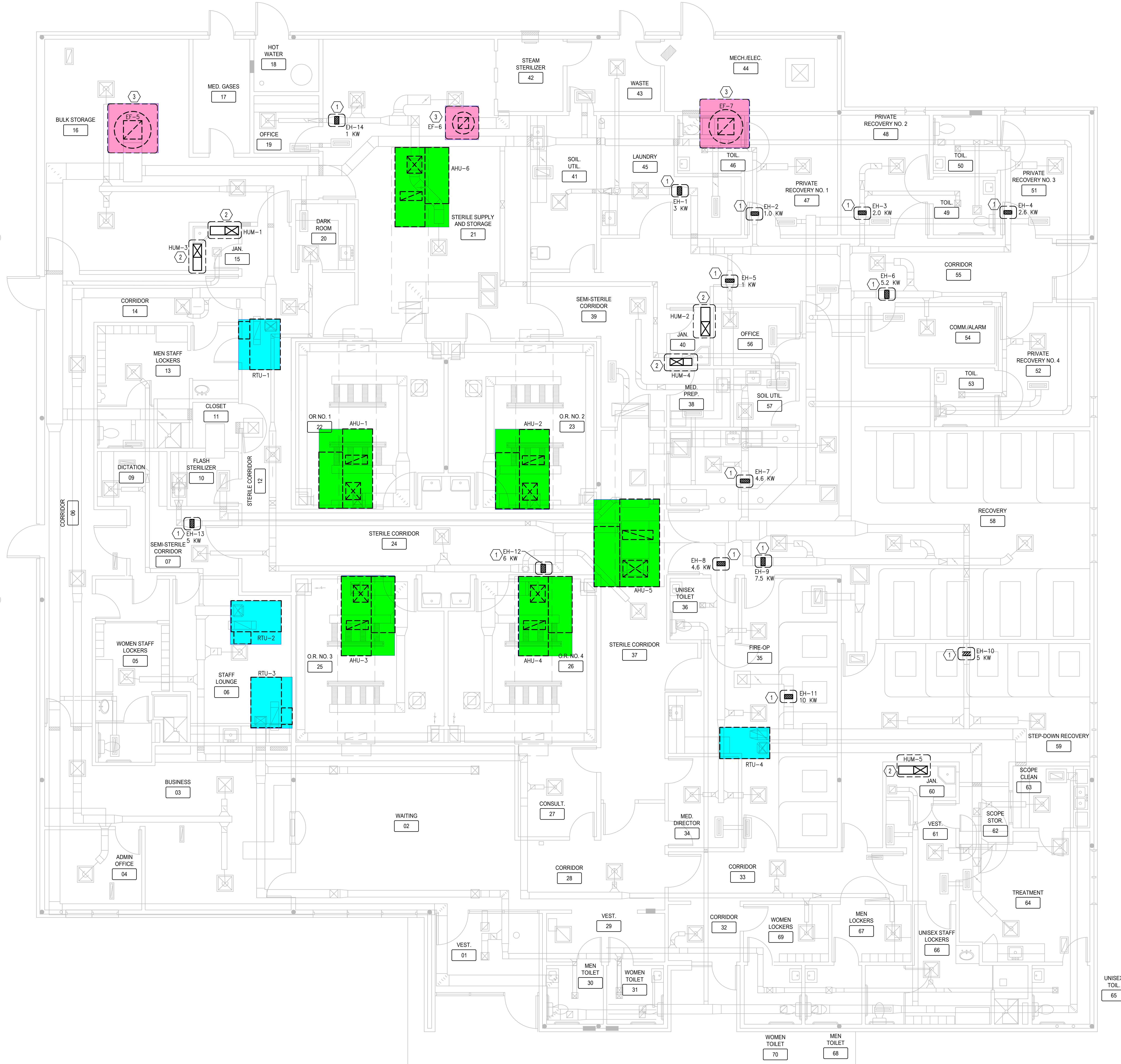


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1 FLOOR PLAN - MECHANICAL
3/16"=1'-0"

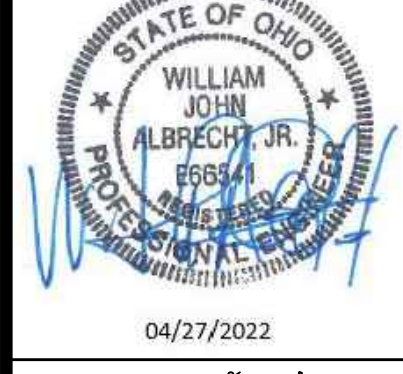
PROJECT NOTES

A. PROJECT SCOPE OF WORK INCLUDES LIKE-FOR-LIKE REPLACEMENTS OF ROOFTOP UNITS, AIR HANDLING UNITS, HUMIDIFIERS, EXHAUST FANS AND ELECTRIC DUCT HEATERS. EXISTING FLOOR PLANS WITH AIR DEVICE LOCATIONS AND DUCT ROUTING SHOWN FOR REFERENCE ONLY. SPACE USAGE WITHIN PROJECT SCOPE NOT ALTERED. VENTILATION RATES FOR AREAS SERVED BY THIS PROJECT ARE UNAFFECTED BY THIS REVISION.

CODED NOTES

1. REMOVE DUCT MOUNTED HEATER AND REPLACE LIKE-FOR-LIKE. MAINTAIN CONTROL WIRING FOR USE WITH NEW HEATER. MODIFY EXISTING DUCTWORK AS REQUIRED TO MAKE FINAL CONNECTIONS TO NEW HEATER.
2. REMOVE WALL MOUNTED HUMIDIFIER AND REPLACE LIKE-FOR-LIKE. ROUTE NEW PIPING TO NEW DUCTMOUNTED DISPERSION TUBE.
3. REMOVE EXISTING ROOF MOUNTED EXHAUST FAN AND REPLACE LIKE-FOR-LIKE. PROVIDE ROOF CURB ADAPTOR WHERE REQUIRED AND MODIFY EXISTING DUCTWORK AS REQUIRED TO MAKE FINAL CONNECTIONS TO NEW UNIT.

