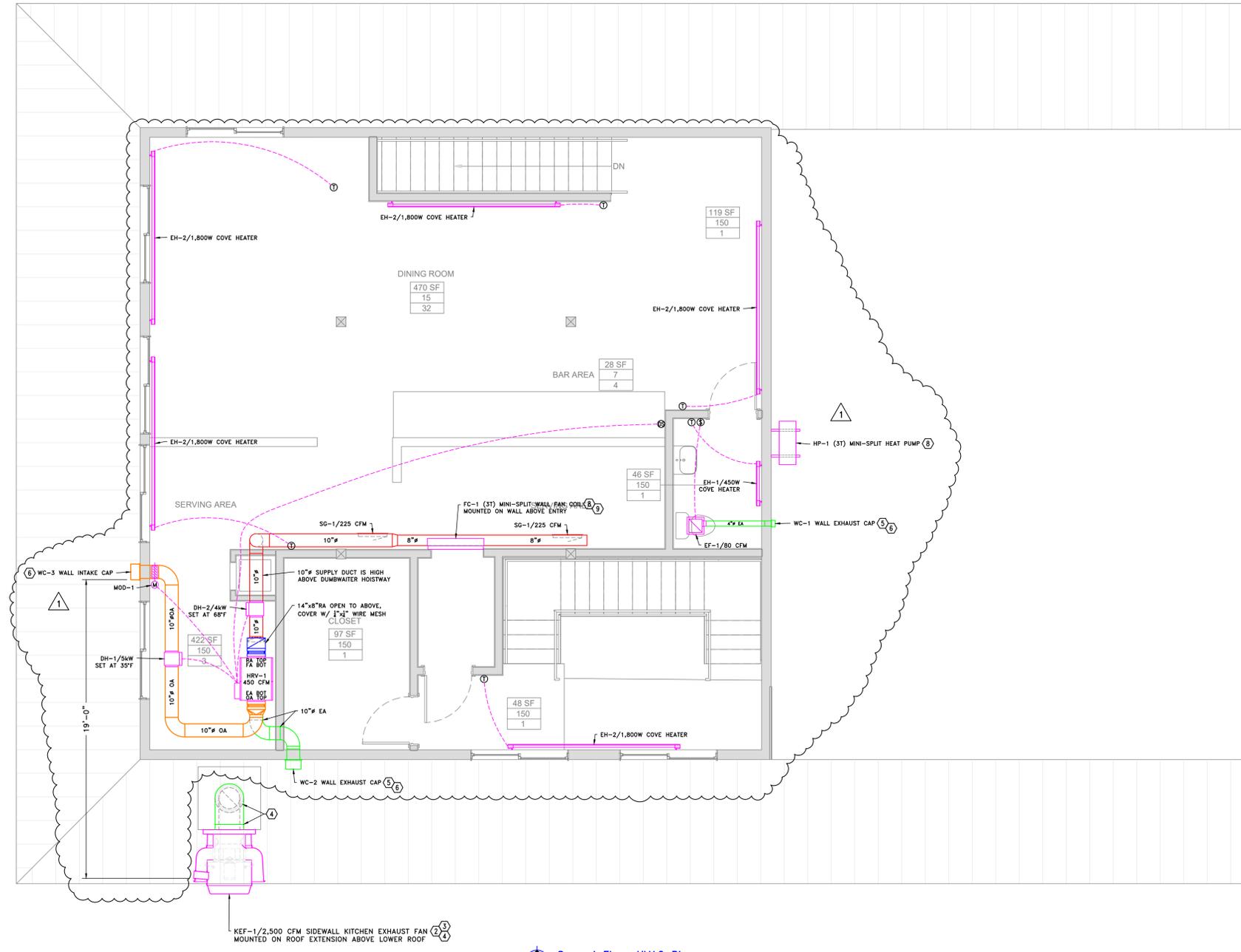


HVAC SYMBOL LEGEND	
	SUPPLY DIFFUSER, SG-X/XXX CFM
	RETURN GRILLE, RG-X/XXX CFM
	EXHAUST GRILLE, EG-X/XXX CFM
	THERMOSTAT
	FAN/VENTILATION CONTROL SWITCH
	MOTOR OPERATOR
	OCCUPANCY SENSOR
	VOLUME DAMPER (VD)

