



MECHANICAL/ELECTRICAL ENGINEERS
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ELECTRIC LEGEND		ELECTRIC LEGEND	
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
RECEPTACLES AND MISCELLANEOUS OUTLET			
	SPECIAL PURPOSE RECEPTACLE		BRANCH CIRCUIT HOME RUN WITH PANEL NAME AND CIRCUIT NUMBER(S)
	RECEPTACLE AT 1/2" ABOVE GRADE / FINISHED FLOOR		CABLE / RACEWAY INSTALLED CONCEALED IN WALLS OR ABOVE CEILING
	RECEPTACLE AT 1/2" ABOVE GRADE / FINISHED FLOOR		CABLE / RACEWAY INSTALLED BELOW FLOOR OR GRADE
	RECEPTACLE AT 1/2" ABOVE GRADE / FINISHED FLOOR		CABLE TRAY
	RECEPTACLE AT 1/2" ABOVE GRADE / FINISHED FLOOR		JUNCTION BOX ABOVE ACCESSIBLE CEILING
	RECEPTACLE AT 1/2" ABOVE GRADE / FINISHED FLOOR		JUNCTION BOX AT OVERHEAD STRUCTURE IN AREAS WITH NO CEILING
	RECEPTACLE AT 1/2" ABOVE GRADE / FINISHED FLOOR	ABBREVIATIONS	
	RECEPTACLE AT 1/2" ABOVE GRADE / FINISHED FLOOR		IG ISOLATED GROUND
	RECEPTACLE AT 1/2" ABOVE GRADE / FINISHED FLOOR		LR LEGALLY REQUIRED STANDBY
	RECEPTACLE AT 1/2" ABOVE GRADE / FINISHED FLOOR		LI LONG - INSTANTANEOUS
	RECEPTACLE AT 1/2" ABOVE GRADE / FINISHED FLOOR		LSIG LONG - SHORT - INSTANTANEOUS - GROUND FAULT
	RECEPTACLE AT 1/2" ABOVE GRADE / FINISHED FLOOR		MCB MAIN CIRCUIT BREAKER
	RECEPTACLE AT 1/2" ABOVE GRADE / FINISHED FLOOR		MTO MANUAL TRANSFER SWITCH
	RECEPTACLE AT 1/2" ABOVE GRADE / FINISHED FLOOR		NIC NOT IN CONTRACT (SHOWN FOR REFERENCE ONLY)
	RECEPTACLE AT 1/2" ABOVE GRADE / FINISHED FLOOR		OFE OWNER-FURNISHED EQUIPMENT - INSTALLED AND WIRED BY E.C.
	RECEPTACLE AT 1/2" ABOVE GRADE / FINISHED FLOOR		P.C. WORK UNDER DIVISION 22
	RECEPTACLE AT 1/2" ABOVE GRADE / FINISHED FLOOR		S.C. WORK UNDER DIVISION 21
	RECEPTACLE AT 1/2" ABOVE GRADE / FINISHED FLOOR		SPD SURGE PROTECTIVE DEVICE
	RECEPTACLE AT 1/2" ABOVE GRADE / FINISHED FLOOR		TAC TO ABOVE ACCESSIBLE CEILING
	RECEPTACLE AT 1/2" ABOVE GRADE / FINISHED FLOOR		TTP TELEPHONE TERMINAL BOARD
	RECEPTACLE AT 1/2" ABOVE GRADE / FINISHED FLOOR		UCR UNDER COUNTER REFRIGERATOR
	RECEPTACLE AT 1/2" ABOVE GRADE / FINISHED FLOOR		U.S.E. LISTED FOR SERVICE ENTRANCE
	RECEPTACLE AT 1/2" ABOVE GRADE / FINISHED FLOOR		VFD/VSD VARIABLE FREQUENCY / SPEED DRIVE
	RECEPTACLE AT 1/2" ABOVE GRADE / FINISHED FLOOR		VM VENDING MACHINE
	RECEPTACLE AT 1/2" ABOVE GRADE / FINISHED FLOOR		WG WIRE GUARD
	RECEPTACLE AT 1/2" ABOVE GRADE / FINISHED FLOOR		WR WEATHER RESISTANT
SINGLE LINE DIAGRAM			
	ELECTRICAL SWITCHBOARD OR SWITCHGEAR		
	DISTRIBUTION BOARD OR DISTRIBUTION BOARD		
	TRANSFORMER		
	FILLED TRANSFORMER		
	GROUNDING ELECTRODE PER NFPA 70 ARTICLE 250 MINIMUM		
	ELECTRICAL PANELBOARD OR DISTRIBUTION BOARD		
	ELECTRICAL SWITCHBOARD OR SWITCHGEAR		
	SURGE PROTECTIVE DEVICE		
PLAN-VIEW AND GRAPHIC LINE TYPES			
WORK SHOWN BOLD CONTINUOUS INDICATES NEW WORK (UNLESS OTHERWISE INDICATED)			
WORK SHOWN FADED INDICATES EXISTING WORK TO REMAIN OR NEW WORK BY OTHERS AS APPLICABLE (UNLESS OTHERWISE INDICATED)			
WORK SHOWN BOLD-DASHED INDICATES SELECTIVE DEMOLITION WORK (UNLESS OTHERWISE INDICATED)			

