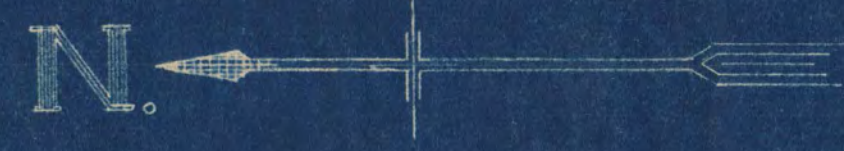
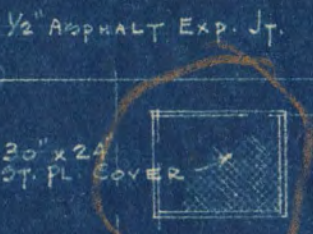


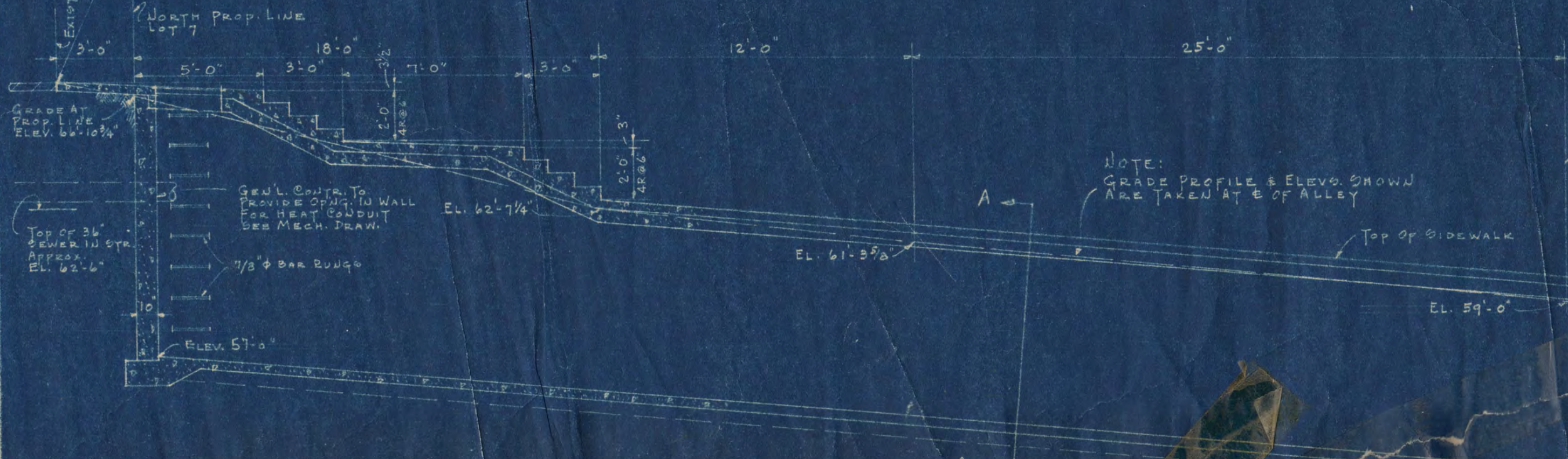
MATERIAL LEGEND



SECTION A-A
SCALE 1/4" = 1'-0"



PLAN TOP OF TUNNEL
SCALE 1/4" = 1'-0"



PLOT PLAN
SCALE 1/32" = 1'-0"

LEGEND OF GRADES
EXISTING GRADES SHOWN THUS ——— + 56.8'
ESTABLISHED GRADES SHOWN THUS ——— + 75.0'



LONGITUDINAL SECTION THRU TUNNEL
SCALE 1/4" = 1'-0"



CENTRAL HEATING PLANT
STATE TEACHERS COLLEGE
ST. CLOUD, MINN.
DEPT. OF ADMINISTRATION, STATE OF MINNESOTA
ST. PAUL, MINN.

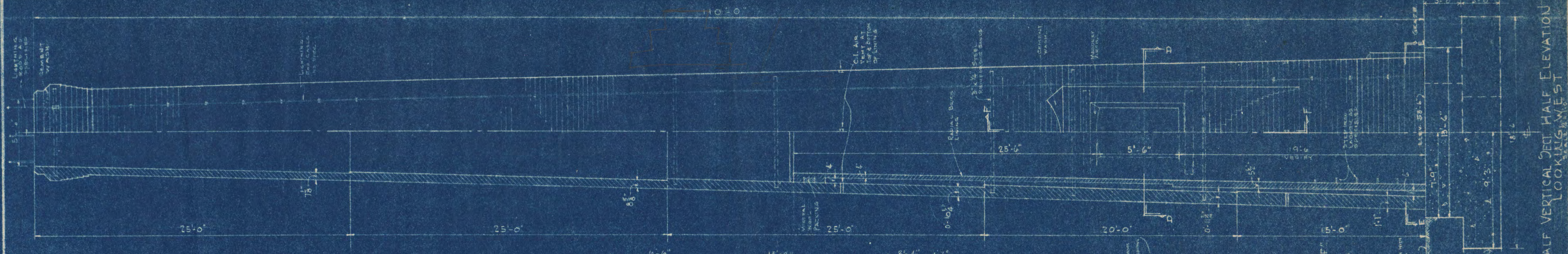
DATE: DEC. 10, 1949
REVISION:
APPROVED BY:
APPROVED BY:
DRAWN BY:
CHECKED BY:

FRANK W. JACKSON, ARCHITECT
FRED V. TRAYNOR, ASSOC. ARCHITECT
ST. CLOUD, MINN.
G. M. ORR, ENGR. CO., CONSULTING ENGINEERS

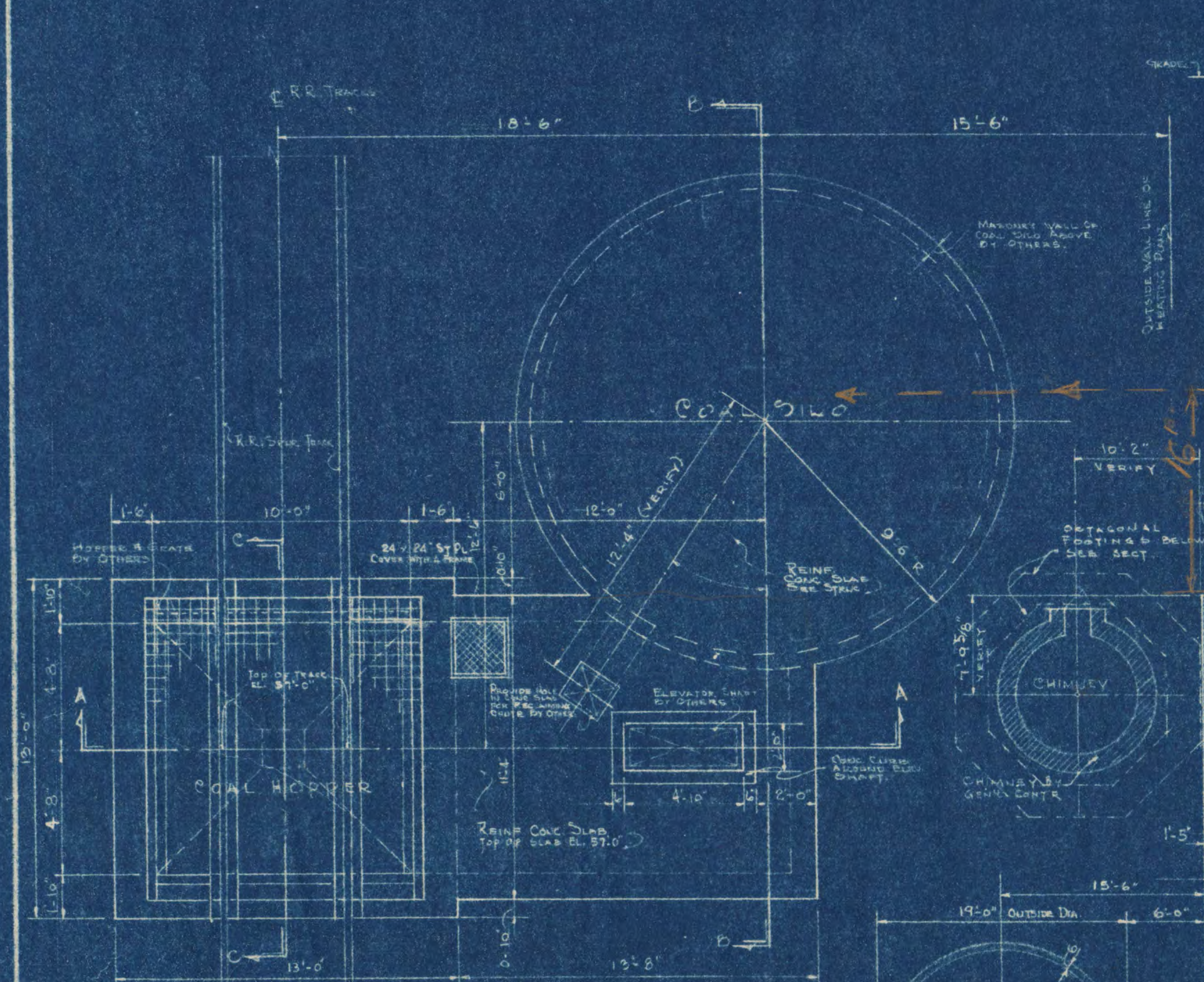
PROJECT NO. 919

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly registered Architect under the laws of the State of Minnesota.

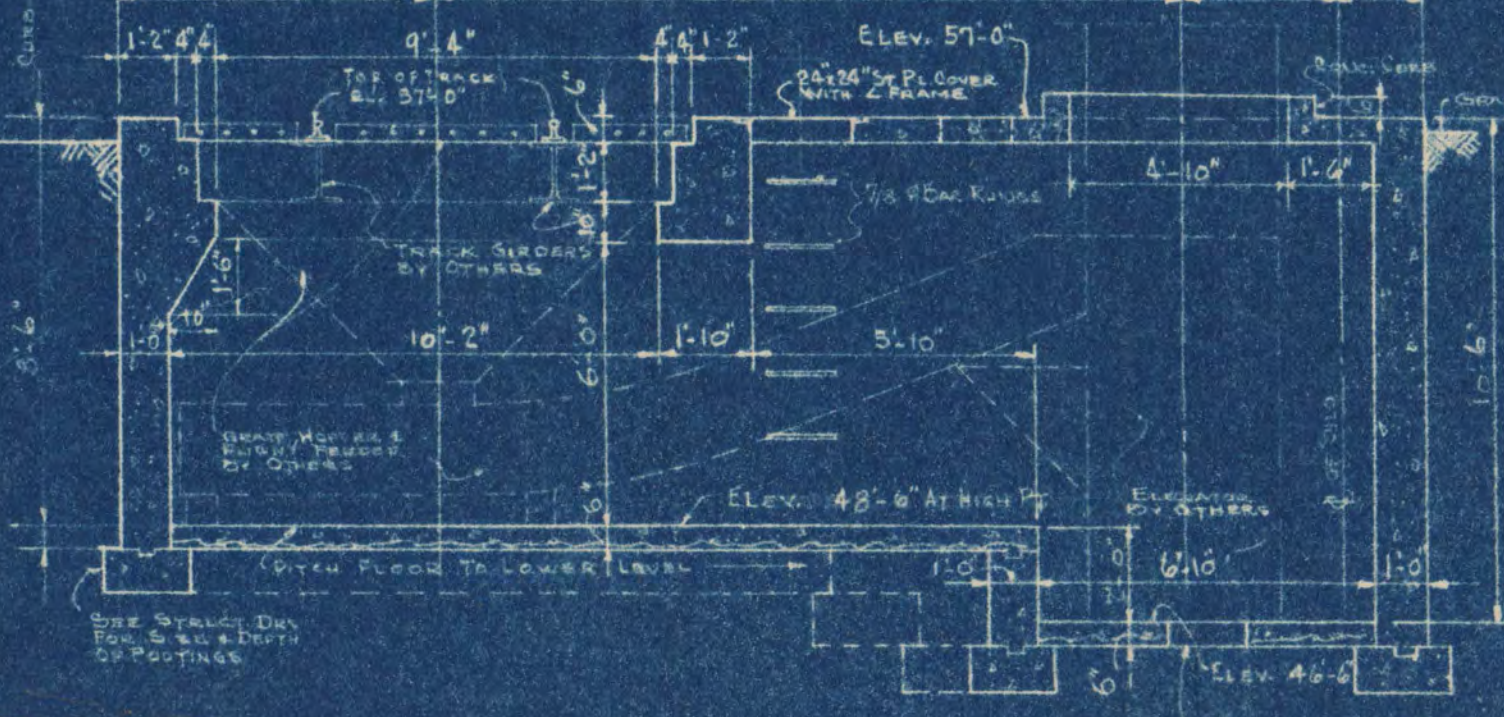
Frank W. Jackson



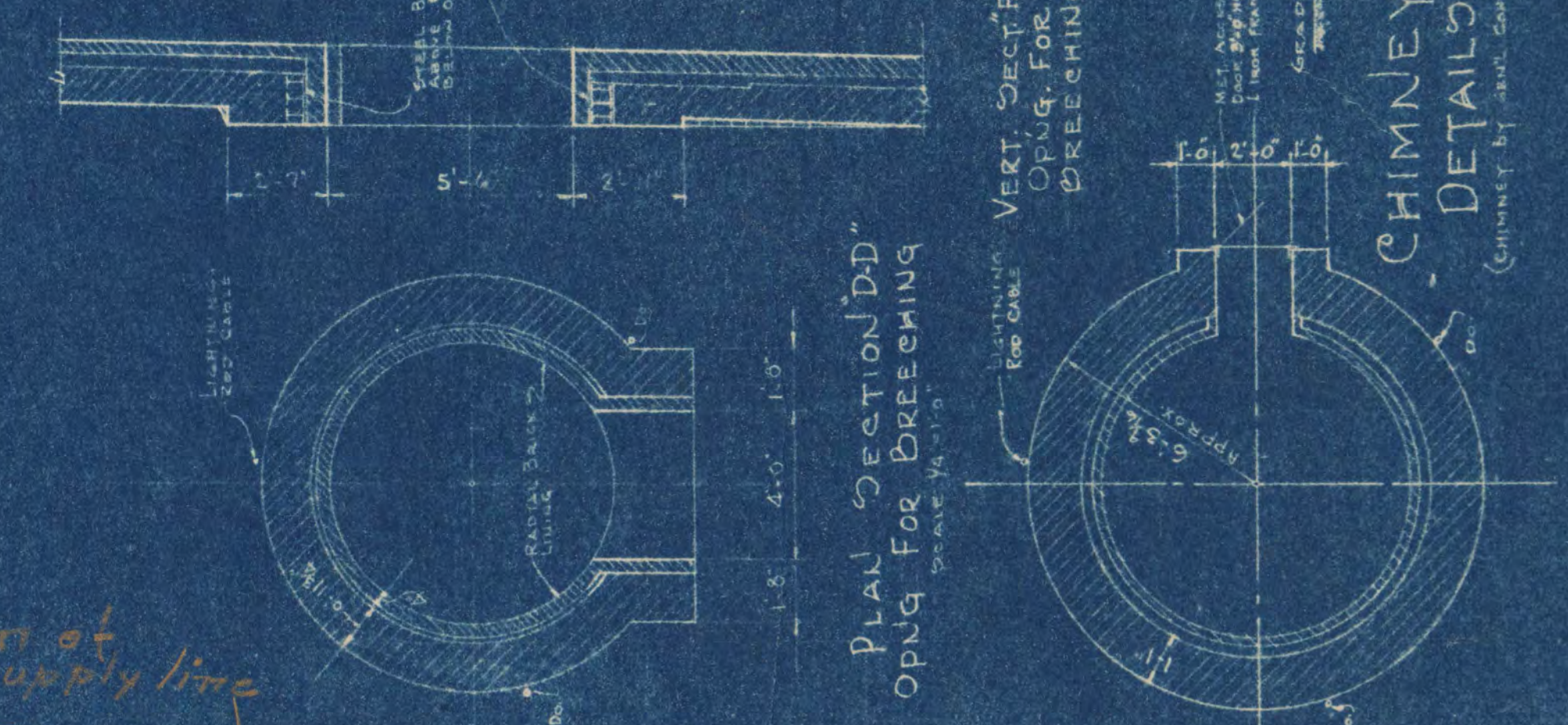
HALF VERTICAL SECTION HALF ELEVATION LOOKING WEST



PLAN DETAIL FOR COAL SILO & HOPPER SCALE 1/4" = 1'-0" SEE ALTERNATE NO. 2

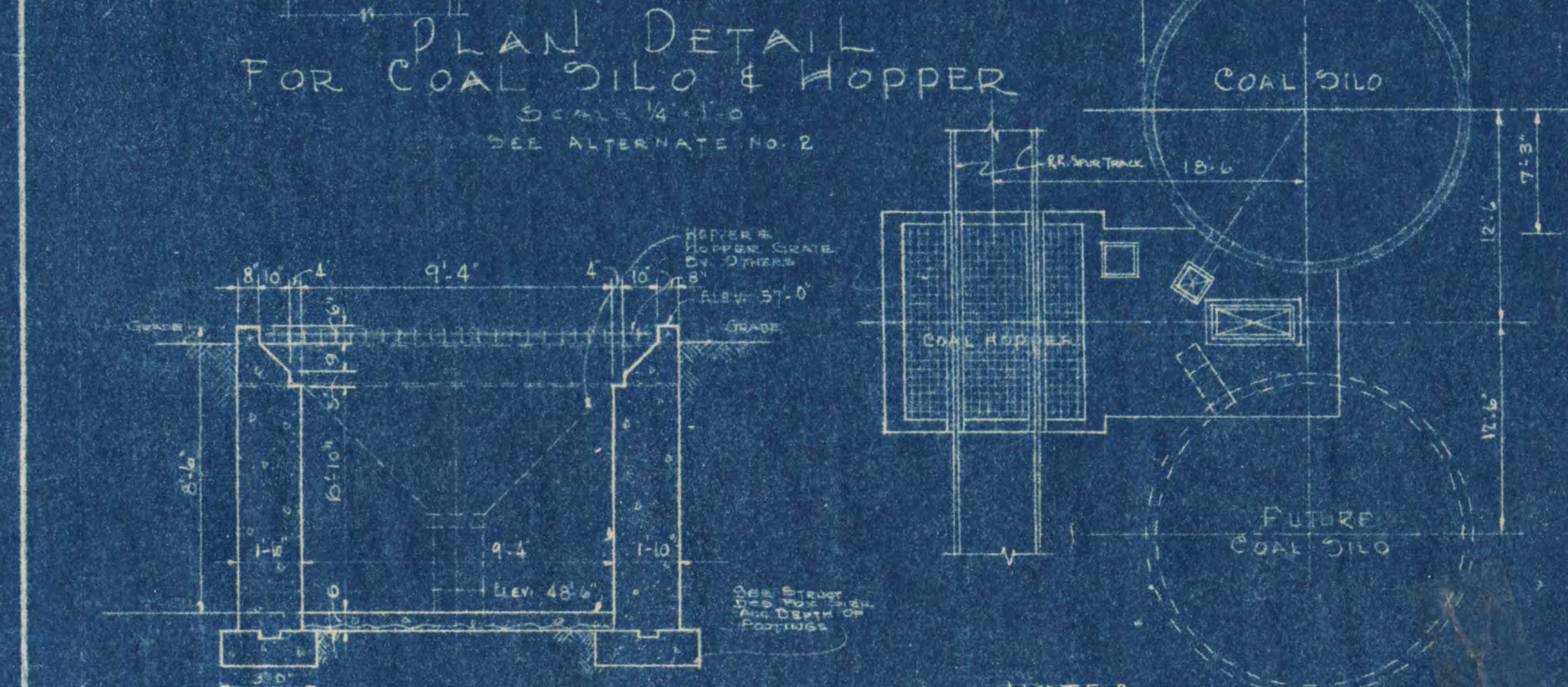


SECTION AT A-A SCALE 1/4" = 1'-0" SEE ALTERNATE NO. 2

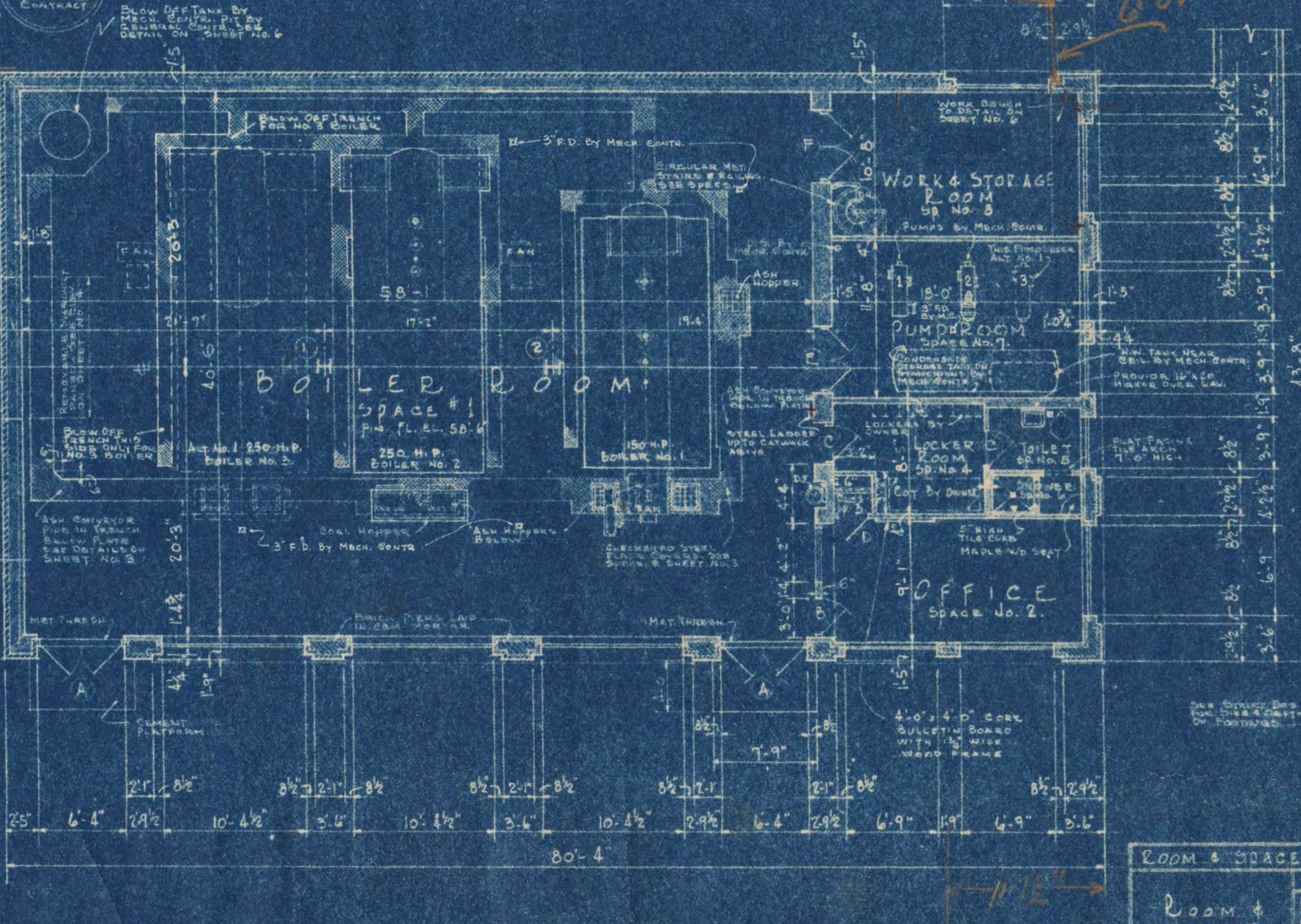


PLAN SECTION DD FOR BREACHING SCALE 1/4" = 1'-0"

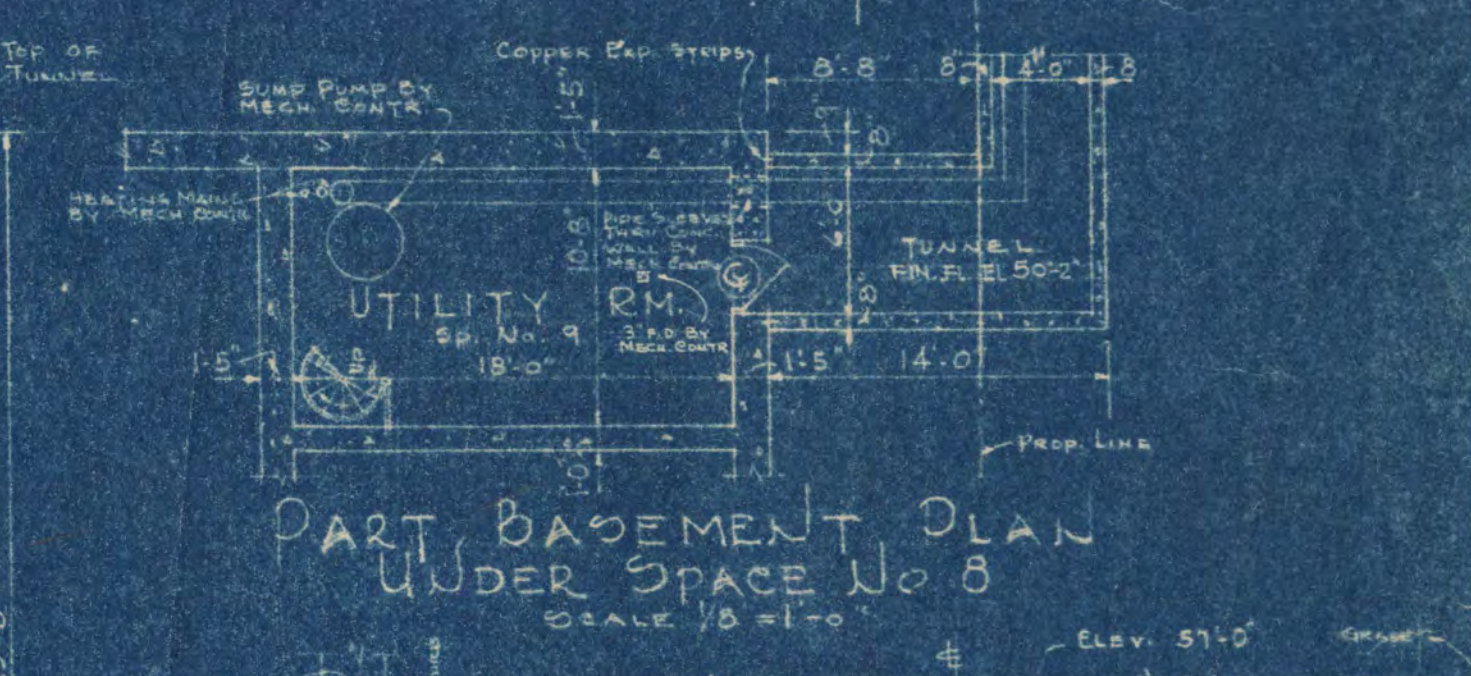
PLAN SECTION EE FOR BREACHING SCALE 1/4" = 1'-0"