KEY NOTES - THIS SHEET

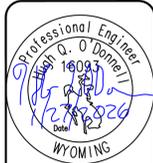
- ① ALL LOCATIONS SHOWN ARE APPROXIMATE. FIELD VERIFY & COORDINATE W/ ALL TRADES BEFORE DEMOLITION/CONSTRUCTION. ANY QUESTIONS OR DISCREPANCIES TO BE FORWARDED TO THE GENERAL CONTRACTOR/ARCHITECT/ENGINEER FOR REVIEW
- ② KITCHEN EXHAUST GREASE DUCTS & FITTINGS TO BE FACTORY BUILT CAPTIVE AIRE DW-3Z ZERO CLEARANCE TO COMBUSTIBLES DOUBLE WALL GREASE DUCT. INSTALL PER MANUFACTURER'S REQUIREMENTS & PERFORM LIGHT/SMOKE LEAK TESTING DURING INSTALLATION
- ③ REFER TO KITCHEN EQUIPMENT DRAWINGS FOR KITCHEN EQUIPMENT SPECIFICATIONS & DETAILS
- ④ 16"RID (22"#00) DW-3Z GREASE DUCT UP FROM BELOW TO EXHAUST FAN BASE
- ⑤ WALL EXHAUST CAPS TO BE LOCATED MINIMUM OF 3FT FROM GRAVITY AIR INTAKES, OPERABLE WINDOWS & DOORS EXCEPT WHERE THE EXHAUST OPENING IS LOCATED NOT LESS THAN 1 FOOT ABOVE
- ⑥ WALL EXHAUST CAPS TO BE LOCATED MINIMUM OF 10FT FROM MECHANICAL AIR INTAKES UNLESS THE EXHAUST IS MINIMUM 3FT ABOVE INTAKE OPENING
- ⑦ INSTALL EQUIPMENT W/ SERVICE CLEARANCES PER MANUFACTURER'S INSTALLATION INSTRUCTIONS & SERVICE REQUIREMENTS
- ⑧ PROVIDE 5/8"O.D. SUCTION & 1/4"O.D. LIQUID LINESET FROM HEAT PUMP (HP-1) LOCATION TO FAN COIL (FC-1) DX COIL. INSTALL & VERIFY SIZING PER MANUFACTURER'S INSTRUCTIONS
- ⑨ PROVIDE FLOOR DRAIN (FD)/CONDENSATE PUMP FOR EQUIPMENT DRAINS OR CONNECT TO NEAREST IPC/IRC APPROVED DRAIN LOCATION



Second Floor HVAC Plan
SCALE: 1/4"=1'-0"

QUANTUM GROUP ENGINEERING, PC
P.O. Box 1525 - 1420 ID-33, Suite 110, Driggs, Idaho 83422
(208) 354-1451 - (208) 523-8068 - email hughodon@ida.net
Date: 1/27/2026

