

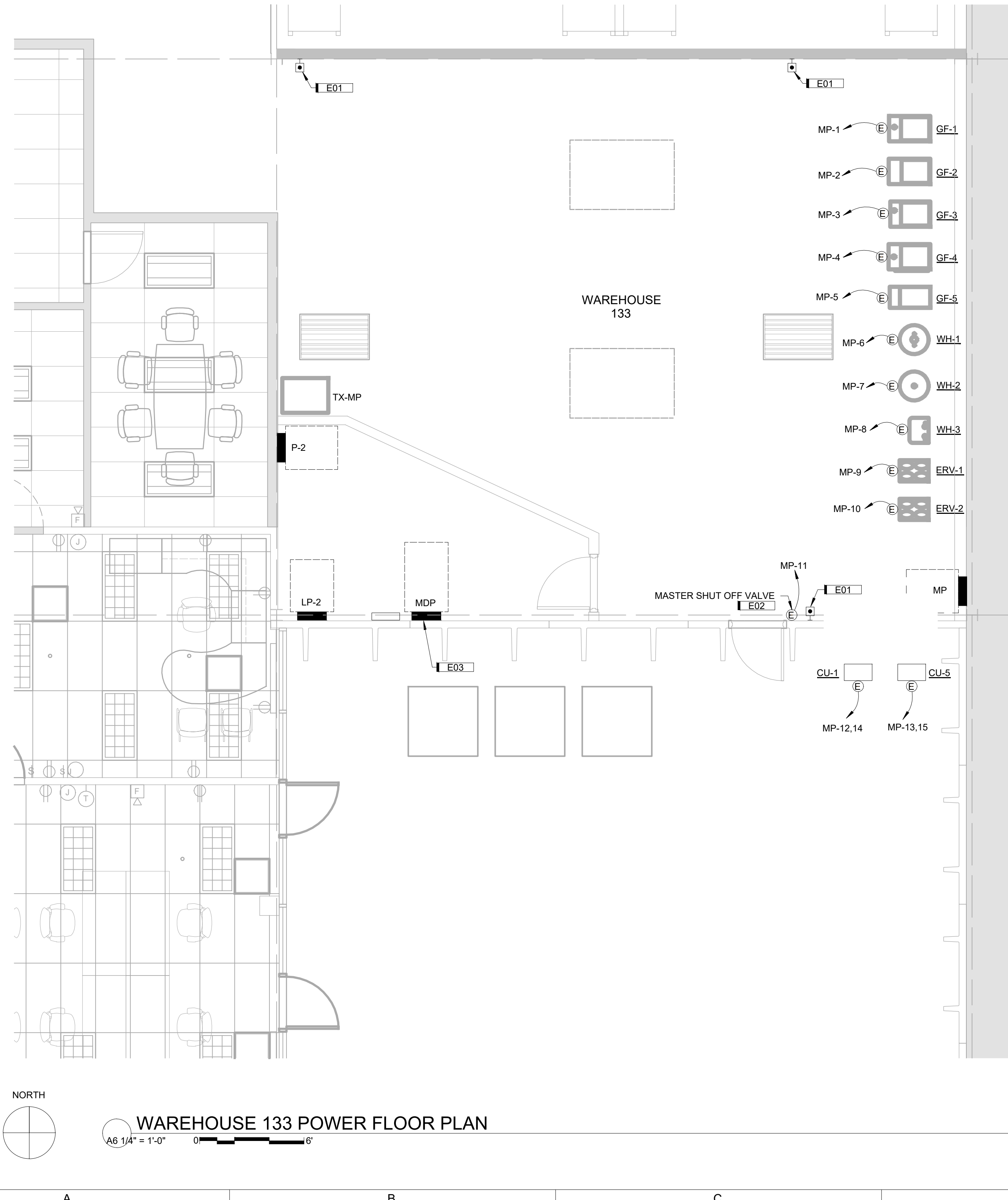
BRANCH PANEL NAME	VOLTAGE	PHASE WIRE BUS SIZE MAIN OCP	AIC RATING									
MDP	480/277 Wye 3	4 400 AMPS 400	---									
CODE: L=LIGHTING, R=RECEPTACLES, M=MOTORS, K=KITCHEN		MOUNTING: SURFACE										
ROOM:	EXISTING PANEL		ENCLOSURE: NEMA 1									
FED...	FEED:											
LOAD	CODE	POLE	BKR	CTKT #	A	B	C	CTKT #	BKR	POLE	CODE	LOAD
WAREHOUSE LTS	L	20	1	4.0/0.5				2	20	3	E	RTU-1
SPACE	--	--	--	--				4	--	--	--	--
P1	E	3	20	7.0/5.0/0.7				8	20	3	E	RTU-2
SPACE	--	--	--	--				10	--	--	--	--
P-2	E	3	100	13.0/0.0/0.0				14	1	--	--	SPACE
SPACE	--	--	--	--				16	20	1	E	1L WAREHOUSE LTS
75 KVA TX-MP	E	3	150	19.0/0.0/1.0				20	20	3	E	EXISTING RTU
SPACE	--	--	--	--				22	--	--	--	--
SPACE	--	--	--	--				24	--	--	--	--
SPACE	--	--	--	--				26	1	--	--	SPACE
SPACE	--	--	--	--				28	1	--	--	SPACE
SPACE	--	--	--	--				30	1	--	--	SPACE
SPACE	--	--	--	--				32	1	--	--	SPACE
SPACE	--	--	--	--				34	1	--	--	SPACE
SPACE	--	--	--	--				36	1	--	--	SPACE
SPACE	--	--	--	--				38	1	--	--	SPACE
SPACE	--	--	--	--				40	1	--	--	SPACE
SPACE	--	--	--	--				42	1	--	--	SPACE
TOTAL LOAD: 16683.7 VA 20351.2 VA 16683.7 VA												
TOTAL AMPS: 60.2 A 73.5 A 60.2 A												
Load Classification: Connected Load (VA) Demand Factor Estimated Demand (VA)												
HVAC 10308 100.00% 10308												
LITES 12000 100.00% 12000												
Power 31600 100.00% 31600												
PANEL TOTALS												
TOTAL CONN. LOAD: 53671.1 VA												
TOTAL EST. DEMAND: 53671.1 VA												
TOTAL CONN. CURRENT: 64.6 A												
TOTAL EST. DEMAND: 64.6 A												

BRANCH PANEL NAME	VOLTAGE	PHASE WIRE BUS SIZE MAIN OCP	AIC RATING										