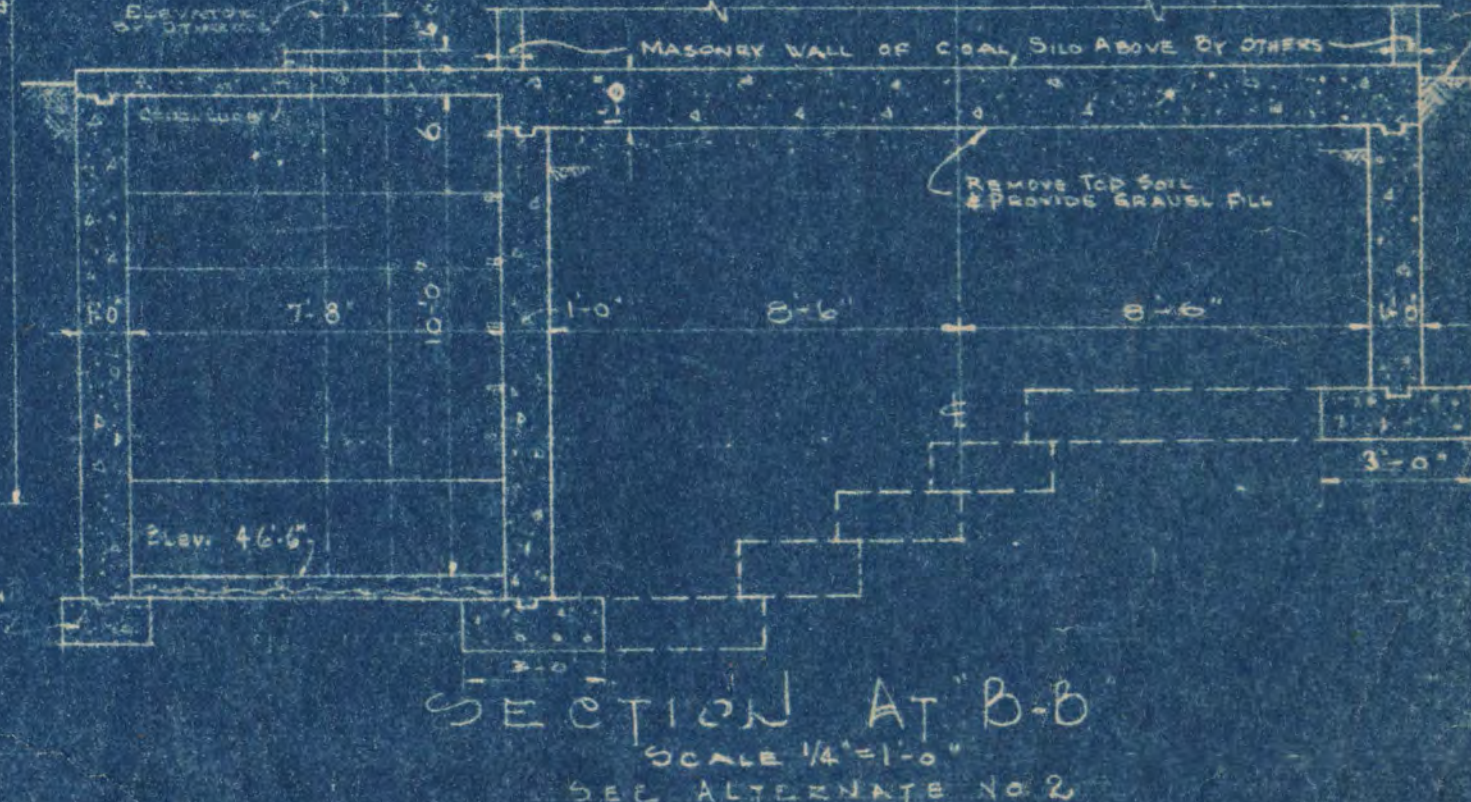
SECTION AT CC SCALE 1/4" = 1'-0" SEE ALTERNATE NO. 2



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



PART BASEMENT PLAN UNDER SPACE NO. 8 SCALE 1/8" = 1'-0"



SECTION AT B-B SCALE 1/4" = 1'-0" SEE ALTERNATE NO. 2

NOTE: COAL SILO & HOPPER TO BE FURNISHED UNDER MECH. CONTRACT. FOUNDATION FOR SILO TO BE PROVIDED BY CIVIL ENGINEER. SEE ALTERNATE NO. 2

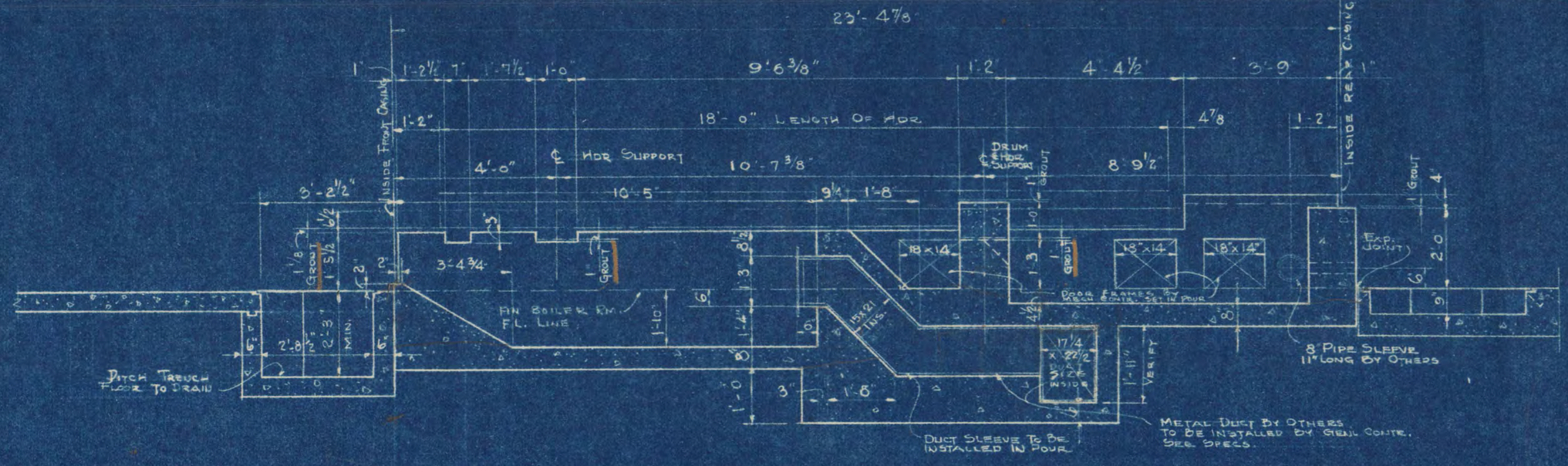
SEE DRAWING NO. 5 FOR PLAN OF UPPER PART OF BOILER ROOM. BOILER FOUNDATIONS BY CIVIL ENGINEER TO DETAIL ON SHEET NO. 8. ALL DIMENSIONS TO PROVIDE CLEARANCE UNDER PUMPS IN PUMP ROOM SP. NO. 7 IN ACCORDANCE WITH MECHANICAL DRAWINGS.

ROOM & SPACE	FLOOR	WALLS	CILING	TRIM	NOTES
1 BOILER RM	CONCRETE	CONCRETE	CONCRETE	CONCRETE	
2 OFFICE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	
3 CLOSET	CONCRETE	CONCRETE	CONCRETE	CONCRETE	
4 LOCKER RM	CONCRETE	CONCRETE	CONCRETE	CONCRETE	
5 TOILET	CONCRETE	CONCRETE	CONCRETE	CONCRETE	
6 SHOWER	CONCRETE	CONCRETE	CONCRETE	CONCRETE	
7 PUMP ROOM	CONCRETE	CONCRETE	CONCRETE	CONCRETE	
8 WORK & STORAGE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	
9 UTILITY RM.	CONCRETE	CONCRETE	CONCRETE	CONCRETE	

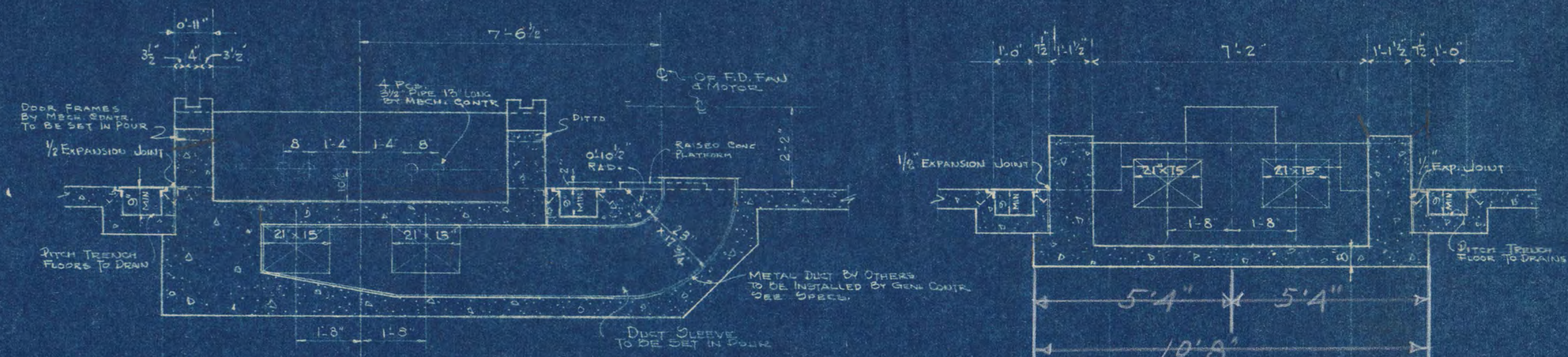
CENTRAL HEATING PLANT
STATE TEACHERS COLLEGE
ST. CLOUD, MINN.
DEPT. OF ADMINISTRATION STATE OF MINNESOTA
ST. PAUL, MINN.

DATE: Dec. 10, 1948
DRAWN BY: Frank W. Jackson
CHECKED BY: Fred V. Traylor
APPROVED BY: R. G. J. [Signature]

PROJECT NO. 919



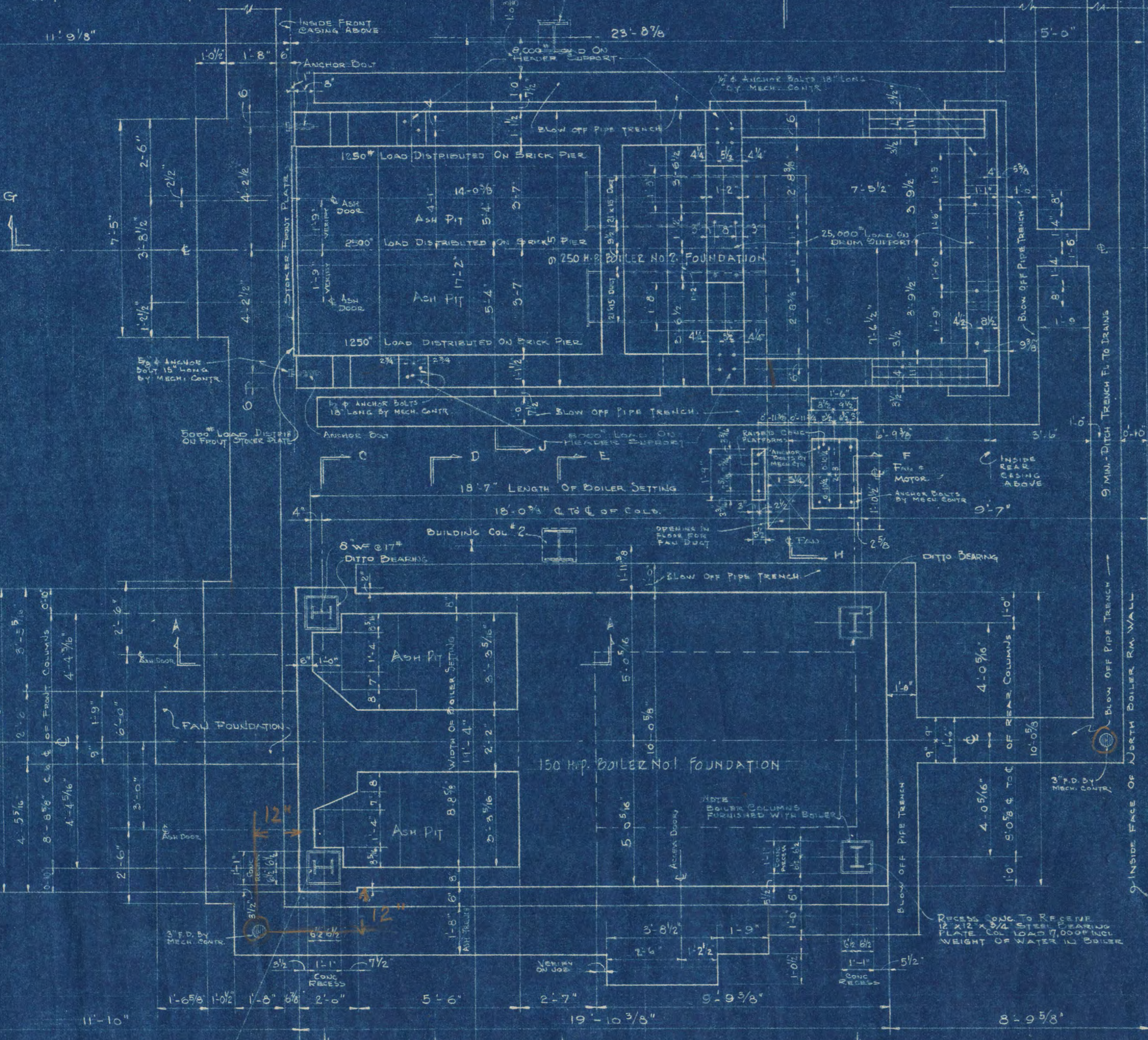
Boiler #2
SECTION G-G
SCALE 3/8"=1'-0"
SECT FOR #3 BOILER SIMILAR



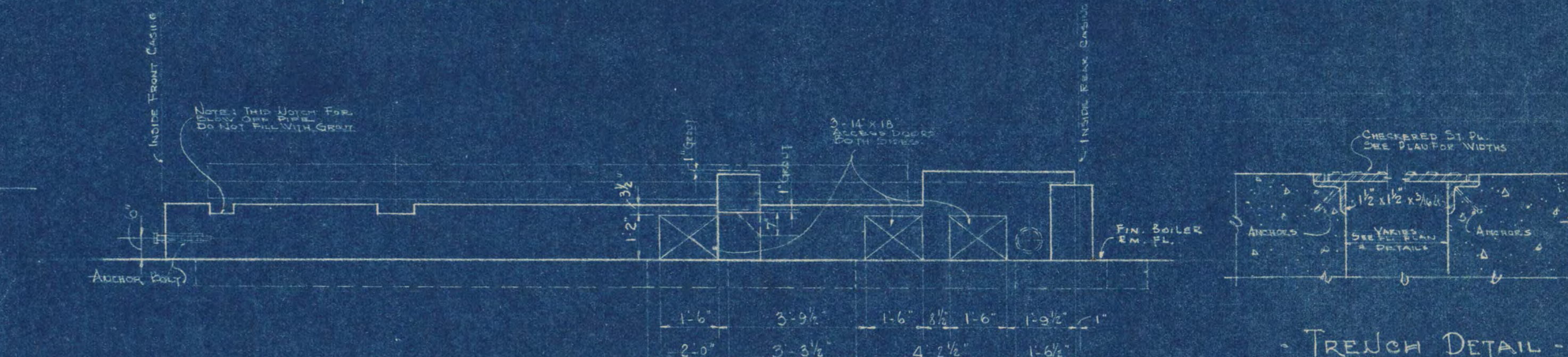
Boiler #2
SECTION H-H
SCALE 3/8"=1'-0"
SECT. FOR #3 BOILER SIMILAR

Boiler #2
SECTION J-J
SCALE 3/8"=1'-0"
SECT. FOR #3 BOILER SIMILAR

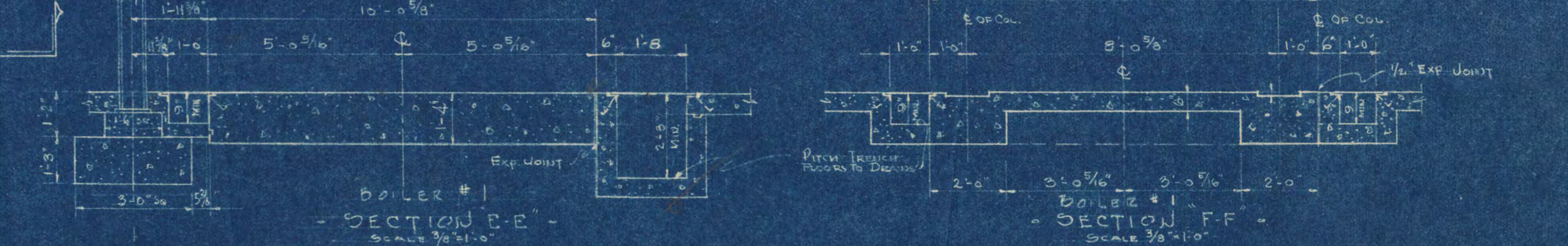
NOTE:
FOUNDATION FOR 250 HP. NO. 3 BOILER SAME AS FOUNDATION FOR NO. 2 BOILER AS DETAILED ON THIS DRAWING EXCEPT THAT BLOW OFF TRENCH IS TO BE OMITTED ON ONE SIDE OF BOILER AS SHOWN ON SHEET NO. 2. SEE ALTERNATE NO. 1 FOR OMITTING FOUNDATION FOR NO. 3 BOILER.



BOILER FOUNDATION PLAN
SCALE 3/8"=1'-0"

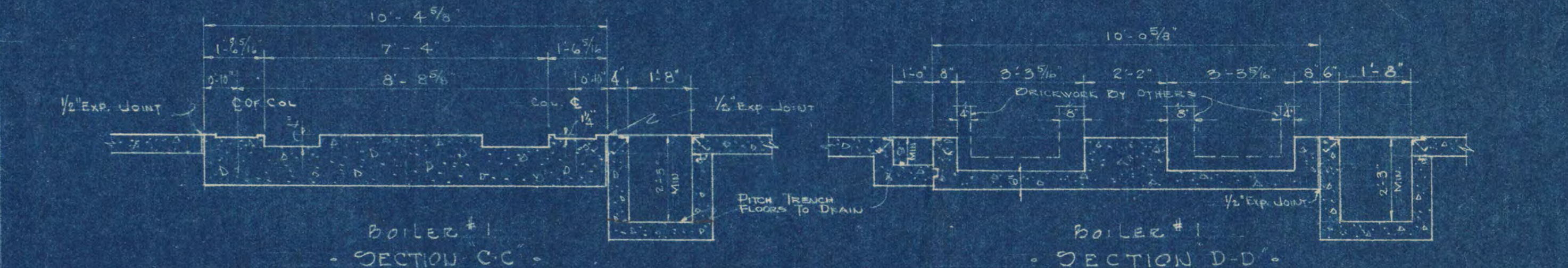


Boiler #2
SIDE ELEVATION OF 250 HP BOILER FOUNDATION
SCALE 3/8"=1'-0"
SECT FOR #3 BOILER SIMILAR



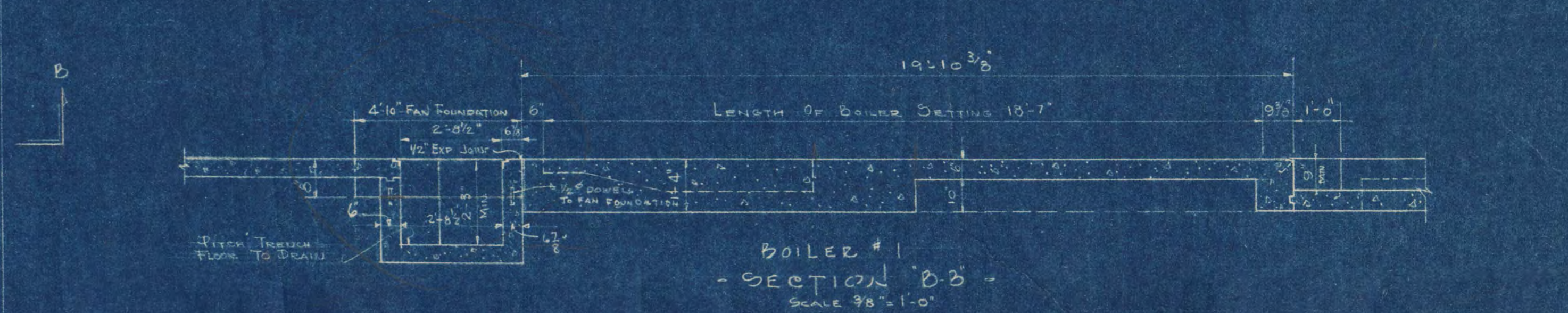
Boiler #1
SECTION E-E
SCALE 3/8"=1'-0"

Boiler #1
SECTION F-F
SCALE 3/8"=1'-0"

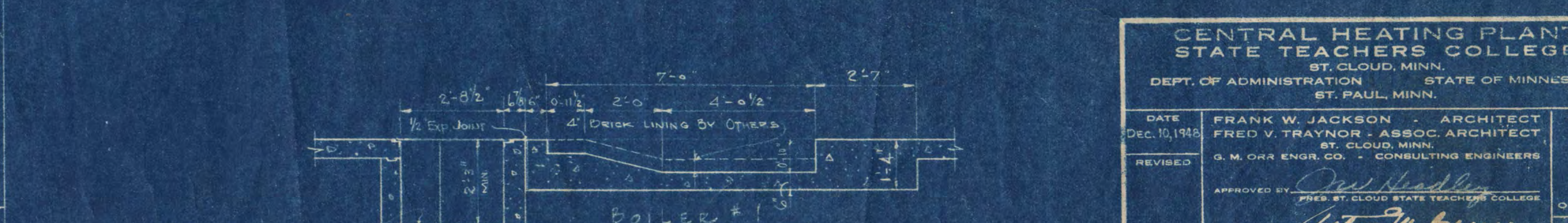


Boiler #1
SECTION C-C
SCALE 3/8"=1'-0"

Boiler #1
SECTION D-D
SCALE 3/8"=1'-0"

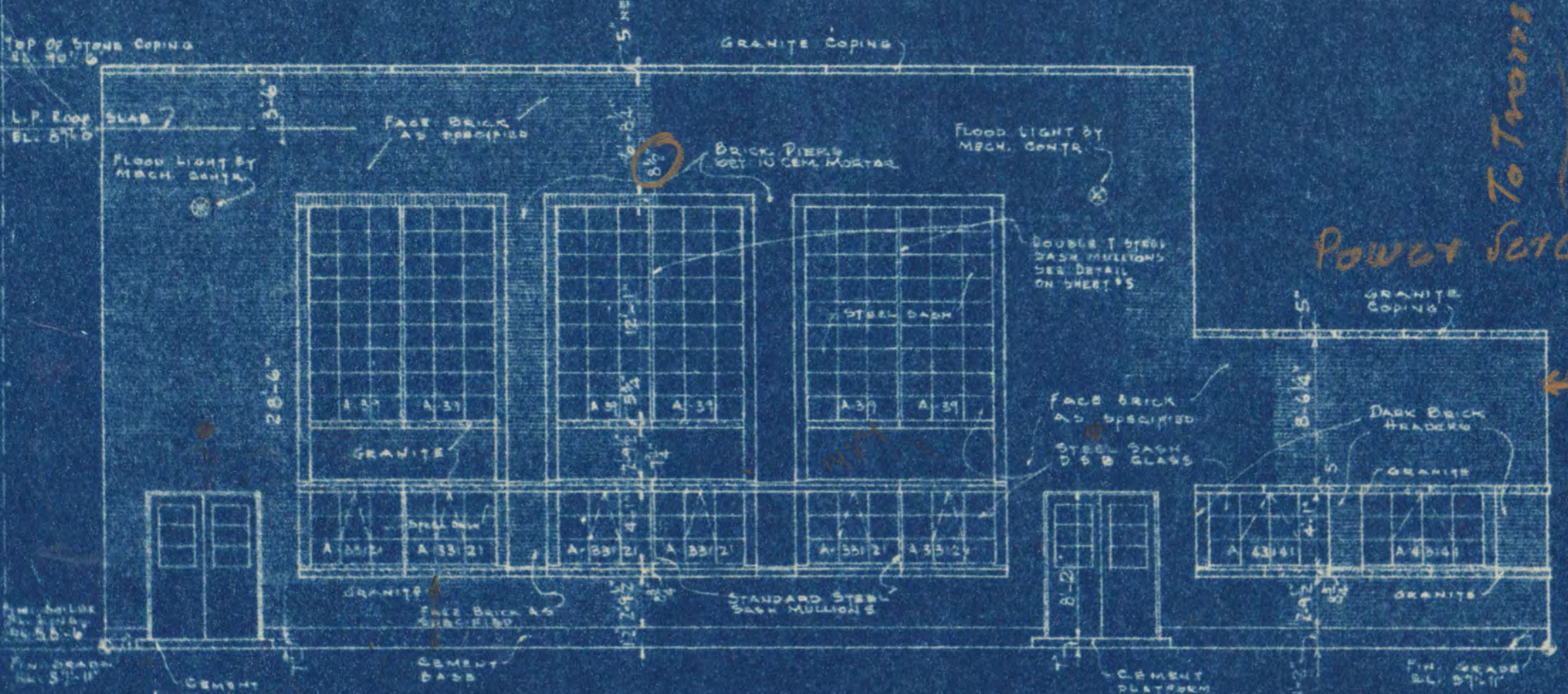


Boiler #1
SECTION B-B
SCALE 3/8"=1'-0"

