ELECTRICAL SPECIFICATIONS

- MATERIALS AND INSTALLATION, AS A MINIMUM, ARE TO CONFORM WITH THE ADOPTED EDITION OF THE NATIONAL ELECTRIC CODE NEC 2011, FBC 2014 (5TH EDITION), FFPC 2014, NFPA 72 2010, LOCAL CODES, ORDINANCES, INCLUDING ALL`AMENDMENTŚ TO THE N.E.C.. EQUIPMENT, WHERE APPLICABLE, WILL BE LISTED WITH THE UNDERWRITERS LABORATORIES, INC. QUALITY AND WORKMANSHIP ESTABLISHED BY DRAWINGS AND SPECIFICATIONS ARE NOT TO BE REDUCED BY THE ABOVE MENTIONED CODES.
- TO THE BEST OF OUR KNOWLEDGE AND ABILITY THESE DRAWINGS REPRESENT AN ACCURATE PRESENTATION OF EXISTING CONDITIONS BASED UPON CAREFUL EVALUATION OF OBSERVED CONDITIONS TO THE EXTENT REASONABLY POSSIBLE. CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS AND IMEDIATELY NOTIFY ENGINEER WITH ANY
- BIDDERS ARE TO VISIT THE SITE AND FAMILIARIZE THEMSELVES WITH EXISTING CONDITIONS AND SATISFY THEMSELVES AS TO THE NATURE AND SCOPE OF WORK. THE SUBMISSION OF A BID WILL BE EVIDENCE THAT SUCH AN EXAMINATION HAS BEEN MADE. LATER CLAIMS FOR LABOR, EQUIPMENT, OR MATERIALS REQUIRED, OR FOR DIFFICULTIES ENCOUNTERED WHICH COULD HAVE BEEN FORESEEN HAD AN EXAMINATION BEEN MADE, WILL NOT BE ALLOWED.
- ALL WORK SHALL BE PERFORMED BY A LICENSED ELECTRICAL CONTRACTOR IN A FIRST-CLASS WORKMANLIKE MANNER. THE COMPLETED SYSTEM IS TO BE FULLY OPERABLE AND ACCEPTANCE OF THIS SYSTEM BY THE ENGINEER MUST BE A CONDITION
- . ALL WORK TO BE COORDINATED WITH OTHER TRADES TO AVOID INTERFERENCE WITH THE PROGRESS OF CONSTRUCTION.
- CONTRACTOR TO GUARANTEE ALL MATERIALS AND WORKMANSHIP FREE FROM DEFECTS FOR PERIOD OF NOT LESS THAN ONE (1) YEAR FROM DATE OF ACCEPTANCE.
- CORRECTION OF ANY DEFECTS TO BE COMPLETED WITHOUT ADDITIONAL CHARGE AND TO INCLUDE REPLACEMENT OR REPAIR OF ANY OTHER PHASE OF THE INSTALLATION WHICH MAY HAVE BEEN DAMAGED THEREBY.
- ALL REQUIRED INSURANCE TO BE PROVIDED FOR PROTECTION AGAINST PUBLIC LIABILITY OF PROPERTY DAMAGE FOR THE DURATION OF THE WORK.
- . CONTRACTOR TO PAY FOR ALL PERMITS, FEES INSPECTIONS AND TESTINGS.
- . ELECTRICAL INSTALLATION TO MEET ALL STANDARD REQUIREMENTS OF LOCAL POWER AND ELEPHONE COMPANIES. ELECTRICAL CONTRACTOR SHALL CONTACT LOCAL POWER AND TELEPHONE COMPANIES PRIOR TO START OF CONSTRUCTION.
- 10. ALL WIRING SHALL BE IN CONDUIT UNLESS OTHERWISE NOTED, MINIMUM WIRE SIZE SHALL BE #12 AWG, EXCLUDING CONTROL WIRING. ALL CONDUCTORS SHALL BE COPPER WITH THWN/THHN INSULATION. CONDUCTORS #10 AND SMALLER MAY BE SOLID; ALL THOSE #8 AND LARGER TO BE STRANDED.
- . ALL UNDERGROUND RACEWAYS SHALL BE MINIMUM 3/4", GALVANIZED RIGID STEEL CONDUIT OR SCHEDULE 40 PVC. ALL OTHER RACEWAYS TO COMPLY WITH GOVERNING CODES. WHERE RIGID STEEL IS USED, IT SHALL BE COMPLETELY COATED WITH AN ALKALI AND RUST RESISTANT BITUMASTIC PAINT, COPPER NO. 50, AND THREADS SHALL BE COATED WITH ZINC CHROMATE. RIGID STEEL SHALL ALSO BE USED WHEN CONDUIT IS EXPOSED TO EXTERIOR ENVIRONMENT SUCH AS EXTERIOR OF BUILDING OR WHERE IT IS EXPOSED AND SUBJECT TO DAMAGE, INSIDE OF BUILDING.
- . OUTLET BOXES SHALL BE PRESSED STEEL IN DRY LOCATIONS, CAST ALLOY WITH THREADED HUBS IN WET OR DAMP LOCATIONS, AND BE OF SPECIAL CONSTRUCTION FOR OTHER CLASSIFIED AREAS. ALL BOXES SHALL BE RECESSED (FLUSH) IN WALLS OR
- DISCONNECT SWITCHES SHALL BE H.P. RATED, GENERAL DUTY, QUICK-MAKE, QUICK-BREAK TYPE. ENCLOSURES SHALL BE AS REQUIRED BY N.E.C. AND LOCATION (WEATHERPROOF, EXPLOSION PROOF, ETC.). ENGRAVED LAMINATED PLASTIC IDENTIFICATION PLATES SHALL BE FURNISHED AND INSTALLED ON ALL DISCONNECT SWITCHES, CONTACTORS AND STARTERS.
- 14. ALL FUSES FOR SAFETY SWITCHES SHALL BE DUAL ELEMENT, CARTRIDGE TYPE. FUSES SHALL BE THOSE MANUFACTURED BY EITHER BUSSMAN OR LITTLEFUSE. THE CONTRACTOR SHALL FURNISH TO THE OWNER ONE SPARE FUSE FOR EACH SIZE AND TYPE OF FUSE INSTALLED. FUSES 600 AMPS OR LESS SHALL BE CLASS RK1, TYPICAL UNLESS OTHERWISE NOTED. FUSES OVER 600 AMPS SHALL BE CLASS L
