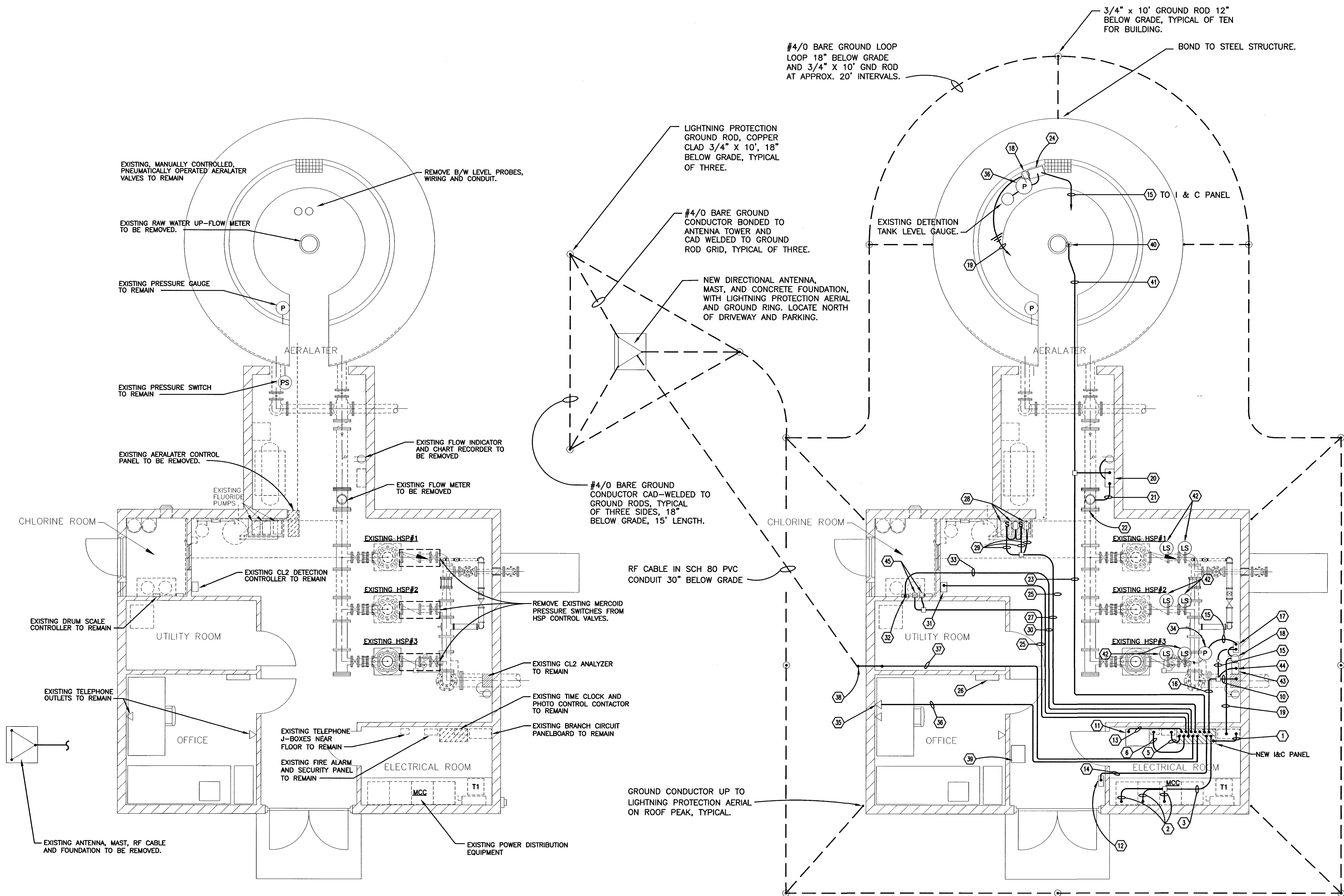


I:\2745\dwg\JWS - IDEM Elec Submittal\FINAL SET NO-3 July 3, 2002 Set of Drawings and Specs\FINAL F2 ELEC DWG\F2As-Built_Drawing\F2E3_REVISD.dwg, 11/15/2004, 10:52 PM