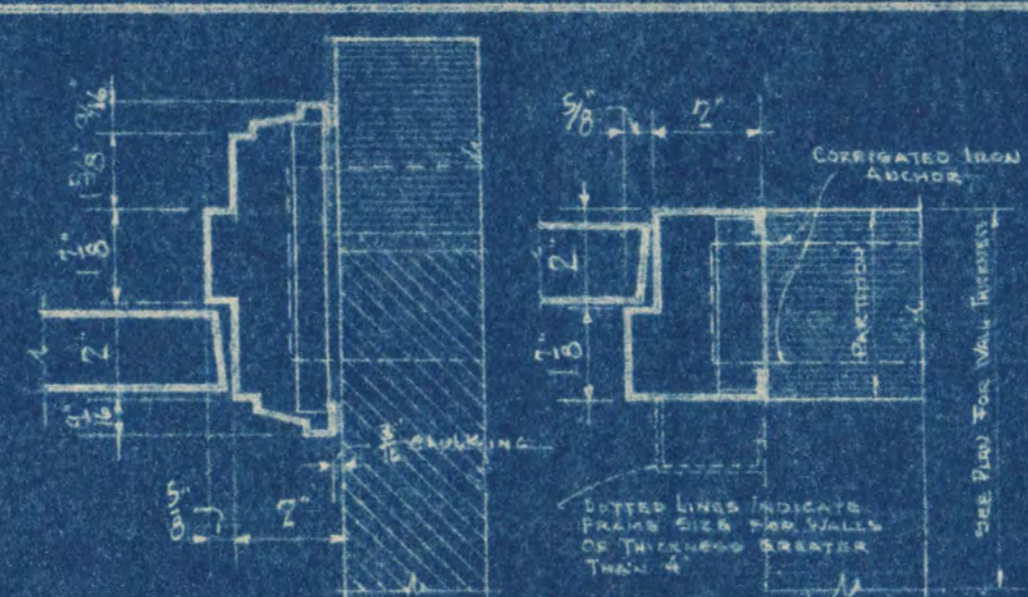


Boiler #1
SECTION A-A
SCALE 3/8"=1'-0"

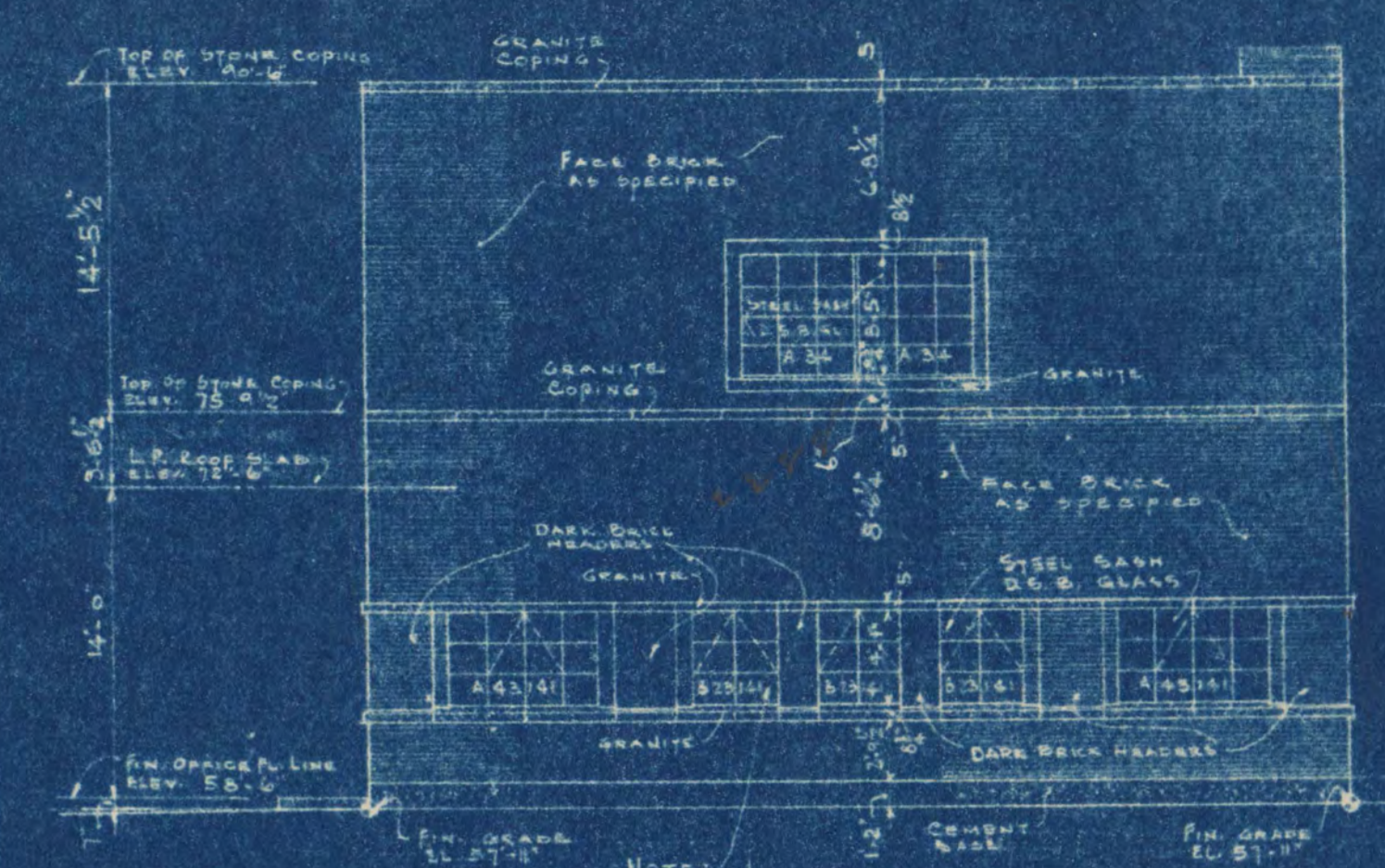
CENTRAL HEATING PLANT STATE TEACHERS COLLEGE ST. CLOUD, MINN. DEPT. OF ADMINISTRATION STATE OF MINNESOTA ST. PAUL, MINN.		
DATE Dec. 10, 1948	FRANK W. JACKSON - ARCHITECT FRED V. TRAYNOR - ASSOC. ARCHITECT ST. CLOUD, MINN. G. M. ORR ENGR. CO. - CONSULTING ENGINEERS	SHEET NO. 3 OF 6
REVISIONS	APPROVED BY <i>Frank W. Jackson</i> PRES. STATE TEACHERS COLLEGE BOARD	PROJECT NO.
	APPROVED BY <i>Fred V. Traynor</i> PRES. STATE TEACHERS COLLEGE BOARD	
DRAWN BY G.F.H. & E.V.T.	APPROVED BY <i>R. G. Scher</i> COMMISSIONER OF ADMINISTRATION AUTHORIZED SIGNATURE	919



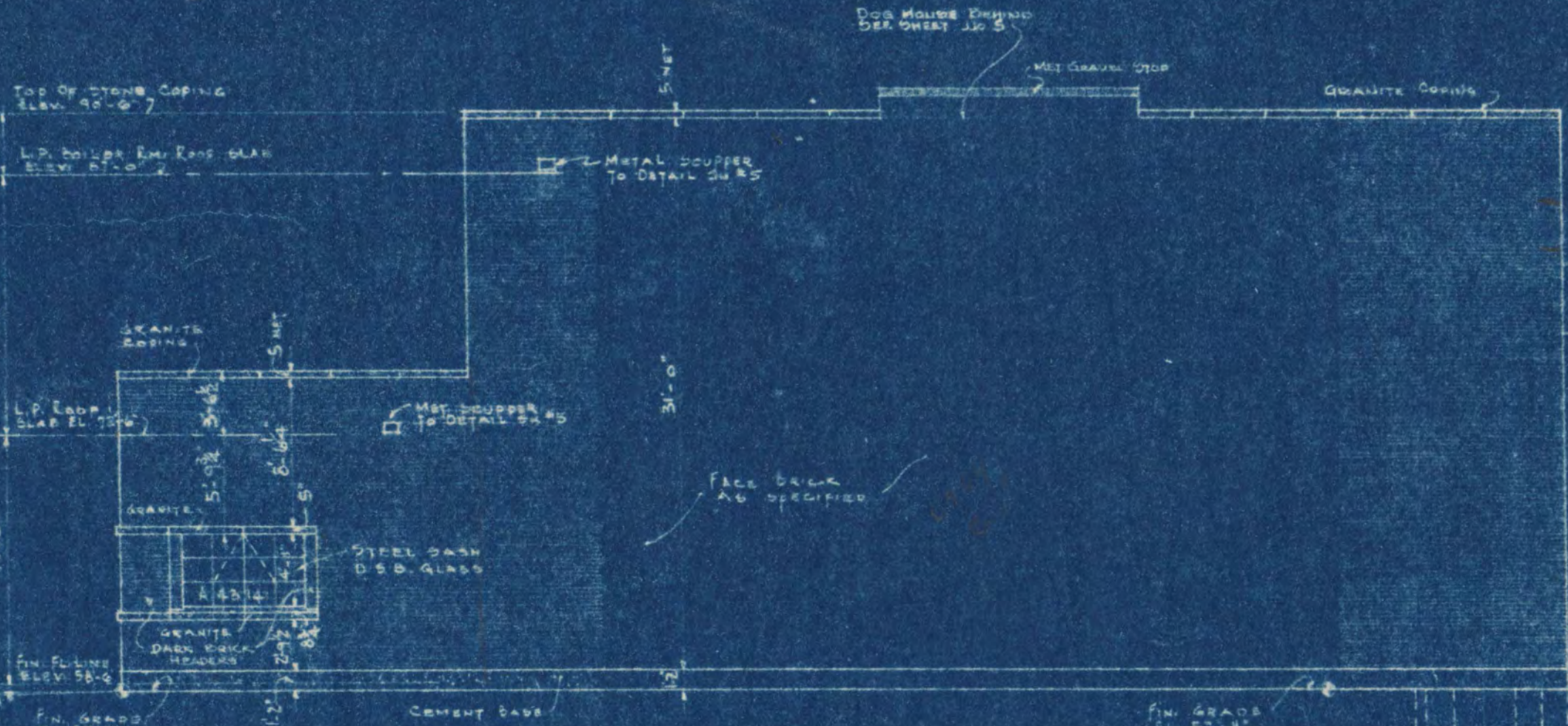
SOUTH ELEVATION
SCALE 3/8" = 1'-0"



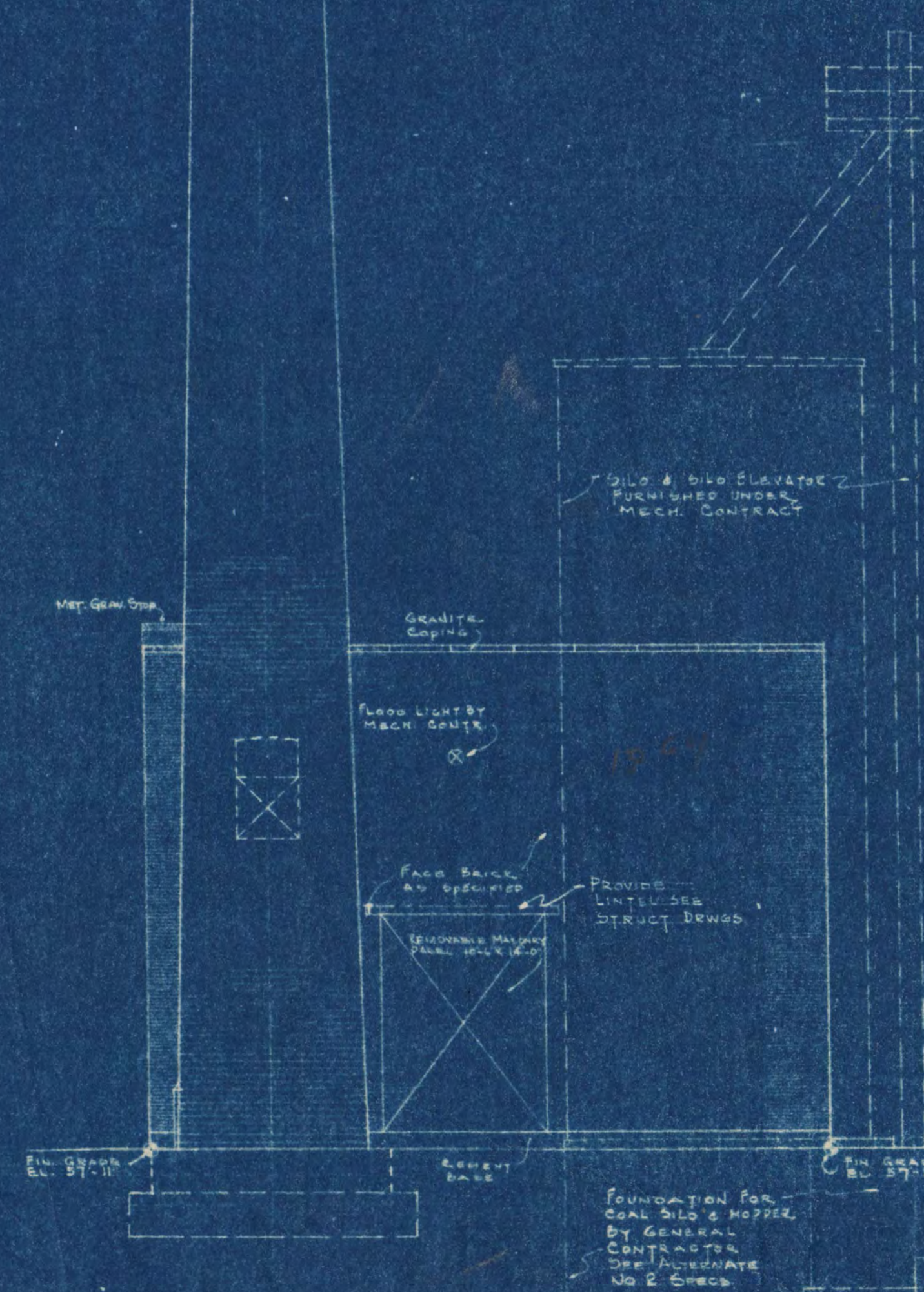
EXTERIOR DOOR FRAME
INTERIOR DOOR FRAME
DOOR FRAME DETAILS
SCALE 3/8" = 1'-0"



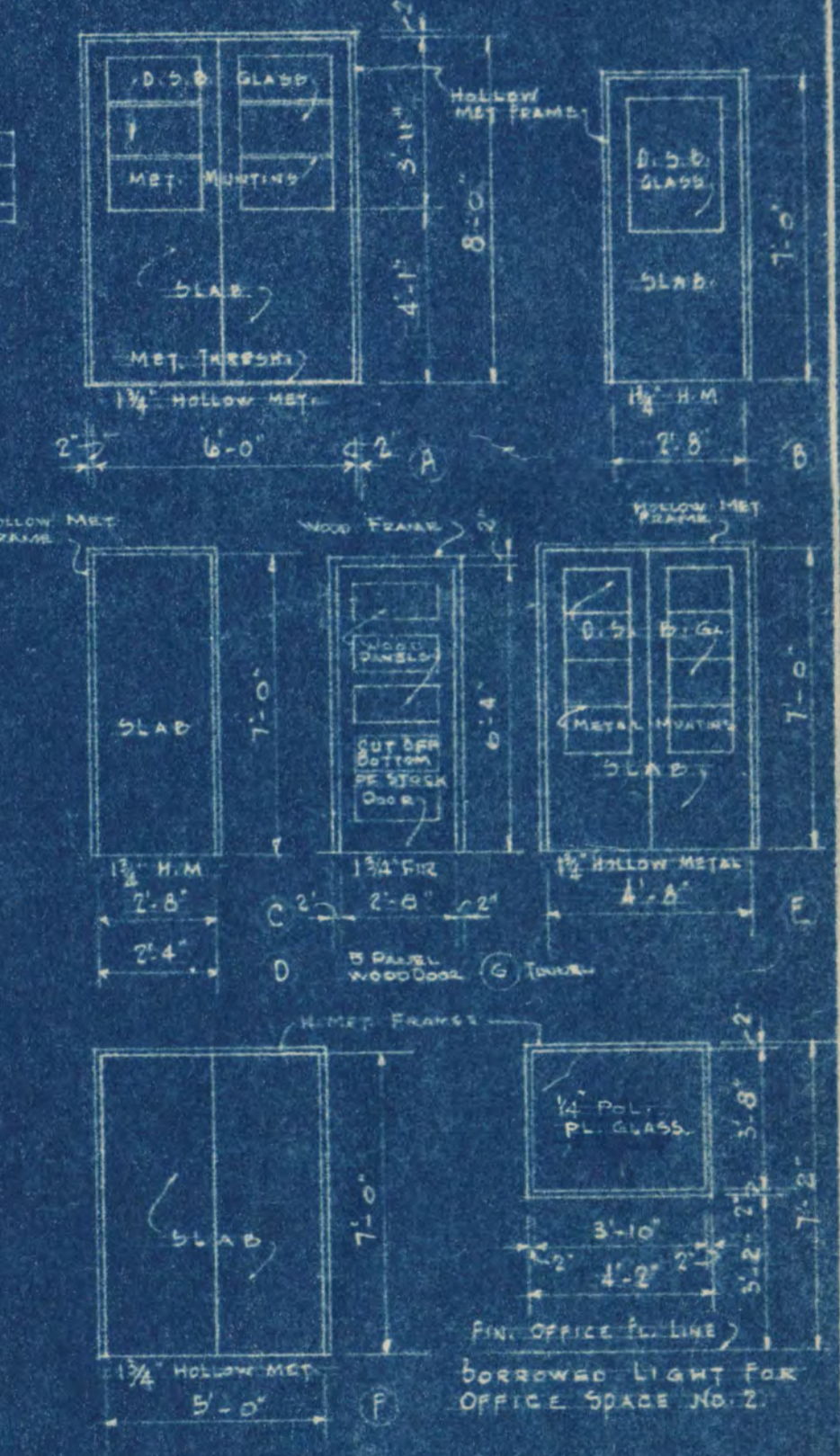
EAST ELEVATION
SCALE 3/8" = 1'-0"



NORTH ELEVATION
SCALE 3/8" = 1'-0"



WEST ELEVATION
SCALE 3/8" = 1'-0"



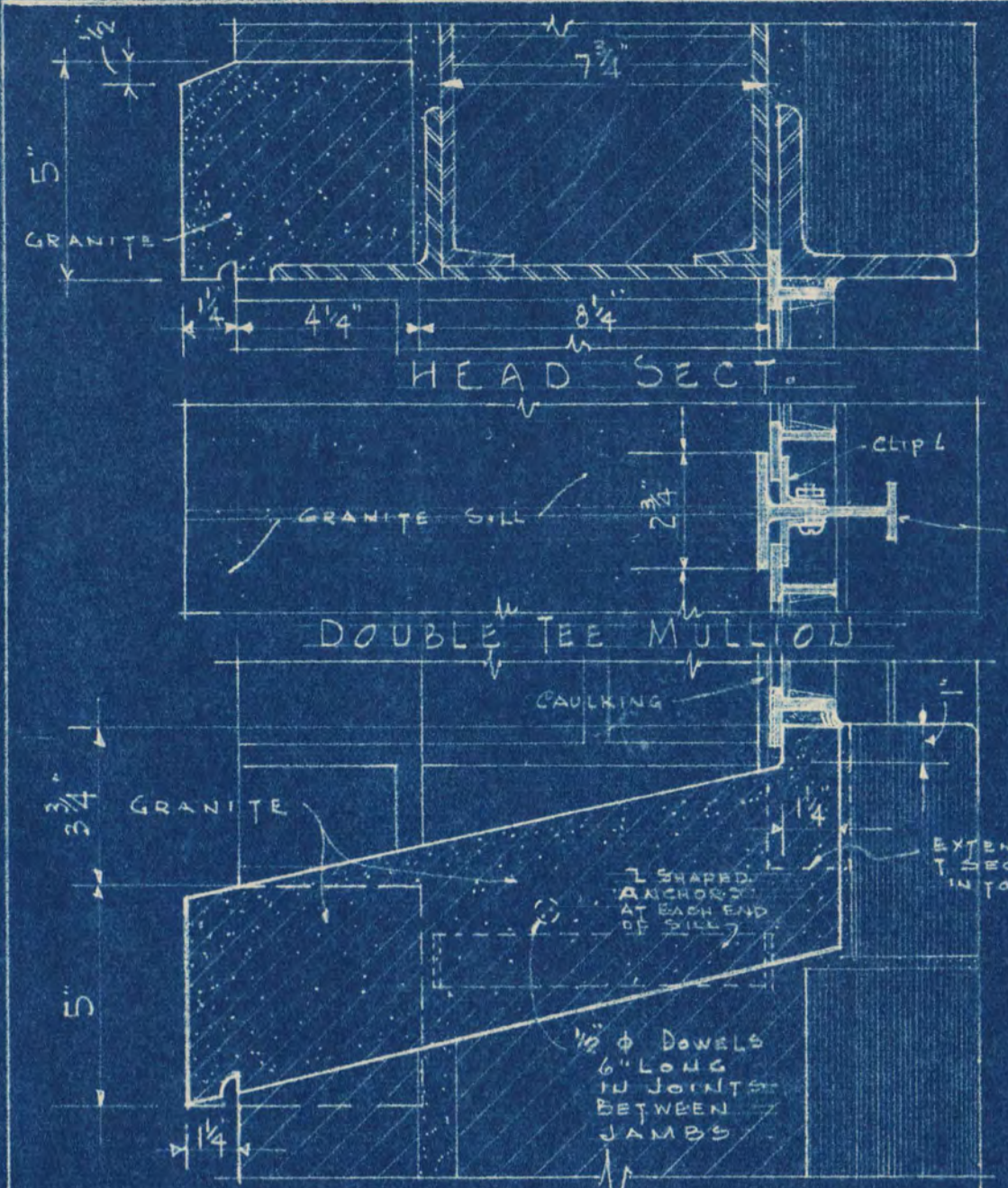
DOOR SCHEDULE
SCALE 1/4" = 1'-0"

Power Service To Transformer

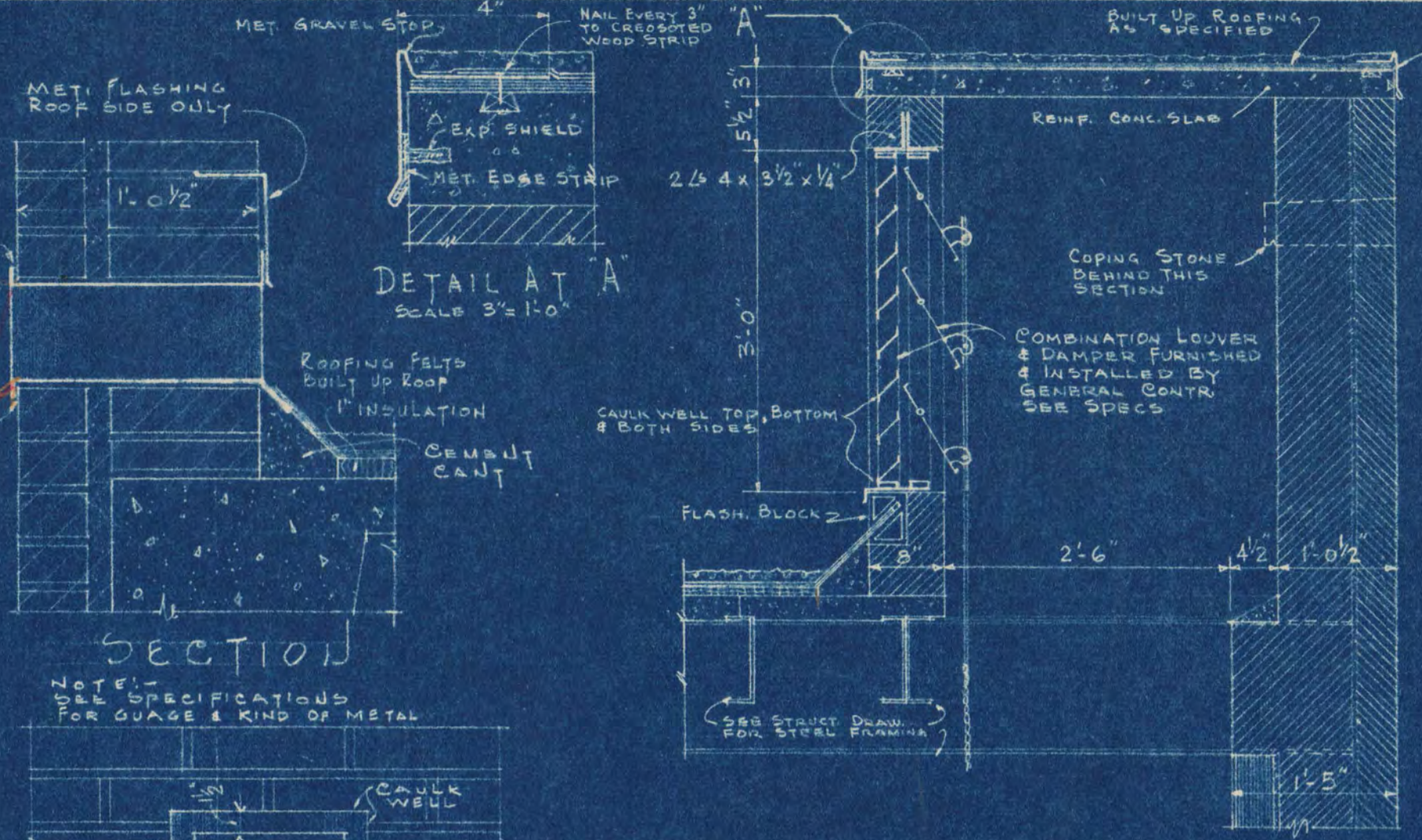
NOTE: CONTE. TO REFER TO SPEC., ALTERNATE NO. 4, REGARDING SUBSTITUTION OF DEPOSITED LIMESTONE TRIM INSTEAD OF GRANITE AT SHOW ON THIS SHEET - UNLESS NOTED OTHERWISE ALL GLASS FOR EXTERIOR WINDOWS SHALL BE D.S.B. GL.

