

CODE ANALYSIS

APPLICABLE CODES

	Year		Year
International Building Code	2006	National Electrical Code	2008
International Mechanical Code	2006	Uniform Code for	
International Plumbing Code	2006	Building Conservation	
International Fire Code	2006	ADA Accessibility	
International Energy Conservation Code	2006	Guidelines	

A. Occupancy and Group: H-5/B-2

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

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

C. Type of Construction (circle one):

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

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

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

E. Mixed Occupancies: _____ Nonseparated Uses: _____

F. Sprinklers:

Required: _____ Provided: _____ Type of Sprinkler System: _____

G. Number of Stories: _____ Building Height: _____

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

I. Tabular Area: _____

J. Area Modifications:

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

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).

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: _____

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.

UTAH NATIONAL GUARD DRAPER - AASF SOUTH HANGER AC UPGRADE DFCM #09161480

DRAWING INDEX:

- M001 - TITLE SHEET
- MG001- MECHANICAL GENERAL NOTES AND LEGEND
- MD101- MECHANICAL DEMOLITION PLAN
- MD102- MECHANICAL ROOF DEMOLITION PLAN
- ME101- MECHANICAL PLANS
- ME102- MECHANICAL ROOF PLANS
- ME501- MECHANICAL DETAILS
- ME502- MECHANICAL DETAILS
- ME601- MECHANICAL SCHEDULES



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MECHANICAL LEGEND					
SYMBOL	ABR.	DESCRIPTION	SYMBOL	ABR.	DESCRIPTION
GENERAL TERMINOLOGY			AIR SIDE		
		SECTION LETTER DESIGNATION			EXISTING AIR DUCT TO BE REMOVED
		SECTION DRAWN ON THIS SHEET			EXISTING AIR DUCT TO REMAIN
		DETAIL NUMBER DESIGNATION			NEW AIR DUCT
		CORRESPONDING WITH GRID LOCATION			FLEXIBLE AIR DUCT CONNECTION
		MECHANICAL EQUIPMENT DESIGNATION			VOLUME DAMPER
		EQUIPMENT ITEM DESIGNATION			SUPPLY AIR DIFFUSER
		REGISTER, GRILL OR DIFFUSER DESIGNATION WITH BALANCING CFM LISTED BELOW			RETURN AIR, FRESH AIR, AND TRANSFER AIR
					CEILING MOUNTED EXHAUST FAN OR EXHAUST GRILLE
		GRILLE, OR LOUVER DESIGNATION WHERE BALANCING NOT REQUIRED			RETURN OR OUTSIDE AIR DUCT UP
		REVISION DESIGNATOR AND NUMBER			SUPPLY DUCT UP
		KEY NOTE DESIGNATOR AND NUMBER			EXHAUST AIR INTAKE UP
	POC	POINT OF CONNECTION			RETURN OR OUTSIDE AIR DUCT DOWN
	POR	POINT OF REMOVAL			SUPPLY DUCT DOWN
AFF		ABOVE FINISHED FLOOR			EXHAUST DUCT DOWN
AP		ACCESS PANEL			ROUND DUCT UP
CL		CENTER LINE ELEVATION			LOWER DUCT DOWN
INV. ELEV.		INVERT ELEVATION		AP	ACCESS PANEL
GC		GENERAL CONTRACTOR			EXISTING EQUIPMENT TO BE REMOVED
MC		MECHANICAL CONTRACTOR			EXISTING EQUIPMENT TO REMAIN
ATC		CONTROL CONTRACTOR			NEW EQUIPMENT
EC		ELECTRICAL CONTRACTOR		FD	FIRE DAMPER
NIC		NOT IN CONTRACT		SD	SMOKE DAMPER
NTS		NOT TO SCALE		FS	FIRE & SMOKE DAMPER
VCP		VITRIFIED CLAY PIPE	SA		SUPPLY AIR
C		COMMON	RA		RETURN AIR
NC		NORMALLY CLOSED	EA		EXHAUST AIR
NO		NORMALLY OPEN	OA		OUTSIDE AIR
			MA		MIXED AIR
			FA		FRESH AIR
			RF		RELIEF AIR

PLUMBING GENERAL NOTES:

- GP-1 ALL PLUMBING SHALL BE INSTALLED AND CONFORM TO THE 2006 EDITION OF THE INTERNATIONAL PLUMBING CODE (IPC) WITH UTAH ANNOTATIONS AND LOCAL AUTHORITY REQUIREMENTS.
- GP-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.
- GP-3 GAS PIPING INSTALLATION SHALL BE IN STRICT ACCORDANCE WITH GAS COMPANY REGULATIONS, NFPA CODE REQUIREMENTS, AND LOCAL AUTHORITY.
- GP-4 ALL MATERIALS SHALL BE NEW AND SHALL BE DOMESTIC MADE UNLESS SPECIFICALLY APPROVED OTHERWISE IN WRITING BY ARCHITECT OR OWNER.
- GP-5 SOIL, WASTE AND VENT PIPING SHALL BE CAST IRON SERVICE WEIGHT HUB AND SPIGOT CONFORMING TO FEDERAL SPECIFICATION WW-P-401, ASTM A-74, OR ANSI A12.5-1 VENT PIPING AND ABOVE GRADE WASTE PIPING 2-1/2" OR LESS MAY BE GALVANIZED STEEL WITH SCREWED DURHAM TARRER DRAINAGE FITTINGS, HOWEVER, GALVANIZED STEEL VENT PIPES SHALL NOT BE USED FOR UNDER OR WITHIN 6" OF THE GROUND AS PER CODE. JOINTS FOR CAST IRON PIPE SHALL BE TYSEAL, INSTALLED PER MANUFACTURER'S RECOMMENDATIONS. ABOVE GRADE CAST IRON PIPING SHALL BE SERVICE WEIGHT NO-HUB WITH STAINLESS STEEL CINCH BANDS. ALL PIPING AND FITTINGS SHALL BE DOMESTIC MADE. ALL WASTE AND VENT PIPING SHALL BE TESTED BY FILLING SYSTEM TO TOP OF THE VENT PIPE (20 FEET OF HEAD MINIMUM) AND SHOW NO LEAKS FOR 6 HOURS.
- GP-6 ALL PLUMBING INFORMATION IS NOT LIMITED TO THE PLUMBING DRAWINGS. CONTRACTOR SHALL BE RESPONSIBLE FOR INFORMATION ON ALL OTHER CONSTRUCTION DOCUMENTS INCLUDING ARCHITECTURAL DRAWING, STRUCTURAL DRAWINGS, MECHANICAL DRAWINGS, AND ELECTRICAL DRAWINGS.
- GP-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 ARCHITECTURAL, STRUCTURAL, MECHANICAL, AND ELECTRICAL DRAWINGS.
- GP-8 COORDINATE ALL PIPING AND PLUMBING EQUIPMENT WITH ALL OTHER TRADES AND/OR CONTRACTORS PRIOR TO INSTALLATION.
- GP-9 ANY AND ALL ALTERATION TO THE SYSTEM SHOWN SHALL BE THE RESPONSIBILITY OF THIS CONTRACTOR AND ARCHITECT/ENGINEER SHALL BE NOTIFIED IN WRITING PRIOR TO CHANGES.
- GP-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.

