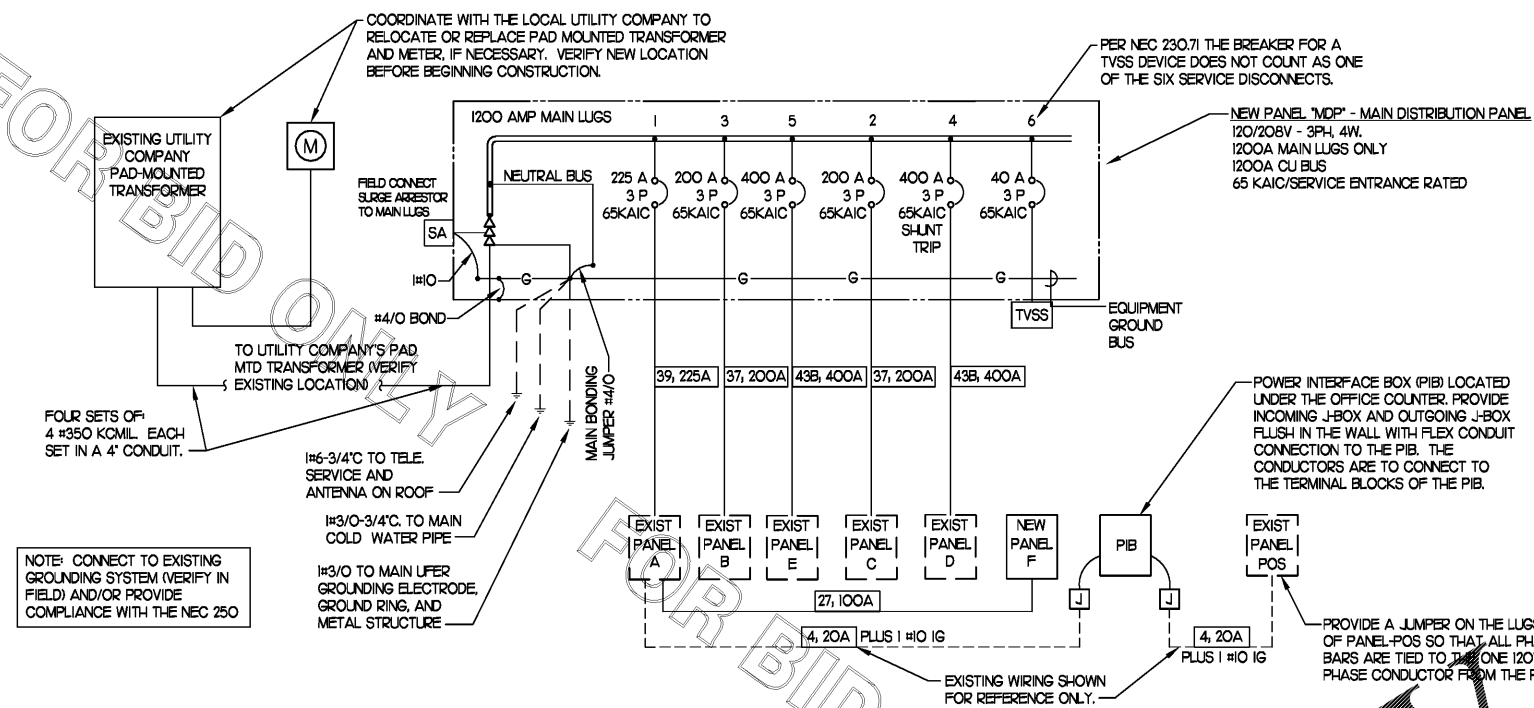


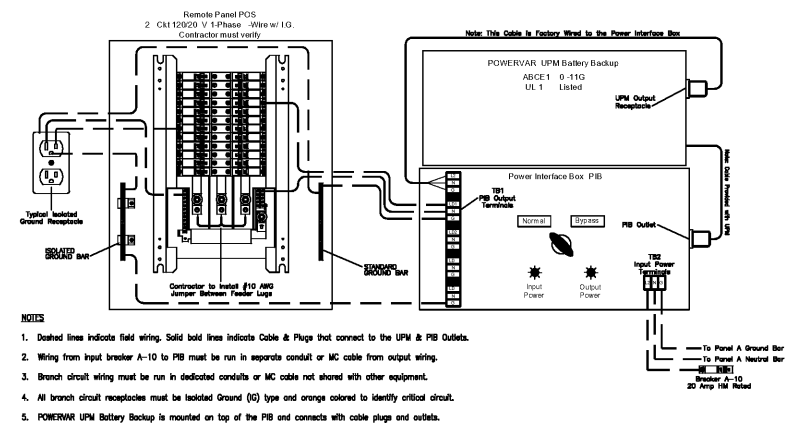
FOR BID ONLY



1 SINGLE LINE DIAGRAM
NO SCALE

PANELBOARD SCHEDULE - PANEL-MDP #2593									
PANELBOARD DESCRIPTION					BREAKER OPTIONS			LOADS	
PANELBOARD NAME	MDP				SW	KVA PHASE A		151.6	
MANUFACTURER / TYPE	SEC / P5				IG	KVA PHASE B		150.7	
VOLTS	208 Y I 20				GF	KVA PHASE C		150.3	
PHASE / WIRE	3 / 4				HA	AMPS PHASE A		1265	
MAIN TYPE / CU BUS AMPS	MLO / 1200				ST	AMPS PHASE B		1256	
AIC SERIES RATING	65,000 MINIMUM				LO	AMPS PHASE C		1262	
MOUNTING SURFACE					NOTES:		KVA CONNECTED	452.7	
NEMA RATING	3R				SERVICE ENTRANCE RATED		KVA DIVERSIFIED	359.2	
QUANTITY OF SECTIONS	1						AMPS CONNECTED	1257	
							AMPS DIVERSIFIED	997.1	
*A/P/O INDICATES CIRCUIT BREAKER AMPACITY/NO. POLES/OPTIONS WITH OPTIONS AS NECESSARY									
PANELBOARD LOAD SUMMARY									
LOAD DESCRIPTION	TYPE	KVA	X	DEMAND FACTOR	DISCRIMINATED	TYPE	NO.	AMPS	NOTES
LIGHTING	L	7.903		1.25				37.9	
