



1112 Manatee Ave. West  
Bradenton, FL 34205  
[purchasing@mymanatee.org](mailto:purchasing@mymanatee.org)

## Solicitation Addendum

---

**Addendum No.:** 3  
**Solicitation No.:** 17-2001OV  
**Project No.:**  
**Solicitation Title:** Chiller and Exhaust Fan Replacement at the Water treatment Lab  
**Addendum Date:** October 26th, 2017  
**Procurement Contact:** Olga Valcich [olga.valcich@mymanatee.org](mailto:olga.valcich@mymanatee.org)

---

**IFB NO. 17-2001OV IS AMENDED AS SET FORTH HEREIN. RESPONSES TO QUESTIONS POSED BY PROSPECTIVE BIDDERS ARE PROVIDED BELOW. THIS ADDENDUM IS HEREBY INCORPORATED IN AND MADE A PART OF IFB NO. 17-2001OV CHILLER AND EXHAUST FAN REPLACEMENT AT THE WATER TREATMENT LAB.**

Replace the following Plan Sheets:

**PLAN SHEET CH-M3.1 MECHANICAL DETAILS**

- "New water Pump schedule": Revised pump Selection CHWP-1. Motor remain unchanged.
- "New water Pump schedule": Note added to clarify connection of new pump to existing piping
- "Buffer Tank Schedule": Note added to clarify that chilled water supply and return piping connections on buffer tank, shall match line size, 4".

**PLAN SHEET CH-E2.0 ELECTRICAL CHILLER YARD RENOVATION PLAN**

- Revised keynote 6 to specify replacing existing 600A 'MDP' panelboard with new panelboard.

**PLAN SHEET CH-E3.0 ELECTRICAL RISER DIAGRAM & SCHEDULES**

- Revised panel schedules and riser diagram to show existing 'MDP' panelboard replaced with new panelboard.

**Change:** BID OPENING DATE DUE: 3:00 PM on ~~October 31, 2017~~ November 3, 2017.

---

NOTE: Items that are ~~struck through~~ are deleted. Items that are underlined have been added. All other terms and conditions remain as stated in the Invitation for Bid.

### End of Addendum

#### INSTRUCTIONS:

Receipt of this addendum must be acknowledged as instructed in the solicitation document. Failure to acknowledge receipt of this Addendum may result in the response being deemed non-responsive.

VFD Schedule - 14079.06D - Manatee water treatment facility pump VFD    Engineer: Advanced Systems Engineering										
VFD #	Serving	HP	ABB Model	Voltage	Enclosure	Mounting Location	Disconnect/Circuit or none	Bypass	Minimum Amp Rating	
	CWP-1	10	ACH550-VCR-015A-4+F267	460/3	UL Type 1	Indoors	Circuit Breaker	Yes	15.4	
NOTES:										
1	Drive amps shall be rated per National Electrical Code Table 430.250.									
2	Provide 5% Internal Line Reactor (VFD's that use optional external reactors are not accepted).									
3	Provide Internal EMV/RFI Filter. Drive input current shall not exceed drive output current.									
4	VFD shall be BTL Listed (Communication "gateways" are not acceptable). VFD shall have Modbus, BACnet, Johnson N2 and Siemens FLN serial communications to interface to BMS system now or in the future.									
5	The VFD shall be rated for 100KAIC without the need for input fusing.									
6	All enclosures shall be UL type approved. (self certified NEMA enclosures not acceptable).									
7	UL type 1 enclosures shall be plenum rated. Drives are mounted indoors, UL Type 1 enclosure									
8	VFD and Bypass complete assembly shall be Seismically tested and certified to IBC2006 Ip factor of 1.5									
9	Include on site factory-authorized start-up validating ABB Warranty (Parts and on-site labor including travel), 36 months from date of shipment.									
ADDITIONAL BYPASS NOTES:										
9	The Bypass shall have the ability to communicate with the Building Automation System even if the VFD is removed.									
10	The Bypass shall have a plain English display of Bypass functions / operation. Provide service switch.									
11	Distinct Annunciation of up to (4) Safety Interlocks in plain English on the Bypass keypad.									
12	The VFD/Bypass system shall be capable of auto transfer to Bypass on selectable VFD faults.									
13	The VFD/Bypass system shall have positive contactor control over a +30 / -35 % voltage range. (115 Volt CPT contactor control not allowed).									
14	The Bypass system shall have single phase protection.									
15	The VFD/Bypass system shall be UL listed to 100 KAIC short circuit rating as a package.									

PIPE WEIGHTS			
SIZE	PIPE	WATER	TOTAL
0.5"	0.285	0.101	0.386
0.75"	0.445	0.210	0.655
1.0"	0.655	0.358	1.013
1.25"	0.884	0.545	1.429
1.5"	1.14	0.77	1.91
2"	1.75	1.34	3.09
2.5"	5.80	2.073	7.873
3"	7.58	3.201	10.781
4"	10.80	5.516	16.316
6"	19.00	12.52	31.52
8"	28.60	21.68	50.28
10"	40.50	34.16	74.66
12"	53.60	48.50	102.10
14"	63.30	58.64	121.94
CHWS&R PIPE 0-2" TO BE TYPE "L" COPPER CHWS&R PIPE 2.5"-12" TO BE SCHEDULE 40 STEEL WEIGHTS SHOWN ARE LBS./FT. AS LISTED IN 2003 ASPE DATA BOOK VOL. 4, TABLE 2-6 & 2-9.			

CHILLER SCHEDULE		
CHILLER / CONDENSER DATA	MARK	CH-1
	MANUFACTURER	CARRIER
	MODEL NUMBER	30XV140
	CAPACITY (TONS)	134.3
	REFRIGERANT	R-134A
	REFRIGERANT CHARGE (LBS)	-
EVAPORATOR DATA	AMBIENT TEMPERATURE (°F) (DB)	92
	FULL-LOAD SOUND PRESS. (dBA)	97
	OPERATING WEIGHT (LBS)	10695
	EVAPORATOR TYPE	VFD SCREW
	NUMBER OF PASSES	2
	BRINE	15% EG
	ENTERING WATER TEMP. (°F)	54.2
	LEAVING WATER TEMP - DESIGN (°F)	42.0
	LEAVING WATER TEMP - MIN (°F)	35
	DESIGN FLOW RATE (GPM)	240
ELECTRICAL DATA	MINIMUM FLOW RATE (GPM)	184
	MAXIMUM FLOW RATE (GPM)	270
	DESIGN PRESSURE DROP (FWG)	10.6
	MAXIMUM PRESSURE DROP (FWG)	10.6
NOTES	ELECTRICAL SERVICE	460-3-60
	IPLV (EER)	19.65
	MCA (AMPS)	281.0
	RECOMMENDED OCP (AMPS)	350.0
NOTES	MAXIMUM OCP (AMPS)	350.0
	1. PROVIDE VAPOR-PROOF CHILLED WATER FLOW SWITCH, MICRO-PROCESSOR CONTROLS, AND CONTROLS POWER TRANSFORMER.	
	2. PROVIDE OPEN PROTOCOL BUILDING AUTOMATION SYSTEM COMMUNICATION, BACNET MSTP.	
	3. PROVIDE NEOPRENE ISOLATORS.	
NOTES	4. PROVIDE FULL START-UP BY MANUFACTURER'S FACTORY- AUTHORIZED SERVICE PROVIDER.	
	5. CONDENSER COILS SHALL HAVE E-COAT BY LUVATA, DIPPED AND BAKED FOR CORROSION PROTECTION. PROVIDE LINE ITEM ADDITIVE ALTERNATE FOR OWNER CONSIDERATION, FOR ADDITIONAL COATING OPTIONS RECOMMENDED BY MANUFACTURER FOR CASING AND / OR OTHER COMPONENTS.	
	6. PROVIDE WITH VARIABLE SPEED CONDENSER FAN CONTROLS.	
	7. PROVIDE CHILLER WITH INTEGRAL DISCONNECT.	
	8. PROVIDE COUNTY WITH 1 YEAR SUPPLY OF CLEANING FLUID FOR CONDENSER COILS.	
	9. BASIS OF DESIGN : PENTAIR (AURORA). APPROVED ALTERNATE MANUFACTURERS, REQUIRE OWNER APPROVAL: B&G, ARMSTRONG, WEINMAN, TACO.	
	10. VERIFY EXISTING PIPING ACCESSORIES, AND PROVIDE NEW WERE REQUIRED PER DETAIL ON DETAIL SHEET.	
	11. MECHANICAL CONTRACTOR MUST OBTAIN SUBMITTAL APPROVAL FROM ELECTRICAL AND MECHANICAL ENGINEERS BEFORE FINAL ORDER IS MADE.	
	12. PROVIDE HIGH-EFFICIENCY TEFC MOTOR, 1750 OR LESS RPM. VFD COMPATIBLE.	
	13. VERTICAL END SUCTION, UNLESS OTHERWISE DIRECTED. FLEXIBLE COUPLING WITH COUPLING GUARD.	
NOTES	14. CAST IRON CASING WITH GAGE PORTS AND FLANGED SUCTION AND DISCHARGE.	
	15. BRONZE OR STAINLESS STEEL IMPELLER KEYED TO MOTOR SHAFT.	
	16. BEARINGS: L10 RATED LIFE OF 30,000 HOURS MINIMUM	
	17. CARBON STEEL SHAFT WITH BRONZE KEY.	
	18. SEAL- STAINLESS STEEL.	
	19. THE MECHANICAL CONTRACTOR SHALL PROVIDE IMPELLER PRE-TRIMMED AS SCHEDULED TEST AND BALACE CONTRACTOR SHALL SUBMIT HEAD PRESSURE MEASUREMENTS TO MECHANICAL ENGINEER TO REVIEW WHETHER FURTHER TRIMMING MAY BE REQUIRED.	
	20. PROVIDE LASER ALIGNMENT FOR ALL PUMPS 20 HP OR LARGER.	
	21. PROVIDE ALIGNMENT BY FACTORY TRAINED AND AUTHORIZED REPRESENTATIVE.	
	22. PROVIDE FULL 5 YEAR MANUFACTURER WARRANTY FOR PARTS. PROVIDE LINE ITEM ADDITIVE ALTERNATE FOR 5 YEAR MANUFACTURER WARRANTY ON LABOR.	
	23. PROVIDE PIPING ACCESSORIES PER DETAIL ON DETAIL SHEET.	
NOTES	24. MECHANICAL CONTRACTOR MUST OBTAIN SUBMITTAL APPROVAL FROM ELECTRICAL AND MECHANICAL ENGINEERS BEFORE FINAL ORDER IS MADE.	
	25. PROVIDE SPOOL PIECE AND/OR PIPING MODIFICATIONS AS REQUIRED TO REPLACE EXISTING PUMP.	
	26. NOTE: PROVIDE LINE ITEM ADDITIVE ALTERNATE TO COUNTY FOR CONSIDERATION, TO PROVIDE SPARE PUMP MOTOR, WRAPPED AND SEALED FOR STORAGE.	
	27.	
	28.	
	29.	
	30.	
	31.	
	32.	
	33.	

NEW WATER PUMP SCHEDULE		
WATER PUMP DATA	MARK	CHWP-1
	SERVICE	PRIMARY
	MANUFACTURER	PENTAIR
	MODEL NUMBER	382A
	SIZE	3x3x9B
	PUMP TYPE	IN-LINE
	SUCTION DIAMETER (IN)	3
	DISCHARGE DIAMETER (IN)	3
	MAXIMUM IMPELLER DIAMETER (IN)	9
	DESIGN IMPELLER DIAMETER (IN)	8.56
	DESIGN FLOW RATE (GPM)	240
	SYSTEM HEAD @ 240 GPM (FT)	59.83
	RPM @ 240 GPM	1558
	MAXIMUM FLOW RATE (GPM)	270
MOTOR DATA	SYSTEM HEAD @ 270 GPM (FT)	75.72
	BHP @ 270 GPM	6.50
	RPM @ 270 GPM	1750
	BHP MAXIMUM (DEAD HEAD)	9.34
	PUMP EFFICIENCY @ 270 GPM	79.4%
	WEIGHT (LBS)	332
	TYPE	TEFC
	HORSEPOWER-NOMINAL	10
	RPM	1750
	ELECTRICAL SERVICE	460/3/60
NOTES	1. BASIS OF DESIGN : PENTAIR (AURORA). APPROVED ALTERNATE MANUFACTURERS, REQUIRE OWNER APPROVAL: B&G, ARMSTRONG, WEINMAN, TACO.	
	2. VERIFY EXISTING PIPING ACCESSORIES, AND PROVIDE NEW WERE REQUIRED PER DETAIL ON DETAIL SHEET.	
	3. MECHANICAL CONTRACTOR MUST OBTAIN SUBMITTAL APPROVAL FROM ELECTRICAL AND MECHANICAL ENGINEERS BEFORE FINAL ORDER IS MADE.	
	4. PROVIDE HIGH-EFFICIENCY TEFC MOTOR, 1750 OR LESS RPM. VFD COMPATIBLE.	
	5. VERTICAL END SUCTION, UNLESS OTHERWISE DIRECTED. FLEXIBLE COUPLING WITH COUPLING GUARD.	
	6. CAST IRON CASING WITH GAGE PORTS AND FLANGED SUCTION AND DISCHARGE.	
	7. BRONZE OR STAINLESS STEEL IMPELLER KEYED TO MOTOR SHAFT.	
	8. BEARINGS: L10 RATED LIFE OF 30,000 HOURS MINIMUM	
	9. CARBON STEEL SHAFT WITH BRONZE KEY.	
	10. SEAL- STAINLESS STEEL.	
NOTES	11. THE MECHANICAL CONTRACTOR SHALL PROVIDE IMPELLER PRE-TRIMMED AS SCHEDULED TEST AND BALACE CONTRACTOR SHALL SUBMIT HEAD PRESSURE MEASUREMENTS TO MECHANICAL ENGINEER TO REVIEW WHETHER FURTHER TRIMMING MAY BE REQUIRED.	
	12. PROVIDE LASER ALIGNMENT FOR ALL PUMPS 20 HP OR LARGER.	
	13. PROVIDE ALIGNMENT BY FACTORY TRAINED AND AUTHORIZED REPRESENTATIVE.	
	14. PROVIDE FULL 5 YEAR MANUFACTURER WARRANTY FOR PARTS. PROVIDE LINE ITEM ADDITIVE ALTERNATE FOR 5 YEAR MANUFACTURER WARRANTY ON LABOR.	
	15. PROVIDE PIPING ACCESSORIES PER DETAIL ON DETAIL SHEET.	
	16. MECHANICAL CONTRACTOR MUST OBTAIN SUBMITTAL APPROVAL FROM ELECTRICAL AND MECHANICAL ENGINEERS BEFORE FINAL ORDER IS MADE.	
	17. PROVIDE SPOOL PIECE AND/OR PIPING MODIFICATIONS AS REQUIRED TO REPLACE EXISTING PUMP.	
	18. NOTE: PROVIDE LINE ITEM ADDITIVE ALTERNATE TO COUNTY FOR CONSIDERATION, TO PROVIDE SPARE PUMP MOTOR, WRAPPED AND SEALED FOR STORAGE.	
	19.	
	20.	

BUFFER TANK SCHEDULE										
MARK	MANUFACTURER	MODEL	SYSTEM	SYSTEM TEMPERATURE		WORKING PRESSURE (PSIG)	TANK SIZE (GALLONS)	CHW S&R CONNECTIONS	SHIPPING WEIGHT (LBS)	OPERATING WEIGHT (LBS)
				MIN. °F	MAX °F					
BT-1	WESSELS CO.	CBT-300	CHW	-	450	125	300	4"	793	3283
<b>NOTES:</b>										
1. PROVIDE INSULATION AND JACKETING PER DETAIL.										

REVISIONS
10-25-17 ADDENDUM 3

Advanced Systems Engineering, Inc.

Project Engineer:  
John R. Wood  
PE-64788

Job No: 14079.06DE  
Manager: JRW  
CADD: JRW  
CA-8468

1855 Automobile Boulevard, Suite 330, Clearwater, FL 33762 • Office: 727.540.9388 • Facsimile: 727.540.8976  
Copyright © 2010. All rights reserved. No part of this document may be reproduced without the permission of ASE.

MECHANICAL SCHEDULES

MANATEE COUNTY - WATER TREATMENT LAB

CHILLER & EXHAUST FAN REPLACEMENT

4751 68th STREET WEST  
BRADENTON, FL 34210

JOB NO: 14079.06DE

PROJ. MNGR: JRW

DRAWN BY: JRW

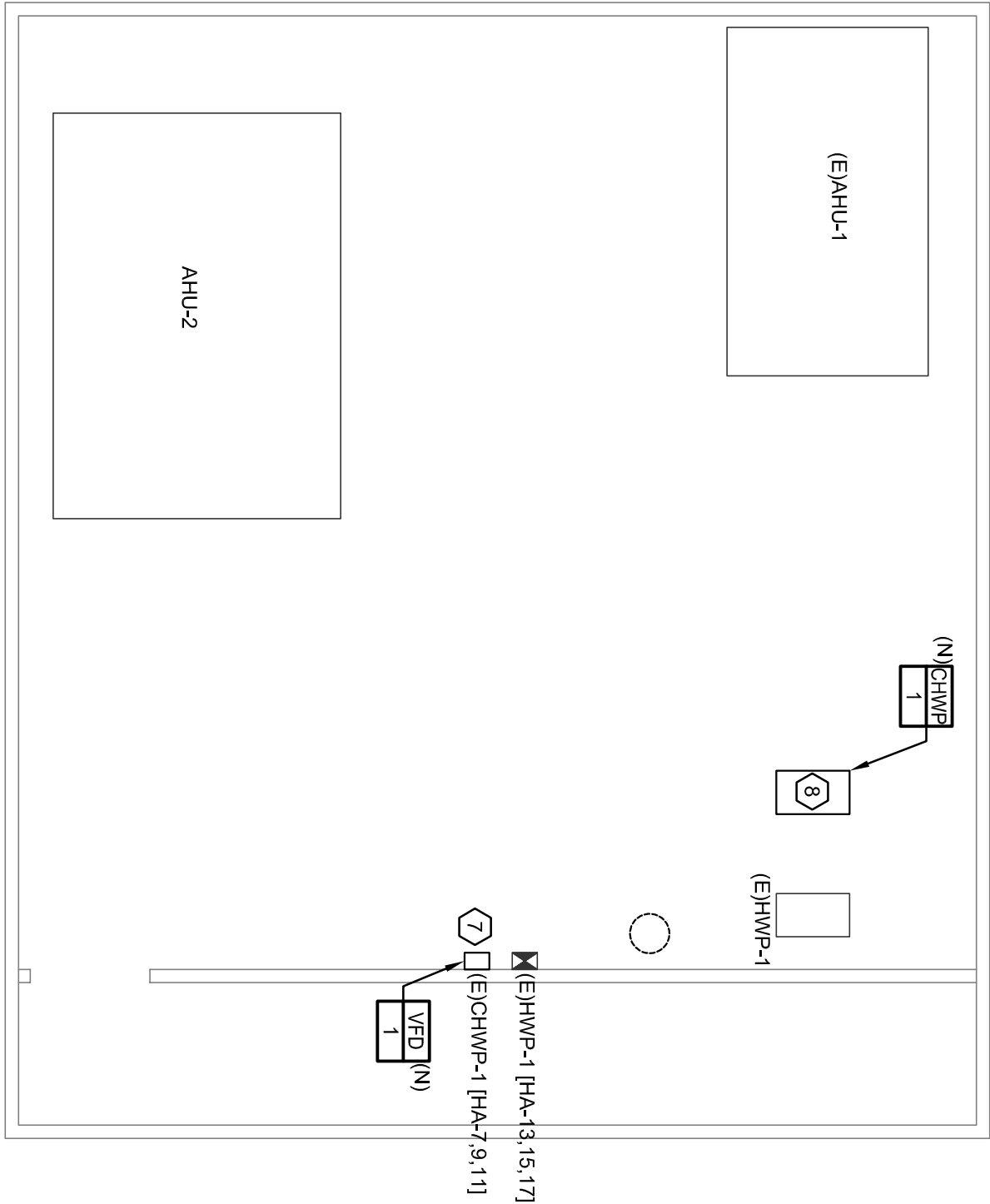
ISSUE DATE: 07.24.2017

SHEET NUMBER

CH-M3.1

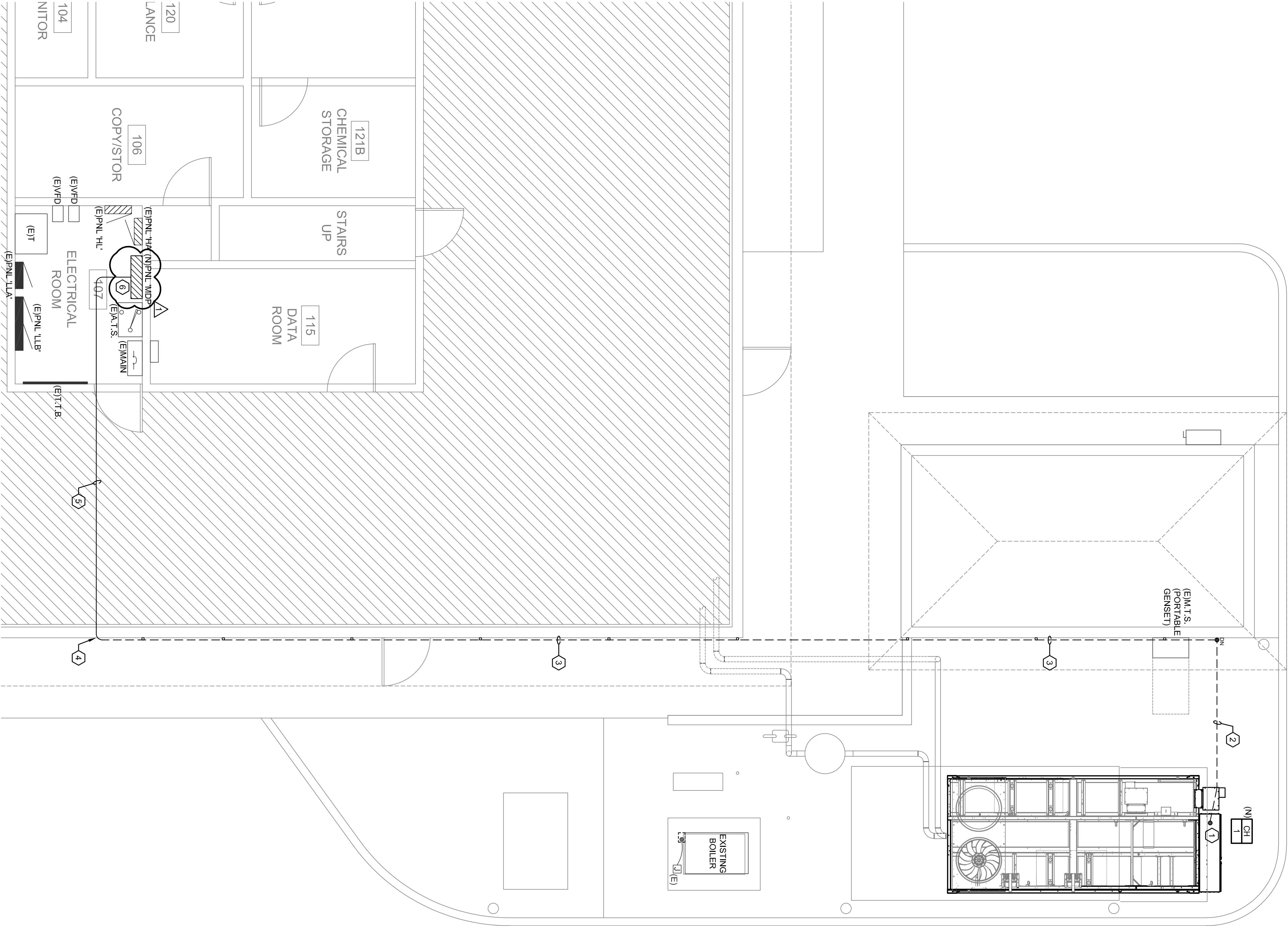
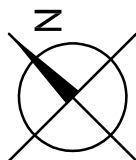
BID SET





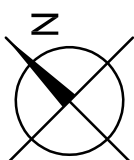
1 ELECTRICAL MECHANICAL ROOM RENOVATION PLAN

SCALE: 1/4"=1'-0"



2 ELECTRICAL CHILLER YARD RENOVATION PLAN

SCALE: 1/4"=1'-0"



### ELECTRICAL NOTES

- PROVIDE MINIMUM OF A 2" FLEXIBLE SEAL/TIGHT CONNECTION TO CHILLER CONTROL PANEL AND PROVIDE FINAL CONNECTION TO CHILLER. COORDINATE EXACT STUB UP AND CONNECTION POINT WITH MECHANICAL CONTRACTOR PRIOR TO ROUGH-IN. CHILLER TO BE PROVIDED WITH INTEGRAL DISCONNECT IN CONTROL PANEL.
- 3 #50 KCMIL CU AND 1 #4 CU E.G. IN 2-1/2". ROUTED EXPOSED ABOVE GROUND. MOUNT CONDUIT TO GROUND WITH ALUMINUM UNISTRUT AND UNISTRUT STYLE STRAPS. PROVIDE ALUMINUM RIGID CONDUIT AND WALLEABLE IRON LB FITTINGS ALL FOR EXPOSED EXTERIOR CONDUIT.
- 3 #50 KCMIL CU AND 1 #4 CU E.G. IN 2-1/2". ROUTE CONDUIT AND WIRE OVERHEAD TIGHT TO BOTTOM OF ROOF DRAINING AND SUPPORT FROM WALL WITH ALUMINUM UNISTRUT AND STRUT STYLE STRAPS.
- PENETRATE WALL ABOVE EXISTING ACCESSIBLE CEILING SPACE. CONTRACTOR SHALL MAKE A WEATHERPROOF SEAL AT PENETRATION POINT.
- 3 #50 KCMIL CU AND 1 #4 CU E.G. IN 2-1/2". ROUTE CONDUIT AND WIRE OVERHEAD ABOVE ACCESSIBLE CEILING SPACE AND SUPPORT FROM STRUCTURE.
- REPLACE EXISTING SQUARE D, 1 LINE 600 AMP 277/480 VOLT, 3 PHASE, 4 WIRE PANELBOARD WITH NEW SQUARE D, 1 LINE 600 AMP 277/480 VOLT, 3 PHASE, 4 WIRE PANELBOARD. NEW PANELBOARD MDP SHALL MATCH EXISTING PANELBOARD. NEW PANELBOARD SHALL BE MOUNTED TO EXISTING WALL FROM EXISTING WPT TO NEW WPT. CONTRACTOR SHALL PROVIDE ALL COATED NECESSARY BREAKER MOUNTING HARDWARE AND ADDITIONAL BLANK PLATES AS REQUIRED. REFER TO PANEL SCHEDULES ON SHEET E3.0 FOR MORE INFORMATION.
- NEW VARIABLE FREQUENCY DRIVE (VFD) WITH INTEGRAL DISCONNECT. FINISHED CONDUIT SHALL BE RIGIDLY SUPPORTED TO GROUND. PROVIDE FINAL CONNECTIONS TO EXISTING CONNECTIONS BY ELECTRICAL CONTRACTOR. CONNECT NEW VFD TO EXISTING BRANCH CIRCUIT CONDUIT AND WIRE SERVING CHILLED WATER PUMP.
- PROVIDE MINIMUM OF 2" FLEXIBLE CONNECTIONS TO NEW PUMP. ELECTRICAL CONTRACTOR SHALL EXTEND EXISTING BRANCH CIRCUIT CONDUIT AND WIRE AS REQUIRED.

### GENERAL NOTES

- ELECTRICIAN SHALL PERFORM A SITE VISIT TO VERIFY EXISTING SYSTEMS AND CONDITIONS PRIOR TO SUBMITTING BID.
- THE EXISTING CIRCUITRY ON THE PLANS IS SHOWN FOR REFERENCE ONLY AND WAS TAKEN FROM THE ORIGINAL CONSTRUCTION DOCUMENTS AND WHAT COULD BE DETERMINED FROM A SITE SURVEY. THE ELECTRICIAN SHALL PROVIDE ALL CIRCUITRY WITHIN THE AREA UNDER CONSTRUCTION AS REQUIRED TO PROVIDE A FULLY FUNCTIONAL ELECTRICAL SYSTEM MEETING THE INTENT OF THE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE EXISTING SYSTEMS AND THE ACCURACY OF THE AS-BUILT CIRCUITRY INDICATED ON THE PLANS PRIOR TO SUBMITTING BID. NO ADDITIONAL COSTS FOR INACCURATE OR UNCONFIRMED EXISTING CONDITIONS WILL BE ACCEPTED.
- ELECTRICIAN MAY RE-USE EXISTING PANELBOARDS, CIRCUIT BREAKERS, TRANSFORMERS, SAFETY SWITCHES, ETC. ONLY WHERE INDICATED TO BE RE-USED ON THE PLANS.
- ELECTRICIAN MAY RE-USE EXISTING CONDUIT, CONDUCTORS, FITTINGS, SUPPORTS, ETC. WHERE THESE ITEMS COMPLY WITH CURRENT CODE AND THE REQUIREMENTS OF THE SPECIFICATIONS.
- AT PROJECT COMPLETION ELECTRICAL CONTRACTOR SHALL RE-LINE DRAWINGS TO DOCUMENT INSTALLED CONDITIONS AND POINT OUT DISCREPANCIES IN INDICATED "AS-BUILT" CONDITIONS.
- ELECTRICAL CONTRACTOR SHALL PROVIDE CIRCUIT IDENTIFICATION LABEL ON NEW DEVICES AS PER SPECIFICATIONS. LABEL SHALL INCLUDE SOURCE PANEL AND CIRCUIT NUMBER. REFER TO ELECTRICAL SPECIFICATIONS FOR MORE INFORMATION.

## ELECTRICAL CHILLER YARD RENOVATION PLAN

### MANATEE COUNTY - WATER TREATMENT LAB

#### CHILLER & EXHAUST FAN REPLACEMENT

4751 65th STREET WEST  
BRADENTON, FL 34210

Advanced Systems Engineering, Inc.

Project Engineer  
David S. Bess  
PE-51871



Job No.14079.06DE  
Manager: KCW  
CADD: KCW

CA-8468

13555 Automobile Boulevard, Suite 330, Clearwater, FL 33762 • Office: 727.540.9396 • Facsimile: 727.540.9376  
Copyright 2010 - all rights reserved. No part of this document may be reproduced without the permission of ASE.

REVISIONS  
10-25-17 ADDENDUM 3

JOB NO.: 14079.06DE

PROJ. MNGR: KCW

DRAWN BY: KCW

ISSUE DATE: 07/24/2017

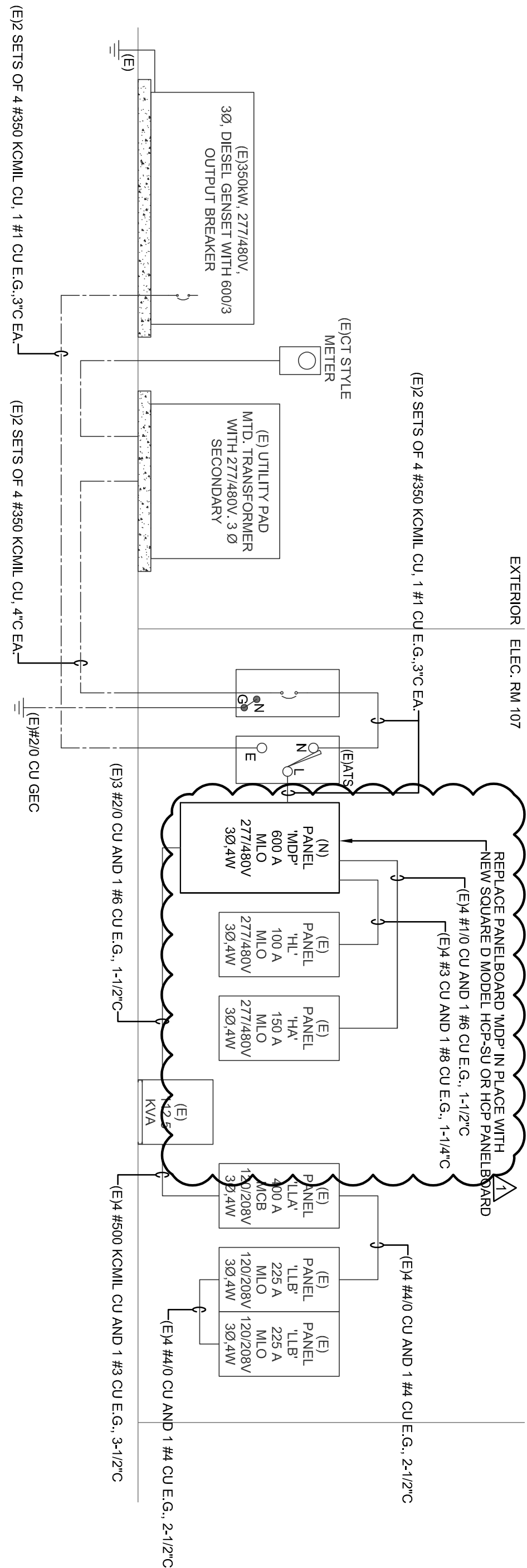
SHEET NUMBER  
CH-E2.0

BID SET

ELECTRICAL RISER DIAGRAM & SCHEDULES  
MANATEE COUNTY - WATER TREATMENT LAB  
CHILLER & EXHAUST FAN REPLACEMENT  
4751 65th STREET WEST  
BRADENTON, FL 34210

JOB NO.: 14079.06DE  
PROJ. MNGR: KCW  
DRAWN BY: KCW  
ISSUE DATE: 07/24/2017

SHEET NUMBER  
CH-E3.0  
BID SET



1 PARTIAL ELECTRICAL RISER DIAGRAM  
SCALE: NO SCALE  
NOTE: RISER DIAGRAM SHOWN FOR REFERENCE ONLY. NO WORK TO EXISTING ELECTRICAL SERVICE IS PART OF THIS SCOPE OF WORK.

PANEL: MDP (NEW)												ACCESSORIES: EXIST. SQUARE D LINE PANEL (HOM)											
VOLTAGE: 480 /277 PHASE: 3						MOUNTING: SURFACE																	
AMPS: 600 AMP MLO WIRE: 4						NEHA: 1						AFC: 35,000											
LOAD (KVA)												LOAD (KVA)											
LTG	REC	MISC	COOL	HEAT	MTR	AMPS	POLE	LOAD DESCRIPTION				LTG	REC	MISC	COOL	HEAT	MTR						
						100	3	PANEL, LT (1)															
								1	A	B	C	D	CHILLER CH (2/3)				380	3					
								3															
								5															
						150	3	PANEL, MK (1)															
								7					1.5 SPACE										
								9					1.5 SPACE										
								11					1.5 SPACE										
						125	3	PANEL, LCT (1)				13	14	TRANSFORMER T1 (1)				175	3				
								15					16										
								17					18										
						125	3	UPS (1)				19	20	TVSS (1)				60	3				
								21					22										
								23					24										
						1.5 SPACE		25					26	TEMP CHILLER (1)				250	3				
						1.5 SPACE		27					28										
								29					30										
CONNECTED LOAD SUMMARY (KVA)												DEMAND LOAD SUMMARY											
A				B				C				TOTALS				D.F.							
LTG	REC	MISC	COOL	HEAT	MTR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0						
REC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0						
MISC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0						
COOL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0						
HEAT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0						
MTR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0						
CONNECTED LOAD PER PHASE												DEMAND LOAD											
PHASE A						0.0 KVA						0.0 AMPS						REFER TO LOAD SUMMARY					
PHASE B						0.0 KVA						0.0 AMPS											
PHASE C						0.0 KVA						0.0 AMPS											
BREAKER NOTES ( )												DEMAND CURRENT: 0.0 AMPS											
1. EX BRKR AND WIRE RELOCATED FROM EX. MDP																							
2. NEW BREAKER, NEW WIRE																							
3. NEW BREAKER REQUIRES B OF MOUNTING SPACE																							
4.																							
5.																							
6.																							