

10/1/24

SURFACES

TUBES	133
FIREBOX TOP AND SIDES	80
BACK	56
TUBEPLATE	38
FURNACES	73
TOTAL HEATING SURFACE	1380
GRATE AREA (5'-9" BAR)	42
TUBE AREA	975
WATER AREA	1080
STEAM SPACE	257.5

LIMITS OF TENSILE STRENGTH OF MATERIAL

SHELL BUTTSTRAPS AND GIRDER	28 TO 32 TONS	SIEMENS MARTIN STEEL
OTHER PLATES	26 " 30 "	" "
FURNACES	26 " 30 "	" "
MAIN STAYS	28 " 32 "	" "
SCREWED STAYS	26 " 30 "	" "
RIVET BARS	26 " 30 "	" "

RIVETING

	LONGIT.	END CIRCUM.
HOLE DIAM.	1 1/8"	1 1/8"
PITCH	7 1/2"	3 1/2"
% PLATE	85.6	67.4
% RIVET	95.0	43.5

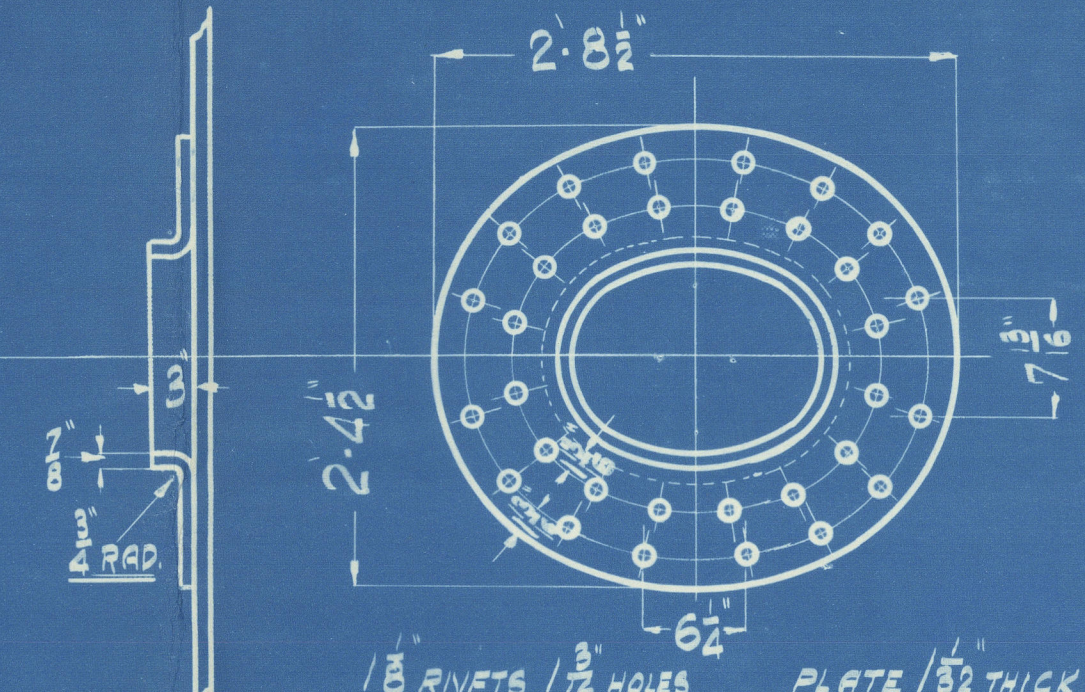
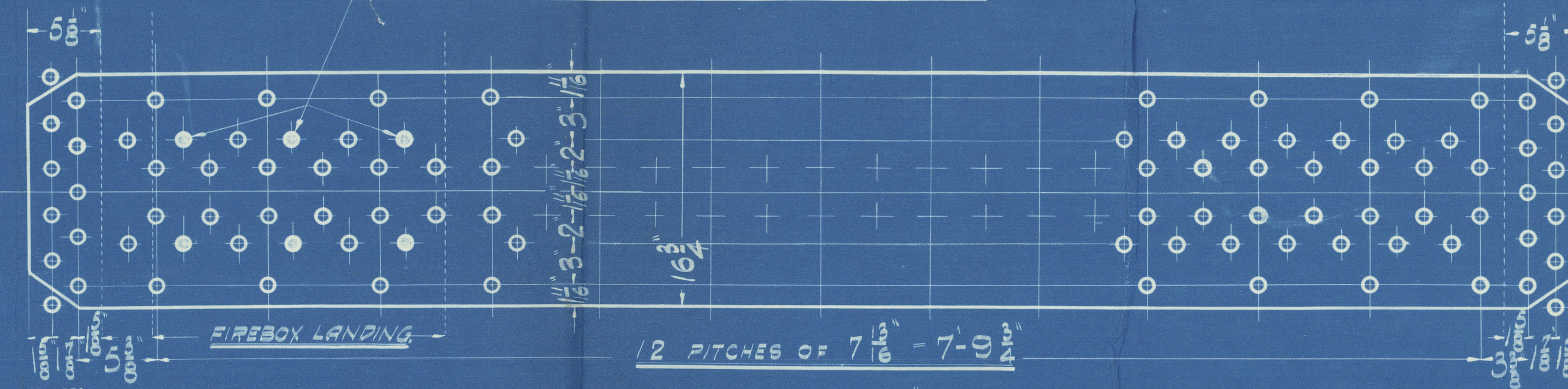
FOR 3/8" OF CIRCUMFERENCE ON TOP, BACK AND FRONT.

