



1 REMOVE EXISTING DUCT MOUNTED HEATING COIL.

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MD-101

BIDDING/REVIEW ISSUE



GENERAL NOTE:

1. REFERENCE "AIR OUTLET SCHEDULE" ON M-801 FOR ALL DIFFUSER & GRILLE SELECTIONS.
2. REBALANCE ALL RTU'S TO AIRFLOW SHOWN ON 1/M-801.
3. BALANCE DIFFUSERS TO CFM'S SHOWN ON DETAIL 1/M-101 OR PROPORTIONAL TO THE MAXIMUM CFM AVAILABLE FROM THE EXISTING AIR HANDLERS IF LESS THAN SPECIFIED.
4. COORDINATE DUCT ROUTING WITH OPEN WEB JOIST LOCATION. FINAL DIFFUSER DUCT CONNECTION MAY NEED TO BE ROUTED THROUGH OPEN WEB JOIST.
5. CONTRACTOR SHALL PROVIDE VOLUME DAMPERS TO ALL DIFFUSERS TO ALL DIFFUSERS. REFERENCE DETAIL 8/M-701 & 1/M-702.

KEYED NOTES:

- 1 PROVIDE NEW DUCT MOUNTED HOT WATER COIL. REFERENCE "HOT WATER COIL SCHEDULE" ON M-801 FOR COIL SELECTION.
- 2 PROVIDE NEW FAN COIL UNITS. REFERENCE SPLIT SYSTEM SCHEDULE ON M-801.

1 MECHANICAL REFLECTIVE CEILING PLAN
1/8" = 1'-0"

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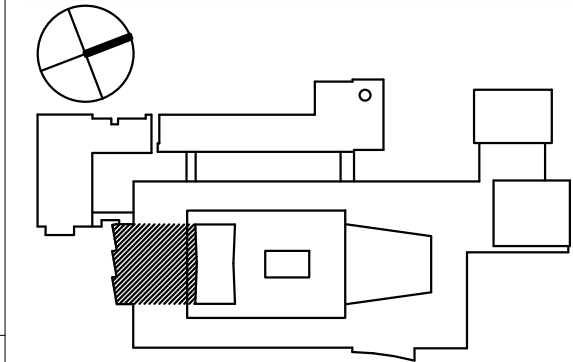
LICENSE EXPIRATION DATE - 9/25



**BYRAM HILLS HIGH SCHOOL
LEARNING COMMONS
RENOVATION**
SED# 66-12-01-06-0-007-01X

12 Tripp Ln,
Armonk, NY 10504

KEY PLAN



REVISIONS

No.	Description	Date

ISSUED: BID SET

DATE: JUNE 25, 2024

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SHEET NAME:
**MECHANICAL FIRST
FLOOR DUCTWORK PLAN**

SHEET NUMBER:

