





PANEL: "R"																		
VOLTS/PHASE/WIRE:		PANEL SIZE & TYPE:		MAIN SIZE AND TYPE:		FED FROM:	CABINET:	LOCATION:	NOTES:									
120/208V, 3 PH 4 WIRE		22" W x 6" D, BOLT-ON		600 AMPERE MAIN LUGS			RECESSED	FUTURE RESTAURANT 170										
ACCESSORIES:																		
PANEL DIRECTORY, IDENTIFICATION, GROUNDING BAR																		
AIC RATING: 22,000																		
NO	OCP	AMP	POLE	BKR	LOAD (KVA)	PHASE LOAD			DESCRIPTION	LOAD (KVA)	CO	PWR	LTG	BKR	OCP	AMP	NO	
						A	B	C										
1	50	2	0.0	7.0	0.0				FC-12 STRIP HEAT	3.5	0.7					2	15	2
3	--	--	--	--	--				FC-13R	0.0	1.5	0.0				--	--	4
5	15	2	0.0	1.5	0.0				FC-13R STRIP HEAT	0.0	7.0	0.0				2	50	6
7	--	--	--	--	--											--	--	8
9	50	2	0.0	7.3	0.0				HP-12R	0.0	7.3	0.0				2	50	10
11	--	--	--	--	--											--	--	12
13	20	1	GF	0.0	1.6	0.0			ICE MACHINE	1.6	2.0					2	30	14
15	20	1	0.0	0.5	0.0				EVAP FAN & LIGHTS		0.5	2.0				--	--	16
17	40	3	0.0	12.6	0.0				DISHWASHER	0.0	5.0	0.0	GF			2	30	18
19	--	--	--	--	--											--	--	20
21	--	--	--	--	--											--	--	22
23	20	1	0.0	0.4	0.0				DISHWASHER CONTROLS		0.4	0.4				--	--	24
25	20	1	0.0	0.6	0.0				DISHWASHER EXHAUST HOOD	0.6	3.5					2	50	26
27	20	1	ST	0.0	0.5	0.0			RANGE VULCAN		0.5	3.5				--	--	28
29	20	1	ST	0.0	0.9	0.0			CONVECTION OVEN		0.9	0.7				1	20	30
31	20	1	ST	0.0	0.4	0.0			RANGE	0.4	0.7					1	20	32
33	20	1	ST	0.0	0.2	0.0			TILTING SKILLET		0.2	2.6				2	40	34
35	20	1	ST	0.0	0.9	0.0			ICOMBI STEAMER		0.9	2.6				--	--	36
37	25	1	0.0	2.0	0.0				STEAM TABLE	2.0	0.5					1	20	38
39	20	1	0.0	0.0	0.9				EXTERIOR CO		0.9	0.4				1	20	40
41	20	1	0.0	0.0	0.7				LOUNGE CO/USB		0.4	0.0				1	20	42
43	20	1	0.0	0.0	0.4				CO BAR		0.2	0.0				1	20	44
45	20	1	0.0	0.0	0.7				CO WAITING HALL AND ADA...		0.7	0.9				1	20	46
47	20	1	GF	0.0	1.2	0.0			FRONT LINE PANTRY FRIDGE	1.2	0.6				GF	1	20	48
49	20	1	GF	0.0	1.2	0.0			FRONT LINE PANTRY FRIDGE	1.2	0.6				GF	1	20	50
51	20	1	0.0	0.0	0.4				COMM		0.4	1.2				1	20	52
53	20	1	0.0	1.5	0.0				LIFT		1.5	1.5				2	20	54
55	20	1	0.0	0.5	0.0				WALK-IN FRIDGE LTG	0.5	1.5					1	20	56
57	20	2	0.0	0.5	0.0				WALK-IN FREEZER COILS		0.3	0.5				1	20	58
59	--	--	--	--	--											--	--	60
61	20	2	0.0	3.0	0.0				WALK-IN FRIDGE CONDENSOR	1.5	0.5				0.3	0.7	20	62
63	--	--	--	--	--											--	--	64
65	20	1	0.3	0.0	0.0				LIGHTING RESTAURANT 170		1.5	1.3				3	20	66
67	20	1	0.0	0.0	0.0				LTG RESTAURANT 170	0.9	1.3					--	--	68
69	20	1	0.0	0.0	0.0				LTG RESTAURANT 170	0.9	1.3					1	20	70
71	20	1	0.0	0.6	0.0				HOOD LIGHTS	0.0	25.1	0.0				3	100	72
73	20	1	0.0	0.0	0.0				DH-1	0.0	8.4					--	--	74
75	30	3	0.0	5.6	0.0				EF-1R		1.9	8.4				--	--	76
77	--	--	--	--	--											--	--	78
