	N	ANEL: MAINS: MMCB:	225 AMPS						VOLTAGE: PHASE: WIRE:	3	VAC					10,000	
-					LOAC	(VA)	. 4 T LOADIVA)				MOUNTING: SURFACE						
٤	RKR	KR POLES DESCRIPTION			UGHTS	RECEPT	HVAC	KITCHEN	PHASE	UGHTS	RECEPT	HVAC	KITCHEN			TRH POLES	BRK
•	1	25/1	HAND DRYER			2,300			A	1	2,300			HAND DRYER		25/1	2
	3	20/1	ICE DISPENSER	(E-86)				360	В				900	DUAL HEAT LAMP W	/F 400	20/2	4
	5	1P	SPACE						C				900	LIGHT	(E-12)	20/2	8
	7	20/1	SOOA SYSTEM (E-81	}				1.500	A				900	DUAL HEAT LAMP W			8
•	9	20/1	LOW TEMP COIL	(E-80.1)		500			В				900	LIGHT	(E-12)	20/2	10
	11	20/1	SODA TOWER	(E-7)				300	C				900				12
	13	20/1	SODA TOWER	(E-7)				300	A				900	HOT WELL	(E-35)	20/2	14
	15		SPACE					**********	В					COFFEE GRINDER	(E-83)	20/1	16
۰	17	20/1	P.O.S.	(E-POS)		900			C				1.000				18
	19	20/1	MED. YEMP. COIL (E-	80F)		840			A	ļ			3.000	COFFEE BREWER	(E-82)	30/2	20
	21		LOW TEMP COIL (E-80)		945	240		В	·			468	U.C. REFRIGERATOR	(E-32)	20/1	22	
•	23	20/2			945			c	 			1.000		>=		24	
	25		1				1,236		Ä				1.000	COFFEE BREWER	(E-82)	30/2	26
	27	15/3	5/3 LOW, TEMP COND. (E-80A)			1,236		В					SPACE		1P	28	
	29			` '		·	1.236		·····c	·			864	FILTER MACHINE	(E-69)	20/1	30
	31	20/1	RECEPT - OFFICE			380			A				504	BREADING MACHINE	(E-28)	20/1	32
	33	20/1	RECEPT OFFICE			380			В	·			1 200	BAG-N-BOX	(E-91)	20/1	34
•	35		RECEPT OFFICE			180			c	·····			1.200	BAG-N-BOX	(E-91)	20/1	36
	37		RECEPT - OFFICE			180			Ā	····		593	1				38
~	39	20/1	D.T. BASE STATION	~~~~	~~~~~	200	~~~~	+	В	·····		593	·	MED, TEMP, CONDENSE	R (E-800	20/2	40
	41		SPACE						c	_				SPACE		1P	
5	ONNE				A	В	c	TOTA	L KVA	·····	DEMAND	FACTOR		ESTIMATED	DEMAN	b	
ĩ	GHTIN	G			0.00	0.00	0.00		.00		1.0	0	*****	0.0	č		
	ECEP		S		5.96	2.01	2.03	10	.01	x 152 10k-	+0.5x > 10k	(Per NEC	220.44)	10.0	51		
			COCLER)		1.83	2.07	1 24	5	13	t	1.0			5.1	3		
	TCHE				6 10	5.00	6.16	1	.27	 		(Per NEC	220 5B)	11.			
	OTALS				13.91	9.08	9.43		42	 				26.37 KVA/	73.25	ALIDS	
			DE SOLID FOURMEN	IT CHOUNK				J		 	LIGHTIN	3 X 25%		0.51		1000	
			TOE ISOLATED GROUP		, a 100LA	ALD SHOO				·	LG. MOT			· · · · · · · · · · · · · · · · · · ·			
E 1 MANUEL MODEL INDICATION										MINIMUM FEEDER 26.37 KVA / 73.25 AMPS						41400	

