

ADDENDUM NO. 2

**ROCK RIVER WATER RECLAMATION DISTRICT
FULLER CREEK PHASE F, PUMP STATION INSTALLATION
CAPITAL PROJECT NO. 1566
IEPA PROJECT NO. L17-5306**

This Addendum Number 2, dated April 18, 2018 for the above referenced project, supersedes all contrary and conflicting information in the specifications and contract documents, which are hereby supplemented or revised as follows:

PROJECT PLANS

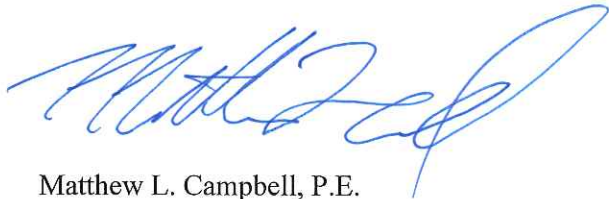
1. Sheets 10 & 11

- a. Replace Sheets 10 and 11 with the enclosed: All proposed 3 Conductor, 350 MCM cable has been revised to **4 Conductor**, 350 MCM cable.
- b. The proposed main breaker for the 480V, "NF" Panel has been revised from 400A to **300A**.

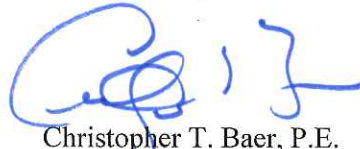
This information shall be taken into consideration when preparing your bid. This addendum will be E-mailed to all plan holders as well as posted to the District's website at www.rwrwd.dst.il.us.

