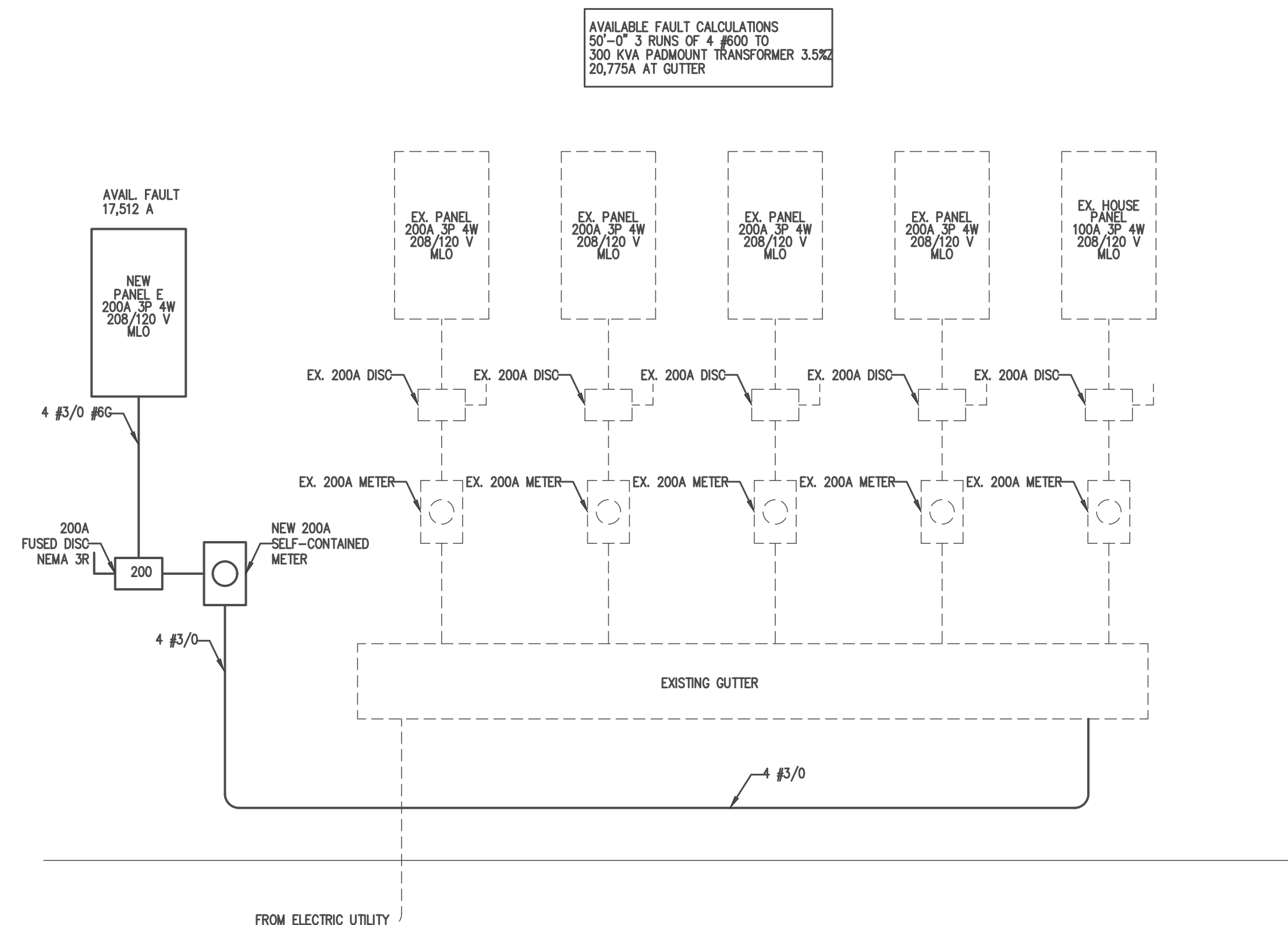


1 ELECTRICAL PLAN
E1 1/4"=1'

- CONTRACTOR SHALL COORDINATE WITH LOCAL UTILITY FOR SERVICE. A COMPLETE AND WORKING SYSTEM IS REQUIRED FOR COMPLIANCE WITH THESE DOCUMENTS. DETERMINE THE POINT OF CONNECTION TO THE UTILITY WITH THE UTILITY REPRESENTATIVE AND PROVIDE ACCORDINGLY FOR A COMPLETE WORKING SYSTEM.
- ANY POWER DISRUPTIONS SHALL BE COORDINATED WITH THE OWNER 10 WORKING DAYS PRIOR TO ANY SHUTDOWN. PROVIDE AN MOP FOR APPROVAL BY THE ENGINEER/ARCHITECT.
- WIRE AND CABLE SHALL BE INSULATED, TYPE THHN OR THWN, 600 VOLTS, WITH COPPER CONDUCTORS. CONDUCTOR SIZES NO. 8 AWG AND LARGER MAY BE STRANDED. CONDUCTORS SIZES NO. 10 AWG AND SMALLER MAY BE SOLID OR STRANDED. NO ROMEX PERMITTED.
- EMT SHALL BE GALVANIZED STEEL TUBING, 1/2-INCH MINIMUM SIZE, EQUAL TO ELECTRUNITE BRAND OR APPROVED AND USED ONLY WITH HEXAGONAL ALL STEEL COMPRESSION FITTINGS.
- PLASTIC CONDUIT SHALL BE RIGID, 3/4-INCH MINIMUM NON-METALLIC, HEAVY DUTY, HIGH IMPACT, SCH. 40 POLYVINYLCHLORIDE (PVC), TYPE I WILL BE USED FOR CONCRETE ENCASEMENT. FITTINGS SHALL BE THE SAME MATERIALS AND MANUFACTURER AS THE PLASTIC CONDUIT.
- FLEXIBLE METAL CONDUIT SHALL BE 1/2-INCH MINIMUM SINGLE STRIP, STEEL, HOT DIPPED GALVANIZED INSIDE AND OUTSIDE, MAXIMUM LENGTH 72 INCHES FOR LIGHTING AND 36" FOR MOTORS. FLEXIBLE METAL CONDUIT SHALL BE LIQUIDTIGHT OR WATERTIGHT WITH PVC JACKET WHERE USED IN DAMP, WET OR OUTSIDE AREAS, AND LIQUIDTIGHT OR WATERTIGHT CONNECTORS SHALL BE USED.
- NO RECEPTACLES OR TEL. OUTLETS TO BE MOUNTED BACK TO BACK, KEEP AT LEAST 2 INCHES BETWEEN RECEPTACLES AND TEL. OUTLETS.
- ALL CONDUCTOR SHALL BE COPPER WITH A MINIMUM SIZE OF #12 AWG EXCEPT FOR FIRE ALARM. THESE CONDUCTORS SHOULD COMPLY WITH NFPA.
- CONTRACTOR SHALL ALIGN FIXTURES, SMOKE DETECTORS, CEILING DIFFUSERS ETC. AS REQUIRED TO PROVIDE A UNIFORM PRESENTATION. AT NO TIME WILL AN IONIZATION DETECTOR BE LOCATED WITHIN 3'-0" OF A SUPPLY OR RETURN AIR GRILLE.
