

SCADA PANEL DIGITAL INPUTS			
TERMINAL BLOCK TBD1			
TERM *	WIRE *	ORIGINATIION	DESCRIPTION OF INPUTS
S0	S0	CP-DO-398	ALARM ACKNOWLEDGE
S0C	S0C	CP-DO-398A	ALARM ACKNOWLEDGE
S1	S1	M1A-11	PUMP 1 NOT IN AUTO
S1C	S1C	M1A-11A	PUMP 1 NOT IN AUTO
S2	S2	M2A-11	PUMP 2 NOT IN AUTO
S2C	S2C	M2A-11A	PUMP 2 NOT IN AUTO
S3	S3	M3A-11	PUMP 3 NOT IN AUTO
S3C	S3C	M3A-11A	PUMP 3 NOT IN AUTO
S4	S4		EF-1 RUNNING
S4C	S4C		EF-1 RUNNING
S5	S5		EF-2 RUNNING
S5C	S5C		EF-2 RUNNING
S6	S6	M1A-4A	PUMP 1 START CONTACTOR CALLED
S6C	S6C	M1A-4B	PUMP 1 START CONTACTOR CALLED
S7	S7	M2A-4A	PUMP 2 START CONTACTOR CALLED
S7C	S7C	M2A-4B	PUMP 2 START CONTACTOR CALLED
S8	S8	M3A-4A	PUMP 3 START CONTACTOR CALLED
S8C	S8C	M3A-4B	PUMP 3 START CONTACTOR CALLED
S9	S9		SPARE
S9C	S9C		SPARE
S10	S10		SPARE
S10C	S10C		SPARE
S11	S11		MANUAL LOCKOUT
S11C	S11C		MANUAL LOCKOUT
S12	S12		MANUAL PURGE
S12C	S12C		MANUAL PURGE
S13	S13	LIGHTING PANEL	CONTROL PANEL POWER FAILURE
S13C	S13C	LIGHTING PANEL	CONTROL PANEL POWER FAILURE
S14	S14		SPARE
S14C	S14C		SPARE
S15	S15	KS-DO-474	ENTRY KEY SW. IN NOT ARMED
S15C	S15C	KS-DO-474A	ENTRY KEY SW. IN NOT ARMED
S16	S16	M1A-0	PUMP 1 BREAKER OPEN
S16C	S16C	M1A-0A	PUMP 1 BREAKER OPEN
S17	S17	M2A-0	PUMP 2 BREAKER OPEN
S17C	S17C	M2A-0A	PUMP 2 BREAKER OPEN
S18	S18	M3A-0	PUMP 3 BREAKER OPEN
S18C	S18C	M3A-0A	PUMP 3 BREAKER OPEN
S19	S19		SPARE
S19C	S19C		SPARE
S20	S20		SPARE
S20C	S20C		SPARE
S21	S21		SPARE
S21C	S21C		SPARE
S22	S22		120V AC POWER FAILURE
S22C	S22C		120V AC POWER FAILURE
S23	S23	UPS	12V DC POWER FAILURE
S23C	S23C	UPS	12V DC POWER FAILURE
S24	S24	TRANSFER SWITCH	TRANSFER SW. IN NORM. POSITION
S24C	S24C	TRANSFER SWITCH	TRANSFER SW. IN NORM. POSITION
S25	S25	TRANSFER SWITCH	TRANSFER SW. IN EMERG. POSITION
S25C	S25C	TRANSFER SWITCH	TRANSFER SW. IN EMERG. POSITION
S26	S26		SPARE
S26C	S26C		SPARE
S27	S27	CP-DO-399	PUMP 1 OVERLOAD TRIP
S27C	S27C	CP-DO-399A	PUMP 1 OVERLOAD TRIP
S28	S28	CP-DO-400	PUMP 2 OVERLOAD TRIP
S28C	S28C	CP-DO-400A	PUMP 2 OVERLOAD TRIP
S29	S29	CP-DO-401	PUMP 3 OVERLOAD TRIP
S29C	S29C	CP-DO-401A	PUMP 3 OVERLOAD TRIP
S30	S30		SPARE
S30C	S30C		SPARE
S31	S31		SPARE
S31C	S31C		SPARE
S32	S32	CP-DO-402	LF PUMP 4 OVERLOAD TRIP
S32C	S32C	CP-DO-402A	LF PUMP 4 OVERLOAD TRIP
S33	S33		SPARE
S33C	S33C		SPARE
S34	S34	M4A-11	LF PUMP 4 NOT IN AUTO
S34C	S34C	M4A-11A	LF PUMP 4 NOT IN AUTO
S35	S35	M4A-4A	LF PUMP 4 STARTER CONTACT CALL
S35C	S35C	M4A-4B	LF PUMP 4 STARTER CONTACT CALL
S36	S36	M4A-0	LF PUMP 4 CIRCUIT BREAKER OPEN
S36C	S36C	M4A-0A	LF PUMP 4 CIRCUIT BREAKER OPEN