MECHANICAL GENERAL NOTES:

- GM-1 MECHANICAL INFORMATION IS NOT LIMITED TO THE MECHANICAL DRAWINGS. CONTRACTOR SHALL BE RESPONSIBLE FOR INFORMATION ON ALL OTHER CONSTRUCTION DOCUMENTS INCLUDING DRAWINGS BY OTHER DISCIPLINES AND SPECIFICATIONS.
- GM-2 A - EACH DRAWING SHEET AND THE SPECIFICATIONS HAVE BEEN PREPARED TO SUPPLEMENT EACH OTHER AND THEY SHALL BE INTERPRETED AS AN INTEGRAL UNIT WITH ITEMS SHOWN AND NOTED ON ONE AND NOT THE OTHER BEING FURNISHED AND INSTALLED AS THOUGH SHOWN AND CALLED OUT IN ALL PLACES.

B - THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR THE INSTALLATION OF THE SYSTEMS ACCORDING TO THE TRUE INTENT AND MEANING OF THE CONTRACT DOCUMENTS.

C - THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT WITH PROPER SERVICE ACCESS AND CLEARANCES ACCORDING TO MANUFACTURERS RECOMMENDATIONS. THE CONTRACTOR SHALL REVIEW SUPPLIERS BID PACKAGES FOR COMPLETENESS AND COMPLIANCE TO THE SPECIFICATIONS, SCHEDULES, AND DESIGN INTENT (ALL EQUIPMENT AND METHODS). THE CONTRACTOR SHALL REMOVE AND REINSTALL CORRECTLY AT HIS OWN EXPENSE ANY EQUIPMENT NOT IN COMPLIANCE.

D - THE CONTRACTOR SHALL CONSULT MANUFACTURERS INSTALLATION INSTRUCTIONS FOR SIZES, METHODS, ACCESSORIES, AND CLEARANCES IN SPACE AVAILABLE PRIOR TO BIDDING PROJECT.

E - ANYTHING NOT CLEAR OR IN CONFLICT WILL BE EXPLAINED BY MAKING APPLICATION TO THE ENGINEER IN WRITING.
- GM-3 ANY AND ALL ALTERATIONS TO THE SYSTEM SHOWN SHALL BE THE RESPONSIBILITY OF THIS CONTRACTOR. ARCHITECT SHALL BE NOTIFIED IN WRITING PRIOR TO CHANGES.
- GM-4 CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AND LOCATIONS.
- GM-5 THE WORKING DRAWINGS ARE DIAGRAMMATIC. THEY DO NOT SHOW EVERY OFFSET, BEND, OR ELBOW NECESSARY FOR THE COMPLETE INSTALLATION IN THE SPACE PROVIDED. ALL LOCATIONS FOR MECHANICAL EQUIPMENT SHALL BE FIELD VERIFIED AND COORDINATED WITH ALL DRAWINGS. THE CONTRACTOR SHALL PROVIDE OR COORDINATE WITH THE GENERAL CONTRACTOR PROVISIONS FOR BLOCKOUTS OR CORE DRILLS THROUGH STRUCTURE.
- GM-6 THE INSTRUCTION TO "PROVIDE" ALSO INCLUDES INSTALLATION.
- GM-7 MECHANICAL CONTRACTOR SHALL PROVIDE AND INSTALL SMOKE AND FIRE DAMPERS AS REQUIRED BY LOCAL CODES AND AUTHORITIES.
- GM-8 SHEET METAL DUCT SIZES SHOWN ON DRAWINGS ARE FREE AREA DIMENSIONS.
- GM-9 PROVIDE AND INSTALL BALANCING DAMPERS IN ALL SUPPLY AND EXHAUST AIR BRANCH DUCTS. BALANCE TO CFM SHOWN ON PLAN.
- GM-10 SEE ARCHITECTURAL REFLECTED CEILING PLAN FOR EXACT LOCATION OF DIFFUSERS AND GRILLES.
- GM-11 PROVIDE TURNING VANES IN ALL ELBOWS OF RECTANGULAR DUCT.
- GM-12 THE CONTRACTOR SHALL ASSUME ALL RESPONSIBILITY IN HANDLING AND DISPOSING OF REFRIGERANTS, OILS, ETC. ALL SUCH MATERIALS SHALL BE HANDLED, DISPOSED, AND USED ON ACCORDANCE WITH ALL LOCAL, STATE, AND FEDERAL LAWS.
- GM-13 THE MECHANICAL CONTRACTOR SHALL VERIFY MOTOR VOLTAGES WITH THE ELECTRICAL DRAWING BEFORE ORDERING MOTORIZED EQUIPMENT AND CONTROLS.
- GM-14 C.F.M. LISTED IS ACTUAL AIR.
- GM-15 SUPPLIERS SHALL REVIEW ALL DRAWINGS AND THE SPECIFICATIONS PRIOR TO SUBMITTING PRICES TO THE CONTRACTOR. ALL QUESTIONS AND DISCREPANCIES SHALL BE BROUGHT TO THE ENGINEERS ATTENTION PRIOR TO BIDDING.
- GM-16 CONTRACTOR SHALL THOROUGHLY REVIEW AND SIGN SUBMITTALS FOR COMPLETENESS AND COMPLIANCE TO THE SPECIFICATIONS PRIOR TO ENGINEERS REVIEW. SUPPLIERS SHALL HIGHLIGHT OR MARK ALL INFORMATION REQUIRED TO SHOW COMPLIANCE TO THE SPECIFICATIONS. ALL REQUESTED EXCEPTIONS TO THE SPECIFICATIONS, OR SCHEDULES SHALL BE CLEARLY NOTED AND EXPLAINED. SUBMITTAL REVIEW AND ACCEPTANCE IS FOR DESIGN CONCEPT ONLY, AND DOES NOT AT ANY TIME RELIEVE THE CONTRACTOR OF RESPONSIBILITY TO MEET SPECIFICATIONS, CAPACITIES, OR DESIGN INTENT.
- GM-17 THE MECHANICAL INSTALLATION SHALL CONFORM TO THE 2006 EDITION OF THE IMC WITH UTAH ANNOTATIONS AND LOCAL AUTHORITY REQUIREMENTS.
- GM-18 ALL DUCTWORK SHALL BE GALVANIZED STEEL FABRICATED TO SMACNA STANDARDS FOR THE VELOCITY, PRESSURE, AND GEOMETRY INVOLVED. DUCT JOINTS SHALL BE SEALED USING HARD CAST TAPE. TYPE AND APPLICATION TECHNIQUES SHALL BE AS RECOMMENDED BY THE MANUFACTURER FOR THE INTENDED USE AND LOCATION.
- GM-19 DUCT LINER SHALL BE ATTACHED TO INSIDE OF DUCTWORK WITH ADHESIVE COATING BETWEEN THE DUCT AND LINER AND FURTHER SECURED BY PINS MECHANICALLY FASTENED TO DUCT. PINS ADHESIVELY ATTACHED ARE NOT ACCEPTABLE ALL EDGES OF LINER SHALL BE THOROUGHLY COATED WITH ADHESIVE AND TIGHTLY BUTTED. LINER SHALL BE FIBERGLASS WITH BLACK CLOTH FINISH ON SMACNA STANDARDS AND ALL REQUIREMENTS OF THE MANUFACTURER. LINER AND ADHESIVE SHALL MEET ALL REQUIREMENTS OF FEDERAL, STATE, AND LOCAL CODES.
- GM-20 THIS CONTRACTOR SHALL BE RESPONSIBLE TO HIRE A DESIGN BUILD ELECTRICIAN TO DISCONNECT AND RE-CONNECT THE ROOF TOP UNITS BEING REPLACED.



