

NOTE: Bypass Dampers (BPDx)
 SYSTEM BYPASS DAMPERS ARE SHOWN FOR COORDINATION AND PLACE HOLDER PURPOSES. DAMPERS SHALL BE FURNISHED AND INSTALLED UNDER FUTURE TENANT IMPROVEMENT (T.I.) PACKAGE IF REQUIRED (TYP)

NOTE: Core Restrooms
 RESTROOMS SHOWN FOR EXHAUST DROP COORDINATION PURPOSES. EXTENSIONS INTO RESTROOMS & JAN. CLOSET TO BE COMPLETED UNDER FUTURE T.I. PACKAGE

DUCTWORK TO BE EXTENDED/MODIFIED UNDER FUTURE T.I. LAYOUT
 DROP 10/10 EA OPEN ENDED DUCT 18" DOWN INTO SPACE FROM ROOF FAN REF2. COVER OPEN W/ALUMINUM MESH.

1st FLOOR
 SCALE: 1/8"=1'-0"
 (SHELL)

DUCTWORK CONST. NOTES

- INTERNALLY LINED (1", R-6) GALVANIZED, SHEET METAL DUCTWORK FROM THE UNIT DOWN TO FLOOR SERVED AND THRU THE FIRST 5 FT HORIZONTAL SECTION. AVG SECTION LENGTH W/DC FLANGE 56.25". [PROVIDED UNDER THE BLDG SHELL PACKAGE]
- GALVANIZED, SHEET METAL DUCTWORK FOR SECTIONS SHOWN. DUCT TO BE WRAPPED W/FIBERGLASS INSULATION (R-6 INSTALLED).
- SHEET METAL TRANSITIONS SHALL BE AT LEAST 24" (MINIMUM).

RTU1 THRU RTU4:
 PACKAGED UNIT DUCTWORK CONNECTIONS THRU CURB W/1.5" FLANGE
 SUPPLY: 60.75"x24.75" (I.D.) / 62.75"x26.75" (O.D.)
 RETURN: 66.5"x19.25" (I.D.) / 68.5"x21.25" (O.D.)

NON-COLORED (NO HATCHED) DUCTWORK
 ALL OTHER DUCTWORK, OFFSETS AND/OR TRANSITIONS SHALL BE FIELD FABRICATED BY THE MECHANICAL CONTRACTOR.

NOTE:
 UNLESS NOTED OTHERWISE, DUCT DIMENSIONS SHOWN ARE INSIDE. FREE CLEAR AREA FOR AIRFLOW, COORDINATE WORK AND OPENINGS REQ'D BASED ON FINAL OUTSIDE/FINISHED DUCT DIMENSIONS IF DUCT IS LINED OR OTHER.

EQUIPMENT LIST - Bldg Shell

- EUH1** LOCATED: HOUSE ROOM
 MFR & MODEL: QMARK MUH03-81 OR EQUAL
 HEATING CAP: 10.2 MBH
 ELECTRICAL: 3 KW, 208V, 1PH, 14.5A
 DIMENSIONS/WEIGHT: 14"Wx7.5"Dx16"H / 27 lbs
 FEATURES/OPTIONS: UNIVERSAL MOUNTING BRACKET; LINE VOLTAGE THERMOSTAT-(#6010 SINGLE POLE) TURN OVER TO E.C. FOR INSTALLATION AND WIRING.
- EWH1, EWH2 & EWH3** LOCATED: 1st FL STAIR LANDINGS; MAIN ENTRY
 MFR & MODEL: QMARK/BERKO/MARLEY #5SHR008
 HEATING CAPACITY: 1800-4000W (13,650 BTU/Hr)
 THERMOSTAT RANGE: 40-99 DEG F
 AIRFLOW: 100 CFM
 ELECTRICAL: 208V, 1PH, 8.7-19.2A; TOGGLE DISCONNECT SWITCH MTD ON FAN DECK TO DISCONNECT SINGLE POINT POWER CONNECTION.
 WEIGHT W/ACC'S: 26 lbs
 DIMENSIONS: HOUSING: 14.375"Wx4"Dx18.25"H
 GRILLE: 15.75"Wx19.125"H (LOUVERED FACE/WHITE)
 FEATURES/OPTIONS: SMARTSERIES WALL HEATER W/LCD TOUCH SCREEN DISPLAY OF DIGITAL THERMOSTAT WITH 5/2-DAY PROGRAMMABILITY WITH FOUR PROGRAM PERIODS PER DAY; LOCKOUT FEATURE; SURFACE MOUNTING FRAME (#HTW5M); COORDINATE SURFACE MOUNTING FRAME/BACK BOX WITH G.C. IN ORDER CAULK AND/OR SEAL AROUND BOX TO MAINTAIN RATING OF WALL ASSEMBLY.
- INSTALLATION NOTE:**
 IN STAIRWELL AND MAIN ENTRY, FIRE CAULK/SEAL AROUND SURFACE FRAMES/BACK BOX AS REQUIRED TO MAINTAIN RATING OF WALL ASSEMBLY WHERE REQ'D.

