

# SALUDA CC HVAC UPGRADES

## RIVERSIDE LIFELONG HEALTH & REHABILITATION

### 672 Gloucester Road Saluda, Virginia 23149



LOCATION MAP

#### PHASING NOTES

THE FACILITY WILL BE OCCUPIED DURING CONSTRUCTION. AS SUCH, ALL CONSTRUCTION ACTIVITIES SHALL BE COORDINATED WITH THE DESIGN PACKAGE, AND ALL MECHANICAL SERVICES SHALL BE MAINTAINED IN OCCUPIED AREAS EXCEPT FOR LIMITED UNAVOIDABLE SHUT-DOWN TIMES COORDINATED WITH THE OWNER.

THESE NOTES OUTLINE A PROPOSED MEANS OF ACCOMPLISHING THE PROJECT CONSTRUCTION WHILE ADJACENT AREAS OF THE FACILITY REMAIN IN OPERATION AND OCCUPIED. THEY DEFINE IN GENERAL THE CONCEPT AND SCOPE OF PHASING FOR THE PROJECT. THEY ARE NOT INTENDED TO LIST EACH AND EVERY ACTION THAT WILL BE REQUIRED. A DEFINITIVE SEQUENCE AND TIME SCHEDULE FOR ACCOMPLISHING THE WORK WILL BE ESTABLISHED BY THE CONTRACTOR'S PROPOSED CONSTRUCTION SCHEDULE. WHERE UTILITY OUTAGES ARE INTERRUPTED BEYOND THE SCHEDULED AND COORDINATED TIME PERIODS AND AFFECT OPERATION OF THE ADJACENT REMAINING FACILITY OPERATIONS, TEMPORARY UTILITIES SHALL BE PROVIDED UNDER THIS CONTRACT.

THE CONTRACTOR SHALL GIVE FULL CONSIDERATION TO THE PHASING WHEN DETERMINING WHEN AND WHERE EQUIPMENT IS TO BE REMOVED AND INSTALLED.

SEE THESE DRAWINGS FOR SPECIFIC EQUIPMENT, PIPING, DUCTWORK, AND WORK NOTES.

- PRIOR TO REMOVING MECHANICAL EQUIPMENT AND PIPING FOR EACH PHASE, THE CONTRACTOR SHALL DISCONNECT EACH AREA FROM THE HYDRONIC SYSTEM.

#### PHASE 1:

- AREA D WORK INCLUDES REMOVAL OF ALL FAN COIL UNITS WHICH SERVE THE RESIDENT ROOMS, INCLUDING ALL ASSOCIATED DUCTWORK, GRILLES, DIFFUSERS, LOUVERS, DAMPERS, PIPING, AND SUPPORTS.
- REMOVAL OF ALL CONDENSATE PIPING.
- INSTALLATION OF NEW FAN COIL UNITS SERVING RESIDENT ROOMS.
- INSTALLATION OF NEW DOAS-3 AND ASSOCIATED DUCTWORK, DIFFUSERS, LOUVERS, AND PIPING.
- INSTALLATION OF THE NEW PIPING SYSTEM TO THE EXISTING HYDRONIC SYSTEM.
- INSTALLATION OF GPS BI-POLAR IONIZATION FANS IN CORRIDORS.
- PROVIDE NEW ELECTRICAL CONNECTIONS TO HVAC EQUIPMENT.
- PROVIDE MEANS OF FLUSHING HYDRONIC SYSTEM FROM ANY DEBRIS AT END OF PHASE OF WORK. PRIOR TO STARTUP OF NEW EQUIPMENT, CONTRACTOR SHALL REACH OUT TO WALTZ ENGINEERED SALES, INC. (757) 542-3055.

#### PHASE 2:

- AREA A WORK INCLUDES REMOVAL OF ALL FAN COIL UNITS WHICH SERVE THE RESIDENT ROOMS, INCLUDING ALL ASSOCIATED DUCTWORK, GRILLES, DIFFUSERS, LOUVERS, DAMPERS, PIPING, AND SUPPORTS.
- REMOVAL OF ALL CONDENSATE PIPING.
- INSTALLATION OF NEW FAN COIL UNITS SERVING RESIDENT ROOMS.
- INSTALLATION OF NEW DOAS-1 AND ASSOCIATED DUCTWORK, DIFFUSERS, LOUVERS, AND PIPING.
- INSTALLATION OF THE CHILLED WATER AND HOT WATER PIPING THAT IS A PART OF THE HYDRONIC SYSTEM.
- INSTALLATION OF GPS BI-POLAR IONIZATION FANS IN CORRIDORS.
- PROVIDE NEW ELECTRICAL CONNECTIONS TO HVAC EQUIPMENT.
- PROVIDE MEANS OF FLUSHING HYDRONIC SYSTEM FROM ANY DEBRIS AT END OF PHASE OF WORK. PRIOR TO STARTUP OF NEW EQUIPMENT, CONTRACTOR SHALL REACH OUT TO WALTZ ENGINEERED SALES, INC. (757) 542-3055.

#### PHASE 4:

- AREA B WORK INCLUDES REMOVAL OF ALL FAN COIL UNITS WHICH SERVE THE RESIDENT ROOMS, INCLUDING ALL ASSOCIATED DUCTWORK, GRILLES, DIFFUSERS, LOUVERS, DAMPERS, PIPING, AND SUPPORTS.
- REMOVAL OF ALL CONDENSATE PIPING.
- INSTALLATION OF NEW FAN COIL UNITS SERVING RESIDENT ROOMS.
- INSTALLATION OF NEW DOAS-2 AND ASSOCIATED DUCTWORK, DIFFUSERS, LOUVERS, AND PIPING.
- INSTALLATION OF THE CHILLED WATER AND HOT WATER PIPING THAT IS A PART OF THE HYDRONIC SYSTEM.
- INSTALLATION OF GPS BI-POLAR IONIZATION FANS IN CORRIDORS.
- PROVIDE NEW ELECTRICAL CONNECTIONS TO HVAC EQUIPMENT.
- PROVIDE MEANS OF FLUSHING HYDRONIC SYSTEM FROM ANY DEBRIS AT END OF PHASE OF WORK. PRIOR TO STARTUP OF NEW EQUIPMENT, CONTRACTOR SHALL REACH OUT TO WALTZ ENGINEERED SALES, INC. (757) 542-3055.

#### PHASE 5:

- AREA C WORK INCLUDES REMOVAL OF ALL FAN COIL UNITS WHICH SERVE THE RESIDENT ROOMS, INCLUDING ALL ASSOCIATED DUCTWORK, GRILLES, DIFFUSERS, LOUVERS, DAMPERS, PIPING, AND SUPPORTS.
- REMOVAL OF ALL CONDENSATE PIPING.
- INSTALLATION OF NEW FAN COIL UNITS SERVING RESIDENT ROOMS.
- INSTALLATION OF NEW DOAS-1 AND ASSOCIATED DUCTWORK, DIFFUSERS, LOUVERS, AND PIPING.
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#### GOVERNING STATE AND LOCAL CODES

2018 VIRGINIA CONSTRUCTION CODE (VCC)  
VIRGINIA ADMINISTRATIVE SECTION & TECHNICAL AMENDMENTS ([www.vbcoa.org](http://www.vbcoa.org))  
2017 NATIONAL ELECTRICAL CODE (NEC)  
2018 VIRGINIA MECHANICAL CODE (VMC)  
2018 VIRGINIA PLUMBING CODE (VPC)

#### BUILDING OCCUPANCY

2018 VCC: HOSPITAL I-2

#### SPECIAL BID REQUIREMENTS

- ALL MECHANICAL EQUIPMENT SHALL BE AS INDICATED ON EQUIPMENT SCHEDULES. PROVIDE BAS SYSTEM AND INTEGRATE ALL EQUIPMENT AND CONTROLS SEQUENCES PROVIDED.
- CONTRACTOR SHALL PROVIDE A DUMPSTER DURING DEMOLITION LOCATED ON THE SITE AS DIRECTED BY THE FACILITIES ENGINEERING DEPARTMENT. WORK AREA SHALL BE CLEANED AT THE END OF EACH WORK DAY.
- THE CONTRACTOR'S BID PRICE SHALL BE ALL INCLUSIVE OF THE INDICATED WORK SHOWN OR DESCRIBED IN THE CONSTRUCTION DOCUMENTS.
- ANY INFORMATION CONSIDERED MISSING OR IN CONFLICT WITHIN THE CONSTRUCTION DOCUMENTS, SHALL BE PUT INTO AN RFI FOR THE ENGINEER TO RESPOND TO A MINIMUM OF 5 DAYS PRIOR TO THE BID DUE DATE.

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**RHS**  
RIVERSIDE HEALTH SYSTEM

PRELIMINARY PROGRESS PRINT  
50%  
12/15/2023  
FOR CONSTRUCTION  
SEAL

Revisions	Date
No.	

RIVERSIDE HEALTH SYSTEMS SALUDA CC HVAC UPDATES	
TITLE SHEET	
672 GLOUCESTER ROAD	
Project #:	23061
Date:	12/15/2023
Project Manager:	RCP
Designed By:	CKH
Drawn By:	BAC
Checked By:	PCS

G-001  
SHEET 1 OF 21

**MECHANICAL GENERAL NOTES**

- GENERAL NOTES ON THIS DRAWING ARE APPLICABLE TO EACH MECHANICAL DRAWING OF THIS SET. REFER TO EACH DRAWING FOR SPECIFIC NOTES APPLICABLE TO THAT DRAWING.
- OUTSIDE AIR INTAKE OPENINGS FOR VENTILATION AIR SHALL BE LOCATED 10'-0" MEASURED FORM ANY FLUES, VENTS, CHIMNEYS, GAS METERS, GAS REGULATORS AND PLUMBING VENTS UNLESS TOP OF SUCH INTAKE OPENINGS IS 2'-0" BELOW ANY OF THE LISTED ITEMS.
- OVERHEAD PIPING IN SPACES WITHOUT HUNG CEILINGS SHALL BE RUN AS CLOSE TO THE ROOF DECK AS PRACTICABLE, AS CLOSE TO PARALLEL JOISTS AS POSSIBLE AND ABOVE LIGHTING FIXTURES TO CONCEAL PIPING.
- OVERHEAD DUCTWORK AND PIPING IN SPACES WITH CEILINGS SHALL BE CONCEALED UNLESS OTHERWISE NOTES.
- COORDINATE LOCATION OF GRILLES, REGISTERS, DIFFUSERS, THERMOSTATS AND OTHER WALL OR CEILING MOUNTED HVAC ACCESSORIES WITH REFLECTED CEILING PLAN. COORDINATE LIGHTING FIXTURE LAYOUT AND ACCESSORIES INSTALLED THROUGHOUT THE ENTIRE BUILDING. IT IS THE INTENT FOR CEILING MOUNTED GRILLES, REGISTERS AND DIFFUSERS TO BE INSTALLED IN THE CENTER OR CEILING PANELS.
- ARRANGE DUCTWORK AND PIPING, PARTICULARLY ABOVE CEILINGS, AS REQUIRED TO CLEAR STRUCTURE, DUCTS, CONDUITS, ETC, ALLOWING SPACE FOR PIPING HANGERS, EXPANSION LOOPS AND ACCESS TO VALVES, FILTERS AND MAINTENANCE OF EQUIPMENT.
- EQUIPMENT WITH FILTERS SHALL BE INSTALLED SO THAT FILTERS CAN BE EASILY REMOVED AND REPLACED.
- COORDINATE LOCATION AND INSTALLATION OF EQUIPMENT WITH ALL OTHER TRADES.
- INSTALL ALL WALL MOUNTED NON-ADJUSTABLE SENSORS AT 5'-0" FROM FINISHED FLOOR TO TOP OF SENSOR. INSTALL ADJUSTABLE DEVICE 4'-0" ABOVE FINISHED FLOOR.
- VALVES AND SPECIALTIES SHALL BE LINE SIZE, EXCEPT FOR CONTROL AND BALANCING VALVES OR UNLESS OTHERWISE NOTED.
- ROUTING SHALL NOT INTERFERE WITH PASSAGeways AND MAINTENANCE. DRAINS FROM AIR CONDITIONING CONDENSATE DRAIN PANS SHALL BE TRAPPED. SLOPE SUSPENDED CONDENSATE DRAIN PIPING AT 1/8" PER FOOT.
- DUCTWORK AND PIPING INSULATION SHALL BE RUN CONTINUOUSLY THROUGH NON-RATED FLOORS, WALLS AND PARTITIONS UNLESS OTHERWISE NOTED.
- FOR PIPE SIZES NOT INDICATED ON PLANS, REFER TO EQUIPMENT CONNECTION DETAILS, FLOW DIAGRAMS, RISER DIAGRAMS AND SCHEDULES.
- PIPING SHALL BE SUPPORTED IN ACCORDANCE WITH THE SPECIFICATION. ADDITIONAL SUPPORTS AND HANGERS SHALL BE ADJACENT TO ELBOWS TO PREVENT WEIGHT OF PIPING BEING PLACED ON EQUIPMENT.
- FOR LOCATION OF MOTOR STARTERS, REFER TO ELECTRICAL DRAWINGS.
- PROVIDE MINIMUM PITCH SUFFICIENT TO INSURE ADEQUATE DRAINAGE.
- INSTALL CEILING REGISTERS A MINIMUM OF 4" FROM EXTERIOR WALL.
- PROVIDE ACCESS DOORS IN DUCTWORK WHERE INDICATED OR REQUIRED FOR ACCESS TO SYSTEM COMPONENTS INCLUDING DAMPER MOTORS AND/OR MOTOR OPERATED DAMPERS.
- FURNISH ALL MECHANICAL EQUIPMENT WITH DISCONNECTS.
- ALL CONDENSATE PIPING SHALL BE COPPER (WITH INSULATION) OR PVC.
- PROVIDE ALL VALVES RECOMMENDED BY THE MANUFACTURER.
- ALL DUCT TAKE-OFFS SHALL BE THE 45° TYPE.
- ALL LOUVERS SHALL BE WEATHER PROOF AND TO BE PROVIDED WITH BIRDScreens. INTAKE LOUVERS SHALL BE SELECTED TO PREVENT WATER PENETRATION.
- PROVIDE ALL EXHAUST FANS WITH SCR CONTROLLER.
- THERMOSTATS SHALL BE CONTROLLED BY OCCUPANTS. OCCUPANTS SHALL BE ALLOWED TO CONTROL SPACE TEMPERATURE +/- 2° FROM SETPOINT.
- COORDINATE ALL MECHANICAL WORK WITH ELECTRICAL.
- CONTRACTOR SHALL VISIT JOB SITE TO DETERMINE EXTENT OF WORK INVOLVED PRIOR TO BIDDING PROJECT.
- THE MECHANICAL SYSTEM HAS BEEN DESIGNED IN ACCORDANCE WITH THE 2018 VIRGINIA UNIFORM STATEWIDE BUILDING CODE.

