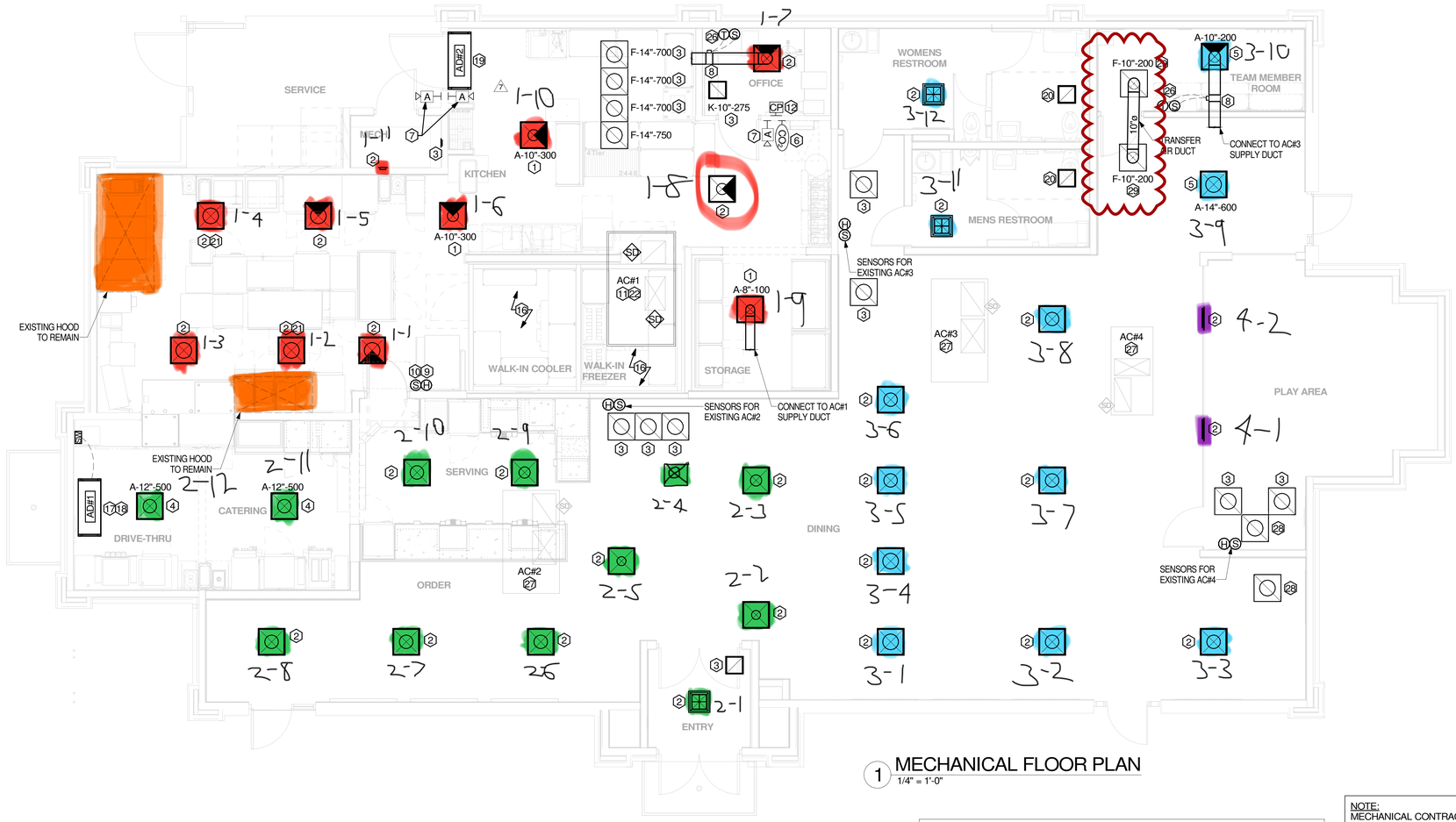

1 MECHANICAL FLOOR PLAN
1/4" = 1'-0"

LEGEND

A-12-400	TYPE - NECK SIZE - CFM		MANUAL VOLUME DAMPER
(S)	REMOTE TEMPERATURE SENSOR	AD-1	AIR DOOR#1 (TYP.)
(H)	HUMIDITY SENSOR		RETURN/EXHAUST
A/S	STROBE AUDIO/VISUAL ALARM-ANNUNCIATOR		SUPPLY DIFFUSER (TYP.)
	CLOSED AIR PATTERN DEFLECTOR	SW	AIR DOOR SWITCH
12x18	DUCT SIZE (REVERSE FOR ELEVATION VIEWS): 1ST NUMBER - HORIZONTAL DIMENSION 2ND NUMBER - VERTICAL DIMENSION	1	PLAN NOTE REFERENCE
		CP	CONTROL PANEL
AC-1	AIR CONDITIONING UNIT #1 (TYP.)	SD	SMOKE DETECTOR
CO_2	CO_2 SENSOR		

HVAC GENERAL NOTES

1. DUCT SIZES SERVING DIFFUSERS AND GRILLES ARE SAME SIZE AS DIFFUSER OR GRILLE NECK UNLESS NOTED OTHERWISE.
2. MECHANICAL CONTRACTOR SHALL BALANCE HVAC SYSTEM AS SHOWN ON THE PLAN & RTU SCHEDULE. IF AIRFLOWS DIFFER BY MORE THAN 5%, CONTACT CFA CONSTRUCTION MANAGER.
3. NO PIPING OR DUCTWORK ALLOWED ABOVE ANY ELECTRICAL/CONTROL PANELS.
4. COORDINATE NEW WORK WITH EXISTING CONDUITS, STRUCTURE & PIPING. FIELD VERIFY EXISTING CONDITIONS PRIOR TO COMMENCING WORK. CONTRACTOR TO NOTIFY DESIGN TEAM WITHOUT DELAY IF ACTUAL LOCATION OF EXISTING MECHANICAL EQUIPMENT DOES NOT MATCH FLOOR PLAN.
