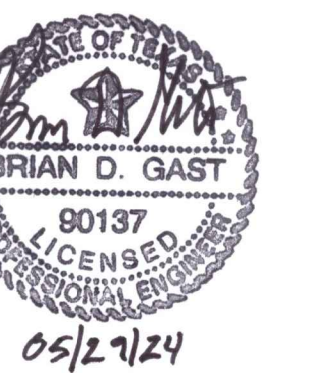


MERITAGE HOMES

8840 CYPRESS
WATERS BLVD.
SUITE 125
DALLAS, TEXAS
75019



ISSUE DATE MAY 29, 2024

PROJECT NUMBER	23082
USABLE SQUARE FOOTAGE	± 15,999 SF
RENTABLE SQUARE FOOTAGE	
SHEET NUMBER	

CONTRACTOR SHALL COORDINATE
MEP DRAWINGS WITH ALL OTHER
DISCIPLINES

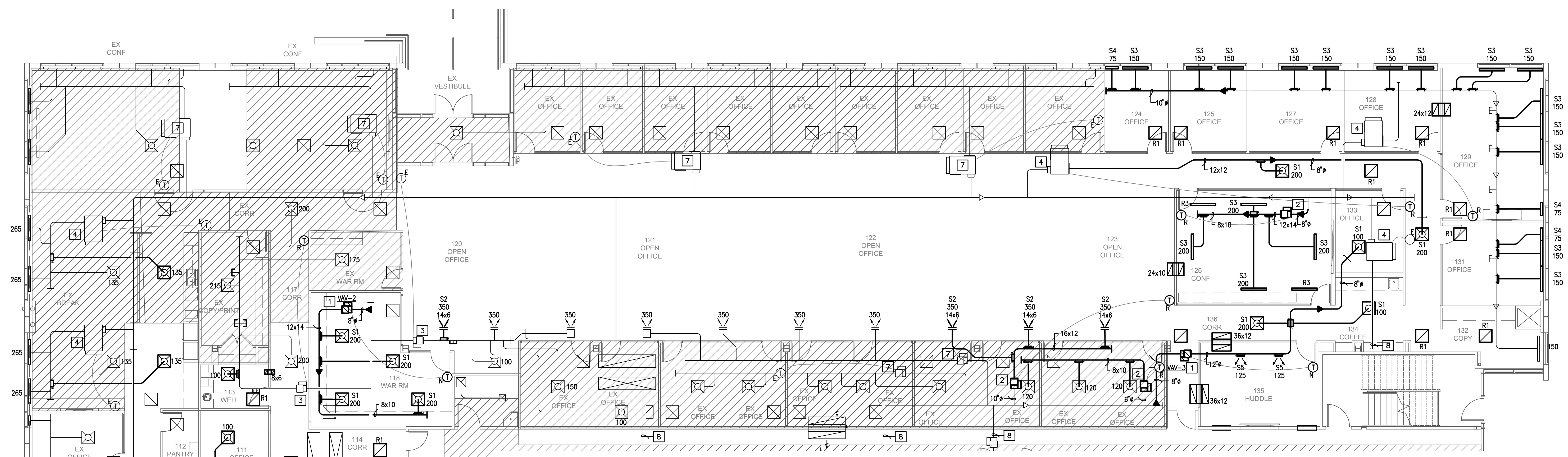


Texas Registered Engineering Firm F-9218
5020 Tennyson Parkway - Plano, TX 75042
Dallas / Fort Worth 214.432.3030
Houston 832.532.2007

