

GENERAL MECHANICAL NOTES

- A. ALL REFERENCES ON THE DRAWINGS AND IN THE SPECIFICATIONS TO "CONTRACTOR" AND "MECHANICAL CONTRACTOR" REFER TO THE TENANT'S MECHANICAL CONTRACTOR, UNLESS NOTED OTHERWISE.
- B. ALL WORK SHOWN AND SPECIFIED HEREIN SHALL BE FURNISHED AND INSTALLED BY THE MECHANICAL CONTRACTOR, UNLESS SPECIFICALLY NOTED OTHERWISE.
- C. THE CONTRACTOR SHALL VISIT THE SITE TO VERIFY EXISTING CONDITIONS PRIOR TO SUBMITTING HIS BID, INCLUDING ALL EXISTING EQUIPMENT, DUCTWORK, PIPING, STUB-INS, TAPS, ETC. NO CLAIMS FOR EXTRAS DUE TO LACK OF FAMILIARITY WITH SITE CONDITIONS WILL BE APPROVED.
- D. THE CONTRACTOR SHALL REVIEW THE DRAWINGS AND SPECIFICATIONS FOR ALL DIVISIONS OF WORK AND SHALL COORDINATE HIS WORK WITH ALL OTHER TRADES. IT IS THIS CONTRACTOR'S RESPONSIBILITY TO PROVIDE ALL HIS SUBCONTRACTORS WITH A COMPLETE SET OF BID DOCUMENTS.
- E. THESE DRAWINGS ARE SCHEMATIC IN NATURE AND SHALL NOT BE SCALED. THE CONTRACTOR SHALL FIT THE WORK TO THE JOB, CAREFULLY INVESTIGATING STRUCTURAL, MECHANICAL, ELECTRICAL AND FINISH CONDITIONS AFFECTING THE WORK, AND SHALL FURNISH AND INSTALL ALL NECESSARY BENDS, OFFSETS, FITTINGS, JUNCTIONS, ETC. WHETHER OR NOT SPECIFICALLY SHOWN OR CALLED FOR, AND SEE THAT THERE ARE NO INTERFERENCES BETWEEN THIS WORK AND THE WORK OF OTHER TRADES.
- F. PROVIDE ALL EQUIPMENT AND MATERIALS, AND PERFORM ALL LABOR REQUIRED TO INSTALL COMPLETE AND OPERABLE MECHANICAL SYSTEMS AS INDICATED ON THE DRAWINGS, AS SPECIFIED, AND AS REQUIRED BY APPLICABLE CODES.
- G. INSTALL ALL MECHANICAL EQUIPMENT, MATERIALS AND APPURTENANCES IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS, THE CONTRACT DOCUMENTS, AND APPLICABLE CODES AND REGULATIONS.
- H. ALL EQUIPMENT, MATERIALS AND INSTALLATION SHALL COMPLY WITH ALL APPLICABLE LANDLORD CRITERIA.
- I. THE LOCATIONS OF ALL ITEMS SHOWN ON THE DRAWINGS THAT ARE NOT DIMENSIONED ARE APPROXIMATE ONLY. THE EXACT LOCATIONS NECESSARY TO SECURE THE BEST CONDITIONS AND RESULTS SHALL BE BASED ON SITE CONDITIONS. INSTALL ALL EQUIPMENT AS REQUIRED TO MAINTAIN MANUFACTURER'S RECOMMENDED SERVICE CLEARANCES.
- J. COORDINATE DIFFUSER, REGISTER AND GRILLE LOCATIONS WITH ARCHITECTURAL REFLECTED CEILING PLAN, LIGHTING, AND OTHER CEILING-MOUNTED ITEMS, AND MAKE MINOR ADJUSTMENTS IN DIFFUSER LOCATIONS AND DUCTWORK AS REQUIRED.
- K. ALL ROOF CUTTING, PATCHING AND FLASHING REQUIRED TO INSTALL THE MECHANICAL SYSTEMS SHALL BE BY A LANDLORD-APPROVED ROOFING CONTRACTOR AT THIS CONTRACTOR'S EXPENSE. COORDINATE ROOF PENETRATIONS WITH LANDLORD AND GENERAL CONTRACTOR.
- L. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL FINAL CONNECTIONS TO LANDLORD'S BASE BUILDING SYSTEMS. RE-USE EXISTING CONNECTION POINTS WHERE POSSIBLE. COORDINATE ALL REQUIREMENTS IN FIELD WITH LANDLORD.
- M. NOTIFY TENANT'S PROJECT MANAGER IF ANY EXISTING DUCTWORK OR PIPING CONNECTION POINTS ARE SMALLER THAN SIZES SHOWN ON DRAWINGS.
- N. REPLACE UNIT COMPONENTS AS REQUIRED TO MAKE UNIT FULLY FUNCTIONAL, INCLUDING BUT NOT LIMITED TO: FANS, MOTORS, DRIVES, BELTS, BEARINGS, COILS, HEAT EXCHANGERS, REFRIGERATION, DAMPERS, DAMPER MOTORS, VALVES, AND OPERATING AND SAFETY CONTROLS. CHANGE FILTERS UPON COMPLETION OF SERVICE WORK AND JUST PRIOR TO JOB TURNOVER.
- O. REMOVE ALL EXISTING MECHANICAL EQUIPMENT, DUCTWORK, PIPING SYSTEMS, CONTROLS, ETC. NOT BEING RE-USED. DO NOT ABANDON IN PLACE. MAINTAIN SERVICES PASSING THROUGH SPACE TO OTHER TENANT SPACES.
- P. CONTRACTOR MAY, AT HIS OPTION, INSTALL ROUND SPIRAL DUCTWORK OF EQUIVALENT CAPACITY IN LIEU OF RECTANGULAR DUCTWORK SHOWN AS LONG AS CEILING HEIGHTS ARE NOT AFFECTED.
- Q. FIBERGLASS DUCTBOARD IS NOT ALLOWED.
- R. BRANCH DUCT RUNOUTS TO DIFFUSERS SHALL BE SAME SIZE AS DIFFUSER NECK, UNLESS SHOWN OTHERWISE.
- S. RIGID DUCTWORK SHALL BE UTILIZED FOR ALL RUNOUTS TO DIFFUSERS IN OPEN CEILING AREAS.
- T. CONTRACTOR SHALL BALANCE ALL HVAC SYSTEMS IN ACCORDANCE WITH THE MECHANICAL SPECIFICATIONS. SUBMIT COPIES OF TEST & BALANCE REPORT TO TENANT, LANDLORD AND ENGINEER.

