



**PIMA COUNTY  
PROCUREMENT DEPARTMENT  
DESIGN AND CONSTRUCTION DIVISION**

130 W. CONGRESS STREET, 3rd FLOOR. TUCSON, AZ. 85701  
PHONE: (520) 724-3731 FAX: (520) 724-4434

April 15, 2016

**ADDENDUM NO. 02**

PROJECT: IFB 193780 – SABINO CREEK PUMP STATION PROJECT NO. 3SCP06

TO ALL CONTRACTORS:

Be advised of the additions, clarifications and/or changes to the above-referenced Invitation for Bid as stated in the following Addendum.

1. The *Bid Due Date and time* **REMAIN** *Thursday, April 28, 2016 at 2:00 p.m.*
  
2. The following changes are hereby incorporated into the Specifications and Plans:
  - A. This project will install no odor control with the exception of the wet well vent/canister. Omit the following items shown on drawings C-101, C-103, M-101, E-102, E-103, E-104, and E-105: Skid Mounted Blueingreen O2 Generator, Skid Mounted Blueingreen oxygenator system, concrete support slabs, shade structural and electrical conduits and wire shown to the Odor Control System.
  - B. On drawing M-101 of the Addendum omit the vortex breaker, Detail 1.
  - C. There is no space available for Earthwork screening activities on site and all spoils will have to be taken off site, before the end of the work day or as soon as they are made.
  - D. Pima County Parks and Rec will assist with landscaping requirements were possible. Coordination with the Woodins and Pima County Parks and Rec will be central to this task, as directed by the Project Manager.
  - E. Contractor shall submit flow management plan(s) for approval from Pima County RWRD.
  
3. The following pages of the plans have been modified to reflect the changes listed above: 8 of 30 - Site Plan; 10 of 30 - Grading Plan; 16 of 30 – Pump Station Discharge Piping Plan; 17 of 30 – Mechanical Details; 18 of 30 – Pump Station Discharge Piping Section; 21 of 30 – Electrical Distribution; 22 of 30 – Electrical Site Plan, and; 23 of 30 – Conduit Schedules. These eight pages are included in this addendum as an attachment and are hereby incorporated into the Plans.

This addendum is a total of **10 pages** (including 8 pages of attachments).

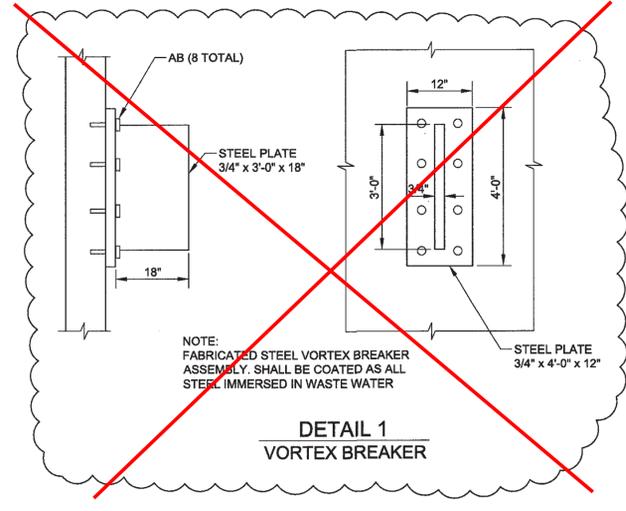
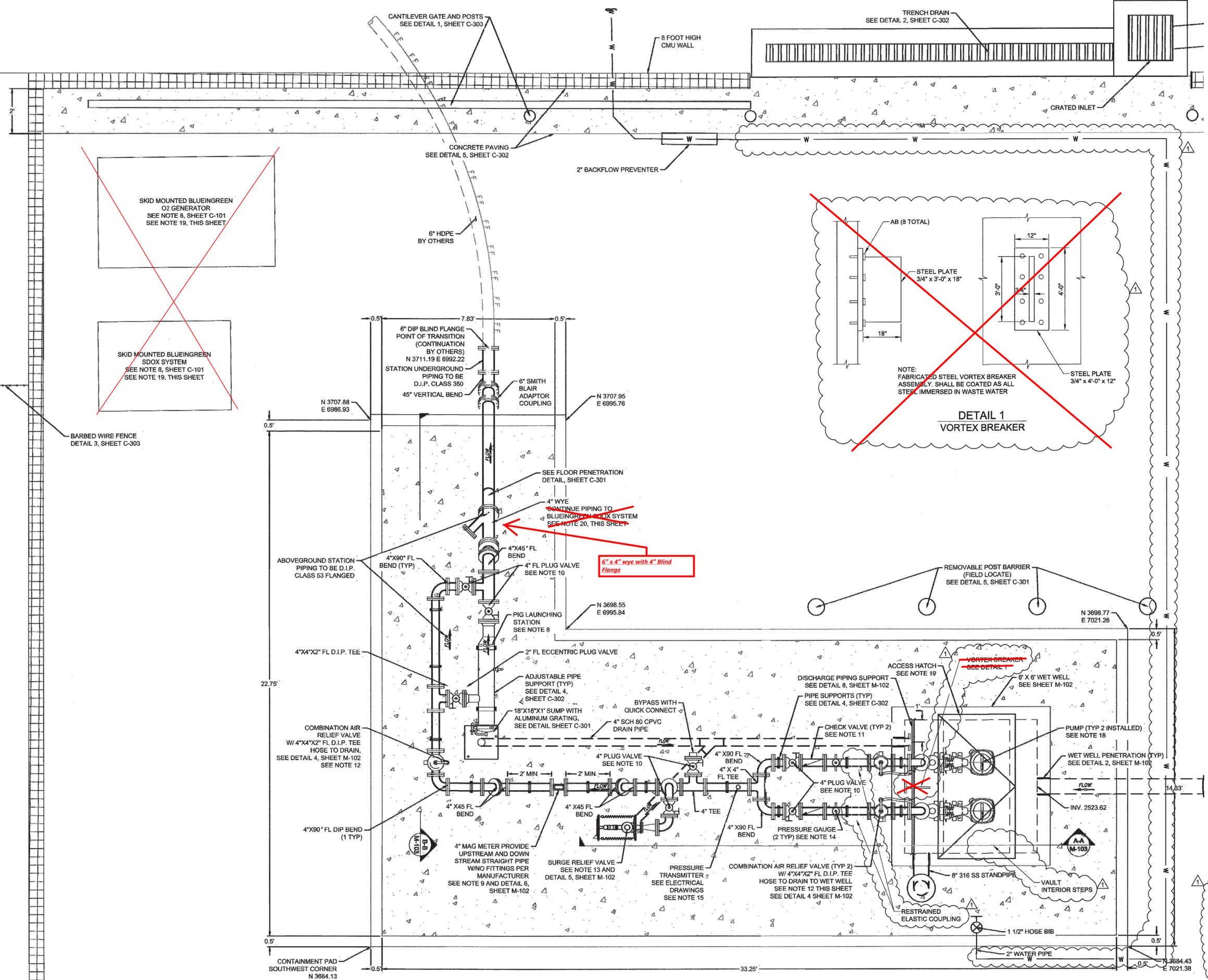
Any questions regarding this addendum should be directed to [keith.rogers@pima.gov](mailto:keith.rogers@pima.gov) or by fax to 520-770-4012.

