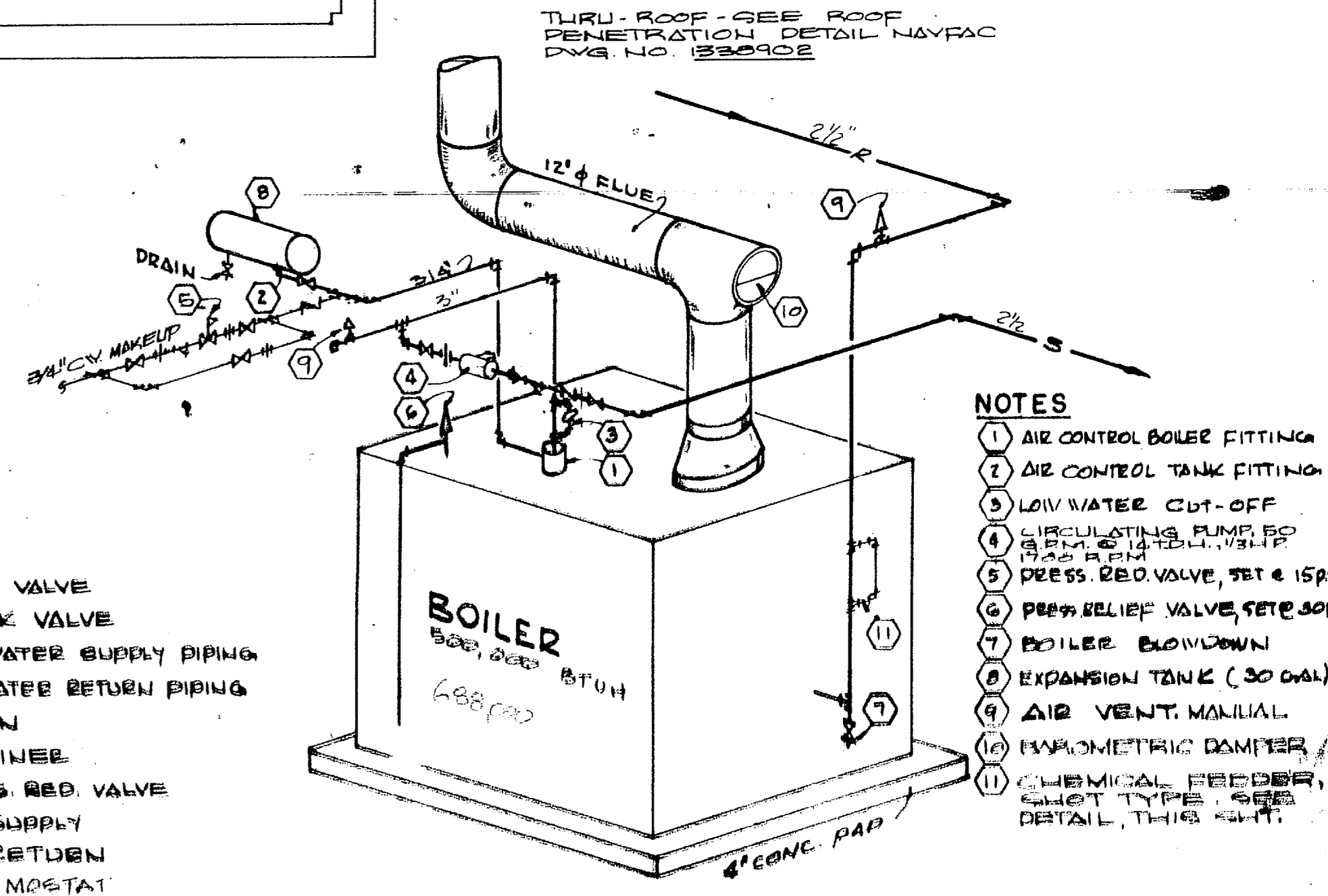
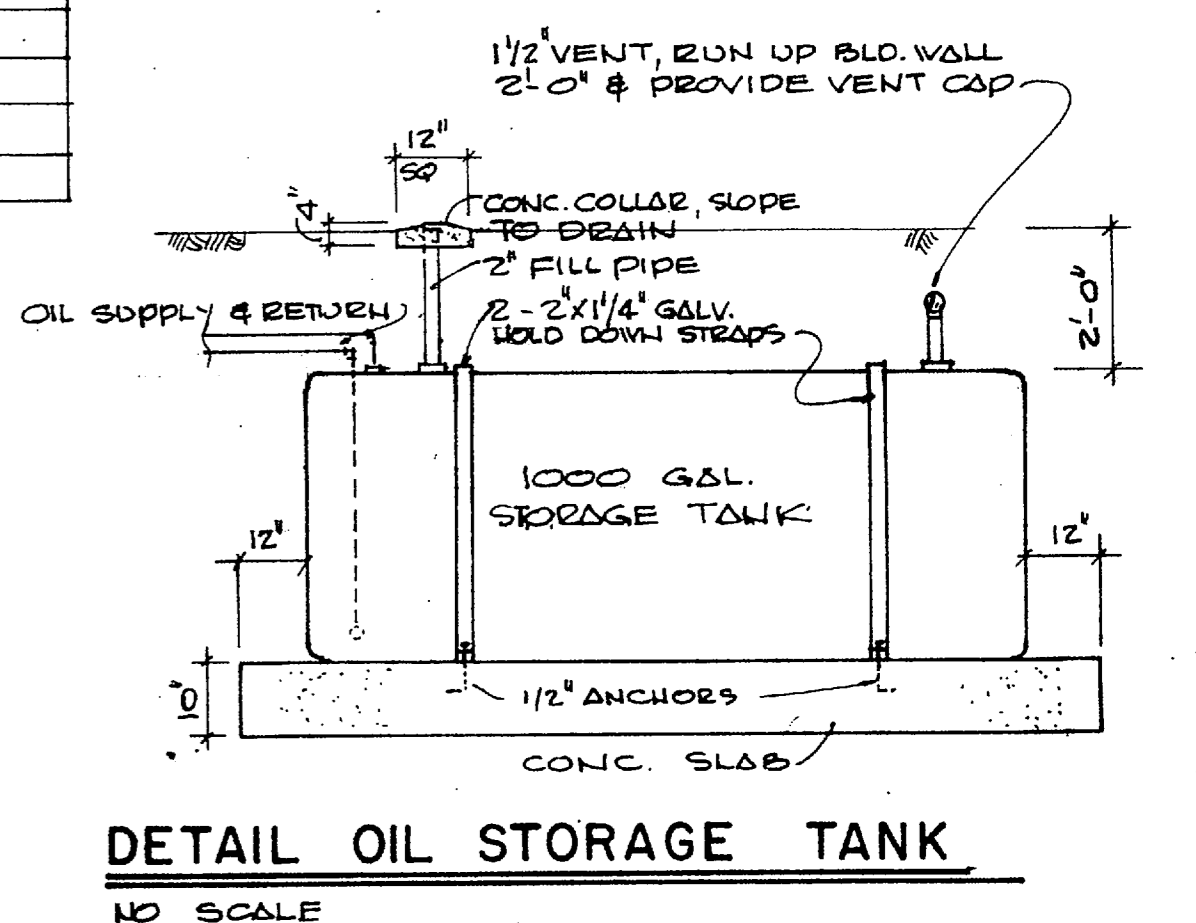
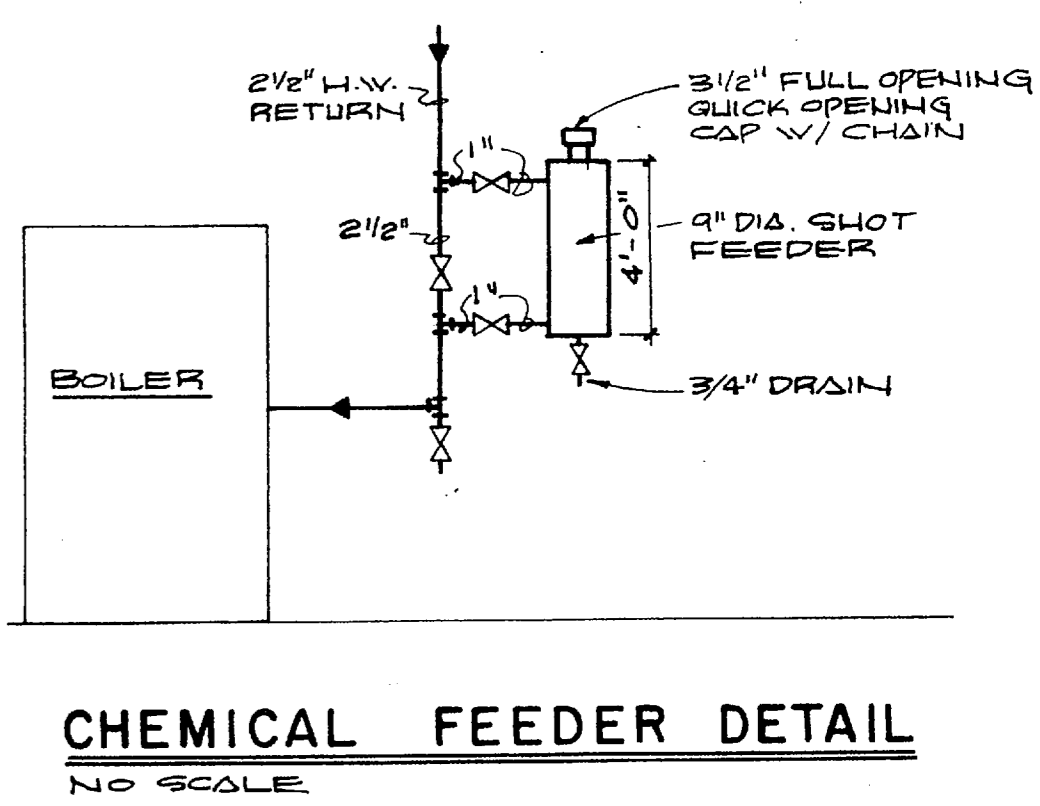
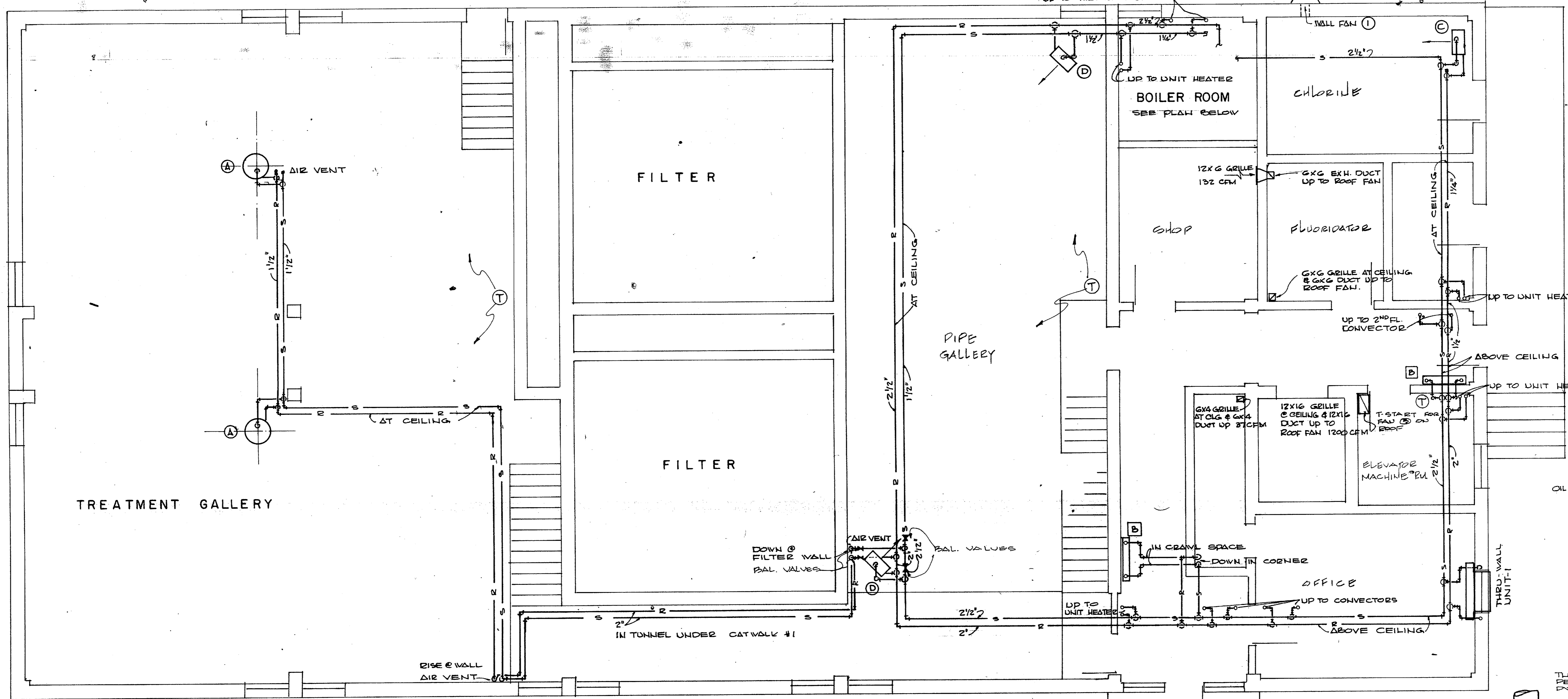


