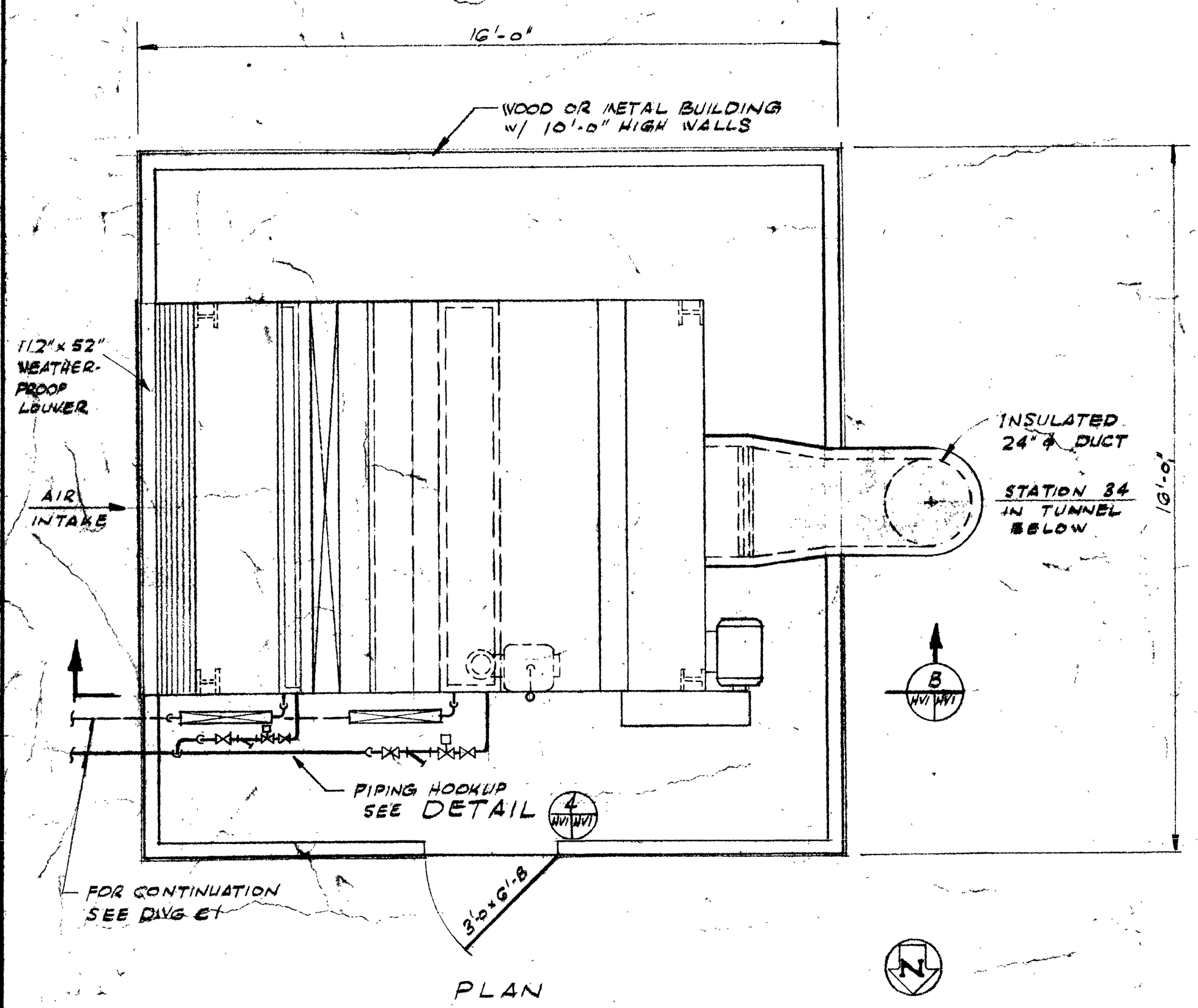
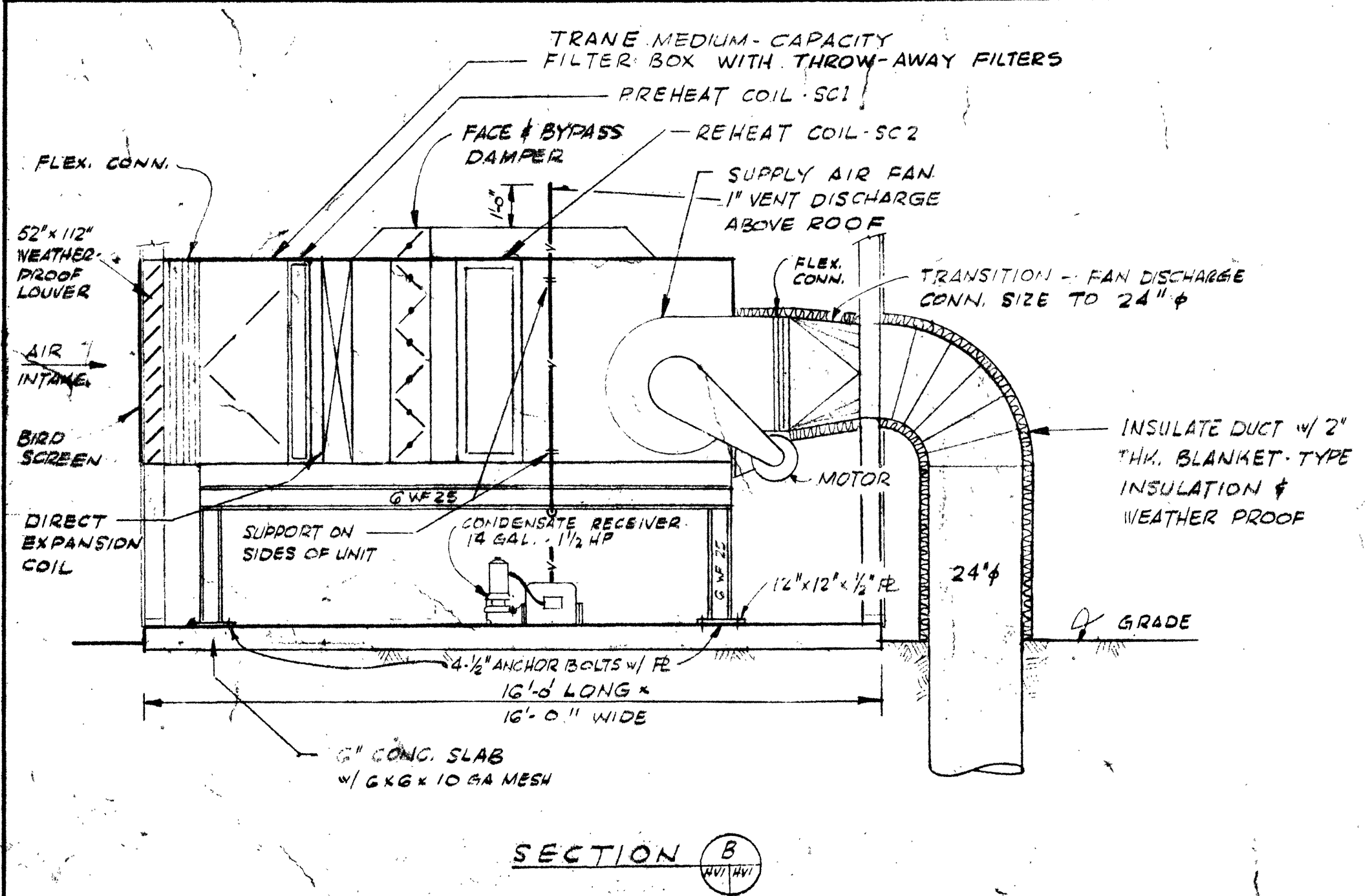