N.	ANEL: IAINS: /MCB:	225 AMPS						VOLTAGE: PHASE: WIRE:		VAC				AIC:	10.000 SUR									
					LOAD	(VA)		1		LOAL	(VA)													
RKR	TRIP FOLES			LIGHTS	RECEPT	HVAC	KITCHEN	PHASE	LIGHTS	RECEPT	HVAC	KITCHEN	DESCR	DESCRIPTION		BF&F								
1	20/1	WALK-IN COOLER (E-48)		300			1	A				800	TIMERS	E-18,18A,18B)	20/1	: 2								
3	20/1	WALK-IN COOLER	(E-48)	300				8				300	TIMERS	(E-18C,18D)	20/1									
5	20/1	WALK-IN COOLER	(E-48A)	300				С				500	ANSUL SYSTEM		20/1	6								
7	20/1	MED. TEMP COIL	(E-808)			240		A				250	EGG & MEAT GF	IDDLE (E-22/59)	20/1	8								
9	15/2	MED. TEMP COND.	(E-80C)			564 564		B C		600		4,600 5.014	HOT FOOD/BEV	(E-2)	125/2	10								
13	100	MED. TENT COND.	(E-00C)		1 1	564	-	A				7.693	BISCUIT WRAP			14								
15	20/1	MARINATOR (E-70)			1		864	В				7,273	STATION (E-17)		125/2 16	16								
17	20/1	WALK-IN FREEZER	(E-52)	300	500		1	C		300		*********	MONITOR		20/1	: 18								
19	2012	REACH-IN FREEZER (E-85) 478		A		1,500			COMMENDACE OUT L	T (CO1)	20/1	20												
21	2012	REMUMINIFICEZER	(E-65)			478		8 C				1,008				22								
23	20/1	INSECT CONTROL FAN	(E-65)			612		С				1,008	ICE MACHINE	(E-58)	20/3	24								
25	20/2	LOW, TEMP COIL	CWAY TERME COM	(F-80€)		945	240		A				1,008	1			26							
27	20/2		(E-00 <i>D</i>)		945			B				1,008				28								
29														564		C				1,008	ICE MACHINE	(E-58)	20/3	30
31	15/3	LOW. TEMP COND.	(E-80E)			564		A				1,008		1	32									
33						564		8			1,656		EXHAUST FAN -		25/1									
35	20/1	LOW TEMP COIL	(E-80D.1)		500			С				150	DREDGE TABLE	(E-53)	20/1									
37 39	60/2	BOOSTER HEATER	(C 70)				4,500	A				1,200	CONVECTION ON		20/1	38								
39			(E-70)				4,500	В	-			1,200	CONVECTION OF	EN (E-36)	20/1									
41		SPACE						С	300				HOOD LIGHTS	(E-33)	20/1	42								
	CTED	CVA		A	8	С		AL KVA		DEMAND		************	EST	MATED DEMAN	ID									
GHTIN				0.30	0.30	0.90		.50		1.0				1.50										
	ACLE			2.45	1.55	1.30		5.29	1 x 1st 10k	+0.5x>10k	(Per NEC	220.44)		5.29										
QUIP (HVAC/COOLER) 2.09 3.26 1.74 7							,09	-	1,0				7.09											
TCHEN 16.48 20.75 7.68 4							4.89		0.65	(Per NEC	220.56)		29.18											
TALS		•••••		21.29	25.86	11.62	5	8.77					43.96 K	VA / 119.61	AMPS									
DTES:	PROV	DE SOLID EQUIPMEN	T GROUNE	BUS.						LIGHTIN				0.375										
										LG. MOTO				0										
									1	MINIMUM	FEFOER		43.43 N	VA / 120.65	AMPS									