M0.01

COVER SHEET -
MECHANICAL

MECHANICAL ABBREVIATIONS & SYMBOLS <small>ALL SYMBOLS MAY NOT APPEAR ON DRAWINGS.</small>			MECHANICAL NOTES <small>ALL NOTES MAY NOT APPLY.</small>			
<p>PIPING DESIGNATIONS</p> <p>— CHS — CHILLED WATER SUPPLY — CHR — CHILLED WATER RETURN — CWS — CONDENSER WATER SUPPLY — CWR — CONDENSER WATER RETURN — HWS — HEATING WATER SUPPLY — HWR — HEATING WATER RETURN — HPWS — HEAT PUMP WATER SUPPLY — HPWR — HEAT PUMP WATER RETURN — E — EXPANSION LINE — CD — CONDENSATE DRAIN</p>			<p>EQUIPMENT DESIGNATIONS</p> <p>AC AIR COMPRESSOR AF AIR FILTER AH/AHU AIR HANDLING UNIT AS AIR SEPARATOR BF BOOSTER FAN CP CIRCULATING PUMP CRAC COMPUTER ROOM AIR CONDITIONER CT COOLING TOWER CU CONDENSING UNIT, AIR COOLED CVT CONSTANT VOLUME FAN TERMINAL COOL/HEAT EDH ELECTRIC DUCT HEATER EF EXHAUST FAN ELH ELECTRIC UNIT HEATER FCU FAN COIL UNIT FD FIRE DAMPER FPB FAN POWERED BOX FSD FIRE/SMOKE COMBINATION DAMPER GRV GRAVITY ROOF VENTILATOR GUH GAS-FIRED UNIT HEATER HC HEATING COIL HP HEAT PUMP, AIR SOURCE HUM HUMIDIFIER HX HEAT EXCHANGER IRH INFRARED HEATER KEF KITCHEN EXHAUST FAN KSF KITCHEN SUPPLY FAN MAU MAKE-UP AIR UNIT MD MOTORIZED DAMPER RTU ROOF TOP UNIT SA SOUND ATTENUATOR SD SMOKE DAMPER SF SUPPLY FAN VAV VARIABLE VOLUME TERMINAL - COOL ONLY VFD VARIABLE FREQUENCY DRIVE VRF VARIABLE REFRIGERANT FLOW VSD VARIABLE SPEED DRIVE VWT VARIABLE VOLUME & TEMPERATURE WH WALL HEATER WSP HEAT PUMP, WATER SOURCE</p>		<p>ABBREVIATIONS</p> <p>AFF ABOVE FINISH FLOOR AFG ABOVE FINISHED GRADE A/C ABOVE CEILING BAS BUILDING AUTOMATION SYSTEM SEE EMCS B/F BELOW FLOOR BFF BELOW FINISHED FLOOR B/G BELOW GRADE BRF BELOW RAISED FLOOR CLG CEILING CO CLEANOUT DCO DOUBLE CLEANOUT DS DOWNSPOUT EMCS ENERGY MANAGEMENT & CONTROL SYSTEM FLR FLOOR CLEANOUT FLR FLOOR GCO GRADE CLEANOUT GW GREASE WASTE HW HOT WATER HWR HOT WATER RETURN MTD MOUNTED OD OVERFLOW DRAIN ODN OVERFLOW DOWNSPOUT NOZZLE PRV PRESSURE REDUCING VALVE RD ROOF DRAIN RV RELIEF VALVE SD STORM DRAIN SS SANITARY SEWER SV SANITARY VENT UNO UNLESS NOTED OTHERWISE VTR VENT THRU ROOF WCO WALL CLEANOUT</p>	
<p>MECHANICAL SYMBOLS</p> <p> NEW FAN POWERED BOX EXISTING FAN POWERED BOX DEMOLISHED FAN POWERED BOX RELOCATED FAN POWERED BOX NEW VAV EXISTING VAV DEMOLISHED VAV RELOCATED VAV NEW DUCTWORK EXISTING DUCTWORK DEMOLISHED DUCTWORK SUPPLY OR OUTSIDE AIR DUCT RETURN OR EXHAUST AIR DUCT DUCT TURNING UP DUCT TURNING DOWN CLEAR INSIDE DUCT DIMENSION, FIRST VALUE IS DUCT WIDTH DUCT TRANSITION DUCT TAP WITH MANUAL VOLUME DAMPER NEW SUPPLY AIR GRILLE NEW RETURN AIR GRILLE NEW EXHAUST AIR GRILLE EXISTING SUPPLY AIR GRILLE EXISTING RETURN AIR GRILLE EXISTING EXHAUST AIR GRILLE DEMOLISHED SUPPLY AIR GRILLE DEMOLISHED RETURN AIR GRILLE DEMOLISHED EXHAUST AIR GRILLE SIDEWALL OUTLET SIDEWALL INLET THERMOSTAT/SENSOR HUMIDISTAT DUCT SMOKE DETECTOR</p>			<p>GENERAL NOTES:</p> <ol style="list-style-type: none"> IT IS THE INTENT AND MEANING OF THE CONSTRUCTION DOCUMENTS THAT THE CONTRACTOR SHALL PROVIDE A MECHANICAL INSTALLATION THAT IS COMPLETE AND ALL ITEMS AND APPURTENANCES NECESSARY, REASONABLY INCIDENTAL, OR CUSTOMARILY INCLUDED EVEN THOUGH EACH AND EVERY ITEM IS NOT SPECIFICALLY CALLED OUT OR SHOWN. THE CONTRACTOR SHALL MAKE A CAREFUL EXAMINATION OF THE SITE AND THOROUGHLY FAMILIARIZE HIMSELF WITH THE REQUIREMENTS OF THE CONTRACT. UPON COMMENCEMENT OF CONSTRUCTION FOR THE WORK INCLUDED IN THIS CONTRACT, THE CONTRACTOR SHALL BE DEEMED TO HAVE MADE SUCH A STUDY OR EXAMINATION AND THAT HE IS FAMILIAR WITH AND ACCEPTS ALL CONDITIONS OF THE PREMISES. PROVIDE EQUIPMENT, MATERIALS, LABOR, SUPERVISION AND SERVICES NECESSARY FOR OR INCIDENTAL TO THE INSTALLATION OF A COMPLETE AND OPERATING HVAC OR PLUMBING SYSTEM AS SHOWN OR INDICATED ON THE DRAWINGS AND/OR AS SPECIFIED. CONTRACTOR SHALL TAKE PROPER PRECAUTIONS TO PROTECT ALL EXISTING OPERATIONS AND PROPERTY ADJACENT WITH WHICH WORK COMES IN CONTACT OR OVER WHICH HE MAY TRANSPORT, HOIST OR MOVE MATERIALS, EQUIPMENT, DEBRIS, ETC. AND SHALL REPAIR SATISFACTORILY ALL DAMAGES CAUSED BY HIM DURING CONSTRUCTION. THE CONTRACTOR SHALL REPLACE WITH NEW MATERIALS AND/OR EQUIPMENT FAILING TO GIVE SATISFACTORY SERVICE DURING THE WARRANTY PERIOD. THE CONTRACTOR SHALL COORDINATE AND NOTIFY THE BUILDING OWNER AND OPERATOR FOR APPROVAL AND SCHEDULING OF ANY BUILDING OR EXISTING TENANT SYSTEM INTERRUPTION. MATERIALS AND WORKMANSHIP SHALL COMPLY WITH CONTRACT DOCUMENTS, APPLICABLE CODES AND STANDARDS, AND, IN THE CASE OF DIFFERENCES BETWEEN APPLICABLE CODES AND STANDARDS AND THE CONTRACT DOCUMENTS, THE CONTRACTOR SHALL PROMPTLY NOTIFY THE ARCHITECT/ENGINEER AND THE OWNER IN WRITING OF SUCH DIFFERENCES. SHOULD THE CONTRACTOR PERFORM ANY WORK THAT DOES NOT COMPLY WITH REQUIREMENTS OF APPLICABLE CODES AND STANDARDS, HE SHALL BEAR ALL COSTS ARISING IN CORRECTING SUCH DEFECTS. APPLICABLE CODES AND STANDARDS SHALL INCLUDE ALL ORDINANCES, UTILITY COMPANY REGULATIONS AND APPLICABLE REQUIREMENTS OF NATIONALLY ACCEPTED CODES AND STANDARDS. THE DRAWINGS WERE PREPARED FROM THE BEST INFORMATION AVAILABLE, BUT DO NOT ATTEMPT TO INDICATE THE LOCATION OF ALL EXISTING EQUIPMENT. THE CONTRACTOR SHALL CAREFULLY INVESTIGATE THE