

CODE ANALYSIS

APPLICABLE CODES

	Year		Year
International Building Code	2009	National Electrical Code	2008
International Mechanical Code	2009	Uniform Code for Building Conservation	
International Plumbing Code	2009	ADA Accessibility Guidelines	
International Fire Code	2009		
International Energy Conservation Code	2009		

A. Occupancy and Group: NA

Change in Use: Yes No Mixed Occupancy: Yes No
Special Use and Occupancy (e.g. High Rise, Covered Mall): NA

B. Seismic Design Category: NA Design Wind Speed: NA mph

C. Type of Construction (circle one): NA

I I II II III III IV V V
A B A B A B HT A B

D. Fire Resistance Rating Requirements for the Exterior Walls based on the fire separation distance (in hours): NA

North: _____ South: _____ East: _____ West: _____

E. Mixed Occupancies: NO Nonseparated Uses: NA

F. Sprinklers:

Required: YES Provided: YES Type of Sprinkler System: WET PIPE

G. Number of Stories: _____ Building Height: _____

H. Actual Area per Floor (square feet): _____

I. Tabular Area: NA

J. Area Modifications: NA

$$a) A_a = A_t + \left[\frac{A_t I_f}{100} \right] + \left[\frac{A_t I_s}{100} \right] \quad I_f = 100 \left[\frac{F}{P} - 0.25 \right] \frac{W}{30}$$

b) Sum of the Ratio Calculations for Mixed Occupancies:

$$\frac{\text{Actual Area}}{\text{Allowable Area}} \leq 1$$

c) Total Allowable Area for:

- 1) One Story: _____
- 2) Two Story: $A_a(2)$ _____
- 3) Three Story: $A_a(3)$ _____

d) Unlimited Area Building: Yes No Code Section: _____

K. Fire Resistance Rating Requirements for Building Elements (hours): NA

Element	Hours	Assembly Listing	Element	Hours	Assembly Listing
Exterior Bearing Walls			Floors - Ceiling Floors		
Interior Bearing Walls			Roofs - Ceiling Roofs		
Exterior Non-Bearing Walls			Exterior Doors and Windows		
Structural Frame			Shaft Enclosures		
Partitions - Permanent			Fire Walls		
Fire Barriers			Fire Partitions		
			Smoke Partitions		

L. Design Occupant Load: NA

Exit Width Required: _____ Exit Width Provided: _____

M. Minimum Number of Required Plumbing Facilities:

- a) Water Closets - Required (m) _____ (f) _____ Provided (m) _____ (f) _____
- b) Lavatories - Required (m) _____ (f) _____ Provided (m) _____ (f) _____
- c) Bath Tubs or Showers: _____
- d) Drinking Fountains: _____ Service Sinks: _____

FOOTNOTES:

- 1) In case of conflict with the U.S. Department of Justice Federal Registers Parts I through V - ADA Guidelines and specific reference to the International Building Code Accessibility Chapters, the more restrictive requirement shall govern.
- 2) Additional Code Information shall be provided at the discretion of the Building Official for Complex Buildings. Including, but not limited to:
 - a) High Rise Requirements.
 - b) Atriums.
 - c) Performance Based Criteria.
 - d) Means or Egress Analysis.
 - e) Fire Assembly Locator Sheet.
 - f) Exterior and Interior Accessibility Route.
 - g) Fire Stopping, Including Tested Design Number.

SNOW COLLEGE HUMANITIES PRINT STUDIO FUME HOOD/EXHAUST UPGRADES DFCM #10153700



State of Utah—Department of Administrative Services

DIVISION OF FACILITIES CONSTRUCTION AND MANAGEMENT

4110 State Office Building / Salt Lake City, Utah 84114 / 538-3018

SPECIAL INSPECTIONS:

1. SEE SHEET DRAWING G002.

DRAWING INDEX:

GENERAL:

- G001--- TITLE SHEET
G002--- SPECIAL INSPECTIONS AND TESTING

MECHANICAL:

- MG001- MECHANICAL GENERAL NOTES AND LEGEND
MD101- MECHANICAL DEMOLITION PLAN
MD102- MECHANICAL PIPING DEMOLITION PLAN
MD103- MECHANICAL ROOF DEMOLITION PLAN
ME101- MECHANICAL FLOOR PLAN
ME102- MECHANICAL PIPING PLAN
ME103- MECHANICAL ROOF PLAN
ME501- MECHANICAL DETAILS
ME601- MECHANICAL SCHEDULES

PLUMBING:

- PG001- PLUMBING GENERAL NOTES AND LEGEND
PD101- PLUMBING DEMOLITION
PE101- PLUMBING FLOOR PLAN
PE601- PLUMBING DETAILS AND SCHEDULES



MECHANICAL ENGINEER
WHW ENGINEERING, INC.
8619 SANDY PARKWAY
SUITE 101
SANDY, UTAH 84075
PHONE: (801) 466-4021 FAX: (801) 466-8536



G001

CONSULTANTS



PROJECT NAME & ADDRESS

**SNOW COLLEGE
HUMANITIES PRINT
STUDIO FUME HOOD**

DFCM No. 10153700

Ephraim, Utah

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SHEET TITLE
**SPECIAL
INSPECTIONS**

SHEET NO.
G002

**SPECIAL INSPECTION AND TESTING UNDER THE PROVISIONS OF IBC 1704
AND FOR MISCELLANEOUS AREAS**

INDICATE REQUIRED SPECIAL INSPECTIONS FOR PROJECT BY CHECKING THE APPROPRIATE BOXES AND PROVIDE SPECIFIC INSTRUCTIONS AS TO THE INSPECTION REQUIREMENTS AND THE EXPECTATIONS OF THE ARCHITECT, ENGINEER AND OWNER.

FABRICATORS (IBC 1704.2) NOT REQUIRED

STEEL (IBC 1704.3) NOT REQUIRED

CONCRETE CONSTRUCTION (IBC 1704.4) NOT REQUIRED

MASONRY CONSTRUCTION (IBC 1704.5) NOT REQUIRED

WOOD CONSTRUCTION (IBC 1704.6) NOT REQUIRED

SOIL CONSTRUCTION (IBC 1704.7) NOT REQUIRED

PILE FOUNDATIONS (IBC 1704.8) NOT REQUIRED

PIER FOUNDATIONS (IBC 1704.9) NOT REQUIRED

SPRAYED FIRE-RESISTANT MATERIAL (IBC 1704.10) NOT REQUIRED

MASTIC AND INTUMESCENT FIRE-RESISTANT COATINGS (IBC 1704.11) NOT REQUIRED

EXTERIOR INSULATION AND FINISH SYSTEMS (EIFS) (IBC 1704.12) NOT REQUIRED

ALTERNATIVE CONSTRUCTION METHODS OR MATERIALS (IBC 1704.13) NOT REQUIRED

EPOXY (IBC 1704.13) NOT REQUIRED

SMOKE CONTROL (IBC 1704.14) NOT REQUIRED

Special inspection for seismic resistance (IBC 1707)

Item	Continuous	Periodic	Detailed Instructions and Frequencies
Structural steel (1707.2)			NOT REQUIRED
Structural wood (1707.3)			NOT REQUIRED
Cold-formed steel framing (1707.4)			NOT REQUIRED
Pier foundations (1707.5)			NOT REQUIRED
Storage racks & access floors (1707.6)			NOT REQUIRED
Architectural components (1707.7)			NOT REQUIRED
Mechanical & electrical items (1707.8)		<input type="checkbox"/>	FINAL ACCEPTANCE AND VERIFICATION AFTER INSTALLATION
Designated systems verification (1707.9)			NOT REQUIRED
Seismic isolation systems (1707.10)			NOT REQUIRED

MISCELLANEOUS AREAS: These inspections are recommended by the Architect/Engineer and approved by DFCM.

Item	Continuous	Periodic	Detailed Instructions and Frequencies
Suspended ceiling grid clips			NOT REQUIRED
Suspended ceiling wire spacing (seismic)			NOT REQUIRED
Soil backfill (specify locations and frequency)			NOT REQUIRED
Soil curb and gutter (specify location and frequency)			NOT REQUIRED
Soil for parking lots (specify location and frequency)			NOT REQUIRED
soil for utility trench backfill			NOT REQUIRED
Reinforcement for slab on grade sidewalks and drive approaches (specify locations and frequency)			NOT REQUIRED
Reinforcement for interior slab on grade (specify locations and frequency)			NOT REQUIRED
Concrete testing for slab on grade sidewalks and drive approaches (specify locations and frequency)			NOT REQUIRED
Concrete testing for interior slab on grade (specify locations and frequency)			NOT REQUIRED
Masonry veneer (specify locations and frequency)			NOT REQUIRED
Asphalt inspection (specify locations and frequency)			NOT REQUIRED
Asphalt testing (specify locations and frequency)			NOT REQUIRED
Inspection of seismic resistance (specify locations and frequency)			NOT REQUIRED
Steam and water line welding (specify locations and frequency)			NOT REQUIRED
Seismic supports for duct work and sealing of joints for duct work		<input type="checkbox"/>	FINAL ACCEPTANCE AND VERIFICATION AFTER INSTALLATION
Seismic supports for electrical raceways, cable trays and lights			NOT REQUIRED
Seismic supports for plumbing lines including gas, water, and steam and condensate		<input type="checkbox"/>	FINAL ACCEPTANCE AND VERIFICATION AFTER INSTALLATION
Seismic bracing for mechanical units both on slab and suspended		<input type="checkbox"/>	FINAL ACCEPTANCE AND VERIFICATION AFTER INSTALLATION

Special Inspector's shall:

