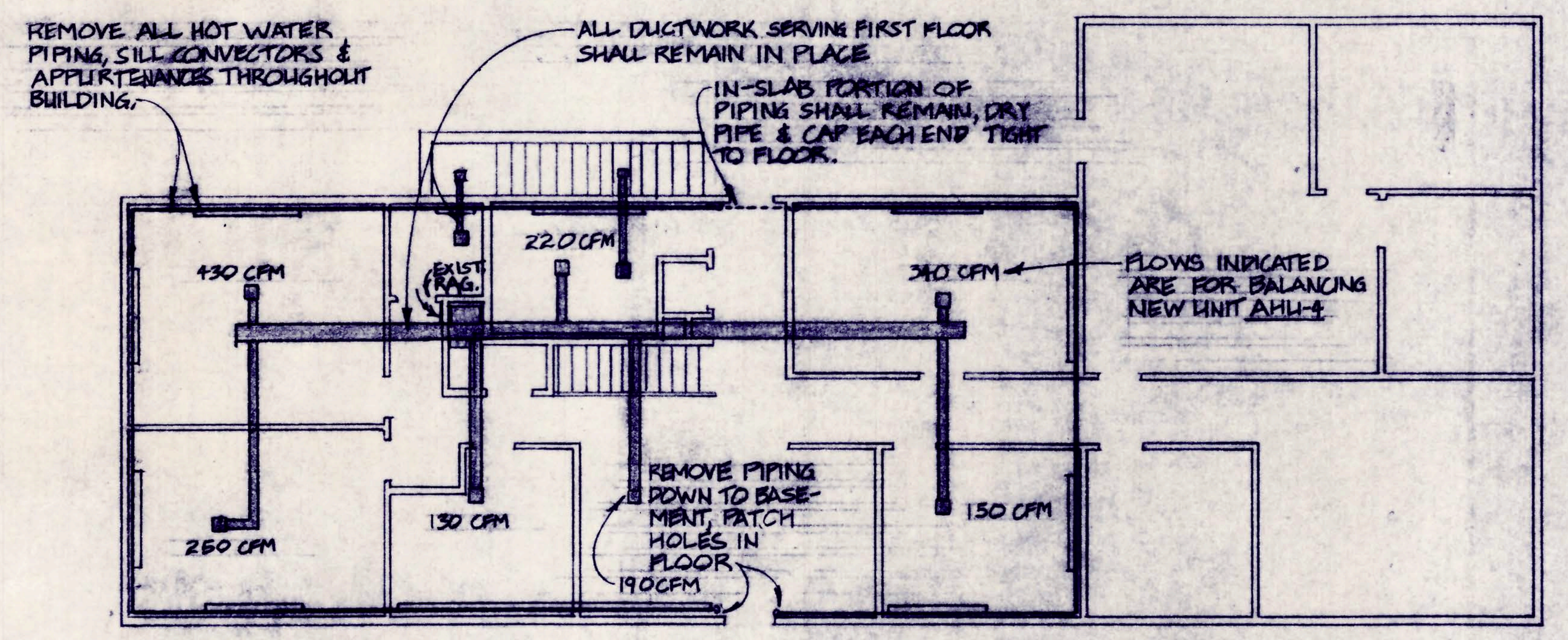
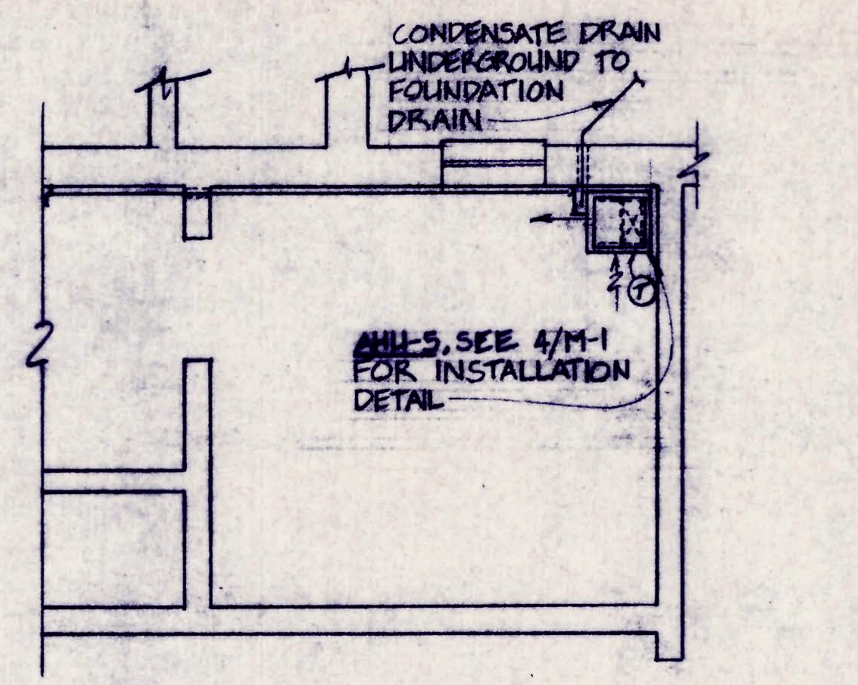


