

ELECTRICAL KEY NOTES

TAG	QTY	NAME	STATUS/ELECTRICAL REQUIREMENTS
1	1	E38TP	NEW 375W FOR THERMAL PRINTER
2	2	E38TP	RELO 375W FOR THERMAL PRINTER
3	1	E38TS	NEW 18W FOR TOUCHSCREEN POS (FOR OEM MOUNT)
4	2	E38TS	RELO 18W FOR TOUCHSCREEN POS (FOR OEM MOUNT)
5	1	GE102C	NEW 120V, 12W, FOR CHECK SCANNER, 120V, 82W, FOR MONITOR AND TINY PC, 120V, 168W, FOR PRINTER
6	1	GE107	NEW 45W 4"-0" AB FL FOR BIOMETRIC READER FOR TSA (REQ'D. LOCKED ON DEVICE @ PANEL)
7	1	GE121	NEW 120V 5.5A DEDICATED CKT PLUS A PHONE MODEM FOR WESTERN UNION TERM.
8	1	GE156	NEW 120V 250W ELEC FED FROM RACEWAY FOR EFT PIN PAD & CREDIT CARD READER
9	2	GE156	RELO 120V 250W ELEC FED FROM RACEWAY FOR EFT PIN PAD & CREDIT CARD READER
10	1	GE38	NEW 120V 500W FOR REGISTER (DEDICATED CKT)
11	2	GE38	RELO 120V 500W FOR REGISTER (DEDICATED CKT)
12	2	GE57	RELO 115V 175W 4"-0" ABOVE FLOOR FOR MONEY ORDER MACHINE
13	1	GE68	NEW 120V 200W 2"-0" AB FL FOR CALCULATOR
14	-	NOT USED	-
15	1	D115	RELO 110V 1PH 10AMP CKT FOR WRAPPER (TABLE TOP). MOUNT RCPT. 4"-0" AB. FL. (NEMA5-15P)
16	1	S27	RELO 110V 1PH 10AMP CKT (NEMA L5-20P) FOR 3-ROLL WRAPPER (NO WINGS)
17	1	T102	RELO (1) 500W CONVENIENCE OUTLET 4"-0" AB FL FOR WORKTABLE
18	1	B3D06H	RELO 44W FOR FANS, 597W FOR A.S., 188W FOR LIGHTS ON 8' GL DR I.C. GROCERY MERCH. MOUNT J.B. 1'-6" AB FL
19	1	G858SC	RELO 348W FOR CHECKSTAND REFRIGERATED MERCHANDISER
20	2	MDCL10H	RELO 60W FOR FANS, 713W FOR A.S., 314W FOR LIGHTS ON 10' GL DR L.T. GROCERY MERCH. MOUNT J.B. 1'-6" AB FL
21	1	B100	NEW 115V 2.4A FOR AIR BRUSH W/COMPRESSOR. MOUNT RCPT 4"-0" AB. FL.
22	2	B153-L1M	NEW 120V, 180W, 1PH, FOR LED LIGHTS ON MID-HIGHT ARTISAN BREAD DISPLAY
23	1	B154-L1M	NEW 120V, 180W, 1PH, FOR LED LIGHTS ON MID-HIGHT BAGUETTE DISPLAY
24	2	B155-L1M	NEW 120V, 180W, 1PH, FOR LED LIGHTS ON MID-HIGHT DONUT DISPLAY
25	1	B44T	NEW 120V 1PH, 75AMPS FOR SERVICE SCALE/UPC PRINTER (TOLEDO), PROVIDE A 3/4" CONDUIT TO ECR RM. MOUNT RCPT 4"-0" AB. FL.
26	1	B44T	RELO 120V 1PH, 75AMPS FOR SERVICE SCALE/UPC PRINTER (TOLEDO), PROVIDE A 3/4" CONDUIT TO ECR RM. MOUNT RCPT 4"-0" AB. FL.
27	1	B55C	NEW 120V, 840W, 1PH, FOR VARIETY BREAD SLICER
