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CORGAN
TGRWA STRUCTURAL ENGINEERS
kW Mission Critical Engineering Member of WSP
ENGINEERING PLUS
Kimley»Horn

COPPER MV FEEDER SCHEDULE - BELOW GRADE (C-BG)

CODE	# OF SETS	PHASE	NEUTRAL	GROUND	CONDUIT
MV300-3-CU	1	(3) 350 KCMIL	-	(1) #3/0 AWG	6"
MV600-3-CU	2	(3) 500 KCMIL	-	(1) #4/0 AWG	6"

LV COPPER FEEDER SCHEDULE

NAME	# OF SETS	PHASE	NEUTRAL	GROUND	CONDUIT
20-3-CU	1	(3) #12 AWG	-	(1) #10 AWG	3/4"
30-3-CU	1	(3) #10 AWG	-	(1) #10 AWG	3/4"
40-3-CU	1	(3) #8 AWG	-	(1) #10 AWG	3/4"
50-3-CU	1	(3) #6 AWG	-	(1) #10 AWG	3/4"
60-3-CU	1	(3) #4 AWG	-	(1) #10 AWG	1"
70-3-CU	1	(3) #4 AWG	-	(1) #8 AWG	1"
70-4-CU	1	(3) #4 AWG	(1) #4 AWG	(1) #8 AWG	1-1/4"
80-3-CU	1	(3) #3 AWG	-	(1) #8 AWG	1"
100-3-CU	1	(3) #1 AWG	-	(1) #8 AWG	1-1/4"
100-4-CU	1	(3) #1 AWG	(1) #1 AWG	(1) #8 AWG	1-1/2"
125-3-CU	1	(3) #1/0 AWG	-	(1) #6 AWG	1-1/2"
135-3-CU	1	(3) #1/0 AWG	-	(1) #6 AWG	1-1/2"
150-3-CU	1	(3) #1/0 AWG	-	(1) #6 AWG	1-1/2"
150-4-CU	1	(3) #1/0 AWG	(1) #1/0 AWG	(1) #6 AWG	1-1/2"
225-4-CU	1	(3) #4/0 AWG	(1) #4/0 AWG	(1) #2 AWG	2 1/2"
250-4-CU	1	(3) 250 KCMIL	(1) 250 KCMIL	(1) #4 AWG	2-1/2"
350-3-CU	2	(3) #4/0 AWG	-	(1) #1 AWG	2"
400-3-CU	2	(3) 250 KCMIL	-	(1) #1 AWG	2 1/2"
600-3-CU	2	(3) 350 KCMIL	-	(1) #1/0 AWG	2 1/2"
700-3-CU	3	(3) 400 KCMIL	-	(1) #3/0 AWG	3"
800-3-CU	3	(3) 400 KCMIL	-	(1) #3/0 AWG	3"
1600-3-CU	4	(3) 600 KCMIL	-	(1) #4/0 AWG	3-1/2"
2500-3-CU	8	(3) 600 KCMIL	-	(1) 400 KCMIL	3-1/2"
3000-3-CU	8	(3) 600 KCMIL	-	(1) 400 KCMIL	3-1/2"
3200-3-CU	8	(3) 600 KCMIL	-	(1) 400 KCMIL	3-1/2"
4000-3-CU	10	(3) 600 KCMIL		(1) 500 KCMIL	3-1/2"
4000-4-CU	10	(3) 600 KCMIL	(1) 600 KCMIL	(1) 500 KCMIL	3-1/2"

MEDIUM VOLTAGE FEEDER SCHEDULES NOTES:

1. THE SIZING OF FEEDERS OVER 1,000 VOLTS SHALL BE IN ACCORDANCE WITH APPLICABLE CODES WITH LOCAL AMENDMENTS (BASIS 20## NEC 210.19(B)) FOR BRANCH CIRCUITS AND 215.2(B) FOR FEEDERS. OVERHEAD CONDUITS TO BE STEEL. CONDUCTORS TO BE ALUMINUM OR COPPER AS INDICATED BY FEEDER TAG AND SCHEDULE.
2. EQUIPMENT GROUND CONDUCTOR SIZED BASED ON APPLICABLE CODES WITH LOCAL AMENDMENTS (BASIS 20## NEC TABLE 250.122).
3. CONTRACTOR SHALL ADJUST CONDUIT SIZE AS REQUIRED BASED ON ACTUAL INSTALLATION CONDITION, INCLUDING LENGTH OF CIRCUIT, NUMBER OF OFFSETS, AND ELBOW AND CABLE PULLING TENSION LIMITATIONS
4. CONTRACTOR SHALL SIZE THE SUPPLY SIDE BONDING JUMPER FOR ALL TRANSFORMER SECONDARY BASED ON APPLICABLE CODES WITH LOCAL AMENDMENTS (BASIS 20## NEC TABLE2 250.102(C)(1)).