MP	120/240 Single 1	3 100 AMPS 100	10,000 AMPS SYMMETRICAL										
CODE: L=LIGHTING, R=RECEPTACLES, M=MOTORS, K=KITCHEN		MOUNTING: SURFACE											
ROOM:	NEW PANEL		ENCLOSURE: NEMA 1										
FED...	FEED:												
LOAD	CODE	POLE	BKR	CTKT #	A	B	C	CTKT #	BKR	POLE	CODE	LOAD	
GF-1	--	--	--	--	1	15	10.9/1.2		2	15	1	GF-2	
GF-3	--	--	--	--				1	10	1	24	GF-4	
GF-5	--	--	--	--				6	15	1	--	WH-1	
WH-2	--	--	--	--				0.2	0.2	8	15	1	WH-3
ERV-1	--	--	--	--				1	15	9.0	1	0.1	ERV-2
MASTER SHUT OFF VALVE	--	--	--	--				1	15	11			CU-1
CU-5	--	--	--	--				2	15	13	1.0/1.8		--
SPARE	--	--	--	--				1	15				SPARE
SPARE	--	--	--	--				1	20	17	0.0/0.0		SPARE
SPARE	--	--	--	--				1	20	19			SPARE
TOTAL LOAD: 5410.8 VA 5355.8 VA													
TOTAL AMPS: 45.1 A 44.6 A													
Load Classification: Connected Load (VA) Demand Factor Estimated Demand (VA)													
HVAC 10766 100.00% 10766													
PANEL TOTALS													
TOTAL CONN. LOAD: 10766.4 VA													
TOTAL EST. DEMAND: 10766.4 VA													
TOTAL CONN. CURRENT: 44.9 A													
TOTAL EST. DEMAND: 44.9 A													

HT AFF	SYMBOL	DESCRIPTION
	(---)	CONDUIT CONCEALED IN WALL OR OVERHEAD
	(---)	CONDUIT CONCEALED BELOW FLOOR
	(---)	CONDUIT TRANSITION UP
	(---)	CONDUIT TRANSITION DOWN
	(---)	CONDUIT STUBBED OUT
	(---)	BRANCH CIRCUIT HOME RUN
	(---)	ELECTRICAL CONNECTION (SEE SCHEDULE)
72"	(---)	CIRCUIT BREAKER PANEL
72"	(---)	PANEL OR DISTRIBUTION PANEL
72"	(---)	SPECIAL CABINET (TYPE DENOTED)
72"	(---)	TRANSFORMER (TYPE DENOTED)
48"	(---)	SAFETY DISCONNECT SWITCH
	(---)	PUSH BUTTON

KEY	NOTE
E01	GAS SHUT OFF VALVE. LOCATION IS SHOWN FOR REFERENCE ONLY. COORDINATE WITH OWNER AND CT MECHANICAL.
