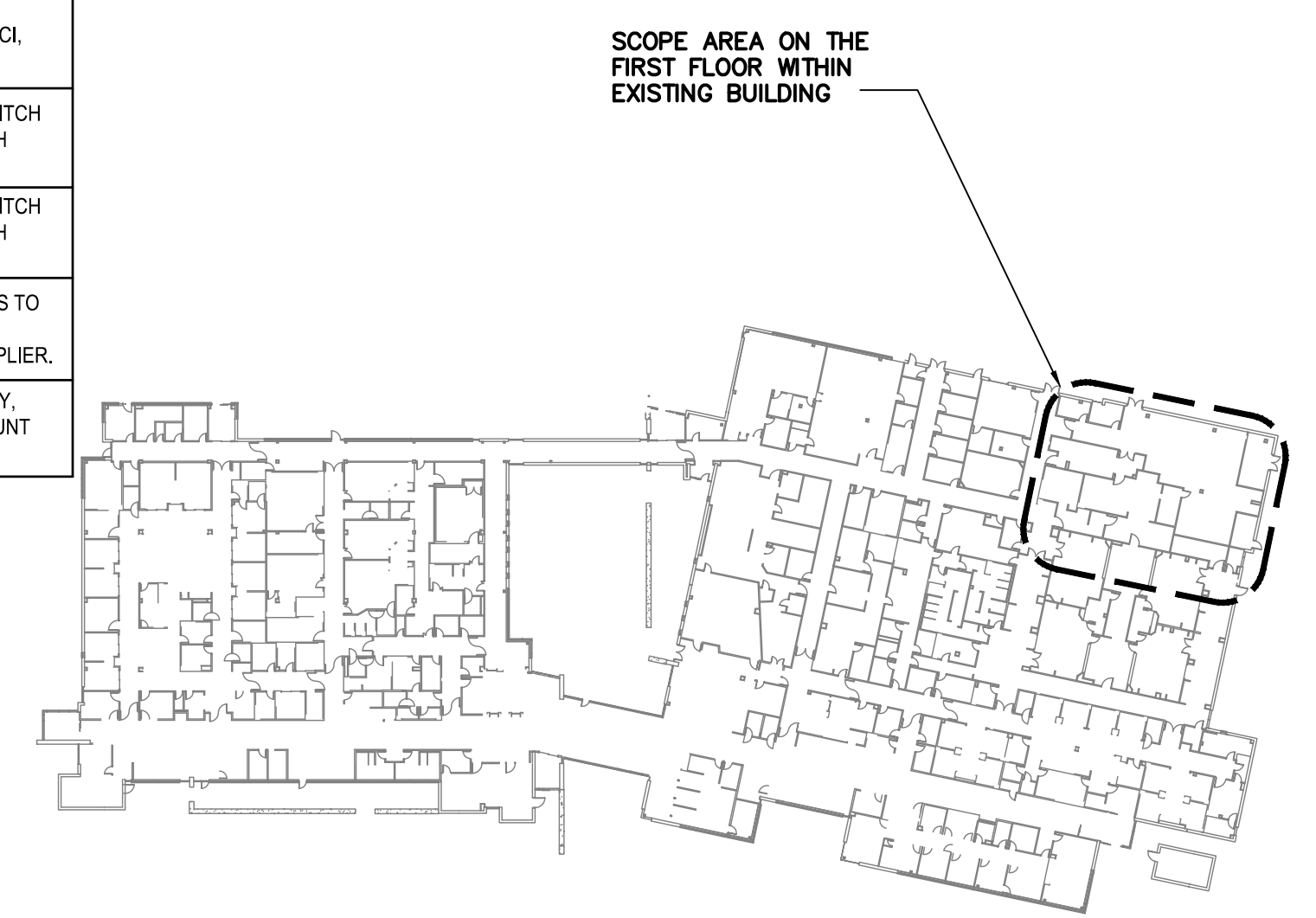


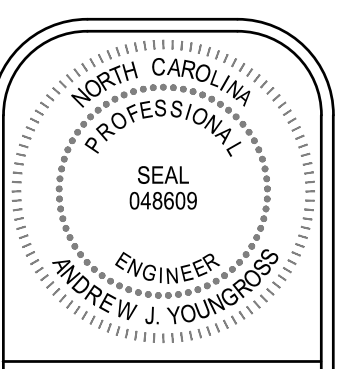
PLAN KEY NOTES	
1	ITEM #01 - CART WASHER. FURNISH & INSTALL NEMA-3R, 200A-3P FUSED DISCONNECT (480V-3P, L1-L2-L3-GRD), PROVIDE 150A FUSES. COORDINATE DISCONNECT LOCATION WITH EQUIPMENT SUPPLIER.
2	ITEM #02 - ENDOSCOPE. FURNISH & INSTALL L15-30 LOCKING RECEPTACLE (208V-3P, L1-L2-L3-GRD). FURNISH AND INSTALL NORTH SHORE SAFETY #PGFS-83105-137 GFCI AUTO RECOVERY ON POWER LOSS (W/O NEUTRAL) INLINE WITH LOCKING RECEPTACLE. ALSO, INSTALL RECEPTACLE AND DATA OUTLET FOR ENDOSCOPE PRINTER. COORDINATE RECEPTACLE & DATA OUTLET LOCATION WITH EQUIPMENT SUPPLIER.
3	ITEM #04 - 3-COMPARTMENT PROCESSING SINK. FURNISH AND INSTALL 15A, 120V, GFCI, HOSPITAL GRADE RECEPTACLE (140W). COORDINATE RECEPTACLE WITH EQUIPMENT SUPPLIER.
4	ITEM #05 - 3-COMPARTMENT PROCESSING SINK. FURNISH AND INSTALL 15A, 120V, GFCI, HOSPITAL GRADE RECEPTACLE (140W). COORDINATE RECEPTACLE WITH EQUIPMENT SUPPLIER.
5	ITEM #06 - WASHER. FURNISH & INSTALL NEMA-3R, 60A-3P FUSED DISCONNECT (480V-3P, L1-L2-L3-GRD), PROVIDE 50A FUSES. COORDINATE DISCONNECT LOCATION WITH EQUIPMENT SUPPLIER.
6	ITEM #07 - STERILIZER. FURNISH & INSTALL NEMA-3R, 30A-3P FUSED DISCONNECT (208V-3P, L1-L2-L3-GRD), PROVIDE 15A FUSES. COORDINATE DISCONNECT LOCATION WITH EQUIPMENT SUPPLIER. PROVIDE 20A-1P CIRCUITRY FOR STERILIZER CONTROLS. PROVIDE A DATA OUTLET FOR EACH PIECE OF EQUIPMENT.
7	ITEM #08 - RELOCATED ULTRASOUND. FURNISH AND INSTALL 20A, 120V, GFCI HOSPITAL GRADE RECEPTACLE. COORDINATE RECEPTACLE WITH EQUIPMENT SUPPLIER.
8	RO #02 - RO CONTROLLER. FURNISH & INSTALL A DEDICATED NEMA 5-20R, HEAVY DUTY, HOSPITAL GRADE, GFCI, 120V RECEPTACLE, (L1,N, GND), COORDINATE HEIGHT WITH EQUIPMENT SUPPLIER.
9	RO #03 - RO PUMP. 250V-3 PHASE (L1,L2,L3, GND), COORDINATE WITH EQUIPMENT SUPPLIER WHETHER EQUIPMENT USES A HARD WIRED CONNECTION OR IF RECEPTACLE NEEDS TO BE PROVIDED. COORDINATE MOUNTING HEIGHT OF J-BOX OR RECEPTACLE WITH EQUIPMENT SUPPLIER.
10	RO #04 - DI EXCHANGE TANKS. DEDICATED NEMA 5-20R, HEAVY DUTY, HOSPITAL GRADE, GFCI, 120V RECEPTACLE (L1,N,GND). MOUNT AT 72" A.F.F.
11	RO #05 - DISTRIBUTION PUMP. NEMA 6-15R, 250V-1PHASE (L1,L2,GND) RECEPTACLE, COORDINATE MOUNTING HEIGHT WITH EQUIPMENT SUPPLIER.
12	RO #06 - ALARM PANEL WITH REMOTE DI QUALITY LIGHT. DEDICATED NEMA 5-20R, HEAVY DUTY, HOSPITAL GRADE, GFCI, 120V RECEPTACLE (L1, N, GND), MOUNT AT 72" A.F.F.
13	FURNISH AND INSTALL NEMA-3R, 20A-120V MOTOR RATED SWITCH FOR MEANS OF DISCONNECT. EF-1 TO BE INTERLOCKED WITH CART WASHER OPERATION.
14	FURNISH AND INSTALL NEMA-3R, 20A-120V MOTOR RATED SWITCH FOR MEANS OF DISCONNECT. EF-2 TO BE INTERLOCKED WITH WASHER OPERATION.
15	AUTOMATIC DOOR OPENER. PROVIDE CONDUIT/CONDUCTORS TO AUTOMATIC DOOR OPENER MOTOR AND PUSH BUTTONS. COORDINATE EXACT REQUIREMENTS WITH EQUIPMENT SUPPLIER.
16	RO #07 - UV ASSEMBLY. DEDICATED NEMA 5-20R, HEAVY DUTY, HOSPITAL GRADE, GFCI, 120V RECEPTACLE (L1, N, GND), MOUNT AT 72" A.F.F.

EQUIPMENT SCHEDULE			
ITEM	DESCRIPTION	MANUF.	MODEL
1	CART WASHER	STEELECO	LC8012
2	ENDOSCOPE CLEANER	EVOTECH	SP60
3	SINK W/ EYEWASH	-	-
4	3-COMP PROCESSING SINK	MAC MEDICAL	W/ SIDE TOP
5	3-COMP PROCESSING SINK	MAC MEDICAL	-
6	WASHER	STEELECO	DS 1000 IS
7	STERILIZER	STERIS	AMSCO CENTURY
8	ULTRASONIC CLEANER	EXISTING	EXISTING



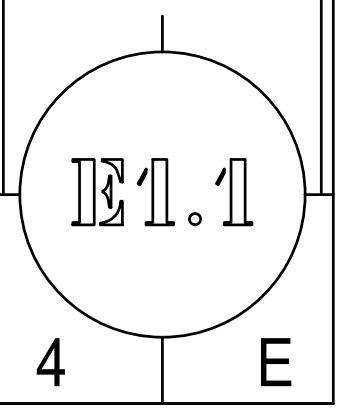
**C.D. HAIR ARCHITECT**  
 2250 Vista Parkway  
 West Palm Beach, FL  
 15034

revision:

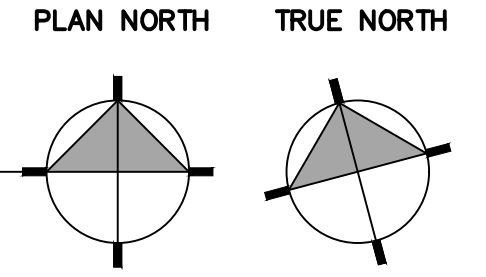



An Interior Renovation for:  
**Harnett Health**  
**Central Sterile Renovation**  
 215 Brightwater Drive  
 Lillington, North Carolina


job no. 24-029/25157  
 principal: AJY  
 designer: RR/HL/KS  
 file name:  
 date: 09.26.25  
 title: **ELECTRICAL PLAN**



**ELECTRICAL PLAN**  
3/16"=1'-0"



**OVERALL FIRST FLOOR PLAN**  
NTS

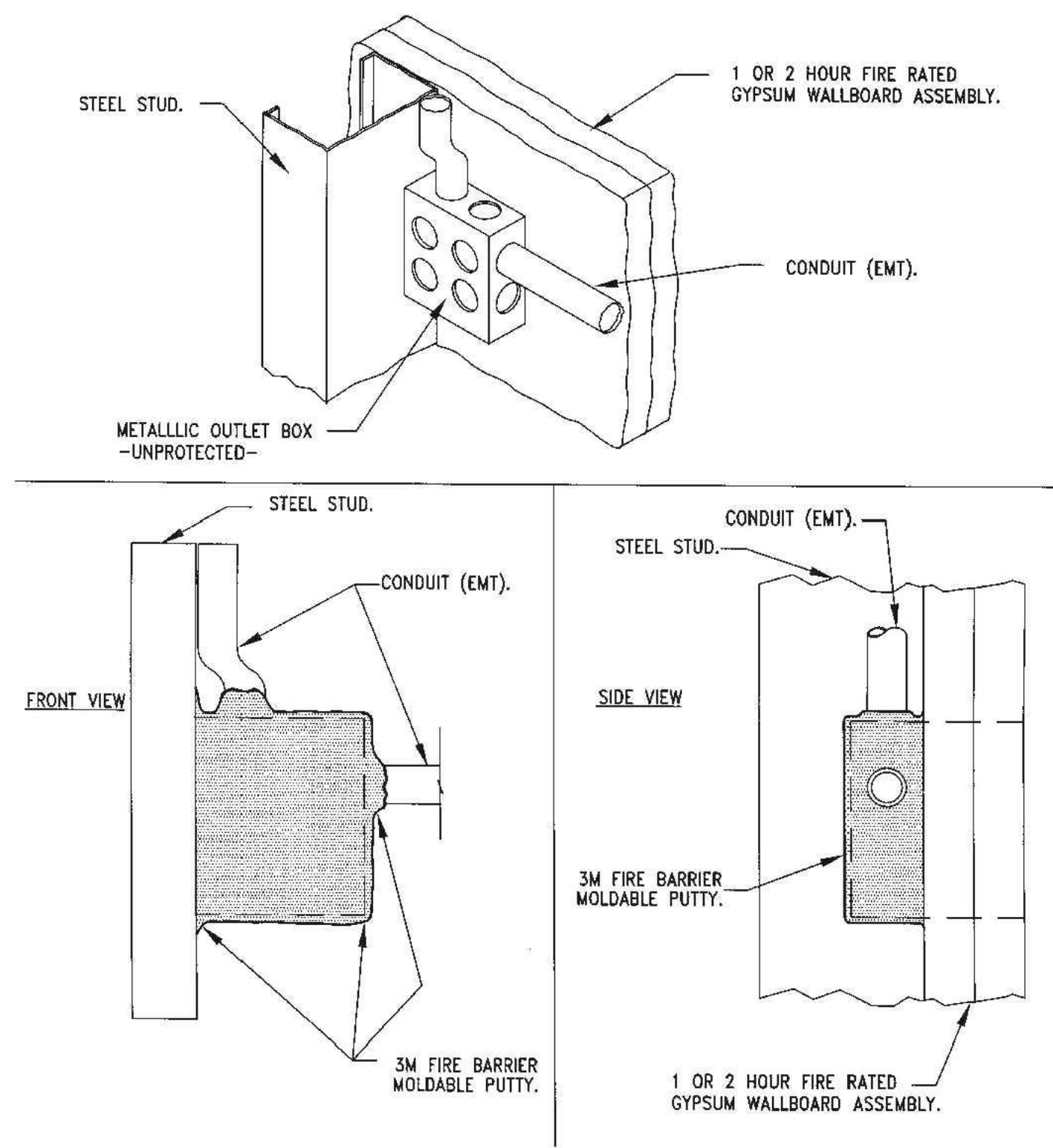
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HVAC  
 PLUMBING  
 ELECTRICAL