Bidders must acknowledge receipt of this addendum on the bid form provided in the Bid Documents. Failure to do so may render the bid non-responsive.

Keith E. Rogers, CPPB  
Contracts Officer







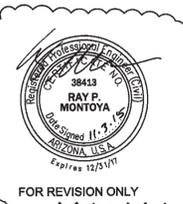
- NOTES:**
1. CHAMFER ALL CONCRETE HORIZONTAL AND VERTICAL EDGES OF CONTAINMENT STRUCTURE.
  2. SEE ELECTRICAL DRAWINGS FOR ELECTRICAL PULLBOXES, CONDUIT LOCATION AND APPURTENANCES.
  3. ALL ABOVE GRADE DIP SHALL BE CLASS 53 MIN.
  4. ALL BELOW GRADE DIP SHALL BE POLYWRAPPED RESTRAINED JOINT PIPE AND FITTING, PRESSURE CLASS 350. THRUST BLOCKS WILL NOT BE ACCEPTED EXCEPT WHERE INDICATED.
  5. FOR FINISHED GRADE ELEVATION SEE SHEET C-103.
  6. COAT ALL PIPE PER SPECIFICATION SECTION 09000.
  7. SUBMIT DIP FORCE MAIN LAYOUTS DRAWINGS SHOWING ALL VALVES AND FITTINGS.
  8. PROVIDE & INSTALL PIG LAUNCHER MODEL PL-150-6 BY JAMISON OR APPROVED EQUAL.
  9. 4" FLOW METER. PROVIDE 4" SPOOL PIECE WITH FLANGES TO MATCH MAG METER LENGTH.
  10. 4" PLUG VALVE BY DEZURIK
  11. 4" CHECK VALVE MODEL 5104 BY APCO
  12. AIR/VACUUM VALVE MODEL D-620SS BY ARI
  13. 2" ANGLE SURGE VALVE MODEL 3002 BY APCO
  14. PRESSURE GAUGE TYPE 1279 BY ASHCROFT SERIES 40, RED VALVE
  15. PRESSURE TRANSMITTER PER SPEC. SECTION 13420
  16. WET WELL TO BE COATED WITH PC RWRD APPROVED COATING SYSTEM.
  17. ELEVATIONS FOR THE CONCRETE CONTAINMENT STRUCTURE, THE TOP OF THE WET WELL, AND THE PROPOSED FINISH GROUND SURFACE ARE SHOWN ON THE GRADING PLAN, SEE SHEET C-103.
  18. PUMP BY FLYGT NP OR EBARA
  19. DOUBLE DOOR ALUMINUM HATCH BY BILCO MODEL JD-AL
  20. PROVIDE HARD PIPE CONNECTIONS BETWEEN O2 GENERATOR, SDOX SYSTEM AND 4" WYE IN ABOVEGROUND DISCHARGE FORCE MAIN PIPING PER BLUEINGREEN REQUIREMENTS.