E02	120V MASTER GAS SHUT OFF VALVE WITH POWER DRAW OF 15.4 WATTS. LOCATION IS SHOWN FOR REFERENCE ONLY. COORDINATE WITH OWNER AND CT MECHANICAL.
E03	EXISTING MDP PANEL. NEW BREAKER AND FEEDER TO SERVE NEW MECHANICAL PANEL. MP AND NEW TRANSFORMER, TX-MP. LOCATION IS SHOWN FOR REFERENCE ONLY. VERIFY EXISTING CONDITIONS WITH OWNER. SEE ONLINE DIAGRAM FOR MORE INFORMATION.

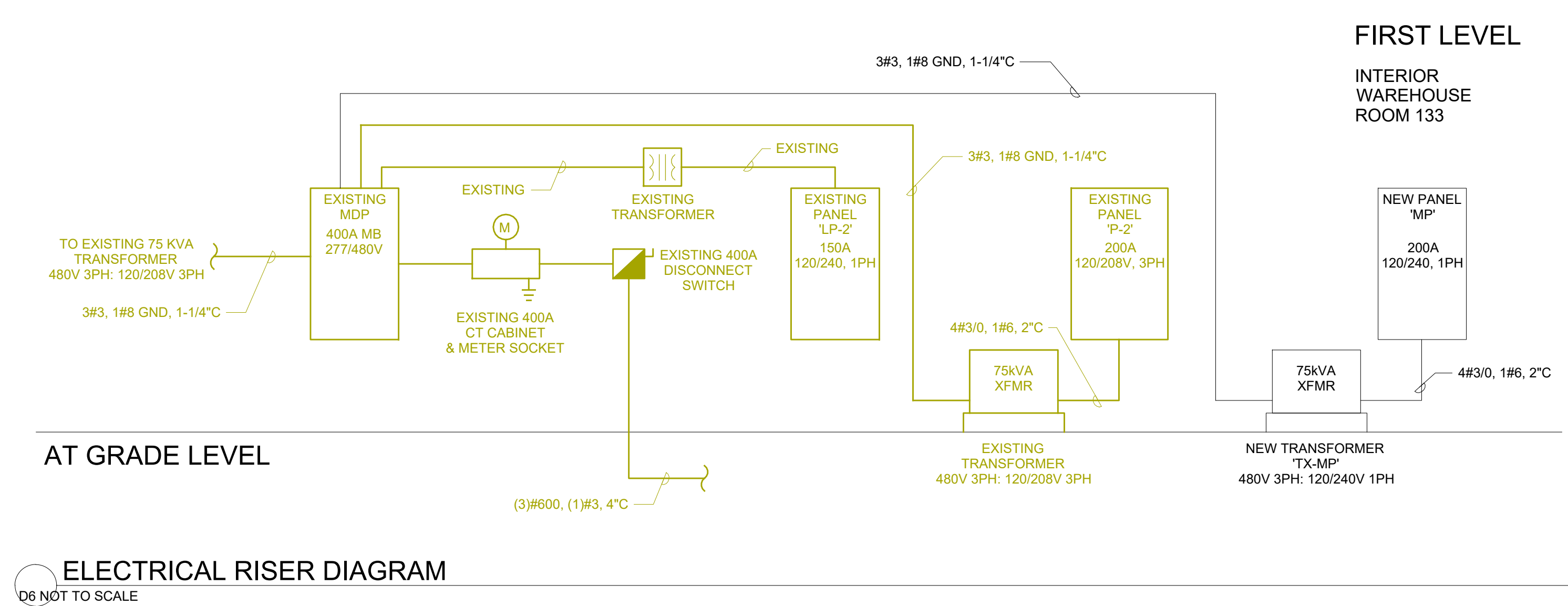
- ELECTRICAL GENERAL NOTES**
- ALL WORK SHALL BE IN CONFORMANCE WITH THE NATIONAL ELECTRICAL CODE - LATEST EDITION ADOPTED BY THE STATE, THE STATE AMENDMENTS, LOCAL/MUNICIPAL CODES AND ORDINANCES, AND THE AUTHORITY HAVING JURISDICTION. THE COMPLETE INSTALLATION SHALL BE IN ACCORDANCE WITH THE ADAAG (AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES).
 - IT IS THE INTENT OF THESE DOCUMENTS TO COMPLY WITH THE APPLICABLE CODES WHERE DISCREPANCIES OCCUR, NOTIFY THE ENGINEER/ARCHITECT IN WRITING FOR INTERPRETATION. CORRECT ANY INSTALLATION THAT FAILS TO COMPLY WITH THE CODES AND STANDARDS AT NO ADDITIONAL COST TO THE OWNER.
 - CONTRACTOR SHALL PROVIDE ALL WORK NECESSARY INCLUDING ALL LABOR, MATERIALS, PERMITS, TAXES, FEES, INSPECTIONS, HARDWARE, AND COST FOR INSTALLATION FOR A COMPLETE AND OPERATIONAL SYSTEM.
