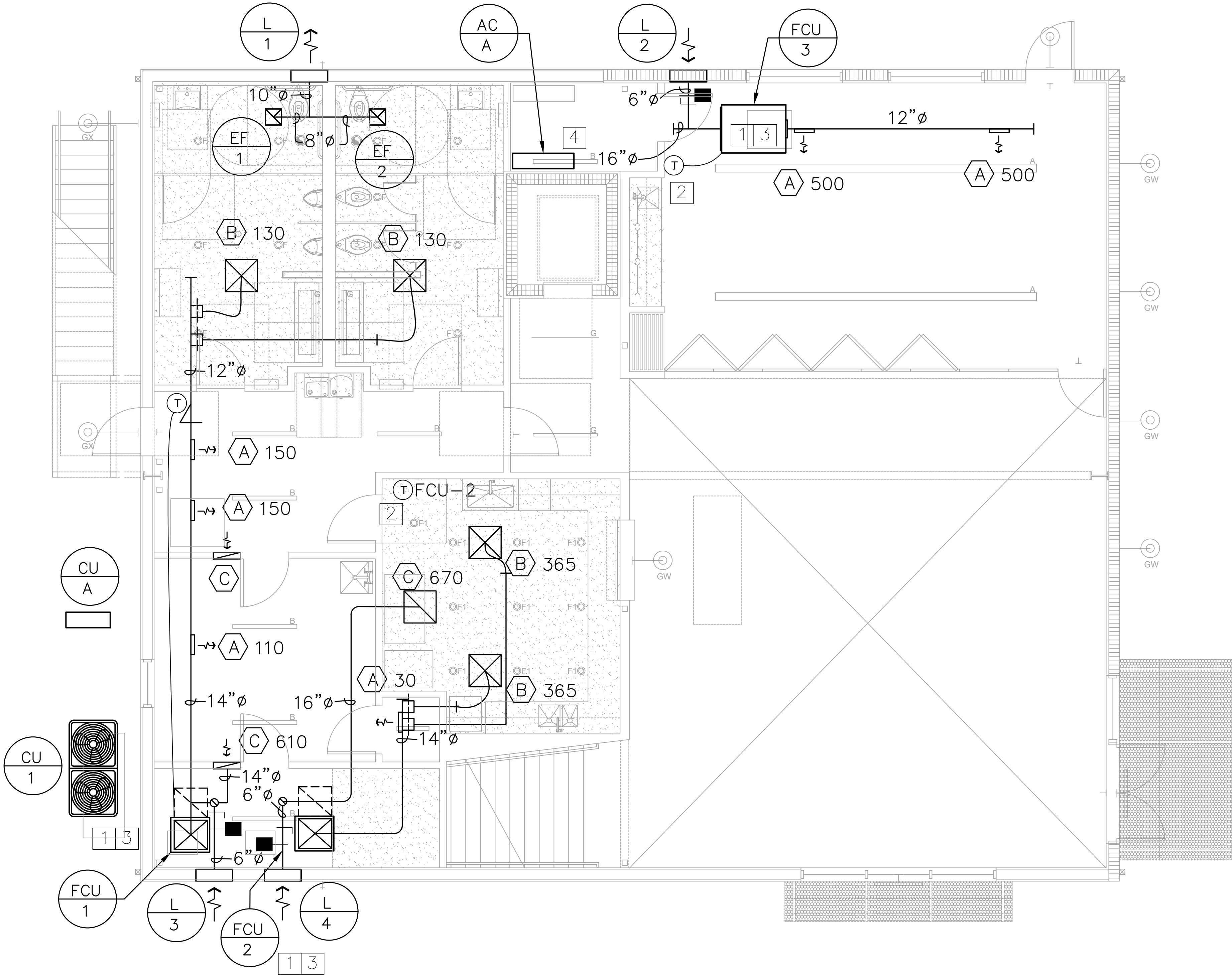


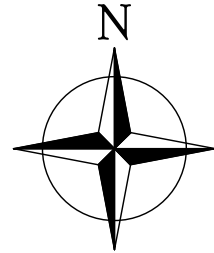
GENERAL MECHANICAL NOTES:

- ALL WORK SHALL BE DONE IN ACCORDANCE WITH 2023 FLORIDA BUILDING CODE 8TH EDITION – MECHANICAL. TO THE BEST OF THE ENGINEER'S KNOWLEDGE, THE PLANS AND SPECIFICATIONS COMPLY WITH THE APPLICABLE MINIMUM BUILDING CODES AND THE APPLICABLE FIRE SAFETY STANDARDS AS DETERMINED BY THE LOCAL AUTHORITY IN ACCORDANCE WITH SECTION AND CHAPTER 633, FLORIDA STATUTES. FBC 110.8.4.4 2023.
- CONTRACTOR SHALL PROVIDE ALL WORK CUSTOMARILY INCLUDED IF NOT SPECIFICALLY CALLED FOR ON THE PLANS. ALL WORK SHALL BE IN ACCORDANCE WITH BASE BUILDING PLANS AND SPECIFICATIONS.
- CONTRACTOR TO CONSULT BUILDING OWNER FOR BUILDING STANDARDS AND CONTROL SEQUENCES.
- CONTRACTOR SHALL CONFIRM THE EXISTENCE OF FIRE DAMPERS AS REQUIRED BY CODE IN ANY DUCT PENETRATING EXISTING FIRE RATED PARTITIONS.
- CONTRACTOR SHALL VISIT THE SITE AND FAMILIARIZE HIMSELF WITH ALL DETAILS OF THE WORK AND EXISTING CONDITIONS. THE INTENT OF THESE NOTES AND MECHANICAL NOTES ON DRAWINGS IS TO CLARIFY THE SCOPE OF WORK AND ALERT CONTRACTOR OF EXISTING CONDITIONS. CONTRACTOR SHALL VERIFY ALL CLEARANCES BEFORE FABRICATION OF DUCTWORK AND PROVIDE ADDITIONAL OFFSET AND/OR CHANGES IN DUCT SIZES TO MEET FIELD CONDITIONS AND COORDINATE WITH ELECTRICAL AND PLUMBING SUBCONTRACTOR BEFORE ANY CONSTRUCTION WORK.
- CONTRACTOR SHALL PROVIDE A COPY OF THE INDEPENDENT TEST AND BALANCE REPORT AT THE FINAL INSPECTION. CONTRACTOR SHALL ALSO PROVIDE ALL REPORTS AS REQUIRED BY THE SPECIFICATIONS.
- THE GENERAL CONTRACTOR IS RESPONSIBLE FOR ALL TRADES INSTALLATION SCHEDULES. FIXED WORK SUCH AS DUCTWORK AND PLUMBING SHALL BE INSTALLED PRIOR TO ANY TRADE WORK THAT CAN BE EASILY RELOCATED OR OFFSET SUCH AS ELECTRICAL CONDUITS AND SMALL WATER LINES, ETC.
- CONTRACTOR SHALL REVIEW STRUCTURAL DRAWINGS BEFORE INSTALLATION TO AVOID ANY BEAM CONFLICTS AND COORDINATE PIPING AND HVAC DUCTWORK ACCORDINGLY.
- BALANCE AIR DISTRIBUTION SYSTEMS TO QUANTITIES AS INDICATED ON DRAWINGS.
- ALL SUPPLY TAKE-OFFS ARE CONNECTED TO HARD TRUNK DUCT WITH SPIN-IN FITTING (WITH MANUAL DAMPER) OF SIZE EQUAL TO DIFFUSER INLET AND DUCT CONNECTION. FLEXIBLE DUCT SHALL BE STRAIGHT WITH NO SACS OR EXCESS DUCT. TOTAL TURNS SHALL NOT EXCEED 135 DEGREES. THERMA-FLEX OR EQUAL INSULATED FLEX DUCT CONFORMING TO NFPA-90A AND UL 181 FOR "AIR DUCT CONNECTOR."
- ALL EXHAUST VENTS MUST BE AT LEAST 10' FROM ANY OUTSIDE AIR INTAKE. CONTRACTOR TO ADJUST VENTS ACCORDINGLY.
- ALL DUCT SIZES INDICATED ON DRAWINGS ARE INSIDE CLEAR DIMENSIONS.
- ALL DUCTWORK SHALL BE SHEETMETAL PER SMACNA STANDARDS, EXCLUDING FLEX DUCT CONNECTIONS OR AS SPECIFICALLY NOTED ON PLANS, EXCLUDING FLEX DUCT CONNECTIONS. SHEETMETAL SHALL BE INSULATED WITH 1.5"THK INSULATION AND SHALL MEET ALL FBCM 604. ALL FLEXIBLE DUCT SHALL BE ATCO BRAND (CLASS 1) WITH AN INSULATION VALUE OF R6. ALL JOINTS MUST BE MECHANICALLY FASTENED AND SEALED TO 100% CLOSURE. METHODS FOR ATTACHMENT AND SEALING SHALL BE APPROVED METHOD AS STATED IN FBCM TABLE 603 AND SECTIONS 603.1 THRU 603.17. ALL DUCTWORK CONSTRUCTION SHALL MEET SECTION C403 OF THE FBC ENERGY CONSERVATION.