- 5. ALL GENERAL PURPOSE SWITCHES AND RECEPTACLES SHALL BE THE PRODUCT OF A SINGLE MANUFACTURER. CATALOG NUMBERS LISTED ARE LEVITON: HOWEVER, COMPARABLE DEVICES BY PASS & SEYMOUR, BRYANT, OR ARROW HART WILL BE ACCEPTED. COLOR OF DEVICES AND PLATES SHALL BE WHITE UNLESS DICTATED OTHERWISE BY ARCHITECT/OWNER.
- 16. IT IS NOT THE INTENT OF THESE PLANS TO SHOW EVERY MINOR DETAIL OF CONSTRUCTION. THE CONTRACTOR IS EXPECTED TO FURNISH AND INSTALL ALL ITEMS FOR A COMPLETE ELECTRICAL SYSTEM, AND PROVIDE ALL NECESSARY DEVICES AND COMPONENTS FOR EQUIPMENT BE PLACED IN PROPER WORKING ORDER.
- 7. A SEPARATE, GREEN TYPE THWN COPPER GROUND CONDUCTOR SHALL BE RUN FROM GROUND LUG OF EACH GROUNDED RECEPTACLE TO AN APPROVED CONNECTION INSIDE THE ENCLOSING STEEL OUTLET BOX. DEVICE MOUNTING SCREWS SHALL NOT BE CONSIDERED AN APPROVED GROUND. A SEPARATE GROUND CONDUCTOR SHALL BE GROUNDING TERMINAL AT BOTH ENDS OF THE RUN. THE GROUNDING CONDUCTOR SHALL BE SIZED IN ACCORDANCE WITH TABLE 250—122 OF THE N.E.C. CONTRACTOR SHALL SIZE CONDUIT TO ACCOMMODATE ADDITIONAL CONDUCTOR.
- 18. LOAD DATA IS BASED ON INFORMATION GIVEN TO THE ENGINEER AT THE TIME OF DESIGN. VERIFY ALL EQUIPMENT NAMEPLATE RATINGS BEFORE ORDERING.
- 19. CIRCUITS SHOWN ON PLANS ARE TO DETERMINE LOAD DATA AND PANEL SIZES. THE CONTRACTOR IS TO PROVIDE CIRCUITS AND ROUTING OF CONDUITS TO SUIT JOB
- 20. FURNISH AND INSTALL DISCONNECT SWITCHES, WIRING, AND CONNECTIONS ON AIR CONDITIONING SYSTEM AS SHOWN ON PLANS. ELECTRICAL CONTRACTOR SHALL PROVIDE CONDUIT AND WIRING FROM C.U.TO A.H.U. ,TERMINATION SHALL BE PERFORMED BY
- 21. ALL FLUORESCENT LIGHT FIXTURES SHALL HAVE IN LINE FUSING AND ENERGY SAVING BALLASTS. (ONLY REQUIRED IN MIAMI DADE COUNTY)
- 22. ALL SWITCHGEAR, PANELS, STARTERS, CONTACTORS ETC., SHALL BE THE PRODUCT OF A SINGLE MANUFACTURER, THE SYSTEM DESIGN IS BASED ON SQUARE "D"; HOWEVER, COMPARABLE EQUIPMENT BY G.E. & SIEMENS ONLY WILL BE ACCEPTABLE. TANDEM AND HALF-SPACE CIRCUIT BREAKERS SHALL NOT BE USED.
- 23. PROVIDE IDENTIFICATION FOR ALL PANELS, CABINETS, ENCLOSURES, DISCONNECTS & TRANSFORMERS USING ENGRAVED NAMEPLATES, WHITE LETTERING ON A BLACK BACKGROUND. NAMEPLATES SHALL IDENTIFY PANEL DESIGNATION (NAME,) VOLTAGE, PHASE & WIRE CONFIGURATION. PROVIDE TYPEWRITTEN DIRECTORIES UNDER PLASTIC COVER FOR ALL PANEL BRANCH CIRCUITS, CLEARLY INDICATING AREA AND TYPE OF LOAD SERVED BY EACH BRANCH CKT PROTECTIVE DEVICE, INCLUDING SPARES. HAND PRINTED WILL NOT BE ACCEPTED.
- 24. ENGRAVED, LAMINATED PLASTIC IDENTIFICATION PLATES SHALL BE FURNISHED AND INSTALLED ON ALL PANELS AND SWITCHGEAR. PLATES SHALL BE AFFIXED TO FRONT OF PANELS, INDICATING PANEL NAME, VOLTAGE AND AMPERAGE.
- 25. ALL UNDERGROUND PVC CONDUIT RUNS SHALL HAVE RIGID STEEL ELBOWS AND RIGID STEEL SECTIONS AT SLAB PENETRATIONS WHERE SUBJECT TO POSSIBLE DAMAGE. WHERI RIGID STEEL IS USED, IT SHALL BE COMPLETELY COATED WITH AN ALKALI AND RUST-RESISTANT BITUMASTIC PAINT, COPPER NO. 50, AND THREADS SHALL BE COATED
- 26. THE ELECTRICAL CONTRACTOR SHALL MEET AND COORDINATE WITH THE LOCAL POWER COMPANY AT THE SITE PRIOR TO CONSTRUCTION. AT THAT TIME, THE CONTRACTOR SHALL COORDINATE ALL RELATED WORK WITH THE UTILITY COMPANY'S RESPONSIBILITIES TO MEET THE OWNER'S SCHED.
- 27. ALL ELECTRICAL CONDUCTORS SHALL BE INSTALLED IN AN APPROVED RACEWAY, EMT, IMC, RIGID GALVANIZED CONDUIT OR SCHEDULE 40 P.V.C. THERE SHALL BE NO TYPE 'NM' AND ELECTRICAL NON-METALLIC TUBING USED FOR BRANCH CIRCUITING. MAXIMUM NUMBER OF 120V CIRCUITS ALLOWED IN A COMMON CONDUIT SHALL BE SIX (6). "MC" TYPE CABLE SHALL NOT BE USED AS HOME RUNS. THE CONTRACTOR SHALL STRICTLY CONFORM TO THE N.E.C. REQUIREMENTS OF DERATING FOR CONDUCTOR AMPACITY AND
- 28. CONDUCTORS SHALL BE COLOR CODED AS FOLLOWS:

208V SYSTEM	240V (HIGH LEG) SYSTEM	480V SYSTEM	PHASE SEQUENCE
NEUTRAL - WHITE	NEUTRAL - WHITE	NEUTRAL - WHITE	ABC, TOP TO BOTTOM
PHASE A - BLACK	PHASE A - BLACK	PHASE A - BROWN	LEFT TO RIGHT,
PHASE B - RED	PHASE B - ORANGE	PHASE B — PURPLE	FRONT TO BACK
PHASE C - BLUE	PHASE C - BLUE	PHASE C - YELLOW	
GRD.CON - GREEN	GRD.CON - GREEN	GRD.CON -	- GREEN

- 29. CONTRACTOR SHALL BE RESPONSIBLE FOR SEALING ALL CONDUIT PENETRATIONS MADE THROUGH FIRE RATED WALLS, CEILINGS, SLABS, ETC. PENETRATION SEALS SHALL BE PER
- 30. CONTRACTOR SHALL MAINTAIN A COMPLETE SET OF CONTRACT DRAWINGS AT JOB SITE WITH COLORED MARKINGS INDICATING PROGRESS OF WORK. THIS SET OF CONTRACT DRAWINGS IS TO BE SEPARATE FROM AND IN ADDITION TO CONTRACTOR'S CONSTRUCTION SET. EVERY UNIT OF EQUIPMENT. DEVICE. CONDUIT AND WIRE IS TO MARKED WHEN INSTALLED. USE GREEN TO INDICATE INSTALLATION AS SHOWN ON DRAWINGS AND USE RED TO INDICATE FIELD CHANGES. UPON COMPLETION OF WORK, THIS SET OF CONTRACT DRAWINGS IS TO BE TURNED OVER TO, AND BECOME PROPERTY OF THE ELECTRICAL
- . IF ELECTRICAL CONTRACTOR HAS QUESTIONS, OR IN THEIR OPINION FINDS OMISSIONS OR ERRORS ON ELECTRICAL DOCUMENTS, IT IS THEIR RESPONSIBILITY TO BRING THIS TO THE ATTENTION OF THE ELECTRICAL ENGINEER IMMEDIATELY. IF ELECTRICAL CONTRACTOR PROCEEDS WITH ANY CHANGES TO THE CONTRACT DOCUMENTS, WITHOUT WRITTEN PRIOR APPROVAL FROM THE ELECTRICAL ENGINEER, CONTRACTOR WILL NOT BE COMPENSATED.

