

SIGNATURE DATE: 08/27/2025

H & B
HOSS & BROWN ENGINEERS
 15902 Midland Drive
 Shawnee, Kansas 66217
 913.262.9090 | mail@h-b.com
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QuikTrip No. 0585
 4720 HAMILTON STREET
 OMAHA, NEBRASKA



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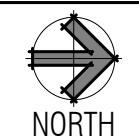
PROTOTYPE	Fryer
DIVISION	Des Moines
VERSION	4600
DATE	06-18-2025

REV	DATE	DESCRIPTION

ORIGINAL ISSUE DATE: 08/27/2025

- 1 REMOVE KITCHEN HOOD SYSTEM AND ALL ASSOCIATED GREASE DUCT BETWEEN HOOD AND EXHAUST FAN ON ROOF, RE: M102.
- 2 REMOVE ROOF-MOUNTED EXHAUST FAN AND ALL ASSOCIATED DUCT WORK, RE: M102.
- 3 EXISTING TEMPERATURE SENSOR AND HUMIDITY SENSOR FOR ROOFTOP UNIT SERVING KITCHEN SHALL REMAIN; SHOWN FOR REFERENCE.
- 4 EXISTING ROOF EQUIPMENT SHALL REMAIN; SHOWN FOR REFERENCE.
- 5 REMOVE DIFFUSER AND ASSOCIATED FLEX DUCT BACK TO LOCATION SHOWN AND RETAIN FOR RELOCATION, RE: M102.

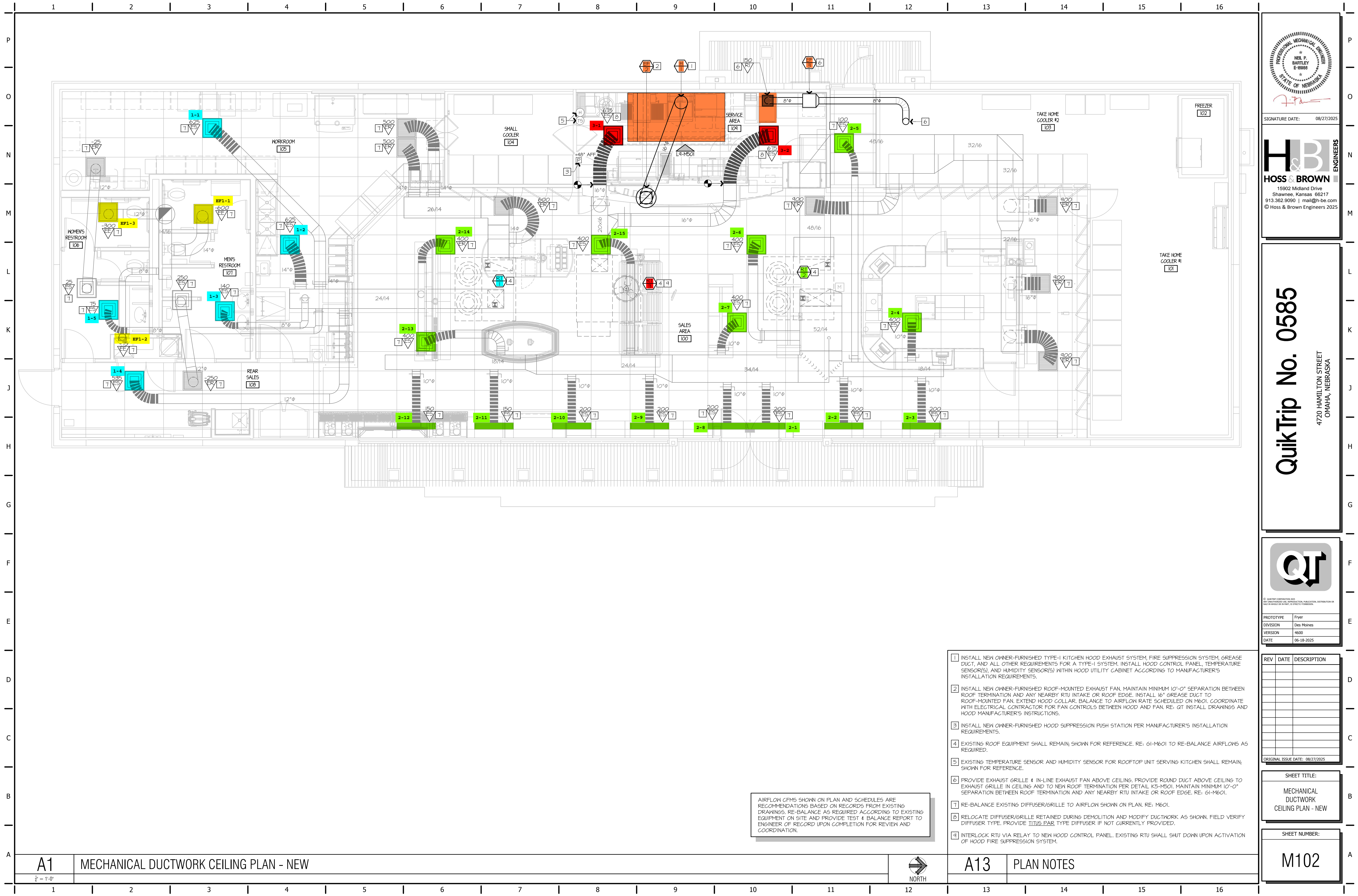
A1 MECHANICAL DUCTWORK CEILING PLAN - DEMO