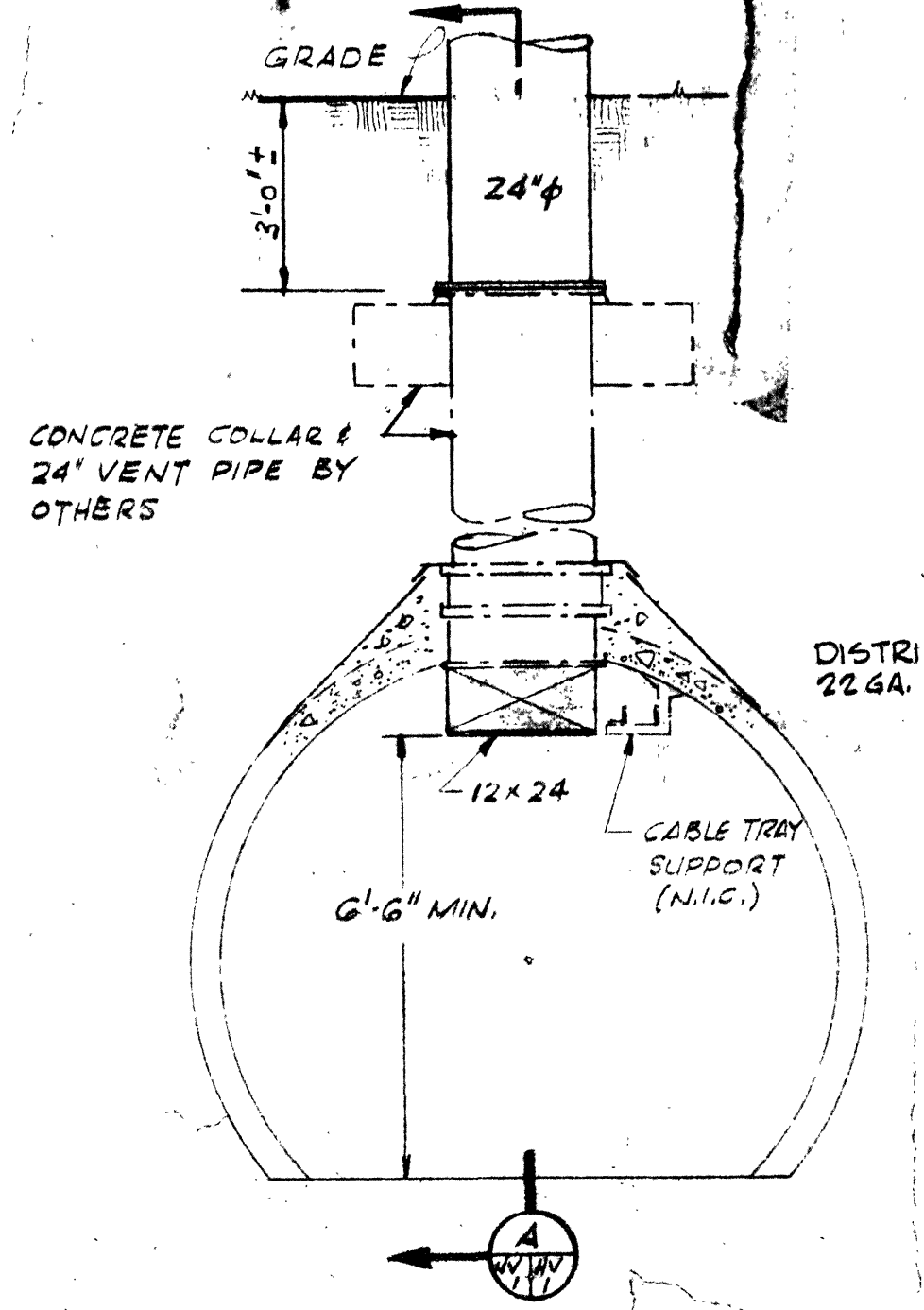


