

**ARCHITECHNICS, INC.
510 MAINE STREET
QUINCY, ILLINOIS 62301**

PROJECT NO. : 5661B

ADDENDUM NO.: 1

ISSUED: 12/4/2017

Project: MECHANICAL SYSTEM REPLACEMENT
BROWN COUNTY COURTHOUSE
200 EAST COURT STREET
MOUNT STERLING, ILLINOIS 62353

This addendum becomes a part of the bidding and contract documents and modifies the drawings and specifications dated November 17, 2017. Acknowledge receipt of this addendum by noting such on the Contractor's Proposal (Bid) Form.

FAILURE TO DO SO MAY SUBJECT BIDDER TO DISQUALIFICATION

ITEM	DESCRIPTION
<u>DRAWINGS:</u>	
1.0 BID DATE	Change: The bid date will be Monday, December 11, 2017 at 2:00 PM at the Office of Architechnics, Inc, 510 Maine Street, Quincy, IL 62301
2.0 SPECS 22 5000 FACILITY NATURAL-GAS PIPING	Clarify: Gas piping does not require protective coating. Piping shall be ASTM A 53/A 53M, black steel, Schedule 40, Type E or S, Grade B.
3.0 SPECS 23 4250 AIR PURIFICATION SYSTEMS	Add: Delete Spec section. Air purification systems are not required on fan coil units.
4.0 SPECS 23 8200 VARIABLE REFRIGERANT FLOW SYSTEMS	Clarify: Mitsubishi is an approved manufacturer based on the attached system diagram and information. Outdoor unit shall be PURY-P240TSLMU-A. Contractor is responsible for coordinating with supplier during bidding for any and all additional electrical, piping, controls, etc for a complete system installation. Contractor shall provide DC600E and complete front end building management system showing floor plan with equipment layout and a clean interface showing all points listed in specs.
5.0 MECHANICAL SHEETS	Add: At contractor option new piping, control wiring, etc can be installed adjacent to existing pipe chases. Install speedichannel or equal pipe cover on any exposed piping.
6.0 MECHANICAL SHEETS	Add: Contractor shall modify existing or install/paint new baseboard to match existing at fan coil locations.
7.0 Sheet M1	Add: Contractor shall coordinate chiller removal and new exterior unit installation with utility company regarding existing overhead power lines.
8.0 Sheet M1	Add: At contractor option Diversitech Quick Sling or equal equipment stand may be used in lieu of steel beams.
9.0 Sheet M5	Replace: Replace with attached revised sheet. See sheet for marked revisions.
10.0 Sheet E1	Replace: Replace with attached revised sheet. See sheet for marked revisions.
11.0 Sheet E3	Replace: Replace with attached revised sheet. See sheet for marked revisions.

12.0 Sheet E4 Replace: Replace with attached revised sheet. See sheet for marked revisions.

13.0 Sheet E5 Replace: Replace with attached revised sheet. See sheet for marked revisions.

This addendum consists of 2 pages. Attachments: Pre-Bid Attendance Record, Plan Holders list, Mitsubishi System Information, SHEETS M5, E1, E3, E4 & E5

ARCHITECHNICS

architects • engineers

510 MAINE STREET

QUINCY, IL 62301

PROJECT NO.

PROJECT NAME

DATE

PAGE NO.

BY

Pre-Bid 11/30

2:00

Isaac Miller Architechnics 217-222-6554

Brian Spencer " "
Chad Kunkel Brown County Board 217-430-3106

Kris Prather HRCO 217-544-8451

Rick Roberts Leander Const. 309 647-7400

Bill Schlupman Schlupman Const 217-430 1410

Phil Fitzjarrald PF Construction 217-248-8600

Seth Meneclun SDM 217-242-8809

GREG FISCHER FBI 217-522-4322

Paul E Kemmer A.H. Kemmer & Sons 217-222-1559

Schuyler Chandler Chandler Htg & Air 217-224-3693

Bruce Thomas MAC's LTD Electrical 217-257-9672

Billy Cramer Lasardiere Const. 309-333-4027

Ed Legg Prairie State P&H inc. choltmans@lavconinc.com
217-494-5836
e.legg@prairiestateinc.com

RECORD OF PLANS AND SPECIFICATIONS

PAGE NO. One

NAME OF PROJECT

Mechanical System Replacement for
Brown County Courthouse - Mt. Sterling, ILPROJECT NO. 5661B DATE BIDS DUE Thursday, December 07, 2017 DEPOSIT \$50.00

TIME AND PLACE OF LETTING

2:00 PM Architechnics, Inc

510 Maine Street - Floor 10, Quincy, IL

*** Indicates Potential Bidding Contractor

Pre-Bid Meeting: 11/30/17

CONTRACTOR NAME ADDRESS/PHONE/EMAIL	COPY NO.	DATE RECEIVED	DATE RETURNED	DEPOSIT RECEIVED	DEPOSIT RETURNED
Architect	#1				
Owner	#2				
*** Prairie State Plumbing & Heating PO BOX 289 Athens, IL 62613 217-636-9000 Fax: 217-636-8927 elegg@prairiestateinc.com	#3	11/30/2017		On File	
Mac's Ltd. Electrical Contractor PO Box 606 Quincy, IL 62306 217 223-8268 Fax: 217 223-0733 macsltd@adams.net	#4	11/27/2017		On File	
*** Peters Heating & A/C 4520 Broadway Quincy, IL 62305 217-222-1368 Fax 217-222-1088 jhoward@petershvac.net	#5	11/27/2017		On File	
Central Illinois Plan Room 1620 S. 5th Street Springfield, Illinois 62703 217-679-1077 Fax: 217-544-6570 plans@ciplanroom.com	D	11/27/2017		11/27/2017	
*** Scranton Heating and Cooling 868 975N Ave Mt Sterling, IL 62353 217-653-5346 cmscran@hotmail.com	D	11/27/2017		11/27/2017	
Johnson Painting 2832 Ghost Hollow Rd. Quincy, IL 62301 217-224-9023 Fax: 217 224-7050 mhorman1200@sbcglobal.net	# 6	11/28/2017		11/28/2017	
*** Chandler Heating and AC 727 Locust St Quincy, Il 62301 217-224-3693 chandlerheatingandacinc@yahoo.co	D	11/30/2017		11/30/2017	
AC Systems 11724 Adie Rd St Louis, MO 63043 314-569-1000 jstanec@acsystemsinc.net		11/30/2017		11/30/2017	

ARCHITECHNICS

510 MAINE STREET, QUINCY, IL 217-222-0554 FAX 217-223-3361

RECORD OF PLANS AND SPECIFICATIONS

PAGE NO. Two

NAME OF PROJECT

Mechanical System Replacement for
Brown County Courthouse - Mt. Sterling, IL

PROJECT NO. 5661B

DATE BIDS DUE

12/7/17 2:00 PM

DEPOSIT:

\$50.00

CONTRACTOR NAME ADDRESS/PHONE/EMAIL	COPY NO.	DATE RECEIVED	DATE RETURNED	DEPOSIT RECEIVED	DEPOSIT RETURNED
Crescent Parts & Equipment 5121 Manchester Ave. St. Louis, Missouri 63110 314-647-5511 314-647-5891 snienaber@crescentparts.com	D	11/30/2017		11/30/2017	
*** Henson Robinson Co P.O. Box 13137 Springfield, IL 62791-3137 217-544-8451 Fax: 217-544-0829 sheila@henson-robinson.com	D	11/30/2017		11/30/2017	
Marold Electric Co. 129 S 10th Quincy, IL 62301 217-222-6267 Fax: 217-222-6289 maroldelectric@comcast.net	#7	12/5/2017		12/5/2017	
Thermal Mechanics Inc. 715 Goddard Ave. Chesterfield, MO 63005 636-532-1110 Fax: 636-532-7318 cheryl.covington@tmi-stl.com	D	11/30/2017		11/30/2017	
*** Laverdiere Construction 4055 W. Jackson Macomb, IL 61455 309-837-1258 Fax 309-833-4993 mlynn@lavconinc.com	D	12/1/2017		12/1/2017	
Dodge Data & Analytics 4300 Beltway Place, STE #180 Arlington, Texas 888-667-8198 darlene.baker-mann@construction.c	D	12/1/2017		12/1/2017	
*** SMD Construction 11393 Old Macomb Rd Rushville, IL 62681 217242880-9 sdmconstruction08@gmail.com	D	11/29/2017		11/29/2017	

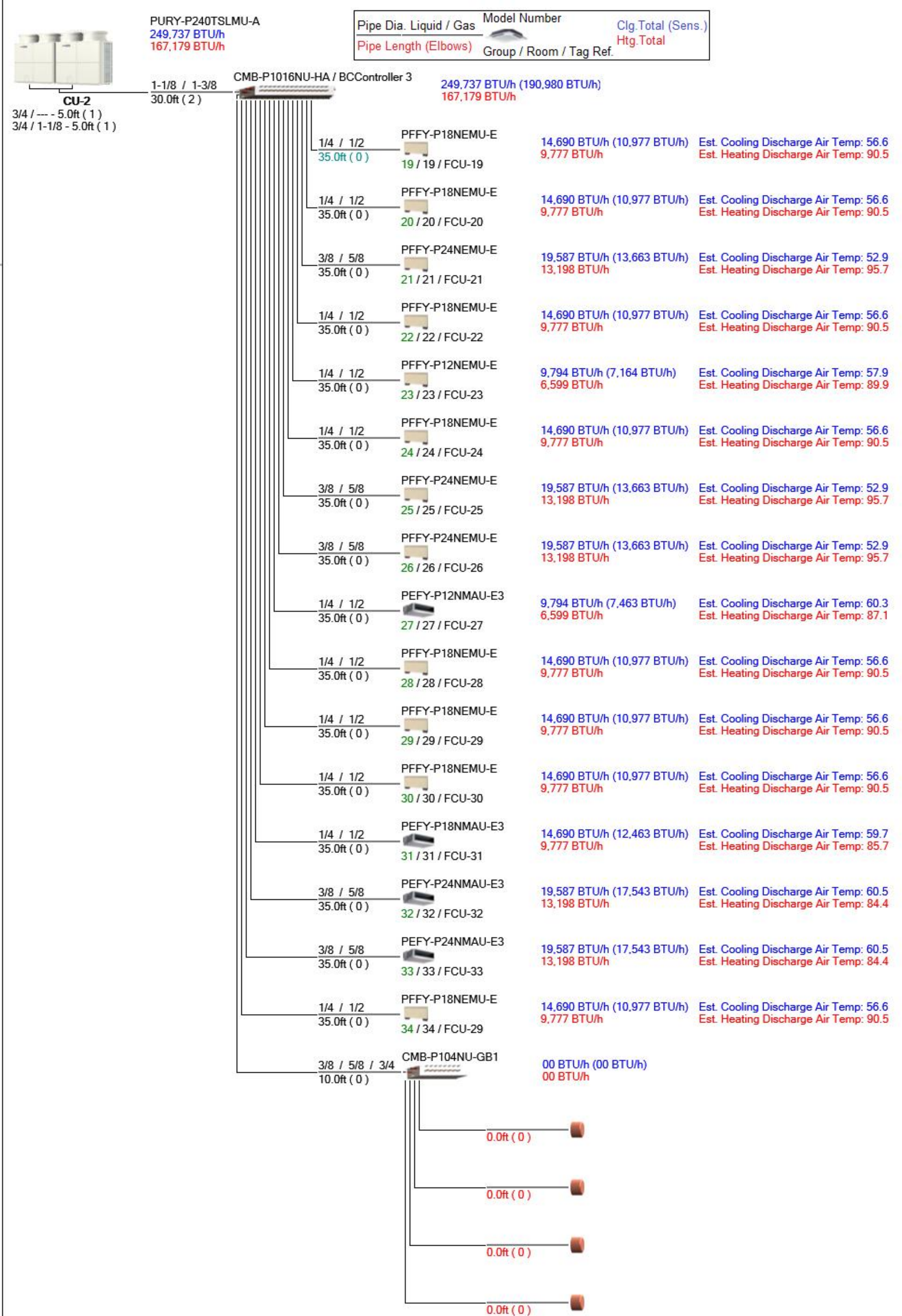
Indoor Units:	18 / 2 to 50	
Capacity:	302 / 120 to 360 (125.8%)	
* Connectable capacity is not actual capacity.		
Total Pipe Length:	686.6 / 2619.2	feet
Furthest Actual:	80.0 / 541.0	feet
Furthest Equiv.:	84.9 / 623.0	feet
After 1st Branch Actual:	45.0 / 176.4	feet
After 1st Branch Equiv.:	45.0 / 176.4	feet
Correction Factors		
Outdoor Unit Capacity:	1.06	1.01
Temperature:	1.00	0.65
Piping Length:	0.97	0.99
Defrosting:	-	0.95
User Derate:	1.00	1.00
Total Derate:	1.04	0.62
Additional Refrigerant:	64.5	lb
Total Refrigerant Amount:	110.8	lb

