



**POCATELLO/CHUBBUCK SCHOOL DISTRICT 25**  
**LEARNING TODAY FOR THE POSSIBILITIES OF TOMORROW**

**Administration Offices  
3115 Pole Line Road  
Pocatello, Idaho 83201**

**Addendum No. 1**

April 7, 2022

RE: Invitation to Bid, 2022 Exhaust System Upgrade

FROM: Business Services  
(208) 235-3270

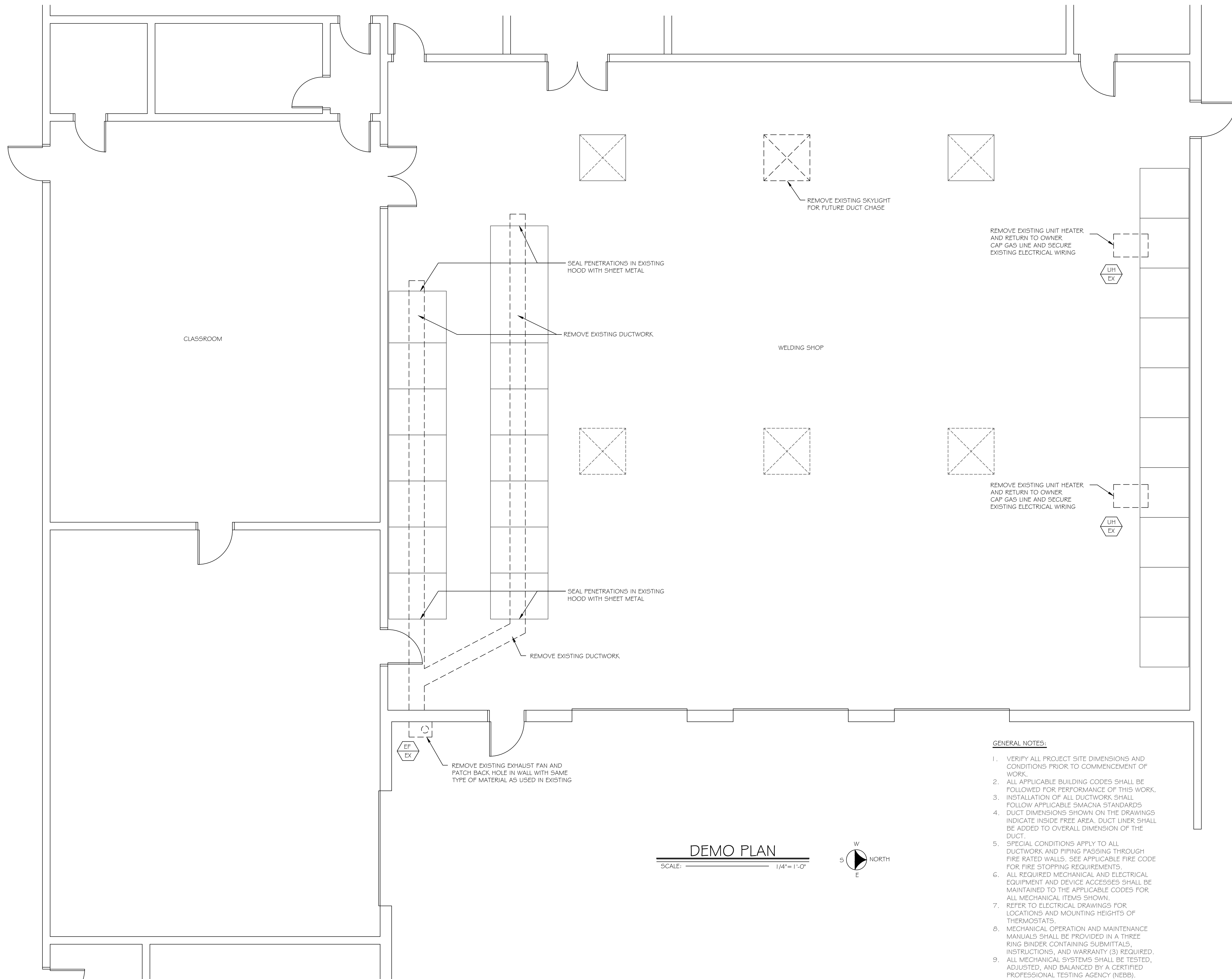
This Addendum becomes a part of the Contract Documents and modifies the original Bidding Specifications, as noted below.

**UPDATED: Welding room drawings and  
Electrical drawings to support EF-2 to 7.5 HP.**

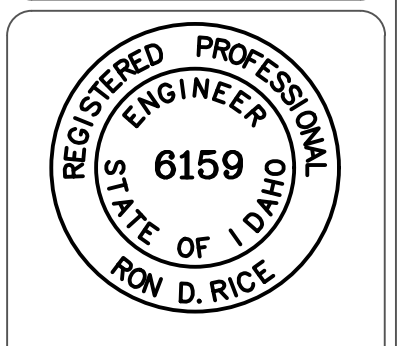
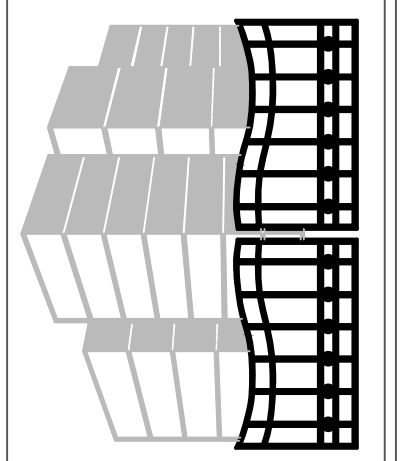
Bid opening date remains the same: April 12, 2022 at 2:00 pm

**Acknowledge Addendum No 1** on the Bid Proposal, Page 1. Failure to acknowledge Addendum No. 1 may subject the bidder to disqualification.

NO OTHER CHANGES  
END OF ADDENDUM No.1 – rlb



**Gate City**  
 ENGINEERING SERVICES  
 340 E. CLARK ST.  
 POCATELLO, ID 83204  
 208.221.9506



ORIGIN-L. DR. - ING. SIGNED BY: RON D. RICE  
 D-TITLE ORIGIN-L. SIGNED: 3-23-2022  
 ORIGIN-L. ON FILE - T  
 340 E-ST CL-RC, POC-TELLO, ID-83204

Pocatello / Chubbuck School District #25  
 Highland High School Welding Shop Exhaust System  
 1800 Bench Road  
 Pocatello, Idaho, 83021

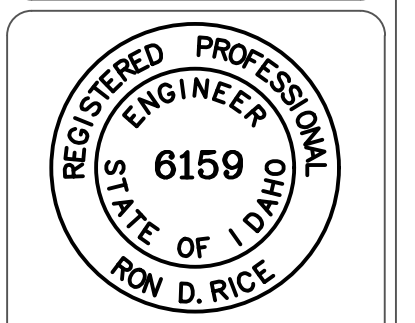
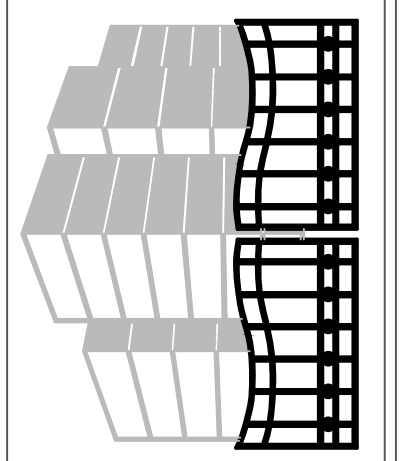
REVISIONS	
REV.	DESCRIPTION
1	4/6/22 EF2 LOCATION / DUCT / COLLECTOR SIZES -LOCATION

PROJECT No.: 2193  
 DATE: 3/23/2022  
 SCALE: As Shown  
 ENGINEER: RON RICE  
 DWG. BY: S.R.