- RE-ADJUST THE THROW OF ALL AIR DISTRIBUTION DEVICES AFFECTED BY THE ADDITION OR REMOVAL OF PARTITIONS.
- ALL CEILING MOUNTED DIFFUSERS SHALL BE 4-WAY THROW UNLESS OTHERWISE NOTED.
- IN GENERAL, PLANS AND DIAGRAMS ARE SCHEMATIC ONLY AND SHOULD NOT BE SCALED.
- COORDINATE AIR DEVICE LOCATIONS WITH LIGHTING FIXTURES.
- PROVIDE ADDITIONAL DUCTWORK AND PIPING SUPPORTS ON BOTH SIDES AND WITHIN 18" OF FIRE RATED WALL. DUCTWORK OR PIPING SHALL NOT BE SUPPORTED FROM ANY FIRE RATED WALL.
- REMOVE ALL FIRE DAMPERS IN ALL DEMOLISHED RATED WALLS. PATCH / REPAIR ALL REMAINING DUCTWORK AS REQUIRED.
- TURNING VANES SHALL BE PROVIDED IN ALL SUPPLY DUCT RECTANGULAR ELBOWS WITH ANGLES BETWEEN 15 DEGREES AND LESS THAN 90 DEGREES PER SMACNA.
- DUCTWORK SHALL NOT BE SUPPORTED BY THE CEILING OR CEILING SUSPENSION SYSTEM.
- ALL WALL MOUNTED THERMOSTATS AND/OR TEMPERATURE SENSORS SHALL BE INSTALLED AT AN ELEVATION OF 48" A.F.F. ALL THERMOSTATS NEED TO BE RECALIBRATED BY A MECHANICAL CONTRACTOR IF THEY ARE RELOCATED. THERMOSTATS SHALL BE FASTENED BY PLASTIC SHIELD AND SCREWS.
- OUTSIDE AIR SUPPLY RATES CONFORM TO FMC TABLE 403.3.1.1-2023 STANDARDS.
- UNLESS OTHERWISE NOTED, INSTALL DUCTWORK AS HIGH AS POSSIBLE, TIGHT TO BOTTOM OF STRUCTURE. COORDINATE DUCT ELEVATION WITH WATER PIPING, SANITARY DRAINS AND MAJOR ELECTRICAL CONDUITS.
- PROVIDE ALL SUPPLEMENTARY STEEL REQUIRED TO INSTALL MECHANICAL EQUIPMENT AND MATERIALS.
- INSTALLATION OF MECHANICAL EQUIPMENT SHALL COMPLY WITH THE MANUFACTURER'S SPECIFICATIONS AND CLEARANCE REQUIREMENTS.
- MATCH DIFFUSER MOUNTING FRAME WITH CEILING TYPE.
- ALL DASHED LINED EQUIPMENT AND DUCTWORK ARE EXISTING. ALL SOLID LINED EQUIPMENT AND DUCTWORK ARE NEW UNDER TENANT WORK EXCEPT FOR DIFFUSERS.
- SUSPENDED FAN UNITS, EXCEPT POWERED INDUCTION UNITS (2000 CFM AND GREATER), SHALL BE SUPPORTED BY NOT LESS THAN FOUR 5/8" DIAMETER RODS EACH COMPLETE WITH 1" DEFLECTION SPRING MOUNTS). SUSPENDED FAN UNITS (LESS THAN 2000 CFM) AND ALL POWERED INDUCTION UNITS SHALL BE SUPPORTED BY 1/2" DIAMETER RODS WITH RUBBER-IN-SHEAR ISOLATORS. IF FANS ARE INTERNALLY ISOLATED WITHIN CABINETS, EXTERNAL ISOLATORS MAY BE OMITTED.
- INSTALL HANGERS AND SUPPORTS AS REQUIRED TO ADEQUATELY SUPPORT THE PIPE LINES WITHOUT INTERFERING WITH THEIR INHERENT FLEXIBILITY, AND AS REQUIRED TO PREVENT SAGGING AND VIBRATION. DO NOT EXCEED SPACINGS AS STATED IN THE MSS SP-58 AND SP-69. VERTICAL RISERS SHALL BE SUPPORTED AT LEAST ONCE IN EACH STORY HEIGHT OR AS SHOWN ON THE DRAWINGS.
- WHERE CONCENTRATED LOADS OF VALVES, FITTINGS, ETC., OCCUR, CLOSER SPACING OF HANGERS AND SUPPORTS WILL BE NECESSARY. SPACINGS SHALL BE BASED ON THE WEIGHT TO BE SUPPORTED AND THE MAXIMUM RECOMMENDED LOADS FOR THE HANGER COMPONENTS.
- ALL MECHANICAL WORK SHALL LEAVE BUILDING/STRUCTURE IN A SAFE STRUCTURAL CONDITION IN ACCORDANCE WITH FBC CHAPTER 16 AS TO COMPLY WITH FBCM 302.1.
- CONTRACTOR SHALL PROVIDE CONCEALED DAMPER REGULATOR OR ACCESS PANEL FOR ADJUSTMENT OF ALL MANUAL DAMPERS/SPIN-IN DAMPERS ABOVE HARD CEILING OR OTHERWISE INACCESSIBLE.