	MAINS:	225 AMPS MLO			VOLTAGE: 209Y/120 VAC PHASE: 3 WRE: 4							AIC: MOUNTING	10,0 : St
				LOAD	(VA)		:	T	LOAD	XVA)			
BRKR	TRF4 FOLES	DESCRIPTION	LIGHTS	RECEPT	HVAC	KITCHEN	PHASE	UGHTS	RECEPT	HVAC	KITCHEN		FOLE
1		FANS		1,000			A	1	900		T	RECEPT: - DIMING	20/
3		LIGHTS - DIMING/SERVING	263				8		540			RECEPT DINING	20/
5	20/1	LIGHTS - HALL/PERIMETER	471				C	1	720			RECEPT KITCHEN	20/
7	20/1	LIGHTS - KITCHEN/SERVING	596				A	1,000			T	MENU BOARD	20/
9	20/1	LIGHTS - KITCH, & BATH.	551		360	1	В	400			1	BUG LIGHTS	20/
11	20/1	LIGHTS - KITCH, STORAGE	535				; c			1,000	1	ELECTRIC WALL HEATER -	15/
13	20/1	LIGHTS - CANOPYS	1,135				A	1		1,000		"EWH"	100
15	20/1	LIGHTS - D/T CANOPY	600				В	1			3,000	WATER HEATER WHZ	40/
17	20/1	LIGHTS - MENU BRD	1,200				C	T			3,000	WATER DEATER WITE	1
19		LIGHTS - PARKING	1,000				A	1	1,500		1	RECEPT ROOF	20/
21	20.2	VE LIGHTS - FRANCING	1,000				В	1	1,500			RECEPT OUTDOOR	20/
23	20/2	20/2 LIGHTS - PARKING	1,000				C	1,000			1	EXTERIOR STANS	20/
25	202 DGHIS - PARKING	1,000			1	A	1,000			·	EXTERIOR	200	
27	2010	LIGHTO BARRONS	1,000				В	1,200			†	PYLON SON	20/
29		LIGHTS - PARKING	1,000				C	1,200			†	#####GN VID.	20/
31	40/1	SUPPLY FAN - SF-1 (E-49)			2,448	1	A	1,200			1	BLDG. SIGN	20/
33	30/1	EXHAUST FAN EF-2 (E-25)			1.920		В В	1	500		71111	TELEPHO BKBD	20/
35	25/1	EXHAUST FAN EF-3 (E-25.1)			1,656	1	c			1,200	- 7	ATER HEARER	20/
37	19	SPACE				1	A	1		A THINK	Mr.	ACE IIII	1 16
39	163	SPACE				1	6	1		·		SPICE /	116
41						1	· c	1	500			FIRE POST, MONTOR.	20/
CONNE	ONNECTED KVA			В	C	TOTA	AL KVA	1	DEMAN	SACTOR		ESTIMATED DEMAI	ND
LIGHTIN	G		6.93	5.01	6.41	11	3.35			W		18.35	
RECEP	TACLE	S	3.40	2.54	1.22	7	.16	5 x 20 10k	+0.5x > 10k	MOVEC	220.4	7.16	
EQUIP (QUIP (RVAC/COOLER)			2.28	3.86	9	.58	- Ø	140			9.58	
KITCHE	N		0.00	3.00	3.00	6	.00	1/2	0.65	(Per NEC	220.56)	3.90	
TOTALS			13.78	12.83	14.48	4	1.10		/	·		39.00 KVA / 108.32	AM
NOTES	PROV	IDE SOLID EQUIPMENT GROU	ND BUS.			dillin	·····		model	G X 25%		4.56775	
		E THIS CIRCUIT THRU LIGHTIN		U.S.			<i>III</i> .	- 44				0	