CONDITIONS SURROUNDING THE INSTALLATION OF HIS WORK PRIOR TO PROCEEDING WITH THE INSTALLATION. CHANGES REQUIRED TO THE DESIGN SHOWN ON THESE DRAWINGS DUE TO EXISTING CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER/OWNER FOR REVIEW BY WAY OF SHOP DRAWINGS OR SKETCHES DETAILING THE EXISTING CONDITIONS AND THE PROPOSED CHANGE. ALL EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S PUBLISHED RECOMMENDATIONS FOR SERVICE INTENDED, AS INTERPRETED BY THE ENGINEER. EXPERIENCED CRAFTSMEN SHALL MAKE THE INSTALLATION OF ALL EQUIPMENT IN A NEAT WORKMANSHIP LIKE MANNER. THE CONTRACTOR SHALL FURNISH ALL MATERIALS, TOOLS, COST AND SERVICE NECESSARY TO COMPLETELY INSTALL ALL MECHANICAL WORK. ALL MECHANICAL AND PLUMBING EQUIPMENT SHALL BE AS SCHEDULED OR APPROVED EQUAL. COORDINATE THERMOSTAT LOCATIONS WITH ARCHITECT PRIOR TO INSTALLATION. DO NOT INSTALL THERMOSTAT ABOVE DIMMER SWITCH. PROPERLY SUPPORT ALL EQUIPMENT AND PIPING WITHIN THE BUILDING AND PROVIDE ADEQUATE PROVISIONS FOR SLOPE AND ANCHORAGE. CONTRACTOR SHALL USE HANGERS, RODS AND INSERTS APPROVED BY UNDERWRITERS LABORATORIES FOR THE SERVICE INTENDED, SECURELY SUPPORTED BY STRUCTURAL MEMBERS WHICH IN TURN ARE SUPPORTED DIRECTLY FROM THE BUILDING STRUCTURE. PROVIDE VIBRATION ISOLATION FOR MOTOR DRIVEN MECHANICAL EQUIPMENT. ALL FANS SHALL CARRY THE CERTIFIED RATING SEAL AUTHORIZED BY AMCA. PROVIDE FLEXIBLE DUCTWORK CONNECTIONS AT EQUIPMENT. DUCTWORK SHALL BE CONSTRUCTED ACCORDING TO SMACNA STANDARDS. DUCT AND FIRE DAMPER SIZES SHOWN ARE AIRSTREAM DIMENSIONS. ALL LONGITUDINAL AND TRANSVERSE SEAMS AND DUCT CONNECTIONS SHALL BE SECURELY FASTENED AND SEALED WITH TAPES OR MASTICS MEETING UL 181A OR UL181B, WELDS, OR GASKETS. INSULATE NEW SUPPLY AND RETURN DUCTWORK AND PLENUMS WITH EITHER EXTERNAL INSULATION TYPE IV DUCT WRAP OR INTERNAL DUCT LINER, 1.5 PCF MINIMUM DENSITY. (SIZES SHOWN ARE AIRSTREAM DIMENSIONS). DUCTWORK AND PLENUMS WITHIN UNCONDITIONED SPACES SHALL HAVE MINIMUM R-8 INSULATION. EXTERIOR DUCTWORK SHALL HAVE MINIMUM R-8 INSULATION. DIFFUSERS, REGISTERS AND GRILLES SHALL BE BUILDING STANDARD UNLESS NOTED OTHERWISE AND SHALL BE PROVIDED WITH FRAMES COMPATIBLE WITH CEILING TYPE. DO NOT SPAN AIR DEVICES OVER PARTITIONS. PROVIDE AN AIR BALANCING DEVICE FOR EACH SUPPLY AIR OUTLET AND ZONE TERMINAL DEVICE. PROVIDE YOUNG REGULATORS WITH BOWDEN CABLE CONTROL FOR ALL DAMPERS ABOVE INACCESSIBLE CEILING. COORDINATE EXACT LOCATION OF ESCUTCHEONS IN CEILING WITH ARCHITECT PRIOR TO INSTALLATION. CONTRACTOR TO VERIFY RETURN AIR PATH AND INCORPORATE RETURN AIR TRANSFER THROUGH WALLS AS NECESSARY. OPENING SIZED FOR A MAXIMUM OF 500 FPM UNLESS NOTED OTHERWISE. COORDINATE ALL WALLS TO DECK WITH EXISTING DUCTWORK AND EXISTING TERMINAL UNITS. BALANCING OF WATER AND AIR SYSTEMS SHALL BE PROVIDED UNDER THIS CONTRACT FOR ALL SYSTEMS WITHIN TENANT BORDERS AND ADJACENT AREAS THAT MAY BE AFFECTED BY BALANCING FOR THIS TENANT. BALANCING CONTRACTOR TO REVIEW DRAWINGS AND NOTIFY THE CONTRACTOR OF APPURTENANCES NEEDED FOR A PROPERLY BALANCED SYSTEM. PROVIDE NEBB CERTIFIED AIR BALANCE REPORT. COLD AND HOT WATER PIPING SHALL BE TYPE L HARD DRAWN COPPER WITH WROUGHT COPPER FITTINGS. PROVIDE SOFT COPPER PIPING UNDER SLAB TO AVOID UNDERGROUND FITTINGS. WHERE ALLOWED BY LOCAL CODES AND AUTHORITY HAVING JURISDICTION, PIPE MAY BE CROSSLINKED POLYETHYLENE (PEX) MANUFACTURED BY PEX-A METHOD AND ASTM F1960 FITTINGS. INSULATE DOMESTIC HOT WATER AND RECIRCULATION LINES (1" THICK) AND DOMESTIC COLD WATER LINES (1/2" THICK) WITH OWENS CORNING FIBERGLASS 25 ASJ, JOHNS-MANVILLE AP OR APPROVED EQUAL, SEALED TO PREVENT SWEATING AND CONTINUOUS THROUGH WALLS, FLOORS, CEILINGS. ALL HOT WATER PIPING SHALL BE INSULATED PER THE ENERGY CODE. COLD WATER PIPING SHALL BE INSULATED IN EXTERIOR WALLS, CEILINGS OR IN SPACES EXPOSED TO OUTDOOR TEMPERATURES WITH 1" THICK FIBERGLASS INSULATION. SOIL, WASTE AND DRAIN PIPING, 2" AND LARGER, SHALL BE SERVICE WEIGHT CAST IRON. WASTE PIPING BELOW THE SLAB SHALL HAVE BELL AND SPIGOT CAST IRON MANUFACTURED TO ASTM A 74 WITH TY-SEAL GASKETS MANUFACTURED TO ASTM C 564. CAST IRON PIPING ABOVE THE SLAB SHALL BE "NO-HUB" PIPE AND FITTINGS MANUFACTURED TO CISPI 301. VENT PIPING MAY BE SCHEDULE 40 GALVANIZED STEEL, DWV COPPER OR SERVICE WEIGHT CAST IRON. ALL CAST IRON SOIL PIPE AND FITTINGS SHALL BE MARKED WITH THE COLLECTIVE TRADEMARK OF THE CAST IRON SOIL PIPE INSTITUTE AND BE LISTED WITH NSF INTERNATIONAL. IF APPROVED BY LOCAL CODES, SOIL, WASTE, AND DRAIN PIPING, 2" AND LARGER, SHALL BE POLYVINYL CHLORIDE (PVC) SCHEDULE 40 PIPING, ASTM AND NSF STAMPED AND APPROVED. FITTINGS SHALL BE PVC SCHEDULE 40 ASTM STAMPED AND APPROVED. HOT WATER CIRCULATING SYSTEMS OR HOT WATER HEAT TRACE SHALL HAVE TIMELOCK CAPABLE CONTROL. PLUMBING FIXTURES AND EQUIPMENT SHALL BE FURNISHED AND INSTALLED COMPLETE WITH TRIM AND ALL OTHER APPURTENANCES REQUIRED TO CONNECT TO ROUGH-IN PIPING AT FLOORS AND WALLS UNLESS OTHERWISE SPECIFIED. WATER HEATING EQUIPMENT WITHOUT INTEGRAL HEAT TRAPS WILL HAVE HEAT TRAPS INSTALLED ON THE SUPPLY AND DISCHARGE PIPING. PVC PIPING LOCATED IN PLENUM RETURN MUST MEET ASTM E84 AND HAVE A FIRE SPREAD OF 25/50. ALL PIPING SHALL