DEMO PLAN  
 M I O

SHEET: 1

- GENERAL NOTES:**
1. VERIFY ALL PROJECT SITE DIMENSIONS AND CONDITIONS PRIOR TO COMMENCEMENT OF WORK.
  2. ALL APPLICABLE BUILDING CODES SHALL BE FOLLOWED FOR PERFORMANCE OF THIS WORK.
  3. INSTALLATION OF ALL DUCTWORK SHALL FOLLOW APPLICABLE SMACNA STANDARDS.
  4. DUCT DIMENSIONS SHOWN ON THE DRAWINGS INDICATE INSIDE FREE AREA. DUCT LINER SHALL BE ADDED TO OVERALL DIMENSION OF THE DUCT.
  5. SPECIAL CONDITIONS APPLY TO ALL DUCTWORK AND PIPING PASSING THROUGH FIRE RATED WALLS. SEE APPLICABLE FIRE CODE FOR FIRE STOPPING REQUIREMENTS.
  6. ALL REQUIRED MECHANICAL AND ELECTRICAL EQUIPMENT AND DEVICE ACCESSSES SHALL BE MAINTAINED TO THE APPLICABLE CODES FOR ALL MECHANICAL ITEMS SHOWN.
  7. REFER TO ELECTRICAL DRAWINGS FOR LOCATIONS AND MOUNTING HEIGHTS OF THERMOSTATS.
  8. MECHANICAL OPERATION AND MAINTENANCE MANUALS SHALL BE PROVIDED IN A THREE RING BINDER CONTAINING SUBMITTALS, INSTRUCTIONS, AND WARRANTY (3) REQUIRED.
  9. ALL MECHANICAL SYSTEMS SHALL BE TESTED, ADJUSTED, AND BALANCED BY A CERTIFIED PROFESSIONAL TESTING AGENCY (NEBB).



ORIGINAL DRAWING SIGNED BY: RON D. RICE  
DATE ORIGINAL SIGNED: 3-23-2022  
ORIGINAL ON FILE AT  
340 EAST CLARK, POCATELLO, IDAHO 83204

Highland High School  
Welding Shop Exhaust System  
Pocatello, Idaho

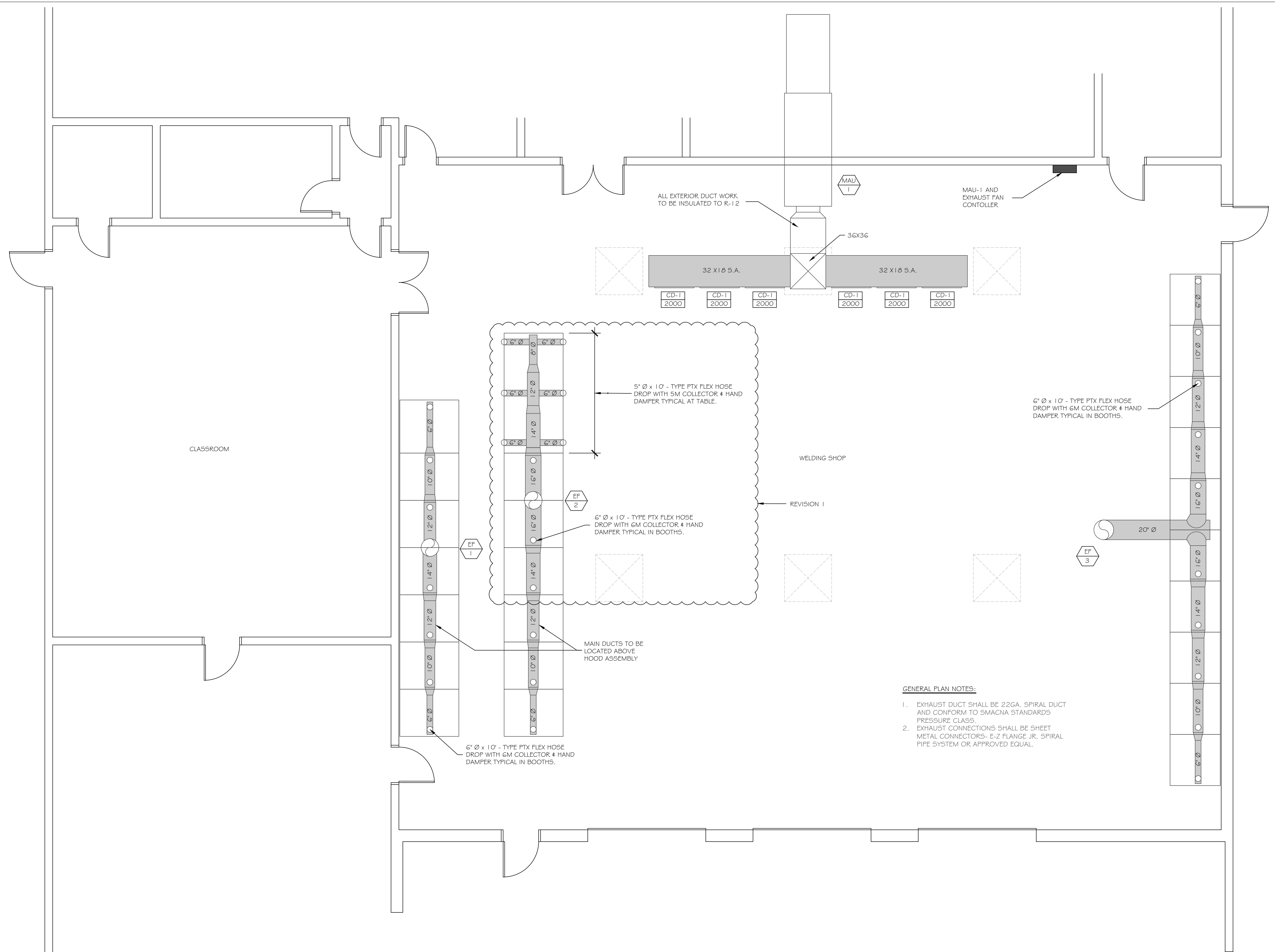
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HVAC FLOOR PLAN