### Suggested Installation for 3M™ Fire Barrier Moldable Putty+ on Electrical Outlet Boxes

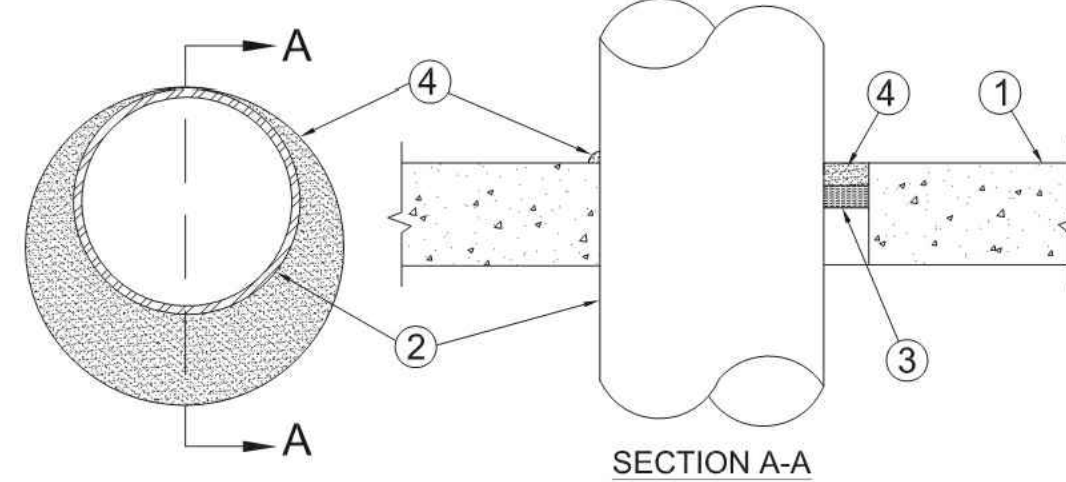


3M Fire Protection Products  
www.3m.com/firestop

CLIV • 1 of 2

Product Support Line  
1-800-328-1687

### System No. C-AJ-1001 March 05, 2007 F Rating - 3 Hr T Rating - 0 Hr W Rating - Class 1 (See Item 4)



- Floor or Wall Assembly** - Min 4-1/2 in. (114 mm) thick lightweight or normal weight (100-150 pcf or 1600-2400 kg/m<sup>3</sup>) concrete. Wall may also be constructed of any UL Classified Concrete Blocks\*. Max diam of circular through opening is 32-1/2 in. (826 mm). See Concrete Blocks (CAZT) category in the Fire Resistance Directory for names of manufacturers.
- Steel Sleeve** (Optional, not shown) - Nom 12 in. (305 mm) diam (or smaller) Schedule 40 (or heavier) steel pipe sleeve cast into concrete floor or wall. Sleeve to be flush with or project max 2 in. (51 mm) from top surface of floor or from both surfaces of wall. As an alternate, nom 12 in. (305 mm) diam (or smaller) sleeve fabricated from nom 0.019 in. (0.48 mm) thick galv steel cast or grouted into floor or wall assembly flush with floor or wall surfaces.
- Through Penetrant** - One metallic pipe, conduit or tubing installed either concentrically or eccentrically within the firestop system. The annular space between pipe, conduit or tubing and periphery of opening shall be min of 0 in. (0 mm, point contact) to max 1-3/8 in. (35 mm). Pipe, conduit or tubing to be rigidly supported on both sides of wall assembly. The following types and sizes of metallic pipes, conduits or tubing may be used:
  - Steel Pipe** - Nom 30 in. (762 mm) diam (or smaller) Schedule 10 (or heavier) steel pipe.
  - Iron Pipe** - Nom 30 in. (762 mm) diam (or smaller) cast or ductile iron pipe.
  - Conduit** - Nom 6 in. (152 mm) diam (or smaller) rigid steel conduit.
  - Conduit** - Nom 4 in. (102 mm) diam (or smaller) steel electrical metallic tubing.
- Packing Material** - Polyethylene backer rod or nom 1 in. (25 mm) thickness of tightly-packed ceramic (alumina silica) fiber blanket, mineral wool batt or glass fiber insulation material used as a permanent form. Packing material to be recessed from top surface of floor or from both surfaces of solid concrete or concrete block wall as required to accommodate the required thickness of caulk fill material (Item 4). As an alternate when max pipe size is 10 in. (254 mm) diam and when max annular space is 1 in. (25 mm), a min 1 in. (25 mm) thickness of tightly-packed ceramic fiber blanket or mineral wool batt packing material may be recessed min 1/2 in. (13 mm) from bottom surface of floor or from either side of solid concrete wall.
- Fill, Void or Cavity Materials** - **Caulk or Sealant** - Applied to fill the annular space to the min thickness shown in the following table:

Max Pipe Diam In. (mm)	Max Annular Space In. (mm)	Packing Mat Type (a)	Min Caulk Takes In. (mm)
10 (254)	1 (25)	BR, CF, GF or MW	1/2 (13)(b)
10 (254)	1 (25)	CF or MW	1/2 (13)(c)
30 (762)	2-1/2 (64)	BR, CF, GF or MW	1 (25)(b)

- (a) BR = Polyethylene backer rod.  
CF = Ceramic fiber blanket.  
GF = Glass fiber insulation.  
MW = Mineral wool batt.  
(b) Caulk installed flush with top surface of floor or both surfaces of wall.  
(c) Caulk installed flush with bottom surface of floor or one surface of solid (non-concrete block) wall.  
**3M COMPANY** - CP 25WB+ or FB-3000 WT  
(Note: W Rating applies only when FB-3000 WT is used on top surface of floor and when it laps onto concrete for sleeved opening.)

\*Bearing the UL Classification Marking

This material was extracted and drawn by 3M Fire Protection Products from the 2007 edition of the UL Fire Resistance Directory. ©UL US

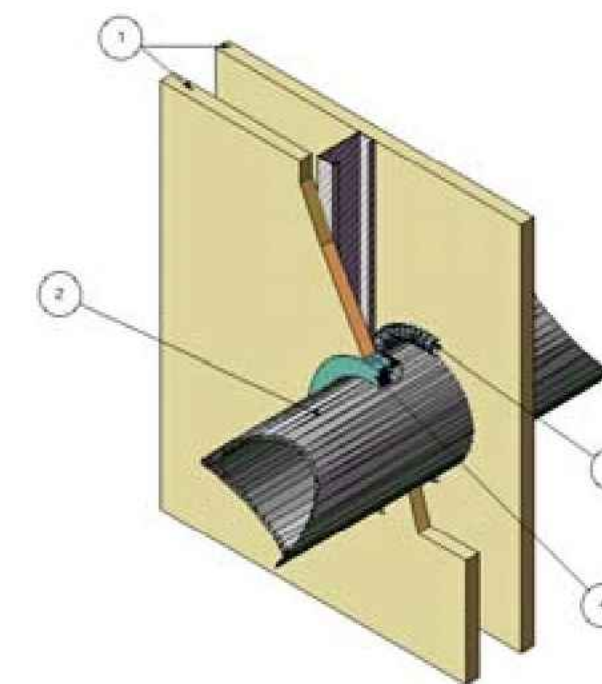
3M Fire Protection Products  
www.3m.com/firestop

C-AJ-1001 • 1 of 1

Product Support Line: 1-800-328-1687  
Choose option 4 for FAX ON DEMAND

Through Penetrations  
Metallic Pipes  
1000 Series  
Concrete  
CAJ

### Design No. FS 118 W August 1, 2003 FIRE PENETRATION SEAL (Mechanical) Penetrating Item Type A T-Rating - 0 hr F-Rating - 2 hr



- GYPSUM WALL ASSEMBLY:** Max. opening for penetrating item in gypsum wallboard layers is to be 1-1/2 in. larger in diameter than the outside of the penetrating item. Two hour fire-rated wall assembly shall include one of the following features:
  - Min. 25 GA galvanized steel studs spaced 24 in. o.c. measuring 3-1/2 in. wide with 1-1/4-in. legs. Studs attached with min. #6 x 3/8-in. steel stud framing screws to channel shaped floor and ceiling runners measuring 1/2-in. deep by 3-1/2-in wide, which are secured to floor and ceiling with 1-in. concrete fasteners spaced max. 18-in. o.c. Studs and runners covered with two layers of 5/8 in. thick, Type X gypsum wallboard on each face. The base layer of gypsum wallboard fastened to steel studs with #6 1-1/8 in. bugle head phillips drywall screws spaced 8 in. o.c. The face layer of gypsum wallboard fastened with #6 1-5/8 in. bugle head phillips drywall screws spaced 12 in. o.c. The face layer of gypsum wallboard fastened with #6 1-5/8 in. bugle head phillips drywall screws spaced 8 in. o.c. Joint Tape and Compound - Vinyl or casein, dry or premixed joint compound applied to face layers of gypsum wallboard in two coats to all exposed screw heads and gypsum wallboard joints. A min. 2-in. wide paper, plastic or fiberglass tape embedded in first layer of compound over joints in gypsum wallboard.
  - Wood studs are to consist of min. nom. 2 x 4 lumber max. spaced 16 in. o.c. Studs attached with min. 16d common nails to 2 x 4 lumber floor and ceiling runners measuring, which are secured to floor and ceiling with 3-in. concrete fasteners spaced max. 18-in. o.c. Studs and runners covered with two layers of 5/8 in. thick, Type X gypsum wallboard on each face. The base layer of gypsum wallboard fastened to wood studs with #6 1-1/8 in. bugle head phillips drywall screws spaced 12 in. o.c. The face layer of gypsum wallboard fastened with #6 1-5/8 in. bugle head phillips drywall screws spaced 8 in. o.c. Joint Tape and Compound - vinyl or casein, dry or premixed joint compound applied to face layers of gypsum wallboard in two coats to all exposed screw heads and gypsum wallboard of compound over joints in gypsum wallboard.
- PENETRATING ITEM:** One metallic pipe, conduit or tubing to be installed concentrically within the through opening. The penetrating item is to be rigidly supported on both sides of the wall assembly. An annular space of 3/4 in. is required within the fire stop system. The following types and sizes of metallic pipes, conduit or tubing may be used:
  - Steel Pipe: Schedule 10 (or heavier) nom. 12 in. diameter (or smaller) steel pipe.
  - Conduit: Nom. 6 in. diameter (or smaller) steel conduit.
  - Conduit: Nom. 4 in. diameter (or smaller) electrical metallic tubing.
  - Copper Tubing: Type L (or heavier) nom. 6 in. diameter (or smaller) copper tubing.
  - Copper Pipe: Nom. 6 in. diameter (or smaller) Regular (or heavier) copper pipe.
- FORMING MATERIAL:** Nom. 1 in. diameter polyethylene backer rod, tightly and permanently friction fit into opening. The forming material is to be recessed from both surfaces of the wall assembly, as required to accommodate the necessary depth of sealant fill material (Item 4).
- FILL, VOID OR CAVITY MATERIAL:** Min. of 5/8 in. thickness of sealant fill material is to be applied within the annulus on both faces of the wall through-penetration.

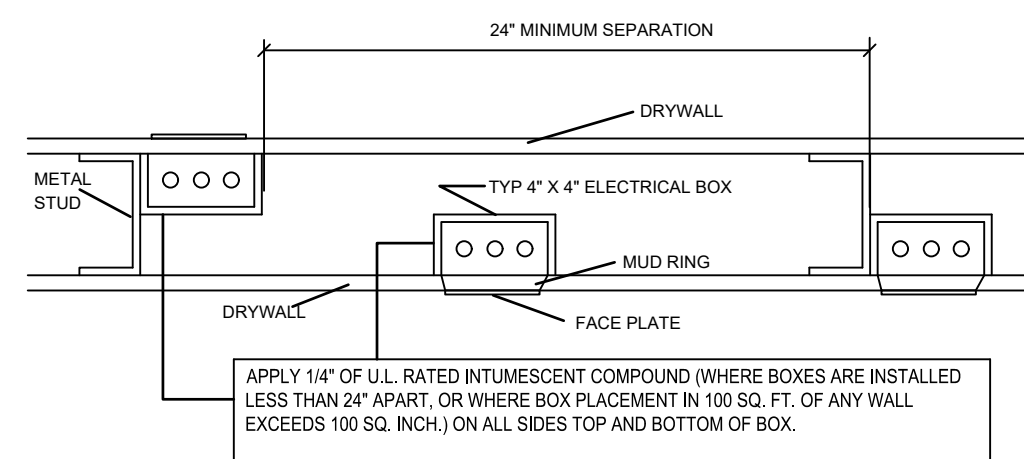
Listed Manufacturer:

3M  
Firestopping  
Firestopping Sealant

3M Fire Barrier™ 2000+ Silicone Joint Sealant

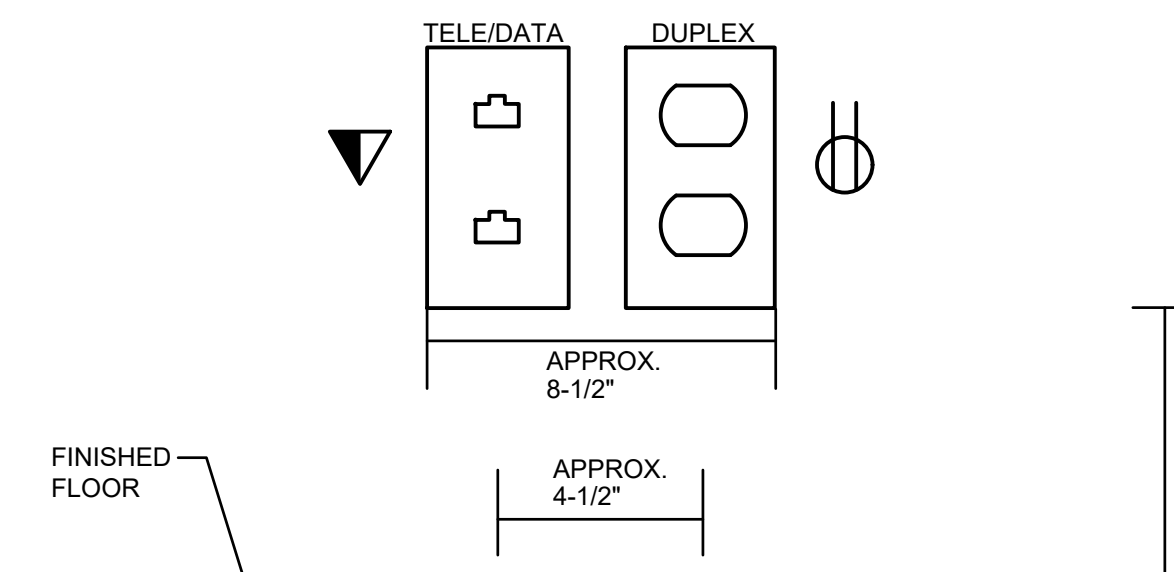
This material was extracted and drawn by 3M Fire Protection Products from the 2006 Product Directory, Intertek/Omega Point Laboratories Inc.®

Protective Wraps  
Joint Sealant  
Through Penetration - Gypsum  
FS



### BACK TO BACK ELECT. BOX MOUNTING DETAIL FOR RATED WALLS

NOT TO SCALE



### TYPICAL ELEVATION FOR PLACEMENT OF RECEPTACLE COVER PLATES IN OFFICES

NOTES:

- LAYOUT MAY BE INVERTED TO SHOW FROM LEFT TO RIGHT.
- TELE/DATA FACEPLATE CONFIGURATION SPECIFIED BY OWNERS CABLING VENDOR.
- DUPLEX SHALL BE TREATED AS A STANDARD ELECTRICAL 1900 BOX.
- BACK TO BACK EDS APPLICATIONS IN STANDARD WALLS REQUIRE AN OFFSET INSTALLATION WITH 24\"/>

### TYPICAL OFFICE WALL TELE/DATA/POWER LAYOUT DETAIL N.T.S.

### NOTE

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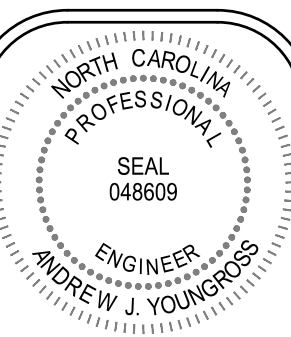
ANDREW J YOUNGROSS, P.E.  
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HVAC  
PLUMBING  
ELECTRICAL

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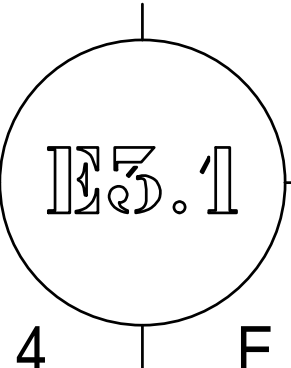
revision:

An Interior Renovation for:  
**Harnett Health  
Central Sterile Renovation**  
215 Brighwater Drive  
Lillington, North Carolina

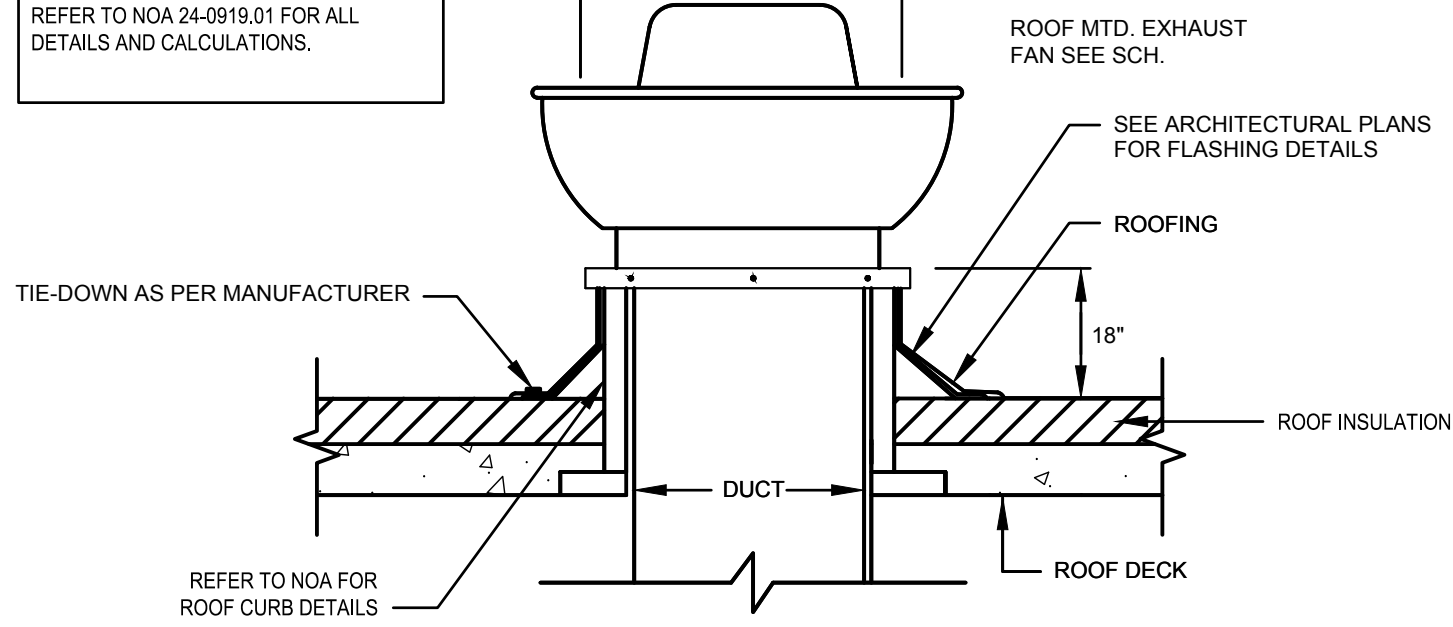

job no. 24-029/25157  
principal: AJY  
designer: RR/HL/KS  
file name:

date: 09.26.25  
title: ELECTRICAL DETAILS

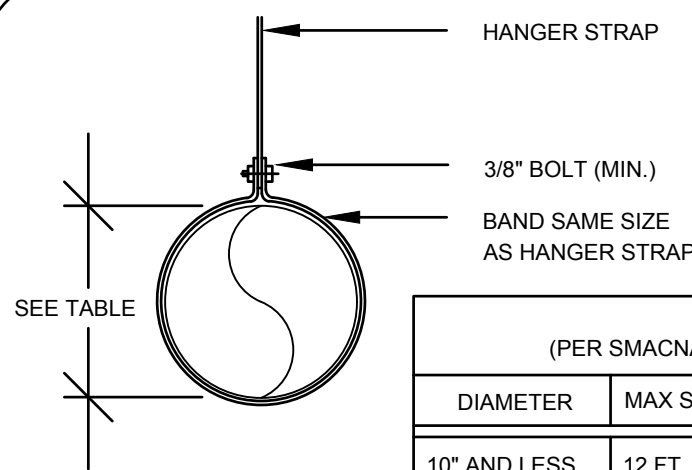


4 E

NOTE:  
ALL ATTACHMENTS SHALL BE COMPLIANT TO 2024 NCMC AND ASCE 7-10.  
REFER TO NOA 24-0919.01 FOR ALL DETAILS AND CALCULATIONS.