MEET ALL LOCAL CODE AND AMENDMENT REQUIREMENTS. EXISTING EQUIPMENT NOTES: A. CONTRACTOR SHALL INSPECT EXISTING PLUMBING AND HVAC EQUIPMENT PRIOR TO SUBMITTING HIS BID. B. CONTRACTOR SHALL INCLUDE IN HIS BID A THOROUGH START-UP SERVICING AND CLEANING OF ALL EXISTING EQUIPMENT. PLACE ALL EXISTING SYSTEMS/EQUIPMENT IN PROPER OPERATING ORDER. C. IF REPAIRS ARE NECESSARY TO PLACE EXISTING EQUIPMENT IN WORKING ORDER, PROVIDE OWNER WITH A DETAILED WRITTEN REPORT OF NECESSARY REPAIRS AND A COST PROPOSAL TO PERFORM THE WORK. ALL SUCH SERVICE REPORTS SHALL BE DELIVERED TO THE OWNER WITHIN TWO DAYS OF NOTICE TO PROCEED. OWNER RESERVES THE RIGHT TO HAVE ANY REQUIRED REPAIRS DONE BY OTHERS AND TO SEEK OTHER OPINIONS OR REQUIRED REPAIRS. PROVIDE INSTALLATION, OPERATION AND MAINTENANCE MANUALS TO THE OWNER. STANDARD NO-HUB COUPLINGS SHALL CONFORM TO CISPI 310 (MOST CURRENT EDITION) AND SHALL BE LISTED BY NSF INTERNATIONAL. HEAVY DUTY COUPLINGS SHALL CONFORM TO THE REQUIREMENTS OF ASTM 1540 AND FM 1680 CLASS I. COMPRESSION GASKETS FOR HUB & SPIGOT SHALL CONFORM TO THE REQUIREMENTS OF ASTM STANDARD C 564 AND ASTM C 1563 (MOST CURRENT EDITION) JOINTS FOR PIPE AND FITTINGS SHALL CONFORM TO THE MANUFACTURER'S INSTALLATION INSTRUCTIONS AND LOCAL CODE REQUIREMENTS. ALL MECHANICAL SYSTEMS AND EQUIPMENT SHALL MEET THE CURRENT ASHRAE/IES 90.1 STANDARDS FOR MINIMUM ENERGY EFFICIENCY LEVELS. DUCTWORK INSULATION SHALL HAVE A MINIMUM VALUE OF R-8. PROGRAMMABLE THERMOSTATS (IF USED) SHALL HAVE NIGHT SET BACK. WATER HEATING SYSTEMS SHALL HAVE HEAT TRAPS. PROVIDE OPERATION AND MAINTENANCE MANUALS. DRAIN PANS SHALL BE STAINLESS STEEL, DOUBLE SLOPED AND CLEANABLE. REFER TO ASHRAE 62 FOR MINIMUM STANDARDS. 		<p>DEMOLITION NOTES:</p> <ol style="list-style-type: none"> PROTECT THE EXISTING EQUIPMENT AND SYSTEMS TO REMAIN OPERATIONAL. IF DAMAGED OR DISTURBED IN THE COURSE OF THE DEMOLITION WORK, IT IS THE CONTRACTOR'S RESPONSIBILITY TO REPAIR OR REPLACE WITH NEW PRODUCT OF EQUAL CAPACITY, QUALITY AND FUNCTIONALITY. CONTRACTOR SHALL COORDINATE WITH THE OWNER TO ARRANGE THE SHUT OFF OF UTILITIES. CONTRACTOR SHALL BOX AND/OR PALLETIZE ALL DEMOLISHED EQUIPMENT AND PROTECT IT ON SITE. REMOVE THESE ITEMS FROM THE SITE AT THE DIRECTION OF THE OWNER. CONTRACTOR SHALL NOT CONSIDER DEMOLITION AND ALTERATION NOTES TO BE ALL-INCLUSIVE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO INSPECT AND ASSESS EACH AREA TO FULFILL THE INTENT OF THE COMPLETE DESIGN. REFER TO ARCHITECTURAL DOCUMENTS FOR DEFINITION OF SCOPE FOR DEMOLITION AREAS AND ADDITIONAL REQUIREMENTS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VISIT THE SITE TO CONFIRM THE EXTENT OF DEMOLITION AND RESOLVE ANY DISCREPANCIES WITH OWNER'S/LANDLORD'S CONSTRUCTION MANAGER. FOR DEMOLITION AREAS, THE CONTRACTOR SHALL REVIEW THE ARCHITECTURAL, MECHANICAL, PLUMBING, ELECTRICAL AND FIRE SUPPRESSION DEMOLITION DRAWINGS AND REMOVE BUILDING, MECHANICAL, AND ELECTRICAL EQUIPMENT ASSOCIATED WITH THE MECHANICAL, PLUMBING AND FIRE SUPPRESSION DEMOLITION. ENSURE THAT ALL LIFE SAFETY SYSTEMS REMAIN OPERATIONAL AND MEET LIFE SAFETY CODE REQUIREMENTS FOR ALL OCCUPIED AREAS THAT REMAIN OPERATIONAL DURING/AFTER DEMOLITION. THIS INCLUDES, BUT IS NOT LIMITED TO, EGRESS PATHWAYS, FIRE ALARM SYSTEMS, EGRESS LIGHTING AND OTHER LIFE SAFETY SYSTEMS. PROTECT EXISTING EQUIPMENT AND SYSTEMS INTENDED TO REMAIN OPERATIONAL. IF DAMAGED OR DISTURBED IN THE COURSE OF THE DEMOLITION WORK, IT IS THE CONTRACTOR'S RESPONSIBILITY TO REPAIR OR REPLACE WITH NEW PRODUCT OF EQUAL CAPACITY, QUALITY AND FUNCTIONALITY. RE-ROUTE AND RE-CONNECT ANY CIRCUIT(S) THAT ARE TO REMAIN IN USE BUT INTERFERES WITH THE NEW CONSTRUCTION. WORK REQUIRING INTERRUPTION OF ELECTRICAL POWER, WHICH WOULD ADVERSELY AFFECT THE NORMAL OPERATION OF THE OWNER/LANDLORD'S PROPERTY OR OTHER BUILDING TENANTS, SHALL BE DONE AT A TIME OTHER THAN NORMAL WORKING HOURS. SCHEDULE ALL OUTAGES WITH OWNER/LANDLORD PRIOR TO SHUTDOWN. OWNER/LANDLORD RESERVES THE RIGHTS TO ALL DEMOLISHED MATERIALS. COORDINATE AND VERIFY EQUIPMENT INTENDED TO BE SALVAGED PRIOR TO DEMOLITION. MATERIALS THAT OWNER/LANDLORD REQUESTS TO BE RE-USED OR SALVAGED, THE MATERIALS SHALL BE REMOVED IN A NEAT WORKMAN LIKE METHOD TO ALLOW THEIR RE-USE. PROTECT THE SALVAGE MATERIALS FOR REUSE BY PROPERLY PACKAGING THE MATERIALS TO PROTECT SALVAGED MATERIALS FROM DAMAGE. SECURELY PACKAGE ALL SALVAGE MATERIAL'S INSTALLATION HARDWARE AND PARTS TO SALVAGED MATERIALS. REMOVE UNUSED BRANCH CIRCUITS BACK TO BRANCH PANELBOARD OF ORIGIN. MARK BREAKER AS "SPARE" AND MAKE ELECTRICALLY SAFE. REMOVE ALL ABANDONED CONDUITS ABOVE LAY-IN CEILING, EXPOSED CONDUITS, FLEXIBLE CONDUITS, SURFACE RACEWAY, SURFACE MOUNTED OUTLET/JUNCTION BOXES, AND EQUIPMENT UNLESS NOTED OTHERWISE. REMOVE DEMOLISHED MATERIAL FROM PROJECT SITE IN ACCORDANCE WITH ALL APPLICABLE CODES, STANDARDS AND REGULATIONS. FOLLOW ALL STATE AND LOCAL REGULATIONS AND CODES FOR PROPER DISPOSAL. 	
<p>MECHANICAL SYMBOLS</p> <p> MANUAL VOLUME DAMPER (VD) FIRE DAMPER (FD) SMOKE DAMPER (SD) FIRE/SMOKE COMBINATION DAMPER (FSD) AUTOMATIC DAMPER, OPPOSED BLADE AUTOMATIC DAMPER, PARALLEL BLADE BACK DRAFT DAMPER</p>						