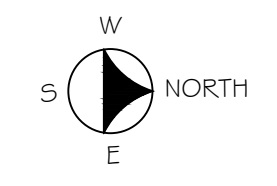
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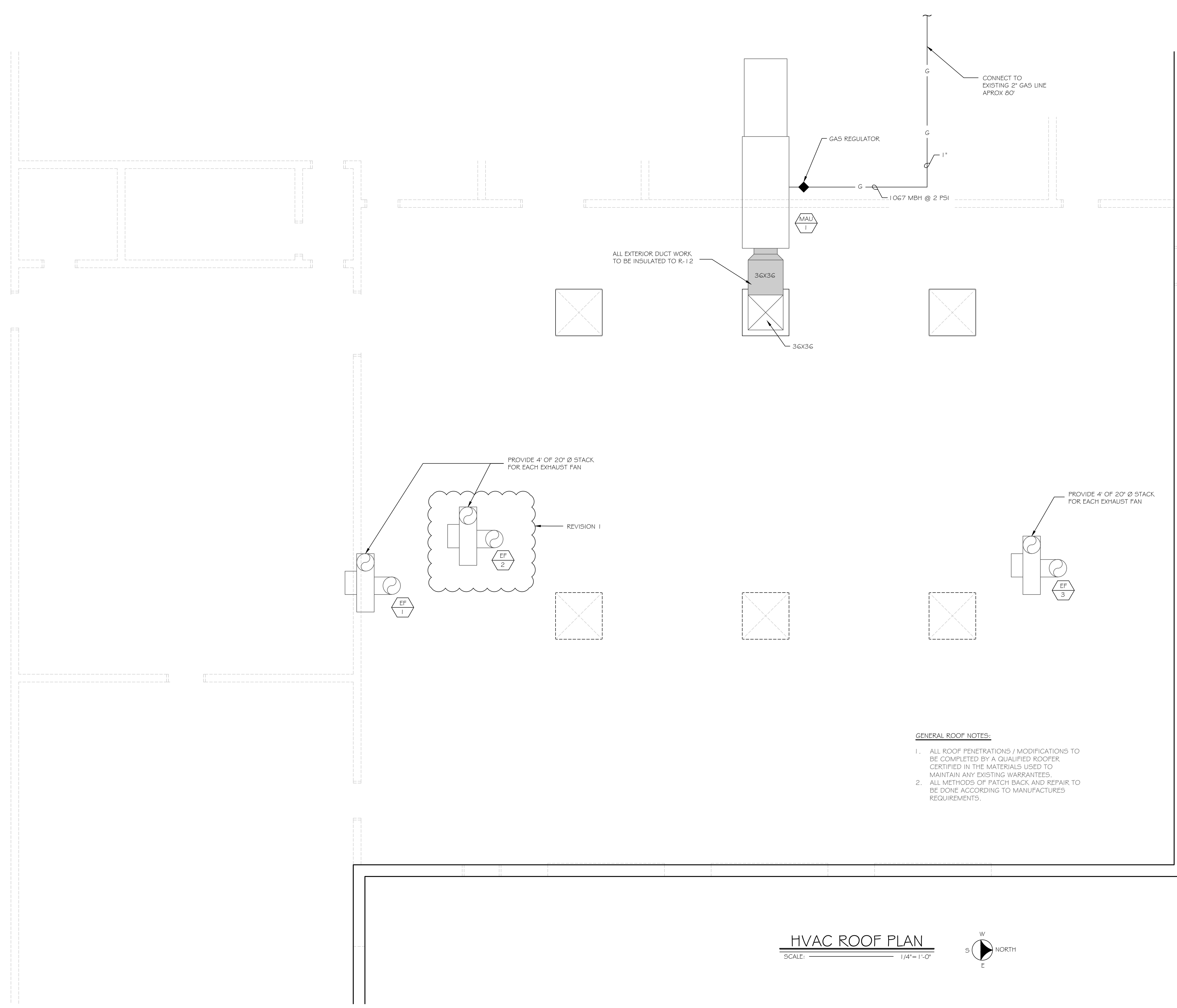
SHEET: 2



- GENERAL PLAN NOTES:**
- EXHAUST DUCT SHALL BE 22GA. SPIRAL DUCT AND CONFORM TO SMACNA STANDARDS PRESSURE CLASS.
  - EXHAUST CONNECTIONS SHALL BE SHEET METAL CONNECTORS- E-Z FLANGE JR. SPIRAL PIPE SYSTEM OR APPROVED EQUAL.

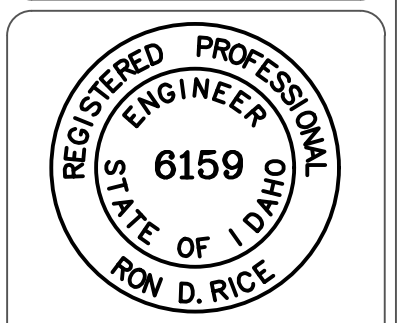
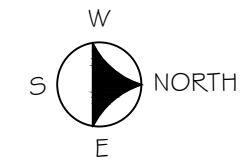
**HVAC FLOOR PLAN**  
SCALE: 1/4" = 1'-0"





- GENERAL ROOF NOTES:
1. ALL ROOF PENETRATIONS / MODIFICATIONS TO BE COMPLETED BY A QUALIFIED ROOFER CERTIFIED IN THE MATERIALS USED TO MAINTAIN ANY EXISTING WARRANTIES.
  2. ALL METHODS OF PATCH BACK AND REPAIR TO BE DONE ACCORDING TO MANUFACTURERS REQUIREMENTS.

**HVAC ROOF PLAN**  
SCALE: 1/4" = 1'-0"



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Highland High School  
Welding shop Exhaust System  
Pocatello, Idaho

REVISIONS	
REV.	DESCRIPTION
1	EF2 LOCATION / DUCT / COLLECTOR SIZES - LOCATION

PROJECT No.: 2193  
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ENGINEER: RON RICE  
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HVAC ROOF PLAN