A13 PLAN NOTES

SHEET TITLE:
 MECHANICAL DUCTWORK CEILING PLAN - DEMO

SHEET NUMBER:
M101



AIRFLOW CFMS SHOWN ON PLAN AND SCHEDULES ARE RECOMMENDATIONS BASED ON RECORDS FROM EXISTING DRAWINGS. RE-BALANCE AS REQUIRED ACCORDING TO EXISTING EQUIPMENT ON SITE AND PROVIDE TEST & BALANCE REPORT TO ENGINEER OF RECORD UPON COMPLETION FOR REVIEW AND COORDINATION.

- 1 INSTALL NEW OWNER-FURNISHED TYPE-I KITCHEN HOOD EXHAUST SYSTEM, FIRE SUPPRESSION SYSTEM, GREASE DUCT, AND ALL OTHER REQUIREMENTS FOR A TYPE-I SYSTEM. INSTALL HOOD CONTROL PANEL, TEMPERATURE SENSOR(S), AND HUMIDITY SENSOR(S) WITHIN HOOD UTILITY CABINET ACCORDING TO MANUFACTURER'S INSTALLATION REQUIREMENTS.
- 2 INSTALL NEW OWNER-FURNISHED ROOF-MOUNTED EXHAUST FAN. MAINTAIN MINIMUM 10'-0" SEPARATION BETWEEN ROOF TERMINATION AND ANY NEARBY RTU INTAKE OR ROOF EDGE. INSTALL 16" GREASE DUCT TO ROOF-MOUNTED FAN. EXTEND HOOD COLLAR. BALANCE TO AIRFLOW RATE SCHEDULED ON M601. COORDINATE WITH ELECTRICAL CONTRACTOR FOR FAN CONTROLS BETWEEN HOOD AND FAN. RE: QT INSTALL DRAWINGS AND HOOD MANUFACTURER'S INSTRUCTIONS.
- 3 INSTALL NEW OWNER-FURNISHED HOOD SUPPRESSION PUSH STATION PER MANUFACTURER'S INSTALLATION REQUIREMENTS.
- 4 EXISTING ROOF EQUIPMENT SHALL REMAIN, SHOWN FOR REFERENCE. RE: 61-M601 TO RE-BALANCE AIRFLOWS AS REQUIRED.
- 5 EXISTING TEMPERATURE SENSOR AND HUMIDITY SENSOR FOR ROOFTOP UNIT SERVING KITCHEN SHALL REMAIN, SHOWN FOR REFERENCE.
- 6 PROVIDE EXHAUST GRILLE # 1 IN-LINE EXHAUST FAN ABOVE CEILING. PROVIDE ROUND DUCT ABOVE CEILING TO EXHAUST GRILLE IN CEILING AND TO NEW ROOF TERMINATION PER DETAIL K5-M501. MAINTAIN MINIMUM 10'-0" SEPARATION BETWEEN ROOF TERMINATION AND ANY NEARBY RTU INTAKE OR ROOF EDGE. RE: 61-M601.
- 7 RE-BALANCE EXISTING DIFFUSER/GRILLE TO AIRFLOW SHOWN ON PLAN. RE: M601.
- 8 RELOCATE DIFFUSER/GRILLE RETAINED DURING DEMOLITION AND MODIFY DUCTWORK AS SHOWN. FIELD VERIFY DIFFUSER TYPE. PROVIDE TITUS PAR TYPE DIFFUSER IF NOT CURRENTLY PROVIDED.
- 9 INTERLOCK RTU VIA RELAY TO NEW HOOD CONTROL PANEL. EXISTING RTU SHALL SHUT DOWN UPON ACTIVATION OF HOOD FIRE SUPPRESSION SYSTEM.