79	--	--	--	--	--						1.9	0.5				1	20	80
81	20	1	0.0	0.0	1.9				CO BAR UNDERCOUNTER		1.9	1.9				1	20	82
83	20	1	GF	0.0	0.0	0.5			CO BAR		0.5					0.5		84
85	20	1	GF	0.0	0.0	0.5			CO BAR		0.5					0.5		86
87	20	1	--	0.0	0.0				SPARE		0.0							88
89	20	1	--	0.0	0.0				SPARE									90
91																		92
93																		94
95																		96
97									SPACE	0.0	0.0	0.0				1	--	98
99	20	1	--	0.0	0.0				SPACE	0.0	0.0	0.0				1	--	100
101	20	1	--	0.0	0.0				SPACE	0.0	0.0	0.0				1	--	102
103	20	1	--	0.0	0.0				SPACE	0.0	0.0	0.0				1	--	104
105	20	1	--	0.0	0.0				SPACE	0.0	0.0	0.0				1	--	106
107	20	1	--	0.0	0.0				SPACE	0.0	0.0	0.0				1	--	108
TOTALS:									CONNECTED KVA PER PHASE	46	50	45				CONNECTED TOTAL KVA =	141	
									CONNECTED AMPS PER PHASE	389	414	377				AVERAGE CONNECTED AMPS PER PHASE =	392	
NEC DIVERSIFIED LOAD CALCULATIONS																		
LIGHTING & CONTINUOUS LOADS: 1.0 KVA @ 125% = 1.2 KVA - 100% CONNECTED LOAD PLUS 25% DIVERSIFIED TOTAL KVA = 146																		
RECEPTACLES: 13.6 KVA @ 87% = 11.8 KVA - FIRST 10KVA @ 100%, REMAINDER @ 50% AVERAGE AMPS PER PHASE = 405																		
ALL OTHER LOADS @ 100%: 130.5 KVA - MOTOR TOTALS INCLUDED IN ALL OTHER LOADS WITH LARGEST MOTOR CALCULATED @ 125% PER NEC																		
BKR: GF=GFICI, GF3=30mA GFICI CAPABLE OF BEING LOCKED OUT IN OPEN POSITION, IG=ISOLATED GROUND, AF=AFICI, ST=SHUNT TRIP, RED=PROVIDE RED COLORED BREAKER, AF=ARC FAULT CURRENT INTERRUPTER, GA=COMBINATION OF GROUND FAULT AND ARC FAULT CIRCUIT INTERRUPTER, GS=COMBINATION OF SHUNT TRIP WITH GFICI																		

INTERIOR LIGHTING FIXTURE SCHEDULE													
GENERAL NOTES													
1. SUBSTITUTIONS AND/OR EQUAL FIXTURES MUST RECEIVE APPROVAL PRIOR TO BIDDING, THEY MUST BE SUBMITTED TO THE ENGINEER NO LESS THAN 2 WEEKS PRIOR TO BID OPENING.													
2. SAMPLES MUST BE PROVIDED FOR ANY AND ALL FIXTURES UPON A/E REQUEST PRIOR TO RELEASING FIXTURES.													
3. ALL FIXTURES SHALL BE LISTED AND APPROVED FOR THEIR INTENDED USE AND LOCATION.													
4. VERIFY THE PROPER MOUNTING KITS OR ACCESSORIES TO FACILITATE INSTALLATION AS SHOWN AT EACH LOCATION ON THE DRAWINGS.													
5. COMPLY WITH THE "INTERIOR LIGHTING" SECTION OF THE SPECIFICATIONS.													
6. ALL LIGHT FIXTURES TO BE EITHER "DLC" OR "LIGHTING FACTS" LISTED OR TO BE APPROVED BY ARCHITECT/ENGINEER AND OWNER.													
7. CONTRACTOR ALLOWANCE PRICES ARE ACCURATE WHEN THIS JOB WAS SPECIFIED, CONTRACTOR AND ELECTRICAL DISTRIBUTOR SHALL VERIFY THIS ALLOWANCE AND REPORT ANY PROBLEMS TO THE ENGINEER BEFORE THE BID. ALLOWANCE PRICE MAY OR MAY NOT INCLUDE LAMP(S) OR FREIGHT AS NOTED, AND DO NOT INCLUDE ANY TAXES.													