	PANEL SCHEDULE Rated Voltage:	L3B 120/208\	.,			EXIST 3PH,4W	ING			Mani	ufacturer:		EXISTING				Mountii	20.	SURFACE		
	Rated Amps: (Cu bus)	120/2001 100A	v			SPACES:		24		Loca				OR EL. ROOM			Type:	ıy.	NEMA 1		
	Main:	MLO				0.7.020.					ect No:		1624.00	on EE noom			A.I.C:		EXISTING		
	mann.	LO						KVA		, .			KVA						EXIOTING.		
	CIRCUIT DESIGNATION	O.C.P.	AWG	MAX. DIST.(ft)	VOLT	RCPT	LTG/CONT	KITCHEN	MOTOR/APP.	PH	RCPT	LTG/CONT	KITCHEN	MOTOR/APP.	MAX. DIST.(ft)	VOLT	AWG	O.C.P.	CIRCUIT DESIGNATION		NOT
1	EXISTING RECEPTACLES	20/1	12	120	3%	1.10				Α	1.10				120	3%	12	20/1	EXISTING RECEPTACLES	2	
3	EXISTING RECEPTACLES	20/1	12	120	3%	1.10				В	1.10				120	3%	12	20/1	EXISTING RECEPTACLES	4	
5	EXISTING RECEPTACLES	20/1	12	120	3%	1.10				С	1.10				120	3%	12	20/1	EXISTING RECEPTACLES	6	
7	EXISTING RECEPTACLES	20/1	12	120	3%	1.10				Α	1.10				120	3%	12	20/1	EXISTING RECEPTACLES	8	
9	EXISTING RECEPTACLES	20/1	12	120	3%	1.10				В	1.10				120	3%	12	20/1	EXISTING RECEPTACLES	10	<u>ار</u>
11	EXISTING RECEPTACLES	20/1	12	120	3%	1.10				С	1.10				120	3%	12	20/1	EXISTING RECEPTACLES	12	2
13	EXISTING RECEPTACLES	20/1	12	120	3%	1.10				Α	1.10				120	3%	12	20/1	EXISTING RECEPTACLES	14	ı
15	EXISTING RECEPTACLES	20/1	12	120	3%	1.10				В	1.10				120	3%	12	20/1	EXISTING RECEPTACLES	16	3
17	EXISTING RECEPTACLES	20/1	12	120	3%	1.10				С	1.10				120	3%	12	20/1	EXISTING RECEPTACLES	18	3
19	EXISTING RECEPTACLES	20/1	12	120	3%	1.10				Α	1.10				120	3%	12	20/1	EXISTING RECEPTACLES	20)
21	EXISTING RECEPTACLES	20/1	12	120	3%	1.10				В	1.10				120	3%	12	20/1	EXISTING RECEPTACLES	22	2
23	EXISTING RECEPTACLES	20/1	12	120	3%	1.10				С	1.10				120	3%	12	20/1	EXISTING RECEPTACLES	24	ı
		FEED				2.20	0.00	0.00	0.00	Α										26	;
	PANEL "L3C"	THRU	3	418	3%	2.20	0.00	0.00	0.00	В										28	3
		LUGS				2.20	0.00	0.00	0.00	С										30	,
	SUBTOTAL C	ONNECTED	D LOAD:			19.8	0.0	0.0	0.0		13.2	0.0	0.0	0.0			: SUBTO	OTAL CO	NNECTED LOAD		

CONTINUOUS & LARGEST MOTOR @ 25%:

CONNECTED MOTOR LOADS @ 100%: 0.0 0.0

CONNECTED LIGHTING LOAD @100%: 0.0 0.0

CONNECTED KITCHEN LOADS @ 65%:: 0.0 0.0 0.0

RECEPTACLE COMPUTED LOAD: 10.5 10.5 31.5

TOTAL COMPUTED LOAD: 10.5 10.5 31.5 KVA

RECEPTACLE COMPUTED LOAD: 4.4 4.6 3.3 12.3

TOTAL COMPUTED LOAD: 4.4 4.6 3.3 12.3 KVA

37 38 28 34.0 A

0.0

88 88 87.4 A

0.0

0.0

	PANEL SCHEDULE Rated Voltage:	L3C 120/208\	,			EXISTI 3PH,4W	ING			Manı	ufacturer:		EXISTING	ì			Mounti	ng:	SURFACE		
F	Rated Amps: (Cu bus)	100A				SPACES:		24		Loca	ition:		3RD FLOO	OR EL. ROOM			Type:		NEMA 1		
P	Main:	MLO								Proje	ect No:		1624.00				A.I.C:		EXISTING		
								KVA					KVA								
	CIRCUIT DESIGNATION	O.C.P.	AWG	MAX. DIST.(ft)	VOLT DROP	RCPT	LTG/CONT	KITCHEN	MOTOR/APP.	PH	RCPT	LTG/CONT	KITCHEN	MOTOR/APP.	MAX. DIST.(ft)	VOLT DROP	AWG	O.C.P.	CIRCUIT DESIGNATION		NOT
1	EXISTING RECEPTACLES	20/1	12	120	3%	1.10				Α	1.10				120	3%	12	20/1	EXISTING RECEPTACLES	2	
3	EXISTING RECEPTACLES	20/1	12	120	3%	1.10				В	1.10				120	3%	12	20/1	EXISTING RECEPTACLES	4	
5	EXISTING RECEPTACLES	20/1	12	120	3%	1.10				С	1.10				120	3%	12	20/1	EXISTING RECEPTACLES	6	
7	EXISTING RECEPTACLES	20/1	12	120	3%	1.10				Α	1.10				120	3%	12	20/1	EXISTING RECEPTACLES	8	
9	SUITE 300 RECEPTACLES	20/1	12	104	3%	1.26				В	1.10				120	3%	12	20/1	SUITE 300 RECEPTACLES	10	
11	SPACE									С	1.10				120	3%	12	20/1	SUITE 300 RECEPTACLES	12	
13	SPACE									Α									SPACE	14	
15	SPACE									В									SPACE	16	
17	SPACE									С									SPACE	18	
19	SPACE									Α									SPACE	20	
	SUBTOTAL C	ONNECTE	LOAD	:		5.7	0.0	0.0	0.0		6.6	0.0	0.0	0.0			: SUBT	OTAL CO	NNECTED LOAD		
											PHASE:		В	С	TOTAL						
	CONNECTED LOAD PHASE A	4.4							JS & LARGES		_	0.0	0.0	0.0	0.0				verify max. O.C.P.D. with namepl	late	
	CONNECTED LOAD PHASE E	3: 4.6						CONNE	CTED MOTOR	LOAD	S @ 100%	0.0	0.0	0.0	0.0			note 2	lockable circuit breaker		
	CONNECTED LOAD PHASE O	3.3						CONNE	ECTED LIGHTIN	NG LOA	AD @100%	0.0	0.0	0.0	0.0			note 3	RUN THRU LIGHTING RELAY	PAN	ŒL
	TOTAL CONNECTED LOAD): 12.3						CONNEC	TED KITCHEN	LOAD	OS @ 65%:	0.0	0.0	0.0	0.0			note 4	G.F.C.I. type circuit breaker		

	PANEL SCHEDULE Rated Voltage:	H3 277/480\	/			EXIST 3PH,4W	ING			Manu	ıfacturer:		EXISTING				Mounti	ng:	SURFACE	
F	Rated Amps: (Cu bus)	100A				SPACES:		22		Loca	tion:		3RD FLOO	OR EL. ROOM			Type:		NEMA 1	
N	Main:	MLO								Proje	ct No:		1624.00				A.I.C:		EXISTING	
							K	(VA					KVA							
	CIRCUIT DESIGNATION	O.C.P.	AWG	MAX. DIST.(ft)	VOLT DROP	RCPT	LTG/CONT	KITCHEN	MOTOR/APP.	РН	RCPT	LTG/CONT	KITCHEN	MOTOR/APP.	MAX. DIST.(ft)	VOLT DROP	AWG	O.C.P.	CIRCUIT DESIGNATION	NO
1	EXISTING LIGHTS	20/1	12	780	3%		0.90			Α		0.90			780	3%	12	20/1	EXISTING LIGHTS	2
3	EXISTING LIGHTS	20/1	12	780	3%		0.90			В		0.90			780	3%	12	20/1	EXISTING LIGHTS	4
5	SPARE	20/1								С		0.90			780	3%	12	20/1	EXISTING LIGHTS	6
7	SPARE	20/1								Α		0.90			780	3%	12	20/1	EXISTING LIGHTS	8
9 L	LIGHTS / EMERGENCY SUITE 300	20/1	12	438	3%		1.60			В		0.90			780	3%	12	20/1	EXISTING LIGHTS	10
1	EXISTING LIGHTS	20/1	12	780	3%		0.90			С		0.90			780	3%	12	20/1	EXISTING LIGHTS	12
3	EXISTING LIGHTS	20/1	12	780	3%		0.90			Α								20/1	SPARE	14
5	EXISTING LIGHTS	20/1	12	780	3%		0.90			В		0.90			780	3%	12	20/1	EXISTING LIGHTS	16
17	SPARE	20/1								С	11.90	8.10	0.00	0.00						18
9	SPARE	20/1								Α	11.00	7.20	0.00	1.50	249	3%	3	100/3	PANEL "L3A"	20
21	SPARE	20/1								В	11.90	6.30	0.00	1.60					THROUGH 75KVA TX	22
	SUBTOTAL CO	ONNECTED	LOAD:			0.0	6.1	0.0	0.0		34.8	27.9	0.0	3.1			: SUBT	OTAL CO	NNECTED LOAD	