28	1	B55S-2	NEW 120V, 720W, 1PH, FOR SELF SERVICE BREAD SLICER
29	1	B95DUB	NEW 1027W FOR CAKE IMAGING MACHINE
30	2	BMDL5HP	NEW 120V FOR FANS, 117W FOR LIGHTS ON 5' MDLP BAKERY CASE
31	1	BVGD6HE	NEW 120V, 70W FOR FANS, 65W FOR LIGHTS ON 6FT GLASS DOOR BEVERAGE CASE. MOUNT J.B. 1'-6" AB FL
32	2	GE244	NEW 15W @ 6"-8" AFF FOR DOCK LIGHT
33	1	PLPROWS	NEW 120V, 20AMP, 1PH CIRCUIT FOR BOOSTER PUMP WHEN REQUIRED.
34	3	D23T	NEW 120V 1PH, 75AMPS FOR SERVICE SCALE/UPC PRINTER (TOLEDO), PROVIDE A 3/4" CONDUIT TO ECR ROOM
35	3	D23T	RELO 120V 1PH, 75AMPS FOR SERVICE SCALE/UPC PRINTER (TOLEDO), PROVIDE A 3/4" CONDUIT TO ECR ROOM
36	1	D26	NEW 504W 4"-0" AB FL FOR MANUAL SLICER
37	2	D26	RELO 504W 4"-0" AB FL FOR MANUAL SLICER
38	4	D299TV-48	NEW 120V, 180W, 1PH, FOR 48" DIGITAL MONITOR FOR DELI MENU BOARD. DATA JACK REQUIRED PER UNIT.
39	1	D36	NEW 120V 1PH 13.0A CKT, 1750W 3"-5" AB FL FOR MICROWAVE OVEN
40	-	NOT USED	-
41	1	D70V	NEW 120V, 12.5A FOR SINGLE CUP COFFEE MACHINE
42	1	D77B	NEW 1150W FOR RICE COOKER
43	1	D77B	RELO 1150W FOR RICE COOKER
44	1	D2625C13	NEW 208V, 13.4A, NEMA L14-20R FOR 13 PAN QUICK CHILLER WITH TOUCHSCREEN
45	1	DCKSOBAT	NEW 208V, 1PH, 1914W FOR HEAT LAMP, 208V, 1PH, 1914W FOR HEAT LAMP, 208V, 1PH, 2475W FOR DROP-IN WARMER, 208V, 1PH, 2475W FOR DROP-IN WARMER, 208V, 1PH, 780W FOR HEATED DRAWER, 120V, 1PH, 35W FOR LIGHTING.
46	2	DHFMD3A	NEW 208V, 9.2AMP, 1PH FOR 3' SELF SERVICE MULTI DECK HOT CASE. NEMA 6-20P PLUG.
47	1	DHMFAM	NEW 120V 1PH 16AMPS FOR 4' MOBILE HOT FOOD
48	1	DFO6BM	NEW 120V, 16W FOR FANS, 39W FOR LED LIGHTS FOR 6' MDLP SELF SERVICE IN LINE COLD FOOD CASE
49	1	DMDLR12HC	NEW 120V, 48W, FOR FANS, 51W, FOR LIGHTS, FOR 12' FRESH SLICED MULTI DECK CASE (REMOTE)
50	1	DMDLR4HC	NEW 120V, 16W, FOR FANS, 31W, FOR LED LIGHTS, FOR 4' FRESH SLICED MULTI DECK CASE (REMOTE)
51	2	DMDLR6HC	NEW 120V, 24W, FOR FANS, 31W, FOR LED LIGHTS, FOR 6' FRESH SLICED MULTI DECK CASE (REMOTE)
52	1	DMDLR8HC	NEW 120V, 32W, FOR FANS, 41W FOR LED LIGHTS, FOR 8' FRESH SLICED MULTI DECK CASE (REMOTE)
53	2	D58HE	NEW 20W FOR FANS, 90W FOR A.S. FANS, 800W A/S HTS, 177W FOR LIGHTS
