

SCOPE OF WORK NOTES

FURNISH ALL LABOR, MATERIALS, EQUIPMENT AND INCIDENTALS REQUIRED TO COMPLETE ALL MECHANICAL WORK SHOWN ON THE CONTRACT DRAWINGS. THE WORK REQUIRED CONSISTS BASICALLY OF, BUT IS NOT LIMITED TO, THE FOLLOWING:

- COORDINATION OF EXISTING DIFFUSERS AND GRILLES WITH OTHER TRADES. NO NEW DUCTS OR GRILLES ARE ANTICIPATED
- VERIFY OPERATION OF ACTUATED DAMPERS IN THE AREA OF THE RENOVATION.
- TEST AND BALANCE OF THE SUPPLY AIR INTO THE ROOM; VERIFY OPERATION OF THERMOSTAT AND VAV.

CODES

THE INSTALLATION SHALL COMPLY WITH THE INDICATED EDITION OF THE FOLLOWING CODES AND ORDINANCES. WHERE SPECIFIC EDITION IS NOT INDICATED, COMPLY WITH THE LATEST PUBLISHED EDITION.

FLORIDA STATE UNIVERSITY DESIGN GUIDELINES
NFPA 70, NATIONAL ELECTRIC CODE
NFPA 90 A, AIR CONDITIONING & VENTILATION SYSTEMS
FLORIDA BUILDING CODE BUILDING (2023)
FLORIDA BUILDING CODE MECHANICAL (2023)
FLORIDA BUILDING CODE PLUMBING (2023)
FLORIDA BUILDING CODE FUEL GAS (2023)
FLORIDA FIRE PREVENTION CODE (2023 EDITION)
STATE AND LOCAL CODES AND ORDINANCES

GENERAL NOTES

THE WORK WILL BE COMPLETE, FULLY OPERATIONAL, AND SUITABLE FOR THE SERVICE REQUIRED. DRAWINGS INDICATE SCOPE AND DO NOT SHOW ALL DETAILS, DEVICES AND INCIDENTAL MATERIALS NECESSARY TO ACCOMPLISH THE WORK. IT IS UNDERSTOOD THAT SUCH DEVICES AND INCIDENTAL MATERIALS REQUIRED WILL BE FURNISHED.

INSTALLERS ARE EXPECTED TO PROVIDE PROFESSIONAL WORK PERFORMED IN ACCORDANCE WITH INDUSTRY STANDARDS AND GOOD PRACTICE.

UPON COMPLETION OF THE WORK THE INSTALLERS WILL CLEAN SPACES THAT WERE OCCUPIED BY TEMPORARY WORK AND TEMPORARY FACILITIES. REMOVE DEBRIS, RUBBISH AND EXCESS MATERIALS FROM THE SITES. REPAIR DAMAGES CAUSED BY INSTALLATION OR USE OF TEMPORARY FACILITIES.

THE INSTALLERS WILL DELIVER TO THE OWNER, UPON SUBSTANTIAL COMPLETION OF THE WORK, ELECTRONIC COPIES OF DESCRIPTIVE LITERATURE RELATED TO THE EQUIPMENT INSTALLED UNDER THIS CONTRACT, INCLUDING PARTS LISTS, WIRING DIAGRAMS, MAINTENANCE AND OPERATION MANUALS AND WARRANTIES CUSTOMARILY SUPPLIED BY MANUFACTURERS FOR EQUIPMENT INCORPORATED IN THIS WORK. THE LITERATURE WILL BE NEATLY ORGANIZED ON A USB STORAGE DRIVE AND DELIVERED PRIOR TO FINAL ACCEPTANCES.

THE CONTRACTOR SHALL GIVE A PHYSICAL DEMONSTRATION AND VERBAL INSTRUCTIONS FOR PROPER OPERATION AND MAINTENANCE OF EQUIPMENT TO THE OWNER OR HIS DESIGNATED REPRESENTATIVE; SCHEDULE THESE DEMONSTRATIONS AND INSTRUCTIONS AT THE OWNER'S CONVENIENCE.