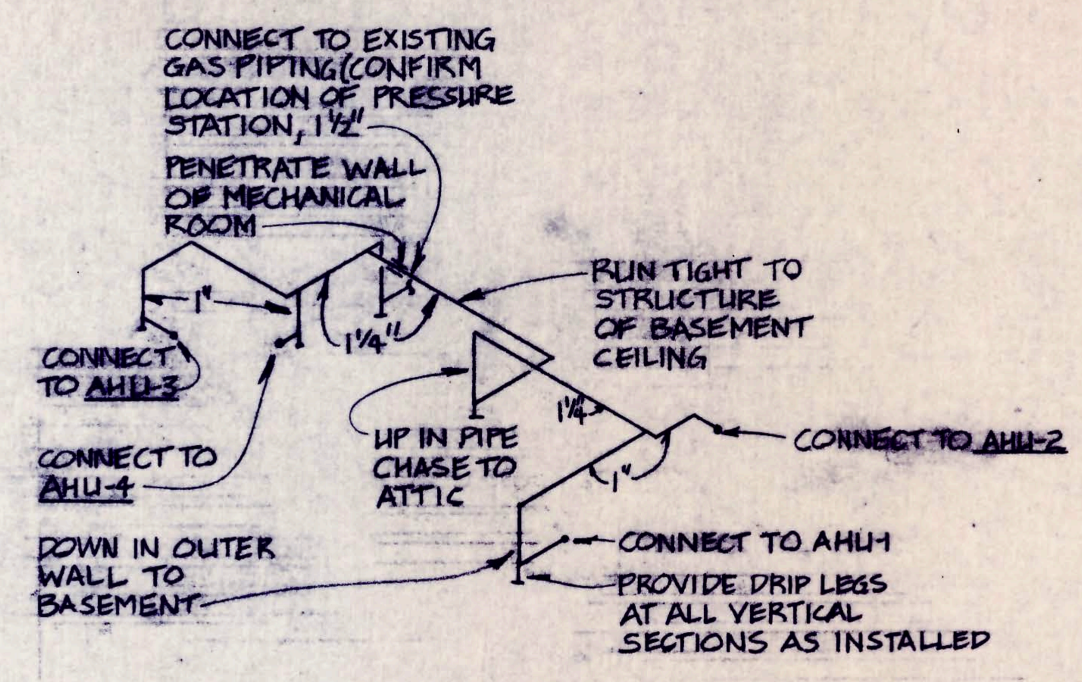
1/M-1 FIRST FLOOR DEMOLITION PLAN-HVAC

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



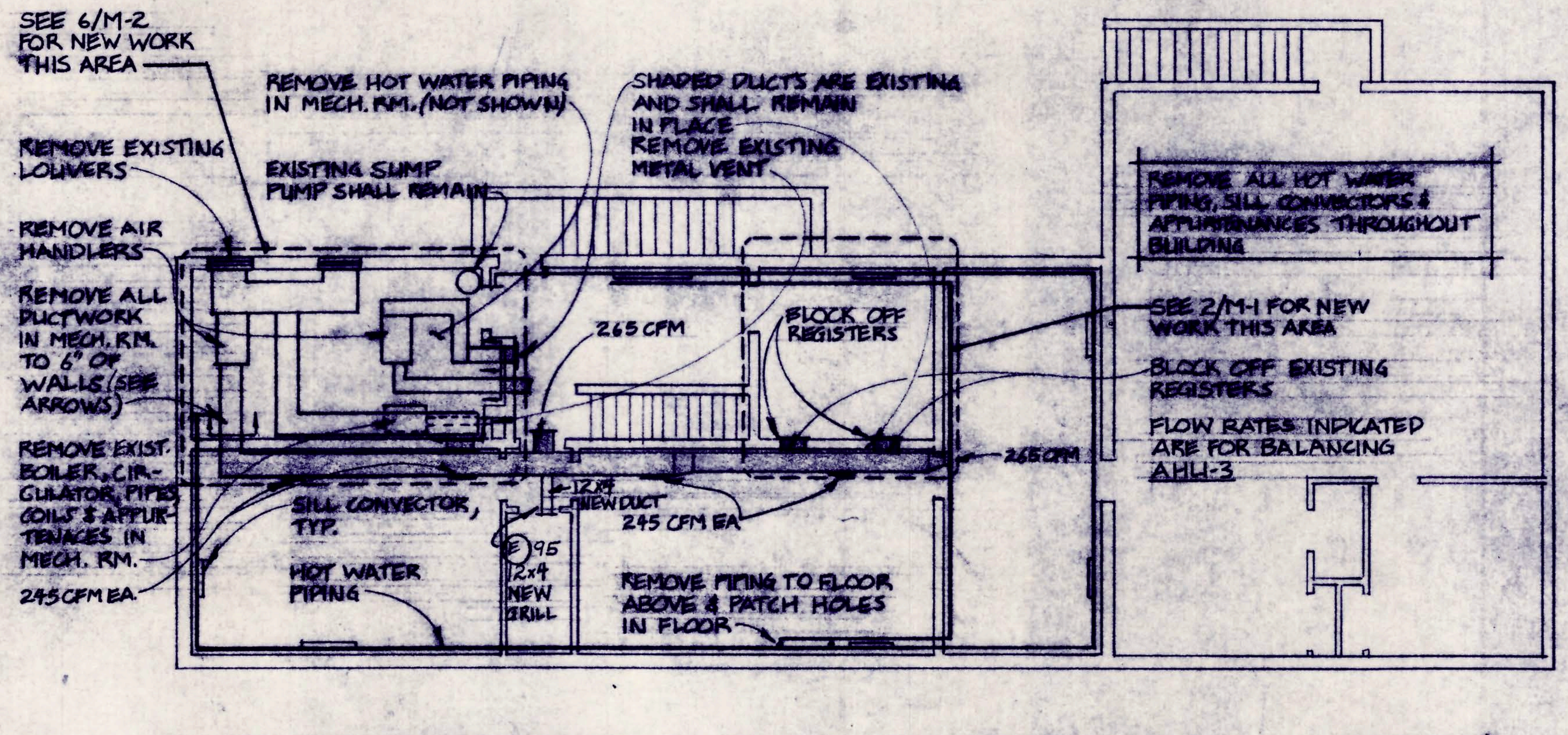
2/M-1 COMPUTER ROOM PARTIAL PLAN

SCALE: 1/4"=1'-0"