1 FLOOR PLAN - MECHANICAL
SCALE: 1/8" = 1'-0"

AIR DEVICE SCHEDULE

DESIG.	MFR.	MODEL #	TYPE	FACE TYPE/SIZE (IN.)	MATERIAL	FINISH	REMARKS
S1	REMARK 1	REMARK 1	CEILING SUPPLY	24x24	STEEL	PER ARCH	1
S2	REMARK 1	REMARK 1	SIDEWALL SUPPLY	SIZE NOTED ON PLANS	STEEL	PER ARCH	1
S3	REMARK 1	REMARK 1	LAY IN SUPPLY	4' LONG, (2) 1" SLOTS	STEEL	PER ARCH	1
S4	REMARK 1	REMARK 1	LAY IN SUPPLY	2' LONG, (2) 1" SLOTS	STEEL	PER ARCH	1
S5	REMARK 1	REMARK 1	DUCT MOUNTED SUPPLY	8x6	STEEL	PER ARCH	1
R1	REMARK 1	REMARK 1	CEILING RETURN	24x24	STEEL	PER ARCH	1
R2	REMARK 1	REMARK 1	LAY IN RETURN	24x24	STEEL	PER ARCH	1
R3	REMARK 1	REMARK 1	LAY IN RETURN	4' LONG, (2) 1" SLOTS	STEEL	PER ARCH	1

NOTES:
A. MAX NO LEVEL OF DIFFUSERS TO BE 30.
B. ACCEPTABLE MANUFACTURERS ARE: PRICE, TITUS, NALOR, GREENHECK.
C. FRAME AND BORDER TYPES TO MATCH CEILING AND/OR WALL.
D. REFERENCE ARCHITECTURAL REFLECTIVE CEILING PLAN.

REMARKS:
1. MATCH BUILDING STANDARD MANUFACTURER AND MODEL.

VARIABLE AIR VOLUME BOX SCHEDULE

DESIG.	GENERAL			MECHANICAL			REMARKS
	SERVES	MFR.	MODEL #	INLET SIZE (IN.)	DESIGN CFM	COOLING MIN. CFM	
VAV-1	100 AND 106	REMARK 3	REMARK 3	6	400	100	1-4
VAV-2	118	REMARK 3	REMARK 3	8	500	200	1-4
VAV-3	133-138	REMARK 3	REMARK 3	8	650	165	1-4

NOTES:
A. EQUIPMENT TO BE CLEARLY LABELED.
B. ACCEPTABLE MANUFACTURERS ARE: ENVIRO-TEC, PRICE, TITUS, YORUKI, TRANE, KRUEGER.
C. REFER TO SCHEDULE FOR MINIMUM SETPOINTS.

