFORMATION.
- R. IN GENERAL, RECEPTACLES SHOWN WITHOUT EQUIPMENT MARKING OR OTHER CALLOUT ARE CONVENIENCE OUTLETS THAT SHALL BE MOUNTED AT 18" A.F.F.
- S. REGARDLESS OF WHERE JB'S ARE SHOWN ON DRAWINGS, FEED CASES FROM WALL WHEREVER CASES ARE LOCATED AGAINST A WALL. INSTALL WALL OUTLET/JUNCTION BOXES FOR SUCH CASES SO THAT BOTTOMS OF BOXES ARE TWO (2) INCHES ABOVE TOP OF RESPECTIVE CASE (FIELD VERIFY).
- T. SEE DETAIL "F" ON ES-SERIES DRAWINGS FOR SPECIAL CIRCUITING AND DIMENSIONING REQUIREMENTS THAT APPLY TO REFRIGERATED CASE EQUIPMENT.
- U. FEC IS RESPONSIBLE FOR ALL NEC REQUIRED LOCAL DISCONNECTING MEANS (NOT FURNISHED WITH EQUIPMENT OR BY KROGER) FOR A COMPLETE INSTALLATION. PROVIDE ALL DISCONNECTING MEANS PER NEC 402.31.
- V. INSTALL (1) KROGER FURNISHED WATTSTOPPER FS-705 OCCUPANCY SENSOR, MOUNTED ATOP GLASS DOOR CASE, FOR EVERY (2) GLASS DOOR CASES. DO NOT INSTALL ON CASES LOCATED ALONG A WALL OR ON GLASS DOOR "END CAPS". REFER TO "KROGER INSTALLATION SPECIFICATIONS FOR WATT STOPPER MOTION SENSORS ON HUSSMANN CASES" FOR ADDITIONAL INFORMATION.
- W. INSTALL JUNCTION BOX AND CIRCUIT TO POWER (2) QUEVISION HANGING FLAT SCREEN MONITORS. CONFIRM EXACT LOCATION OF THE MONITORS WITH QUEVISION INSTALLER OR KROGER PM BEFORE INSTALLING JUNCTION BOXES. QUEVISION INSTALLER TO INSTALL EACH 120 VOLT CONVENIENCE OUTLET ON HANGING MONITOR POLE/BRACKET AND MAKE FINAL CONNECTION AT JUNCTION BOX.