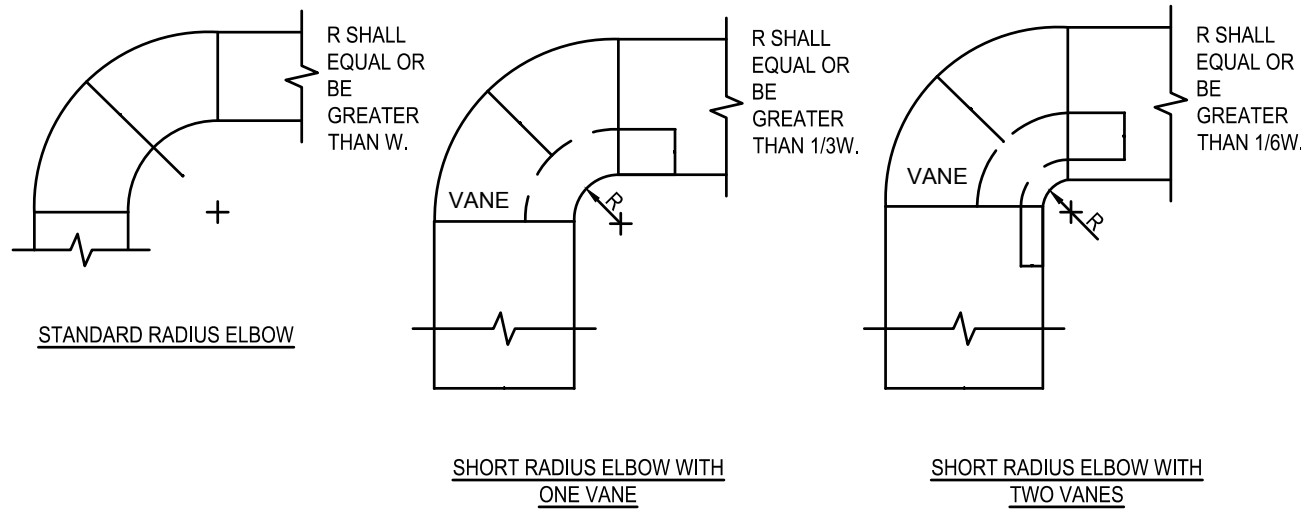
**EXHAUST FAN DETAIL ROOFTOP MOUNTED**  
N.T.S



HANGER SIZES FOR ROUND DUCTS (PER SMACNA METAL AND FLEXIBLE DUCT CONSTRUCTION STANDARDS)				
DIAMETER	MAX SPACING	WIRE DIAMETER	ROD	STRAP
10" AND LESS	12 FT	ONE 12 GA.	1/4"	1" X 22 GA
11"-18"	12 FT	TWO 12 GA OR ONE 8 GA.	1/4"	1" X 22 GA
19"-24"	12 FT	TWO 10 GA.	1/4"	1" X 22 GA
25"-36"	12 FT	TWO 8 GA.	3/8"	1" X 20 GA
37"-50"	12 FT		TWO 3/8"	TWO 1" X 20 GA.
51"-60"	12 FT		TWO 3/8"	TWO 1" X 18 GA.
61"-84"	12 FT		TWO 3/8"	TWO 1" X 16 GA.
85"-96"	12 FT		TWO 1/2"	TWO 1-1/2" X 16 GA.

NOTES:  
- STRAPS ARE GALVANIZED STEEL; RODS ARE UNCOATED OR GALVANIZED STEEL.  
- WIRE IS BLACK ANNEALED, BRIGHT BASIC OR GALVANIZED STEEL. ALL ARE ALTERNATES.  
- TABLES ALLOW FOR CONVENTIONAL WALL THICKNESS, AND JOINT SYSTEMS PLUS 1 LB/SQ.FT. INSULATION WEIGHT.  
- IF HEAVIER DUCTS ARE TO BE INSTALLED, ADJUST HANGER SIZES TO BE WITHIN THEIR LOAD LIMITS.

**METAL ROUND DUCT HANGER DETAIL**  
N.T.S.



NOTE:  
1. THE INTERIOR SURFACE OF ALL RADIUS ELBOWS SHALL BE MADE ROUND.  
2. ALL STANDARD RADIUS ELBOWS SHOWN ON FLOOR PLANS MAY BE MADE SHORT RADIUS ELBOWS. ALL SHORT RADIUS ELBOWS SHALL HAVE VANES. VANES SHALL BE CONSTRUCTED, SUPPORTED AND FASTENED AS RECOMMENDED BY SMACNA.

**TYPICAL RADIUS ELBOW DETAIL**  
N.T.S

FAN SCHEDULE		
UNIT DESIGNATION	EF-1	EF-2
MANUFACTURER	GREENHECK	GREENHECK
MODEL	CUE-090-VG	CUE-080-VG
TYPE	UPBLAST ROOF	UPBLAST ROOF
AREA SERVED	CART WASHER	WASHER
CONSTRUCTION	ALUMINUM HOUSING	ALUMINUM HOUSING
<b>DIMENSIONS</b>		
WIDTH (IN.)	210	210
LENGTH (IN.)	210	210
HEIGHT (IN.)	13.375	13.375
OUTLET (IN.)	19x19	19x19
WEIGHT (LB)	30	21
<b>CONDITION OF SERVICE</b>		
CFM	400	200
E.S.P. (IN. W.G.)	0.5	0.5
RPM (MAX)	1,925	1,725
SONES	9	7.6
<b>FAN MOTOR</b>		
DRIVE	DIRECT	DIRECT
HP (AMPS OR WATTS)	0.12 HP	0.07 HP
VOLTAGE/PHASE	115/1/0	115/1/0
CYCLE (HZ)	60	60
MOTOR SPEEDS	VARIABLE	VARIABLE
TYPE OF MOTOR	VARI-GREEN	VARI-GREEN
<b>SPECIAL FEATURES</b>		
BIRD SCREEN	-	-
MATERIAL (A/FIBR./GL./STEEL)	AI	AI
BACKDRAFT DAMPER	YES	YES
BUILT IN DISCONNECT	YES	YES
<b>FAN CONTROL</b>		
CONTINUOUS	NO	NO
OCCUPANCY SENSOR	-	-
WALL TIMER SWITCH	-	-
WALL TOGGLE SWITCH	-	-
TEMPERATURE	-	-
OTHER (SEE NOTES)	-	-
NOTES	1	2

NOTES:  
1. FAN TO BE INTERLOCKED WITH CART WASHER OPERATION.  
2. FAN TO BE INTERLOCKED WITH WASHER OPERATION.  
3. PROVIDE AND INSTALL PREFABRICATED ROOF CURB CLEAR HEIGHT FROM TOP OF CURB AND FINISHED ROOF TO BE 18 INCHES. INTERIOR OF CURB SHALL BE INSULATED AS PER ROOF INSULATION SPECS. COORDINATE EXACT LOCATION OF CURB AND ROOF OPENING WITH GENERAL CONTRACTOR PRIOR TO INSTALLATION.

MECHANICAL LEGEND	
SYMBOL	DESCRIPTION
C.F.M.	CUBIC FEET PER MINUTE
FD (E)	EXISTING FIRE DAMPER W/ ACCESS PANEL
FSD (E)	EXISTING FIRE SMOKE DAMPER W/ ACCESS PANEL
A	A = DIFFUSER TYPE, CFM = DIFFUSER AIR FLOW
[Symbol]	DUCTWORK - SEE SPECS
[Symbol]	EXISTING DUCTWORK - TO REMAIN
[Symbol]	EXISTING SUPPLY DIFFUSER
[Symbol]	EXISTING EXHAUST DIFFUSER

HVAC DESIGN REQUIREMENTS		
	YES	NO
DUCT SMOKE DETECTOR		✓
FIRE DAMPERS	✓	
SMOKE DAMPER(S)	✓	
FIRE RATED ENCLOSURE	✓	
FIRE RATED ROOF/FLOOR CEILING ASSEMBLY	✓	
FIRE STOPPING		✓
SMOKE CONTROL		✓

GENERAL DUCTWORK NOTES	
1.	ALL DUCT SIZES SHOWN ARE INSIDE CLEAR DIMENSIONS.
2.	DUCT CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE SMACNA HVAC DUCT CONSTRUCTION STANDARD AND DETAILS ON THESE PLANS.
3.	ALL AIR DEVICES (DIFFUSERS, REGISTERS AND GRILLES) SHALL BE ALL ALUMINUM CONSTRUCTION WITH EXPOSED SURFACE OFF WHITE BAKED ENAMEL FINISH OR AS SPECIFIED BY ARCHITECT. PROVIDE OPPOSED BLADE DAMPERS AT ALL DIFFUSERS AND REGISTERS AS INDICATED ON PLANS. PROVIDE BALANCING DAMPERS WITH EXTRACTOR FOR ALL SUPPLY AND RETURN DIFFUSERS AND REGISTERS TO ENSURE COMPLIANCE WITH NCMC - 2024 SEC. 603.18 AND NCMC - 2024 SEC. 601.5 FOR BALANCED RETURN TRANSFER AIR FLOW. REMOTE CABLE OPERATED DAMPERS SHALL BE PROVIDED IN INACCESSIBLE AND HARD CEILING AREAS, "YOUNG REGULATOR OR EQUAL".
4.	ALL DAMPER CONTROLS SHALL BE ACCESSIBLE.
5.	ALL OUTSIDE AIR DUCTS OR INTAKES SHALL HAVE DAMPERS.
6.	ALL PENETRATIONS OF REQUIRED FIRE RATED WALLS, SLABS AND CEILINGS SHALL BE WITH AN ACCESSIBLE U.L. LABELED FIRE DAMPER OR WITH A U.L. LISTED FIRE STOPPING SYSTEM INSTALLED IN ACCORDANCE WITH THE MANUFACTURE'S LISTED DETAILS AND SPECS.
7.	ALL BRANCH TAKE-OFFS SHALL BE PROVIDED WITH MANUAL VOLUME DAMPERS. PROVIDE RADIUS ELBOWS WHERE FEASIBLE. SQUARE ELBOWS AND TEES SHALL BE FURNISHED W/SINGLE FOIL TURNING VANES. PROVIDE MANUAL VOLUME DAMPERS WITH EXTRACTOR AT ALL FLEX TAKE-OFFS. PROVIDE REMOTE, CABLE OPERATED VOLUME DAMPERS IN INACCESSIBLE AND HARD CEILING AREAS, "YOUNG REGULATOR" OR EQUAL.
8.	ALL OUTSIDE AIR DUCTS OR INTAKES SHALL HAVE DAMPERS. BOTH OUTDOOR AIR SUPPLY AND EXHAUST SYSTEMS SHALL BE EQUIPPED WITH DAMPERS THAT WILL AUTOMATICALLY SHUT WHEN THE SYSTEMS OR SPACES SERVED ARE NOT IN USE. VENTILATION OUTSIDE AIR DAMPERS SHALL BE CAPABLE OF AUTOMATICALLY SHUTTING OFF DURING PREOCCUPANCY BUILDING WARMUP, COOLDOWN, AND SETBACK, EXCEPT WHEN VENTILATION REDUCES ENERGY COSTS (E.G. NIGHT PURGE) OR WHEN VENTILATION MUST BE SUPPLIED TO MEET CODE REQUIREMENTS. MOTORIZED DAMPERS SHALL BE NOT LESS THAN A CLASS 1 LEAKAGE-RATED DAMPER WITH A MAXIMUM LEAKAGE RATE OF 4 CFM PER S.F. AT 1" W.G. WHEN TESTED IN ACCORDANCE WITH AMCA 500D.
9.	SMACNA DUCT PRESSURE CLASSES BASED ON OPERATING PRESSURE ARE: 1/2", 1", 2", 3", 4", 6", AND 10". EACH DUCT SYSTEM SHALL BE CONSTRUCTED FOR THE SPECIFIC DUCT PRESSURE CLASS SHOWN ON PLANS, WHERE NO PRESSURE CLASS IS SPECIFIED FOR CONSTANT VOLUME SYSTEMS, 1" W.G. PRESSURE CLASS IS THE BASIS OF COMPLIANCE WITH THE SMACNA STANDARDS REGARDLESS OF VELOCITY. WHERE NO PRESSURE CLASS IS SPECIFIED FOR VARIABLE VOLUME SYSTEMS, 2" W.G. PRESSURE CLASS IS THE BASIS OF COMPLIANCE WITH THE SMACNA STANDARDS FOR DUCTWORK UPSTREAM OF VAV BOXES. ALL DUCTWORK SHALL BE SEALED TO SMACNA HVAC DUCT CONSTRUCTION STANDARDS FOR ITS PRESSURE CLASS SEALING METHODS.
10.	ALL INSULATION SHALL HAVE FIRE/SMOKE RATING LESS THAN 25/50.

DUCTWORK SPECIFICATIONS	
1.	ALL EXHAUST DUCTWORK SHALL BE 16 GAGE STAINLESS STEEL OR 16 GAGE GALVANIZED STEEL LIQUID TIGHT WELDED. INSTALLATION SHALL BE IN STRICT CONFORMANCE WITH MANUFACTURER'S REQUIREMENTS.

AIR DISTRIBUTION SCHEDULE										
TYPE	MFG	MODEL	PATTERN	DAMPER	MOUNTING	NECK	MODULE	MAX N.C.	MAX CFM	NOTES
A1	SEE NOTE 2	SEE NOTE 2	SUPPLY	O.B.D.	SURFACE	SEE PLANS	24x24	25	-	2
E1	SEE NOTE 2	SEE NOTE 2	EXHAUST	O.B.D.	SURFACE	SEE PLANS	24x24	25	-	2
EX1	EXISTING	EXISTING	SUPPLY	EXISTING	SURFACE	EXISTING	24x24	25	-	1
EX2	EXISTING	EXISTING	EXHAUST	EXISTING	EXISTING	EXISTING	25	-	-	1

NOTES:  
1) EXISTING DIFFUSER TO REMAIN.  
2) NEW DIFFUSER TO MATCH EXISTING SPEC.

BUILDING ENVELOPE					
TYPE	DESCRIPTION	R-VALUE (ADDED VALUE)	SUMMER U-VALUE (ASSEMBLY)	SHADING COEFFICIENT	SOLAR HEAT GAIN COEFFICIENT
ROOF	N/A	N/A	N/A		
WALL	N/A	N/A	N/A		
GROUND SLAB	EXISTING	-	0.100		
GLASS WINDOWS				N/A	N/A
GLASS DOORS				N/A	N/A

NOTES:  
THE VALUES SHOWN ABOVE ARE AS PER SPECIFICATIONS GIVEN BY ARCHITECT AND WERE USED TO SIZE THE HVAC EQUIPMENT AND INPUTTED INTO THE ENERGY CALCULATIONS FOR CODE COMPLIANCE UNDER THE PERFORMANCE BASIS METHOD. THE INFORMATION PROVIDED HERE ARE BY NO MEANS TO BE USED AS A SPECIFICATION OF THE BUILDING ENVELOPE. CONSULT ARCHITECTURAL PLANS FOR SUCH. NO CHANGES SHALL BE MADE WITHOUT THE WRITTEN APPROVAL OF OWNER, ARCHITECT, AND ENGINEER.