ALL RIVET HOLES DRILLED IN PLACE

	END CIRCUM.
HOLE DIAM.	1 1/8"
PITCH	3"
% PLATE	64.6
% RIVET	47.0

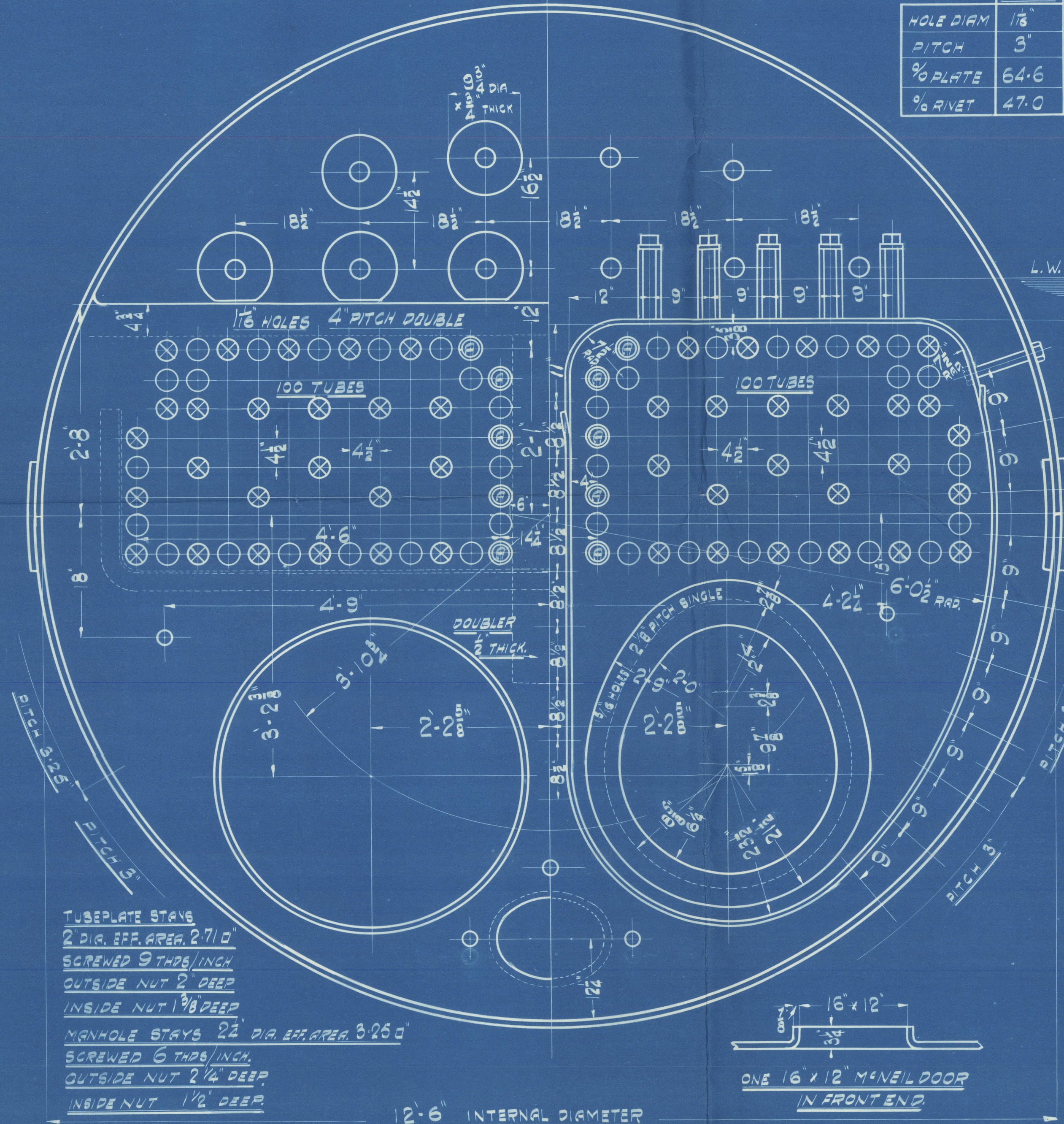
FOR 1/8" OF CIRCUMFERENCE ON BOTTOM, BACK AND FRONT