TIENDA LA MEXICANA
141 HIGHWAY 89
ALPINE, WY 83001
SECOND FLOOR HVAC PLAN



M102

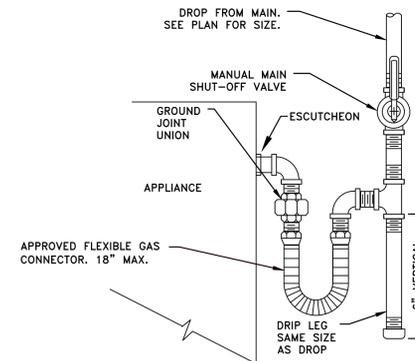
MECHANICAL SCHEDULE WITH ELECTRICAL COORDINATION

EQUIPMENT SYMBOL	IDENTIFICATION EQUIPMENT DESCRIPTION	RESPONSIBILITIES			MECHANICAL CHARACTERISTICS							ELECTRICAL CHARACTERISTICS					CONTROL					UNIT DISCONNECT			REMARKS				
		FURNISHED BY	INSTALLED BY	WIRED BY	MAKE	MODEL	GAS	Design CFM	ESP	BTU/H INPUT	BTU/H OUTPUT	WEIGHT	ELECTRIC					COOLING		HEATING			SYSTEM	SIZE		FUSES			
													VOLTAGE	Ø	HP/KW	FLA	MCA	MAX FUSE	VIA	DAY	NIGHT SETBACK	DAY					NIGHT SETBACK	ON	OFF
KEH-1	TYPE 1 KITCHEN EXHAUST HOOD	HVAC	HVAC	ELECT	CAPITVEAIRE	5424 ND-2-PSP-F	--	2,500	0.909	--	--	1,041#	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	
KEF-1	KITCHEN HOOD EXHAUST FAN	HVAC	HVAC	ELECT	CAPITVEAIRE	DU180HFA	--	2,500	1.45	--	--	239#	208	3	1.5 HP	6.6	8.3	20	KCC	--	--	--	OCC	UNOCC	CKT BRK	20	20	2	
MAU-1	PROPANE MAKEUP AIR UNIT	HVAC	HVAC	ELECT	CAPITVEAIRE	A1-D.500-15D	PROP.	2,000	0.5	175,335	161,308	964#	208	3	3 HP	8.6	23.6	40	KCC	--	--	70	60	OCC	UNOCC	CKT BRK	40	40	2
FC-1	3T MINI-SPLIT WALL FAN COIL	HVAC	HVAC	ELECT	mitsubishi	MSZ-GX36NL	--	765	--	--	36,000	37#	240	1	56 W	--	1	15	T	75	85	70	60	OCC	UNOCC	CKT BRK	15	15	3
HP-1	3T MINI-SPLIT R454B HEAT PUMP	HVAC	HVAC	ELECT	mitsubishi	MUZ-GX36NL	--	--	--	--	36,000	116#	240	1	--	--	23	25	FC-1/T	75	85	70	60	OCC	UNOCC	CKT BRK	25	25	4
HRV-1	HEAT RECOVERY VENTILATOR	HVAC	HVAC	ELECT	FANTECH	SHR 450	--	450	0.4	--	--	146#	120	1	470 W	3.92	4.9	15	OS	--	--	--	--	OCC	UNOCC	PLUG IN	15	15	5
DH-1	5kW INLINE DUCT HEATER	HVAC	HVAC	ELECT	THERMOLEC	TER-10-5-240	--	450	--	17,060	17,060	20#	240	1	5 kW	20.8	26	35	HRV-1	--	--	35	--	OCC	UNOCC	CKT BRK	35	35	6
DH-2	4kW INLINE DUCT HEATER	HVAC	HVAC	ELECT	THERMOLEC	TER-10-4-240	--	450	--	13,648	13,648	20#	240	1	4 kW	16.7	20.9	30	HRV-1	--	--	68	--	OCC	UNOCC	CKT BRK	30	30	6
EF-1	CEILING EXHAUST FAN	HVAC	HVAC	ELECT	PANASONIC	FV-0511VKS2	--	80	0.25	--	--	13.4#	120	1	20 W	0.20	0.25	15	\$	--	--	--	--	OCC	UNOCC	SWITCH	15	15	7
EH-1	ELECTRIC COVE HEATER	ELECT	ELECT	ELECT	QMARK	RCC4524C	--	--	--	--	1,535	4#	240	1	450W	1.9	2.4	20	T	--	--	70	60	OCC	UNOCC	CKT BRK	20	20	8
EH-2	ELECTRIC COVE HEATER	ELECT	ELECT	ELECT	QMARK	RCC18024C	--	--	--	--	6,142	15#	240	1	1,800W	7.5	9.4	20	T	--	--	70	60	OCC	UNOCC	CKT BRK	20	20	8

- 1) KEH-1 TO BE SUPPLIED W/ FIRE SUPPRESSION SYSTEM, SEE KITCHEN EQUIPMENT SELECTIONS FOR DETAILS.
- 2) SEE KITCHEN EQUIPMENT SELECTIONS FOR DETAILS.
- 3) FC-3 TO BE PROVIDED W/ CONDENSATE DRAIN PUMP, WALL MOUNT BRACKETS & WIRELESS REMOTE CONTROL.
- 4) HP-3 TO BE PROVIDED W/ REFRIGERANT LINESET & WALL MOUNT BRACKETS W/ VIBRATION ISOLATORS.
- 5) HRV-1 TO BE PROVIDED W/ OCCUPANCY SENSOR (OS), ECO-TOUCH CONTROL, DUCT CONNECTORS & MOUNTING BRACKETS.
- 6) DH-1 & DH-2 TO BE SUPPLIED W/ SCR ELECTRONIC TEMPERATURE CONTROLLERS W/ SUPPLY AIR TEMPERATURE SENSORS, DUCT CONNECTORS & MOUNTING BRACKETS.
- 7) EF-1 EXHAUST FAN TO BE SUPPLIED W/ BACKDRAFT DAMPER, DUCT CONNECTOR & MOUNTING BRACKETS.
- 8) EH-1 & EH-2 ELECTRIC COVE HEATERS TO BE SUPPLIED W/ MOUNTING BRACKETS & DIGITAL PROGRAMMABLE LINE VOLTAGE THERMOSTATS (T).

