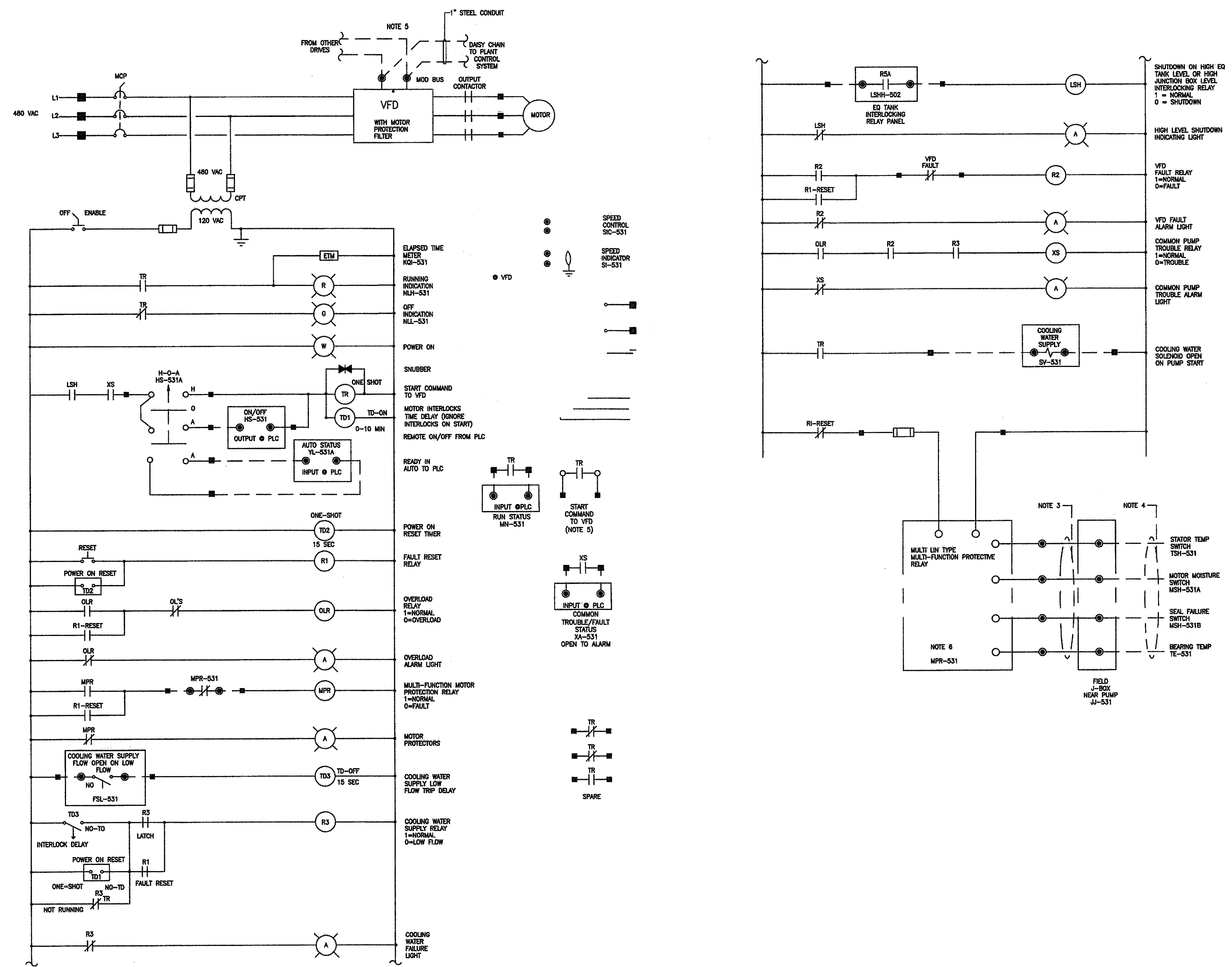


F  
E  
D  
C  
B  
A



EQUALIZED WASTEWATER FLOW RETURN PUMPS (P-531, 532, 533) - VARIABLE SPEED

THE ELEMENTARY CONTROL DIAGRAM IS SHOWN FOR P-531. ALL DEVICES ARE LOCATED IN RVSS UNLESS NOTED OTHERWISE. EXTERNAL INTERFACES AND WIRING BETWEEN LOCAL CONTROL PANELS, PLC, AND/OR OTHER DEVICES HAVE BEEN SHOWN ONLY. THE INTERNAL INTERFACES AND WIRING INSIDE THE PANELS, PLC, ETC., ARE NOT SHOWN. THE CONTROL DIAGRAM IS TYPICAL AND APPLICABLE TO THE EQUIPMENT INDICATED IN THE TABLE BELOW.