REVISIONS			
SYM	DESCRIPTION	DATE	APPROVED
AS BUILT		8-1-73	JRB

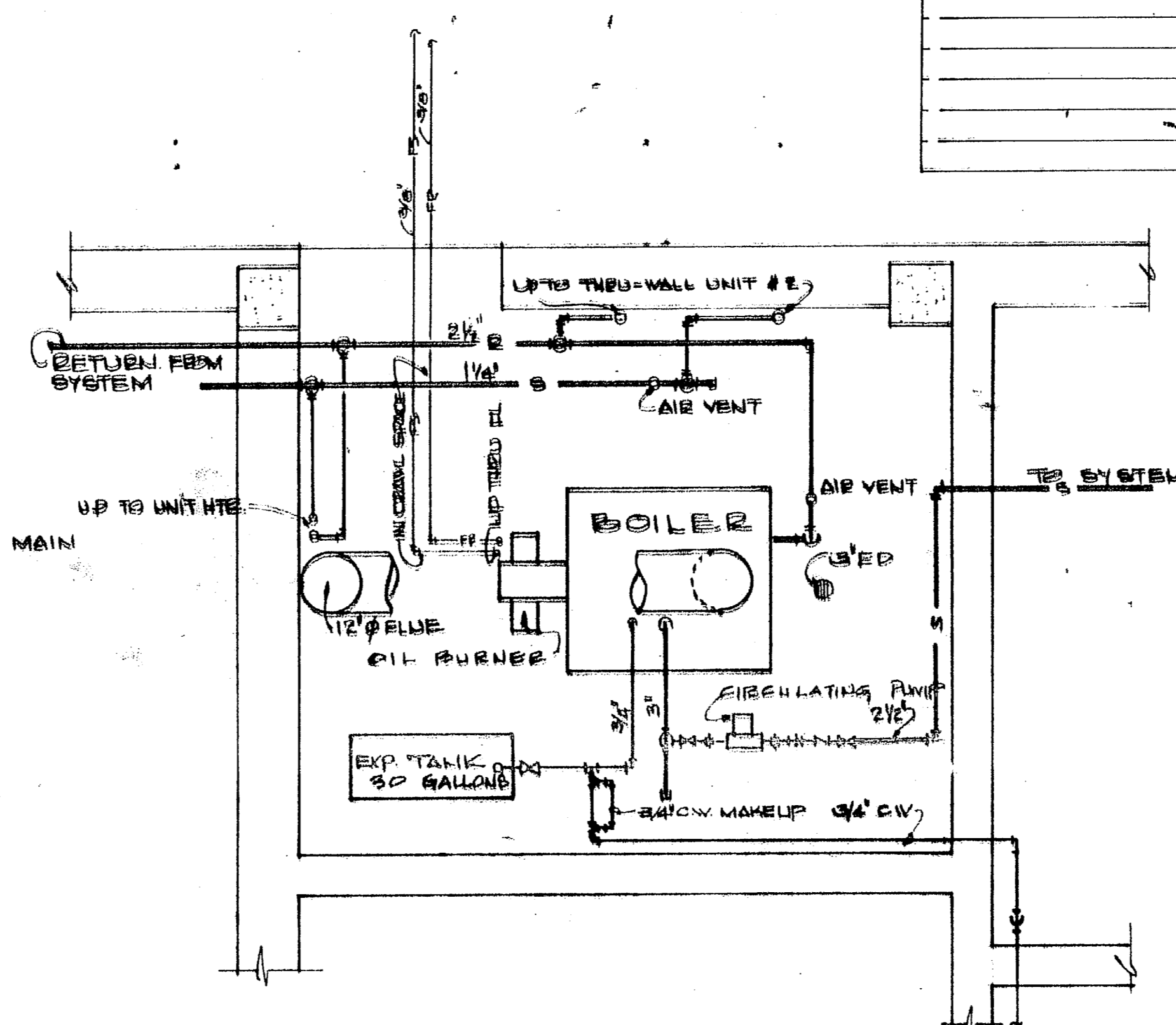
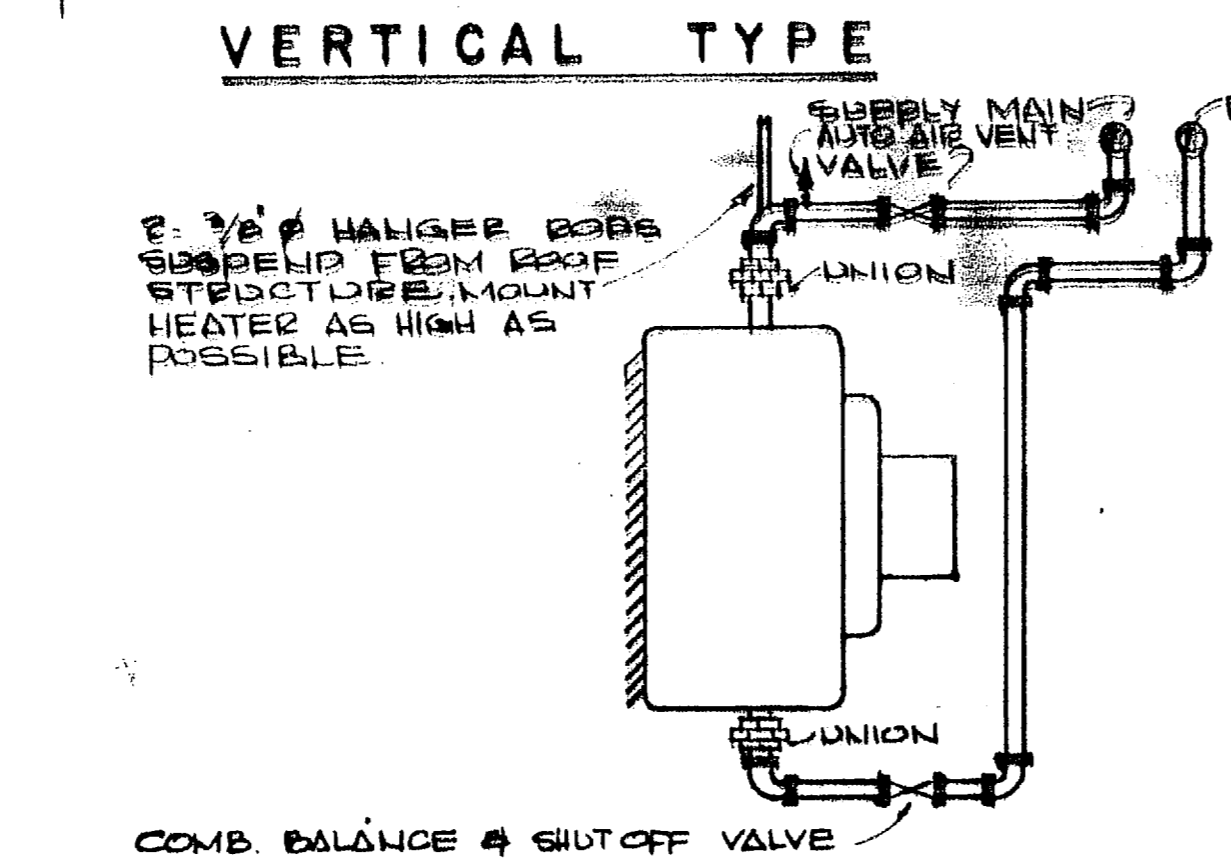
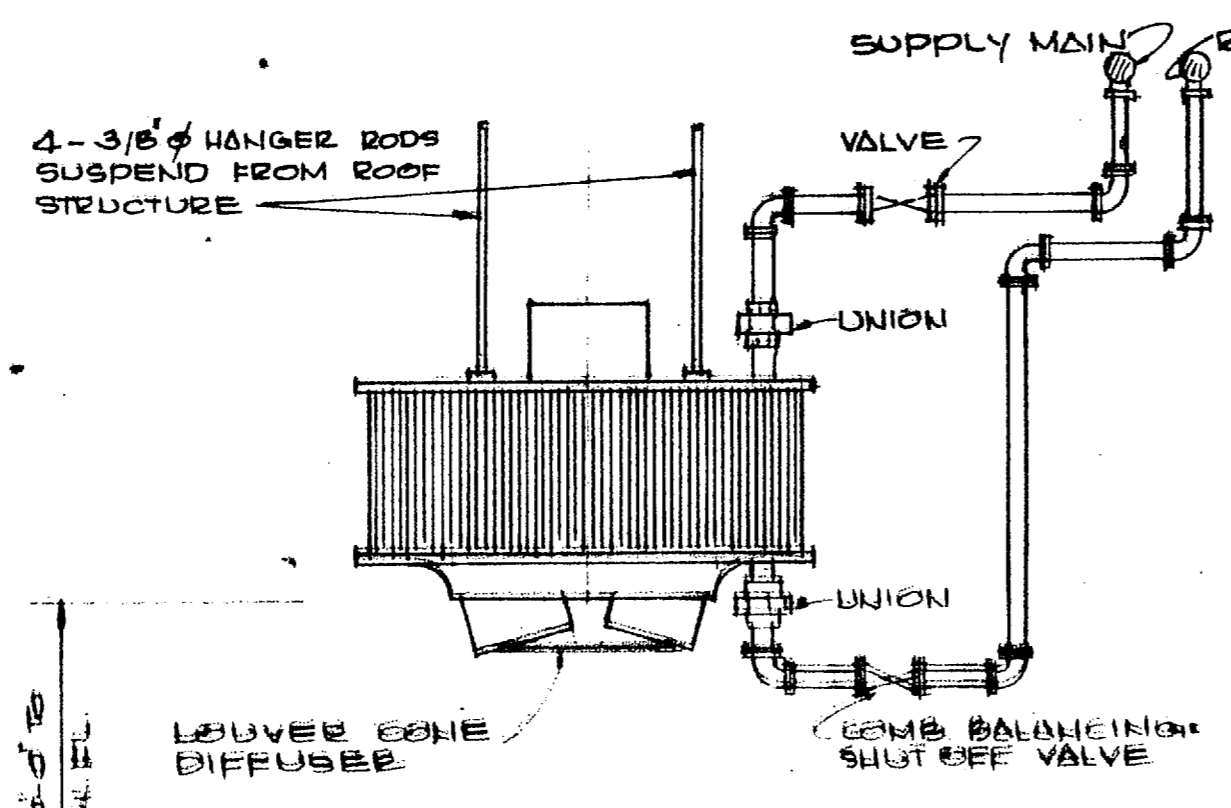


- NOTES**
- (1) AIR CONTROL BOILER FITTING
 - (2) AIR CONTROL TANK FITTING
 - (3) LOW WATER CUT-OFF
 - (4) CIRCULATING PUMP, 50 GPM @ 120 VOLT
 - (5) PRESS. REL. VALVE, SET @ 150 PSI
 - (6) PRESS. RELIEF VALVE, SET @ 150 PSI
 - (7) BOILER BLOWDOWN
 - (8) AIR EXPANSION TANK (30 GAL)
 - (9) AIR VENT, MANUAL
 - (10) MANOMETRIC DAMPER
 - (11) CHEMICAL FEEDER, SHOT TYPE, SEE DETAIL, THIS SHEET.