HVAC DIFFUSER/GRILL/LOUVER/REGISTER SCHEDULE

MARK	TYPE	VENDOR	MODEL	FRAME	FACE	DAMPER	REMARKS
SG-1	Duct Mounted Spiral Grille	Titus	S300FS	Duct	--	ASD	22"Wx4H" w/ Air Scoop Damper
WC-1	Dryer Wall Exhaust Cap	Famco	DWV4	Wall	--	BDD	4"Ø w/ Backdraft Damper, Color Per Architect
WC-2	Wall Exhaust Cap	Famco	SDWV10	Wall	--	BDD	10"Ø w/ Birdscreen & Backdraft Damper
WC-3	Wall Intake Cap	Famco	SWV10	Wall	--	--	10"Ø, w/ Birdscreen, Color Per Architect
MOD-1	Motor Operated Damper	Famco	ADC1024ES	Duct	--	N.C.	10"Ø, w/ 24v Actuator & End Switch



Gas Fixture Connection Detail
SCALE: NTS

GENERAL HVAC NOTES TO ALL SHEETS

1. INSTALL PER IMC, SMACNA & ASHRAE STANDARDS, PRESSURE CLASS 1" W.G. W/ ROUND & RECTANGULAR STYLE "A" METAL DUCT ONLY. USE FLEXIBLE DUCT ONLY TO CONNECT DIFFUSERS, MAXIMUM LENGTH TO BE 5 FEET. ALL TRANSITION DUCTWORK TO BE PER SMACNA REQUIREMENTS.
2. DUCTWORK PRIORITY IS SUPPLY, RETURN, FRESH AIR & EXHAUST. RECTANGULAR & SQUARE DUCTWORK SIZES SHOWN ARE NET OUTSIDE W/ 1" LINER. SQUARE & RECTANGULAR SUPPLY DUCTS, RETURN DUCTS & RETURN PLENUMS TO BE INSULATED & LINED W/ 1" HIGH DENSITY FIBERGLASS MAT INSULATION. ROUND DUCTS TO BE WRAPPED W/ 1/2" FOIL FACE INSULATION.
3. ALL SUPPLY & RETURN AIR DUCTS & PLENUMS SHALL BE INSULATED W/ A MINIMUM OF R-5 INSULATION WHEN LOCATED IN UNCONDITIONED SPACES & W/ A MINIMUM OF R-8 INSULATION WHEN LOCATED OUTSIDE THE BUILDING. WHEN LOCATED WITHIN A BUILDING ENVELOPE ASSEMBLY, THE DUCT OR PLENUM SHALL BE SEPARATED FROM THE BUILDING EXTERIOR OR UNCONDITIONED OR EXEMPT SPACES BY A MINIMUM OF R-8 INSULATION.
4. ALL JOINTS, LONGITUDINAL & TRANSVERSE SEAMS & CONNECTIONS IN DUCTWORK SHALL BE SECURELY FASTENED & SEALED W/ WELDS, GASKETS, MASTICS, MASTIC PLUS EMBEDDED FABRIC SYSTEMS OR TAPES, TAPES & MASTICS USED TO SEAL DUCTWORK SHALL BE LISTED & LABELED IN ACCORDANCE W/ UL 181A OR UL 181B. DUCT CONNECTIONS TO FLANGES OF AIR DISTRIBUTION SYSTEM EQUIPMENT SHALL BE SEALED & MECHANICALLY FASTENED. UNLISTED DUCT TAPE IS NOT PERMITTED AS A SEALANT ON ANY METAL DUCTS.
5. INSTALL ALL EQUIPMENT PER MANUFACTURERS REQUIREMENTS. ALL HVAC EQUIPMENT TO BE UL LISTED.
6. EQUIPMENT DRAINS TO MEET IPC & MANUFACTURERS REQUIREMENTS.
7. ALL LINE VOLTAGE WIRING BY ELECTRICAL CONTRACTOR PER ELECTRICAL DRAWINGS & SPECIFICATIONS.
8. ALL LOW VOLTAGE WIRING BY MECHANICAL CONTRACTOR PER MECHANICAL DRAWINGS & SPECIFICATIONS.
9. ALL LOW VOLTAGE WIRING SHALL BE PLENUM RATED OR INSTALLED IN CONDUIT BY MECHANICAL CONTRACTOR. CONDUIT TO BE INSTALLED BY ELECTRICAL CONTRACTOR W/ WORK CONFORMING TO ELECTRICAL DRAWINGS & SPECIFICATIONS.
10. THE ENTIRE INSTALLATION SHALL COMPLY W/ ALL LOCAL & STATE CODES & OTHER AUTHORITIES HAVING JURISDICTION. CONTRACTOR SHALL SECURE, PAY & SCHEDULE ALL PERMITS, FEES, OUTAGES & INSPECTIONS.
11. THERMOSTATS & TEMPERATURE CONTROL DEVICES ARE TO BE INSTALLED SO THAT THEY ARE NOT INFLUENCED BY ADJACENT HEAT PRODUCING LOADS SUCH AS AUDIO/VISUAL EQUIPMENT, COMPUTERS, LIGHTING CONTROL PANELS & SIMILAR COMPONENTS. INSTALL THERMOSTATS & TEMPERATURE CONTROL DEVICES OUT OF DIRECT SUNLIGHT CONDITIONS. COORDINATE LOCATIONS W/ ARCHITECT & GENERAL CONTRACTOR.
12. THERMOSTATS ARE TO HAVE INTERNET BASED CONNECTIVITY.