Conditions (°F)				
Cooling				
Indoor DB	80.0	Humidity	51.8%	Indoor WB 67.0
Outdoor DB	96.0			
Heating				
Indoor DB	70.0			
Outdoor DB	-2.0	Humidity	72.8%	Outdoor WB -2.7



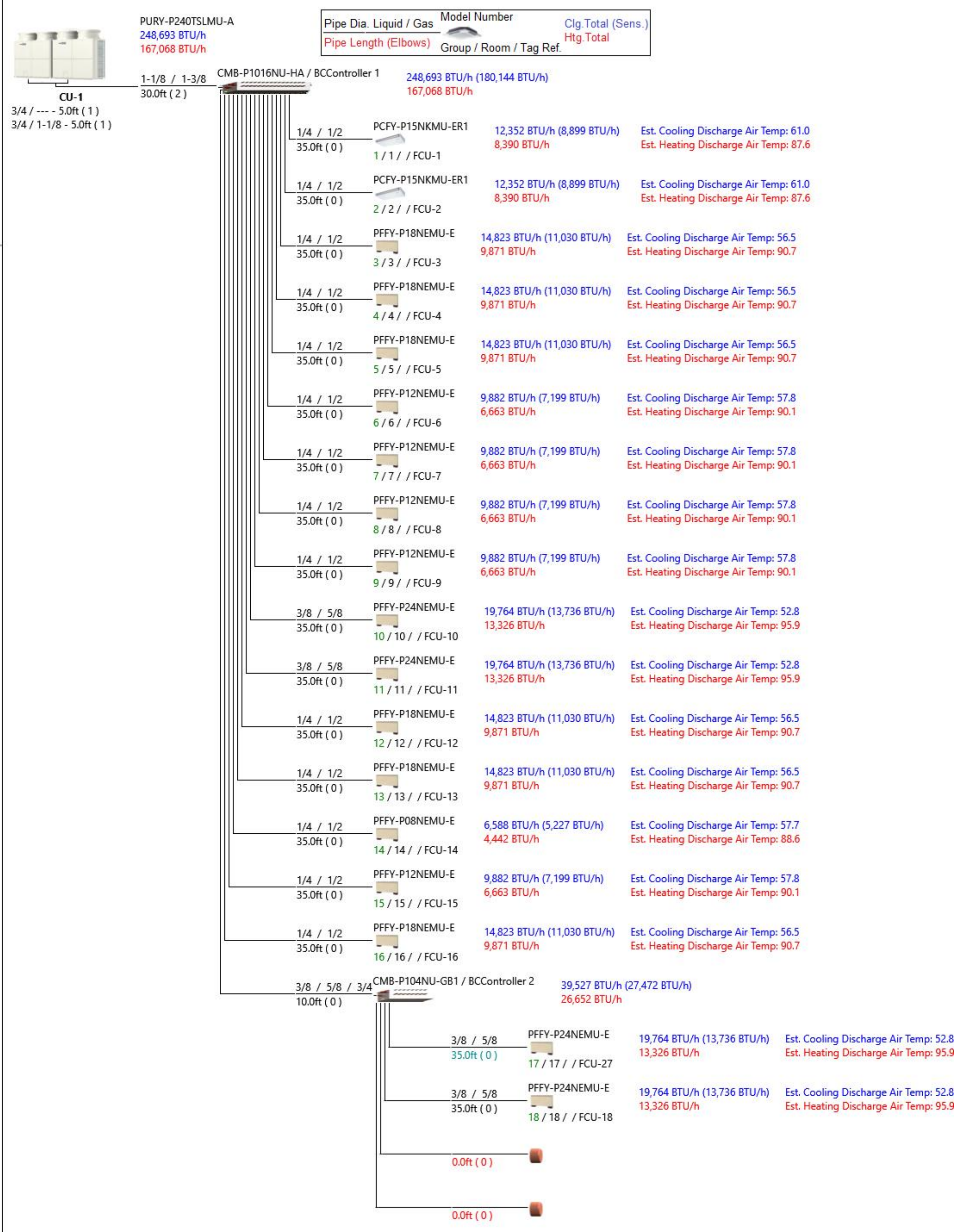
Indoor Units:	16 / 2 to 50	
Capacity:	306 / 120 to 360 (127.5%)	
* Connectable capacity is not actual capacity.		
Total Pipe Length:	616.6 / 2619.2	feet
Furthest Actual:	70.0 / 541.0	feet
Furthest Equiv.:	74.9 / 623.0	feet
After 1st Branch Actual:	35.0 / 155.8	feet
After 1st Branch Equiv.:	35.0 / 155.8	feet
Correction Factors		
Outdoor Unit Capacity:	1.07	1.01
Temperature:	1.00	0.65
Piping Length:	0.97	0.99
Defrosting:	-	0.95
User Derate:	1.00	1.00
Total Derate:	1.04	0.62
Additional Refrigerant:	64.3	lb
Total Refrigerant Amount:	110.5	lb

Conditions (°F)			
Cooling			
Indoor DB	80.0	Humidity	51.8%
Indoor WB	67.0		
Outdoor DB	96.0		
Heating			
Indoor DB	70.0		
Outdoor DB	-2.0	Humidity	72.8%
Outdoor WB	-2.7		



Indoor Units:	18 / 2 to 50	
Capacity:	302 / 120 to 360 (125.8%)	
* Connectable capacity is not actual capacity.		
Total Pipe Length:	686.6 / 2619.2	feet
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After 1st Branch Equiv.:	45.0 / 176.4	feet
Correction Factors		
Outdoor Unit Capacity:	1.06	1.01
Temperature:	1.00	0.65
Piping Length:	0.97	0.99
Defrosting:	-	0.95
User Derate:	1.00	1.00
Total Derate:	1.04	0.62
Additional Refrigerant:	64.5	lb
Total Refrigerant Amount:	110.8	lb

Conditions (°F)					
Cooling					
Indoor DB	80.0	Humidity	51.8%	Indoor WB	67.0
Outdoor DB	96.0				
Heating					
Indoor DB	70.0				
Outdoor DB	-2.0	Humidity	72.8%	Outdoor WB	-2.7



Indoor Units:	16 / 2 to 50	
Capacity:	306 / 120 to 360 (127.5%)	
* Connectable capacity is not actual capacity.		
Total Pipe Length:	616.6 / 2619.2	feet
Furthest Actual:	70.0 / 541.0	feet
Furthest Equiv.:	74.9 / 623.0	feet
After 1st Branch Actual:	35.0 / 155.8	feet
After 1st Branch Equiv.:	35.0 / 155.8	feet
Correction Factors		
Outdoor Unit Capacity:	1.07	1.01
Temperature:	1.00	0.65
Piping Length:	0.97	0.99
Defrosting:	-	0.95
User Derate:	1.00	1.00
Total Derate:	1.04	0.62
Additional Refrigerant:	64.3	lb
Total Refrigerant Amount:	110.5	lb

Conditions (°F)				
Cooling				
Indoor DB	80.0	Humidity	51.8%	Indoor WB 67.0
Outdoor DB	96.0			
Heating				
Indoor DB	70.0			
Outdoor DB	-2.0	Humidity	72.8%	Outdoor WB -2.7



3.2.3.1

Mitsubishi Electric
DiamondSystemBuilder

12/4/2017

12:25 PM

Job Name:	
System Reference:	Date:



OUTDOOR VRF HEAT PUMP WITH HEAT RECOVERY SYSTEM

UNIT OPTION

Standard Model..... PURY-P240TSLMU-A
 Seacost (BS) model PURY-P240TSLMU-A-BS

ACCESSORIES

Twinning Kit (required) CMY-ER200CBK
 Joint Kit For details see Pipe Accessories Submittal
 BC Controller (Required) For details see Pipe Accessories Submittal
 Low Ambient Kit for details see Low Ambient Kit Submittal
 Snow/Hail Guards Kit.....For details see Snow/Hail Guards kit submittal
 Base Pan Heater Kit For details see Base Pan Heater Kit Submittal