FOR REFERENCE:

EXISTING F.P. VAV BOX SCHEDULE			
DESIGNATION		VAV 2-03	
PRIMARY AIR DATA			
AIR FLOW (MAXIMUM-MINIMUM)	CFM-CFM	550 - 160	
TEMPERATURE	°F	55	
MAXIMUM PRESSURE DROP	IN. H ₂ O	0.25	
HEATING DATA			
UNIT HEATING AIR FLOW	CFM	430	
PRIMARY ENTERING AIR TEMP.	°F	55	
PLENUM TEMP.	°F	68	
BOX LEAVING AIR TEMP. (MIN.)	°F	100	
ENTERING WATER TEMPERATURE	°F	180	
COIL MAX. FLOW	GPM	1.5	
CAPACITY	MBTUH	15.7	
WATER PIPING RUNOUT SIZE	IN.	3/4	
FAN DATA			
FAN AIRFLOW	CFM	270	
DOWNSTREAM S.P.	IN. H ₂ O	0.3	
FAN POWER	HP	1/15	
POWER	V / PH	277 / 1	
FLA	A	1.3	
MANUFACTURER		TRANE	
MODEL NUMBER		VPWE	
SIZE		8	

LAYOUT & COORDINATION:

INSTALLERS ARE EXPECTED TO COORDINATE IN ORDER TO AVOID INTERFERENCE BETWEEN TRADES. THE INSTALLERS ARE EXPECTED TO VERIFY CRITICAL DIMENSIONS AND FIELD FABRICATE PIPING AS NECESSARY TO ACCOMMODATE CONDITIONS. INSTALLERS ARE EXPECTED TO INSTALL EQUIPMENT SUCH THAT PROPER MAINTENANCE CLEARANCES ARE MAINTAINED FOR EQUIPMENT OF ALL TRADES.

THE CONTRACTOR SHALL TAKE FULL AND COMPLETE RESPONSIBILITY FOR AVOIDING CONFLICTS WITH EXISTING BUILDING STRUCTURE, PIPING AND EQUIPMENT. BEFORE FABRICATING ANY DUCTWORK OR PIPING, FIELD VERIFY THE SPACE AVAILABLE WHILE MAINTAINING REQUIRED ACCESS TO EQUIPMENT FROM ALL TRADES. ANY CHANGE REQUIRED SO THAT DUCTWORK OR PIPING WILL FIT EXISTING CONDITIONS AND ANY DUCTWORK OR PIPING DISPOSED AS SCRAP BY FAILING TO VERIFY FIELD CONDITIONS WILL BE AT THE EXPENSE OF THE CONTRACTOR.

HAZARDOUS MATERIALS

CONTRACTORS ARE EXPECTED TO NOTIFY THE OWNER WHENEVER THEY DISCOVER THAT THEIR WORK WILL EXPOSE THEM TO ANY MATERIALS THAT ARE THE LEAST BIT SUSPICIOUS. REMOVAL OF CONTAMINATED MATERIALS WILL BE THE RESPONSIBILITY OF THE OWNER. HOWEVER THE CONTRACTOR IS RESPONSIBLE TO INSPECT FUTURE WORK AREAS IN A TIMELY FASHION SO AS NOT TO BE HELD UP WAITING FOR ABATEMENT.

SPECIAL CONDITIONS

THE BUILDING MAY BE OCCUPIED DURING CONSTRUCTION. TAKE EVERY PRECAUTION TO INSURE THE SAFETY OF THE OCCUPANTS. PROVIDE FOR REASONABLE SAFETY PRECAUTIONS, SIGNAGE AND OTHER WARNINGS. KEEP EXITS CLEAR. COORDINATE THE WORK TO MINIMIZE THE DISTURBANCE OF BUILDING OCCUPANTS. KEEP CONSTRUCTION AREAS CLEAN ON A DAILY BASIS. TAKE CARE TO MAINTAIN THE CONDITION OF EXISTING MATERIALS AND SURFACES. REPAIR ANY DAMAGE TO MATCH EXISTING.

THE CONTRACTOR IS EXPECTED TO TAKE EVERY PRECAUTION AGAINST THE INITIATION OF FIRES AND WILL, AS A MINIMUM, MAINTAIN FIRE EXTINGUISHERS FOR USE BY HIS EMPLOYEES. NO SMOKING WILL BE ALLOWED INSIDE THE BUILDING.

DUCTWORK:

- ALL WORK SHALL COMPLY WITH SMACNA HVAC DUCT CONSTRUCTION STANDARDS - METAL AND FLEXIBLE, STATIC PRESSURE REQUIREMENTS FOR VAV SINGLE-ZONE SYSTEMS: SUPPLY (2") AND RETURNS (-1").
- USE EITHER ROUND OR RECTANGULAR DUCT WITH EQUAL OR GREATER EQUIVALENT FREE AREA TO ACCOMMODATE EXISTING STRUCTURE.
- FLEXIBLE DUCT ON RUNOUTS SHALL NOT EXCEED 10'. USE SPIRAL ROUND DUCT FOR LONGER RUNS.
- DUCT SIZES MAY BE CHANGED TO ACCOMMODATE CONDITION AS LONG AS THE INTERNAL FREE AREA IS NOT DIMINISHED.
- RUN-OUT DUCTS TO DIFFUSERS SHALL BE EQUAL TO DIFFUSER NECK SIZE, SEE GRILLE/FLOW SCHEDULES.
- TAG ALL DAMPER LOCATIONS WITH ORANGE FLAG TAPE.
- PERMANENTLY MARK ALL DAMPER SHAFTS TO INDICATE DAMPER POSITION.

