

8th 15 7 93

Steel Boilers No 159 2 Boilers 12'-6" dia. 10'-0" long. Shell 1/2" thick. 1/4" holes 7/8" pitch

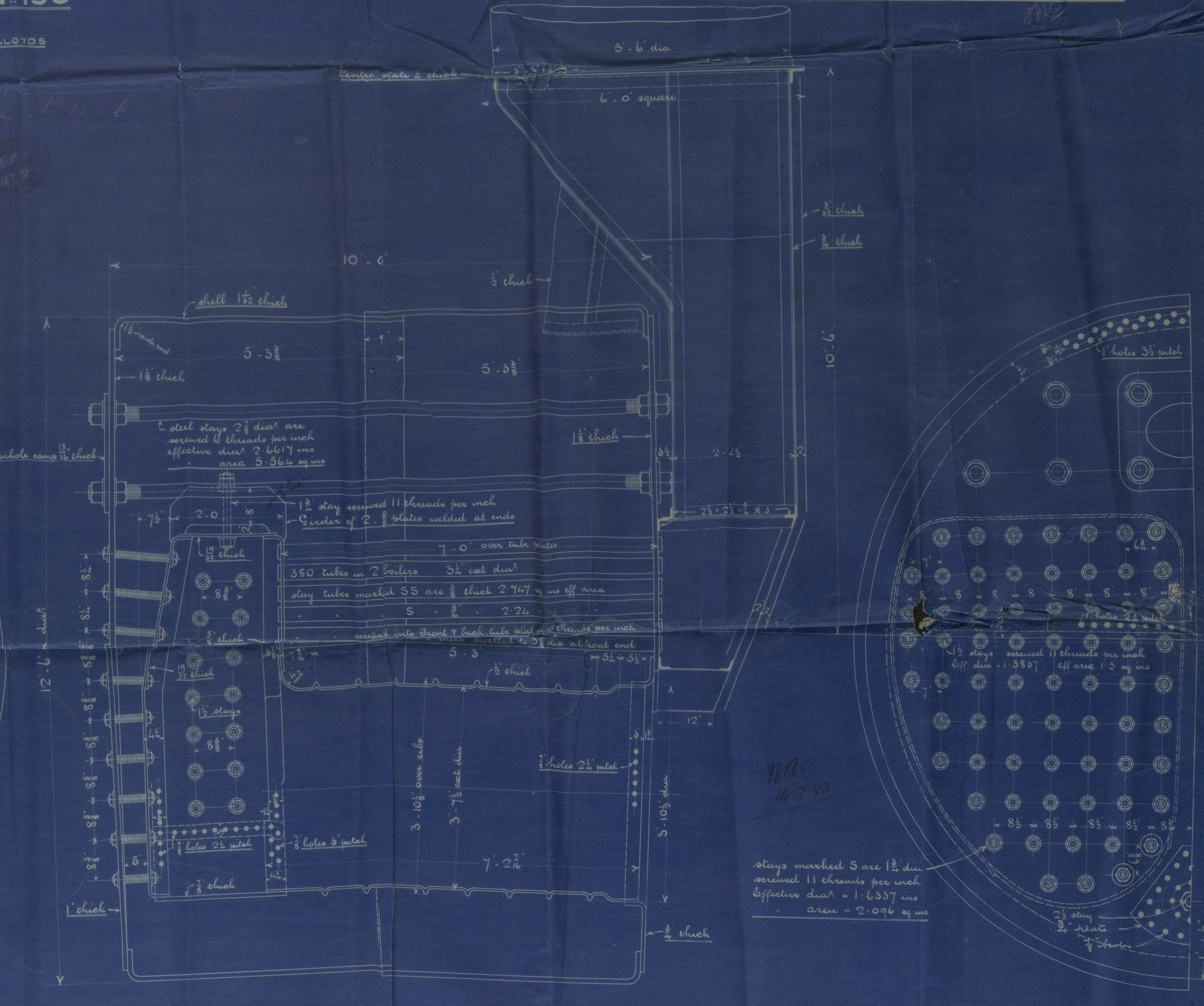
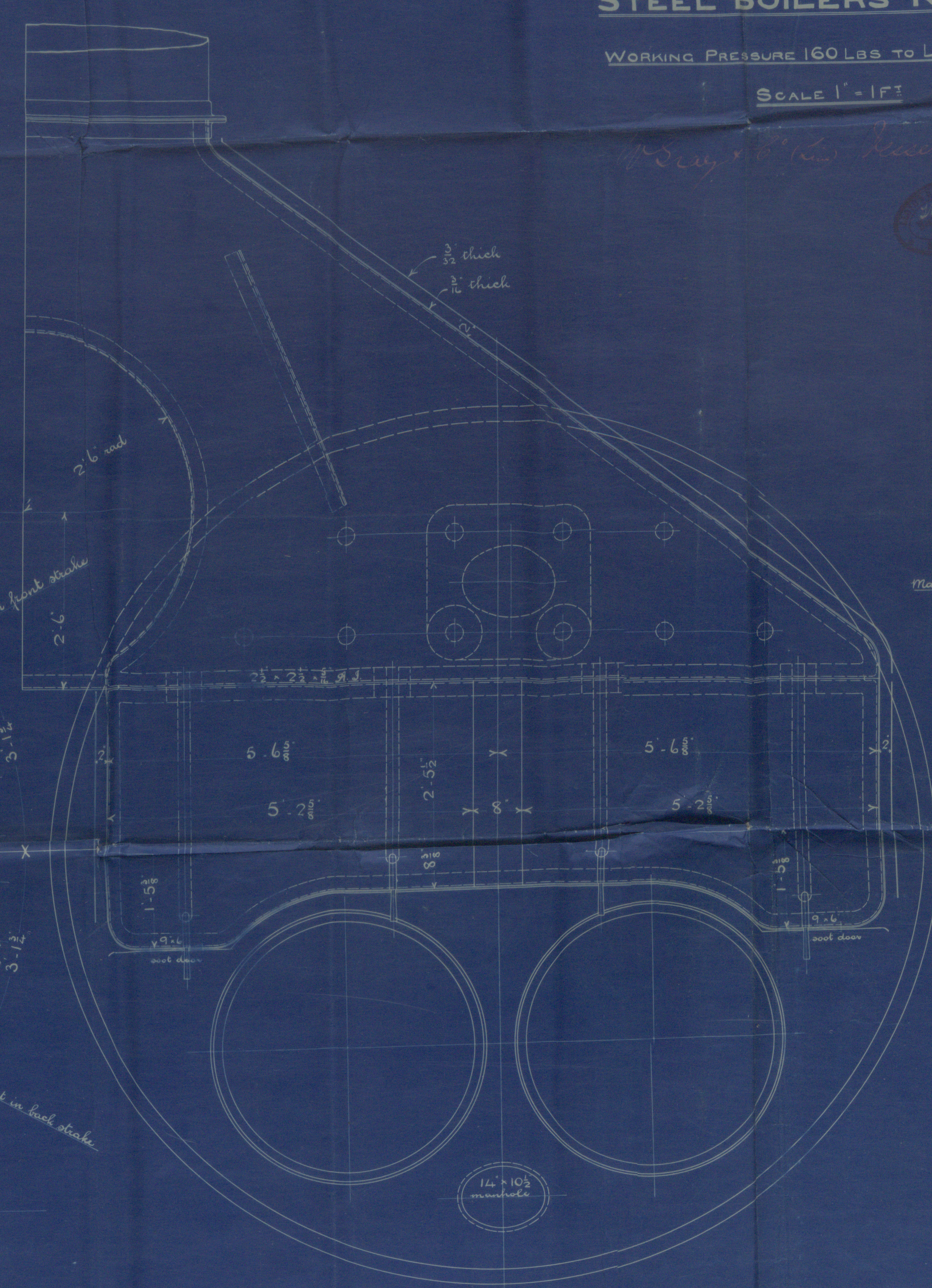
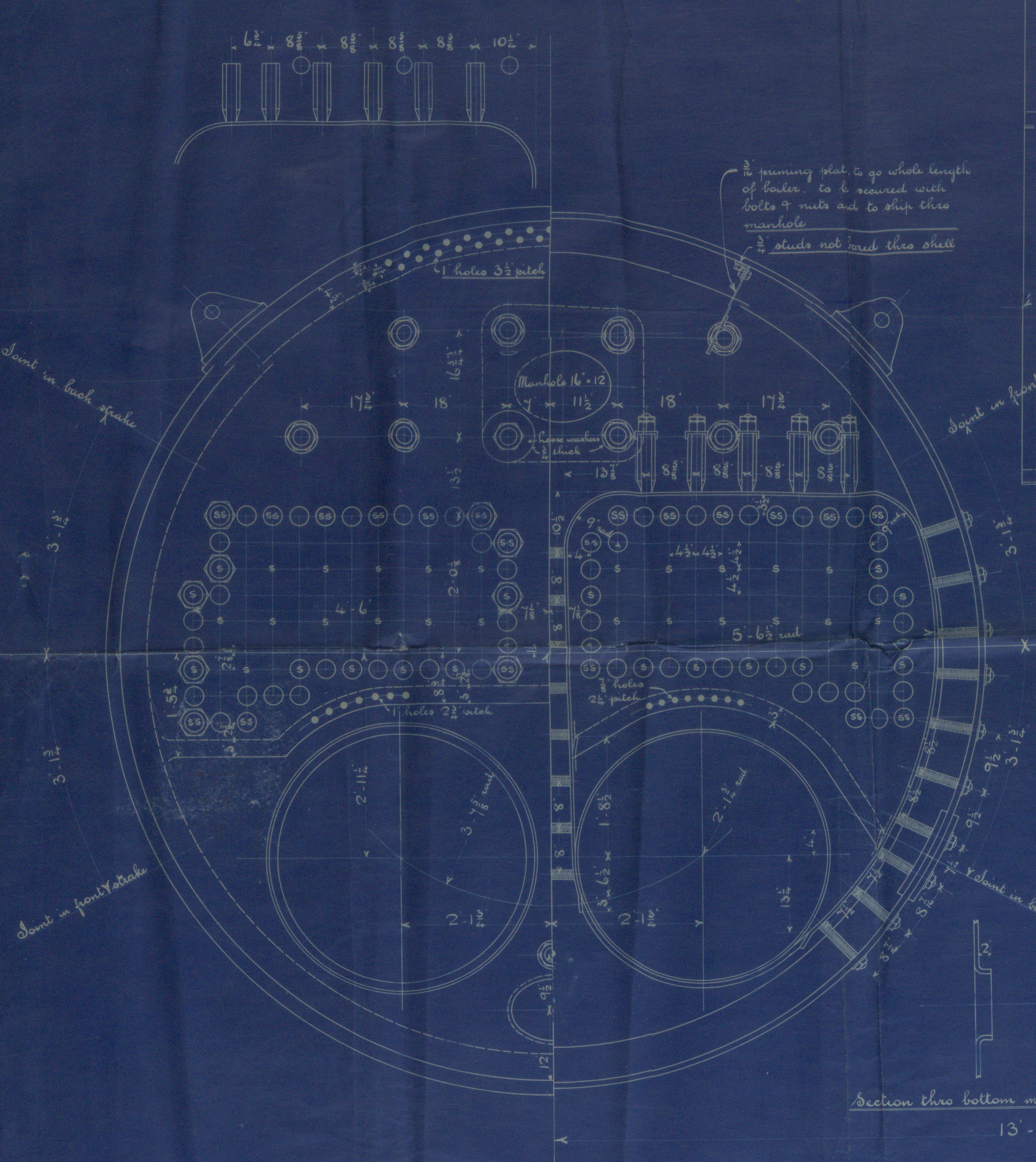
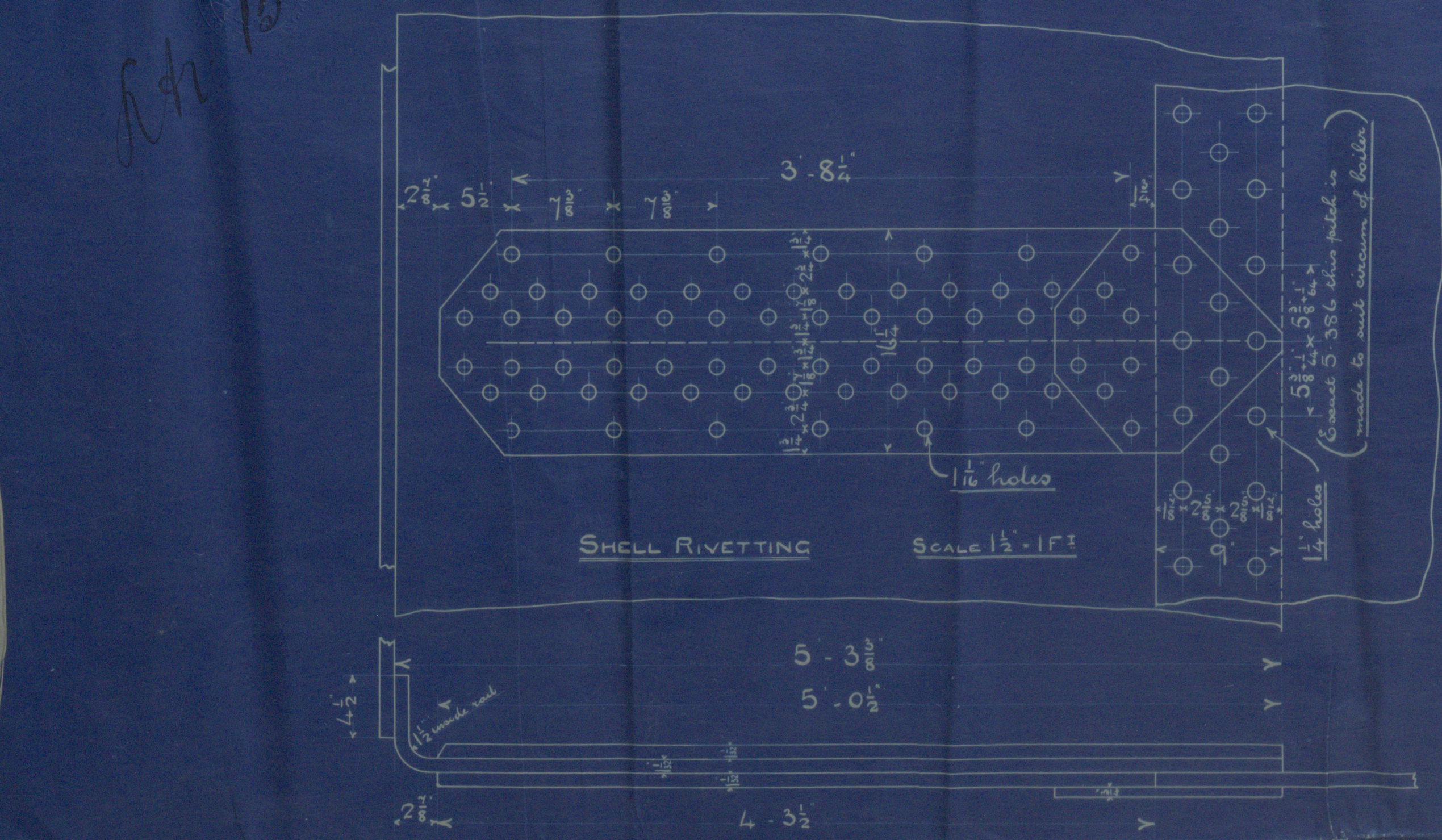
Plate	$\frac{P-d}{P}$	$\frac{7.375-1.0625}{7.375}$	85.59%	Purvis	$\frac{C(t-2)}{D}$	$\frac{1160(8-2)}{4.3-5}$	160