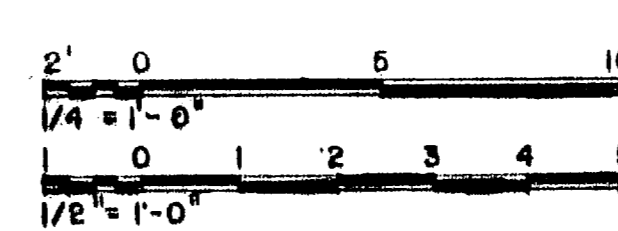
FIRST FLOOR PIPING PLAN
1/4" = 1'-0"

UNIT HEATER SCHEDULE						
MARK	TYPE	CAP. BTU/H	Q. W. IN	Q. W. OUT	W.P.	REMARKS
(1)	VERTICAL	15,000	1.5	2.250	1/4"	78,000
(2)	VERTICAL	30,000	3.0	4.500	1/4"	50,000
(3)	VERTICAL	30,000	3.0	4.500	1/4"	38,000
(4)	VERTICAL	30,000	3.0	4.500	1/4"	28,000
		406		194,000		

ALL CAPACITIES BASED ON 140° ENT. V.T. 20° T.D. 60° ENT. AIR
ALL MOTORS TO BE 120 VOLTS, 1 PHASE

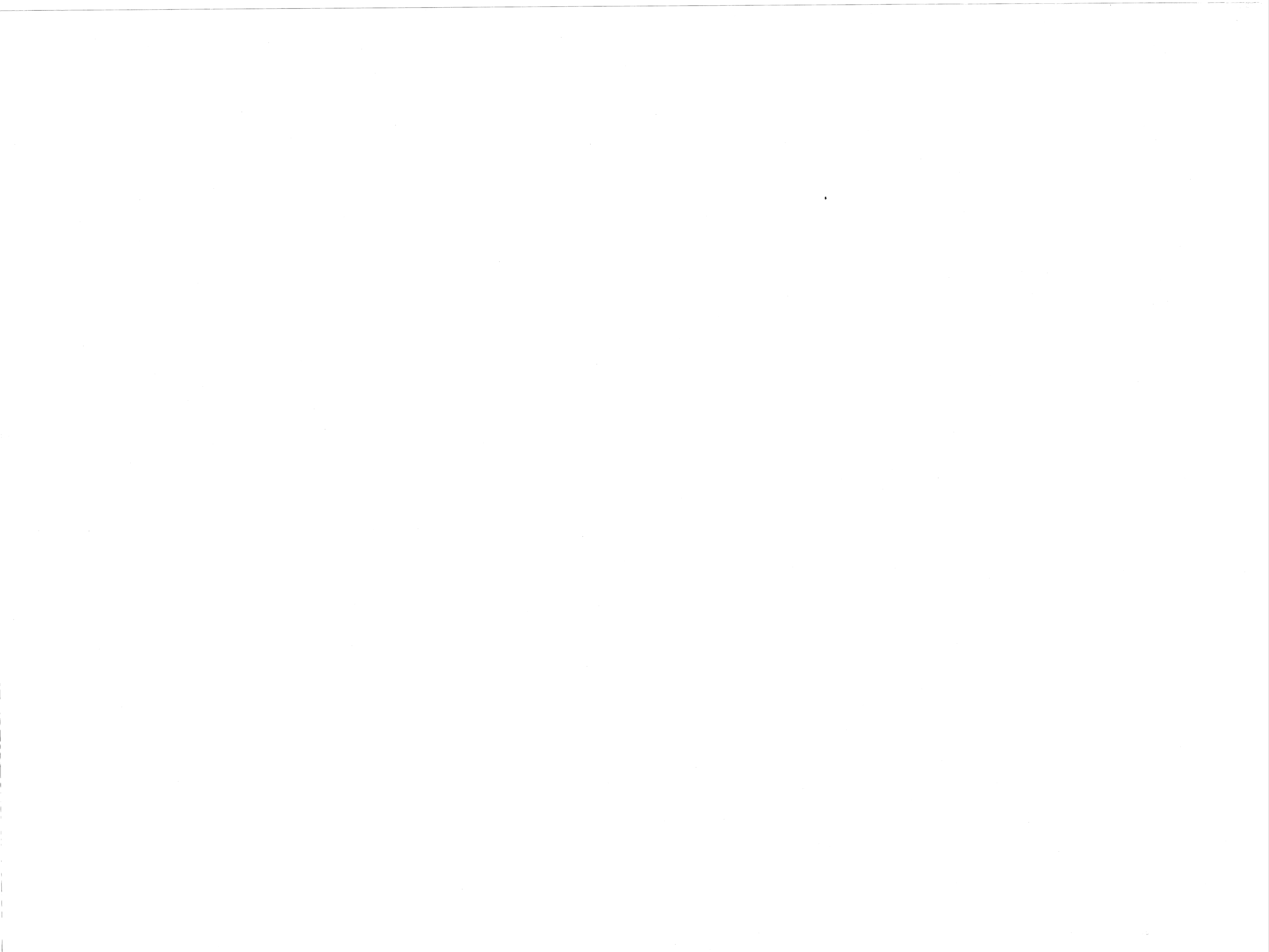


- LEGEND**
- GATE VALVE
 - CHECK VALVE
 - HOT WATER SUPPLY PIPING
 - HOT WATER RETURN PIPING
 - UNION
 - STRAINER
 - PRESS. REL. VALVE
 - OIL SUPPLY
 - OIL RETURN
 - THERMOSTAT

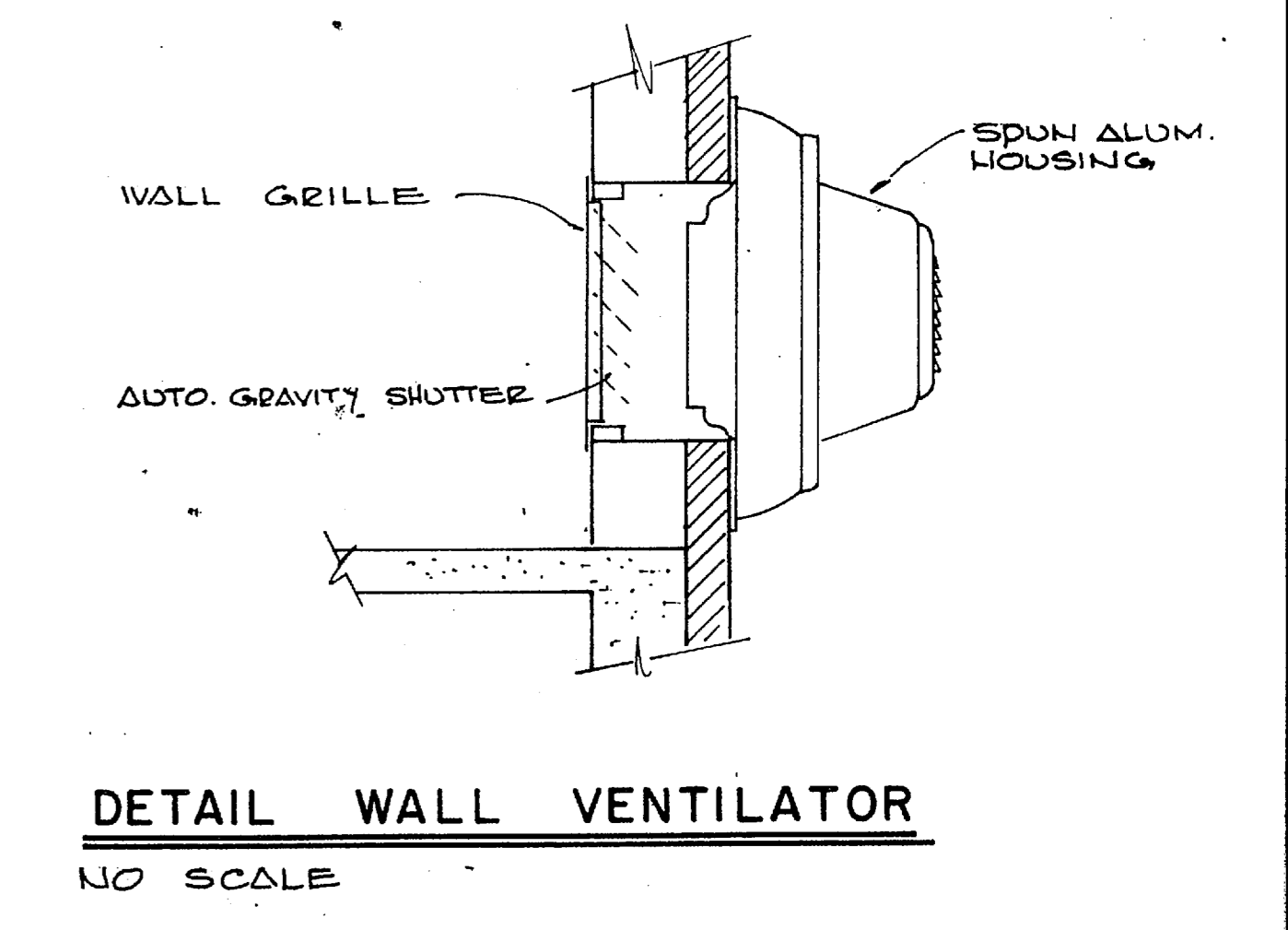
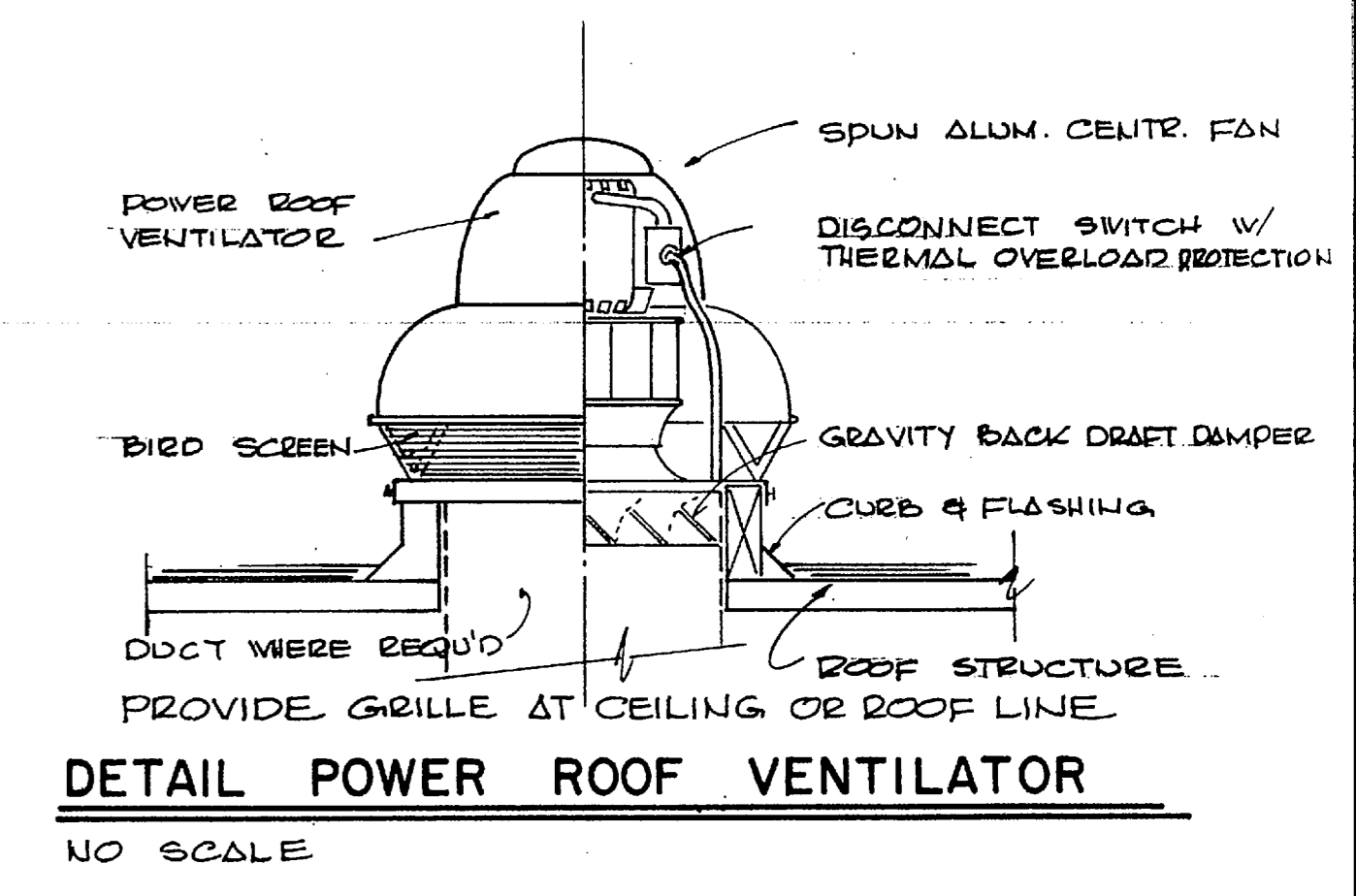
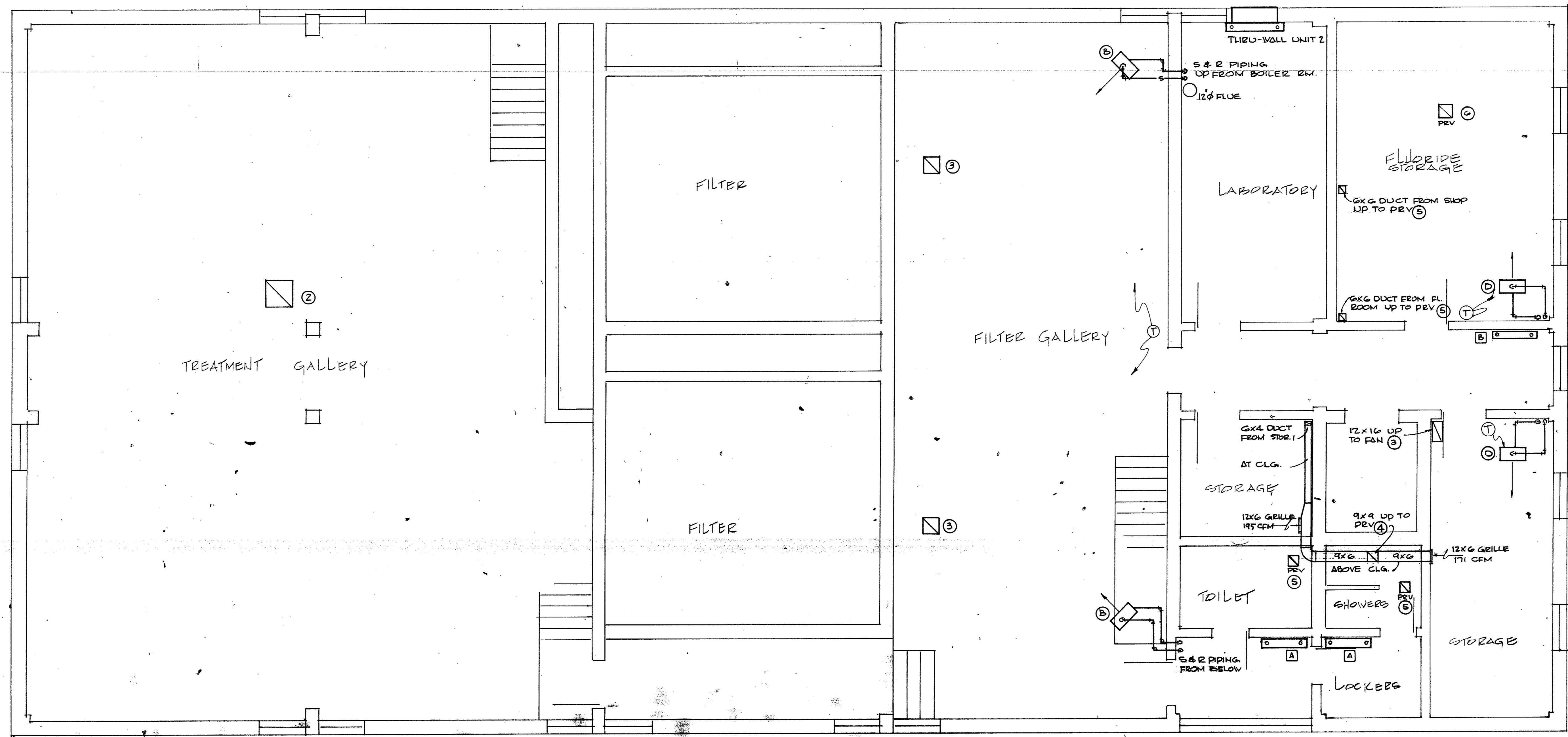


