

SINGLE LINE FEEDER SCHEDULE 60-4C (4)#4 AWG CU & (1)#10 AWG CU GND. IN 1-1/4" CDNDUIT FEEDER SCHEDULE GENERAL NOTES • FEEDERS DENOTED BY A "*" HAVE BEEN OVERSIZED TO COMPENSATE FOR VOLTAGE DROP. "CU" = COPPER CONDUCTOR • "AL" = ALUMINUM CONDUCTOR ALL CONDUCTOR AND CONDUIT SIZES SHOWN ARE MINIMUM REQUIREMENTS, INCREASE SIZES AS NEEDED TO ACCOMMODATE VOLTAGE DROP, DE-RATING, SITE CONDITIONS, AND MEANS AND METHODS USED FOR INSTALLATION OF FEEDERS.

GENERAL NOTES

- A. EXISTING BUILDING SERVICE AND DISTRIBUTION SYSTEM SHALL REMAIN IN OPERATION AT ALL TIMES.
- B. ANY EQUIPMENT OR FEEDERS THAT ARE DISCONNECTED DUE TO CONSTRUCTION SHALL BE PROVIDED WITH TEMPORARY CONNECTIONS TO MAINTAIN PROPER SERVICE.
- C. WHERE INDICATED PROVIDE NEW BREAKERS IN EXISTING SWITCHBOARD AND PANELS. NEW BREAKERS REQUIRED SHALL BE FURNISHED AND INSTALLED BY THE ELECTRICAL CONTRACTOR.
- D. WHERE INDICATED REMOVE EXISTING PANELS AND REPLACE WITH NEW PANELS FURNISHED BY THE ELECTRICAL CONTRACTOR.
- E. ALL NEW PANELS INDICATED ON SINGLE LINE DIAGRAM SHALL BE FURNISHED BY THE ELECTRICAL CONTRACTOR UNLESS SPECIFICALLY
- INDICATED OTHERWISE, SEE SPECIFICATIONS.
- F. ALL ELECTRICAL EQUIPMENT DESIGNATED TO BE REMOVED AS PART OF THIS PROJECT SHALL BE COMPLETELY REMOVED. THIS INCLUDES ALL ASSOCIATED WIRING, CONDUIT, CONTROLS, AND ACCESSORIES BACK TO SOURCE.
- G. ENSURE THAT EXISTING BUILDING AND ALL SYSTEM GROUND CONTINUITY IS MAINTAINED AT ALL TIMES DURING CONSTRUCTION.
- H. ELECTRICAL SERVICE SHALL BE GROUNDED AND BONDED PER NEC 250. GROUNDING SHALL INCLUDE CONNECTIONS TO GROUND RODS, BUILDING STEEL, AND COLD WATER SERVICE.

ROOM					\	/OLTS	208Y/12	OV 3	3P 4	W	AIC R	EFER TO S	SINGLE-LINE	E DIAGR	AM		
М	OUNTIN	IG <u>RE</u>	FER TO SINGLE-LINE DIAGRAM	BUS AMPS <u>REFER TO SINGLE-LINE DIAGRAM</u>								MAIN	REFER TO	SINGLE-LIN	NE DIAGE	RAM	
			F2		١	NEUTRAI	<u>100%</u> _					LUGS	REFER TO	SINGLE-LI	NE DIAG	RAM_	
	BKR CK					KVA LO		СКТ								(VA LO	
#	TYP BK		CIRCUIT DESCRIPTION		Α	В	С	-	TYP	BKR	CIRCUIT DESCR	IPTION			Α	В	С
1 3 5 7 9 11 13 115 117 119 21 23 25 27 29	20 -/ 20 -/ 20 -/ 20 20 20 20 20)/1 /1)/1	(ST) CHICKEN DOUBLE OVEN (ST) (ST) CHICKEN DOUBLE OVEN (ST) (ST) CHICKEN HOOD LIGHTS (ST) CHICKEN HOOD ANSUL SYS. SPARE SPARE SPARE SPARE SPARE SPARE		0.348 0.9 0.18	0.348 0.4 0.	0.348	2 4 6 8 10 12 14 16 18 20 22 24 26 28 30		20/1 30/2 20/1 20/1 20/1 20/1 20/1 20/1 20/1 20/1	CHICKEN GREATHARDT CHICKE ROOF RECEPTANEW ARIUS FANEW	N CASE ACLE N N			0.52 0.18 0.9 0	2.3 . 0.9 . 0.52 . 0 .	2.3 0.72 0
	- 20	<u>// :</u>	S. A.C.	•		•	<u> </u>			20/1	TOTAL CONNE	CTED KV	'A BY PHA	SE	3.03	4.47	4.77
\dashv											TOTAL CONNEC				25.2	38.9	41.3
			LIGHTING 0.4 LARGEST MOTOR 1.04 OTHER MOTORS 0 RECEPTACLES 2.7	CALC 0.5 1.31 0 2.7	(12 (12 (12 (10 (50%	5%)	DA	I ANG		KITCHEN NONCOII TOTAL I	JOUS 0 4.6° NTINUOUS 0.18 N EQUIP 3.3° N/DIVERSE 0	3	CALC. K 0 4.61 0.18 2.17 0 11.5	(125%) (100%) (100%) (100%) (65%) (N/A)			