NEIL P. BARTLEY
 E-8988
 STATE OF NEBRASKA

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15902 Midland Drive
 Shawnee, Kansas 66217
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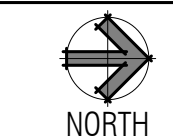
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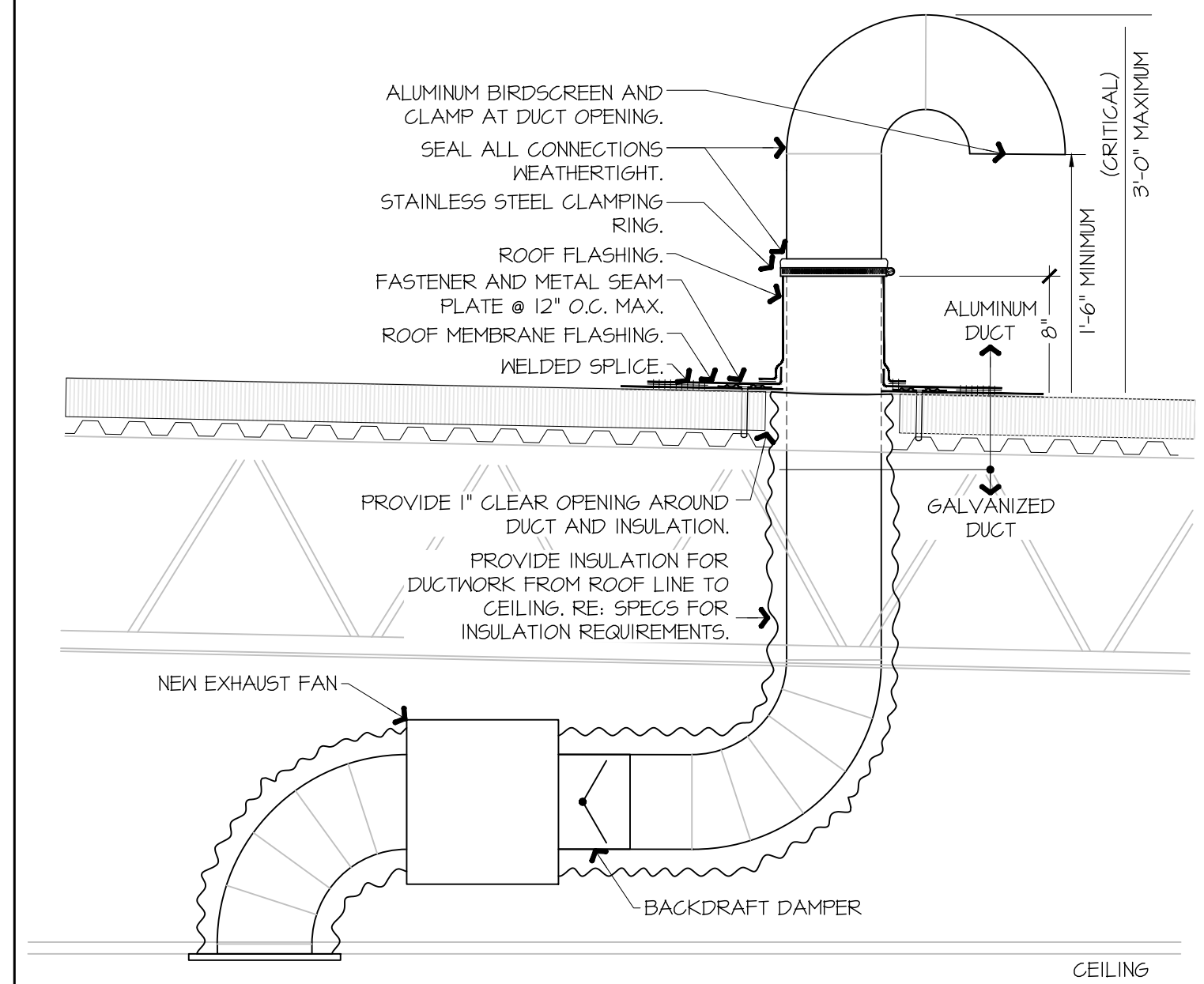
REV	DATE	DESCRIPTION