MECHANICAL PLAN -FIRST FLOOR

SCALE: 1/4" = 1'-0"



SPECIAL MECHANICAL NOTES/REQUESTS:

- ALL EXPOSED DUCT WORK TO BE ROUND DOUBLE WALL – SPIRAL.
- INSTALL SIDEWALL DUCT MOUNTED DIFFUSERS AT A 45° ANGLE.
- ALL ROOF MOUNTED EQUIPMENT TO BE MOUNTED ON MANUFACTURER'S ROOF CURB.
- ALL DUCTWORK TO BE MOUNTED AS TIGHT TO STRUCTURE ABOVE AS POSSIBLE.
- NO FLEX DUCTWORK TO BE OVER OPEN CEILING. CONCEAL ALL FLEX DUCT OVER CEILING AND BEHIND RAISED WALL ALONG EDGE OF CEILING.

KEYED MECHANICAL NOTES:

- ALL EQUIPMENT TO BE INSTALLED ACCORDING TO MANUFACTURE'S GUIDELINES. MAINTAIN MINIMUM CLEARANCE FOR SERVICE & ACCESSIBILITY.
- CONTRACTOR SHALL COORDINATE FINAL THERMOSTAT LOCATIONS WITH TENANT FURNITURE, LOCATE THERMOSTAT IN APPROXIMATE LOCATION AS SHOWN.
- PROVIDE CONDENSATE SUMP AND PUMP WITH INSULATED CONDENSATE DRAIN LINE.ROUTE DRAIN LINE TO EXTERIOR OF BUILDING AND SPILL TO GRADE.
- COORDINATE FINAL LOCATION OF AC UNIT WITH ELEVATOR ELECTRICAL EQUIPMENT.

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THE WAREHOUSE

A RENOVATION AT:

1916 E 136 AVE
TAMPA, FL 33613

FOR:

UNIVERSITY AREA COMMUNITY
DEVELOPMENT CORP (UACDC)