M3.0

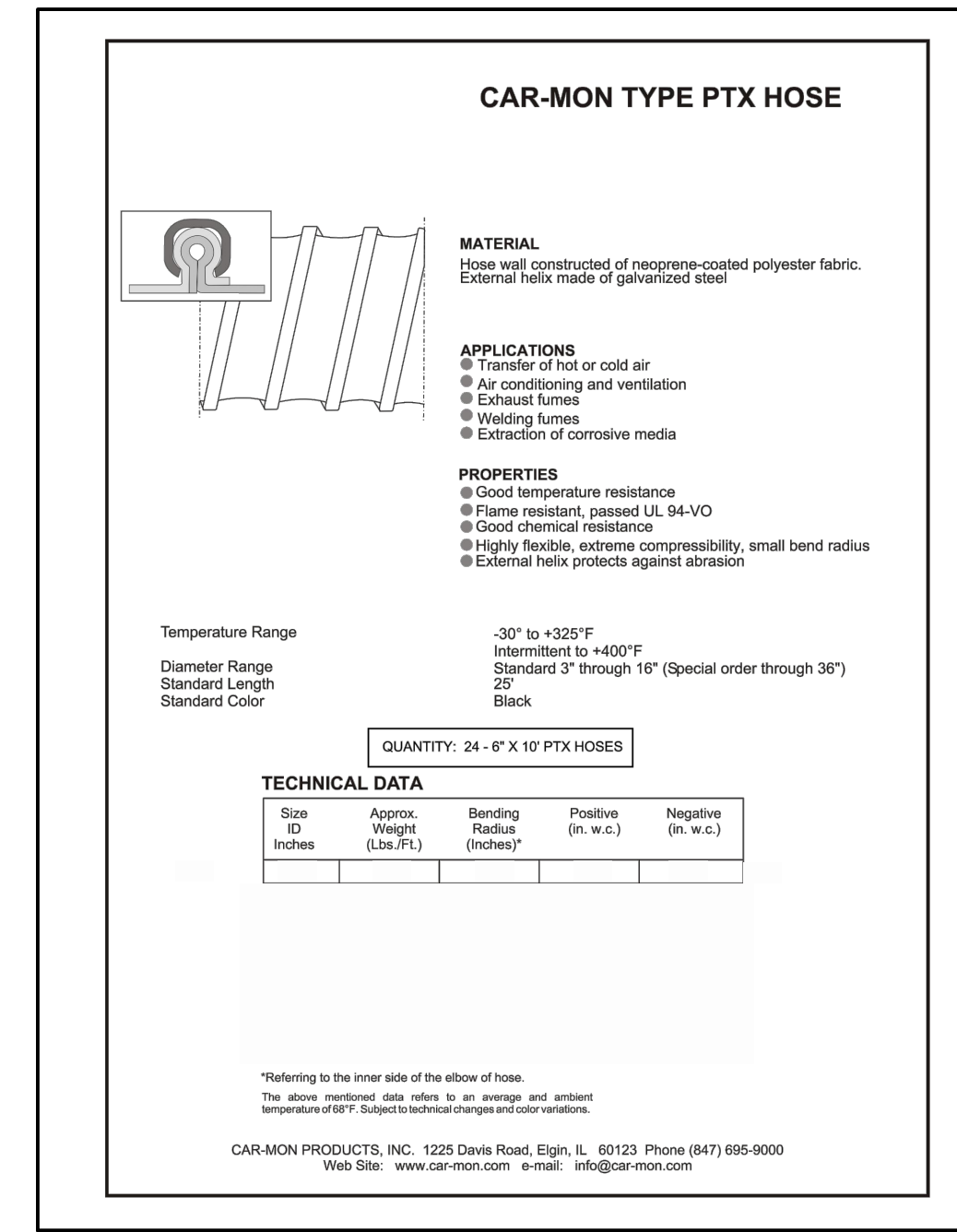
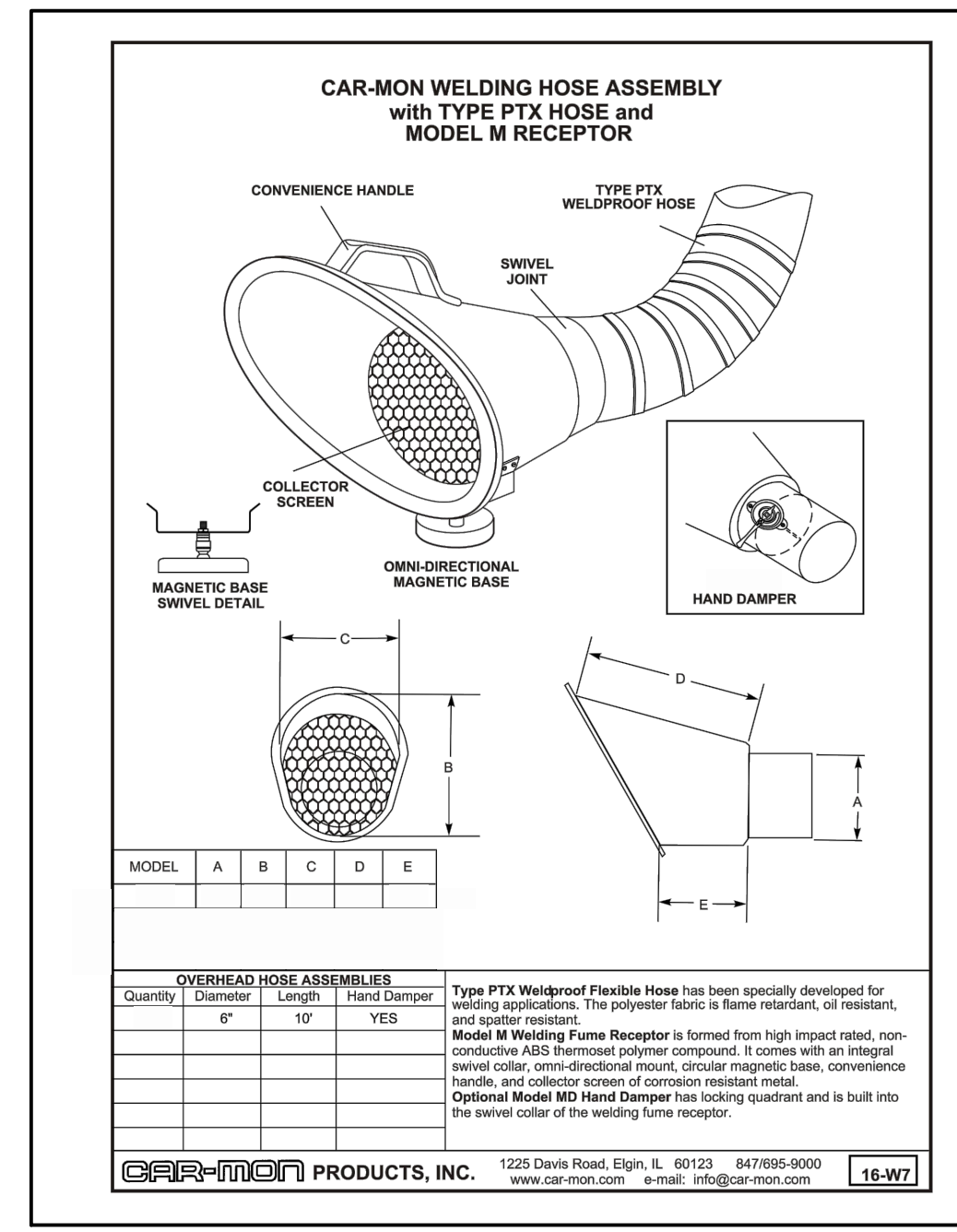
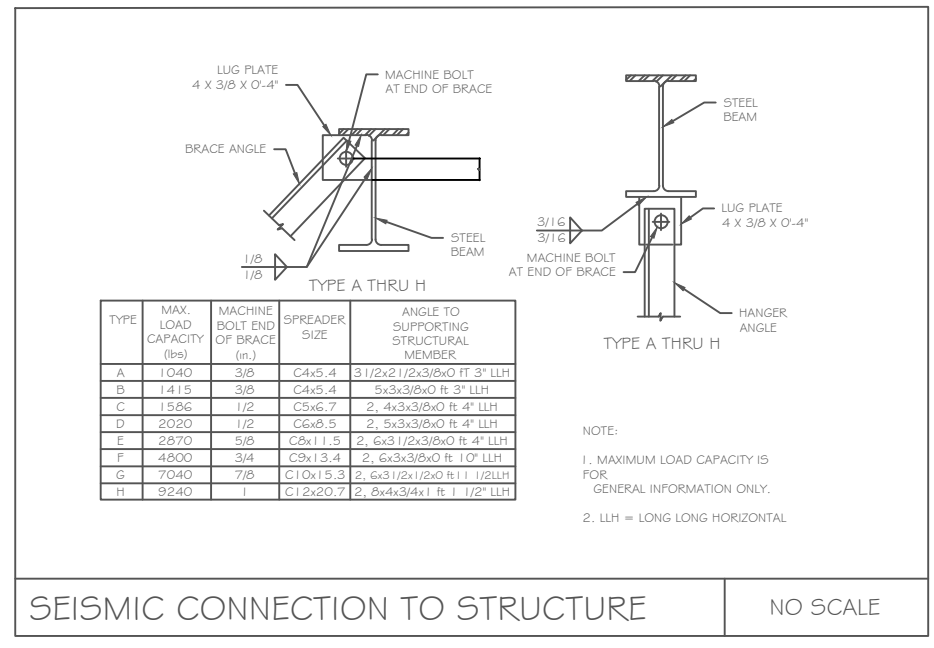
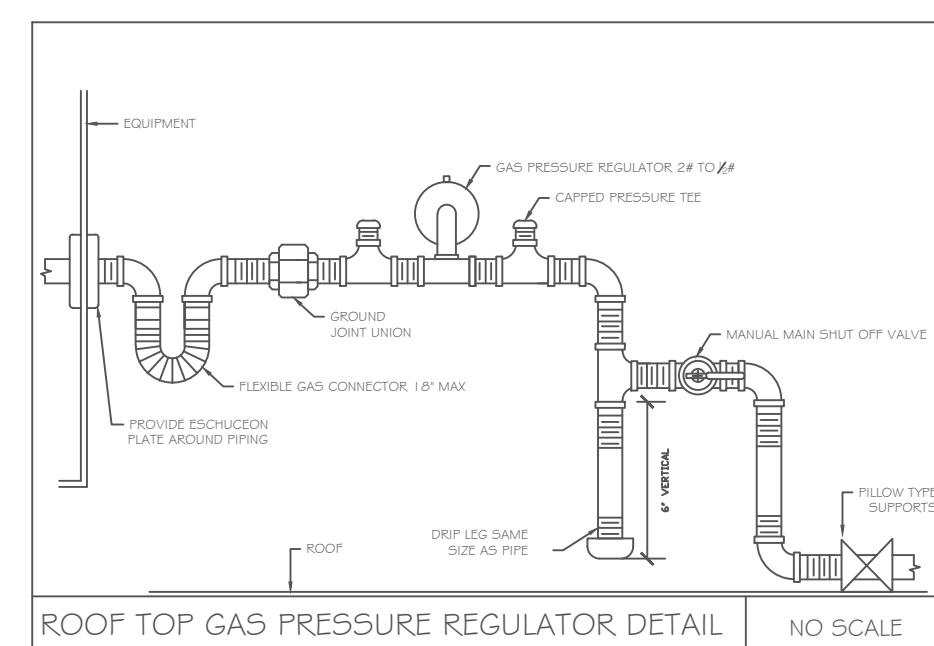