BATTERY FEEDER SCHEDULE NOTES:

1. PROPOSED BATTERY CONDUCTORS AND RACEWAY ARE SHOWN, CONDUCTOR SIZING AND RACEWAY SHALL BE COORDINATED WITH MANUFACTURER AND SHALL BE IN ACCORDANCE WITH ALL APPLICABLE LOCAL CODES AND LOCAL AMENDMENTS.
2. BATTERY CABLES IN CABLE TRAY ARE EXTRA FLEXIBLE TYPE (DLO) WITH MAXIMUM STRAND OF 24AWG (0.020 INCH) DIAMETER. BATTERY CABLES IN CONDUIT TO BE THHN OR EQUIVALENT.
3. PROVIDE 2-HOLE, LONG BARREL, COMPRESSION LUGS WITH INSPECTION WINDOWS IDENTIFIED FOR EXTRA FLEXIBLE CONDUCTORS TYPE B-172, ASTM 833. LUGS SHALL BE IDENTIFIED FOR THE SPECIFIC CONDUCTOR CLASS USED.
4. CABLE TRAY CALCULATIONS ARE BASED ON APPLICABLE CODES WITH LOCAL AMENDMENTS (BASIS NEC ARTICLE 392.80(A)(2)(d)). CALCULATION BASED ON AMBIENT TEMPERATURE OF 86°F.
5. THE FEEDER SCHEDULE ABOVE IS BASED ON DLO TYPE RHH/RHW COPPER CONDUCTOR FOR BATTERY CONNECTION AND THWN GROUNDING CONDUCTORS IN ELECTRICAL METAL TUBING (EMT) UON. ALL CONDUCTOR CHARACTERISTICS SHALL BE LISTED ON THE CONDUCTOR JACKET.
6. WHERE CABLE TRAY IS REQUESTED AS AN ALTERNATE, THE CONTRACTOR SHALL PROVIDE A CODE COMPLIANT ALTERNATIVE TO THE SCHEDULE LISTED ABOVE WITH FULL RATED CONDUCTORS AND TERMINATIONS.

COPPER LV FEEDER SCHEDULE - BELOW GRADE (C-BG)

CODE	# OF SETS	PHASE	NEUTRAL	GROUND - EGC (CU)	CONDUIT
2500-3-CU	8	(3) 600 KCMIL	-	(1) 400 KCMIL	3-1/2"
3200-3-CU	8	(3) 600 KCMIL	-	(1) 400 KCMIL	3-1/2"
4000-4-CU	10	(3) 600 KCMIL	(1) 600 KCMIL	(1) 500 KCMIL	3-1/2"

ALUMINUM LV FEEDER SCHEDULE - BELOW GRADE CONDUIT (C-BG)

CODE	# OF SETS	PHASE	NEUTRAL	GROUND - EGC (CU)	CONDUIT

BELOW GRADE FEEDER SCHEDULE NOTES:

1. COPPER/ALUMINUM CONDUCTOR AMPACITY BASED ON APPLICABLE CODES WITH LOCAL AMENDMENTS (BASIS 20## NEC TABLE 310.60(C)(77)).
2. ###KV PHASE CONDUCTORS SHALL BE: ALUMINUM, 133% EPR LV-105 INSULATION, COPPER TAPE SHIELD, PVC JACKET.
3. GROUND WIRE SHALL BE: 600V, TYPE "XHHW" (WET LOCATION).
4. EACH UNDERGROUND ###LV FEEDER SHALL BE INSTALLED IN AN UNDERGROUND DUCTBANK. EACH DUCTBANK SHALL CONSIST OF SCHEDULE 40 PVC POWER CONDUIT(S).
5. PVC SCHEDULE 40 CONDUIT IS SIZED BASED ON A MINIMUM 6" DUCT AND RECOMMENDED CONDUIT SIZE BY MANUFACTURER FOR 105DEG-C, 133% INSULATION.
6. CONTRACTOR SHALL ADJUST WIRE AND CONDUIT ACCORDINGLY FOR CIRCUIT LENGTH, PULLING CONDITIONS, TYPE OF CONDUIT INSTALLED, AND IF OVERHEAD OR UNDERGROUND.
7. IT IS THE RESPONSIBILITY OF THE INSTALLING CONTRACTOR TO CONDUCT FINAL AMPACITY CALCULATIONS ON ALL UNDERGROUND POWER FEEDERS TO VERIFY THAT THE POWER CABLE SIZES, QUANTITIES, AND DUCTBANK ORIENTATIONS SHOWN ON THE CONSTRUCTION DRAWINGS ARE ADEQUATE TO CARRY THE DESIGN LOAD WHILE LIMITING CABLE TEMPERATURES TO A MAXIMUM OF 75DEG-C FOR 600V CABLES.
8. ALL SOIL TESTING SHALL BE PERFORMED BY A GEOTECHNICAL CONSULTANT. TESTING SHALL FOLLOW THE REQUIREMENTS STATED IN IEEE STD 442, GUIDE FOR THERMAL RESISTIVITY MEASUREMENTS.
9. THE INSTALLING CONTRACTOR SHALL COORDINATE WITH THE GEOTECHNICAL CONSULTANT AND GENERAL CONTRACTOR TO HAVE ALL SOIL/BACKFILL MATERIAL, WHICH WILL BE USED FOR BACKFILLING UNDERGROUND DUCTBANKS, TESTED. SOIL TEST RESULTS SHALL INCLUDE THE FOLLOWING AS A MINIMUM: AMBIENT SOIL TEMPERATURE, MOISTURE CONTENT, SOIL TYPE, THERMAL DRY OUT CHARACTERISTICS CURVE, AND THERMAL RESISTIVITY (RHO) IN DEG-C-CM/W. THE GEOTECHNICAL CONSULTANT SHALL PROVIDE IN WRITING A RECOMMENDED MOISTURE CONSTANT AND THERMAL RESISTIVITY (RHO) TO BE USED IN CALCULATIONS FOR EACH TYPE OF MATERIAL
10. THE INSTALLING CONTRACTOR SHALL COORDINATE WITH THE GEOTECHNICAL CONSULTANT AND GENERAL CONTRACTOR TO HAVE ALL CONCRETE MATERIAL AND/OR FLUIDIZED THERMAL BACKFILL, WHICH WILL BE USED IN DUCTBANK CONSTRUCTION OR BACKFILLING UNDERGROUND CONDUIT/DUCTBANKS, TESTED. SOIL TEST RESULTS SHALL INCLUDE THE FOLLOWING AS A MINIMUM: THERMAL DRY OUT CHARACTERISTICS CURVE AND THERMAL RESISTIVITY (RHO) IN DEG-C-CM/W. THE GEOTECHNICAL CONSULTANT SHALL PROVIDE IN WRITING A RECOMMENDED MOISTURE CONTENT AND THERMAL RESISTIVITY (RHO) TO BE USED IN CALCULATIONS FOR EACH TYPE OF MATERIAL.
11. INSTALLING CONTRACTOR SHALL USE EITHER ETAP OR CYMCAP SOFTWARE TO PERFORM THE CALCULATIONS.
12. INSTALLING CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER IN WRITING IF THE CALCULATIONS INDICATE AN UNDERSIZED DUCTBANK.
13. SUBMIT CALCULATIONS AND ALL TEST REPORTS AS PART OF THE SHOP DRAWING SUBMITTAL PROCESS FOR APPROVAL BY THE ENGINEER. THE CALCULATION SUBMITTAL SHALL BE SEALED AND SIGNED BY A PROFESSIONAL ENGINEER.
14. DESIGN LOAD IS BASED UPON WORST CASE FAIL OVER CONDITIONS.

COPPER FEEDER SCHEDULE-CABLEBUS (C-BUS)

NAME	# OF SETS	PHASE	NEUTRAL	GROUND	AMBIENT CONDITION
4000-3-CU	10	(3) 600 KCMIL		(1) 500 KCMIL	

CABLEBUS FEEDER SCHEDULE NOTES:

1. CABLE BUS SIZING IS BASED ON 75°C OPERATING TEMPERATURE AND ##°F AMBIENT.

ALUMINUM FEEDER SCHEDULE-CABLEBUS (C-BUS)

CODE	# OF SETS	PHASE	NEUTRAL	GROUND	AMBIENT CONDITION

ALUMINUM FEEDER SCHEDULE - ABOVE GRADE CONDUIT (C-AG)

NAME	# OF SETS	PHASE	NEUTRAL	GROUND	CONDUIT
70-4-AL	1	(3) #4 AWG	(1) #4 AWG	(1) #8 AWG	1-1/4"
125-3-AL	1	(3) #1/0 AWG	-	(1) #6 AWG	1-1/2"
225-3-AL	1	(3) 350 KCMIL	-	(1) #2 AWG	2-1/2"
225-4-AL	1	(3) 300 KCMIL	(1) 300 KCMIL	(1) #2 AWG	3"
1600-3-AL	5	(3) 600 KCMIL	-	(1) 350 KCMIL	3 1/2"
4000-4-AL	12	(3) 600 KCMIL	(1) 600 KCMIL	(1) 750 KCMIL	3-1/2"