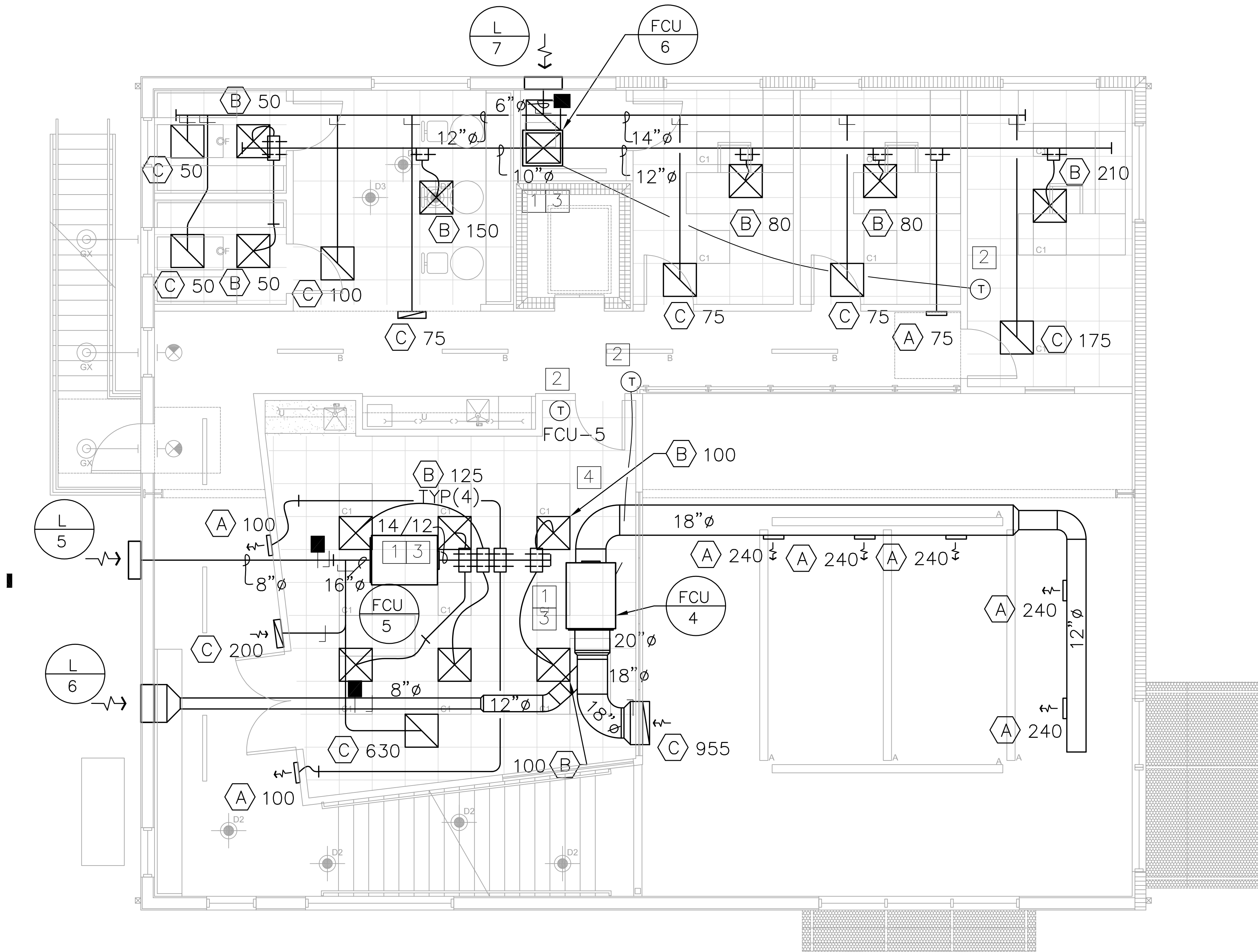
NO.	ISSUE DESCRIPTION	DATE
05	100% CD SET	03-21-24
06	HILLS CTY PPR	06-13-24
07	PERMIT SET	09-25-24
08	PERMIT SET REV 01	01-06-25
09	BIDDING DOCUMENTS	04-18-25

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DRAWN: WG
REVIEWED: WG
PROJECT NO: 1805

MECHANICAL PLAN
FIRST FLOOR

M1.0



MECHANICAL PLAN -SECOND FLOOR

SCALE: 1/4" = 1'-0"

SPECIAL MECHANICAL NOTES/REQUESTS:

1. ALL EXPOSED DUCTWORK TO BE ROUND DOUBLE WALL - SPIRAL.
2. INSTALL SIDEWALL DUCT MOUNTED DIFFUSERS AT A 45° ANGLE.
3. ALL ROOF MOUNTED EQUIPMENT TO BE MOUNTED ON MANUFACTURER'S ROOF CURB.
4. ALL DUCTWORK TO BE MOUNTED AS TIGHT TO STRUCTURE ABOVE AS POSSIBLE.
5. NO FLEX DUCTWORK TO BE OVER OPEN CEILING. CONCEAL ALL FLEX DUCT OVER CEILING AND BEHIND RAISED WALL ALONG EDGE OF CEILING.

KEYED MECHANICAL NOTES:

- 1 ALL EQUIPMENT TO BE INSTALLED ACCORDING TO MANUFACTURE'S GUIDELINES. MAINTAIN MINIMUM CLEARANCES FOR SERVICE & ACCESSIBILITY.
- 2 CONTRACTOR SHALL COORDINATE FINAL THERMOSTAT LOCATIONS WITH TENANT FURNITURE, LOCATE THERMOSTAT IN APPROXIMATE LOCATION AS SHOWN.
- 3 PROVIDE CONDENSATE SUMP AND PUMP WITH INSULATED CONDENSATE DRAIN LINE. ROUTE DRAIN LINE TO EXTERIOR OF BUILDING AND SPILL TO GRADE.
- 4 CONTRACTOR TO RUN DUCT UNDER EXISTING COLUMN.