- Be approved by the Building Official prior to performing any duties;
- Provide proof of licensure as a special inspector by the State of Utah for each type of inspection;
- Inspection reports are to meet the requirement of IBC 1704.1.2 and DFCM standards;
- Inspection reports are to be submitted to the code consultant, architect, DFCM project manager, and the State of Utah Building Official within 48 hrs. of inspection;
- A final inspection report shall be submitted following completion of the project documenting the type of special inspections performed and a statement indicating that the structure is in compliance with the drawings, specifications and applicable codes. IBC 1702.1.2

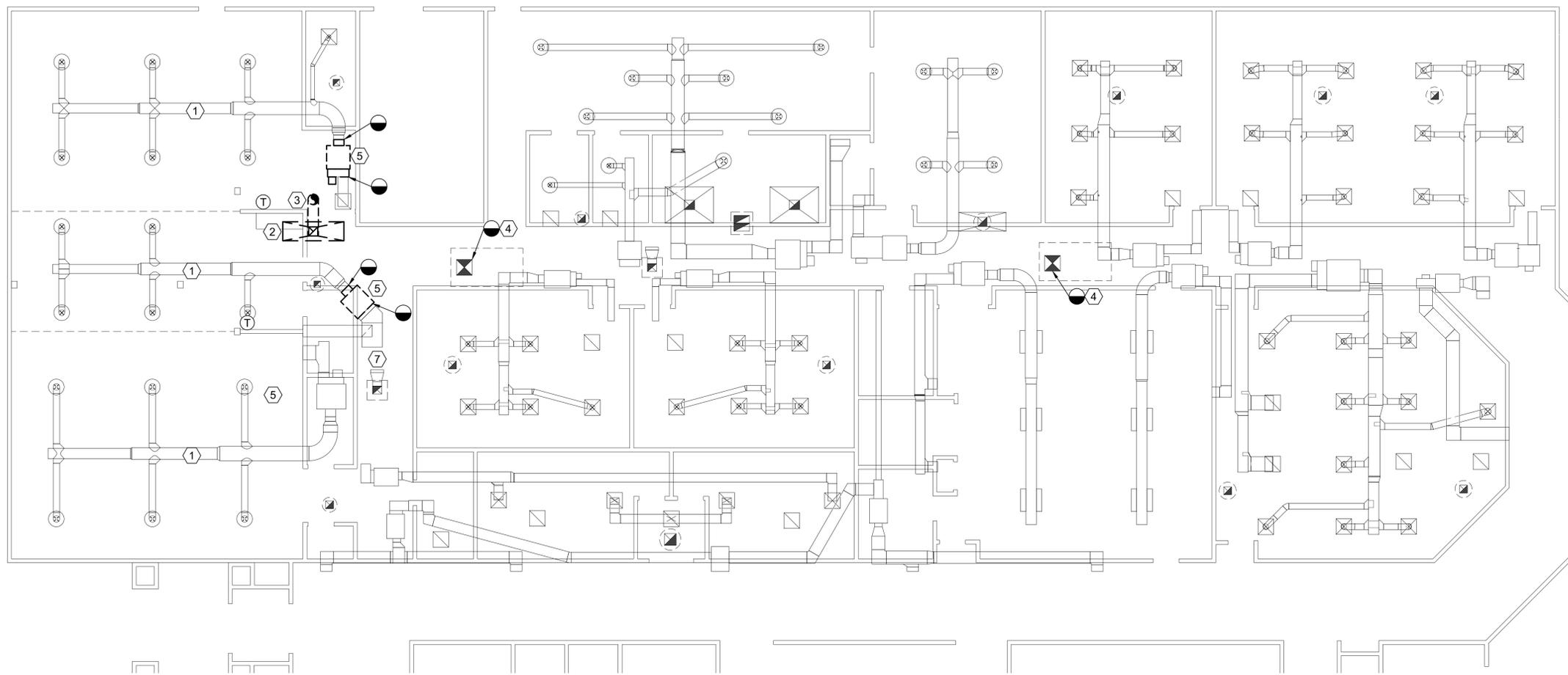
Updated October 8, 2009

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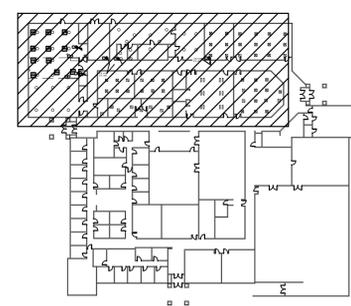
WHW
ENGINEERING INC.
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8619 Sandy Parkway Suite 101
SANDY, UTAH 84071
(801) 485-4021, FAX 485-8636
EMAIL: excellence@whw-engineering.com

- SHEET NOTES:**
- ① EXISTING DUCTWORK AND DIFFUSERS SHALL REMAIN.
 - ② REMOVE EXISTING CANOPY EXHAUST HOOD AND ASSOCIATED DUCTWORK THRU ROOF. SEE MD103 FOR REMOVAL OF ASSOCIATED EXHAUST FAN. FIELD VERIFY.
 - ③ REMOVE EXISTING CANOPY EXHAUST HOOD DUCT. EXISTING ROOF PENETRATION SHALL BE REUSED FOR NEW EXHAUST DUCT. SEE ME101 FOR DETAILS.
 - ④ 24"x24" MAKE-UP UNIT SUPPLY DUCT SHALL REMAIN. SEE MD103 FOR REMOVAL OF MAKE-UP AIR UNIT.
 - ⑤ REMOVE EXISTING FAN COIL AND ASSOCIATED COMPONENTS. EXISTING DUCT AND METASYS CONTROLS SHALL BE REMOVED AND PROTECTED FOR REINSTALLATION ON NEW FAN COIL. PROTECT DUCT AND CONTROLS FOR RECONNECTION TO NEW FAN COIL UNIT. FIELD VERIFY.



MECHANICAL DEMOLITION PLAN

1/8" = 1' - 0"

KEYPLAN

PROJECT NAME & ADDRESS

**SNOW COLLEGE
HUMANITIES PRINT
STUDIO FUME HOOD**

DFCM No. 10153700

Ephraim, Utah

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**MECHANICAL
DEMOLITION PLAN**

SHEET NO.
MD101

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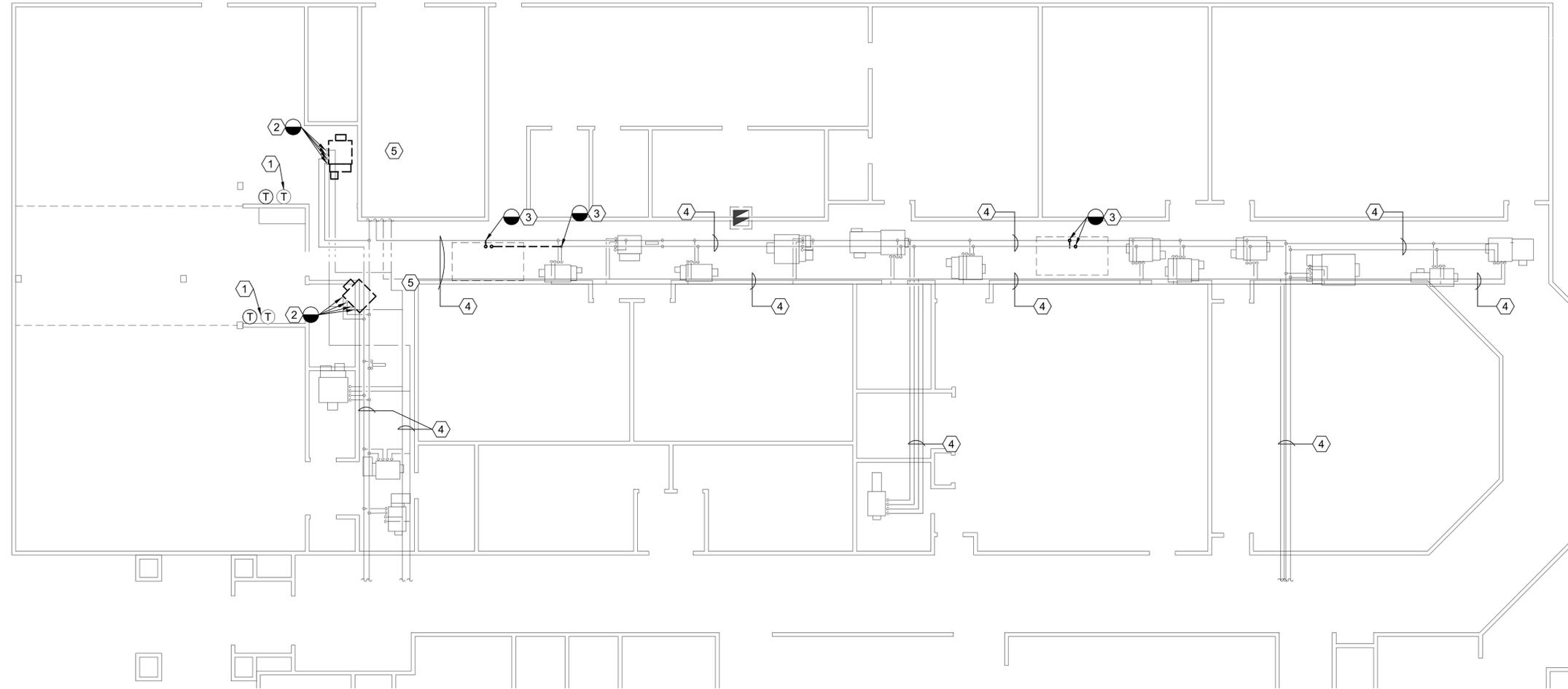
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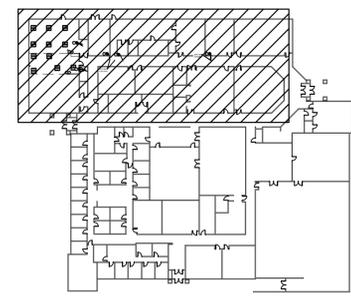
SHEET TITLE
**MECHANICAL PIPING
DEMOLITION PLAN**