DATE	BY	ISSUE/REVISION
04/27/22	CSL	PERMIT SUBMITTAL



MECHANICAL FLOOR PLAN
HVAC RENOVATIONS FOR:
MERCY HEALTH EASTGATE SURGERY CENTER
4415 AICHOLTZ ROAD
CINCINNATI, OHIO 45245



JOB NO.:
SCALE: AS NOTED
DATE: 04/27/2022
DRAWN BY: CSL
APPROVED BY: CSL
DRAWING NUMBER:
M-1
REVISION NO.: 0

Unit Rating

2425 South Yukon Ave - Tulsa, Oklahoma 74107-2728 Ph: (918) 583-2266 Fax: (918) 583-6064
AAON® Model Ver. 4.315 (SN: 024160)

RN-007-8-0-EB09-122:N000-DOF-DCF-00C-OHEABBE-00-00E0000VX
Tag: RTU# 1,2,3,4

(Values do not account for changes described in SPA)

Job Information

Job Name:	EASTGATE AMBULATORY SURGERY	Approx. Op./Ship Weights:	1473 / 1473 lbs. (+5%)
Job Number:	CENTER	Supply CFM/RSF:	2000 / 2.5 in. Wg.
Site Address:	600 ft	Final Filter FV Qty:	225.00 fpm / 4
Refrigerant:	R-410A	Ambient Temperature:	95 °F DB / 75 °F WB
		Returns Temperature:	62.38 °F DB / 60.06 °F WB

Unit Information
***WEIGHT AND PERFORMANCE DO NOT INCLUDE SPA*

External:	2.50 in. wg.	Economizer:	0.05 in. wg.
Evaporator:	0.26 in. wg.	Heating:	0.02 in. wg.
Filters Clean:	0.08 in. wg.	Cabinet:	0.06 in. wg.
Dirt Allowance:	0.35 in. wg.	Re-Heat Coil:	0.03 in. wg.
		Total:	0.14 in. wg.

Static Pressure

Cooling Section

Total Capacity:	Gross	Net	61.60 MBH
Sensible Capacity:	38.10	29.81	MBH
Latent Capacity:	31.79	36.99	MBH
Mixed Air Temp:	68.50 °F DB	63.00 °F WB	
Entering Air Temp:	68.50 °F DB	63.00 °F WB	
Le Air Temp (Coil):	56.18 °F DB	56.18 °F WB	
Le Air Temp (Unit):	54.32 °F DB	52.02 °F WB	
Digital Comp. Capacity Ratio:	100%		
Supply Air Fan:	1 x RNA185 @ 2.92 BHP		
SA Fan RPM / Width:	2106 / 2.774"		
Evaporator Coil:	8.5 ft / 6 Rows / 14 FPI		
Evaporator Face Velocity:	236.5 fpm		

Heating Section

Pre-Heat Type:	Std (No Preheat)
Heating Type:	Electric Heat
Heating CFM:	2000
Total Capacity:	51.2 MBH
OA Temp:	0.0 °F DB / -1.0 °F WB
RA Temp:	63.00 °F DB / 60.0 °F WB
Entering Air Temp:	52.1 °F DB / 52.1 °F WB
Leaving Air Temp:	78.5 °F DB / 61.4 °F WB
Input:	15.0 kW
Heater Qty:	2
Electric Heat FLA:	41.6

Re-Heat Coil:

Capacity:	24 MBH
Le DB / WB:	62.00 °F / 55.15 °F
RH:	65%

Rating Information

Cooling Capacity (MBH):	74.0	CIRCUIT 1 - COMP. COND. 1ST STAGE HEATW RELAY LOCKOUT
Cooling EER:	12.3	CIRCUIT 2 - SUPPLY, CONTROLS
Cooling IHER:	14.8	CIRCUIT 3 - 2ND STAGE HEAT

Application EER @ Op. Conditions: 7.7

Electrical Data

Rating:	208/3/60
Unit FLA:	58
SCCR:	5 kAIC

Cabinet Sound Power Levels*

Octave Bands:	63	125	250	500	1000	2000	4000	8000
Discharge L(WdB):	87	86	88	85	78	75	72	68
Returns L(WdB):	77	78	75	69	65	61	56	46

*Sound power levels are given for informational purposes only. The sound levels are not guaranteed.

Date Created/Modified: 12/1/2021 12:27:09 PM Using Ver 4.315 (OSM 0123456) Date Printed: 12/1/2021 12:28:02 PM

18.5" STAR Plenum

2425 South Yukon Ave - Tulsa, Oklahoma 74107-2728 Ph: (918) 583-2266 Fax: (918) 583-6064
AAON® Model Ver. 4.315 (SN: 024160)

Job Information:

Job Name:	EASTGATE AMBULATORY SURGERY	WHEEL SPECIFICATION:	2,200
Job Tag:	CENTER	Max RPM:	2100
Rep Firm:	RTU# 1,2,3,4	Diameter x Qty:	18.5 in. x 1
Date:	12/1/2021	Tip Speed:	18.5 in. x 1
		Inertia:	2000

OPERATING CONDITIONS:

Air Flow:	2,000 CFM	MOTOR SELECTION:	5 / No
Static Pressure:	4.34 in. Wg.	Rated HP / Bypass:	1847
Relief Dampers DP:	0.07 in. Wg.	Frame Size:	1750
		Nominal RPM:	1750
		VAC/PH/Hz:	208/3/60
		Efficiency:	Premium / 0.895
		Enclosure Type:	ODP
		Max Inertial Load:	52 WR*

FAN PERFORMANCE:

RPM:	2106	FAN SOUND POWER (Inlet/Outlet):							
BHP:	2.92	Octave Band:	(Re 10^-12 watts)						
Efficiency:	46.8%	1	2	3	4	5	6	7	8
In/Out Velocity:	1143/1198 FPM	87	86	88	86	81	78	76	72
Plenum Out Velocity:	33 FPM	87	86	88	86	81	78	76	72

Max Duct SP with Blocked Airway: 5 in. Wg. @ 2106 rpm

Supply Fan Model: RNA185 @ 2106 RPM and 67% Width
Design Conditions: 2000 CFM @ 4.44" SP

Date Created/Modified: 12/1/2021 12:27:09 PM Using Ver 4.315 (OSM 0123456) Date Printed: 12/1/2021 12:28:02 PM

Unit Submittal

2425 South Yukon Ave - Tulsa, Oklahoma 74107-2728 Ph: (918) 583-2266 Fax: (918) 583-6064
AAON® Model Ver. 4.315 (SN: 024160)

RN-007-8-0-EB09-122:N000-DOF-DCF-00C-OHEABBE-00-00E0000VX
Tag: RTU# 1,2,3,4

Job Information:

Job Name:	EASTGATE AMBULATORY SURGERY	Unit Submittal For:	CENTER
Job Number:	Job #9909015	Unit Submittal Date:	December 01, 2021