SCADA PANEL DIGITAL INPUTS			
TERMINAL BLOCK TBD1			
TERM *	WIRE *	ORIGINATIION	DESCRIPTION OF INPUTS
S40	S40	CP-DO-17	MP MANUAL SEQ. SW. 1-2-3
S40C	S40C	CP-DO-17A	MP MANUAL SEQ. SW. 1-2-3
S41	S41	CP-DO-19	MP MANUAL SEQ. SW. 1-3-2
S41C	S41C	CP-DO-19A	MP MANUAL SEQ. SW. 1-3-2
S42	S42	CP-DO-21	MP MANUAL SEQ. SW. 2-3-1
S42C	S42C	CP-DO-21A	MP MANUAL SEQ. SW. 2-3-1
S43	S43	CP-DO-23	MP MANUAL SEQ. SW. 2-1-3
S43C	S43C	CP-DO-23A	MP MANUAL SEQ. SW. 2-1-3
S44	S44	CP-DO-25	MP MANUAL SEQ. SW. 3-1-2
S44C	S44C	CP-DO-25A	MP MANUAL SEQ. SW. 3-1-2
S45	S45	CP-DO-27	MP MANUAL SEQ. SW. 3-2-1
S45C	S45C	CP-DO-27A	MP MANUAL SEQ. SW. 3-2-1
S46	S46	M1A-24A	PUMP 1 HIGH MOISTURE/TEMP
S46C	S46C	M1A-24B	PUMP 1 HIGH MOISTURE/TEMP
S47	S47	M2A-24A	PUMP 2 HIGH MOISTURE/TEMP
S47C	S47C	M2A-24B	PUMP 2 HIGH MOISTURE/TEMP
S48	S48	M3A-24A	PUMP 3 HIGH MOISTURE/TEMP
S48C	S48C	M3A-24B	PUMP 3 HIGH MOISTURE/TEMP
S49	S49	M4A-24A	LOW FLOW PUMP HIGH MOISTURE/TEMP
S49C	S49C	M4A-24B	LOW FLOW PUMP HIGH MOISTURE/TEMP
S50	S50	M-6A	ELECTRICAL SYSTEM GROUND FAULT
S50C	S50C	M-6A	ELECTRICAL SYSTEM GROUND FAULT
S51	S51		G1 NOT IN DISCHARGE MODE
S51C	S51C		G1 NOT IN DISCHARGE MODE
S52	S52		G2 NOT IN DISCHARGE MODE
S52C	S52C		G2 NOT IN DISCHARGE MODE
S53	S53	CP-DO-165	MAIN PUMP FAIL TO STOP
S53C	S53C	CP-DO-165A	MAIN PUMP FAIL TO STOP
S54	S54	CP-DO-217	HIGH WATER ALARM-FLOAT
S54C	S54C	CP-DO-217A	HIGH WATER ALARM-FLOAT
S55	S55	CP-DO-218	START STANDBY LEVEL-FLOAT
S55C	S55C	CP-DO-218A	START STANDBY LEVEL-FLOAT
S56	S56	CP-DO-219	START LAG LEVEL-FLOAT
S56C	S56C	CP-DO-219A	START LAG LEVEL-FLOAT
S57	S57	CP-DO-220	START LEAD PUMP LEVEL-FLOAT
S57C	S57C	CP-DO-220A	START LEAD PUMP LEVEL-FLOAT
S58	S58	CP-DO-221	STOP MAIN PUMP, START LF LEVEL-FLOAT
S58C	S58C	CP-DO-221A	STOP MAIN PUMP, START LF LEVEL-FLOAT
S59	S59	CP-DO-222	MAIN PUMP FAIL TO STOP LEVEL
S59C	S59C	CP-DO-222A	MAIN PUMP FAIL TO STOP LEVEL
S60	S60	CP-DO-223	STOP LF PUMP LEVEL-FLOAT
S60C	S60C	CP-DO-223A	STOP LF PUMP LEVEL-FLOAT
S61	S61	CP-DO-224	LOW WATER LEVEL ALARM
S61C	S61C	CP-DO-224A	LOW WATER LEVEL ALARM
S62	S62		SPARE
S62C	S62C		SPARE
S63	S63	UPS	UPS ALARM
S63C	S63C	UPS	UPS ALARM
S64	S64	COMB GAS MONITOR	COMB GAS DETECTOR FAILURE
S64C	S64C	COMB GAS MONITOR	COMB GAS DETECTOR FAILURE
S65	S65	COMB GAS MONITOR	COMB GAS DETECTOR WARNING/ALARM
S65C	S65C	COMB GAS MONITOR	COMB GAS DETECTOR WARNING
S66	S66		SPARE
S66C	S66C		SPARE
S67	S67	FAP-DO-487	FIRE ALARM
S67C	S67C	FAP-DO-487A	FIRE ALARM
S68	S68	AP-DO-476	INTRUSION ALARM
S68C	S68C	AP-DO-476A	INTRUSION ALARM
S69	S69		PUMP ROOM TSH ALARM
S69C	S69C		PUMP ROOM TSH ALARM
S70	S70		ELECTRICAL ROOM TSH ALARM
S70C	S70C		ELECTRICAL ROOM TSH ALARM
S71	S71	ATS	ATS IN TEST MODE
S71C	S71C	ATS	ATS IN TEST MODE
S72	S72	ATS	UTILITY POWER AVAILABLE
S72C	S72C	ATS	UTILITY POWER AVAILABLE
S73	S73	ATS	GENERATOR LOADED
S73C	S73C	ATS	GENERATOR LOADED
S74	S74	ATS	GENERATOR RUNNING
S74C	S74C	ATS	GENERATOR RUNNING
S75	S75	GENERATOR CP	GENERATOR FUEL TANK LOW
S75C	S75C	GENERATOR CP	GENERATOR FUEL TANK LOW
S76	S76	GENERATOR CP	GENERATOR NOT IN AUTO
S76C	S76C	GENERATOR CP	GENERATOR NOT IN AUTO
S77	S77	GENERATOR CP	GENERATOR COMMON ALARM
S77C	S77C	GENERATOR CP	GENERATOR COMMON ALARM
S78	S78	GENERATOR CP	GENERATOR E-STOP
S78C	S78C	GENERATOR CP	GENERATOR E-STOP
S79	S79	GENERATOR CP	GENERATOR FUEL TANK LEVEL
S79C	S79C	GENERATOR CP	GENERATOR FUEL TANK LEVEL