R	ROOM MOUNTING REFER TO SINGLE-LINE DIAGRAM					VOLTS 208Y/120V 3P 4W BUS AMPS <u>REFER TO SINGLE-LINE DIAGRAM</u> NEUTRAL 100%								AIC	REFER TO	SINGLE-LIN	E DIAGE	RAM		
М														L MAIN	N <u>REFER TO</u>	SINGLE-LI	NE DIAC	RAM		
FED FROM <u>UTILITY</u>															MAIN <u>REFER TO SINGLE—LINE DIAGRAM</u> LUGS <u>REFER TO SINGLE—LINE DIAGRAM</u>					
CKTBKR CKT						KVA LOAD CKT BKR CKT												KVA LOA		
#	ΓΥΡ	BKR	CIRCUI	IT DESCRIPTION			Α	В	С	#	TYP	BKR	CIRCUIT DE	SCRIPTION			Α	В		
1		20/1	(EX)				0.			. 2		20/1	(EX)				0 .			
3		20/1	(EX)					0] .	4		20/1	(EX)					0 .		
5		20/1	(EX)			•			0	. 6		20/1	(EX)				.		0	
7		20/1	(EX)			•	0.	٠.	.	. 8		20/1	(EX)				O .	.		
9		20/1	(EX)			•		0.	١٠.	10		20/1	(EX)					° .		
11 13		20/1	(EX)			•	١٠.		0	12		20/1	(EX)				.		0	
15		20/1 20/1	(EX)			•	0.	0.		16		20/1 20/1	(EX)				0 .	0 .		
17		20/1	(EX)			•		0	0	18		20/1	(EX)					٠ .	0	
19		20/1	(EX)			•	0.	•	١٠.	20		20/1	(EX)				lo .		١	
21		20/1	(EX)			•	•	0 .	•	22		20/1	(EX)				°	0.	ŀ	
23		20/1	(EX)			•	•	1 .	0.	24		20/1	(EX)					·	lo	
25		60/3		RPF4		•	3.03	1	•	26		20/1	(EX)				lo .	•		
27		ĺ				•	•	4.47	'	28		20/1	(EX)					0		
29		j i				•	•		4.77	30		20/1	(EX)				'		0	
31		20/1	(EX)			•	0	1:	1 :	32		20/1	(EX)				o			
33		20/1	(EX)					0		34		20/1	(EX)					0		
35		20/1	(EX)			•			0	. 36		20/1	(EX)						0	
37		20/1	(EX)				0.		1.	. 38		20/1	(EX)				0 .			
39		20/1	(EX)			•		0.	.	. 40		20/1	(EX)					0 .		
41		20/1	(EX)						0.	. 42		20/1	(EX)						0	
													TOTAL CO	NNECTED I	KVA BY PH	ASE	3.03	4.47	_	
													TOTAL CON	NECTED AN	MPS BY PH	ASE	25.2	38.9	41	
					CONN. KVA	CAL	C. KVA						(CONN. KVA	CALC.	KVA				
				LIGHTING	0.4	0.5		5%)				CONTIN	UOUS	0	0	(125%)				
				LARGEST MOTOR		1.31		5%)				HEATIN		4.61	4.61	(100%)				
				OTHER MOTORS		0		0%)					NTINUOUS	0.18	0.18	(100%)				
				RECEPTACLES	2.7	2.7	(50%	్ >10)					N EQUIP	3.34	2.17	(65%)				
													·	0	_ 0	<u>(</u> N/A)				
												TOTAL	KVA -	12.3	11.5	· ·				
									В	ALAN	CED	THREE I	PHASE AMPS	31.8						