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PROJECT NAME & ADDRESS

**UTAH NATIONAL
GUARD - AASF**

SOUTH HANGER
AC UPGRADE

7563 S. AIRPORT RD
WEST JORDAN, UTAH 84084

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SHEET TITLE
**MECHANICAL GENERAL NOTES
AND LEGEND**

SHEET NO.
MG001



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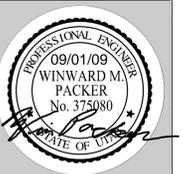
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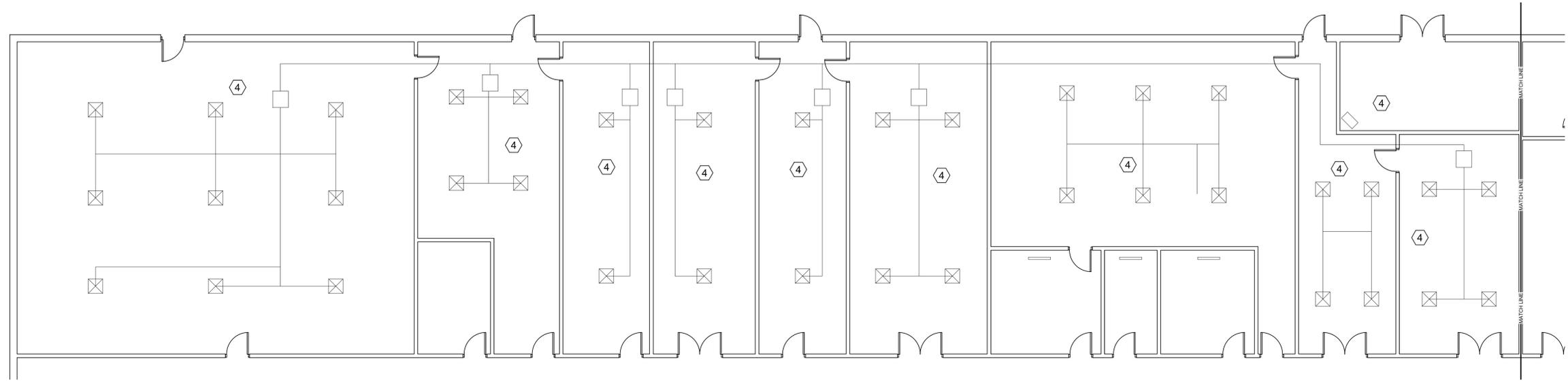
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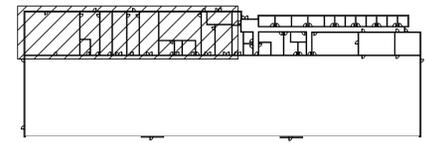
SHEET TITLE
**MECHANICAL DEMOLITION
 PLANS**

SHEET NO.
MD101



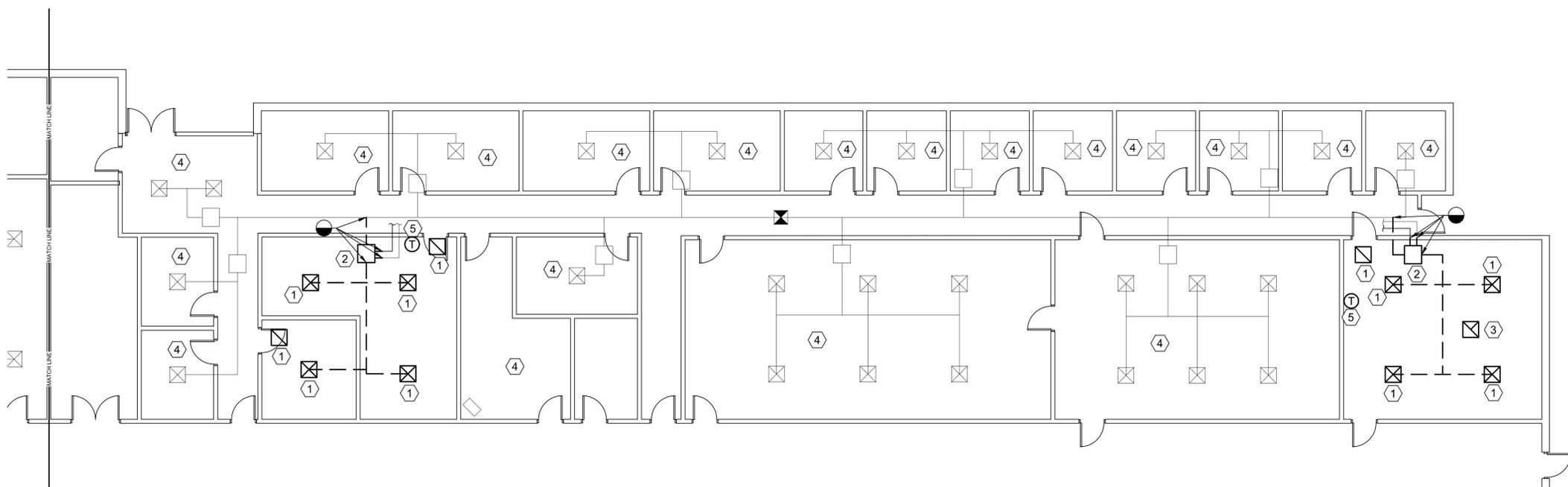
SOUTH WEST DEMOLITION PLAN

SCALE: 1/8" = 1'-0"