VENTILATION CALCULATIONS PROPOSED: AS PER TABLE 7-1, DESIGN PARAMETERS FROM ANSI/ASHRAE/ASHE STANDARD 170-2021																
	ROOM #	SPACE DESIGNATION	AREA:	CEIL HEIGHT:	VOLUME:	PRESSURE RELATIONSHIP TO ADJACENT AREA	MINIMUM SUPPLY FLOW:	SUPPLY AIR FLOW PROVIDED:	MINIMUM TOTAL AIR CHANGES PER HOUR	PROVIDED TOTAL AIR CHANGES PER HOUR	ACCEPTABLE	MINIMUM OUTSIDE AIR	PROVIDED OUTSIDE AIR	MINIMUM OUTSIDE AIR	PROVIDED OUTSIDE AIR	ALL ROOM AIR EXHAUSTED DIRECTLY OUTDOORS
			(SF)	(FT)	(CF)		(CFM)	(CFM)	(ACH)	(ACH)	(YES/NO)	(ACH)	(ACH)	(CFM)	(CFM)	
VAV 2-19	1833	DECONTAMINATION	329	9	2961	NEGATIVE	296	295	6	6	YES	2	2	EXISTING	EXISTING	YES
	TOTAL		329		2961			295								
VAV 2-22	1831	CART CASE	213	9	1917	NEGATIVE	192	240	6	8	YES	2	2	EXISTING	EXISTING	YES
	TOTAL		213		0			240								

MECHANICAL DRAWING LIST	
DRAWING NUMBER	DRAWING NAME
M01	MECHANICAL NOTES, LEGEND AND SCHEDULES
M10	MECHANICAL PLAN - DEMOLITION
M11	MECHANICAL PLAN
M21	AIR BALANCE SUMMARY - EXISTING AND PROPOSED

**NOTE**  
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HVAC PLUMBING ELECTRICAL

**C.D. HAIR ARCHITECT**  
2520 Viera Parkway  
Viera, FL 32981  
15034

revision:

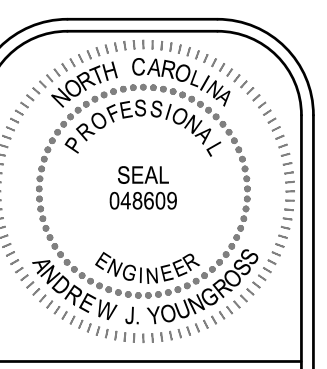

NORTH CAROLINA PROFESSIONAL SEAL 048609  
ENGINEER ANDREW J. YOUNGROSS

An Interior Renovation for:  
**Harnett Health Central Sterile Renovation**  
215 Brightwater Drive  
Lillington, North Carolina


job no. 24-029/25157  
principal: AJY  
designer: RR/HL/KS  
file name:  
  
date: 09.26.25  
title:  
**MIRCHANICAL NOTES, LEGEND, AND SCHEDULES**

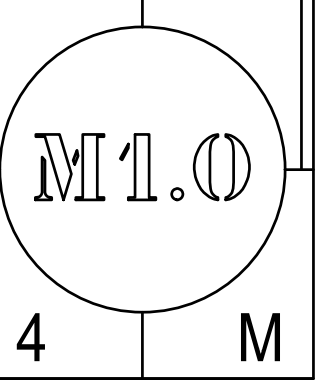
M0.1  
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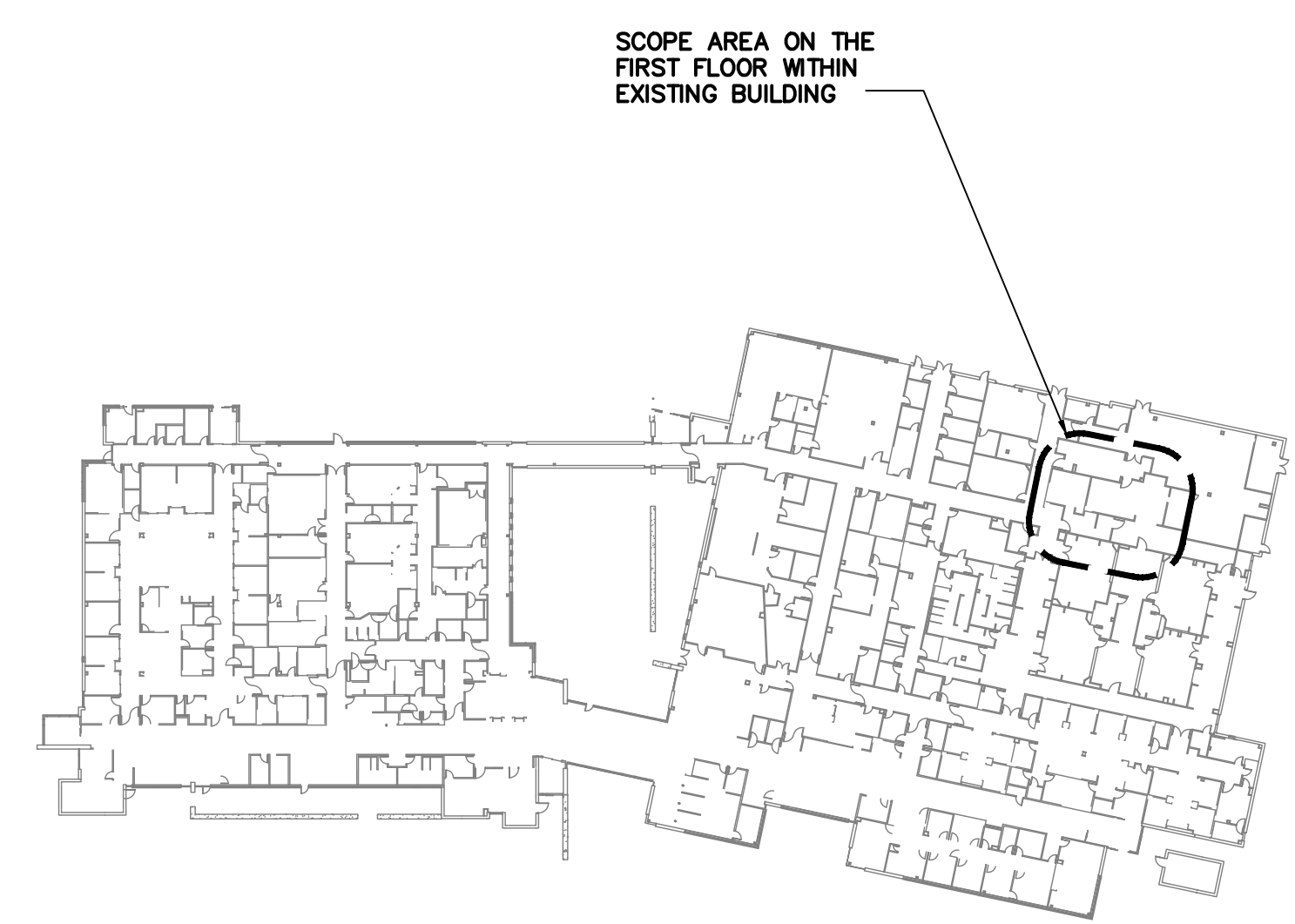
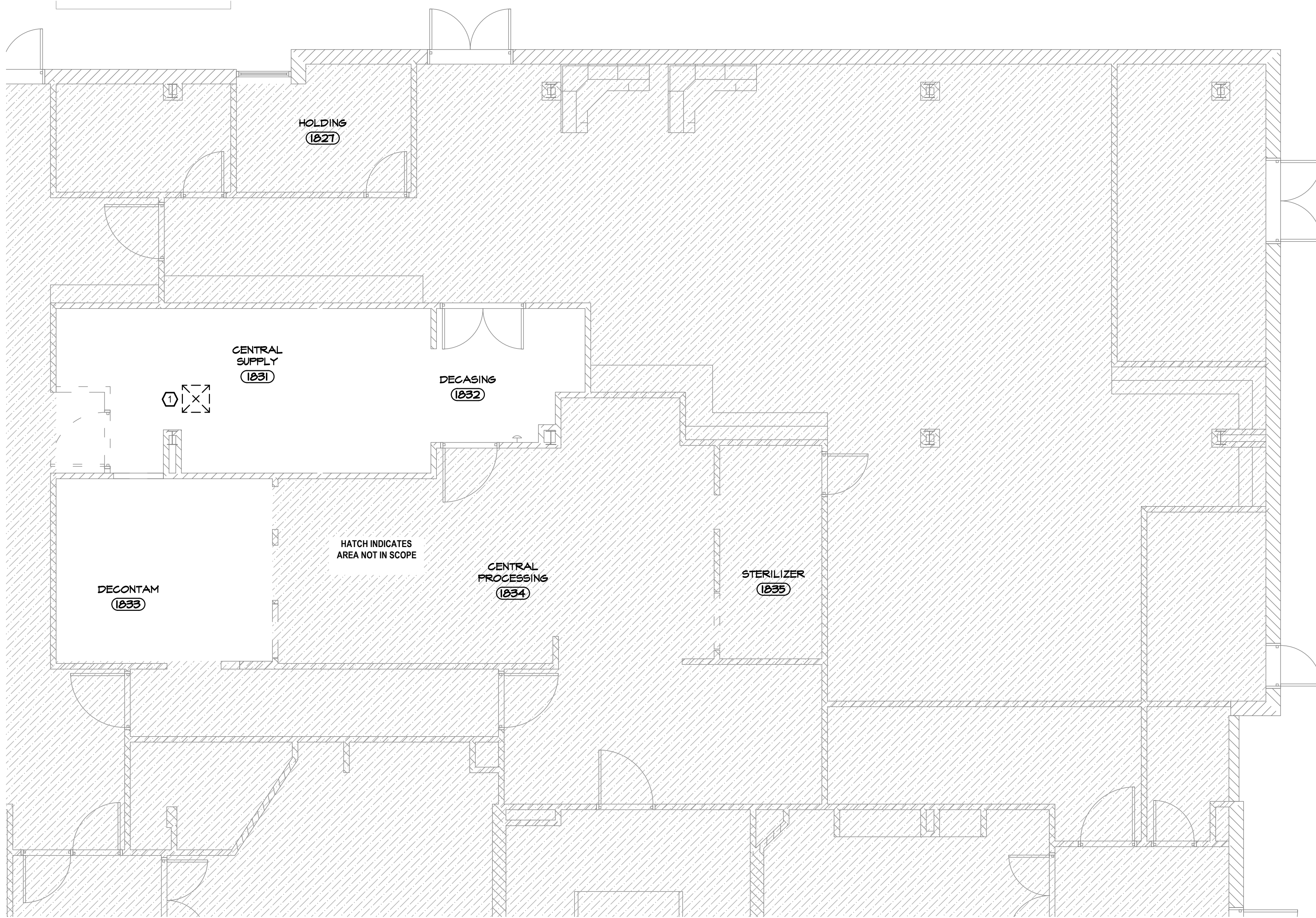


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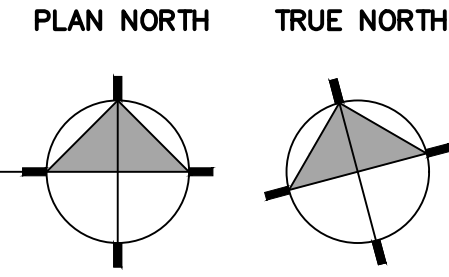
job no. 24-029/25157  
 principal: AJY  
 designer: RR/HL/KS  
 file name:  
 date: 09.26.25  
 title:  
**MIRCHANCAL  
 PLAN -  
 DEMOLITION**



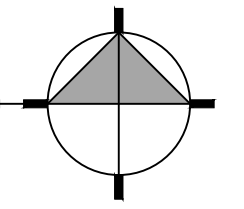
GENERAL NOTES	
EXISTING DUCTWORK AND DIFFUSER LAYOUT IS BASED ON EXISTING PLANS PROVIDED TO THE ENGINEER DATED DECEMBER 03, 2010.	
PLAN KEY NOTES	
⬡	EXISTING SUPPLY DIFFUSER TO BE REMOVED.



**MECHANICAL PLAN - DEMOLITION**  
 3/16"=1'-0"



**OVERALL FIRST FLOOR PLAN**  
 NTS

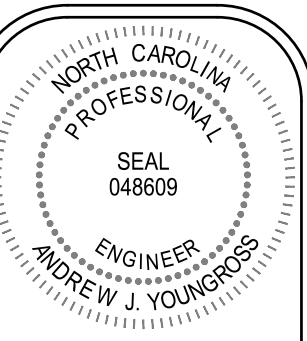


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HVAC  
 PLUMBING  
 ELECTRICAL

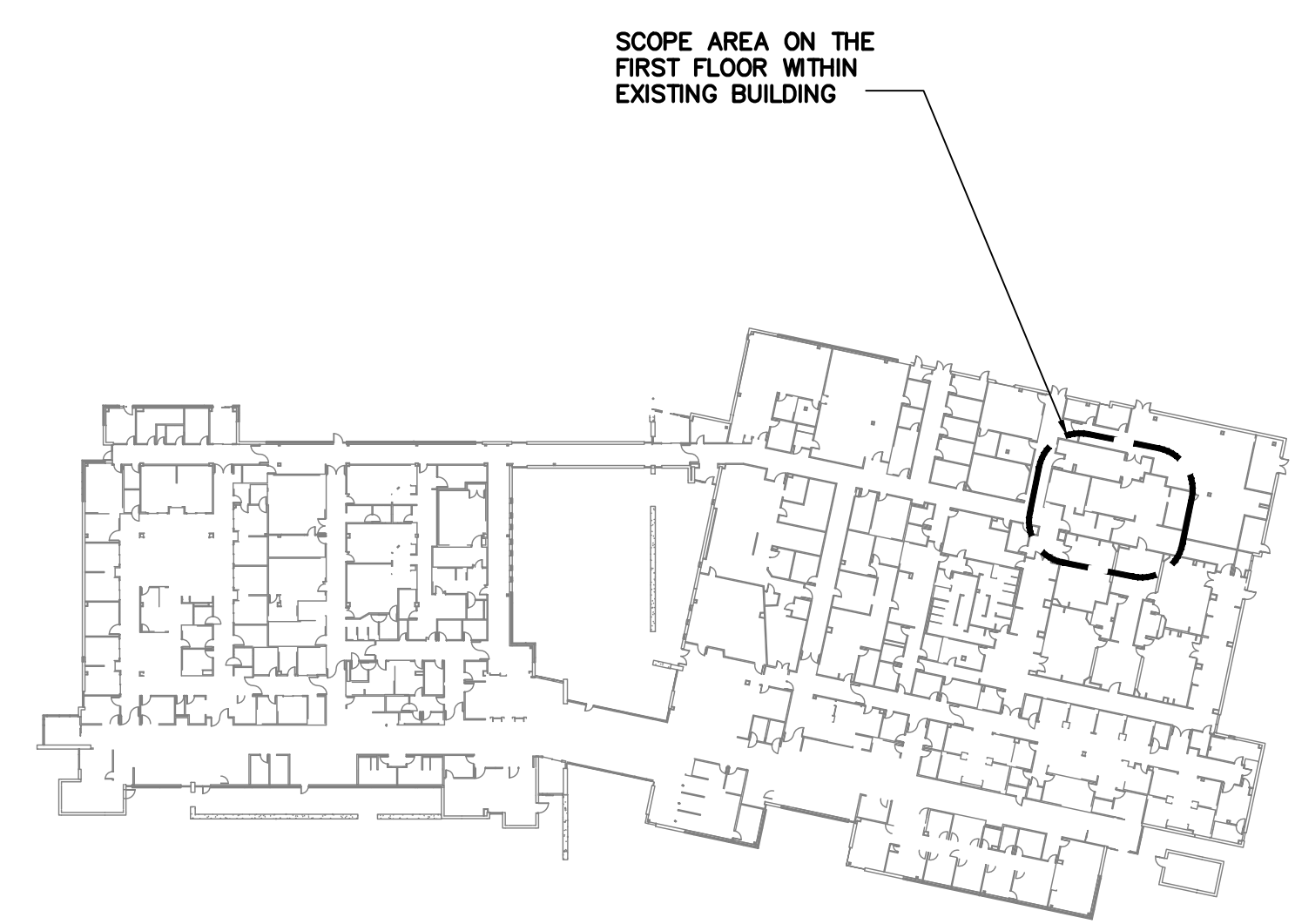
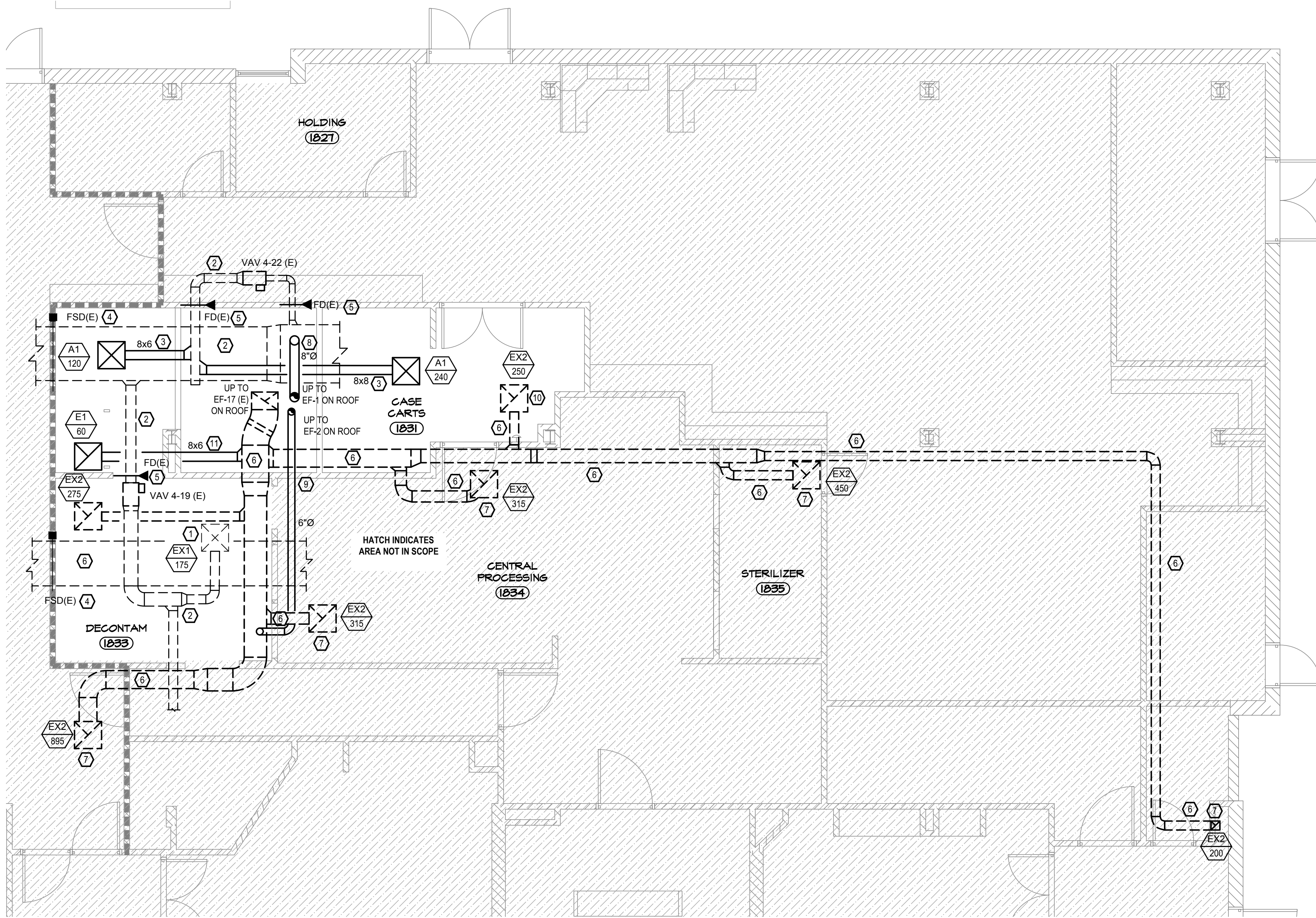
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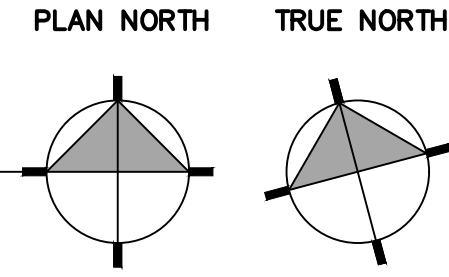
An Interior Renovation for:  
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 215 Brightwater Drive  
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job no. 24-029/25157  
 principal: AJY  
 designer: RR/HL/KS  
 file name:  
 date: 09.26.25  
 title: **MECHANICAL PLAN**