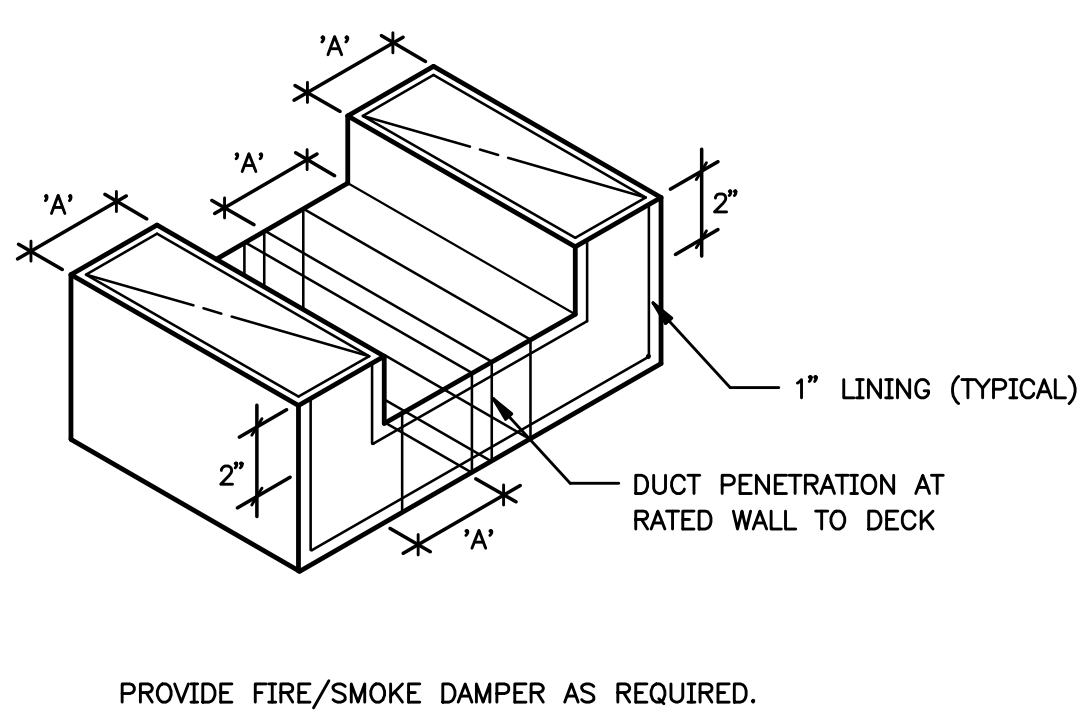
REMARKS:
1. 7 DAY PROGRAMMABLE THERMOSTAT.
2. SINGLE POINT CONNECTION AND FUSED DISCONNECT FOR EACH UNIT.
3. MATCH BUILDING STANDARD BRAND AND MODEL FOR ALL NEW VAVS.
4. BOXES SHALL BE COMPLETE WITH BRAND NAME, DOCUMENTATION/LOG, ELECTRONIC CONTROLS AND CONNECTED TO BUILDING AUTOMATION SYSTEM.
5. PROVIDE 100 TO 240 CONTROL TRANSFORMER.
6. INLET DUCT SIZE SHALL MATCH THE BOX SIZE AS SCHEDULED. INSTALLED MAXIMUM OF 9'-0" OF FLEXIBLE DUCTWORK AT THE PRIMARY INLET OF THE BOX.

GENERAL NOTES:

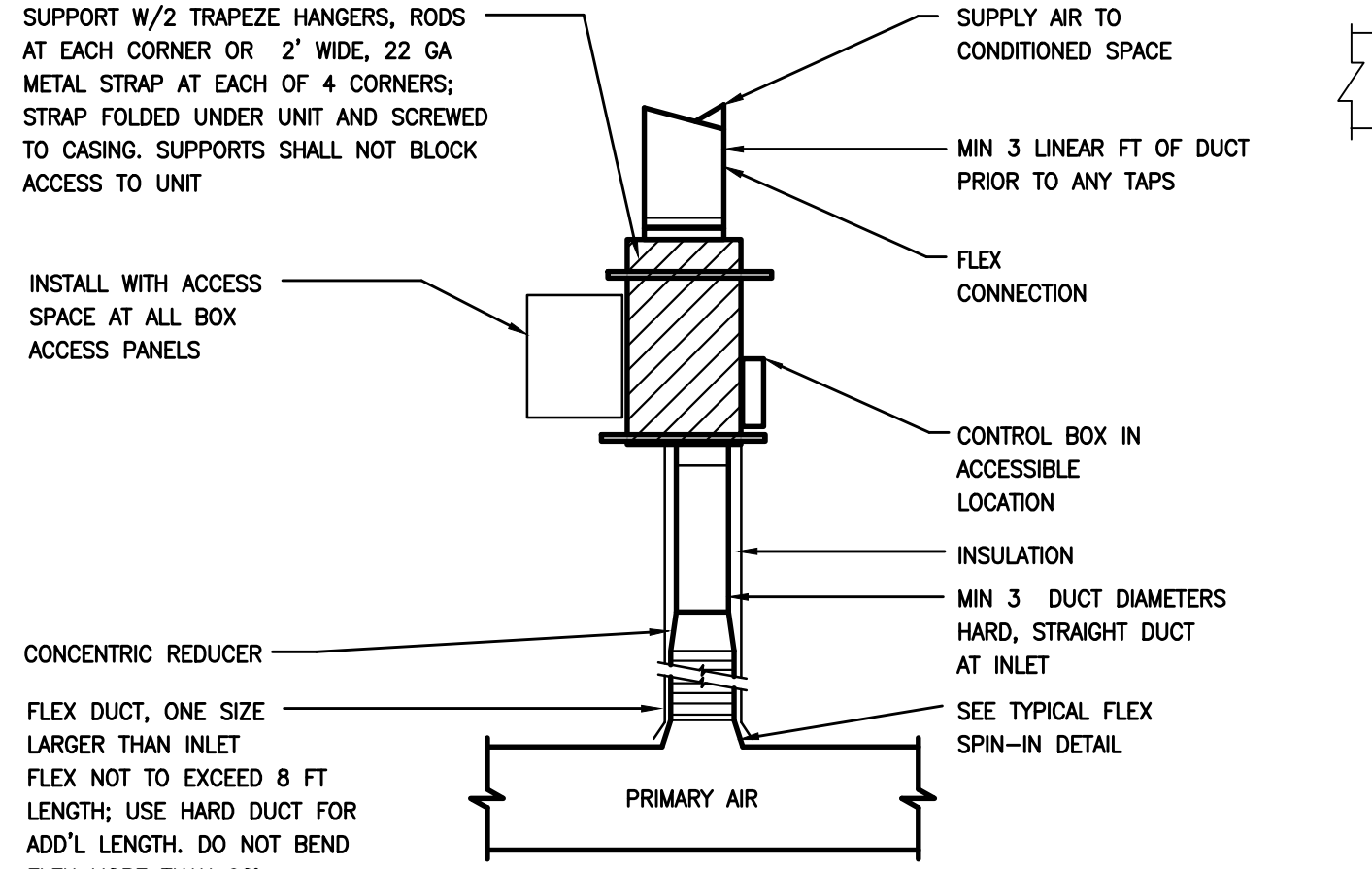
- A. FIELD VERIFY EXISTING CONDITIONS BEFORE BID AND CONSTRUCTION. NO ALLOWANCES WILL BE MADE FOR LACK OF KNOWLEDGE OF EXISTING CONDITIONS.
- B. REFER TO MEP SHEET FOR SPECIFICATIONS.
- C. ALL CONTROLS FOR VAV AND FAN POWERED BOXES SHALL BE BY ALERTON.
- D. PROVIDE REMOTE DAMPER CABLE FOR GRILLES IN GYP CEILING AND LOCATE ACCESS AT GRILLE FACE.
- E. ANY T-STAT MOUNTED ON EXTERIOR WALLS MUST BE INSULATED BEHIND T-STAT TO PREVENT FALSE READINGS.
- F. ALL CONTROLS WORK SHALL BE PERFORMED BY CLIMATEC. CONTROLS ARE BY ALERTON. CONFIRM FAN POWERED BOX AND VAV BOX TAGS ARE CORRECT WITH CONTROLS SYSTEM.
- G. CONSTRUCTION FILTERS SHALL REMAIN OR BE PLACED ON ALL FAN POWERED BOXES DURING CONSTRUCTION. FILTERS SHALL BE REMOVED AFTER CONSTRUCTION AND VERIFIED BY BUILDING MANAGEMENT BEFORE CEILING IS CLOSED.
- H. ALL MECHANICAL EQUIPMENT TO BE TIED INTO BUILDING EMS. COORDINATE EXACT REQUIREMENTS WITH BUILDING BEFORE CONSTRUCTION.
- I. ALL FAN POWERED BOXES AND VAV BOXES SHALL BE INSTALLED SO THAT MANUFACTURER REQUIRED CLEARANCES ARE MAINTAINED FOR ACCESS AND MAINTENANCE.
- J. REUSE AND RELOCATE ALL GRILLES WHERE APPLICABLE. CLEAN ALL EXISTING AND RELOCATED GRILLES TO "LIKE NEW" CONDITION.
- K. MOUNT ALL NEW AND RELOCATED THERMOSTATS A MINIMUM OF 48" ABOVE FINISHED FLOOR. THERMOSTAT LOCATIONS ARE DIAGRAMMATIC. FIELD VERIFY EXACT PLACEMENT OF THERMOSTATS WITH TENANT AND ARCHITECT PRIOR TO CONSTRUCTION.
- L. FOR ALL HVAC EQUIPMENT, MAINTAIN ALL MANUFACTURER REQUIRED CLEARANCES FOR ACCESS AND MAINTENANCE.
- M. PROVIDE SMOKE/FIRE DAMPERS FOR ALL NEW PENETRATIONS IN FIRE RATED WALL. FIELD VERIFY THAT EXISTING PENETRATIONS HAVE APPROPRIATE FIRE/SMOKE DAMPERS.
- N. EXISTING THERMOSTATS SHALL BE COVERED AND SEALED DURING CONSTRUCTION. ALL EXISTING THERMOSTATS BEING REUSED SHALL BE SERVICED AND CALIBRATED.
- O. ALL HVAC EQUIPMENT AND ASSOCIATED ELECTRICAL SHALL BE RELOCATED IF NECESSARY TO MAINTAIN MANUFACTURER'S RECOMMENDED CLEARANCE FROM ALL DEMISING WALLS, WALLS TO DECK, GYPSUM CEILINGS, AND/OR ANY BUILD OUT MATERIALS THAT MAY OBSTRUCT THE SERVICING OF THE EQUIPMENT.
- P. VERIFY ALL WALLS CONSTRUCTED TO DECK WITH ARCHITECTURAL DRAWINGS BEFORE BID AND CONSTRUCTION. VERIFY PROPER RETURN AIR PATH IS PROVIDED WITH OPENINGS AND RETURN AIR TRANSFER DUCTS IN WALL TO DECK. SIZE AS NECESSARY TO MAINTAIN MAXIMUM AIR VELOCITY OF 500 FPM. BUILD ALL WALLS AROUND EXISTING AND NEW DUCTWORK AS NECESSARY TO MAINTAIN WALL TO DECK AND AVOID INTERSECTION OF DUCTWORK.