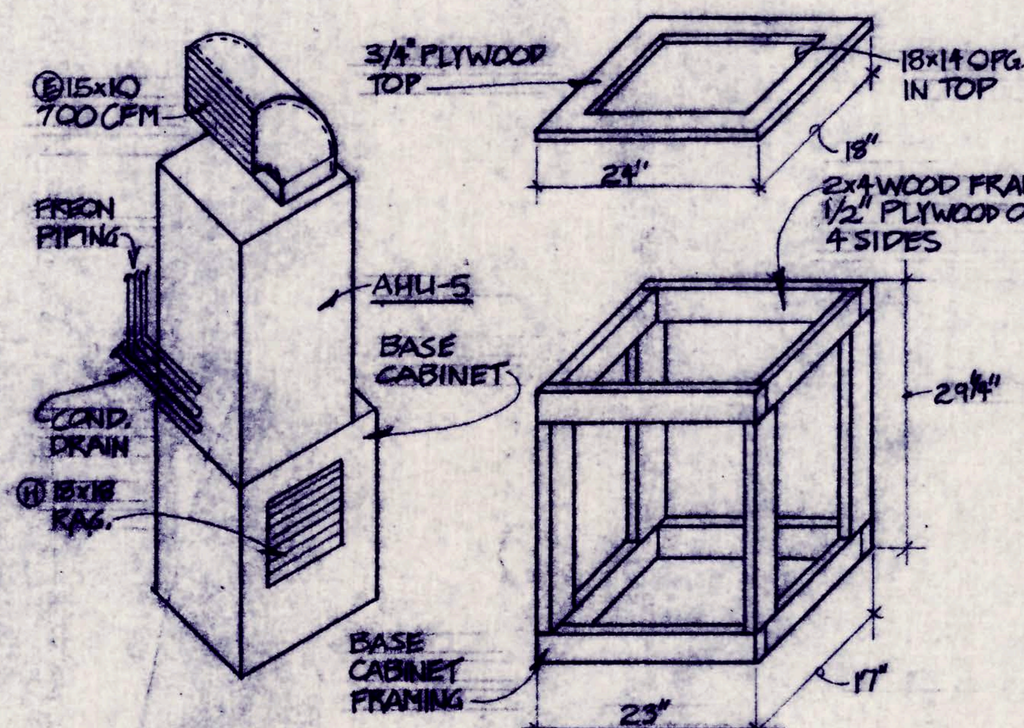
8/M-1 GAS PIPING SCHEMATIC

NO SCALE



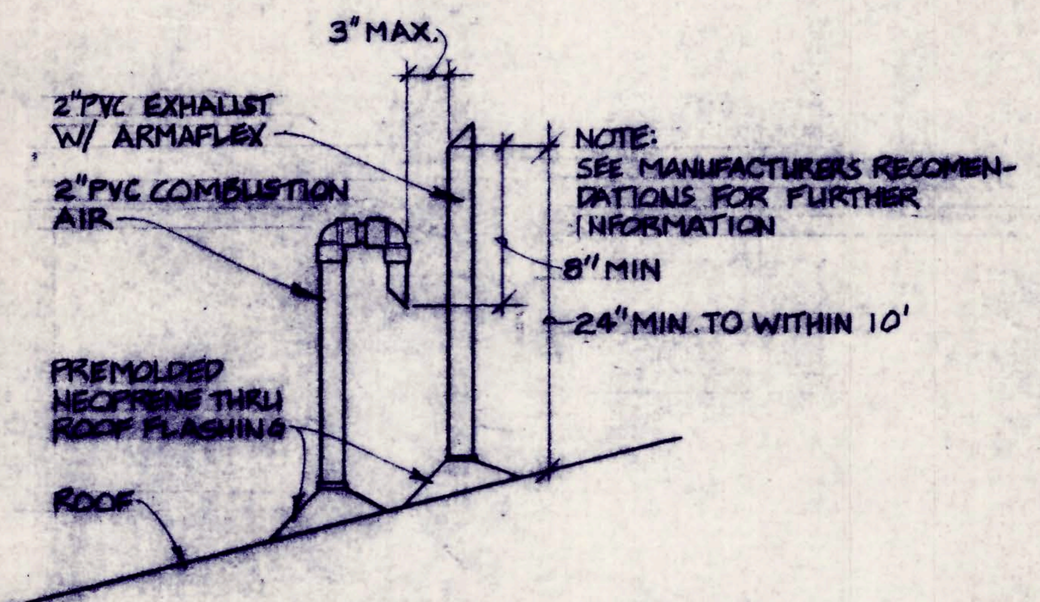
3/M-1 BASEMENT DEMOLITION PLAN-HVAC

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



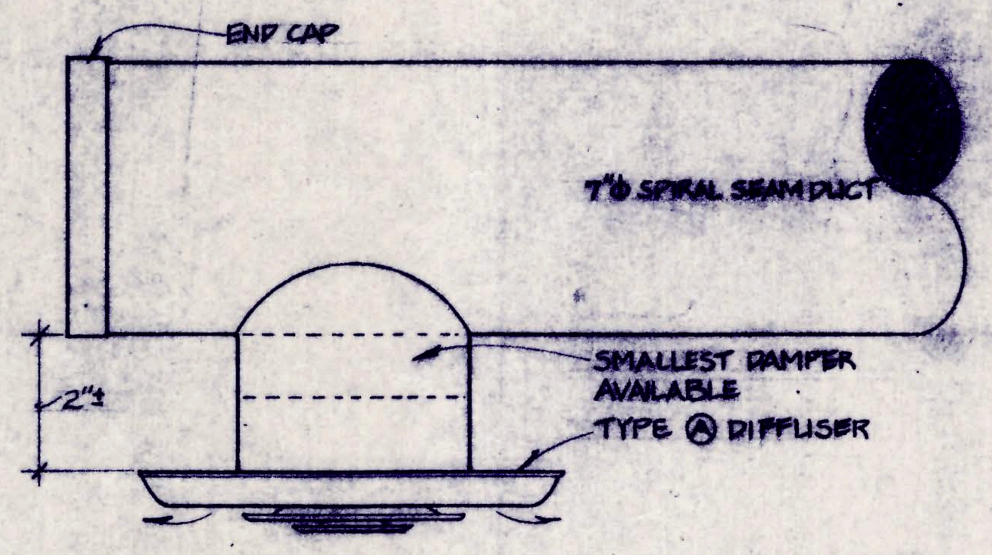
4/M-1 AHU-5 DETAILS

NO SCALE



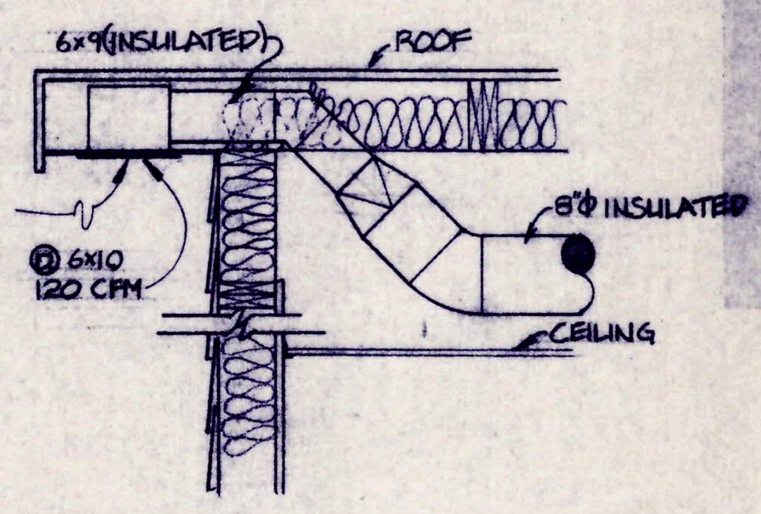
5/M-1 PIPING TERMINATION AT ROOF

NO SCALE



6/M-1 DIFFUSER DETAIL

SCALE: 3"=1'-0"



7/M-1 SOFFIT DETAIL

SCALE: 3/4"=1'-0"

MECHANICAL EQUIPMENT
GRILLS, REGISTERS & DIFFUSERS

Symbol	Type	Neck(size)	Model #	Frame #	Brand	Notes
A	Round Ceiling Diffuser	6"	RM-1	-	Krueger	1
B	24 x 24 Perforated Face	8"	4504	23	Krueger	2
C	24 x 24 Perforated Face	22 x 22	S-80PSFF-1	1 1/2" Flat Tee Bar Boarder	Krueger	3
D	Louver Face Grill	6 x 10	S580H-Z	851	Krueger	4
E	Louver Face Grill	See Plans	5885V	855	Krueger	5
F	Door Grill	See Plans	5600A	-	Krueger	
G	Return Grill	-	-	-	-	6
H	Louver Face Grill	See Plans	S585H	854	Krueger	
J	Round Socket Jet	5"	RPL-B	-	Krueger	7