CONDENSING UNIT SCHEDULE

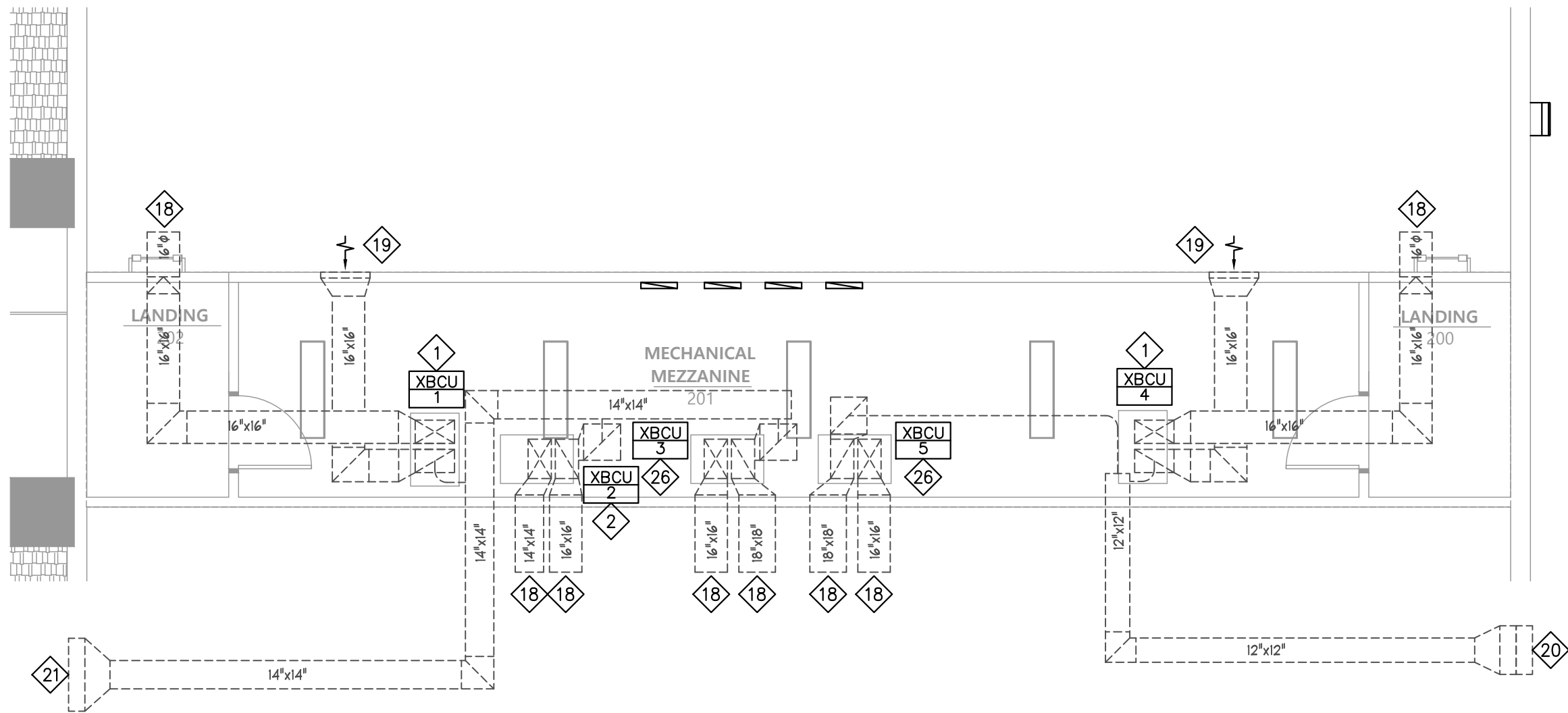
UNIT TAG	CU-1	CU-2	CU-3	CU-4
LOCATION	GROUND	GROUND	GROUND	GROUND
MANUFACTURER	CARRIER	CARRIER	CARRIER	CARRIER
MODEL NUMBER	25SPA548A003	25SPA536A003	25SPA560A003	25SPA548A003
SERVICE	XBCU-1	XBCU-2	XBCU-3	XBCU-4
REFRIGERANT TYPE	R-410A	R-410A	R-410A	R-410A
NOMINAL CAPACITY (TON)	4	3	5	4
SEER	14.3	14.3	14.3	14.3
CIRCUITS (DUAL, SINGLE)	SINGLE	SINGLE	SINGLE	SINGLE
COMPRESSOR TYPE	SCROLL	SCROLL	SCROLL	SCROLL
QUANTITY	1	1	1	1
UNLOADING %	0-100	0-100	0-100	0-100
CONDENSER NUMBER OF FANS	1	1	1	1
HP	-	-	-	-
MBH (OUTPUT)	48.0	36.0	60.0	48.0
AMBIENT AIR TEMP	95.0	95.0	95.0	95.0
REFR SUCTION TEMP	45°F	45°F	45°F	45°F
REFRIGERANT PIPE SIZES				
LIQUID	PER MANUF.	PER MANUF.	PER MANUF.	PER MANUF.
SUCTION	PER MANUF.	PER MANUF.	PER MANUF.	PER MANUF.