 - ALL MATERIALS FURNISHED BY THE CONTRACTOR SHALL BE NEW, COMPLETE WITH MANUFACTURER'S GUARANTEE OR WARRANTY AND SHALL BE LISTED BY A NATIONALLY RECOGNIZED TESTING LABORATORY (NRTL).
 - COORDINATE ELECTRICAL INSTALLATION WITH ALL TRADES PRIOR TO INSTALLATION. IF ELECTRICAL WORK INSTALLED INTERFERES WITH OTHER TRADES AFTER INSTALLATION, THE CONTRACTOR SHALL MAKE ALL NECESSARY CHANGES TO CORRECT THE CONDITION AT NO ADDITIONAL COST TO THE OWNER.
 - DRAWINGS ARE DIAGRAMMATIC. ALL DIMENSIONS SHOWN ARE APPROXIMATE. CONTRACTOR SHALL VERIFY ALL FURNITURE, MODULAR FURNITURE, AND EQUIPMENT LOCATIONS WITH ARCHITECTURAL PLANS, ELEVATIONS AND REVIEWED SHOP DRAWINGS. PRIOR TO MAKING THE ACTUAL ELECTRICAL INSTALLATION THIS CONTRACTOR SHALL ADJUST CONNECTION LOCATIONS TO ACCOMMODATE FURNITURE AND/OR EQUIPMENT.
 - ALL ELECTRICAL PANELS WITH ANY BRANCH CIRCUIT LOAD REVISIONS (DEMOLITION OR NEW WORK) SHALL HAVE A NEW TYPED UPDATED CIRCUIT DIRECTORY CARD INSTALLED INSIDE THE DOOR OF THE ELECTRICAL PANEL. THE CONTRACTOR SHALL VERIFY THAT ALL UNUSED CIRCUIT BREAKERS ARE TURNED OFF AND PROPERLY INDICATED AS 'SPARE' ON THE NEW CIRCUIT DIRECTORY CARD. THE CONTRACTOR SHALL INSTALL FILLER PLATES WHERE BREAKERS ARE REMOVED AS PART OF THIS PROJECT OR HAVE BEEN REMOVED PREVIOUSLY.