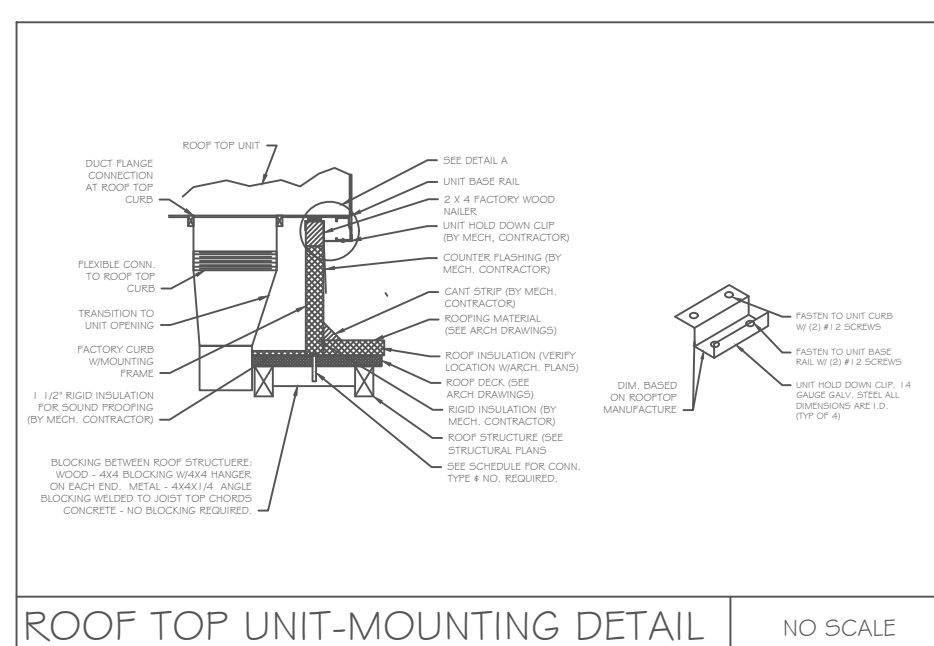
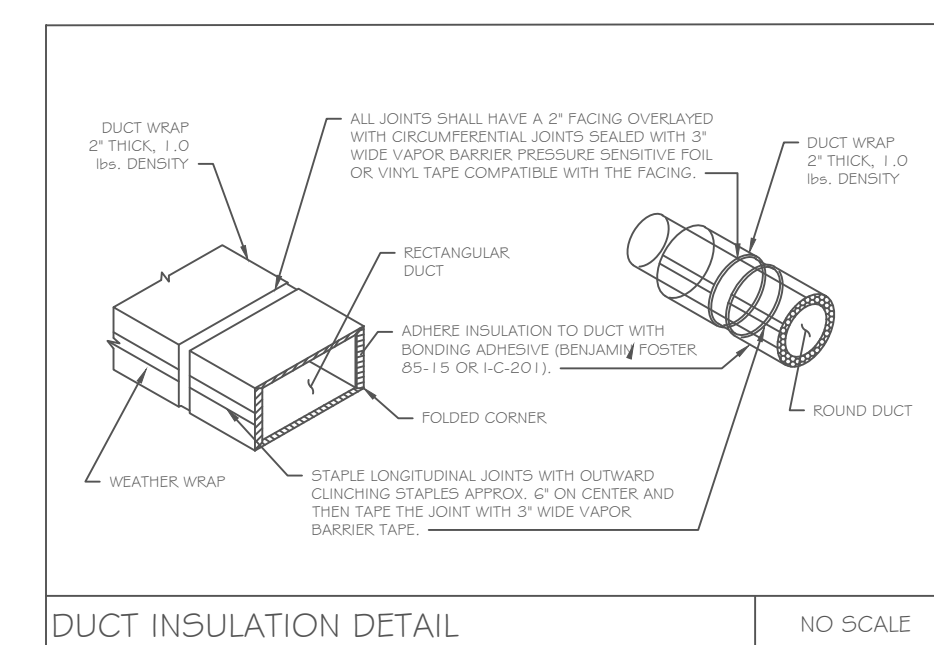
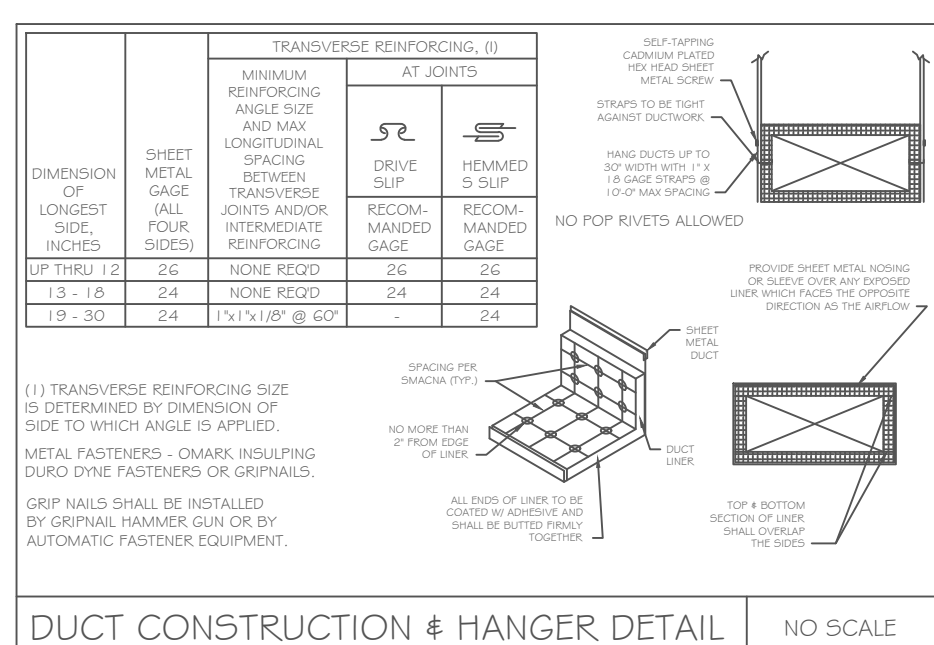
SHEET: 3