HOT GAS	PER MANUF.	PER MANUF.	PER MANUF.	PER MANUF.
ELECTRICAL				
MCA	32.8	20.3	33.2	32.8
V-PH-CY	208/1/60	208/1/60	208/1/60	208/1/60
STARTER	DIV. 15	DIV. 15	DIV. 15	DIV. 15
DISCONNECT	DIV. 16	DIV. 16	DIV. 16	DIV. 16
OPERATING WEIGHT (LBS)	245	245	245	245
REMARKS	PROVIDE UNIT WITH LOW AMB. CONTROL CRANKCASE HEATER HARD SHUT-OFF TXV, COMPRESSOR HARD START ASSIST, FOLLOW LONGLINE GUIDE FOR PIPE SIZING.	PROVIDE UNIT WITH LOW AMB. CONTROL CRANKCASE HEATER HARD SHUT-OFF TXV, COMPRESSOR HARD START ASSIST, FOLLOW LONGLINE GUIDE FOR PIPE SIZING.	PROVIDE UNIT WITH LOW AMB. CONTROL CRANKCASE HEATER HARD SHUT-OFF TXV, COMPRESSOR HARD START ASSIST, FOLLOW LONGLINE GUIDE FOR PIPE SIZING.	PROVIDE UNIT WITH LOW AMB. CONTROL CRANKCASE HEATER HARD SHUT-OFF TXV, COMPRESSOR HARD START ASSIST, FOLLOW LONGLINE GUIDE FOR PIPE SIZING.