- CIRCUIT BREAKERS AND WIRE ARE SIZED FOR SPECIFIC EQUIPMENT. BEFORE ORDERING WIRE, BREAKERS AND CONDUIT FOR THIS PROJECT THE CONTRACTOR SHALL COORDINATE WITH THE OTHER CONTRACTORS ON THE JOB AND VERIFY THE ELECTRICAL DATA FOR THE EQUIPMENT WHICH WILL ACTUALLY BE INSTALLED. NOTIFY ENGINEER OR ARCHITECT OF ANY DISCREPANCIES.
- ALL CONDUIT TERMINATING IN THE CEILING CAVITIES IS TO BE LABELED.
- ALL CONDUIT SHALL BE COLOR CODED WITH 1/2" WIDE TAPE, 10'-0" ON CENTER IN ACCORDANCE WITH STANDARD INDUSTRY PRACTICE.
- THE MOUNTING HEIGHTS AND LOCATIONS OF ALL WALL MOUNTED OUTLETS AND JUNCTION BOXES SHALL BE REVIEWED AND COORDINATED WITH THE ARCHITECT AND OWNER, PRIOR TO INSTALLATION, FOR USE WITH ACTUAL EQUIPMENT.
- EACH CONTRACTOR WILL PROVIDE HIS OWN SUPPORT OF ALL DEVICES AND EQUIPMENT PROVIDED BY HIM AND SHALL SUPPORT SUCH EQUIPMENT PER APPROVED GOVERNING CODES OR PER APPROVAL OF THE ENGINEER/ARCHITECT. UNACCEPTABLE WORKMANSHIP OR MATERIALS SHALL BE REPLACED AT THE REQUEST OF THE ENGINEER/ARCHITECT AT THE CONTRACTORS EXPENSE.
- THE CONTRACTOR SHALL REFER TO THE ARCHITECTURAL PLANS FOR FLOOR PLAN DIMENSIONS.
- THE CONTRACTOR SHALL COORDINATE ANY AND ALL WORK WITH OTHER TRADES INVOLVED IN THIS PROJECT PRIOR TO THE INSTALLATION OF HIS EQUIPMENT, SO AS TO AVOID CONFLICTS DURING CONSTRUCTION AND ALLOW FOR OPTIMUM WORKING SPACE AND MAINTENANCE.
- ALL FUSES DISCONNECT SWITCHES AND BREAKER SIZES SHOWN FOR MECHANICAL EQUIPMENT SHALL BE VERIFIED BEFORE PURCHASE AND INSTALLATION OF SAID EQUIPMENT WITH THE EQUIPMENT SUPPLIER AND MECHANICAL CONTRACTOR.
- WHERE EQUIPMENT PENETRATES EXTERIOR WALL OR ROOF THEY SHALL BE PROPERLY SEALED WITH METHODS APPROVED BY THE ARCHITECT/ENGINEER.
- ALL WORK IS TO BE DONE IN STRICT COMPLIANCE WITH THE LATEST VERSION OF THE NEC AND APPLICABLE STATE CODES.
- RECESSED FIXTURES INSTALLED IN RATED ASSEMBLIES SHALL BE INSTALLED WITH AN ENCLOSURE SO AS TO MAINTAIN THE RATING OF ASSEMBLY.