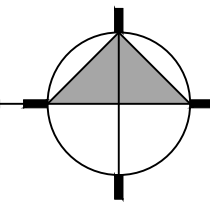
GENERAL NOTES	
A.	IT IS THE RESPONSIBILITY OF THE GENERAL AND MECHANICAL CONTRACTORS TO FULLY INSPECT THE SITE PRIOR TO COMMENCEMENT.
B.	VERIFY ALL EXISTING CONDITIONS INCLUDING LOCATION OF ALL STRUCTURAL ELEMENTS, ROOF TRUSSES, COLUMNS, ETC. AND COORDINATE DUCT LOCATIONS ACCORDINGLY.
C.	SEE ARCHITECTURAL DRAWINGS FOR CEILING ELEVATIONS AND FIXTURE LOCATIONS.
D.	EXISTING DUCTWORK LAYOUT AND DIFFUSER VALUES ARE BASED ON EXISTING PLANS PROVIDED TO THE ENGINEER. NOTIFY ENGINEER IF THERE ARE ANY DISCREPANCIES BETWEEN THE EXISTING SUPPLY AND EXHAUST DIFFUSER VALUES AND THE ACTUAL SUPPLY AND EXHAUST DIFFUSER VALUES BASED ON THE FINAL TEST AND BALANCE THAT IS TO BE PERFORMED BY CONTRACTOR.
E.	MECHANICAL ENGINEER SCOPE OF WORK WAS TO ADD EXHAUST DUCTWORK AND ROOFTOP EXHAUST FANS TO ACCOMMODATE FOR THE CART WASHER AND ADDITIONAL WASHER.
PLAN KEY NOTES	
①	EXISTING SUPPLY DIFFUSER TO REMAIN AS IS.
②	EXISTING SUPPLY DUCTWORK REMAIN AS IS.
③	CONTRACTOR TO PROVIDE NEW SUPPLY DUCTWORK AND CONNECT TO EXISTING SUPPLY DUCTWORK. DUCTWORK TO MATCH EXISTING SPECIFICATIONS. NEW SUPPLY DIFFUSER TO BE PROVIDED. CONTRACTOR TO COORDINATE FINAL LOCATION IN THE FIELD.
④	EXISTING FSD TO REMAIN AS IS.
⑤	EXISTING FD TO REMAIN AS IS.
⑥	EXISTING DUCTWORK TO REMAIN AS IS.
⑦	EXISTING EXHAUST DIFFUSER REMAIN AS IS.
⑧	8"Ø EXHAUST DUCT FOR CART WASH TO BE ROUTED TO EF-1 ON ROOF. EXHAUST DUCT WORK TO BE WELDED STAINLESS STEEL. CONTRACTOR TO COORDINATE EXACT ROUTING IN THE FIELD. ROOF MOUNTED EXHAUST FAN TO BE AS PER SCHEDULE ON M0.1. ROOF MOUNTED EXHAUST FAN TO BE INSTALLED ON 18" ROOF CURB AT LEAST 10 FT AWAY FROM ANY OUTSIDE AIR INTAKE. CONTRACTOR TO COORDINATE EXACT LOCATION IN THE FIELD. INTERLOCK FAN OPERATION WITH WASHER OPERATION AND COORDINATE TIE IN POINT WITH WASHER EQUIPMENT SUPPLIER.
⑨	8"Ø EXHAUST DUCT FOR WASHER TO BE ROUTED TO EF-2 ON ROOF. EXHAUST DUCT WORK TO BE WELDED STAINLESS STEEL. CONTRACTOR TO COORDINATE EXACT ROUTING IN THE FIELD. ROOF MOUNTED EXHAUST FAN TO BE AS PER SCHEDULE ON M0.1. ROOF MOUNTED EXHAUST FAN TO BE INSTALLED ON 18" ROOF CURB AT LEAST 10 FT AWAY FROM ANY OUTSIDE AIR INTAKE. CONTRACTOR TO COORDINATE EXACT LOCATION IN THE FIELD. INTERLOCK FAN OPERATION WITH WASHER OPERATION AND COORDINATE TIE IN POINT WITH WASHER EQUIPMENT SUPPLIER.
⑩	EXISTING EXHAUST DIFFUSER TO BE REBALANCED AS INDICATED.
⑪	CONTRACTOR TO PROVIDE NEW 8-4 EXHAUST DUCTWORK AND CONNECT TO EXISTING EXHAUST DUCTWORK. CONTRACTOR TO COORDINATE FINAL LOCATION OF NEW EXHAUST DIFFUSER IN THE FIELD.



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



**OVERALL FIRST FLOOR PLAN**  
 NTS

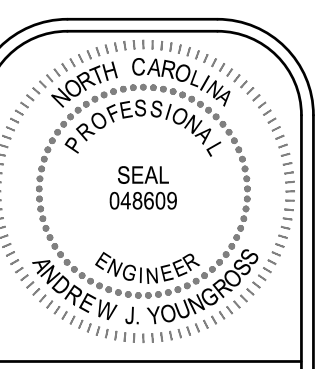


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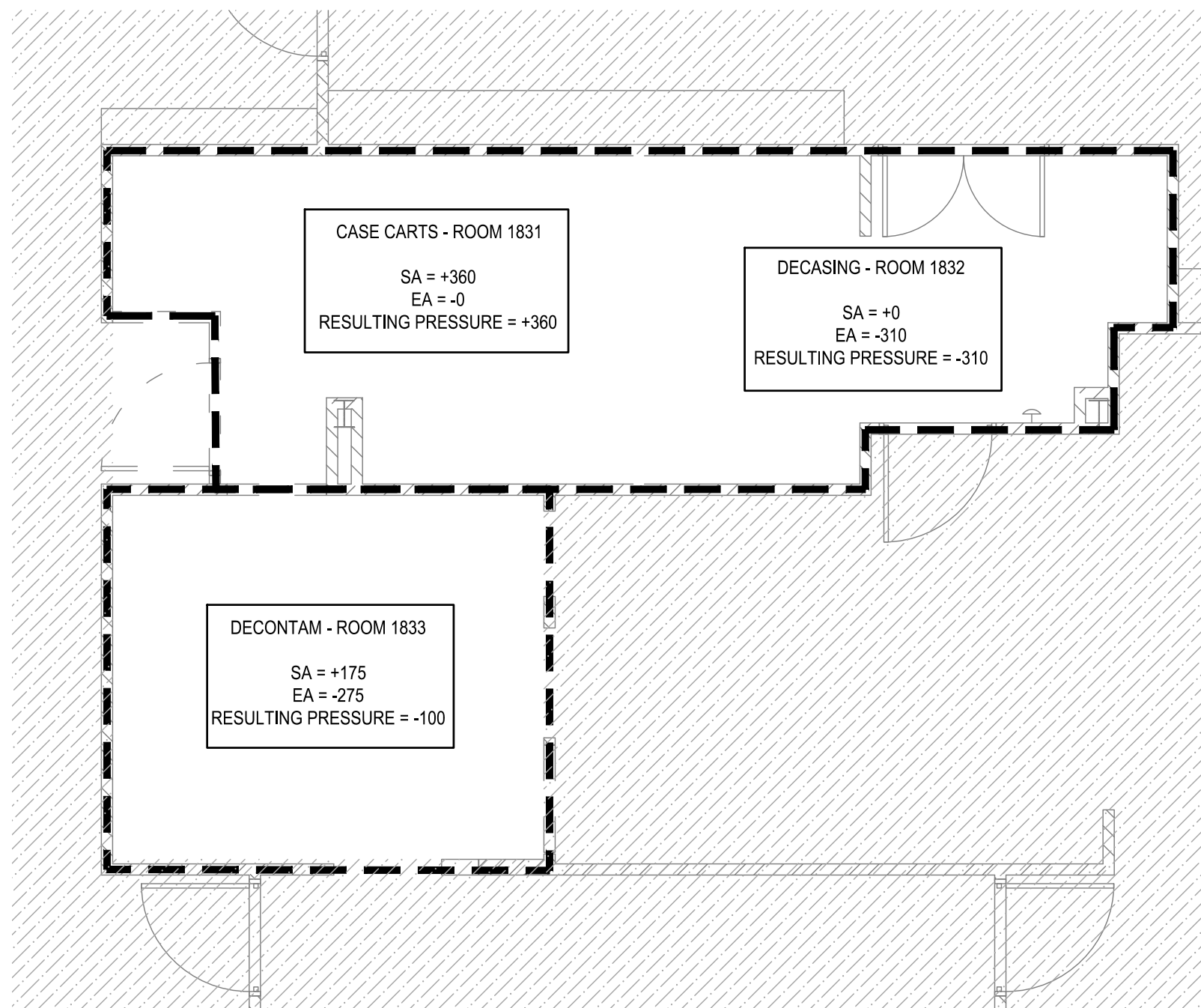
**HVAC  
 PLUMBING  
 ELECTRICAL**

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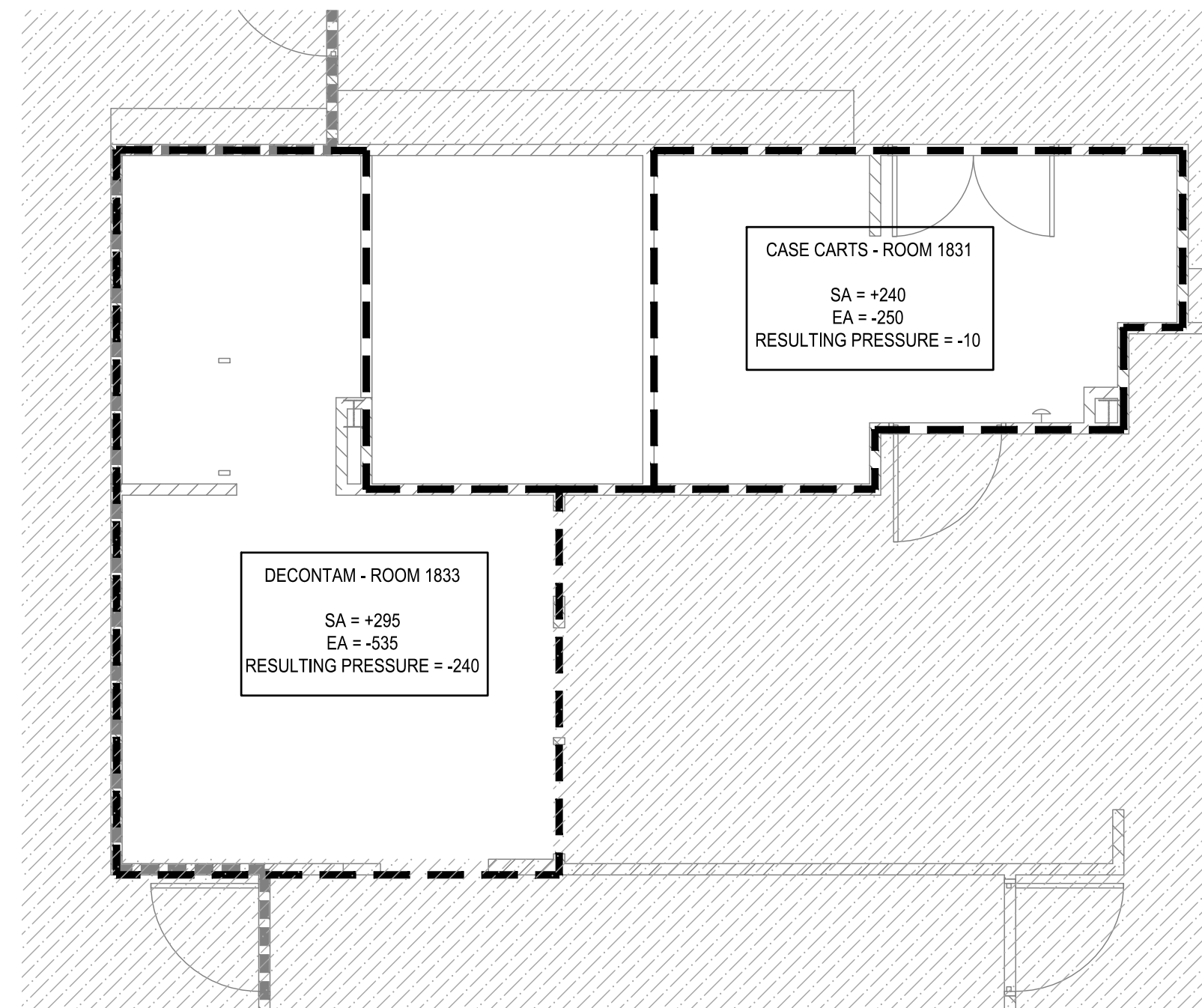



An Interior Renovation for:  
**Harnett Health  
 Central Sterile Renovation**  
 215 Brightwater Drive  
 Lillington, North Carolina


job no. 24-029/25157  
 principal: AJY  
 designer: RR/HL/KS  
 file name:  
 date: 09.26.25  
 title: **AIR BALANCE  
 SUMMARY -  
 EXISTING AND  
 PROPOSED**