KEYED NOTES

- E3 FEED EQUIPMENT VIA METHODS USED FOR ADJACENT CASHIER STATION. CONCEAL WORK WITHIN CHECKOUT CASEWORK. SEE DETAILS ESD-42 AND ESD-45A.
- E5A PROVIDE HOLLOW TUBE STEEL TELE POWER POLE TO BE USED AS A CABLE/RACEWAY CHASE. NOTE THAT THE POLE IS NOT A UL LISTED LABELED RACEWAY. ALSO, PROVIDE MATERIALS TO ANCHOR AT TOP OF COUNTER/DONORIA OPEN ON TWO SIDES FOR EXT OF CABLES/RACEWAYS, AND/OR ABOVE CEILING, IN OVERHEAD JOIST SPACE, WITH UNISTRUT OR OTHER NEATLY INSTALLED METHOD AS DETERMINED IN FIELD. PROVIDE FLEXIBLE STEEL CONDUIT WITH PARRY SUEDE GREEN INSULATED EQUIPMENT GROUND CONDUCTORS) AT TOP OF POLE AND USE POLE AS A CHASE TO FEED DOWN TO COUNTERTOP EQUIPMENT. SEE DETAILS ESD-2, AND ESD-84 ON ES-SERIES SHEETS.
- E5B UTILIZE ADJACENT RACEWAY IN SAME ROW OR COLUMN, CONCEAL ALL WIRING AND CONDUIT FROM VIEW IN ROUTE TO SINGLE RACEWAY.
- E5C PROVIDE PAINTED CONDUIT DROP (S) SUPPORTED PER DIVISION 28 SPECIFICATIONS FROM JUNCTION BOX IN JOIST SPACE TO EQUIPMENT SHOWN. ANCHOR CONDUIT TO SHELVING/EQUIPMENT PER ESD-2.
- E11A BEC TO PROVIDE ABOVE CEILING JUNCTION BOX AND CORD DROP AS SHOWN IN ACCESSIBLE LOCATION ON DETAIL. ESD-14 ON ES-SERIES DRAWINGS. CORD DROP TO BE WHITE IN AREAS IN VIEW TO CUSTOMERS. FINAL DROP TO BE INSTALLED ONLY AFTER CASE HAS BEEN SET. MATCH "SD" CORD SIZE AND RECEPTACLE WITH CASE REQUIREMENTS IN FIELD. PRIOR TO INSTALLATION VERIFY FINAL LOCATION WITH KROGER PM.
- E13 BEC SHALL PROVIDE CIRCUIT TO JUNCTION BOX. FEC SHALL PROVIDE WIRING AND CONNECTION AS REQUIRED FOR DISPLAY SHELF LIGHTED CANOPY OR VALANCE AS APPLICABLE. FIELD VERIFY SPECIFICS AND LOCATIONS. FEC TO FIELD WIRE VALANCE LIGHTS FOR ENTIRE ROW OF SHELVING PER DETAIL "T2" ON SHEET ES-SERIES DRAWINGS. THIS NOTE APPLIES FOR ALL C38-SERIES AND QMT-SERIES SHELVES. ROWS OF SHELVING BETWEEN PAST THEM AND TO ANY OTHER INDICATED SHELVING ROWS.
- E19 BEC SHALL PROVIDE CIRCUIT FOR BERRY CASE(S) IN JUNCTION BOX ABOVE CEILING IN JOIST SPACE. FEC SHALL INSTALL CORD DROP FOR CASE(S) ONLY AFTER CASE IS SET IN ITS FINAL LOCATION.
- E33 BEC SHALL PROVIDE QUAD RECEPTACLE FOR THEFT DETECTION ELECTRONIC SURVEILLANCE SYSTEM CONTROL BOX. SEE DETAIL ESD-42 ON ES-SERIES DRAWINGS. COORDINATE WORK WITH DECOR ELEMENTS AT DOORS IN SALES AND VESTIBULE AREAS.
- E92 INDICATED CASES FED FROM ABOVE THROUGH VERTICAL RACEWAY/COLUMN WRAP. BEC SHALL PROVIDE CIRCUIT TO JUNCTION BOX IN JOIST SPACE. FEC SHALL PROVIDE CONDUIT AND WIRING TO MAKE FINAL TERMINATIONS AT REQUIRED CASES. COORDINATE CONDUIT DROPS WITHIN 12" OF OTHER TRACES (I.E. REFRIGERATION, PLUMBING). REFER TO ESD-2/ESD-38 FOR SERVICES CASES/SINGLE WIDE ISLANDS. REFER TO ESD-2/ESD-38A FOR L/C/DROUBLE WIDE ISLAND CASES. REFER TO E-SERIES SHEETS FOR ESD-2. REFER TO KROGER REFRIGERATION DRAWINGS FOR RISDS.
- RE2 RELOCATE EXISTING EQUIPMENT TO LOCATION SHOWN. SEE DEMO POWER PLAN FOR EXISTING LOCATION. EXTEND/MODIFY/SUPPLEMENT EXISTING CONDUIT AND WIRE FROM PREVIOUS CIRCUIT LOCATION TO NEW. PROVIDE ALL MATERIALS AS REQUIRED FOR A COMPLETE RELOCATION.
- RE3 EXTEND/SUPPLEMENT EXISTING CIRCUITS TO NEW EQUIPMENT SHOWN. CONNECT FANS TO CIRCUITS THAT PREVIOUSLY SERVED FANS, LIGHTS TO CIRCUITS THAT PREVIOUSLY SERVED LIGHTS, ETC. E.C. TO ENSURE NEWLY WETTERED LOAD OF EACH CIRCUIT DOES NOT EXCEED 1800W. PROVIDE ADDITIONAL CIRCUITS FROM SIMILAR PANEL FOR LOADS THAT EXCEED THIS LIMIT.

OWNERSHIP OF INSTRUMENTS OF SERVICE
All reports, plans, specifications, computer files, field data, notes and other documents and instruments prepared by the Consultant as instruments of service shall remain the property of the Consultant. The Consultant shall retain all common law, statutory and other reserved rights, including, without limitation, the copyright therein.



Date Change Description

KROGER N273 WORTHINGTON
50 WORTHINGTON MALL
WORTHINGTON, OH 43085
for
THE KROGER COMPANY

MOODY•NOLAN
300 Spruce Street
Suite 300
Columbus, Ohio 43215
Phone: (614) 461-4664
Fax: (614) 280-8881
www.moodynolan.com

Dwg. Coord: EBA Tech. Coord: LGF Proj. # 21701

ELECTRICAL POWER PLAN AND DETAILS
PERMIT BID

E1.3
12/10/2019