ID	DESCRIPTION	DELIVERED DIRECT LUMENS	COLOR TEMP	CRI	TYPE	VOLTAGE	WATTS	MANUFACTURER (CATALOG SERIES)					
(GS-4)	DESCRIPTION: RESTAURANT 2X4 FLAT PANEL MOUNTING, RECESSED FINISH: SCBA OPTICS: SCBA OPTIONS: EM	5,000	3500K	80	LED (0-10V DIMMING)	120/277V	45	METALUX 24PFR735 HE WILLIAMS LP-2-LL-50-8-35 LITHONIA CPX 2X4 5000LM 35K M2 COLUMBIA CFP24-4135-HE					
EP-1	DESCRIPTION: EXIT SIGN, EDGE LIT, SINGLE SIDED MOUNTING: CEILING, WALL FINISH: SCBA OPTICS: SCBA OPTIONS: EM: BATTERY		GREEN		LED	120/277V	5	ISOLITE (I,EL) EVELNITE (SOV) EMERGENSEE (SEEXLRN)					
TH-7	DESCRIPTION: RESTAURANT TRACK LIGHT MOUNTING: FINISH: SCBA EM	1,800	3500K	80	LED	120V	20	JUNO T238L					
TX-1	DESCRIPTION: TAPE LIGHT MOUNTING: SURFACE FINISH: SCBA EM	400	3000K	80	LED	120V	4	LUMINI (MK-XX-72HO-30K-F-CB-WHE-1)					
TX-4	DESCRIPTION: RESTAURANT BAR PENDANT MOUNTING: PENDANT EM: NONE	2,000	3000K	80	LED (0-10V DIMMING) 1%	120/277V	20	OWNER FURNISHED, CONTRACTOR INSTALLED					
TX-5	DESCRIPTION: RESTAURANT 6" SQUARE DOWNLIGHT MOUNTING: RECESSED, CEILING FINISH: SCBA OPTICS: MEDIUM WIDE BEAM, CLEAR REFLECTOR, MATTE DIFFUSE OPTIONS: NONE	2,000	3500K	80	LED (0-10V DIMMING) 1%	120/277V	20	LITHONIA LDW50-35-20-L56-AR-LD-MVOLT-G210 HALO PRS6-FS12-D010 PRESOLITE ITR-6SOD-H-ML-DM1-LTR-6SOD-T-SL-35-8-MD-SS HE WILLIAMS 6DS-L20835-DIM1-UNV-RM-OF-CS-A-F1					
TX-6	DESCRIPTION: RESTAURANT HEAT LAMP MOUNTING: PENDANT EM: NONE	2,000	3000K	80	LED (0-10V DIMMING) 1%	120/277V	20	OWNER FURNISHED, CONTRACTOR INSTALLED					
TX-7	DESCRIPTION: RESTAURANT LOBBY PENDANT MOUNTING: PENDANT EM: NONE	2,000	3000K	80	LED (0-10V DIMMING) 1%	120/277V	20	OWNER FURNISHED, CONTRACTOR INSTALLED					
WB-2	DESCRIPTION: RESTAURANT VANITY MOUNTING: FINISH: SCBA EM	1,500	3000K	80	LED	120V	20	OXYGEN 3-571-24-120V-3500K-15					

EQUIPMENT SCHEDULE																										
EQUIPMENT SCHEDULE KEY																										
E = DIVISION 26																										
Q = FURNISHED WITH EQUIPMENT																										
* - COORDINATE WITH THE DIVISION 23 TEMPERATURE CONTROL INSTALLER																										
** - AUTOMATIC CONTROL WIRING BY DIVISION 23																										
NOTES:																										