GRILLE AND DIFFUSER SCHED.

TYPE	A	B	C	D	E
ITEM	SUPPLY	RETURN/TRANS	SUPPLY	TRANSFER	SUPPLY
DESCRIPTION	LAY-IN	LAY-IN	DUCT MOUNT	WALL MOUNT	LAY-IN
MANUFACTURER	TITUS	TITUS	TITUS	TITUS	TITUS
MODEL NUMBER	TMS	50F	300RS	350FL	TMS
REMARKS	STD. WHITE FINISH 24"x24" FACE W/EG EQUALIZING GRID, OBD & "LAY-IN" TRM FRAME	STD. WHITE FINISH W/ "LAY-IN" TRM FRAME	STD. WHITE FINISH W/ OBD	STD. WHITE FINISH	STD. WHITE FINISH 12"x12" FACE W/EG EQUALIZING GRID, OBD & "LAY-IN" TRM FRAME

EXHAUST FAN SCHED.

UNIT TAG	EF-2	EF-3
AREA SERVED	TOILET ROOM 114	TOILET ROOM 115
MANUFACTURER	GREENHECK	GREENHECK
MODEL NUMBER	SP-A125	SP-A125
DRIVE (BELT, DIRECT)	DIRECT	DIRECT
FAN DATA		
CFM	100	100
ESP	0.25"	0.25"
RPM	1100	1100
HP	53 WATTS	53 WATTS
ELECTRICAL		
V-PH-CY	115/1/60	115/1/60
STARTER	-	-
DISCONNECT	DIV. 16	DIV. 16
WEIGHT (LBS)	15	15
REMARKS	WITH INTEGRAL BACKDRAFT DAMPER, E.C. SHALL INTERLOCK WITH TOILET ROOM LIGHTS	WITH INTEGRAL BACKDRAFT DAMPER, E.C. SHALL INTERLOCK WITH TOILET ROOM LIGHTS



1 MEZZANINE HVAC PLAN
3/16" = 1'-0"

FOR PERMIT ISSUE

DATE	DESCRIPTION
12.28.2023	REVIEW SET
01.12.2024	PERMIT SET
CHECKED	LAK
DRAWN	TMS
HEI PROJECT NO.	R23-4590.006

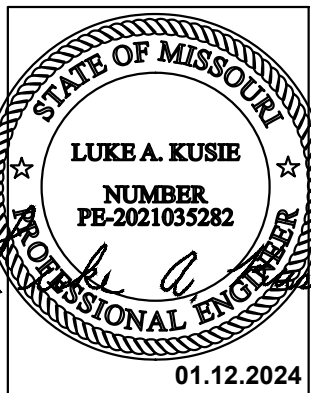
MEZZANINE HVAC PLAN

M1.1



DAMIAN
FARRELL
DESIGN
GROUP

359 METTY DRIVE, SUITE 4A
ANN ARBOR, MI 48103
tel: 734.998.1331



C3 - BRANSON MO
3125 GREEN MOUNTAIN DRIVE
BRANSON, MO 65616