Notes:
1. Provide damper #RP-12 (Butterfly damper)
2. 4 way blow
3. Include 1" filter frame & filter
4. Provide insect screen behind grill face
5. Include opposed blade damper
6. Existing return grill, clean & repaint to match surrounding surface
7. Conventionally called "Punkah Louvers"

Air Conditioning System

System	Description
1. (AHU-1, CU-1)	Provide 24,200 BTUH cooling at ARI condiotions. 11.00 SEER. AHU shall be balanced to provide 870 CFM @ .65" W.G. Heating capacity shall be 74,000 BTUH with a 93.0% AFUE at DOE rating conditions. Design based on Lennox Models HS-19-261 condensing unit. C14-26FF upflow evaporator coil. G14Q4-80 gas furnace.
2. (AHU-2, CU-2)	Provide 47,500 BTUH cooling at ARI conditions. 11.65 SEER. AHU shall be balanced to provide 1535 CFM @ .60" W.G. Heating capacity shall be 72,000 BTUH with a 93.4% AFUE at DOE rating conditions. Design based on Lennox Models HS-14-511 condensing unit. CH16-51FF horizontal evaporator coil. GSR14Q4/5-80 gas furnace.
3. (AHU-3, CU-3)	Provide 46,500 BTUH cooling at ARI conditions. 11.35 SEER. AHU shall be balanced to provide [illegible] CFM @ .6" W.G. Heating capacity shall be 74,000 BTUH with a 93% AFUE at DOE rating conditions. Design based on Lennox Models HS-14-511 condensing unit. C16-46FF upflow evaporator coil. G14Q5-80 gas furnace.
4. (AHU-4, CU-4)	Provide 58,000 BTUH cooling at ARI conditions. 11.00 SEER. AHUS shall be balanced to provide [illegible] CFM @ .6" W.G. Heating capacity shall be 95,000 BTUH with a 95% AFUE at DOE rating conditions. Design based on Lennox Models HS-14-651 condensing unit. C16-51FF upflow evaporator coil. G14Q4/5-100 gas furnace.
5. (AHU-5, CU-5)	Provide 19,600 BTUH cooling at ARI conditions. 10.05 SEER. AHU shall be balanced to provide 700 CFM @ .20" W.G. Heating capacity shall be 9,500 BTUH electric heat. Design based on Lennox Models HS-16-211 condensing unit. CB18-21 blower powered evaporator unit.