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MECHANICAL PLAN
SECOND FLOOR

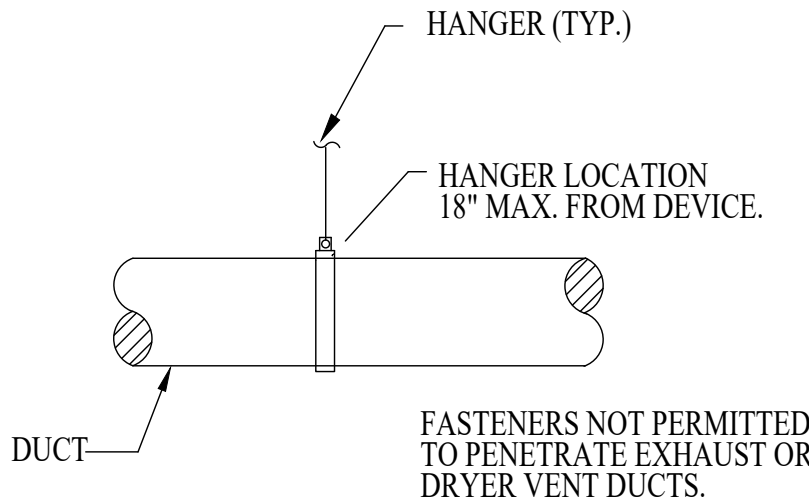
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SPLIT SYSTEM CONDENSING UNIT SCHEDULE									
REMARKS: 1. SIZE AND ROUTE REFERIGERANT LINES PER MANUFACTURER'S RECOMMENDATIONS. 2. COORDINATE EXACT LOCATION OF UNITS WITH OWNER. 3. ALL FCU'S TO UTILIZE R-410A REFRIGERANT.									
MARK CUNO.	PAIR WITH	LOCATION	COOLING/HEATING CAPACITY BTU	ELECTRICAL DATA			WEIGHT (LBS)	BASIS OF DESIGN	ACCESSORIES
				V/φ	MCA	MCOP			
CU-1,2	FCU-1,2,3,4 5,6	GROUND	168,000.0 188,000.0	230/1	47	50	1,137.0	CARRIER MMY-MAP0726FT2P-UL	①②
ACCESSORIES: ① DISCONNECTS BY DIVISION 16 ② PROVIDE WITH LOW AMBIENT CONTROLS									

