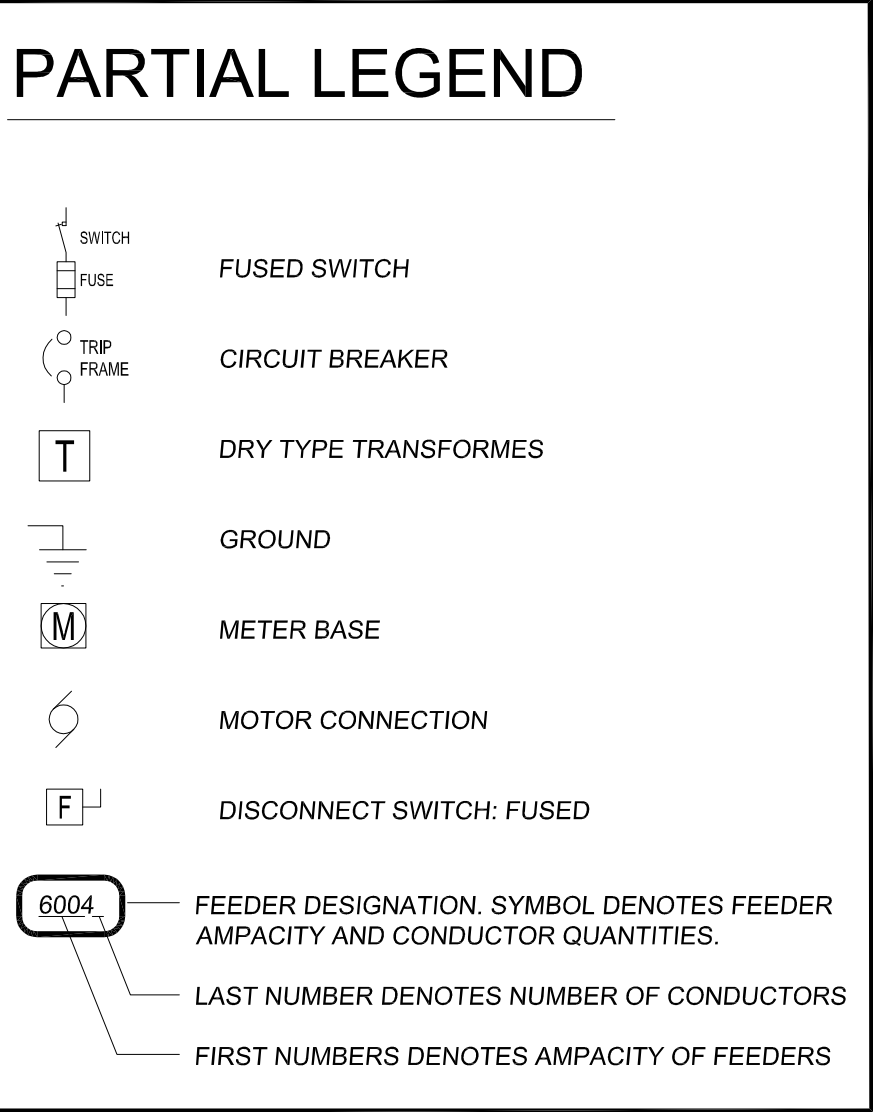


FEEDER SCHEDULE					FEEDER SCHEDULE				
COPPER 3 PHASE, 3 WIRE + GROUND					COPPER 3 PHASE, 4 WIRE + GROUND				
NOMINAL AMPACITY	TAG	CONDUIT SIZE (MIN)	PHASE CONDUCTORS	GROUND CONDUCTOR	TAG	CONDUIT SIZE (MIN)	PHASE CONDUCTORS	GROUND CONDUCTOR	
20	203	1/2"	(3) #12	#12	204	1/2"	(4) #12	#12	
30	303	1/2"	(3) #10	#10	304	3/4"	(4) #10	#10	
40	403	3/4"	(3) #8	#10	404	3/4"	(4) #8	#10	
50	503	3/4"	(3) #6	#10	504	1"	(4) #6	#10	
60	603	1"	(3) #4	#10	604	1 1/4"	(4) #4	#10	
70	703	1 1/4"	(3) #4	#8	704	1 1/4"	(4) #4	#8	
80	803	1 1/4"	(3) #3	#8	804	1 1/4"	(4) #3	#8	
90	903	1 1/4"	(3) #2	#8	904	1 1/4"	(4) #2	#8	
100	1003	1 1/4"	(3) #1	#8	1004	1 1/2"	(4) #1	#8	
110	1103	1 1/4"	(3) #1	#6	1104	1 1/2"	(4) #1	#6	
125	1253	1 1/4"	(3) #1	#6	1254	2"	(4) #1/0	#4	
150	1503	1 1/2"	(3) #1/0	#6	1504	2"	(4) #2/0	#4	
175	1753	1 1/2"	(3) #2/0	#6	1754	2"	(4) #3/0	#4	
200	2003	2"	(3) #3/0	#6	2004	2 1/2"	(4) #4/0	#4	
225	2253	2"	(3) #4/0	#4	2254	2 1/2"	(4) 250KCM	#3	
250	2503	2 1/2"	(3) 250KCM	#4	2504	3"	(4) 350KCM	#2	
300	3003	2 1/2"	(3) 350KCM	#4	3004	3 1/2"	(4) 500KCM	#2	
350	3503	3"	(3) 500KCM	#3	3504	(2) 2"	(8) #3/0	(2) #3	
400	4003	(2) 2"	(6) #3/0	#3	4004	(2) 2 1/2"	(8) #4/0	(2) #2	
450	4503	(2) 2"	(6) #4/0	(2) #3	4504	(2) 3"	(8) 250KCM	(2) #1	
500	5003	(2) 2 1/2"	(6) 250KCM	(2) #2	5004	(3) 2 1/2"	(12) #3/0	(3) #1	
600	6003	(2) 3"	(6) 350KCM	(2) #1	6004	(2) 3 1/2"	(8) 500KCM	(2) #2/0	
800	8003	(3) 3"	(9) 350KCM	(3) #1/0	8004	(3) 3"	(12) 350KCM	(3) #2/0	
1000	10003	(3) 3"	(9) 500KCM	(3) #2/0	10004	(4) 3"	(16) 350KCM	(4) #2/0	