EXTERIOR LIGHTING & SIGNAGE	EL	24.089		1.25				107.2	
RECEPTACLES	R	10.720		PER NEC 408.50(D)				46.9	
MISCELLANEOUS	MS	2.830		1.25				3.53	
HVAC	HV	94.680						394.68	
HEAT	HT	8.984						39.94	
SINGLE PHASE MOTOR	MT	7.612						31.65	
KITCHEN EQUIPMENT	K	249.500		0.65				1022.34	
KITCHEN REFRIG. EQUIPMENT	X							30.509	
TOTAL		452.7						1257	

ELECTRICAL LOAD SUMMARY - STORE #2593	
NOT ALL ELECTRIC RESISTIVE LOADS	
THE FOLLOWING IS BASED ON NEC 215.2	
LOAD DESCRIPTION	KVA
LIGHTING	7.90
EXTERIOR LITG AND SIGNAGE	24.09
RECEPTACLES	10.72
MISCELLANEOUS	2.83
HVAC	94.68
HEAT	8.98
SINGLE PHASE MOTORS	7.61
KITCHEN EQUIPMENT	249.50
KITCHEN REFRIGERATION EQUIPMENT	46.94
TOTAL CONNECTED KVA	452.75
IF TOTAL IS 0-200 KVA, THEN TOTAL LOAD 100%	0.00
IF TOTAL IS 201-325 KVA, THEN LOAD OVER 200 AT 50% + 200	0.00
IF TOTAL LOAD IS 326-800 KVA, THEN LOAD OVER 325 AT 45% + 262.5	319.99
IF TOTAL LOAD IS OVER 800 KVA, THEN LOAD OVER 800 AT 20% + 476.3	0.00
DIVERSIFIED AMPS AT 208 VOLT	866.65



2 POWERVAR LAPC with PIB and Panel POS Wiring Diagram
NO SCALE

CONDUIT AND CONDUCTORS SCHEDULE																
Mark No.	OCP Amp/Poles	Conductors		Conductors		Min Eq Grd		Raceway Size (nominal inches)								
		Total Ampacity	60d C / 75d C	Phase & Neutral Qty	Type	Qty	Size	No. Sets	Phase, Neutral & Equip Grd		With Isolated Ground					
									EMT	IMC	RIGID	PVC	EMT	IMC	PVC	
1	20/1	20	--	2	12	THHN	1	12	One	0.75	0.75	0.75	0.75	0.75	0.75	0.75
2	20/2	20	--	3	12	THHN	1	12	One	0.75	0.75	0.75	0.75	0.75	0.75	0.75
3	20/3	20	--	4	12	THHN	1	12	One	0.75	0.75	0.75	0.75	0.75	0.75	0.75
4	25/1	30	--	2	10	THHN	1	10	One	0.75	0.75	0.75	0.75	0.75	0.75	0.75
5	25/2	30	--	3	10	THHN	1	10	One	0.75	0.75	0.75	0.75	0.75	0.75	0.75
6	25/3	30	--	4	10	THHN	1	10	One	0.75	0.75	0.75	0.75	0.75	0.75	0.75
7	30/1	30	--	2	10	THHN	1	10	One	0.75	0.75	0.75	0.75	0.75	0.75	0.75
8	30/2	30	--	3	10	THHN	1	10	One	0.75	0.75	0.75	0.75	0.75	0.75	0.75
9	30/3	30	--	4	10	THHN	1	10	One	0.75	0.75	0.75	0.75	0.75	0.75	0.75
10	40/1	40	--	2	8	THHN	1	10	One	0.75	0.75	0.75	0.75	0.75	0.75	0.75
11	40/2	40	--	3	8	THHN	1	10	One	0.75	0.75	0.75	0.75	0.75	0.75	0.75
12	40/3	40	--	4	8	THHN	1	10	One	0.75	0.75	0.75	0.75	0.75	0.75	1.00
13	50/1	55	--	2	6	THHN	1	10	One	0.75	0.75	0.75	0.75	0.75	0.75	0.75
14	50/2	55	--	3	6	THHN	1	10	One	0.75	0.75	0.75	0.75	1.00	1.00	1.00
15	50/3	55	--	4	6	THHN	1	10	One	1.00	1.00	1.00	1.00	1.00	1.00	1.00
16	60/1	70	--	2	4	THW	1	8	One	1.00	1.00	1.00	1.00	1.25	1.00	1.25
17	60/2	70	--	3	4	THW	1	8	One	1.25	1.00	1.25	1.25	1.25	1.25	1.25
18	60/3	70	--	4	4	THW	1	8	One	1.25	1.25	1.25	1.25	1.25	1.25	1.25
19	70/1	70	--	2	4	THW	1	8	One	1.00	1.00	1.00	1.00	1.25	1.00	1.25
20	70/2	70	--	3	4	THW	1	8	One	1.25	1.00	1.25	1.25	1.25	1.25	1.25
21	70/3	70	--	4	4	THW	1	8	One	1.25	1.25	1.25	1.25	1.25	1.25	1.25
22	80/2	85	--	3	3	THW	1	8	One	1.25	1.25	1.25	1.25	1.25	1.25	1.25
23	80/3	85	--	4	3	THW	1	8	One	1.25	1.25	1.25	1.25	1.50	1.25	1.50
24	90/2	95	--	3	2	THW	1	8	One	1.25	1.25	1.25	1.25	1.50	1.25	1.50
25	90/3	95	--	4	2	THW	1	8	One	1.50	1.25	1.50	1.50	1.50	1.50	1.50
26	100/2	110	--	3	1	THW	1	6	One	1.50	1.50	1.50	1.50	2.00	2.00	2.00
27	100/3	110	--	4	1	THW	1	6	One	2.00	2.00	2.00	2.00	2.00	2.00	2.00
28	110/2	--	115	3	2	THW	1	6	One	1.25	1.25	1.25	1.25	1.50	1.25	1.50
29	110/3	--	115	4	2	THW	1	6	One	1.50	1.25	1.50	1.50	1.50	1.50	1.50
30	125/2	--	130	3	1	THW	1	6	One	1.50	1.50	1.50	1.50	2.00	2.00	2.00
31	125/3	--	130	4	1	THW	1	6	One	2.00	2.00	2.00	2.00	2.00	2.00	2.00
32	150/2	--	150	3	1/0	THW	1	6	One	2.00	1.50	2.00	2.00	2.00	2.00	2.00
33	150/3	--	150	4	1/0	THW	1	6	One	2.00	2.00	2.00	2.00	2.00	2.00	2.00
34	175/2	--	175	3	2/0	THW	1	6	One	2.00	2.00	2.00	2.00	2.00	2.00	2.00
35	175/3	--	175	4	2/0	THW	1	6	One	2.00	2.00	2.00	2.00	2.50	2.50	2.50
36	200/2	--	200	3	3/0	THW	1	6	One	2.00	2.00	2.00	2.00	2.50	2.50	2.50
37	200/3	--	200	4	3/0	THW	1	6	One	2.50	2.50	2.50	2.50	2.50	2.50	2.50
38	225/2	--	230	3	4/0	THW	1	4	One	2.50	2.00	2.50	2.50	2.50	2.50	2.50
39	225/3	--	230	4	4/0	THW	1	4	One	2.50	2.50	2.50	2.50	2.50	3.00	3.00
40	250/3	--	255	4	250	THW	1	4	One	2.50	3.00	3.00	3.00	3.00	3.00	3.00
41A	300/3	--	285	4	300	THW	1	4	One	3.00	3.00	3.00	3.00	3.00	3.00	3.00
41B	300/3	--	310	4	350	THW	1	4	One	3.00	3.00	3.00	3.00	3.00	3.00	3.00
42A	350/3	--	335	4	400	THW	1	4	One	3.00	3.50	3.50	3.50	3.50	3.50	3.50
42B	350/3	--	380	4	500	THW	1	4	One	3.50	3.50	3.50	3.50	3.50	3.50	3.50
43A	400/3	--	380	4	500	THW	1	3	One	3.50	3.50	3.50	3.50	3.50	3.50	3.50
43B	400/3	--	400	4	3/0	THW	2	3	Two	2.50	2.50	2.50	2.50	2.50	2.50	2.50
44A	600/3	--	570	4	300	THW	2	1	Two	3.00	3.00	3.00	3.00	3.00	3.00	3.00
44B	600/3	--	620	4	350	THW	2	1	Two	3.00	3.00	3.00	3.00	3.00	3.00	3.50
45A	800/3	--	760	4	500	THW	2	1/0	Two	3.50	3.50	3.50	3.50	3.50	3.50	3.50
45B	800/3	--	820	4	600	THW	2	1/0	Two	4.00	4.00	4.00	4.00	4.00	4.00	4.00
46	1000/3	--	1005	4	400	THW	3	2/0	Three	3.50	3.50	3.50	3.50	3.50	3.50	3.50
47	1200/3	--	1240	4	350	THW	4	3/0	Four	3.50	3.50	3.50	3.50	3.50	3.50	4.00
48	1600/3	--	1675	4	400	THW	5	4/0	Five	4.00	4.00	4.00	4.00	4.00	4.00	4.00