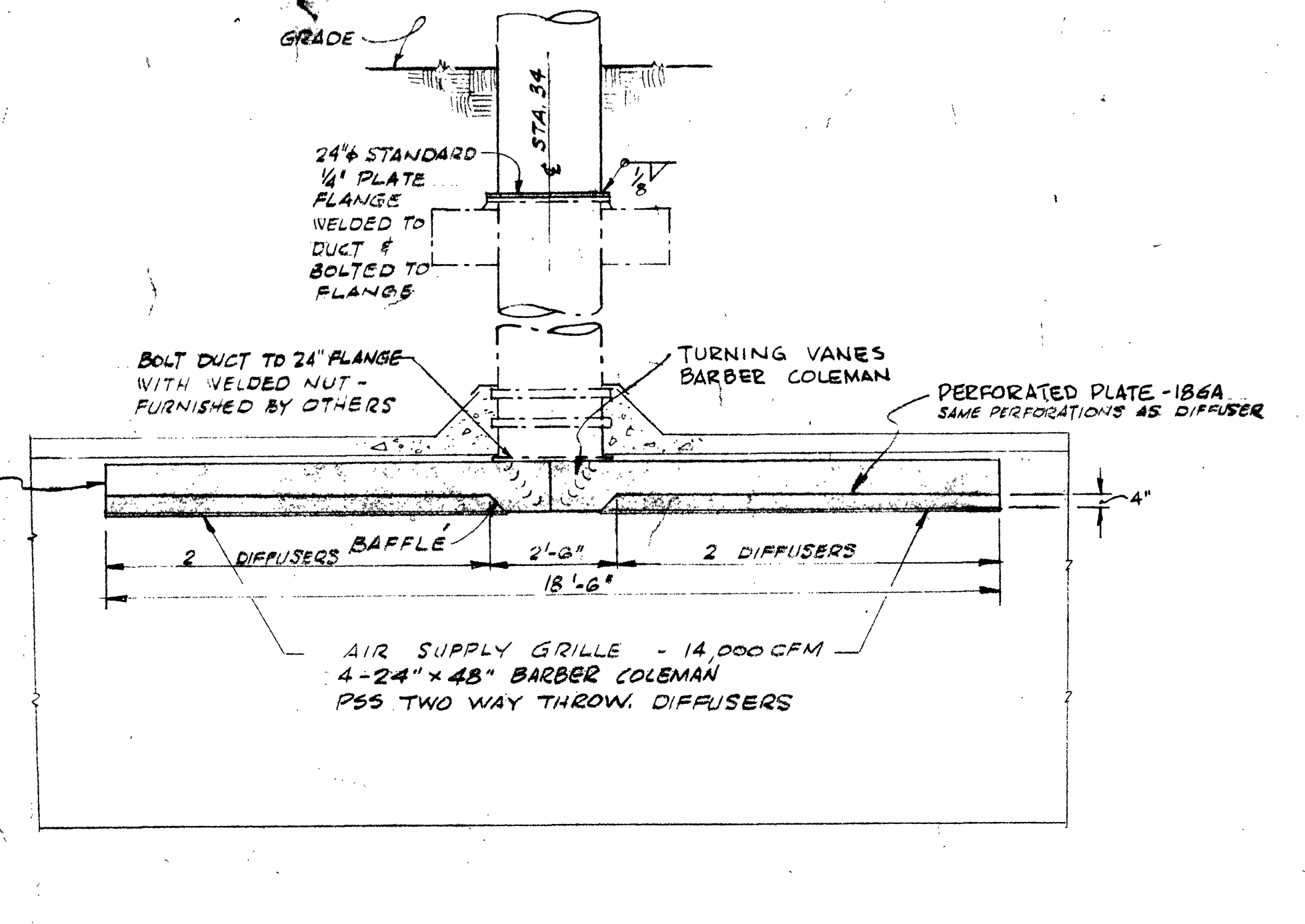


AIR SUPPLY UNIT DETAIL
SCALE 3/8" = 1'-0"

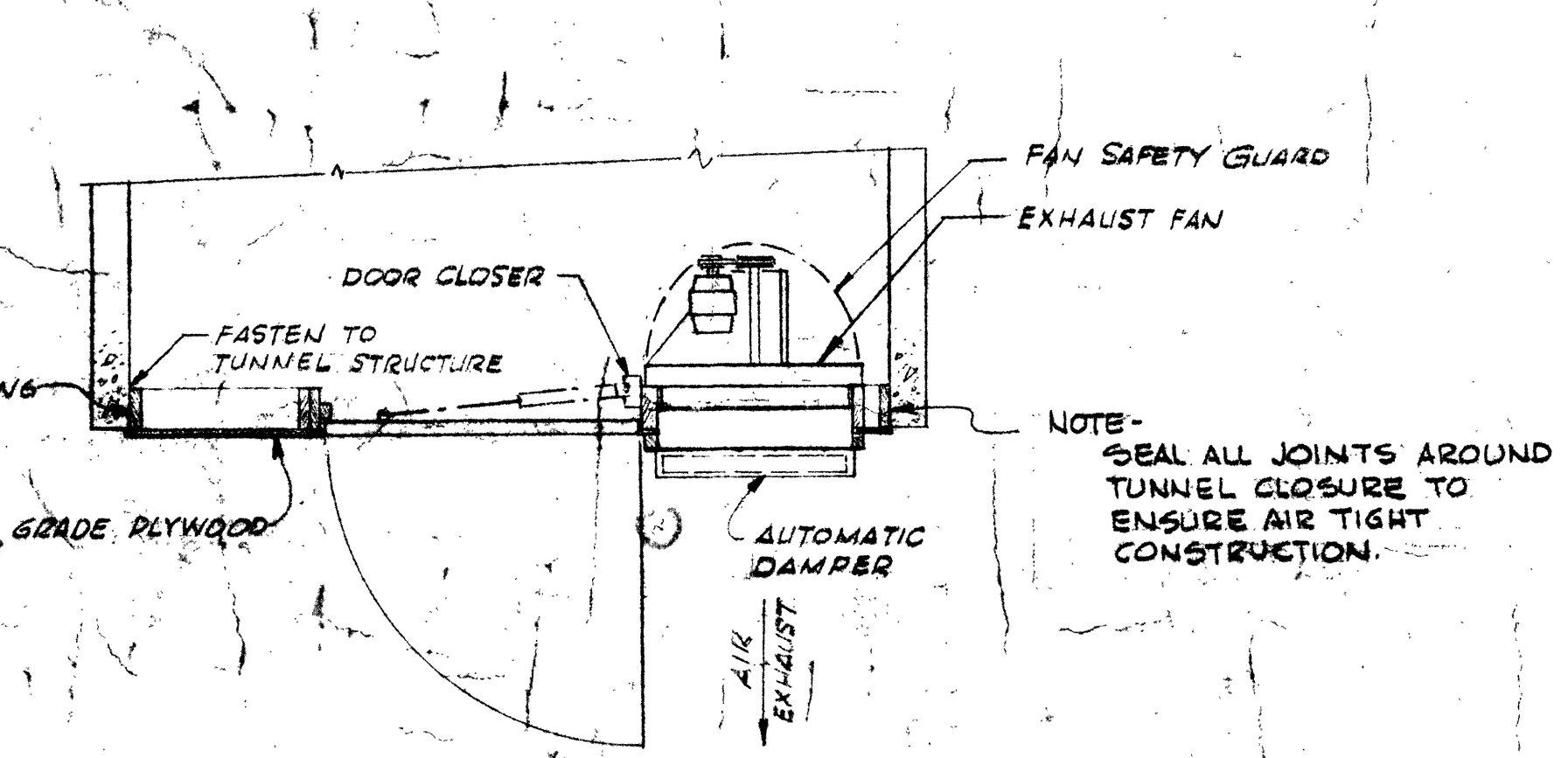
NOTE
PROVIDE BUILDING TO HOUSE AIR HANDLER AND ASSOCIATED EQUIPMENT. STRUCTURE SHALL BE APPROXIMATELY 10'-0" X 10'-0" X 10'-0" HIGH BUT SHALL PROVIDE NOT LESS THAN 3'-0" ACCESS ON 3 SIDES OF UNIT FOR MAINTENANCE. THE STRUCTURE SHALL PROVIDE A WEATHERPROOF AND SECURITY TIGHT BUILDING. THE BUILDING SHALL BE CONSTRUCTED IN A NEAT, WORKMANLIKE MANNER. DOOR SHALL BE FITTED WITH A YALE TYPE LOCK. ALL OUTSIDE SURFACES SHALL BE PAINTED 1 PRIME COAT AND 1 FINISH COAT OF COLOR TO BE APPROVED BY THE OWNER. PLANS OF THE PROPOSED STRUCTURE SHALL BE APPROVED BY THE OWNER BEFORE CONSTRUCTION.