ALUMINUM MV FEEDER SCHEDULE - BELOW GRADE CONDUIT (C-BG)

CODE	# OF SETS	PHASE	NEUTRAL	GROUND	CONDUIT

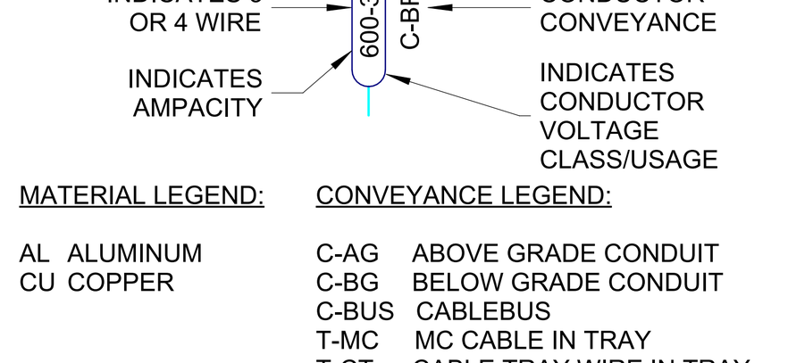
COPPER FEEDER SCHEDULE / ALUMINUM FEEDER SCHEDULE

COPPER FEEDER TAG	# OF SETS	PHASE (CONDUCTORS PER SET)	NEUTRAL (CONDUCTORS PER SET)	EQUIPMENT GROUNDING CONDUCTOR (EGC, NEC 250.122), SUPPLY-SIDE BONDING JUMPER (SSBJ, NEC250.102(C)(1))	EMT (CONDUIT SIZE (MIN))	GROUNDING ELECTRODE CONDUCTOR (GEC, NEC 250.66)	AMPACITY	ALUMINUM FEEDER TAG	# OF SETS	PHASE (CONDUCTORS PER SET)	NEUTRAL (CONDUCTORS PER SET)	EQUIPMENT GROUNDING CONDUCTOR (EGC, NEC 250.122), SUPPLY-SIDE BONDING JUMPER (SSBJ, NEC250.102(C)(1))	EMT (CONDUIT SIZE (MIN))	GROUNDING ELECTRODE CONDUCTOR (GEC, NEC 250.66)
20-3-CU	1	(3) #12	-	(1) #12 EGC	3/4"	-	20A	20-3-AL	-	-	-	-	-	-
20-4-CU	1	(3) #12	(1) #12	(1) #12 EGC	3/4"	-		20-4-AL	-	-	-	-	-	-
T20-4-CU	1	(3) #12	(1) #12	(1) #8 SSBJ	3/4"	(1) #8, 3/4"C		T20-4-AL	-	-	-	-	-	-
30-3-CU	1	(3) #10	-	(1) #10 EGC	3/4"	-	30A	30-3-AL	-	-	-	-	-	-
30-4-CU	1	(3) #10	(1) #10	(1) #10 EGC	3/4"	-		30-4-AL	-	-	-	-	-	-
T30-4-CU	1	(3) #10	(1) #10	(1) #8 SSBJ	3/4"	(1) #8, 3/4"C		T30-4-AL	-	-	-	-	-	-
40-3-CU	1	(3) #8	-	(1) #10 EGC	3/4"	-	40A	40-3-AL	-	-	-	-	-	-
40-4-CU	1	(3) #8	(1) #8	(1) #10 EGC	3/4"	-		40-4-AL	-	-	-	-	-	-
T40-4-CU	1	(3) #8	(1) #8	(1) #8 SSBJ	3/4"	(1) #8, 3/4"C		T40-4-AL	-	-	-	-	-	-
50-3-CU	1	(3) #6	-	(1) #10 EGC	3/4"	-	50A	50-3-AL	-	-	-	-	-	-
50-4-CU	1	(3) #6	(1) #6	(1) #10 EGC	1"	-		50-4-AL	-	-	-	-	-	-
T50-4-CU	1	(3) #6	(1) #6	(1) #8 SSBJ	1"	(1) #8, 3/4"C		T50-4-AL	-	-	-	-	-	-
60-3-CU	1	(3) #4	-	(1) #10 EGC	1"	-	60A	60-3-AL	-	-	-	-	-	-
60-4-CU	1	(3) #4	(1) #4	(1) #10 EGC	1 1/4"	-		60-4-AL	-	-	-	-	-	-
T60-4-CU	1	(3) #4	(1) #4	(1) #8 SSBJ	1 1/4"	(1) #8, 3/4"C		T60-4-AL	-	-	-	-	-	-
70-3-CU	1	(3) #4	-	(1) #8 EGC	1"	-	70A	70-3-AL	-	-	-	-	-	-
70-4-CU	1	(3) #4	(1) #4	(1) #8 EGC	1 1/4"	-		70-4-AL	-	-	-	-	-	-
T70-4-CU	1	(3) #4	(1) #4	(1) #8 SSBJ	1 1/4"	(1) #8, 3/4"C		T70-4-AL	-	-	-	-	-	-
80-3-CU	1	(3) #3	-	(1) #8 EGC	1"	-	80A	80-3-AL	-	-	-	-	-	-
80-4-CU	1	(3) #3	(1) #3	(1) #8 EGC	1 1/4"	-		80-4-AL	-	-	-	-	-	-
90-3-CU	1	(3) #2	-	(1) #8 EGC	1 1/4"	-	90A	90-3-AL	-	-	-	-	-	-
90-4-CU	1	(3) #2	(1) #2	(1) #8 EGC	1 1/4"	-		90-4-AL	-	-	-	-	-	-
100-3-CU	1	(3) #1	-	(1) #8 EGC	1 1/4"	-	100A	100-3-AL	-	-	-	-	-	-
100-4-CU	1	(3) #1	(1) #1	(1) #8 EGC	1 1/2"	-		100-4-AL	-	-	-	-	-	-
T100-4-CU	1	(3) #1	(1) #1	(1) #6 SSBJ	1 1/2"	(1) #6, 3/4"C		T100-4-AL	-	-	-	-	-	-
110-3-CU	1	(3) #2	-	(1) #6 EGC	1 1/4"	-	110A	110-3-AL	-	-	-	-	-	-
110-4-CU	1	(3) #2	(1) #2	(1) #6 EGC	1 1/4"	-		110-4-AL	-	-	-	-	-	-
T110-4-CU	1	(3) #2	(1) #2	(1) #8 SSBJ	1 1/4"	(1) #8, 3/4"C		T110-4-AL	-	-	-	-	-	-
125-3-CU	1	(3) #1	-	(1) #6 EGC	1 1/4"	-	125A	125-3-AL	-	-	-	-	-	-
125-4-CU	1	(3) #1	(1) #1	(1) #6 EGC	1 1/2"	-		125-4-AL	-	-	-	-	-	-
