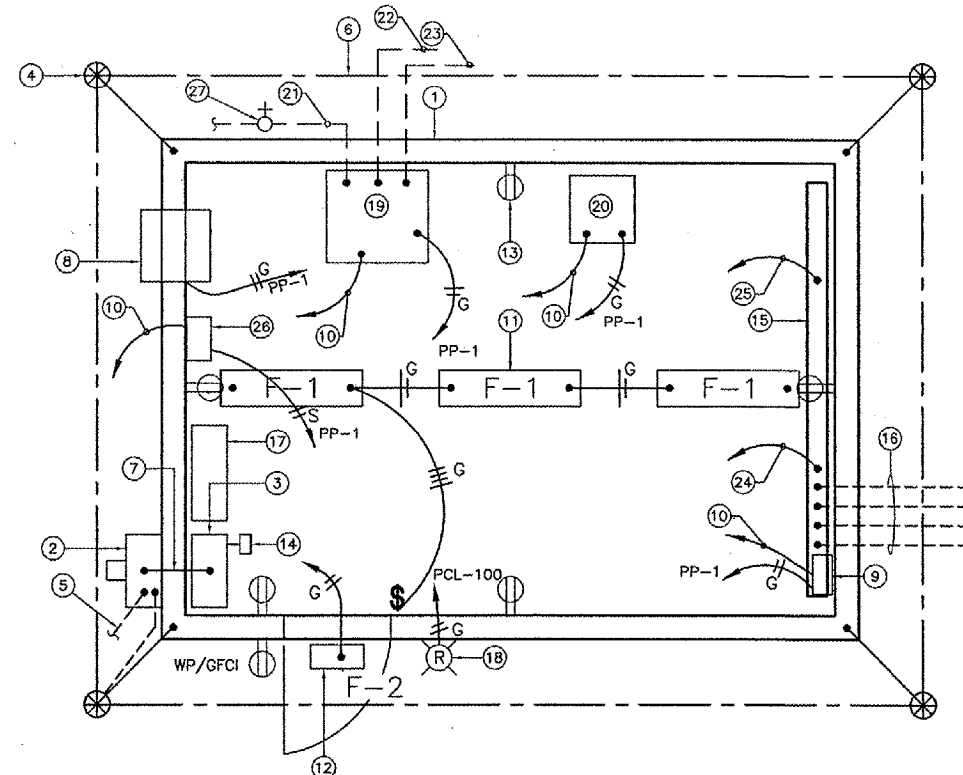


- ① 16'X12' PRE-FABRICATED METAL BUILDING.
- ② 100 AMP C.T CABINET AND UTILITY METER.
- ③ 120/240V, 1-PHASE, 100 AMP POWER PANELBOARD PP-1 WITH 100 AMP, 2-POLE MAIN CIRCUIT BREAKER.
- ④ 1" DIA. X 10'0" LONG COPPER GROUND ROD (TYPICAL OF 4). INSTALL GROUND RODS 1'0" BELOW GRADE. ALL CONNECTIONS TO GROUND ROD SHALL BE ONE-SHOT EXOTHERMIC CADWELD OR EQUAL.
- ⑤ 3-1/2" XHHW, 600V AND 1-1/2" #6 GND. IN 2" GRS CONDUIT TO POLE MOUNTED UTILITY TRANSFORMER.
- ⑥ 1/2" - 500 MCM BARE COPPER GROUND WIRE (TYP). INSTALL GROUND WIRE MIN. 1'0" BELOW GRADE. ALL CONNECTIONS TO GROUND WIRE AND TO VAULT ENCLOSURE SHALL BE ONE-SHOT EXOTHERMIC CADWELD OR EQUAL.
- ⑦ 3-1/2" XHHW, 600V AND 1-1/2" #6 GND. IN 2" GRS CONDUIT.
- ⑧ WALL MOUNTED ENVIRONMENTAL CONTROL UNIT, 11000 BTUH AIR CONDITIONER, 3.6KW HEATSTRIP, BARD CATALOG #WA121-A03 EX4XXJ WITH SUPPLY AND RETURN GRILL AND 2-STAGE THERMOSTAT.
- ⑨ NEMA SIZE "0" STARTER WITH HAND-OFF AUTO SELECTOR SWITCH IN NEMA 12 ENCLOSED FOR STORM WATER SAMPLING PUMP
- ⑩ 6 #12 THWN, 1 #12 GND. IN 3/4" CONDUIT TO PLC-100
- ⑪ F-1 TYPE LIGHT FIXTURE. FIXTURE SHALL BE 4'0" FLOURESCENT WITH T-8 LAMPS MODEL DWAE-2-32-120-EB101 AS MANUFACTURED BY DAY-BRITE OR EQUAL.
- ⑫ F-2 TYPE WALL LIGHT FIXTURE. FIXTURE SHALL BE 70W METAL HALIDE MODEL W4-070HP-12-5-K-B AS MANUFACTURED BY HOLOPHANE OR EQUAL.
- ⑬ GENERAL PURPOSE CONVENIENCE DUPLEX RECEPTACLES. (TYP OF 4). INSTALL 2#12 THWN, 1#12 GND. IN 3/4" CONDUIT FOR RECEPTACLE CIRCUIT.
- ⑭ TRANSIENT VOLTAGE SURGE SUPPRESSER. (TVSS).
- ⑮ 8"x8" WIREWAY. INSTALL WIREWAY 2'-0" AFF.
- ⑯ 4-WAY CONCRETE ENCASED DUCT BANK TO HANDHOLE WITH:  
 -16 #12 XLP-USE, 2 #12 GND. (VALVE CONTROLS)  
 -4 #10 XLP-USE, 2 #10 GND. (VALVE POWER)  
 -2-2/C #16 SHIELDED CABLE (VALVE POSITION)  
 -2 #10 XLP, 1 #10 GND. (PUMP POWER)
- ⑰ PLC 100 ENCLOSURE. SEE PLC SCHEMATIC SHEETS FOR DETAILS.
- ⑱ VAPOR PROOF ALARM LIGHT WITH 100 WATT BULB, RED GLOBE AND GUARD.
- ⑲ CART-MOUNTED BOD ANALYZER
- ⑳ AMMONIA ANALYZER
- ㉑ 1" WATER LINE
- ㉒ ㉓ 2" & 3" PVC SAMPLING AND RETURN LINES
- ㉔ 4 #10 XLP-USE, 2 #10 GND. IN 1" CONDUIT TO PP-1
- ㉕ 16 #12 XLP-USE, 2 #10 GND. AND 2-2/C #16 SHIELDED IN 1 1/2" CONDUIT TO PLC-100
- ㉖ SENSAPHONE CELL PHONE ALARM DIALER, MODEL 1800 OR APPROVED EQUAL.
- ㉗ 1" HOSE BIBB, MOUNTED ON EXTERIOR WALL WITH 1" BALL VALVE.