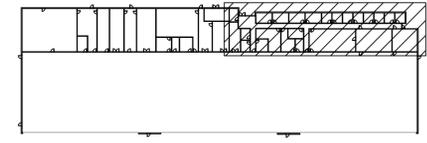
KEY PLAN

- SHEET NOTES:**
- ① REMOVE EXISTING DIFFUSERS OR GRILLE.
 - ② REMOVE EXISTING VAV BOX AND EXISTING CONTROL VALVES, ACCESSORIES, FITTINGS, ETC. EXCLUDING ISOLATION VALVES.
 - ③ REMOVE EXISTING EXHAUST GRILLE AND ASSOCIATED DUCTWORK BACK TO FAN.
 - ④ EXISTING HVAC SYSTEM SHALL REMAIN.
 - ⑤ REMOVE EXISTING THERMOSTAT. FIELD VERIFY EXACT LOCATION.



NORTH WEST DEMOLITION PLAN

SCALE: 1/8" = 1'-0"



KEY PLAN

- GENERAL NOTES:**
1. FIELD VERIFY ALL EXISTING CONDITIONS, LOCATIONS, DUCT SIZES ETC. PRIOR TO ORDERING OR FABRICATING.

1

2

3

4

5



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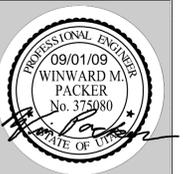
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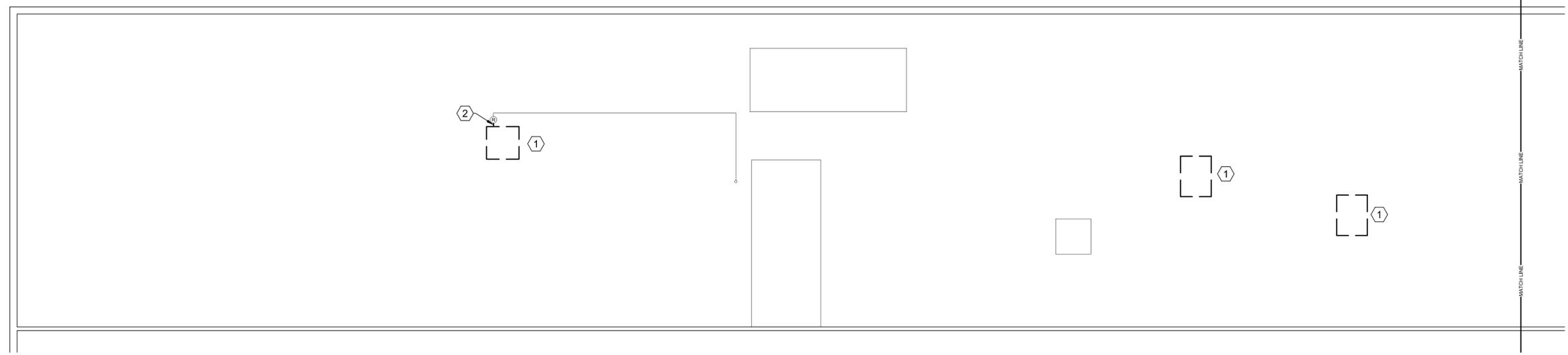
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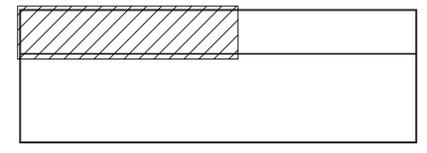


SHEET TITLE
**MECHANICAL ROOF
 DEMOLITION PLANS**

SHEET NO.
MD102

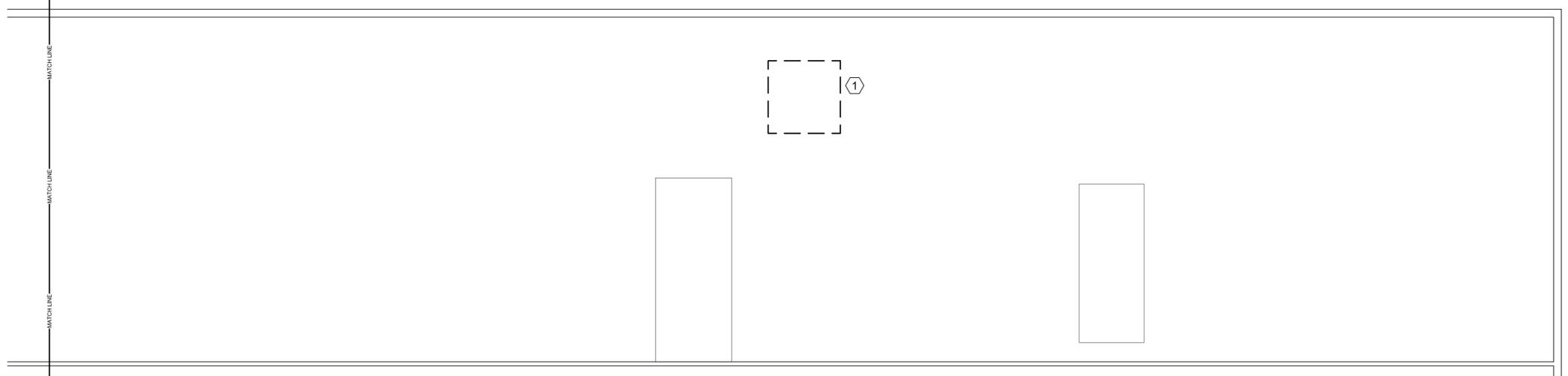


SOUTH WEST DEMOLITION ROOF PLAN
 SCALE: 1/8" = 1'-0"

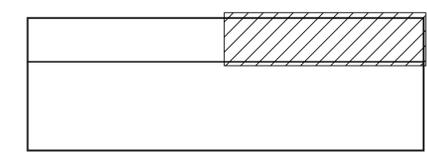


KEY PLAN

- SHEET NOTES:**
- ① REMOVE EXISTING ROOF TOP UNIT. PROTECT EXISTING ELECTRICAL SERVICE TO UNITS.
 - ② REMOVE EXISTING GAS LINE FROM ROOF TOP TO GAS REGULATOR.



NORTH WEST DEMOLITION PLAN
 SCALE: 1/8" = 1'-0"



KEY PLAN

- GENERAL NOTES:**
- 1. FIELD VERIFY ALL EXISTING CONDITIONS, LOCATIONS, DUCT SIZES ETC. PRIOR TO ORDERING OR FABRICATING.