M-101

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BIDDING/REVIEW ISSUE

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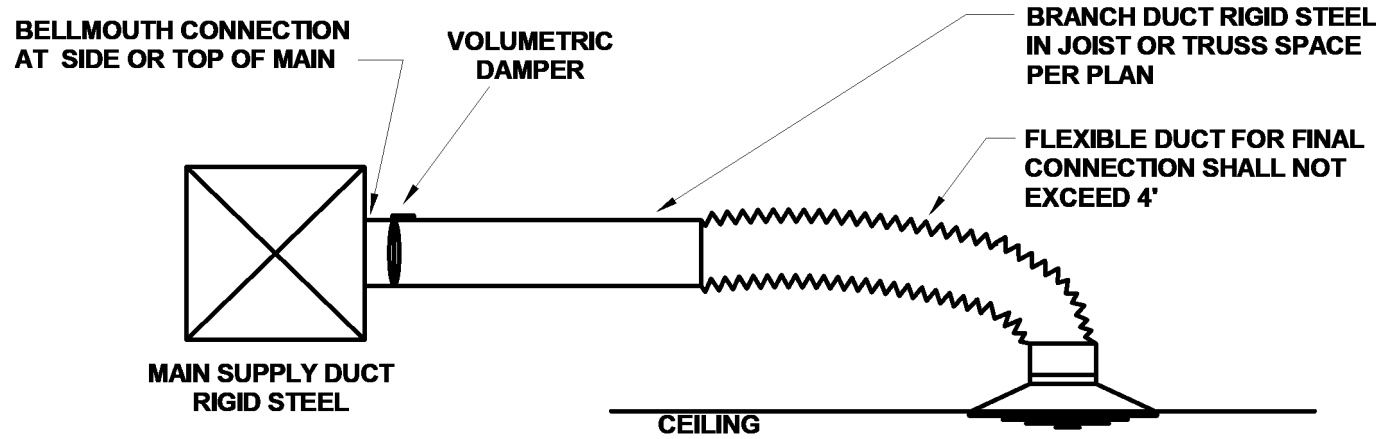
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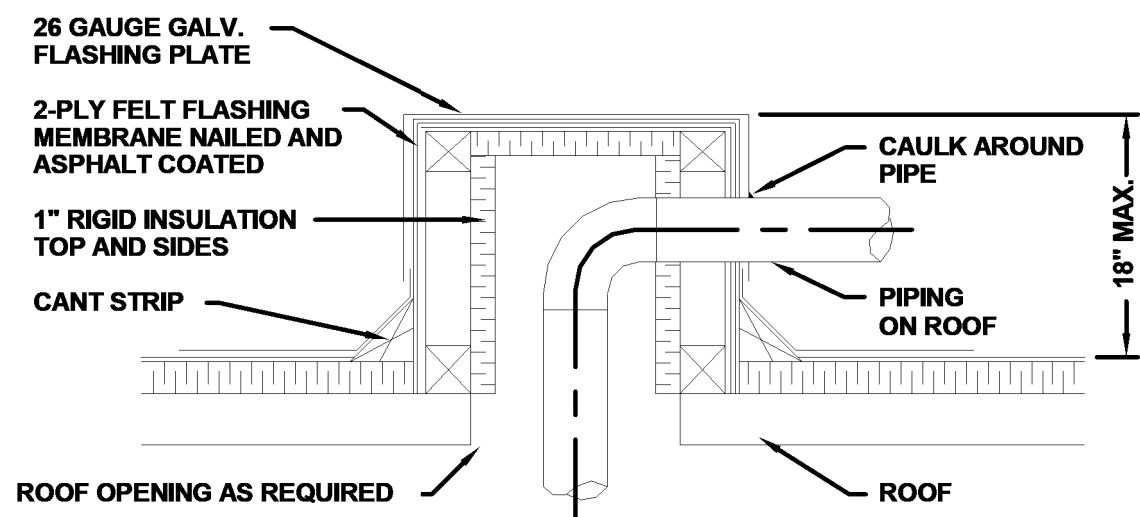