CONSTRUCTION NOTES

1. BLDG SHELL DUCTWORK SHALL BE EXTENDED DOWN INTO EACH SPACE UNLESS NOTED OTHERWISE. DUCT MAINS SHOULD HAVE AT LEAST (1)-90° ELBOW WITH HORIZONTAL SECTION(S) SHOWN. COVER OPEN END OF DUCTS W/ALUMINUM MESH.
2. TEMPORARY LOCATION OF SYSTEM THERMOSTAT.
3. COMBINE AND ROUTE RESTROOM EXHAUST DUCTS FOR 1st and 2nd FLOOR CORE RESTROOMS UP THRU CHASE. OFFSET ABOVE 2nd FLOOR CEILING AND EXTEND UP THRU ROOF TO EXHAUST FAN REF1.
4. COORDINATE LOCATION OF SURFACE MOUNTED ELECTRIC WALL HEATER W/G.C. AND E.C. IN STAIRWELL AND MAIN ENTRY. FIRE CAULK/SEAL AROUND SURFACE FRAMES/BACK BOX AS REQUIRED TO MAINTAIN RATING OF WALL ASSEMBLY WHERE REQ'D.
5. COORDINATE LOCATION OF UNIT HEATER W/ALL TRADES TO AVOID CONFLICT. TURN OVER LINE VOLTAGE THERMOSTAT TO E.C. FOR INSTALLATION AND WIRING.