5. CONTRACTOR SHALL CLEAN & REFURBISH ALL EXISTING DUCTWORK. PATCH & REPAIR OPENING AIR TIGHT OF EXISTING DUCTWORK AS REQUIRED (TYPICAL ALL). FIELD VERIFY AND COORDINATE ALL EXISTING HVAC SIZES, LOCATIONS, AND CONDITION PRIOR TO BID.
6. REUSE AND REWORK EXISTING HVAC DUCTWORK. PROVIDE NEW SECTION FOR RECONNECTION AS REQUIRED. FIELD VERIFY ALL REQUIREMENTS PRIOR TO BID.
7. CONTRACTOR SHALL BALANCE, INSPECT, REPAIR, OR REPLACE AS NECESSARY IF REQUIRED FOR EXISTING CEILING OR SIDEWALL MOUNTED AIR DEVICES TO REMAIN. FIELD VERIFY AND COORDINATE EXACT SIZE, AIR QUANTITY, LOCATION, AND CONDITION PRIOR TO BID. AIR FLOW SHALL REMAIN AS IS UNLESS NOTED ON PLAN, OR DIRECTED BY CONSTRUCTION MANAGER. ANY DEFICIENCIES AND OR DISCREPANCIES SHALL BE REPORTED TO ARCHITECT/ENGINEER IMMEDIATELY. COORDINATE AIR BALANCE RESULTS WITH CONSTRUCTION MANAGER.
8. FLEXIBLE DUCT NOT SHOWN FOR CLARITY. ALL TAKE-OFFS SHALL INCLUDE FLEXIBLE DUCT. SEE DETAIL FOR FLEXIBLE DUCT INSTALLATION REQUIREMENTS.
9. UNLESS NOTED OTHERWISE, MC TO ADJUST ALL DIFFUSER AIR PATTERN DEFLECTORS TO THROW HORIZONTALLY ALONG THE CEILING.
10. SUPPORT ALL DUCT DROPS AT BASE OF DROP FROM STRUCTURE.