- ### GENERAL ELECTRICAL PROJECT NOTES
- PROVIDE ALL JUNCTION BOXES, CONDUIT, WIRE INSTALLATIONS, TERMINATIONS, ETC. AS NECESSARY FOR COMPLETE OPERATIONAL INSTALLATION OF KROGER SUPPLIED MATERIALS.
 - ELECTRICAL CONTRACTOR RESPONSIBILITIES FOR KROGER SUPPLIED MATERIALS SHALL BE AS FOLLOWS:
 - RECEIVE, UNLOAD, STORE AND PROTECT PRODUCT ON SITE.
 - INSPECT PRODUCTS UPON RECEIPT FOR SHORTAGES, DAMAGES OR DEFECTS AND NOTIFY SUPPLIER WITHIN 24 HOURS.
 - NOTIFY SUPPLIER WITHIN 20 DAYS OF RECEIPT OF ANY HIDDEN DAMAGES FOR PRODUCTS REVIEWED.
 - NEATLY INSTALL ALL CONDUIT, CABLES, ETC. PARALLEL AND PERPENDICULAR TO BUILDING STEEL.
 - PROVIDE SWEEP BENDS, INSULATED THROAT FITTINGS (OR BUSHINGS) AND 200# DRAG LINE (PULL STRING) IN ALL EMPTY CONDUITS. "OVERHEAD JOIST SPACE" SHALL BE TAKEN TO MEAN AT THE BOTTOM CHORD OF JOISTS OF THE HIGH ROOF STRUCTURE, EVEN IF CONDUIT ORIGINATED IN AN AREA WITH A CEILING OR A LOWER ROOF STRUCTURE, INSTALL ALL CONDUITS CONCEALED WHEREVER POSSIBLE. FIELD COORDINATE ALL ROUTING AND TERMINATION DETAILS IN ADVANCE.
 - ALL ELECTRICAL DEVICES, OUTLETS, JUNCTION BOXES, ETC. THAT ARE SHOWN AGAINST A WALL SHALL BE FLUSH MOUNTED IN THE WALL. (i.e. RECESSED IN WALL, SO OPENING IS FLUSH WITH FINISHED WALL SURFACE). REFER TO EQUIPMENT SCHEDULE FOR MOUNTING HEIGHTS AND ADDITIONAL INFORMATION. ALSO SEE DETAILS WHERE APPLICABLE.
 - INSTALL ELECTRICAL OUTLETS FOR REFRIGERATION ISLAND CASES IN A STRAIGHT LINE ALIGNED WITH THE HUB DRAWING. COORDINATE WITH PLUMBING DIMENSIONS SIGNED PLAN.
 - PROVIDE MINIMUM #12AWG THIN BRANCH CIRCUIT WIRING.
 - REGARDLESS OF WHETHER DEVS 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).
 - NEW WORK SHOWN ON DRAWINGS IS SHOWN TO INDICATE MINIMUM REQUIREMENTS FOR THE NEW EQUIPMENT LAYOUT. EXISTING CONDUIT/OUTLET WORK MAY BE RE-USED WHEREVER POSSIBLE, SUBJECT TO BEING EQUIVALENT TO THE NEW WORK REQUIREMENTS SHOWN.
 - SAWCUT AND NEATLY PATCH (IN KIND) EXISTING FLOOR SLAB AS REQUIRED FOR NEW UNDERFLOOR DUCT SYSTEM, ISLAND RELATED WORK, CHECKOUT AREA RACEWAYS, NEW GONDOLA/SHELVING RUNS, ETC.