**MECHANICAL GENERAL DEMOLITION NOTES**

- EXISTING HVAC PIPING, DUCTWORK, AND EQUIPMENT SHOWN IS BASED ON EXISTING PLANS AND FIELD OBSERVATION WITHOUT DEMOLITION. AFTER DEMOLITION, ANY CLARIFICATION REQUIRED TO DETERMINE SCOPE OF WORK SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT.
- THE CONTRACTOR SHALL VISIT THE JOB SITE AND THOROUGHLY FAMILIARIZE THEMSELVES WITH THE EXISTING CONDITIONS.
- DRAWINGS DO NOT SHOW EVERY EXISTING PIPE, CONDUIT, DUCT, ETC. CONTRACTOR SHALL TAKE CARE TO REMOVE ONLY ITEMS REQUIRED TO BE REMOVED AND VERIFY PIPES, DUCTS, ETC. BEFORE REMOVAL.
- BUILDING IS TO REMAIN OCCUPIED DURING CONSTRUCTION. REMOVAL OR SHUT-DOWN OF EQUIPMENT THAT AFFECTS AN OCCUPIED AREA'S AIR CONDITIONING OR HEATING SHALL ONLY BE DONE AS APPROVED OR TEMPORARY AIR CONDITIONING OR HEATING SHALL BE PROVIDED AT CONTRACTOR'S EXPENSE. THIS MAY REQUIRE NIGHT AND WEEKEND WORK TO KEEP BUILDING IN OPERATION.
- REMOVE EXISTING EXPOSED DUCTWORK AND PIPING NOT TO BE REUSED. ABDON IN PLACE UNUSED DUCTWORK AND PIPING CONCEALED ABOVE CEILINGS, IN WALLS OR BELOW FLOORS.

**CONTRACT GENERAL CONDITIONS**

- CONTRACTOR WILL VERIFY ALL SIZES AND EXISTING CONDITIONS PRIOR TO SUBMITTING A BID FOR THE PROJECT.
- CONTRACTOR WILL BE RESPONSIBLE FOR OBTAINING AND POSTING ALL APPLICABLE PERMITS.
- CONTRACTOR WILL NOT INTERRUPT OR DISTURB THE NORMAL OPERATIONS OF THE BUILDING.
- COORDINATE WITH THE OWNER FOR LOCATION OF ANY CONSTRUCTION OFFICE OR STORAGE TRAILER. CONTRACTOR WILL NOT BLOCK ANY PARKING AREAS/DRIVeways OR INTERFERE WITH THE TRAFFIC FLOW AROUND THE BUILDING.
- CONTRACTOR WILL NOT INTERRUPT ANY UTILITIES OR SERVICE PROVIDED TO THE BUILDING WITHOUT PRIOR PERMISSION.
- CONTRACTOR MUST PROVIDE SAFETY TAPE AND BARRIERS AROUND AREAS OR WORK. ALL EQUIPMENT AND MATERIALS MUST BE SECURED FROM THEFT AND VANDALISM.
- CONTRACTOR WILL CONTROL WORKERS ON SITE AT ALL TIMES. WORKERS WILL BE RESTRICTED TO THE WORKING AREAS ONLY. WORKERS WILL NOT USE BUILDING LOUNGES, VENDING MACHINES OR TELEPHONES.
- CONTRACTOR WILL NOT ALLOW TRASH TO ACCUMULATE OVER 1 DAY. ALL CONSTRUCTION DEBRIS AND TRASH MUST BE DISPOSED OF IN CONTRACTOR'S DISPOSAL BIN. CONTRACTOR WILL NOT USE BUILDING DUMPSTER FOR DISPOSAL OF DEBRIS OR TRASH.
- NO SMOKING AT ANY TIME IN THE BUILDINGS.
- THE BUILDINGS MUST BE IN OPERATION DURING CONSTRUCTION. PHASING AND SCHEDULING IS REQUIRED AS SPECIFIED. CONTRACTOR SHALL SCHEDULE HIS WORK AND COORDINATE HIS ACTIVITIES SO AS TO CAUSE THE LEAST INTERFERENCE WITH THE NORMAL OPERATIONS OF THE BUILDING. WORK THAT RESULTS IN EXCESSIVE NOISE OR FUMES SHALL BE SCHEDULED DURING WEEKENDS OR AFTER NORMAL WORKING HOURS.

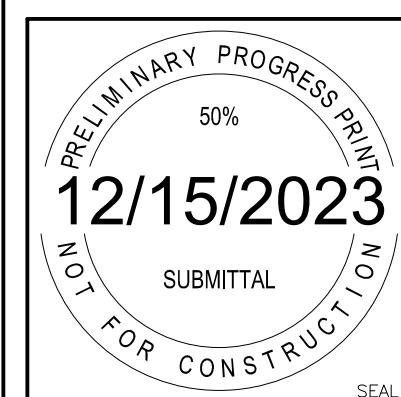
**LEGEND**

(X)	GRILLE, REGISTER OR DIFFUSER TAG (CFM AS NOTED)
XXX	BALANCE EXISTING TERMINAL DEVICE TO INDICATED VALUE
(XXX)	SUPPLY AIR CEILING DIFFUSER
(X)	RETURN AIR GRILLE / REGISTER
(X)	EXHAUST AIR GRILLE / REGISTER
(X)	SURFACE MOUNTED SUPPLY DIFFUSER
(X)	SURFACE MOUNTED RETURN/EXHAUST GRILLE
(X)	SUPPLY AIR DUCT TURNING DOWN
(X)	SUPPLY AIR DUCT TURNING UP
(X)	RETURN AIR DUCT TURNING DOWN
(X)	RETURN AIR DUCT TURNING UP
(X)	EXHAUST AIR DUCT TURNING DOWN
(X)	EXHAUST AIR DUCT TURNING UP
(X)	VOLUME DAMPER
FD	FIRE DAMPER
FSD	FIRE / SMOKE DAMPER
M	MOTORIZED DAMPER
(S)	SMOKE DETECTOR
(T)	THERMOSTAT, WALL MOUNTED
(C)	POINT OF CONNECTION NEW TO EXISTING
(C)	POINT OF DEMOLITION LIMIT
(C)	SHEET KEYNOTE
A#	VIEW NAME
XXXX	SCALE: XX : XX
A#	VIEW SCALE
A#	VIEW OR DETAIL DESIGNATION
A#	VIEW OR DETAIL DESIGNATION
A##	SECTION OR DETAIL SHOWN ON THIS SHEET

**ABBREVIATIONS**

AFF	ABOVE FINISHED FLOOR
AP	ACCESS PANEL
APD	AIR PRESSURE DROP
APPROX	APPROXIMATELY
BDD	BACKDRAFT DAMPER
CFM	CUBIC FEET PER MINUTE
DB	DRY BULB TEMPERATURE
dB	DECIBELS
DN	DOWN
EA	EXHAUST AIR
EAT	ENTERING AIR TEMPERATURE
EDB	ENTERING DRY BULB TEMPERATURE
EL	ELEVATION
ESP	EXTERNAL STATIC PRESSURE
EWB	ENTERING WET BULB TEMPERATURE
FA	FREE AREA
FLA	FULL LOAD AMPS
GPM	GALLONS PER MINUTE
HP	HORSEPOWER
IOM	INSTALLATION AND OPERATIONS MANUAL
KW	KILOWATT
LAT	LEAVING AIR TEMPERATURE
LDB	LEAVING DRY BULB TEMPERATURE
LWB	LEAVING WET BULB TEMPERATURE
LWT	LEAVING WATER TEMPERATURE
MAX	MAXIMUM
MBH	1000 BRITISH THERMAL UNITS PER HOUR
MCA	MINIMUM CIRCUIT AMPACITY
MIN	MINIMUM
MOCP	MAXIMUM OVER CURRENT PROTECTION
N.C.	NORMALLY CLOSED
N.O.	NORMALLY OPEN
OA	OUTSIDE AIR
PD	PRESSURE DROP
RA	RETURN AIR
RH	RELATIVE HUMIDITY
RPM	REVOLUTIONS PER MINUTE
SA	SUPPLY AIR
SC	SENSIBLE COOLING
SD	SMOKE DETECTOR
SF	SQUARE FEET
SP	STATIC PRESSURE
TC	TOTAL COOLING
TSP	TOTAL STATIC PRESSURE
TYP	TYPICAL
UON	UNLESS OTHERWISE NOTED
WB	WET BULB TEMPERATURE
WC	WATER COLUMN
WG	WATER GAUGE
Ø	ROUND DUCT/PHASE

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Revisions

Date Description No.

SALUDA, VA 23149

672 GLOUCESTER ROAD

RIVERSIDE CC HVAC UPDATES

MECHANICAL GENERAL NOTES, LEGEND AND ABBREVIATIONS

Project #:	23061
Date:	12/15/2023
Project Manager:	RCP
Designed By:	CKH
Drawn By:	DMG
Checked By:	PCS

M-001  
SHEET 2 OF 21



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# SHEET KEYNOTES

- I. DISCONNECT AND REMOVE 4-PIPE FAN COIL UNIT COMPLETE INCLUDING, BUT NOT LIMITED TO, ASSOCIATED DUCTWORK, DAMPERS, EQUIPMENT SUPPORTS, AND HANGERS. ASSOCIATED FACE MOUNTED DIFFUSERS AND GRILLES, AND THERMOSTATS ASSOCIATED WITH FAN COIL UNIT SHALL BE DEMOLISHED. FOR INFORMATION ON DEMOLITION OF PIPING, SEE MD103.
  2. DEMOLISH OUTSIDE AIR DUCTWORK. DEMOLISH EXISTING DUCT HANGERS SUPPORTING EQUIPMENT.
  3. DUCTWORK IS EXISTING TO REMAIN. CONTRACTOR SHALL ENSURE THAT DUCTWORK IS NOT DAMAGED DURING DEMOLITION PHASE.



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## IVERSIDE HEALTH SYSTEM



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SALUDA, VA 23149

# RIVERSIDE HEALTH SYSTEMS SALUDA CC HVAC UPGRADES

# PART I

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## 672 GLOUCESTER ROAD

Project #:	23061
Date:	12/15/2023
Project Manager:	RCP
Designed By:	CKH
Drawn By:	DMG
Checked By:	PCS

MD102

F

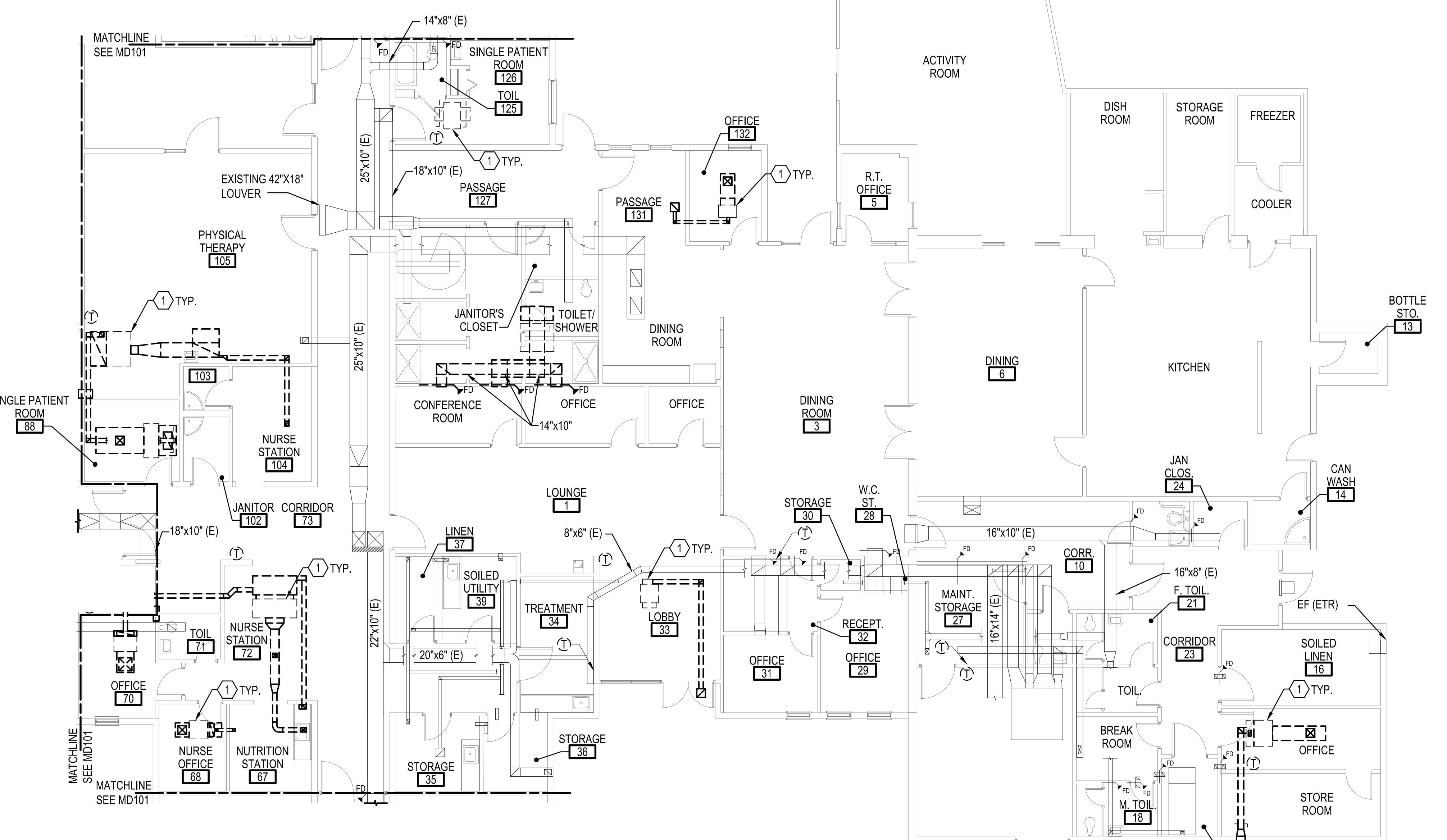
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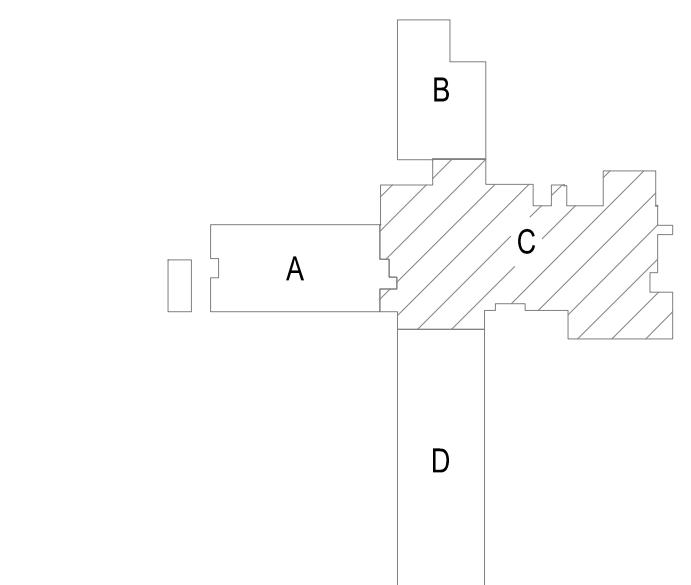
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**A2 PARTIAL FLOOR PLAN - AREA C - DEMOLITION**

E: 1/8" = 1'-0"