1. NEMA 3R																										
2. TOGGLE SWITCH W/ THERMAL OVERLOAD.																										
3. PROVIDE FUSED DISCONNECT ELEVATOR POWER MODULE WITH SHUNT TRIP.																										
4. CONTRACTOR TO PERFORM FINAL CONNECTION TO LINE VOLTAGE THERMOSTATS.																										
5. TOGGLE SWITCH W/BACNET INTERFACE.																										
6. INDOOR UNITS FED FROM OUTDOOR UNIT. PROVIDE DISCONNECTS FOR BOTH.																										
7. PROVIDE SWITCH WITH BACNET MS/TP CAPABILITY.																										
8. PROVIDE LABEL ON DISCONNECT "DISCONNECT OUTDOOR UNIT PRIOR TO INDOOR."																										
9. LINE VOLTAGE THERMOSTAT ON WALL.																										
10. PROVIDE EXPLOSION PROOF DEVICES AND WIRING METHODS.																										
11. PROVIDE DUAL-REDUNDANT 100% RATED VFD'S FOR AIR HANDLER.																										
12. PROVIDE MANUAL STARTER WITH THERMAL OVERLOAD AND RELAY FOR ATC/BAS CONTROL.																										
GENERAL NOTES:																										
1. WHERE DISCONNECTS, STARTERS, OR VFCs ARE BEING PROVIDED BY ELECTRICAL CONTRACTOR, LOCATE EQUIPMENT IN ACCESSIBLE LOCATION, SUCH THAT IT IS WITHIN SITE OF THE MECHANICAL EQUIPMENT IT IS SERVING, AND COMPLIES WITH N.E.C. REQUIRED CLEARANCES.																										
MARK	QTY	ITEM DESCRIPTION	HP	KW	MCA	FLA	VOLT	PH	Hz	WIRE AND CONDUIT SIZE	FURN BY	DEVICE	LOCATION	FURN BY	DEVICE	LOCATION	FURN BY	DEVICE	SIZES	SELECTOR SWITCH	PILOT LAMP	NORMALLY OPEN CONTACT	NORMALLY CLOSED CONTACT	PHASE FAILURE RELAY	NOTES	MARK
CUH	1	ELECTRIC HEATER				11.1	208	3	60	3 #12, 12 GR 0.75" CND	E	20/3 CB	R	E	TOGGLE SWITCH	R	Q									CUH
DH-1	1	DUCT HEATER				0.5	120	1	60	2 #12, 12 GR 0.75" CND	E	15/1 CB	R	E	TOGGLE SWITCH	R	Q									DH-1
EF-1R	1	EXHAUST FAN				15.5	208	3	60	3 #10, 10 GR 0.75" CND	E	30/3 CB	R	E	30A/3P FRN-25	R	Q									EF-1R
EF-2R	1	EXHAUST FAN	1/3			7.2	120	1	60	2 #12, 12 GR 0.75" CND	E	20/1 CB	R	E	TOGGLE SWITCH	R	Q									EF-2R
EF-R	3	EXHAUST FAN				0.5	120	1	60	2 #12, 12 GR 0.75" CND	E	15/1 CB	R	E	TOGGLE SWITCH	Q										EF-R
FC-1R	1	FAN COIL UNIT				4	208	1	60	2 #12, 12 GR 0.75" CND	E	15/2 CB	R	E	30A/2P FRN-10	R	Q									FC-1R
FC-1RH	1	FAN COIL UNIT				36	208	1	60	2 #6, #10 GR 1" CND	E	50/2 CB	R	E	60A/2P FRN-45	R	Q									FC-1RH
FC-12R	1	FAN COIL UNIT				7	208	1	60	2 #12, 12 GR 0.75" CND	E	15/2 CB	R	E	30A/2P FRN-10	R	Q									FC-12R
FC-12RH	1	FAN COIL UNIT				36	208	1	60	2 #6, #10 GR 1" CND	E	50/2 CB	R	E	60A/2P FRN-45	R	Q									FC-12RH
FC-13R	1	FAN COIL UNIT				7	208	1	60	2 #12, 12 GR 0.75" CND	E	15/2 CB	R	E	30A/2P FRN-10	R	Q									FC-13R
FC-13RH	1	FAN COIL UNIT				36	208	1	60	2 #6, #10																