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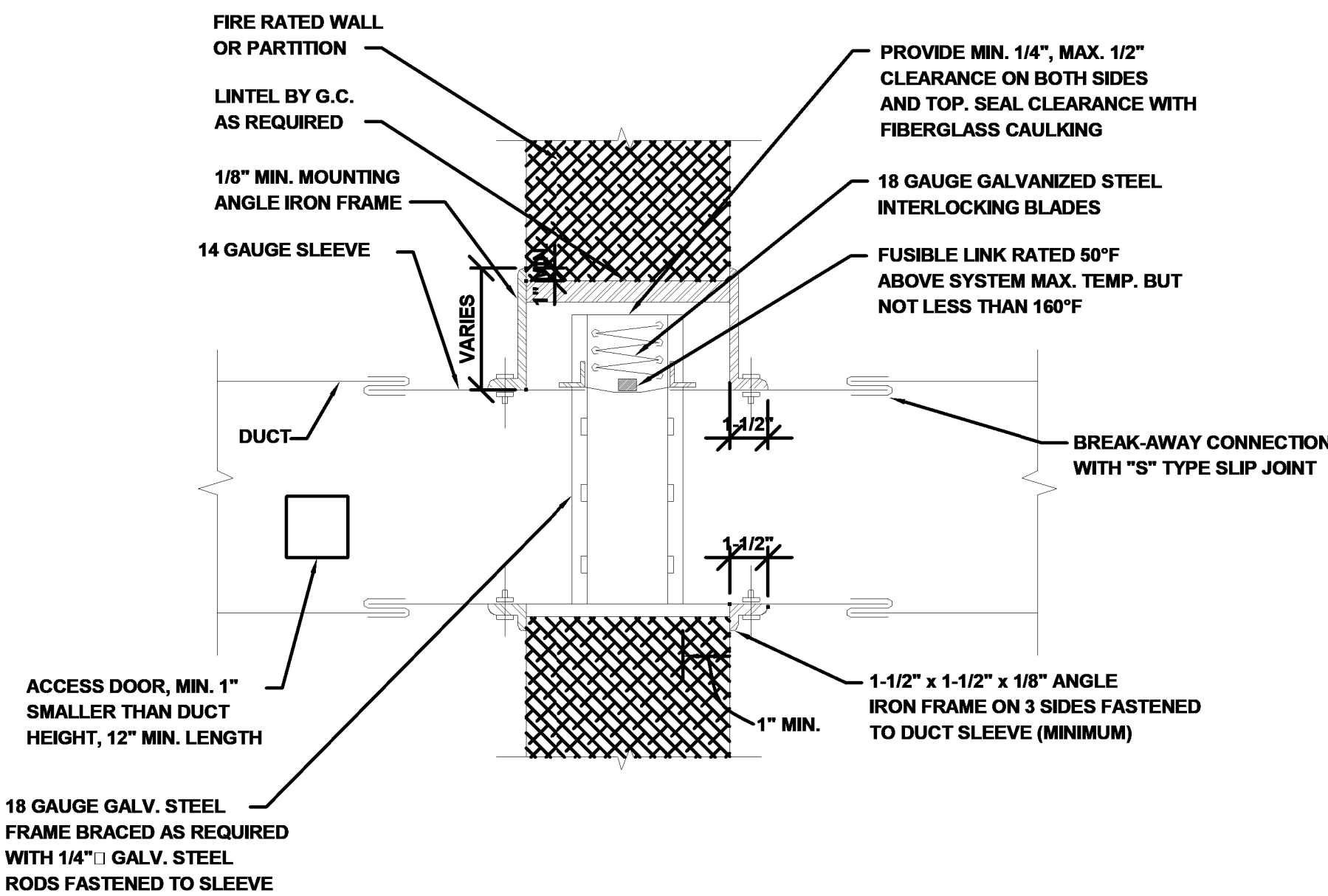
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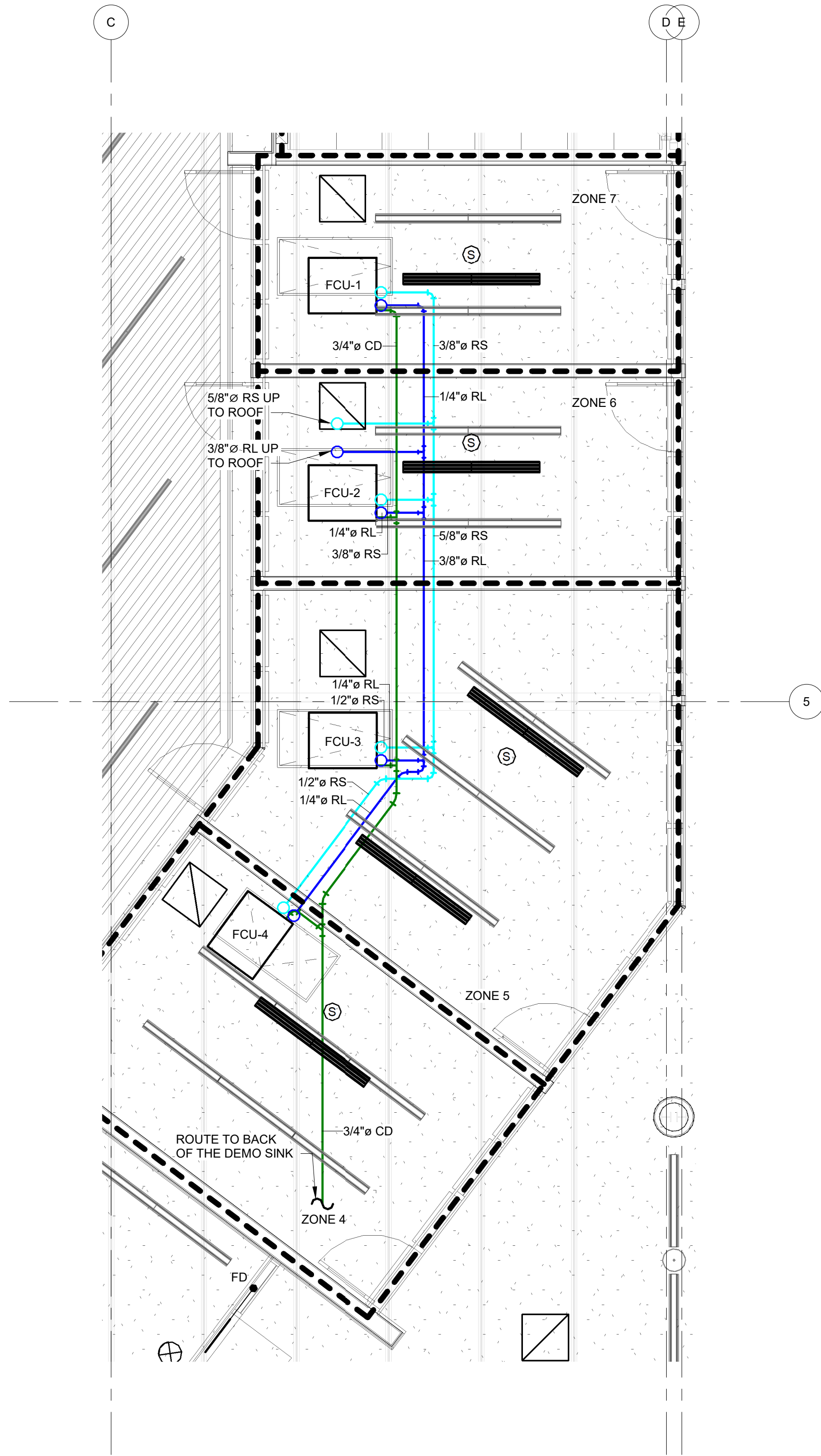
1 DUCT DIFFUSER DETAIL
N.T.S.