HVAC EQUIPMENT SCHEDULE														
MARK	DESCRIPTION	MANUF # MODEL NUMBER	SUPPLY FAN			VOLTAGE	MOP/ M.C.A.	HEATING INPUT	HEATING OUTPUT	LENGTH	HEIGHT	WIDTH	WEIGHT (LBS)	ACCESSORIES
			CFM	ESP	HP									
AW	DIRECT GAS FIRED MAKE-UP AIR UNIT	ECON-AIR EA4-D-1000-300	12000	.5	10	460/3/60	25 / 16.7	10667	9813	195"	52"	48"	1581	CURB ASSEMBLY, MOTORIZED INLET DAMPER, DISCONNECT, CONTROL PANEL.

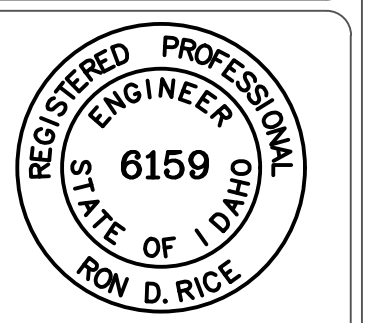
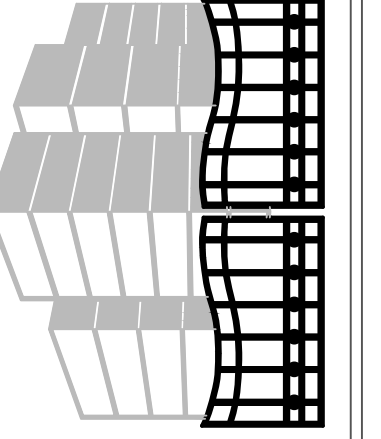
DIFFUSER, GRILLE, & REGISTER SCHEDULE							
SYMBOL	DESCRIPTION	NECK SIZE	FACE SIZE	MATERIAL	PATTERN	INSTALLATION	NOTES
CD-1	BEVELED EDGE	40 X 14	42 X 16	ALUMINUM	DOUBLE DEFLECTION	DUCT	KRUEGER 5880H

EXHAUST FAN SCHEDULE											
SYMBOL	TYPE	C.F.M.	S.P.	H.P.	CHAR.	R.P.M.	CONTROL	MANUFACTURE / MODEL	ROTATION	DISCHARGE	ACCESSORIES
EF	UTILITY SET	4200	4"	5	460/3/60	1881	FROM MAU-1 CONTROLLER	CAR-MON CMB-30	CW-UB	UP BLAST	FAN INLET / DISCHARGE FLEX CONNECTIONS, WEATHER COVER, VIBRATION RAILS, DRAIN, BACK-DRAFT DAMPER
EF	UTILITY SET	6000	4"	7.5	460/3/60	1790	FROM MAU-1 CONTROLLER	CAR-MON CMB-32	CW-UB	UP BLAST	
EF	UTILITY SET	6000	4"	7.5	460/3/60	1790	FROM MAU-1 CONTROLLER	CAR-MON CMB-32	CW-UB	UP BLAST	

REVISION 1



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Highland High School  
Welding Shop Exhaust System  
Pocatello, Idaho

REVISIONS		
REV	DATE	DESCRIPTION
1	4/6/22	EF2 LOCATION / DUCT / COLLECTOR SIZES - LOCATION

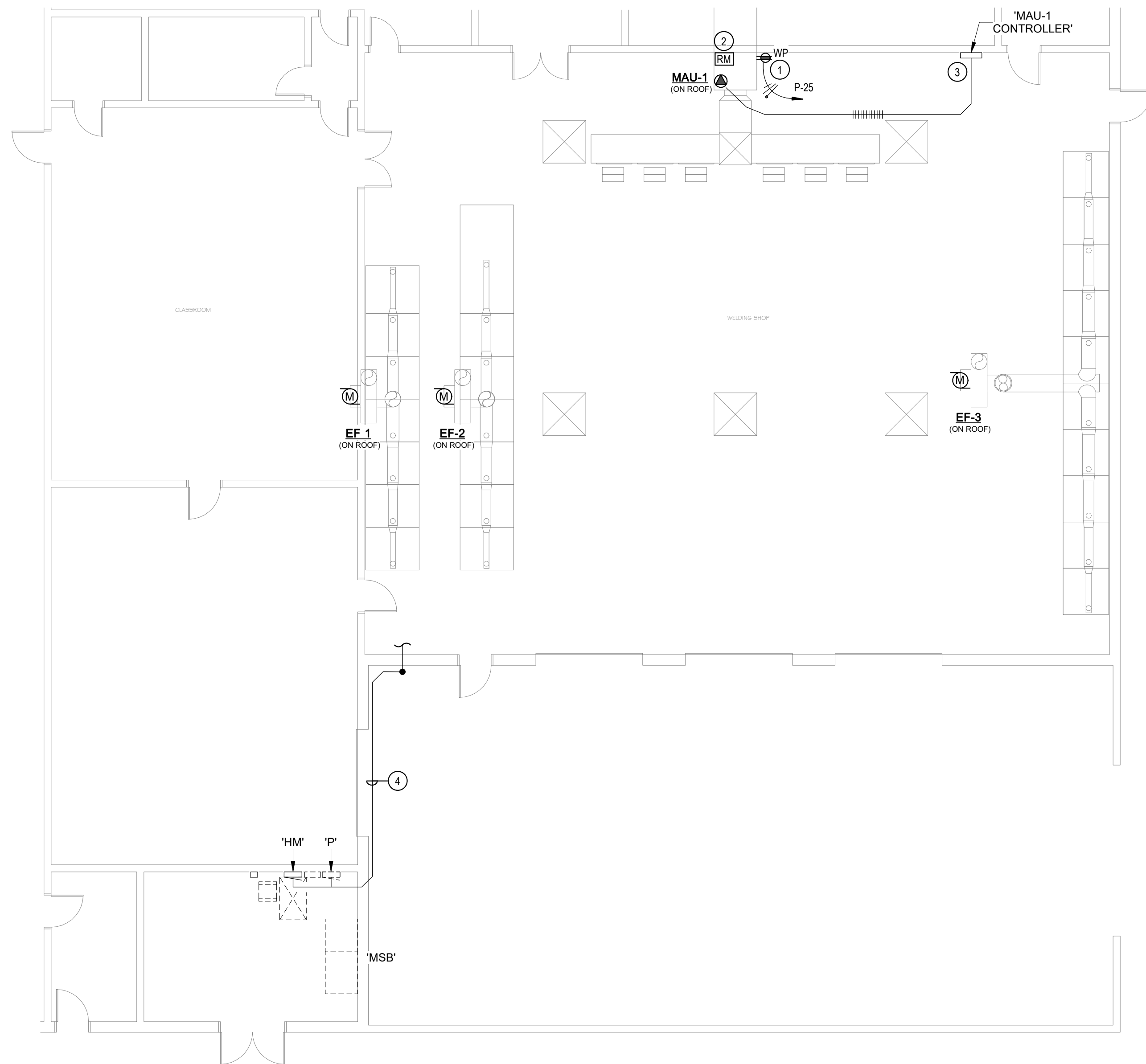
PROJECT No.: 2193  
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ENGINEER: RON RICE  
DWG. BY: S.R.