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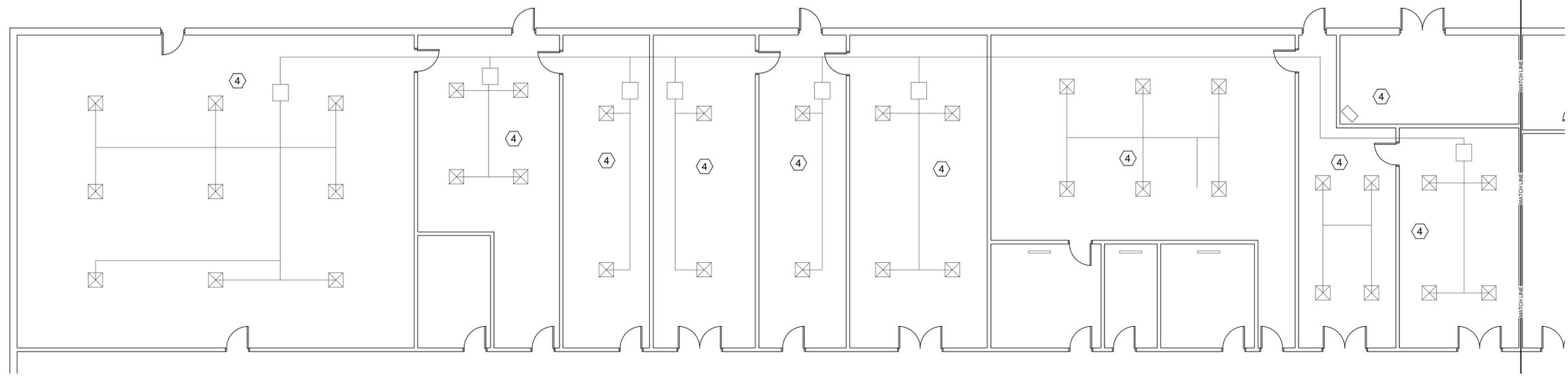
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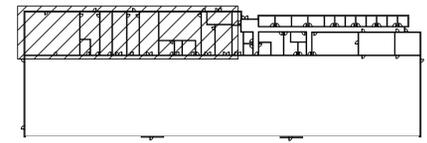


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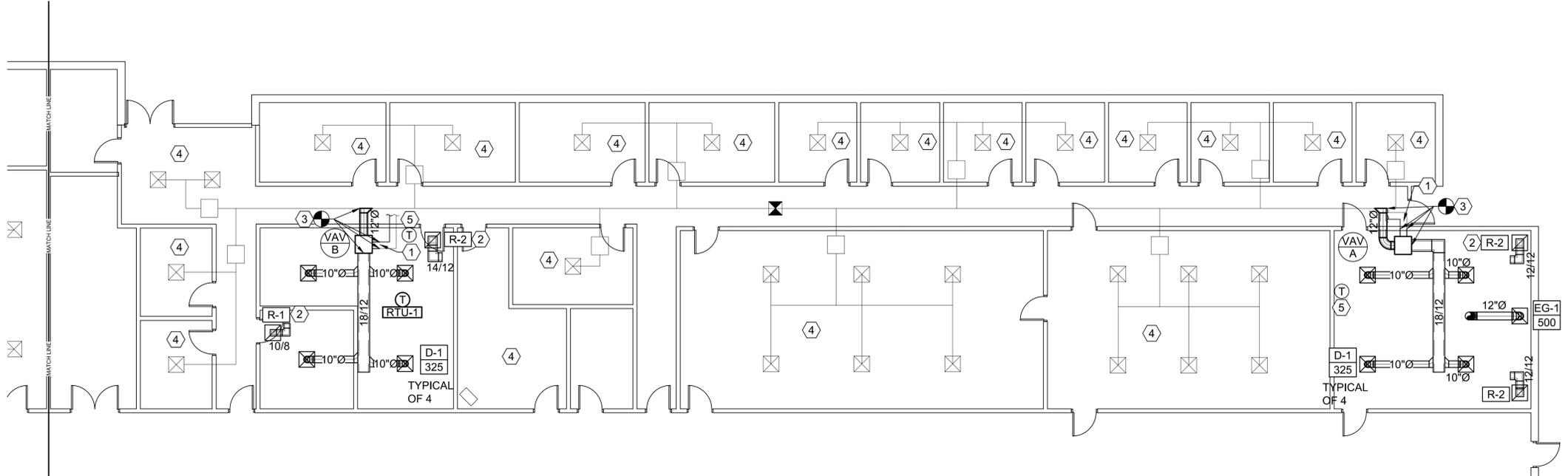
SOUTH WEST MECHANICAL FLOOR PLAN

SCALE: 1/8" = 1'-0"



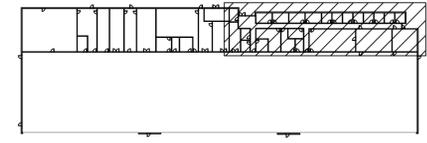
SHEET NOTES:

- ① TIE INTO EXISTING HOT WATER SUPPLY AND RETURN PIPING IN THIS APPROXIMATE LOCATION. PIPE NEW VAV PER DETAIL ON ME502.
- ② PROVIDE RETURN AIR BOOT. SEE DETAIL ME501.
- ③ TIE NEW DUCT BRANCH INTO EXISTING MEDIUM PRESSURE DUCTWORK AT THIS APPROXIMATE LOCATION. FIELD VERIFY.
- ④ EXISTING HVAC SYSTEM SHALL REMAIN.
- ⑤ REPLACE EXISTING THERMOSTAT. FIELD VERIFY LOCATION.



NORTH WEST MECHANICAL FLOOR PLAN

SCALE: 1/8" = 1'-0"



GENERAL NOTES:

- 1. FIELD VERIFY ALL EXISTING CONDITIONS, LOCATIONS, DUCT SIZES ETC. PRIOR TO ORDERING OR FABRICATING.