CENTRAL HEATING PLANT
STATE TEACHERS COLLEGE
ST. CLOUD, MINN.
DEPT. OF ADMINISTRATION STATE OF MINNESOTA
ST. PAUL, MINN.

DATE	FRANK W. JACKSON, ARCHITECT	SHEET NO.
DEC. 10, 1948	FRED V. TRAYNOR, ASSOC. ARCHITECT	4
REVISED	G. N. ORR, ENGR. CO., CONSULTING ENGINEERS	6
APPROVED BY	STATE OF MINNESOTA	PROJECT NO.
	STATE TEACHERS COLLEGE	919
APPROVED BY	STATE TEACHERS COLLEGE BOARD	
DRAWN BY	R. G. NEHER	
REV. EAK		

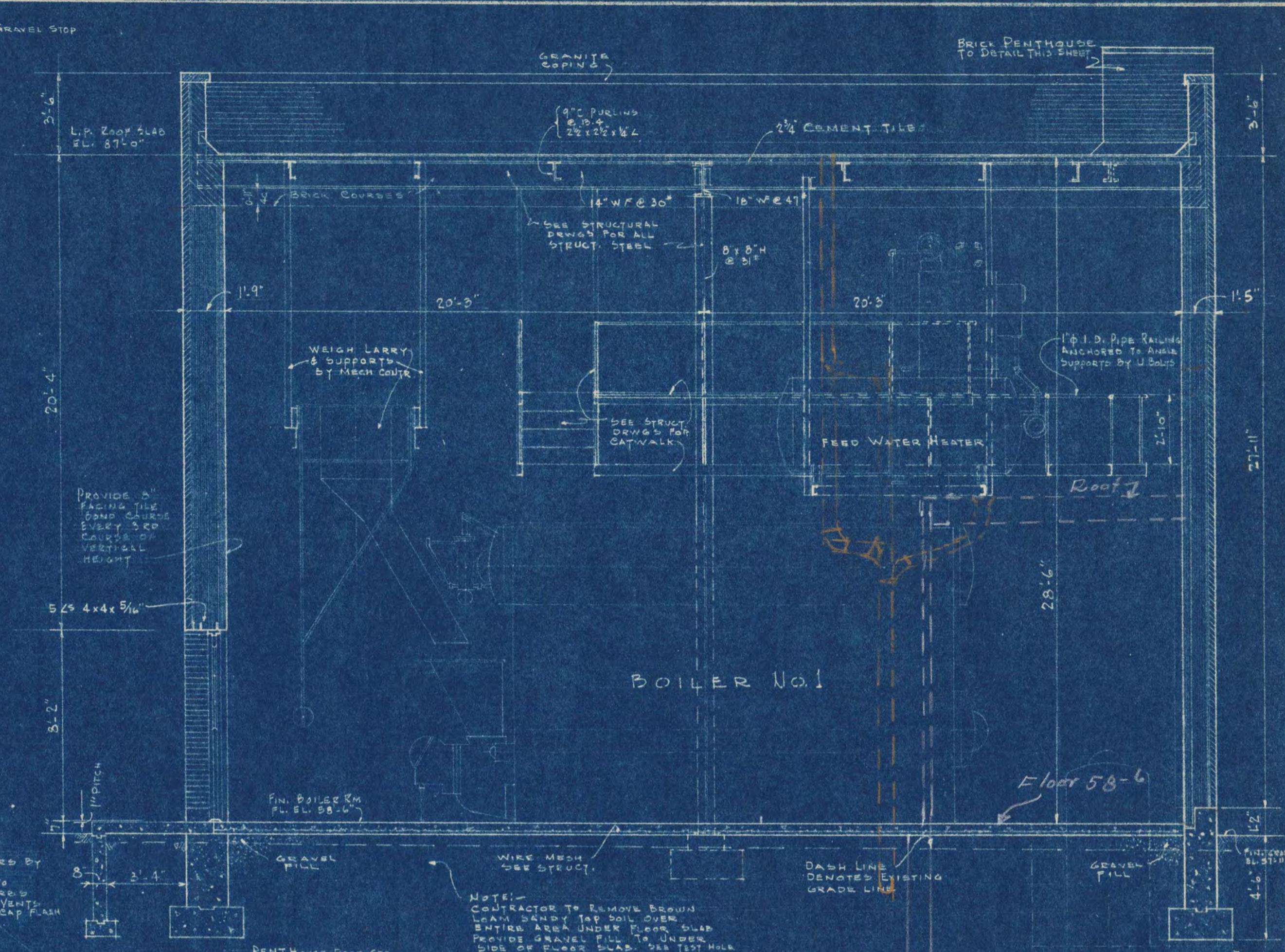


STILL SECT.
TYPICAL STEEL SASH
WINDOW DETAIL
SCALE 3/8" = 1'-0"

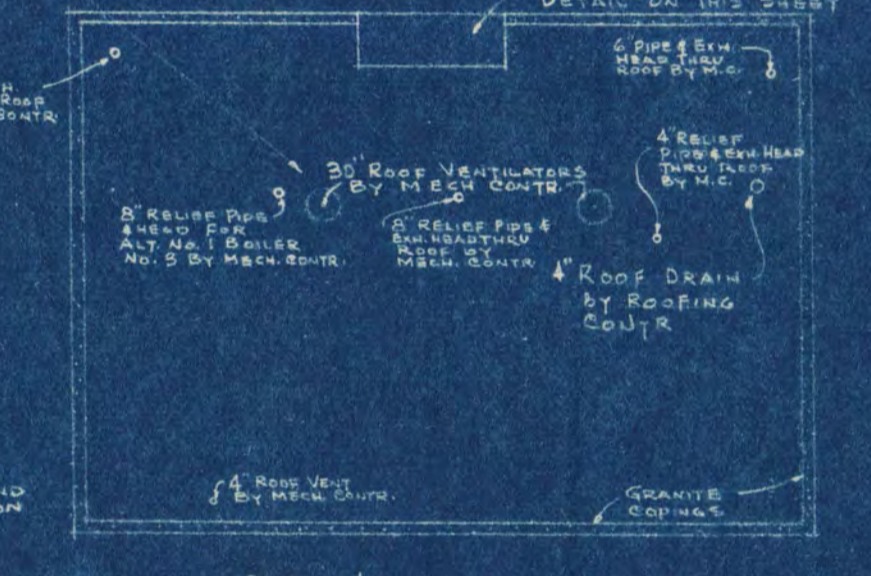


EXTERIOR ELEVATION
DETAIL OF
METAL ROOF SCUPPER
SCALE 1/2" = 1'-0"
SEE ROOF PLANS & ELEVATIONS
FOR LOCATION OF SCUPPERS

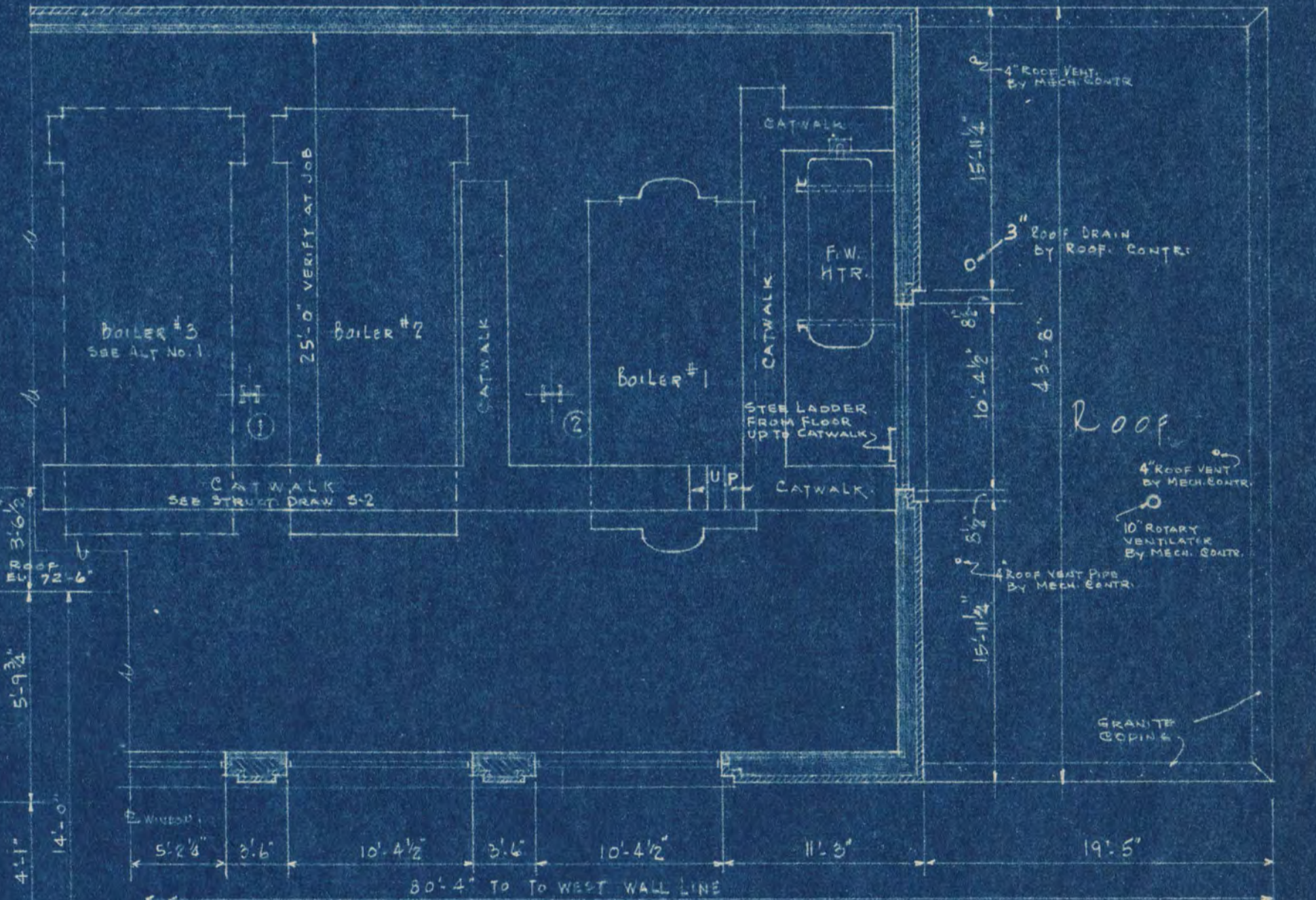
SECTION 1-1
SCALE 3/4" = 1'-0"
BRICK PENTHOUSE DETAILS



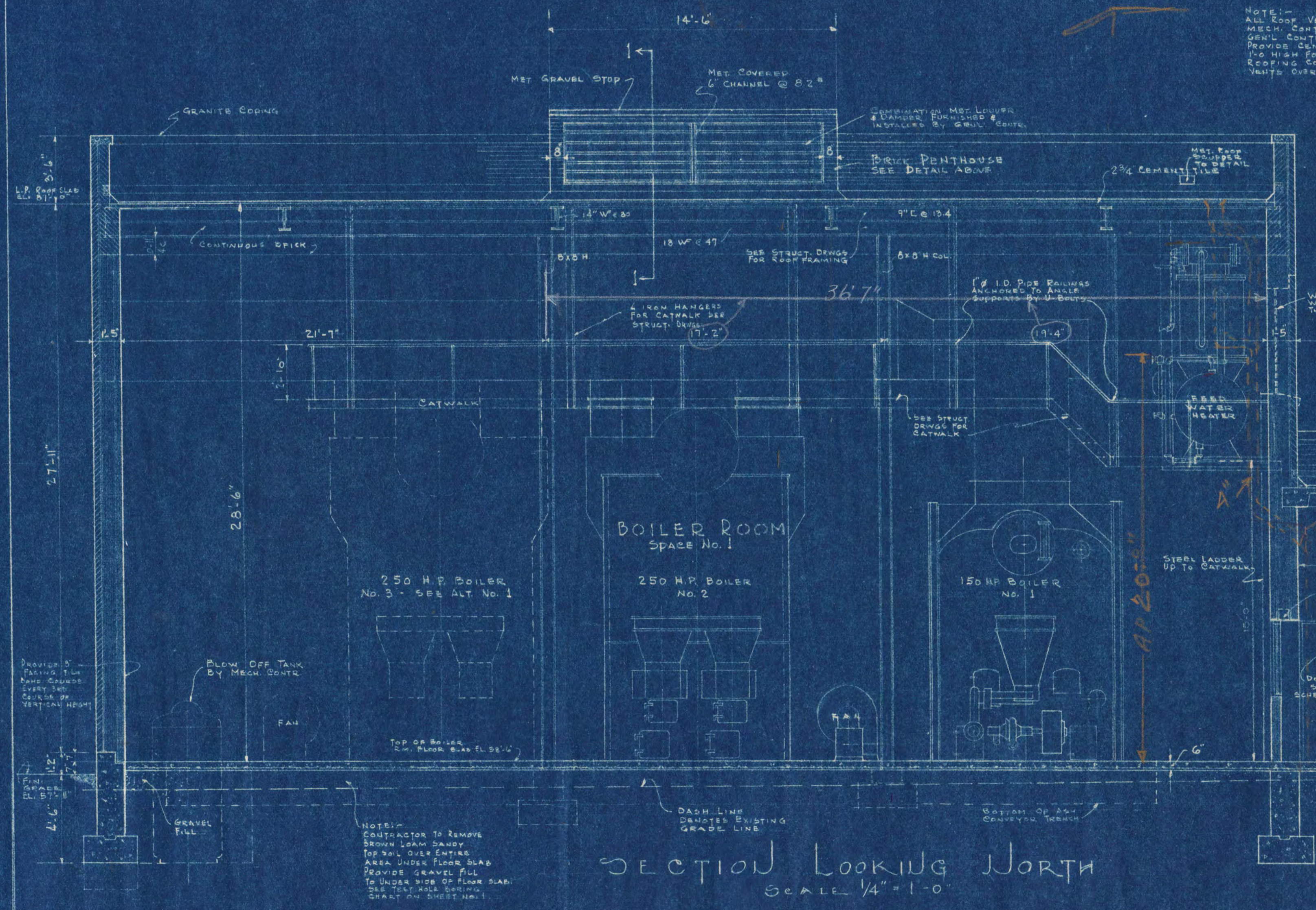
SECTION LOOKING WEST
SCALE 1/4" = 1'-0"
SEE STRUCT. DRAW FOR SIZE & DEPTH OF FOOTINGS



ROOF PLAN OVER BOILER RM.
SCALE 1/2" = 1'-0"