SKID MOUNTED BLUEINGREEN O2 GENERATOR  
 SEE NOTE 8, SHEET C-101  
 SEE NOTE 19, THIS SHEET

SKID MOUNTED BLUEINGREEN SDOX SYSTEM  
 SEE NOTE 8, SHEET C-101  
 SEE NOTE 19, THIS SHEET

BARBED WIRE FENCE  
 DETAIL 3, SHEET C-303

6" x 4" wye with 4" Blind Flange



NO	DESCRIPTION	REV BY	NAME	AGENCY/DATE	APPROVED BY

SCALE: AS SHOWN DATE: 3/18/2015  
 DESIGNED: RAY P. MONTOYA  
 DRAWN BY: RAY P. MONTOYA  
 CHECKED BY: RAY P. MONTOYA  
 APPROVED BY: RAY P. MONTOYA  
 PROJECT NO.: 130-10917-000

G-2010-100  
 SHEET NUMBER  
**M-101**  
 16 of 30

G-2010-100

DRAWING NAME: LA 130-10917-000\_V-L-0\_Production\_V-L-01\_Discharge\_PIPING\_Station\_M-101.dwg PLOT DATE: 07/13/2015 6:27 PM BY: chris\_arnold





PANEL NO.		PP-1	TYPE		MAIN DISTRIBUTION		LOCATION		SABINO CREEK PS	
SERVICE VOLTAGE		480Y/277V 3PH 4W	PHASE BUS RATING		225 AMP		MOUNTING		SURFACE	
MAIN BREAKER SIZE		225 AMP MCB	NEUTRAL BUS RATING		225 AMP		DRAWING NO.		E-105	
			SHORT CIRCUIT RATING		25000 AIC		NEMA RATING		4X	

CIRCUIT	DESCRIPTION	LOAD AMP	BREAKER		VOLT AMPS			CKT. NO.	CKT. NO.	VOLT AMPS			BREAKER		LOAD AMP	DESCRIPTION	CIRCUIT
			POLE	AMP	A	B	C			A	B	C	POLE	AMP			
P-201	CP-SCPS-02	34	3	100	9433*	9433*	9433*	1	2	100			3	30	0.4	SPD	
								3	4								
								5	6								
								7	8	6590			2	70	28.7	TRANSFORMER 1	P-212
P-210A	SDOX-CS ODOR CONTROL	7.8	3	50	2018	2018	2018	9	10	6590			1	20	0.0	SPARE	
								11	12								
								13	14								
P-210B	OZ GEN ODOR CONTROL	0.0	3	00	6367***	6367***	6367***	15	16				3	20	0.0	SPARE	
								17	18								
								19	20								
	SPARE	0.0	3	20				21	22								
	PROVISIONS FOR							23	24								
	PROVISIONS FOR							25	26								
	PROVISIONS FOR							27	28								
	PROVISIONS FOR							29	30								
	PROVISIONS FOR							31	32								
	PROVISIONS FOR							33	34								
	PROVISIONS FOR							35	36								
	PROVISIONS FOR							37	38								
	PROVISIONS FOR							39	40								
	PROVISIONS FOR							41	42								

TOTAL PHASE A:	24508	VOLT-AMPS	TOTAL CONNECTED LOAD:	66.9	KVA
TOTAL PHASE B:	24508	VOLT-AMPS	ESTIMATED DEMAND LOAD:	88.9**	KVA
TOTAL PHASE C:	17918	VOLT-AMPS	ESTIMATED DEMAND LOAD:	106.9**	AMP
			MAXIMUM PHASE CURRENT:	88.5	AMP

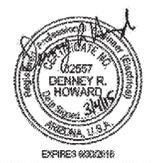
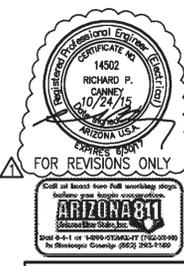
\* FROM 'ELECTRICAL LOAD ANALYSIS' ON SHEET E-102 (ASSUMES ONLY ONE MOTOR OPERATES)  
 \*\* FROM PANEL LP-1 SCHEDULE ON THIS SHEET (57.3A x (240V/480V))  
 \*\*\* FROM 'ELECTRICAL LOAD ANALYSIS' ON SHEET E-102