54	2	DR60BPE	NEW 120V 5AMP FOR BI PARTING SLIDER DOOR (CONNECTION AT CENTERLINE OF HEADER)
55	2	DR60BPI	NEW 120V 5AMP FOR BI PARTING SLIDER DOOR (CONNECTION AT CENTERLINE OF HEADER)
56	2	E102	NEW 56W FOR THINCLIENT & MONITOR
57	1	E102	RELO 56W FOR THINCLIENT & MONITOR
58	1	E15MR	NEW (1) 120V QUAD OUTLET ON A 20A DEDICATED CIRCUIT. MOUNT QUAD OUTLET TO THE REAR SIDE OF THE CABLE TRAY ABOVE THE RACK. ADDITIONALLY, (2) 120V NEMA L5-30 OUTLETS ON 30A DEDICATED CIRCUITS ARE REQUIRED FOR 4-POST MDF RACK.
59	1	E15M	NEW (1) 120V QUAD OUTLET ON A 20A DEDICATED CIRCUIT. MOUNT QUAD OUTLET TO THE REAR SIDE OF THE CABLE TRAY ABOVE THE RACK.
60	1	E42-17	NEW 120V, 37W, 1PH FOR 19" LED COMPUTER MONITOR
61	2	E6	NEW 960W FOR MFP (FAX PRINTER COPIER SCANNER), COORDINATE RCPT HGT WITH COUNTER
62	1	E7MFD	NEW 1200W DEDICATED CIRCUIT FOR COPY PRINT SCAN MFD
63	1	E8B	NEW 120V, 1AMP FOR BILL COUNTER, COORDINATE RCPT HGT WITH COUNTER
64	1	E9C	NEW 120V, 10A DEDICATED CIRCUIT FOR EAS CONTROLLER
65	2	E9K	NEW POWERED BY E9C CONTROLLER
66	2	E9L	NEW POWERED BY E9C CONTROLLER
67	1	GE102A	NEW 488W FOR ACCOUNTING PC, MONITOR & THERMAL PRINTER
68	1	F47W1_BL	NEW (2)120V, 20A DUPLEX OUTLETS & 112W FOR LIGHTS ON FLORAL WORKSTATION
69	2	F5DNBHX	NEW 50W FOR FANS, 177W FOR LIGHTS ON 8' 5-DECK NARROW FLORAL CASE
70	2	GE11C	NEW 120V 500W FOR DEPARTMENT HEAD COMPUTER WORKSTATION
71	1	GE186	NEW 120V 1PH 14AMPS FOR MICROWAVE MOUNT RCPT 4"-0" AB. FL
72	1	GE186	RELO 120V 1PH 14AMPS FOR MICROWAVE MOUNT RCPT 4"-0" AB. FL
73	1	GE1H	RELO 115V 30W, 1PH, FOR PREP AREA FLY ZAPPER. (MOUNT @ 6"-0" AFF TO BOTTOM)
74	1	GE2	NEW 115V 15A CKT FOR LOTTERY MACHINE
75	4	HDR2	NEW 120V, 8.33AMP, 1PH FOR DYSON LOW VOLTAGE HAND DRYER
76	1	GE216B-2	NEW 120V 6AMPS, 1PH 2"-0" AB FL FOR REFRIG (REQ'D. LOCKED ON DEVICE @ PANEL)
77	1	G858SC-2	NEW 120V, 3.8 AMP, 1PH FOR CHECKSTAND REFRIGERATED MERCHANDISER, COMES WITH 9' CORD WITH NEMA 5-15P PLUG.
78	1	M11T	RELO 120V 1PH, 75AMPS FOR SERVICE SCALE/UPC PRINTER (TOLEDO), MOUNT RCPT 4"-0" AB FL. PROVIDE A 3/4" CONDUIT TO ECR ROOM
79	1	MDTG12HX	NEW 176W FOR FANS & A.S. HTS, 92W FOR GLASS A.S. HTS, 2900W (208V 1PH) FOR ELEC DEF (ROUTE CONDUIT TO MECH CENTER OR PROTOCOL UNIT FOR CONTROL CKT & DEFROST WIRING) ON 12' ICE CREAM TEMP DELI ISLAND W/GLASS
80	1	MMSC4HC-2	NEW 120V, 2806W, 1PH FOR 4' MOBILE SELF CONTAINED PROMO MEAT CASE. SUPPLIED WITH CORD & NEMA L5-30P PLUG.
81	1	MS12HC-2	NEW 120V, 4.7W FOR AIRSWEEP FANS, 93W FOR LED LIGHTS, 1800W FOR CONVENIENCE OUTLET, FOR 12' SERVICE MEAT CASE
82	1	R16	NEW (1) 15 AMP CKT TO BE ISOLATED & DEDICATED FOR PHARMACY LASER PRINTER
83	1	R50B	NEW 150W FOR PRESCRIPTION VALIDATION & DISPENSING DEVICE
84	1	R9C	NEW 315W FOR RX EASYFILL PRN PC & 17" LCD
85	1	RBF	RELO 120V, 15A, 1PH CIRCUIT FOR SMALL FREEZER (BIOMEDICAL) REQUIRED TO BE ON EMERGENCY CIRCUIT.
86	1	RBR	RELO 120V, 15A CIRCUIT FOR UNDERCOUNTER REFRIGERATOR (BIOMEDICAL) REQUIRED TO BE ON EMERGENCY CIRCUIT.
87	1	RBU	RELO 120V, 15A CIRCUIT FOR UNDERCOUNTER REFRIGERATOR (BIOMEDICAL) REQUIRED TO BE ON EMERGENCY CIRCUIT.
88	1	P31T	RELO 120V 1PH, 75AMPS FOR SERVICE SCALE/UPC PRINTER (TOLEDO), MOUNT RCPT 4"-0" AB FL. PROVIDE A 3/4" CONDUIT TO ECR ROOM
89	1	P54	NEW 100W FOR PRODUCE MISTING CONTROL/TIMER. DUPLEX OUTLET MOUNTED ABOVE CASE.
90	1	P1DSC6J	NEW 208V, 18.5AMP, 1PH FOR 8'X6' REFRIGERATED PROMO CASE (SELF-CONTAINED) UNIT COMES WITH 10' CORD AND L6-20P NEMA PLUG.
91	1	PWSC6M-3_SR	NEW 240V, 9.5AMP, 1PH FOR 8' ULTRA FRESH BERRY CASE (SELF-CONTAINED) UNIT COMES WITH 9' CORD AND L14-30P NEMA PLUG.
92	2	PWSC6M-3_SR	NEW 240V, 9.5AMP, 1PH FOR 8' ULTRA FRESH BERRY CASE (SELF-CONTAINED) UNIT COMES WITH 9' CORD AND L14-30P NEMA PLUG.
93	1	S24T	RELO 120V 1PH, 75AMPS FOR SERVICE SCALE/UPC PRINTER (TOLEDO). PROVIDE A 3/4" CONDUIT TO ECR ROOM
94	1	S7	NEW 120V 18A 4"-0" AB FL FOR OVEN STEAMER
95	1	S36TS-8	NEW 208V, 3PH, 13AMPS FOR S.C. ICE FLAMER W/ CART TRANSPORT SYSTEM (1000 LB.)
96	1	S5DRNBHX	NEW 100W FOR FANS, 354W FOR LIGHTS ON 9' ENK SEAFOOD CASE. MOUNT J.B. 1'-6" AB FL
97	1	SS12HC-DSFM	NEW 95W FOR FANS, 134W FOR ANTISWEATS, AND 15A CONV. OUTLET
98	2	T6SC	NEW 1265W FOR 6' TABLE W/REF BASE (SELF-CONT.)
99	1	T8SC	NEW 115V 10AMP FOR 8' SELF-CONTAINED TABLE W/REFRIG. BASE