END OF ADDENDUM NO. 2

Issued April 18, 2018
Rock River Water Reclamation District



Matthew L. Campbell, P.E.
Project Engineer



Christopher T. Baer, P.E.
Engineering Manager

Enclosures: Revised Plan Sheets 10 & 11

CONDUIT SCHEDULE

CONDUIT I.D. NUMBER	INTERIOR/EXTERIOR	SIZE	FROM	TO	APPROXIMATE LENGTH	CONDUCTORS (#) DESCRIPTION	ASSOCIATED EQUIPMENT
1	INTERIOR - CTRL. BLDG.	3" DIAMETER	SERVICE METER	AUTO TRANS. SWITCH	14.7	(1) 4 CONDUCTOR, 350 MCM	AUTO TRANSFER SWITCH (ATS)
2	INTERIOR - CTRL. BLDG.	3" DIAMETER	AUTO TRANS. SWITCH	CONDUIT 6	1.7	(1) 4 CONDUCTOR, 350MCM	ATS; INT. POWER CENTER
3	INTERIOR - CTRL. BLDG.	3" DIAMETER	AUTO TRANS. SWITCH	CONDUIT 6	1.7	(1) 3 CONDUCTOR, #8 SHIELDED VFD CABLE, 1000V RATED	VFD#1; PUMP #1
4	INTERIOR - CTRL. BLDG.	3" DIAMETER	AUTO TRANS. SWITCH	CONDUIT 6	1.7	(1) 3 CONDUCTOR, #8 SHIELDED VFD CABLE, 1000V RATED	VFD #2; PUMP #2
5	INTERIOR - CTRL. BLDG.	3" DIAMETER	AUTO TRANS. SWITCH	CONDUIT 6	1.7	SPARE - NO CONDUCTORS	-
6	INTERIOR - CTRL. BLDG.	8" X 8"	AUTO TRANS. SWITCH	INT. POWER CENT.	17.7	(2) 3 CONDUCTOR, #8 SHIELDED, 1000V RATED; (1) 4 CONDUCTOR, 350 MCM; (2) #8 CU THWN	ATS; INT. POWER CENTER; VFD #1; PUMP #1; VFD #2; PUMP #2
7	INTERIOR - CTRL. BLDG.	1 1/2" DIAMETER	CONDUIT 6	VFD #1	1.4	(1) 3 CONDUCTOR #8 CU, THWN	INT. POWER CENTER; VFD #1
8	INTERIOR - CTRL. BLDG.	1 1/2" DIAMETER	CONDUIT 6	VFD #1	1.4	(1) 3 CONDUCTOR #8 SHIELDED VFD CABLE 1000V RATED	VFD #1; PUMP #1
9	INTERIOR - CTRL. BLDG.	1 1/2" DIAMETER	CONDUIT 6	VFD #2	1.4	(1) 3 CONDUCTOR #8 CU, THWN	INT. POWER CENTER; VFD #2
10	INTERIOR - CTRL. BLDG.	1 1/2" DIAMETER	CONDUIT 6	VFD #2	1.4	(1) 3 CONDUCTOR #8 SHIELDED VFD CABLE, 1000V RATED	VFD #2; PUMP #2
11	INTERIOR - CTRL. BLDG.	3/4" DIAMETER	CONTROL PANEL	VFD #1	3.7	(2) 2 CONDUCTOR #18 CU THWN	CTRL PANEL; VFD #1
12	INTERIOR - CTRL. BLDG.	3/4" DIAMETER	CONTROL PANEL	VFD #1	3.7	(1) 2 CONDUCTOR #18 SHIELDED	CTRL PANEL; VFD #1
13	INTERIOR - CTRL. BLDG.	3/4" DIAMETER	CONTROL PANEL	VFD #2	3.7	(2) 2 CONDUCTOR #18 CU THWN	CTRL PANEL; VFD #2
14	INTERIOR - CTRL. BLDG.	3/4" DIAMETER	CONTROL PANEL	VFD #2	3.7	(1) 2 CONDUCTOR #18 SHIELDED	CTRL PANEL; VFD #2
15	INTERIOR - CTRL. BLDG.	3/4" DIAMETER	INT. POWER CENTER	CONTROL PANEL	10.4	(1) 3 CONDUCTOR #10 CU THWN	INT. POWER CENTER; CTRL PANEL
16	INTERIOR - CTRL. BLDG.	3/4" DIAMETER	CONTROL PANEL	FLOW METER #1	1.2	(1) 2 CONDUCTOR #18 SHIELDED	CONTROL PANEL; FLOW METER #1