STAYS SCREWED THRO BUTTSTRAPS NO NUTS OUTSIDE



SHELL MANHOLE COMPENSATING RING

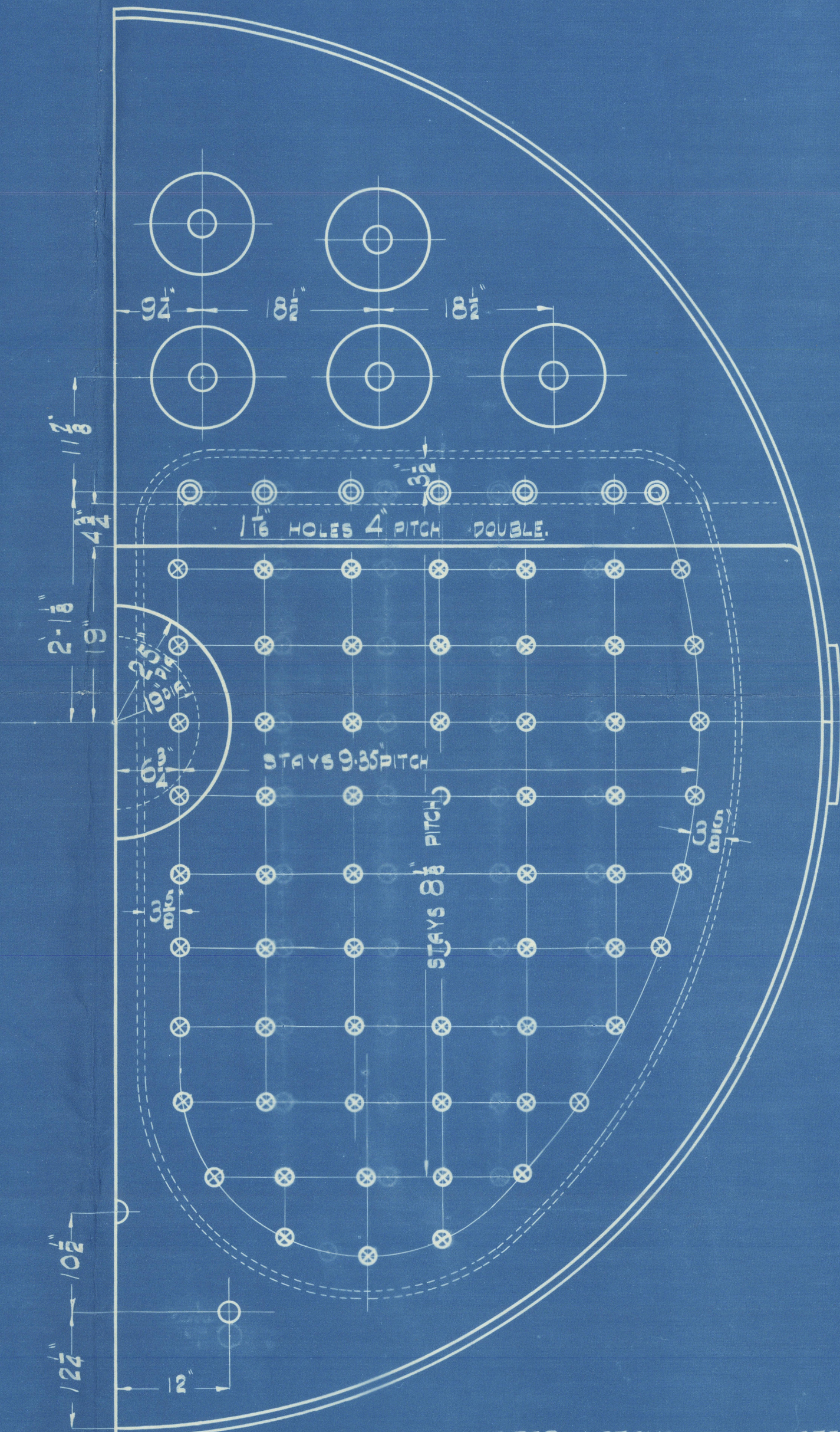
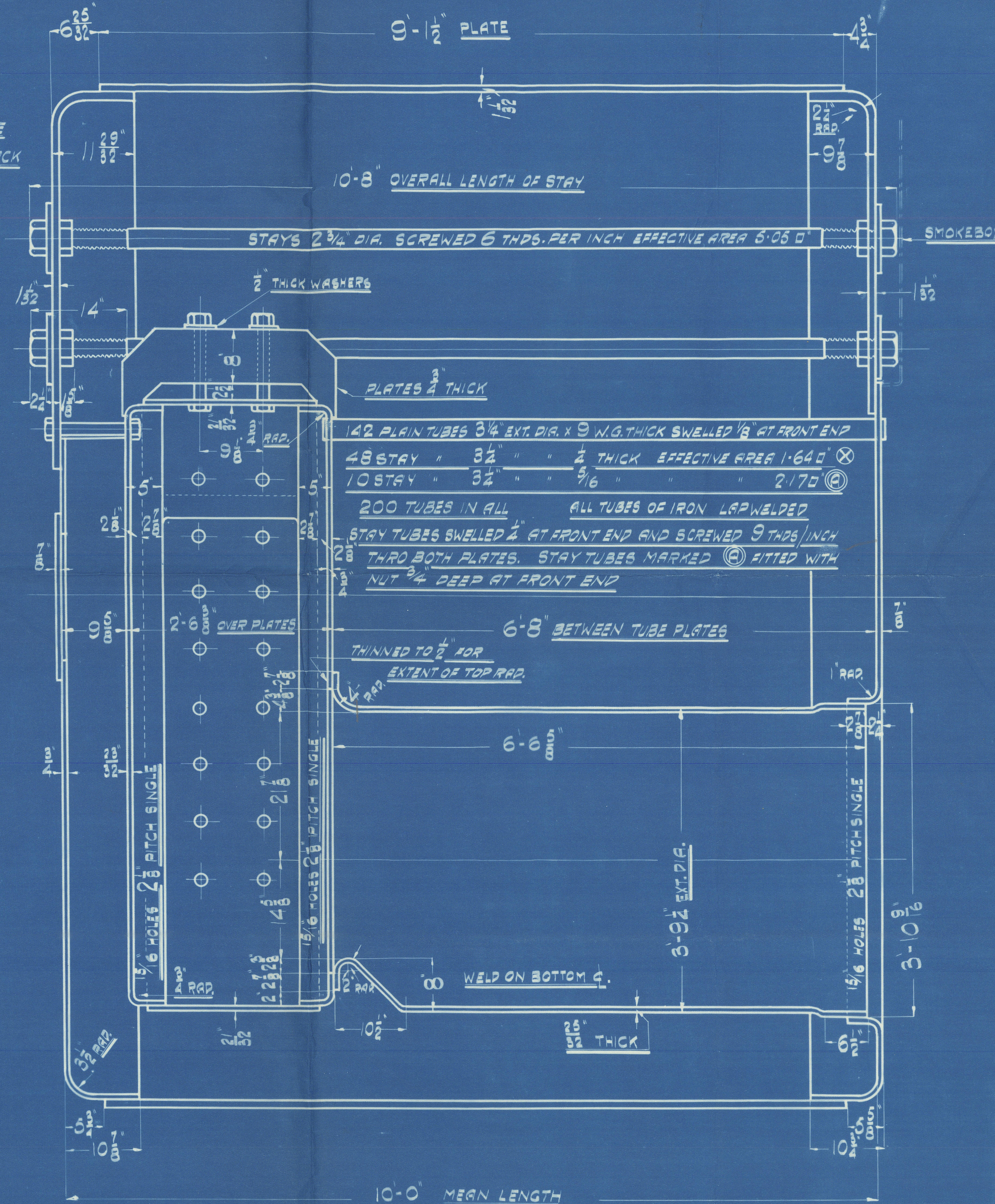
McNEIL DOOR