SCADA PANEL DIGITAL OUTPUTS			
TERMINAL BLOCK TBD0			
TERM *	WIRE *	DESTINATION	DESCRIPTION OF OUTPUTS
P0			
P0X			
P1	M1A-2	M1A-DI-2	MAIN PUMP 1 CALL
P1X	M1A-9	M1A-DI-9	MAIN PUMP 1 CALL
P2	M2A-2	M2A-DI-2	MAIN PUMP 2 CALL
P2X	M2A-9	M2A-DI-9	MAIN PUMP 2 CALL
P3	M3A-2	M3A-DI-2	MAIN PUMP 3 CALL
P3X	M3A-9	M3A-DI-9	MAIN PUMP 3 CALL
P4			SPARE
P4X			SPARE
P5			SPARE
P5X			SPARE
P6			PRIMARY COMPR CALL
P6X			SECONDARY COMPR CALL
P7			PRIMARY SOL. VALVE CALL
P7X			SECONDARY SOL. VALVE CALL
P8			SECONDARY COMPR CALL
P8X			SECONDARY SOL. VALVE CALL
P9			SECONDARY SOL. VALVE CALL
P9X			COMPR. INFLOW VALVE CALL
P10			COMPR. INFLOW VALVE CALL
P10X			SOLENOID INFLOW VALVE CALL
P11			SOLENOID INFLOW VALVE CALL
P11X			SOLENOID INFLOW VALVE CALL
P12	M4A-2	M4A-DI-2	LF PUMP 4 CALL
P12X	M4A-9	M4A-DI-9	LF PUMP 4 CALL
P13			
P13X			
P14	CP-173	CP-DI-173	CALL MAIN LEAD PUMP
P14X	CP-1	CP-DI-1	CALL MAIN LEAD PUMP
P15	CP-174	CP-DI-174	CALL MAIN LAG PUMP
P15X	CP-1	CP-DI-1	CALL MAIN LAG PUMP
P16			
P16X			
P17			
P17X			
P18	CP-175	CP-DI-175	CALL MAIN STBY PUMP
P18X	CP-1	CP-DI-1	CALL MAIN STBY PUMP
P19	CP-176	CP-DI-176	CALL LF PUMP
P19X	CP-1	CP-DI-1	CALL LF PUMP
P20			PUMP STATION INTRUSION
P20X			PUMP STATION INTRUSION
P21	CP-301	CP-DI-301	PRIMARY BUBBLER FAILURE
P21X	CP-303	CP-DI-303	PRIMARY BUBBLER FAILURE
P22	CP-286	CP-DI-286	SECONDARY BUBBLER FAILURE
P22X	CP-288	CP-DI-288	SECONDARY BUBBLER FAILURE
P23	CP-340	CP-DI-340	SCADA PANEL POWER FAILURE
P23X	CP-342	CP-DI-342	SCADA PANEL POWER FAILURE
P24	CP-361	CP-DI-361	CENTRAL PUMP TEST
P24X	CP-363	CP-DI-363	CENTRAL PUMP TEST
P25	CP-343	CP-DI-343	SCADA PANEL ALARM
P25X	CP-345	CP-DI-345	SCADA PANEL ALARM
P26	CP-331	CP-DI-331	TRANSFER SWITCH FAILURE
P26X	CP-333	CP-DI-333	TRANSFER SWITCH FAILURE
P27	CP-352	CP-DI-352	FLOAT FAILURE
P27X	CP-354	CP-DI-354	FLOAT FAILURE
P28			
P28X			
P29	CP-298	CP-DI-298	DISCHARGE CHAMBER FLOODED
P29X	CP-300	CP-DI-300	DISCHARGE CHAMBER FLOODED
P30			DISCHARGE CHAMBER COMPR CALL
P30X			DISCHARGE CHAMBER COMPR CALL
P31			DISCHARGE CHAMBER SOL. VALVE CALL
P31X			DISCHARGE CHAMBER SOL. VALVE CALL
P32	CP-294	CP-DI-294	DISCHARGE CHAMBER BUBBLER FAILURE
P32X	CP-296	CP-DI-296	DISCHARGE CHAMBER BUBBLER FAILURE