17	INTERIOR - CTRL. BLDG.	3/4" DIAMETER	CONTROL PANEL	FLOW METER #1	1.2	(1) 3 CONDUCTOR #12 CU THWN	CONTROL PANEL; FLOW METER #1
18	INTERIOR - CTRL. BLDG.	3/4" DIAMETER	CONTROL PANEL	FLOW METER #2	1.2	(1) 2 CONDUCTOR #18 SHIELDED	CONTROL PANEL; FLOW METER #2
19	INTERIOR - CTRL. BLDG.	3/4" DIAMETER	CONTROL PANEL	FLOW METER #2	1.2	(1) 3 CONDUCTOR #12 CU THWN	CONTROL PANEL; FLOW METER #2
20	INTERIOR - CTRL. BLDG.	3/4" DIAMETER	FLOW METER #1	PULL BOX #1	5.6	(1) 2 CONDUCTOR #18 SHIELDED	FLOW METER #1; FLOW TRANSDUCER #1
21	INTERIOR - CTRL. BLDG.	3/4" DIAMETER	FLOW METER #2	PULL BOX #1	1.9	(1) 2 CONDUCTOR #18 SHIELDED	FLOW METER #2; FLOW TRANSDUCER #2
22	INTERIOR - CTRL. BLDG.	1 1/2" DIAMETER	CONTROL PANEL	PULL BOX #1	3.6	(3) 2 CONDUCTOR #18 SHIELDED	WW LEVEL; PUMP #1 AMPS; PUMP #2 AMPS
23	INTERIOR - CTRL. BLDG.	1 1/2" DIAMETER	CONTROL PANEL	PULL BOX #1	3.5	(7) 2 CONDUCTOR #18; (2) 3 CONDUCTOR #12 CU THWN	WW FLOAT; PUMP #1 TEMP; PUMP #2 TEMP; V.V. FLOAT; V.V. LIGHTING & VENT.
24	INTERIOR - CTRL. BLDG.	3/4" DIAMETER	INT. POWER CENTER	EX. LP "A"	22.8	(1) 3 CONDUCTOR #6 CU THWN	INT. POWER CENTER; EX. LP"A"
25	INTERIOR - CTRL. BLDG.	3/4" DIAMETER	INT. POWER CENTER	CTRL. ROOM LIGHT	5.8	(1) 3 CONDUCTOR #12 CU THWN	INT. POWER CENTER; NEW LIGHT/SWITCH
26	INTERIOR - CTRL. BLDG.	3/4" DIAMETER	WALL SWITCH	CTRL. ROOM LIGHT	9.9	(1) 3 CONDUCTOR #12 CU THWN	NEW LIGHT; NEW SWITCH
27	EXTERIOR - UNDERGROUND	3" DIAMETER	PULL BOX #2	JUNCTION BOX #1	67	(2) 3 CONDUCTOR #8 SHIELDED VFD CABLE, 1000V RATED	VFD #1; PUMP #1; VFD #2; PUMP #2
28	EXTERIOR - UNDERGROUND	3" DIAMETER	PULL BOX #2	JUNCTION BOX #1	67	SPARE - NO CONDUCTORS	-
29	EXTERIOR - UNDERGROUND	2" DIAMETER	PULL BOX #1	JUNCTION BOX #1	78	(1) 2 CONDUCTOR #18 SHIELDED	WET WELL LEVEL
30	EXTERIOR - UNDERGROUND	2" DIAMETER	PULL BOX #1	JUNCTION BOX #1	78	(1) 2 CONDUCTOR #18 CU THWN	WET WELL FLOAT
31	EXTERIOR - UNDERGROUND	2" DIAMETER	PULL BOX #1	JUNCTION BOX #2	128	(2) 2 CONDUCTOR #18 CU THWN; (3) 3 CONDUCTOR #12 CU THWN	VALVE VAULT LIGHTS, VENTILATION, SUMP PUMP RECEPTICLE
32	EXTERIOR - UNDERGROUND	2" DIAMETER	PULL BOX #1	JUNCTION BOX #2	128	(2) 2 CONDUCTOR #18 SHIELDED	FLOW METER #1 TRANSDUCER; FLOW METER #2 TRANSDUCER
33	EXTERIOR - UNDERGROUND	2" DIAMETER	PULL BOX #1	JUNCTION BOX #2	128	SPARE - NO CONDUCTORS	-