KEYPLAN



MD102

SHEET 4 OF 21

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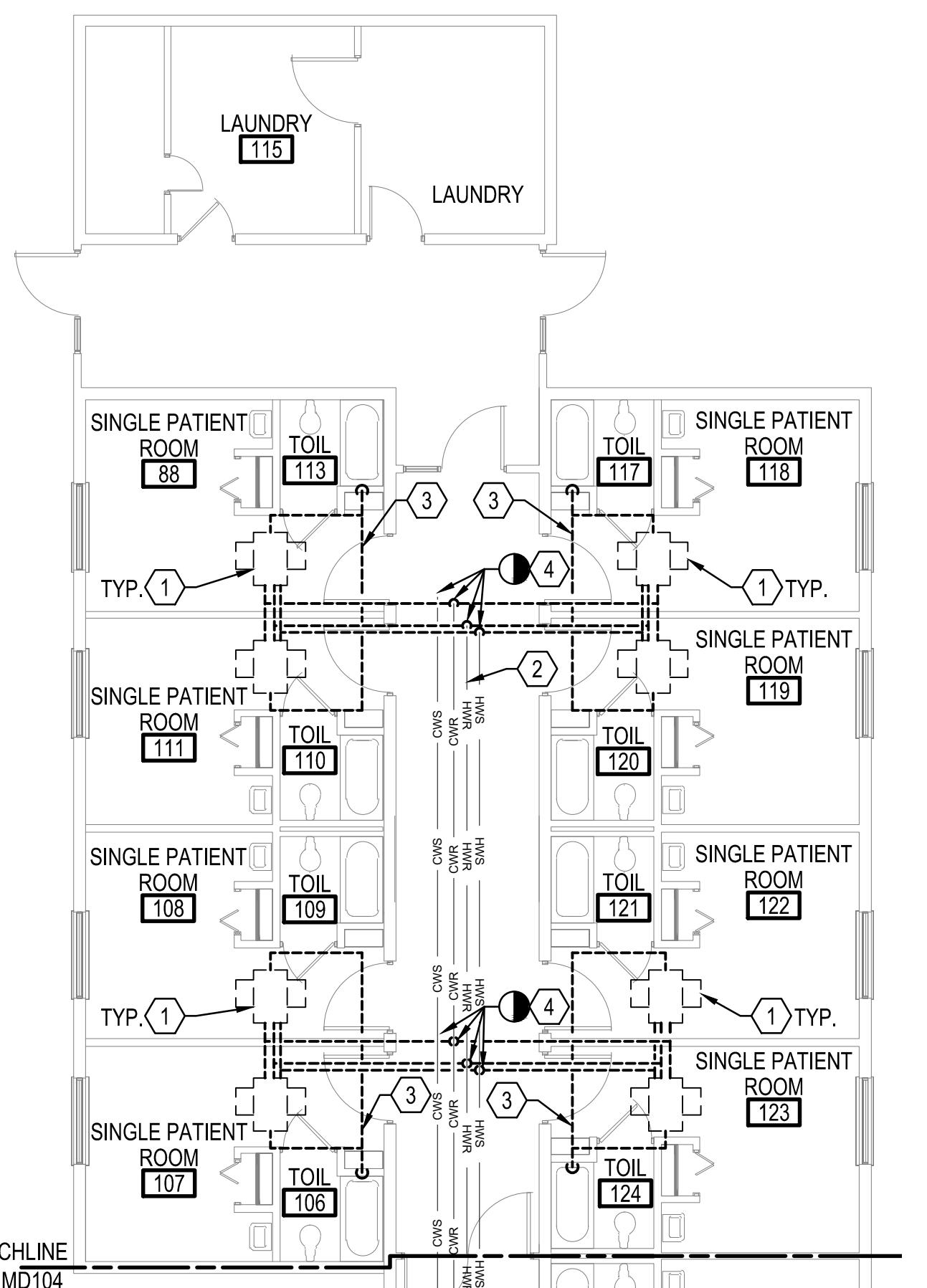
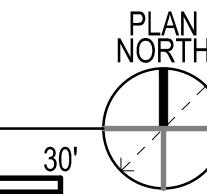
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PATIENT  
STOR  
88**PARTIAL FLOOR PLAN - AREA A - PIPING - DEMOLITION**

D1

SCALE: 1/8" = 1'-0"

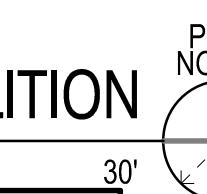
0' 5' 10' 20' 30'

**PARTIAL FLOOR PLAN - AREA B - PIPING - DEMOLITION**

A2

SCALE: 1/8" = 1'-0"

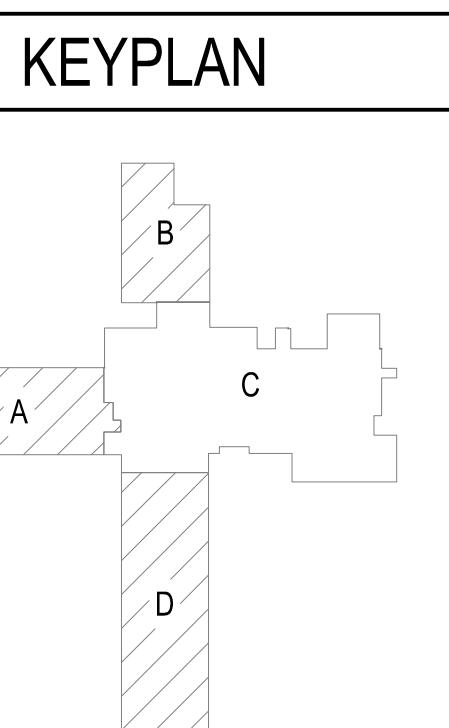
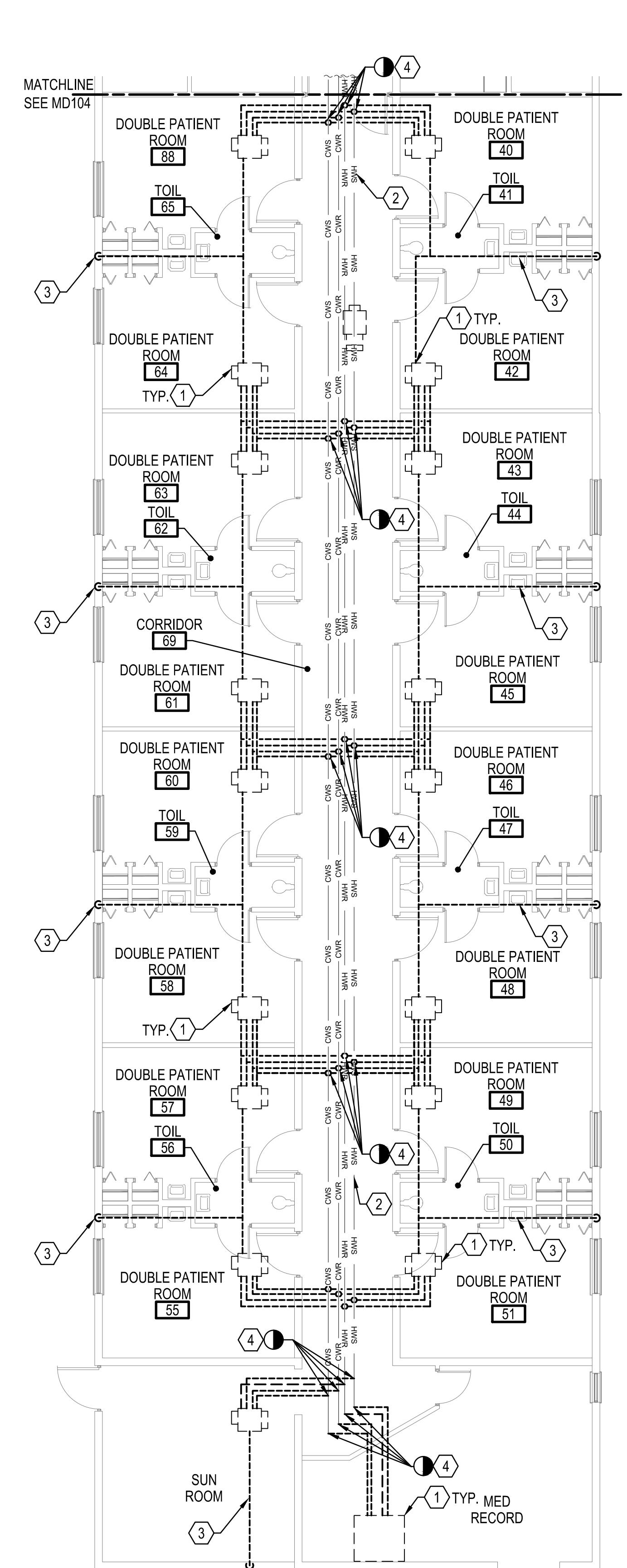
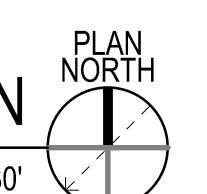
0' 5' 10' 20' 30'

**PARTIAL FLOOR PLAN - AREA D - PIPING - DEMOLITION**

A4

SCALE: 1/8" = 1'-0"

0' 5' 10' 20' 30'

**SHEET KEYNOTES**

- DISCONNECT AND REMOVE 4-PIPE FAN COIL UNIT COMPLETE INCLUDING, BUT NOT LIMITED TO, HOT WATER PIPING, CHILLED WATER PIPING, CONDENSATE PIPING, AND DRAIN PAN. FOR MORE INFORMATION ON DEMOLITION OF DUCTWORK, SEE MD101.
- EXISTING PIPING TO REMAIN. CONTRACTOR TO ENSURE ENTIRE WING HAS BEEN DISCONNECTED FROM THE HYDRONIC SYSTEM PRIOR TO DEMOLITION WORK.
- DEMOLISH EXISTING CONDENSATE PIPING COMPLETE INCLUDING ANY ASSOCIATED HANGERS OR SUPPORTS.
- DEMOLISH CHILLED WATER SUPPLY AND RETURN, AND HOT WATER SUPPLY AND RETURN PIPING FROM MAIN TO FAN COIL UNIT AND ANY ASSOCIATED VALVES.

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**Revisions**

No. \_\_\_\_\_

Date \_\_\_\_\_

**RIVERSIDE HEALTH SYSTEMS  
SALUDA CC HVAC UPDATES**SALUDA, VA 23149  
672 GLOUCESTER ROAD

**PARTIAL FLOOR PLAN - AREAS A, B, AND D - PIPING - DEMOLITION**

Project #: 23061  
Date: 12/15/2023

Project Manager: RCP  
Designed By: CKH  
Drawn By: DMG  
Checked By: PCS

MD103

SHEET 5 OF 21

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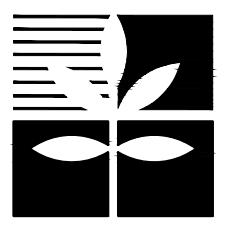
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## SHEET KEYNOTES

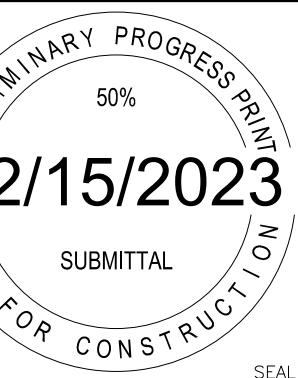
- DISCONNECT AND REMOVE 4-PIPE FAN COIL UNIT COMPLETE INCLUDING, BUT NOT LIMITED TO, HOT WATER PIPING, CHILLED WATER PIPING, CONDENSATE PIPING, AND DRAIN PAN. FOR MORE INFORMATION ON DEMOLITION OF DUCTWORK, SEE MD101.
- EXISTING PIPING TO REMAIN. CONTRACTOR TO ENSURE ENTIRE WING HAS BEEN DISCONNECTED FROM THE HYDRONIC SYSTEM PRIOR TO DEMOLITION WORK.
- DEMOLISH EXISTING CONDENSATE PIPING COMPLETE INCLUDING ANY ASSOCIATED HANGERS OR SUPPORTS.
- DEMOLISH CHILLED WATER SUPPLY AND RETURN, AND HOT WATER SUPPLY AND RETURN PIPING FROM MAIN TO FAN COIL UNIT AND ANY ASSOCIATED VALVES.



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TELEPHONE: (757) 461-6757



RIVERSIDE HEALTH SYSTEM



## Revisions

Date \_\_\_\_\_

No. \_\_\_\_\_

Description \_\_\_\_\_

SALUDA, VA 23149

## RIVERSIDE HEALTH SYSTEMS SALUDA CC HVAC UPDATES

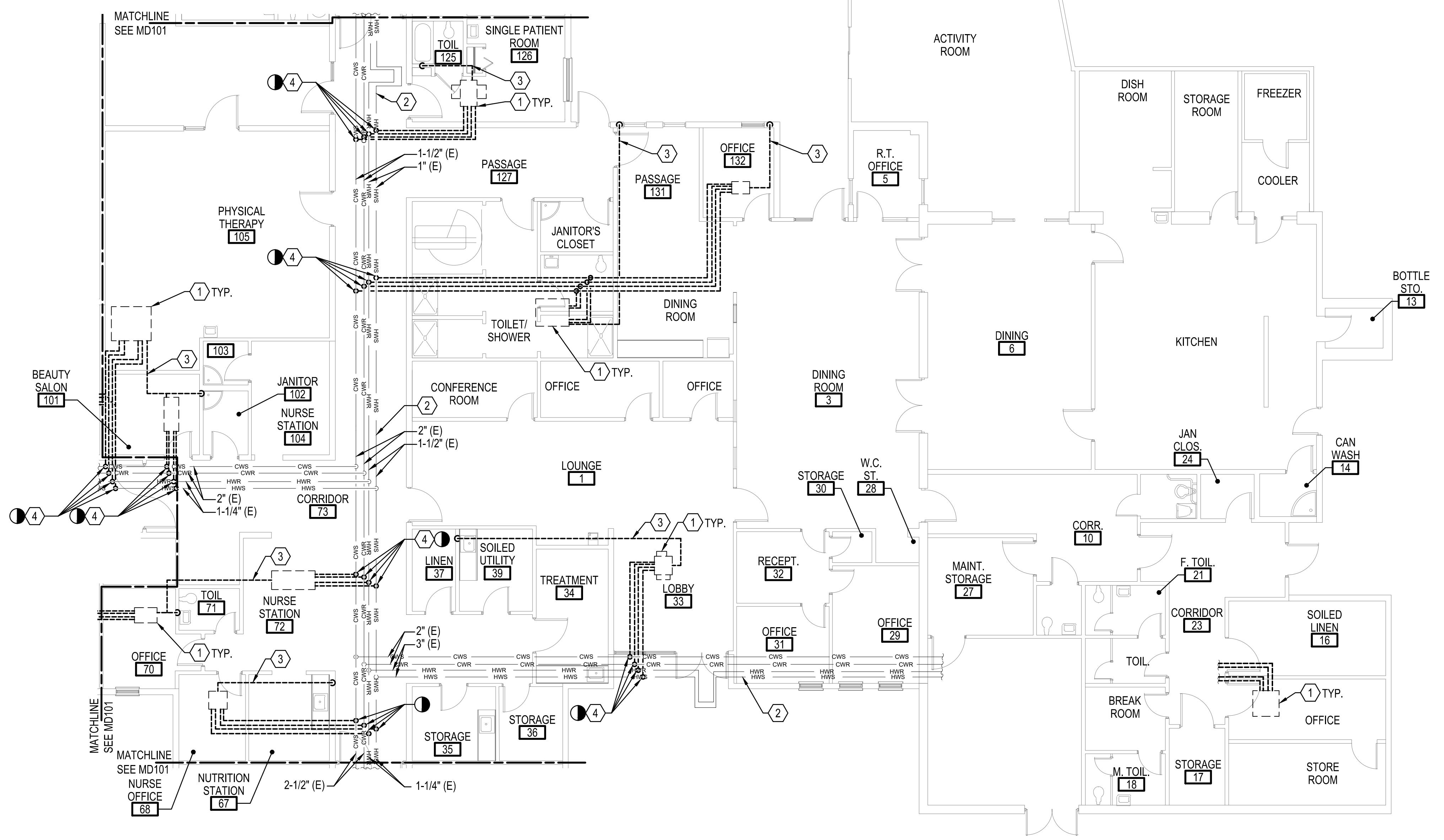
672 GLOUCESTER ROAD

Project #: 23061  
Date: 12/15/2023

Project Manager: RCP  
Designed By: CKH  
Drawn By: DMG  
Checked By: PCS

MD104

Sheet 6 of 21



A2 PARTIAL FLOOR PLAN - AREA C - PIPING - DEMOLITION

SCALE: 1/8" = 1'-0"

