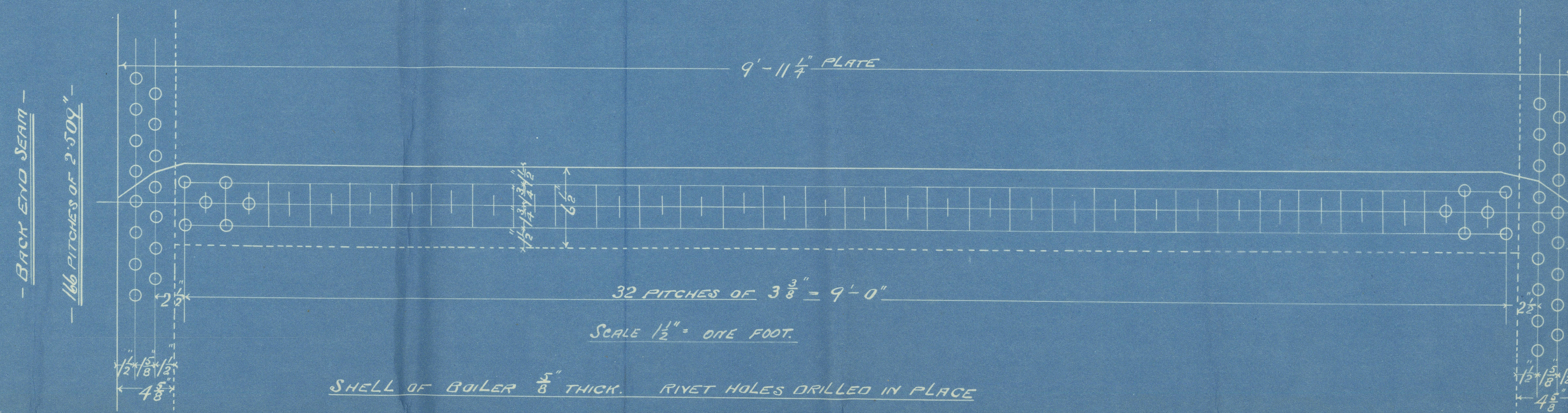


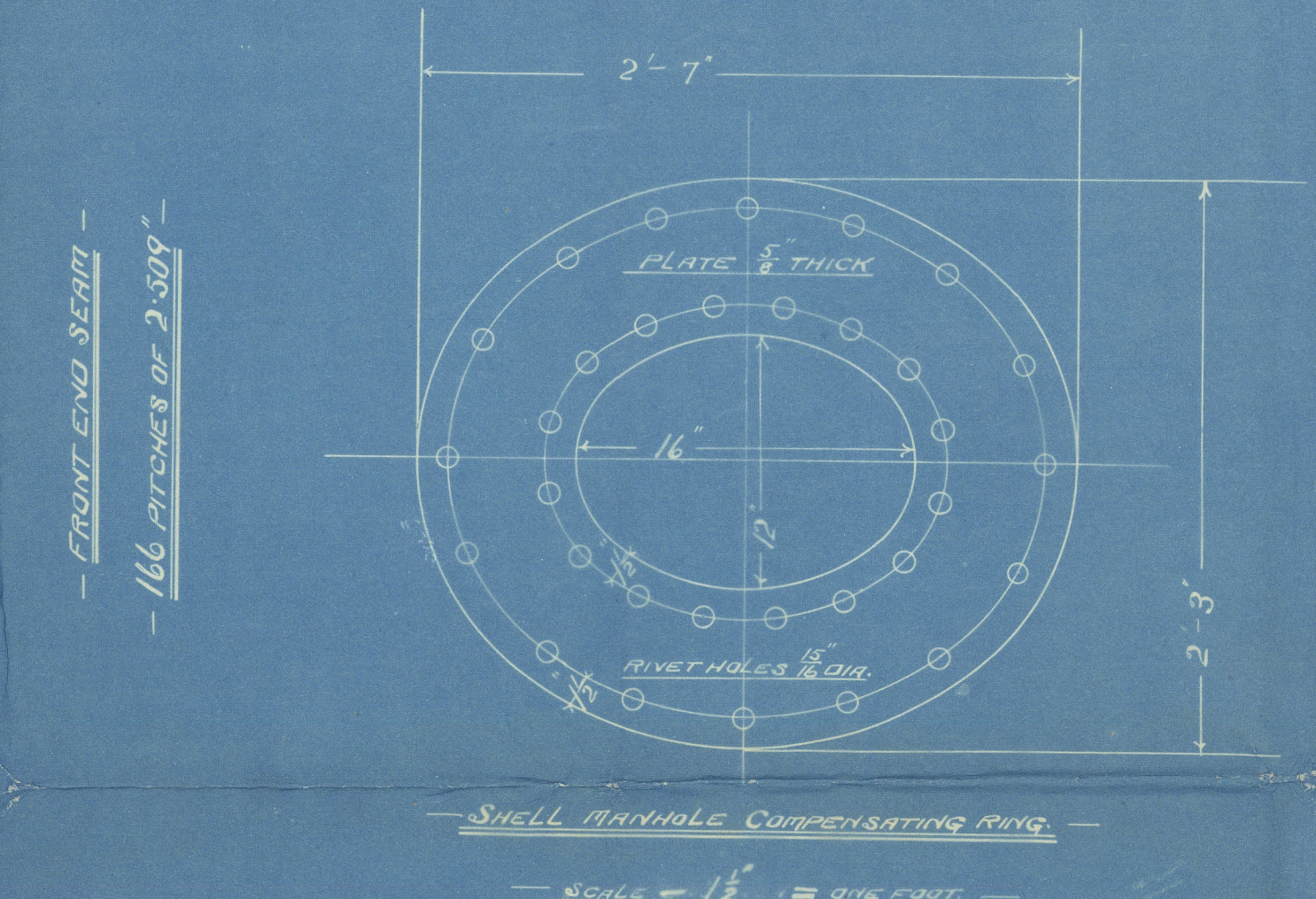
28:12:04

THICKNESSES		
	STEEL	IN.
SHELL		$\frac{3}{8}$
TOP FRONT & BACK		1
FRONT TUBE PLATE		$\frac{3}{8}$
BOTTOM BACK		$\frac{3}{8}$
BACK TUBE PLATE		$\frac{3}{8}$
FIREBOX BACK		$\frac{1}{2}$
TOP & SIDES		$\frac{7}{8}$
BOTTOM		$\frac{1}{2}$
FURNACES		$\frac{1}{2}$
GRIDERS		$\frac{1}{2}$
MANHOLE DOUBLING		$\frac{3}{8}$