34	EXTERIOR - UNDERGROUND	2" DIAMETER	PULL BOX #1	JUNCTION BOX #2	128	SPARE - NO CONDUCTORS	-
35	EXTERIOR - UNDERGROUND	2" DIAMETER	PULL BOX #1	YARD LIGHT	130	(1) 3 CONDUCTOR #12 CU THWN	INT. POWER CENTER; YARD LIGHTING
36	EXTERIOR - UNDERGROUND	2" DIAMETER	PULL BOX #1	RTU ANTENNA	112	(1) RG 58 COAX CABLE	CTRL PANEL; RTU ANTENNA
37	EXTERIOR - UNDERGROUND	2" DIAMETER	PULL BOX #1	YARD LIGHT UTILITY POLE	112	SPARE - NO CONDUCTORS	-
38	EXTERIOR - UNDERGROUND	3" DIAMETER	PULL BOX #2	NEW GENERATOR	52	(1) 4 CONDUCTOR 350 MCM	ATS; NEW GENERATOR
39	EXTERIOR - UNDERGROUND	3" DIAMETER	PULL BOX #2	NEW GENERATOR	52	SPARE - NO CONDUCTORS	-
40	EXTERIOR - UNDERGROUND	1" DIAMETER	PULL BOX #1	NEW GENERATOR	63	(2) 2 CONDUCTOR #18 CU THWN	CTRL PANEL; NEW GENERATOR
41	EXTERIOR - UNDERGROUND	1" DIAMETER	PULL BOX #1	NEW GENERATOR	63	(2) 3 CONDUCTOR #12 THWN	INT. POWER CENTER; NEW GENERATOR
42	INTERIOR - WET WELL	2" DIAMETER	PUMP #1 DISCONNECT	EDGE OF ACCESS OPENING	8	PUMP #1 CABLE (SUPPLIED W/ PUMP)	PUMP #1
43	INTERIOR - WET WELL	2" DIAMETER	JUNCTION BOX #1	EDGE OF ACCESS OPENING	8	(1) 2 CONDUCTOR #18 SHIELDED (SUPPLIED WITH TRANSDUCER)	WET WELL LEVEL TRANSDUCER
44	INTERIOR - WET WELL	2" DIAMETER	JUNCTION BOX #1	EDGE OF ACCESS OPENING	8	(1) 2 CONDUCTOR #18 CU THWN (SUPPLIED W/ FLOAT SWITCH)	WET WELL FLOAT SWITCH
45	INTERIOR - WET WELL	2" DIAMETER	PUMP #2 DISCONNECT	EDGE OF ACCESS OPENING	8	PUMP #2 CABLE (SUPPLIED W/ PUMP)	PUMP #2
46	INTERIOR - VALVE VAULT	3/4" DIAMETER	JUNCTION BOX #2	LIGHT AND VENTILATION CIRCUIT	30	(2) 3 CONDUCTOR #12 CU THWN	VALVE VAULT LIGHTING AND VENTILATION
47	INTERIOR - VALVE VAULT	3/4" DIAMETER	JUNCTION BOX #2	SUMP PUMP RECEPTICLE	15	(2) 3 CONDUCTOR #12 CU THWN	VALVE VAULT SUMP RECEPTICLE
48	INTERIOR - VALVE VAULT	3/4" DIAMETER	JUNCTION BOX #2	FLOAT SWITCH	15	(1) 2 CONDUCTOR #18 CU THWN	VALVE VAULT FLOAT SWITCH
49	INTERIOR - VALVE VAULT	3/4" DIAMETER	JUNCTION BOX #2	LIGHT/VENT SWITCH (PLUNGER STYLE ON HATCH)	26	(1) 2 CONDUCTOR #18 CU THWN	ACCESS STATUS (CTRL TO PLUNGER SWITCH ON ACCESS HATCH)
50	INTERIOR - CONTROL ROOM	3/4" DIAMETER	INT. POWER CENTER	INTERIOR PULL BOX #1	15	(4) 3 CONDUCTOR #12 CU THWN	INT. POWER CENTER; VALVE VAULT SUMP RECEPTICLE; YARD LIGHTING; NEW GENERATOR
51	EXTERIOR - UNDERGROUND	1" DIAMETER	PULL BOX #1	NEW GENERATOR	63	SPARE - NO CONDUCTORS	-
52	EXTERIOR - UNDERGROUND	1" DIAMETER	PULL BOX #1	NEW GENERATOR	63	SPARE - NO CONDUCTORS	-