ORIGINAL ISSUE DATE: 08/27/2025

SHEET TITLE:
 MECHANICAL
 DUCTWORK
 CEILING PLAN - NEW

SHEET NUMBER:
 M102





GENERAL NOTES:
KITCHEN EXHAUST HOOD SHALL BE TYPE-I RATED FOR MEDIUM DUTY COOKING APPLIANCES THAT PRODUCE GREASE OR SMOKE AS A RESULT OF THE COOKING PROCESS. HOOD SHALL BE PROVIDED WITH AUTOMATIC FIRE SUPPRESSION SYSTEM INTERLOCKED WITH EQUIPMENT SHUTDOWN CONTROLS. HOOD SHALL BE PROVIDED WITH UL1046 GREASE FILTERS. HOOD SHALL BE LISTED AND LABELED FOR 0" CLEARANCE REQUIREMENTS TO COMBUSTIBLES.

HEAT AND MOISTURE LOADS FOR APPLIANCES THAT DO NOT PRODUCE GREASE OR SMOKE AS A RESULT OF THE COOKING PROCESS AND ARE NOT LOCATED UNDER THE HOOD, HAVE BEEN INCORPORATED INTO THE HVAC SYSTEM CAPACITY SERVING THE KITCHEN.

ALL OVENS NOT LOCATED UNDERNEATH A HOOD ARE UL1010 LISTED FOR VENTLESS OPERATION.