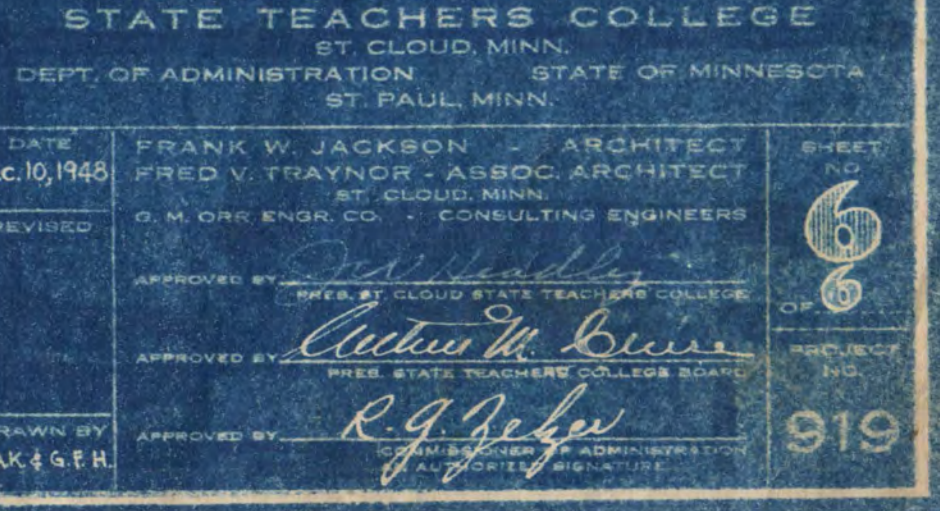
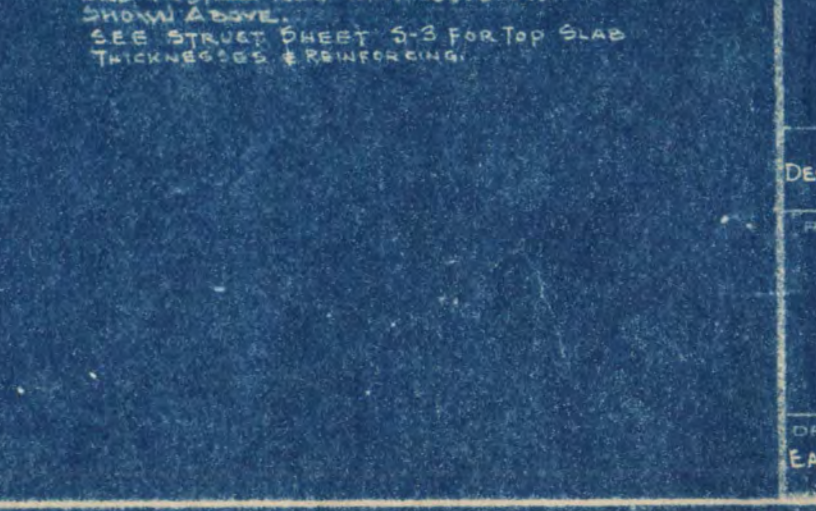
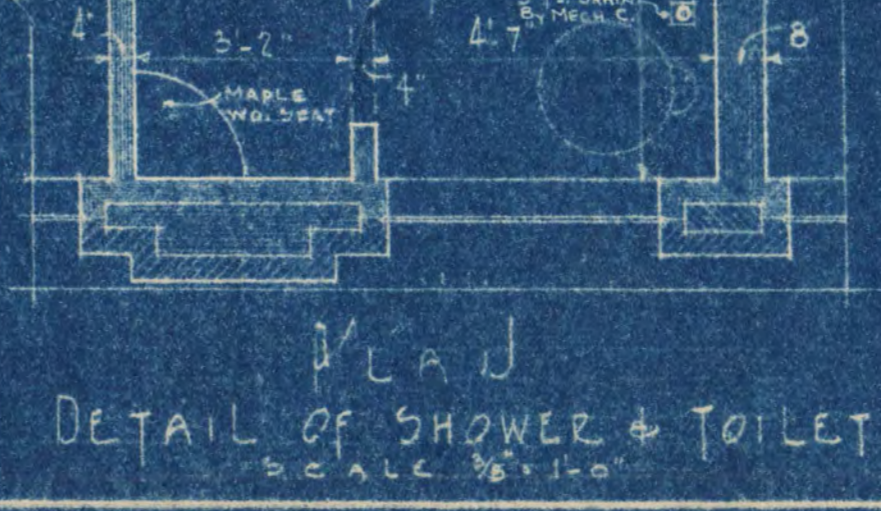
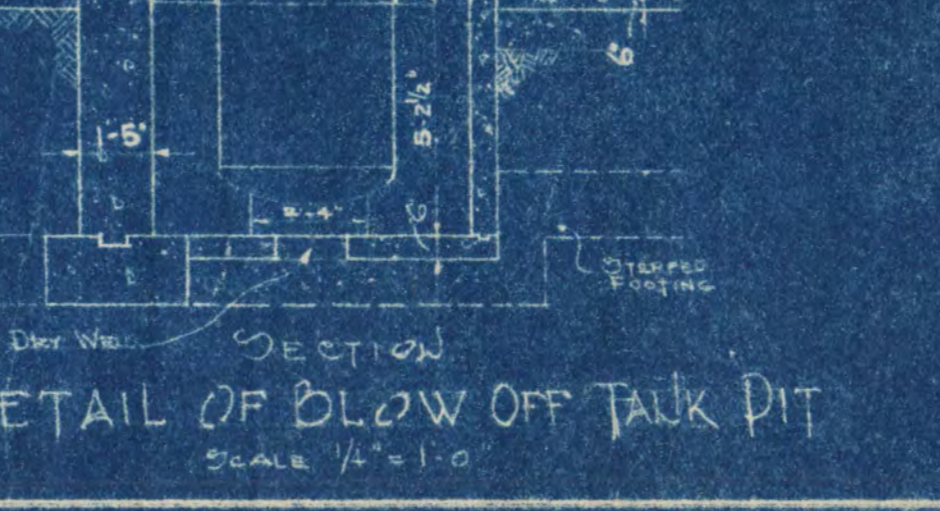
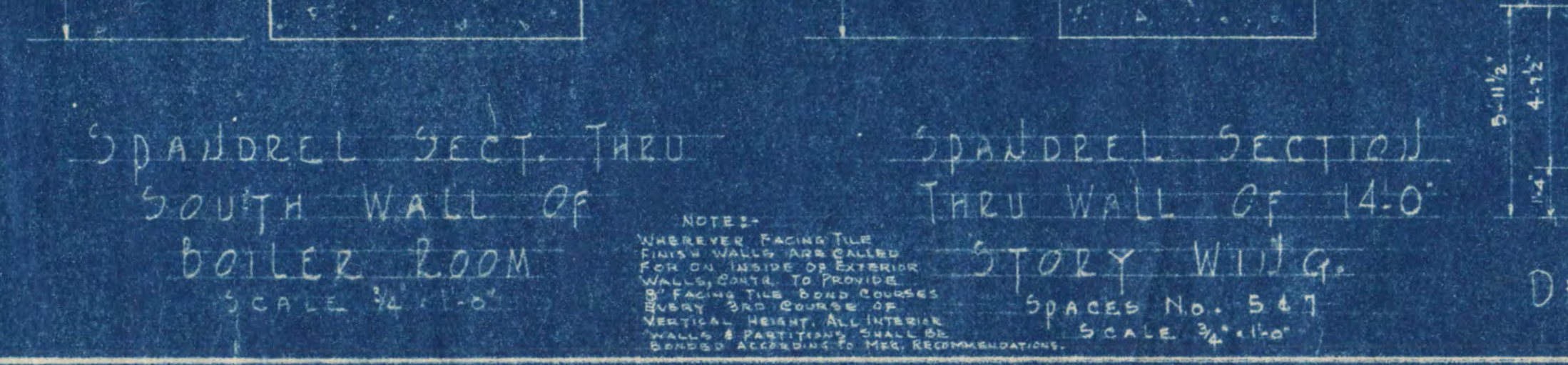
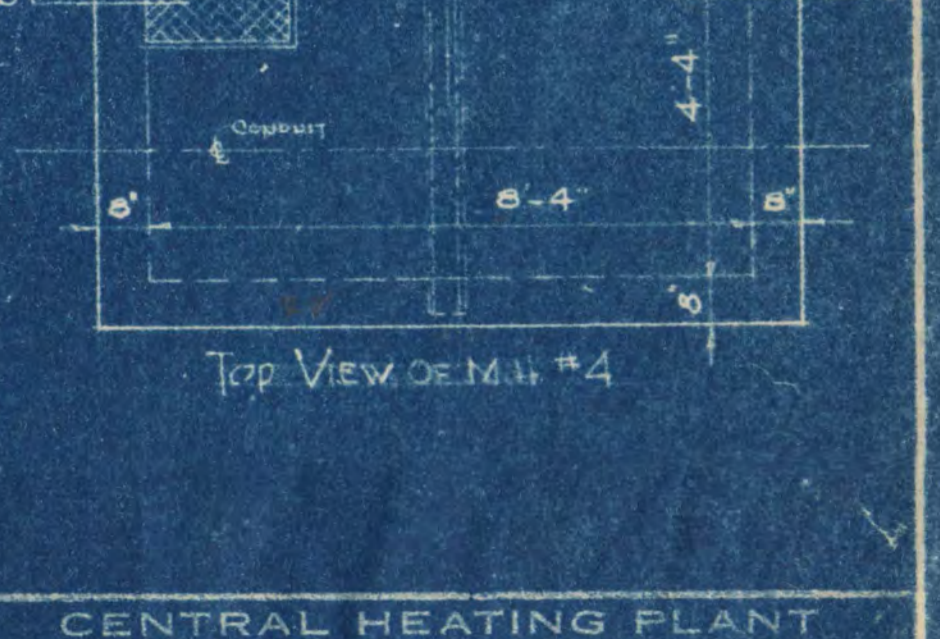
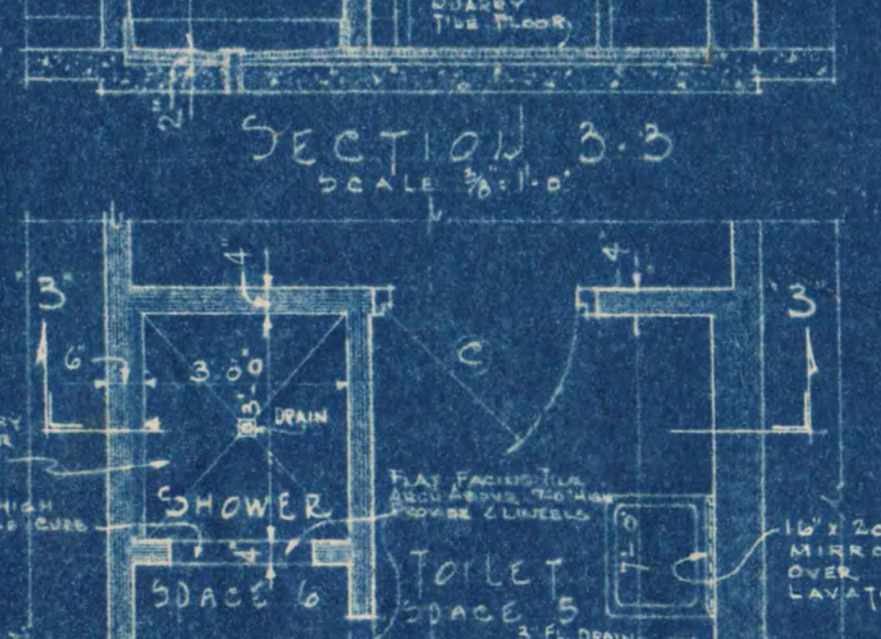
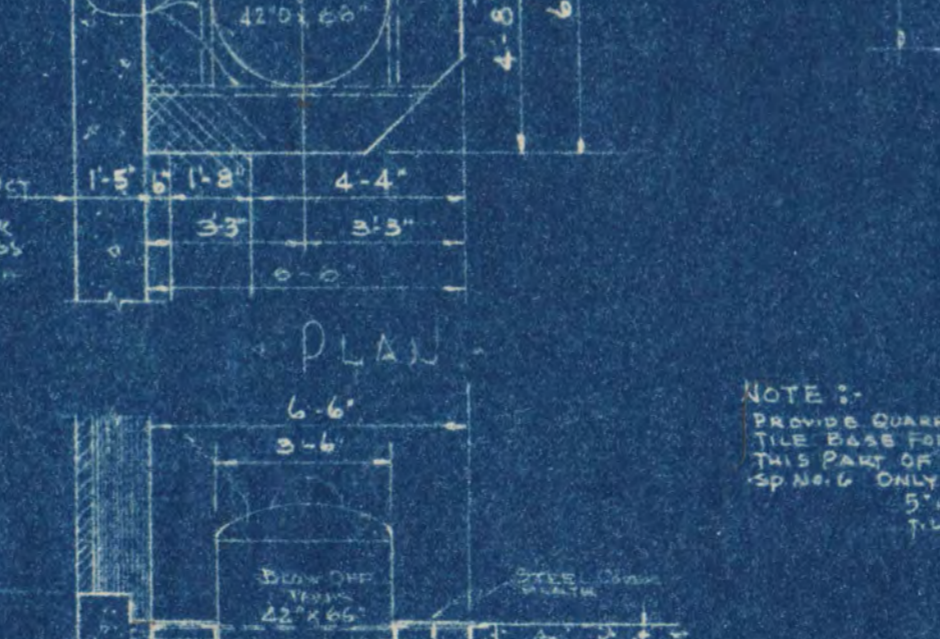
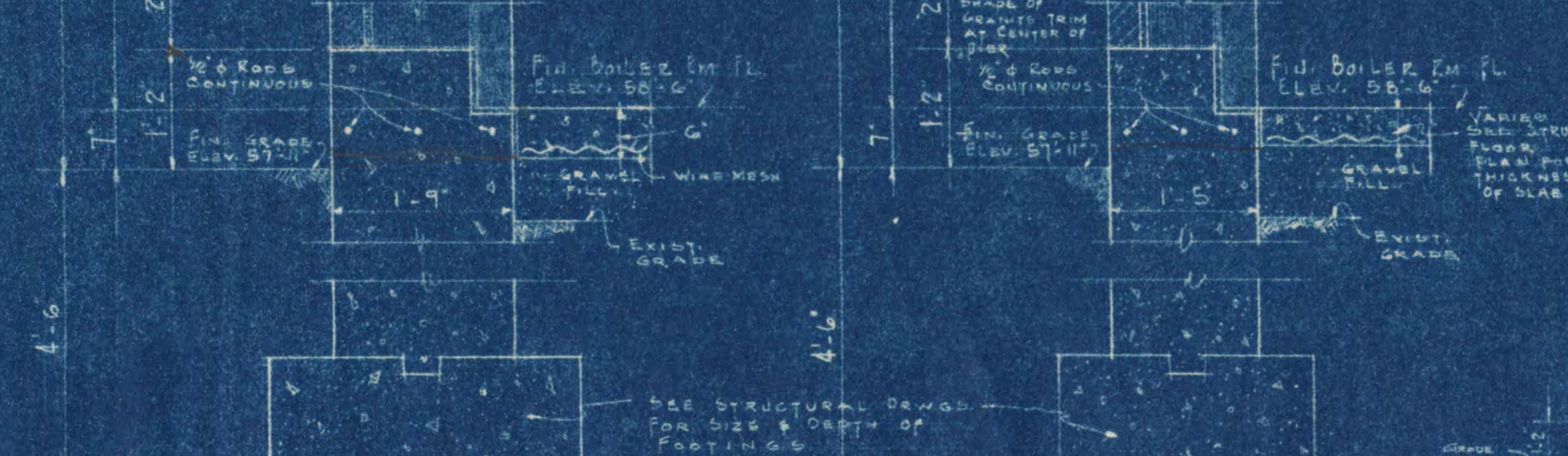
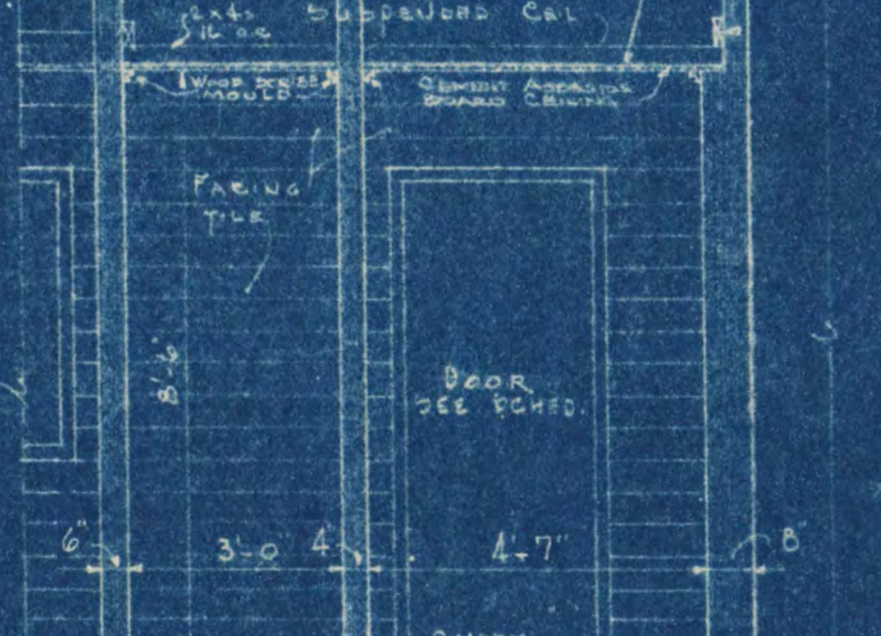
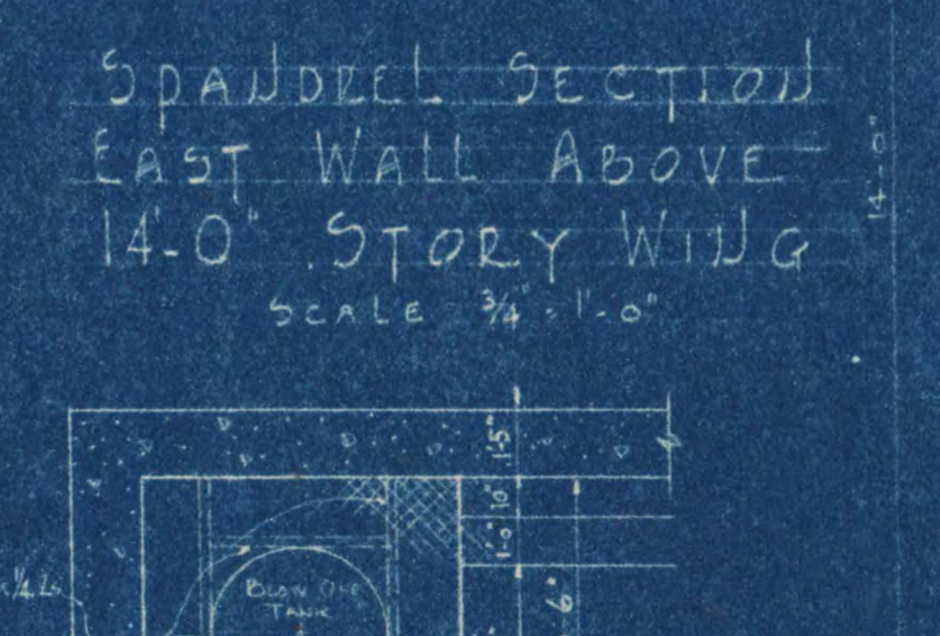
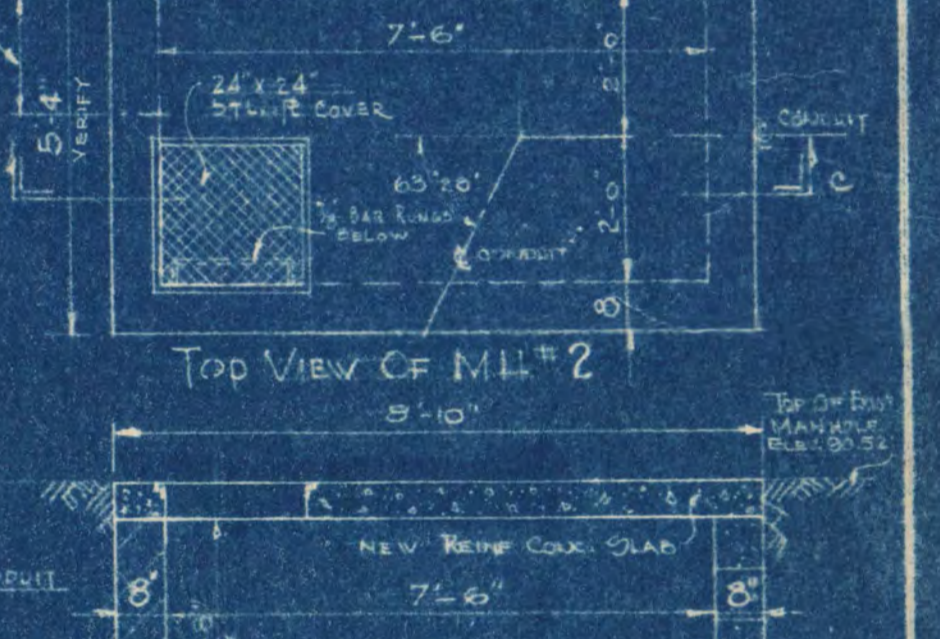
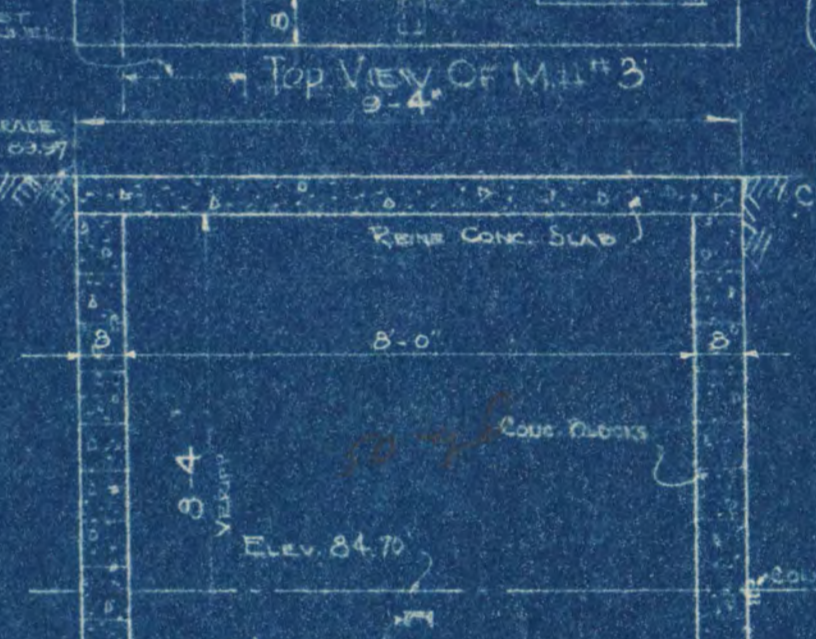
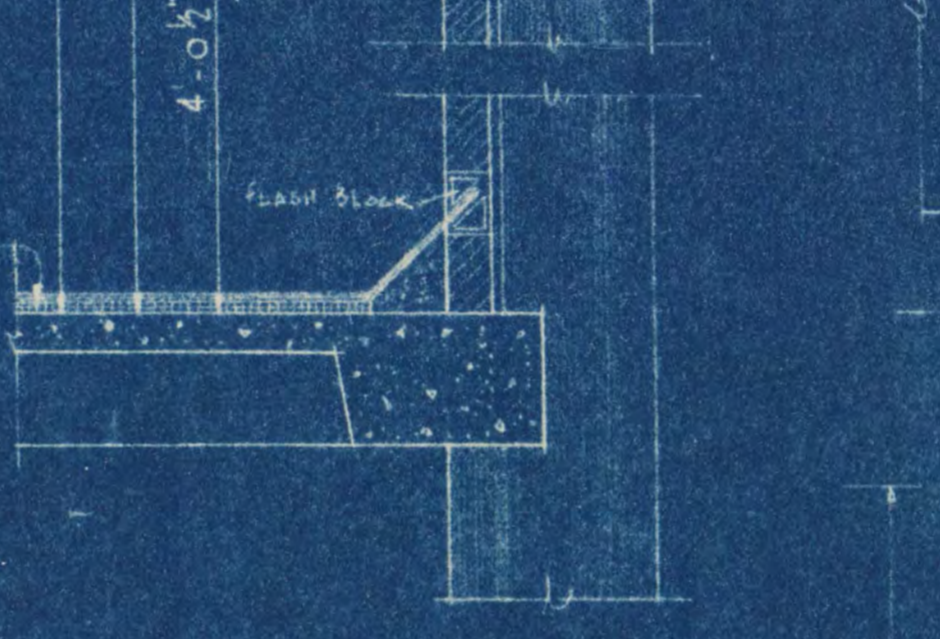
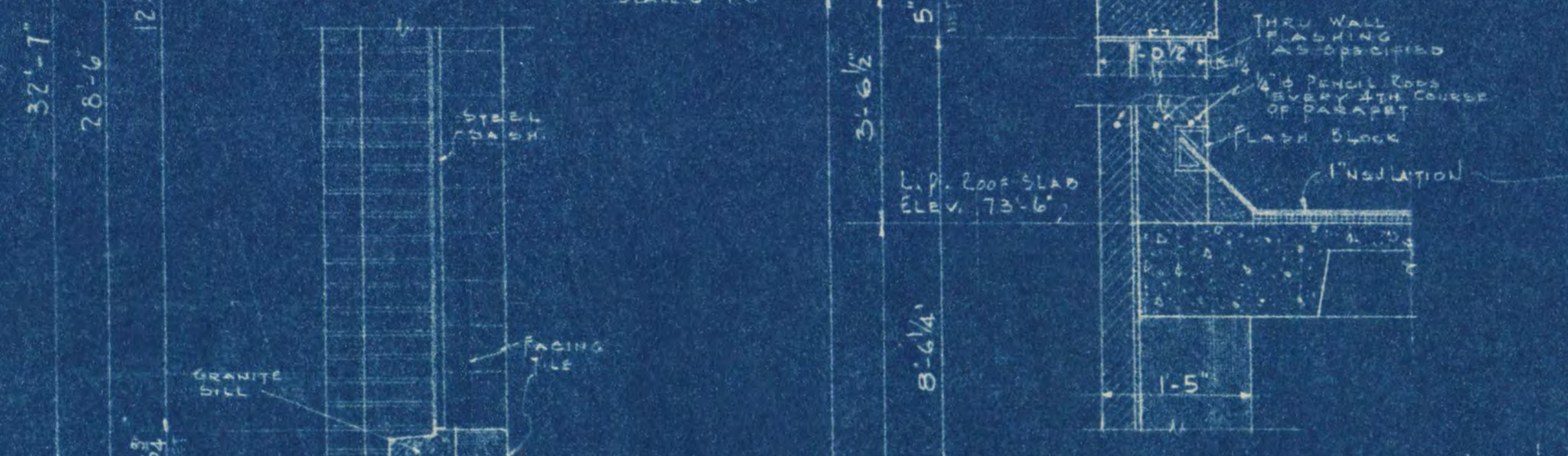
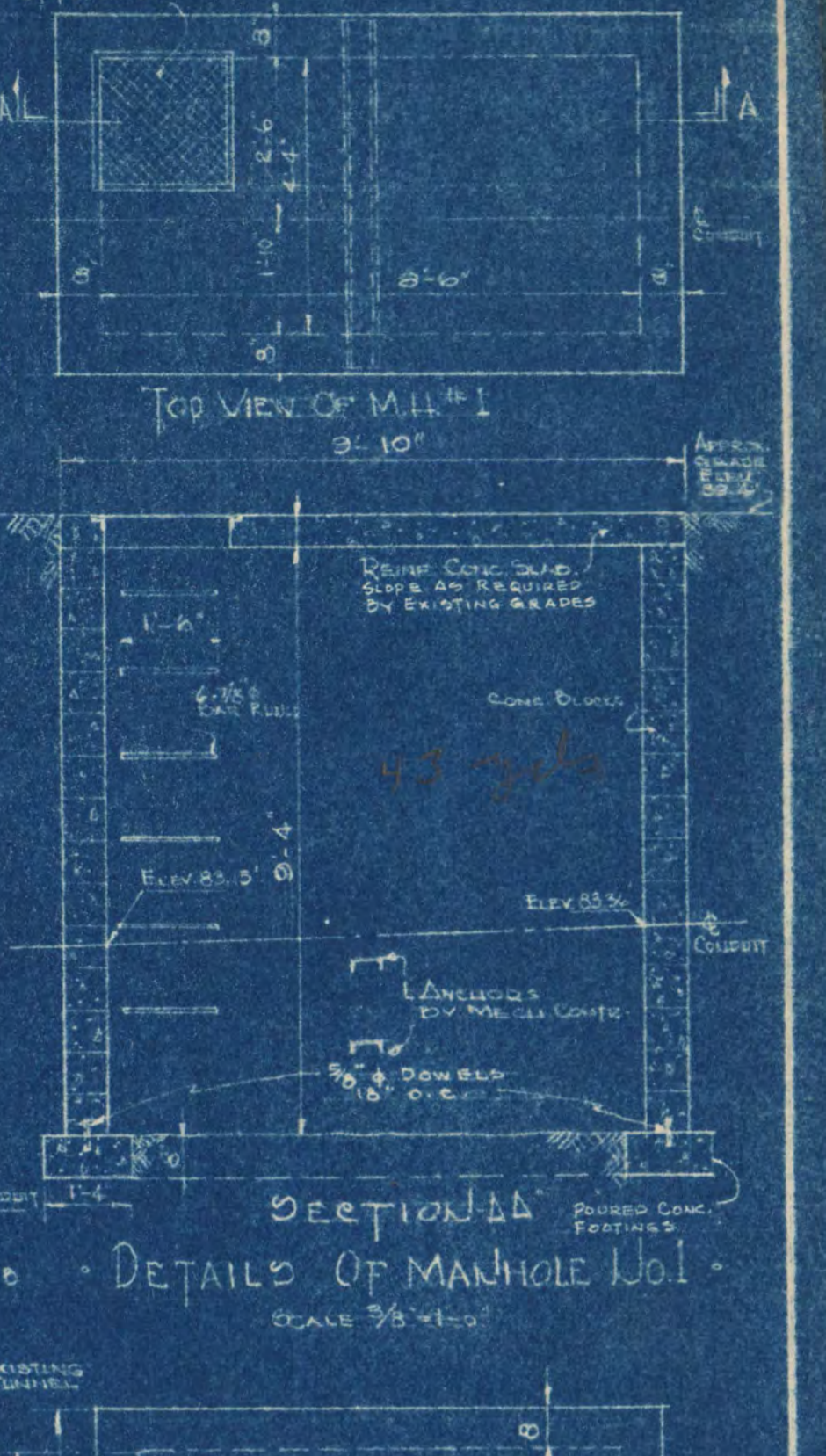
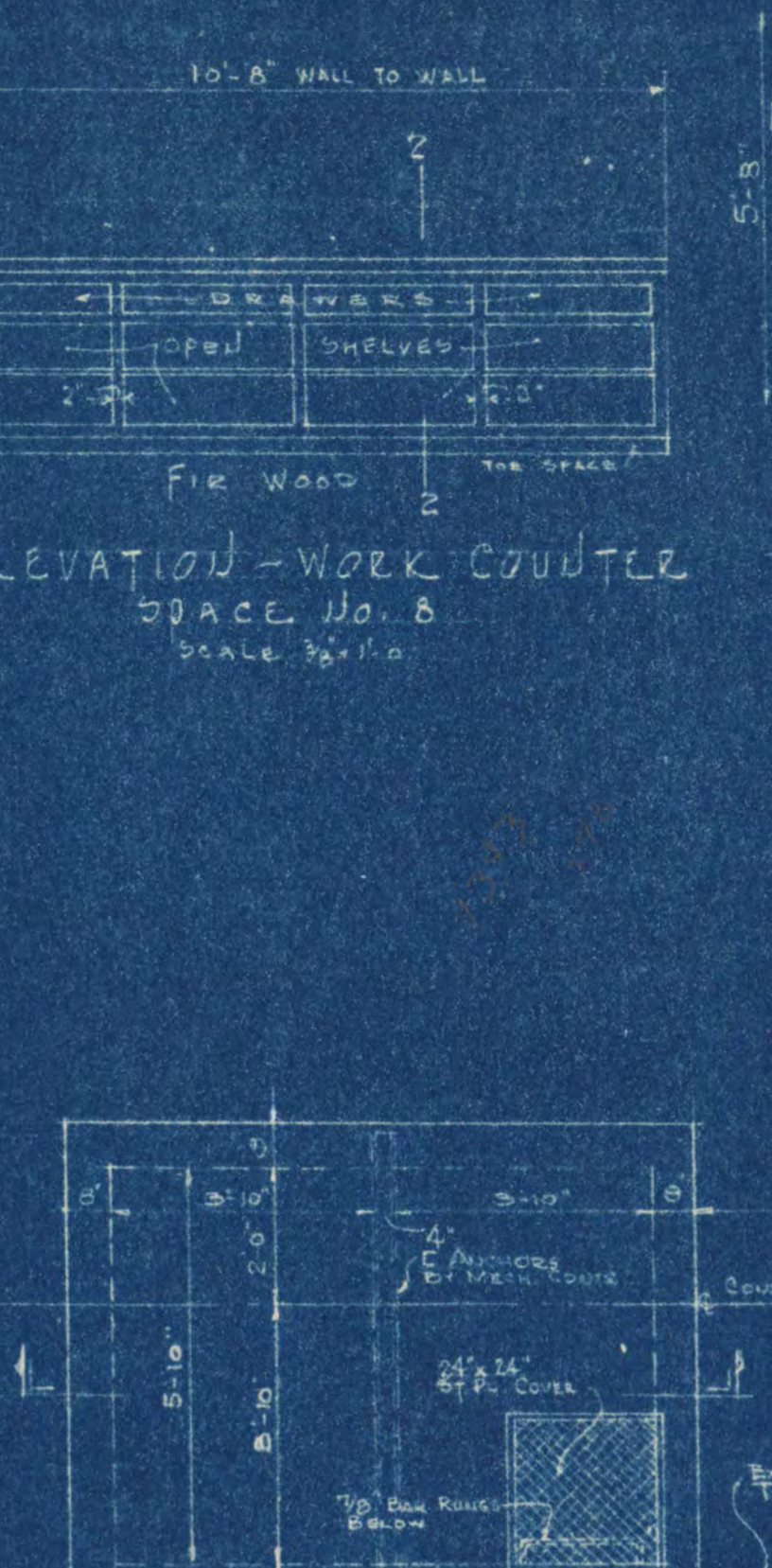
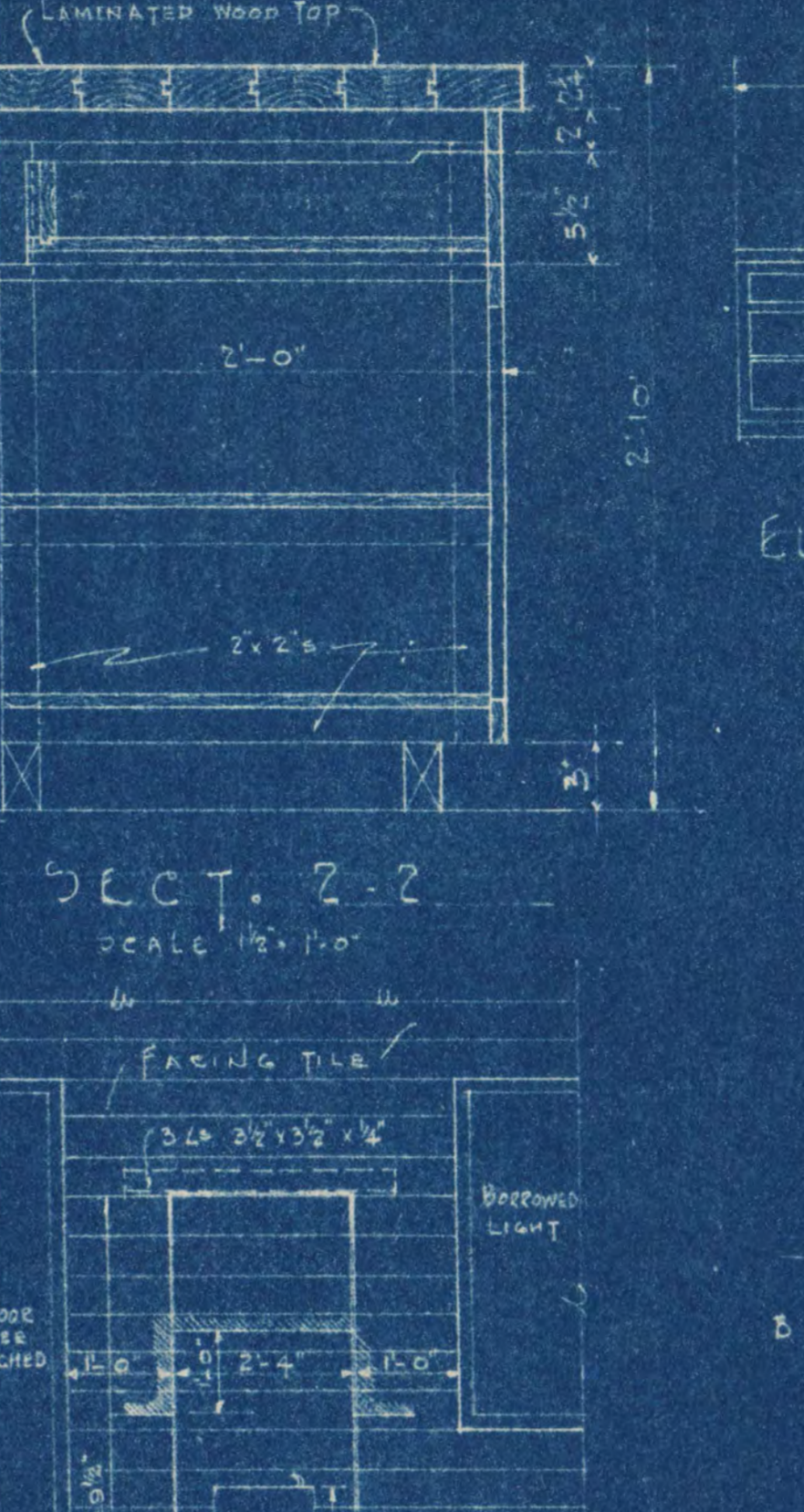
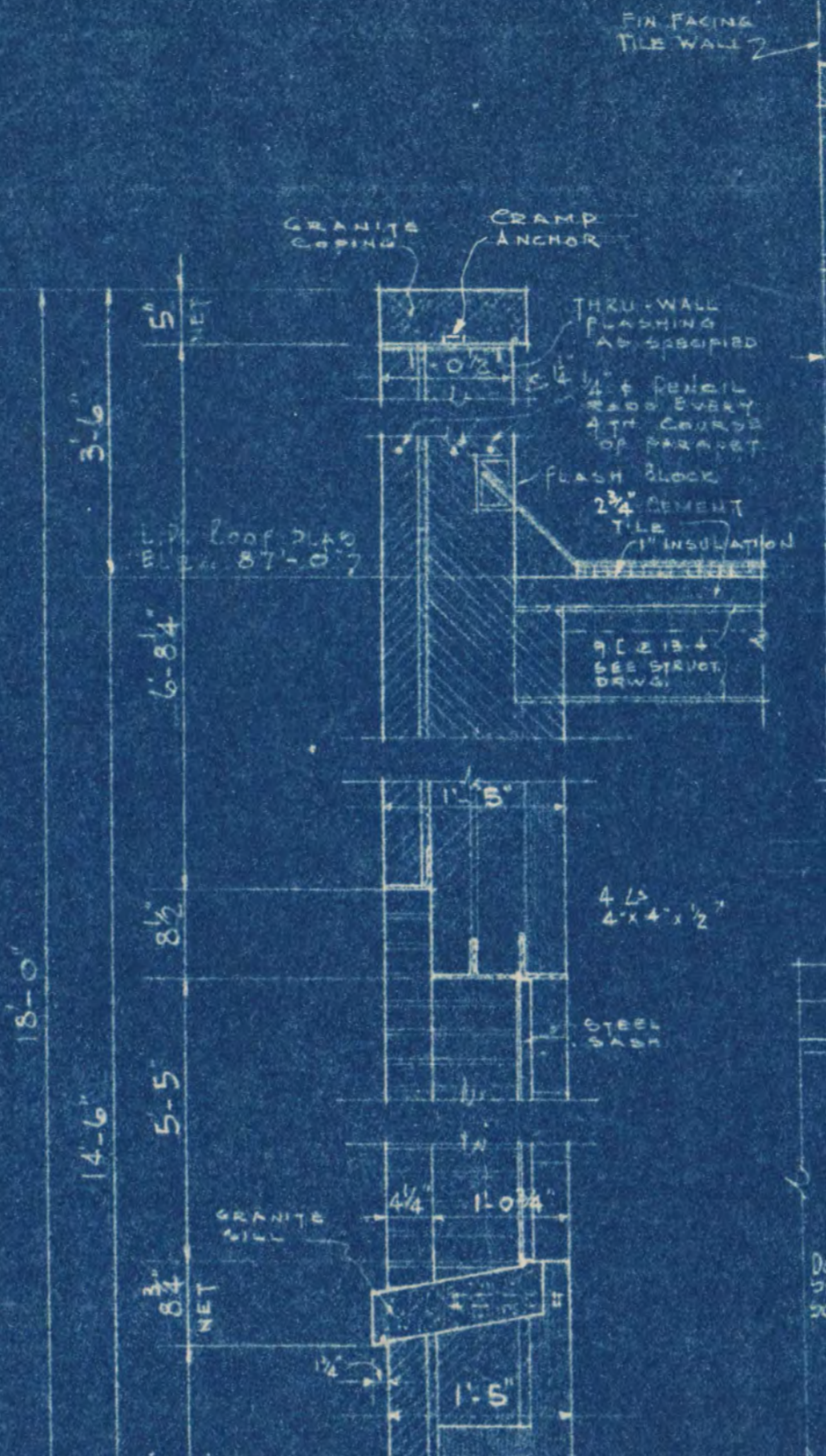
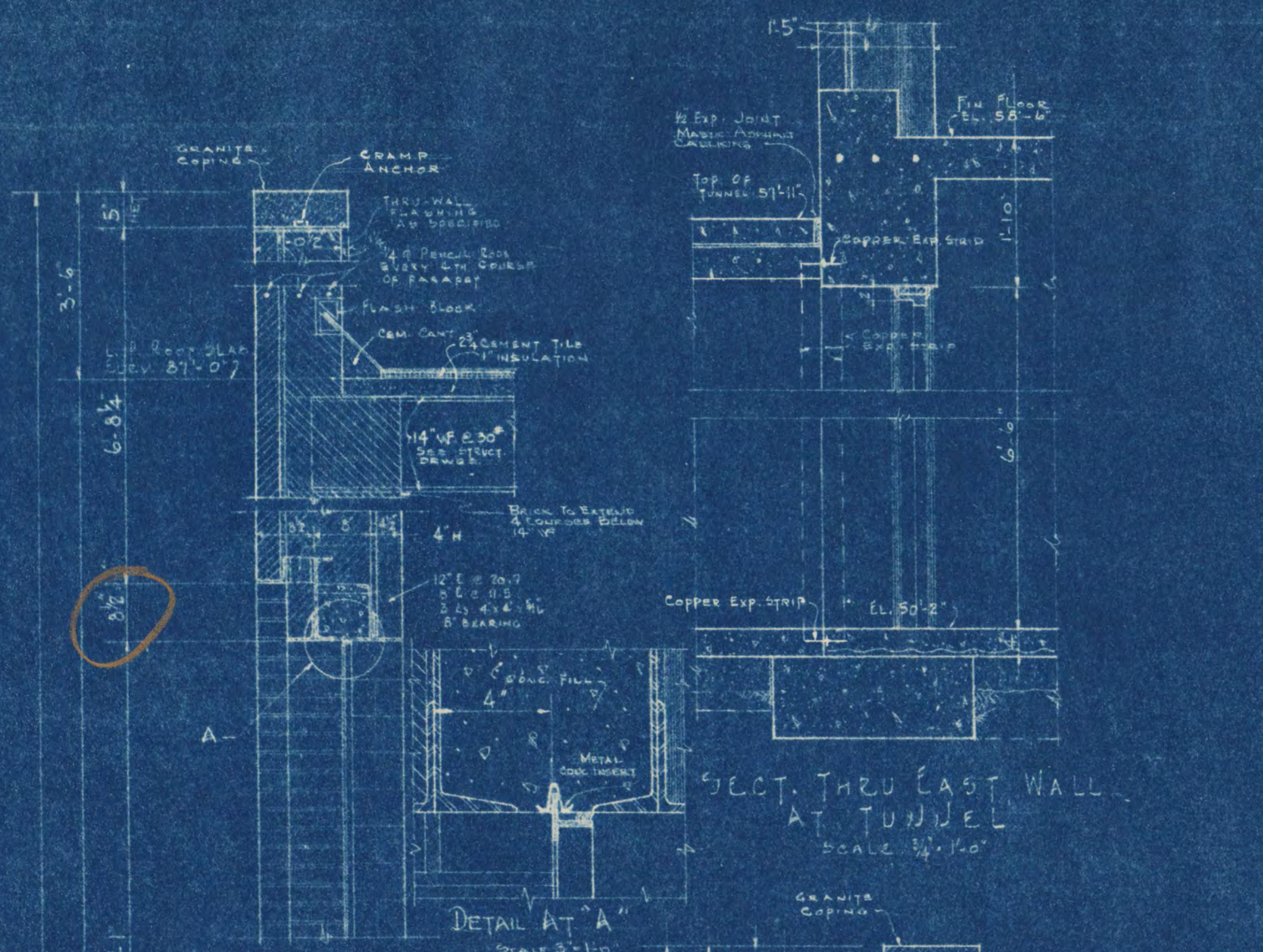