GROUNDING SYSTEM

SEE PROPOSED GROUND LOOP ON SITE ELECTRICAL SITE PLAN	
ITEM	QUANTITY
10' CU GROUND RODS	7 EACH
#4/0 CU GROUNDING CABLE	205 FEET

EQUIPMENT SCHEDULE

CONTROL ROOM	
ITEM	DESCRIPTION, MAKE & MODEL
INTEGRATED POWER CENTER	SQUARE D IPC2TC2C-SEE
AUTOMATIC TRANSFER SWITCH	ASCO 300 SERIES 400AMP, CAT. NO. J-03ATS-A-3-400-480-GO-F
PUMP #1 VFD	480V, 3PH, 30HP CONSTANT TORQUE BY ABB OR DANFOSS
PUMP #2 VFD	480V, 3PH, 30HP CONSTANT TORQUE BY ABB OR DANFOSS
PUMP #1 FLOW METER	GREYLINE INSTRUMENTS #DFM5.1A-1-A-A-1-A-1-B-1-A
PUMP #2 FLOW METER	GREYLINE INSTRUMENTS #DFM5.1A-1-A-A-1-A-1-B-1-A
CONTROL ROOM LIGHT	LED CEILING MOUNT - RAB CLED52BBWBL
RRWRD CONTROL PANEL *	ASSEMBLED AND SUPPLIED BY THE DISTRICT*
WET WELL	
PUMP #1	25 HP SUBMERSIBLE CAPABLE OF 809GPM @ 60.4TDH AS MANUFACTURED BY VAUGHN, GRUNDFOS, ABS, FLYGT OR, HOMA
PUMP #2	25 HP SUBMERSIBLE CAPABLE OF 809GPM @ 60.4TDH AS MANUFACTURED BY VAUGHN, GRUNDFOS, ABS, FLYGT OR, HOMA
LEVEL TRANSDUCER	PMC VERSALINE VL2113-10PSIG-35-IS
HIGH LEVEL FLOAT SWITCH	DWYER SERIES FSW2
VALVE VAULT	
LIGHTING	2- WALL MOUNTED RAB VXBRLD26DG
EXHAUST FAN	FANTECH MODEL FKD8XL, 115V
SUBMERSIBLE PUMP	ABS/ROBUSTA 100, 115V
PUMP #1 FLOW METER TRANSDUCER	SUPPLIED W/ FLOWMETER (GREYLINE) SEE CTRL ROOM EQUIP.
PUMP #2 FLOW METER TRANSDUCER	SUPPLIED W/ FLOWMETER (GREYLINE) SEE CTRL ROOM EQUIP.
FLOOD ALARM SWITCH	DWYER SERIES FSW2
NEW UTILITY POLE	
YARD LIGHTING	LITHONIA SECURITY FLOODLIGHT, OLF-3RH-40K-120-PE-BZ
RTU ANTENNA	ANTENEX VOYAGER, VG1502 WITH LIGHTNING ARRESTOR

CONDUCTOR TYPE/TOTAL PROJECT LENGTH

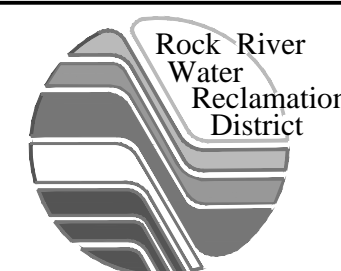
TEMPORARY UTILITY CONDUCTORS + TOTAL FROM CONDUIT SCHEDULE + 10% (ESTIMATE ONLY, CONTRACTOR TO FIELD VERIFY)	
CONDUCTOR	QUANTITY
4 CONDUCTOR 350 MCM	94 FEET
3 CONDUCTOR 350 MCM (TEMPORARY)	125 FEET
3 CONDUCTOR #6 CU THWN	25 FEET
3 CONDUCTOR #8 SHIELDED VFD CABLE, 1000V RATED	194 FEET
3 CONDUCTOR #8 CU THWN	42 FEET
3 CONDUCTOR #10 CU THWN	12 FEET
3 CONDUCTOR #12 CU THWN (INCLUDING 180' TEMP)	905 FEET
2 CONDUCTOR #18 CU THWN	578 FEET
2 CONDUCTOR #18 SHIELDED	399 FEET
RG 58 COAXIAL CABLE	124 FEET
CAT 6 CABLE (TEMPORARY)	300 FEET