Specifications		System	Module 1	Module 2
Unit Type		PURY-P240TSLMU-A (-BS)	PURY-P120TLMU-A (-BS)	PURY-P120TLMU-A (-BS)
Nominal Cooling Capacity (208/230V)	Btu/h	240,000	120,000	120,000
Nominal Heating Capacity (208/230V)	Btu/h	270,000	135,000	135,000
Operating Temperature Range *1	Cooling (Indoor)*1	Refer to Module Data	23 ~ 126 °F (-5 ~ 52 °C) DB	23 ~ 126 °F (-5 ~ 52 °C) DB
	Heating (Indoor)		-4 ~ +60° F (-20 ~ +15.5° C) WB	-4 ~ +60° F (-20 ~ +15.5° C) WB
External Dimensions (H x W x D)	In. (mm)	Refer to Module Data	64-31/32 x 68-29/32 x 29-5/32 (1650 x 1750 x 740)	64-31/32 x 68-29/32 x 29-5/32 (1650 x 1750 x 740)
Net Weight	Lbs. (kg)	1390 (630)	695 (315)	695 (315)
External Finish		Refer to Module Data	Pre-coated galvanized steel sheet (+powder coating for -BS type)	
Electrical Power Requirements	Voltage, Phase, Hertz	Refer to Module Data**	208 / 230V, 3-phase, 60Hz	
Minimum Circuit Ampacity (MCA)**	A	Refer to Module Data**	42 / 39	42 / 39
Maximum Overcurrent Protection (MOP)**	A	Refer to Module Data**	60	60
Piping Diameter (Brazed)				
From Twinning Kit to First Joint or Header (In. / mm)	Liquid (High Pressure)	1-1/8 / 28.58	Refer to System Data	Refer to System Data
	Gas (Low Pressure)	1-3/8 / 34.9	Refer to System Data	Refer to System Data
From Modules to Twinning Kit (In. / mm)	Liquid (High Pressure)	Refer to Module Data	3/4 / 19.05	3/4 / 19.05
	Gas (Low Pressure)	Refer to Module Data	1-1/8 / 28.6	1-1/8 / 28.6
Max. Total Refrigerant Line Length	Ft.	2,460	Refer to System Data	Refer to System Data
Max. Refrigerant Line Length (Bet. ODU & IDU)	Ft.	541		
Max. Control Wiring Length	Ft.	1,640		
Indoor Unit	Total Capacity	50~150	Refer to System Data	Refer to System Data
	Model / Quantity	P6~P96 / 2~50	Refer to System Data	Refer to System Data
Sound Pressure Level	dB(A)	63	Refer to System Data	Refer to System Data
Fan				
Type x Quantity		Refer to Module Data	Propeller fan x 2	Propeller fan x 2
Airflow Rate	CFM		11,300	11,300
External Static Pressure	In. WG		Selectable; 0, 0.12 or 0.24" WG; factory set to 0" W.G.	
Compressor Operating Range		7% - 100%	Refer to System Data	Refer to System Data
Compressor Type x Quantity		Refer to Module Data	Inverter scroll hermetic compressor x 1	Inverter scroll hermetic compressor x 1
Refrigerant		Refer to Module Data	R410A x 23 lbs. + 2 oz. (10.5 kg)	R410A x 23 lbs. + 2 oz. (10.5 kg)
Protection Devices	High Pressure	Refer to Module Data	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)
	Inverter Circuit (Comp. / Fan)		Over-heat protection, Over-current protection	Over-heat protection, Over-current protection
AHRI Ratings (Ducted/Non-Ducted)	EER	11.8 / 12.9	Refer to System Data	
	IEER	19 / 22.3	Refer to System Data	
	COP	3.45 / 3.64	Refer to System Data	
	SCHE	22.9 / 26.8	Refer to System Data	

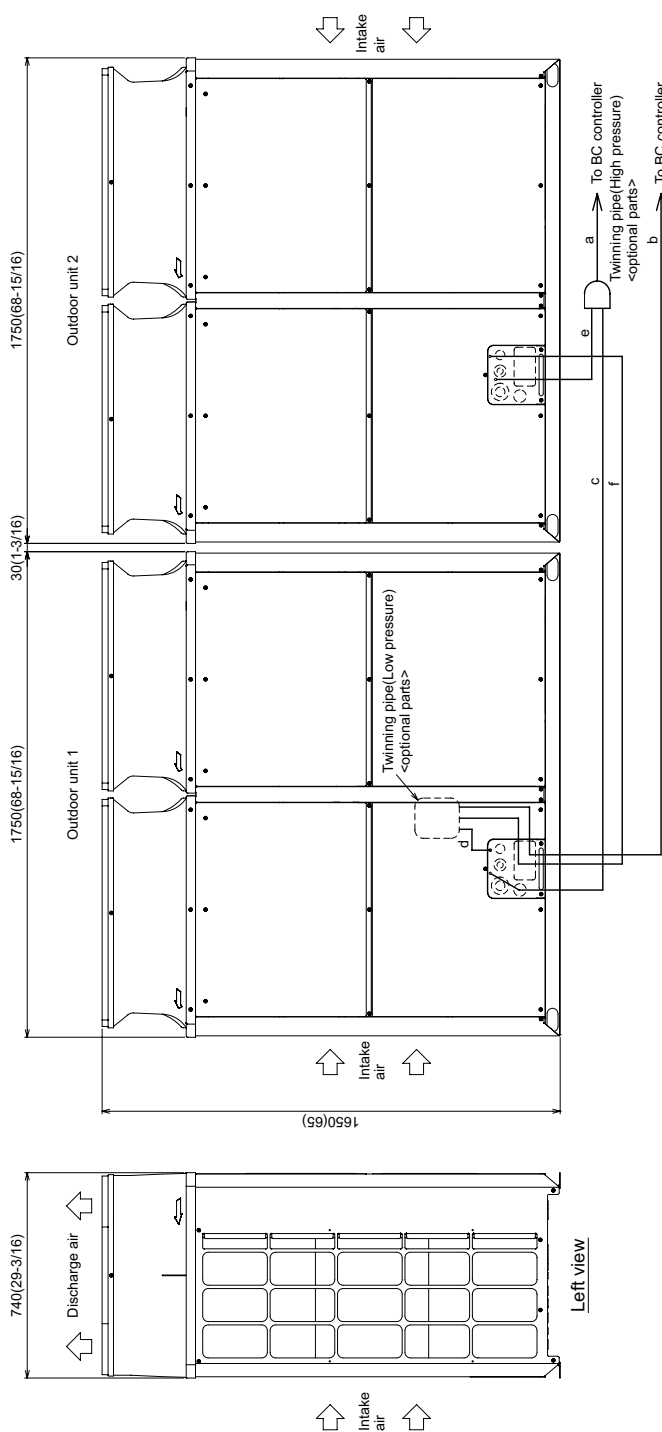
NOTES:

*1. Harsh weather environments may demand performance enhancing equipment. Ask your Mitsubishi Electric representative for more details about your region.

*2. For details on extended cooling operation range down to -10° F DB, see Low Ambient Kit Submittal.

** Each individual module requires a separate electrical connection. Reference electrical data for each individual module.

Model: **PURY-P240TSLMU-A (-BS)- DIMENSIONS**



Front view

Unit model	P240	P264	P288
Component unit model	P120	P144	P144
Twinning Kit -Outdoor unit	High pressure c ø19.05(3/4)	c ø22.2(7/8)	c ø22.2(7/8)
Low pressure d - (Note 5)	f ø28.58(1-1/8)	d - (Note 5)	f ø28.58(1-1/8)
Unit model	P312	P336	
Component unit model	P168	P168	P168
Twinning Kit -Outdoor unit	High pressure c ø22.2(7/8)	c ø22.2(7/8)	c ø22.2(7/8)
Low pressure d - (Note 5)	f ø28.58(1-1/8)	d - (Note 5)	f ø28.58(1-1/8)

Unit: mm (in.)

Twinning pipe connection size		PURY-P240TSLMU-A(-BS)	PURY-P264TSLMU-A(-BS)	PURY-P288TSLMU-A(-BS)	PURY-P240TSLMU-A(-BS)	PURY-P264TSLMU-A(-BS)	PURY-P288TSLMU-A(-BS)
Component unit name	Outdoor unit 1	PURY-P240TSLMU-A(-BS)	PURY-P264TSLMU-A(-BS)	PURY-P288TSLMU-A(-BS)	PURY-P240TSLMU-A(-BS)	PURY-P264TSLMU-A(-BS)	PURY-P288TSLMU-A(-BS)
Outdoor Twinning Kit (optional parts)		PURY-P240TSLMU-A(-BS)	PURY-P264TSLMU-A(-BS)	PURY-P288TSLMU-A(-BS)	PURY-P240TSLMU-A(-BS)	PURY-P264TSLMU-A(-BS)	PURY-P288TSLMU-A(-BS)
BC controller - Twinning pipe	High pressure a	ø19.05(3/4)		ø19.05(3/4)	ø19.05(3/4)		ø19.05(3/4)
	Low pressure b	ø28.58(1-1/8)		ø28.58(1-1/8)	ø28.58(1-1/8)		ø28.58(1-1/8)

- Note 1 Connect the pipes as shown in the figure above. Refer to the table above for the pipe size.
2. Twinning pipe (High pressure) should not be tilted more than 15 degrees from the horizontal plane.
Be sure to see the Installation Manual for details of twinning pipe installation.
3. The pipe section before the twinning pipe (section "a" in the figure) must have at least 500mm(19-11/16) of straight section.
Including the straight pipe that is supplied with the twinning pipe.
4. Only use the twinning pipe by Mitsubshi (optional parts).
5. Connect the outdoor unit 1 with the twinning pipe (Low pressure) (section "d" in the figure).

Model: PURY-P120TLMU-A (-BS)- DIMENSIONS

Unit: mm (in.)

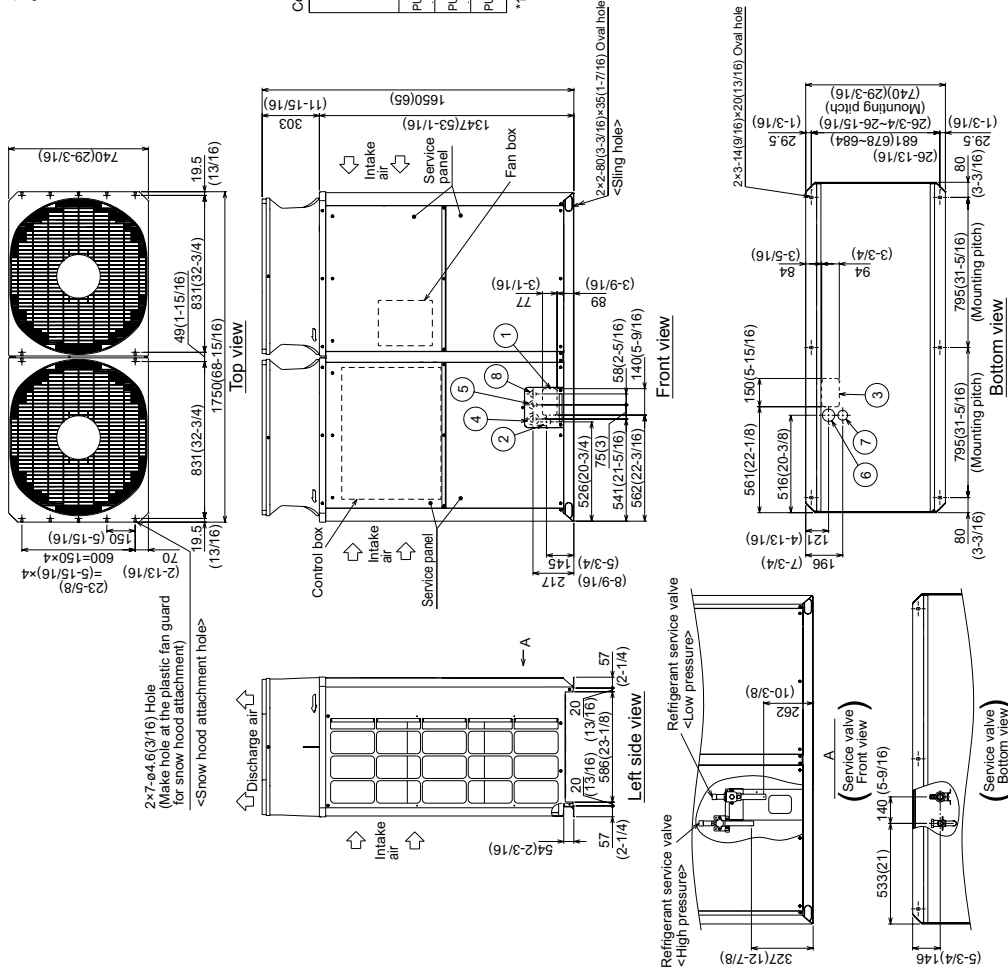
- <Accessories>
 • Connecting pipe
 • Low pressure>
 • Elbow (ID ϕ 28.58(1-1/8) $\times$ OD ϕ 28.58(1-1/8) ... P120 P144 P168 1pc.
 • High pressure>
 • Pipe (ID ϕ 25.4(1) $\times$ ID ϕ 19.05(3/4) ... P120 1pc.
 • Pipe (ID ϕ 25.4(1) $\times$ OD ϕ 19.05(3/4) ... P120 1pc.
 • Pipe (ID ϕ 25.4(1) $\times$ ID ϕ 22.2(7/8) ... P144 P168 1pc.
 • Pipe (ID ϕ 25.4(1) $\times$ OD ϕ 22.2(7/8) ... P144 P168 1pc.
 • Pipe (ID ϕ 25.4(1) $\times$ ID ϕ 22.2(7/8) ... P144 P168 1pc.
 • Pipe (ID ϕ 25.4(1) $\times$ OD ϕ 22.2(7/8) ... P144 P168 1pc.
 Note 1 Please refer to the next page for information regarding necessary spacing around the unit and foundation work.
 2. At brazing of pipes, wrap the refrigerant service valve with wet cloth and keep the temperature of refrigerant service valve under 120°C(248°F).