 - NO ENERGIZED CONDUCTORS SHALL BE EXPOSED AT ANYTIME EXCEPT WHEN THE IMMEDIATE AREA IS UNDER THE SUPERVISION OF A QUALIFIED ELECTRICIAN.
 - WHERE CONDUIT IS SURFACE MOUNTED TO A WALL AND RUN VERTICALLY DOWN TO A SWITCH/OUTLET BOX, UTILIZE 1-HOLE OR 2-HOLE CONDUIT STRAPS.
 - REFER TO THE ARCHITECTURAL DRAWINGS FOR LOCATIONS OF BUILDING EXPANSION JOINTS. ALL CONDUITS CROSSING EXPANSION JOINTS SHALL BE INSTALLED WITH EXPANSION FITTINGS, UNLESS THE CONDUIT IS BELOW SLAB IN THE COMPACTED GRANULAR FILL. EXPANSION FITTINGS SHALL BE INSTALLED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE, AND MANUFACTURER'S WRITTEN RECOMMENDATIONS.
 - PENETRATIONS THROUGH FIRE RATED WALLS BY DIVISION 26 CONTRACTOR SHALL BE SEALED WITH APPROPRIATE FIRE PROOFING MATERIAL TO RESTORE FIRE RATING. REFER TO ARCHITECTURAL DRAWINGS FOR FIRE RATED WALLS.
 - THE CONTRACTOR SHALL KEEP THE WORK AREA CLEAN OF ALL DEBRIS ON A DAILY BASIS. ALL NEW MATERIALS AWAITING INSTALLATION SHALL BE KEPT IN AREAS DESIGNATED BY THE OWNER.
 - THESE DRAWINGS SHALL NOT BE SCALED TO OBTAIN DIMENSIONS. REFER TO DIMENSIONED ARCHITECTURAL FLOOR PLANS. IF THE DIMENSIONS CANNOT BE DETERMINED BY THE INFORMATION GIVEN, CONTRACTOR SHALL CONTACT THE ENGINEER FOR ADDITIONAL INFORMATION.
 - PERIODIC SITE OBSERVATION BY THE ENGINEER IS SOLELY FOR THE PURPOSE OF DETERMINING IF THE WORK OF THE CONTRACTOR IS PROCEEDING IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. THIS LIMITED SITE OBSERVATION SHOULD NOT BE CONSTRUED AS EXHAUSTIVE OR CONTINUOUS TO CHECK THE QUALITY OR QUANTITY OF THE WORK, BUT RATHER PERIODIC IN AN EFFORT TO GUARD THE OWNER AGAINST DEFECTS OR DEFICIENCIES IN THE WORK OF THE CONTRACTOR.
 - THE INFORMATION CONTAINED ON THE ELECTRICAL DRAWINGS IS IN ITSELF INCOMPLETE AND VOID UNLESS USED IN CONJUNCTION WITH ALL OTHER DISCIPLINE DRAWINGS, THE SPECIFICATIONS, TRADE PRACTICES, OR APPLICABLE STANDARDS, CODES, ETC., AND SHALL BE CONSIDERED THE CONTRACT DOCUMENTS AND WITH ALL THEREIN BY REFERENCE, WHICH THE CONTRACTOR CERTIFIES KNOWLEDGE OF BY SIGNING THE CONTRACT.
 - CONTRACTOR IS TO ASSUME FULL RESPONSIBILITY, UNRELIEVED BY REVIEW OF SHOP DRAWINGS OR PERIODIC OBSERVATION OF CONSTRUCTION, FOR COMPLIANCE WITH THE CONTRACT DOCUMENTS, FOR DIMENSIONS TO BE CONFIRMED AND CORRELATED ON THE JOB SITE AND BETWEEN INDIVIDUAL DRAWINGS OR SETS OF DRAWINGS FOR FABRICATION PROCESSES AND CONSTRUCTION TECHNIQUES (INCLUDING EXCAVATION, SHORING, SCAFFOLDING, BRACING, ERECTION, FORM WORK, ETC.), FOR COORDINATION OF THE VARIOUS TRADES, AND FOR SAFE CONDITIONS ON THE JOB SITE. VARIATIONS IN FIELD CONDITIONS RELATIVE TO THE CONTRACT DOCUMENTS SHALL BE REPORTED TO THE ENGINEER AS SOON AS THEY ARE FOUND. WORK SHALL NOT PROGRESS UNTIL WRITTEN PERMISSION FROM THE ENGINEER IS OBTAINED.