CONDUIT AND CONDUCTOR REQUIREMENTS

- ALL LENGTHS PROVIDED ARE ESTIMATED; CONTRACTOR SHALL VERIFY REQUIRED LENGTHS OF CONDUITS AND CONDUCTORS IN THE FIELD.
- ALL CONDUCTORS SHALL BE STRANDED COPPER, THHN OR TWHN.
- REQUIRED COLORS FOR INSULATION SHALL BE AS FOLLOWS:
 - 480V - BROWN, ORANGE, YELLOW
 - 120V - BLACK, RED, WHITE
 - 24VDC - BLUE
- ALL INTERIOR CONDUITS SHALL BE RIGID GALVANIZED STEEL CONFORMING TO ANSI C80.1 AND MANUFACTURED IN ACCORDANCE WITH UL6.
- ALL EXPOSED EXTERIOR CONDUIT AND CONDUITS INSTALLED IN THE PROPOSED WET WELL AND VALVE VAULT SHALL BE PVC COATED METAL CONDUIT CONFORMING TO NEMA RN1, ANSI C80.1.
- UNLESS NOTED ELSEWHERE IN PLANS ALL INTERIOR ENCLOSURES SHALL CONFORM TO NEMA 12; ALL EXTERIOR SHALL CONFORM TO NEMA 3R.
- ALL BURIED CONDUIT SHALL BE SCHEDULE 40 PVC ENCASED IN CONCRETE.
- DIAMETERS INDICATED FOR CONDUITS SHALL BE CONSIDERED MINIMUM.
- CONTRACTOR SHALL COMPLY WITH THE CURRENT NATIONAL ELECTRIC CODE (NEC). SHOULD PLANS AND SPECIFICATIONS CONTAIN CONFLICTS WITH NEC; NEC SHALL GOVERN. NO ADDITIONAL PAYMENT WILL BE MADE FOR MODIFICATIONS OR ADDITIONS TO COMPLY WITH THE CURRENT NEC.

NOTES REGARDING EQUIPMENT

- DISTRICT WILL SUPPLY A COMPLETELY ASSEMBLED CONTROL PANEL TO CONTRACTOR.
- CONTRACTOR SHALL PULL AND PREPARE WIRING TO CONTROL PANEL FOR DISTRICT PERSONNEL TO LAND. CONTRACTOR SHALL NOT LAND ANY WIRES IN THE CONTROL PANEL.
- ALL SPECIFIC MANUFACTURES AND MODELS LISTED SHALL BE CONSIDERED STANDARD. CONTRACTOR MAY SUBMIT "EQUAL" ITEMS AS SUBSTITUTE FOR DISTRICT REVIEW AND APPROVAL.