FLEX DUCT SIZE

RANGE	SIZE	RANGE	SIZE
0 -80 CFM	6" DIA.	511 -950 CFM	14" DIA.
81 -170 CFM	8" DIA.	951 -1100 CFM	16" DIA.
171 -300 CFM	10" DIA.	1101 -1450 CFM	18" DIA.
301 -510 CFM	12" DIA.	1451 -1900 CFM	20" DIA.

NOTES:
1. BASED ON WIRE HELIX FLEXIBLE DUCT: TYPE FLEX-MASTER.
2. UL LISTING: U-181 / ETL CLASS 1 AIR DUCT.
3. STANDARD CODE: NFPA 90A AND 90B, BOCA, SBBC HUD/FHA, MIN PROPERTY STD.
4. FLAME SPREAD.....LESS THAN 25
5. SMOKE DEVELOP.....LESS THAN 50
6. MIN R6.0 FOR ATTIC/UNCONDITION SPACE. MANUFACTURER IS TO BE USED AS A BASIS FOR DESIGN. CONTACT ENGINEER OF RECORD TO SUBMIT ON APPROVED EQUALS.

NOTE:
MECHANICAL CONTRACTOR TO PROVIDE TEST AND BALANCE REPORT BEFORE FINAL INSPECTION.

NOTE:
IF BALANCING DAMPERS ARE NOT EXISTING IN THE BRANCH DUCT OR AT THE TAKE-OFF. MECHANICAL CONTRACTOR SHALL SUPPLY AND INSTALL NEW BALANCING DAMPERS WITHIN THE BRANCH DUCT (TYPICAL).

NOTE:
REFER TO SCHEDULES AND DETAILS MECHANICAL SHEET FOR FURTHER INFORMATION.

NOTE:
GENERAL CONTRACTOR TO HIRE REFRIGERATION CONTRACTOR TO RECLAIM REFRIGERANT FROM EXISTING FREEZER/COOLER ICE MAKERS AND RECHARGE EXISTING ICE MAKERS AFTER EQUIPMENT IS REINSTALLED, REFER TO KEY NOTES #16 ON SHEET M-101.