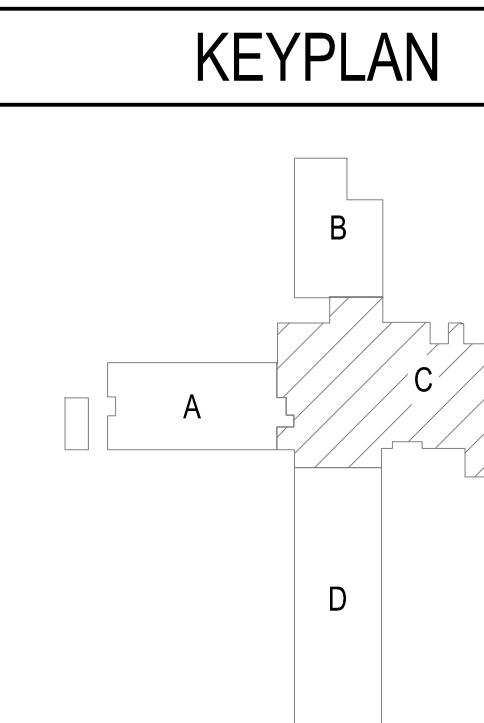
0'

5'

10'

20'

30'



B

A

C

D

MD104

Sheet 6 of 21

1

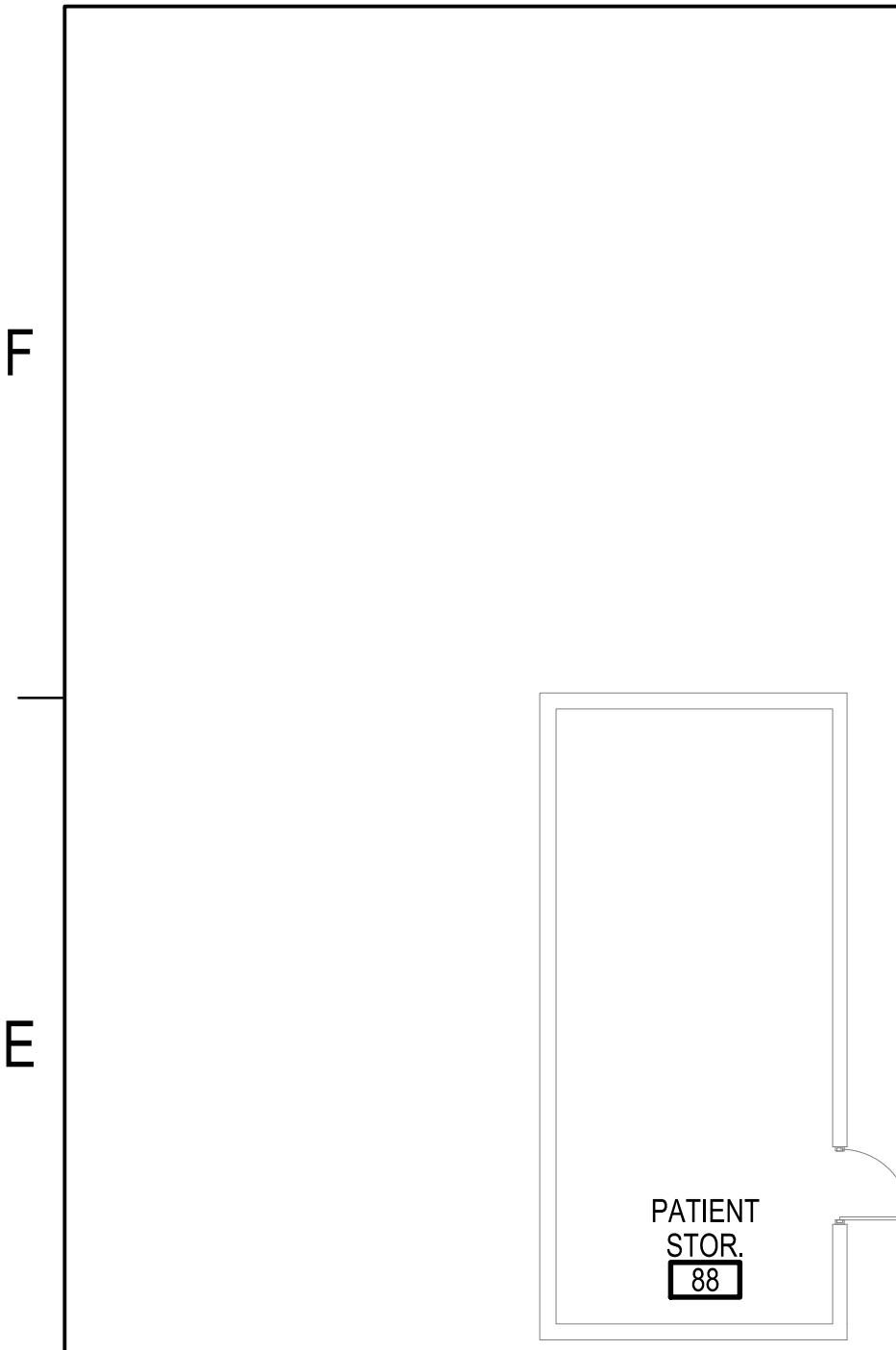
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3

4

5

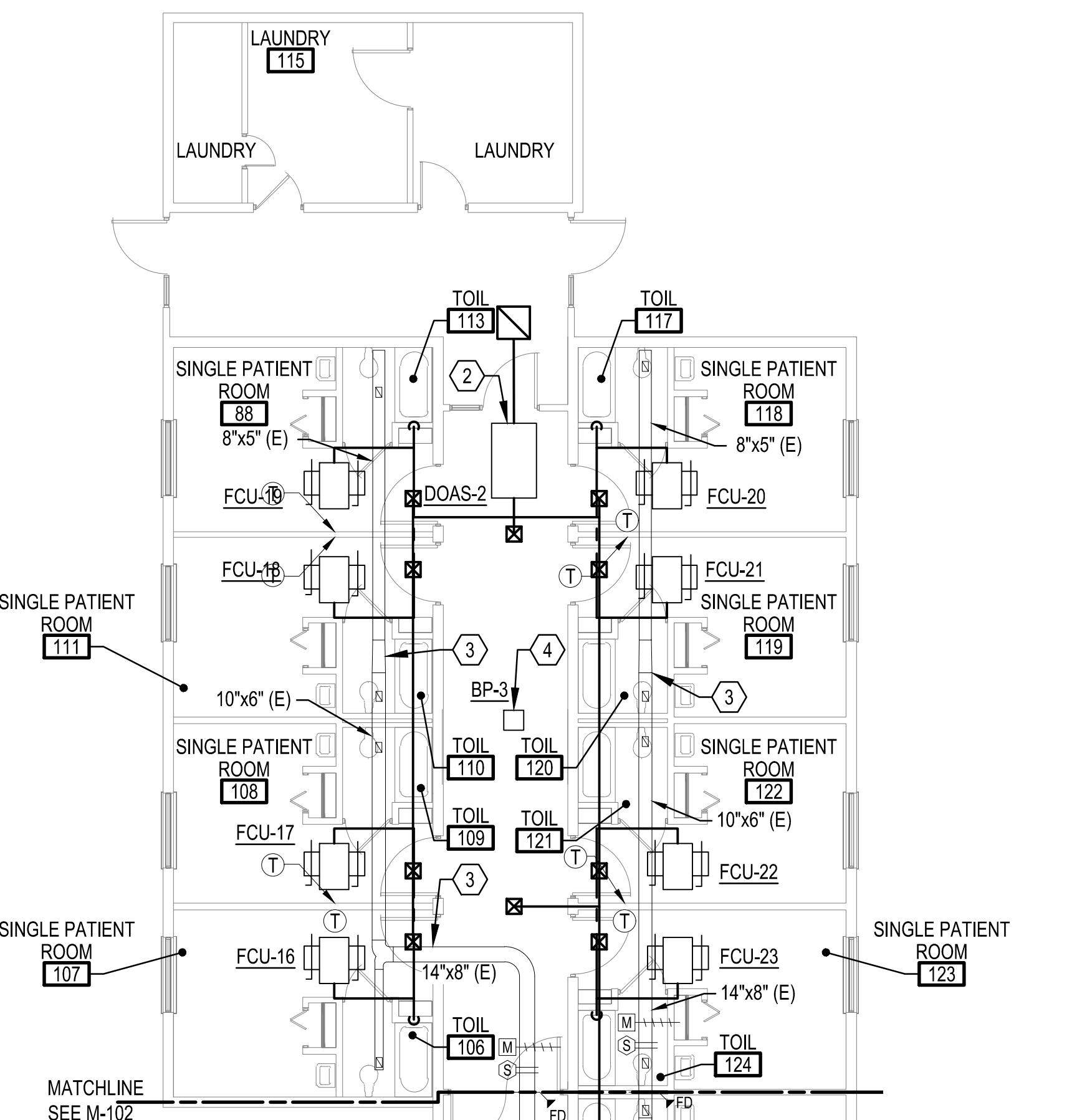
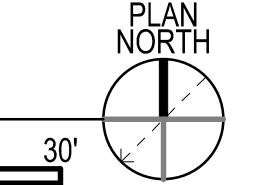
6



D1 PARTIAL FLOOR PLAN - AREA A - NEW WORK

SCALE: 1/8" = 1'-0"

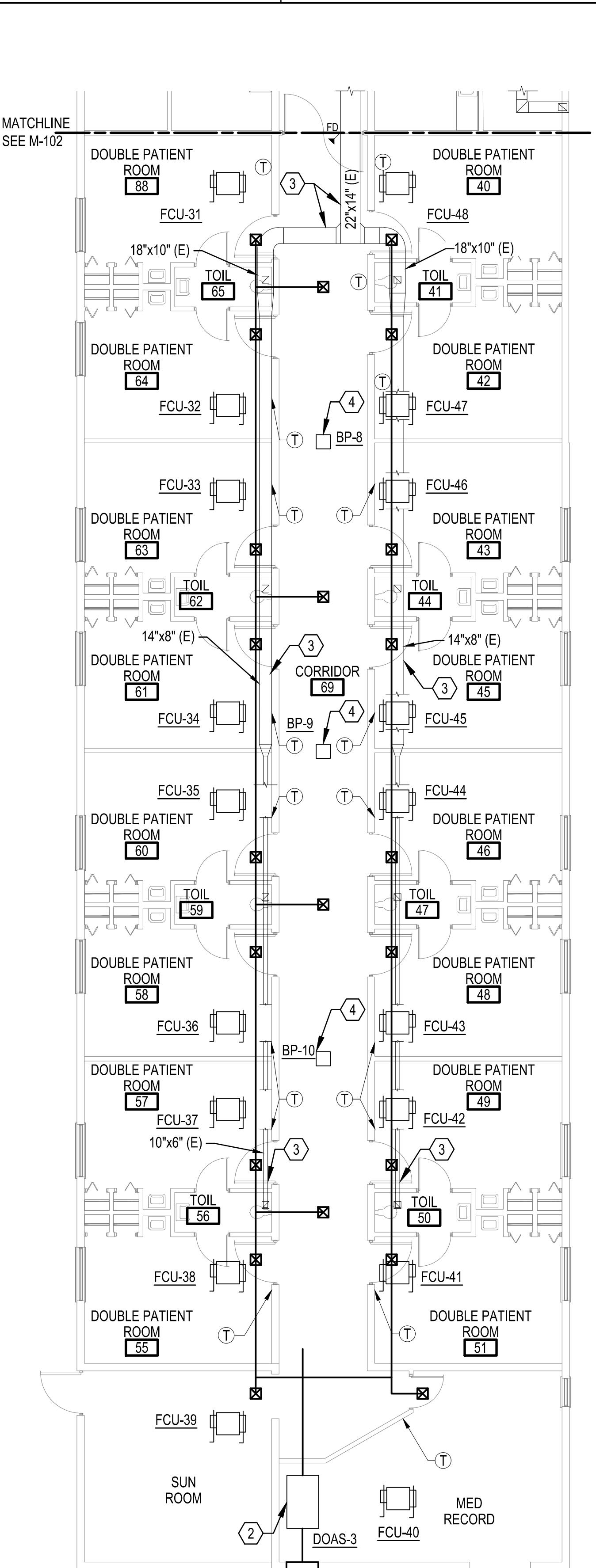
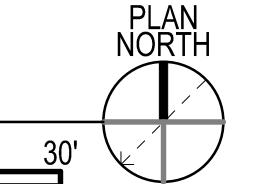
0' 5' 10' 20' 30'



A2 PARTIAL FLOOR PLAN - AREA B - NEW WORK

SCALE: 1/8" = 1'-0"

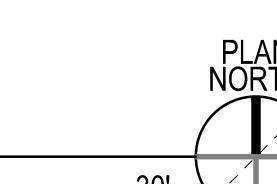
0' 5' 10' 20' 30'



A4 PARTIAL FLOOR PLAN - AREA D - NEW WORK

SCALE: 1/8" = 1'-0"

0' 5' 10' 20' 30'



- X SHEET KEYNOTES**
1. PROVIDE NEW FAN COIL UNIT COMPLETE INCLUDING THERMOSTATIC CONTROLS. THERMOSTAT SHALL BE MOUNTED APPROXIMATELY 4'-0" AFF. FOR MORE INFORMATION ON INSTALLATION, REFER TO MANUFACTURER IOM AND SEE SHEET M-102. PROVIDE UNIT WITH AUXILIARY DRAIN PAN.
  2. PROVIDE NEW DEDICATED OUTDOOR AIR UNIT COMPLETE INCLUDING BUT NOT LIMITED TO EQUIPMENT SUPPORTS, CONDENSATE DRAIN PIPING, AND THERMOSTATIC CONTROLS. FOR MORE INFORMATION ON INSTALLATION, REFER TO MANUFACTURER IOM. PROVIDE UNIT WITH AUXILIARY DRAIN PAN.
  3. EXHAUST DUCTWORK IS EXISTING TO REMAIN.
  4. PROVIDE GPS IDF-2 BIPOLAR IONIZATION FAN IN CEILING. FOR MORE INFORMATION, SEE FAN SCHEDULE ON SHEET M-601.