**PANEL SCHEDULE LEGEND**

I = INTERMITTANT LOAD  
 C = CONTINUOUS LOAD  
 NOTE #C DESIGNATIONS USED FOR LOAD CALCULATIONS ONLY

LP-1													
PANEL INFORMATION						PANEL CALCULATIONS							
LOCATION	ELECTRICAL LINEUP					NEMA RATING	3R	13280	TOTAL CONNECTED VA			A PHASE	8085
VOLTAGE	240 /120					WIRE	3	2350	TOTAL CONTINUOUS VA			B PHASE	595
PHASE	1					AMP RATING	125	13830	TOTAL INTERMITTENT VA				
MAIN INTERRUPT	125A					FEED		13868	TOTAL PANEL VA				
MANUFACTURER	10 KAIC					MTG.	SURFACE	57.8	TOTAL PANEL AMPS				
#C	CIRCUIT	DESCRIPTION	LOAD (VA)	BKR	CBR	Ø	CIR	BKR	LOAD (VA)	DESCRIPTION	CIRCUIT	#C	
I	P204	SITE LIGHTS - PUMP STATION AND GENERATOR AREAS	575	20-1P	1	A	2	20-1P	1500	SCADA CABINET CP-PCS-1A	P218	C	
C	P207	GENERATOR BATTERY CHARGER	600	20-1P	3	B	4	20-1P	575	SITE LIGHTS - ODOR CONTROL AND PUMP STATION AREAS	P203	I	
I	P209	GENERATOR BLOCK HEATER	1500	20-1P	5	A	6	20-1P	150	FLOW METER FOIT-130	P205	C	
C	P211A	SDOX-CS ODOR CONTROL PNL CP-SCPS-03 (ALTERNATE CIRCUIT)		60-2P	7	B	8	20-1P	180	GFCI RECEPTACLE AT GENERATOR AREA	P215	I	
I	P208	GFCI RECEPTACLE - WET WELL AREA	760	20-1P	9	A	10	20-1P	1000	AIR CONDITIONER CP-PCS-02	P217	I	
I	P214	AIR CONDITIONER CP-PCS-1A	1000	20-1P	11	B	12	20-1P		SPARE			
I	P216	GENERATOR CONTROL HEATER	400	20-1P	13	A	14	20-1P		SPARE			
		SPARE		20-1P	15	B	16	20-1P	780	GFCI RECEPTACLE & LIGHTING - CONTROL PANEL AREA	P219	I	
				20-1P	17	A	18	20-1P	1800	GFCI RECEPTACLE FOR OXYGEN GENERATION EQUIPMENT	P223	I	
				20-1P	19	B	20	20-1P	1800	GFCI RECEPTACLE FOR OXYGEN GENERATION EQUIPMENT	P223	I	
C	P211B	OZ GEN ODOR CONTROL PNL CP-SCPS-04 (ALTERNATE CIRCUIT)		40-2P	21	A	22	20-1P	560	GFCI RECEPTACLE & LIGHTING FOR SDOX-CS EQUIPMENT	P228	I	
		SPARE		20-1P	23	B	24	20-1P	100	IRRIGATION CONTROLLER	P224	C	

\* IF THIS ALTERNATE CIRCUIT IS USED THE LOAD SHALL NOT EXCEED THE SERVING TRANSFORMER AND PANEL CAPACITY, SUBMIT LOADS FOR REVIEW.