HANGER SCHEDULE

ROUND DUCT HANGER SIZES				
DUCT DIA.	ROUND HANGERS	STRAP HANGERS	MAX. SPACING	# OF HANGERS
0 - 18"	8 Ga. WIRE	1" X 16 Ga.	10' -0"	1
19" - 36"	8 Ga. WIRE	2" X 12 Ga.	10' -0"	1
37" - 50"	2" X 16 Ga.	2" X 16 Ga.	10' -0"	1
51" - 84"	2" X 16 Ga.	2" X 16 Ga.	10' -0"	2

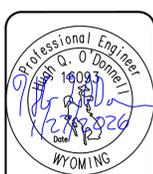
RECTANGULAR DUCT HANGER SIZES				
LONGEST DIMENSION	ROUND HANGERS	STRAP HANGERS	TRAPEZE SHELF ANGLES	MAX. SPACING
0 - 18"	8 Ga. WIRE	1" X 16 Ga.	1 X 1 X 1/8"	10' -0"
19" - 30"	8 Ga. WIRE	1" X 16 Ga.	1 X 1 X 1/8"	10' -0"
31" - 42"	1/4" ROD	1" X 16 Ga.	1.5 X 1.5 X 1/8"	10' -0"
43" - 60"	3/8" ROD	1" X 16 Ga.	1.5 X 1.5 X 1/8"	10' -0"
61" - 84"	3/8" ROD	2" X 16 Ga.	2 X 2 X 1/8"	8' -0"
85" - 96"	3/8" ROD	2" X 16 Ga.	2 X 2 X 3/16"	8' -0"
97" +	3/8" ROD	2" X 16 Ga.	2 X 2 X 1/4"	8' -0"

INSULATION SCHEDULE

SYSTEM TYPE	FLUID TEMP. RANGE (°F)	INSULATION TYPE
HOT & COLD WATER ABOVE FLOOR	40° - 180°	1" CLOSED CELL POLYOLEFIN
HOT & COLD WATER BELOW FLOOR	40° - 180°	1/2" ARMAFLEX
ROOF DRAIN & OVERFLOW DRAIN	35° - 100°	1" FIBERGLASS W/ VAPOR BARRIER
REFRIGERANT	35° - 140°	1/2" ARMAFLEX

QUANTUM GROUP ENGINEERING, PC
 P.O. Box 1525 - 1420 ID-33, Suite 110, Driggs, Idaho 83422
 (208) 354-1451 - (208) 523-8068 - email hughodon@ida.net
 Date: 1/27/2026
 File: 25-034-M

TIENDA LA MEXICANA
 141 HIGHWAY 89
 ALPINE, WY 83001
 HVAC SCHEDULES & NOTES



M600