KEY NOTES:

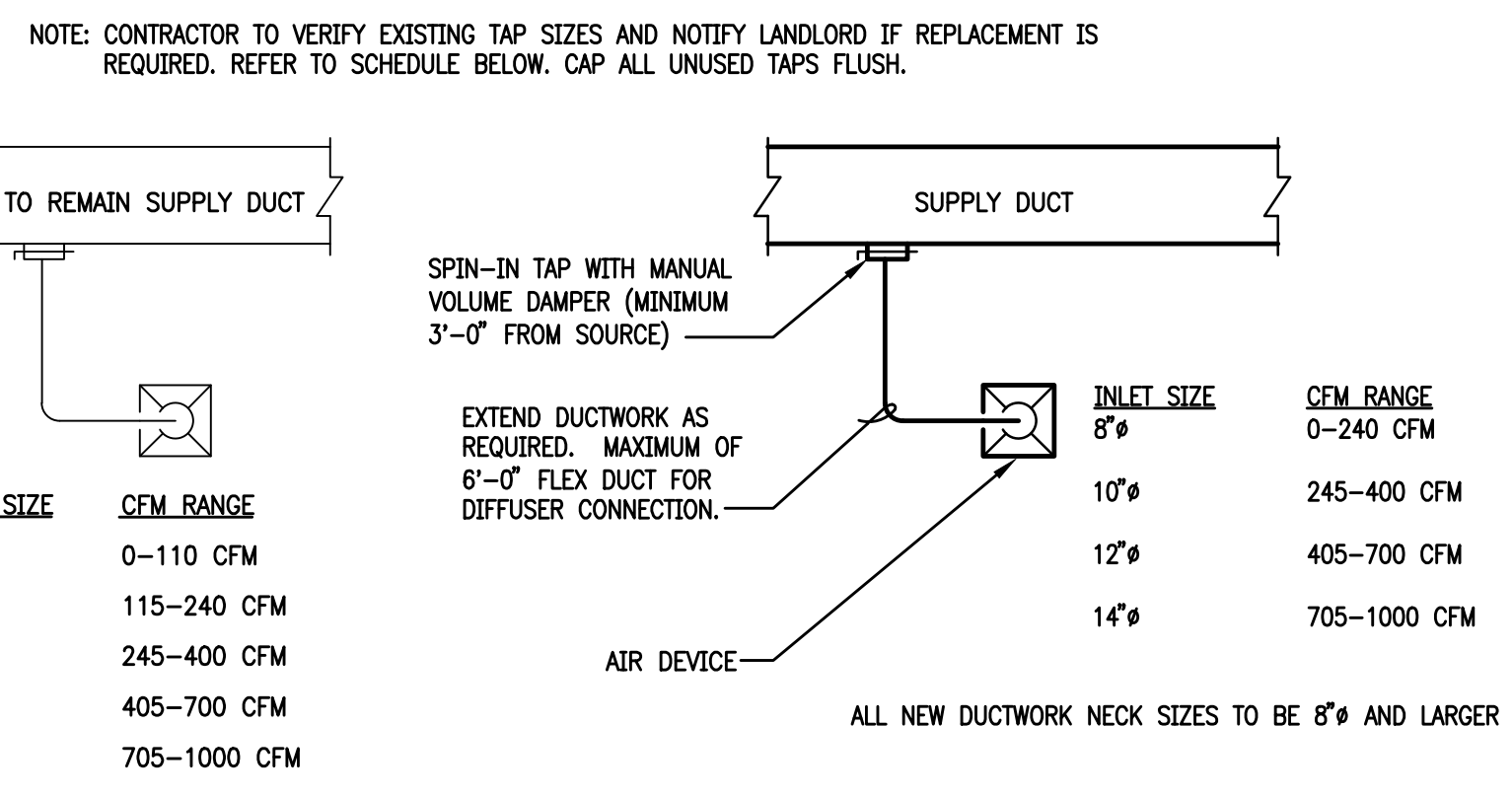
- 1 PROVIDE AND INSTALL A NEW VARIABLE AIR VOLUME BOX PER THE VARIABLE AIR VOLUME BOX SCHEDULE SHOWN ON SHEET M1.01. MAINTAIN ALL MANUFACTURER REQUIRED CLEARANCES FOR MAINTENANCE AND ACCESS.
- 2 RELOCATED VARIABLE AIR VOLUME BOX. CONTRACTOR TO RELOCATE ALL ASSOCIATED ELECTRICAL, CONTROLS, AND WIRING TO NEW LOCATION.
- 3 EXISTING VARIABLE AIR VOLUME BOX TO REMAIN AS IS. RELOCATE AS NECESSARY TO AVOID ANY NEW WALLS TO DECK. REPORT ANY DEFICIENCIES TO AOS ENGINEERING.
- 4 EXISTING FAN POWERED BOX TO REMAIN AS IS. RELOCATE AS NECESSARY TO AVOID ANY NEW WALLS TO DECK. REPORT ANY DEFICIENCIES TO AOS ENGINEERING.
- 5 EXISTING LIEBERT INDOOR UNIT TO REMAIN AS IS. CONTRACTOR TO VERIFY UNIT IS IN PROPER WORKING CONDITION. REPAIR AND REPLACE AS NECESSARY. REPORT ANY DEFICIENCIES TO AOS ENGINEERING.
- 6 EXISTING LIEBERT OUTDOOR CONDENSING UNIT TO REMAIN AS IS. CONTRACTOR TO VERIFY UNIT IS IN PROPER WORKING CONDITION. REPAIR AND REPLACE AS NECESSARY. REPORT ANY DEFICIENCIES TO AOS ENGINEERING.
- 7 EXISTING FPB/VAV AND ASSOCIATED DUCTWORK/GRILLES TO REMAIN. REPORT ANY DEFICIENCIES TO AOS ENGINEERING.
- 8 HVAC CONTINUATION OUT OF SCOPE OF WORK. EXISTING TO REMAIN.