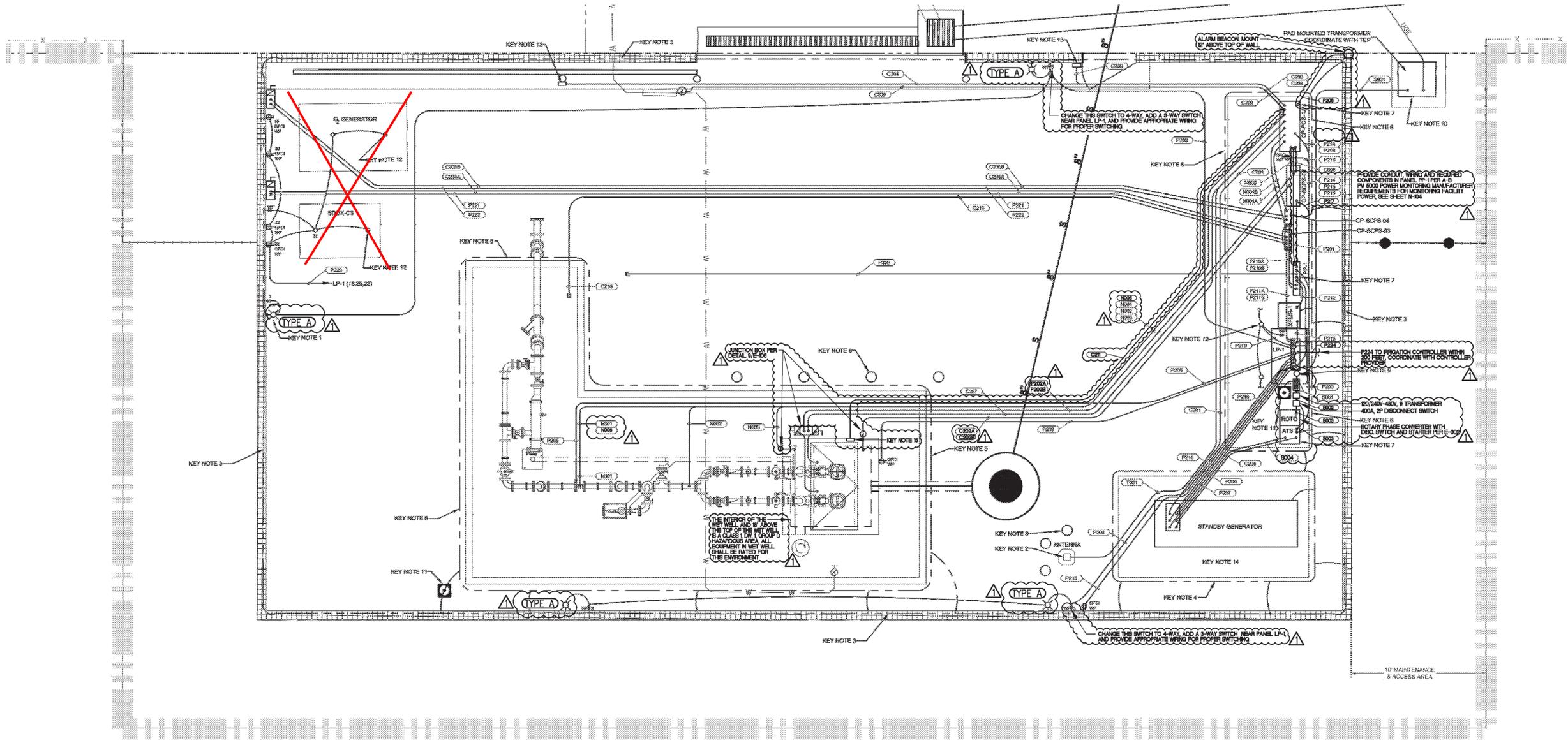


SCALE: AS SHOWN	DATE: 7/16/2015	DESIGNED: DRH	DRAWN BY: ALO	CHECKED BY: DRH	APPROVED BY: DRH	PROJECT NO: 133-15817-02D
G-2010-100 SHEET NUMBER						
E-103						
21 of 30						

DRAWING MADE BY: L.A. LUCAS (10/17/2015) DATE: 10/24/19  
 CHECKED BY: DENNEY R. HOWARD (10/24/19)  
 PROJECT NO: 133-15817-02D

**ELECTRICAL SITE PLAN**

**SABINO CREEK PUMP STATION**



**ELECTRICAL SITE PLAN**

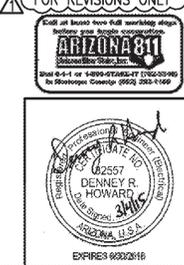
**GENERAL NOTES:**

- CONDUIT ROUTING IS CONCEPTUAL IN NATURE. CONTRACTOR TO SUBMIT SHOP DRAWING OF CONDUIT PLAN FOR APPROVAL PRIOR TO INSTALLATION.
- WIRE SIZE AND SUBSEQUENT CONDUIT SIZING HAS BEEN BASED ON DERATING FOR TEMPERATURE OF 46-50C AND WIRE SPECIFIED IN SPEC 16122 PER NEC TABLE 310.16. WHERE MULTIPLE CIRCUITS ARE CONTAINED IN THE SAME CONDUIT, THE WIRE SIZES HAVE ALSO BEEN ADJUSTED BASED ON THE NEC.
- GROUNDING WIRE (PER SPEC) TO BE BONDED TO REBAR MATS AS SHOWN AT A SPACING OF NO MORE THAN 20 FEET UNLESS OTHERWISE NOTED.
- PROVIDE SUFFICIENT GROUNDING PADS IN CONCRETE PADS FOR EXISTING AND FUTURE EQUIPMENT. SEE SHEET E-106.
- ELECTRICAL SUPPORT SYSTEM AND SHADE STRUCTURE OMITTED FOR CLARITY.
- PROVIDE CONDUIT AND WIRE FOR ELECTRICAL PRIMARY FEED TO TEP PAD-MOUNTED TRANSFORMER IN ACCORDANCE WITH TUCSON ELECTRIC POWER (TEP) DESIGN AND STANDARD SPECIFICATIONS/DETAILS. ALSO PROVIDE CONDUIT AND WIRE FROM THE TRANSFORMER THRU THE METERING EQUIPMENT AND ON TO THE MAIN SERVICE DISCONNECT.
- PROVIDE RIGID GALVANIZED STEEL OR PVC COATED RIGID GALVANIZED STEEL CONDUIT MEETING THE REQUIREMENTS OF NEMA 801 AND UL6 IN LIEU OF RIGID ALUMINUM CONDUIT OR PVC COATED RIGID ALUMINUM CONDUIT CALLED FOR IN SPECIFICATION SECTION 1630. ALL CONDUIT SHALL BE 1" MINIMUM.
- WET WELL LEVEL INSTRUMENT PART 02 SHALL BE AN ULTRASONIC TYPE LEVEL INSTRUMENT AND SHALL BE PROVIDED AS PART OF THE SCADA PANEL CP-PCS-1A, IN LIEU OF THE HYDROSTATIC LEVEL INSTRUMENT SHOWN IN THESE DRAWINGS.