SHEET NO.
MD102

- SHEET NOTES:
- ① REMOVE EXISTING THERMOSTAT. FIELD VERIFY EXACT LOCATION.
 - ② DISCONNECT HOT AND CHILLED WATER PIPING FROM EXISTING FAN COIL AT THIS APPROXIMATE LOCATION. REMOVE EXISTING METASYS CONTROLS AND PROTECT FOR REINSTALLATION. PROTECT FOR RECONNECTION TO EQUIPMENT. FIELD VERIFY.
 - ③ DISCONNECT HOT AND CHILLED WATER PIPING FROM EXISTING MAKE UP UNIT ABOVE, AT THIS APPROXIMATE LOCATION. PROTECT FOR RECONNECTION TO NEW EQUIPMENT. FIELD VERIFY.
 - ④ EXISTING CHILLED AND HOT WATER PIPING SHALL REMAIN.
 - ⑤ EXISTING FAN COIL SHALL BE REMOVED. FIELD VERIFY EXACT LOCATION.



**MECHANICAL PIPING
DEMOLITION PLAN**
1/8" = 1' - 0"



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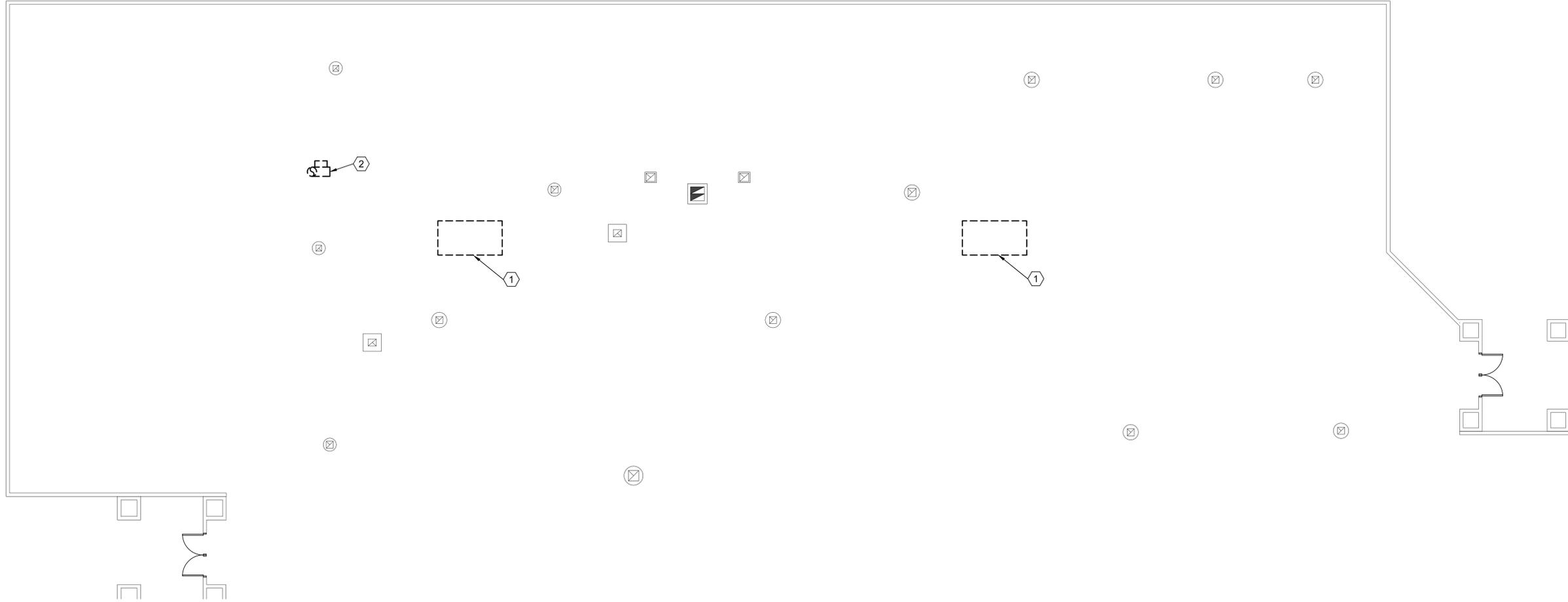


SHEET TITLE
**ROOF MECHANICAL
DEMOLITION PLAN**

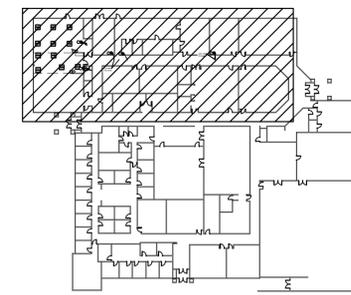
SHEET NO.
MD103

SHEET NOTES:

- ① REMOVE MAKE-UP AIR UNIT AND ALL ASSOCIATED ITEMS. SUPPLY/RETURN DUCT, AND WATER PIPING BELOW SHALL REMAIN. FIELD VERIFY.
- ② REMOVE EXISTING ROOF MOUNTED EXHAUST FAN AND ALL ASSOCIATED ITEMS. ROOF PENETRATION AND CURB SHALL BE REUSED FOR NEW EXHAUST FAN AND DUCT WORK. FIELD VERIFY.



ROOF MECHANICAL DEMOLITION PLAN
1/8" = 1' - 0"



KEYPLAN

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SHEET TITLE
**MECHANICAL
FLOOR PLAN**

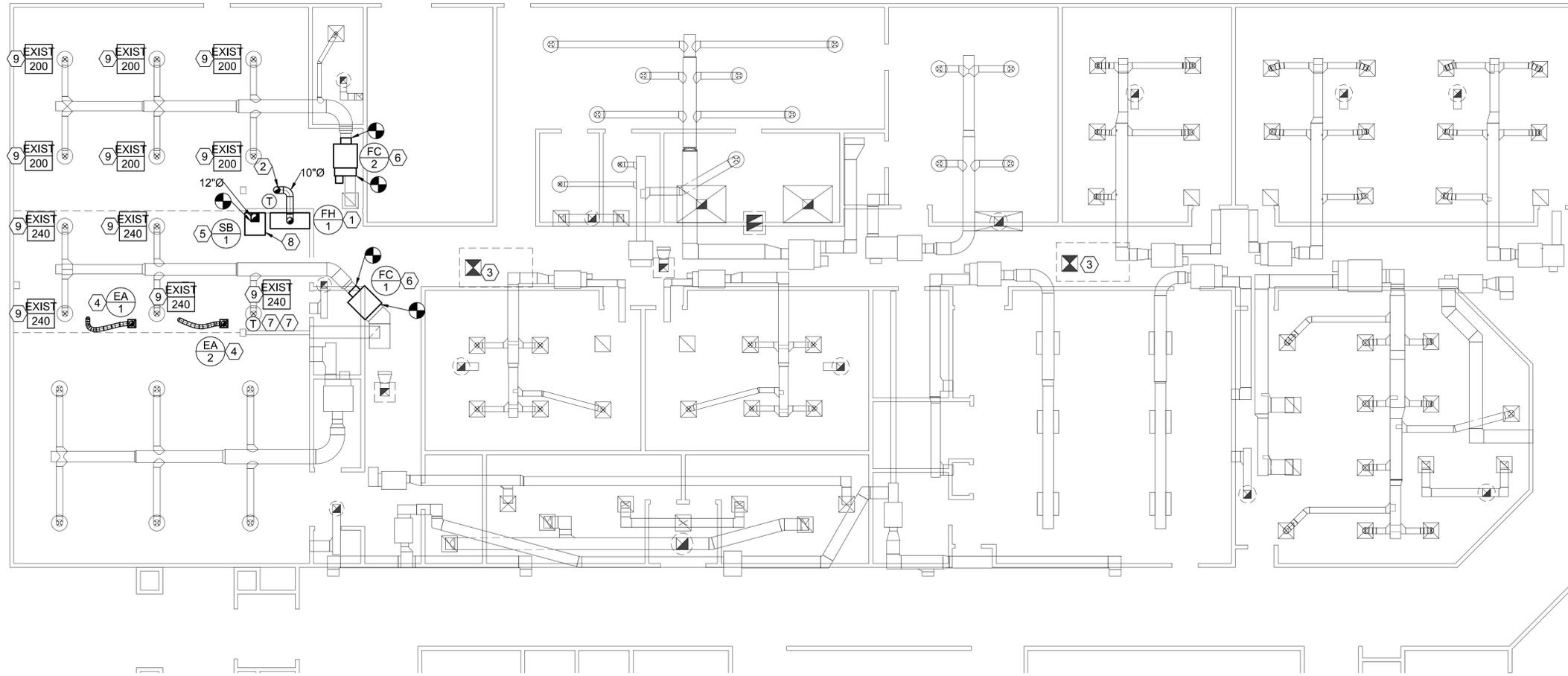
SHEET NO.
ME101

SHEET NOTES:

- ① PROVIDE NEW FUME HOOD.
- ② PROVIDE NEW FUME HOOD EXHAUST UP TO NEW FAN ON ROOF. PROVIDE ALL NECESSARY TRANSITIONS FOR PROPER CONNECTION TO FUME HOOD. EXISTING ROOF PENETRATION FOR DEMOLISHED CANOPY HOOD SHALL BE REUSED, MODIFY, PATCH AND SEAL AS NECESSARY. FIELD VERIFY.
- ③ 24"x24" MAKE-UP AIR SUPPLY DUCT SHALL BE CONNECTED TO NEW MAKE UP UNIT SUPPLY OUTLET. SEE SHEET ME103 FOR DETAIL.
- ④ PROVIDE NEW FLEXIBLE EXHAUST EXTRACTION ARM. PROVIDE ALL NECESSARY MOUNTS, SUPPORTS, DUCT TRANSITIONS ETC. FOR COMPLETE INSTALLATION. EXTRACTION ARM SHALL BE MOUNTED ABOVE TEMPORARY PARTITION WALL. COORDINATE EXACT PLACEMENT WITH BUILDING OWNER. PROVIDE NEW EXHAUST DUCT TO NEW FANS ON ROOF. CUT, PATCH AND SEAL ROOF AS NECESSARY FOR NEW PENETRATIONS. FIELD VERIFY.
- ⑤ PROVIDE NEW SPRAY BOOTH AND EXHAUST DUCT WORK. CONTRACTOR SHALL PROVIDE ALL NECESSARY TRANSITIONS NEEDED TO ADAPT TO SPRAY BOOTH. PROVIDE NEW EXHAUST DUCT TO NEW FANS ON ROOF. CUT, PATCH AND SEAL ROOF AS NECESSARY FOR NEW PENETRATIONS. FIELD VERIFY.
- ⑥ PROVIDE NEW FAN COIL. PROVIDE ALL NECESSARY TRANSITIONS FOR RECONNECTION TO EXISTING DUCT. REINSTALL METASYS CONTROLS ON NEW FAN COIL. FIELD VERIFY.
- ⑦ PROVIDE SWITCH FOR EXTRACTION ARM EXHAUST FAN AT THIS APPROXIMATE LOCATION. COORDINATE EXACT PLACEMENT WITH BUILDING OWNER. FIELD VERIFY.
- ⑧ PROVIDE SWITCH FOR PAINT BOOTH EXHAUST FAN AT THIS APPROXIMATE LOCATION. COORDINATE EXACT LOCATION WITH BUILDING OWNER. FIELD VERIFY.
- ⑨ BALANCE EXISTING DIFFUSERS TO VALUE SHOWN. FIELD VERIFY EXACT LOCATION.

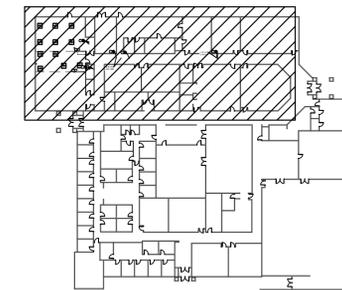
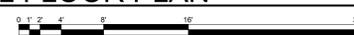
GENERAL NOTES:

1. CONTRACTOR SHALL HIRE A DESIGN BUILD ELECTRICAL CONTRACTOR FOR THE ELECTRICAL PORTION OF THIS PROJECT PER GENERAL NOTE G-18 SHEET MG001. FIELD VERIFY ALL APPLICABLE CONDITIONS.
2. ALL NEW DUCTWORK SHALL BE EXPOSED AND PAINTED WHITE TO MATCH EXISTING. FIELD VERIFY.



MECHANICAL FLOOR PLAN

1/8" = 1'-0"



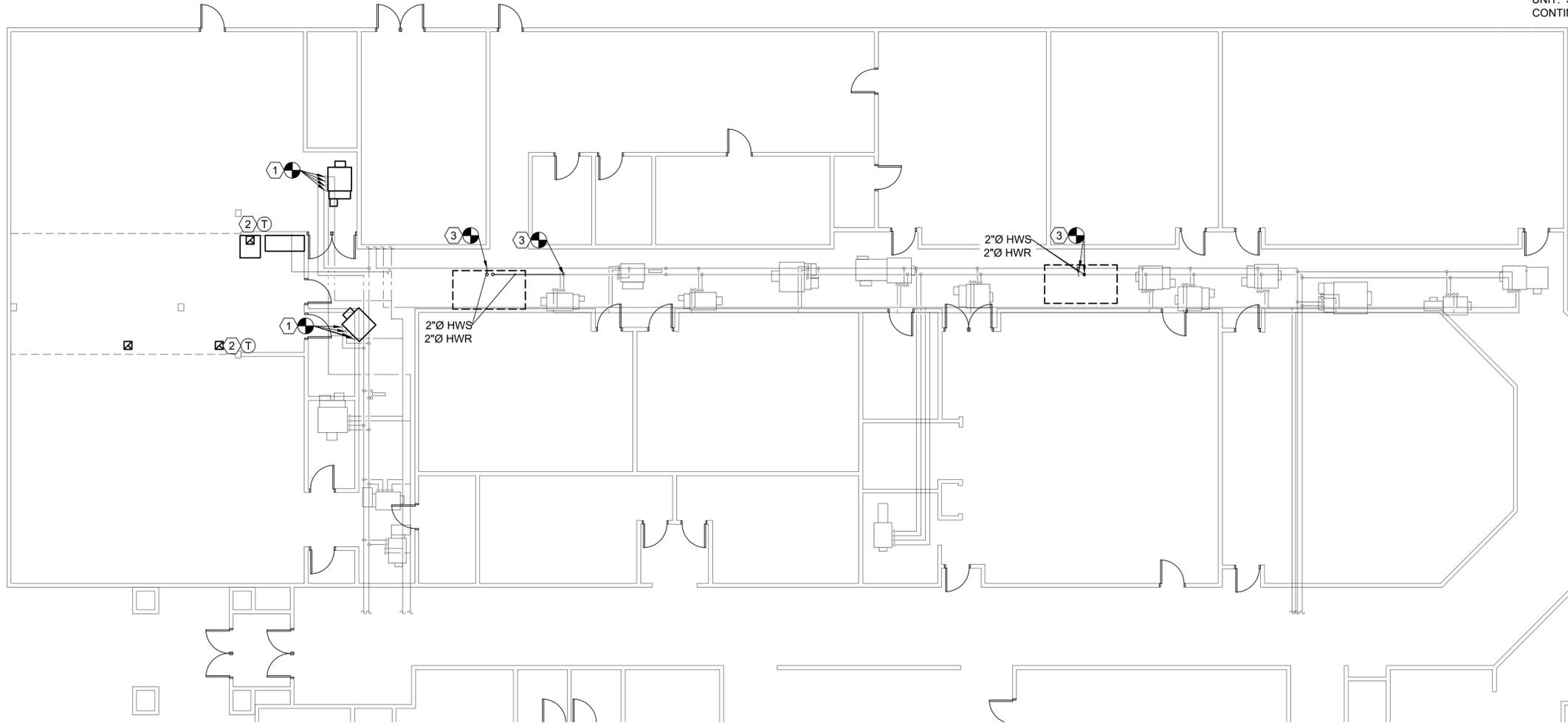
KEYPLAN

CONSULTANTS



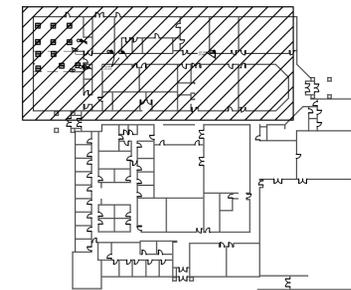
SHEET NOTES:

- ① TIE INTO EXISTING HOT AND CHILLED WATER AT THIS APPROXIMATE LOCATION. PROVIDE NEW PNEUMATICALLY OPERATED CONTROL VALVE. SEE PIPING DETAIL SHEET ME501. REINSTALL EXISTING METASYS CONTROLS.
- ② PROVIDE NEW THERMOSTAT AT THIS APPROXIMATE LOCATION. TIE INTO EXISTING METASYS CONTROLS. FIELD VERIFY EXACT LOCATION.
- ③ TIE INTO EXISTING HOT WATER SUPPLY AND RETURN AT THIS LOCATION. PIPING SHALL RISE THROUGH EXISTING CURB PERIMETER INTO NEW MAKE UP UNIT. SEE SHEET ME103 FOR CONTINUATION.