HENRY VON DEBEN & ASSOCIATES CONSULTING ENGINEERS WILMINGTON, N. C.		DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND ATLANTIC DIVISION NORFOLK, VA.	
DES. JRB	DR. A.W.	CHK. JRB	
SUPV. HVO	CH. ENGR. JRB	DATE	
SUBMITTED BY JRB		DATE	5/25/70
APP. HVO	DATE	DATE	
PUBLIC WORKS OFFICER		NAVY AC DRAWING NO.	1338915
DATE		CONTR. CONTR. NO.	862470-70-B-0939
DATE		SCALE	AS SHOWN
DATE		REV.	27 OF 48

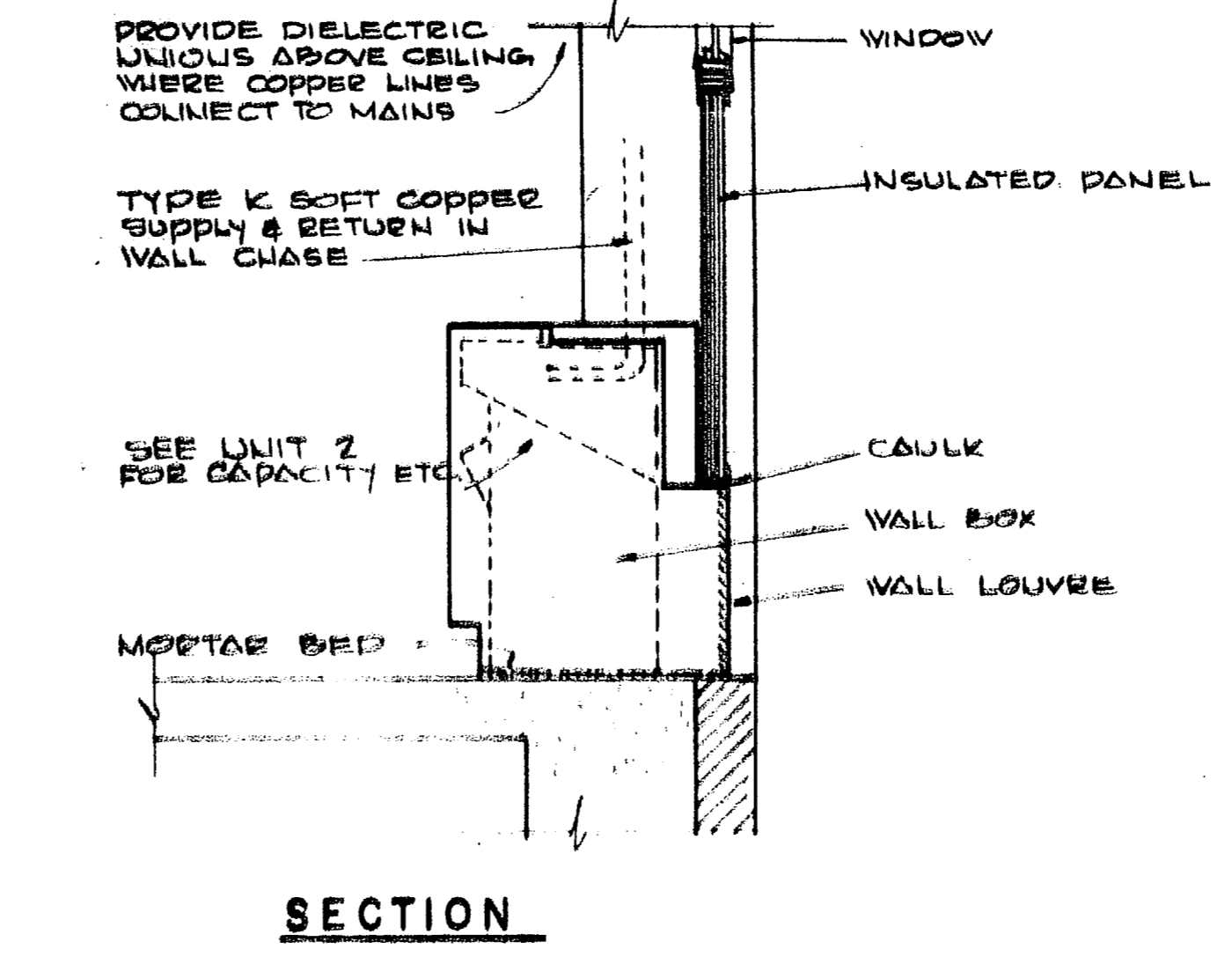
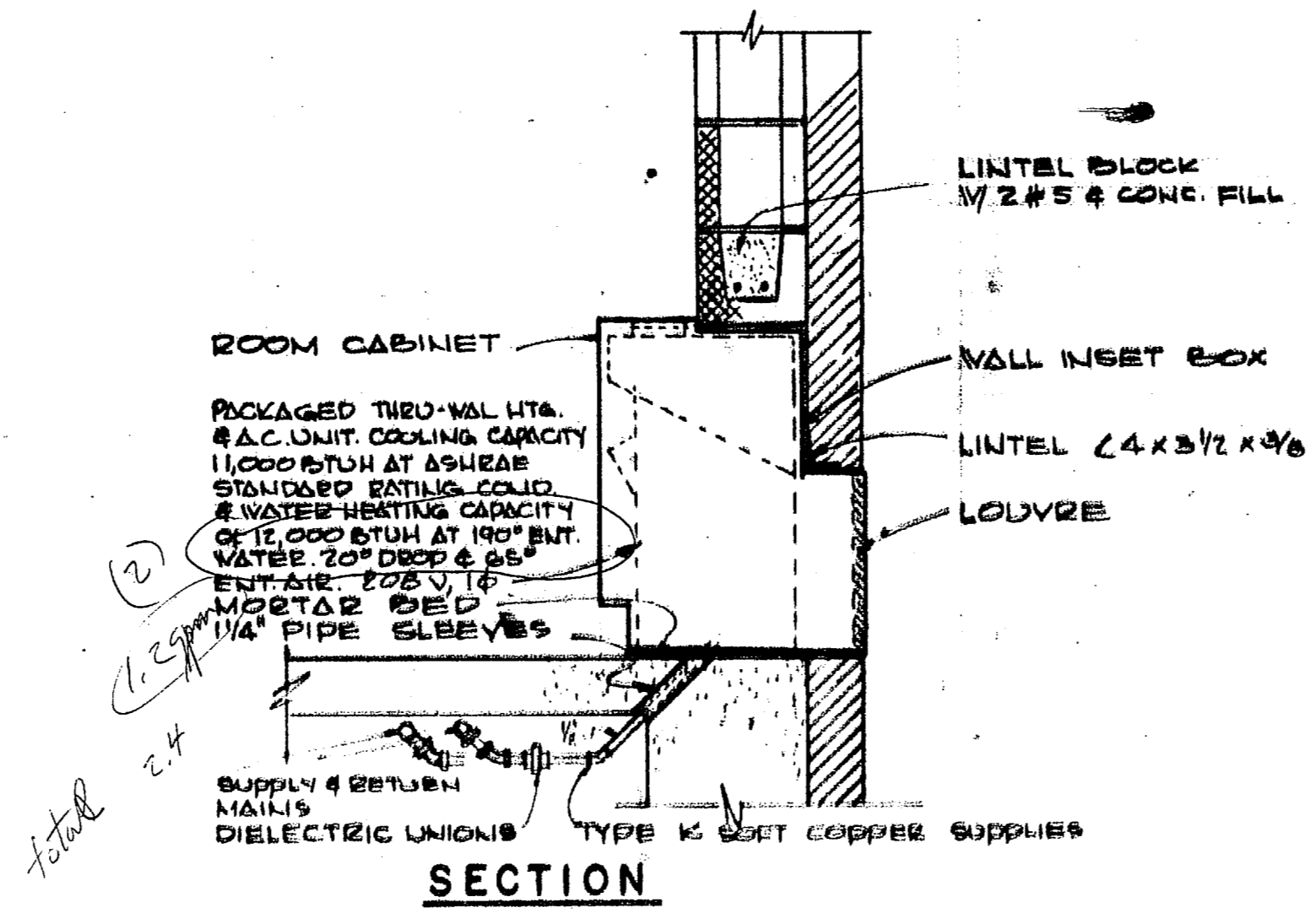
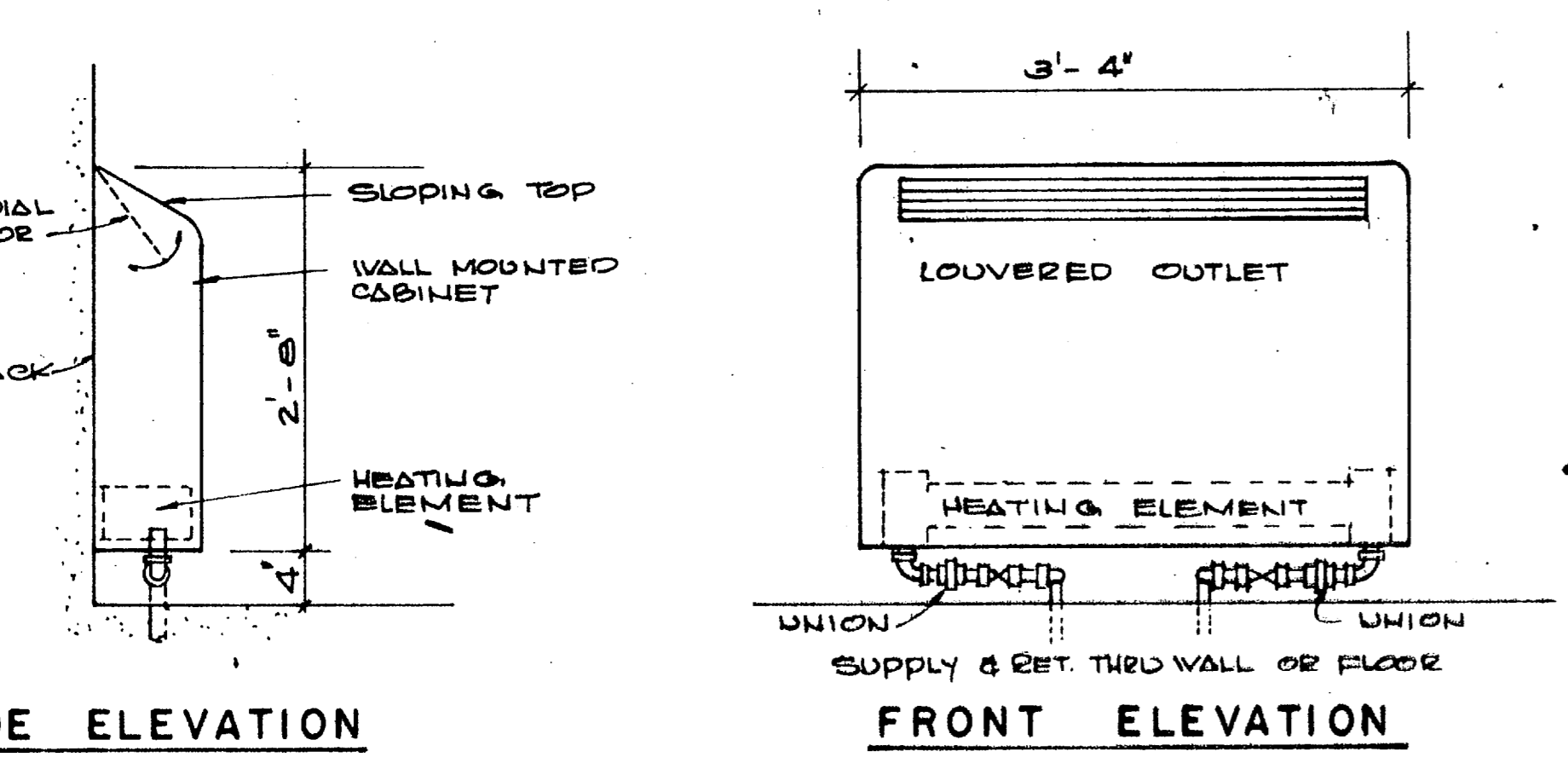
84915