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50%  
12/15/2023  
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FOR CONSTRUCTION  
SEAL

Revisions	Date
No. _____	_____

RIVERSIDE HEALTH SYSTEMS  
SALUDA, VA 23149  
672 GLOUCESTER ROAD  
PARTIAL FLOOR PLAN - AREAS A, B, AND D - NEW WORK

Project #: 23061  
Date: 12/15/2023

Project Manager: RCP  
Designed By: CKH  
Drawn By: DMG  
Checked By: PCS

M-101

SHEET 7 OF 21

F

E

D

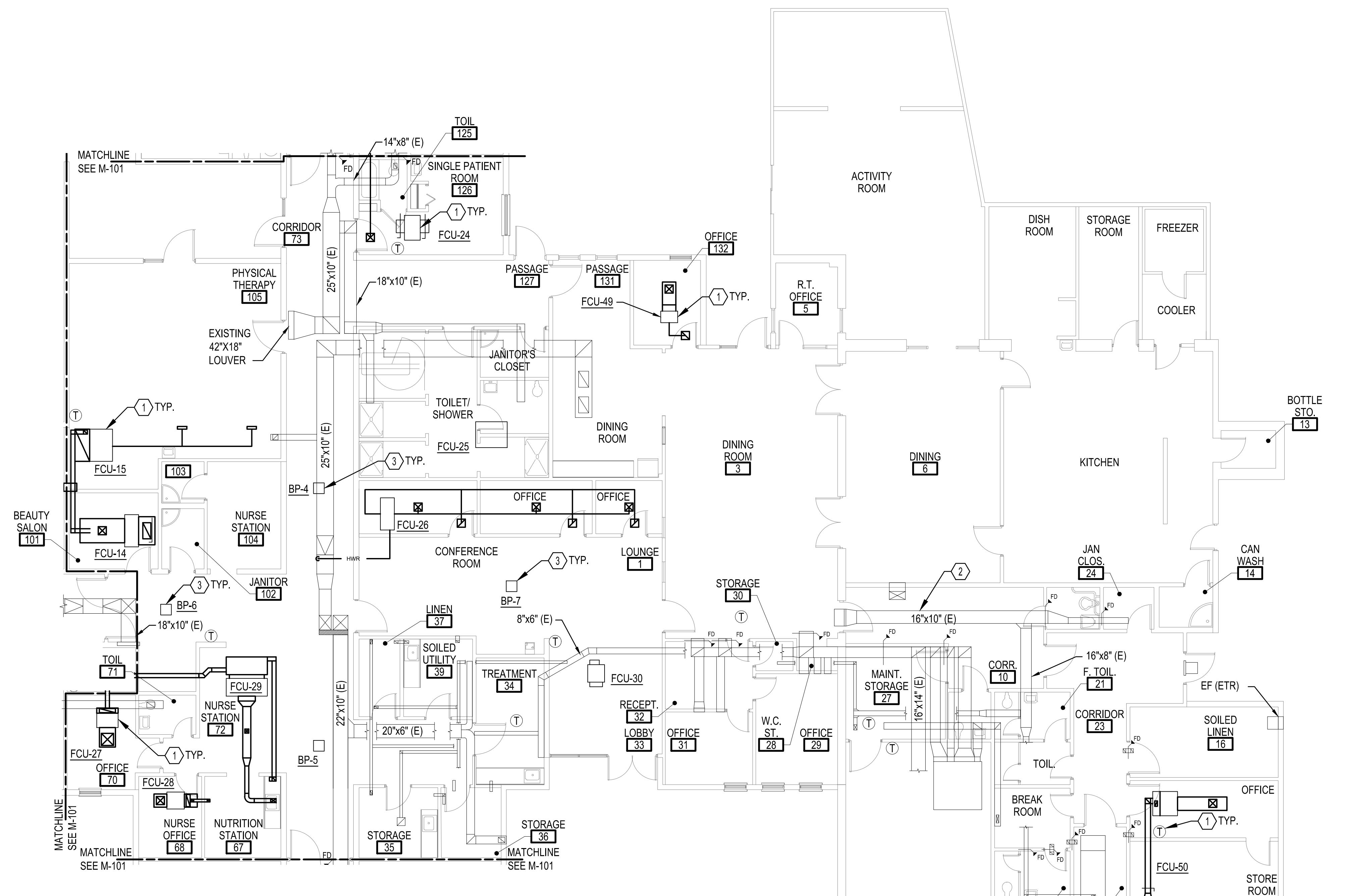
C

B

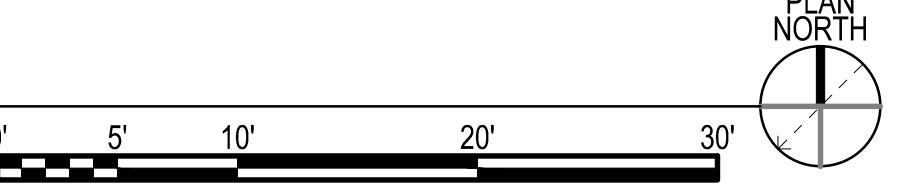
A

**(A2) PARTIAL FLOOR PLAN - AREA C - NEW WORK**

SCALE: 1/8" = 1'-0"



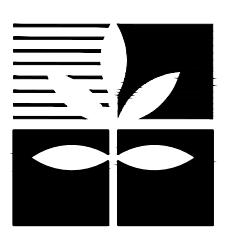
0' 5' 10' 20' 30'



**SHEET KEYNOTES**

1. PROVIDE NEW FAN COIL UNIT COMPLETE INCLUDING FLEXIBLE PIPING CONNECTIONS, THERMOSTATIC CONTROLS, AND ALL MANUFACTURER RECOMMENDED VALVES. FOR MORE INFORMATION ON INSTALLATION, REFER TO MANUFACTURERS IOM AND SEE SHEET M-501. PROVIDE UNIT WITH DRAIN PAN.
2. DUCTWORK IS EXISTING TO REMAIN.
3. PROVIDE GPS IDF-2 BIPOLAR IONIZATION FAN IN CEILING. FOR MORE INFORMATION, SEE FAN SCHEDULE ON SHEET M-601.

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RIVERSIDE HEALTH SYSTEM



Revisions	Date
No. _____	Description _____

SALUDA, VA 23149  
672 GLOUCESTER ROAD

**RIVERSIDE HEALTH SYSTEMS  
SALUDA CC HVAC UPDATES  
PARTIAL FLOOR PLAN - AREA C - NEW WORK**

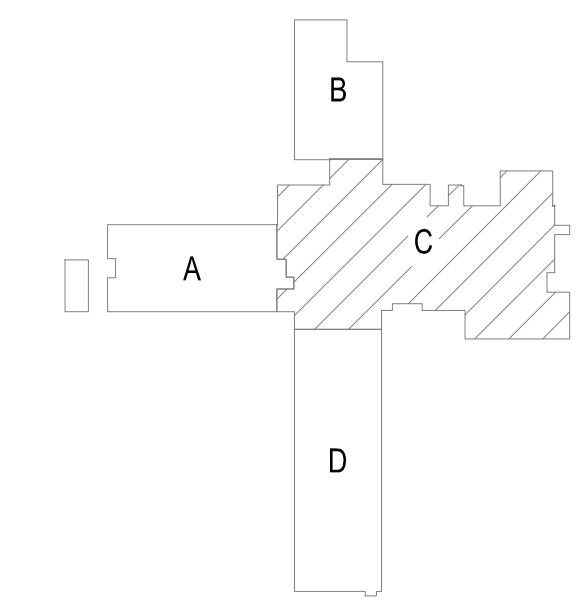
PROJECT NUMBER: 23061  
DATE: 12/15/2023

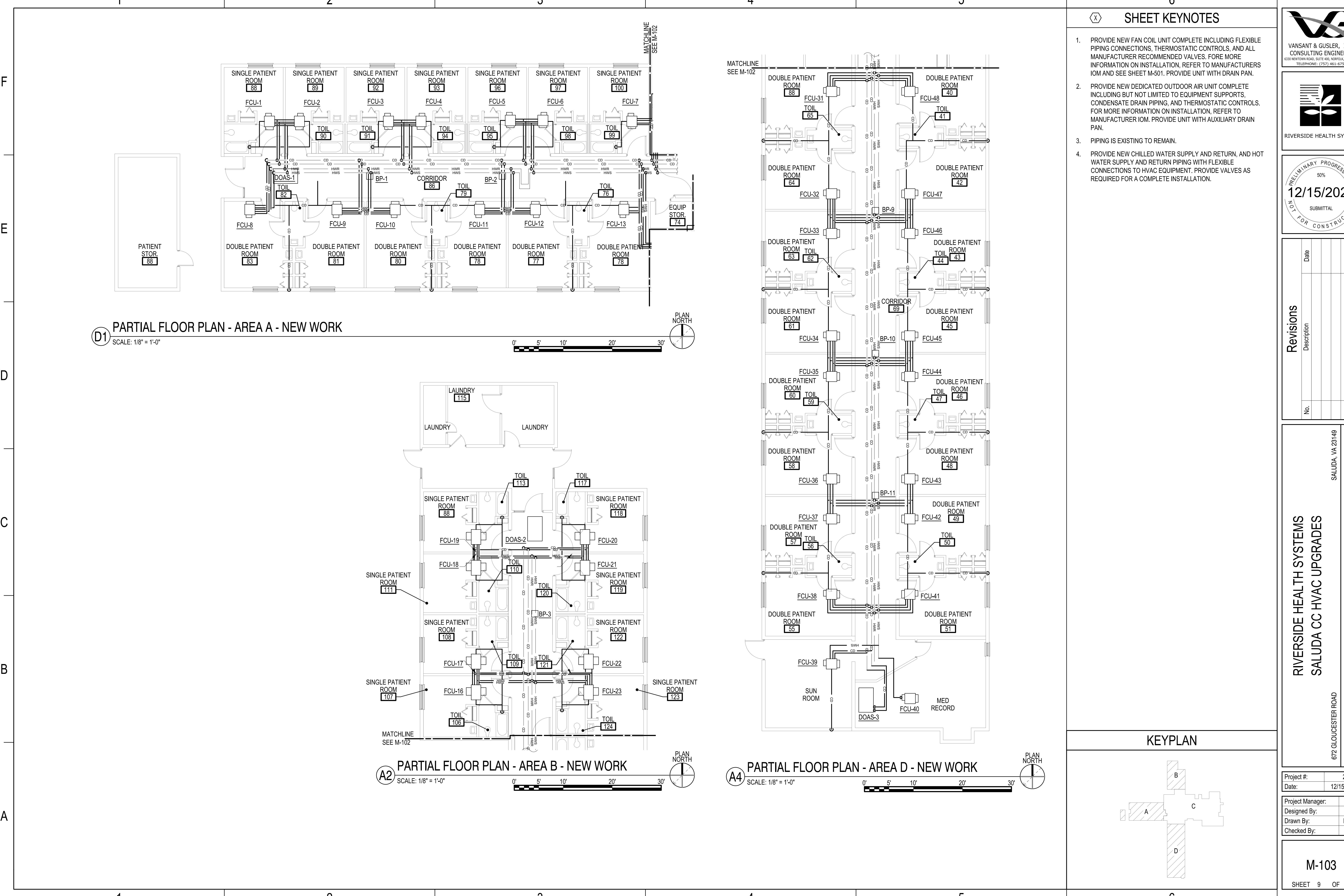
672 GLOUCESTER ROAD

Project #:	23061
Date:	12/15/2023
Project Manager:	RCP
Designed By:	CKH
Drawn By:	DMG
Checked By:	PCS

**M-102**

SHEET 8 OF 21





F

E

D

C

B

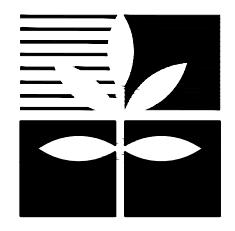
A

## SHEET KEYNOTES

1. PROVIDE NEW FAN COIL UNIT COMPLETE INCLUDING FLEXIBLE PIPING CONNECTIONS, THERMOSTATIC CONTROLS, AND ALL MANUFACTURER RECOMMENDED VALVES. FOR MORE INFORMATION ON INSTALLATION, REFER TO MANUFACTURERS IOM AND SEE SHEET M-501. PROVIDE UNIT WITH DRAIN PAN.
2. PIPING IS EXISTING TO REMAIN.
3. PROVIDE NEW CHILLED WATER SUPPLY AND RETURN, AND HOT WATER SUPPLY AND RETURN PIPING WITH FLEXIBLE CONNECTIONS TO HVAC EQUIPMENT. PROVIDE VALVES AS REQUIRED FOR A COMPLETE INSTALLATION.



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RIVERSIDE HEALTH SYSTEM



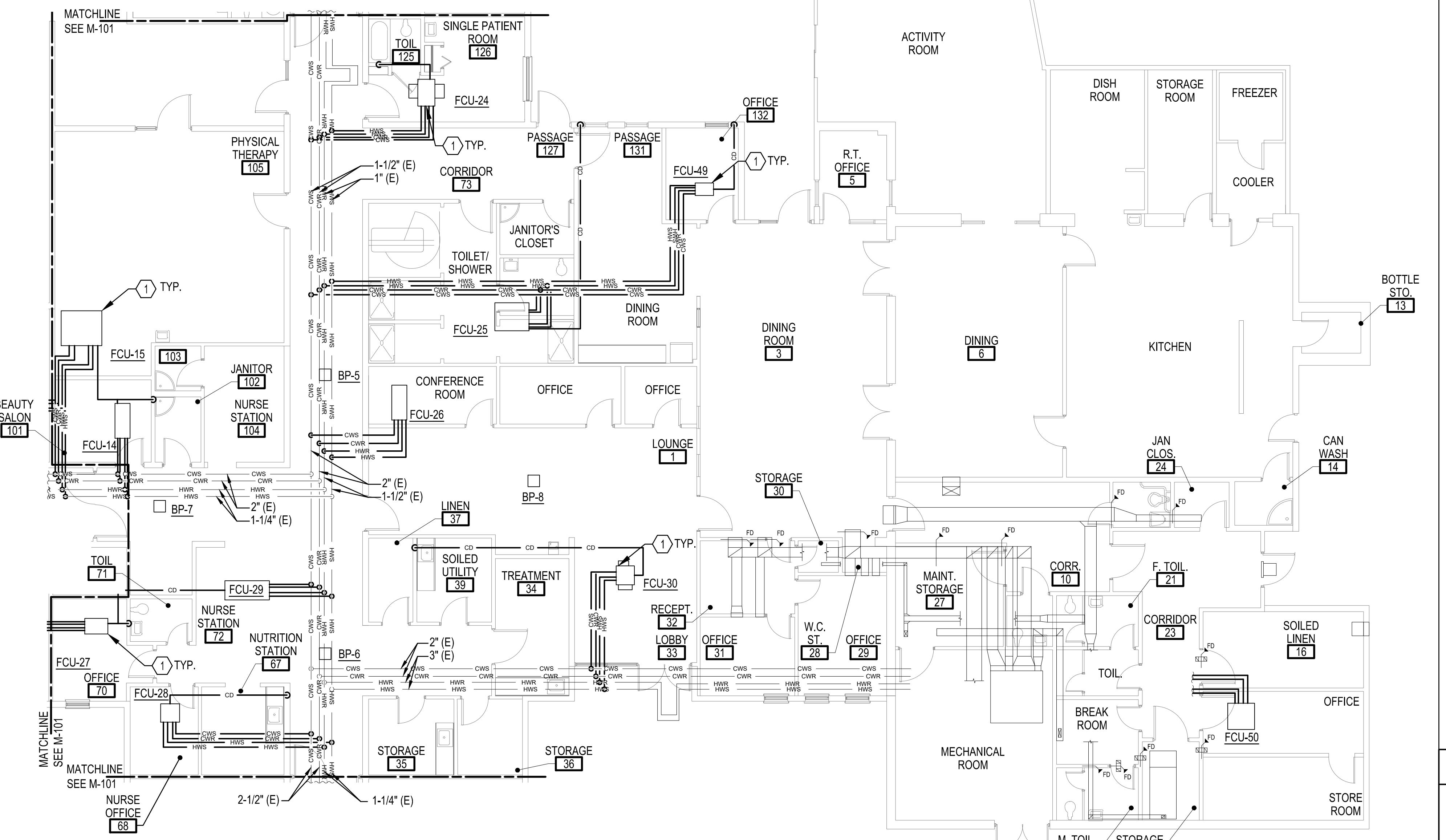
Revisions	Date
No. _____	Description _____

