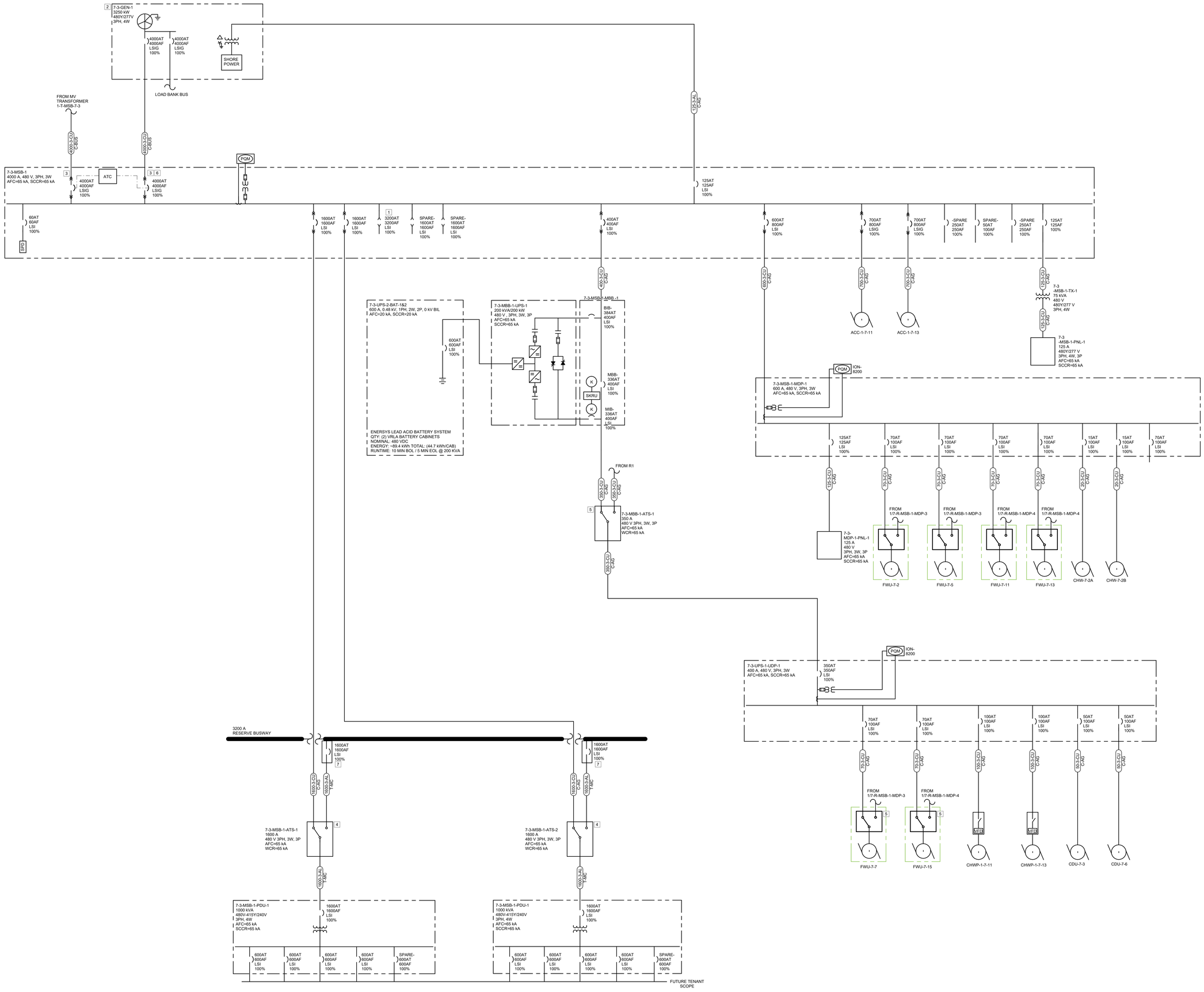

GENERAL NOTES

1. REFER TO E00-01 FOR LINE TYPE LEGEND.
2. REFER TO THE E02-00 SERIES DRAWINGS FOR EQUIPMENT LOCATIONS.
3. CIRCUIT BREAKERS ARE 3P, 100% RATED WITH LSI TRIP UNITS UNLESS NOTED OTHERWISE.
4. EQUIPMENT IN PRE-PURCHASE MATRIX IS FURNISHED BY THE OWNER AND INSTALLED BY THE CONTRACTOR. MATERIALS (CABLE, RACEWAY, ETC.) REQUIRED FOR INSTALLATION AND CONNECTION OF PRE-PURCHASED EQUIPMENT IS BY CONTRACTOR UNLESS OTHERWISE NOTED. ANY EQUIPMENT NOT IN THE MATRIX AND NOT SPECIFICALLY CALLED OUT AS BEING OWNER FURNISHED SHALL BE FURNISHED AND INSTALLED COMPLETE BY THE CONTRACTOR.
5. THE ROUTING OF THIS CABLE SHALL BE NEAT AND A PLAN SHALL BE PRESENTED TO THE OWNER AND ENGINEER DETAILING PROPOSED ROUTING FOR APPROVAL PRIOR TO BEGINNING THIS WORK.
6. ENGINEER SHALL PROVIDE ELECTRICAL CONTRACTOR A SPREADSHEET PRIOR TO COMMISSIONING WITH A LIST OF ALL THE CIRCUIT BREAKER TYPES AND PLUGS USED TO CONSTRUCT THE MODEL FOR THE COORDINATION STUDY. ELECTRICAL CONTRACTOR SHALL TAKE SPREADSHEET INTO THE FIELD AND VERIFY EACH BREAKER IN SHEET MATCHES WHAT IS INSTALLED. PROVIDE LIST OF DISCREPANCIES, IF ANY, TO THE ENGINEER WITHIN 3 WORKING DAYS OF RECEIPT OF DOCUMENT.
7. ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR PROVIDING A COMPLETE SET OF AS-BUILT FEEDER CONFIGURATIONS AND LENGTHS TO THE ENGINEER FOR USE IN THE SHORT CIRCUIT AND ARC-FLASH STUDIES. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
8. REFER TO OWNER-FURNISHED EQUIPMENT SCHEDULE AND FEEDER SCHEDULES FOR ADDITIONAL INFORMATION.
9. SECONDARY TAP CONDUCTORS FOR OUTSIDE TRANSFORMERS ARE COMPLIANT WITH NEC 240.21(C)(2), INSTALLED IN ACCORDANCE WITH 230.6
10. ALL POWER AND GROUNDING CONNECTIONS SHALL USE NEMA 2-HOLE, LONG BARREL COMPRESSION TYPE CONNECTIONS WITH NO OX COMPOUND, UNLESS OTHERWISE INDICATED. MARK LUG AND BUS WITH PERMANENT MARKER AFTER INSTALLATION AND VERIFICATION OF PROPER TORQUE TO INDICATE CORRECT BOLT TORQUE LOCATION. BOLTS, FLAT WASHERS, AND BELLEVILLE WASHERS SHALL BE GRADE 5 WITH A MINIMUM OF THREE (3) THREADS SHOWING AFTER TORQUES IS COMPLETE. SEE DETAILS FOR GROUNDING TERMINATIONS AND POWER TERMINATIONS.
11. ALL CONTROL WIRING TERMINATIONS SHALL USE RING TYPE OR WAGO COMPRESSION CONNECTORS. ALL WIRING SHALL BE LABELED.
12. PROVIDE GLAND TYPE CONNECTORS FOR ALL BATTERY CABLES PUNCHING DOWN ON THE TOP OF UPS MODULES AND BATTERY CABINETS.