T125-4-CU	1	(3) #1	(1) #1	(1) #6 SSBJ	1 1/2"	(1) #6, 3/4"C		T125-4-AL	-	-	-	-	-	-
150-3-CU	1	(3) #1/0	-	(1) #6 EGC	1 1/2"	-	150A	150-3-AL	-	-	-	-	-	-
150-4-CU	1	(3) #1/0	(1) #1/0	(1) #6 EGC	1 1/2"	-		150-4-AL	-	-	-	-	-	-
T150-4-CU	1	(3) #1/0	(1) #1/0	(1) #6 SSBJ	1 1/2"	(1) #6, 3/4"C		T150-4-AL	-	-	-	-	-	-
175-3-CU	1	(3) #2/0	-	(1) #6 EGC	1 1/2"	-	175A	175-3-AL	-	-	-	-	-	-
175-4-CU	1	(3) #2/0	(1) #2/0	(1) #6 EGC	2"	-		175-4-AL	-	-	-	-	-	-
T175-4-CU	1	(3) #2/0	(1) #2/0	(1) #4 SSBJ	2"	(1) #4, 3/4"C		T175-4-AL	-	-	-	-	-	-
200-3-CU	1	(3) #3/0	-	(1) #6 EGC	2"	-	200A	200-3-AL	1	(3) 250 KCMIL	-	(1) #4 EGC	2"	-
200-4-CU	1	(3) #3/0	(1) #3/0	(1) #6 EGC	2"	-		200-4-AL	1	(3) 250 KCMIL	(1) 250 KCMIL	(1) #4 EGC	2 1/2"	-
T200-4-CU	1	(3) #3/0	(1) #3/0	(1) #4 SSBJ	2"	(1) #4, 3/4"C		T200-4-AL	1	(3) 250 KCMIL	(1) 250 KCMIL	(1) #2 SSBJ	2 1/2"	(1) #2, 3/4"C
225-3-CU	1	(3) #4/0	-	(1) #4 EGC	2"	-	225A	225-3-AL	1	(3) 300 KCMIL	-	(1) #2 EGC	2"	-
225-4-CU	1	(3) #4/0	(1) #4/0	(1) #4 EGC	2 1/2"	-		225-4-AL	1	(3) 300 KCMIL	(1) 300 KCMIL	(1) #2 EGC	2 1/2"	-
T225-4-CU	1	(3) #4/0	(1) #4/0	(1) #2 SSBJ	2 1/2"	(1) #2, 3/4"C		T225-4-AL	1	(3) 300 KCMIL	(1) 300 KCMIL	(1) #1/0 SSBJ	2 1/2"	(1) #1/0, 3/4"C
250-3-CU	1	(3) 250 KCMIL	-	(1) #4 EGC	2"	-	250A	250-3-AL	1	(3) 350 KCMIL	-	(1) #2 EGC	2 1/2"	-
250-4-CU	1	(3) 250 KCMIL	(1) 250 KCMIL	(1) #4 EGC	2 1/2"	-		250-4-AL	1	(3) 350 KCMIL	(1) 350 KCMIL	(1) #2 EGC	2 1/2"	-
300-3-CU	1	(3) 350 KCMIL	-	(1) #4 EGC	2 1/2"	-	300A	300-3-AL	1	(3) 500 KCMIL	-	(1) #2 EGC	2 1/2"	-
300-4-CU	1	(3) 350 KCMIL	(1) 350 KCMIL	(1) #4 EGC	2 1/2"	-		300-4-AL	1	(3) 500 KCMIL	(1) 500 KCMIL	(1) #2 EGC	3"	-
T300-4-CU	1	(3) 350 KCMIL	(1) 350 KCMIL	(1) #2 SSBJ	2 1/2"	(1) #1/0, 3/4"C		T300-4-AL	1	(3) 500 KCMIL	(1) 500 KCMIL	(1) #1/0 SSBJ	3"	(1) #1/0, 3/4"C
350-3-CU	1	(3) 500 KCMIL	-	(1) #3 EGC	2 1/2"	-	350A	350-3-AL	2	(3) #4/0	-	(1) #1 EGC	2"	-
350-4-CU	1	(3) 500 KCMIL	(1) 500 KCMIL	(1) #3 EGC	3"	-		350-4-AL	2	(3) #4/0	(1) #4/0	(1) #1 EGC	2"	-
T350-4-CU	1	(3) 500 KCMIL	(1) 500 KCMIL	(1) #1/0 SSBJ	3"	(1) #1/0, 3/4"C		T350-4-AL	2	(3) #4/0	(1) #4/0	(1) #2 SSBJ	2"	(1) #1/0, 3/4"C
400-3-CU	2	(3) #3/0	-	(1) #3 EGC	2"	-	400A	400-3-AL	2	(3) 250 KCMIL	-	(1) #1 EGC	2"	-
400-4-CU	2	(3) #3/0	(1) #3/0	(1) #3 EGC	2"	-		400-4-AL	2	(3) 250 KCMIL	(1) 250 KCMIL	(1) #1 EGC	2 1/2"	-
T400-4-CU	2	(3) #3/0	(1) #3/0	(1) #4 SSBJ	2"	(1) #2, 1/2"C		T400-4-AL	2	(3) 250 KCMIL	(1) 250 KCMIL	(1) #2 SSBJ	2 1/2"	(1) #1/0, 3/4"C
450-3-CU	2	(3) #4/0	-	(1) #2 EGC	2"	-	450A	450-3-AL	2	(3) 300 KCMIL	-	(1) #1/0 EGC	2 1/2"	-
450-4-CU	2	(3) #4/0	(1) #4/0	(1) #2 EGC	2 1/2"	-		450-4-AL	2	(3) 300 KCMIL	(1) 300 KCMIL	(1) #1/0 EGC	2 1/2"	-
500-3-CU	2	(3) 250 KCMIL	-	(1) #2 EGC	2"	-	500A	500-3-AL	2	(3) 350 KCMIL	-	(1) #1/0 EGC	2 1/2"	-
500-4-CU	2	(3) 250 KCMIL	(1) 250 KCMIL	(1) #2 EGC	2 1/2"	-		500-4-AL	2	(3) 350 KCMIL	(1) 350 KCMIL	(1) #1/0 EGC	2 1/2"	-