Connecting pipe specifications

Model	Diameter			
	Refrigerant pipe		Service valve	
	High pressure	Low pressure	High pressure	Low pressure
PURY-P120TLMU	ϕ 19.05 Braze (3/4) *1	ϕ 28.58 Braze (1-1/8) *1	ϕ 25.4 (1)	ϕ 28.58 (1-1/8)
PURY-P144TLMU	ϕ 22.2 Braze (7/8) *1	ϕ 28.58 Braze (1-1/8) *1	ϕ 25.4 (1)	ϕ 28.58 (1-1/8)
PURY-P168TLMU	ϕ 22.2 Braze (7/8) *1	ϕ 28.58 Braze (1-1/8) *1	ϕ 25.4 (1)	ϕ 28.58 (1-1/8)

*1 Use the included connecting pipe and connect to the refrigerant service valve piping.

NO.	Usage	Specifications
①	Front through hole	140 $\times$ 77 Knockout hole (5-9/16) (3-1/16)
②	For pipes	Front through hole (Uses when twinning kit (optional parts) is mounted.) ϕ 45 Knockout hole (1-13/16)
③	Bottom through hole	150 $\times$ 94 Knockout hole (5-15/16) (3-3/4)
④	Front through hole	ϕ 62.7 or ϕ 34.5 Knockout hole (2-1/2) (1-3/8)
⑤	Front through hole	ϕ 43.7 or ϕ 22.2 Knockout hole (1-3/4) (7/8)
⑥	Bottom through hole	ϕ 65 Knockout hole (2-9/16)
⑦	Bottom through hole	ϕ 52 Knockout hole (2-1/16)
⑧	For transmission cables	ϕ 34 Knockout hole (1-3/8)



Model: PURY-P120TLMU-A (-BS)- DIMENSIONS

Unit: mm (in.)

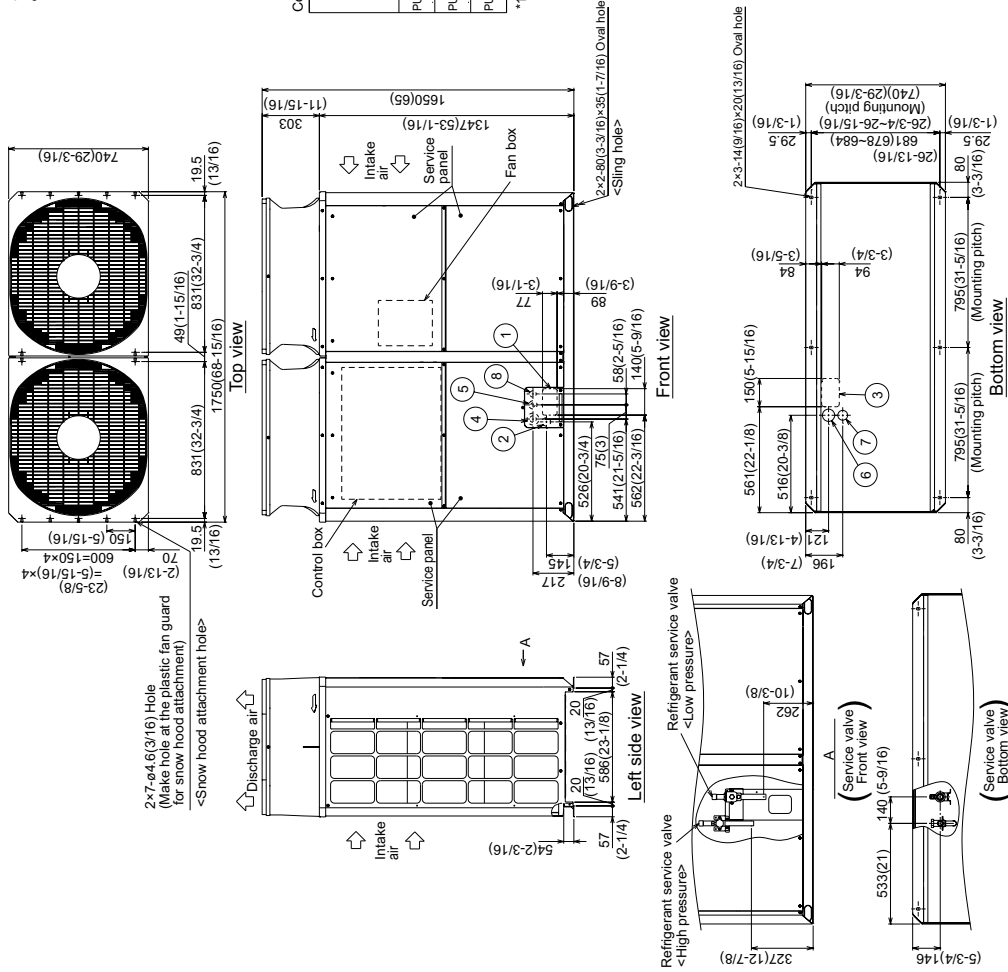
- <Accessories>
 • Connecting pipe
 • Low pressure>
 • Elbow (ID ϕ 28.58(1-1/8) $\times$ OD ϕ 28.58(1-1/8) ... P120 P144 P168 1pc.
 • High pressure>
 • Pipe (ID ϕ 25.4(1) $\times$ ID ϕ 19.05(3/4) ... P120 1pc.
 • Pipe (ID ϕ 25.4(1) $\times$ OD ϕ 19.05(3/4) ... P120 1pc.
 • Pipe (ID ϕ 25.4(1) $\times$ ID ϕ 22.2(7/8) ... P144 P168 1pc.
 • Pipe (ID ϕ 25.4(1) $\times$ OD ϕ 22.2(7/8) ... P144 P168 1pc.
 • Pipe (ID ϕ 25.4(1) $\times$ ID ϕ 22.2(7/8) ... P144 P168 1pc.
 • Pipe (ID ϕ 25.4(1) $\times$ OD ϕ 22.2(7/8) ... P144 P168 1pc.
 Note 1 Please refer to the next page for information regarding necessary spacing around the unit and foundation work.
 2. At brazing of pipes, wrap the refrigerant service valve with wet cloth and keep the temperature of refrigerant service valve under 120°C(248°F).

Connecting pipe specifications

Model	Diameter			
	Refrigerant pipe		Service valve	
	High pressure	Low pressure	High pressure	Low pressure
PURY-P120TLMU	ϕ 19.05 Braze (3/4) *1	ϕ 28.58 Braze (1-1/8) *1	ϕ 25.4 (1)	ϕ 28.58 (1-1/8)
PURY-P144TLMU	ϕ 22.2 Braze (7/8) *1	ϕ 28.58 Braze (1-1/8) *1	ϕ 25.4 (1)	ϕ 28.58 (1-1/8)
PURY-P168TLMU	ϕ 22.2 Braze (7/8) *1	ϕ 28.58 Braze (1-1/8) *1	ϕ 25.4 (1)	ϕ 28.58 (1-1/8)

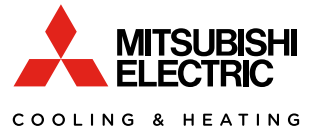
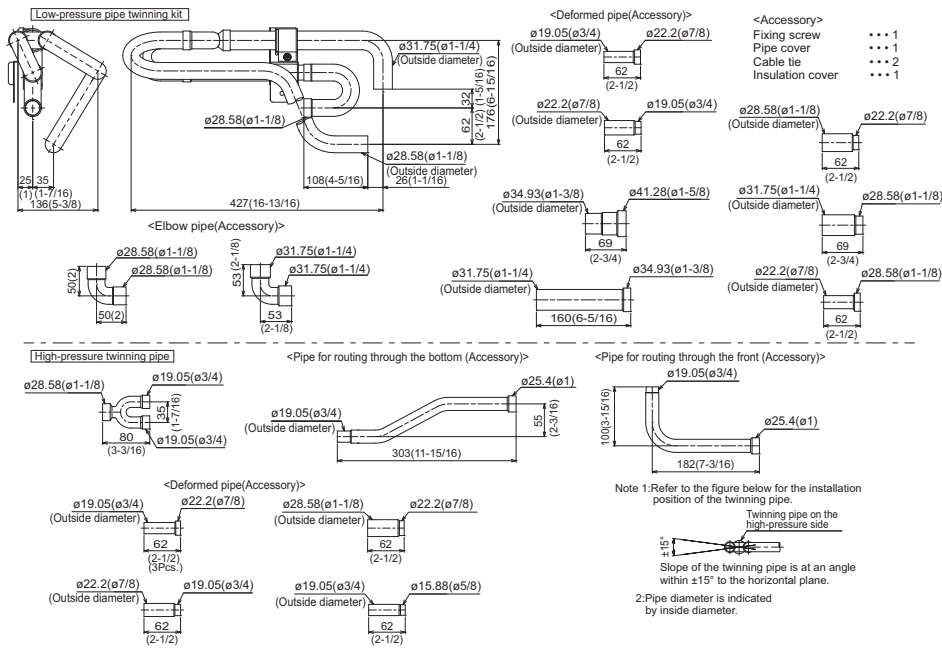
*1 Use the included connecting pipe and connect to the refrigerant service valve piping.

NO.	Usage	Specifications
①	Front through hole	140 $\times$ 77 Knockout hole (5-9/16) (3-1/16)
②	For pipes	Front through hole (Uses when twinning kit (optional parts) is mounted.) ϕ 45 Knockout hole (1-13/16)
③	Bottom through hole	150 $\times$ 94 Knockout hole (5-15/16) (3-3/4)
④	Front through hole	ϕ 62.7 or ϕ 34.5 Knockout hole (2-1/2) (1-3/8)
⑤	Front through hole	ϕ 43.7 or ϕ 22.2 Knockout hole (1-3/4) (7/8)
⑥	Bottom through hole	ϕ 65 Knockout hole (2-9/16)
⑦	Bottom through hole	ϕ 52 Knockout hole (2-1/16)
⑧	For transmission cables	ϕ 34 Knockout hole (1-3/8)



Twinning Kit: CMY-ER200CBK- DIMENSIONS

Unit: mm (in.)