13. RESTRAIN ALL FEEDERS 800A AND ABOVE TO PREVENT CABLE MOVEMENT DURING EXTERNAL FAULT CONDITIONS AT ALL SWITCHBOARDS, UPS, BATTERY CABINETS AND CABLE TRAYS WITH BATTERY CABLES. PROVIDE AS RECOMMENDED BY MANUFACTURER FOR THE AVAILABLE FAULT CURRENT. TYPICALLY, PROVIDE THE FOLLOWING

    A. WRAP LINE CABLES TOGETHER AT 6" AND 12" FROM TERMINALS WITH 5 WRAPS OF 3/8" NYLON ROPE OR EQUIVALENT (TENSILE STRENGTH OF 2000LBS)

    B. SUPPORT THE REMAINDER OF THE CABLE WITH FIVE WRAPS EVERY 6" OR ONE WRAP EVERY 1"
14. COORDINATION STUDY TO BE COMPLETED ONCE FINAL EQUIPMENT SUBMITTALS HAVE BEEN RECEIVED AND DEVICES VERIFIED ON SITE. CONTRACTOR TO PROVIDE FINAL FEEDER LENGTHS TO ENGINEER FOR COORDINATION STUDY AND ARC FLASH ANALYSIS.

KEYED NOTES

1. FUTURE PROVISION FOR MBB BREAKER
2. ONLY ON BLOCKS FOR DATAHALLS 1,4,7 AND 10
3. BREAKER TOP OR BOTTOM FED
4. FOR ALL ATS SERVING CRITICAL IT LOADS ON EACH 7-TO-MAKE-6 POWER PLANT, PROVIDE TRANSFER INHIBIT CONTROLS SO THAT NO MORE THAN ONE (2) 1600A CRITICAL IT ATS MAY TRANSFER TO THE RESERVE BLOCK AT ANY TIME; ADDITIONAL CRITICAL IT ATS TRANSFERS SHALL BE INHIBITED UNTIL THE ACTIVE TRANSFER OR RETRANSFER IS COMPLETE
5. FOR ALL MUPS LOAD ATS ON EACH 7-TO-MAKE-6 POWER PLANT, PROVIDE TRANSFER INHIBIT CONTROLS SO THAT NO MORE THAN ONE (1) MUPS ATS MAY TRANSFER TO THE RESERVE BLOCK AT ANY TIME; ADDITIONAL MUPS ATS TRANSFERS SHALL BE INHIBITED UNTIL THE ACTIVE TRANSFER OR RETRANSFER IS COMPLETE
6. PREPARED SPACE ON ALL BLOCKS. ONLY PROVIDE BREAKER ON BLOCKS FOR DATAHALLS 1,4,7 AND 10
7. ELECTRICAL CONTRACTOR SHALL PROVIDE (3) FAULT INDICATORS AT LOCATION INDICATED. FAULT INDICATORS SHALL BE COMPATIBLE WITH THE CONDUCTOR SIZE AT THE INPUT SWITCHES OF EACH TRANSFORMER. FAULT INDICATORS SHALL BE COOPER POWER SERIES TYPE S.T.A.R CURRENT RESET FAULTED CIRCUIT INDICATORS, NO EXCEPTIONS.

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

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

FEEDER NAMING SCHEME

INDICATES CONDUCTOR MATERIAL
INDICATES 3 OR 4 WIRE
INDICATES AMPACITY
CONDUCTOR CONVEYANCE
INDICATES CONDUCTOR VOLTAGE CLASS/USAGE

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

CRITICAL POWER BLOCK ONE-LINE DIAGRAM 7-3

JOB US0049903.5614
SHEET

E01-07C

1/23/2026 3:53:47 PM E01-07C CRITICAL POWER BLOCK ONE-LINE DIAGRAM 7-3