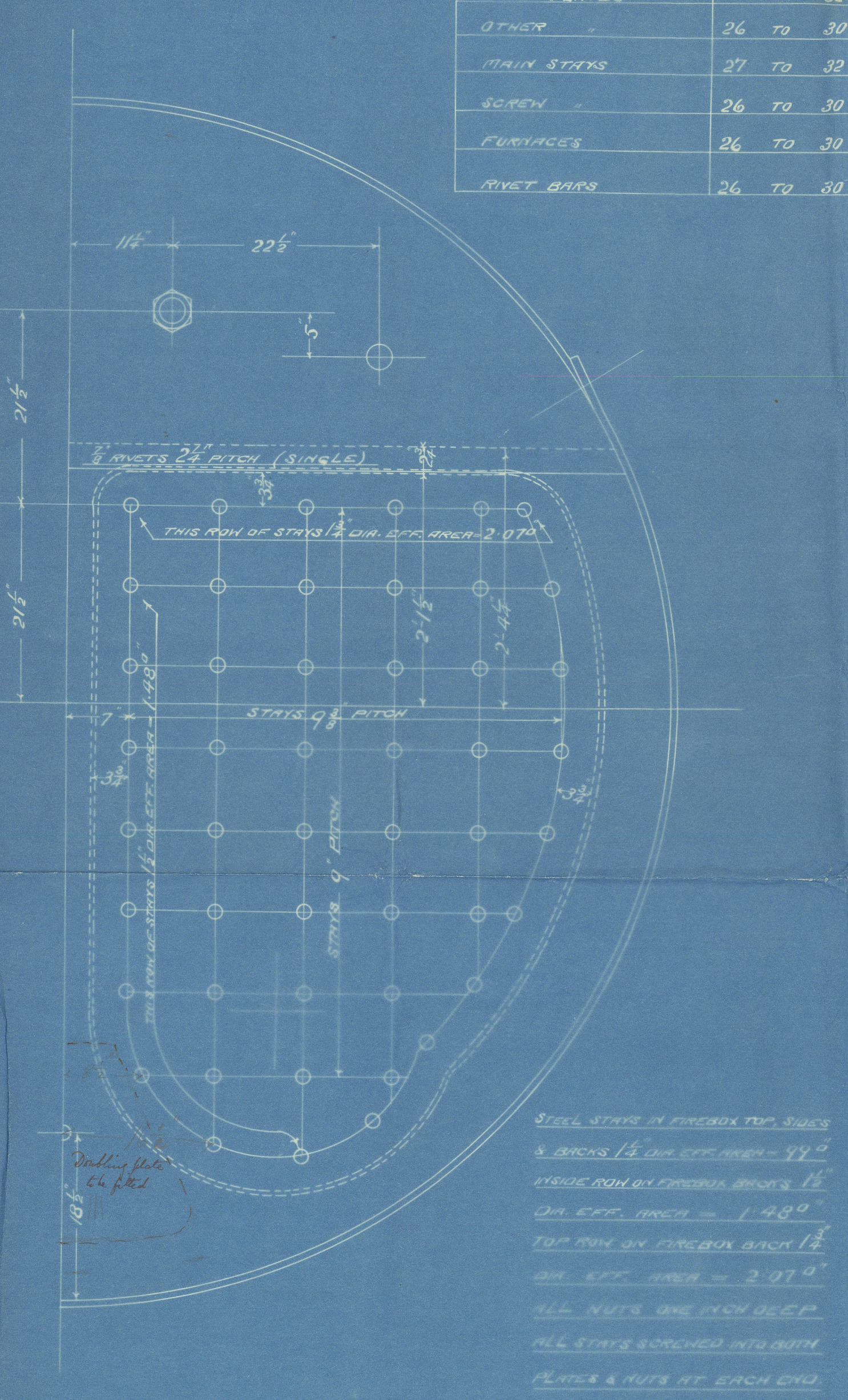
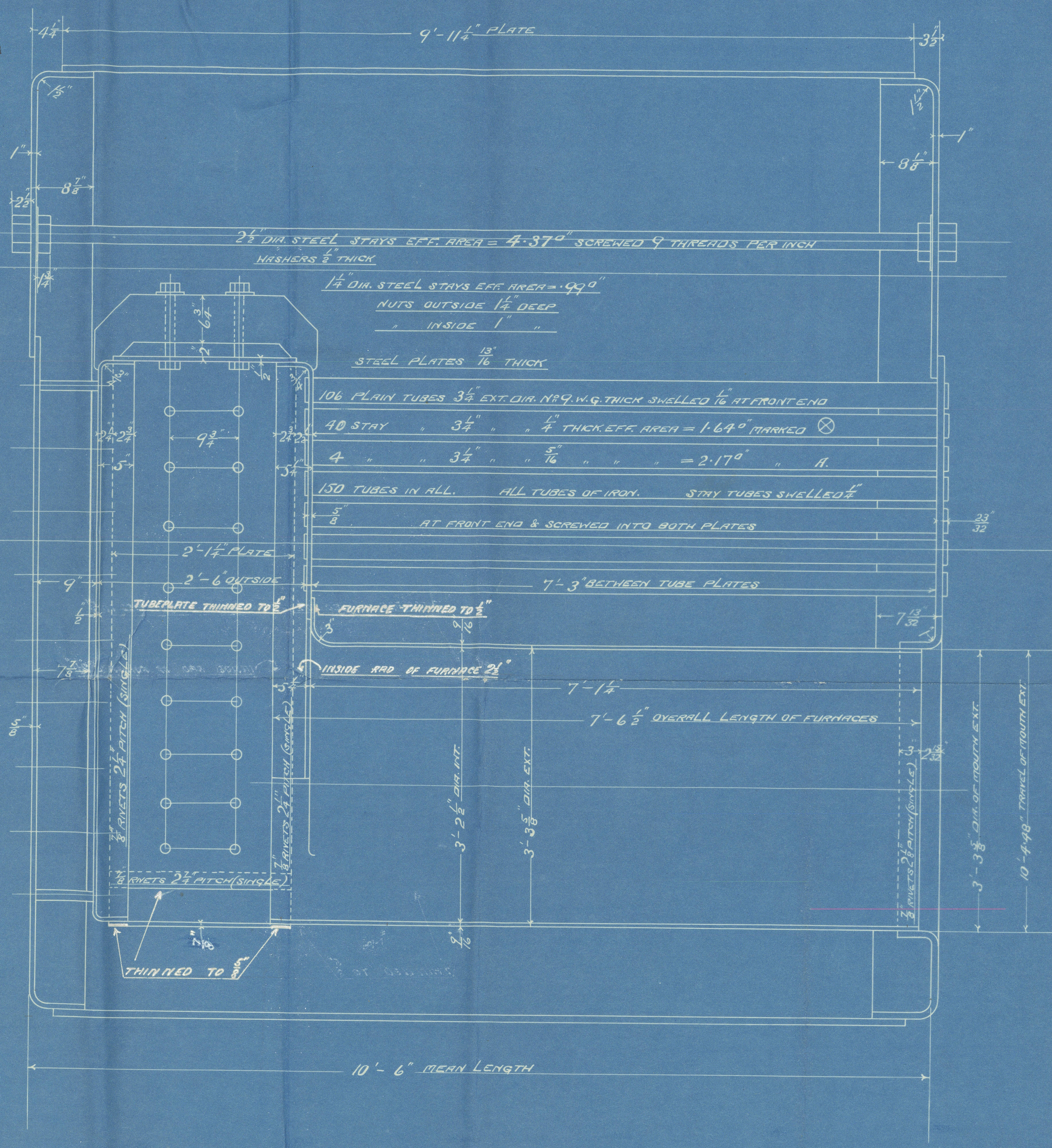
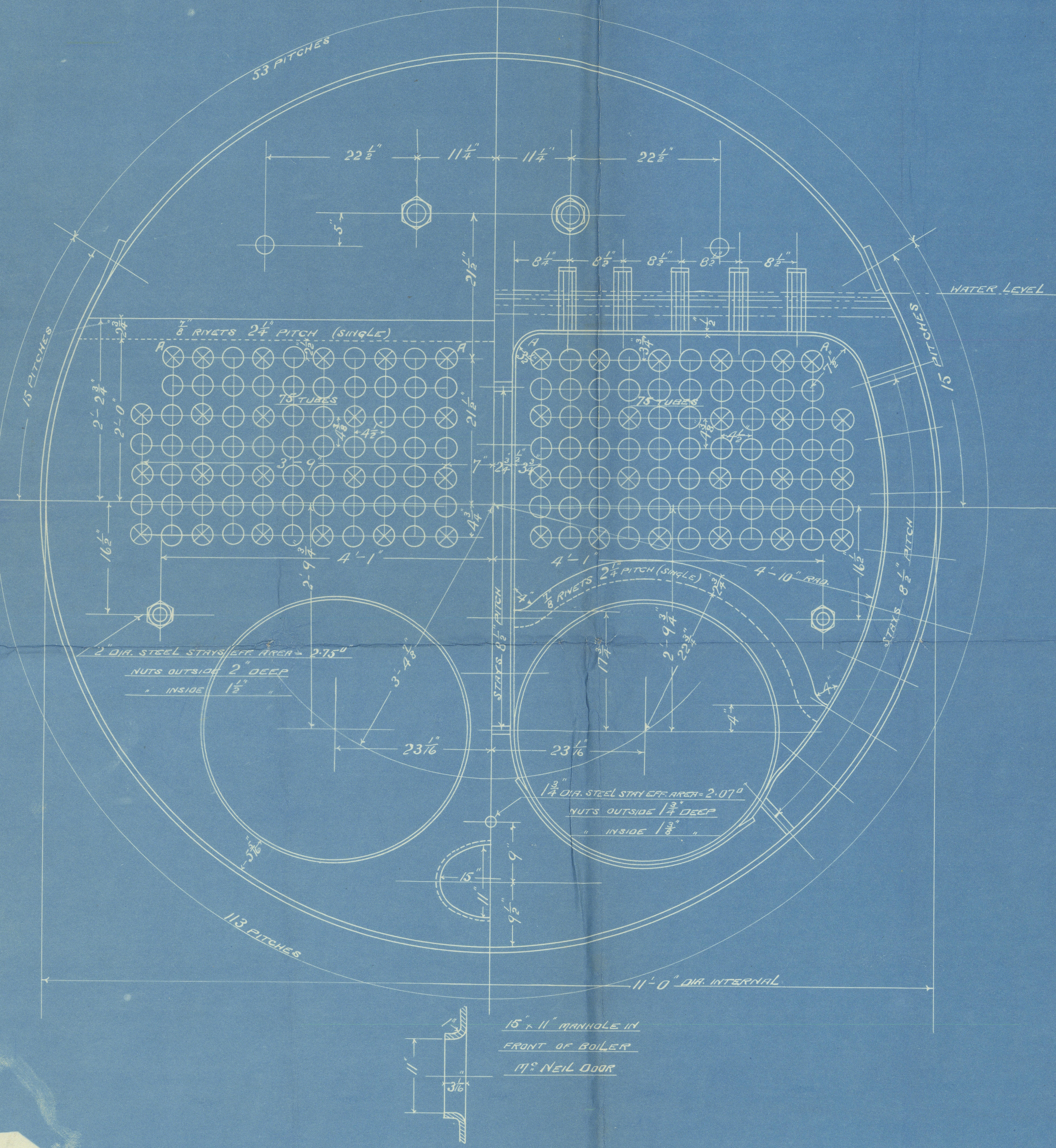
SURFACES		
150 TUBES $3\frac{1}{2}$ EXT. DIA. @ 6-168	925	sq. ft.
FIREBOXES	133	sq. ft.
FURNACES	74	sq. ft.
TOTAL HEATING SURFACE	1132	sq. ft.
GRATE AREA @ 3'-2 1/2" DIA.	35.2	sq. ft.
WATER AREA	100	sq. ft.
TUBE AREA	6.91	sq. ft.
STEAM SPACE	202	cu. ft.
RATIO GRATE AREA TO HEATING SURF.	1:32.06	
TUBE AREA	1:26.20	
WATER AREA	1:2.83	
STEAM SPACE	1:5.72	
% BOILER ABOVE FIREBOXES	30.5	
LENGTH OF FIREBOXES	5'-6"	
HEIGHT OF WATER		