HVAC KEYNOTES

1. NEW SUPPLY AIR DIFFUSERS ASSOCIATED WITH THE NEW AC-1. CONTRACTOR SHALL EXTEND EXISTING SUPPLY AIR DUCT IF POSSIBLE OR UPDATE DUCT SIZES AS SHOWN AND AS REQUIRED. BALANCE CFM MENTIONED ON PLAN. (7)
2. NEW SUPPLY AIR DIFFUSERS/GRILLES. CONTRACTOR SHALL EXTEND EXISTING SUPPLY AIR DUCT AS REQUIRED. CFM IS EXISTING TO REMAIN.
3. NEW RETURN AIR GRILLES. CONTRACTOR SHALL EXTEND EXISTING RETURN AIR DUCT AS REQUIRED. CFM IS EXISTING TO REMAIN.
4. NEW SUPPLY AIR DIFFUSERS ASSOCIATED WITH THE EXISTING AC-2. CONTRACTOR SHALL EXTEND EXISTING SUPPLY AIR DUCT AS REQUIRED. BALANCE MENTIONED CFM ON PLAN.
5. NEW SUPPLY AIR DIFFUSERS ASSOCIATED WITH THE EXISTING AC-3. CONTRACTOR SHALL EXISTING SUPPLY AIR DUCT AS REQUIRED. BALANCE MENTIONED CFM ON PLAN.
6. STRONG SYSTEMS SHALL SUPPLY AND INSTALL CO_2 SENSOR ANALOX-AX60. SENSOR SHALL BE MOUNTED AT 12" AFF WITH SPLASH GUARD AND CAGE. ELECTRICAL CONTRACTOR TO PROVIDE SINGLE-GANG J-BOX WITH 1/2" CONDUIT EXTENDED TO ABOVE ACCESSIBLE CEILING SPACE. INSTALL PER MANUFACTURER'S RECOMMENDATIONS AND PER LOCAL CODE REQUIREMENTS. FIELD VERIFY EXACT LOCATION AND ALL REQUIREMENTS PRIOR TO BID AND CONSTRUCTION. FOR MORE INFORMATION CONTACT: STRONG SYSTEMS INTERNATIONAL, INC. CHRIS VERCH (770) 729-1199 OR (770) 462-2501.
7. STRONG SYSTEMS SHALL SUPPLY AND INSTALL CO_2 ANNUNCIATOR MOUNTED AT 60" AFF. ELECTRICAL CONTRACTOR TO PROVIDE SINGLE-GANG J-BOX WITH 1/2" CONDUIT EXTENDED TO ABOVE ACCESSIBLE CEILING SPACE. INSTALL PER MANUFACTURER'S RECOMMENDATIONS AND PER LOCAL CODE. FIELD VERIFY EXACT LOCATION AND ALL REQUIREMENTS PRIOR TO BID AND CONSTRUCTION. FOR MORE INFORMATION CONTACT: STRONG SYSTEMS INTERNATIONAL, INC. CHRIS VERCH (770) 729-1199 OR (770) 462-2501.
8. YOUNG REGULATOR MODEL 4075-LMB24-IF ROUND ZONE DAMPER WITH MODEL T-720A AUTOMATIC CHANGEOVER THERMOSTAT. MOUNT TSTAT AT 4'-0" AFF. POWER OPEN/SPRING CLOSE. ADJUST MECHANICAL LIMIT FOR 50 CFM MINIMUM AIRFLOW. CHICK-FIL-A HAS A NATIONAL ACCOUNT WITH TOM BARROW COMPANY FOR THE ZONE DAMPER. THE MECHANICAL CONTRACTOR SHALL PURCHASE THE ZONE DAMPER DIRECTLY FROM TOM BARROW COMPANY. CONTACT MR. SCOTT GEORGE AT 404-351-1010, FOR PRICING AND AVAILABILITY. ZONE DAMPERS NOT PURCHASED THRU TOM BARROW COMPANY WILL NOT BE ACCEPTED.
9. MOUNT NEW LENNOX HUMIDITY SENSOR ON WALL ABOVE SPACE TEMP SENSOR AND ROUTE WIRING TO UNIT ON ROOF.
10. MOUNT NEW REMOTE TEMPERATURE SENSOR ON WALL AT 48" AFF AND ROUTE WIRING BACK TO TEMP CONTROL PANEL. FOR SENSOR SERVING KITCHEN AC-1. COORDINATE EXACT LOCATION WITH KITCHEN EQUIPMENT PRIOR TO BID AND CONSTRUCTION.
11. PROVIDE A LENNOX FACTORY INSTALLED SUPPLY SIDE & RETURN SIDE SMOKE DETECTORS. REFER TO SCHEDULE ON SHEET M-402 AND LENNOX SMOKE DETECTOR AND ANNUNCIATOR WIRING DIAGRAM ON SHEET M-501.