SALUDA, VA 23149

## RIVERSIDE HEALTH SYSTEMS SALUDA CC HVAC UPGRADES

### PARTIAL FLOOR PIPING PLAN - AREA C - NEW WORK

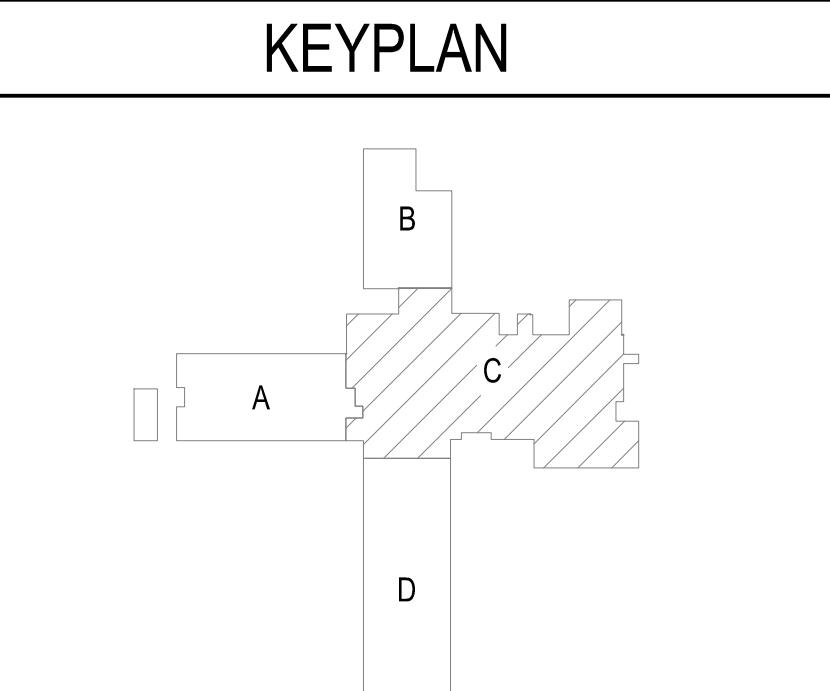
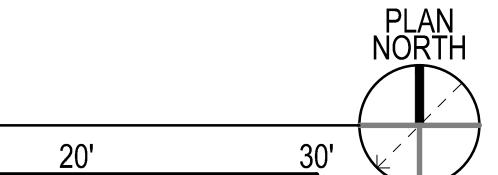
672 GLOUCESTER ROAD



(A2) PARTIAL FLOOR PIPING PLAN - AREA C - NEW WORK

SCALE: 1/8" = 1'-0"

0' 5' 10' 20' 30'

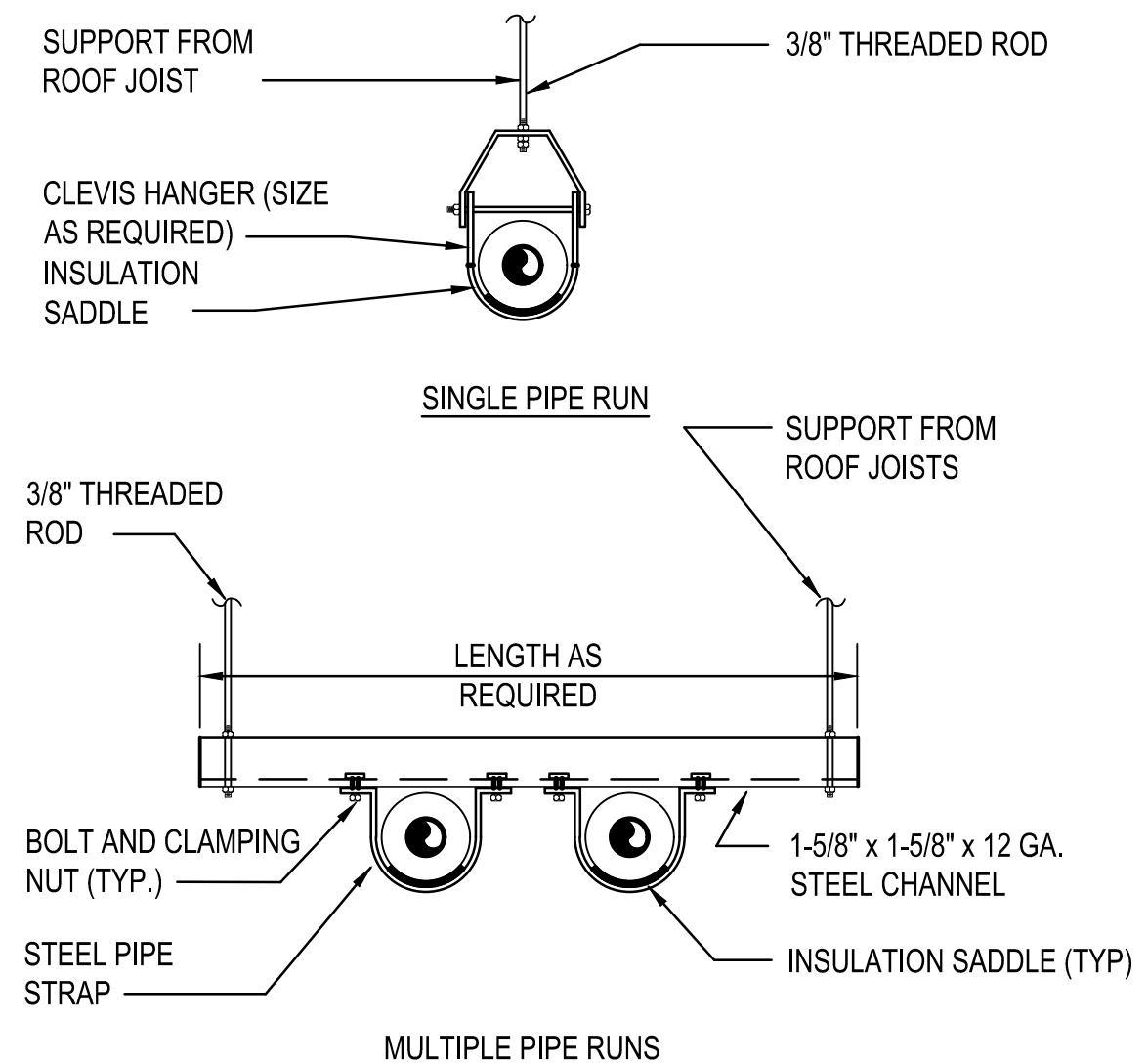


M-104  
SHEET 10 OF 21

Project #: 23061  
Date: 12/15/2023  
Project Manager: RCP  
Designed By: CKH  
Drawn By: DMG  
Checked By: PCS

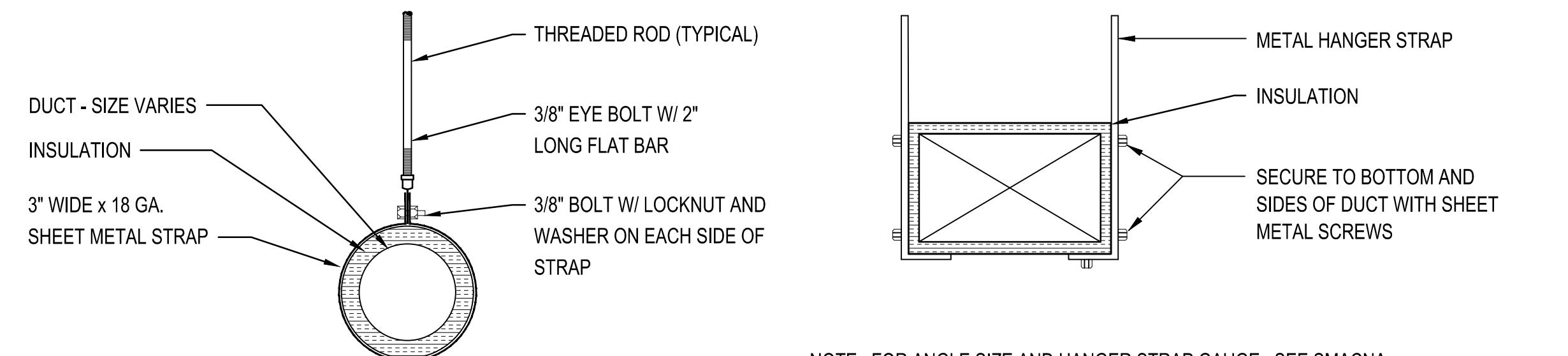
1 2 3 4 5 6

F



(E2) TYPICAL PIPE SUPPORT DETAILS

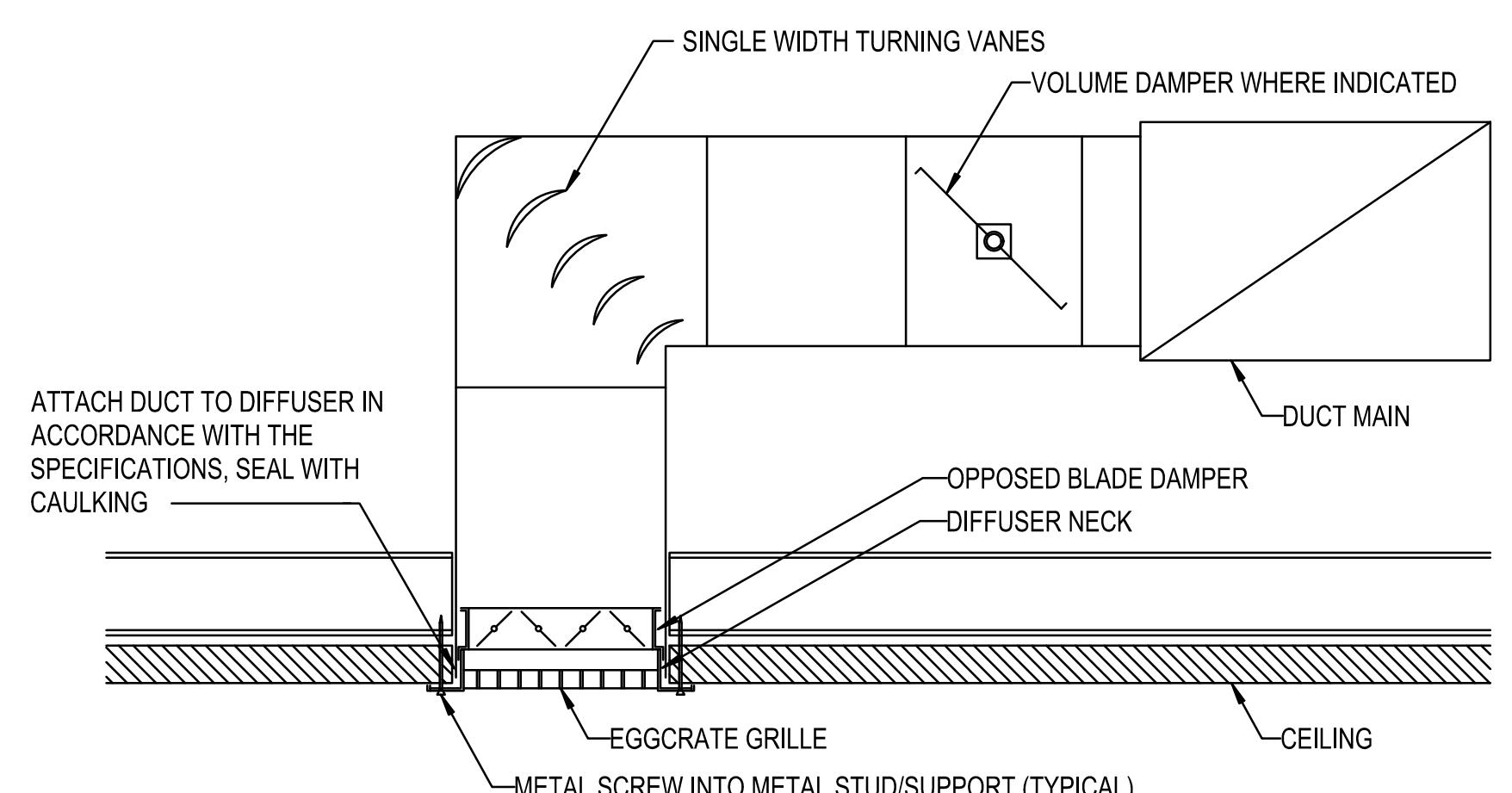
NOT TO SCALE



NOTE: FOR ANGLE SIZE AND HANGER STRAP GAUGE, SEE SMACNA LOW PRESSURE DUCT CONSTRUCTION STANDARDS.