**LIGHTING CODE COMPLIANCE**  
 AREA E3a, OPTION 2 (ALL FULL, CUT-OFF) LIMITS ARE:  
 150,000 LUMENS FOO PER ACRE  
 NET ACREAGE = 0.12 ACRES. THEREFORE LUMEN LIMITS ARE:  
 0.12 ACRES x 150,000 LUMENS PER ACRE = 18,000 LUMENS FOO  
 INSTALLED FIXTURES:  
 (TYPE A) (FCO, 2 LAMP-13W FLUORESCENT WALL MOUNTED, 900 LUMEN/LAMP):  
 4 FIXTURES x 4,488 LUMENS/FIXTURE = 17,952 LUMENS  
 TOTAL LUMENS:  
 TOTAL = 17,952 LUMENS (18,000 LUMENS, ACCEPTABLE)

**KEY NOTES:**

- WALL MOUNT FIXTURES TO BE FULL CUTOFF LITHONIA LIGHTING (DRAWN LED 20C 700 30K 1FTM 100 DBOB OR EQUAL - TYP OF 4).
- REFER TO E-107 FOR DETAIL OF POLE GROUNDING AND ANTENNA MOUNTING.
- RUN GROUNDING WIRE (PER SPEC) ON INSIDE FACE OF PERIMETER WALL FOUNDATION REBAR MAT. BOND TO REBAR MAT AT DISTANCES NO GREATER THAN 10 FEET. REFER TO G-302 FOR PERIMETER WALL FOUNDATION DETAIL. RUN BELOW CONCRETE AT ENTRANCE GATE.
- RUN GROUNDING WIRE (PER SPEC) ON OUTSIDE FACE OF GENERATOR FOUNDATION REBAR MAT. BOND TO REBAR MAT AT DISTANCES NO GREATER THAN 5 FEET.
- RUN GROUNDING WIRE (PER SPEC) ON OUTSIDE FACE OF PUMP STATION CONTAINMENT PAD REBAR MAT FOUNDATION. RUN GROUND UNDERNEATH DRAIN SUMP. BOND TO REBAR MAT AT DISTANCES NO GREATER THAN 10 FEET.
- RUN GROUNDING WIRE (PER SPEC) ON OUTSIDE FACE OF ELECTRICAL/CONTROL EQUIPMENT AREA REBAR MAT. BOND TO REBAR MAT AT DISTANCES NO GREATER THAN 5 FEET. TIE ALL GROUNDING RODS INSTALLED PER PCOCT REQUIREMENT FOR GROUNDING LOOP.
- CAREFULLY COORDINATE LAYOUT OF ALL POWER AND CONTROL EQUIPMENT WITH MODULAR DESIGN OF THE SHADE STRUCTURE SO THAT THE FINAL CONFIGURATION IS OPERATIONALLY EFFICIENT AND HELPS MINIMIZE WASTED STRUCTURAL FRAMING MEMBERS. TYPICAL REFER TO RWRD STANDARD DETAIL 504 FOR ADDITIONAL INFORMATION.
- FIELD LOCATE REMOVABLE BARRICADES. REFER TO DETAIL SHEET M-104, TYPICAL.
- INSTALL INCOMING POWER METER PER TEP REQUIREMENTS.
- COORDINATE ALL WORK ASSOCIATED WITH ELECTRICAL SERVICE WITH TEP STANDARDS AND REQUIREMENTS. PROVIDE CONCRETE PAD FOR TRANSFORMER, BELOW GRADE PRIMARY AND SECONDARY CONDUITS, SERVICE LATERAL CONDUCTORS, ETC. AS REQUIRED BY TEP STANDARDS. COORDINATE FINAL SCOPE OR WORK REQUIREMENTS WITH TEP.
- PROVIDE GROUND TEST WELL. REFER TO DETAIL 7 ON SHEET E-108.
- PROVIDE LIGHTING FIXTURES AND ASSOCIATED BRANCH CIRCUITING UNDER SHADE STRUCTURES.
- PROVIDE INTRUSION ALARM CONTACTS AT EACH ENTRY GATE. COORDINATE FINAL INSTALLATION CONFIGURATION AND CONTACT SELECTION WITH GATE MECHANICS TO PROVIDE RELIABLE OPEN/CLOSE INDICATION.
- PROVIDE CONCRETE PAD WITH APPROXIMATE 18'-0" x 8'-0" DIMENSIONS. FINAL DIMENSIONS TO BE COORDINATED WITH SELECTED GENERATOR SO THAT PAD IS A MINIMUM OF 2'-0" BEYOND BOTH LENGTH AND WIDTH DIMENSIONS.
- PROVIDE INTRUSION ALARM CONTACTS AT THE WET WELL HATCH. COORDINATE FINAL INSTALLATION CONFIGURATION AND CONTACT SELECTION WITH HATCH MECHANICS TO PROVIDE RELIABLE OPEN/CLOSE INDICATION. NOTE EXPLOSIONPROOF REQUIREMENT FOR CONTACTS. CONDUIT C211 MAY BE RUN THROUGH J-BOX WITH CONDUIT C202 IF SELECTED SWITCH HAS APPROPRIATE CABLE TO J-BOX.