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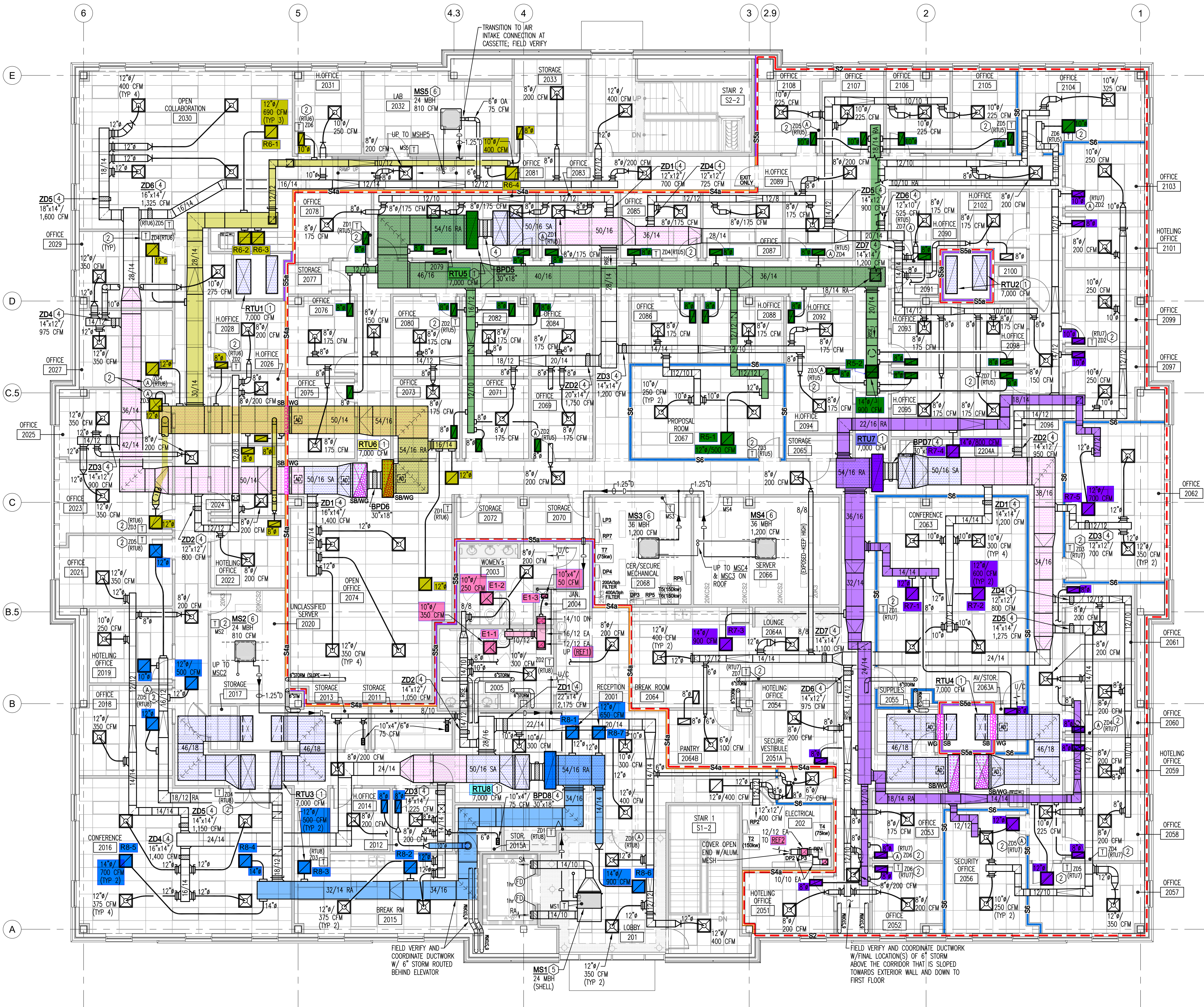
ISSUANCES

No.	Description	Date
	Issued for Bldg Shell Permit	2-10-25
	Issued for 2nd FL T.I. Permit	11-24-25

Drawn By _____
 Checked By _____
 Client Number 727
 Project Number 7617

DRAWING TITLE
MECHANICAL
1st FL SHELL PLAN

SHEET NO.
M103



2nd FLOOR
SCALE: 1/8"=1'-0"
(T.I.)