CONTINUOUS & LARGEST MOTOR @ 25%: 2.7

EXISTING

3PH.4W

SPACES:

CONNECTED MOTOR LOADS @ 100%: 1.5 1.6

CONNECTED KITCHEN LOADS @ 65%:: 0.0 0.0

RECEPTACLE COMPUTED LOAD: 10.5 11.0 11.0

Manufacturer:

Location:

Project No:

CONNECTED LIGHTING LOAD @100%: 10.8

	THICK C.D.		
note 6	non concurrent load		
note 7	Provide isolated ground		
note 8	Provide lockable type circuit break	ker	
ng:	SURFACE		
	NEMA 1		
	EXISTING		
O.C.P.	CIRCUIT DESIGNATION		NOTE
20/1	EXISTING RECEPTACLES	2	
20/1	EXISTING RECEPTACLES	4	
20/1	EXISTING RECEPTACLES	6	
20/1	EXISTING RECEPTACLES	8	
20/1	SUITE 300 RECEPTACLES	10	
20/1	SUITE 300 RECEPTACLES	12	
	SPACE	14	
	SPACE	16	

note 1 verify max. O.C.P.D. with nameplate

note 3 RUN THRU LIGHTING RELAY PANEL

note 2 lockable circuit breaker

note 5 HACR C.B.

note 5 HACR C.B.

note 6 non concurrent load

note 7 Provide isolated ground

note 8 Provide lockable type circuit breaker

note 4 G.F.C.I. type circuit breaker

CONNECTED LOAD PHASE A: 23.3

CONNECTED LOAD PHASE B: 25.9

CONNECTED LOAD PHASE C: 22.7

RECEPT. CONNECTED LOAD PH.A: 11.0

TOTAL CONNECTED LOAD: 71.9

PANEL SCHEDULE L3A

CONNECTED LOAD PHASE B: 19.7

TOTAL CONNECTED LOAD: 59.5

CONNECTED LOAD PHASE C:

RECEPT. CONNECTED LOAD PH.A: 11.9

RECEPT. CONNECTED LOAD PH.B: 11.0

RECEPT. CONNECTED LOAD PH.C: 11.9

225A

PROVIDE NEW 200A MCB

D. with nameplat	te	
aker		
TING RELAY I	PAN	ŒL
t breaker		
l		

-	CIRCUIT DESIG	NATION	O.C.P.	AWG	MAX. DIST.(ft)	VOLT DROP	RCPT	LTG/CONT	KITCHEN	MOTOR/APP.	PH	RCPT	LTG/CONT	KITCHEN	MOTOR/APP.	MAX. DIST.(ft)	VOLT DROP	AWG	O.C.P.	CIRCUIT DESIGNATION	N
1	EXISTING LIGHTS	SALES	20/1	12	146	3%		0.9			Α		0.90			146	3%	12	20/1	EXISTING LIGHTS SALES	2
3	EXISTING LIGHTS	SALES	20/1	12	146	3%		0.9			В		0.90			146	3%	12	20/1	EXISTING LIGHTS SALES	4
5	EXISTING LIGHTS	SALES	20/1	12	146	3%		0.9			С		0.90			146	3%	12	20/1	EXISTING LIGHTS SALES	6
7	EXISTING LIGHTS	SALES	20/1	12	146	3%		0.9			Α		0.90			146	3%	12	20/1	EXISTING LIGHTS SALES	8
9	EXISTING LIGHTS	SALES	20/1	12	146	3%		0.9			В		0.90			146	3%	12	20/1	EXISTING LIGHTS SALES	10
11	EXISTING LIGHTS	SALES	20/1	12	146	3%		0.9			С		0.90			146	3%	12	20/1	EXISTING LIGHTS SALES	12
13	EXISTING LIGHTS	SALES	20/1	12	146	3%		0.9			Α		0.90			146	3%	12	20/1	EXISTING LIGHTS SALES	14
15	EXISTING LIGHTS	SALES	20/1	12	146	3%		0.9			В		0.90			146	3%	12	20/1	EXISTING LIGHTS SALES	16
17	EXISTING LIGHTS	SALES	20/1	12	146	3%		0.9			С		0.90			146	3%	12	20/1	EXISTING LIGHTS SALES	18
19	EXISTING LIGHTS	SALES	20/1	12	146	3%		0.9			Α		0.90			146	3%	12	20/1	EXISTING LIGHTS SALES	20
21	EXISTING LIGHTS	SALES	20/1	12	146	3%		0.9			В		0.90			146	3%	12	20/1	EXISTING LIGHTS SALES	22
23	;						11.00	0.00	0.00	0.00	С		0.90			146	3%	12	20/1	EXISTING LIGHTS SALES	24
25	PANEL "L3	В"	100/3	3	84	3%	11.00	0.00	0.00	0.00	Α		0.90			146	3%	12	20/1	EXISTING LIGHTS SALES	26
27	-						11.00	0.00	0.00	0.00	В									SPACE	28
29	SUITE 300 RECEP	PTACLES	20/1	12	146	3%	0.90				С									SPACE	30
31	SUITE 300 RECEP	PTACLES	20/1	12	146	3%	0.90				Α									SPACE	32
33	SUITE 300 COFFE	E MAKER	20/1	12	88	3%				1.50	В									SPACE	34
35	SUITE 300 MICR	OWAVE	20/1	12	82	3%				1.60	С									SPACE	36
37	SPACE										Α									SPACE	38
39	SPACE										В									SPACE	40
41	SPACE										С									SPACE	42
	S	UBTOTAL CO	NNECTE	LOAD:			34.8	9.9	0.0	3.1		0.0	11.7	0.0	0.0			: SUBT	OTAL CON	NECTED LOAD	