MECHANICAL PIPING PLAN

1/8" = 1' - 0"



KEYPLAN

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DFCM No. 10153700

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SHEET TITLE
**MECHANICAL PIPING
PLAN**

SHEET NO.
ME102

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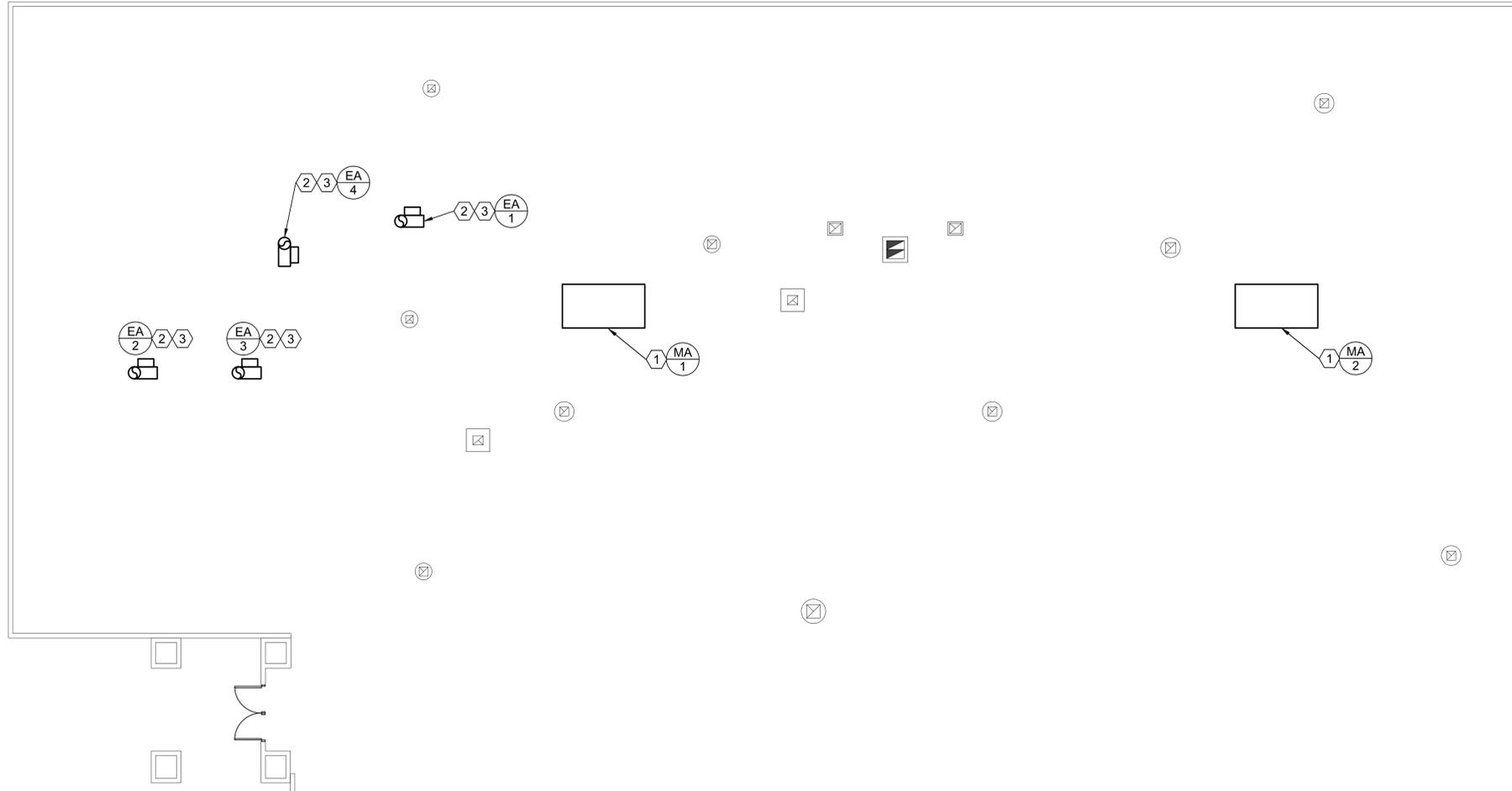


SHEET NOTES:

- ① PROVIDE NEW MAKE-UP AIR UNITS (MA-1) AND (MA-2) AND ALL ASSOCIATED ITEMS. UNIT SHALL TIE INTO EXISTING DUCT AND WATER PIPING BELOW. SEE DETAIL SHEET ME501. NEW MAKE UP UNIT SHALL BE TIED INTO EXISTING CONTROL SYSTEM. PROVIDE WITH TRANSITION CURB TO ADAPT TO EXISTING CURB. FIELD VERIFY.
- ② PROVIDE NEW ROOF MOUNTED EXHAUST FAN (EF-1) AND ALL ASSOCIATED ITEMS. SEE DETAIL SHEET ME501 FOR DETAILS.
- ③ CUT, PATCH, SEAL, AND MODIFY ROOFING AS NECESSARY FOR NEW EXHAUST DUCT PENETRATION, NEW CURBS, ETC. FIELD VERIFY.

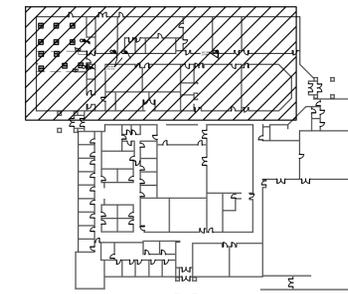
GENERAL NOTES:

1. CONTRACTOR SHALL HIRE A DESIGN BUILD ELECTRICAL CONTRACTOR FOR THE ELECTRICAL PORTION OF THIS PROJECT PER GENERAL NOTE G-18 SHEET MG001. FIELD VERIFY ALL APPLICABLE CONDITIONS.
2. ROOF CUTTING, PATCHING AND REPAIR SHALL BE PERFORMED BY A PER-AUTHORIZED ROOFING CONTRACTOR. APPROVED SHORT LIST OF ALLOWABLE CONTRACTORS CAN BE FOUND AT: WWW.DFCM.UTAH.GOV/StdDocs



ROOF MECHANICAL PLAN

1/8" = 1' - 0"



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SHEET TITLE
**MECHANICAL ROOF
PLAN**

SHEET NO.
ME103

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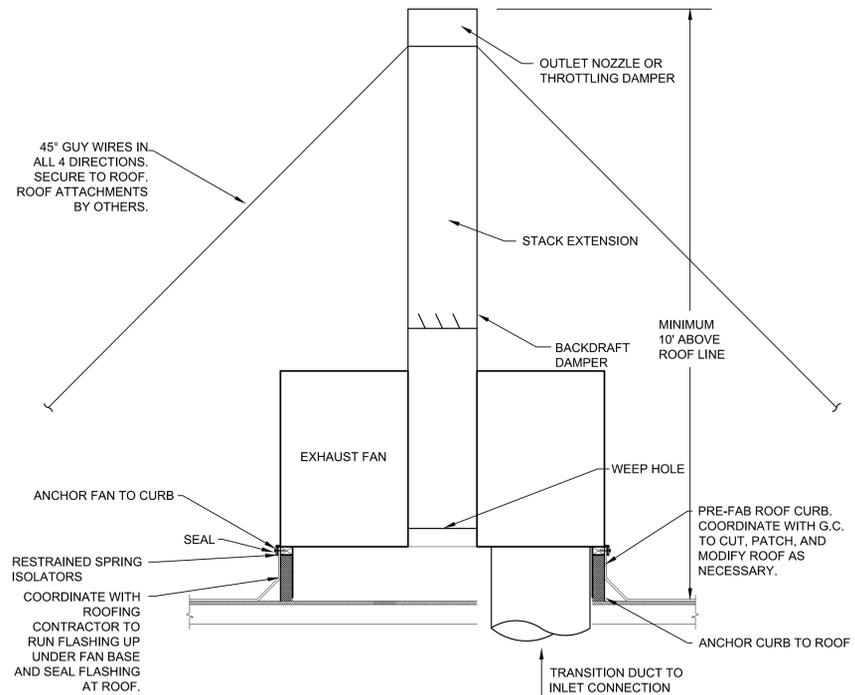
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SHEET TITLE	