SCHEDULES  
DETAILS  
M4.0

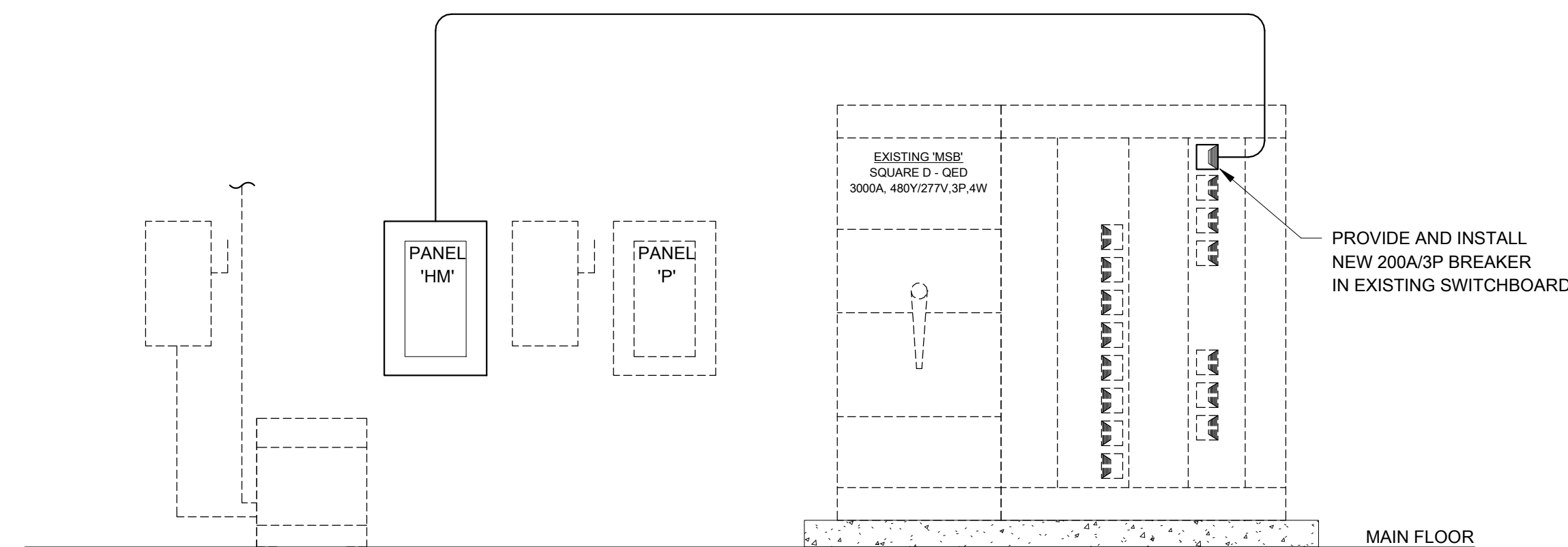
SHEET: 4







**1 MECH. EQUIPMENT CONNECTION PLAN**  
SCALE: 1/8" = 1'-0"



**2 PARTIAL POWER RISER DIAGRAM**  
SCALE: 12" = 1'-0"

MECHANICAL - MAKE-UP AIR UNIT SCHEDULE								
EQUIP. ID	VOLTS	PH.	MCA	MOCF	CIRCUIT	FEEDER	DISCONNECT	NOTES
MAU-1	480 V	3	17 A	25 A	HM-1,3,5	3/4"C, 3#10+1#10G	30 A NONFUSED - 3R	1

MECHANICAL - EXHAUST FAN SCHEDULE								
EQUIP. ID	VOLTS/PH.	HP	FLA	CONTROL	CIRCUIT	FEEDER	COMBINATION DISC./STARTER	NOTES
EF-1	480 V / 3	5	8 A	INTERLOCK W/ MAU-1	HM-2,4,6	3/4"C, 3#10+1#10G	30 A FUSED - 3R/SIZE 0	2,3
EF-2	480 V / 3	7-1/2	15 A	INTERLOCK W/ MAU-1	HM-8,10,12	3/4"C, 3#12+1#12G	30 A FUSED - 3R/SIZE 1	2,3
EF-3	480 V / 3	7-1/2	15 A	INTERLOCK W/ MAU-1	HM-14,16,18	3/4"C, 3#12+1#12G	30 A FUSED - 3R/SIZE 1	2,3

**MECHANICAL SCHEDULE NOTES:**

- E.C. SHALL PROVIDE LOCAL DISCONNECT SWITCH FOR EQUIPMENT; SIZE AND TYPE AS INDICATED IN SCHEDULE. IF FUSED DISCONNECT IS SPECIFIED FOR EQUIPMENT, FUSE PER EQUIPMENT NAMEPLATE RATING.
- E.C. SHALL PROVIDE COMBINATION STARTER/DISCONNECT SWITCH FOR EQUIPMENT; SIZE AND TYPE AS INDICATED IN SCHEDULE. PROVIDE WITH CONTROL XFMR (2) SETS OF NO/NC CONTACTS, CONTROLS WITH M.C. PRIOR TO ROUGH-IN. FUSE DISCONNECT PER EQUIPMENT NAMEPLATE RATING.
- INTERLOCK EXHAUST FAN WITH MAU-1; COORDINATE WITH MECH. CONTRACTOR.

**PANEL: HM**

**LOCATION:** MSB  
**FED FROM:** MSB  
**MOUNTING:** SURFACE  
**ENCLOSURE:** NEMA 1  
**MFG & MODEL:** SQ. D/NF SERIES

**VOLTAGE:** 480/277 Wye  
**PHASES:** 3  
**WIRES:** 4  
**BUSSING:** SEE SPEC'S  
**DIMENSIONS:** 20"W x 5.8"D x "H

**A.I.C. RATING:** 35K  
**PANEL TYPE:** MLO  
**PANEL AMPS:** 225 A  
**MBR AMPS:** N/A  
**FEED:** TOP

**PROJECT:** Highland High School Welding Shop Exhaust System

CKT	CIRCUIT DESCRIPTION	NOTE	AMPS	P	A			B			C			P	AMPS	NOTE	CIRCUIT DESCRIPTION	CKT		
					3702	2106		3702	2106		3702	2106								
3	Welding - MAU		25 A	3				3702	2106				3	15 A			Welding - EF 1	2		
5	SPARE		--	20 A	1													4		
7	SPARE		--	20 A	1			0	4157									6		
9	SPARE		--	20 A	1					0	4157			3	20 A		Welding - EF 2	10		
11	SPARE		--	20 A	1						0	4157						12		
13	SPARE		--	20 A	1			0	4157									14		
15	SPARE		--	20 A	1					0	4157			3	20 A		Welding - EF 3	16		
17	SPARE		--	20 A	1							0	4157					18		
19	SPARE		--	20 A	1			0	0					1	20 A	--	SPARE	20		
21	PREPARED SPACE		--	--	1			--	0					1	20 A	--	SPARE	22		
23	PREPARED SPACE		--	--	1			--	0					1	20 A	--	SPARE	24		
25	PREPARED SPACE		--	--	1			--	0					1	20 A	--	SPARE	26		
27	PREPARED SPACE		--	--	1			--	0					1	20 A	--	SPARE	28		
29	PREPARED SPACE		--	--	1			--	--					1	--	--	PREPARED SPACE	30		
31	PREPARED SPACE		--	--	1			--	--					1	--	--	PREPARED SPACE	32		
33	PREPARED SPACE		--	--	1			--	--					1	--	--	PREPARED SPACE	34		
35	PREPARED SPACE		--	--	1			--	--					1	--	--	PREPARED SPACE	36		
37	PREPARED SPACE		--	--	1			--	--					1	--	--	PREPARED SPACE	38		
39	PREPARED SPACE		--	--	1			--	--					1	--	--	PREPARED SPACE	40		
41	PREPARED SPACE		--	--	1			--	--					1	--	--	PREPARED SPACE	42		
<b>TOTAL LOAD:</b>						14.1 kVA	14.1 kVA	14.1 kVA												
<b>TOTAL AMPS:</b>						51 A	51 A	51 A												
<b>TOTAL ESTIMATED DEMAND AMPS:</b>						55 A														