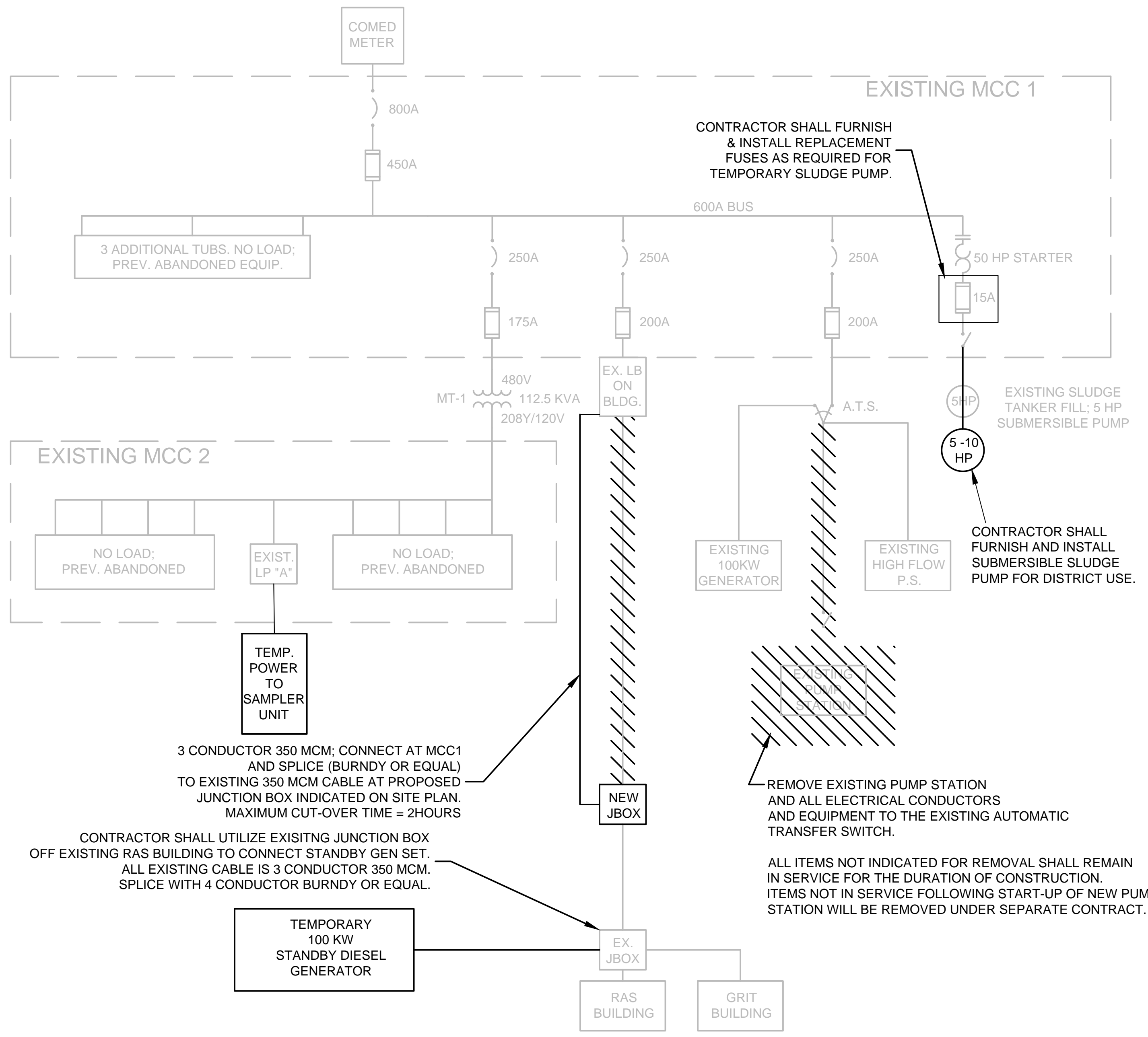
ROCK RIVER WATER RECLAMATION DISTRICT
 3501 KISHWAUKEE STREET
 ROCKFORD, ILLINOIS 61109
 (815) 387-7660