600-3-CU	2	(3) 350 KCMIL	-	(1) #1 EGC	2 1/2"	-	600A	600-3-AL	2	(3) 500 KCMIL	-	(1) #2/0 EGC	2 1/2"	-
600-4-CU	2	(3) 350 KCMIL	(1) 350 KCMIL	(1) #1 EGC	2 1/2"	-		600-4-AL	2	(3) 500 KCMIL	(1) 500 KCMIL	(1) #2/0 EGC	3"	-
T600-4-CU	2	(3) 350 KCMIL	(1) 350 KCMIL	(1) #2 SSBJ	2 1/2"	(1) #2/0, 3/4"C		T600-4-AL	2	(3) 500 KCMIL	(1) 500 KCMIL	(1) #1/0 SSBJ	3"	(1) #4/0, 3/4"C
700-3-CU	2	(3) 500 KCMIL	-	(1) #1/0 EGC	2 1/2"	-	700A	700-3-AL	3	(3) 350 KCMIL	-	(1) #3/0 EGC	2 1/2"	-
700-4-CU	2	(3) 500 KCMIL	(1) 500 KCMIL	(1) #1/0 EGC	3"	-		700-4-AL	3	(3) 350 KCMIL	(1) 350 KCMIL	(1) #3/0 EGC	2 1/2"	-
800-3-CU	2	(3) 600 KCMIL	-	(1) #1/0 EGC	3"	-	800A	800-3-AL	3	(3) 400 KCMIL	-	(1) #3/0 EGC	2 1/2"	-
800-4-CU	2	(3) 600 KCMIL	(1) 600 KCMIL	(1) #1/0 EGC	3 1/2"	-		800-4-AL	3	(3) 400 KCMIL	(1) 400 KCMIL	(1) #3/0 EGC	2 1/2"	-
1000-3-CU	3	(3) 400 KCMIL	-	(1) #2/0 EGC	2 1/2"	-	1000A	1000-3-AL	3	(3) 600 KCMIL	-	(1) #4/0 EGC	2 1/2"	-
1000-4-CU	3	(3) 400 KCMIL	(1) 400 KCMIL	(1) #2/0 EGC	3"	-		1000-4-AL	3	(3) 600 KCMIL	(1) 600 KCMIL	(1) #4/0 EGC	3"	-
1200-3-CU	3	(3) 600 KCMIL	-	(1) #3/0 EGC	3"	-	1200A	1200-3-AL	4	(3) 500 KCMIL	-	(1) 250 KCMIL EGC	2 1/2"	-
1200-4-CU	3	(3) 600 KCMIL	(1) 600 KCMIL	(1) #3/0 EGC	3 1/2"	-		1200-4-AL	4	(3) 500 KCMIL	(1) 500 KCMIL	(1) 250 KCMIL EGC	3"	-
1600-3-CU	4	(3) 600 KCMIL	-	(1) #4/0 EGC	3"	-	1600A	1600-3-AL	5	(3) 600 KCMIL	-	(1) 350 KCMIL EGC	3"	-
1600-4-CU	4	(3) 600 KCMIL	(1) 600 KCMIL	(1) #4/0 EGC	3 1/2"	-		1600-4-AL	5	(3) 600 KCMIL	(1) 600 KCMIL	(1) 350 KCMIL EGC	3 1/2"	-
2000-3-CU	5	(3) 600 KCMIL	-	(1) 250 KCMIL EGC	3"	-	2000A	2000-3-AL	6	(3) 600 KCMIL	-	(1) 400 KCMIL EGC	3"	-
2000-4-CU	5	(3) 600 KCMIL	(1) 600 KCMIL	(1) 250 KCMIL EGC	3 1/2"	-		2000-4-AL	6	(3) 600 KCMIL	(1) 600 KCMIL	(1) 400 KCMIL EGC	3 1/2"	-
2500-3-CU	6	(3) 600 KCMIL	-	(1) 350 KCMIL EGC	3"	-	2500A	2500-3-AL	8	(3) 600 KCMIL	-	(1) 600 KCMIL EGC	3"	-
2500-4-CU	6	(3) 600 KCMIL	(1) 600 KCMIL	(1) 350 KCMIL EGC	3 1/2"	-		2500-4-AL	8	(3) 600 KCMIL	(1) 600 KCMIL	(1) 600 KCMIL EGC	3 1/2"	-
3000-3-CU	8	(3) 500 KCMIL	-	(1) 400 KCMIL EGC	3"	-	3000A	3000-3-AL	9	(3) 600 KCMIL	-	(1) 600 KCMIL EGC	3"	-
3000-4-CU	8	(3) 500 KCMIL	(1) 500 KCMIL	(1) 400 KCMIL EGC	3"	-		3000-4-AL	9	(3) 600 KCMIL	(1) 600 KCMIL	(1) 600 KCMIL EGC	3 1/2"	-
4000-3-CU	10	(3) 600 KCMIL	-	(1) 500 KCMIL EGC	3"	-	4000A	4000-3-AL	12	(3) 600 KCMIL	-	(1) 600 KCMIL EGC	3"	-
4000-4-CU	10	(3) 600 KCMIL	(1) 600 KCMIL	(1) 500 KCMIL EGC	3 1/2"	-		4000-4-AL	12	(3) 600 KCMIL	(1) 600 KCMIL	(1) 600 KCMIL EGC	3 1/2"	-
5000-3-CU	12	(3) 600 KCMIL	-	(1) 600 KCMIL EGC	3"	-	5000A	5000-3-AL	15	(3) 600 KCMIL	-	(1) 600 KCMIL EGC	3"	-
5000-4-CU	12	(3) 600 KCMIL	(1) 600 KCMIL	(1) 600 KCMIL EGC	3 1/2"	-		5000-4-AL	15	(3) 600 KCMIL	(1) 600 KCMIL	(1) 600 KCMIL EGC	3 1/2"	-