CONSTRUCTION NOTES

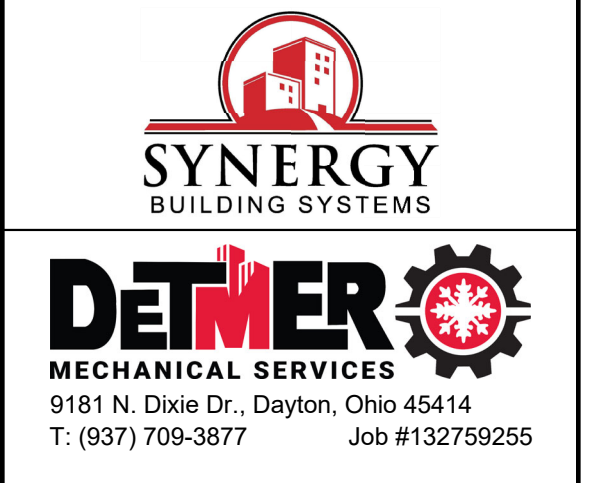
- BLDG SHELL DUCTWORK DOWN THRU SHAFTS TO BE MAINTAINED. REMOVE MESH FROM END OF DUCTWORK AND EXTEND AS SHOWN. ENSURE INSULATION IS CONTINUOUS WITHOUT TEARS.
- REMOVE TEMPORARY THERMOSTAT AS REQUIRED TO ACCOMMODATE T.I. WORK AND CONTROLS ASSOCIATED WITH ZONE DAMPERS, ETC. WHERE SHOWN. IF THERMOSTAT IS INSTALLED ON A WALL OR SECURE CONSTRUCTION, THE DEVICE SHOULD BE SURFACE MOUNTED. COORDINATE W/E.C. CONTROLS SHALL BE HARD WIRED. NO WIRELESS CONTROLS (OR HAVE THE CAPABILITY TO BE WIRELESS) ARE PERMITTED. THERMOSTATS/CONTROLLERS TO BE CLEARLY LABELED FOR ZONE AND RTU IT SERVES.
- SECURITY BARS (SB) AND/OR WAVE GUIDES (WG) WITH ACCESS DOOR AND DIELECTRIC BREAK (CANVAS CONNECTION) ON THE SECURE SIDE. REFER TO DETAILS ON SHEET M003 FOR DUCTWORK THAT PENETRATES SECURE ASSEMBLIES.
- INSTALL ZONE AND BYPASS DAMPER IN AN ACCESSIBLE LOCATION; DO NOT INSTALL ABOVE LIGHTS, SPRINKLER HEADS, DUCTWORK, ETC. PROVIDE CONTROL WIRING TO RESPECTIVE THERMOSTAT, AVERAGING SENSOR AND ZONE CONTROL BOARD; LABEL STAT FOR DAMPER AND RTU IT SERVES.
- NOTE DETELED ---
- FIELD VERIFY LOCATION OF SUSPENDED INDOOR CASSETTE WITH OTHER CEILING MOUNTED DEVICES AND SHIFT AS NECESSARY. ROUTE LINE SET UP TO HEAT PUMP OR A/C UNIT ON ROOF W/DIELECTRIC BREAK INSIDE. INSULATE LINE SET THE ENTIRE RUN. ROUTE FULL SIZE (1.25") SCH 40 PVC DRAIN LINE SLOPED OR PUMPED OVER TO MOP BASIN IN JANITOR CLOSET; LABEL DRAIN LINE FOR FUTURE REFERENCE.
- INSTALL HUMIDIFIER W/REMOTE DISTRIBUTION UNIT PER THE MFR'S INSTRUCTIONS; ADJUST/SHIFT UNIT AS NECESSARY BASED ON MOUNTING BRACKETS AND HANG STUD SPACING FOR A SECURE INSTALLATION. COORDINATE WATER SUPPLY, DRAIN AND ELECTRICAL CONNECTIONS W/P.C. AND E.C. PROVIDE CONDENSATE PUMP TO ENSURE PROPER DISPOSAL OF CONDENSATE TO MAIN DRAIN LINE USED BY