2 PIPING THROUGH ROOF
N.T.S.



3 SHUTTER TYPE FIRE DAMPER FOR
FOR LOW PRESSURE SYSTEMS DETAIL
N.T.S.



4 MECHANICAL REFRIGERENT PIPING BLOWUP VIEW
1/4" = 1'-0"

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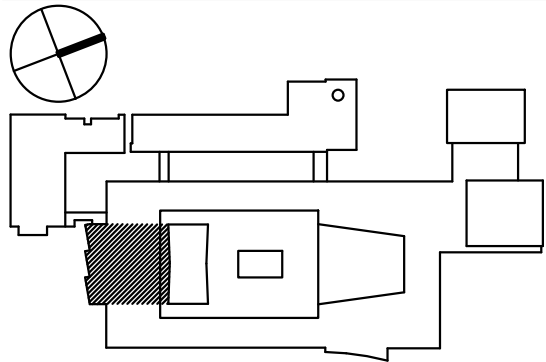
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KEY PLAN



REVISIONS

No.	Description	Date

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M-702

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Checked by: Daniel Fellenzer
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DUCTED SPLIT-SYSTEM UNIT SCHEDULE												
UNIT NO.	LOCATION	TYPE	MANUFACTURER	MODEL NO.	NET COOLING/HEATING CAPACITY (BTU/HR)	MOUNTING LOCATION	SEER	HSPF	FAN CFM	VOLT/PHASE	MCA	MOCP
FCU-1,2	OFFICE SPACE	CONCEALED DUCTED	MITSUBISHI	PEAD-A09AA8	9,000	CEILING	---	---	250	208/1	---	---
FCU-3	CONFERENCE ROOM	CONCEALED DUCTED	MITSUBISHI	PEAD-A18AA8	18,000	CEILING	---	---	500	208/1	---	---
FCU-4	BREAKROOM	CONCEALED DUCTED	MITSUBISHI	PEAD-A12AA8	12,000	CEILING	---	---	350	208/1	---	---
HP-1	ROOF	HEAT PUMP	MITSUBISHI	MXZ-SM48NAMHZ2-U1	48000/48,000	---	16	9.5	---	208/1	42	50

- NOTES:
1. PROVIDE CONDENSATION PUMPS FOR ALL INDOOR EQUIPMENT PIPE TO NEAREST SANITARY CONNECTION WITH FUNNEL DRAIN.
 2. INSTALL HP-1 WITH ACCESSORY BASE PAN HEATER.
 3. SIZE REFRIGERANT PIPING AS RECOMMENDED BY MANUFACTURER.
 4. PROVIDE HP-1 WITH WIND BAFFLES.
 5. EC SHALL PROVIDE POWER TO INDOOR UNITS THROUGH OUTDOOR UNIT.