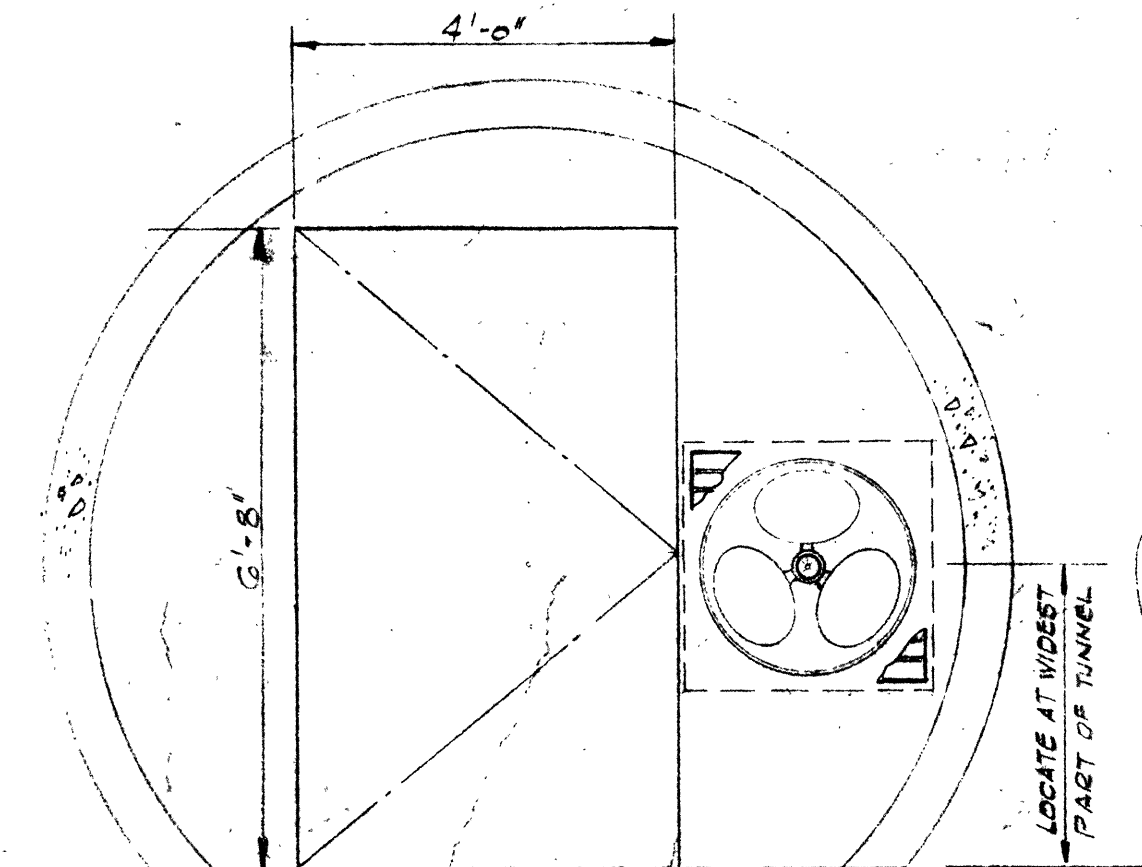
SECTION 1 THRU TUNNEL
AIR DISTRIBUTION BOX DETAIL
SCALE 3/8" = 1'-0"



SECTION 2
AIR DISTRIBUTION BOX DETAIL
SCALE 3/8" = 1'-0"