NO.	DESCRIPTION	REV BY	NAME	DATE	APPROVED BY

SCALE: AS SHOWN DATE: 7/16/2015  
 DESIGNED: DRH  
 DRAWN BY: ALO  
 CHECKED BY: DRH  
 APPROVED BY: DRH  
 PROJECT NO: 133-10817-000

FOR REVISIONS ONLY

Arizona State Board of Professional Engineers and Land Surveyors  
 EXPIRES 03/31/16

**CONTROL**

CIRCUIT NUMBER	CONDUIT SIZE	SIGNAL CONDUCTORS	NEUTRAL CONDUCTORS	GROUND CONDUCTORS	FROM	TO
C-201	1"	12 #12	N/A	1 #12	GENERATOR	CP-PCS-1A
<del>C-202</del>	<del>1"</del>	<del>10 #12</del>	<del>N/A</del>	<del>1 #12</del>	<del>WET WELL FLOAT SWITCHES</del>	<del>CP-PCS-1A</del>
C-203	1"	2 #12	N/A	1 #12	MAN GATE INTRUSION SWITCH	CP-PCS-1A
C-204	1"	2 #12	N/A	1 #12	SLIDING GATE INTRUSION SWITCH	CP-PCS-1A
C-205	1 1/2"	24 #12	N/A	1 #12	CP-SCPS-02	CP-PCS-1A
<del>C-206A</del>	<del>1"</del>	<del>BY VENDOR</del>	<del>N/A</del>	<del>BY VENDOR</del>	<del>ODOX-06 ODOR CONTROL PNL CP-PCS-06</del>	<del>ODOR CONTROL EQUIPMENT</del>
<del>C-206B</del>	<del>1"</del>	<del>BY VENDOR</del>	<del>N/A</del>	<del>BY VENDOR</del>	<del>O2 GEN ODOR CONTROL PNL CP-PCS-04</del>	<del>ODOR CONTROL EQUIPMENT</del>
C-207	2"	12 #12	N/A	1 #12	WET WELL PUMPS JUNCTION BOX	CP-SCPS-02
C-208	1"	8 #12	N/A	1 #12	AUTOMATIC TRANSFER SWITCH	GENERATOR CONTROL PANEL
C-209	2"	-	N/A	-	CP-PCS-1A	JUNCTION BOX AT GATES
C-210	1"	PULL CORD	N/A	-	FUTURE DO SENSOR	SDOX-CS ODOR CONTROL PNL CP-PCS-03
C-211	1"	2 #12	N/A	1 #12	CP-PCS-1A	JUNCTION BOX AT WET WELL HATCH

PROVIDE TWO CONDUITS, C-202A AND C-202B, ONE FOR EACH SWITCH, 6#12, #12G, 1" EACH CONNECT TO INTRINSICALLY SAFE RELAYS PROVIDED IN CP-PCS-1A

NOTE: CIRCUITS MAY BE COMBINED INTO LARGER RACEWAYS AT THE CONTRACTOR'S DISCRETION, IF PRE-APPROVED BY OWNER.