TEST AND BALANCE WORK SUMMARY

TEST AND BALANCE WORK INCLUDES:
- RE-BALANCE OF SUPPLY AIR AND RETURN AIR SYSTEMS

DIFFUSER & GRILLE SCHEDULE						
TYPE	QTY	DESCRIPTION	MODEL	REMARKS	AIR PATTERN	DAMPER
	1	PERFORATED RETURN GRILLE	TITUS PAR-AA	SURFACE MOUNT, 3/16" Ø HOLES ON 1/4" CENTERS, ALUMINUM CONSTRUCTION, WHITE FINISH, 12x12 MODULE SIZE, 6x6 CONNECTION (FIELD VERIFY)	NA	NO

HVAC SYMBOLS/LEGEND

DESIGNATION	DESCRIPTION
	LAY-IN SUPPLY AIR DIFFUSER
	LAY-IN RETURN AIR DIFFUSER WITH OUT DUCT CONNECTION
	SURFACE MOUNT SUPPLY GRILLE
	SURFACE MOUNT RETURN GRILLE
	ROUND DUCT WITH SIZE INDICATED
	THERMOSTAT/TEMPERATURE SENSOR & WIREWAY
	TEMP./RELATIVE HUMIDITY SENSOR AND WIREWAY
	RECTANGULAR DUCTWORK & INTERNAL SIZE (FREE AREA)
	RECTANGULAR DUCTWORK W/LINER & INTERNAL SIZE (FREE AREA)
	FLEXIBLE DUCT CONNECTION
	MITERED ELBOW FITTING WITH DOUBLE THICKNESS TURNING VANES
	MITERED TAKEOFF WITH MVD (PROVIDE INSULATION STANDOFF)
	MITERED TAKEOFF WITHOUT MVD (USE AT TAKEOFFS FOR VAV TERMINALS)
	EXTENT OF DEMOLITION
	DUCT SMOKE DETECTOR
	POINT OF CONNECTION TO EXISTING
	MANUAL VOLUME DAMPER WITH LOCKING QUADRANT
	ELECTRIC OPERATED CONTROL DAMPER
	FIRE DAMPER
	COMBINATION FIRE/SMOKE DAMPER
	SMOKE DAMPER
	AIR FLOW VIA 1" DOOR UNDERCUT
	AIR FLOW DIRECTION
	GRILLE AND FLOWRATE (CFM) DESIGNATION
	CEILING MOUNTED EXHAUST FAN
	RELOCATE AND RELOCATED
	SERVICE AREA - MAINTAIN CLEAR
	ACCESS DOOR WITH LATCH, DIMENSION INDICATES SIZE
	FLEXIBLE DUCT

ABBREVIATIONS

AD	ACCESS DOOR
AF	ABOVE FINISHED FLOOR
AHAP	AS HIGH AS POSSIBLE
BAS	BLDG AUTOMATION SYSTEM
BD	BACKDRIFT DAMPER
BHP	BRAKE HORSE POWER
BOD	BOTTOM OF DUCT
BTUH	BRITISH THERMAL UNIT/HOUR
CFM	CUBIC FEET PER MINUTE
CLG	CEILING
CONC	CONCRETE
CHWS	CHILLED WATER SUPPLY
CHWR	CHILLED WATER RETURN
D	DUCT DETECTOR
DB	DRY BULB
DIA OR Ø	DIAMETER
DG	DOOR GRILLE
DTL	DETAIL
DW	DOMESTIC WATER
EF	EXHAUST FAN
ETR	EXISTING TO REMAIN
(EX)	EXISTING
EXT	EXTERNAL OR EXTERIOR
FD	FLOOR DRAIN
FL	FLOOR
GPM	GALLONS PER MINUTE
H	HIGH
HD	HUB DRAIN
L	LONG
LAT	LEAVING AIR TEMPERATURE
MAX	MAXIMUM
MBH	1000 BTU/HOUR
MIN	MINIMUM
N	NEW
NIC	NOT IN CONTRACT
NPS	NOMINAL PIPE SIZE
OA	OUTSIDE AIR
OC	ON CENTER
PL	PLACES
PNL	PANEL
RA	RETURN AIR
RAG	RETURN AIR GRILLE
RLA	RATED LOAD AMPS
RV	ROOF VENT
SA	SUPPLY AIR
SAG	SUPPLY AIR GRILLE
SP	STATIC PRESSURE
SQ	SQUARE
T	TEMPERATURE
XFR	TRANSFER
THK	THICK
TOD	TOP OF DUCT
TYP	TYPICAL
UG	UNDERGROUND
UOS	UNLESS OTHERWISE SPECIFIED
VAV	VARIABLE AIR VOLUME
V	VOLTS
WB	WET BULB
W	WIDE
WG	WATER GAUGE