**STORM WATER SAMPLING BUILDING PLAN VIEW**

- 1. CONTRACTOR SHALL INSTALL C.T. CABINET. COMED WILL FURNISH METER. CONTRACTOR SHALL COORDINATE ALL SERVICE CONNECTIONS WITH COMED.
- 2. HEATING, LIGHTING AND MISC. CIRCUITS NOT SHOWN FOR CLARITY. SEE PANELBOARD SCHEDULE.

ALL ELECTRICAL WORK RELATED TO STORM WATER SAMPLING BUILDING SHALL BE PAID UNDER PAY ITEM FOR STORM WATER SAMPLING BUILDING ELECTRICAL, PAY ITEM 800131

PANEL SCHEDULE														
PANEL DESIGNATION:		POWER PANELBOARD, "PP-1"						TYPE:		120V/240V, 1-PHASE				
LOCATION:		STORM WATER SAMPLING BUILDING						POLE:		42				
VOLTS: 240V/120V				W RE: 3				AMPS: 100						
PHASE: SINGLE				MOUNTING: SURFACE				MAIN CIRCUIT BREAKER: 100A-2P						
CKT NO.	LOAD	BREAKER SIZE	LOAD AMPS	USAGE FACTOR	PHASE A	PHASE B	POLE NO.	PHASE A	PHASE B	USAGE FACTOR	LOAD AMPS	BREAKER SIZE	LOAD	CKT NO.
1	DIVERSION VALVE #1	30A-2P	6	0.5	3		1 2			0.5	6	30A-2P	DIVERSION VALVE #2	2
3						3	3 4	3		1	2			4
5		20A-1P	6	1	6		5 6	4		1	4	20A-1P	INDOOR LIGHTS	6
7	OUTDOOR LIGHTS	20A-1P	2	1	2		7 8	3		0.5	2	20A-1P	RECEPTACLES	8
9	BOD SAMPLE PUMP	20A-2P	8	1	8		9 10				8	20A-1P	PLC-100	10
						8	11 12	10		1	10	20-2P	AIR CONDITIONER	12
13	AMMONIA ANALYZER	20A-2P	2	1	2		13 14				2	20-2P	BOD ANALYZER	16
						2	15 16	16		1	16			18
17	SPARE	20A-2P					17 18							20
19	SPARE	20A-1P					19 20					20A-1P	SPARE	22
21	SPARE	20A-1P					21 22					20A-2P	SPARE	24
23	SPARE	20A-1P					23 24							26
25	SPARE	20A-1P					25 26					20A-2P	TVSS	28
27	SPARE	20A-1P					27 28							30
29	SPARE	20A-1P					29 30					20A-1P	SPARE	32
31	SPARE	20A-1P					31 32					20A-1P	SPARE	34
33	SPACE						33 34					20A-1P	SPACE	36
35	SPACE						35 36					20A-1P	SPACE	38
37	SPACE						37 38						SPACE	40
39	SPACE						39 40						SPACE	42
41	SPACE						41 42						SPACE	

PHASE TOTAL AMPS:	51	48	TOTAL USAGE LOAD:	15.000	VA
	A	B	M.N. XFMR VA:	15.000	VA
PHASE TOTAL VA:	6120	5760			

FEEDER:  
 WIRESIZE: 1-2 PER PHASE  
 WIRETYPE: XHHW  
 WIRES PER CONDUIT: 4  
 CONDUIT SIZE: 2"  
 NO. OF CONDUITS: 1  
 GROUND CONDUCTOR: #6  
 BOND NEUTRAL AND GROUND BAR: NO  
 SHORT CIRCUIT RATING: 35,000 A

REVISIONS		
NUMBER	BY	DATE

0 1 2  
 THIS BAR IS EQUAL TO 2"  
 AT FULL SCALE (34X22).

CHICAGO ROCKFORD INTERNATIONAL AIRPORT  
 ROCKFORD, ILLINOIS

STORM WATER SAMPLING  
 BUILDING PLAN

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DESIGN BY:	BDH/CAD
DRAWN BY:	JRO/CAD
CHECKED BY:	DLP
APPROVED BY:	
DATE:	02/29/08
JOB No:	07258-06
ILLINOIS PROJECT:	RFD-3787
A.I.P. PROJECT:	3-17-0088-XX
<b>FINAL SUBMITTAL</b>	
SHEET 38 OF 83 SHEETS	