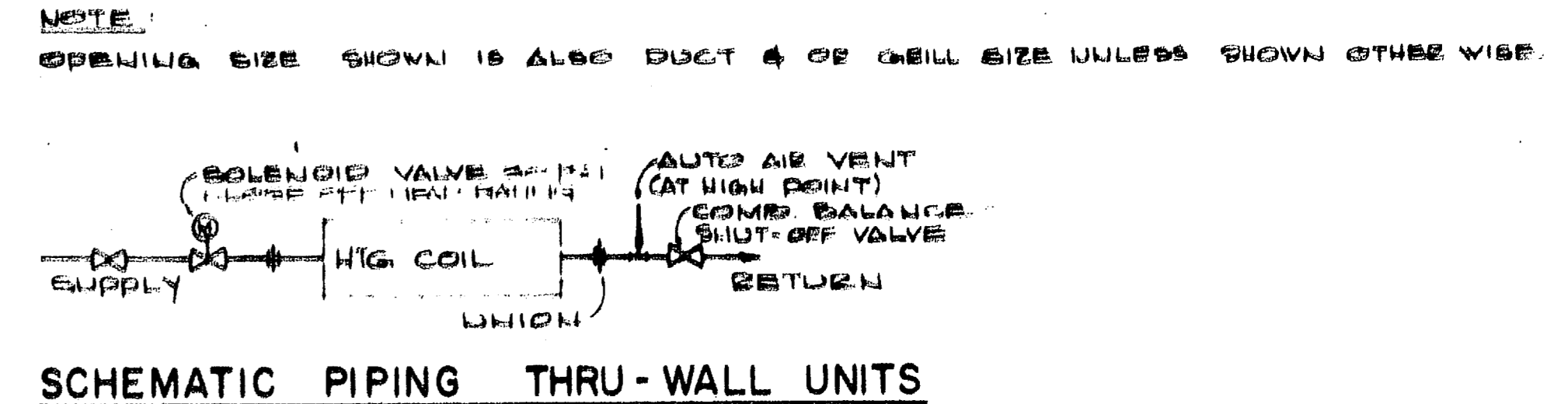
REVISIONS			
SYM	DESCRIPTION	DATE	APPROVED
R-1	AS BUILT	8-1-73	J.R.B.



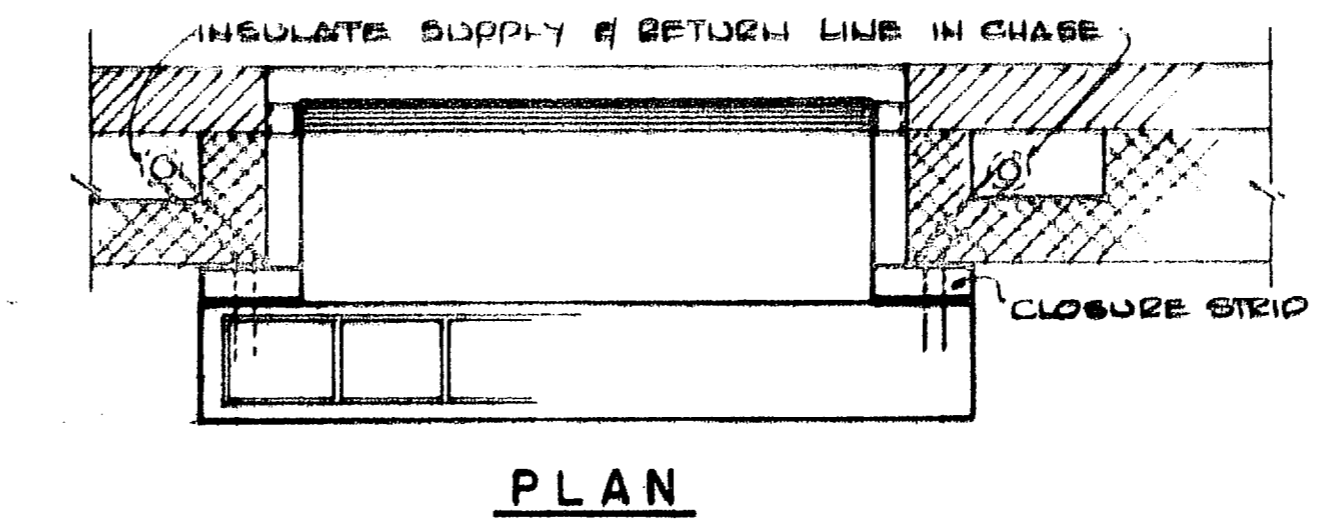
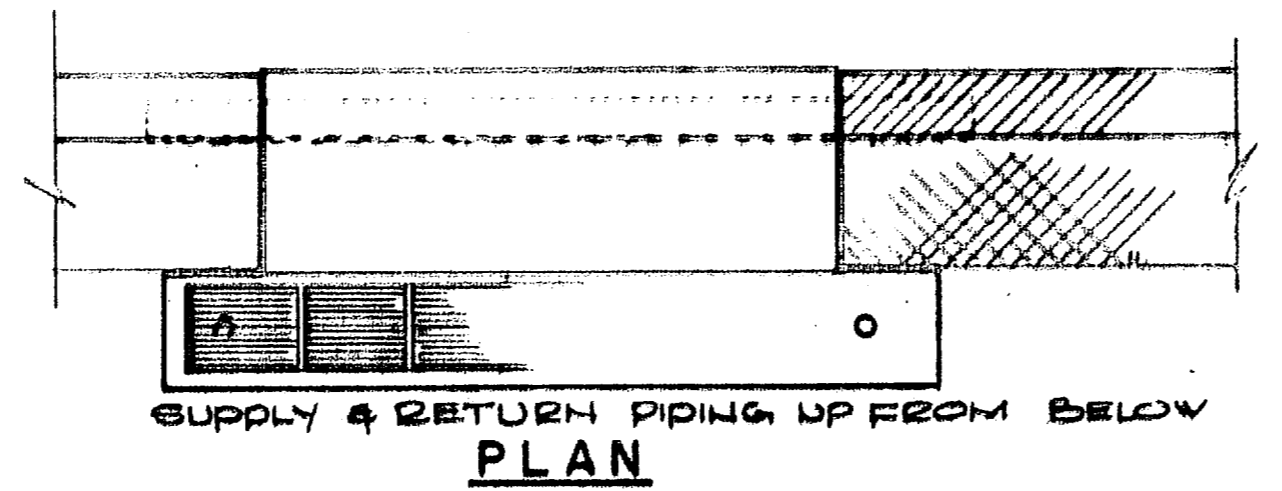
SECOND FLOOR PIPING PLAN
1/4" = 1'-0"



SCHEDULE OF FANS							
MARK	TYPE	CFM	SP. WATER	MIN. H.P.	ELECTRICAL	ROOF/WALL OPNG.	REMARKS
1	WALL VENTILATOR	625	1/8"	1/8	120 V, 1 φ	12x12	BELT DRIVE
2	POWER ROOF VENT	5700	1/8"	3/4	208 V, 1 φ	24x24	" "
3	"	1500	1/8"	1/4	120 V, 1 φ	14x14	" "
4	"	400	1/4"	1/8	120 V, 1 φ	8x8	DIRECT DRIVE
5	"	150	1/4"	1/8	120 V, 1 φ	8x8	" "
6	"	760	1/8"	1/8	120 V, 1 φ	12x12	BELT DRIVE



CONVECTOR SCHEDULE				
MARK	CAPACITY	HEIGHT-DEPTH-LENGTH	GPM	REMARKS
(2) A	10,000	32" x 6" x 40"	1	1/2" RUNOUTS
(3) B	7,500	32" x 6" x 40"	3/4	1/2" RUNOUTS



ALL CAPACITIES ARE BASED ON 190° ENT. W.T. 20° TEMP DROP, 65° E.A.