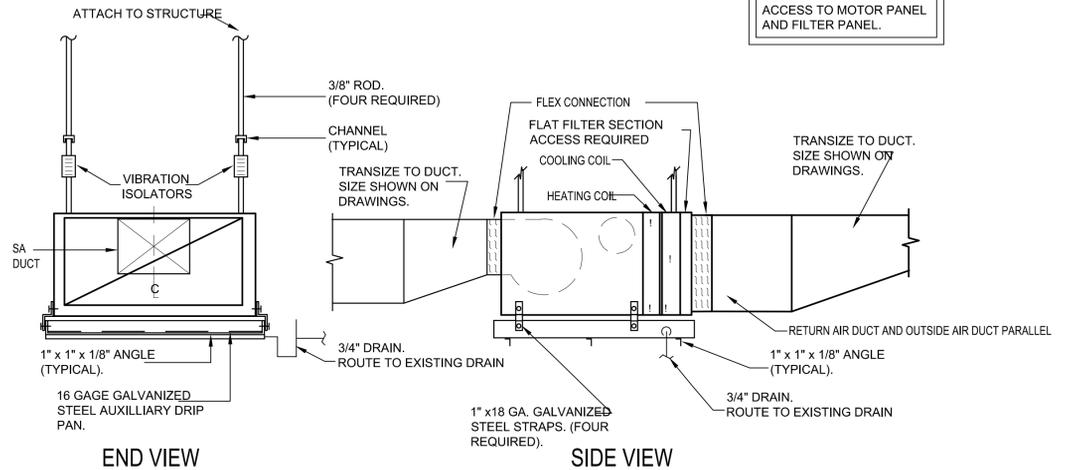


**MECHANICAL
DETAILS**

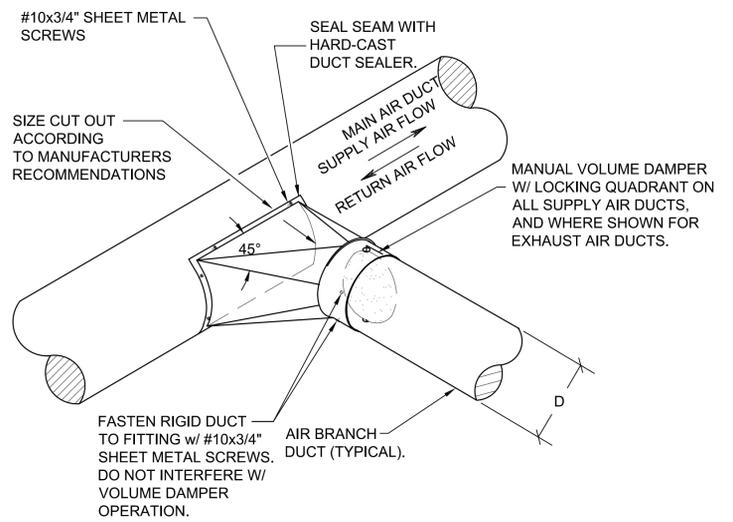
SHEET NO.
ME501



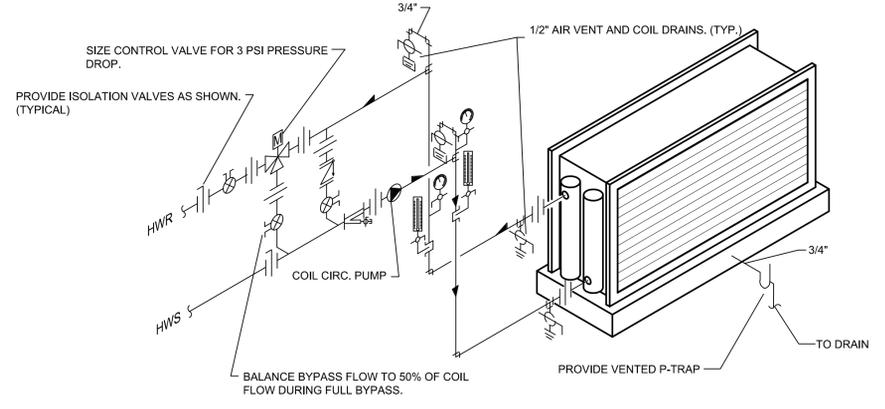
C1 ROOF MOUNTED FUME EXHAUST FAN DETAIL
SCALE: NONE



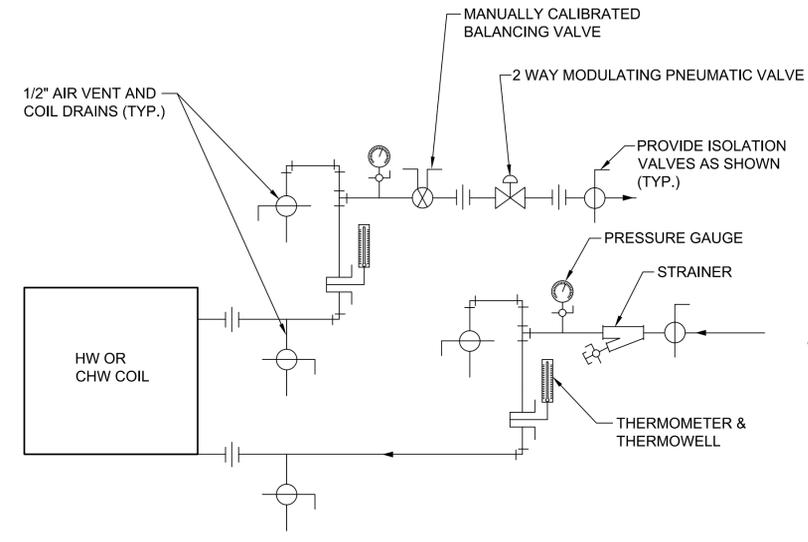
C3 FAN COIL UNIT DETAIL
SCALE: NONE



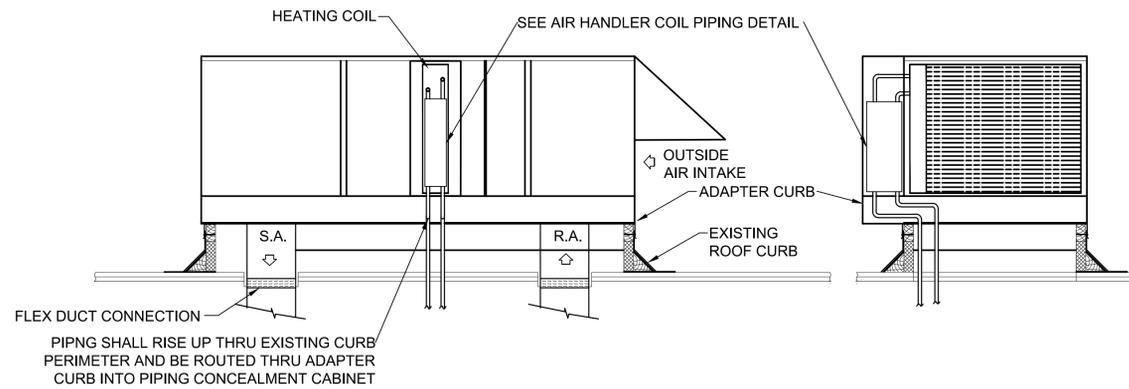
B1 ROUND-TO-ROUND DUCT CONSTRUCTION DETAIL
SCALE: NONE



B3 AIR HANDLER COIL PIPING DETAIL
SCALE: NONE



B4 FAN COIL PIPING DETAIL
SCALE: NONE



A3 MAKE-UP AIR UNIT DETAIL
SCALE: NONE

FUME HOOD SCHEDULE					
SYMBOL	MANUFACTURER & MODEL No.	SERVES	SIZE	C.F.M.	SCHEDULE NOTES
Ⓢ 1	KEWAUNEE H05K	PRINT STUDIO	5'	750	1,2,3,4,5,6,7,8
1. FUME HOOD BY KEWAUNEE, LABCONCO, OR HAMILTON. SEE SPECIFICATIONS. 2. PROVIDE FREE STANDING HOOD WITH VENTED SOLVENT BASE CABINET. 3. HOOD FINISH SHALL BE OWNER SELECTED FROM MANUFACTURERS STANDARD OPTIONS. 4. PROVIDE PRE-PIPED FOR HOT AND COLD WATER. 5. PROVIDE HANGING HAND SPRAYER INSIDE HOOD WITH PRESSURE AND THERMOSTATIC MIXING VALVE. VALVE SHALL BE EQUIPPED WITH VACUUM BREAKER. 6. HOOD SHALL BE EQUIPPED WITH 48" X 19" X 8" DEEP STAINLESS SINK/WORK SURFACE INSIDE HOOD. 7. HOOD SHALL BE PRE-WIRED WITH EXPLOSION PROOF LIGHTS, GFCI PROTECTED DUPLEX SERVICE OUTLETS, AND EXHAUST FAN SWITCH. 8. HOOD LINER SHALL BE AN EPOXY RESIN, DESIGNED FOR USE WITH NITRIC ACID, ACETONE, LACQUER THINNER, XYLENE, PAINT THINNER, ALCOHOL, AND SOLVENTS. 9. PROVIDE PRE-PIPED ACID NEUTRALIZATION TANK IN CABINET.					

FLEXIBLE EXHAUST EXTRACTION ARM SCHEDULE						
EXHAUST ARM NO.	MANUF.	ROOM SERVED	LENGTH	EXHAUST		
				TOTAL EXH. CFM	DIA.	S.P.
Ⓢ 1	NEDERMAN STD.	PRINT STUDIO	10'	420	6-1/4"	2.0
Ⓢ 2	NEDERMAN STD.	PRINT STUDIO	10'	420	6-1/4"	2.0
1. SEE SPECIFICATIONS FOR APPROVED MANUFACTURERS.						

PAINT SPRAY BOOTH SCHEDULE					
SYMBOL	MANUFACTURER & MODEL No.	SERVES	SIZE	C.F.M.	SCHEDULE NOTES
Ⓢ 1	LAGUNA PRO-X	ART STUDIO	31"	1200	1,2,3,4,5,6
1. PROVIDE WITH STAINLESS STEEL WORK SHELF BY MFG. 2. PROVIDE WITH 30" HIGH PAINTED STEEL STAND BY MFG. 3. PROVIDE WITH ALUMINUM BAFFLE FILTER BY MFG. 4. PROVIDE WITH WORK PIECE TURN TABLE BY MFG. 5. PROVIDE WITH 12"Ø EXHAUST COLLAR. 6. PROVIDE WITH TOP EXHAUST DISCHARGE IF AVAILABLE.					

FAN COIL UNIT SCHEDULE															
SYMBOL	SERVES	FAN			COOLING COIL					HEATING COIL (2 ROW)				MANUF. & MODEL #	SCHEDULE NOTES
		CFM COOLING / HEATING	O.A. CFM 55°F	VOLTAGE	MIN. REQ'D CAP. TOTAL MBH	MIN. REQ'D CAP. GPM	MAX WATER P.D.	ENTERING AIR DB° F	ENT. AIR WB° F	MBH	MIN. GPM	MAX WATER P.D.	EAT / LAT		
Ⓢ 1	ART STUDIO	1200	240	120/1/60	36.2	7.2	4.7	80	67	68.5	6.8	9	55/105	AIRTHERM BBH-012	1,2,3,4
Ⓢ 2	CLASSROOM	1400	280	120/1/60	40.1	8.0	2.6	80	67	79.0	7.8	2.7	55/105	AIRTHERM BBH-016	1,2,3,4
1. HEATING PARAMETERS BASED ON 20° F DELTA 'T' ON WATER. COOLING BASED ON 10°F DELTA 'T' ON WATER. 2. UNIT SHALL BE SUPPLIED WITH MIXING BOX AND FILTER SECTION. 3. ALL HEATING AND COOLING PARAMETERS ARE BASED ON 50% GLYCOL MIXTURE. 4. SEE SPECIFICATIONS FOR APPROVED MANUFACTURERS.															