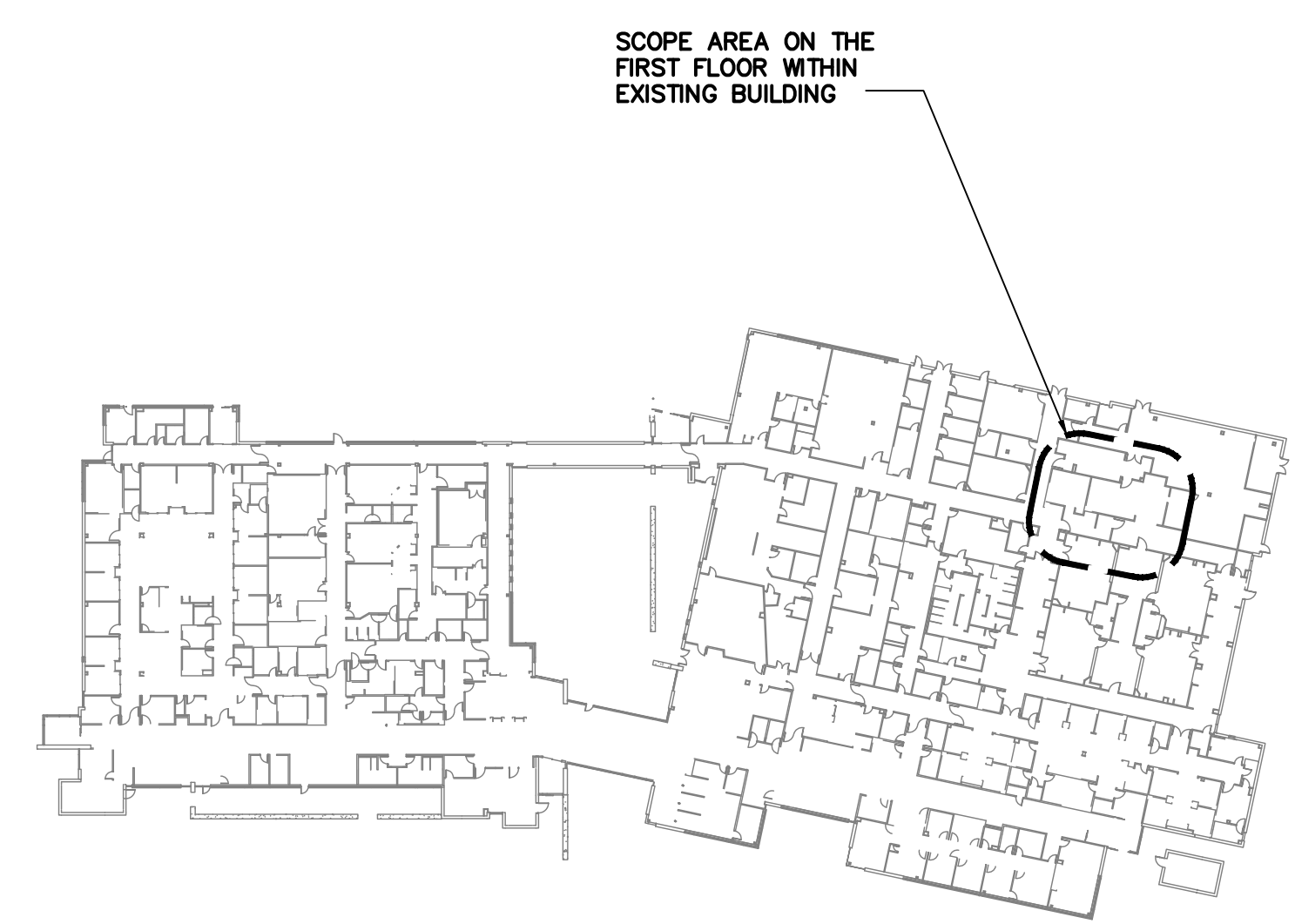


**AIR BALANCE SUMMARY - EXISTING**  
 3/16"=1'-0"  
 PLAN NORTH TRUE NORTH



**AIR BALANCE SUMMARY - PROPOSED**  
 3/16"=1'-0"  
 PLAN NORTH TRUE NORTH

**GENERAL NOTES**  
 EXISTING DIFFUSER VALUES ARE BASED ON EXISTING PLANS PROVIDED TO THE ENGINEER DATED DECEMBER 03, 2010. NOTIFY ENGINEER IF THERE ARE ANY DISCREPANCIES BETWEEN THE EXISTING SUPPLY AND EXHAUST DIFFUSER VALUES AND THE ACTUAL SUPPLY AND EXHAUST DIFFUSER VALUES BASED ON THE FINAL TEST AND BALANCE THAT IS TO BE PERFORMED BY CONTRACTOR.



**OVERALL FIRST FLOOR PLAN**  
 NTS

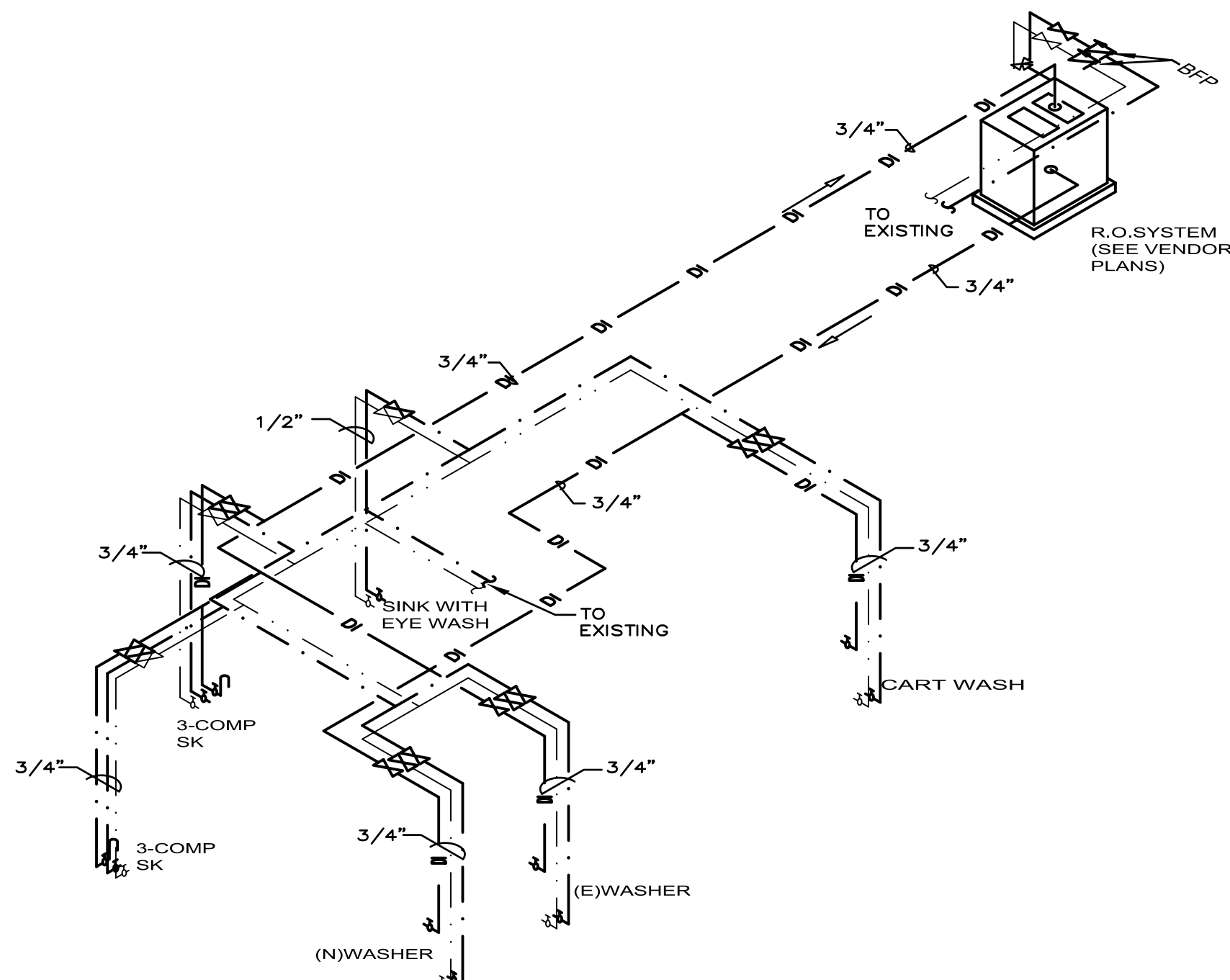
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**CONNECTION TO EXISTING PLUMBING SYSTEM NOTES**

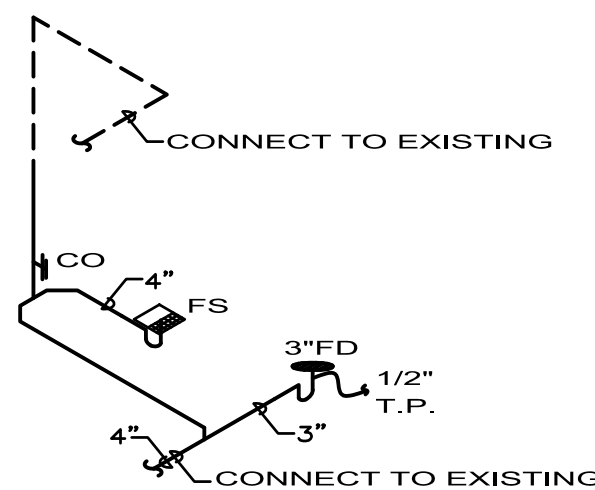
- INSTALLATION OF WORK AND NEW CONNECTION TO EXISTING PLUMBING LINES SHALL BE MADE AT TIME WHICH WILL NOT INTERFERE OR INTERRUPT THE NORMAL BUILDING OPERATION.
- EXACT LOCATIONS, SIZE, AND ELEVATION OF EXISTING PIPING SHALL BE FIELD VERIFIED BEFORE START OF ANY WORK. ACTUAL FIELD CONDITIONS MAY REQUIRE ADJUSTMENT OR MODIFICATION TO PROPOSED ROUGHING, LAYOUT, AND ROUTING OF PIPING, INCLUDING POINT OF CONNECTION TO EXISTING WORK OF ADEQUATE SIZE TO ACCOMMODATE NEW WORK.
- PROVIDE NECESSARY ADJUSTMENT OF NEW INSTALLATION DUE TO INTERFERENCE WITH BUILDING CONDITIONS, INCLUDING WORK OF OTHER TRADES.
- PIPING MATERIAL, VALVES, PIPE SUPPORTS, PIPE COVERING, ETC. USED IN THE INSTALLATION OF WORK OF THIS CONTRACT SHALL BE NEW AND SHALL MATCH EXISTING, PROVIDING SAME MEETS ALL APPLICABLE BUILDING AND PLUMBING CODES.
- EXISTING PIPING SHALL BE MODIFIED AND/OR REMOVED TO POINT THAT WOULD ACCOMMODATE CONNECTION OF NEW (WATER AND WASTE) PLUMBING ROUGHING.
- PROVIDE NECESSARY TEST TO DETERMINE TIGHTNESS OF EXISTING AND NEW PLUMBING PIPING SYSTEMS. ALL LEAKS AND OPEN OUTLETS FOUND DURING TEST SHALL BE REPAIRED, CAPPED OR PLUGGED, PERFORM ADDITIONAL TEST UNTIL IT IS DETERMINED THAT THE PLUMBING PIPING SYSTEMS IS WATER TIGHT.
- ALL OPENINGS, HOLES, ETC. MADE FOR THE REMOVAL OF PLUMBING PIPING, FIXTURES, ETC. SHALL BE PATCHED WITH MATERIAL TO MATCH EXISTING.
- IF FIELD CONDITION FINDS THAT EXISTING SANITARY, AND VENT, CAN BE UTILIZED, CONNECT NEW SANITARY, AND VENT LINES TO EXISTING. MAKE NECESSARY ADJUSTMENTS TO ACCOMMODATE NEW SANITARY, AND VENT LINES.



**R.O. DISTRIBUTION PIPING**  
N.T.S.

**GENERAL PLUMBING NOTES**

- ALL WORK SHALL COMPLY WITH THE 2018 EDITION OF THE NORTH CAROLINA STATE PLUMBING CODE, DHRSR AND ALL LOCAL CODE AMENDMENTS.
- DO NOT SCALE DRAWINGS. VERIFY DIMENSIONS IN FIELD PRIOR TO COMMENCEMENT OF WORK. THE DRAWINGS ARE DIAGRAMMATIC AND INDICATE GENERAL LAYOUT OF PLUMBING SYSTEMS.
- CONTRACTOR SHALL VISIT THE EXISTING SITE (IF APPLICABLE) PRIOR TO BIDDING AND SHALL INVESTIGATE ALL CONDITIONS THAT AFFECT HIS WORK. VERIFY LOCATIONS, SIZES, DIMENSIONS, AND INVERT ELEVATIONS OF ALL ON-SITE SANITARY SEWERS, STORM DRAINS, WATER MAINS AND NATURAL GAS MAINS, AND MAKE CERTAIN THAT ALL CONNECTIONS CAN BE MADE. THE CONTRACTOR SHALL MAKE THE ARCHITECT/ENGINEER AWARE OF ANY CONFLICTS.
- CONTRACTOR SHALL REVIEW ARCHITECTURAL, STRUCTURAL, MECHANICAL AND OTHER DRAWINGS PRIOR TO BID AND SHALL COORDINATE ALL TRADES TO PROVIDE A COMPLETE PRODUCT TO AVOID CONFLICTS BETWEEN THE TRADES, AND TO DETERMINE WHICH TRADE IS TO PERFORM THE NECESSARY WORK. RESOLVE ALL QUESTIONS OR CONFLICTS WITH THE ENGINEER BEFORE ANY EQUIPMENT IS ORDERED, MATERIALS FABRICATED OR SYSTEMS INSTALLED. CONSULT THE ARCHITECT'S DRAWINGS FOR ALL GRADE AND FINISH FLOOR ELEVATIONS.
- PLUMBING PLANS, DETAILS AND RISERS ARE SCHEMATIC AND MAY NOT INDICATE ALL FITTINGS, OFFSETS, ETC. REQUIRED TO MAKE INSTALLATION COMPLETE. PLUMBING CONTRACTOR SHALL LOCATE PIPING FOLLOWING GENERAL ROUTING AS INDICATED ON PLANS AND PROVIDE NECESSARY FITTINGS, ETC. AS REQUIRED TO PROVIDE A COMPLETE SYSTEM AND MEET PLUMBING CODE REQUIREMENTS.
- INFORMATION AND COMPONENTS SHOWN ON RISER DIAGRAMS OR DETAILS, BUT NOT SHOWN ON PLANS, AND VICEVERSA, SHALL BE PROVIDED AS IF EXPRESSLY REQUIRED BY BOTH.
- WHERE USED, "PROVIDE" SHALL MEAN "FURNISH AND INSTALL".
- CONTRACTOR SHALL GUARANTEE THE INSTALLATION AGAINST DEFECTS IN MATERIALS AND WORKMANSHIP WHICH MAY OCCUR UNDER NORMAL USAGE FOR A PERIOD OF ONE YEAR AFTER OWNER'S ACCEPTANCE. DEFECTS SHALL BE PROMPTLY REMEDIED WITHOUT COST TO THE OWNER.
- CONTRACTOR SHALL SECURE AND PAY FOR ALL PERMITS, FEES, INSPECTION AND TESTS. CONTRACTOR SHALL OBTAIN PERMIT AND APPROVED SUBMITTALS PRIOR TO COMMENCEMENT OF WORK OR ORDERING EQUIPMENT. PLUMBING CONTRACTOR SHALL BE PRESENT FOR ALL INSPECTIONS OF HIS WORK BY REGULATORY AUTHORITIES.
- CONTRACTOR SHALL PROVIDE RECORD DRAWINGS TO THE BUILDING OWNER AND ARCHITECT. DRAWING SHALL INCLUDE ALL ADDENDUM ITEMS, CHANGE ORDERS, ALTERATIONS, REROUTINGS, ETC.
- CONTRACTOR SHALL PROVIDE INSURANCE FOR PROTECTION AGAINST PUBLIC LIABILITY AND PROPERTY DAMAGE FOR THE DURATION OF THE WORK.
- CONTRACTOR SHALL PROVIDE SHOP DRAWINGS FOR ALL EQUIPMENT AT ONE TIME, INDEXED IN A NEAT AND ORDERLY MANNER. PARTIAL SUBMITTALS WILL NOT BE ACCEPTED. PLUMBING CONTRACTOR SHALL NOT ORDER ANY EQUIPMENT WITHOUT APPROVAL FROM PLUMBING ENGINEER, ARCHITECT, OWNER, AND INTERIOR DESIGNER (IF APPLICABLE).
- CONTRACTOR SHALL PROVIDE ACCESS PANELS FOR ALL CONCEALED VALVES. ACCESS PANELS IN RATED WALLS OR CEILINGS MUST MAINTAIN THE SAME RATING AND MUST MATCH THE FINISH OF THE WALL OR CEILING IN WHICH IS INSTALLED.
- DIELECTRIC COUPLINGS ARE REQUIRED BETWEEN ALL DISSIMILAR METAL IN PIPING AND EQUIPMENT CONNECTIONS.
- MATERIALS AND EQUIPMENT SHALL BE NEW OF AMERICAN MANUFACTURER, FREE OF DEFECTS AND IT SHALL MEET THE REQUIREMENTS OF THE NATIONAL BOARD OF FIRE UNDERWRITERS, ASTM & ANSI SPECIFICATIONS WHERE SUCH EXIST, STANDARD AND LOCAL BUILDING CODES, AND SHALL BE SUITABLE FOR THE USE INTENDED.