All condensing units shall be provided with Low ambient operating equipment. CU-5 shall be equiped to operate down to 0°F outdoor ambient conditions. Suction accumulators shall be provided where recomended by the manufacturer due to excessive refrigerant line length.

GENERAL NOTES

1) These plans are schematic in nature and not intended to show all possible conditions. The contractor shall provide a complete operational HVAC system as indicated on these drawings. The contractor is responsible for investigating existing conditions prior to submitting the bid. No adjustments in contract amount due to existing conditions will be allowed.

2) All existing ductwork shall remain except that in the existing mechanical room which shall be removed up to approximately 6 inches of the walls. All air handlers and associated equipment shall also be removed.

3) All piping and associated devices and the hydronic heating system (including the boiler, vent and pump) shall be removed. Care shall be taken to insure no damage is done to the structure or to architectural features. Any damage or openings due to removed equipment shall be patched and otherwise repaired to match adjacent materials and finishes.

4) All equipment and materials removed shall become the property of the contractor who shall remove same from government property as soon as practical after demolition. No final inspection will be conducted until all demolished materials are removed from the site.

5) This design is based upon specific manufacturers. The contractor will be responsible for making any adjustments to the design to accommodate other manufacturers if used. No adjustments in contract amount shall be allowed due to changes resulting from contractor's selection of different manufacturers. Further, the Government's checking of submittals shall not consider specific dimensions of the equipment. The contractor shall be solely responsible for insuring the selection of suitable equipment which meets the characteristics described by these documents.

6) Thermostats shall be located where shown 54" AFF. Thermostats for units 3 & 4 shall be mounted where existing thermostats are located.

7) Ductwork dimensions are net inside dimensions. Sheetmetal shall be increased to accommodate liner as needed.

8) The interior of ducts which are visible through grill faces shall be painted flat black.

9) Spiral seam steel or aluminum flat oval and round ducts only shall be used in the basement level new construction. These ducts are exposed to the interior space. The contractor shall be careful to install these ducts level and straight. All joints shall be either by welds or screwed slip joints. Strap hanger shall not be perforated having only holes needed to attach to duct and to ceiling. All strap hangers shall be trimmed square with burrs removed. Attachment to ceilings shall be consistent from strap to strap with excess material snipped away to provide a square end. These ducts and straps shall be painted as directed on the Architectural finish schedule.

10) All other ducts shall be either rectangular or round, metal or fiberglass subject to the constraints of space and connections to equipment. Flexible ducting runouts will not be allowed.

11) All existing controls shall be removed. Conduits for control wiring shall remain for routing of new control wiring where possible.

12) All existing ductwork which remains shall be vacuumed clean on the interior. All diffusers which remain shall be removed, cleaned of dirt and rust and reinstalled.

13) CONTRACTOR SHALL PROVIDE CONCRETE PADS INDICATED & AS RECOMMENDED BY THE MANUFACTURER FOR ALL CU'S & AHU'S EXCEPT AHU'S 2 & 5.

U.S. DEPARTMENT OF AGRICULTURE FOREST SERVICE REGION 8	DESIGNED PCB CHECKED ACK DRAWN PCB CHECKED PCB ACK	APPROVED Bruce Mendes REG. ENG. Jim Milner ASST. REG. ENG.	LONDON RANGER OFFICE ADDITION	MECHANICAL - NOTES, DEMOLITION, DETAILS	DATE APR 14, 1987 DRAWING No B-8609	SHEET M-1 OF 2

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