WASTE WATER PUMP TAG NO.	RVSS TAG NO.	H-O-A VFD	REMOTE ON/OFF AT PLC	RUN STATUS	READY IN AUTO	FAULT STATUS	MOTOR PROTECTION RELAY	BEARING TEMP	STATOR TEMP. SWITCH	MOTOR LEAKAGE	STATOR HOUSING LEAKAGE	COOLING WATER FLOW	COOLING WATER SOLENOID	FIELD JUNCTION BOX	ELAPSED TIME METER	RUNNING	OFF INDICATION	E-STOP INPUT @ PLC	FROM LEVEL INTERLOCKING PANEL HIGH LEVEL SHUTDOWN SEE E7-605
FLOW RETURN PUMP P-531	VFD-531	HS-531A	HS-531	MN-531	YL-531A	XA-531	MPR-531	TE-531	TSH-531	MSH-531A	MSH-531B	FSL-531	SV-531	U-531			NLL-531	NA	RSA LSH-502
FLOW RETURN PUMP P-532	VFD-532	HS-532A	HS-532	MN-532	YL-532A	XA-532	MPR-532	TE-532	TSH-532	MSH-532A	MSH-532B	FSL-532	SV-532	U-532			NLL-532	NA	RSB LSH-502
FLOW RETURN PUMP P-533	VFD-533	HS-533A	HS-533	MN-533	YL-533A	XA-533	MPR-533	TE-533	TSH-533	MSH-533A	MSH-533B	FSL-533	SV-533	U-533			NLL-533	NA	RSC LSH-502

- NOTES:
- NOT USED
  - UNLESS NOTED OTHERWISE, ALL EQUIPMENT AND DEVICES TAG NUMBERS ON THIS DRAWING SHALL BE PREFIXED WITH XX FOR PUMP STATION PLANT AREA DESIGNATION.
  - PREFAB. MULTI-CONDUCTOR CABLE FURNISHED BY PUMP SUPPLIER AND TERMINATED IN FIELD JUNCTION BOX.
  - MULTI-CONDUCTOR 12/C SHIELDED CABLE TO BE PROVIDED BY CONTRACTOR.
  - EACH VFD AND RVSS DRIVE TO BE PROVIDED WITH A MOD BUS TYPE NETWORK INTERFACE. EACH DRIVE TO BE DAISY CHAINED TOGETHER IN ONE INCH STEEL CONDUIT TO THE PLANT CONTROL SYSTEM.
  - MULTI-FUNCTION MOTOR PROTECTION RELAY SIMILAR TO GE MULTI-LIN SERIES, TO BE PROVIDED WITH RVSS DRIVE TO PROVIDE PUMP AND MOTOR PROTECTION FUNCTIONS SHOWN. RELAY TO BE MOUNTED INSIDE RVSS DRIVE AND SHALL BE POWERED FROM ITS 120 VAC SINGLE PHASE POWER CONTROL POWER.

- LEGEND
- MPR MOTOR PROTECTION RELAY
  - DCS CONNECTION TO FOXBORO DCS WIRING CABINET
  - PLC PLC CONNECTION TO PLC I/O POINT INSIDE LOCAL CONTROL PANEL
  - CONNECTION AT FIELD DEVICE AS NOTED
  - \* EQUIPMENT OR DEVICE FURNISHED BY PUMP MANUFACTURERS AS NOTED
  - CONNECTION AT VFD
  - RVSS REDUCED VOLTAGE SOLID STATE SOFT STARTER
  - VFD VARIABLE FREQUENCY DRIVE

- REFERENCE DRAWINGS:
- E7-102 JET MIXING SYSTEM ELECTRICAL PLANS
  - E7-103 EQUALIZATION FACILITY ELECTRICAL BUILDING
  - E7-101 JET MIXING SYSTEM SINGLE LINE DRAWING
  - I-104 EQUALIZATION TANK P&ID.
  - I-105 FLOW RETURN SYSTEM P&ID



PEACHTREE CREEK SOUTH FORK RELIEF STORAGE AND PUMPING STATION  
 DEPARTMENT of WATERSHED MANAGEMENT  
 CITY OF ATLANTA

REV	DATE	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: BLB

SHEET TITLE  
 ELECTRICAL  
 00-GENERAL  
 FLOW RETURN PUMPS  
 ELEMENTARY  
 CONTROL DIAGRAM

SHEET NO. E7-603 REV. 0