ELECTRICAL I AND C PLAN - REMOVAL WORK
SCALE: 1/4" = 1'-0"

ELECTRICAL I AND C PLAN - NEW WORK
SCALE: 1/4" = 1'-0"

ELECTRICAL PLAN NOTES

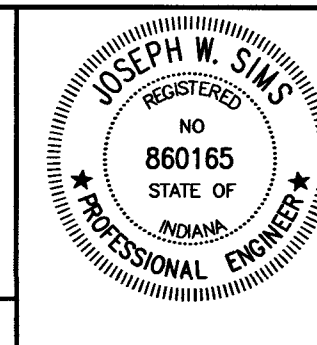
- 1 120VAC POWER CIRCUITS FOR NEW I AND C PANEL AND FOR FLOWRIDE METERING PUMP RECEPTACLES. 4-#12, 1-#12GND, 3/4" C. CONNECT TO SPARE IP-20A CIRCUIT BREAKERS.
- 2 HSP MOTOR STATUS WIRING, 4-#14 GND, 1-#14 GND, 3/4" C.
- 3 MOTOR STATUS WIRING, 12-#14, 1-#14 GND, 3/4" C.
- 4 J-BOX, TYPICAL.
- 5 FIRE ALARM AND SECURITY SYSTEM TROUBLE AND ALARM STATUS WIRING, 4-#14, 1-#14 GND, 1/2" C.
- 6 TELEPHONE-TO-SCADA CONNECTION WIRING. 1-TWO PAIR CABLE FOR DIALER, 1-TWO PAIR CABLE FOR MODEM, 2-ONE PAIR CABLE FOR ON-OFF CONTROL OF WELL PUMP MOTORS, 1" C.
- 7 DELETED.
- 8 DELETED.
- 9 DELETED.
- 10 TWO 4-20MADC INSTRUMENT CABLES, 3/4" C., CL2 MEASUREMENT.
- 11 NEW AUTOMATIC TRANSFER SWITCH. (F-1 ALT. BID)
- 12 NEW EMERGENCY GENERATOR ANNUNCIATOR PANEL. (F-1 ALT. BID)
- 13 4-#14, 1-#14 GND, 1/2" C., ATS POSITION WIRING. (F-1 ALT. BID)
- 14 4-#14, 1-#14 GND, 1/2" C., EMERGENCY GENERATOR PRE-ALARM AND ALARM STATUS.
- 15 ONE 4-20MADC INSTRUMENT CABLE, 1/2" C., FOR PRESSURE MEASUREMENT.
- 16 FIVE 4-20MADC INSTRUMENT CABLES, 1 1/4" C.
- 17 NEW LOCAL INDICATOR AND TRANSMITTER FOR PLANT DISCHARGE PRESSURE, CORD AND PLUG CONNECTED TO 120VAC.
- 18 NEW DUPLEX RECEPTACLE AND SURFACE BOX.
- 19 120VAC CIRCUIT, 2-#12, 1-#12 GND, 1/2" C., CONNECT TO SPARE IP-20A CIRCUIT BREAKER IN EXISTING BRANCH CIRCUIT PANELBOARD.
- 20 NEW LOCAL INDICATOR, TOTALIZER, AND TRANSMITTER FOR FINISHED WATER FLOW.
- 21 FLOW METER INSTRUMENT CABLE, 1/2" SEALTIGHT FLEX, C. 9-CONDUCTOR BELDEN CABLE.
- 22 NEW FINISHED WATER FLOW METER.
- 23 TWO 4-20MADC INSTRUMENT CABLES, 3/4" C., FOR RAW WATER FLOW MEASUREMENT AND FINISHED WATER FLOW MEASUREMENT.
- 24 NEW AERULATOR DETENTION TANK LEVEL PRESSURE SENSOR, LOCAL INDICATOR AND TRANSMITTER.
- 25 4-#14, 1-#14 GND, 3/4" C.
- 26 PANELVIEW
