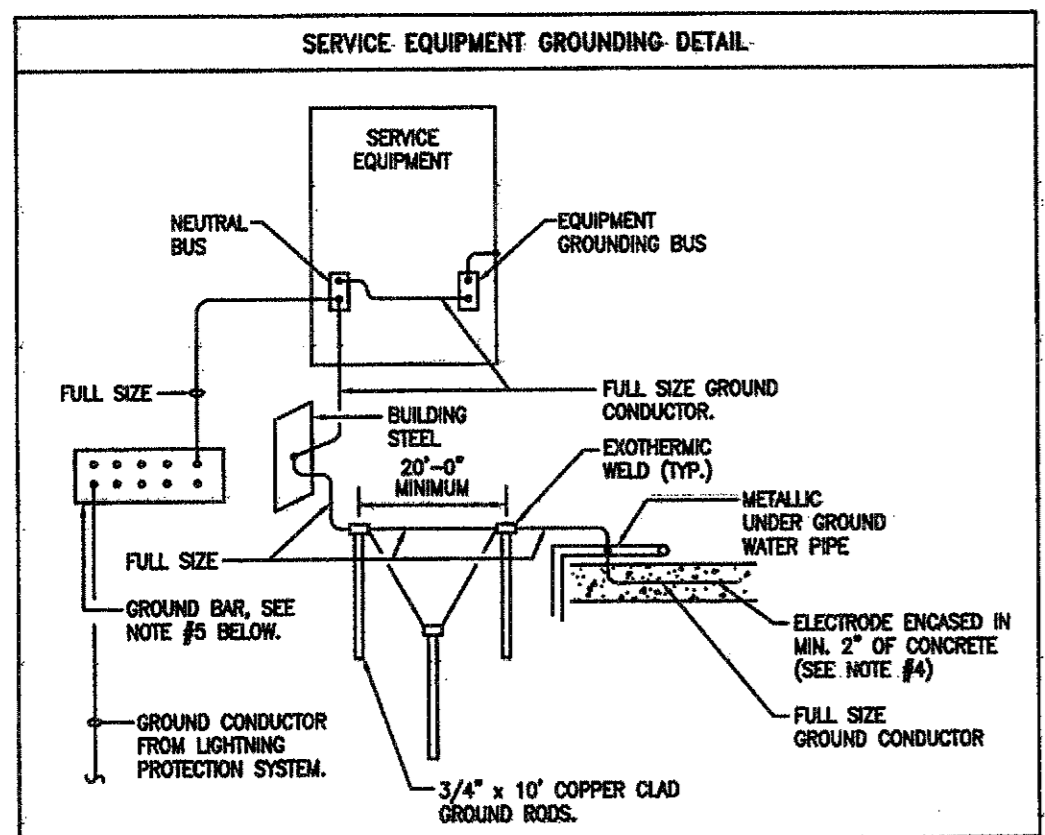
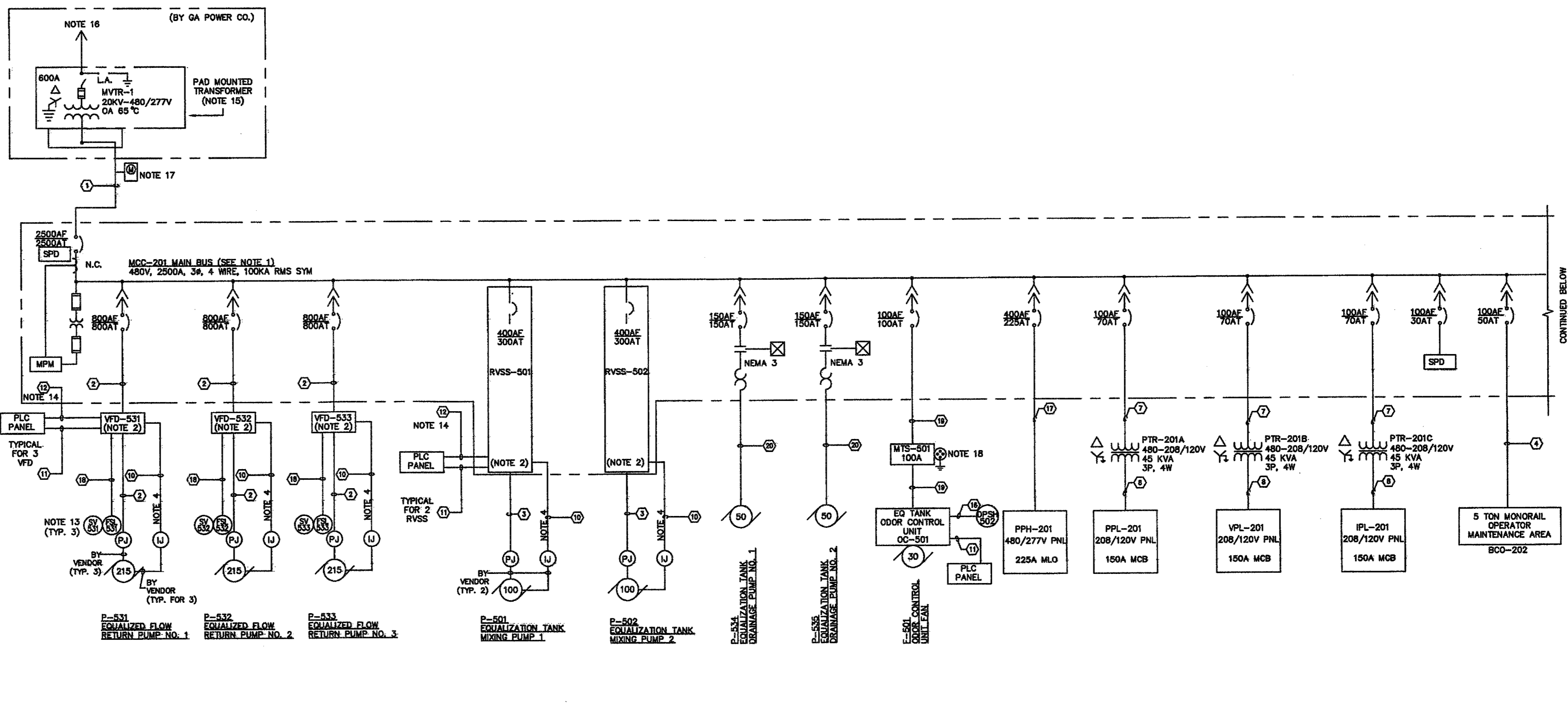