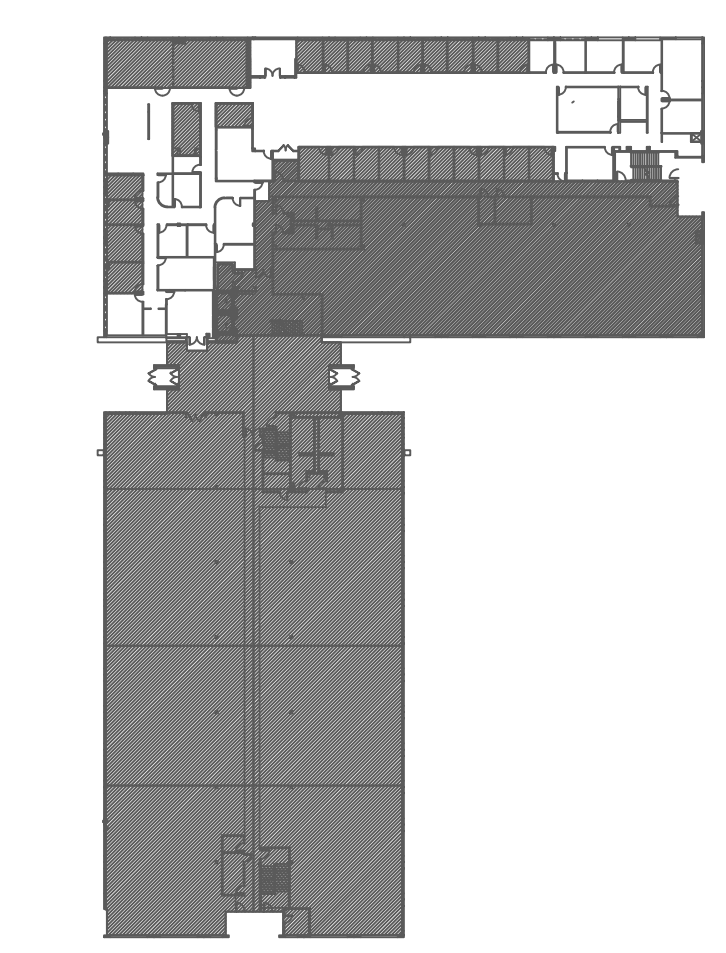
4 RETURN AIR TRANSFER
SCALE: NONE



3 VAV BOX DETAIL
SCALE: NOT TO SCALE



2 SUPPLY DIFFUSER CONNECTION DETAIL
SCALE: NOT TO SCALE



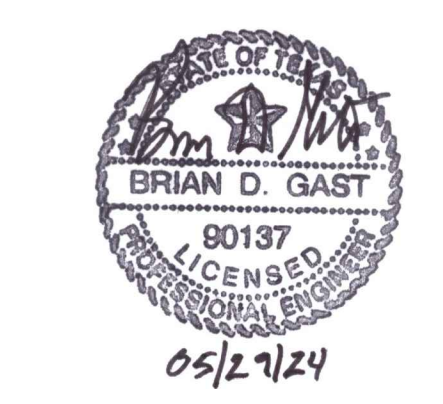
1 FIRST FLOOR KEY PLAN
SCALE: N/A

CONTRACTOR SHALL COORDINATE MEP DRAWINGS WITH ALL OTHER DISCIPLINES



MERITAGE HOMES

8840 CYPRESS
WATERS BLVD.
SUITE 125
DALLAS, TEXAS
75019



ISSUE DATE: MAY 29, 2024

PROJECT NUMBER: 23082
USABLE SQUARE FOOTAGE: +/- 15,999 SF
RENTABLE SQUARE FOOTAGE:
SHEET NUMBER:

M1.01
GROUND LEVEL FLOOR
PLAN - MECHANICAL

AOS JOB #: 118-014-24