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PROJECT	UNIT	REMARKS	DATE
DESIGN DEVELOPMENT 100% CONSTRUCTION DOCUMENTS	TS	JB	5/15/2026
	TS	JB	6/25/2026

 McGinnis + Fleming Engineering 200 W. 1st Street, Suite 100 Tallahassee, FL 32301	Project #: 19370.77 Phase: 100% Construction Documents	Job Title: Challenger Learning Center 0135 & 0136 Remodel Tallahassee, FL
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Seal:

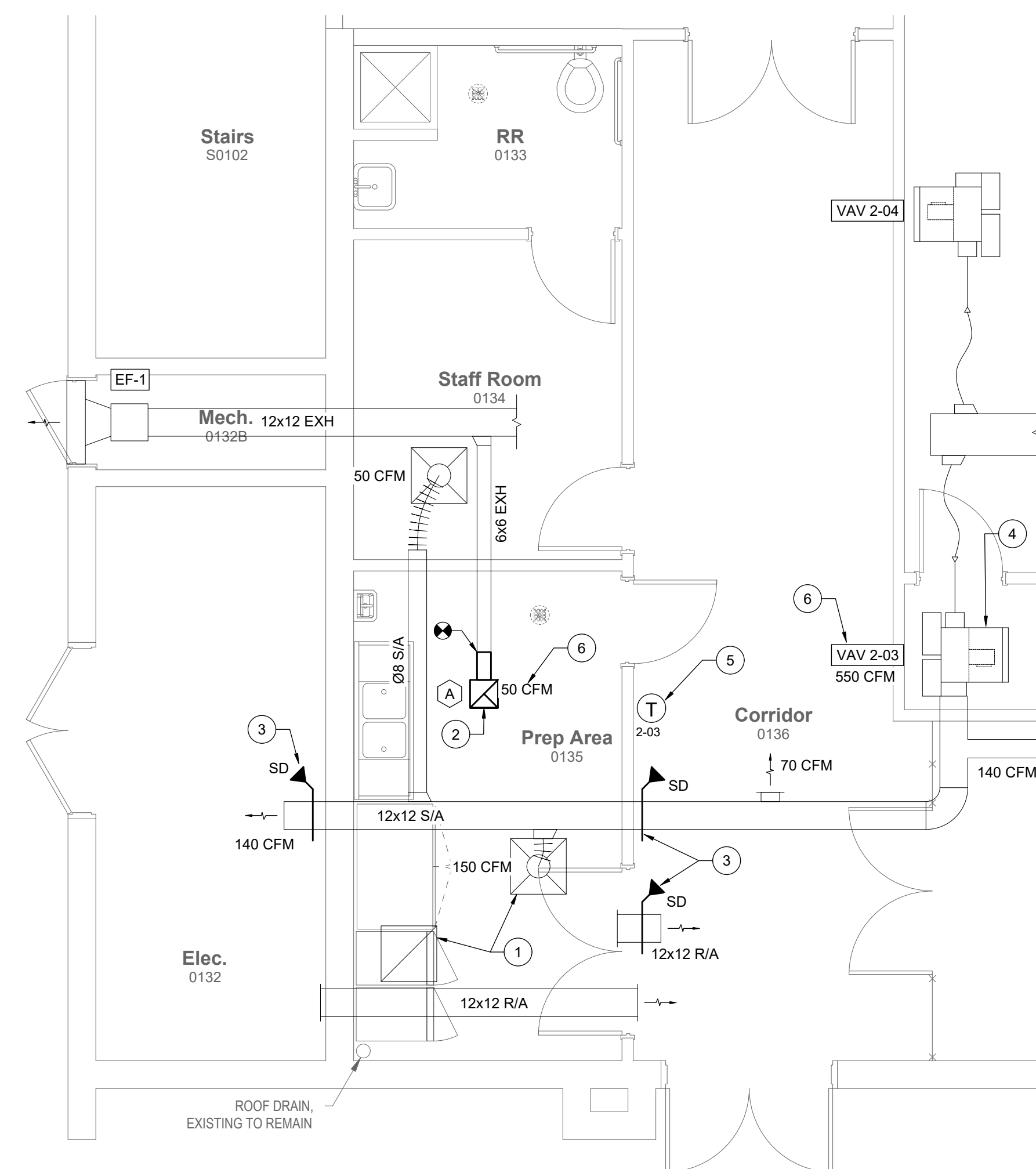
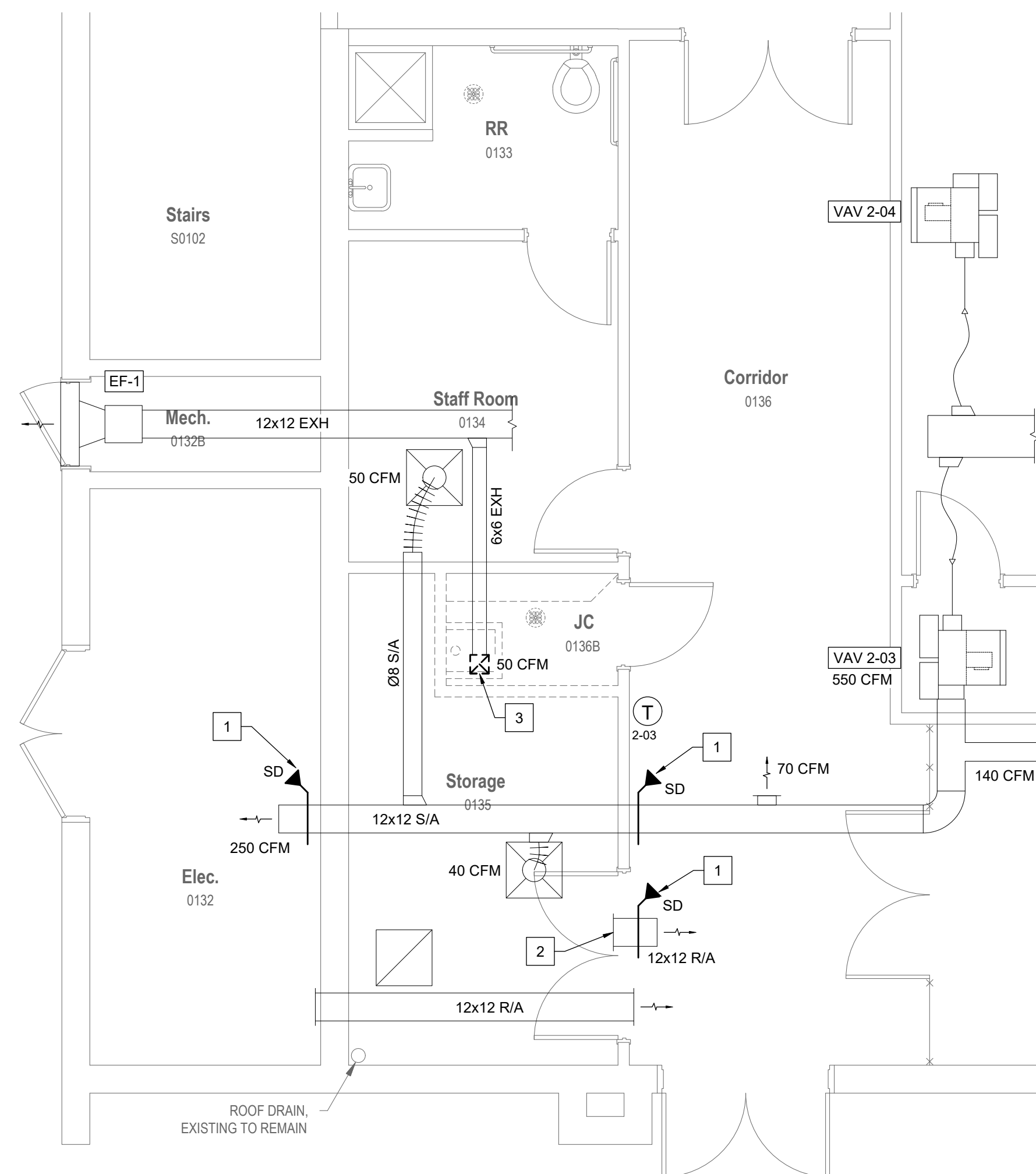
ALW

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Description:
Mechanical Notes.
Legend, and Schedules

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M3.0