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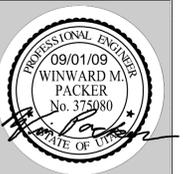
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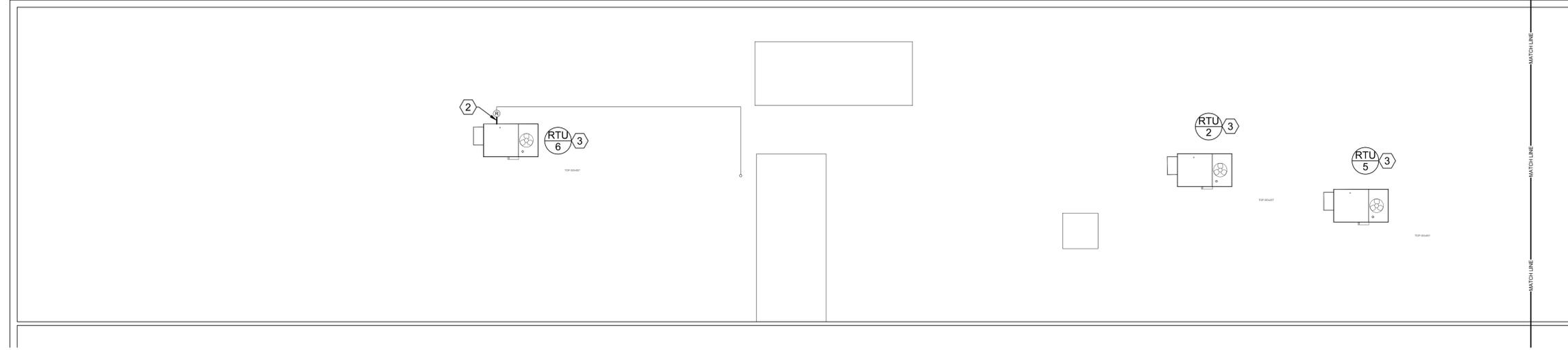
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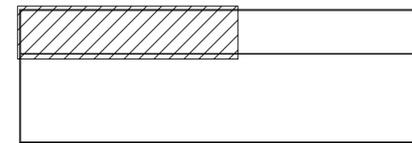
SHEET TITLE
MECHANICAL ROOF PLANS

SHEET NO.
ME102



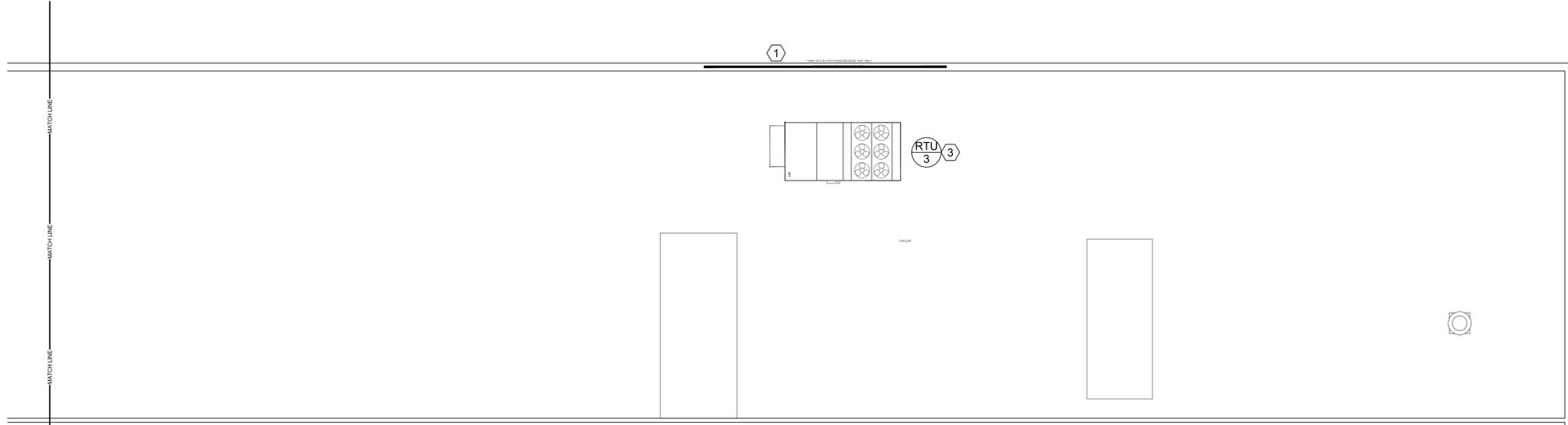
SOUTH WEST MECHANICAL ROOF PLAN

SCALE: 1/8" = 1'-0"



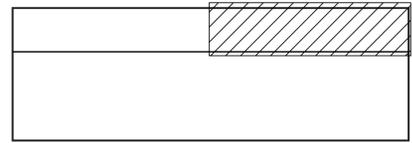
KEY PLAN

- SHEET NOTES:**
- 1 PROVIDE GUARDRAIL AT ANY LOCATION NEW RTU IS WITHIN 10' OF ROOF EDGE. SEE DETAIL ME502.
 - 2 CONNECT NEW ROOF TOP UNIT TO EXISTING GAS LINE. SEE DETAIL ON ME502.
 - 3 PROVIDE NEW ROOFTOP UNIT AND NEW TRANSITION CURB TO REPLACE EXISTING UNIT.
 - 4 EXISTING EXHAUST FAN TO REMAIN.



NORTH WEST MECHANICAL ROOF PLAN

SCALE: 1/8" = 1'-0"

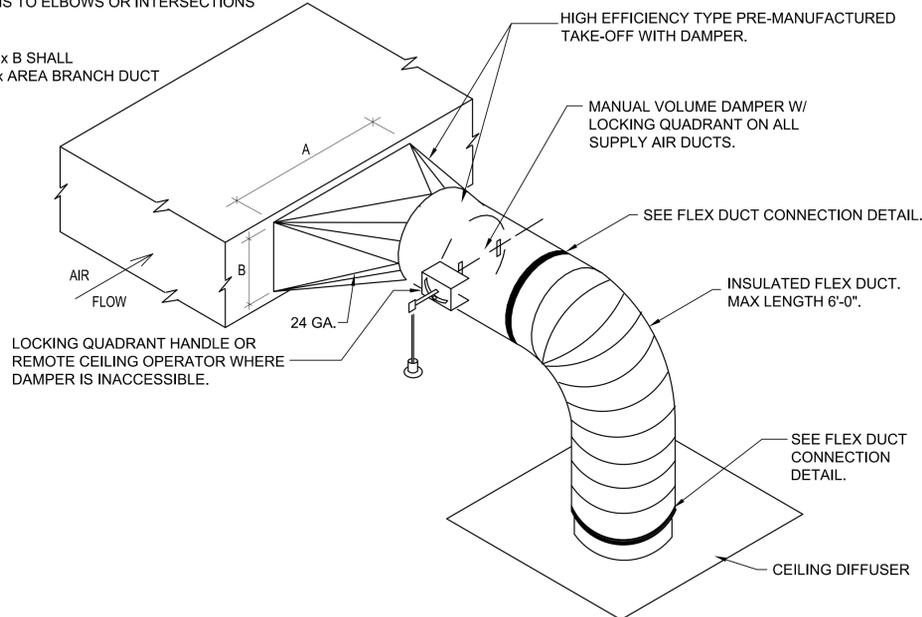


KEY PLAN

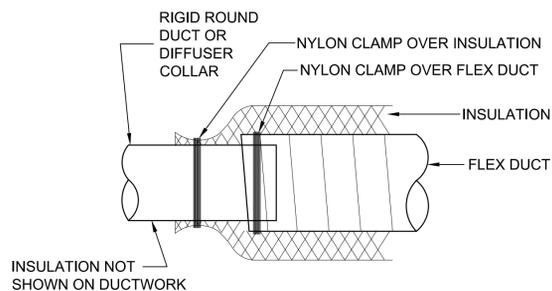
- GENERAL NOTES:**
1. FIELD VERIFY ALL EXISTING CONDITIONS, LOCATIONS, DUCT SIZES ETC. PRIOR TO ORDERING OR FABRICATING.
 2. PROVIDE NEW FACTORY ROOF CURBS, TRANSITIONS, ETC. AS NECESSARY TO CONNECT TO EXISTING DUCTWORK.