- 27 6-#12, 1-#12 GND, 3/4" C. 120VAC CIRCUITS FOR ENERGIZING FLUORIDE PUMP RECEPTACLES.
- 28 EXISTING RECEPTACLES FOR FLUORIDE METERING PUMPS.
- 29 2-#12, 1-#12 GND, 1/2" C., 120VAC CIRCUIT FOR FLUORIDE PUMPS.
- 30 2-#14, 1-#14 GND, 1/2" C. FOR CL2 DETECTION ALARM.
- 31 EXISTING CL2 DETECTION UNIT.
- 32 EXISTING CL2 SCALE UNIT.
- 33 ONE 4-20MADC ANALOG INSTRUMENT CABLE, 1/2" C., FOR CL2 SCALE OUTPUT.
- 34 NEW PRESSURE TRANSDUCER.
- 35 NEW PORTABLE PC NETWORK OUTLET; +42".
- 36 CAT 5 ETHERNET CABLE, 1/2" C.
- 37 COAX RF ANTENNA CABLE, 11/2" C.
- 38 LB THROUGH WALL NEAR GROUND LEVEL, UNDERGROUND 11/2" C. TO ANTENNA MAST.
- 39 EXISTING BREATHING APPARATUS CABINET.
- 40 NEW RAW WATER UP-FLOW METER.
- 41 FLOW METER INSTRUMENT CABLE, 1/2" C.
- 42 RETROFIT VALVE WITH NEW LIMIT SWITCHES FOR VALVE OPEN AND VALVE CLOSED POSITIONS. REVISE CONTROL WIRING TO SHUT-OFF HSP IF VALVE FAILS TO OPEN. MONITOR VALVE OPEN-CLOSE POSITIONS.
- 43 NEW HACH ANALYZER, WITH CORD AND PLUG CONNECTED TO 120VAC.
- 44 TWO 4-20MADC INSTRUMENT CABLES, 3/4" C., HACH MEASUREMENT.
- 45 PRE-FILTER AND POST-FILTER CL2 INJECTION SOLENOIDS. 2-#14, 1-#14 GND, 1/2" C. EACH. APPROXIMATE LOCATION. PRE-CL2 SOLENOID ENERGIZED WHEN A WELL PUMP IS "ON"; POST-CL2 SOLENOID ENERGIZED WHEN HSP IS "ON".

NOTES:

J. W. SIMS & ASSOCIATES
ENGINEERING COMPANY
1545 COUNTRY CLUB ROAD
INDIANAPOLIS, INDIANA 46234
(317) 209-4035 (FAX) 209-4035

NO.	DESCRIPTION	DATE	BY
1	AS-BUILT REVISION	5/2004	GCR
REVISIONS			

HOOSIER HILLS REGIONAL WATER DISTRICT
DIVISION "F" WATERWORKS SYSTEM IMPROVEMENTS
CONTRACT F-2
ELECTRICAL I AND C PLAN
WATER TREATMENT PLANT IMPROVEMENTS
GRW PROJECT NO. 2745 JWSA PROJECT NO. 2001-05



GRW Engineers, Inc.
Engineers, Architects, Planners
INDIANAPOLIS, INDIANA
LOUISVILLE & LEXINGTON, KENTUCKY
CINCINNATI, OHIO
NASHVILLE, TENNESSEE
ARLINGTON, TEXAS

DRAWN: JWS
FILE NAME: F2-E3_REVISD.dwg
CHECKED: JWS
APPROVED: JWS
DATE: NOVEMBER, 2001
SCALE: AS NOTED
SHEET NO. E3/584