NO.	TRANSFORMER SCHEDULE
PTR-201A	45 KVA, DRY-TYPE, NEMA 1
PTR-201B	45 KVA, DRY-TYPE, NEMA 1
PTR-201C	45 KVA, DRY-TYPE, NEMA 1

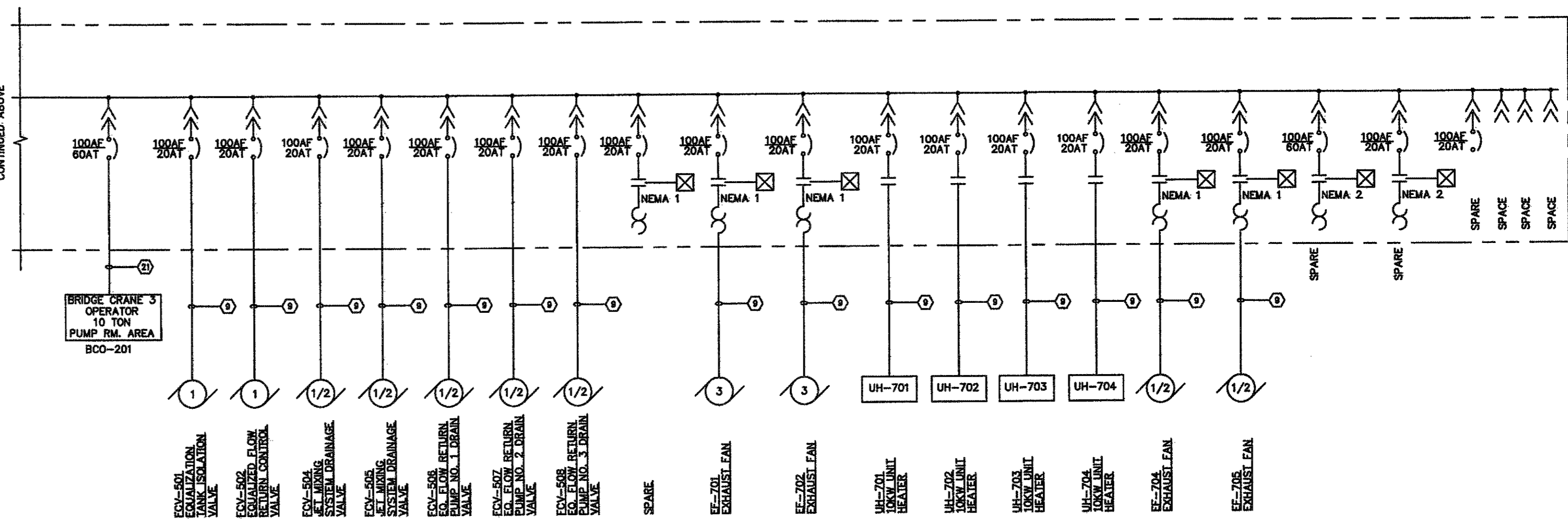
CONDUCTORS/CONDUITS SCHEDULE	
①	6 SETS 4 #750kcmil, 4" C.
②	2 SETS 3 #500kcmil, 1#1/0 G., 3" C.
③	3#350kcmil, 1#2 G, 3" C
④	3#8, 1#10 G, 1" C
⑤	3 #4/0, 1#4 G, 2" C
⑥	3 #4, 1 #8 G, 1" C.
⑦	3 #4, 1 #8 G, 1 1/2" C.
⑧	4 #1/0, 1 #6 G, 1 1/2" C.
⑨	3 #12, 1 #12 G, 1" C.
⑩	12/C #18 SHIELDED IN 1" C.
⑪	12 #14 IN 1" C
⑫	2-2/C #18SH IN 1"ORC. (SEE NOTE 14)
⑬	2 #14, 3/4" C
⑭	6 #14, 3/4" C
⑮	2/C #16SH, 1"ORC.
⑯	3/C #14, 1"ORC.
⑰	3 #4/0, 1 #4G, 2 1/2" C.
⑱	4#14 - 3/4" C.
⑲	3 #1, 1 #6G, 1 1/2" C.
⑳	3 #1/0, 1 #6G, 1 1/2" C.
㉑	3 #4, 1 #10G, 1 1/4" C.
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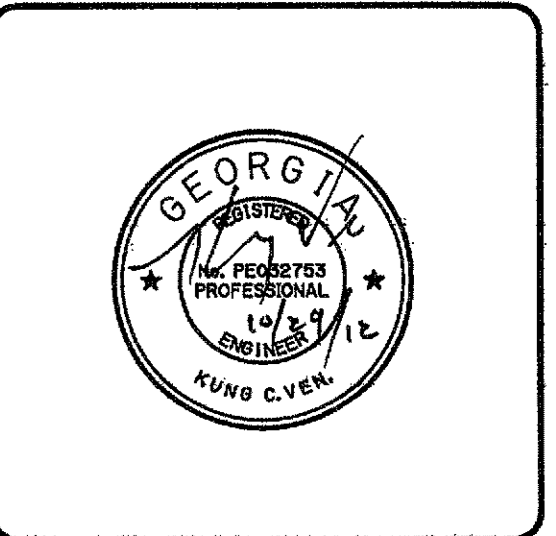
- NOTES:**
- FULL SIZE GROUND MEANS THAT GROUND CONDUCTOR SIZE SHALL BE AS SHOWN ON SERVICE EQUIPMENT AT THE SINGLE LINE DIAGRAM.