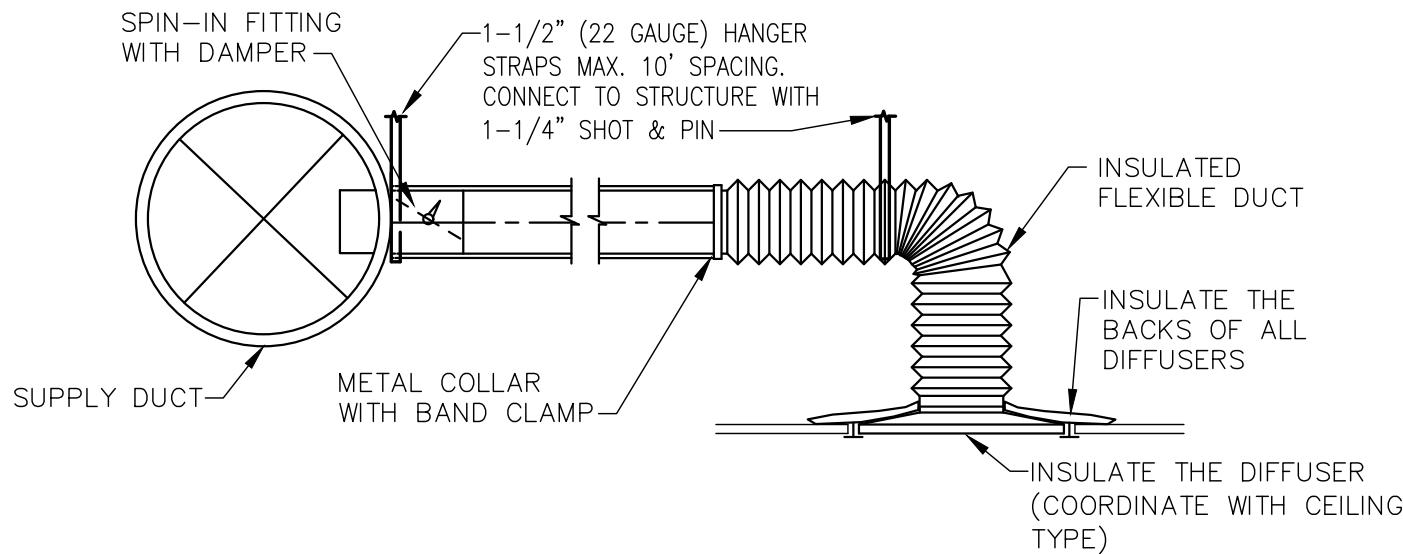
DUCTLESS FAN COIL UNIT SCHEDULE														
MARK A/C #	FAN DATA			COIL DATA				FILTER DATA			BASIS OF DESIGN	ELECTRIC MCA	ELECTRICAL MOCP	REMARKS
	CFM	EXT. SP "WG	MOTOR HP	V/φ	EDB °F	EWB °F	TOTAL CAP MBH	SEN. CAP. MBH	TYPE	AREA SQ FT				
A	635	-	-	230/1	80	67	24	-	-	-	MITSUBISHI TPKA0A0241KA70A	1.0	SEE CU	①②③④
① PROVIDE DIGITAL THERMOSTAT FOR EACH UNIT ② PROVIDE LOW AMBIENT COOLING. ③ POWER FEED FROM CONDENSING UNIT ④ PROVIDE CONDENSATE PUMP ④ CONDENSATE TO BE ROUTED TO GRADE														

DUCTLESS AIR COOLED CONDENSING UNIT SCHEDULE							
MARK CU #	LOC'N.	PAIRED WITH A/C-#...	V/φ	ELECTRICAL DATA MCA MCOP		BASIS OF DESIGN	REMARKS
A	GRADE	A	230/1	19	26	MITSUBISHI TRUYA0241HA70(N/B)A	①
① 95 OUT DOOR AIR TEMP.							

AIR DISTRIBUTION SCHEDULE					
REMARKS: 1. COORDINATE FRAME & BORDER TYPE WITH CEILING TYPE. REFER TO ARCHITECTURAL PLANS. 2. COORDINATE WITH BLDG MGT FOR BLDG STANDARDS.					
MARK	CFM	NECK SIZE (INCHES)	FACE SIZE (INCHES)	BASIS OF DESIGN	ACCESSORIES
A	0-130	6"x6"	7.75"x7.75"	SUPPLY EQUAL TO TITUS 300FL.	
	131-200	10"x6"	11.75"x7.75"		
	201-320	14"x6"	15.75"x7.75"		
	321-450	12"x10"	13.75"x11.75"		
B	0-125	6"ø	24"x24"	PERFORATED SUPPLY DIFFUSER EQUAL TO TITUS OMNI. INSULATE BACK OF ALL DIFFUSERS.	
	126-195	8"ø	24"x24"		
	196-265	10"ø	24"x24"		
	266-425	12"ø	24"x24"		
C	0-1600	22"x22"	24"x24"	RETURN/EXHAUST GRILLE EQUAL TO TITUS 350FL.	