1200	12003	(6) 3"	(12) 350KCM	(4) #3/0	12004	(4) 3 1/2"	(16) 350KCM	(4) 250KCM	
1600	16003	(5) 3"	(15) 500KCM	(5) #4/0	16004	(6) 3"	(24) 350KCM	(6) 250KCM	
2000	20003	(6) 3"	(18) 500KCM	(6) 250KCM	20004	(6) 3 1/2"	(24) 500KCM	(6) 250KCM	
2500	25003	(6) 4"	(18) 750KCM	(6) 350KCM	25004	(8) 4"	(32) 500KCM	(8) 350KCM	
3000	30003	(7) 4"	(21) 750KCM	(7) 500KCM	30004	(9) 4"	(36) 500KCM	(9) 500KCM	
4000	40003	(9) 4"	(27) 750KCM	(9) 500KCM	40004	(12) 4"	(48) 500KCM	(12) 500KCM	
Notes:					Notes:				
1. REFER TO SPECIFICATIONS FOR INSULATION TYPE PER WIRE					1. REFER TO SPECIFICATIONS FOR INSULATION TYPE PER WIRE				
2. MINIMUM CONDUIT SIZES IDENTIFIED MEET MAXIMUM 40% FIL FOR EMT, RMC AND PVC SCHEDULE 40.					2. MINIMUM CONDUIT SIZES IDENTIFIED MEET MAXIMUM 40% FIL FOR EMT, RMC AND PVC SCHEDULE 40.				
3. FOR FEEDER RATINGS 100AMPS OR LESS, ACTUAL AMPACITY IS CALCULATED BY THOSE GIVEN IN NEC 310.15(B)(16), 60DEG C.					3. ALL NEUTRAL CONDUCTORS ARE CONSIDERED CORRENT CARRING, THEREFORE AMPACITY ADJUSTMENTS HAVE BEEN INCLUDED IN ACCORANCE WITH NEC TABLE 310.15(B)(3)(a) TO ACCOMMODATE FOUR (4) CURRENT CARRYING CONDUCTORS IN A SINGLE RACEWAY.				
4. FOR FEEDER RATINGS GREATER THAN 100AMPS, ACTUAL AMPACITY IS CALCULATED BY THOSE GIVEN IN NEC 310.15(B)(16)					4. ADJUSTED CONDUCTOR AMPACITIES ARE CALCULATED BASED ON THOSE GIVEN FOR 90DEG C CONDUCTORS IN ACCORDANCE WITH NEC 310.15(B) AND TABLE NEC 310.15(B)(16). FOR FEEDER RATINGS 100AMPS OR LESS, THE ADJUCTED AMPACITY SHALL NOT EXCEED THE 60DEG C RATING FOR FE				