rivets	$\frac{a \times 7/8 \times 8.5}{P \times t}$	$\frac{886.5 \times 1.75 \times 8.5}{7.375 \times 1.03125}$	86.76%	Main stays	$\frac{C \times a}{surf \supp'd}$	$\frac{9000 \times 5.564}{18.5 \times 16.75}$	161.6
shell	$\frac{C(t-2)}{D}$	$\frac{20(16.5-2)85.59}{180}$	165.4	screwed stays	"	$\frac{9000 \times 2.016}{18.625 \times 8.625}$	160.5
F & B Tops	$\frac{C \times t^2}{P^2}$	$\frac{175 \times 18^2}{18.5^2}$	1165.6	"	"	$\frac{8000 \times 1.5}{8.425 \times 8.5}$	113.6
F. I. Plate	"	$\frac{150 \times 18^2}{14.26^2}$	2393	stay tubes	"	$\frac{7500 \times 2.24}{9 \times 9}$	207.4
B. I. Plate	"	$\frac{140 \times 10^2}{9^2}$	172.8	back bolt	$\frac{C \times t^2}{P^2}$	$\frac{135 \times 16^2}{13.625^2}$	186.1
Comb cham	"	$\frac{135 \times 9.5^2}{8.625^2}$	163.78	B. I. Plate	$\frac{1600(D-d)t}{W \times D}$	$\frac{1600(4.5-2.76)10}{31.5 \times 4.5}$	173.0
Girders	$\frac{C \times d^3 \times t}{(P \times L) \times dist \ of \ (24-5.625)24 \times 8.625}$	$\frac{6600 \times 8^3 \times 1.25}{(24-5.625)24 \times 8.625}$	165.9	Heating surface in 2 Boilers	2740 sq feet		