**MECHANICAL ROOM SANITARY ISOMETRIC**  
N.T.S.

**WATER PIPING SYSTEM NOTES**

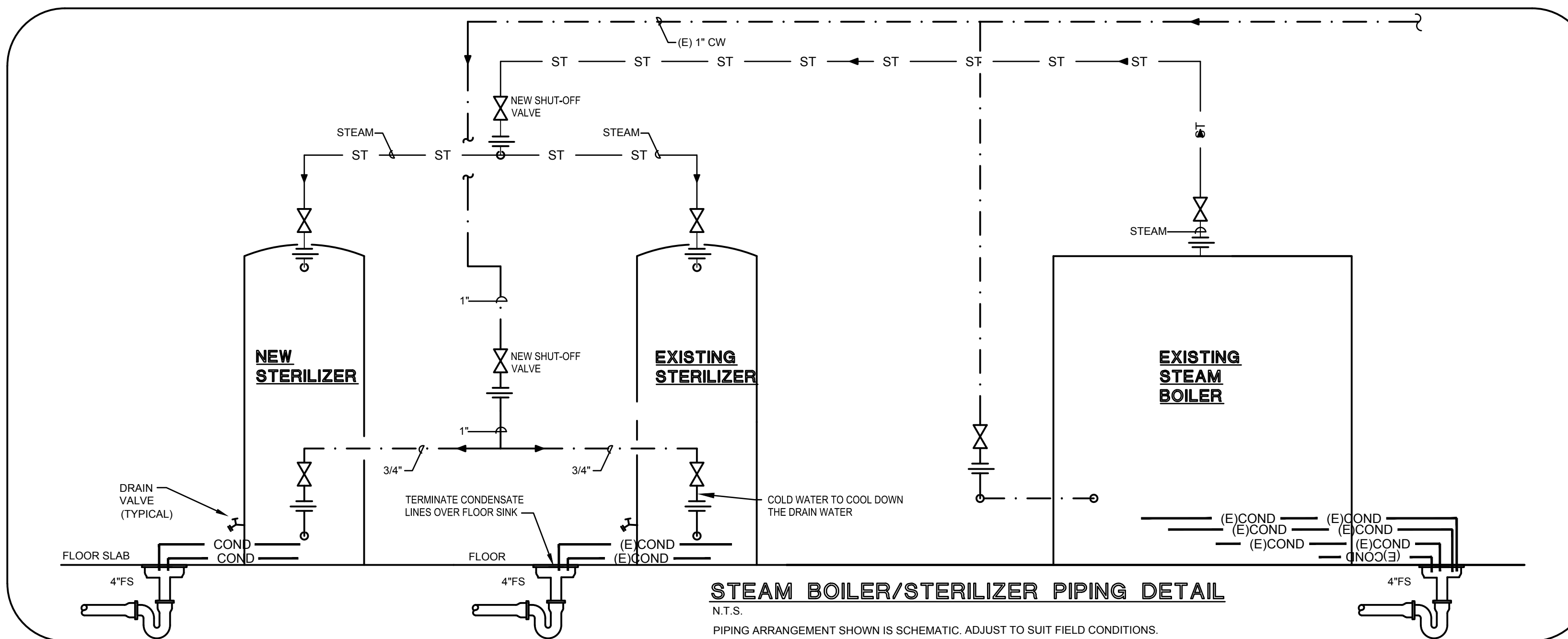
- WATER PIPING SHALL BE: COPPER PIPING (ABOVE GRADE): ASTM B88, TYPE 1, HARD DRAWN. FITTINGS: (a) SOLDERED ANSI/ASME B16.23, CAST BRASS OR ANSI/ASME B16.29, WROUGHT COPPER. (b) PRESSED: ASME B16.18 OR ASME B16.22, COPPER PRESS FITTING WITH EPDM O-RING AND LEAK DETECTION FEATURE. JOINTS: (a) SOLDERED: ANSI/ASME B32, LEAD-FREE SOLDER, GRADE 957A. (b) PRESSED: ASME B16.18 OR ASME B16.22, COPPER PRESS FITTING WITH EPDM O-RING AND LEAK DETECTION FEATURE. FITTINGS AND JOINTS SHALL COMPLY WITH SECTION 605 OF 2023 FBC-PLUMBING. WATER VALVES 2" AND SMALLER SHALL BE A BRONZE BALL VALVE, TWO-PIECE BODY, 600 PSI WORKING PRESSURE, NIBCO MODEL S-585-80-LF (NSF-61 LEAD FREE) OR APPROVED EQUAL. THE USE OF GATE VALVES SHALL BE PROHIBITED.
- DOMESTIC HOT WATER SYSTEMS WITH RECIRCULATION LOOPS SHALL BE PROVIDED WITH 1" INSULATION FOR SUPPLY AND RETURN PIPING. FOR BRANCHES OFF MAIN LOOP, INSULATE FIRST 8 FT OF PIPING. DOMESTIC HOT WATER SYSTEMS WITHOUT RECIRCULATION SHALL BE PROVIDED WITH 1" INSULATION FOR THE FIRST 8 FT OF PIPE AFTER THE WATER HEATER. INSULATION MATERIAL SHALL BE FIBERGLASS (JOHN MANVILLE MICRO-LOK), ARMACEL, ELASTOMERIC (AP ARMAFLEX), OR APPROVED EQUAL. COVER VALVES, FITTINGS AND FLANGES WITH INSULATION SIMILAR TO ADJACENT PIPE COVERING. EXTERIOR ABOVE GRADE WATER PIPING SHALL BE FINISHED WITH AN ALUMINUM JACKET SECURED WITH 1/2" ALUMINUM BANDS AND SEALS, ALUMINUM SCREWS, OR POP RIVETS ON 3". PLACE LAPS TO SHED WATER, AND CAULK WHERE NECESSARY TO PREVENT WATER INTRUSION. INSTALLATION SHALL BE IN STRICT CONFORMANCE WITH MANUFACTURER'S REQUIREMENTS.
- NEW OR REPAIRED POTABLE WATER SYSTEMS SHALL BE PURGED OF DELETERIOUS MATTER AND WHERE REQUIRED BY THE ADMINISTRATIVE AUTHORITY, DISINFECTED PRIOR TO UTILIZATION. THE METHOD TO BE FOLLOWED SHALL BE AS PER SECTION 610 OF FPC-2023.
- ALL FIXTURES MUST BE PROVIDED WITH READILY ACCESSIBLE STOPS AND APPROPRIATELY MARKED ACCESS PANELS. COORDINATE LOCATIONS WITH GENERAL CONTRACTOR PRIOR TO INSTALLATION.
- PROVIDE ANGLE STOPS ON ALL WATER SERVICE LINES TO FIXTURES FOR INDIVIDUAL SHUT-OFF.
- PROVIDE A WATER HAMMER ARRESTOR ON ALL WATER SUPPLY LINES SERVING FLUSH VALVE PLUMBING FIXTURES, SOLVED VALVES, ETC. INCLUDING OTHER FIXTURES OR EQUIPMENT WITH QUICK CLOSING VALVES (ICE MAKERS, & DISHWASHERS). USE SLOX CHIEF SHOCK ARRESTORS, P.D.I. 1/4", 1/2" CONN., P.D.I. 3/4", 1" CONN., APPROVED FOR INSTALLATION WITH NO ACCESS PANEL REQUIRED. CONFORMS WITH ANSISASSE 1010 STANDARDS.
- PROVIDE AUTOMATIC TRAP PRIMER ON COLD WATER CONNECTION TO LAVATORY FIXTURE WITH COLD WATER TUBE TO FLOOR DRAIN AUXILIARY INLET FITTING. FLOOR DRAINS IN AREAS WHERE A LAVATORY (TRAP PRIMER) CONNECTION IS NOT AVAILABLE, PROVIDE A TRAP PRIMER DISTRIBUTION UNIT PRECISION PLUMBING PRODUCTS, MODEL PR-500 (OR APPROVED EQUAL) AND A SHUT-OFF VALVE IN ACCESSIBLE AREA.
- D.I. WATER DISTRIBUTION PIPING TO BE POLYPROPYLENE.
- ESCUTOCHONS SHALL BE CHROME PLATED BRASS WITH LOCKING SCREWS WHERE PIPES PASS THROUGH FINISHED WALLS.

**STEAM & STEAM CONDENSATE PIPING SYSTEM NOTES**

- STEAM PIPING SHALL BE TYPE "L", HARD DRAWN COPPER WITH WROUGHT OR FORGED COPPER FITTINGS CONFORMING WITH ASTM B 88 OR BLACK STEEL PIPE CONFORMING WITH ASTM A 53 A 53M. INSTALLATION SHALL BE IN STRICT CONFORMANCE WITH MANUFACTURER'S REQUIREMENTS.
- STEAM SUPPLY AND RETURN PIPING 1-1/4" OR LESS SHALL BE INSULATED WITH 1-1/2" THICK FIBERGLASS AND PIPING 1-1/2" TO 4" SHALL BE INSULATED WITH 2" THICK FIBERGLASS. EXTERIOR ABOVE GRADE WATER PIPING SHALL BE FINISHED WITH AN ALUMINUM JACKET SECURED WITH 1/2" ALUMINUM BANDS AND SEALS, ALUMINUM SCREWS, OR POP RIVETS ON 3". PLACE LAPS TO SHED WATER, AND CAULK WHERE NECESSARY TO PREVENT WATER INTRUSION. INSTALLATION SHALL BE IN STRICT CONFORMANCE WITH MANUFACTURER'S REQUIREMENTS.
- SUBJECT PIPING SYSTEM TO HYDROSTATIC TEST PRESSURE THAT IS NOT LESS THAN 1.5 TIMES THE WORKING PRESSURE. TEST PRESSURE SHALL NOT EXCEED MAXIMUM PRESSURE FOR ANY VESSEL, PUMP VALVE, OR OTHER COMPONENT IN SYSTEM UNDER TEST. VERIFY THAT STRESS DUE TO PRESSURE AT BOTTOM OF VERTICAL RUNS DOES NOT EXCEED 90% OF SPECIFIED MINIMUM YIELD STRENGTH. AFTER HYDROSTATIC TEST PRESSURE HAS BEEN FOR AT LEAST 10 MINUTES, EXAMINE PIPING, JOINTS, AND CONNECTIONS FOR LEAKAGE. ELIMINATE LEAKS BY TIGHTENING, REPAIRING, OR REPLACING COMPONENTS, AND REPEAT HYDROSTATIC TEST UNTIL THERE ARE NO LEAKS.
- TESTING REPORT SHALL BE SUBMITTED TO THE OWNER.
- STEAM SUPPLY PIPING SHALL BE SLOPED UNIFORMLY DOWN IN THE DIRECTION OF FLOW AT 1/4 INCH PER 10 FEET AND STEAM CONDENSATE RETURN PIPING SHALL BE SLOPED DOWN IN THE DIRECTION OF FLOW AT 1/2 INCH PER 10 FEET. ON STRAIGHT HORIZONTAL RUNS WITH NO DRAINAGE POINTS, SPACE DRIP LEGS AT INTERVALS NOT EXCEEDING 300 FT. WHEN PIPE IS PITCHED DOWN IN THE DIRECTION OF THE STEAM FLOW AND AT A MAXIMUM OF 150 FT. WHEN THE PIPE IS PITCHED UP, SO THAT CONDENSATE FLOW IS OPPOSITE THAT OF STEAM FLOW. INSTALLATION SHALL BE IN STRICT COMPLIANCE WITH MANUFACTURER'S REQUIREMENTS.
- EXPANSION JOINTS SHALL BE COMPLIANT WITH THE EJMA (EXPANSION JOINTS MANUFACTURING ASSOCIATION) STANDARDS. INSTALLATION SHALL BE IN STRICT COMPLIANCE WITH MANUFACTURER'S REQUIREMENTS.

**PLUMBING FIXTURE LIST**

TAG	MFG.	MODEL	REMARKS
FS-2	ZURN	FD2378-NH3-H	NO HUB FLOOR SINK, 8" X 8", 1/2 GRATE, CAST IRON BODY WITH A WHITE ACID-RESISTANT PORCELAIN ENAMEL INTERIOR COATING, AND AN ABS ANTI-SPLASH DOME STRAINER.



**STEAM BOILER/STERILIZER PIPING DETAIL**  
N.T.S.  
PIPING ARRANGEMENT SHOWN IS SCHEMATIC. ADJUST TO SUIT FIELD CONDITIONS.

**PLUMBING DRAWING LIST**

DRAWING NUMBER	DRAWING NAME
P0.1	PLUMBING NOTES AND DETAIL
P1.1	PLUMBING PLAN - DOMESTIC AND DI WATER
P1.2	PLUMBING PLAN - SANITARY

**NOTE**

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HVAC PLUMBING ELECTRICAL

**C.D. HAIR ARCHITECT**  
2250 Vista Parkway  
West Palm Beach, FL  
15034

revision:

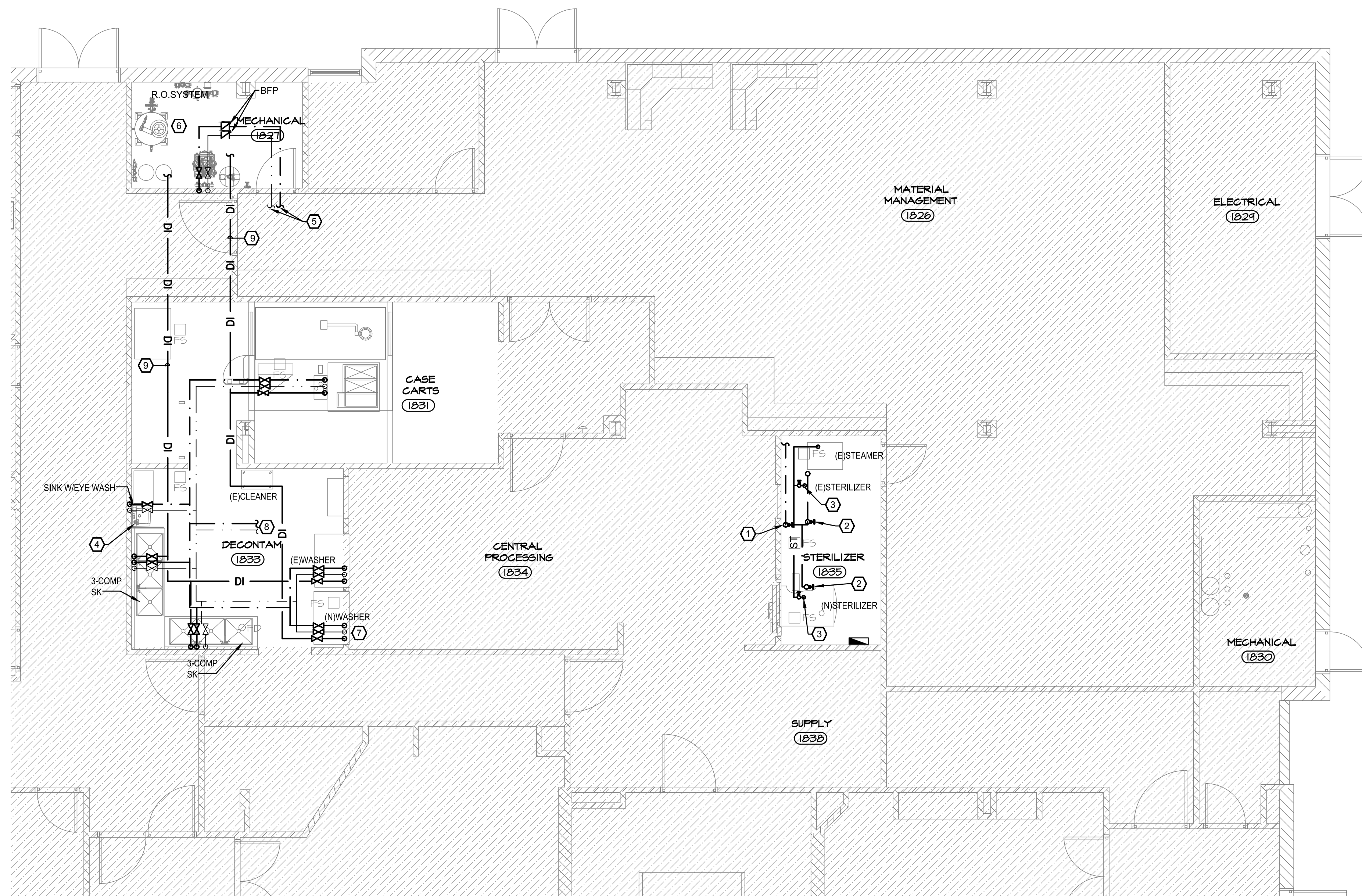

SEAL 048609  
ENGINEER  
ANDREW J. YOUNGROSS

An Interior Renovation for:  
**Harnett Health Central Sterile Renovation**  
215 Brighthwater Drive  
Lillington, North Carolina