ZONE DAMPER SCHEDULE

UNIT TAG	AREA(S) SERVED	DESIGN AIRFLOW RATE (CFM)	SIZE (INCHES)	THERMOSTAT (WIRED) SENSOR (REMOTE/AVERAGING)	QTY
RTU5 (7,000 CFM)					
ZD1	OFFICES 2078,79,81,83	700	12"x12"	1	1
ZD2	OFFICES 2069,71,73,75,76,80,82,84	1,750	20"x14"	1	1
ZD3	PROPOSAL 2067; OFFICES 2068,88,92,94	1,200	14"x14"	1	1
ZD4	OFFICES 2085,07,09; CORRIDOR	725	12"x12"	1	1
ZD5	OFFICES 2105-2108	900	14"x12"	1	1
ZD6	OFFICE 2104; CORRIDOR	525	12"x10"	1	1
ZD7	OFFICES 2090,93,95,96,98; 2102	1,200	14"x14"	1	1
BP05	BYPASS DAMPER (NOTE E)	5,600	30"x18"		
RTU6 (7,000 CFM)					
ZD1	OPEN OFFICE 2074	1,400	16"x14"	1	1
ZD2	H. OFFICES 2022,24,26,28	800	12"x12"	1	1
ZD3	OFFICES 2023,25; CORRIDOR	900	14"x12"	1	1
ZD4	OFFICES 2027,28; CORRIDOR	975	14"x12"	1	1
ZD5	OPEN COLLABORATION 2030	1,600	18"x14"	1	1
ZD6	OFFICE 2031; STOR 2033; STAIR 2; CORR.	1,325	16"x14"	1	1
BP06	BYPASS DAMPER (NOTE E)	5,600	30"x18"		
RTU7 (7,000 CFM)					
ZD1	CONFERENCE 2063	1,200	14"x14"	1	1
ZD2	OFFICES 2097,99 & 2101,2103	950	14"x12"	1	1
ZD3	OFFICE 2062	700	12"x12"	1	1
ZD4	OFFICES 2058-2061	800	12"x12"	1	1
ZD5	OFFICE 2057; SECURITY 2056; CORRIDOR	1,275	14"x14"	1	1
ZD6	OFFICES 2051,52,53; CORRIDOR	975	14"x12"	1	1
ZD7	BREAK ROOM 264; CORRIDOR	1,100	14"x14"	1	1
BP07	BYPASS DAMPER (NOTE E)	5,600	30"x18"		
RTU8 (7,000 CFM)					
ZD1	RECEPTION 2001; LOBBY 201; STAIR 1	2,175	22"x14"	1	1
ZD2	WOMEN 2003; MEN 2005; CORR; STAIR	1,050	14"x12"	1	1
ZD3	BREAK ROOM 2015; OFFICES 2012,14	1,225	14"x14"	1	1
ZD4	CONFERENCE 2016	1,400	16"x14"	1	1
ZD5	OFFICES 2018,19; CORRIDOR	1,150	14"x14"	1	1
BP08	BYPASS DAMPER (NOTE E)	5,600	30"x18"		
GENERAL NOTES:					
A. ZONE DAMPERS (ROUND OR RECTANGULAR) SHALL BE 2-POSITION TYPE, 24vac, SPRING-RETURN DAMPER W/BUILT-IN ACTUATOR.					
B. LOCATION OF ZONE DAMPERS SHALL BE COORDINATED WITH CEILING SYSTEMS, LIGHTS, FRAMING, ETC. IF ZONE DAMPER IS LOCATED ABOVE A HARD CEILING (SOFFIT, ETC.) A LABELED ACCESS PANEL SHALL BE INSTALLED.					
C. PROVIDE ALL POWER AND WIRING DIAGRAMS TO E.C. FOR COORDINATION.					
D. LOCATION FOR ZONE BOARD FOR EACH ZONE DAMPER SYSTEM SHALL BE FIELD VERIFIED AND DETERMINED. E.C. SHALL PROVIDE POWER TO BOARD.					
E. BYPASS DAMPERS SHALL BE ELECTRIC TYPE WITH DAMPERS SIZED AT 0.15"-0.2" W.C. FOR APPROX. AIRFLOW SHOWN.					
Zone Damper Totals:		Size		QTY	
12x10	1	16x14	3		
12x12	5	18x14	1		
14x12	6	20x14	1		
14x14	7	22x14	1		
TOTAL		TOTAL		4	
		Bypass Damper Totals:		Size	
				30x18	
				4	



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ISSUANCES

No.	Description	Date
	Issued for Bldg Shell Permit	2-10-25
	Issued for 2nd FL T.I. Permit	11-24-25