STEEL BOILERS No 159

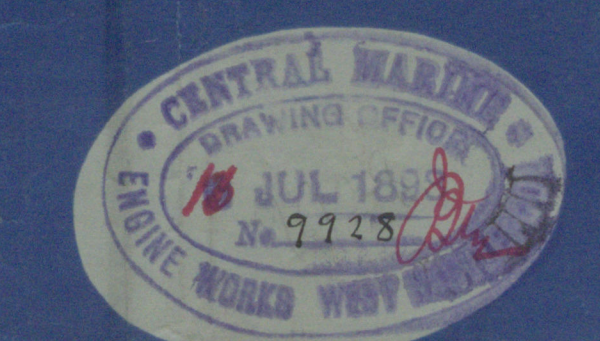
WORKING PRESSURE 160 LBS TO LLOYDS

SCALE 1" = 1' 1"

Design by Geo. Lewis 11/11/66



Section thro bottom manhole
13'-6" Centres for No 159

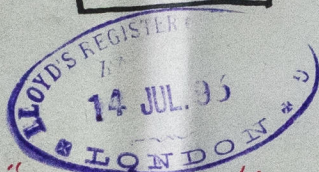


Central Marine & Works
2 Main Boilers
No 159
160 lbs

W Bray & Co Ltd
Diesel No 466

No 2380
240 lbs
320 lbs
16.8.93 T.R.B.

W & P
13.7.93



S.S. "Ariadne Alexandra"
W. H. P. Report No. 9196.



HPL 371-0011



Lloyd's Register
Foundation