HENRY VON OEBEN & ASSOCIATES CONSULTING ENGINEERS WILMINGTON, N. C.

DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND ATLANTIC DIVISION

NAVAL STATION WASHINGTON, VA

WATER TREATMENT PLANTS, WELLS AND DISTRIBUTION SYSTEM

CAMP LEJEUNE NORTH CAROLINA

TREATMENT PLANT SECOND FLOOR HEATING AND VENTILATING

PROJECT NO. 1338916

DATE 8-1-73

APPROVED [Signature]

RECORD DRAWING DATE 8-1-73

84916

12 x 8 cmw
95"
6" base keeping part
- 3 1/2" door opening

REVISIONS			
SYM	DESCRIPTION	DATE	APPROVED
Ⓐ	REVISED AS BUILT	15 MAY 67	JRE

UNIT HEATER SCHEDULE

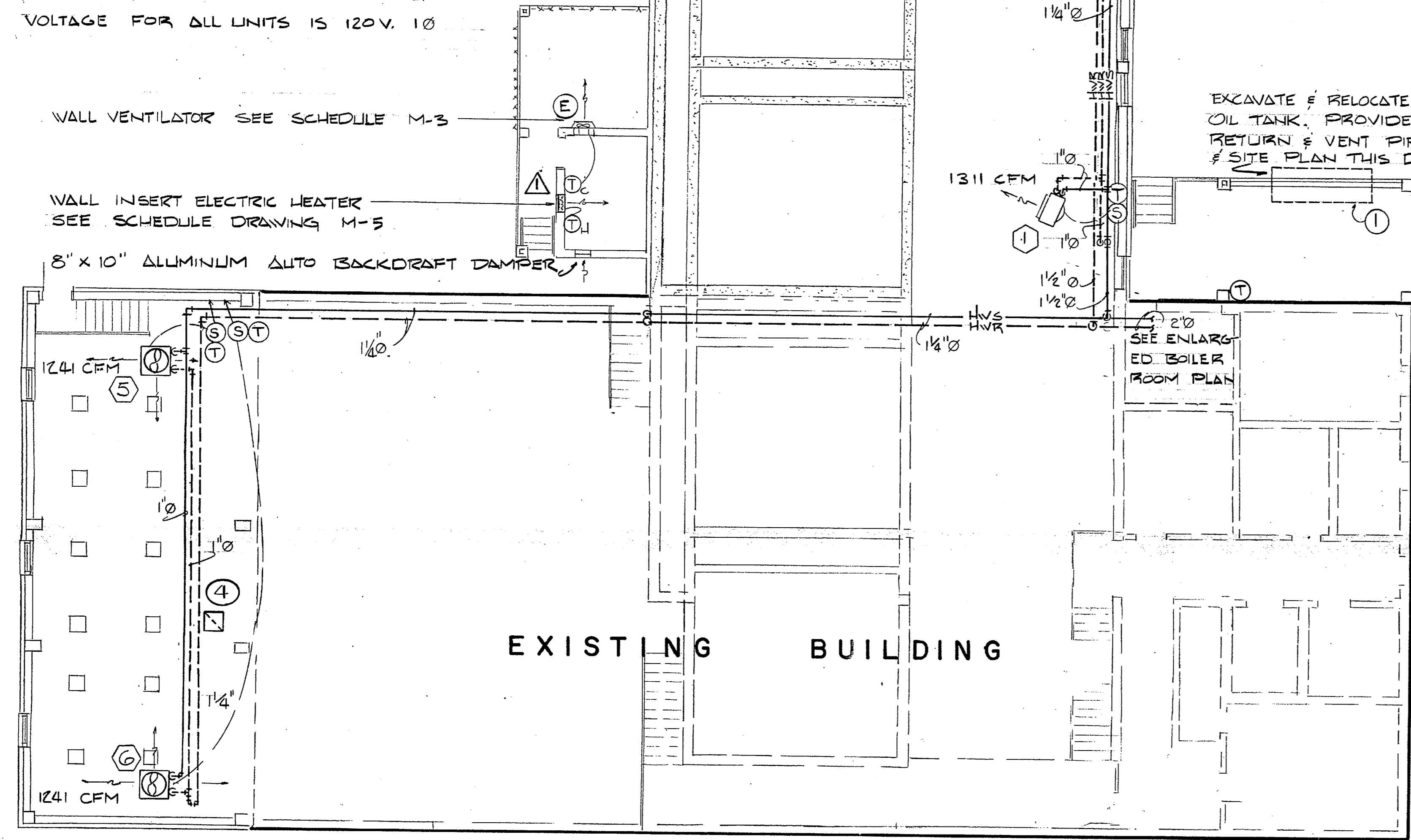
UNIT	CFM	WPD	HP	GPM	RPM	RUNOUT	TYPE	MBH
①	1311	0.69	1/8	4.96	1550	1"	HORIZONTAL	49.6
②	1311	0.69	1/8	4.96	1550	1"	HORIZONTAL	49.6
③	1479	0.55	1/8	5.59	1550	1"	HORIZONTAL	55.9
④	1479	0.55	1/8	5.59	1550	1"	HORIZONTAL	55.9
⑤	1241	0.27	1/8	4.69	850	1"	VERTICAL	46.9
⑥	1241	0.27	1/8	4.69	850	1"	VERTICAL	46.9

NOTE: ALL UNIT HEATERS SELECTED FOR 190° EWT
60° EAT & 20° WTD ACROSS COIL.
VOLTAGE FOR ALL UNITS IS 120V. 1Ø

ROOF VENTILATOR SCHEDULE

UNIT	CFM	S.P.C. (H ₂ O)	HP	BHP	RPM	TIP SPEED	ROOF OPENING
①	2668	0.125	1/4	0.23	730	3530	20 1/2"
②	2668	0.125	1/4	0.23	730	3530	20 1/2"
③	2668	0.125	1/4	0.23	730	3530	20 1/2"
④	3181	0.125	1/2	0.36	855	4141	20 1/2"

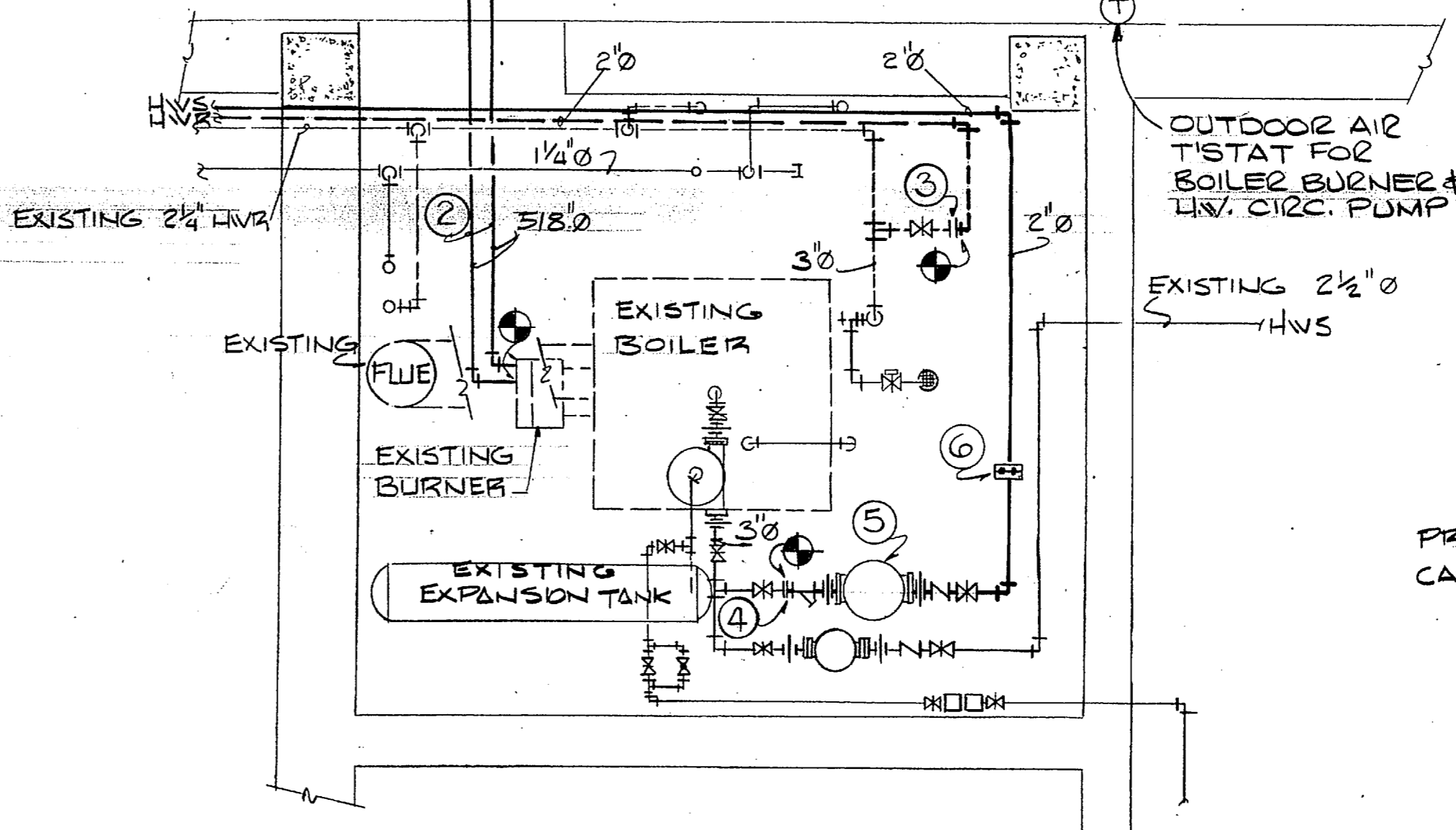
NOTE: ALL UNITS TO USE 18" DIAMETER CENTRIFUGAL ROOF EXHAUSTERS
SPUN ALUMINUM CONSTRUCTION
VOLTAGE FOR ALL UNITS IS 120V. 1Ø



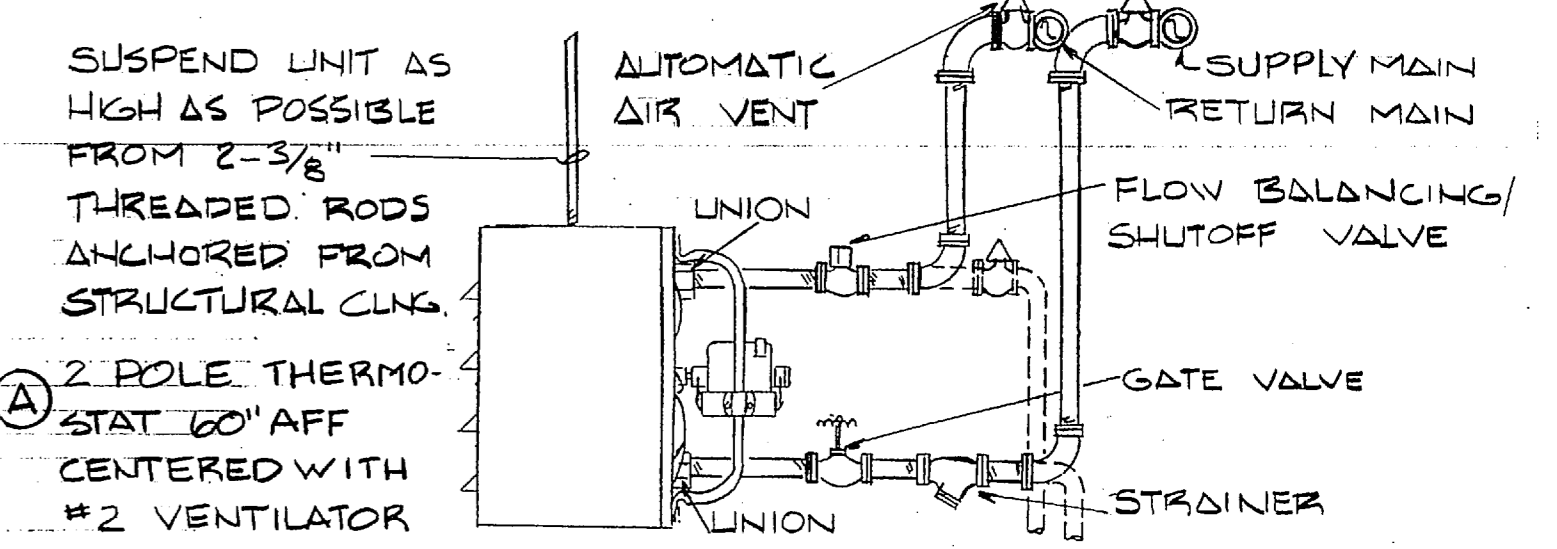
FIRST FLOOR PLAN
SCALE 1/8" = 1'-0"

EXCAVATE & RELOCATE EXISTING 1000 GAL. OIL TANK. PROVIDE NEW OIL SUPPLY, RETURN & VENT PIPING. SEE DETAIL & SITE PLAN THIS DRAWING.