NOTE: TAKE-OFFS SHOULD NOT BE INSTALLED CLOSER THAN TWO WIDTHS TO ELBOWS OR INTERSECTIONS

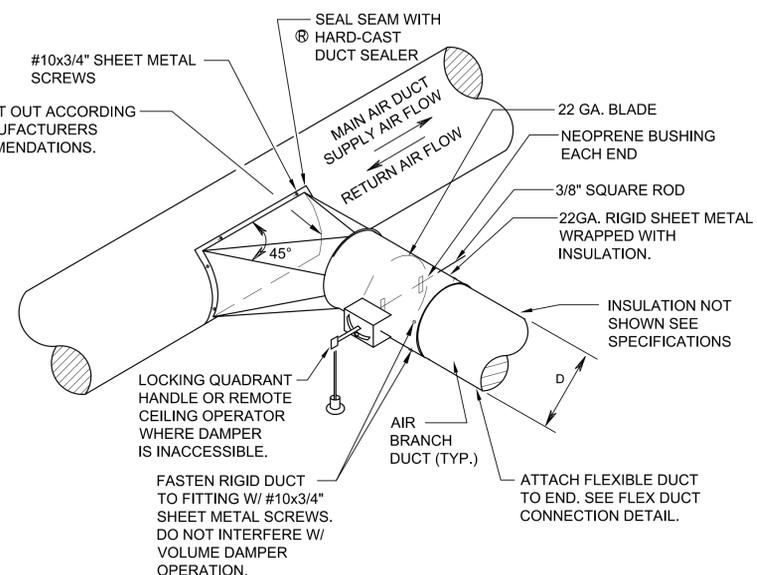
NOTE: AREA OF A x B SHALL BE EQUAL TO 1.5 x AREA BRANCH DUCT



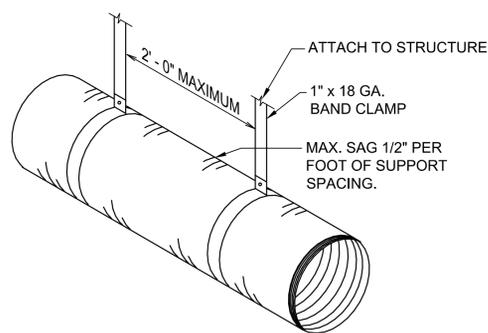
C1 SQUARE-TO-ROUND TAKE-OFF DETAIL
SCALE: NONE



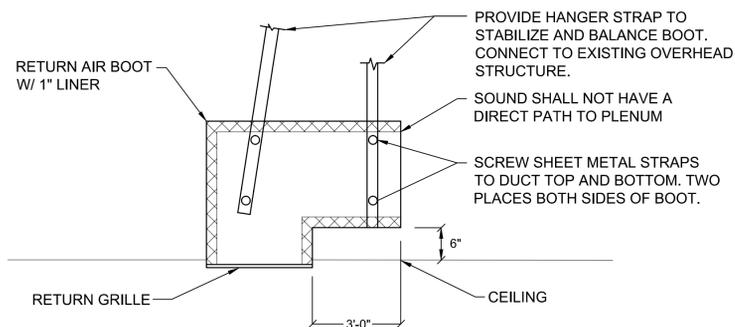
C3 FLEX DUCT CONNECTION DETAIL
SCALE: NONE



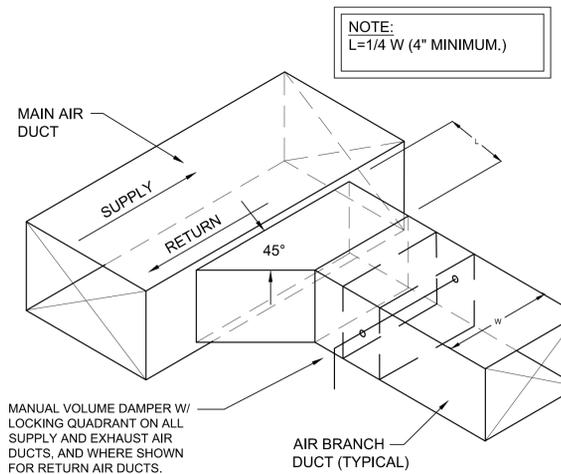
C4 ROUND-TO-ROUND DUCT CONSTRUCTION DETAIL
SCALE: NONE



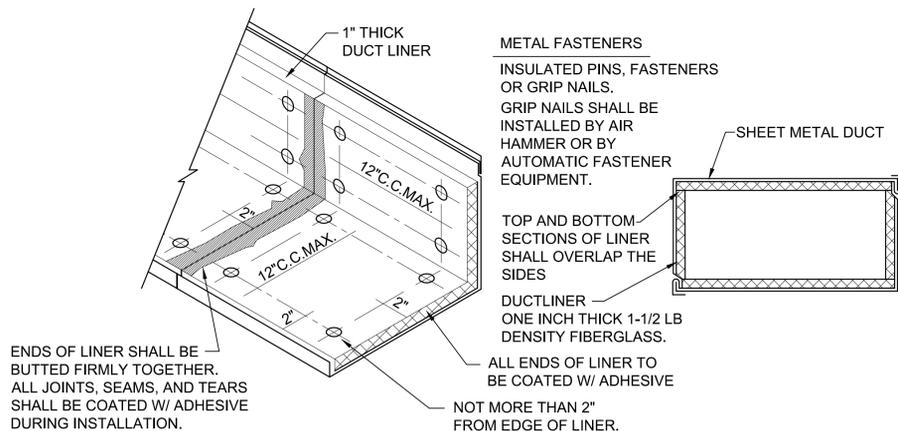
B1 FLEXIBLE DUCT SUPPORT DETAIL
SCALE: NONE