TUBEPLATE STAYS
2 DIA. EFF. AREA 2710
SCREWED 9 THDS/INCH
OUTSIDE NUT 2 DEEP
INSIDE NUT 1 1/8 DEEP
MANHOLE STAYS 2 1/2 DIA. EFF. AREA 3260
SCREWED 6 THDS/INCH
OUTSIDE NUT 2 1/4 DEEP
INSIDE NUT 1 1/2 DEEP

12'-6" INTERNAL DIAMETER

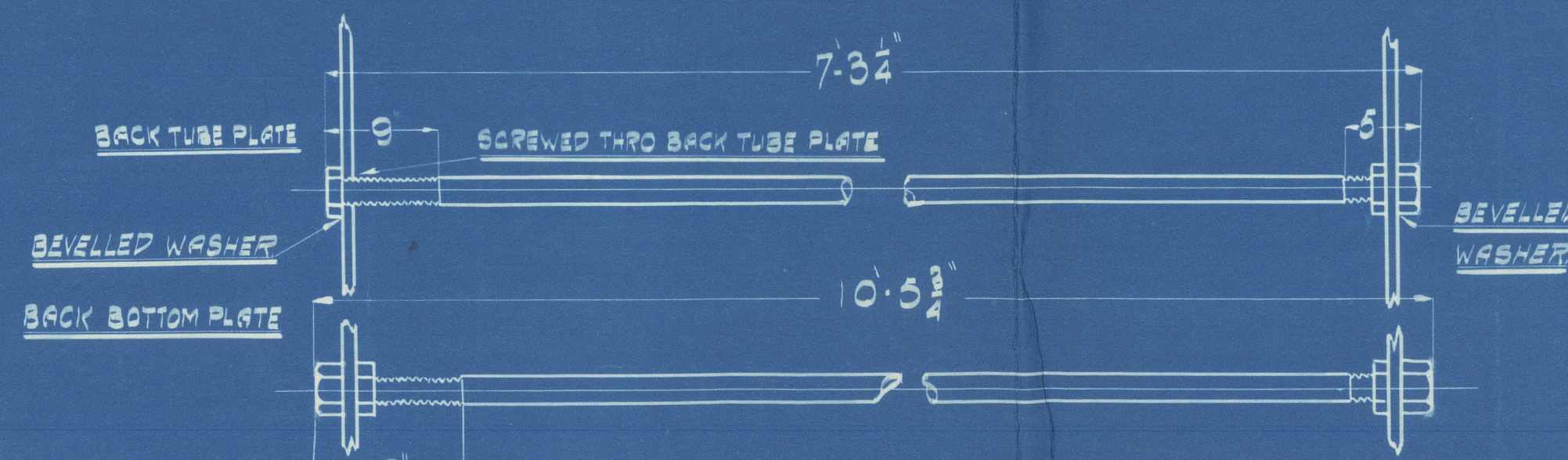
ONE 16" x 12" McNEIL DOOR
IN FRONT END



FIREBOX STAYS STEEL

POSITION	MARK	DIA	THREADS / INCH	DEPTH OF NUT
TOP & SIDES	○	1 5/8"	9	7/8 (GIRDER TOPS 1 5/8)
BACK	⊗	1 3/4"	9	1 1/8
BACK TOP ROW	⊙	2"	9	1"

ALL FIREBOX STAYS SCREWED THRO BOTH PLATES AND NUT FITTED AT EACH END.



MAIN BOILER Nº459-460

SCALE = 1" = ONE FOOT
WORKING PRESSURE 180 LBS/SQ IN

COST SECTION M.B.



pl. C.H.H.
10-1-24

O.T. Nº 490020
DIRC. Nº 6010

Amended Plan.

— " —

Cooper & Grey Ltd.

Boilers Nos 459/460

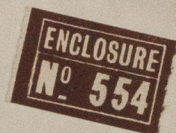
for W. Beardmore & Co.

Speedwell Iron Works

Coatbridge.

S.S. "Rydal Force"

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Lloyd's Register
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