CONNECTED MOTOR LOADS @ 100%: 0.0 1.5 1.6 3.1

TOTAL COMPUTED LOAD: 21.1 21.0 20.4 62.5 KVA

RECEPTACLE COMPUTED LOAD: 11.0 10.5 11.0

0.0

176 175 170 173.5 A

CONNECTED LIGHTING LOAD @100%: 8.1 7.2

CONNECTED KITCHEN LOADS @ 65%:: 0.0 0.0

VOLTAGE DROP CALCULATIONS

3% VOLTAGE DROP CALCULATED FOR EVERY BRANCH CIRCUIT SHOWS MAXIMUM DISTANCE ALLOWED FOR THE SPECIFIED WIRE SIZE BASED ON DESIGNED LOAD.

CONNECTED LOAD PHASE A: 11.0

CONNECTED LOAD PHASE B: 11.0

CONNECTED LOAD PHASE C: 11.0

RECEPT. CONNECTED LOAD PH.A: 11.0

RECEPT. CONNECTED LOAD PH.B: 11.0

RECEPT. CONNECTED LOAD PH.C: 11.0

RECEPT. CONNECTED LOAD PH.A: 4.4

RECEPT. CONNECTED LOAD PH.B: 4.6

RECEPT. CONNECTED LOAD PH.C: 3.3

TOTAL CONNECTED LOAD: 33.0

ALL CIRCUITS HAVE BEEN VERIFIED ON FLOOR PLANS BASED ON HORIZONTAL STRAIGHT RUNS WITH ADDITIONAL 30 FEET OF VERTICAL RUNS. ACTUAL DISTANCES FOR EVERY CIRCUIT RUN SHALL BE FIELD MEASURED BY THE ELECTRICAL CONTRACTOR. CONTRACTOR SHALL PROVIDE NEXT WIRE SIZE FOR RUNS OVER MAXIMUM DISTANCE SHOWN ON PANEL SCHEDULES.

- AN OPERATING MANUAL AND MAINTENANCE MANUAL SHALL BE PROVIDED TO THE BUILDING OWNER AS PER FBC 2014 405.7.4.2. THE MANUALS SHALL INCLUDE, AT A MINIMUM, THE FOLLOWING:
- 1. SUBMITTAL DATA STATING EQUIPMENT RATING AND SELECTED OPTIONS FOR EACH PIECE OF EQUIPMENT REQUIRING MAINTENANCE.
- 2. OPERATION MANUALS AND MAINTENANCE MANUALS FOR EACH PIECE OF EQUIPMENT REQUIRING MAINTENANCE. REQUIRED ROUTINE MAINTENANCE SHALL
- BE CLEARLY IDENTIFIED. 3. NAMES AND ADDRESSES OF AT LEAST ONE QUALIFIED SERVICE AGENCY