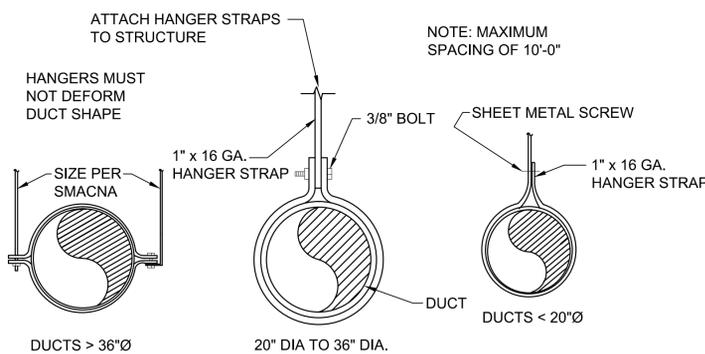
B3 RETURN AIR BOOT DETAIL
SCALE: NONE



A4 BRANCH DUCT TAKE-OFF & DAMPER DETAIL
SCALE: NONE



A1 DUCT LINER DETAIL
SCALE: NONE



A3 ROUND DUCT SUPPORT DETAIL
SCALE: NONE



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PROJECT NAME & ADDRESS

**UTAH NATIONAL
GUARD - AASF**
SOUTH HANGER
AC UPGRADE

7563 S. AIRPORT RD
WEST JORDAN, UTAH 84084

MARK	DATE	REVISION

PROJECT MANAGER:
WP
DRAWN BY:
RB
CHECKED BY:
WP
DATE:
08/31/09
WHW JOB NO.:
09030
SHEET TITLE



MECHANICAL DETAILS

SHEET NO.

ME501

ROOFTOP AIR CONDITIONER SCHEDULE (GAS HEAT)

SYMBOL	MANUFACTURER & MODEL NUMBER	SA CFM	OSA CFM	E.S.P. IN W.G.	HEATING	COOLING			ELECTRICAL								EER/ SEER	OPER. WT. (LBS)	SCHEDULE NOTES
					TOT. MIN. INPUT MBH	AMB. AIR (DB)	AMB. AIR (WB)	MIN. TOTAL MBH	V - Ø - Hz	COMPRESSOR #	COMPRESSOR TOTAL RLA	COMPRESSOR TOTAL LRA	EVAP BLOWER BHP	POWER EXHAUST FLA (QTY)	MCA	MOC			
RTU 1	EXISTING	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RTU 2	CARRIER 48PGEC06-A-6	1995	400	.5	0	95	65	58.6	460-3-60	1	9.6	62	.75	-	15.4	25	14.6 SEER	1100	1,2,3,4,5,6,8,9
RTU 3	CARRIER 48A3T020CCV611HM	8000	1600	3.0	525	95	65	231.1	460-3-60	3	10.6 / 10.6 / 14.7	75 / 75 / 95	6.75	12.6 (2)	76.3	90	10.1 EER	5000	1,2,3,4,5,7,8,9
RTU 4	EXISTING	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RTU 5	CARRIER 48PGFC03-A-3	800	160	.5	0	95	65	23.5	230-1-60	1	12.8	60	.17	-	21.8	30	14.0 SEER	900	1,2,3,4,5,8,9
RTU 6	CARRIER 48PGFC03-A-3	800	160	.5	56	95	65	23.5	230-1-60	1	12.8	60	.17	-	21.8	30	14.0 SEER	900	1,2,3,4,5,9

1. E. S. P. DOES NOT INCLUDE LOSSES THROUGH ACCESSORIES.
2. RATED MINIMUM INPUT AT SEA LEVEL.
3. PROVIDE ONE 15 AMP, 120 VOLT, DUPLEX GFCI SERVICE OUTLET. FACTORY INSTALLED, FIELD WIRED.
4. BELT DRIVE UNIT
5. PROVIDE SMOKE DETECTOR IN SUPPLY AND RETURN AIR FOR ALL UNITS OVER 2000 CFM.
6. PROVIDE WITH POWER EXHAUST.
7. PROVIDE WITH VFD AND MODULATING POWER EXHAUST.
8. PROVIDE WITH GAS HEAT OPTION. GAS CONNECTION TO BE MADE AT A FUTURE DATE.
9. PROVIDE WITH TRANSITION CURB TO ADAPT TO EXISTING CURB.

VAV BOX SCHEDULE

SYMBOL	SERVES	INLET DIA. (INCHES)	COOLING			HEATING								NC LEVEL	MANUF. MODEL #	SCHEDULE NOTES
			MAX CFM	MIN CFM	MX APD (IN)	COIL EAT	COIL LAT	MAX CFM	COIL BTUH	FLOW GPM	EWT	(FT) PD	ROWS			
VAV 101	215	12	1300	260	.32	55	90	1600	41.4	1.3	180	1.5	2	25	KRUEGER LMHS	1
VAV 102	222	12	1300	260	.32	55	90	1600	41.4	1.3	180	1.5	2	25	KRUEGER LMHS	1

1. COORDINATE CONTROLS WITH SECTION 15900.

DIFFUSER SCHEDULE

SYMBOL	TYPE	MAX CFM	FACE SIZE	NECK SIZE	CEILING TYPE	BLOW	PATTERN	SCHEDULE NOTES
D-1 CFM	CEILING	500	12X12	10"Ø	LAY-IN	4-WAY		1,2,3,4,5

1. PROVIDE LAY-IN CEILING AND BORDER / MODULE AS REQUIRED. SEE ARCHITECTURAL CEILING PLANS.
2. MAXIMUM NC 25 AT CFM LISTED.
3. PROVIDE TRANSITION TO DIFFUSER NECK SIZE AS REQUIRED TO DUCT WORK SHOWN ON PLAN.
4. DIFFUSER SHALL BE PRICE MODEL SMD OR EQUAL BY APPROVED MANUFACTURER IN SPECIFICATIONS.
5. FINISH SHALL BE STANDARD WHITE.

REGISTER, LOUVER & GRILLE SCHEDULE

SYMBOL	TYPE	SERVICE	MAX CFM	NOMINAL SIZE	THROAT SIZE	CEILING TYPE	SCHEDULE NOTES
R-1	CEILING	RETURN	375	12/12	12/12	LAY-IN	1,2,3,4
R-2	CEILING	RETURN	1200	22/22	22/22	LAY-IN	1,2,3,4

REGISTER, LOUVER AND DIFFUSER SCHEDULE NOTES:

1. MAXIMUM NC = 25 @ MAXIMUM CFM NOTED.
2. SHALL BE PRICE 535 OR EQUAL BY OTHER APPROVED MANUFACTURERS.
3. SEE SPECIFICATIONS FOR APPROVED MANUFACTURERS.
4. FINISH SHALL BE STANDARD WHITE.
5. FINISH TO BE SPECIFIED BY ARCH



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09030



SHEET TITLE
MECHANICAL SCHEDULES

SHEET NO.
ME601