PART BOILER RM. PLAN ABOVE BOILERS
SCALE 1/8" = 1'-0"



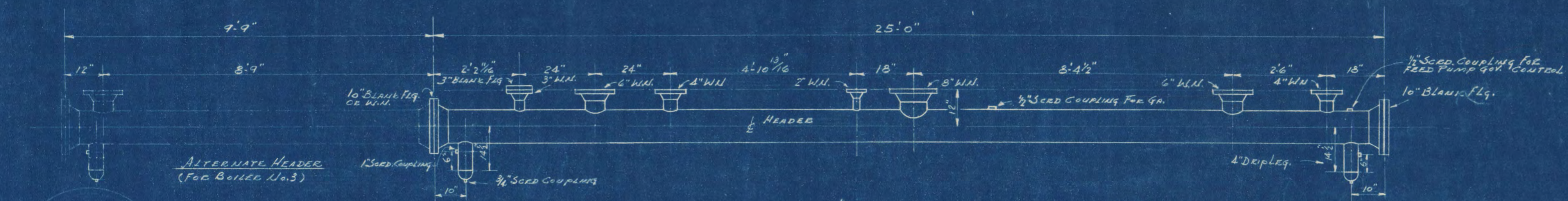
SECTION LOOKING NORTH
SCALE 1/4" = 1'-0"

CENTRAL HEATING PLANT STATE TEACHERS COLLEGE ST. CLOUD, MINN. DEPT. OF ADMINISTRATION - STATE OF MINNESOTA ST. PAUL, MINN.		
DATE DEC. 10, 1948	FRANK W. JACKSON - ARCHITECT FRED V. TRAYNOR - ASSOC. ARCHITECT ST. CLOUD, MINN.	SHEET NO. 5
REVISED	G. M. ORR ENGR. CO. - CONSULTING ENGINEERS	OF 6
APPROVED BY <i>Frank W. Jackson</i>	APPROVED BY <i>Fred V. Traynor</i>	PROJECT NO.
APPROVED BY <i>G. M. Orr</i>	APPROVED BY <i>R. G. Nelson</i>	919
DRAWN BY F.V.T. & E.A.C.	APPROVED BY DEPT. OF ADMINISTRATION AUTHORIZED SIGNATURE	



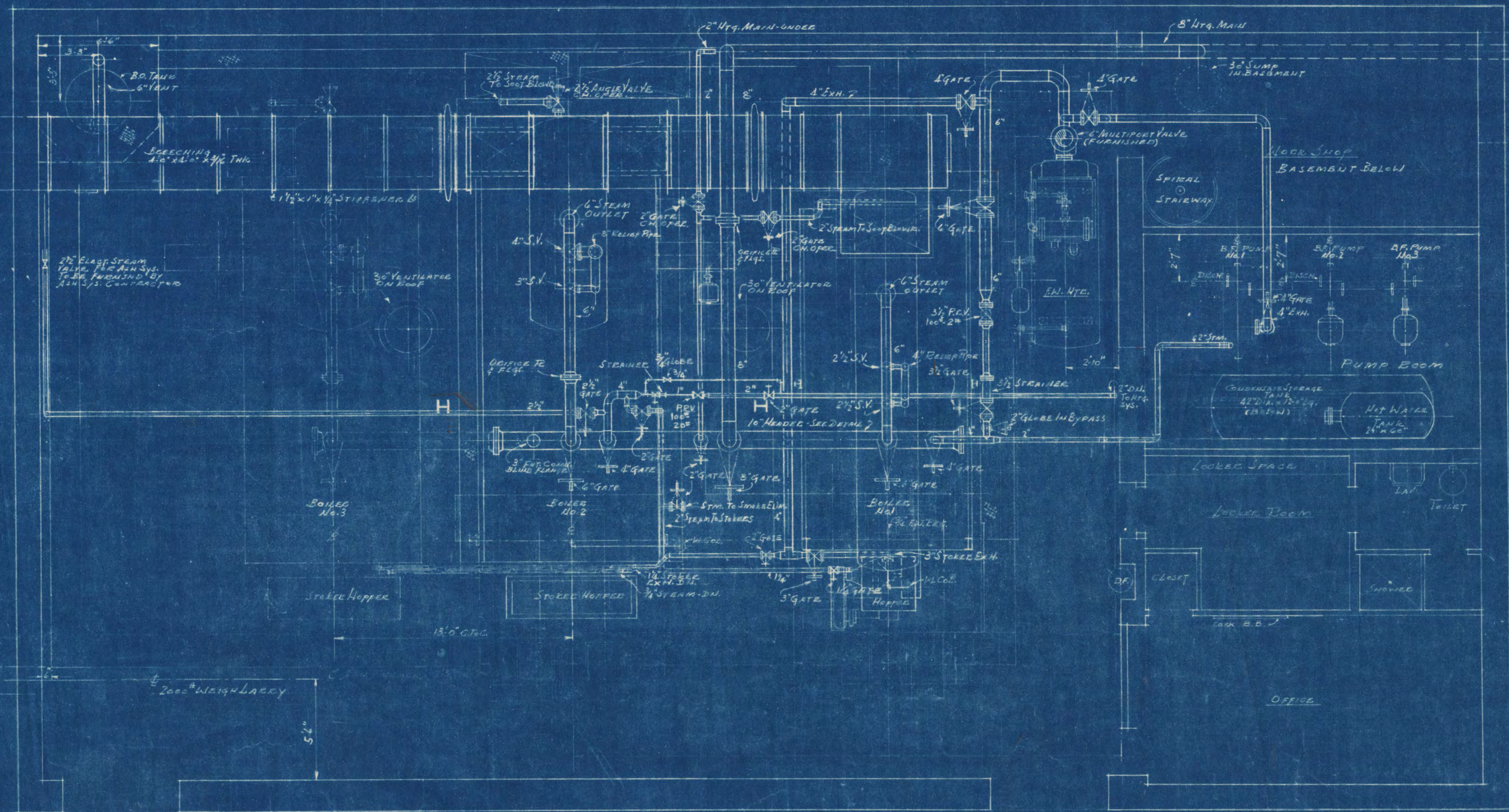
**CENTRAL HEATING PLANT
STATE TEACHERS COLLEGE**
ST. CLOUD, MINN.
DEPT. OF ADMINISTRATION STATE OF MINNESOTA
ST. PAUL, MINN.

DATE DEC. 10, 1945	FRANK W. JACKSON - ARCHITECT FRED V. TRAYNOR - ASSOC. ARCHITECT ST. CLOUD, MINN.	SHEET 6
REVISIONS	G. M. ORR, ENGR. CO. CONSULTING ENGINEERS	PROJECT NO.
APPROVED BY	<i>Frank W. Jackson</i> FRANK W. JACKSON MINN. STATE TEACHERS COLLEGE BOARD	CONTRACT NO.
APPROVED BY	<i>R. G. Geyer</i> R. G. GEYER STATE OF MINNESOTA ADMINISTRATIVE SERVICES DIVISION	919
DRAWN BY E.A.K.F.F.R.		



DETAIL OF 10" STEAM HEADER
SCALE: 1/2" = 1'-0"

MATERIAL SPECIFICATIONS
 PIPE: SCHED. 60 ASTM. A-53
 FLANGES: 300# MIN. FORG. STL. SCHED. 60 BORE
 GASKETS: 1/8" THK. COMP. ASBESTOS
 FABRICATE IN ACCORD. WITH
 A.S.M.E. CODE FOR PRESSURE PIPING.
 TEST HYDROSTATICALLY TO 300 P.S.I.

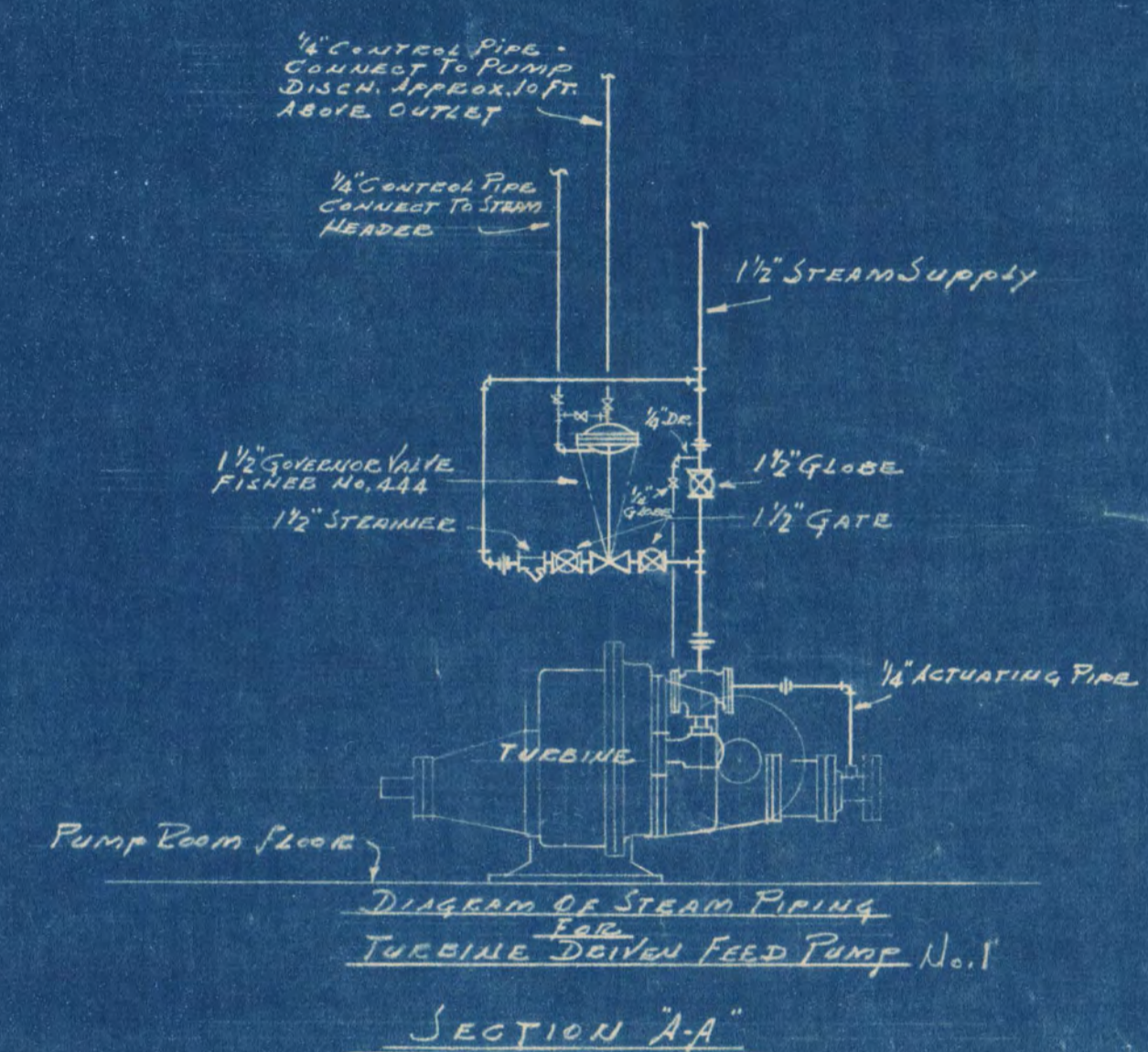
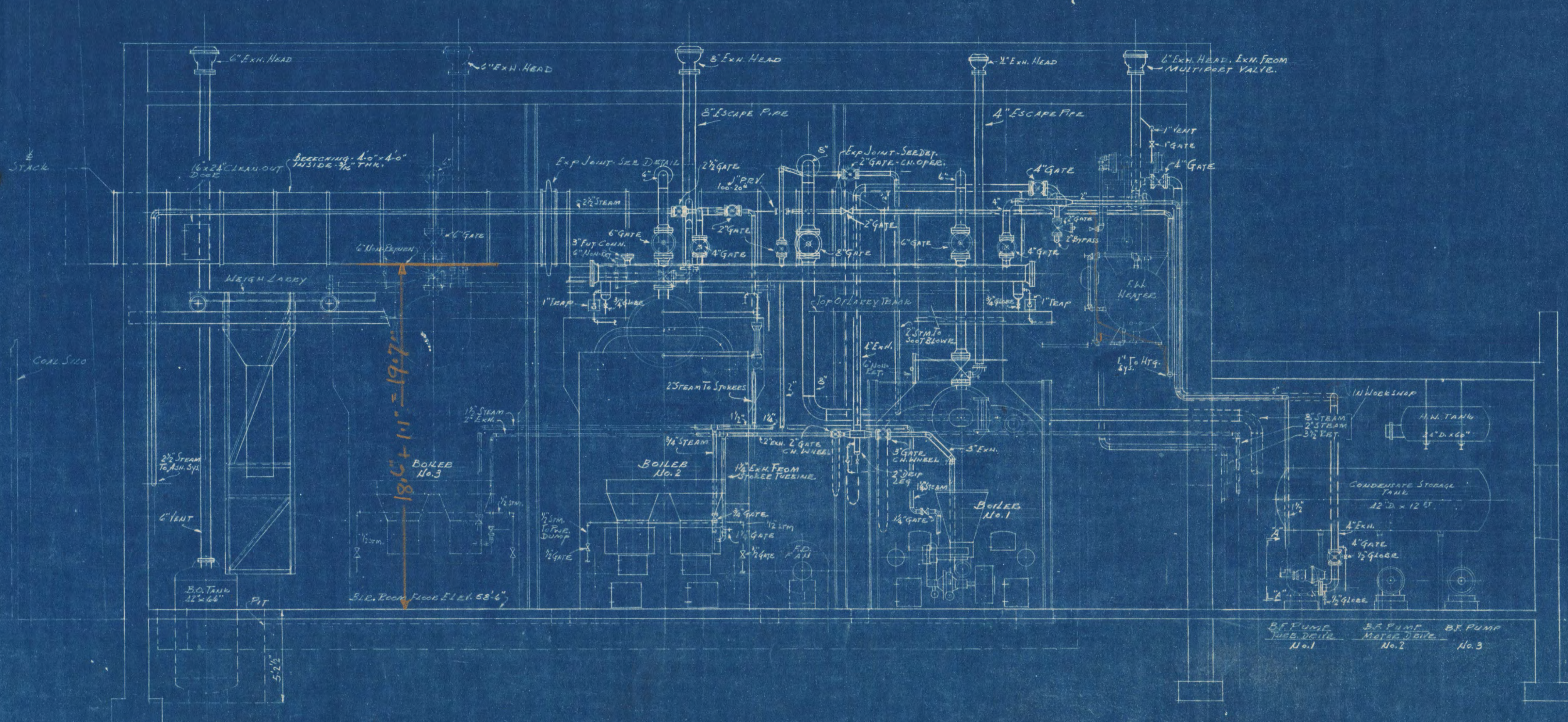


MAIN STEAM & EXHAUST PIPING
 BOILER HOUSE
 PLAN

CENTRAL HEATING PLANT STATE TEACHERS COLLEGE ST. CLOUD, MINN. DEPT. OF ADMINISTRATION STATE OF MINNESOTA ST. PAUL, MINN.		
DATE DEC. 10 1948	FRANK W. JACKSON - ARCHITECT FRED V. TRAYNOR - ASSOC. ARCHITECT OF CLOUD, MINN. D. N. ORR ENGR. CO., CONSULTING ENGINEERS	SHEET NO. M-1
REVISED	APPROVED BY <i>[Signature]</i> PRES. STATE TEACHERS COLLEGE BOARD	OF 13
	APPROVED BY <i>[Signature]</i> R. G. JOHNSON DEPT. OF ADMINISTRATION STATE OF MINNESOTA	PROJECT NO. 919
DRAWN BY E.W.M.	DATE Dec. 10, 1948	REV. NO. 712

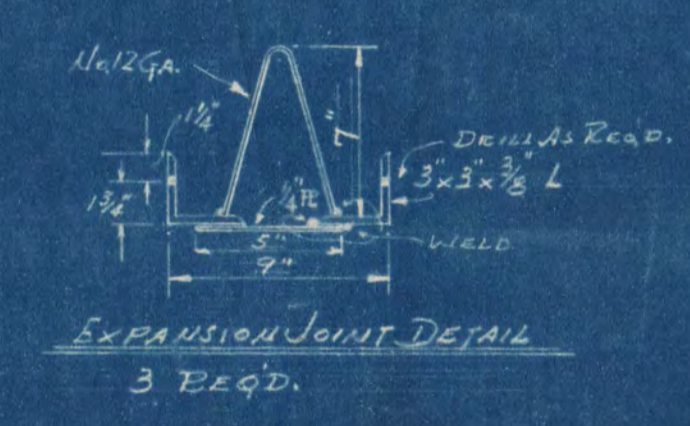
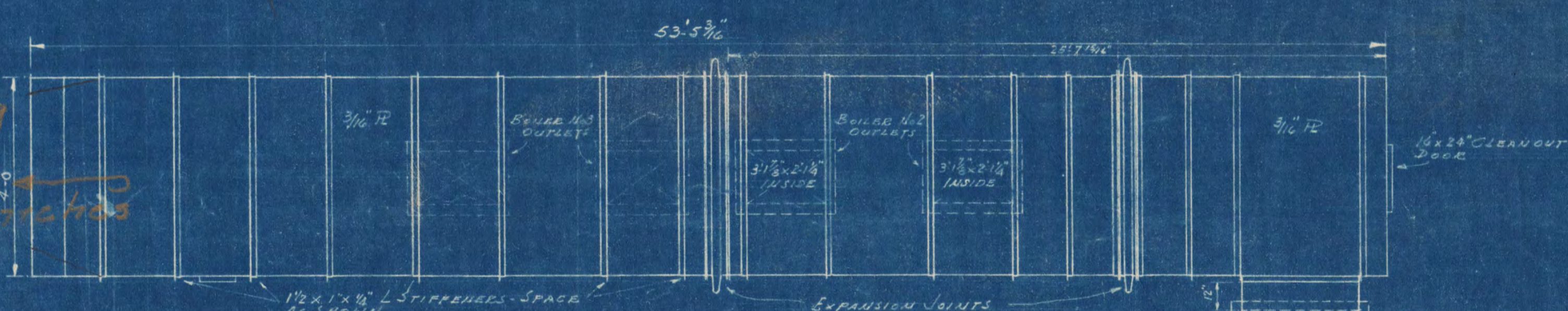
I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer for the State of Minnesota.