3 ELECTRICAL NOTES
E1 N.T.S.

ROOM MOUNTING FLUSH FED FROM UTILITY NOTE		VOLTS 208Y/120V 3P 4W BUS AMPS 200 NEUTRAL 100%			AIC 22,000 MAIN BKR MLO LUGS STANDARD						
CKT #	CKT BKR	CIRCUIT DESCRIPTION	LOAD KVA			CKT #	CKT BKR	CIRCUIT DESCRIPTION	LOAD KVA		
			A	B	C				A	B	C
1	20/1	EXISTING LIGHTING	0.5			2	70/3	EX. RTU	4.33		
3	20/1	EXISTING LIGHTING		0.5		4				4.33	
5	20/1	EXISTING RECEPTACLES			1.08	6					4.33
7	20/1	EXISTING RECEPTACLES	1.08			8	30/2	EX. WATER HEATER	2.25		
9	20/1	EXISTING RECEPTACLES		1.08		10				2.25	
11	20/1	EXISTING RECEPTACLES			1.08	12	20/1	SPACE			0
13	20/1	EXISTING RECEPTACLES	1.08			14	20/1	SPACE	0		0
15	20/1	EXISTING RECEPTACLES		1.08		16	20/1	SPACE	0	0	0
17	20/1	SPACE			0	18	20/1	SPACE	0	0	0
19	20/1	SPACE	0			20	20/1	SPACE	0		
21	20/1	SPACE		0		22	20/1	SPACE	0	0	
23	20/1	SPACE			0	24	20/1	SPACE	0		
25	20/1	SPACE	0			26	20/1	SPACE	0	0	
27	20/1	SPACE		0		28	20/1	SPACE	0		
29	20/1	SPACE			0	30	20/1	SPACE	0	0	
31	20/1	SPACE	0			32	20/1	SPACE	0		
33	20/1	SPACE		0		34	20/1	SPACE	0	0	
35	20/1	SPACE			0	36	20/1	SPACE	0		
37	20/1	SPACE	0			38	20/1	SPACE	0	0	
39	20/1	SPACE			0	40	20/1	SPACE	0		
41	20/1	SPACE			0	42	20/1	SPACE	0	0	
TOTAL CONNECTED KVA BY PHASE			9.24	9.24	6.49						
		CONN KVA	CALC KVA				CONN KVA	CALC KVA			
LIGHTING		1	1.25	(125%)	NONCONTINUOUS		4.5	4.5	(100%)		
LARGEST MOTOR		5.5	1.38	(25%)	HEATING		13	13	(100%)		
RECEPTACLES		6.48	6.48	(50%*10)	COOLING		5.5	0	(0%)		
				TOTAL LOAD				26.6			
				BALANCED 3-PHASE LOAD				73.8 A			



2 ELEC. RISER DIAGRAM
E1 N.T.S.

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FIRST COMMAND RENOVATIONS
 181 MITTIE HADDOCK DR
 CAMERON NC

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PROJECT NO: 2020-030
 DRAWN BY: SLL
 REVISIONS:

SHEET NO:
E1