MAKE-UP AIR UNIT SCHEDULE													
SYMBOL	C.F.M.	EXTERNAL S.P. IN W.C.	HOT WATER HEATING						ELECTRIC AL		WEIGHT (LBS.)	MANUF. & MODEL #	SCHEDULE NOTES
			MBH	ΔT AIR	ENTERING WATER TEMP	ΔT WATER	FLUID PD. (FT H2O)	GPM	V - Ø - Hz	HP			
Ⓢ 1	4800	1.25	267	60	180°F	20	2.5	29.7	230/3/60	5	1500	TRANE TSCX	1,2,3
Ⓢ 2	4800	1.25	267	60	180°F	20	2.5	29.7	208/3/60	5	1500	TRANE TSCX	1,2,3
1. SEE SPECIFICATIONS FOR APPROVED MANUFACTURERS. 2. HEATING PARAMETERS BASED ON 50% GLYCOL MIXTURE. 3. PROVIDE WITH ADAPTER CURB. ADAPTER CURB SHALL ALLOW WATER PIPING TO RISE THROUGH EXISTING CURB PERIMETER AND INTO PIPING CABINET AS TO AVOID ADDITIONAL ROOF PENETRATIONS. FIELD VERIFY.													

EXHAUST FAN SCHEDULE												
SYMBOL	MANUFACTURER & MODEL No.	SERVES	C.F.M.	STATIC PRESSURE IN. WG.	MINIMUM PLUME HEIGHT (ft)	LWA (db)	MOTOR			OPER. WT. (LBS)	SCHEDULE NOTES	
							V - Ø - Hz	HP	RPM			
Ⓢ 1	COOK 80CPS-LE	FH-1	7.5	1.5	10	87	120/1/60	1/2	2473	350	1,2,3,4	
Ⓢ 2	COOK 70CPS-LE	EA-1	525	3.0	10	101	120/1/60	3/4	3450	350	1,2,3	
Ⓢ 3	COOK 70CPS-LE	EA-2	525	3.0	10	101	120/1/60	3/4	3450	350	1,2,3	
Ⓢ 4	COOK 120CPS-LE	SB-1	1200	1.0	10	79	120/1/60	1/2	1791	350	1,2,3	
1. SEE SPECIFICATIONS FOR APPROVED MANUFACTURERS. 2. PROVIDE WITH CURB, 10' STACK, AND GUY WIRES FROM CURB TO STACK. 3. PROVIDE WITH RESTRAINED ISOLATOR FAN BASE. 4. PROVIDE WITH ADAPTER CURB FOR EXISTING ROOF PENETRATION AS NECESSARY.												

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DFCM No. 10153700

Ephraim, Utah

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PROJECT MANAGER:

WP

DRAWN BY:

JB

CHECKED BY:

WP

DATE:

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WHW JOB NO.:

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SHEET TITLE

**MECHANICAL
SCHEDULES**

SHEET NO.

ME601



CONSULTANTS



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SHEET TITLE
**PLUMBING
GENERAL NOTES
AND LEGEND**

SHEET NO.
PG001

PLUMBING LEGEND

MEANING	SYMBOL OR ABBREVIATION	MEANING	SYMBOL OR ABBREVIATION
HOT WATER LINE	— — — — —	WALL CLEANOUT	WCO
COLD WATER LINE	— — — — —	CLEANOUT	CO
HOT WATER RECIRCULATING LINE	— — — — —	CLEANOUT TO GRADE	COTG
VENT LINE	— — — — —	FLOOR CLEANOUT	FCO
WASTE LINE	— — — — —	BALL VALVE	⊕
GAS LINE	— G —	UNION	— —
VENT THRU ROOF	VTR	CONNECTION TO EXISTING PIPING	⊕
UNDER FLOOR	UF	REGULATOR	Ⓜ
SANITARY SEWER	— SS —	SOFT WATER	SW
PRIMARY ROOF DRAIN (PRD)	— PD —	SECONDARY ROOF DRAIN (SRD)	— SD —

PLUMBING GENERAL NOTES:

- G-1 ALL PLUMBING SHALL BE INSTALLED AND CONFORM TO THE 2009 EDITION OF THE INTERNATIONAL PLUMBING CODE (IPC) WITH UTAH ANNOTATIONS AND LOCAL AUTHORITY REQUIREMENTS.
- G-2 ALL PIPING MATERIALS SHALL MEET ALL REQUIREMENTS OF IPC AND LOCAL AUTHORITY. PLASTIC PIPING SHALL BE ALLOWED ONLY WHERE ALLOWED BY CODE. PLASTIC PIPING SHALL NOT BE ROUTED THROUGH RETURN AIR PLENUMS OR OTHER AREAS PROHIBITED BY THE IMC, IPC OR NFPA CODES OR BY LOCAL AUTHORITY
- G-3 GAS PIPING INSTALLATION SHALL BE IN STRICT ACCORDANCE WITH GAS COMPANY REGULATIONS, NFPA CODE REQUIREMENTS, AND LOCAL AUTHORITY.
- G-4 ALL MATERIALS SHALL BE NEW AND SHALL BE DOMESTIC MADE UNLESS SPECIFICALLY APPROVED OTHERWISE IN WRITING BY ARCHITECT OR OWNER.
- G-5 PROVIDE VACUUM BREAKERS AND BACK FLOW PREVENTERS WHERE REQUIRED BY CODE OR WHERE THERE MAY BE ANY POSSIBLE CHANCE FOR CROSS CONTAMINATION. PREVENTERS SHALL BE INSTALLED IN ACCORDANCE WITH UTAH CODE.
- G-6 ALL PLUMBING INFORMATION IS NOT LIMITED TO THE PLUMBING DRAWINGS. CONTRACTOR SHALL BE RESPONSIBLE FOR INFORMATION ON ALL OTHER CONSTRUCTION DOCUMENTS INCLUDING SPECIFICATIONS, ARCHITECTURAL DRAWING, STRUCTURAL DRAWINGS, MECHANICAL DRAWINGS, AND ELECTRICAL DRAWINGS.
- G-7 THE WORKING DRAWINGS ARE DIAGRAMMATIC, BECAUSE OF THE SMALL SCALE OF THE DRAWING, THEY DO NOT SHOW EVERY OFFSET, BEND OR ELBOW NECESSARY FOR THE COMPLETE INSTALLATION IN THE SPACE PROVIDED. ALL PIPING SHALL BE CHECKED AND COORDINATED WITH THE SPECIFICATIONS, ARCHITECTURAL, STRUCTURAL, MECHANICAL, AND ELECTRICAL DRAWINGS.
- G-8 COORDINATE ALL PIPING AND PLUMBING EQUIPMENT WITH ALL OTHER TRADES AND/OR CONTRACTORS PRIOR TO INSTALLATION.
- G-9 ANY AND ALL ALTERATIONS TO THE SYSTEM SHOWN SHALL BE THE RESPONSIBILITY OF THIS CONTRACTOR AND ARCHITECT/ENGINEER SHALL BE NOTIFIED IN WRITING PRIOR TO CHANGES.
- G-10 GAS LINE FITTINGS SHALL BE STANDARD WELD FITTINGS WITH TAPERED REDUCERS. DO NOT USE VALVES, UNIONS, OR AUTO CONTROLS IN GAS LINES ROUTED IN INACCESSIBLE CONCEALED SPACES.
- G-11 ALL WATER SYSTEMS SHALL MEET THE REQUIREMENTS OF ANSIS/NSF STANDARD 61 SECTION 9 (1998), CONCERNING METAL CONTAMINANTS IN THE WATER SYSTEM.
- G-12 WATER PIPING SHALL NOT BE ROUTED IN OUTSIDE WALLS OR ON EXTERIOR SIDE OF BUILDING INSULATION ENVELOPE.
- G-13 WATER HAMMER ARRESTORS SHALL BE INSTALLED IN ALL WATER LINES WITH QUICK OPEN OR QUICK CLOSE VALVES.

WATER HAMMER ARRESTOR SCHEDULE:

- TYPE A 1-11 FIXTURE UNITS
- TYPE B 12-32 FIXTURE UNITS
- TYPE C 33-60 FIXTURE UNITS
- TYPE D 61-113 FIXTURE UNITS

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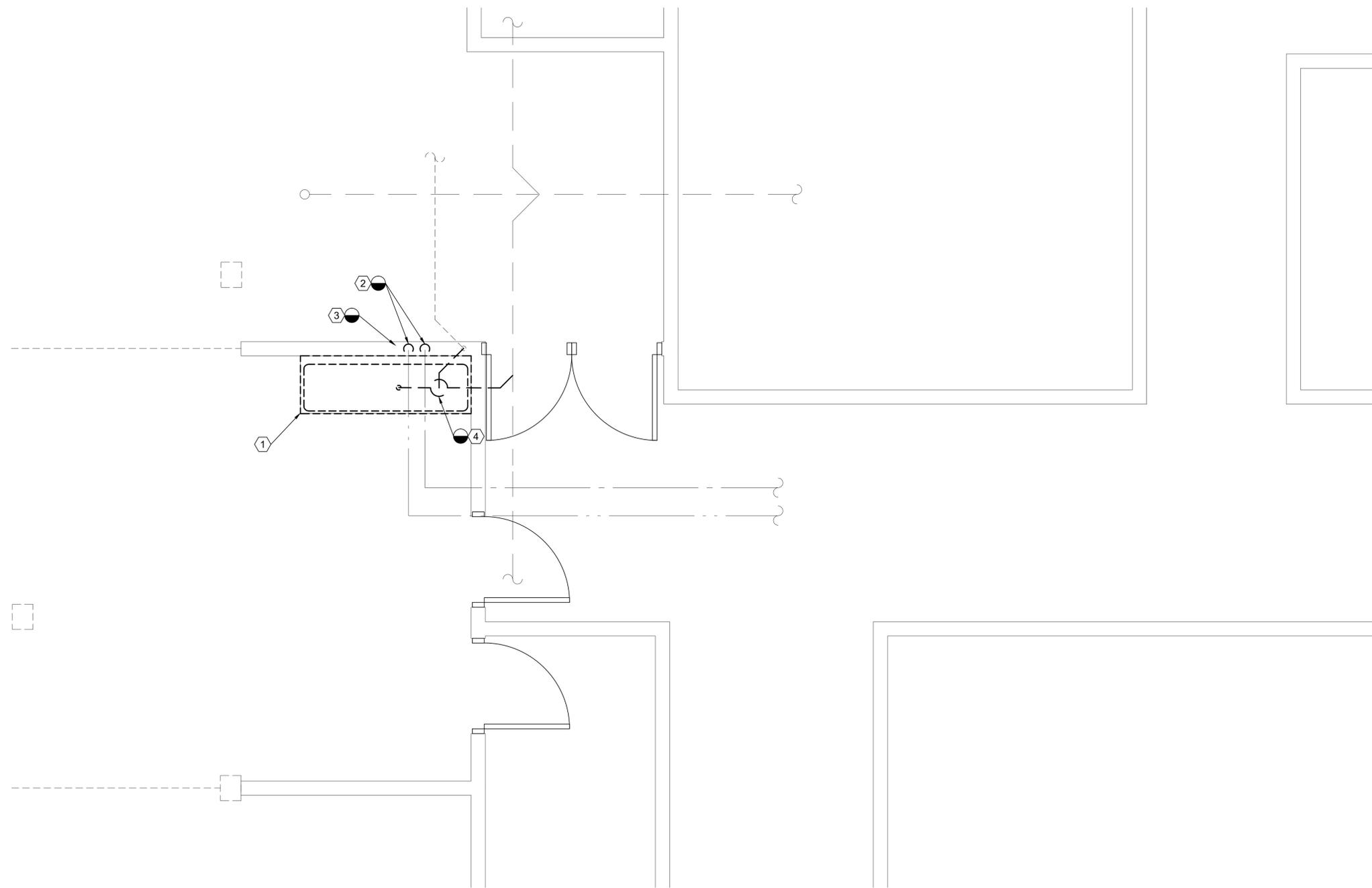


SHEET TITLE
**PLUMBING
DEMOLITION PLAN**

SHEET NO.
PD101

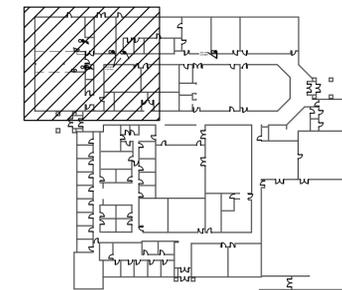
SHEET NOTES:

- ① REMOVE EXISTING SINK, CABINET, AND ALL ASSOCIATED ITEMS. PATCH AND REPAIR FLOORING UNDERNEATH AS NECESSARY. MATCH EXISTING. FIELD VERIFY.
- ② REMOVE HOT AND COLD WATER PIPING TO SINK AT THIS APPROXIMATE LOCATION. FIELD VERIFY EXACT POINT OF REMOVAL.
- ③ REMOVE WASTE AND VENT PIPING TO SINK. FIELD VERIFY EXACT POINT OF REMOVAL FOR EASE OF RE-CONNECTION TO NEW HOOD PLUMBING.
- ④ REMOVE NEUTRALIZATION TANK AND ASSOCIATED VENT AND WASTE PIPING. FIELD VERIFY EXACT POINT OF REMOVAL.

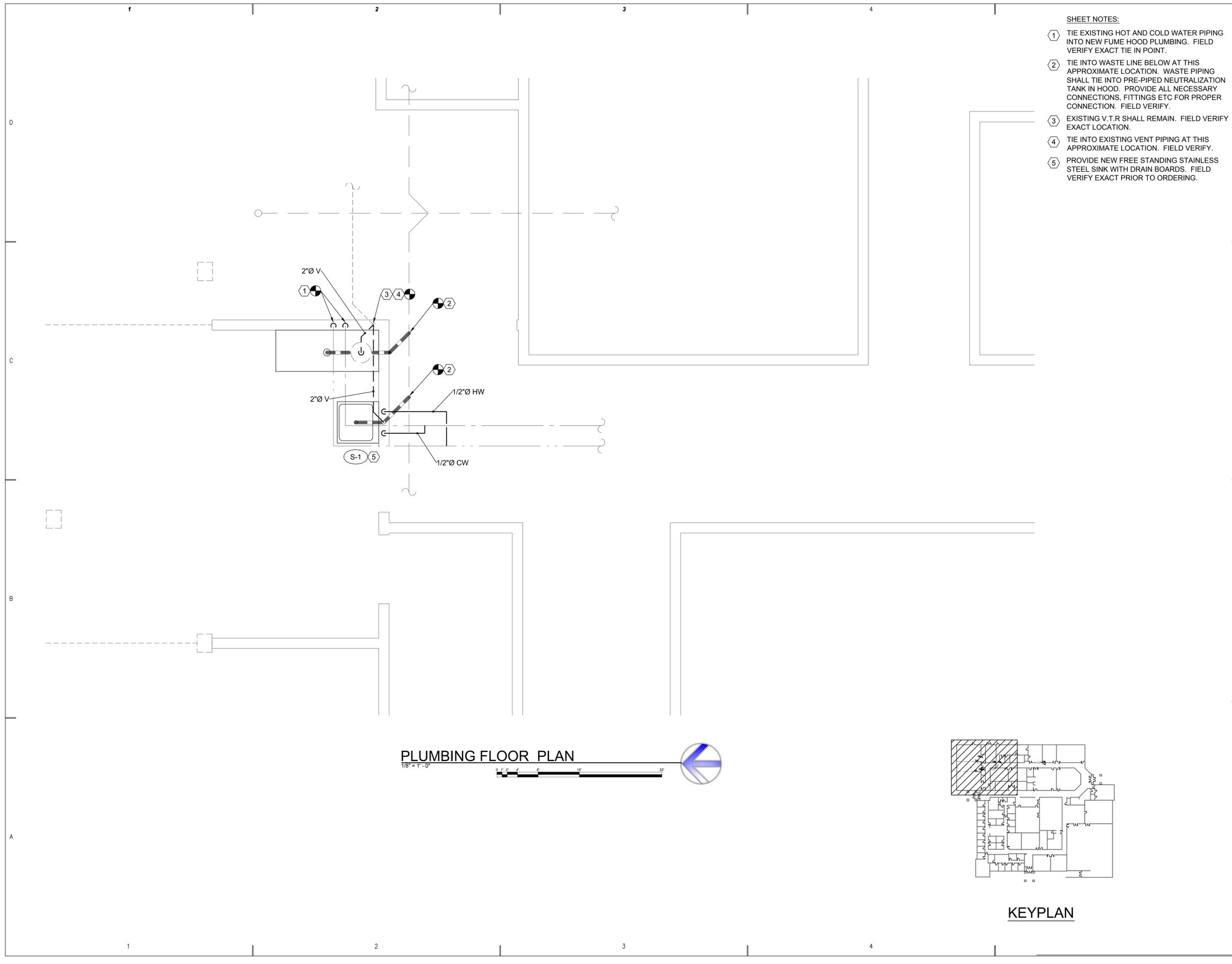


PLUMBING DEMOLITION PLAN

1/8" = 1'-0"



KEYPLAN



- SHEET NOTES:**
- ① TIE EXISTING HOT AND COLD WATER PIPING INTO NEW FUME HOOD PLUMBING. FIELD VERIFY EXACT TIE IN POINT.
 - ② TIE INTO WASTE LINE BELOW AT THIS APPROXIMATE LOCATION. WASTE PIPING SHALL TIE INTO PRE-PIPED NEUTRALIZATION TANK IN HOOD. PROVIDE ALL NECESSARY CONNECTIONS, FITTINGS ETC FOR PROPER CONNECTION. FIELD VERIFY.
 - ③ EXISTING V.T.R SHALL REMAIN. FIELD VERIFY EXACT LOCATION.
 - ④ TIE INTO EXISTING VENT PIPING AT THIS APPROXIMATE LOCATION. FIELD VERIFY.
 - ⑤ PROVIDE NEW FREE STANDING STAINLESS STEEL SINK WITH DRAIN BOARDS. FIELD VERIFY EXACT PRIOR TO ORDERING.

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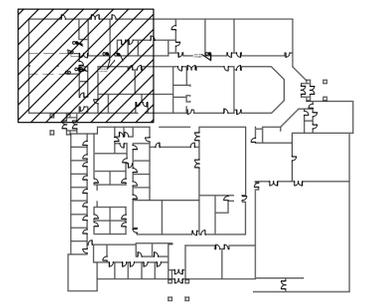
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PLUMBING FLOOR PLAN
 1/8" = 1' - 0"



KEYPLAN

PLUMBING FLOOR PLAN

SHEET NO.
PE101

PLUMBING FIXTURE SCHEDULE

SYMBOL	FIXTURE	INDIVIDUAL LINE SIZES					REMARKS
		TRAP	WASTE	VENT	COLD WATER	HOT WATER	
(S-1)	STUDIO SINK	2"	2"	1-1/2"	1/2"	1/2"	SINGLE COMPARTMENT, FREE STANDING, STAINLESS STEEL SINK COMPLETE WITH FAUCET, BACKSPLASH, DRAINBOARDS, ETC. SCALE DRAWINGS FOR APPROXIMATE SIZE. FIELD VERIFY PRIOR TO ORDERING

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SHEET TITLE

**PLUMBING
SCHEDULES**

SHEET NO.

PE601