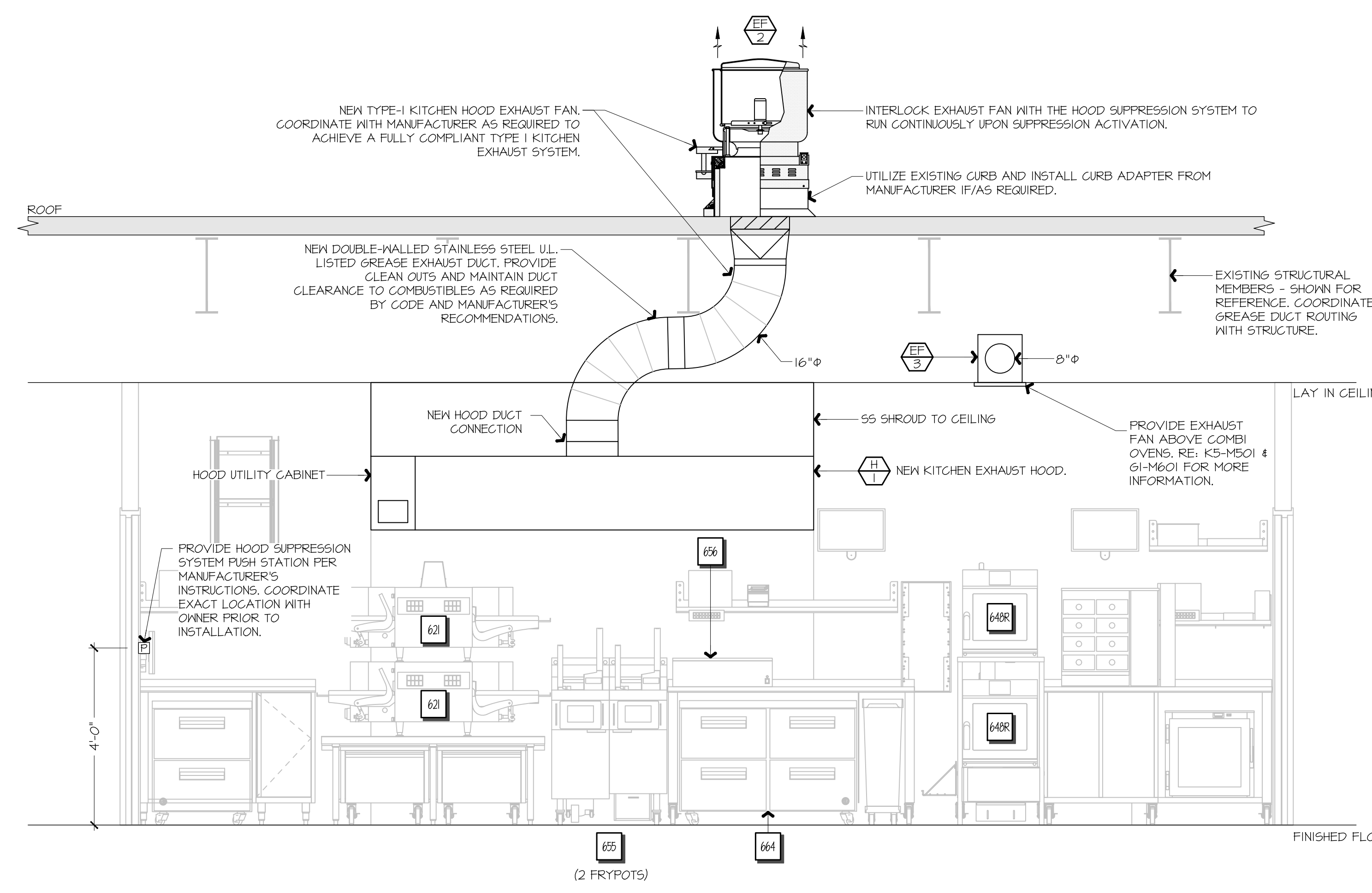
SEQUENCE OF OPERATION:
THE FOLLOWING KITCHEN EQUIPMENT SHALL BE INTERLOCKED WITH CURRENT TRANSFORMERS THAT AUTOMATICALLY ACTIVATE THE HOOD EXHAUST FAN UPON THE KITCHEN EQUIPMENT BEING ENERGIZED: [62] PIZZA OVENS, [648] COMBI OVENS, [647] STEAM DRAWER, [655] FRYER, [656] FRY HOLDING STATION.

AS HOOD EXHAUST FAN ENERGIZES, RTU'S SHALL MODULATE OUTSIDE AIR TO MAINTAIN BUILDING PRESSURIZATION. RE: M601.