Drawn By
Checked By
Client Number
Project Number

727
7617

DRAWING TITLE
**MECHANICAL
2nd FL T.I. PLAN**

SHEET NO.
M202



CONSTRUCTION NOTES

** SEE SHEET M202 FOR KEYED CONSTRUCTION NOTES **

DUCTWORK CONST. NOTES

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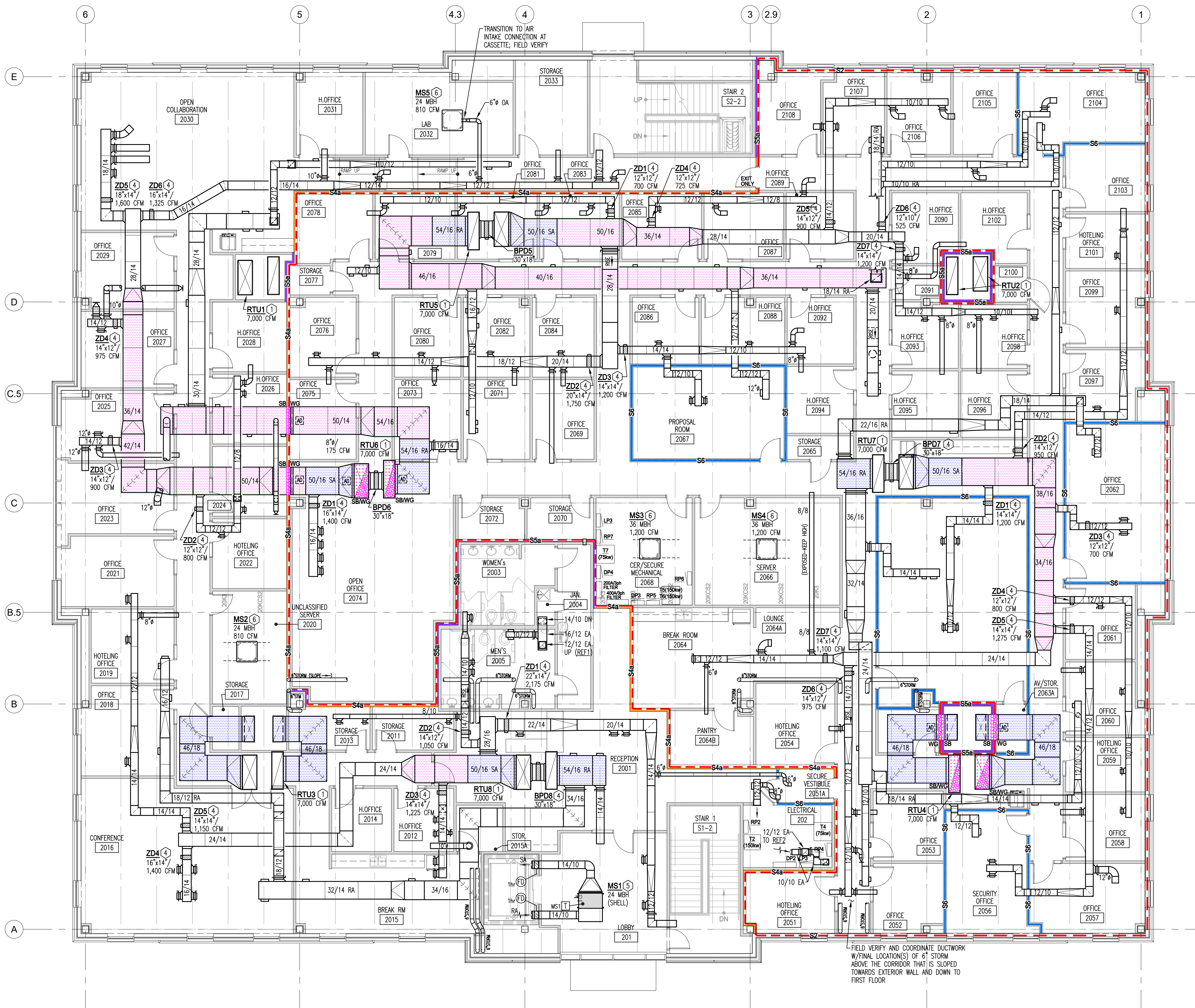
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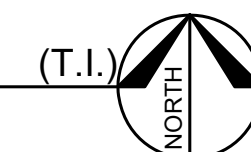
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2nd FLOOR - MAIN DUCT LAYOUT
SCALE: 1/8"=1'-0"



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DRAWING TITLE

MECHANICAL
2nd FL MAIN DUCT

SHEET NO.

M202b