RIVETING			
	LONG JOINT	BACK END SEAM	FRONT END SEAM
PITCH	3 3/8	2.509	2.509
DIA. OF HOLES	15/16	15/16	15/16
% PLATE	73.2	62.6	62.6
% RIVET	83.4	75	75



LIMITS OF TENSILE STRENGTHS	
SHELL PLATES	28 1/2 TO 32 TONS/IN.
OTHER	26 TO 30
MAIN STAYS	27 TO 32
SCREEN	26 TO 30
FURNACES	26 TO 30
RIVET BARS	26 TO 30



STEEL STAYS IN FIREBOX TOP, BACK & SIDES 1 1/2 DIA. EXT. AREA = 2.07"

NUTS OUTSIDE 1 1/2" DEEP

DIA. EXT. TUBES = 1.20"

TOP TUBE ON FIREBOX BACK 1 1/2"

DIA. EXT. TUBES = 2.07"

ALL NUTS ONE INCH DEEP

ALL STAYS SLOTTED INTO BOTH PLATES & NUTS AT EACH END

RS
28.12.04



DONKEY BOILER

CON. N^o 425

ONE OFF
TO LLOYD'S SURVEY
SCALE ONE INCH = ONE FOOT
WORKING PRESSURE 90 LBS PER IN.²

W643-0160 1/2

From DAVID ROWAN & CO., GLASGOW.

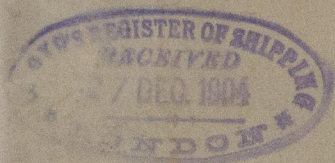
ENCLOSURE

FOR

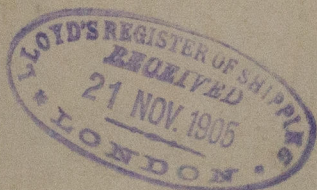
*Marine Surveyors to Lloyds
Register*

D. Rowan & Co's

Belr. 425



"Matoppe"
Gls. nkt. no. 23283



© 2020

Lloyd's Register
Foundation

W643 0160