Dec. 10, 1948 Rev. No. 712



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

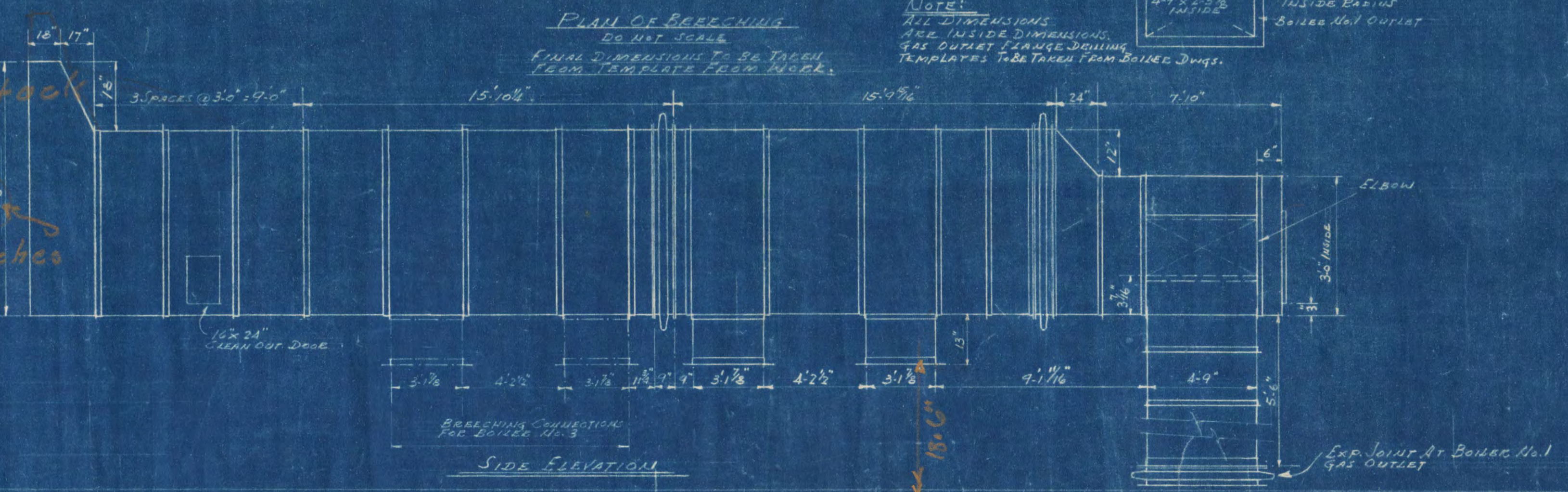
Branching
4' x 4' = 2304 sq inches



PLAN OF BRANCHING
DO NOT SCALE
FINAL DIMENSIONS TO BE TAKEN FROM 150 PLATE FIELD MODEL

NOTE:
ALL DIMENSIONS ARE INSIDE DIMENSIONS.
GAS OUTLET FLANGE DRILLING TEMPLATES TO BE TAKEN FROM BOILER DWGS.

opg. in stack
41' + 66' = 2706 sq inches

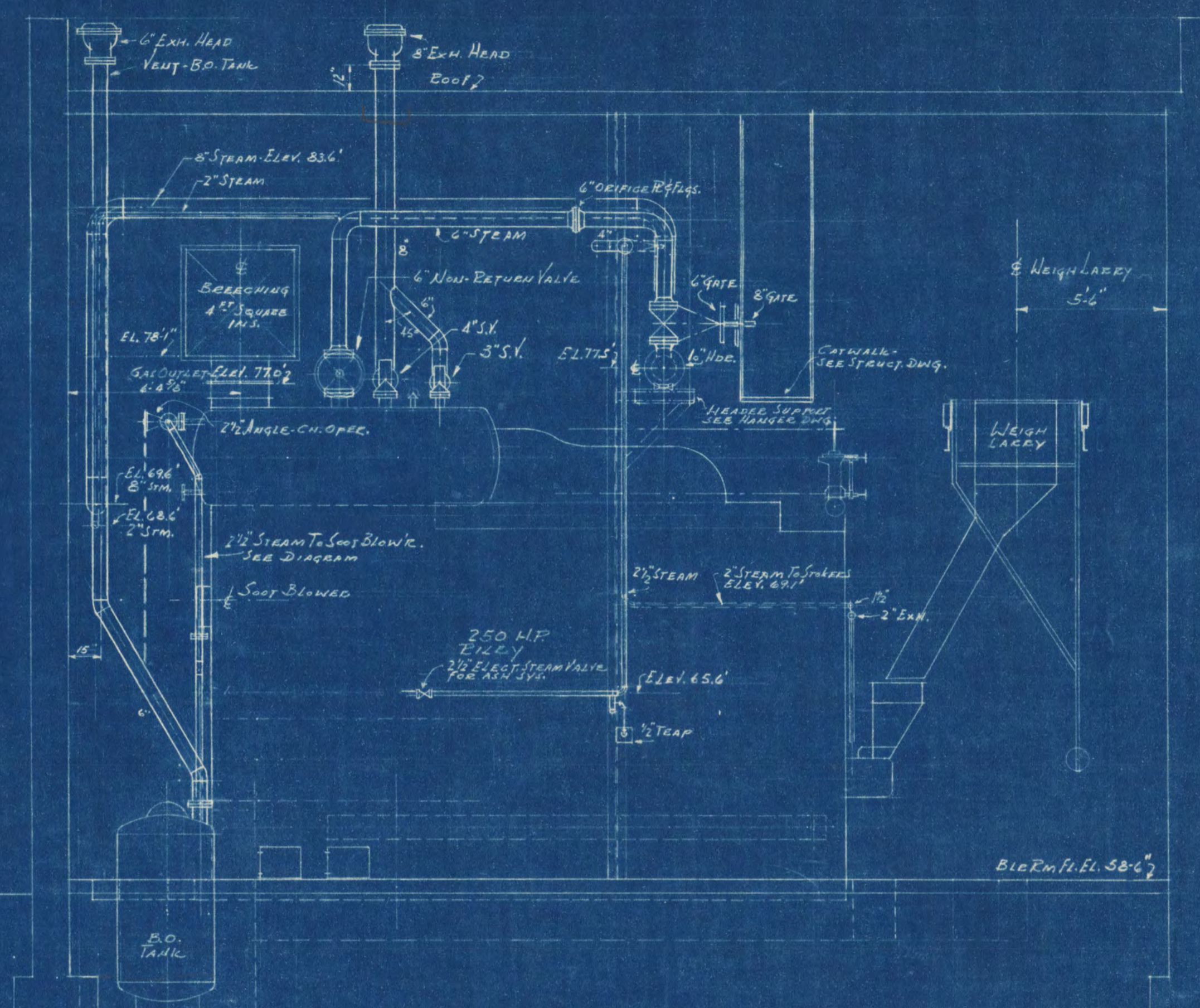


SIDE ELEVATION

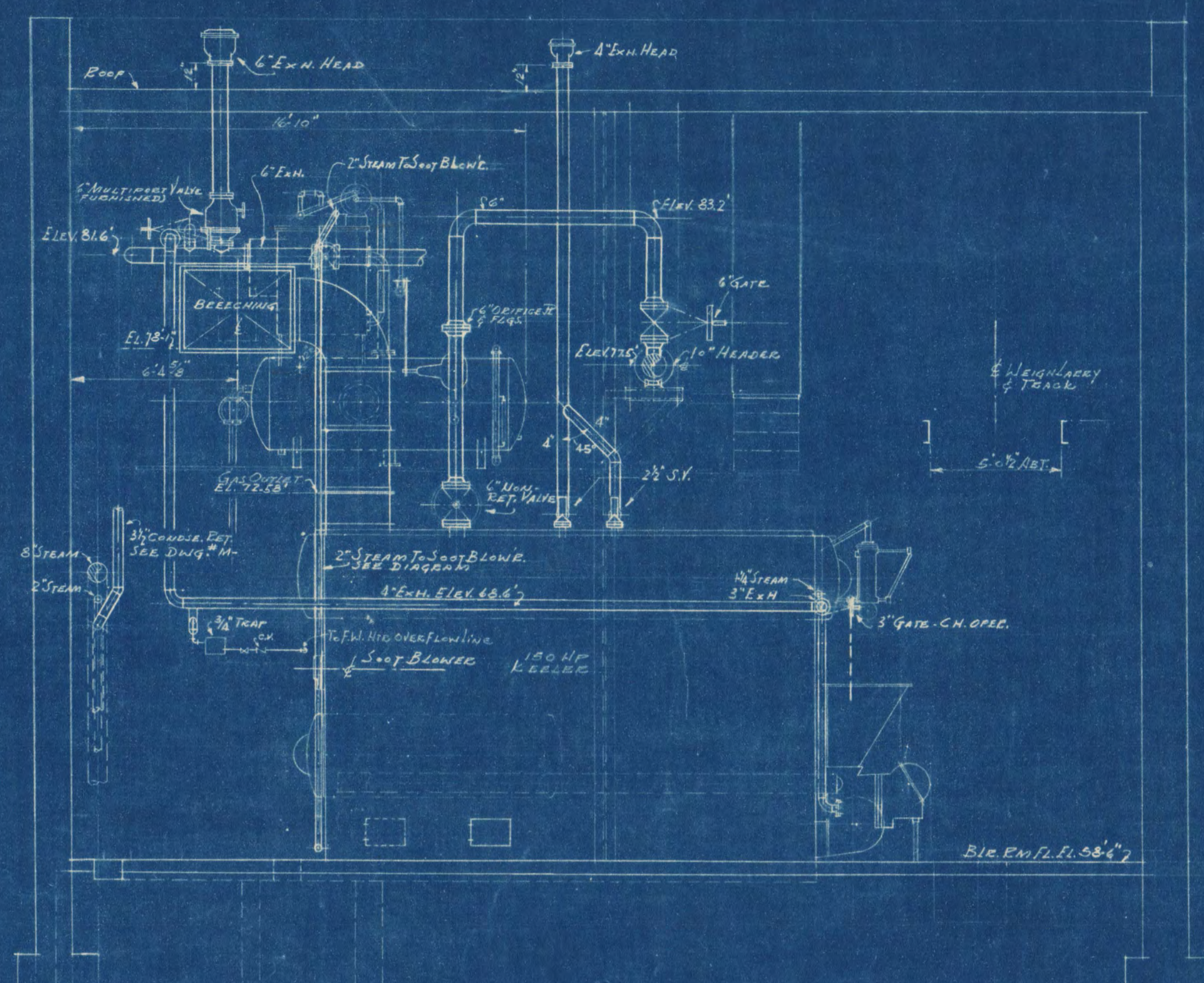
MAIN STEAM & EXHAUST PIPING
- BOILER HOUSE -
ELEVATION & DETAILS

CENTRAL HEATING PLANT STATE TEACHERS COLLEGE ST. CLOUD, MINN. DEPT. OF ADMINISTRATION STATE OF MINNESOTA ST. PAUL, MINN.		
DATE Dec. 10, 1948	FRANK W. JACKSON - ARCHITECT FRED V. TRAYNOR - ASSOC. ARCHITECT ST. CLOUD, MINN.	SHEET NO. M-2
REVISOR	G. M. ORR ENGR. CO. - CONSULTING ENGINEERS	OF 13 SHEETS
APPROVED BY	<i>Wm. Steadley</i> STATE OF MINNESOTA REGISTERED PROFESSIONAL ENGINEER	PROJECT NO.
APPROVED BY	<i>Arthur M. Course</i> FREE STATE TEACHERS COLLEGE BOARD	919
DRAWN BY P.J.M.	APPROVED BY <i>R. G. [Signature]</i> COMMISSIONER OF ADMINISTRATION AN AUTHORIZED OFFICIAL	

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer under the laws of the State of Minnesota.
Date: Dec. 10, 1948 Reg. No. 702



ELEVATION
LOOKING EAST
SCALE: 1/4" = 1'-0"



ELEVATION -
LEFT SIDE - KEELER BOILER
SCALE: 1/4" = 1'-0"

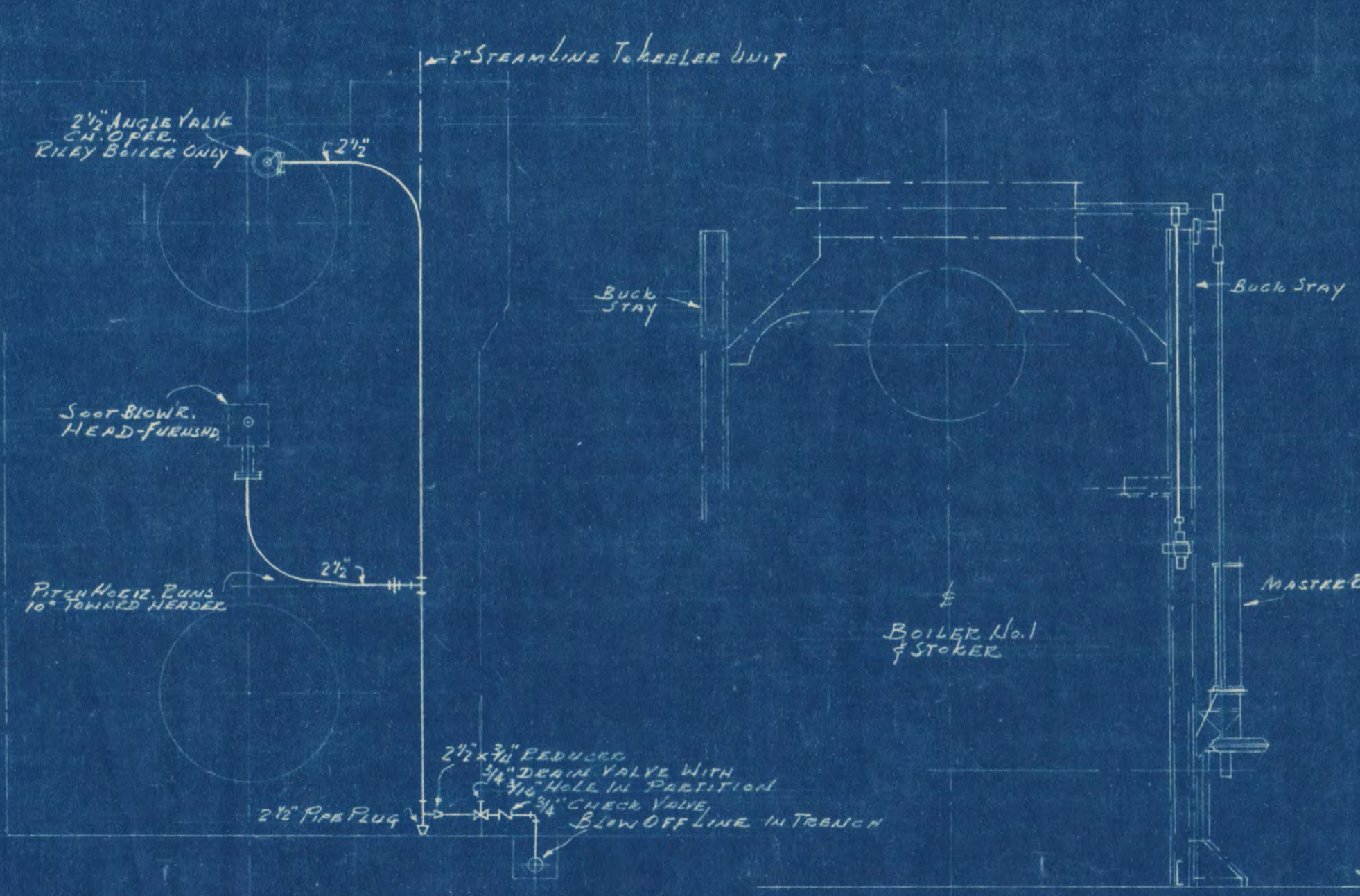
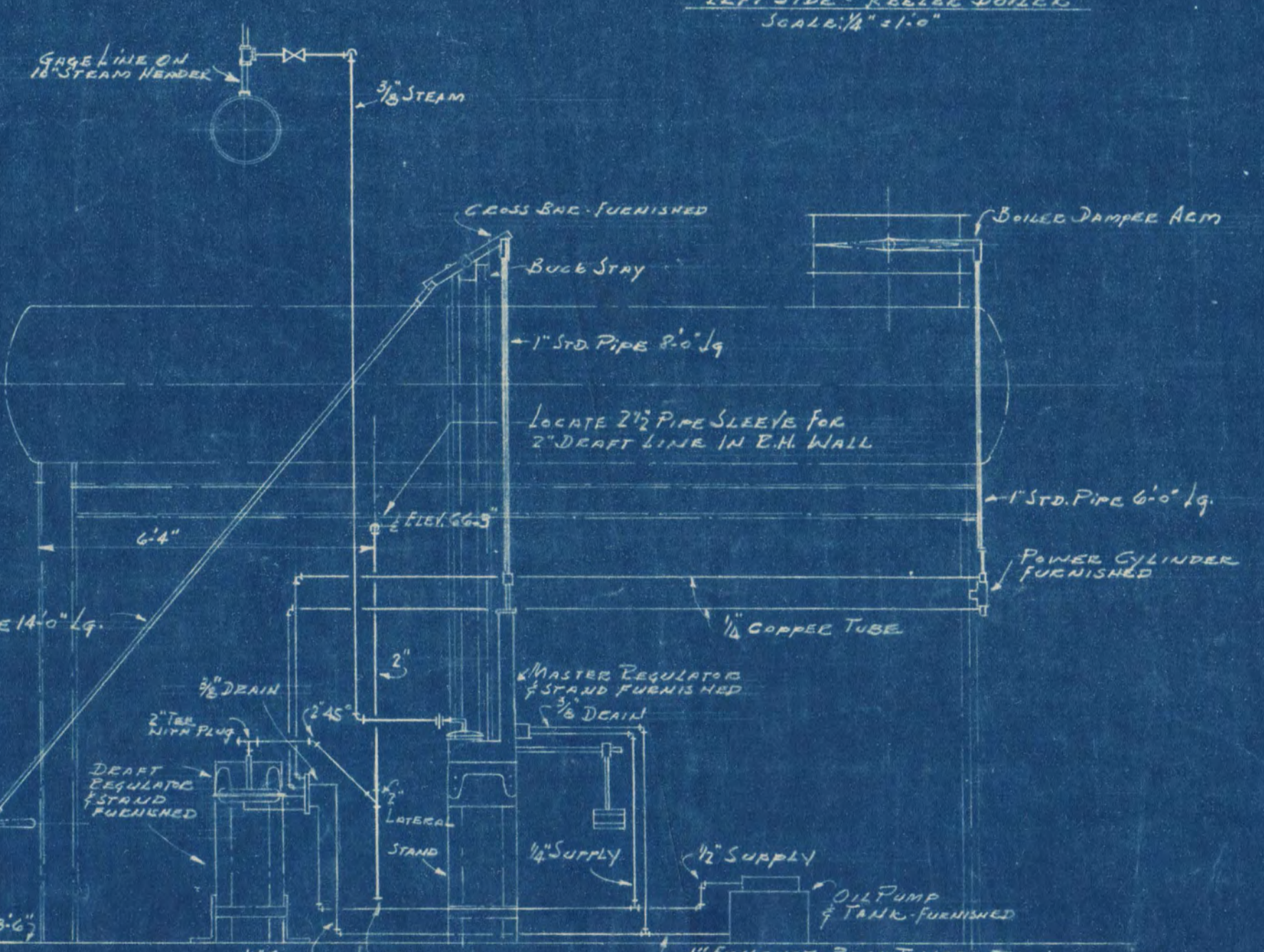


DIAGRAM OF SOOT BLOWER PIPING
FOR RILEY BOILER - KEELER BOILER SIMILAR
EXCEPT PIPE SIZE TO BE 2"