 - AFTER GROUNDING SYSTEM IS INSTALLED, GROUND RESISTANCE SHALL BE MEASURED TO ASSURE THAT GROUND VALUE OF 1 OHM MAXIMUM RESISTANCE IS ACHIEVED. IF NOT, ADDITIONAL GROUNDING SHALL BE PROVIDED TO MEET THE SPECIFIED VALUE.
 - ALL CONNECTIONS TO GROUND RODS SHALL BE EXOTHERMIC WELD CONNECTIONS.
 - GROUND CONDUCTOR SHALL BE LOCATED WITHIN OR NEAR BOTTOM OF CONCRETE FOUNDATION OR FOOTING THAT IS IN DIRECT CONTACT WITH THE EARTH AND SHALL CONSIST OF AT LEAST 20 FEET OF ONE OR MORE STEEL REINFORCING BARS OR RODS OF NOT LESS THAN 1/2 INCH DIAMETER OR AT LEAST 20'-0" OF BARE COPPER CONDUCTOR.
 - COPPER GROUND BAR 6" H. x 24" L. x 1/4" THICK WITH A MINIMUM OF 12 HOLES AND CU/AL LUGS FOR CONDUCTORS UP TO #4/D STRANDED. GROUND BAR SHALL BE MOUNTED ON STANDOFFS AT 18" A.F.F. GROUND BAR SHALL BE FURNISHED, INSTALLED AND WIRED BY THE ELECTRICAL CONTRACTOR.