PLAN
TUNNEL CLOSURE DETAIL
NO SCALE



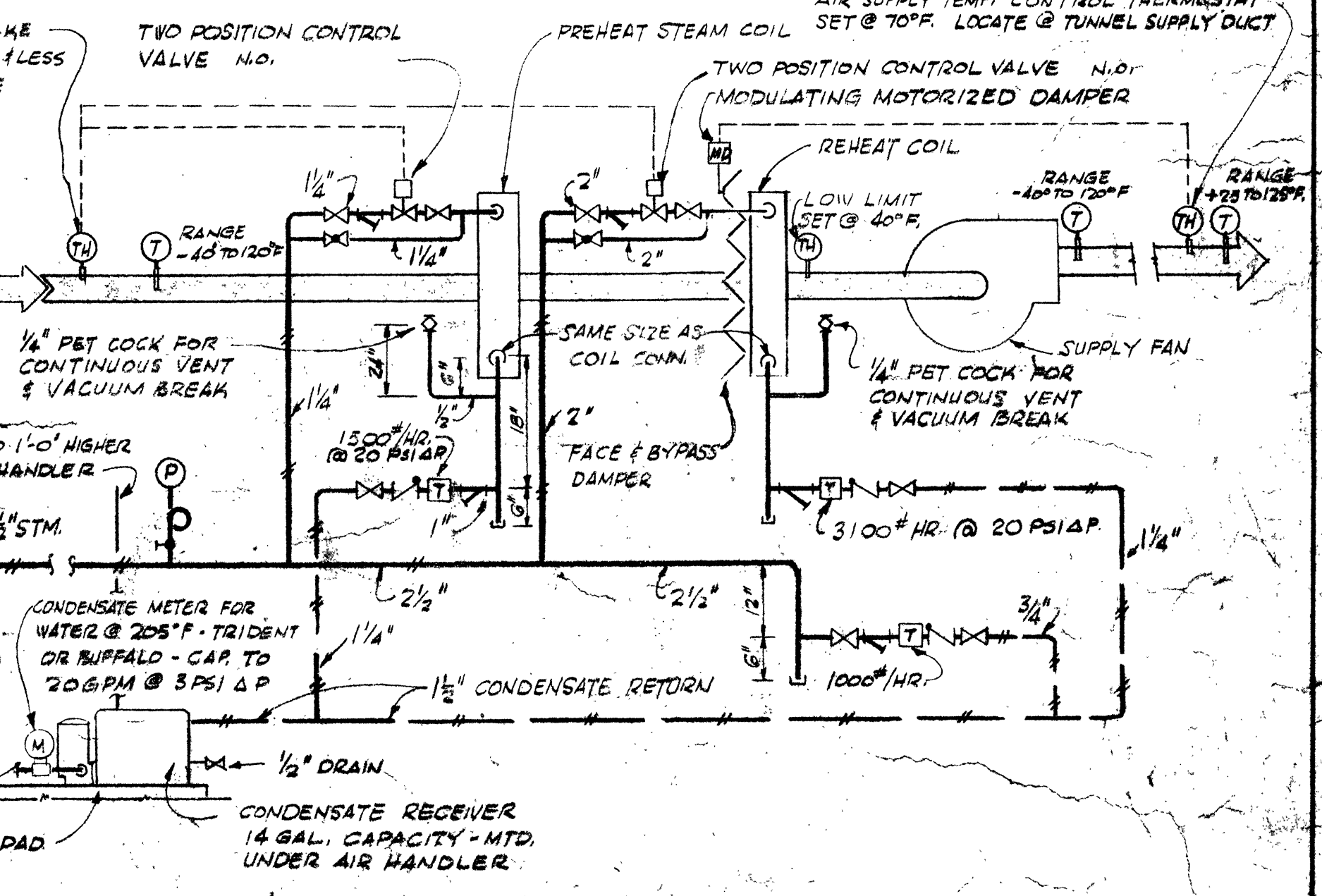
ELEVATION
TUNNEL CLOSURE DETAIL
NO SCALE

EQUIPMENT SCHEDULE									
FANS									
NO.	SERVICE	CAPACITY CFM	STATIC IN. W.G.	FAN SPEED RPM	TIP SPEED FPM	MOTOR HP	TYPE	MANUFACTURER	MODEL NO.
TAH-1	TUNNEL AIR SUPPLY	14,000	2 1/2	1200	8,500	15	AIR HANDLER WITH AIRROLL FAN	TRANE #25	CLIMATE CHANGER
TEF-1	ACCESS TUNNEL EXHAUST	2000	1/2	1700	2100	3/4	DIRECT DRIVE PROPELLOR	TRANE OD 20	
TEF-2	EAST BEAM TUNNEL EXHAUST	5000	1/2	1100	7900	1	BELT DRIVE PROPELLOR	TRANE PB 25	TYPE G WHEEL
TEF-3	WEST BEAM TUNNEL EXHAUST	5000	1/2	1100	7900	1	BELT DRIVE PROPELLOR	TRANE PB 25	TYPE G WHEEL