FEEDER SCHEDULES NOTES:

1. COPPER OR ALUMINUM CONDUCTOR AMPACITY BASED ON APPLICABLE CODES WITH LOCAL AMENDMENTS (BASIS 20 ## NEC TABLE 310.16) 60ºC FOR <=100A & 75ºC FOR >100A.
2. CONTRACTOR MAY SUBSTITUTE THE SCHEDULED FEEDER WITH AN ALTERNATE SELECTION OF EQUAL OR GREATER AMPACITY WITH THE PRIOR WRITTEN APPROVAL OF THE ENGINEER.
3. COPPER OR ALUMINUM EQUIPMENT GROUND CONDUCTOR SIZED BASED ON APPLICABLE CODES WITH LOCAL AMENDMENTS (BASIS 20 ## NEC TABLE 250.122). GROUND CONDUCTOR MATERIAL IS TO MATCH PHASE CONDUCTOR.
4. CONDUIT SIZES INDICATED ARE NEC MINIMUM. CONTRACTOR SHALL INCREASE CONDUIT SIZE AS REQUIRED BASED ON ACTUAL INSTALLATION CONDITIONS, INCLUDING LENGTHS OF CIRCUIT, NUMBER OF OFFSETS AND ELBOWS AND CABLE PULLING TENSION LIMITATIONS. FOR ALTERNATE CONDUIT TYPES, CONTRACTOR MUST OBTAIN WRITTEN APPROVAL OF THE ENGINEER.
5. CONTRACTOR SHALL SIZE THE SUPPLY SIDE BONDING JUMPER FOR ALL TRANSFORMER SECONDARY BASED ON APPLICABLE CODES WITH LOCAL AMENDMENTS (BASIS 20 ## NEC TABLE 250.102(C)(1)). CONTACT ENGINEER FOR CLARIFICATIONS.
6. ALUMINUM CONDUCTORS ARE TO BE UTILIZED ON FEEDERS 200 AMPS AND LARGER, UNLESS OTHERWISE NOTED.
7. WHERE APPLICABLE, CONDUCTORS ARE TO ADHERE TO REQUIREMENTS OF NEC SECTION 300.5(B), UNDERGROUND INSTALLATIONS IN WET LOCATIONS.
8. THE MAXIMUM VOLTAGE DROP ON ANY CIRCUIT SHALL NOT EXCEED 5 PERCENT OF THE CIRCUIT SUPPLY VOLTAGE WHEN MEASURED AT THE LOAD TERMINATION OF THE CIRCUIT.
9. CONDUIT SIZING BASED ON EMT STANDARDS. FOR ALL OTHER CONDUIT TYPES, REFER TO NEC CHAPTHER 9, TABLE 4.
10. TERMINATION AND WIRE SIZING SHALL BE BASED ON THE 60 DEGREE COLUMN FOR 100A OR LESS PER NEC 110.14C.