- ### ENERGY MANAGEMENT SYSTEM (EMS) LEGEND NOTES
- # ROUTE INDICATED HOME RUNS AS FOLLOWS. FIELD VERIFY ALL PANEL LOCATIONS.
 - WHERE REFRIGERATION EQUIPMENT IS SERVED FROM A "SYSTEM", ROUTE TO "RC" CONTROL PANEL IN REAR COMPRESSOR ROOM.
 - WHERE REFRIGERATION EQUIPMENT IS SERVED FROM RACK "A" OR RACK "B", ROUTE TO RESPECTIVE RACK'S "RC" CONTROL PANEL IN REAR COMPRESSOR ROOM.
 - IF THE NOTES STATED ABOVE, PROVIDE SHALL MEAN FURNISH AND INSTALL.
 - "BEC" TO REFER TO BUILDING ELECTRICAL CONTRACTOR BIDDING TO THE GENERAL CONTRACTOR, "FEC" TO REFER TO FIXTURES ELECTRICAL CONTRACTOR SEPARATELY BIDDING EQUIPMENT TO KROGER. FOR ALL REMODELS AND EXPANSIONS, BEC AND FEC RESPONSIBILITIES WILL BE COMBINED AND FALL TO THE ELECTRICAL CONTRACTOR BIDDING TO THE GENERAL CONTRACTOR.
 - FEC TO PROVIDE AND WIRE ALL ADDITIONAL CONTACTORS, RELAYS AND ADDITIONAL ENCLOSURES NECESSARY FOR A FULLY WORKING DEFROST SYSTEM. REFER TO HUSSMAN EQUIPMENT SCHEDULES FOR PROTOCOL SYSTEMS AS THESE ARE TYPICALLY PROVIDED WITH THE PROTOCOL. FOR RACK AND PARALLEL SYSTEMS, ASSUME NONE ARE PROVIDED BY THE MANUFACTURE.

ENERGY MANAGEMENT SYSTEM (EMS) LEGEND

(APPLIES ONLY FOR EMS DRAWING SHEETS)

SYMBOL	DESCRIPTION	NOTE	CABLE/CONDUCTORS
	DEFROST CONDUIT	PROVIDE OUTLET BOX AT CASE. PROVIDE WIRING FROM CASE TO RESPECTIVE DEMP/OS "RC" PANEL. SEE DEFROST WIRING SCHEDULE ON EMS SHEETS. PROVIDE WIRING IN 1" CONDUIT FOR WALK IN COOLERS/FREEZERS AND ALL OTHER APPLICATIONS. FOR REFRIGERATED CASES PROVIDE WIRING FROM CASE TO RESPECTIVE SINGLE PHASE CONTROL POINT PER RISD-13 (WHERE APPLICABLE), OR DIRECTLY TO PROTOCOL UNIT. SEE DEFROST WIRING SCHEDULE FOR DEFROST CIRCUIT PHASE. IN ADDITION PROVIDE 1" CONDUIT FOR KLIXON UNITS. KLIXON UNITS TO BE WIRED IN SERIES PER REFRIGERATION CIRCUIT WITH A SINGLE HOME RUN TO "RC" PER CIRCUIT.	SEE DEFROST WIRING SCHEDULE ON EMS SHEETS. REFER TO SPECIFICATION 26.05.19 FOR CABLING REQUIREMENTS AND ADDITIONAL INFORMATION.
	SUCTION STOP SOLENOID	PROVIDE OUTLET BOX AT CASE. PROVIDE CABLE IN 1" CONDUIT FROM SOLENOID TO RESPECTIVE "RC" CONTROL PANEL. SOLENOID SHALL BE FURNISHED & INSTALLED BY REFRIGERATION CONTRACTOR.	SEE 208V COOLING COIL FAN WIRING SCHEDULE ON THIS SHEET.
	TEMPERATURE SENSOR (REFRIGERATION)	PROVIDE OUTLET BOX AT CASE. PROVIDE CABLE FROM SENSOR TO RESPECTIVE "RC" CONTROL PANEL. PROVIDE 1" CONDUIT TO JOIST SPACE OR ABOVE CEILING, THEN FREE WIRE TO JOIST SPACE. CABLE IN JOIST SPACE TO BE FREE WIRE.	REFER TO SPECIFICATION 26.05.19 FOR CABLING REQUIREMENTS AND ADDITIONAL INFORMATION. REFER TO REFRIGERATION INSTALLATION SPECS FOR FREE WIRE REQUIREMENTS.

A REMODEL OR NEW CONSTRUCTION FOR:

KROGER GA-388

564 CROSSTOWN DRIVE PEACHTREE CITY, GA

PROJECT: KROGER REGION
 DATE: 12-21-2018
 SHEET TITLE: CONSTRUCTION SET
 ELECTION ABBREVIATIONS, SYMBOLS, AND GENERAL NOTES

REV	DATE	DESCRIPTION

PROJECT NO: 20995
 CAD DWG FILE:
 DRAWN BY: JAD
 CWD BY: JAT

E0.1

SHEET NO