SERIES RATING

- SYSTEM WILL BE SERIES RATED. ELECTRICAL CONTRACTOR WILL COMPLY WITH CURRENT CEC ART 240.86 (A) & (B), FOR MARKING AND MOTOR CONTRIBUTIONS.
- EQUIPMENT SHALL BE MARKED WITH THE SERIES RATING COMBINATIONS AS REQUIRED BY CURRENT NEC ART 110.22. THE SERIES RATING COMBINATION WILL BE MARKED ON THE EQUIPMENT BY THE MANUFACTURER. THE EQUIPMENT ENCLOSURE (S) SHALL BE LEGIBLY MARKED IN THE FILED TO INDICATE THE EQUIPMENT HAS BEEN APPLIED WITH A SERIES COMBINATION RATING. THE MARKING SHALL BE READILY VISIBLE AND STATE THE FOLLOWING:

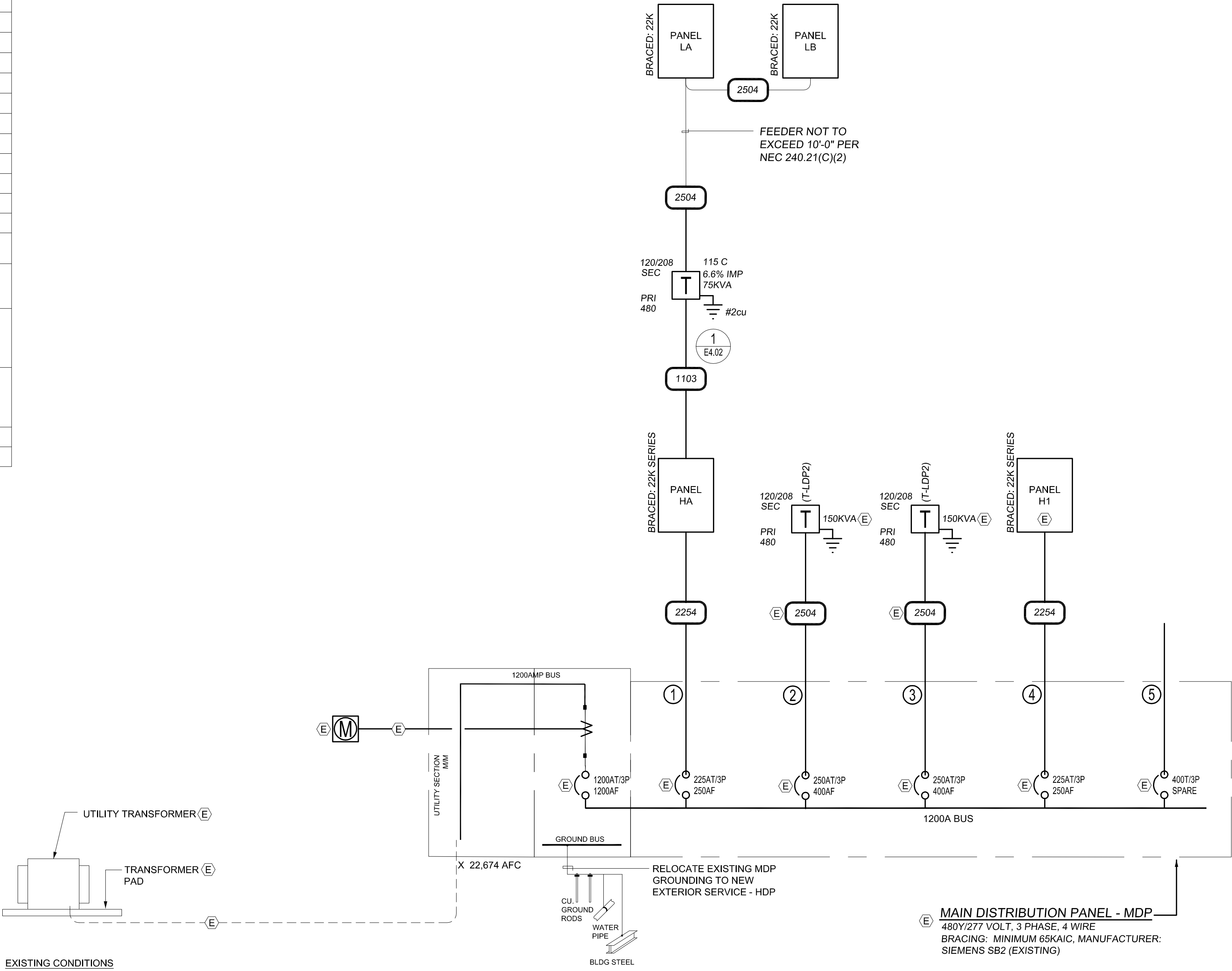
'CAUTION - SERIES RATED SYSTEM _____ AMPERES AVAILABLE. IDENTIFIED REPLACEMENT COMPONENTS REQUIRED' (480 VOLT SYSTEM)