1340 Satellite Boulevard, Suwanee, GA 30024
Toll Free: 800-433-4822 www.mehvac.com



FORM# PURY-P240TSLMU-A (-BS) -20160224

FAN COIL SCHEDULE (FC)														
MK	MFGR. & MODEL NO.	AIR FLOW (CFM)	OUTSIDE AIRFLOW (CFM)	COOLING				HEATING		ELECTRICAL			REMARKS	
				TOTAL CAP. (MBH)	SENS. CAP. (MBH)	EAT DB (°F)	EAT WB (°F)	TOTAL CAP. (MBH)	EAT DB (°F)	VOLT	PHASE	MCA		
FC-1	DAIKIN FXHQ12	410	0	10.3	8.0	75	63	13.5	68	208	1	0.8	①	
FC-2	DAIKIN FXHQ12	410	0	10.3	8.0	75	63	5.7	68	208	1	0.8	①	
FC-3	DAIKIN FXLQ18	490	0	15.5	10.5	75	63	13.5	68	208	1	0.6	①	
FC-4	DAIKIN FXLQ18	490	0	15.5	10.5	75	63	5.7	68	208	1	0.6	①	
FC-5	DAIKIN FXLQ18	490	0	15.5	10.5	75	63	5.7	68	208	1	0.6	①	
FC-6	DAIKIN FXLQ12	280	0	10.3	7.2	75	63	13.5	68	208	1	0.5	①	
FC-7	DAIKIN FXLQ12	280	0	10.3	7.2	75	63	5.7	68	208	1	0.5	①	
FC-8	DAIKIN FXLQ09	245	0	8.2	5.9	75	63	5.7	68	208	1	0.3	①	
FC-9	DAIKIN FXLQ12	280	0	10.3	7.2	75	63	13.5	68	208	1	0.5	①	
FC-10	DAIKIN FXLQ24	560	0	20.6	13.9	75	63	5.7	68	208	1	0.6	①	
FC-11	DAIKIN FXLQ24	560	0	20.6	13.9	75	63	5.7	68	208	1	0.6	①	
FC-12	DAIKIN FXLQ18	490	0	15.5	10.5	75	63	13.5	68	208	1	0.6	①	
FC-13	DAIKIN FXLQ18	490	0	15.5	10.5	75	63	5.7	68	208	1	0.6	①	
FC-14	DAIKIN FXLQ09	245	0	8.2	5.9	75	63	26.5	68	208	1	0.3	①	
FC-15	DAIKIN FXLQ12	280	0	10.3	7.2	75	63	26.5	68	208	1	0.5	①	
FC-16	DAIKIN FXLQ18	490	0	15.5	10.5	75	63	20.0	68	208	1	0.6	①	
FC-17	DAIKIN FXLQ24	560	0	20.6	13.9	75	63	26.5	68	208	1	0.6	①	
FC-18	DAIKIN FXLQ18	490	0	15.5	10.5	75	63	5.7	68	208	1	0.6	①	
FC-19	DAIKIN FXLQ18	490	0	15.5	10.5	75	63	13.5	68	208	1	0.6	①	
FC-20	DAIKIN FXLQ18	490	0	15.5	10.5	75	63	5.7	68	208	1	0.6	①	
FC-21	DAIKIN FXLQ24	560	0	20.6	13.9	75	63	5.7	68	208	1	0.6	①	
FC-22	DAIKIN FXLQ18	490	0	15.5	10.5	75	63	13.5	68	208	1	0.6	①	
FC-23	DAIKIN FXLQ12	280	0	10.3	7.2	75	63	5.7	68	208	1	0.5	①	
FC-24	DAIKIN FXLQ18	490	0	15.5	10.5	75	63	5.7	68	208	1	0.6	①	
FC-25	DAIKIN FXLQ24	560	0	20.6	13.9	75	63	13.5	68	208	1	0.6	①	
FC-26	DAIKIN FXLQ24	560	0	20.6	13.9	75	63	5.7	68	208	1	0.6	①	
FC-27	DAIKIN FXMQ12	280	0	10.3	7.2	75	63	5.7	68	208	1	0.5	①	
FC-28	DAIKIN FXLQ18	490	0	15.5	10.5	75	63	13.5	68	208	1	0.6	①	
FC-29	DAIKIN FXLQ18	490	0	15.5	10.5	75	63	5.7	68	208	1	0.6	①	
FC-30	DAIKIN FXLQ18	490	0	15.5	10.5	75	63	13.5	68	208	1	0.6	①	
FC-31	DAIKIN FXMQ18	490	1350	15.5	10.5	95	78	N/A	25	208	1	0.6	①	
FC-32	DAIKIN FXMQ24	688	1350	20.6	16.0	95	78	N/A	25	208	1	1.8	①	
FC-33	DAIKIN FXMQ24	688	1350	20.6	16.0	95	78	N/A	25	208	1	1.8	①	
FC-34	DAIKIN FXLQ18	490	1350	15.5	10.5	95	78	N/A	25	208	1	0.6	①	

① MECHANICAL CONTRACTOR PROVIDE AND INSTALL INSTALL CONDENSATE PUMP - SEE MECH. PIPING PLANS

VRV HEAT RECOVERY UNIT SCHEDULE (CU)											
MARK	MANUFACTURER	MODEL	COMB %	COOLING DESIGN TEMP (F°)	COOLING CAPACITY (BTUH)	HEATING DESIGN TEMP (F°)	HEATING CAPACITY (BTUH)	ELECTRICAL			WEIGHT (LBS)
								VOLTAGE	PHASE	MCA	
CU-1	DAIKIN	REYQ456TTJU	130	96	451942	-3	325827	208	3	61.9&55&55	780 X 3

NOTES: 1. PROVIDE WITH 10 YEAR PARTS AND 10 YEAR COMPRESSOR WARRANTY FROM DATE OF START UP.
2. EACH OUTDOOR UNIT MODULE SHALL HAVE TWO COMPRESSORS. IF ONE COMPRESSOR FAILS, IT CAN BE ISOLATED SO BACK UP COMPRESSOR CAN OPERATE.

NEUTRAL AIR UNIT SCHEDULE (NAU)																								
MARK	MAKE	MODEL	AIRFLOW (CFM)	OSA (CFM)	ESP (IN. W.G.)	MOTOR SIZE (HP)	COOLING						HEATING					ELECTRICAL				WEIGHT (LBS)		
							EAT		LAT		CAPACITY TOTAL (BTUH)	CAPACITY SENS. (BTUH)	AMBIENT DB (°F)	TYPE	INPUT SIZE (MBH)	STAGES	CAPACITY TOTAL (MBH)	EDB (°F)	LDB (°F)	VOLTAGE	PHASE		MCA (AMPS)	MOPD (AMPS)
							DB (°F)	WB (°F)	DB (°F)	WB (°F)														
NAU-1	DAIKIN	DPS015A	2000	2000	1.00	2.3	97.0	78.0	70.0	63.0	116071	86157	97.0	GAS	300	10:1	240	-10.0	80.0	208	3	63.3	90	2600

NOTES: 1. PROVIDE 24" ROOF CURB
2. INTERCONNECT INTO EXISTING FIRE ALARM SYSTEM FOR SHUTDOWN
3. PROVIDE UNITS WITH NON-FUSED DISCONNECT SWITCH
4. PROVIDE UNITS WITH PHASE FAILURE MONITOR
5. PROVIDE UNITS WITH BACnet/MSTP CARD, FACTORY INSTALLED
6. UNIT SHALL MODULATE FAN SPEED BASED ON BUILDING PRESSURE SENSOR

ELECTRIC HEATER (EH)							
MK	MFGR. & MODEL NO.	HEATING DATA		CFM	ELECTRICAL DATA		REMARKS
		KW	BTU/HR		VOLT	PHASE	
EH-1	MARKEL 3450 SERIES	2	6,826	245	208	1	① ② ③
EH-2	MARKEL 3450 SERIES	2	6,826	245	208	1	① ② ③
EH-3	MARKEL E2910-048C	1	3,413	0	208	1	① ② ③ ④
EH-4	MARKEL F2912-060C	1.2	4,250	0	208	1	① ② ③
EH-5	MARKEL F2912-060C	1.2	4,250	0	208	1	① ② ③
EH-6	MARKEL H2920-096C	1.5	5,100	0	208	1	① ② ③
EH-7	MARKEL H2920-096C	1.5	5,100	0	208	1	① ② ③
EH-8	MARKEL 3450 SERIES	2	6,826	245	208	1	① ② ③

- ① SURFACE MOUNT ③ FACTORY DISCONNECT
② INTEGRAL THERMOSTAT ④ VERIFY EXISTING CIRCUIT PRIOR TO ORDERING

CURRENT DATE: XX/2017

LICENSE EXPIRES: 11/30/19

MECHANICAL SYSTEM REPLACEMENT FOR:
BROWN COUNTY COURTHOUSE
200 EAST COURT STREET, MOUNT STERLING, IL

CONSTRUCTION
DOCUMENT
PHASE

ISSUED FOR
CONSTRUCTION

ISSUE DATE: 11/17/2017

REVISIONS

1 ADDENDUM NO. 1

PROJECT NUMBER: 5661

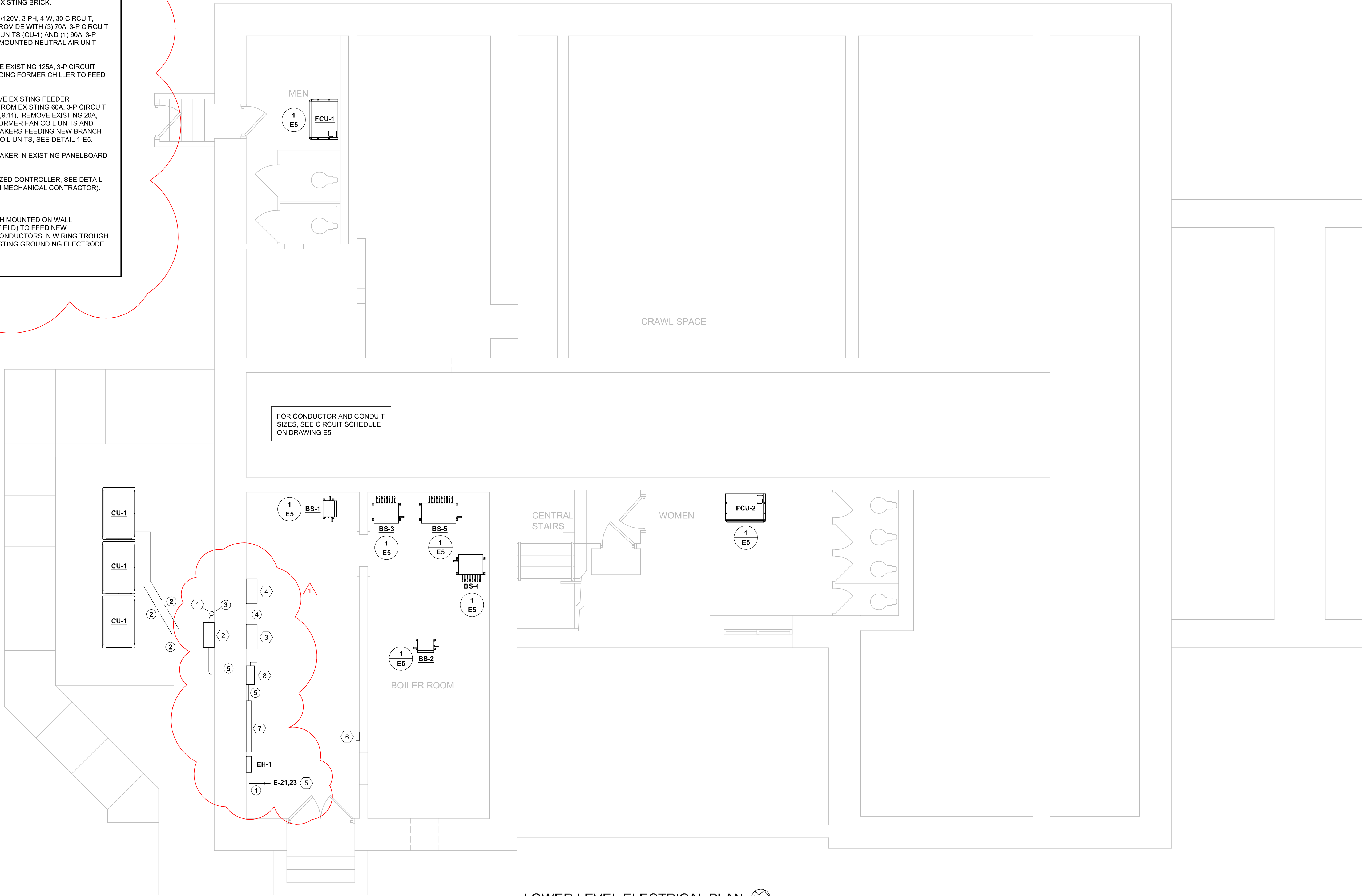
MECHANICAL
SCHEDULES

DWG. NO.

M5

KEYED NOTES

- 1 NEW CONDUIT INSTALLED EXPOSED ON FACE OF WALL CLEAR OF WINDOWS AND ADJACENT TO NEW GAS PIPING FOR ROOF MOUNTED NEUTRAL AIR UNIT, SEE DRAWINGS E2, E3 AND E4 FOR CONTINUATION. PAINT TO MATCH EXISTING BRICK.
- 2 NEW PANELBOARD "M": 225A, 208Y/120V, 3-PH, 4-W, 30-CIRCUIT, M.L.O., IN NEMA 3R ENCLOSURE. PROVIDE WITH (3) 70A, 3-P CIRCUIT BREAKERS FEEDING CONDENSING UNITS (CU-1) AND (1) 90A, 3-P CIRCUIT BREAKER FEEDING ROOF MOUNTED NEUTRAL AIR UNIT (NAU-1).
- 3 EXISTING PANELBOARD "D": REUSE EXISTING 125A, 3-P CIRCUIT BREAKER (D-13,15,17,19,21,23) FEEDING FORMER CHILLER TO FEED EXISTING PANELBOARD "E".
- 4 EXISTING PANELBOARD "E": REMOVE EXISTING FEEDER CONDUCTORS AND CONDUIT FED FROM EXISTING 60A, 3-P CIRCUIT BREAKER IN PANELBOARD "D" (D-7,9,11). REMOVE EXISTING 20A, 1-P CIRCUIT BREAKERS FEEDING FORMER FAN COIL UNITS AND INSTALL NEW 15A, 2-P CIRCUIT BREAKERS FEEDING NEW BRANCH SELECTOR BOXES AND NEW FAN COIL UNITS, SEE DETAIL 1-E5.
- 5 INSTALL NEW 15A, 2-P CIRCUIT BREAKER IN EXISTING PANELBOARD "E".
- 6 NEW I-TOUCH MANAGER CENTRALIZED CONTROLLER, SEE DETAIL 2-E5 (VERIFY FINAL LOCATION WITH MECHANICAL CONTRACTOR).
- 7 EXISTING WIRING TROUGH.
- 8 NEW 200A, 3-P DISCONNECT SWITCH MOUNTED ON WALL (COORDINATE FINAL LOCATION IN FIELD) TO FEED NEW PANELBOARD "M". TAP WIRE BUS CONDUCTORS IN WIRING TROUGH TO FEED SWITCH. GROUND TO EXISTING GROUNDING ELECTRODE CONDUCTOR IN WIRING TROUGH.



LOWER LEVEL ELECTRICAL PLAN
SCALE: 1/4" = 1'-0"
0 2' 4' 8'
GRAPHIC SCALE
NORTH

CURRENT DATE: XX/XX/2017

LICENSE EXPIRES: 11/30/19

MECHANICAL SYSTEM REPLACEMENT FOR:
BROWN COUNTY COURTHOUSE
200 EAST COURT STREET, MOUNT STERLING, IL

CONSTRUCTION
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PHASE

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ISSUE DATE: 11/17/2017

REVISIONS

1 ADDENDUM NO. 1

PROJECT NUMBER: 5661

**LOWER
LEVEL
ELECTRICAL
PLAN**

DWG. NO.

E1

KEYED NOTES

1

NEW CONDUIT INSTALLED EXPOSED ON FACE OF WALL CLEAR OF WINDOWS AND ADJACENT TO NEW GAS PIPING FOR ROOF MOUNTED NEUTRAL AIR UNIT, SEE DRAWING E4 FOR CONTINUATION. PAINT TO MATCH EXISTING BRICK.

2

CONTRACTOR MAY EXTEND CONDUIT RUNS BETWEEN FLOORS IN EXISTING FURRED CHASE ADJACENT TO REFRIGERANT PIPING. MODIFY CHASE AS REQUIRED TO INSTALL CONDUIT, AND PATCH AND PAINT TO MATCH EXISTING CONSTRUCTION.

3

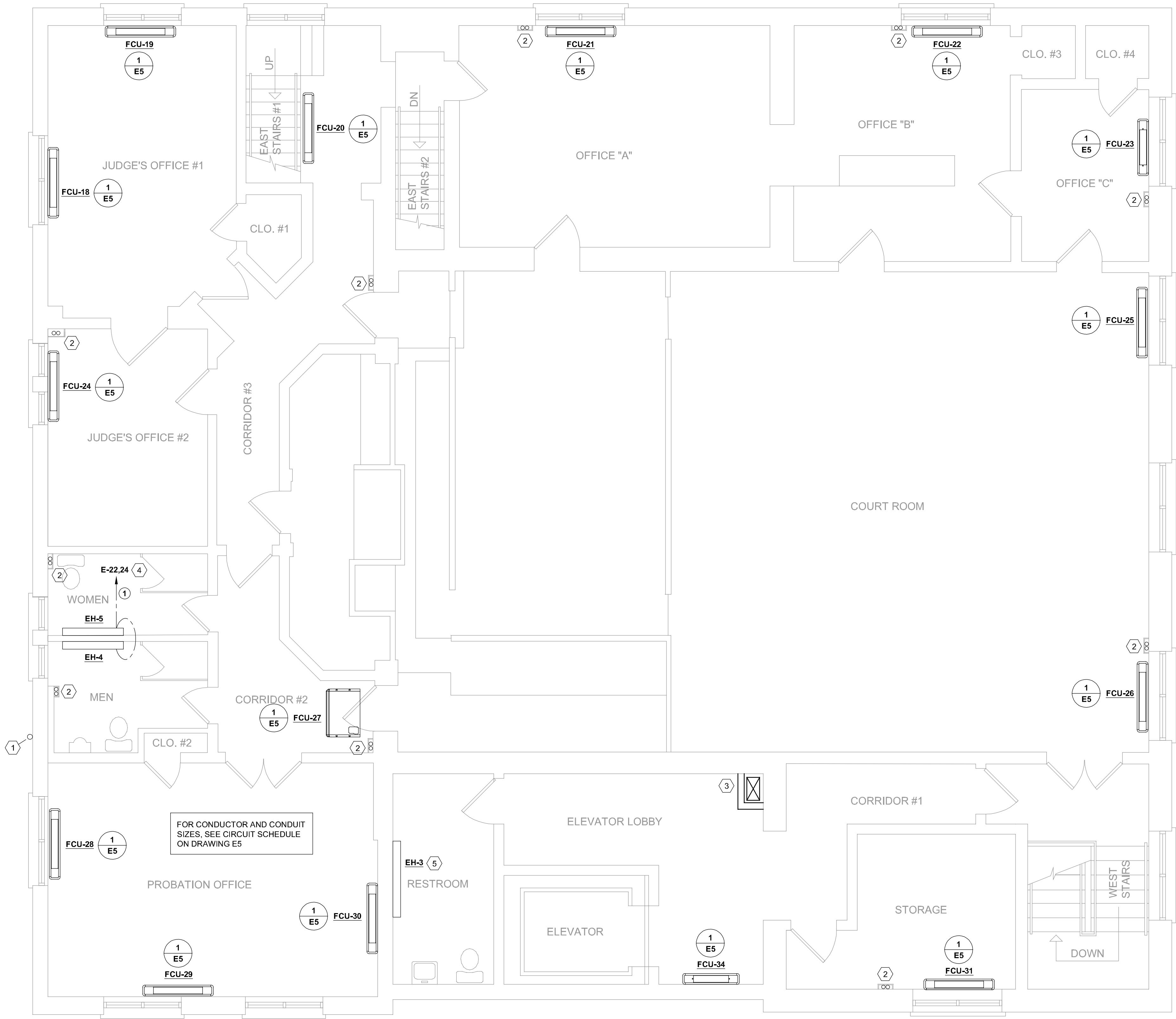
ELECTRICAL CONTRACTOR RELOCATE EXISTING SECURITY CAMERA AND MOTION SENSOR AS REQUIRED TO CLEAR NEW DUCT CHASE. NEW CHASE INSTALLED BY MECHANICAL CONTRACTOR.

4

INSTALL NEW 20A, 2-P CIRCUIT BREAKER IN EXISTING PANELBOARD "E".

5

RECONNECT NEW ELECTRIC BASEBOARD HEATER TO EXISTING 208V, 1-PHASE BRANCH CIRCUIT FED FROM EXISTING 20A, 2-P CIRCUIT BREAKER IN PANELBOARD "D".



SECOND LEVEL ELECTRICAL PLAN
SCALE: 1/4" = 1'-0"
GRAPHIC SCALE
NORTH

CURRENT DATE: XX/2017

LICENSE EXPIRES: 11/30/19

MECHANICAL SYSTEM REPLACEMENT FOR:
BROWN COUNTY COURTHOUSE
200 EAST COURT STREET, MOUNT STERLING, IL

CONSTRUCTION
DOCUMENT
PHASE

ISSUED FOR
CONSTRUCTION

ISSUE DATE: 11/17/2017

REVISIONS	
1	ADDENDUM NO. 1

PROJECT NUMBER: 5661

SECOND
LEVEL
ELECTRICAL
PLAN

DWG. NO.

E3

MECHANICAL SYSTEM REPLACEMENT FOR:
BROWN COUNTY COURTHOUSE
200 EAST COURT STREET, MOUNT STERLING, IL

CONSTRUCTION
DOCUMENT
PHASE

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CONSTRUCTION

ISSUE DATE: 11/17/2017

REVISIONS	
1	ADDENDUM NO. 1

PROJECT NUMBER: 5661

**MEZZANINE
LEVEL
ELECTRICAL
PLAN**

DWG. NO.

E4

KEYED NOTES

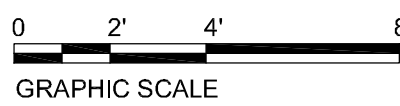
- NEW CONDUIT INSTALLED EXPOSED ON FACE OF WALL CLEAR OF WINDOWS AND ADJACENT TO NEW GAS PIPING. OFFSET EXPOSED HORIZONTALLY ALONG FASCIA AS SHOWN. PAINT TO MATCH EXISTING BRICK.
- EXTEND CONDUIT UP AND OVER PARAPET AND ACROSS ROOF ON GAS PIPING SUPPORTS. PAINT TO MATCH EXISTING BRICK AND FASCIA.
- FACTORY WIRED WEATHERPROOF CONTROL PANEL WITH SINGLE POINT POWER TERMINAL BLOCK FOR MAIN POWER CONNECTION.
- INSTALL NEW 20A, 2-P CIRCUIT BREAKER IN EXISTING PANELBOARD "E".

FOR CONDUCTOR AND CONDUIT
SIZES, SEE CIRCUIT SCHEDULE
ON DRAWING E5

FOR CONDUCTOR AND CONDUIT
SIZES, SEE CIRCUIT SCHEDULE
ON DRAWING E5

MEZZANINE LEVEL ELECTRICAL PLAN

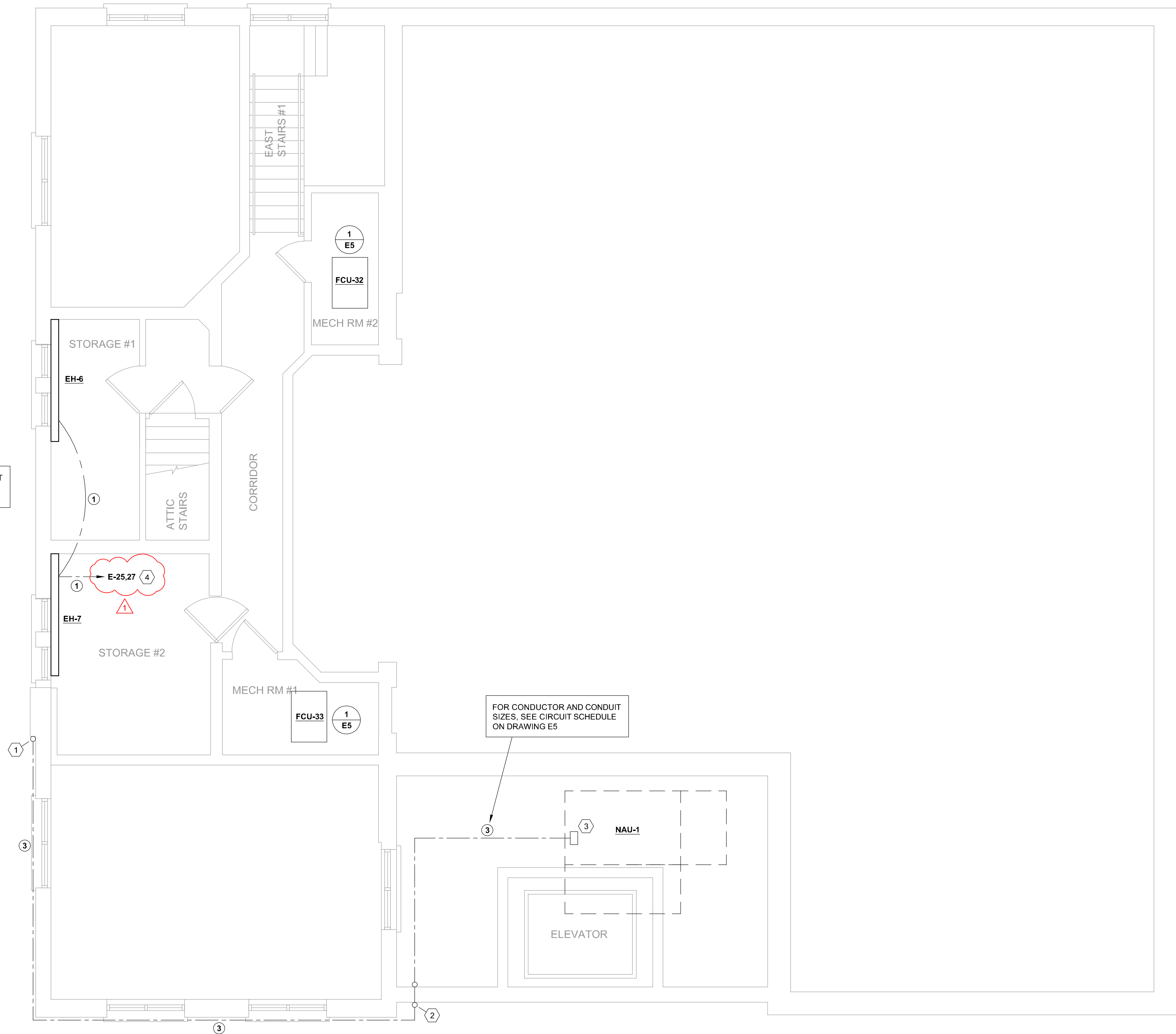
SCALE: 1/4" = 1'-0"