Notes:

Conductors are rated at 600 volt or below and are to be copper.

NEC Table 310.15(B)(16) is used for the basis of the conductor ampacities, which is not more than three current carrying conductors in a raceway at an ambient temperature of 30 deg C with 60 deg C rated conductors and connectors per 110.14-C-1 for up to 100 amp rated and up to #1 AWG conductors for equipment terminations and 75 deg C rated conductors and termination connectors for larger than 100 amp or above #1 AWG conductors.

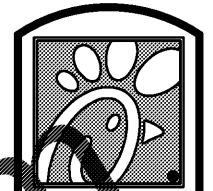
NEC Tables 4, 5, and Appendix C is used for the basis of the conduit sizes. Table C1 for EMT, Table C4 for IMC, Table C8 for Rigid, and Table C10 for PVC (Sch 40).

All Branch Feeders and Branch Circuits shall include a green Equipment Grounding Conductor. Omit Grounding conductor on Service Entrance Feeders.

Omit Neutral conductor on all Delta primary transformer feeders or 3 phase loads not requiring a neutral.

The above conductors are not calculated for Voltage Drop. Any circuits that exceed 100 feet shall be calculated by the Installer to have less than a three percent voltage drop on feeders and five percent on branch circuits per the NEC.

Order Plans



5200 Buffington Rd.
Atlanta Georgia,
30349-2998

Revisions:
Mark Date By
△ 06.30.17
ISSUED FOR PERMIT

Mark Date By
△ 07.11.17
ISSUED FOR BID

Mark Date By
△

Seal
STATE OF KENTUCKY
MARK T. KURZYNSKI
1 2
01-11-17

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STORE #02593
HOUSTON ROAD FSJ

4980 HOUSTON RD
FLORENCE, KY
41042

SHEET TITLE
SINGLE LINE
RISER DIAGRAM

VERSION: S08C-R
ISSUE DATE: 05.2017

Job No. : 17091.CD.R
Store : 02593
Date : 06.30.17
Drawn By : RW
Checked By : MK

Sheet
E3.2