'CAUTION - SERIES RATED SYSTEM _____ AMPERES AVAILABLE. IDENTIFIED REPLACEMENT COMPONENTS REQUIRED' (208 VOLT SYSTEM)

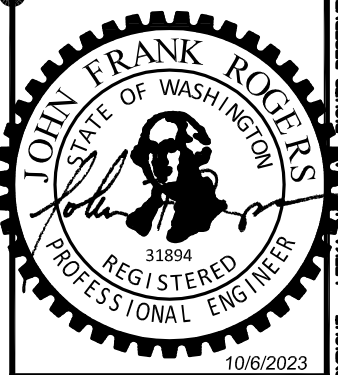
ELECTRICAL CONTRACTOR WILL MAINTAIN ON SITE ALL DOCUMENTATION REGARDING SERIES RATING BREAKER COMBINATIONS TO BE USED ON THIS PROJECT FOR THE FIELD INSPECTOR UPON REQUEST. THE SERIES RATED COMBINATIONS WILL BE HIGHLIGHTED AND TABBED FOR THE INSPECTORS USE.

GENERAL NOTES

- ELECTRICAL CONTRACTOR IS RESPONSIBLE TO REFERENCE CURRENT EDITION OF THE NATIONAL ELECTRICAL CODE FOR CONDUIT FILL FOR THE EXACT TYPE OF CONDUCTOR BEING INSTALLED AND SIZE THE CONDUIT AS REQUIRED BY CODE.
- ELECTRICAL CONTRACTOR IS RESPONSIBLE TO VERIFY VOLTAGE DROP FOR EXACT ROUTING AND LENGTH OF ALL CONDUCTORS.
- ELECTRICAL CONTRACTOR TO PROVIDE ALL DISCONNECTS AT MECHANICAL UNITS.
- PROVIDE DUCT DETECTORS IN ALL MECHANICAL UNITS AS REQUIRED BY CODE AND/OR THE FIRE MARSHAL.
- CONTRACTOR WILL BE RESPONSIBLE TO VERIFY DIMENSIONS OF ALL EQUIPMENT AND MAINTAIN ALL CODE REQUIRED CLEARANCES. EQUIPMENT BASED ON SIEMENS EQUIPMENT, PROVIDE SEISMIC SUPPORTS AS REQUIRED.
- ALL ELECTRICAL WORK WILL COMPLY WITH THE CURRENT NATIONAL ELECTRICAL CODE (NEC).
- SWITCHBOARDS, PANELBOARDS, CONTROL PANELS AND MOTOR CONTROL CENTERS AND HVAC UNITS WILL BE FIELD MARKED TO WARN QUALIFIED PERSONNEL OF THE POTENTIAL ARC FLASH HAZARDS AND THE APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT (PPE) PER 2010 NEC ART 110-16 AND NFPA 70E-2000. THE MARKINGS SHALL BE LOCATED SO AS TO BE CLEARLY VISIBLE TO QUALIFIED PERSONS BEFORE EXAMINATION, ADJUSTMENT, SERVICING, OR MAINTENANCE OF THE EQUIPMENT.
- FUSES WILL BE PROVIDED WITH REJECTION TYPE FUSE HOLDERS.
- CONDUCTORS WILL BE TYPE THHN/THW.
- ELECTRICAL DEDICATED SPACES: NO PIPING, DUCTS, EQUIPMENT FOREIGN TO ELECTRICAL EQUIPMENT SHALL BE PERMITTED WITHIN THE DEDICATED SPACE ABOVE THE ELECTRICAL EQUIPMENT.



1 ELECTRICAL ONE-LINE DIAGRAM - 480Y/277 VOLT, 3 PHASE, 4 WIRE



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**Tenant Improvement
ESD112
Mental Health Facility Phase II**
2400 NE 65th Ave. Vancouver WA.

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