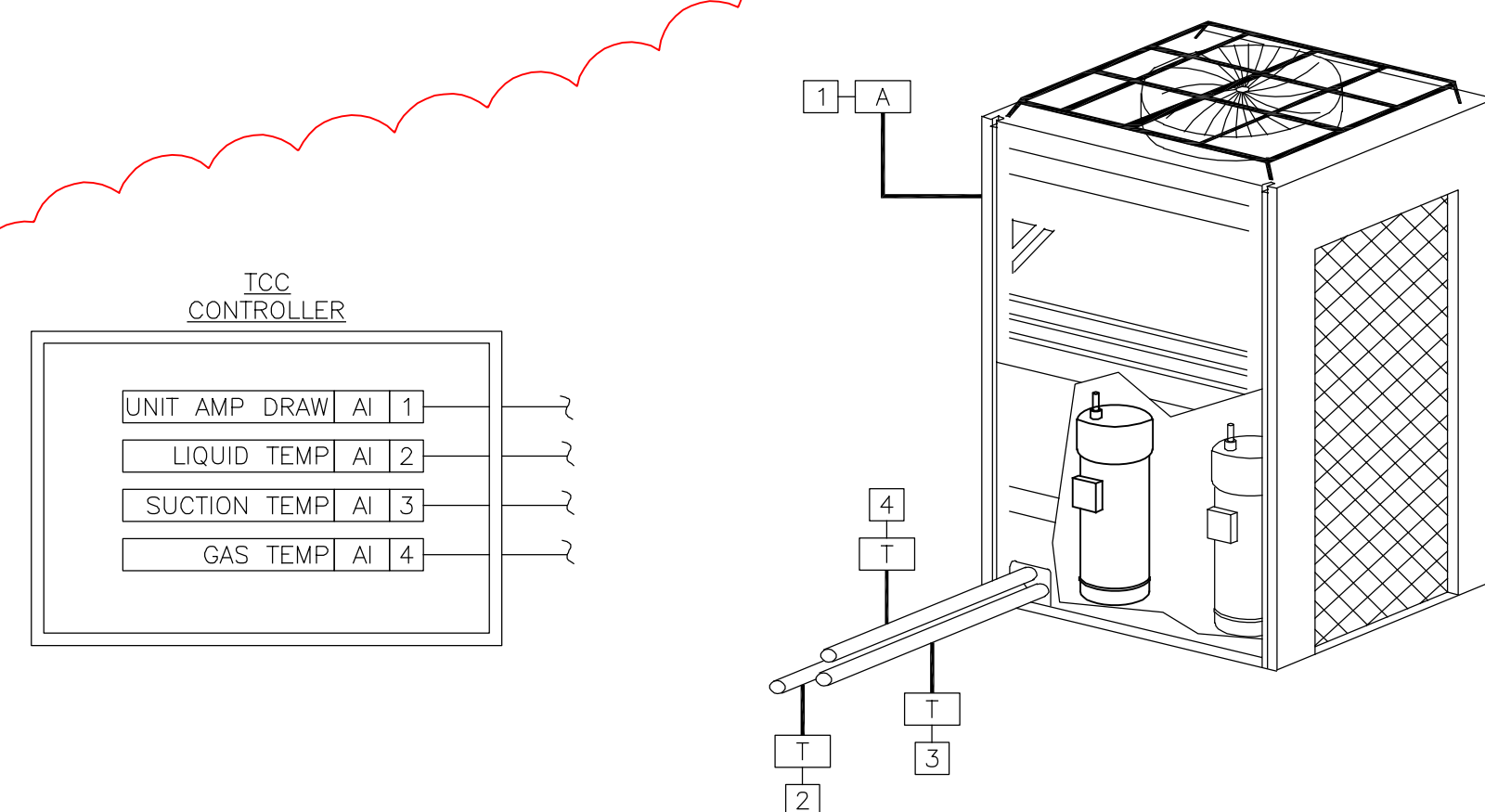
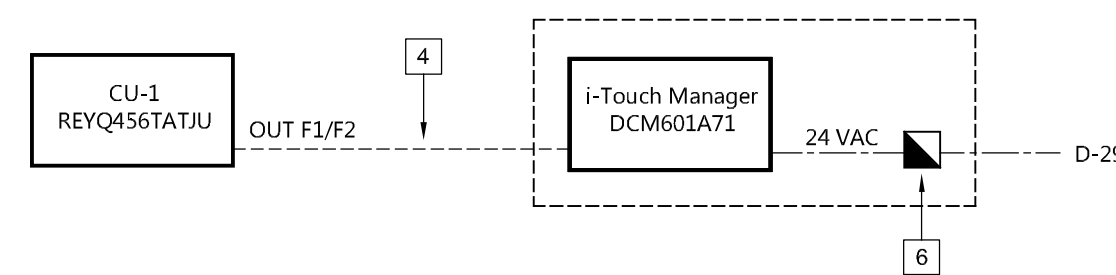
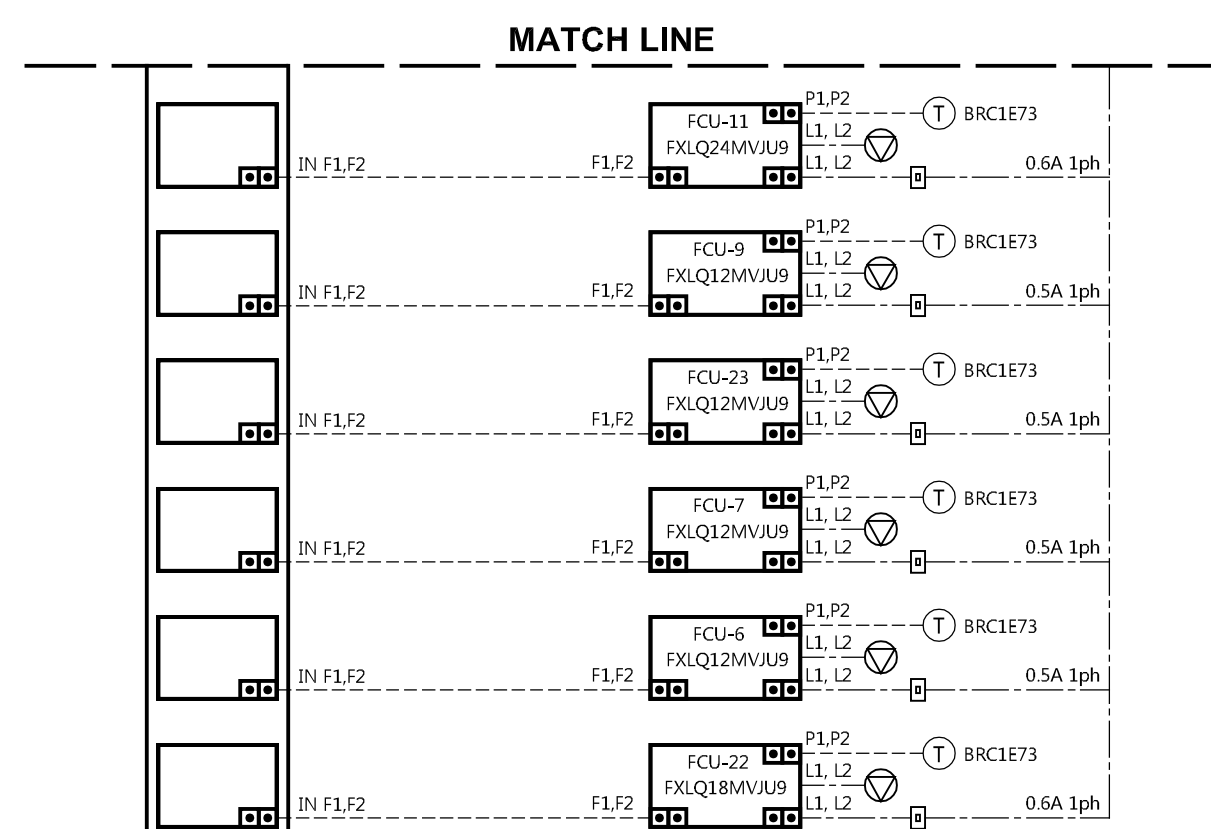
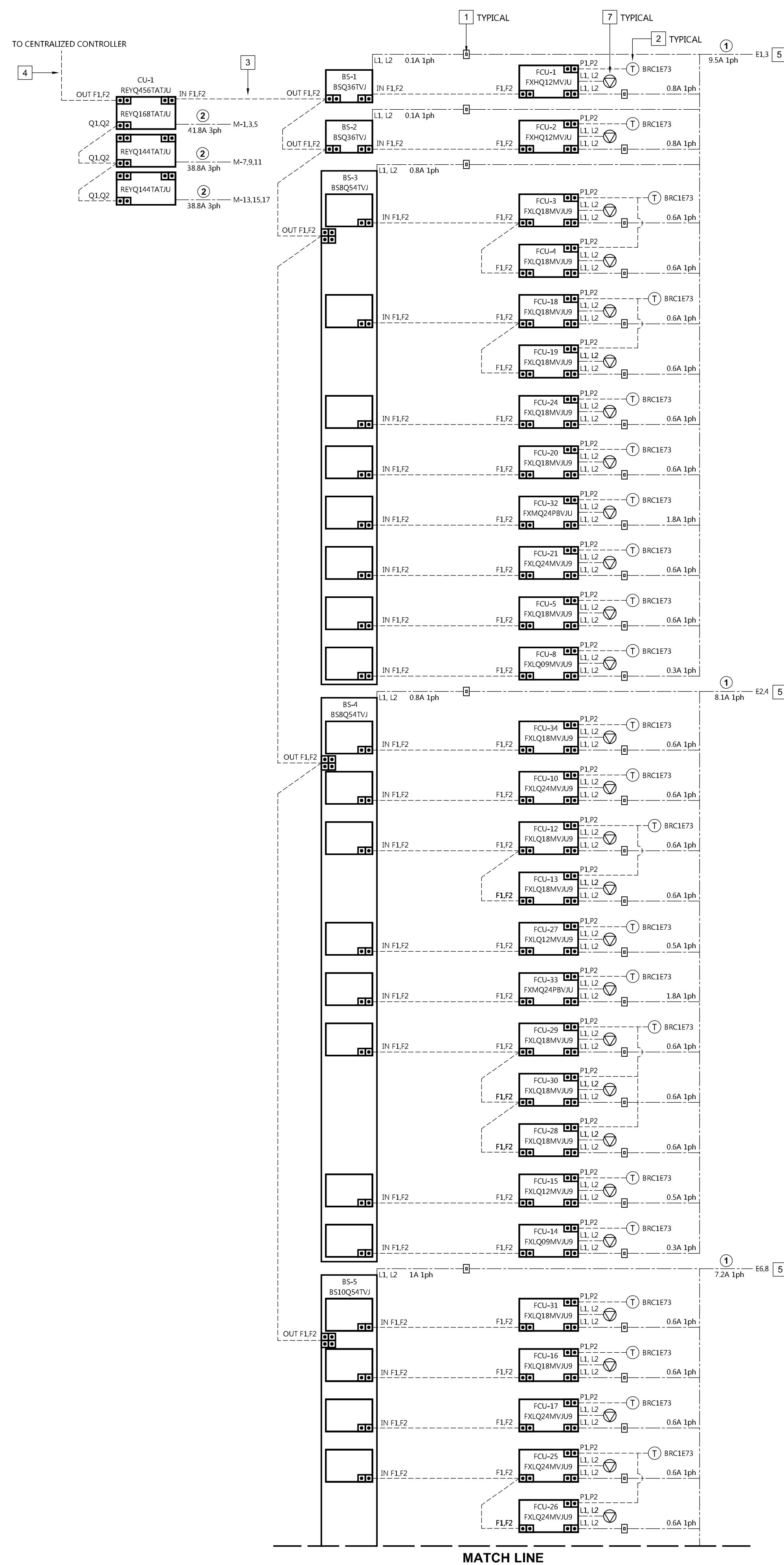


GRAPHIC SCALE



NORTH





- | | |
|---|--|
| 1 | 30 AMP, 600V, DOUBLE-LEGE, SINGLE PHASE AC MOTOR DISCONNECT SWITCH MOUNTED ON UNIT HOUSING IN STANDARD ELECTRICAL HANDY BOX WITH GALVANIZED STEEL COVER, FURNISHED AND INSTALLED BY ELECTRICAL CONTRACTOR, EQUAL TO LEVITON, TYPE MS302-DS. |
| 2 | SURFACE MOUNTED BOX FURNISHED AND INSTALLED BY ELECTRICAL CONTRACTOR FOR NAVIGATION WIRED REMOTE CONTROLLER AND TEMPERATURE CONTROL WIRING. RACEWAYS SHALL BE SURFACE MOUNTED ON FACE OF WALL TO ABOVE ACCESSIBLE CEILING OR TO FAN COIL UNIT, EQUAL TO WIREMOLD #400 NONMETALLIC, SINGLE CHANNEL, TWO-PIECE TYPE, TWO RECESSED (EMBEDDED) MECHANICAL CONTRACTOR. NAVIGATION WIRED REMOTE CONTROLLER AND TEMPERATURE CONTROL WIRING FURNISHED AND INSTALLED BY MECHANICAL CONTRACTOR, SEE MECHANICAL DRAWINGS FOR FOR LOCATIONS. |
| 3 | EMPTY 3/4" CONDUIT FROM CONDENSING UNIT TO BRANCH SELECTOR BOX FURNISHED AND INSTALLED BY ELECTRICAL CONTRACTOR (CONDUIT MAY BE TERMINATED "OPEN" WITH BUSHING ABOVE ACCESSIBLE CEILING WHERE POSSIBLE). CONTROL WIRING FURNISHED AND INSTALLED BY MECHANICAL CONTRACTOR. |
| 4 | EMPTY 3/4" CONDUIT FROM CONDENSING UNIT TO CENTRALIZED CONTROLLER FURNISHED AND INSTALLED BY ELECTRICAL CONTRACTOR. CONTROL WIRING FURNISHED AND INSTALLED BY MECHANICAL CONTRACTOR. |
| 5 | NEW FIELD WIRED 208V, 1-PHASE CIRCUIT. REMOVE EXISTING 120 VOLT BRANCH CIRCUIT CONDUCTORS AND 20A, 1-PHASE CIRCUIT BREAKERS SERVING EXISTING FAN COIL UNITS TO BE REPLACED BACK TO PANELBOARD "E" INSTALL NEW 20A CIRCUIT BREAKER IN PANELBOARD "E" AND NEW CIRCUIT CONDUCTORS TO NEW BRANCH SELECTOR BOXES AND NEW FAN COIL UNITS. CONTRACTOR MAY INSTALL NEW CONDUCTORS IN EXISTING RACEWAYS WHERE POSSIBLE. |
| 6 | 120/240V TRANSFORMER (40 VA) AND LOW VOLTAGE WIRING BY MECHANICAL CONTRACTOR. |
| 7 | REMOTE PERISTALTIC CONDENSATE PUMP FURNISHED AND INSTALLED BY MECHANICAL CONTRACTOR. FIELD WIRED 208V, 1-PHASE CIRCUIT BY ELECTRICAL CONTRACTOR, SEE WIRING DIAGRAM 3-E5. |



- | | |
|---|---|
| P1/P2 | 18-2 AWG STRANDED, UNSHIELDED, PLENUM RATED LOW VOLTAGE CONTROL WIRING BY MECHANICAL CONTRACTOR |
| F1/F2 | 18-2 AWG STRANDED, UNSHIELDED, PLENUM RATED LOW VOLTAGE CONTROL WIRING BY MECHANICAL CONTRACTOR |
| Q1/Q2 | 18-2 AWG STRANDED, UNSHIELDED, PLENUM RATED LOW VOLTAGE CONTROL WIRING BY MECHANICAL CONTRACTOR |
| L1/L2 | POWER WIRING BY ELECTRICAL CONTRACTOR (SEE WIRING DIAGRAMS) |
| BS | BRANCH SELECTOR UNIT |
| FCU | FAN COIL UNIT |
| CU | CONDENSING UNIT |
|  | TOGGLE SWITCH DISCONNECT |
|  | NAVIGATION WIRED REMOTE CONTROLLER |
|  | REMOTE CONDENSATE PUMP |

CIRCUIT SCHEDULE

- ① (2) - #12 CONDUCTORS, #12 GROUND, 1/2" CONDUIT (208V, 1-PHASE)
- ② (3) - #4 CONDUCTORS, #8 GROUND, 1-1/4" CONDUIT (208V, 3-PHASE, 3-WIRE)
- ③ (3) - #3 CONDUCTORS, #8 GROUND, 1-1/4" CONDUIT (208V, 3-PHASE, 3-WIRE)
- ④ (4) - #1 CONDUCTORS, #6 GROUND, 2" CONDUIT (208V, 3-PHASE, 4-WIRE)
- ⑤ (4) - #3/0 CONDUCTORS, #6 GROUND, 2-1/2" CONDUIT (208V, 3-PHASE, 4-WIRE)