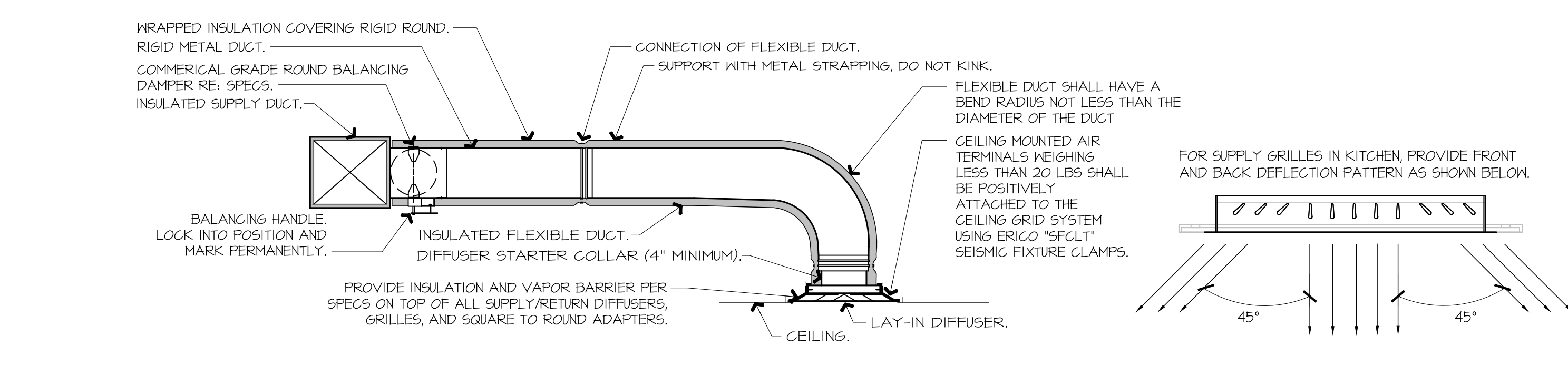
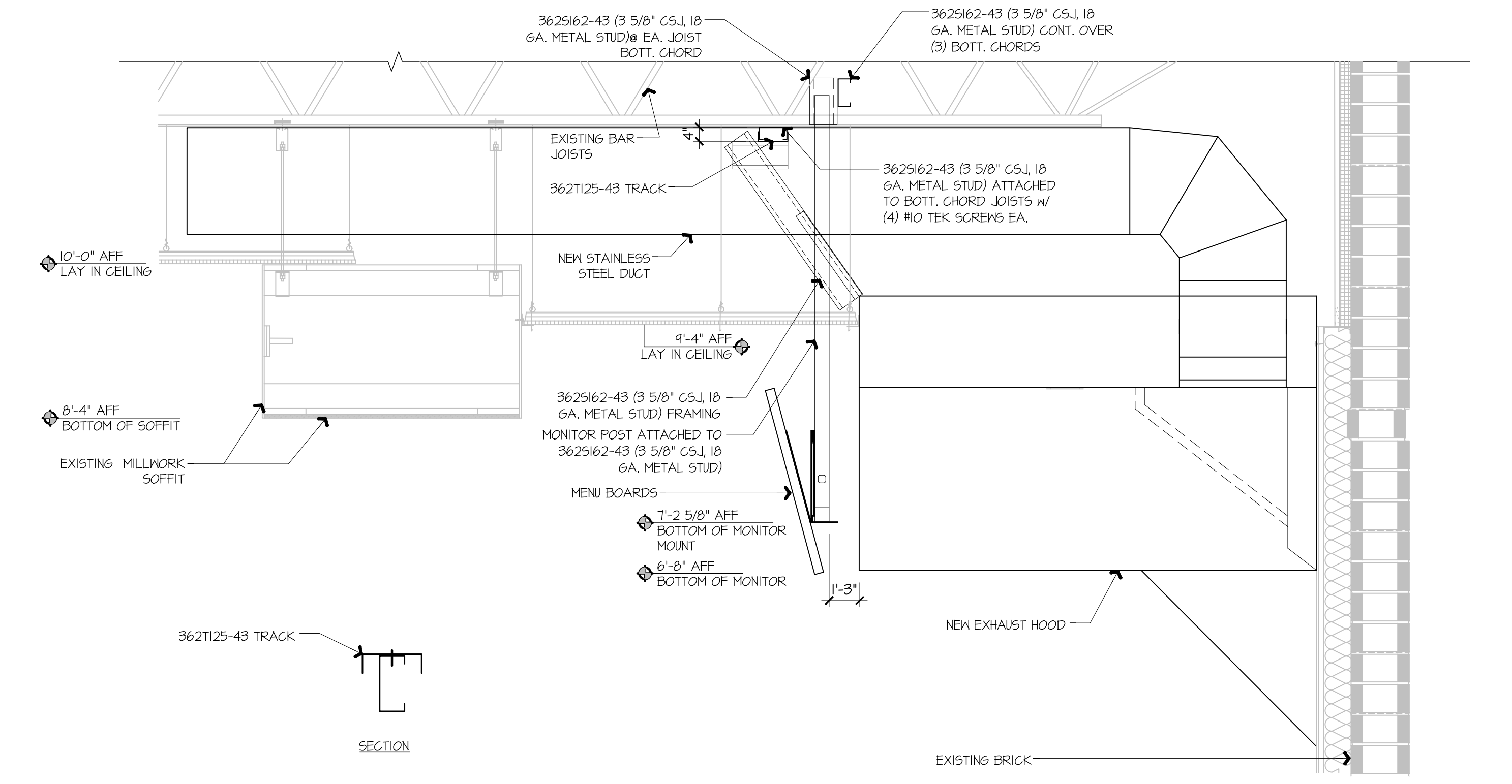
HEAT SENSORS SHALL BE PROVIDED WITHIN HOOD CANOPY FOR TEMPERATURE AND HUMIDITY MONITORING. RE: MANUFACTURER DRAWINGS.