**POWER**

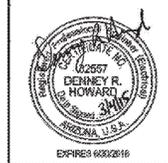
CIRCUIT NUMBER	CONDUIT SIZE	PHASE CONDUCTORS	NEUTRAL CONDUCTORS	GROUND CONDUCTORS	FROM	TO
S-001	TWO 3"	2-500 KCMIL in EACH CONDUIT	1-500 KCMIL	1 #4/0	UTILITY TRANSFORMER	167 KVA TRANSFORMER (THRU METERING AND SERVICE ENTRANCE SWITCH)
S-002	3"	2-500 KCMIL	-	1 #4/0	167 KVA TRANSFORMER	SECONDARY FUSED DISCONNECT
S-003	3"	3-500 KCMIL	-	1 #4/0	SECONDARY FUSED DISCONNECT	TO/FROM ROTARY PHASE CONVERTER AND TO AUTOMATIC TRANSFER SWITCH
S-004	3"	3-350 KCMIL	1-350 KCMIL	1 #4/0	GENERATOR	AUTOMATIC TRANSFER SWITCH
P-200	3"	3-500 KCMIL	1-500 KCMIL	1 #4/0	AUTOMATIC TRANSFER SWITCH	POWER PANEL PP-1
P-201	1 1/2"	3 #1	-	1 #4	POWER PANEL PP-1	CP-SCPS-02
<del>P-202</del>	<del>1"</del>	<del>3 #6</del>	<del>-</del>	<del>1 #8</del>	<del>CP-SCPS-02</del>	<del>PS-1 AND PS-2 PUMP DISCONNECTS</del>
P-203	1"	1 #10	1 #10	1 #10	LIGHTING PANEL LP-1	NORTH and WEST WALL LIGHTS
P-204	1"	1 #10	1 #10	1 #10	LIGHTING PANEL LP-1	SOUTH WALL LIGHTS
P-205	1"	1 #10	1 #10	1 #10	LIGHTING PANEL LP-1	FLOW METER FQIT-130
P-206	1"	1 #10	1 #10	1 #10	PCS-1A RTU PANEL	ALARM BEACON
P-207	1"	1 #10	1 #10	1 #10	LIGHTING PANEL LP-1	GENERATOR BATTERY CHARGER
P-208	1"	1 #10	1 #10	1 #10	LIGHTING PANEL LP-1	WET WELL GFCI RECEPTACLE
P-209	1"	1 #10	1 #10	1 #10	LIGHTING PANEL LP-1	GENERATOR ENGINE COOLANT HEATER
P-210A	2"	3 #6	-	1 #10	POWER PANEL PP-1 (IF 480V POWER REQ'D)	SDOX-CS ODOR CONTROL PNL CP-PCS-03
P-210B	2"	3 #6	-	1 #10	POWER PANEL PP-1 (IF 480V POWER REQ'D)	O2 GEN ODOR CONTROL PNL CP-PCS-04
P-211A	2"	2 #4	-	1 #10	LIGHTING PANEL LP-1 (IF 240V POWER REQ'D)	SDOX-CS ODOR CONTROL PNL CP-PCS-03
P-211B	2"	2 #3	-	1 #10	LIGHTING PANEL LP-1 (IF 240V POWER REQ'D)	O2 GEN ODOR CONTROL PNL CP-PCS-04
P-212	1"	2 #3	-	1 #4	POWER PANEL PP-1	TRANSFORMER XFRM-1
P-213	1 1/2"	2 #2/0	1 #2/0	1 #4	TRANSFORMER XFRM-1	LIGHTING PANEL LP-1
P-214	1"	1 #10	1 #10	1 #10	LIGHTING PANEL LP-1	SCADA PANEL AIR CONDITIONER
P-215	1"	1 #10	1 #10	1 #10	LIGHTING PANEL LP-1	GFCI RECEPTACLE AT GENERATOR
P-216	1"	1 #10	1 #10	1 #10	LIGHTING PANEL LP-1	GENERATOR CONTROL HEATER
P-217	1"	1 #10	1 #10	1 #10	LIGHTING PANEL LP-1	CP-SCPS-02 AIR CONDITIONER
P-218	1"	1 #10	1 #10	1 #10	LIGHTING PANEL LP-1	SCADA CP-PCS-1A
P-219	1"	1 #10	1 #10	1 #10	LIGHTING PANEL LP-1	RECEPTACLE AND SCREEN CANOPY LTG
P-220	2"	-	-	-	POWER PANEL PP-1	FUTURE PUMP PAD (PLUG AT END)
<del>P-221</del>	<del>2"</del>	<del>3 #4</del>	<del>-</del>	<del>1 #10</del>	<del>ODOX-CS ODOR CONTROL PNL CP-PCS-03</del>	<del>ODOR CONTROL EQUIPMENT</del>
<del>P-222</del>	<del>2"</del>	<del>3 #6</del>	<del>-</del>	<del>1 #10</del>	<del>O2 GEN ODOR CONTROL PNL CP-PCS-04</del>	<del>ODOR CONTROL EQUIPMENT</del>
<del>P-223</del>	<del>1"</del>	<del>3 #10</del>	<del>1 #10</del>	<del>1 #10</del>	<del>LIGHTING PANEL LP-1</del>	<del>ODOR CONTROL EQUIP., RECEPT., LIGHTING</del>
P-224	1"	1 #10	1 #10	1 #10	LIGHTING PANEL LP-1	IRRIGATION CONTROLLER

PROVIDE TWO CONDUITS, P-202A AND P-202B, ONE FOR EACH PUMP, 3#6, #8G, 1" EACH

**INSTRUMENT**

CIRCUIT NUMBER	CONDUIT SIZE	FILL	FROM	TO	NOTES
N-001	1" RIGID with 20mil WRAP	1 - TSP	FLOW INDICATOR TOTALIZER TRANSMITTER FQIT-130	CP-PCS-1A	4-WIRE TRANSMITTER
N-002	1" RIGID with 20mil WRAP	1 - TSP	PRESSURE INDICATOR TRANSMITTER PIT-120	CP-PCS-1A	2-WIRE TRANSMITTER
N-003	1" RIGID with 20mil WRAP	PROVIDE WITH ULTRASONIC SENSOR	LEVEL TRANSMITTER LT-102	CP-PCS-1A	ULTRASONIC SENSOR CABLE
N-004A	1" RIGID with 20mil WRAP	-	FUTURE ODOR CONTROL PANEL (PLUG AT END)	CP-PCS-1A (PLUG AT END)	-
N-004B	1" RIGID with 20mil WRAP	-	FUTURE ODOR CONTROL PANEL (PLUG AT END)	CP-PCS-1A (PLUG AT END)	-
N-005	2" RIGID with 20mil WRAP	ETHERNET/IP, 4 - TSP	CP-SCPS-02	PCS-1A	WET WELL PUMP MONITORING
T-001	1" RIGID with 20mil WRAP	COAX	CP-PCS-1A	ANTENNA	-
N-006	1"	2 #12, #12G	FLOW INDICATOR TOTALIZER TRANSMITTER FQIT-130	CP-PCS-1A	CP-PCS-1A

NO	DESCRIPTION	REV BY	NAME	DATE	APPROVED BY



PROJECT: 135-1687-000; DATE: 7/16/2015; DRAWING: E-105; SHEET: 23 OF 30; FILE: G-2010-100; PROJECT: 135-1687-000; DATE: 7/16/2015; DRAWING: E-105; SHEET: 23 OF 30; FILE: G-2010-100