FEEDER NAMING SCHEME



MATERIAL LEGEND:

AL ALUMINUM
CU COPPER

CONVEYANCE LEGEND:

C-AG ABOVE GRADE CONDUIT
C-BG BELOW GRADE CONDUIT
C-BUS CABLEBUS
T-MC MC CABLE IN TRAY
T-CT CABLE TRAY WIRE IN TRAY

CLASS/USAGE LEGEND:

[BLANK] 600V, TYP. LV DISTRIBUTION
T 600V, FOR LV XFMR
G 600V, FOR LV GENERATOR
MV 35KV, MV DISTRIBUTION

ISSUES

1	11/12/2025	CONCEPTUAL DESIGN
2	12/12/2025	SCHEMATIC DESIGN
3	12/17/2025	STEEL MILL ORDER
4	1/23/2026	DESIGN DEVELOPMENT

REVISIONS

kW Mission Critical Engineering
Contact: David Adams Phone: 703.926.0715
Engineer: Matthew Fagert
License #: 123456 Exp. Date: 00/00/0000

NOT FOR CONSTRUCTION

Date: 00/00/0000

SERVERFARM

Clarksville, AR

L	K	J	
G	E	C	A
H	F	D	B
P	N	M	

ELECTRICAL FEEDER SCHEDULES

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1/23/2026 3:54:29 PM E01-50 ELECTRICAL FEEDER SCHEDULES