SPECIAL REPAIR NOTES

P47	PANEL OUT OF BALANCE - F Fed from 100 amp fuses in main distribution section 2, 3 AWG. IR Image: 2391 A Phase: 4 amps B Phase: 30amps C Phase: 1 amps Neutral: 15 amps Balance panel to within 10% phase to phase.
P47	PANEL OUT OF BALANCE - H Fed from unknown fuse size in main distribution section 2, 4/0 AWG. IR Image: 2392 A Phase: 96 amps B Phase: 71 amps C Phase: 66 amps Neutral: 31 amps Balance panel to within 10% phase to phase.
P44	OVERSIZED BREAKER - F#3 30 amp breaker, 12 AWG, labeled "Hall Lights", 12 amp load. Repair, downsize breaker to 20 amps.
P25	CODE VIOLATION - PANEL A Blue conductor wrapped with white tape terminated on right neutral bar. Replace with properly colored conductor, entire length.
P36	CIRCUIT TRIPPED - HA CIRCUIT #29 20 amp breaker, 12 AWG, not scheduled. Repair, identify and properly schedule circuit.
P21	SAFETY ISSUE - PANEL C Install breaker blank on circuit # 40
P49	SAFETY ISSUE - PANELS G AND H Missing breaker blanks. Install as needed. Panel G circuit # 40 Panel H circuit # 24
P7	EXISTING NEUTRALS, CASE LIGHTING & FANS Existing refrigeration conduits in mechanical room suggest lights and fans are sharing neutrals. This only applies to new and relocated case work - lights and fans are to have dedicated neutrals.
P2	MAIN BREAKER ENCLOSURE Needs to be labeled as "Main Service Disconnect" on outside of enclosure door.

P5	ANTI-SWEAT PANEL Fed from unknown source, 12 AWG. 21 of 28 channels in use. Repair, properly schedule circuit.
P13	PANEL SCHEDULE LABELING All schedules are to be 100% accurate, on card stock, typed, dated, and installed in a clear pocket. Receptacles and lighting are to be labeled by area/location. Case circuits are to reference refrigeration circuits. Spare is a breaker with no wire. Blank is an empty slot. All wired and active breakers shall be properly scheduled. Note: Wired breakers with no active load / device shall be labeled as Spare, Ending Location. Do not remove existing panel schedules.
P22	SCHEDULES INCORRECT
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P50	

CONTACTOR SCHEDULE (KROGER PROVIDED)

TAG	COIL	AMPERAGE	POLES	LOAD
CTEM*	120	30	2	EXTERIOR EGRESS LTG.
CTDP	120	30	2	DELI PREP W/ MOMENTARY OVERRIDE
CTBP	120	30	2	BAKERY PREP W/ MOMENTARY OVERRIDE
CTRX	120	30	2	PHARMACY W/ MOMENTARY OVERRIDE
CTMP	120	30	2	MEAT PREP W/ MOMENTARY OVERRIDE

* ELECTRICALLY HELD CONTACTOR FOR EMS CONTROL UNDER NORMAL CONDITIONS AND AUTOMATIC "ON" UPON LOSS OF NORMAL POWER.