PLAN MARK	DESCRIPTION	PANEL	HP/KW VOL/1PH	FLA	MCA	C/B	CONDUIT, WIRE SIZE	DISC.	DESIGN BASIS	NOTES
GF-1	GAS FURNANCE	MP	1/2 HP	120/1	7.7	9.6	3/4" C, 2#12, 1#12 GND	201 NF	AIRBASE A97MV	1
CU-1	CONDENSING UNIT	MP	3.1 kW	208/1	14.8	18.5	3/4" C, 2#10, 1#10 GND	402 F WP	COMFORTMAKER N24A	1
GF-2	GAS FURNANCE	MP	1.2 kW	120/1	10	13.4	3/4" C, 2#12, 1#12 GND	PWE	COMFORTMAKER N95SN	
GF-3	GAS FURNANCE	MP	3/4 HP	120/1	8.4	10.5	3/4" C, 2#12, 1#12 GND	201 NF	CONCORD 8051UH	
GF-4	GAS FURNANCE	MP	1/2 HP	120/1	9.8	12.3	3/4" C, 2#12, 1#12 GND	PWE	GOODMAN QM196	
GF-5	GAS FURNANCE	MP	0.13 kW	120/1	1.09	1.4	3/4" C, 2#12, 1#12 GND	PWE	TRANS TUE	1
CU-5	CONDENSING UNIT	MP	1.7 kW	208/1	8.1	10.1	1/2" 3/4" C, 2#10, 1#10 GND	202 F WP	PAYNE PA13NR018	1
WH-1	GAS WATER HEATER	MP	0.2 kW	120/1	1.7	2.1	3/4" C, 2#12, 1#12 GND	REC	AO SMITH GCR-40NG	
WH-2	GAS WATER HEATER	MP	0.2 kW	120/1	1.7	2.1	3/4" C, 2#12, 1#12 GND	REC	AO SMITH GPVT-40NG	
WH-3	GAS WATER HEATER	MP	0.2 kW	120/1	1.7	2.1	3/4" C, 2#12, 1#12 GND	REC	NAVLEN MPE150S	
ERV-1	ENERGY RECOVER VENTILATOR	MP	0.7 kW	120/1	0.85	1.1	3/4" C, 2#12, 1#12 GND	201 NF	CLEAN COMFORT VH30100	
ERV-2	ENERGY RECOVER VENTILATOR	MP	0.7 kW	120/1	0.85	1.1	3/4" C, 2#12, 1#12 GND	201 NF	CLEAN COMFORT VE30100	

KEY:
FLA = FULL LOAD AMPS MCA = MIN. CIRCUIT AMPS C/B = CIRCUIT BREAKER VFD = VARIABLE FREQUENCY DRIVE WP=WEATHERPROOF
SPSW = SINGLE POLE SWITCH F = FUSED NF = NON-FUSED REC = RECEPTACLE MMS=MANUAL MOTOR STARTER
PWE = PROVIDED WITH EQUIPMENT MAG=MAGNETIC STARTER

NOTES:
1. CU-5 COORDINATES WITH GF-5 AND CU-1 COORDINATES WITH GF-1.



SHIVEFALTERY
 ARCHITECTURE & ENGINEERING
 4217620 - Design Build
 CECA: Residential HVAC
 Equipment
 PRELIMINARY
 - NOT FOR
 CONSTRUCTION
 DRAWN BY: LSA
 APPROVED BY: JHW
 ISSUED FOR: 12/15/2021
 PROJECT NUMBER: 4217620
 FIELD BOOK: