#### **ADDENDUM NO. 3**

#### TO: PLANS AND SPECIFICATIONS FOR STATE OF MISSOURI

Replace Boilers and Controls Farmington Correctional Center Farmington, Missouri Project No.: C2006-01

Bid Opening Date: 1:30 PM, Thursday, September 14, 2023 (Not Changed)

Bidders are hereby informed that the construction Plans and/or Specifications are modified as follows:

#### **VOLUME 1**

#### **SPECIFICATION CHANGES**:

- 1. Volume 1 Section 230923, Direct Digital Control (DDC) System For HVAC
  - a. REPLACE Paragraph 2.1 as follows:
    - 2.1 DDC SYSTEM MANUFACTURERS

<u>Manufacturers:</u> Subject to compliance with requirements, provide products by the following:

Schneider Electric USA, Inc. (C&C Group)

Contact information: Corey Schepers C&C Group cschepers@c-cgroup.com (913)530-7369

#### **DRAWING CHANGES:**

- 1. Volume 1 Drawing E6.0 Electrical One Line Diagram and Schedules
  - a. REVISE per attached Revision A, dated 9/6/2023

#### **VOLUME 2**

#### **SPECIFICATION CHANGES:**

- 1. Volume 2 Section 230901, Instrumentation and Controls for HVAC Power Plant
  - a. REPLACE Paragraph 2.4-A (Page 230901-8) as follows:
    - 2.4-A. New controllers shall interface with the Owner's existing Building Automation—System (BAS) and with the new Volume 1 BAS for monitoring/status reporting and archival of data.
      - 1. Provide new control loop displays on existing and/or new Volume 1 BAS operator interface stations.

- 2. Coordinate specific requirements with Owner's Representative.
- 2. Volume 2 Section 232519.16, Reverse Osmosis Water Treatment Equipment
  - a. REPLACE Paragraph 2.2-O.1 as follows:
    - 2.2-O.1. Provide a communications interface between the new RO control system and the existing power plant building automation system (Automated Logic) and with the new Volume 1 building automation system for monitoring/status reporting and archival of data. Coordinate specific requirements with Owner's Representative.
- 3. Volume 2 Section 232519.20, Reverse Osmosis Water Treatment System Controls
  - a. REPLACE Paragraph 2.1-B.2 as follows:
    - 2.1-B.2. Provide communications capability to allow the controller to interface with the Owner's existing Automated Logic Building Automation System (BAS) and with the new Volume 1 control system for monitoring, status reporting, and archival of data. Coordinate specific requirements with Owner's Representative.
- 4. Volume 2 Section 232519.40, Reverse Osmosis Water Pumping System
  - a. REPLACE Paragraph 2.7-A as follows:
    - 2.7-A. Provide a communications interface between the new RO pump control system and the existing power plant building automation system (Automated Logic) and with the new Volume 1 control system. Coordinate specific requirements with Owner's Representative.

#### **GENERAL COMMENTS:**

- Please contact Paul Girouard, Contract Specialist, at 573-751-4797 or <u>Paul.Girouard@oa.mo.gov</u> for questions about bidding procedures and MBE\WBE\SDVE goals and submittal requirements.
- 2. All bids shall be submitted on the bid forms without additional terms and conditions, modifications, or stipulations. Each space on the bid forms shall be properly filled including a bid amount for the alternate. Failure to do so will result in rejection of the bid.
- 3. MBE/WBE/SDVE participation requirements can be found in DIVISION 00. The MBE/WBE/SDVE participation goals are 10%/10%/3%, respectively. All MBE, WBE, and MBE/WBE contractors, subcontractors, and suppliers must be certified by the State of Missouri, Office of Equal Opportunity. No other certifications from other Missouri certifying agencies will be accepted. If a bidder is unable to meet a participation goal, a Good Faith Effort Determination Form must be completed. Failure to complete this process will result in rejection of the bid.
- 4. The new deadline for technical questions was September 6, 2023 at noon (12:00 PM).
- 5. Changes to, or clarification of, the bid documents are only made as issued in the addenda.
- 6. All correspondence with respect to this project must include the State of Missouri project number as indicated above.
- 7. Current Planholders list available online at: <a href="https://www.oafmdcplanroom.com/jobs/2077/plan-holders/c2006-01-replace-boilers-controls-farmington-correctional-center">https://www.oafmdcplanroom.com/jobs/2077/plan-holders/c2006-01-replace-boilers-controls-farmington-correctional-center</a>

8. Prospective Bidders contact American Document Solutions, 1400 Forum Blvd., Suite 7A, Columbia MO 65203, 573-446-7768 to order official plans and specifications.

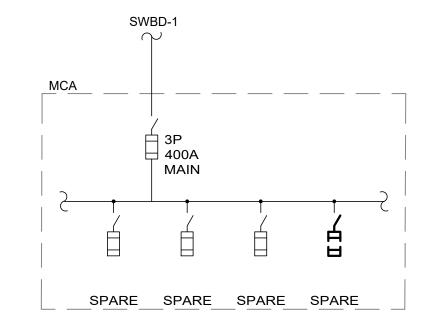
### **ATTACHMENTS:**

1. Revised Volume 1 Drawing E6.0

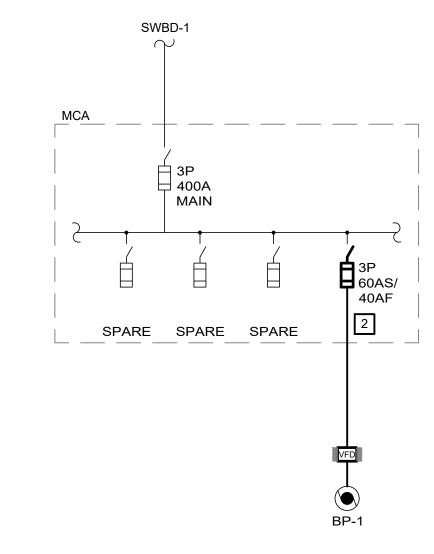
September 7, 2023

**END OF ADDENDUM NO. 3** 

# DEMOLITION WORK - ONE-LINE DIAGRAM - MSB



DEMOLITION WORK
PARTIAL ONE-LINE DIAGRAM - MCA



# NEW WORK PARTIAL ONE-LINE DIAGRAM - MCA

	MECHANICAL-ELECTRICAL INTERFACE																					
EQUIPMENT				MOTOR	DATA	BRANCH CIRCUIT DATA	SOURCE DATA			UNIT CONTROLS						ID	EQUIPMENT DISCONNECT					REMARKS
									OCP			ОСР		1	5	اد ا					5	
EQUIP.		REF.		HP / (kW)	VOLTAGE /			TYPE <sup>3</sup> /	SWITCH/FUSE SIZE		STARTER		SWITCH/FUSE				SWITCH					
ID	DESCRIPTION	SHEET	LOCATION	/ (MCA) <sup>1</sup>	PHASE	FEEDER SIZE	SOURCE:	POLES	or CB TRIP	TYPE <sup>4</sup>	SIZE	TYPE <sup>3</sup>	or CB TRIP	<b>NEMA RATING</b>	F   I   C		SIZE	POLE	OCP SIZE	NEMA RATIN	IG   F   I   C	
HWP-1	HOT WATER PUMP	E3.2	BOILER PLANT SOUTH	15HP	480 / 3	(3) #10, (1) #10 GRD - 3/4"C	PP2	CB / 3	40	VFD	NA	NA	NA	1	E E E	HWP-1	60A	3	40A	1	E E E	VFD PROVIDED BY DIVISION 26
HWP-2	HOT WATER PUMP	E3.2	BOILER PLANT SOUTH	15HP	480 / 3	(3) #10, (1) #10 GRD - 3/4"C	PP2	CB / 3	40	VFD	NA	NA	NA	1	E E E	HWP-2	60A	3	40A	1	E E E	VFD PROVIDED BY DIVISION 26
BP-1	DOMESTIC WATER BOOSTER SKID	E3.0	BOILER PLANT NORTH	20HP	480 / 3	(3)#8, (1)#10 GRD - 3/4"C	MCA	FS / 3	60/40	VFD	NA	NA	NA	1	<u>  M   M   E</u>	BP-1	NA	NA	NA	NA	N N N	FACTORY-MOUNTED VFD
DWP-1	DOMESTIC WATER PUMP	E3.2	BOILER PLANT SOUTH	1.5HP	480 / 3	(3)#12, (1)#12 GRD - 3/4"C	PP2	CB / 1	20	COMB	0	FS	15A	1		DWP-1	NA NA	NΔ	NA NA	NA	N N N	
DWP-2	DOMESTIC WATER PUMP	E3.2	BOILER PLANT SOUTH	1.5HP	180 / 3	(3)#12, (1)#12 GRD - 3/4"C	PP2	CB / 1	20	COMB		FQ	15A	1		DWP-2	NA NA	NA NA	NA I	NA NA	N N N	
DVVI -Z	DOMESTIC WATER FORM	LJ.Z	BOILLIN FLAINT SOOTTI	1.3111	400 // 3	(3)#12, (1)#12 GND - 3/4 C	FFZ	CD / I	20	COIVID		10	13/4	<u> </u>	-   -   -	DVVF-Z	INA .	INA	INA	IVA	IN IN IN	