12. STRONG SYSTEMS SHALL SUPPLY AND INSTALL CO_2 CENTRAL CONTROL UNIT MOUNTED AT 60" AFF. ELECTRICAL CONTRACTOR TO PROVIDE SINGLE-GANG J-BOX WITH 1/2" CONDUIT EXTENDED TO ABOVE ACCESSIBLE CEILING SPACE. INSTALL PER MANUFACTURER'S RECOMMENDATIONS AND PER LOCAL CODE. FIELD VERIFY EXACT LOCATION AND ALL REQUIREMENTS PRIOR TO BID AND CONSTRUCTION. COORDINATE WITH ELECTRICAL DRAWING E2.2 FOR EXACT LOCATION. FOR MORE INFORMATION CONTACT : STRONG SYSTEMS INTERNATIONAL, INC. CHRIS VERCH (770) 729-1199 OR (770) 462-2501. (7)
13. NOT USED.
14. NOT USED.
15. NOT USED.
16. CONTRACTOR SHALL INSTALL AND ROUTE NEW INSULATED REFRIGERANT PIPING FROM ROOF MOUNTED REMOTE CONDENSER TO FREEZER & COOLER EVAPORATORS.
17. AIR CURTAIN (AD-1) MOUNTED WITHIN CEILING CENTERED ABOVE DRIVE THRU DOOR 4" FROM THE EXTERIOR WALL. PROVIDE AIR DEFLECTOR CONE ABOVE DOOR FOR (AD-1). REFER TO DETAIL 6/M-401 FOR INFORMATION. ATTACH AIR CURTAIN TO STRUCTURE USING 3/8" ALL THREAD SUPPORTS.
18. FIELD WIRE FACTORY PROVIDED CONTROLS. MC IS RESPONSIBLE FOR ALL FINAL CONNECTIONS FOR LOW VOLTAGE INTERLOCK WITH TORMAX DOOR. REFER TO DETAIL 4/M-501 FOR INFORMATION.
19. AIR DOOR MOUNTED OVER DOOR HEADER AT 7'-4" AFF TO BOTTOM OF UNIT. PROVIDE BLOCKING IN WALL BEHIND AIR CURTAIN. USE FACTORY PRE-PUNCHED MOUNTING HOLES ON BACK SIDE OF AIR CURTAIN ONLY. ATTACH AIR CURTAIN TO WALL USING 3/8" LAG BOLTS, LENGTH AS REQUIRED TO FULLY PENETRATE BLOCKING. LOCATE MAGNETIC CONTACT TYPE MICROSWITCH IN DOOR FRAME ON STRIKE SIDE.
20. NEW EXHAUST AIR DIFFUSERS. CONTRACTOR SHALL EXTEND EXISTING EXHAUST AIR DUCT AS REQUIRED. CFM IS EXISTING TO REMAIN.
21. MECHANICAL CONTRACTOR TO ADJUST PATTERN DEFLECTORS TO THROW STRAIGHT DOWN. (7)
22. EXISTING SUPPLY AIR AND RETURN AIR DUCTWORK ASSOCIATED WITH THE NEW AC-1 UNIT TO REMAIN THE SAME.
23. NOT USED.
24. NOT USED.
25. NOT USED.
26. PROVIDE 120V/24V 50 VA TRANSFORMER TO SERVE YOUNG REGULATOR ZONE DAMPER ACTUATOR AND THERMOSTAT. POWER TRANSFORMER FROM 120V POWER CIRCUIT THAT REMAINS LIVE 24/7. PROVIDE ALL NECESSARY WIRING AND COMPONENTS TO MAKE CONTROL AND POWER CONNECTIONS TO TRANSFORMER, ZONE DAMPER, AND THERMOSTAT PER MANUFACTURER'S IOM. THERE IS NO INTERLOCKING OR MONITORING BY WAY OF THE S.E.C. CFA-500 PANEL. SEE WIRING DIAGRAMS ON M-501.
27. EXISTING DUCTWORK, DUCT ACCESSORIES AND SMOKE DETECTOR ASSOCIATED WITH THE EXISTING AC UNIT TO REMAIN THE SAME.
28. NEW TRANSFER AIR GRILLES. CONTRACTOR SHALL EXTEND EXISTING TRANSFER AIR DUCT AS REQUIRED. CFM IS EXISTING TO REMAIN.
29. NEW TRANSFER AIR GRILLES. CONTRACTOR SHALL INSTALL NEW TRANSFER AIR DUCT AS REQUIRED. BALANCE CFM ON PLAN.

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FSR#01740

BUILDING TYPE / SIZE: ER S03
RELEASE: 24.02
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REVISION SCHEDULE

NO.	DATE	DESCRIPTION
4	01/04/2025	PERMIT REV 4
7	06/16/2025	PERMIT REV 7

- For Construction -

CONSULTANT PROJECT # C29146
DATE 12/23/25
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SHEET
MECHANICAL FLOOR PLAN
SHEET NUMBER
M-201

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