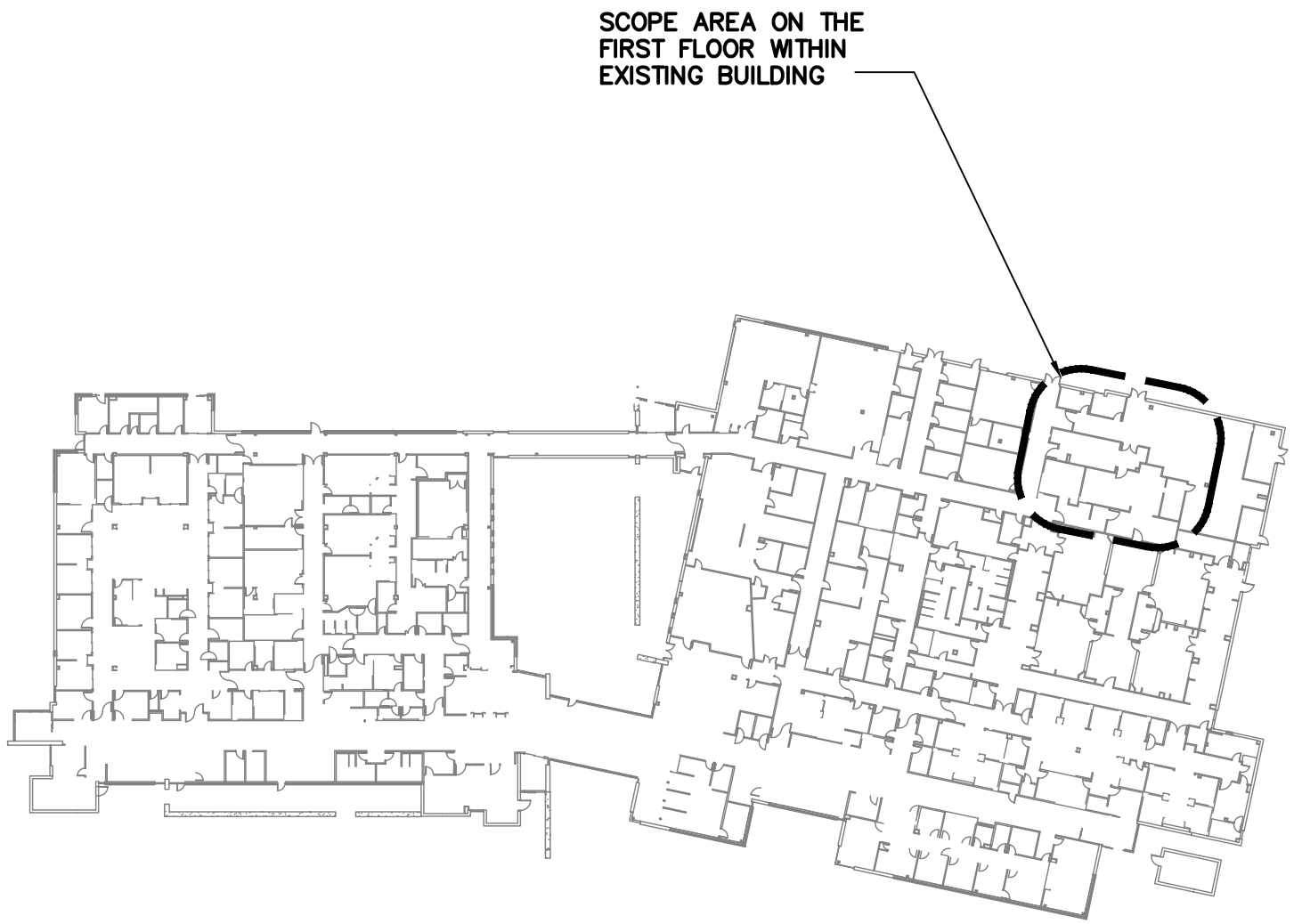

job no. 24-029/25157  
principal: AJY  
designer: RR/HL/KS  
file name:

date: 09.26.25  
title: PLUMBING NOTES, DETAIL

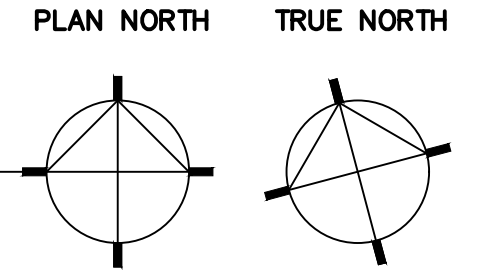
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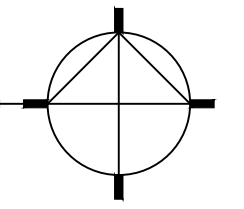
PLAN KEY NOTES	
1	PROVIDE NEW SHUT OFF VALVE ON RISER FROM EXISTING MAIN WATER SUPPLY. CONTRACTOR SHALL VERIFY IN FIELD EXACT SIZE AND LOCATION PRIOR TO COMMENCING ANY WORK.
2	PROVIDE INDIVIDUAL SHUT-OFF VALVE ON 1" CW SUPPLY. PROVIDE 3/4" CW FOR EACH STERILIZER FOR THE DRAIN COOLING VALVES.
3	PROVIDE NEW SHUT-OFF VALVE ON STEAM PIPING AND SPLIT STEAM SUPPLY IN 2 SEPARATE BRANCHES EACH ONE WITH ISOLATION VALVE. ONE FOR EACH STERILIZER. CONTRACTOR SHALL VERIFY IN FIELD EXACT SIZE AND LOCATION PRIOR TO COMMENCING ANY WORK.
4	DECK MOUNTED EYE WASH GUARDIAN G1949 OR SIMILAR. AUTOFLOW 90° SWING-DOWN. PROVIDE G8020 THERMOSTATIC MIXING VALVE TO PRECISELY BLEND HOT AND COLD WATER TO DELIVER TEPID WATER AS REQUIRED BY ANSI Z358.1-2014.
5	CONNECT NEW 3/4" CW AND HW LINES WITH VALVES AND BACKFLOW PREVENTORS TO EXISTING WATER LINES THIS AREA. CONTRACTOR SHALL VERIFY IN FIELD EXACT SIZE AND LOCATION PRIOR TO COMMENCING ANY WORK.
6	R.O. SYSTEM ROOM. R.O. EQUIPMENT LAYOUT BY WATER VENDOR VINCENT TESORO II AT MECHANICAL SOLUTIONS INC. (WATERGURU.COM)
7	CONNECT NEW 3/4" CW AND HW AND 3/4" D.I. WATER LINES WITH VALVES TO NEW WASHER. CONTRACTOR SHALL VERIFY IN FIELD EXACT SIZE AND LOCATION PRIOR TO COMMENCING ANY WORK.
8	CONNECT NEW 3/4" CW AND HW LINES TO EXISTING WATER LINES THIS AREA. CONTRACTOR SHALL VERIFY IN FIELD EXACT SIZE AND LOCATION PRIOR TO COMMENCING ANY WORK.
9	3/4" D.I. WATER LOOP TO FEED SINKS, WASHERS AND CART WASH.



PLUMBING PLAN - DOMESTIC AND DI WATER  
3/16"=1'-0"



OVERALL FIRST FLOOR PLAN  
NTS



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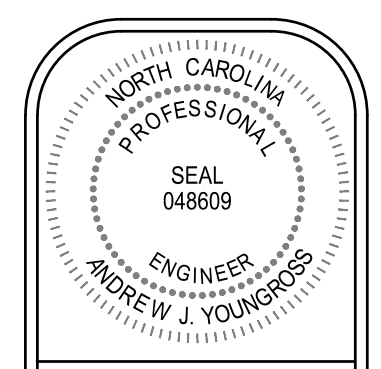

NORTH CAROLINA  
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An Interior Renovation for:  
**Harnett Health  
Central Sterile Renovation**  
215 Brighthouse Drive  
Lillington, North Carolina


job no. 24-029/25157  
principal: AJY  
designer: RR/HL/KS  
file name:  
date: 09.26.25  
title:  
**PLUMBING  
PLAN DOMESTIC  
AND DI WATER**

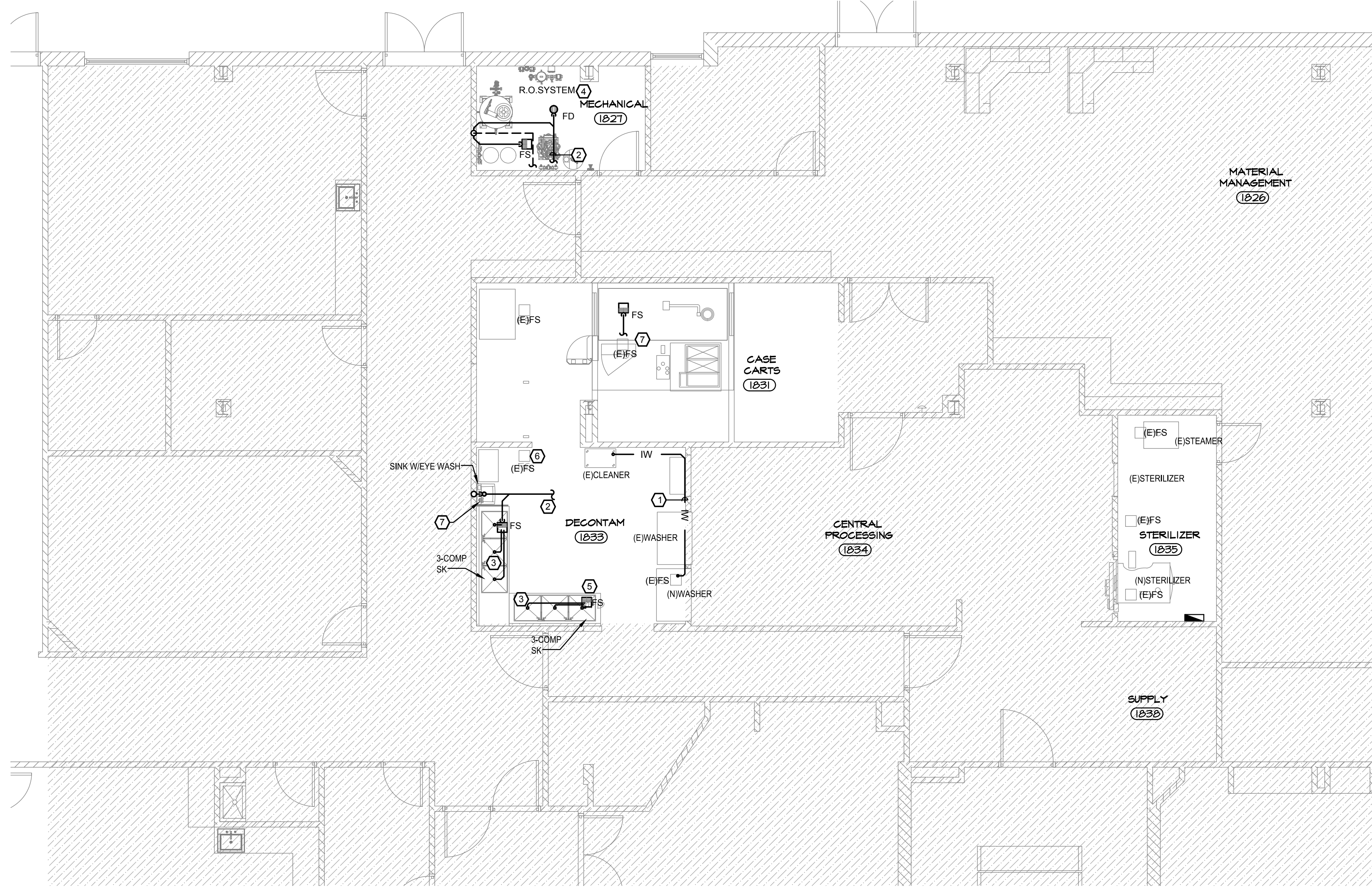
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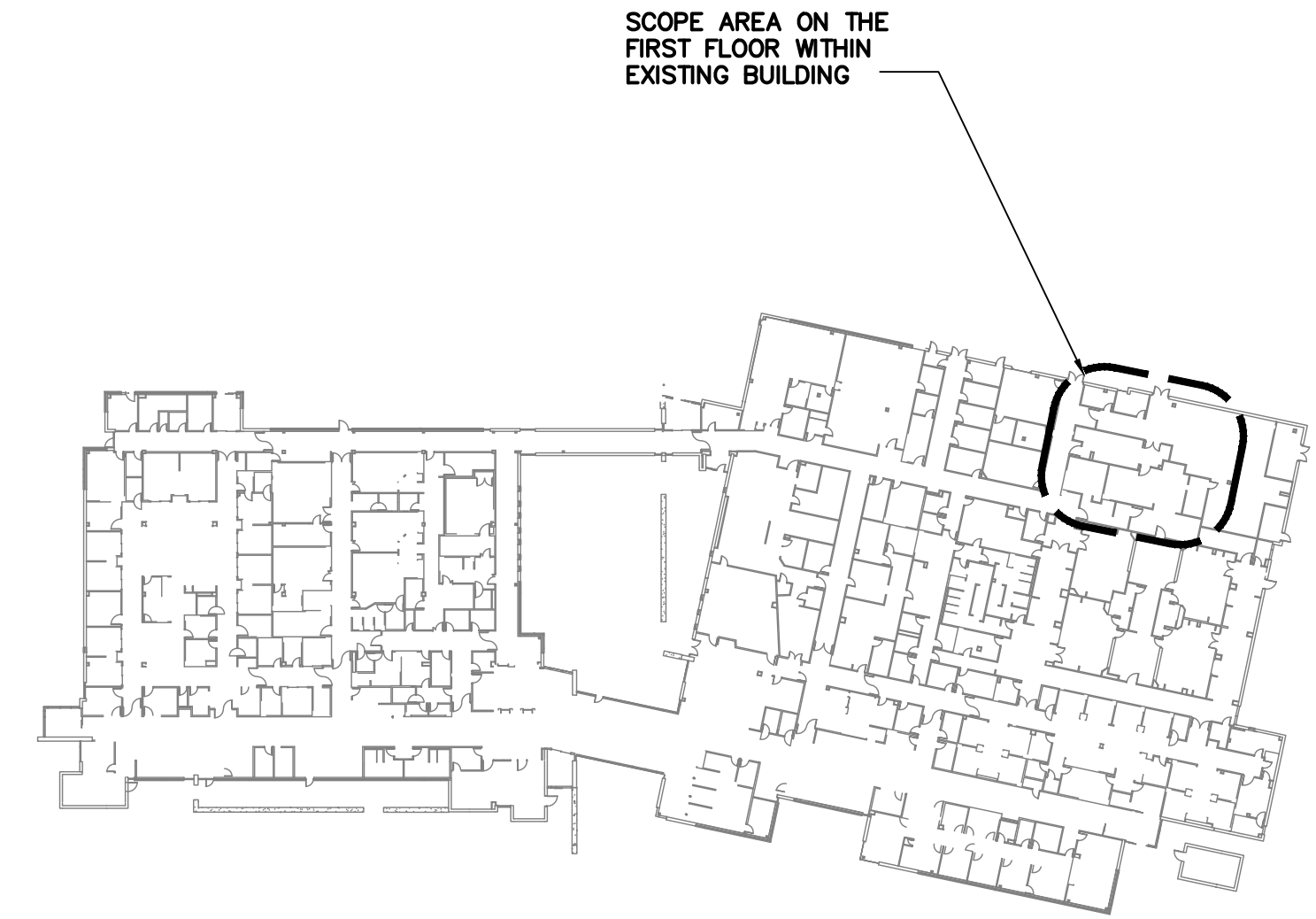



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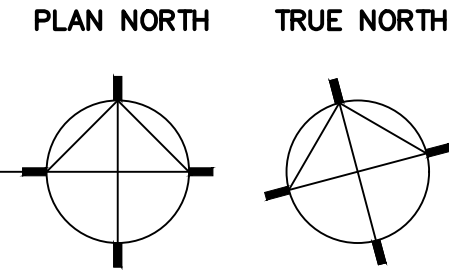

job no. 24-029/25157  
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**PLUMBING  
 PLAN  
 SANITARY**



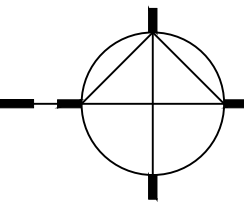
PLAN KEY NOTES	
①	EXTEND INDIRECT WASTE FROM ULTRASONIC CLEANER TO EXISTING FLOOR SINK THIS AREA AND TERMINATE WITH AN AIR GAP. CONTRACTOR SHALL VERIFY IN FIELD EXACT LOCATION OF FLOOR SINK.
②	CONNECT NEW 4" SANITARY LINE TO EXISTING SANITARY LINE THIS AREA. CONTRACTOR SHALL VERIFY IN FIELD EXACT SIZE, LOCATION AND INV. ELEVATIONS PRIOR TO COMMENCING ANY WORK.
③	PROVIDE 1 1/2" INDIRECT WASTE FROM EACH SINK WELL AND TERMINATE OVER FLOOR SINK WITH AN AIR GAP AS PER NORTH CAROLINA PLUMBING CODE 2018 SECTION 802.1.1
④	R.O. SYSTEM ROOM. R.O. EQUIPMENT LAYOUT BY WATER VENDOR VINCENT TESORO II AT MECHANICAL SOLUTIONS INC. (WATERGURU.COM)
⑤	REMOVE AND REPLACE EXISTING FLOOR DRAIN WITH NEW FLOOR SINK. SEE SPECS. CONTRACTOR SHALL VERIFY IN FIELD EXACT SIZE AND LOCATION.
⑥	REMOVE EXISTING FLOOR SINK. CAP SANITARY BELOW SLAB. PATCH TO MATH FLOOR.
⑦	REMOVE EXISTING FLOOR SINK. EXTEND SANITARY TO NEW FLOOR SINK LOCATION INSIDE PIT. CONTRACTOR SHALL VERIFY IN FIELD EXACT SIZE, LOCATION AND INVERT ELEVATION PRIOR TO COMMENCING ANY WORK.



**PLUMBING PLAN - SANITARY**  
 3/16"=1'-0"



**OVERALL FIRST FLOOR PLAN**  
 NTS



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