UPON ACTIVATION OF THE FIRE SUPPRESSION SYSTEM, ALL EQUIPMENT LOCATED UNDER THE HOOD SHALL BE SHUTDOWN VIA CONTACTORS LOCATED WITHIN THE HOOD UTILITY CABINET, AND RTU SERVING KITCHEN SPACE SHALL BE AUTOMATICALLY SHUTDOWN. RE: A13-E601.

K1	NOT USED	K5	COMBI OVEN FAN EXHAUST DUCTWORK
		NOT TO SCALE	A1-M102



F9	FSC REAR WALL ELEVATION - NEW
1/2" = 1'-0"	A1-M102



NOTES:

- PROVIDE AT FLEXIBLE DUCT CONNECTION METAL OR "PANDUIT" DRAMBAND ON THE INTERIOR FLEXIBLE DUCT HELIX. SECURE THE INSULATION OVER THE DRAMBAND WITH AN ADDITIONAL DRAMBAND.
- PROVIDE BEADING ON ROUND METAL DUCT 12" OR LARGER IN DIAMETER.
- PROVIDE MINIMUM 4" COLLARS FOR ATTACHMENT OF THE FLEX DUCT TO ROUND DUCT, DAMPERS AND DIFFUSERS.
- BAND RIGID ROUND DUCT INSULATION TO DUCT AND PROVIDE FIBER REINFORCED FOIL BACKED TAPE FOR INSULATION OVERLAP.

A1	KITCHEN EXHAUST HOOD SUPPORT DETAIL
NOT TO SCALE	A1-M102

A9	DIFFUSER CONNECTION DETAIL
NOT TO SCALE	A1-M102

PROFESSIONAL MECHANICAL ENGINEER
NEL P. BARTLEY
E-6888
STATE OF NEBRASKA

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REV	DATE	DESCRIPTION

SHEET TITLE:
MECHANICAL SECTIONS & DETAILS

SHEET NUMBER:
M501