**BRK NOTES:**  
A = ARC-FAULT BREAKER    GP = GFEPD BREAKER    LCP = CRKT TO BE ROUTED THROUGH LTG CONTROL PANEL  
S = SHUNT-TRIP BREAKER    G = GFCCI BREAKER    R = RED HANDLED, LOCK-OUT TYPE

**POWER RISER FEEDER SCHEDULE**

SOURCE	LOAD	# OF CONDUIT RUNS	CONDUIT SIZE	FEEDER SIZE	CONDUCTOR TYPE	LOAD AMPS	FEEDER BREAKER SIZE
MSB	PANEL HM	1	2"	3-#3/0, 1-#3/0, 1-#6	COPPER	51 A	200 A

**FEEDER SCHEDULE EGEND & NOTES**

- # OF RUNS INDICATES THE NUMBER OF PARALLEL RUNS FOR THE FEEDER.
- FEEDER SIZE IN SCHEDULE IS AS INDICATED BELOW:  
QTY-#PHASE SIZE, QTY-#NEUTRAL SIZE, QTY-#GROUND SIZE

QTY & SIZE OF PHASE CONDUCTOR(S)    QTY & SIZE OF NEUTRAL CONDUCTOR(S)    QTY & SIZE OF GROUND CONDUCTOR(S)

**GENERAL NOTES:**

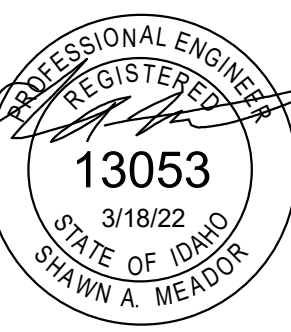
- REFER TO SYMBOL SCHEDULE SHEET FOR PROJECT GENERAL NOTES AND GENERAL NOTES ASSOCIATED WITH THE INSTALLATION OF EACH SYSTEM, INCLUDING BUT NOT LIMITED TO: LIGHTING, POWER, FIRE ALARM, SPECIAL SYSTEMS, ETC.

**FIRE ALARM EXPANSION NOTES:**

- PROVIDE ALL EQUIPMENT, MATERIALS AND LABOR NECESSARY TO EXPAND THE EXISTING BUILDING FIRE ALARM SYSTEM. THE SYSTEM ADDITION SHALL BE CONNECTED DIRECTLY TO THE EXISTING MAIN FIRE ALARM PANEL. THE INSTALLATION SHALL BE AS RECOMMENDED BY THE MANUFACTURER AND ACCEPTED BY THE LOCAL AHJ. WHEN THE SYSTEM IS COMPLETE, A FACTORY REPRESENTATIVE SHALL TEST THE SYSTEM, MAKE ADJUSTMENTS AND PLACE THE SYSTEM IN OPERATING ORDER.
- WITHIN 30 DAYS AFTER THE CONTRACT AWARD AND PRIOR TO THE PURCHASE OF ANY EQUIPMENT, THE FIRE ALARM SYSTEM CONTRACTOR SHALL SUBMIT FOR APPROVAL SIX (6) COPIES OF THE FOLLOWING:
  - A LIST OF MATERIALS THAT ARE TO BE USED ON THE PROJECT, INCLUDING MANUFACTURER, MODEL NUMBER AND TECHNICAL INFORMATION.
  - PRELIMINARY CIRCUIT DIAGRAMS SHOWING INTERCONNECTION OF ALL MONITORING, NOTIFICATION AND ANNUNCIATION DEVICES, PANELS AND WIRING COUNTS. DIAGRAMS ARE TO BE 11"X17", DONE IN A GOOD WORKMAN LIKE MANNER.
  - TECHNICAL MANUALS FOR ALL OF THE EQUIPMENT THAT IS TO BE USED ON THE PROJECT.
  - SUBMIT SHOP DRAWINGS AND REQUIRED CALCULATIONS TO THE LOCAL AHJ.
  - OBTAIN A WRITTEN LETTER OF ACCEPTANCE OF THE PROPOSED SYSTEM AND INCLUDE WITH THE SHOP DRAWING SUBMITTAL TO THE ENGINEER.
- CONTRACTOR SHALL PROVIDE AND INSTALL ALL REQUIRED POWER SUPPLIES, ELECTRONICS AND CONNECTIONS TO MODIFY EXISTING SYSTEM TO ACCEPT NEW ADDITION. THE COMPLETE SYSTEM SHALL MAINTAIN A UL LISTING.
- ELECTRICAL CONTRACTOR SHALL INCLUDE A \$2,000.00 CASH ALLOWANCE IN THE BID FOR MISCELLANEOUS ADDITIONS AND/OR REQUIREMENTS IMPOSED BY THE LOCAL AHJ.

**KEY NOTES:**

- RECEPTACLE MOUNTED TO HVAC UNIT, COORDINATE MOUNTING WITH M.C. PRIOR TO ROUGH-IN.
- PROVIDE FIRE ALARM RELAY/MONITOR MODULE FOR INTERCONNECTION TO MAKE-UP AIR UNIT. UNIT SHALL DOWN UPON ACTIVATION OF BUILDING FIRE ALARM SYSTEM.
- MAU CONTROLLER PROVIDED AND INSTALLED BY M.C. E.C. SHALL PROVIDE, INSTALL AND TERMINATE CONDUCTORS/CABLE BETWEEN CONTROLLER AND UNIT. PROVIDE 1"C, (9)#14 AND (1) 2 CONDUCTOR SHIELDED CABLE PER MAU MANUFACTURER SHOP DRAWINGS. E.C. SHALL COORDINATE FIELD VERIFY EXACT CONDUCTOR/CABLE COLORS AND REQUIREMENTS WITH M.C. PRIOR TO INSTALLATION.
- TO AVOID ROOF PENETRATIONS, CONDUITS/CONDUCTORS FOR NEW MECH. EQUIPMENT SHALL BE ROUTED THROUGH WALL AND RAN ON EXTERIOR HIGH ON WALL THEN TRANSITION TO ROOF, FIELD VERIFY EXACT CONDUIT ROUTING WITH EXISTING CONDITIONS.



Pocatello / Chubbuck School District #25  
Highland High School Welding Shop Exhaust System  
1800 Bench Road  
Pocatello, Idaho, 83201

Revisions	Date
Description: EF-2 CHANGE	04/07/22
No. 1	

Project Number: 2237  
Date: 3/10/2022  
Designed By: SAM  
Checked By: TEP

Sheet Title:  
**ELECTRICAL PLAN, RISER & SCHEDULES**

Sheet:  
**E0.1**