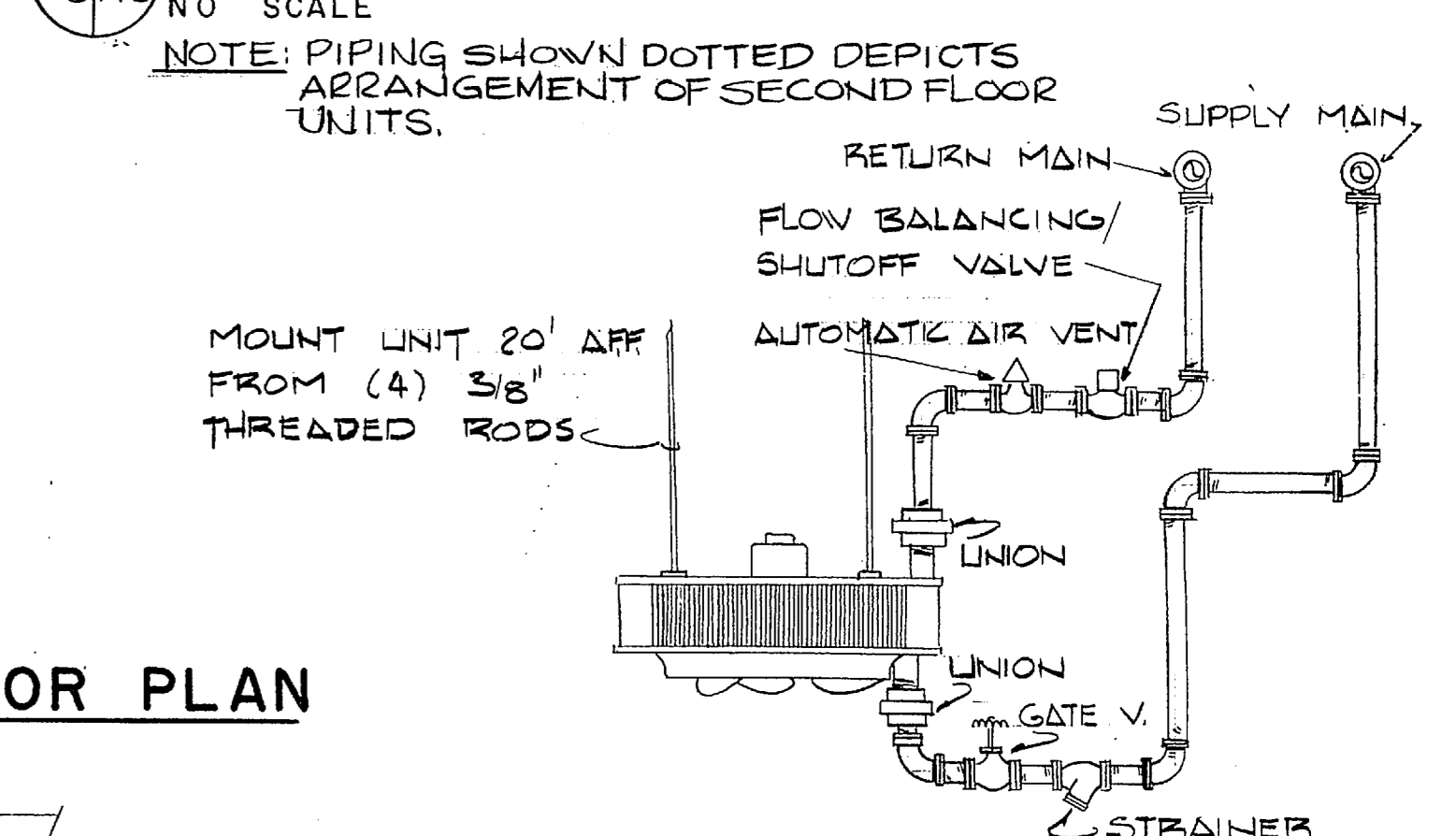
PIPE GALLERY SECOND FLOOR PLAN
SCALE 1/8" = 1'-0"



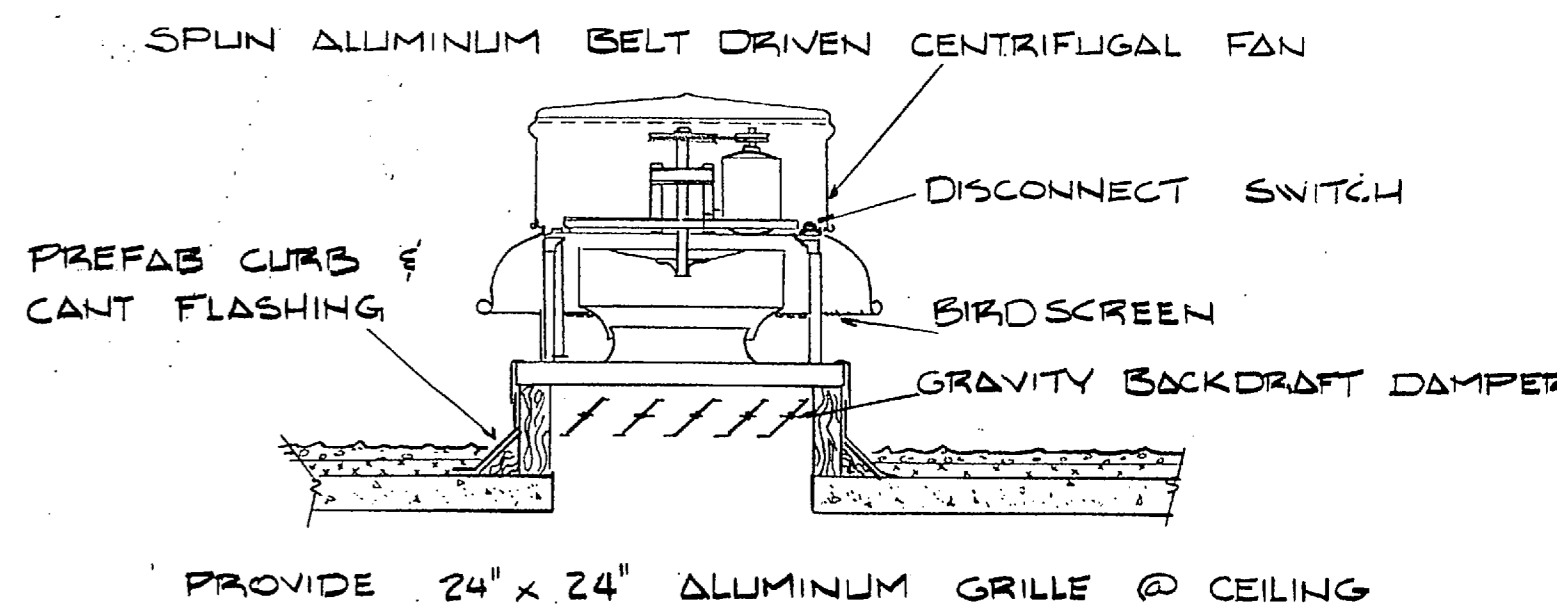
BOILER ROOM PLAN
SCALE 1/2" = 1'-0"



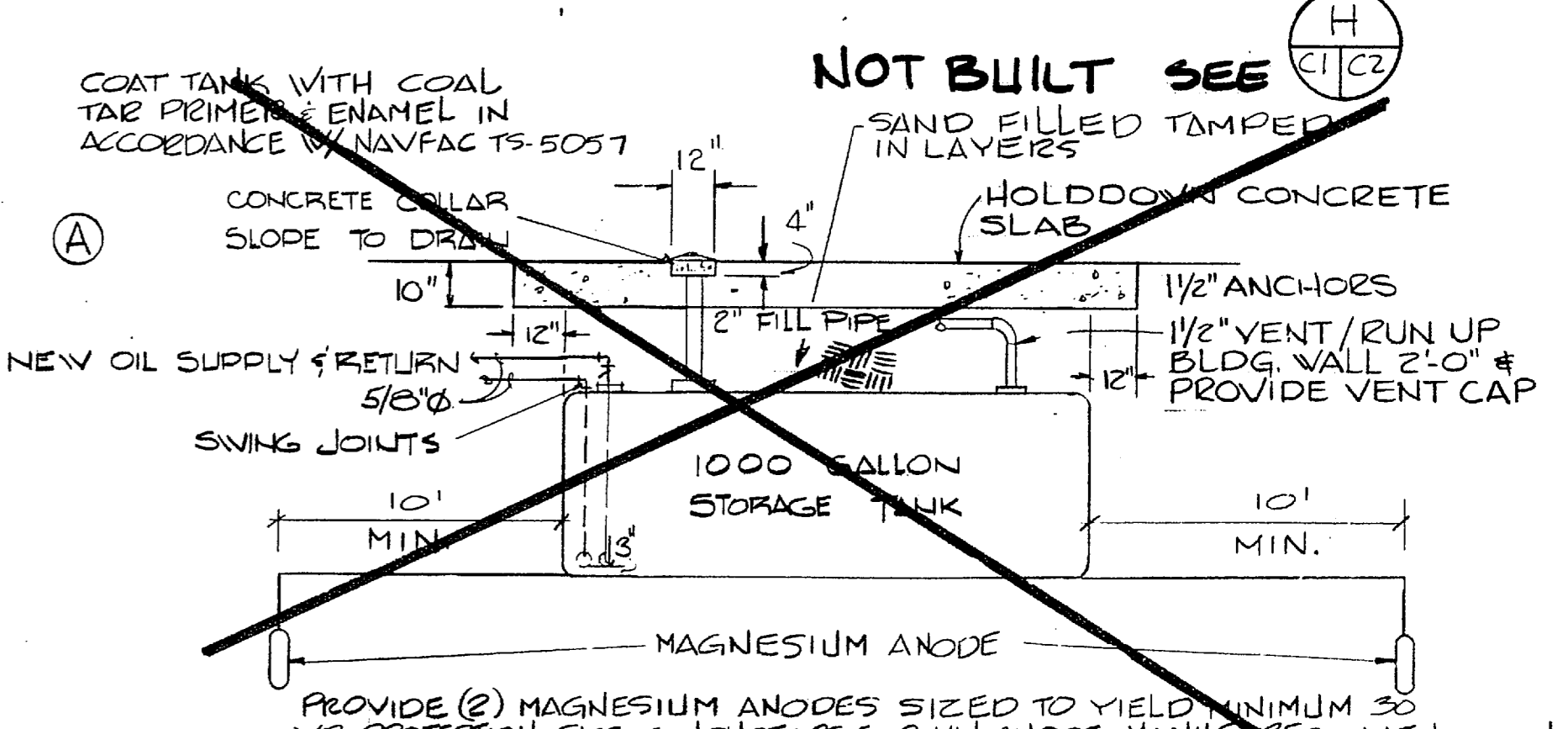
A DETAIL HORIZONTAL UNIT HEATER
NO SCALE