RIGID ROUND DUCT



SUPPLY DIFFUSER FLEX SUPPORT DETAIL
NTS

SPLIT SYSTEM AIR HANDLING UNIT SCHEDULE																	
REMARKS: 1. ALL FCU'S TO UTILIZE R-410A REFRIGERANT AND TO HAVE MINIMUM 13.0 SEER RATING																	
MARK FCU NO.	MIN.O.A. CFM	MAX.O.A. CFM	FAN DATA			COOLING DATA				HEATING DATA		ELECTRICAL DATA			WEIGHT (lbs)	BASIS OF DESIGN	ACCESSORIES
			CFM	EXT.SP "WC"	MOTOR HP	EDB °F	EWB °F	TOTAL CAP MBH	SENS. CAP MBH	ELECTRIC		V/φ	MCA	MOCP			
										(KW)	STEPS						
FCU-1	60	60	670	0.8	-	80	67	17.9	13.6	-	-	230/1	2.8	15	67	CARRIER MMD-AP0180VHG2UL	①②③④⑤
FCU-2	90	90	760	0.8	-	80	67	23.8	17.6	-	-	230/1	2.8	15	49	CARRIER MMD-AP0240VHG2UL	①②③④⑤
FCU-3	120	120	1000	0.6	-	80	67	29.8	22.3	-	-	230/1	4.5	15	93	CARRIER MMD-UP0301BHP-UL	①②③④⑤
FCU-4	205	205	1200	0.6	-	80	67	47.7	35.7	-	-	230/1	3.6	15	58	CARRIER MMD-UP0481BHP-UL	①②③④⑤
FCU-5	120	120	750	0.6	-	80	67	29.9	22.3	-	-	230/1	2.3	15	67	CARRIER MMD-UP0301BHP-UL	①②③④⑤
FCU-6	100	100	700	0.6	-	80	67	23.8	17.9	-	-	230/1	2.8	15	49	CARRIER MMD-AP0240VHG2UL	①②③④⑤
ACCESSORIES: ① AUXILIARY DRAIN PAN WITH FLOAT SWITCH. UNIT TO SHUT DOWN UPON WATER DETECTION. CONDENSATE DRAIN SHALL BE FULL SIZE FROM UNIT ② SINGLE POINT ELECTRICAL CONNECTION ③ 2" DISPOSABLE FILTERS ④ PROGRAMMABLE DIGITAL THERMOSTAT ⑤ DISCONNECTS BY DIVISION 16																	

VENT SCHEDULE	
MARK V #	DESCRIPTION
1 THRU 6	GREENHECK WALL EXHAUST VENT, MODEL BVF- 12" X 12", PROVIDE BACKDRAFT DAMPER, INSULATED PLENUM, AND BIRD SCREEN

EXHAUST FAN SCHEDULE									
MARK EF #	SERVICE	LOC'N.	CFM	S P IN WG	RPM MAX	MOTOR		BASIS OF DESIGN	REMARKS
						AMPS/HP	V o		
EF-1,2	RESTROOM	CEILING	150	0.375	1400	1.10	115/1	GREENHECK CSP-A190 OR APPROVED EQUAL	① THRU ④
① DISCONNECT/STARTER									
② BACKDRAFT DAMPER									
③ UNIT MOUNTED SPEED CONTROLLER									
④ CONTROLLED WITH LIGHT SWITCH									

FMC TABLE 403.3.1.1 VENTILATION REQUIREMENTS	
65 PEOPLE X 5 CFM/PERSON + 4,412 SQ FT X 0.06CFM/SQ FT = 590 CFM THE DESIGN DRAWINGS PROVIDE 695 CFM OF OUTSIDE AIR.	
OUTSIDE AIR	
FCU-1	60- CFM
FCU-2	90- CFM
FCU-3	120- CFM
FCU-4	205- CFM
FCU-5	120- CFM
FCU-6	100- CFM
TOTAL	
OUTSIDE AIR	+ 695 - CFM
EXHAUST	- 300 - CFM
EXFILTRATION	- 250 - CFM
TOTAL BLDG. PRESSURE	
	+145- CFM
EXHAUST AIR	
EF 1-1	150- CFM
EF 1-2	150- CFM
TOTAL EXHAUST	
	300- CFM

AIR BALANCE

MECHANICAL LEGEND	
—	MANUAL VOLUME DAMPER
EXIST.	EXISTING
RA	RETURN AIR
OA	OUTSIDE AIR
—>	DUCT REDUCTION IN DIRECTION OF FLOW
[SD]	DUCT MOUNTED SMOKE DETECTOR
■	MOTORIZED DAMPER
[X]	RETURN (OR EXHAUST) GRILLE
[X]	SUPPLY DIFFUSER
ETR	EXISTING TO REMAIN
RE	RELOCATE EXISTING
ER	EXISTING RELOCATED
▶	FIRE DAMPER
▶	EXISTING FIRE DAMPER
(S)	SMOKE TIGHT DUCT SEAL
[SD]	SMOKE DAMPER
[SD]▶	FIRE/SMOKE DAMPER
—	NEW HARD DUCT
- -	EXISTING HARD DUCT
~	NEW FLEXIBLE DUCT
~	EXISTING FLEXIBLE DUCT
(T)	THERMOSTAT
—	NEW CONNECTION
[BD]	BACKDRAFT DAMPER

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MECHANICAL
DETAIL & SCHEDULE

M3.0