STEAM COILS									
NO.	SERVICE	CAPACITY BTU/HR	FACE AREA SQ. FT.	TEMP. DIFF. °F	FACE VEL. FPM	PRESS. DROP PSI	STEAM CAP. LBS/HR	CONTROL VALVE	TRAP
SC1	PREHEAT	450,000	14,000	-10 +20	400	0.21 W.G.	80	500	500/HR
SC2	REHEAT	1,350,000	14,000	+20 +110	400	0.21 W.G.	80	1550	1550/HR

CONDENSATE RETURN PUMP
8000 EDR 12 GPM @ 45 PSIG 14 GALLON RECEIVER 1 1/2 HP MOTOR GOULD #2F33

DIRECT EXPANSION COIL									
AIR VOLUME CFM	CAPACITY BTU/HR	ENT. AIR D.B.	ENT. AIR W.B.	LVG. AIR D.B.	LVG. AIR W.B.	SUCTION TEMPERATURE °F	AIR FRICTION MAX. IN. W.G.	COIL FACE VELOCITY FPM	FACE CAPACITY
14,000	785,000	96°F	75°F	75°F	60°F	45°F	1" W.G.	400	



STEAM COIL HOOK-UP PIPING DETAIL
NO SCALE

GENERAL NOTES
1. FOR LOCATION OF TEMPORARY HEATING & VENTILATING EQUIPMENT SEE DRAWING HV-2.
2. DX COIL CONNECTIONS SHALL BE CAPPED.

MATERIAL SPECIFICATION

PIPE
STEAM - BLACK STEEL SCHEDULE 40
CONDENSATE - BLACK, GENUINE WROUGHT IRON SCHEDULE 40

FITTINGS
2" & SMALLER - BLACK 160# MALLEABLE IRON - SCREWED TYPE
2 1/2" & LARGER - STD. WT. STEEL BUTT WELDING

VALVES
GATE - 2" & SMALLER - 160# BRONZE SCREWED, RISING STEM CRANE #31
2 1/2" & LARGER - 250# IRON BODY BRASS STEM PLAIN DISC 5TH CRANE #7E
GLOBE - 200# BRONZE SCREWED, PLUG DISC TYPE CRANE # 212 P
CHECK - 160# BRONZE SCREWED CRANE # 34

STRAINERS
150# 4" PATTERN, SCREWED

TRAPS
INVERTED BUCKET TYPE FOR 150 PSIG WORKING PRESSURE - ARMSTRONG 800 SERIES

FANS & AIR HANDLER
CAPACITIES AS INDICATED. THE AIR HANDLER SHALL BE WEATHERPROOFED SUITABLE FOR OUTDOOR INSTALLATION.

STEAM COILS
CAPACITIES AS INDICATED. DESIGNED FOR OPERATION AT 100 PSIG. NON-FREEZE TYPE.

MOTORS
TOTALLY ENCLOSED, FAN COOLED, 440VOLT 3 PHASE, 60 CYCLE.

DUCTWORK
BLACK STEEL 20 GAGE 1/4" ALL JOINTS WELDED OR SOLDERED. ELBOWS SHALL HAVE A CENTERLINE RADIUS OF NOT LESS THAN 1 1/2 TIMES THE DUCT DIAMETER. TRANSITIONS SHALL HAVE TAPER ANGLES NOT GREATER THAN 30°.

CONTROLS
THE STEAM COILS SHALL BE FITTED WITH MOTORIZED VALVES. THE VALVES SHALL BE TWO-POSITION NORMALLY OPEN TYPE SUITABLE FOR A STEAM WORKING PRESSURE OF 100 PSIG. THE VALVES SHALL BE CONTROLLED BY AN OUTSIDE AIR CONTROLLER. THE PREHEAT COIL SHALL OPEN AT +35°F. & LESS AND THE REHEAT COIL SHALL OPEN AT 70°F. & LESS OR SET POINT.

INSULATION
ALL STEAM & CONDENSATE PIPES VALVES & FITTINGS SHALL BE INSULATED W/ 7 1/2" DENSITY FIBERGLASS INSULATION. (STEAM LINE - 1 1/2" THICK, CONDENSATE 1" THICK, CONDENSATE PUMP & RECEIVER 2" THICK) ALL INSULATION SHALL BE WEATHER-PROOFED W/ 45# FELT AND ALL JOINTS SHALL BE LAPPED AND SEALED.