Base Option	Description
R Series	Roof Top Unit
N Generation	Niuh Generation
007 Unit Size	Seven
S Voltage	208V/3W/60Hz
0 Interior Protection	Standard
E Refrigerant Style	R-410A VCC - High Efficiency
B Unit Configuration	Air-Cooled Cond. + 6 Row Enrg. Coil
0 Coil Control	Standard
9 Cooling/Heat Pump Staging	Modulating - 1 Variable Capacity Compressor
1 Heating Type	Electric Heat
2 Heating Designation	Heat 2 - 15 kW
2 Heating Staging	2 Stage

Feature Option	Description
N 1A. RAAV Section	Energy Recovery Wheel Option Bn - No Power Exhaust
0 1B. RAAV Blower Configuration	Standard - None
0 1C. RAAV Blower	Standard - None
0 1D. RAAV Blower Motor	Standard - None
2 2. OA Control	Fully Modulating Actuator - Enthalpy Limit
3. Heat Options	Standard
4. Maintenance Options	115V Convenience Outlet - Field Wired + Remote Start/Stop Terminals - LVDT
5A. SA Blower Configuration	1 Blower + Premium Efficiency Motor + 1 VFD
0B. SA Blower	18.5" Direct Drive Backward Curved Plenum
0C. SA Motor	22 hp - 1750 rpm
0 6A. Pre Filter Type	Standard - None
0 6B. Unit Filter Type	2" Pleated - 30% EFF
0 6C. Filter Options	Clamped Filter Switch + Magnetohe Gauge
7. Refrigeration Control	Standard - All Comp. Cooling Lock Out Through Unit Controls
8. Refrigeration Options	HGB Load + MHROR
9. Refrigeration Accessories	ECM Condenser Fan - Heat Pressure Control
10. Power Options	Non-fused Disconnect Power Switch - 100 Amps
11. Safety Options	RA Smoke Detector
12. Controls	Phase & Brown Out Protection
13. Special Controls	Constant Volume (CV) Unit Controller - CV Cool + CV Heat
14A. Outside Air Configuration	Standard - None
0 14B. Preheat Status	Standard - None
16. Glycol Present	Water or No WSHIP
16. Interior Cabinet Options	Standard - Double Wall + R-13 Foam Insulation + Stainless Steel Drain Pan
17. Exterior Cabinet Options	Standard - Double Wall + R-13 Foam Insulation + Steel Coil Guards
0 18. Electrical Rating	Standard - 5 KVAIC
0 19. Code Options	Standard - ETL, U.S.A. Listing
0 20. Crating	Standard - None
0 21. Water-Cooled Cond.	Standard - None
V 22. Control Vendors	VCC-X Controls + Integrated BACnet MSTP
X 23. Type	Special Price Authorization + AAON Gray Paint

Date Created/Modified: 12/1/2021 12:27:09 PM Using Ver 4.315 (OSM 0123456) Date Printed: 12/1/2021 12:28:04 PM

RN SERIES A - CABINET ~ ECONOMIZER, EMPTY ENERGY RECOVERY SECTION ~ 6-10 TON

CLEARANCES

LOCATION	UNIT SIZE
OUTSIDE AIR	6-10 TON
FRONT	36
CONTROLS SIDE	48
LEFT SIDE	6
RIGHT SIDE	48
TOP	UNOBSTRUCTED

DETAIL A **DETAIL B**

DETAIL C

FRONT VIEW **RIGHT SIDE VIEW**

NOTE: ALL DIMENSIONS ARE IN INCHES

Unit Rating

2425 South Yukon Ave - Tulsa, Oklahoma 74107-2728 Ph: (918) 583-2266 Fax: (918) 583-6064
AAON® Model Ver. 4.315 (SN: 024160)

RN-013-8-0-FB09-000:N000-DOF-DSG-00C-EDFABBD-00-00A0000VX
Tag: RTU# 5

(Values do not account for changes described in SPA)

Job Information

Job Name:	EASTGATE AMBULATORY SURGERY	Approx. Op./Ship Weights:	2097 / 2097 lbs. (+5%)
Job Number:	CENTER	Supply CFM/RSF:	5086 / 3 in. wg.
Site Address:	600 ft	Final Filter FV Qty:	368.19 fpm / 4
Refrigerant:	R-410A	Ambient Temperature:	95 °F DB / 75 °F WB
		Returns Temperature:	68.3 °F DB / 57.3 °F WB

Unit Information
***WEIGHT AND PERFORMANCE DO NOT INCLUDE SPA*

External:	3.00 in. wg.	Economizer:	0.24 in. wg.
Evaporator:	0.40 in. wg.	Heating:	0.00 in. wg.
Filters Clean:	0.15 in. wg.	Cabinet:	0.17 in. wg.
Dirt Allowance:	0.35 in. wg.	Re-Heat Coil:	0.06 in. wg.
		Total:	0.37 in. wg.

Static Pressure

Cooling Section

Total Capacity:	Gross	Net	135.14 MBH
Sensible Capacity:	122.79	108.18	MBH
Latent Capacity:	26.96	36.99	MBH
Mixed Air Temp:	73.52 °F DB	61.37 °F WB	
Entering Air Temp:	73.52 °F DB	61.37 °F WB	
Le Air Temp (Coil):	50.53 °F DB	50.35 °F WB	
Le Air Temp (Unit):	53.22 °F DB	51.50 °F WB	
Digital Comp. Capacity Ratio:	100%		
Supply Air Fan:	1 x 220D70 @ 5.22 BHP		
SA Fan RPM / Width:	1957 / 3.450"		
Evaporator Coil:	14.6 ft / 6 Rows / 12 FPI		
Evaporator Face Velocity:	348.5 fpm		

Heating Section

Pre-Heat Type:	Std (No Preheat)
Heating Type:	No Heat
Capacity:	92 MBH
Le DB / WB:	67.56 °F / 57.26 °F
RH:	54%

Re-Heat Coil:

Capacity:	92 MBH
Le DB / WB:	67.56 °F / 57.26 °F
RH:	54%

Rating Information

Cooling Capacity (MBH):	144.0	CIRCUIT 1 - COMP. COND.
Cooling EER:	12	CIRCUIT 2 - SUPPLY, CONTROLS
Cooling IHER:	14	

Application EER @ Op. Conditions: 8.5

Electrical Data

Rating:	208/3/60
Unit FLA:	74
SCCR:	5 kAIC

Cabinet Sound Power Levels*

Octave Bands:	63	125	250	500	1000	2000	4000	8000
Discharge L(WdB):	96	94	90	82	79	74	74	65
Returns L(WdB):	87	85	88	74	70	65	65	55

*Sound power levels are given for informational purposes only. The sound levels are not guaranteed.