FRONT ELEVATION

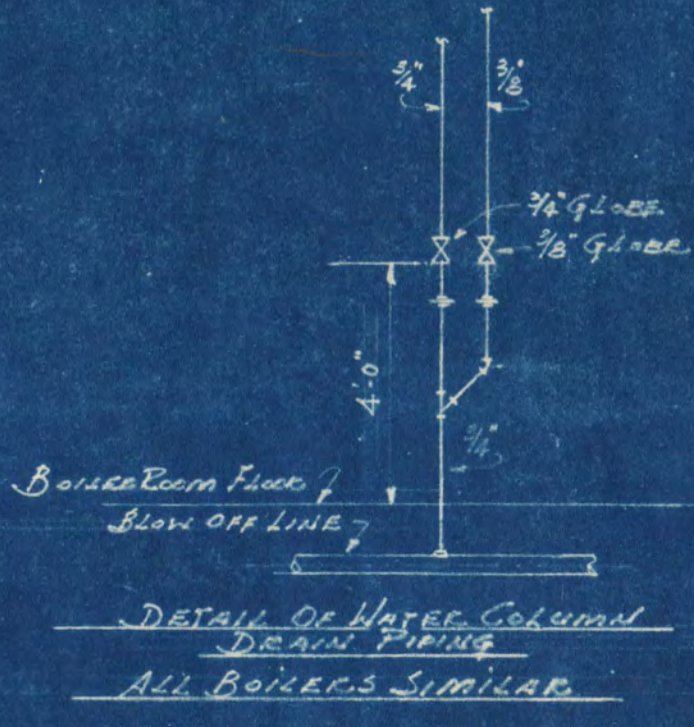
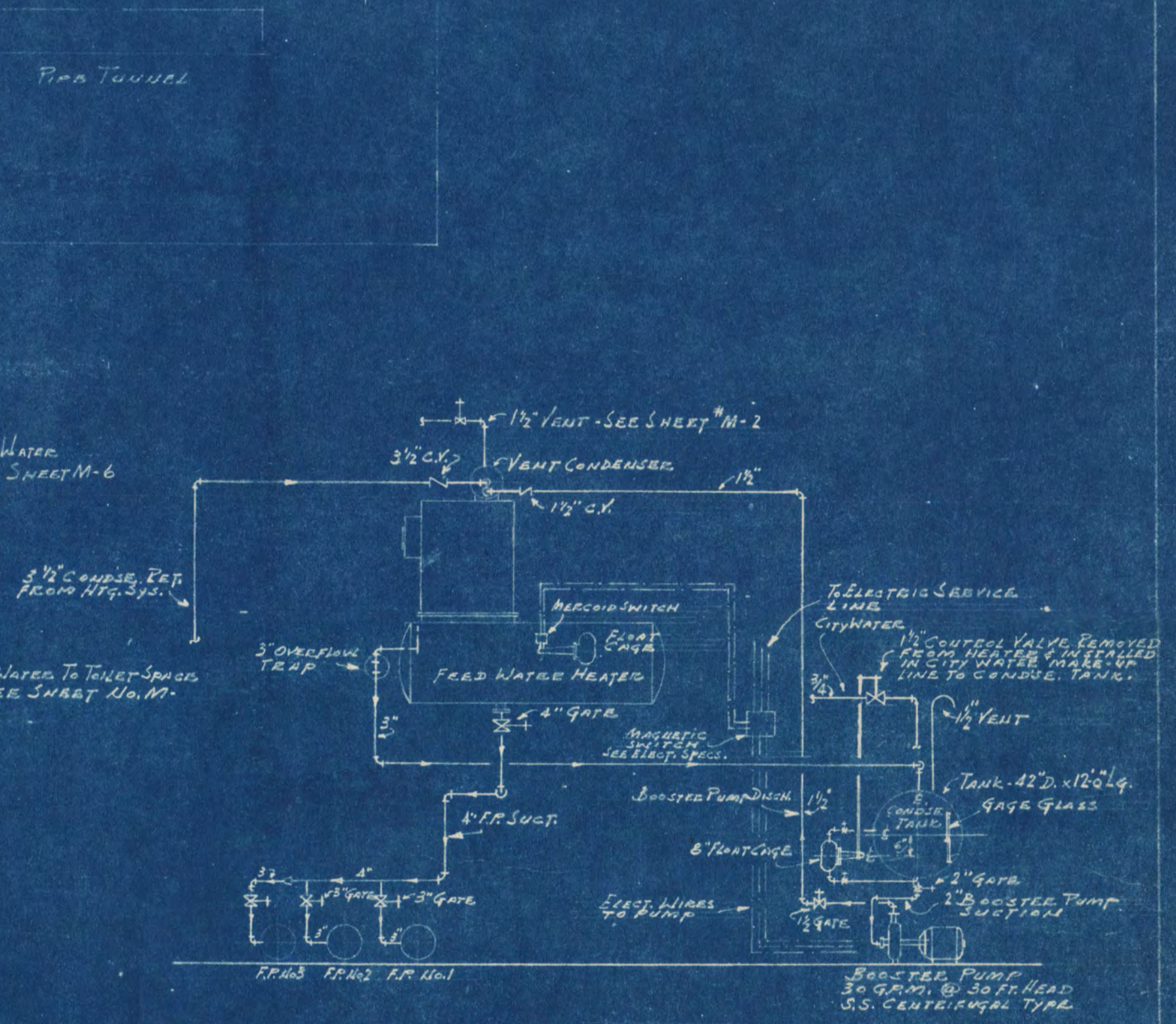
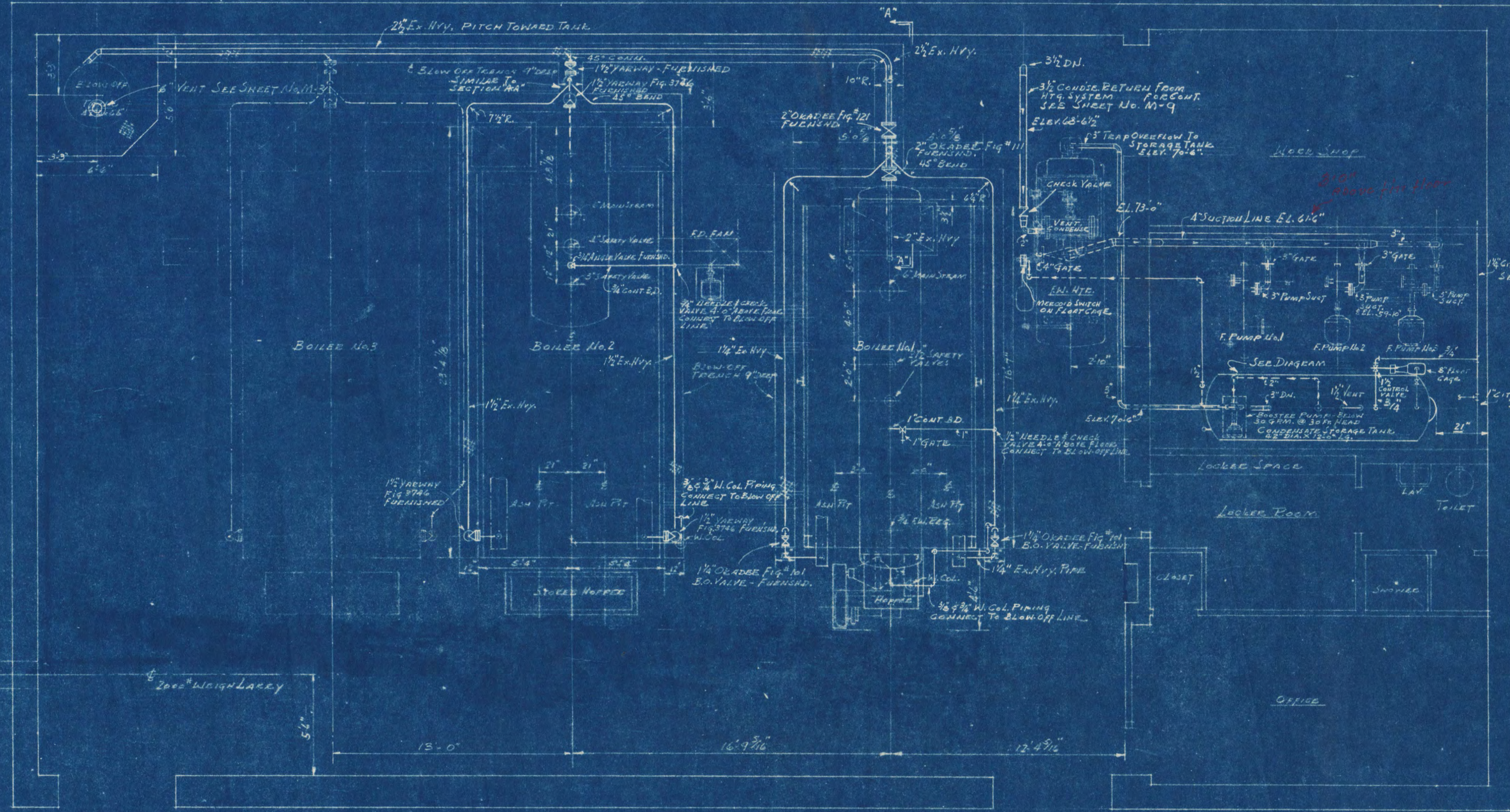
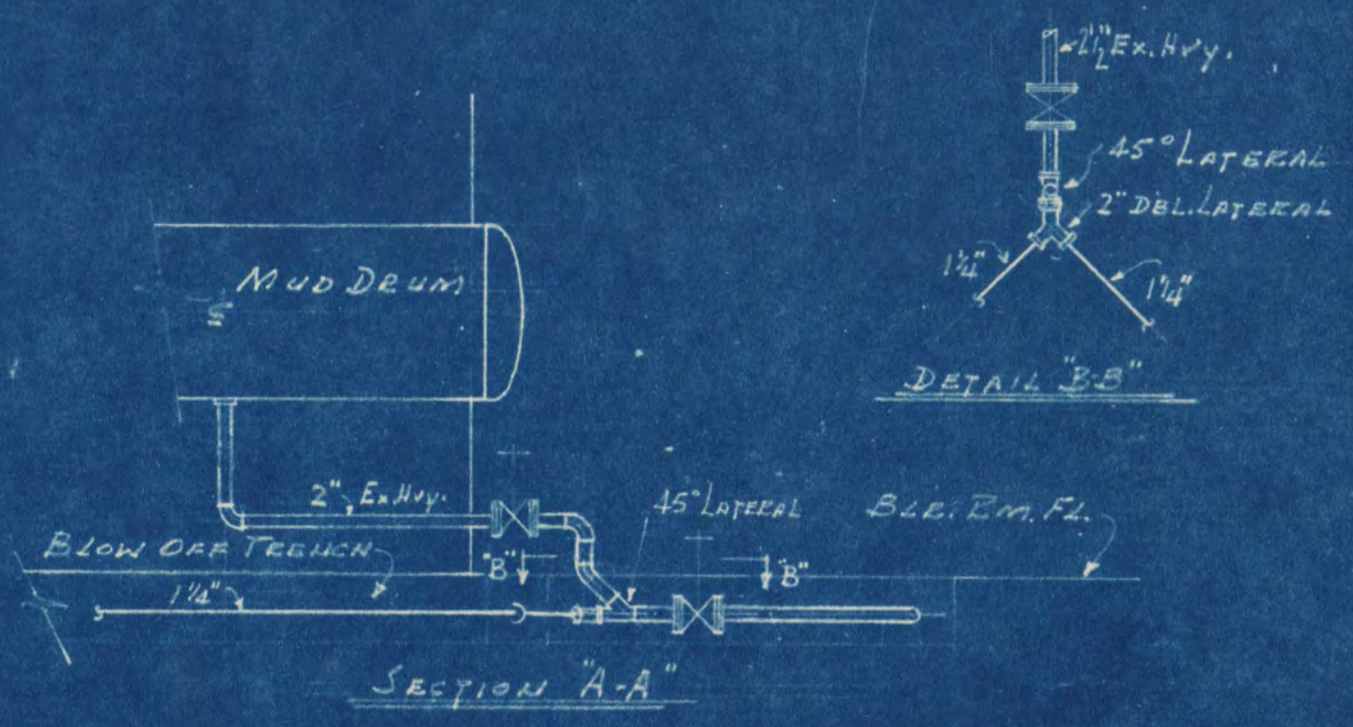
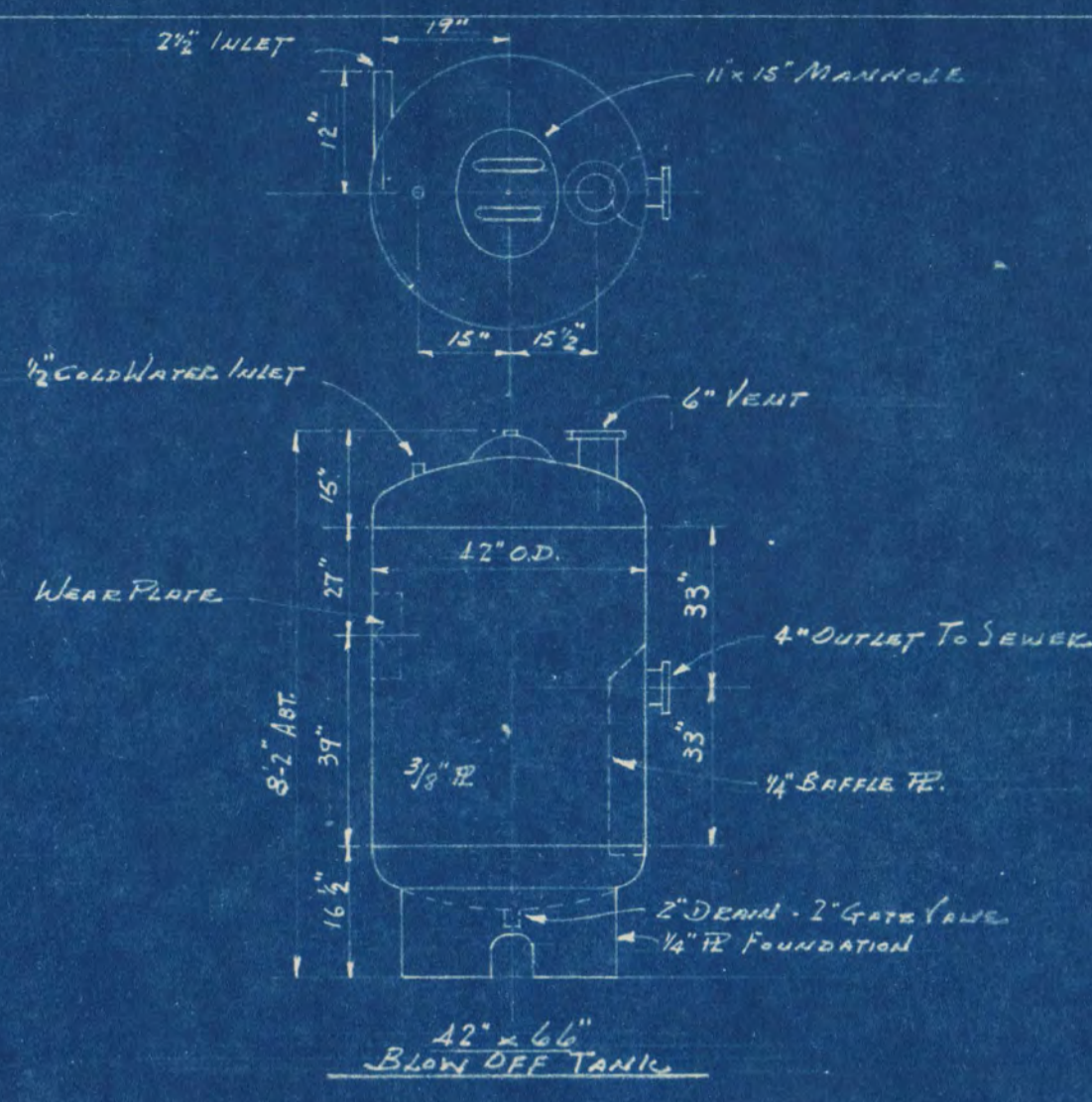


SCHEMATIC LAYOUT OF COMBUSTION CONTROL - BOILER NO. 1
SHOWING P.K. MASTER REGULATOR CONTROLLING COAL FEED
& AIR SUPPLY, P.K. DEAERATOR CONTROLLING OUTLET DAMPER

SIDE ELEVATION

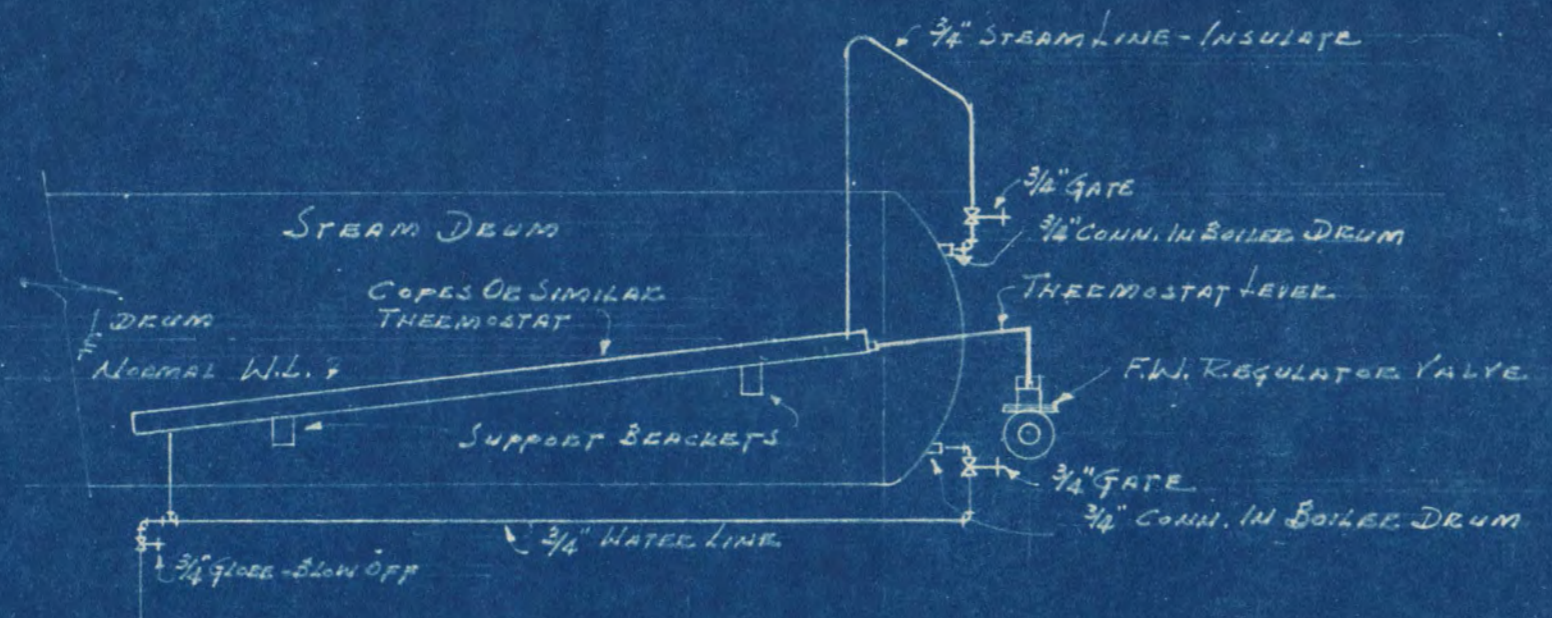
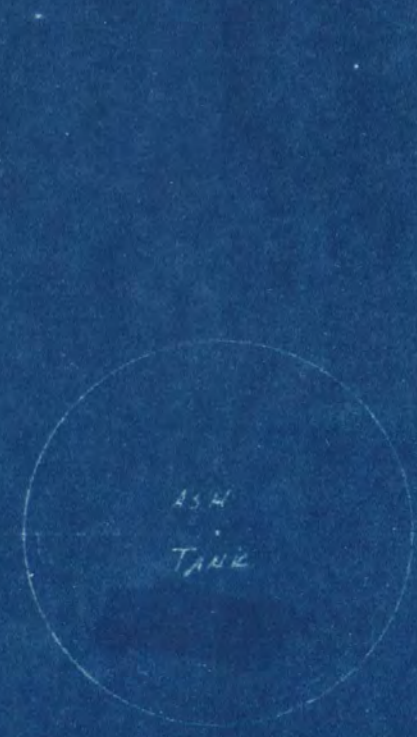
MAIN STEAM & EXHAUST PIPING
BOILER HOUSE
SECTIONS & DETAILS

CENTRAL HEATING PLANT STATE TEACHERS COLLEGE ST. CLOUD, MINN. DEPT. OF ADMINISTRATION STATE OF MINNESOTA ST. PAUL, MINN.		
DATE Dec. 10, 1948	FRANK W. JACKSON ARCHITECT FRED V. TRAYNOR, ASSOC. ARCHITECT ST. CLOUD, MINN. G. M. ORR, ENGR., CONSULTING ENGINEER	SHEET NO. M-3 OF 13
APPROVED BY <i>Arthur M. Burr</i>	PROJECT NO.	
DRAWN BY R.M.	APPROVED BY <i>R. G. Jelske</i>	919

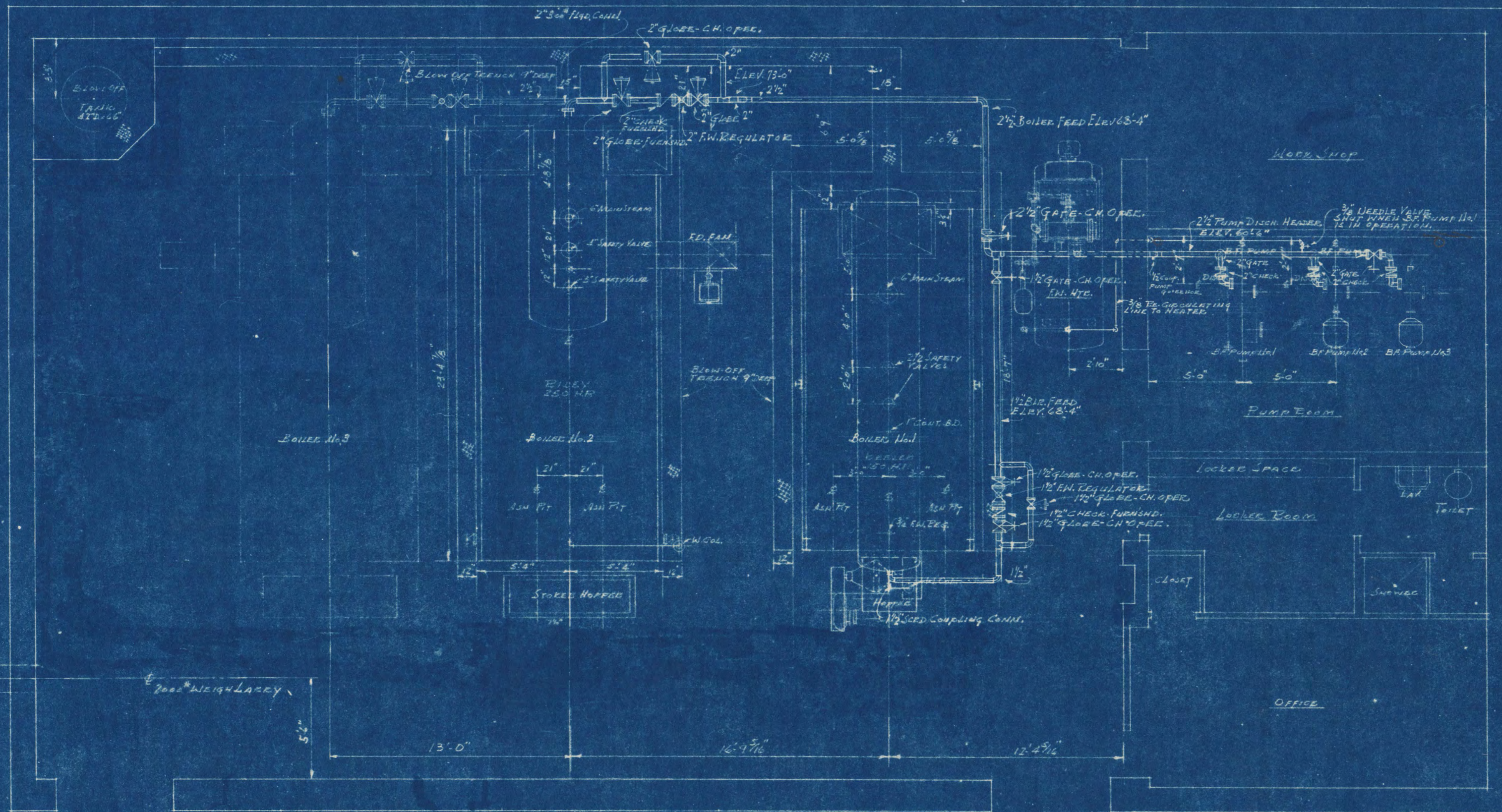


**BOILER BLOW OFF
AND
CONDENSATE PIPING
BOILER HOUSE**

CENTRAL HEATING PLANT STATE TEACHERS COLLEGE ST. CLOUD, MINN. DEPT. OF ADMINISTRATION STATE OF MINNESOTA ST. PAUL, MINN.		
DATE Dec. 10, 1948	FRANK W. JACKSON ARCHITECT FRED V. TRAYNOR ARCHITECT OF ST. CLOUD, MINN. B. MORRIS ENGINEER & CONSULTING ENGINEER	SHEET NO. 17-A
REVISIONS	APPROVED BY <i>[Signature]</i> CHIEF STATE ENGINEER	OF 13
	APPROVED BY <i>[Signature]</i> PRES. STATE TEACHERS COLLEGE BOARD	PROJECT NO.
DRAWN BY R.J.M.	APPROVED BY <i>[Signature]</i> SUPERVISOR OF ADMINISTRATION AND BUSINESS SIGNATURE	919



PIPING Hook UP FOR BOILER FEED WATER REGULATOR

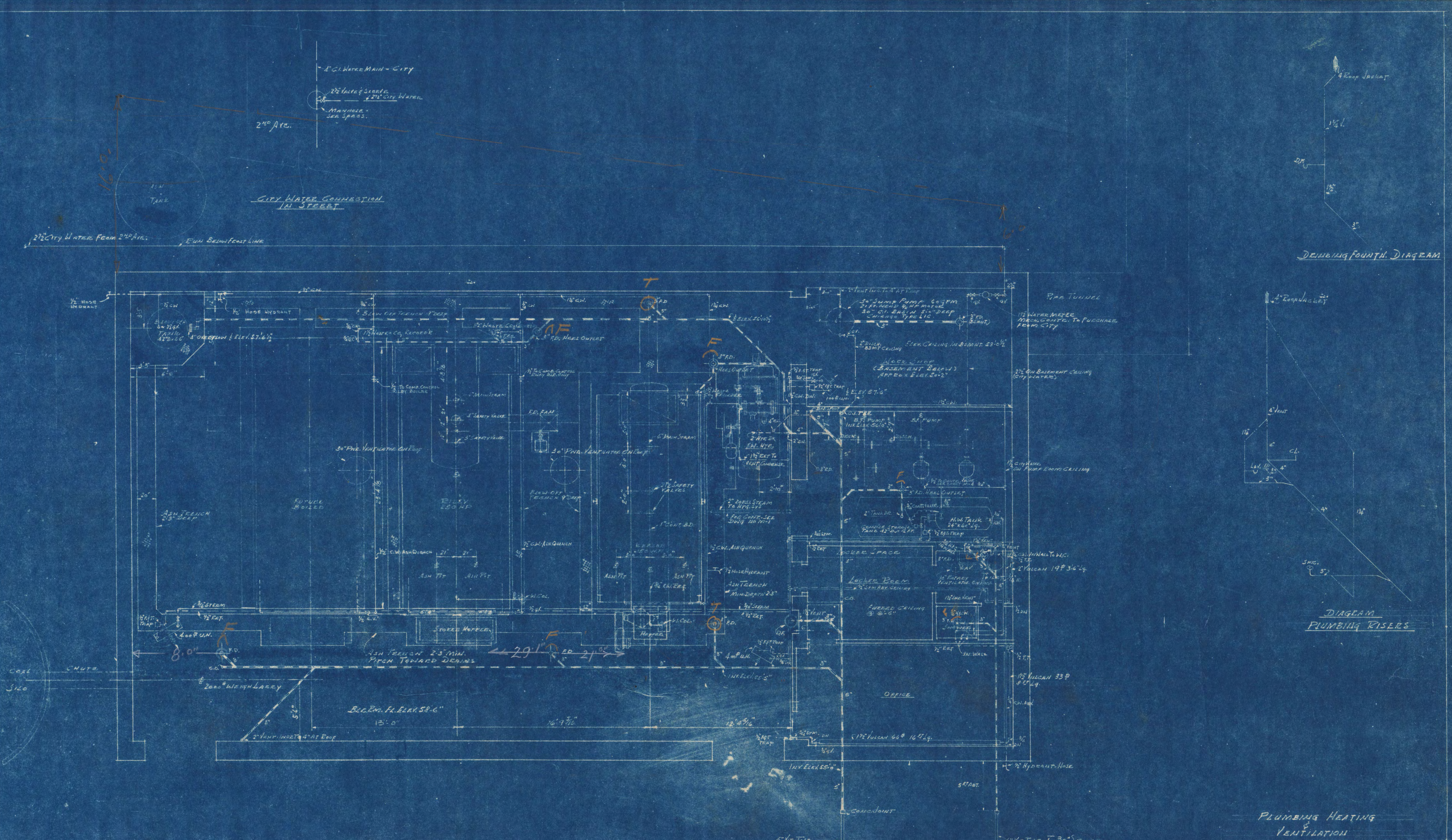


Pipe Tunnel

Property Line

BOILER FEED DISCHARGE PIPING
Boiler House

CENTRAL HEATING PLANT STATE TEACHERS COLLEGE ST. CLOUD, MINN. DEPT. OF ADMINISTRATION STATE OF MINNESOTA ST. PAUL, MINN.		
DATE Dec. 10, 1948	FRANK W. JACKSON ARCHITECT FRED V. TRAYNOR & ASSOC. ARCHITECT ST. CLOUD, MINN. G. M. ORR ENGR. CO. CONSULTING ENGINEERS	SHEET NO. M-5
REVISED	APPROVED BY <i>Frank W. Jackson</i> ARCHITECT	OF 13
	APPROVED BY <i>Arthur M. Owen</i> PRES. STATE TEACHERS COLLEGE BOARD	PROJECT NO.
DRAWN BY R.M.	APPROVED BY <i>R. G. Zeman</i> COMMISSIONER OF ADMINISTRATION ST. PAUL, MINN.	919



CLIMBING FOUNTAIN DIAGRAM

DIAGRAM PLUMBING RISERS

PLUMBING HEATING VENTILATION

CENTRAL HEATING PLANT STATE TEACHERS COLLEGE ST. CLOUD, MINN. DEPT. OF ADMINISTRATION STATE OF MINNESOTA ST. PAUL, MINN.		
DATE Dec. 10, 1948	FRANK W. JACKSON ARCHITECT FRED V. TRAYNOR - ASSECC. ARCHITECT BY CLAUDIO M. BLARE G. M. ORR ENGR. CO. - CONSULTING ENGINEERS	SHEET NO. 10-6
REVISIONS	APPROVED BY <i>Claudio M. Blare</i> PRES. STATE TEACHERS COLLEGE BOARD	OF 13 PROJECT NO.
DRAWN BY R. G. Johnson	APPROVED BY <i>R. G. Johnson</i> CONSULTING ENGINEER	919

APPROX. DISTANCE TO SUMP 120 FT.

30" SANITARY SEWER IN STREET SEE DWG. SHEET NO. M-8.

INT. SUMP AT SUMP 54'