HOT WATER/HEATING COIL SCHEDULE																
UNIT	SERVICE	LOCATION	MANUF. & MODEL #	CAPACITY DATA		COIL DATA					WATER DATA			E.A.T. (°F)	L.A.T. (°F)	REMARKS
				AIR FLOW (CFM)	CAPACITY (MBH)	FACE AREA (SQ. FT)	FACE VEL. (FPM)	ROWS	FIN/FT	SIZE (WXH)	FLOW (GPM)	E.W.T. (°F)	L.W.T. (°F)			
HC-1	RTU-3	DUCT MOUNTED	GREENHECK	2200	105	2.33	800	2	108	30" X 12"	10.5	180	160	51	95	SEE NOTES

- NOTES:
1. PRVIDE HC-1 WITH 3-WAY MODULATING CONTROL VALVES.
 2. REFERENCE HEATING COIL CONNECTON DETAIL ON M-701.

ROOFTOP UNIT SCHEDULE										
UNIT	AREA SERVED	SUPPLY FAN DATA			COOLING COIL TOTAL CAPACITY (MBH)	ELECTRICAL DATA		MANUFACTURER (MODEL)	WEIGHT (LBS)	REMARKS
		TOTAL SYSTEM (CFM)	MINIMUM O.A. (CFM)	E.S.P (IN. WG)		MCA	VOLTAGE/PHASE			
EXISTING RTU-1	ZONE 8	2000	SEE VENTILATION TABLE	1.2	60	32	208/3ø	CARRIER	---	SEE NOTES
EXISTING RTU-2	ZONE 2	2000	SEE VENTILATION TABLE	1.2	60	32	208/3ø	CARRIER	---	SEE NOTES
EXISTING RTU-3	ZONE 3	2200	SEE VENTILATION TABLE	1	60	32	208/3ø	CARRIER	---	SEE NOTES
RTU-4,5,6	ZONE 1	2000	400	0.8	60	90	208/3ø	TRANE (WHC050H3RGA)	1100	SEE NOTES
RTU-7	CORRIDOR	1200	200	0.6	60	80	208/3ø	TRANE (WHC036H3REB)	800	SEE NOTES

- NOTES:
1. REBALANCE RTU-1,2, & 3 TO THE AIRFLOWS STATED ABOVE.
 2. REFERENCE REFURBISH NOTES ON M-001.
 3. ENSURE ALL ROOFTOP UNITS HAVE DUCT SMOKE DETECTORS, PROVIDED BY MC AND WIRED BY EC AS NECESSARY.
 4. RTU-4, 5,6, & 7 SHALL BE TIED TO THE EXISTING BMS.
 5. PROVIDE RTU-4,5,6 WITH A 18KW ELECTRIC STRIP HEATER TO OPERATE IN CONJUNCTION WITH THE HEAT PUMP DURING LOW ABIMENT CONDITIONS.
 6. PROVIDE RTU-7 WITH A 12KW ELECTRIC STRIP HEATER TO OPERATE IN CONJUNCTION WITH THE HEAT PUMP DURING LOW ABIMENT CONDITIONS.
 7. PROVIDE RTU-4,5,6 & 7 WITH A 7-DAY PROGRAMMABLE THERMOSTAT.