No.	DATE	REVISION	INT.
1.	4-10-18	ADDENDUM NO. 1	MC
2.	4-18-18	ADDENDUM NO. 2	MC

**FULLER CREEK PHASE F, PUMP STATION INSTALLATION
 CAPITAL IMPROVEMENT PROJECT #1566**

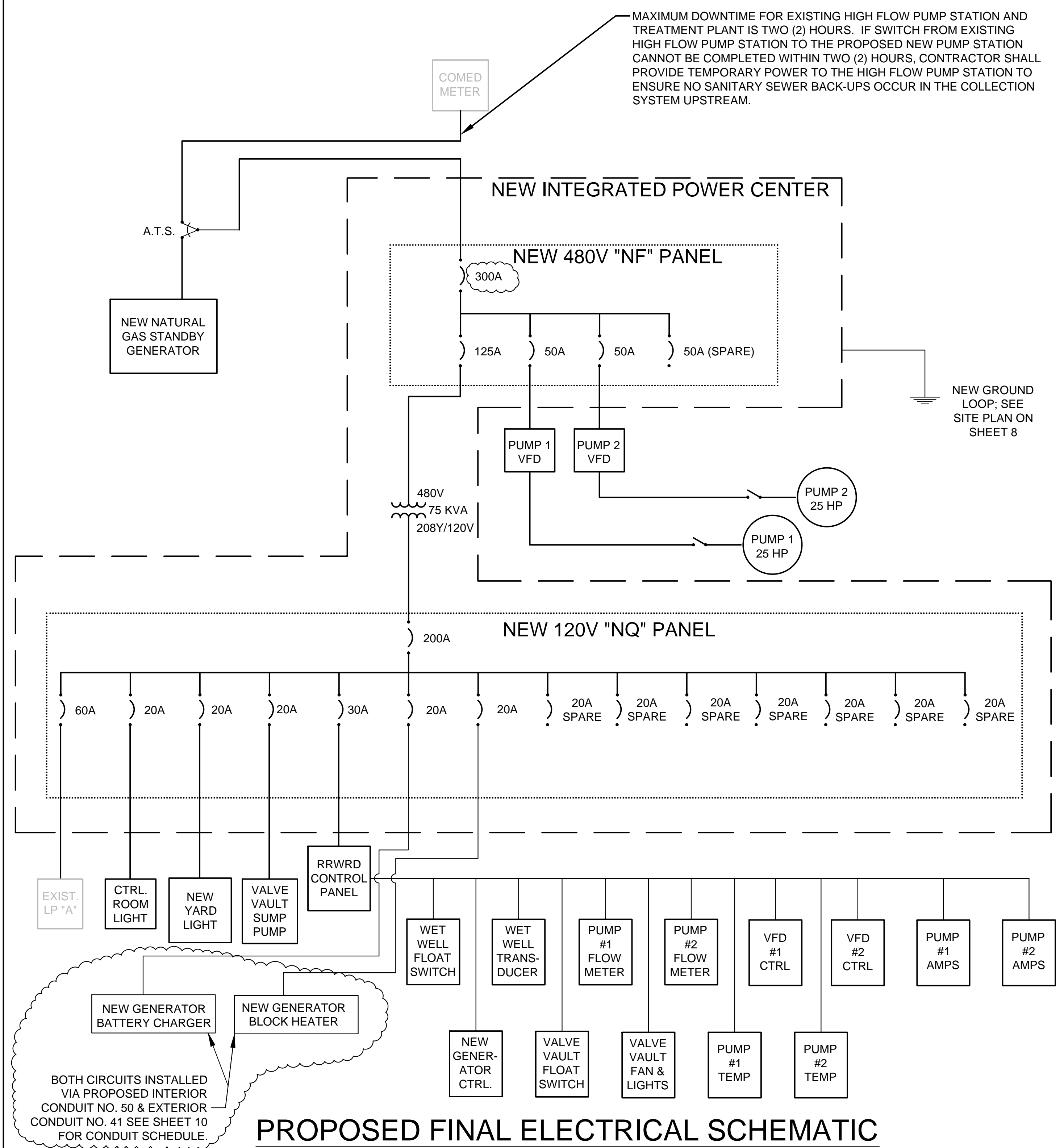
**WEST SOPER STREET
 ELECTRICAL WIRING SCHEDULE**

Sheet No.
 10 OF 12
 Date
 4/18/2018



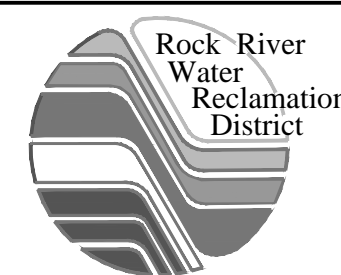
**EXISTING BLOWER BUILDING ELECTRICAL SCHEMATIC;
PROPOSED TEMPORARY ELECTRIC UTILITY PLAN**

PROPOSED TEMPORARY ELECTRIC UTILITY INDICATED IN BOLD
THIS DRAWING IS INTENDED FOR CLARIFICATION AND SHALL BE
USED IN CONJUNCTION WITH SITE PLAN AND EQUIPMENT SCHEDULES.



PROPOSED FINAL ELECTRICAL SCHEMATIC

THIS DRAWING IS INTENDED FOR CLARIFICATION AND SHALL BE
USED IN CONJUNCTION WITH SITE PLAN AND EQUIPMENT SCHEDULES.



**ROCK RIVER WATER
RECLAMATION DISTRICT**
3501 KISHWAUKEE STREET
ROCKFORD, ILLINOIS 61109
(815) 387-7660

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**FULLER CREEK PHASE F, PUMP STATION INSTALLATION
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**WEST SOPER STREET
ELECTRICAL SCHEMATIC**

Sheet No.
11 OF 12
Date
4/18/2018