NOTES:

- MCC-201 SHALL BE SERVICE ENTRANCE RATED, BOTTOM ENTRY.
- POWER AND SIGNAL CONDUCTORS FOR VFD'S AND RVSS'S SHALL BE IN SEPARATE CONDUITS AND SEPARATED WITHIN THE CABINETS TO ENSURE NO ELECTRONIC INTERFERENCE.
- INTERFACE TO POM SYSTEM IS REQUIRED.
- CONTROL WIRING SHALL BE FURNISHED AS REQUIRED PER MANUFACTURER'S DRAWINGS.
- SAFETY SWITCHES AT MOTOR LOADS ARE NOT PROVIDED ASSUMING THAT "LOCKOUT TAGOUT" PROCEDURES WILL BE IMPLEMENTED AS A REQUIREMENT BY PLANT OPERATION AND MAINTENANCE.
- ALL BREAKERS SHALL HAVE A MINIMUM OF 100KAIC.
- ALL VFD'S, CONTROL PANELS AND OTHER MOTOR CONTROL APPARATUS LOCATED REMOTELY FROM THE MOTOR CONTROL CENTER SHALL HAVE ITS OWN DISCONNECTING MEANS.
- PROVIDE INTEGRAL SOLID STATE MOTOR WINDING HEATER CONTROL OPTION (UTILIZING MOTOR PHASE CONDUCTORS AS MOTOR SPACE HEATER).
- NOT USED.
- PROVIDE EMPTY CONDUIT STUB-UP, PULL STRING, CAP, AND MARK FOR FUTURE FOR ALL FUTURE EQUIPMENT.
- NOT USED.
- LOCAL CONTROL STATIONS AND LOCAL CONTROL PANELS SHALL BE WIRED TO NEAREST LOCAL REMOTE INPUT/OUTPUT (RIO) CABINET.
- NOT USED.
- WIRING FOR VFD'S AND RVSS'S FOR EACH PUMP SHALL HAVE FEED BACK AND CONTROL SIGNALS WIRED BACK TO THE PLC PANEL IN ADDITION TO THE NORMAL START/STOP AND STATUS CONTACTS SHOWN ON THE MOTOR ELEMENTARIES.
- MEDIUM VOLTAGE TRANSFORMER SHALL BE SIZED AND PROVIDED BY GEORGIA POWER COMPANY (GAPOC). CONTRACTOR SHALL COORDINATE ALL WORK WITH GAPOC AND PROVIDE CONDUITS AND CONDUCTORS FOR SERVICE LATERAL FROM MCC-201 TO THE SECONDARY SIDE OF THIS MEDIUM VOLTAGE TRANSFORMER.
- GAPOC WILL PROVIDE THE MAIN SERVICE FROM A NEARBY 20KV OVERHEAD CIRCUIT.
- PROVIDE C.T.'S, METER, AND ENCLOSURE ADJACENT TO TRANSFORMER UNLESS PROVIDED BY UTILITY. COORDINATE FINAL WORK WITH UTILITY.
- MANUAL TRANSFER SWITCH MTS-501 WITH GROUNDED QUICK DISCONNECT FOR PORTABLE GENERATOR.



SINGLE LINE DIAGRAM



PEACHTREE CREEK SOUTH FORK
RELIEF STORAGE AND PUMPING STATION

CITY OF ATLANTA
DEPARTMENT OF WATERSHED MANAGEMENT

REV	DATE	REVISION DESCRIPTION
0	10/28/12	100 PERCENT BID PACKAGE

THIS LINE IS ONE INCH LONG WHEN PLOTTED FULL SCALE

THIS DRAWING MUST BE USED IN CONJUNCTION WITH THE APPLICABLE OR GOVERNING TECHNICAL SPECIFICATIONS AND OTHER CONTRACT DOCUMENTS.

PROJECT NO: FC-6260
DATE: OCTOBER 2012

RESP PROF: KCV
DESIGNER: AWP
CHECKER: WFR

SHEET TITLE
ELECTRICAL
07-JET MIXING PUMP STATION
SINGLE LINE DIAGRAM

SHEET NO. E7-101 REV. 0