SCADA PANEL ANALOG INPUTS			
TERMINAL BLOCK TBA1			
TERM *	WIRE *	ORIGINATIION	DESCRIPTION OF INPUTS
L1	L1	M1A-0B	MAIN PUMP 1 CURRENT - AMP
L1C	L1C	M1A-0C	MAIN PUMP 1 CURRENT - AMP
L1S	L1S	M1A	MAIN PUMP 1 CURRENT - AMP
L2	L2	M2A-0B	MAIN PUMP 2 CURRENT - AMP
L2C	L2C	M2A-0C	MAIN PUMP 2 CURRENT - AMP
L2S	L2S	M2A	MAIN PUMP 2 CURRENT - AMP
L3	L3	M3A-0B	MAIN PUMP 3 CURRENT - AMP
L3C	L3C	M3A-0C	MAIN PUMP 3 CURRENT - AMP
L3S	L3S	M3A	MAIN PUMP 3 CURRENT - AMP
L4	L4		GENERATOR FUEL TANK
L4C	L4C		GENERATOR FUEL TANK
L4S	L4S		GENERATOR FUEL TANK
L5	L5		SPARE
L5C	L5C		SPARE
L5S	L5S		SPARE
L6	L6		SPARE
L6B	L6B		SPARE
L7	L7		SPARE
L7C	L7C		SPARE
L8	L8		SPARE
L8A	L8A		SPARE
L9	L9		SPARE
L9B	L9B		SPARE
L10	L10		SPARE
L10C	L10C		SPARE
L11	L11		SPARE
L11A	L11A		SPARE
L12	L12	SCADA EQUIPMENT	PRIMARY BUBBLER LEVEL CB1
L12A	L12A	SCADA EQUIPMENT	PRIMARY BUBBLER LEVEL CB1
L13	L13	SCADA EQUIPMENT	SECONDARY BUBBLER LEVEL CB2
L13A	L13A	SCADA EQUIPMENT	SECONDARY BUBBLER LEVEL CB2
L14	L14	SCADA EQUIPMENT	DISCHARGE CHAMBER BUBBLER LEVEL CB3
L14A	L14A	SCADA EQUIPMENT	DISCHARGE CHAMBER BUBBLER LEVEL CB3
L15	L15		SPARE
L15C	L15C		SPARE
L15S	L15S		SPARE
L16	L16	MAG FLOW METER	STATION DISCHARGE FLOW
L16C	L16C	MAG FLOW METER	STATION DISCHARGE FLOW
L16S	L16S	MAG FLOW METER	STATION DISCHARGE FLOW
L17	L17	M4A-0B	LF PUMP 4 CURRENT - AMP
L17C	L17C	M4A-0C	LF PUMP 4 CURRENT - AMP
L17S	L17S	M4A	LF PUMP 4 CURRENT - AMP

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REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

PUMP STATION NO. 48
REHABILITATION
SCADA PANEL
TERMINAL SCHEDULE

SCALE: N/A
DATE: 03-10-11

DRAWN BY: KCC/HFF
CHECKED BY: KCC/MS