AIR OUTLET SCHEDULE										
DESIGNATION AND SYMBOL	AIRFLOW (CFM)	OVERALL LENGTH (FEET)	INLET/NECK SIZE (INCHES)	FACE SIZE (INCHES)	APPLICATION	MANUF. & MODEL	ACCESSORIES	MAX S.P.	FINISH	REMARKS
LD-1	500	15'	6" Ø	---	2-SLOT LINEAR DIFFUSER	PRICE (SDS100)	PROVIDE SDB PLENUM	0.08	COORDIANTE WITH ARCHITECT	SEE NOTES
LD-2	300	9'	6" Ø	---	3-SLOT LINEAR DIFFUSER	PRICE (SDS100)	PROVIDE SDB PLENUM	0.08	COORDIANTE WITH ARCHITECT	SEE NOTES
LD-3	400	10'	10" Ø	---	2-SLOT LINEAR DIFFUSER	PRICE (SDS100)	PROVIDE SDB PLENUM	0.08	COORDIANTE WITH ARCHITECT	SEE NOTES
LD-4	100	4'	7" Ø	---	2-SLOT LINEAR DIFFUSER	PRICE (SDS100)	PROVIDE SDB PLENUM	0.08	COORDIANTE WITH ARCHITECT	SEE NOTES
LD-5	200	6'	6" Ø	---	2-SLOT LINEAR DIFFUSER	PRICE (SDS100)	PROVIDE SDB PLENUM	0.08	COORDIANTE WITH ARCHITECT	SEE NOTES
LD-6	600	18'	6" Ø	---	2-SLOT LINEAR DIFFUSER	PRICE (SDS100)	PROVIDE SDB PLENUM	0.08	COORDIANTE WITH ARCHITECT	SEE NOTES
LD-7	600	15'	10" Ø	---	3-SLOT LINEAR DIFFUSER	PRICE (SDS100)	PROVIDE SDB PLENUM	0.08	COORDIANTE WITH ARCHITECT	SEE NOTES
LD-8	300	9'	6" Ø	---	2-SLOT LINEAR DIFFUSER	PRICE (SDS100)	PROVIDE SDB PLENUM	0.08	COORDIANTE WITH ARCHITECT	SEE NOTES
CD-1	150-200 201-250	---	8" Ø 10" Ø	24" X 24"	CEILING DIFFUSER	PRICE (SPD)	---	0.08	COORDIANTE WITH ARCHITECT	SEE NOTES
RG-1	100-1200	---	---	24" X 24"	PLENUM RETURN GRILLE	PRICE (PDR)	---	0.03	COORDIANTE WITH ARCHITECT	SEE NOTES

- NOTES:
1. ALL LINEAR DIFFUSERS INSTALLED WITHIN THE SLATTED CEILING WILL REQUIRE CUSTOM PLENUMS DUE TO THE HEIGHT OF THE SLATS. CONTRACTOR SHALL INCORPARTE COST OF CUSTOM PLENUMS IN BASE BID.

VENTILATION TABLE PER 2020 MCNYS Chapter 4							
Space	(Room #)	Occupancy Classification	Area (sqft)	Space Ventilation (CFM/ft. ² ,	Number of Occupants	Occupant Ventilation (CFM/person)	Total Ventilation Airflow (CFM)
FSP SUITE (100)		OFFICES	880	0.06	4	5	78
FSP ADMIN (100C)		OFFICES	128	0.06	2	5	20
FSP CR (100D)		CLASSROOM	67	0.12	1	10	21
FSP CR (100E)		CLASSROOM	67	0.12	1	10	21
FSP OFF (100F)		OFFICES	149	0.06	2	5	21
FSP OFF (100G)		OFFICES	117	0.06	2	5	20
LIBRARY (L01)		MULTIUSE ASSEMBLY	5,190	0.06	100	7.5	1,249
LIBRARIAN OFFICE (L02)		OFFICES	205	0.06	1	5	19
MEETING ROOM (L03)		CONFERENCE ROOMS	151	0.06	3	5	28
MEETING ROOM (L04)		CONFERENCE ROOMS	151	0.06	3	5	28
MEETING ROOM (L05)		CONFERENCE ROOMS	299	0.06	16	5	118
MEETING ROOM (L06)		CONFERENCE ROOMS	216	0.06	10	5	75
SNACK KIOSK		BREAKROOM	300	0.06	16	5	118

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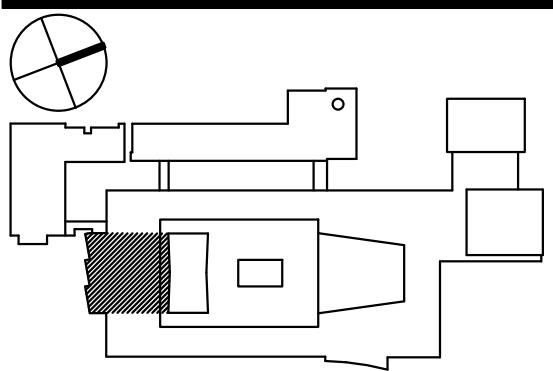
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KEY PLAN



REVISIONS		
No.	Description	Date

ISSUED: BID SET
DATE: JUNE 25, 2024
SCALE: As indicated
SHEET NAME: MECHANICAL SCHEDULES

SHEET NUMBER:
M-801