ROOM							VOLTS 480Y/277V 3P 4W								AIC REFER TO SINGLE-LINE DIAGRAM					
MOUNTING <u>REFER TO SINGLE-LINE DIAGRAM</u> FED FROM <u>UTILITY</u> NOTE						BUS AMPS <u>REFER TO SINGLE-LINE DIAGRAM</u> NEUTRAL <u>100%</u>) SINGLE-LI O SINGLE-L			-		
		CKT BKR	OLD OLL	IT DECODIDE					KVA LC				CKT BKR	OIDOLUT DE	CODIDTION				KVA L	OAD
1 3 5 7 9 11 13 15 17 19 21 23 25 27		20/1 20/1 20/1 20/1 20/1 20/1 20/1 20/1	(EX) (EX) (EX) (EX) (EX) (#) PF (EX) (EX)	IT DESCRIPTION RODUCE SIGN EMBER SERVI	LIGHTIN			O	B	0.686 0.00	2 4 6 8 10 12 14 16		20/1 20/1 20/1 20/1 20/1 20/1 20/1 20/1	(EX) (EX) (EX) (EX) (EX) (EX) (EX) (EX)	SCRIP HUN			O	0 0 0	. 0
														TOTAL CO	NNECTED K	VA BY PH	ASE	0	0	2.
														TOTAL CON	NECTED AM	PS BY PH	ASE	0	0	9.
				LIGHTING LARGEST M OTHER MOT RECEPTACLI	2. OTOR 0 ORS 0		3.31 0 0 0	(12 (10	 25%) 25%) 00%) %>10)				KITCHEN	Jous ; Itinuous I Equip N/DIVERSE	ONN. KVA 0 0 0 0 0 0 2.65	CALC. 0 0 0 0 0 0 3.31	(125%) (100%) (100%) (100%) (N/A) (N/A)			

PANEL SCHEDULE LEGEND (EX) = EXISTING CIRCUIT TO REMAIN. (#) = NEW CIRCUIT TO EXISTING CIRCUIT BREAKER. (G) = PROVIDE GROUND-FAULT CIRCUIT INTERRUPTER (GFCI) CIRCUIT BREAKER. (GE) = PROVIDE GROUND-FAULT EQUIPMENT PROTECTION (GFEP) CIRCUIT BREAKER. (ST) = PROVIDE SHUNT TRIP CIRCUIT BREAKER. (A) = PROVIDE ARC-FAULT CIRCUIT INTERRUPTER (AFCI) CIRCUIT BREAKER. (L) = PROVIDE LOCK-ON DEVICE. (LT) = PROVIDE LOCK-ONTAG-OUT DEVICE. (N) = NEW CIRCUIT TO NEW CIRCUIT BREAKER PROVIDED BY E.C.
PANEL SCHEDULE GENERAL NOTES
A. PROVIDE HACR RATED BREAKERS FOR ALL MOTOR LOADS. B. PROVIDE LOCKING TYPE BREAKER (LOCK-ON) FOR ALL LIFE SAFETY AND NIGHT LIGHTING BRANCH CIRCUITS, EVEN IF NOT SPECIFICALLY CALLED OUT CASE-BY-CASE.
C. UNLESS INDICATED OTHERWISE ON PLANS OR SCHEDULES, PROVIDE NEW BRANCH OVERCURRENT PROTECTIVE DEVICE (OPD) TO MATCH EXISTING IN CASES WHERE NEW CIRCUITS OR FEEDERS ARE SHOWN CONNECTED TO EXISTING POWER DISTRIBUTION EQUIPMENT. PROVIDE OPD MANUFACTURED BY THE SAME MANUFACTURER AS THE EXISTING EQUIPMENT IN WHICH IT WILL BE INSTALLED. PROVIDE A.I.C. RATINGS THAT MEET OR EXCEED THE RATINGS OF THE EXISTING

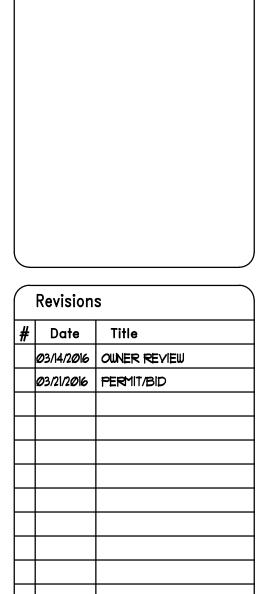
PANEL/EQPT	VOLTAGE	RATING	MOCP	EXISTING LOAD (A)		REMOVED LOAD (KW)	ADDED LOAD		NEW TOTAL LOAD (A)	MC PAN
LP1	480	225A	225A	112.20	93.3	0.0	3.3	119.9	144.2	3
RPF-SEC1/2	208	125A	125A	12.80	4.6	0.0	11.5	17.3	47.9	2
MDP	480	1200A	N/A	579.76	482.0	0.0	3.27	605.8	728.6	2
TRANSFORME EXISTING PEA NEC MULTIPLI TOTAL ADDED NEW LOAD OF	K DEMAND ER (EXISTIN LOAD	IG LOAD	* 1.25)			482.0 602.5	KVA KVA			

THE COMPLETED STORE LOAD Kva (632) IS LESS THAN THE MAXIMUM OUTPUT OF THE EXISTING TRAINSFORMER (500 kVA). EXISTING TRAINSFORMER WILL REMAIN.



designing where you want to go.









BJS WHOLESALE CLUB

PORTLAND, ME PROJECT NO. 03/21/2016 PT8TI

SINGLE LINE **DIAGRAM**

E030