LEGEND

STEAM SUPPLY - 100 PSIG
PUMPED CONDENSATE RETURN
GRAVITY CONDENSATE RETURN

GATE VALVE
GLOBE VALVE
CHECK VALVE
STRAINER
STEAM TRAP
CAP
THERMOMETER - RANGE AS INDICATED - WEXLER #5A
THERMOSTAT
PRESSURE GAGE, SYRION F-COCK - RANGE 0 TO 100 PSIG - WEXLER #5A
N.O. NORMALLY OPEN
TAH TEMPORARY AIR HANDLER
TEF TEMPORARY EXHAUST FAN

DATE	BY	CHKD	APPD
10/15/92	W.M.B.	W.M.B.	W.M.B.

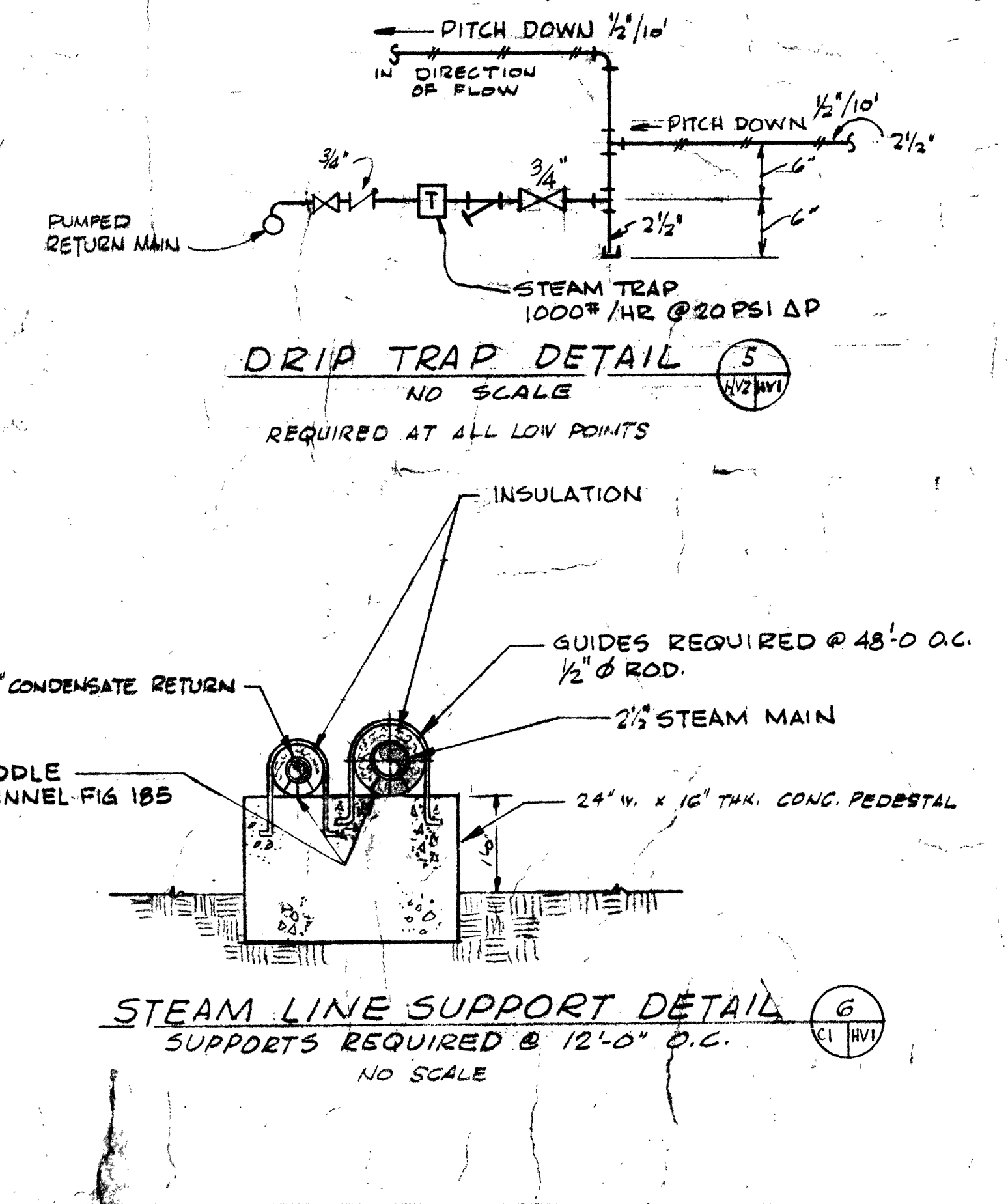
IO GEV CORNELL SYNCHROTRON LABORATORY
CORNELL UNIVERSITY
ITHACA, NEW YORK

TUNNEL FINISHING WORK
TEMPORARY HEATING & VENTILATING SYSTEM

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ARCHITECT
STRUCTURAL ENGR.
CONSTRUCTION ENGR.

DATE: JAN 15 1992
WMB & A NO. 111-E



DRIP TRAP DETAIL
STEAM LINE SUPPORT DETAIL
NO SCALE