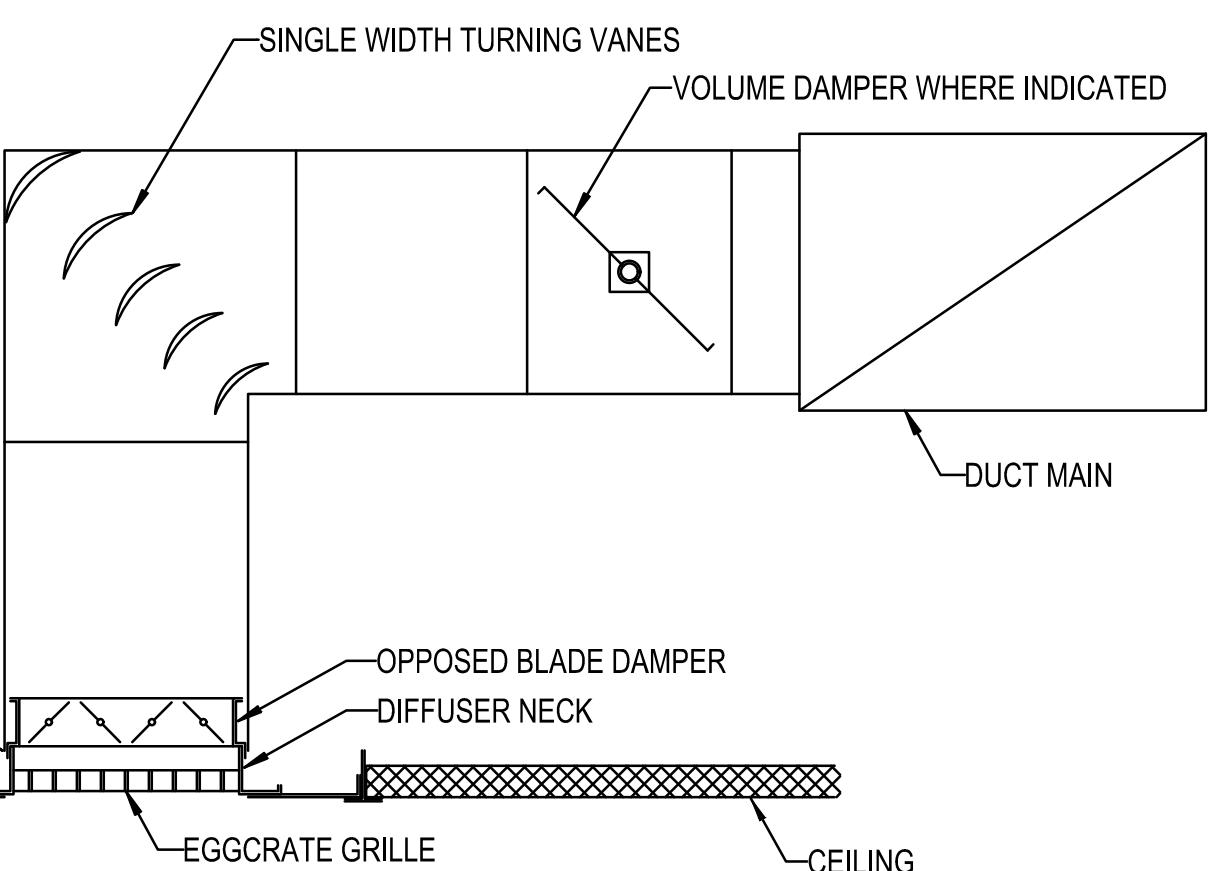
(E4) TYPICAL DUCT SUPPORT DETAILS

NOT TO SCALE



(A2) TYPICAL RETURN/EXHAUST GRILLE CONNECTION DETAIL

NOT TO SCALE



(A4) TYPICAL SUPPLY DIFFUSER CONNECTION DETAIL

NOT TO SCALE

1 2 3 4 5 6

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RIVERSIDE HEALTH SYSTEM

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FOR CONSTRUCTION  
SEAL

Revisions	Date
No. _____	_____ Description _____

RIVERSIDE HEALTH SYSTEMS  
SALUDA, VA 23149  
672 GLOUCESTER ROAD  
MECHANICAL DETAILS

Project #: 23061  
Date: 12/15/2023

Project Manager: RCP  
Designed By: CKH  
Drawn By: DMG  
Checked By: PCS

M-501

SHEET 11 OF 21

1 2 3 4 5 6

F

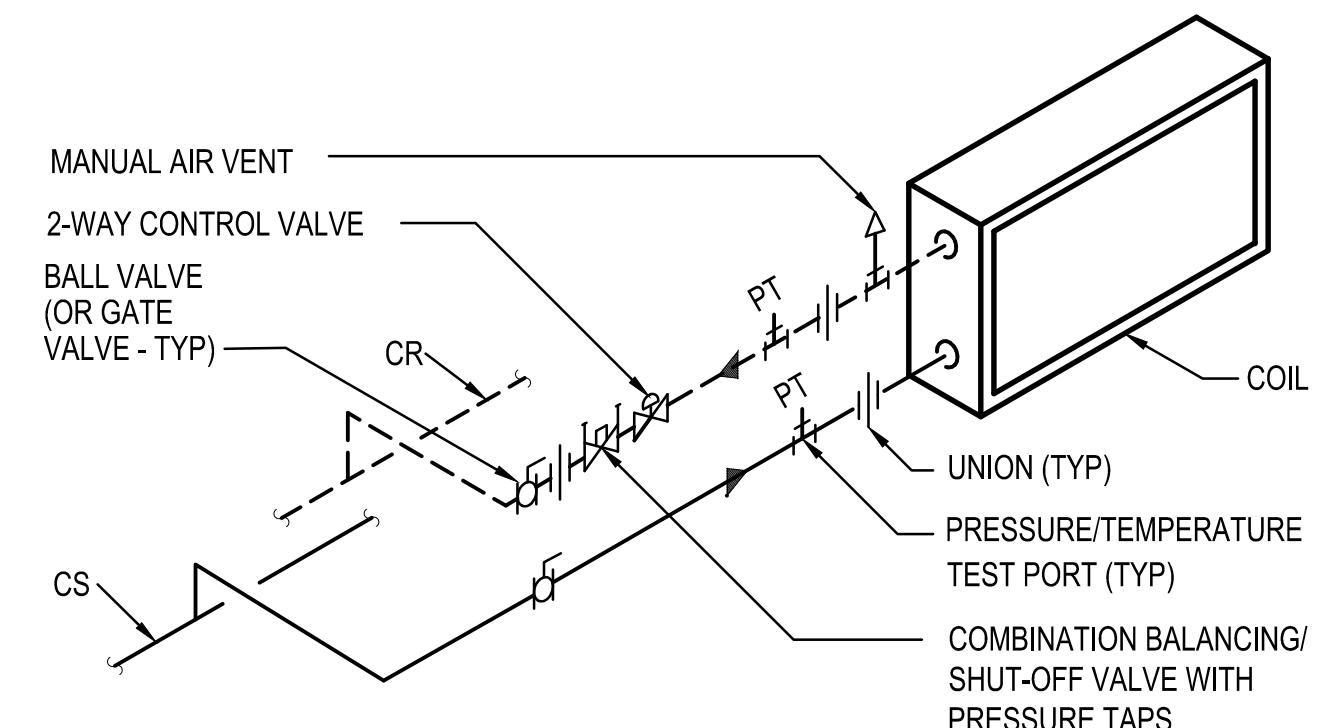
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D

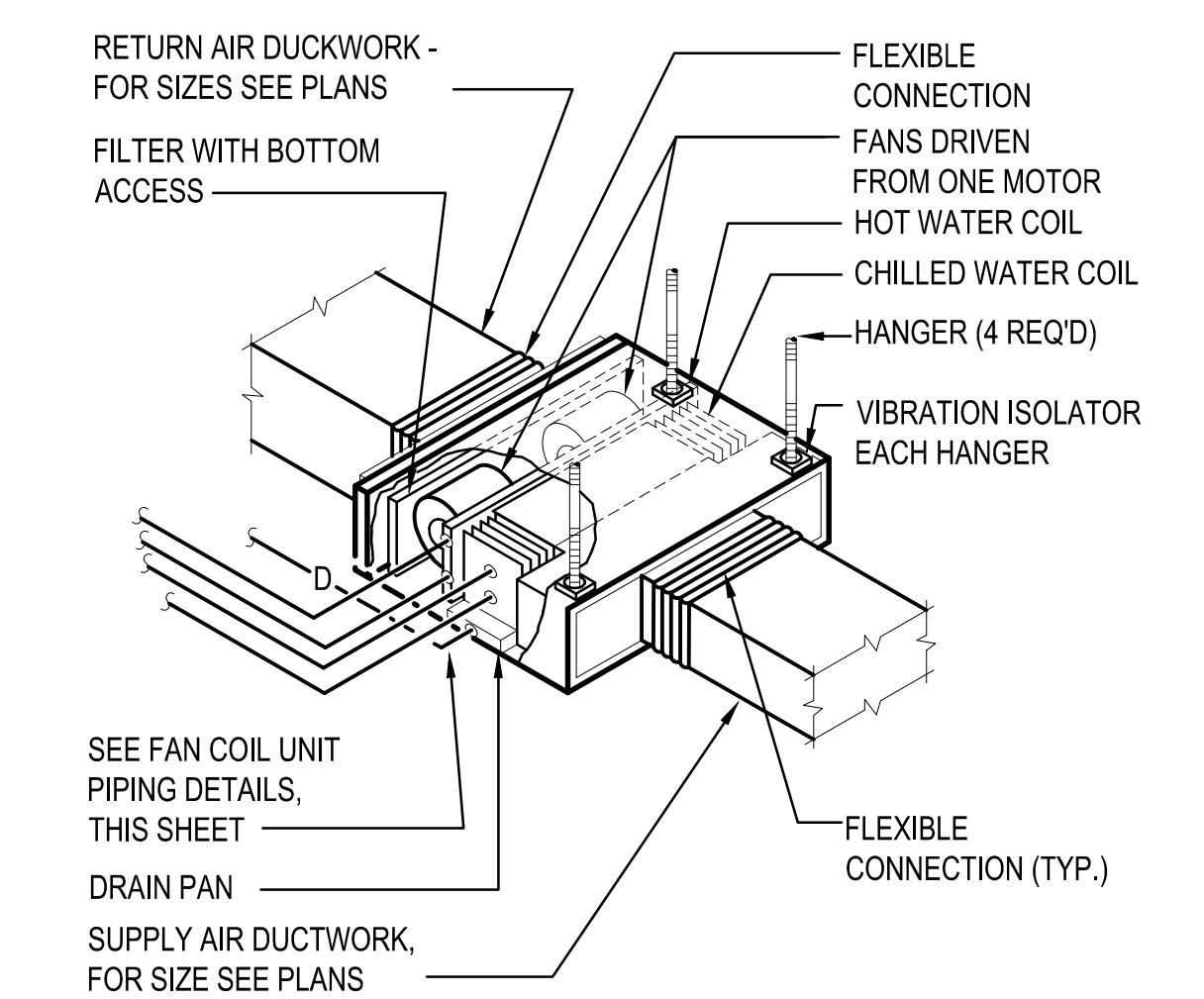
C

B

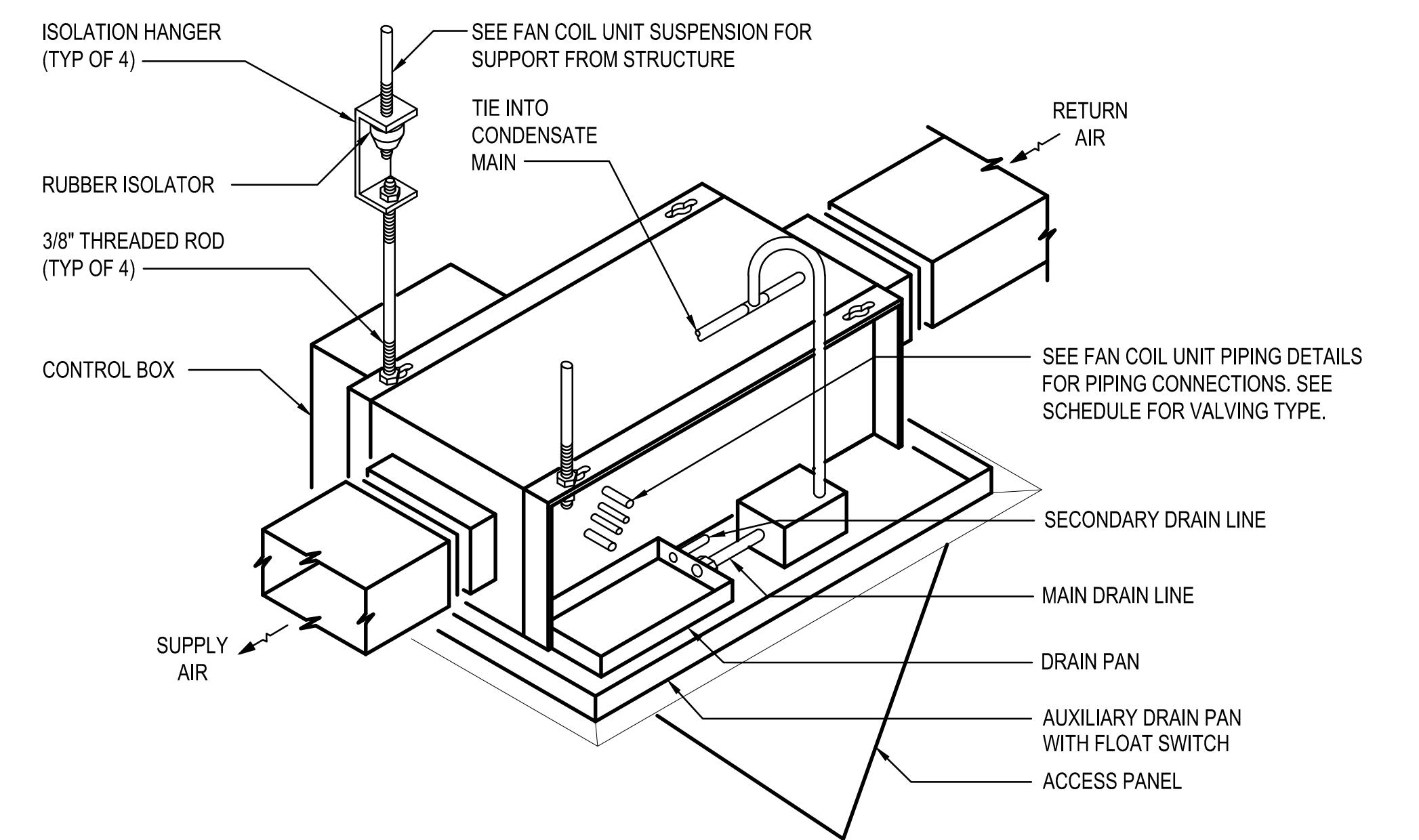
A



(D3) FCU COOLING COIL PIPING DETAIL  
NOT TO SCALE



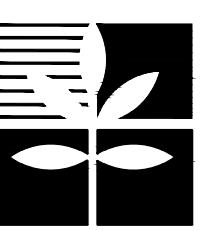
(D5) HORIZONTAL CONCEALED FCU DETAIL - 4 PIPE  
NOT TO SCALE



(B4) CONCEALED FAN COIL UNIT INSTALLATION DETAIL  
NOT TO SCALE



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RIVERSIDE HEALTH SYSTEM



Revisions

Description

No.

RIVERSIDE HEALTH SYSTEMS  
SALUDA CC HVAC UPDATES  
MECHANICAL DETAILS

SALUDA, VA 23149

672 GLOUCESTER ROAD

Project #: 23061  
Date: 12/15/2023

Project Manager: RCP  
Designed By: CKH  
Drawn By: DMC  
Checked By: PCS

M-502

SHEET 12 OF 21

### DEDICATED OUTDOOR AIR UNIT SCHEDULE

TAG NO.	SUPPLY FAN DATA						HOT WATER HEATING COIL DATA								CHILLED WATER COOLING COIL DATA								REHEAT HOT WATER COIL DATA										
	C.F.M. (MAX./MIN.)	O.A. C.F.M.	E.S.P. (IN. WG.)	T.S.P. (IN. WG.)	FAN TYPE	ELECTRICAL DATA		TOTAL CAPACITY M.B.H.	E.D.B. (°F)	L.D.B. (°F)	E.W.T. (°F)	G.P.M.	L.W.T. (°F)	MAX. A.P.D. (IN. WG.)	MAX. W.P.D. (FT. WG.)	TOTAL CAPACITY M.B.H.	E.D.B. (°F)	E.W.B. (°F)	L.D.B. (°F)	L.W.B. (°F)	E.W.T. (°F)	L.W.T. (°F)	G.P.M.	MAX. A.P.D. (IN. WG.)	MAX. W.P.D. (FT. WG.)	TOTAL CAPACITY M.B.H.	E.D.B. (°F)	L.D.B. (°F)	E.W.T. (°F)	G.P.M.	L.W.T. (°F)	MAX. A.P.D. (IN. WG.)	MAX. W.P.D. (FT. WG.)
						VOLTS	PHASE																										
DOAS-1	920	920	0.50	2.00	PLENUM	208	1	31.2	53.5	85.1	200	3.22	180	0.02	3.65	42.2	80.9	69.3	54.9	54.7	45	55	8.40	0.30	2.39	33.3	55.0	88.7	200	3.44	180	0.02	4.11
DOAS-2	810	810	0.50	2.00	PLENUM	208	1	26.7	54.4	85.1	200	2.76	180	0.01	4.48	36.3	80.5	69.0	54.9	54.7	45	55	7.23	0.20	4.14	30.7	55.0	90.3	200	3.17	180	0.01	5.84
DOAS-3	1270	1270	0.50	2.00	PLENUM	208	1	46.1	51.2	85.1	200	4.76	180	0.03	7.53	61.0	81.7	70.0	54.9	54.8	45	55	12.16	0.50	4.82	49.9	55.0	91.6	200	5.15	180	0.03	8.73

NOTES:

1. LEAVING AIR TEMPERATURE IS TO BE PROVIDED AT THE UNIT DISCHARGE. TOTAL & SENSIBLE CAPACITIES ARE "NET" VALUES TO BE PROVIDED DOWNSTREAM OF THE SUPPLY AIR FAN.
- [2. PROVIDE WITH MOTOR STARTER(S) SIZED IN ACCORDANCE WITH NEMA RECOMMENDATIONS.]
- [2. PROVIDE WITH INVERTER DUTY RATED MOTOR(S) AND VARIABLE FREQUENCY DRIVE(S)]
3. PROVIDE WITH THE FOLLOWING SECTIONS: [MIXING BOX], [ECONOMIZER], [ANGLED FILTER], [FLAT FILTER], [MEDIUM ACCESS], [PREHEAT COIL], [MEDIUM ACCESS], [COOLING COIL], [MEDIUM ACCESS], [REHEAT COIL], [MEDIUM ACCESS], [FAN], [DIFFUSER], [FINAL FILTER]
4. [PROVIDE A SEPARATE 120 VOLT/1 PHASE ELECTRICAL CONNECTION FOR FACTORY MOUNTED SERVICE MODULE FOR SERVICE LIGHT AND RECEPTACLE.]