LOAD BREAKDOWN

SERVICE : 120/208V-3PH-4W, 2000A

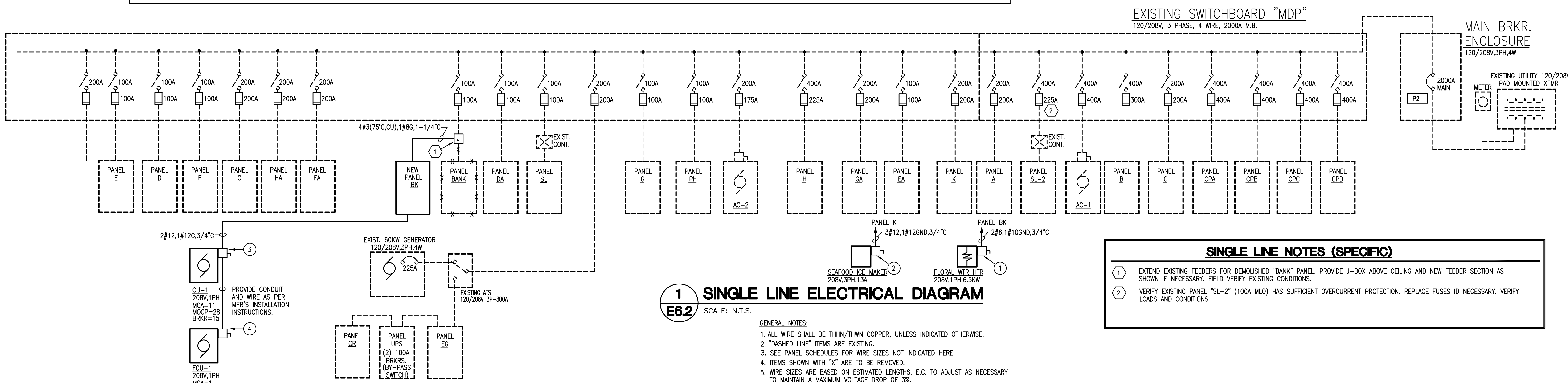
CONNECTED LOAD	CONNECTED KVA
EXISTING DEMAND LOAD: 359.0 KWD (1.85 PF)(1.25)	527.9
ADDED RECEPTACLES	3.2
ADDED REFRIGERATION EQUIP.	7.7
ADDED KITCHEN EQUIP.	2.8
ADDED WATER HEATER	4.2
ADDED MISC.	22.4
ADDED HVAC	2.3
TOTALS:	570.5 KVA
$\frac{570.5}{\sqrt{3}} = 327.2$	1,584 AMPS

NOTE: NEW LIGHTING AND KITCHEN EQUIPMENT LOADS ARE OFFSET BY REMOVAL OF EXISTING

DISCONNECT SCHEDULE (KROGER PROVIDED)

- 600V, 2P,60A, NON-FUSED
- 600V, 3P,30A,WP, FUSED PER NAMEPLATE
- 600V, 2P,30A,WP, FUSED PER NAMEPLATE
- 600V, 2P,30A, NON-FUSED

FUSES TO BE PROVIDED BY EC.
SEE SPECIFICATIONS FOR ADDITIONAL DISCONNECT INFORMATION.



SINGLE LINE NOTES (SPECIFIC)

- EXTEND EXISTING FEEDERS FOR DEMOLISHED "BANK" PANEL. PROVIDE J-BOX ABOVE CEILING AND NEW FEEDER SECTION AS SHOWN IF NECESSARY. FIELD VERIFY EXISTING CONDITIONS.
- VERIFY EXISTING PANEL "SL-2" (100A MLO) HAS SUFFICIENT OVERCURRENT PROTECTION. REPLACE FUSES IF NECESSARY. VERIFY LOADS AND CONDITIONS.

GENERAL NOTES:

- ALL WIRE SHALL BE THIN/THWN COPPER, UNLESS INDICATED OTHERWISE.
- "DASHED LINE" ITEMS ARE EXISTING.
- SEE PANEL SCHEDULES FOR WIRE SIZES NOT INDICATED HERE.
- ITEMS SHOWN WITH "X" ARE TO BE REMOVED.
- WIRE SIZES ARE BASED ON ESTIMATED LENGTHS. E.C. TO ADJUST AS NECESSARY TO MAINTAIN A MAXIMUM VOLTAGE DROP OF 3%.



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A REMODEL FOR:
KROGER MID-ATLANTIC
PROJECT
6-1-2020
DATE
CONSTRUCTION SET
SHEET TITLE
SINGLE LINE ELECTRICAL DIAGRAM
SHEET NO.

REVISIONS
MARK DATE DESCRIPTION
PROJECT NO: 20201
CAD DWG FILE: R-215.E6.2
DRAWN BY: WSM
CHK'D BY: SWH
E6.2
SHEET NO.