CONDUIT AND CONDUCTORS SCHEDULE

	COND	UIT A	ND C	ONDUC	TOR	S SCH	HEDULE	(Base	ed on	2008	NEC)				
0CP	Load		С	onducto	rs		Raceway Size (nominal inches)								
Device	Phase & Neutral			Equip	Grd	No.	Phas	e, Neuti	ral & E	Grd		With IG			
(Amp/P)	Amperes	Qty	Size	Type	Qty	Size	Sets	EMT	IMC	RIGID	PVC	EMT	IMC	PVC	
15/3	1 - 12	3	12	THHN	1	12	One	1/2	1/2	1/2	1/2	1/2	1/2	1/2	
20/1	1 - 16	2	12	THHN	1	12	One	1/2	1/2	1/2	1/2	1/2	1/2	1/2	
20/2	1 - 16	2	12	THHN	1	12	One	1/2	1/2	1/2	1/2	1/2	1/2	1/2	
20/2	1 - 16	3	12	THHN	1	12	One	1/2	1/2	1/2	1/2	1/2	1/2	1/2	
20/3	1 - 16	4	12	THHN	1	12	One	1/2	1/2	1/2	1/2	1/2	1/2	1/2	
25/1	17 - 20	2	10	THHN	1	10	One	1/2	1/2	1/2	1/2	1/2	1/2	1/2	
30/2	21 - 24	3	10	THHN	1	10	One	3/4	3/4	3/4	3/4	3/4	3/4	3/4	
30/3	21 - 24	4	10	THHN	1	10	One	3/4	3/4	3/4	3/4	3/4	3/4	3/4	
60/3	41 - 48	4	4	THW	1	8	One	1 1/4	1 1/4	1 1/4	1 1/4	1 1/4	1 1/4	1 1/4	
125/2	89 - 100	3	1	THW	1	6	One	1 1/2	1 1/2	1 1/2	1 1/2	2	2	2	
225/3	161 - 180	4	4/n	THW	1	4	One	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	3	3	

<u>Notes:</u>

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

NEC Table 310.16 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.

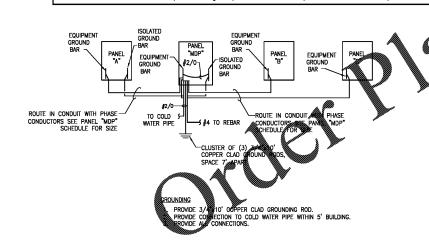
NEC Appendix C is used for the basis of the conduit sizes. Table C1 for EMT, Table C4 for IMC, Table C8 for Rigid, and Table C10 for PVC (Sch 40).

All Branch Feeders and Branch Circuits shall include a green Equipment Ground.

Omit Grounding conductor on Service Entrance Feeders.

Omit Neutral conductor on all Delta primary transformer feeder

The above conductors are not calculated for Voltage Drop. Any circuits that exceed 100 feet shall be calculated by the



TYPICAL BONDING & GROUNDING DETAIL

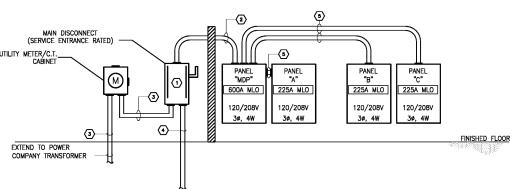
SCALE: NONE

 E.C. SHALL PROVIDE GROUNDING SYSTEM AS SHOWN OR EQUAL IN ACCORDANCE WITH NEC ARTICLE 250, AND ALL LOCAL CODES. REFER TO NOTE NO. 6 THIS SHEET.

ALL INITRIOR METAL PIPING (WATER AND GAS) SHALL BE BONDED TO THE SERVICE ENTRANCE ENCLOSUBE. THE GROUNDED CONDUCTOR AT THE SERVICE, THE GROUNDING ELECTRODE CONDUCTOR OF SUFFICIENT SIZE OR TO ONE OR MORE GROUNDING ELECTRODES USED. THE BONDING JUMPER SHALL BE SIZED IN ACCORDANCE WITH TABLE 250.68 (FOR WATER) THE GAS PIPING SHALL BE BONDED WITH A JUMPER SIZED PER TABLE 250.122 USING THE RATING OF CIRCUIT THAT MAY ENERGIZE THE PIPING.

GENERAL NOTES:

- 1. REFER TO SHEET E-1 FOR SPECIFICATIONS & NOTES.
- COLOR CODE: N=WHITE, ØA=BLACK, ØB=RED, ØC=BLUE, EG=GREEN OR BARE, CONTROLS=STRIPED FOR ISOLATED GROUND, OR STANDARD FOR AREA.
- CONDUIT: EMT CONCEALED IN INTERIOR, IMC OR RIGID EXPOSED TO WEATHER, SCHEDULE 40 PVC FOR BURIED IN SLAB — 1/2" MIN. EXCEPT 3/4" MIN. FOR 30 POWER TO RTU'S, & 6" MAX. OF 3/8" FLEX FOR LIGHTING FIXTURE TAPS.
- 4. A TYPED WRITTEN LISTING OF FINAL CIRCUIT ASSIGNMENTS SHALL BE PERMANENTLY ATTACHED BY TI E.C. WITH COPIES PROVIDED TO THE STORE MANAGER AND OWNER.
- 5. PANELBOARD CIRCUIT BREAKERS SHALL BE SERIES RATED AND PROVIDED WILLIA MINIMA SYMMÉTICA. SI RATING AS INDICATED ON THE PANEL SCHEDULE. CONTRACTOR SHALL COORDING E WITH THE STIE SPECIA UTILITY TO DETERMINE THE MAXIMUM AVAILABLE FAULT CURRENT AT THE STIE SEFORE YDDERING SHALL BE RATED TO WITHSTAND THE MAXIMUM AVAILABLE SHOULD BEFORE YDDERING AND ARDS. CIRCUIT BREAKERS SHALL BE RATED TO WITHSTAND THE MAXIMUM AVAILABLE SHALL BE RATINGS THAT ELECTRICAL CONTRACTOR SHALL PROVIDE CIRCUIT BREAKERS AND PANELBOARD ST. M. WITHFALLC. RATINGS THAT EXCEED THE AVAILABLE FAULT AT THE POWER COMPANY TRANSFORMED SIS EQUIPMENT BRATING SHALL BE OBTAINED PRIOR TO BID AND INCLUDED IN THE ELECTRICAL CONTRACTOR'S FINA BRICE.
- PROVIDE AN ISOLATED GROUND FROM PANEL "A" TO FANEL "MDP" COME BUS. BOND THE GROUND BUS TO THE GROUNDING ELECTRODE PER N.E.C. REQUIRENTS, SEE DETAIL THIS SAY. THE GROUNDING ELECTRODE SHALL CONSIST OF (3) 3/4" DIAMETER BYJED (10) OT COPER PLATED GROUND ROD SPACE 7" APART, A 1/2" DIAMETER BY TWENTY FOOT REBAY THE COS. FROM SLAB, AND A METALLIC COLD WATER PIPE DOWNSTREAM OF THE WATER METER, VALLAGE.



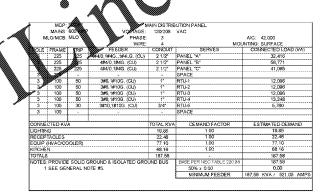
CONSTRUCTION NOTES:

- 1 E.C. SHALL DETERMINE VOLTAGE DROP AND SHALL COORDINATE SIZE OF CONDUCTORS, AS REQUIRED.
- 2 POWER TO HOOD LIGHTS, FRYER BATTERY, FRYER FILTER, OVENS, AND OTHER EQUIPMENT LOCATED UNDER HOODS MUST BE ISOLATED UPON DETECTION BY HOOD ANSUL SYSTEM OR UPON MANUAL ACTIVATION. E.C. SHALL WIRE SHUNT TRIPS TO HOOD CONTROL PANEL.
 - E.C. SHALL RUN (2) 3/4" C & (2) 1" C. SPARE CONDUITS WITH PULL WIRE, FROM PANELBOARD TO ABOVE CELING AND CAP. LABEL SPARE CONDUITS WITH WHICH PANEL THEY ORIGINATED FROM. (TYP. FOR ALL SPARE CANDUITE.)

ELECTRICAL RISER DIAGRAM

KEY NOTES

- 1) 600A/3/3R/600A (CLASS J) FUSED DISCONNECT 4 SEE BONDING & GROUNDING DETAIL
- 2 2 SETS 4#350 kcmil, 1#1G., 1#1I.G. 3 1/2"C. 5 SEE PANEL "MDP" SCHEDULE
- 3 2 SETS 4#350 kcmil-3"C (5" PVC TO TRANSFORMER)





FOODS,

RELEASE



LE. BRISCOE WAY & MADISON BLYD. PROJECT: R-2002
MADISON, MADISON COUNTY ALABAMA DATE: 04/17/20
O THE STAURANT
PANEL SCHEDULES & RISER DIAGRAM