CRU-1	CONDENSATE RECEIVER	E3.2	BOILER PLANT SOUTH	4HP	480 / 3	(3) #12, (1) #12 GRD - 3/4"C	PP2	CB / 3	20	PWCP	NA	NA	NA	1	ммЕ	CRU-1	30A	3	20A	1	E E E	
BF-1	BOILER FAN	E3.1	BOILER PLANT CENTRAL	75HP	480 / 3	(3)#1, (1)#6 GRD - 2"C	MSB	FS / 3	200/125	VFD	NA	NA	NA	1	M   M   E	BF-1	200A	3	125A	1	EEE	VFD PROVIDED BY DIVISION 23
BF-2	BOILER FAN	E3.1	BOILER PLANT CENTRAL	100HP	480 / 3	(3)#2/0, (1)#6 GRD - 2"C	MSB	FS / 3	200/175	VFD	NA	NA	NA	1	M   M   E	BF-2	200A	3	175A	1	EEE	VFD PROVIDED BY DIVISION 23
BF-3	BOILER FAN	E3.1	BOILER PLANT CENTRAL	75HP	480 / 3	(3)#1, (1)#6 GRD - 2"C	MSB	FS / 3	200/125	VFD	NA	NA	NA	1	M   M   E	BF-3	200A	3	125A	1	E E E	VFD PROVIDED BY DIVISION 23
RCP-1	DOMESTIC HOT WATER RETURN PUMP	E3.1	BOILER PLANT SOUTH	3HP	480   /   3	(3)#12, (1)#12 GRD - 3/4"C	PP2	CB  / 3	20A	COMB	0	FS	15A	1	E   E   E	RCP-1	NA	NA	NA	NA	N   N   N	

UTILITY

MSB - 277/480V, 1000A, 3Ø, 3W, 30kAIC

175AF

VFD

BF-2

125AF

60AF

60AF

SPARE SPARE SPARE

 $\downarrow$  200AS/  $\downarrow$  200AS/  $\downarrow$  200AS/  $\downarrow$  60AS/  $\downarrow$  60AS/  $\downarrow$  100AS  $\downarrow$  100AS/  $\downarrow$  30AS/  $\downarrow$  30AS/  $\downarrow$  100AS/  $\downarrow$  100AS/  $\downarrow$  200AS/  $\downarrow$  200AS/  $\downarrow$  200AS/

STEAM

**HEATERS** 

**NEW WORK - ONE-LINE DIAGRAM - MSB** 

30AF

30AF

FUEL

PUMPS

T-300

100AF

100AF

#2

BKR POLES

40

20

20

20

20

Ph CKT

3 B 4

5 C 6

7 A 8

9 B 10

11 C 12

15 B 16

17 C 18 19 A 20 21 B 22

25 A 26

27 B 28

29 C 30

31 A 32 20 33 B 34 20 35 C 36 20 37 A 38 20 39 B 40 20 MCC-

PP2

277/480V 125A 3Ø

LOAD

HWP-2

RCP-1

SPARE

SPARE

SPARE

SPARE

SPARE

SPARE

SPARE

FIC<sup>5</sup>: (Furnished, Installed, Connected)

E Electrical Contractor

N Not Applicable

M Mechanical, Plumbing, Fire Protection Contractor, or Factory

100AF

DEAERATOR

480 V DELTA

14 K AIC

BKR

20

3P 3W

125 A

LOCATION: BOILER PLANT SOUTH

POLES

PANELBOARD: PP2

MAIN:

VOLTAGE: PHASE:

SHORT CIRCUIT:

LOAD

CRU-1

DWP-1

SPARE

SPARE

SPARE

SPARE

SPARE SPARE

SPARE

-- M SIEMENS

4300

HP / (kW)<sup>1</sup>:
HORSEPOWER IS SHOWN UNLESS KILOWATTS (kW) OR MINIMUM CIRCUIT
AMPACITY (MCA) IS CALLED OUT

FS FUSED SWITCH
CB CIRCUIT BREAKER
NA NOT APPLICABLE

TYPE<sup>4</sup>:

COMB Combination Magnetic Starter
/ Disconnect Switch or Circuit Breaker
MAG Magnetic Starter
2S1W 2-speed 1-winding Magnetic Starter
2S2W 2-speed 2-winding Magnetic Starter
MAN Manual Motor Starter
PWCP Pre-wired Control Panel

MAN Manual Motor Starter

WCP Pre-wired Control Panel

VFD Variable Frequency Drive

TOG Toggle Switch (horsepower rated)

TST Thermostat

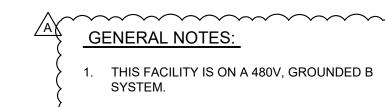
RIB Relay in a Box

NA Not Applicable

# GENERAL ONE-LINE NOTES:

- ALL EQUIPMENT SHOWN AS THIN CONTINUOUS LIGHT LINE IS EXISTING EQUIPMENT TO REMAIN.
- 2. ALL EQUIPMENT SHOWN AS THICK DASHED HEAVY LINE IS EXISTING EQUIPMENT TO BE
- 3. ALL EQUIPMENT SHOWN AS THICK CONTINUOUS HEAVY LINE IS NEW EQUIPMENT.

  3. ALL EQUIPMENT SHOWN AS THICK CONTINUOUS HEAVY LINE IS NEW EQUIPMENT.
- 4. COORDINATE ELECTRICAL SHUT-DOWNS WITH OWNER AND AMEREN.



## ONE-LINE KEYED NOTES:

- 1 RE-FEED 100A CONNECTION TO SALLY PORT FROM SPARE SWITCH LOCATED IN MSB. SEE PLANS SHEET E3.2 FOR MORE INFORMATION.
- 2 FURNISH AND INSTALL NEW FUSE SWITCH IN EXISTING MCA TO FEED NEW BOOSTER PUMP SKID. SEE PLANS SHEET E3.0 FOR MORE INFORMATION.

STATE OF MISSOURI MICHAEL L. PARSON, GOVERNOR



PHIL WENTZ
MO Engineering Registration No. P-29111

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# McClure Engineering

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McClure Engineering
Professional Engineering
Corporation
Missouri State Certificate of
Authority #000087

OFFICE OF ADMINISTRATION DIVISION OF FACILITIES MANAGEMENT, DESIGN AND CONSTRUCTION

DEPARTMENT OF CORRECTIONS

BOILER UPGRADES

FARMINGTON CORRECTIONAL CENTER 1012 WEST COLUMBIA STREET

PROJECT # C2006-01

FARMINGTON, MO 63640

SITE# 7008 FACILITY# 9327008094

REVISION: ADDENDUM #3
DATE: POPULATE: ADDENDUM #3
09/06/2023
DATE: REVISION:

DATE: ISSUE DATE: 04/26/2023

ISSUE DATE: 04/26/2023

DRAWN BY: AAC CHECKED BY: ESW DESIGNED BY: EMP

SHEET TITLE:

ELECTRICAL ONE-LINE DIAGRAM AND SCHEDULES

SHEET NUMBER:

E6.0

31 OF 31 SHEETS 04/26/2023