Date Created/Modified: 12/1/2021 12:27:09 PM Using Ver 4.315 (OSM 0123456) Date Printed: 12/1/2021 12:28:17 PM

22.0" STAR Plenum

2425 South Yukon Ave - Tulsa, Oklahoma 74107-2728 Ph: (918) 583-2266 Fax: (918) 583-6064
AAON® Model Ver. 4.315 (SN: 024160)

Job Information:

Job Name:	EASTGATE AMBULATORY SURGERY	WHEEL SPECIFICATION:	2,200
Job Tag:	CENTER	Max RPM:	2200
Rep Firm:	RTU# 5	Diameter x Qty:	22.0 in. x 1
Date:	12/1/2021	Tip Speed:	11,272 FPM
		Inertia:	3 WR*

OPERATING CONDITIONS:

Air Flow:	5,086 CFM	MOTOR SELECTION:	7.5 / No
Static Pressure:	4.27 in. Wg.	Rated HP / Bypass:	2137
Relief Dampers DP:	0.00 in. Wg.	Frame Size:	1760
		Nominal RPM:	1760
		VAC/PH/Hz:	208/3/60
		Efficiency:	Premium / 0.91
		Enclosure Type:	ODP
		Max Inertial Load:	64 WR*

FAN PERFORMANCE:

RPM:	1957	FAN SOUND POWER (Inlet/Outlet):							
BHP:	5.22	Octave Band:	(Re 10^-12 watts)						
Efficiency:	67.1%	1	2	3	4	5	6	7	8
In/Out Velocity:	1553/1712 FPM	96	94	99	94	88	85	83	78
Plenum Out Velocity:	95 FPM	96	94	99	94	88	85	83	78

Max Duct SP with Blocked Airway: 5.7 in. Wg. @ 1957 rpm

Supply Fan Model: 220D70 @ 1957 RPM and 100% Width
Design Conditions: 5086 CFM @ 4.47" SP

Date Created/Modified: 12/1/2021 12:27:09 PM Using Ver 4.315 (OSM 0123456) Date Printed: 12/1/2021 12:28:22 PM

Unit Submittal

2425 South Yukon Ave - Tulsa, Oklahoma 74107-2728 Ph: (918) 583-2266 Fax: (918) 583-6064
AAON® Model Ver. 4.315 (SN: 024160)

RN-013-8-0-FB09-000:N000-DOF-DSG-00C-EDFABBD-00-00A0000VX
Tag: RTU# 5

Job Information:

Job Name:	EASTGATE AMBULATORY SURGERY	Unit Submittal For:	CENTER
Job Number:	Job #9909015	Unit Submittal Date:	December 01, 2021

Base Option	Description
R Series	Roof Top Unit
N Generation	Niuh Generation
007 Unit Size	Seven
S Voltage	208V/3W/60Hz
0 Interior Protection	Standard
E Refrigerant Style	R-410A VCC - Standard Efficiency
B Unit Configuration	Air-Cooled Cond. + 6 Row Enrg. Coil
0 Coil Control	Standard
9 Cooling/Heat Pump Staging	Modulating - 1 VCC + 1 On/Off Comp.
0 Heating Type	No Heating
0 Heating Designation	No Heating
0 Heating Staging	No Heating

Feature Option	Description
N 1A. RAAV Section	Energy Recovery Wheel Option Bn - No Power Exhaust
0 1B. RAAV Blower Configuration	Standard - None
0 1C. RAAV Blower	Standard - None
0 1D. RAAV Blower Motor	Standard - None
2 2. OA Control	Fully Modulating Actuator - Enthalpy Limit
3. Heat Options	Standard
4. Maintenance Options	115V Convenience Outlet - Field Wired + Remote Start/Stop Terminals - LVDT
5A. SA Blower Configuration	1 Blower + Premium Efficiency Motor + 1 VFD
0B. SA Blower	22" Direct Drive Backward Curved Plenum - 70% Width
0C. SA Motor	7.5 hp - 1750 rpm
0 6A. Pre Filter Type	Standard - None
0 6B. Unit Filter Type	2" Pleated - 30% EFF
0 6C. Filter Options	Clamped Filter Switch + Magnetohe Gauge
7. Refrigeration Control	Press Stat
8. Refrigeration Options	Modulating Hot Gas Reheat
9. Refrigeration Accessories	VFD Condenser Fan - Heat Pressure Control
10. Power Options	Non-fused Disconnect Power Switch - 100 Amps
11. Safety Options	RA Smoke Detector
12. Controls	Phase & Brown Out Protection
13. Special Controls	VAV Unit Controller - VAV Cool + CV Heat
0 14A. Outside Air Configuration	Standard - None
0 14B. Preheat Status	Standard - None
16. Glycol Present	Water or No WSHIP
16. Interior Cabinet Options	Standard - Double Wall + R-13 Foam Insulation + Stainless Steel Drain Pan
17. Exterior Cabinet Options	Standard - Double Wall + R-13 Foam Insulation + Steel Coil Guards
0 18. Electrical Rating	Standard - 5 KVAIC
0 19. Code Options	Standard - ETL, U.S.A. Listing
0 20. Crating	Standard - None
0 21. Water-Cooled Cond.	Standard - None
V 22. Control Vendors	VCC-X Controls + Integrated BACnet MSTP
X 23. Type	Special Price Authorization + AAON Gray Paint

Date Created/Modified: 12/1/2021 12:27:09 PM Using Ver 4.315 (OSM 0123456) Date Printed: 12/1/2021 12:28:19 PM

RN SERIES B - CABINET WITH ECONOMIZER ~ 9-15 TON EMPTY ENERGY RECOVERY SECTION

CLEARANCES

LOCATION	UNIT SIZE
OUTSIDE AIR	9-15 TON
FRONT	40
CONTROLS SIDE	48
LEFT SIDE	6
RIGHT SIDE	48
TOP	UNOBSTRUCTED

DETAIL A **DETAIL B**

DETAIL C

FRONT VIEW **RIGHT SIDE VIEW**

NOTE: ALL DIMENSIONS ARE IN INCHES

STATE OF OHIO
WILLIAM JOHN BOYER, JR.
REGISTERED PROFESSIONAL ENGINEER
NO. 10747
EXPIRES 12/31/2023

DATE: 04/27/2022

ISSUE/REVISION

NO.	DATE	BY	ISSUE/REVISION
1	04/27/22	CSL	PERMIT SUBMITTAL

MECHANICAL ROOF PLAN

HVAC RENOVATIONS FOR:
MERCY HEALTH EASTGATE SURGERY CENTER
44115 AICHOLTZ ROAD
CINCINNATI, OHIO 45245

JOB NO.:
SCALE: AS NOTED
DATE: 04/27/2022
DRAWN BY: CSL
APPROVED BY: CSL
DRAWING NUMBER:
M-3
REVISION NO.: 0



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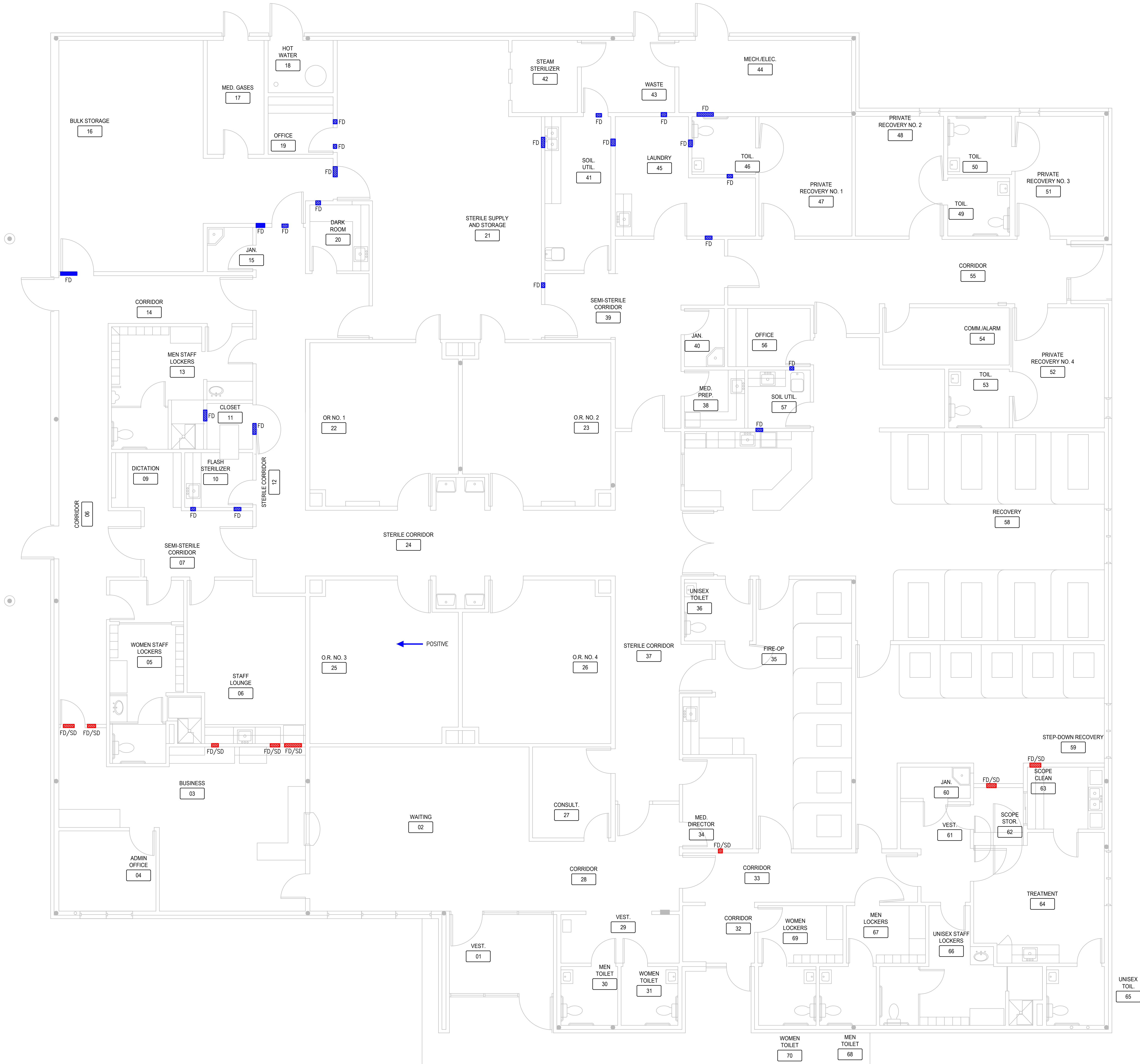
STEAM HUMIDIFIER SCHEDULE												
TAG	MANUFACTURER	MODEL	AREA SERVED	AIRFLOW (CFM)	CALCULATED CAPACITY (LBS/HR)	DUCT SIZE (IN)	WATER HOOKUP	NUMBER OF TUBES	ELECTRICAL			ACCESSORIES
									VOLTPHASE	KW	AMPS	
HUM-1	ARMSTRONG	EHU-801	AHU-1	2000	17	20X15	3/8"	1	208/3	6	16.7	
HUM-2	ARMSTRONG	EHU-801	AHU-2	2000	17	20X15	3/8"	1	208/3	6	16.7	
HUM-3	ARMSTRONG	EHU-801	AHU-3	2000	17	20X15	3/8"	1	208/3	6	16.7	
HUM-4	ARMSTRONG	EHU-801	AHU-4	2000	17	20X15	3/8"	1	208/3	6	16.7	
HUM-5	ARMSTRONG	EHU-803	AHU-5	5000	44	40X16	3/8"	1	208/3	15	41.7	

FAN SCHEDULE														
TAG	MANUFACTURER	MODEL	AREA SERVED	LOCATION	FAN TYPE	AIRFLOW (CFM)	ESP (IN WG)	SONES	FAN MOTOR (RPM)	DRIVE TYPE	DAMPER TYPE	ELECTRICAL		ACCESSORIES
												VOLTPHASE	HP	
EF-5	COOK	ACRU-B	CENTRAL	ROOF	UPBLAST	3845	1.5	19.4	1396	BELT	GRAVITY	208/3	2	
EF-6	COOK	ACRU-B	STERILIZER	ROOF	UPBLAST	1500	0.375	6.9	797	BELT	GRAVITY	115/1	1/3	
EF-7	COOK	ACRU-B	MECHANICAL	ROOF	UPBLAST	2500	0.375	8.8	807	BELT	GRAVITY	115/1	1/2	
SF-1	COOK	ASP	INTAKE	ROOF	FORWARD CURVE	500	0.2	5	498	DIRECT	N/A	115/1	1/6	