B DETAIL VERTICAL UNIT HEATER
NO SCALE



C DETAIL POWER ROOF VENTILATOR
NO SCALE



D DETAIL OIL TANK INSTALLATION
NO SCALE

KEYED NOTES

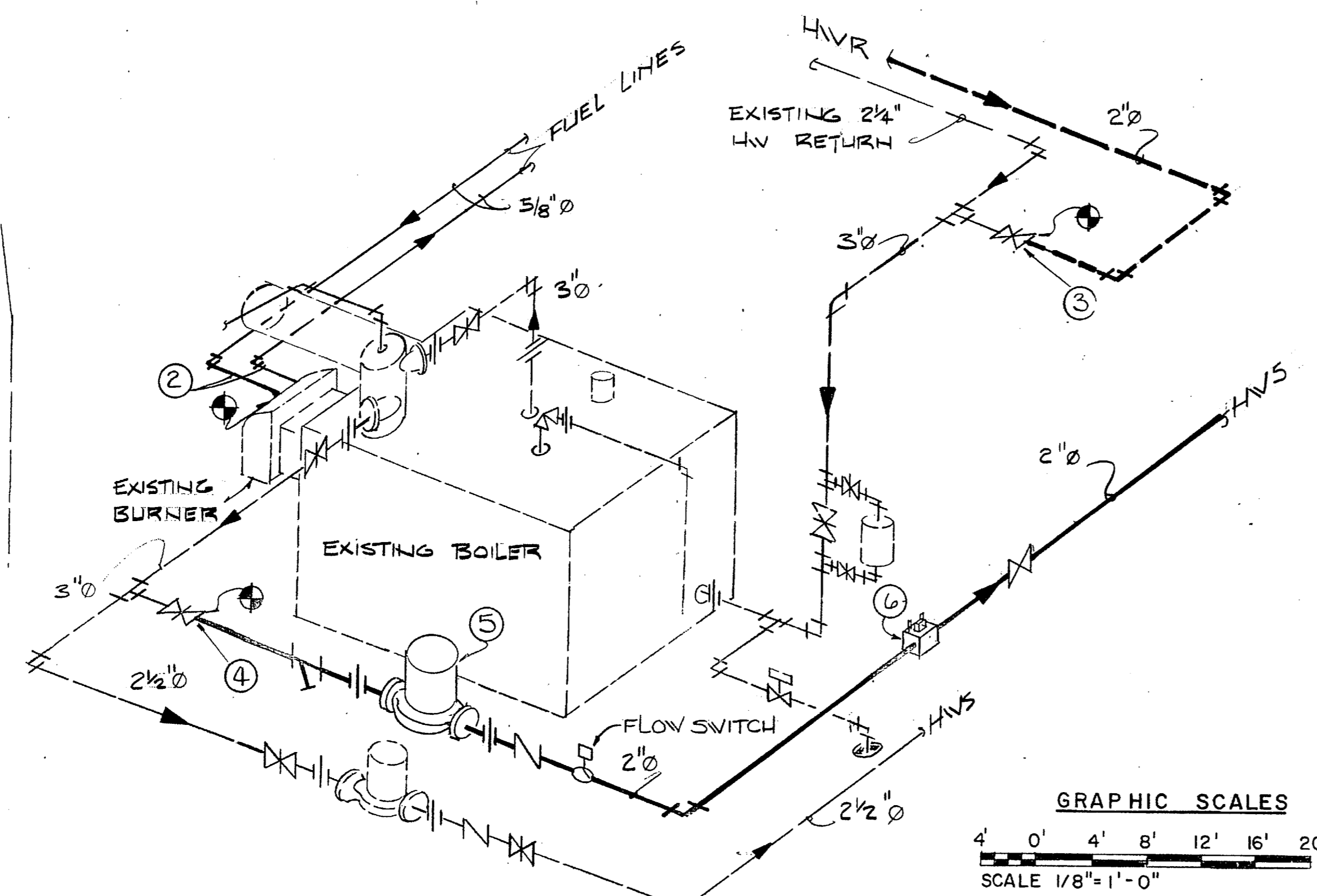
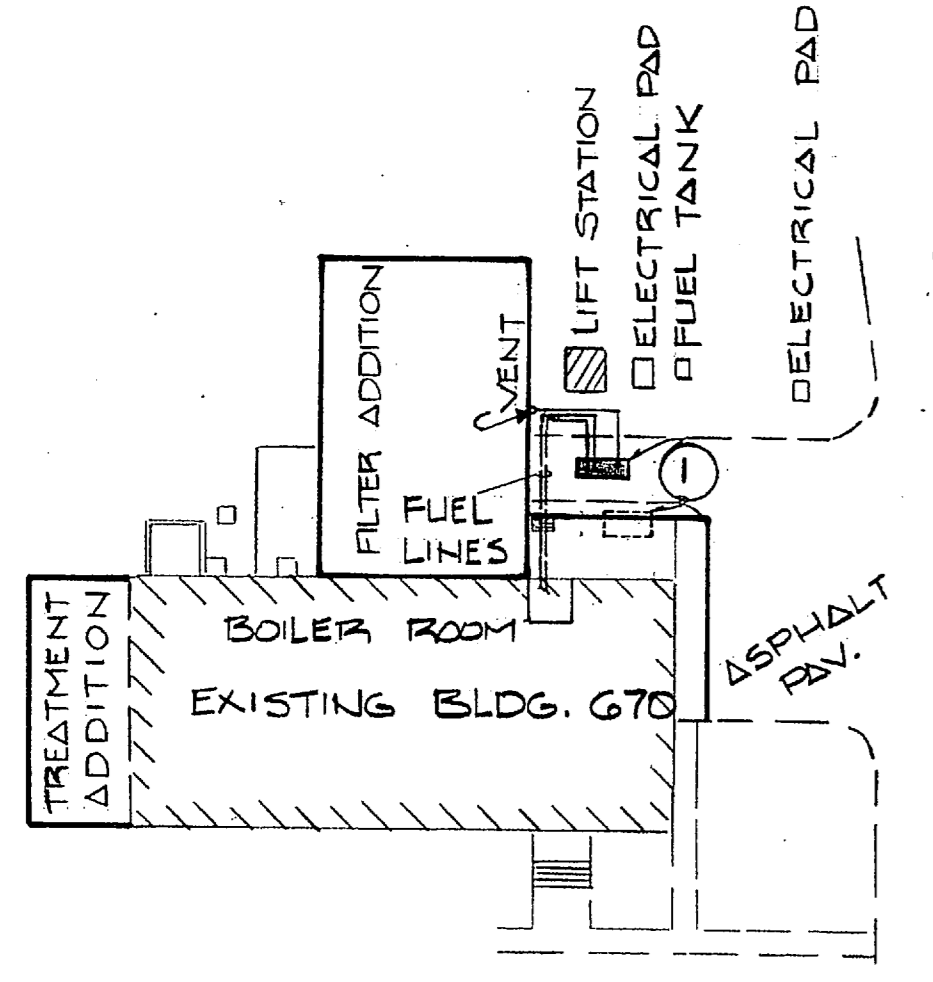
- RELOCATE EXISTING 1000 GALLON UNDERGROUND OIL STORAGE TANK SEE DETAIL D OF THIS DRAWING.
- REMOVE EXISTING 3/8" OIL SUPPLY & RETURN LINES/ PROVIDE NEW 3/8" COPPER SUPPLY & RETURN TUBING. CONNECT W/ EXISTING BURNER, (TYPE 'K' HARD DRAWN COPPER).
- CONNECT NEW 2" HW RETURN TO EXISTING HW SYSTEM/ REMOVE EXISTING CAPPED NIPPLE & EXTEND NEW RETURN FROM GATE VALVE
- CONNECT NEW 2" HW SUPPLY TO EXISTING HW SYSTEM/ REMOVE EXISTING CAPPED NIPPLE & EXTEND NEW SUPPLY FROM GATE VALVE
- PROVIDE NEW INLINE CENTRIFUGAL HW CIRCULATING PUMP TO PERFORM AS FOLLOWS:

GPM	FT. HEAD	BHP	HP	RPM	VOLTAGE	MIN. EFFICIENCY
30.48	27'	0.39	1/2	1750	120V. 1Ø	50%
- PROVIDE INLINE BALANCING TYPE FLOW MEASURING DEVICE POSITION MINIMUM 3' DOWNSTREAM OF ELBOW. FLOW SHALL BE 30.48 GPM WHEN SYSTEM IS BALANCED.

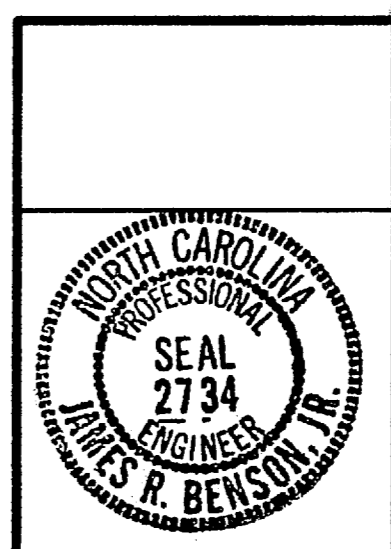
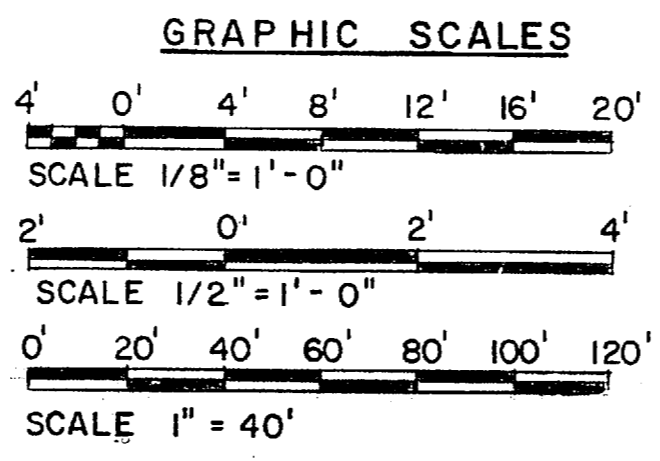
LEGEND

- GATE VALVE
- CHECK VALVE
- GUARD PROTECTED DRAIN VALVE
- NEW
- EXISTING
- HWS
- HVE
- NEW TO EXISTING POINT OF CONNECTION
- UNIT HEATER SENTINEL SWITCH MTD. 48" AFF. SINGLE POLE, 20 AMP, 120 V.
- THERMOSTAT
- TEMP. PRESSURE RELIEF VALVE
- STRAINER
- HOT WATER SUPPLY
- HOT WATER RETURN
- FLOW SWITCH

BLDG. 670 SITE PLAN
SCALE 1" = 40'



BOILER ROOM PIPING ISOMETRIC
NO SCALE



RECORD DRAWING LETTER DATED MAY 15 1967		NAVAC DIVISION	
HENRY VON OESSEN AND ASSOCIATES CONSULTING ENGINEERS AND PLANNERS WILMINGTON, NORTH CAROLINA		NAVAL FACILITIES ENGINEERING COMMAND ATLANTIC DIVISION NORFOLK, VIRGINIA	
DES. TMH DR. TMH CHK. JRB PROJ. MGR. JRB CH. ENGR. JRB SUBMITTED BY: DATE: 2/6/67		NAVAL STATION CAMP LEJEUNE NORTH CAROLINA	
FIRM MEMBER PRINCIPAL DATE: 2/6/67		EXPANSION OF HOLCOMB BOULEVARD WATER TREATMENT PLANT	
APPROVED: DATE: 2/6/67		TREATMENT PLANT HEATING & VENTILATING PLAN	
ACTIVITY - SATISFACTORY TO DATE		SIZE: CODE IDENT. NO.: NAVAC DRAWING NO.: 4107573	
FOR EPD FOR COMMANDER NAVAC		CONSTR. CONTR. NO.: N62470-81-B-1644	
SCALE: AS SHOWN		SPEC: 05-81-1644	
		SHEET 40 OF 74	
		EFD DNG. NO. 207573	

792 IN
688 OUT

89-5811 New Yorker (instilled)

670-100