GRILLE, REGISTER & DIFFUSER SCHEDULE							
TAG	TYPE	FACE DIMENSION	SERVICE	C.F.M. RANGE	NECK SIZE	MAX. P.D.	MANUFACTURER/ MODEL NO.
A	LOUVERED FACE ADJUSTABLE LAY-IN CEILING DIFFUSER	24"X24"	SUPPLY	0-115	6"ø	0.08	PRICE ASCD
B	LOUVERED FACE ADJUSTABLE LAY-IN CEILING DIFFUSER	24"X24"	SUPPLY	120-225	8"ø	0.08	PRICE ASCD
C	LOUVERED FACE ADJUSTABLE LAY-IN CEILING DIFFUSER	24"X24"	SUPPLY	230-400	10"ø	0.08	PRICE ASCD
D	LOUVERED FACE ADJUSTABLE LAY-IN CEILING DIFFUSER	24"X24"	SUPPLY	405-625	12"ø	0.08	PRICE ASCD
F	LOUVERED FACE ADJUSTABLE LAY-IN CEILING DIFFUSER	12"x12"	SUPPLY	0-115	6"ø	0.08	PRICE ASCD
G	LOUVERED FACE ADJUSTABLE LAY-IN CEILING DIFFUSER	12"x12"	SUPPLY	120-225	8"ø	0.08	PRICE ASCD
L	CEILING LAY-IN RETURN GRILLE 45° DEFLECTION, 3/4" SPACING	24"x24"	RETURN	0-420	12"x12"	0.05	PRICE 530
M	CEILING LAY-IN RETURN GRILLE 45° DEFLECTION, 3/4" SPACING	24"x24"	RETURN	425-730	20"x20"	0.05	PRICE 530
Q	CEILING LAY-IN RETURN GRILLE 45° DEFLECTION, 3/4" SPACING	12"x12"	EXHAUST	0-225	12"x12"	0.05	PRICE 530

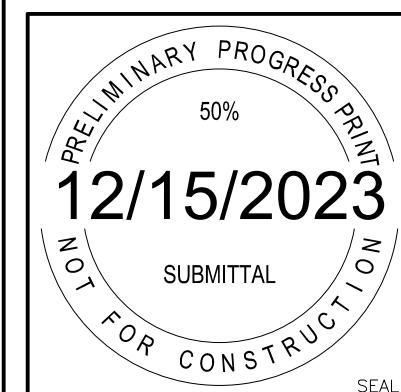
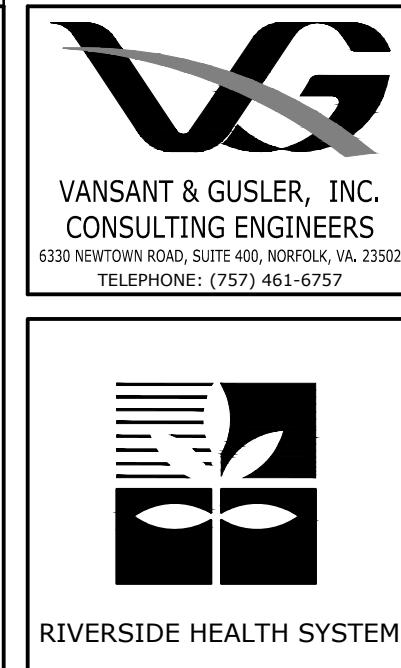
THE FOLLOWING NOTES ARE TYPICAL UNLESS OTHERWISE NOTED:

1. SELECTIONS BASED ON PRICE
2. PROVIDE ALUMINUM DIFFUSERS AND REGISTERS WITH OPPOSED BLADE VOLUME DAMPERS, BAKED STANDARD WHITE ENAMEL FINISH (INCLUDING HEAD OF SCREWS), MAXIMUM NC=25 AT HIGHEST CFM AND PROVIDE SQUARE TO ROUND TRANSITION AS REQUIRED.
3. PROVIDE 4-WAY PATTERN CEILING DIFFUSERS, UNLESS OTHERWISE NOTED ON PLANS OR SCHEDULE.
4. MAXIMUM PRESSURE DROP SHALL INCLUDE VOLUME DAMPER WHERE DAMPER IS PROVIDED.

HVAC DESIGN CONDITIONS						
CONDITIONED AREA	indoors		outdoors			
	summer		winter	summer		
	°F D.B.	% R.H.	°F D.B.	°F W.B.	°F D.B.	
RHS SALUDA RESIDENT AREAS	72.0	50	70.0	95.1	75.7	18.5

NOTES:

1. OUTDOOR CONDITIONS ARE FOR SALUDA, VIRGINIA AT 99.6% HEATING AND 0.4% COOLING.
2. INDOOR DESIGN TEMPERATURE HAS A +/- 2°F DEADBAND AND A +/- 10% RH DEADBAND.



Revisions	Date
No.	

RIVERSIDE HEALTH SYSTEMS SALUDA CC HVAC UPDATES	
MECHANICAL SCHEDULES	
672 GLOUCESTER ROAD	
Project #:	23061
Date:	12/15/2023
Project Manager:	RCP
Designed By:	CKH
Drawn By:	DMG
Checked By:	PCS

M-601  
SHEET 13 OF 21



VANSANT & GUSLER, INC.  
CONSULTING ENGINEERS  
6330 NEWTON ROAD, SUITE 400, NORFOLK, VA 23502  
TELEPHONE: (757) 461-6757



RIVERSIDE HEALTH SYSTEM



Revisions	Date
No.	

RIVERSIDE HEALTH SYSTEMS SALUDA CC HVAC UPGRADES		SALUDA, VA 23149
MECHANICAL SCHEDULES		672 GLOUCESTER ROAD

Project #: 23061  
Date: 12/15/2023

Project Manager: RCP  
Designed By: CKH  
Drawn By: DMG  
Checked By: PCS

M-602  
SHEET 14 OF 21

### 4-PIPE FAN COIL UNIT SCHEDULE

TAG NO.	APPROX. C.F.M. (U.O.N.)	O.A. C.F.M.	EXTERNAL STATIC PRESSURE (IN. WG.)	CHILLED WATER COOLING DATA			HOT WATER HEATING COIL			FAN MOTOR H.P.
				MIN. TOTAL CAPACITY (B.T.U./HR)	MIN. SENS. CAPACITY (B.T.U./HR)	G.P.M.	MAX. PD (FT. WG.)	MIN. CAPACITY (B.T.U./HR)	G.P.M.	
FCU-1	400	20	0.10	12,414	9,524	2.5	2.17	20,776	2.1	0.22
FCU-2	400	20	0.10	12,414	9,524	2.5	2.17	20,776	2.1	0.22
FCU-3	400	20	0.10	12,414	9,524	2.5	2.17	20,776	2.1	0.22
FCU-4	400	20	0.10	12,414	9,524	2.5	2.17	20,776	2.1	0.22
FCU-5	400	20	0.10	12,414	9,524	2.5	2.17	20,776	2.1	0.22
FCU-6	400	20	0.10	12,414	9,524	2.5	2.17	20,776	2.1	0.22
FCU-7	400	20	0.10	12,414	9,524	2.5	2.17	20,776	2.1	0.22
FCU-8	400	20	0.10	12,414	9,524	2.5	2.17	20,776	2.1	0.22
FCU-9	400	20	0.10	12,414	9,524	2.5	2.17	20,776	2.1	0.22
FCU-10	400	20	0.10	12,414	9,524	2.5	2.17	20,776	2.1	0.22
FCU-11	400	20	0.10	12,414	9,524	2.5	2.17	20,776	2.1	0.22
FCU-12	400	20	0.10	12,414	9,524	2.5	2.17	20,776	2.1	0.22
FCU-13	400	20	0.10	12,414	9,524	2.5	2.17	20,776	2.1	0.22
FCU-14	400	20	0.10	12,414	9,524	2.5	2.17	20,776	2.1	0.22
FCU-15	555	25	0.10	17,460	13,360	3.6	2.57	28,710	2.9	0.55
FCU-16	400	20	0.10	12,414	9,524	2.5	2.17	20,776	2.1	0.22
FCU-17	400	20	0.10	12,414	9,524	2.5	2.17	20,776	2.1	0.22
FCU-18	400	20	0.10	12,414	9,524	2.5	2.17	20,776	2.1	0.22
FCU-19	400	20	0.10	12,414	9,524	2.5	2.17	20,776	2.1	0.22
FCU-20	400	20	0.10	12,414	9,524	2.5	2.17	20,776	2.1	0.22
FCU-21	400	20	0.10	12,414	9,524	2.5	2.17	20,776	2.1	0.22
FCU-22	400	20	0.10	12,414	9,524	2.5	2.17	20,776	2.1	0.22
FCU-23	400	20	0.10	12,414	9,524	2.5	2.17	20,776	2.1	0.22
FCU-24	400	20	0.10	12,414	9,524	2.5	2.17	20,776	2.1	0.22
FCU-25	400	20	0.10	12,414	9,524	2.5	2.17	20,776	2.1	0.22
FCU-26	400	20	0.10	12,414	9,524	2.5	2.17	20,776	2.1	0.22
FCU-27	210	10	0.10	6,406	4,916	1.3	3.11	12,334	1.3	0.44
FCU-28	240	15	0.10	7,649	5,859	1.6	1.71	13,531	1.4	0.08
FCU-29	1000	100	0.25	27,164	21,234	5.5	1.63	60,816	6.2	4.12
FCU-30	635	50	0.25	16,850	13,180	3.4	3.80	29,440	3.0	0.57
FCU-31	400	20	0.10	12,414	9,524	2.5	2.17	20,776	2.1	0.22
FCU-32	400	20	0.10	12,414	9,524	2.5	2.17	20,776	2.1	0.22
FCU-33	400	20	0.10	12,414	9,524	2.5	2.17	20,776	2.1	0.22
FCU-34	400	20	0.10	12,414	9,524	2.5	2.17	20,776	2.1	0.22
FCU-35	400	20	0.10	12,414	9,524	2.5	2.17	20,776	2.1	0.22
FCU-36	400	20	0.10	12,414	9,524	2.5	2.17	20,776	2.1	0.22
FCU-37	400	20	0.10	12,414	9,524	2.5	2.17	20,776	2.1	0.22
FCU-38	400	20	0.10	12,414	9,524	2.5	2.17	20,776	2.1	0.22
FCU-39	400	20	0.10	12,414	9,524	2.5	2.17	20,776	2.1	0.22
FCU-40	400	20	0.10	12,414	9,524	2.5	2.17	20,776	2.1	0.22
FCU-41	400	20	0.10	12,414	9,524	2.5	2.17	20,776	2.1	0.22
FCU-42	400	20	0.10	12,414	9,524	2.5	2.17	20,776	2.1	0.22
FCU-43	400	20	0.10	12,414	9,524	2.5	2.17	20,776	2.1	0.22
FCU-44	400	20	0.10	12,414	9,524	2.5	2.17	20,776	2.1	0.22
FCU-45	400	20	0.10	12,414	9,524	2.5	2.17	20,776	2.1	0.22
FCU-46	400	20	0.10	12,414	9,524	2.5	2.17	20,776	2.1	0.22
FCU-47	400	20	0.10	12,414	9,524	2.5	2.17	20,776	2.1	0.22
FCU-48	400	20	0.10	12,414	9,524	2.5	2.17	20,776	2.1	0.22
FCU-49	280	10	0.10	8,869	3,789	1.8	2.34	15,831	1.6	0.84
FCU-50	280	10	0.10	8,869	3,789	1.8	2.34	15,831	1.6	0.84

NOTES:

1. UNITS SHALL BE THE HORIZ. CONCEALED TYPE WITH DIRECT DRIVE FAN(S), HINGED BOTTOM ACCESS, 3 ROW COOLING, AND 1 ROW HEATING COIL CONFIGURATION.
2. PROVIDE AUXILIARY DRAIN PAN UNDER UNIT VALVES.
3. UNIT COOLING CAPACITIES BASED ON 45°F ENT. WATER TEMP., 80°F DB/67°F WB ENT. AIR TEMP., WET COIL, AND MEDIUM OR LOW FAN SPEED OPERATION.
4. UNIT HEATING CAPACITY BASED ON 200°F ENT. WATER TEMP., 70°F ENT. AIR TEMP., AND MEDIUM OR LOW FAN SPEED OPERATION.
5. 120 VOLTS, SINGLE PHASE POWER REQUIREMENT. PROVIDE WITH DOOR INTERLOCKING DISCONNECT SWITCH AND SILENT SOLID STATE RELAY.
6. DESIGN BASED ON ENVIRO-TECH.

Project Manager: RCP  
Designed By: CKH  
Drawn By: DMG  
Checked By: PCS

M-602

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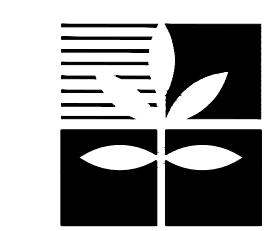
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VANSANT & GUSLER, INC.  
CONSULTING ENGINEERS  
6330 NEWTOWN ROAD, SUITE 400, NORFOLK, VA 23502  
TELEPHONE: (757) 461-6752



RIVERSIDE HEALTH SYSTEM



## Revisions

No. \_\_\_\_\_ Description \_\_\_\_\_ Date \_\_\_\_\_

RIVERSIDE HEALTH SYSTEMS  
SALUDA CC HVAC UPGRADES  
672 GLOUCESTER ROAD  
SALUDA, VA 23149

MECHANICAL FLOW DIAGRAMS

Project #:	23061
Date:	12/15/2023

Project Manager:	RCP
Designed By:	CKH
Drawn By:	DMG
Checked By:	PCS

M-701

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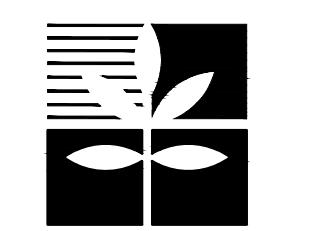
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VANSANT & GUSLER, INC.  
CONSULTING ENGINEERS  
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TELEPHONE: (757) 461-6757



RIVERSIDE HEALTH SYSTEM



SEAL

## Revisions

No. \_\_\_\_\_ Description \_\_\_\_\_ Date \_\_\_\_\_

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