ELECTRIC DUCT HEATER SCHEDULE									
TAG	MANUFACTURER	MODEL	SYSTEM	KW	TYPE	ELECTRICAL		ACCESSORIES	
						VOLTPHASE	AMPS		
EH-1	INDEECO	QUA	AHU-5	3.0	SLIP-IN	208/1		1,2,3	
EH-2	INDEECO	QUA	AHU-5	1.0	SLIP-IN	208/1		1,2,3	
EH-3	INDEECO	QUA	AHU-5	2.0	SLIP-IN	208/1		1,2,3	
EH-4	INDEECO	QUA	AHU-5	2.6	SLIP-IN	208/1		1,2,3	
EH-5	INDEECO	QUA	AHU-5	1.0	SLIP-IN	208/1		1,2,3	
EH-6	INDEECO	QUA	AHU-5	5.2	SLIP-IN	208/3		1,2,3	
EH-7	INDEECO	QUA	AHU-5	4.6	SLIP-IN	208/3		1,2,3	
EH-8	INDEECO	QUA	AHU-5	4.6	SLIP-IN	208/1		1,2,3	
EH-9	INDEECO	QUA	AHU-5	7.5	SLIP-IN	208/3		1,2,3	
EH-10	INDEECO	QUA	AHU-5	5.0	SLIP-IN	208/3		1,2,3	
EH-11	INDEECO	QUA	SF-1	10	SLIP-IN	208/3		1,2,3	
EH-12	INDEECO	QUA	AHU-5	6.0	SLIP-IN	208/3		1,2,3	
EH-13	INDEECO	QUA	AHU-5	5.0	SLIP-IN	208/3		1,2,3	
EH-14	INDEECO	QUA	AHU-6	1.0	SLIP-IN	208/1		1,2,3	

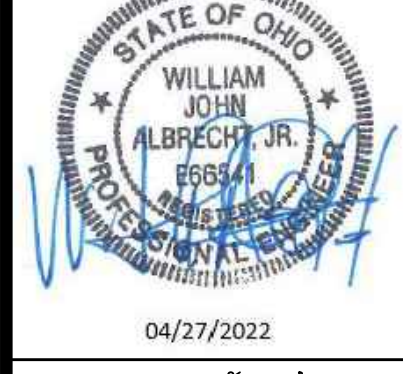
ACCESSORIES
1. SCR CONTROL
2. AIRFLOW SWITCH
3. DOOR INTERLOCKING DISCONNECT AND STANDARD UL ACCESSORIES

DATE	BY	ISSUE/REVISION	DATE	BY	ISSUE/REVISION
04/27/22	CSL	PERMIT SUBMITAL			
					
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EQUIPMENT INFORMATION HVAC RENOVATIONS FOR: MERCY HEALTH EASTGATE SURGERY CENTER 4415 AICHOLTZ ROAD CINCINNATI, OHIO 45245					
JOB NO.: SCALE: AS NOTED DATE: 04/27/2022 DRAWN BY: CSL APPROVED BY: CSL DRAWING NUMBER: M-5 REVISION NO.: 0					



6 FLOOR PLAN - FIRE DAMPER LOCATIONS
 3/16"=1'-0"

DATE	ISSUE/REVISION
04/27/22	CSL PERMIT SUBMITTAL



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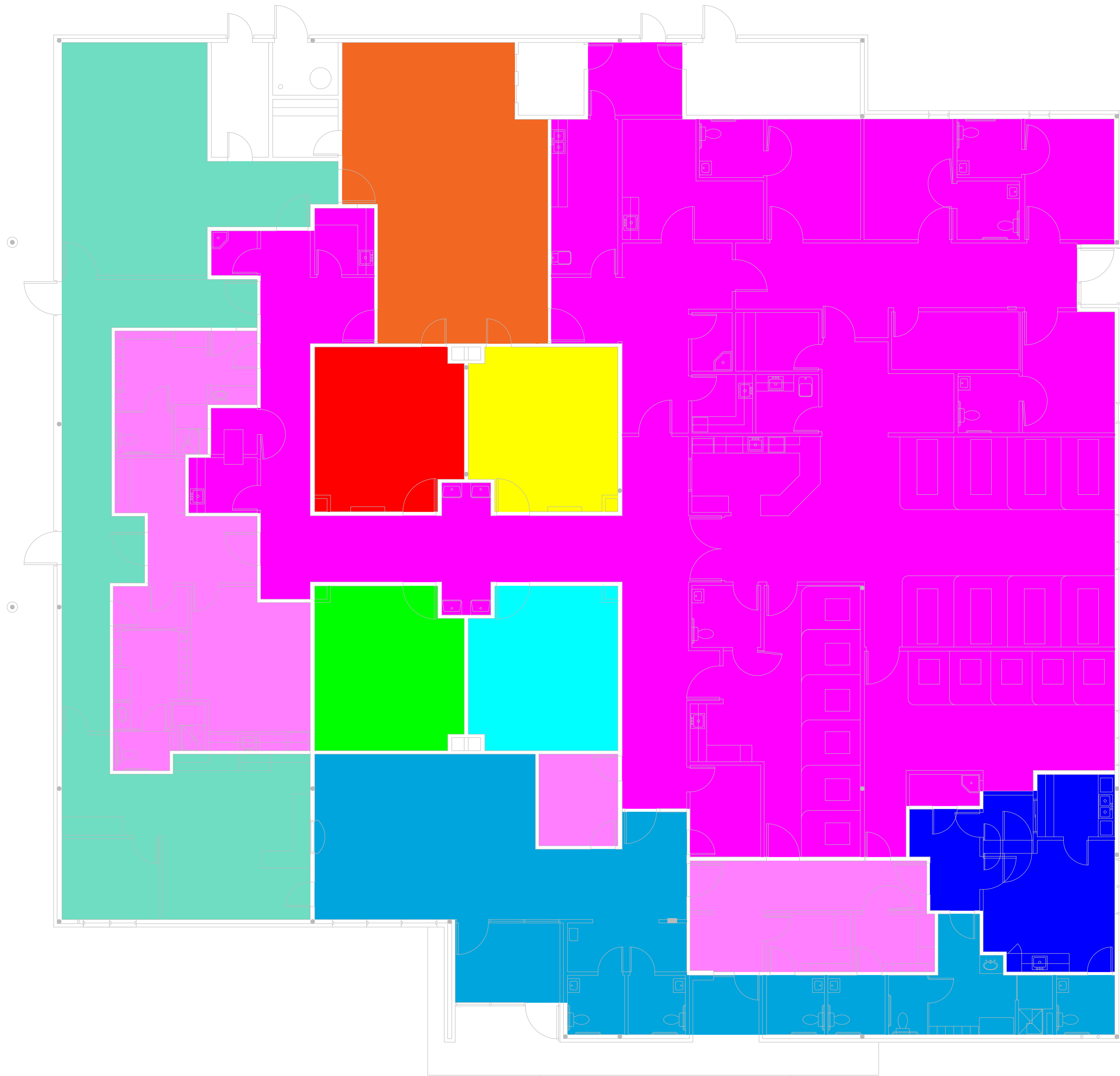
Perfection Group
 2649 COMMERCE BOULEVARD
 CINCINNATI, OHIO 45241
 513-235-7380 FAX
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MECH. FLOOR PLAN - FIRE DAMPER LOCATIONS
 HVAC RENOVATIONS FOR:
 MERCY HEALTH EASTGATE SURGERY CENTER
 4415 AICHOLTZ ROAD
 CINCINNATI, OHIO 45245

JOB NO.:
 SCALE: AS NOTED
 DATE: 04/27/2022
 DRAWN BY: CSL
 APPROVED BY: CSL
 DRAWING NUMBER:
M-6
 REVISION NO.: 0

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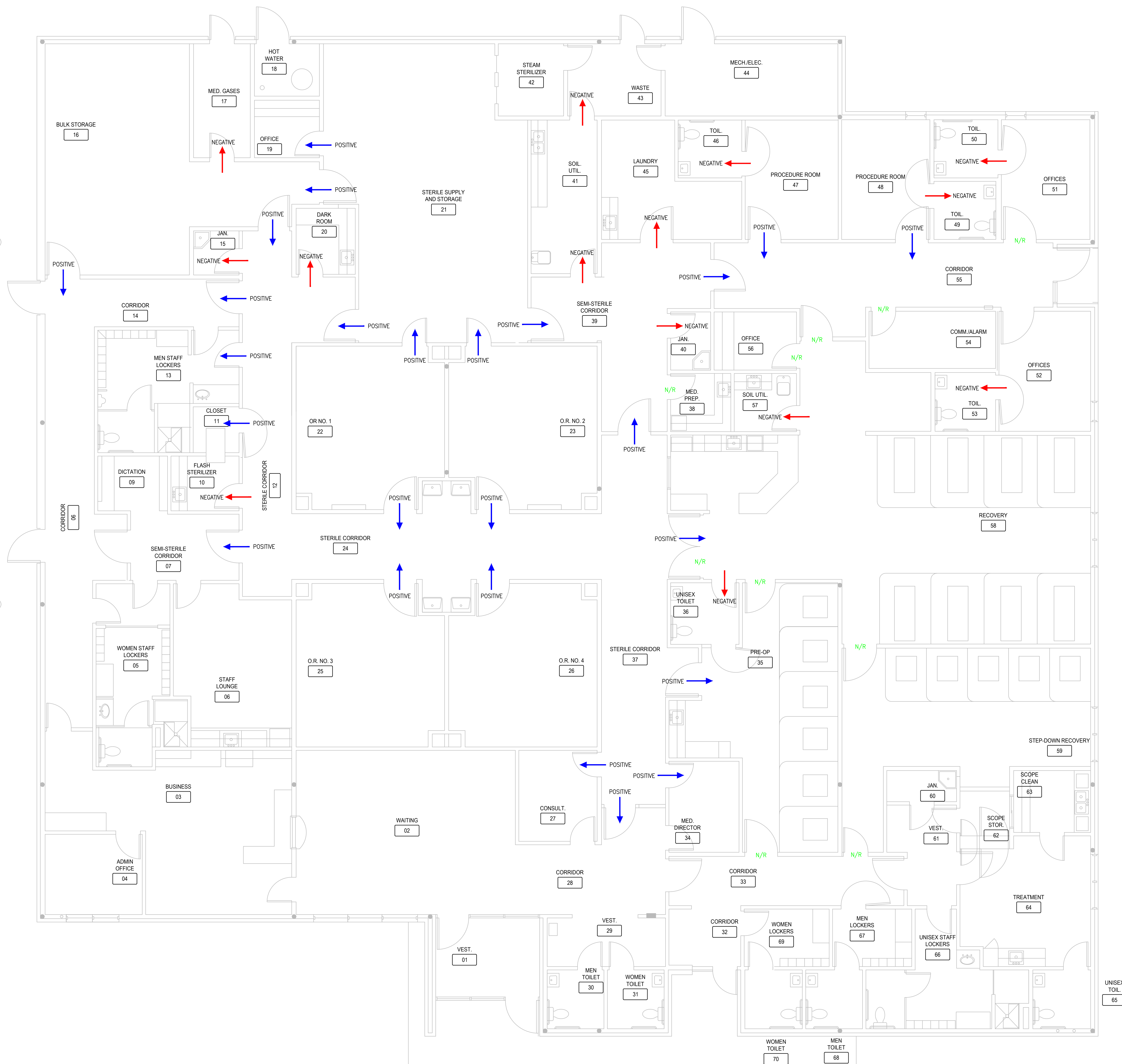
- AREA SERVED BY AHU-1
- AREA SERVED BY AHU-2
- AREA SERVED BY AHU-3
- AREA SERVED BY AHU-4
- AREA SERVED BY AHU-5
- AREA SERVED BY AHU-6
- AREA SERVED BY RTU-1
- AREA SERVED BY RTU-2
- AREA SERVED BY RTU-3
- AREA SERVED BY RTU-4

1 FLOOR PLAN - ZONING PLAN
 3/16"=1'-0"

	DATE	BY	ISSUE/REVISION	DATE	BY	ISSUE/REVISION
	04/27/22	CSL	PERMIT SUBMITTAL			
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MECH. FLOOR PLAN - ZONING PLAN HVAC RENOVATIONS FOR: MERCY HEALTH EASTGATE SURGERY CENTER 4415 AICHOLTZ ROAD CINCINNATI, OHIO 45245						
JOB NO.: SCALE: AS NOTED DATE: 04/27/2022 DRAWN BY: CSL APPROVED BY: CSL DRAWING NUMBER: <div style="font-size: 24px; font-weight: bold; display: inline-block;">M-7</div> REVISION NO.: 0						

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← POSITIVE PRESSURE
DIRECTION OF AIRFLOW

← NEGATIVE PRESSURE
DIRECTION OF AIRFLOW

N/R NO PRESSURE
REQUIREMENT

1 FLOOR PLAN - PRESSURE PLAN
3/16"=1'-0"

DATE	BY	ISSUE/REVISION
04/27/22	CSL	PERMIT SUBMITTAL
05/08/22	CSL	PRESSURE RELATIONSHIP UPDATES



04/27/2022

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MECH. FLOOR PLAN - PRESSURE PLAN
HVAC RENOVATIONS FOR:
MERCY HEALTH EASTGATE SURGERY CENTER
4415 AICHOLTZ ROAD
CINCINNATI, OHIO 45245

JOB NO.:
SCALE: AS NOTED
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DRAWN BY: CSL
APPROVED BY: CSL
DRAWING NUMBER:
M-8
REVISION NO.: 0

AIR CHANGE REQUIREMENTS - ASHRAE 170-2017 (AHU-1)											
SPACE NUMBER	SPACE NAME	AREA	CEILING HEIGHT	MINIMUM AIR CHANGE REQUIREMENTS PER ASHRAE 170-2017			ACTUAL AIR CHANGES PROVIDED				PRESSURE REQ.
				MIN. TOTAL AIR AC/HR REQ.	MIN. OUTDOOR AIR REQ. AC/HR	TOTAL AIR AC/HR	SUPPLY AIR (CFM)	OUTDOOR AIR AC/HR	OA (CFM)	EA (CFM)	
22	OPERATING RM. #1	340	10	20	4	35	2000	7	375	0	POSITIVE



AIR CHANGE REQUIREMENTS - ASHRAE 170-2017 (AHU-2)											
SPACE NUMBER	SPACE NAME	AREA	CEILING HEIGHT	MINIMUM AIR CHANGE REQUIREMENTS PER ASHRAE 170-2017			ACTUAL AIR CHANGES PROVIDED				PRESSURE REQ.
				MIN. TOTAL AIR AC/HR REQ.	MIN. OUTDOOR AIR REQ. AC/HR	TOTAL AIR AC/HR	SUPPLY AIR (CFM)	OUTDOOR AIR AC/HR	OA (CFM)	EA (CFM)	
23	OPERATING RM. #2	340	10	20	4	35	2000	7	375	0	POSITIVE

AIR CHANGE REQUIREMENTS - ASHRAE 170-2017 (AHU-3)											
SPACE NUMBER	SPACE NAME	AREA	CEILING HEIGHT	MINIMUM AIR CHANGE REQUIREMENTS PER ASHRAE 170-2017			ACTUAL AIR CHANGES PROVIDED				PRESSURE REQ.
				MIN. TOTAL AIR AC/HR REQ.	MIN. OUTDOOR AIR REQ. AC/HR	TOTAL AIR AC/HR	SUPPLY AIR (CFM)	OUTDOOR AIR AC/HR	OA (CFM)	EA (CFM)	
25	OPERATING RM. #3	340	10	20	4	35	2000	7	375	0	POSITIVE

AIR CHANGE REQUIREMENTS - ASHRAE 170-2017 (AHU-4)											
SPACE NUMBER	SPACE NAME	AREA	CEILING HEIGHT	MINIMUM AIR CHANGE REQUIREMENTS PER ASHRAE 170-2017			ACTUAL AIR CHANGES PROVIDED				PRESSURE REQ.
				MIN. TOTAL AIR AC/HR REQ.	MIN. OUTDOOR AIR REQ. AC/HR	TOTAL AIR AC/HR	SUPPLY AIR (CFM)	OUTDOOR AIR AC/HR	OA (CFM)	EA (CFM)	
26	OPERATING RM. #4	340	10	20	4	35	2000	7	375	0	POSITIVE

AIR CHANGE REQUIREMENTS - ASHRAE 170-2017 (AHU-5)											
SPACE NUMBER	SPACE NAME	AREA	CEILING HEIGHT	MINIMUM AIR CHANGE REQUIREMENTS PER ASHRAE 170-2017			ACTUAL AIR CHANGES PROVIDED				PRESSURE REQ.
				MIN. TOTAL AIR AC/HR REQ.	MIN. OUTDOOR AIR REQ. AC/HR	TOTAL AIR AC/HR	SUPPLY AIR (CFM)	OUTDOOR AIR AC/HR	OA (CFM)	EA (CFM)	
34	MED. DIRECTOR	94	9	NR	NR	NR	119	NR	14	0	NR
35	PRE-OP	476	9	2	NR	8	515	NR	51	0	NR
36	TOILET	63	9	NR	NR	NR	37	NR	0	75	NEGATIVE
37	STERILE CORRIDOR	1035	9	2	0	5	648	NR	68	0	NR
38	MED. PREP.	52	9	4	2	8	47	NR	15	0	NR
39	SEMI STERILE CORRIDOR	295	9	2	0	5	182	0	18	0	NR
41	SOILED UTILITIES	150	9	10	NR	22	98	NR	18	400	NEGATIVE
43	WASTE	100	9	10	NR	18	69	NR	15	200	NEGATIVE
45	LAUNDRY	188	9	10	NR	10	150	NR	29	120	NEGATIVE
46	TOILET	54	9	NR	NR	NR	40	NR	0	75	NEGATIVE
47	PRIVATE RECOVERY	165	9	6	2	7	132	2	50	0	NR
48	PRIVATE RECOVERY	156	9	6	2	10	175	2	50	0	NR
49	TOILET	53	9	NR	NR	NR	35	NR	0	75	NEGATIVE
50	TOILET	53	9	NR	NR	NR	41	NR	0	75	NEGATIVE
51	PRIVATE RECOVERY	157	9	6	2	14	275	2	50	0	NR
52	PRIVATE RECOVERY	163	9	6	2	9	175	2	50	0	NR
53	TOILET	53	9	NR	NR	NR	35	NR	0	75	NEGATIVE
54	COMM. ALARM	107	9	NR	NR	NR	89	NR	0	0	NR
55	CORRIDOR	354	9	2	0	NR	272	NR	24	0	NR
56	OFFICE	71	9	NR	NR	NR	99	NR	12	0	NR
57	SOILED UTILITIES	54	9	10	0	21	47	NR	9	120	NEGATIVE
58	RECOVERY	1251	9	6	2	6	741	2	375	0	NR
59	STEPDOWN RECOVERY	505	9	6	2	8	418	2	152	0	NR

AIR CHANGE REQUIREMENTS - ASHRAE 170-2017 (AHU-6)											
SPACE NUMBER	SPACE NAME	AREA	CEILING HEIGHT	MINIMUM AIR CHANGE REQUIREMENTS PER ASHRAE 170-2017			ACTUAL AIR CHANGES PROVIDED				PRESSURE REQ.
				MIN. AIR AC/HR REQ.	MIN. OUTDOOR AIR REQ. AC/HR	TOTAL AIR AC/HR	SUPPLY AIR (CFM)	OUTDOOR AIR AC/HR	OA (CFM)	EA (CFM)	
19	OFFICE	340	10	N/A	N/A	N/A	60	N/A	15	0	NR
21	STERILE STORAGE	796	10	4	2	16	2130	3	410	0	POSITIVE

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AIR CHANGE SCHEDULES HVAC RENOVATIONS FOR: MERCY HEALTH EASTGATE SURGERY CENTER 4415 AICHOLTZ ROAD CINCINNATI, OHIO 45245					
JOB NO.:					
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