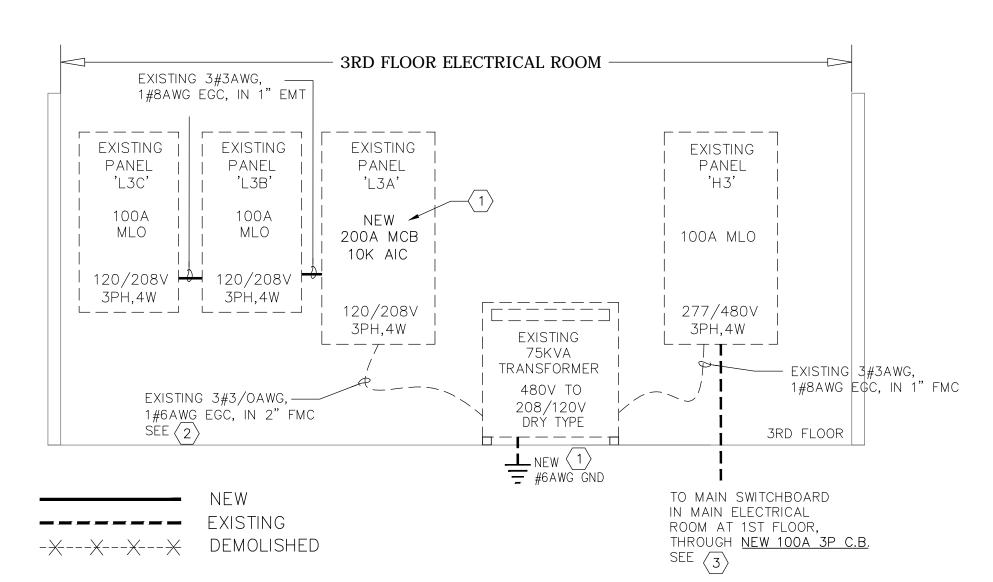
NOTES TO CONTRACTOR

· REFER TO ARCHITECTURAL REFLECTED CEILING PLAN DRAWINGS FOR ACTUAL LOCATIONS OF ALL CEILING LIGHTS AND DEVICES.

- ELECTRICAL DRAWINGS SHALL NOT BE USED TO LOCATE FIXTURES. - COORDINATE WITH ARCHITECT/CLIENT TYPE AND COLOR OF

REFER TO ARCHITECT FOR ALL FINAL LOCATIONS/DEVICES PRIOR TO BID/ROUGH IN.

SWITCH/RECEPTACLE PLATES



EXISTING ELECTRICAL RISER

N.T.S.

1. PROVIDE 3P 200A MAIN CIRCUIT BREAKER KIT TO EXISTING 225A MLO PANEL PROVIDE ALTERNATE PRICING FOR REPLACING THE EXISTING 225A MLO PANEL WITH NEW 200A

3P MCB PANEL IN THE SAME LOCATION AND RECONNECT ALL EXISTING BRANCH CIRCUITS AS PREVIOUS. 2. FIELD VERIFY EXISTING WIRE SIZE AND PROVIDE NEW AS SHOWN IF THE EXISTING AWG IS FOUND SMALLER. . FIELD VERIFY AND CONFIRM EXISTING AWG SIZE OF THE FEEDER TO PANEL H3 AND REPLACE EXISTING CORRESPONDING 225A 3P CIRCUIT BREAKER IN MAIN SWITCHBOARD WITH NEW 100A 3P TO PROVIDE PROPER OCP.

PROVIDE PROPER SIGNAGE AS PER 110-16. SIGNAGE TO STATE: "WARNING ARC FLASH HAZARD. APPROPRIATE PPE REQUIRED. FAILURE TO COMPLY CAN RESULT IN DEATH OR INJURY. REFER TO NFPA 70 E.

STATE OF FLORIDA

date

I HEREBY CERTIFY THAT THESE PLANS WHERE PREPARED BY ME OR UNDER MY SUPERVISION, AND TO THE BEST OF MY KNOWLEDGE, COMPLY WITH ALL APPLICABLE CODES.	AMERICAN UNIT
project no. 1624.00	Engineers Inc. Dedicated to Excellence
seal	Bedicated to Executence
Viet Bach Nguyen, PE	4508 SW 24th Street Fort Lauderdale, FL 335 Tel: (954) 471-8657

CA # 29803

american-eng@comcast.net

ARCHITECTURAL ENTERPRISES, INC. 499 East Palmetto Park Rd. Suite 204 Boca Raton, FL 33432

T 561.479.9884 www.ccsarch.com Florida Registration Number AA26001852

CONSULTANTS:

note 1 verify max. O.C.P.D. with nameplate

note 6 RUN THROUGH TIME SWITCH

note 2 lockable circuit breaker

note 4 G.F.C.I. type circuit breaker

note 7 Provide isolated ground bar

SURFACE

NEMA 1

EXISTING

note 3 RUN THRU LIGHTING RELAY PANEL

note 2 lockable circuit breaker

note 5 HACR C.B.

note 6 non concurrent load

note 7 Provide isolated ground

note 4 G.F.C.I. type circuit breaker

Mounting:

Type:

A.I.C:

note 3 new circuit breaker

note 5 HACR C.B.

3.1

34.0

0.0

32.4

0.0

10.8

0.0

92 101 88 93.8 A

EXISTING (SIEMENS

1624.00

3RD FLOOR EL. ROOM

12.4

TOTAL COMPUTED LOAD: 25.5 28.1 24.5 78.0 KVA

ELECTRICAL, MECHANICAL, PLUMBING:

AMERICAN UNITED ENGINEERS 4508 SW 24TH STREET FORT LAUDERDALE, FL 33317 PHONE: (954) 471-8657

SUITE 300 WORLD EXECUTIVE CENTER 3500 N STATE ROAD 7 LAUDERDALE LAKES, FL 33319

INTERIOR IMPROVEMENTS

CONSTRUCTION DOCUMENTS

00110111	OOTION DO	JOOINILITI O	,
PROJECT N DATE: CAD FILE N		2016.02 05-11-16	
ADDEND	VREVISION	NS	
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CYNTHIA C. SPRAY, AIA AR-94167

DRAWING TITLE: ELECTRICAL RISER PANEL SCHEDULES

SPECIFICATIONS

DRAWING NO:

SEAL: