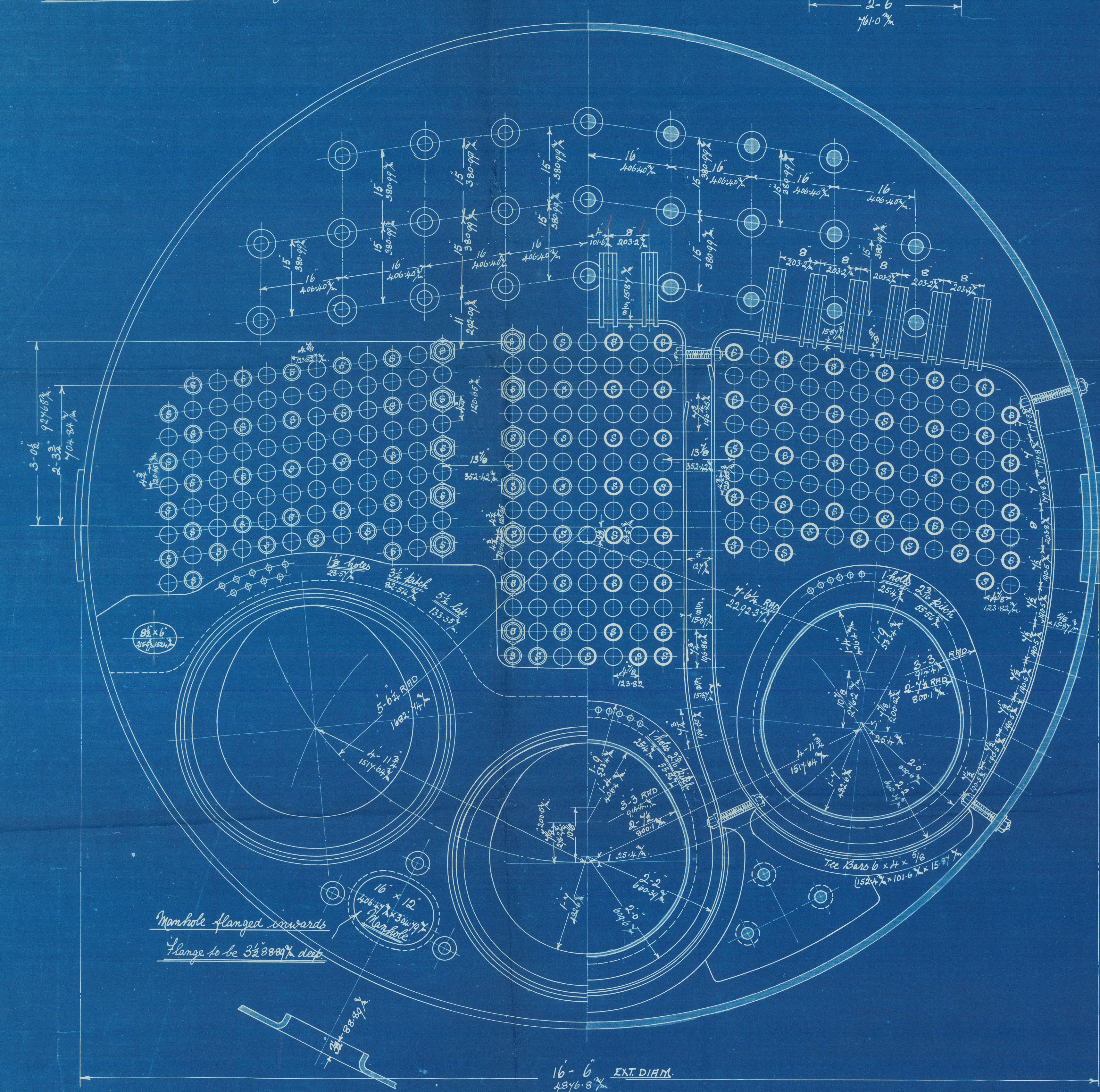


# - 2 STEEL BOILERS - N<sup>o</sup> 494.

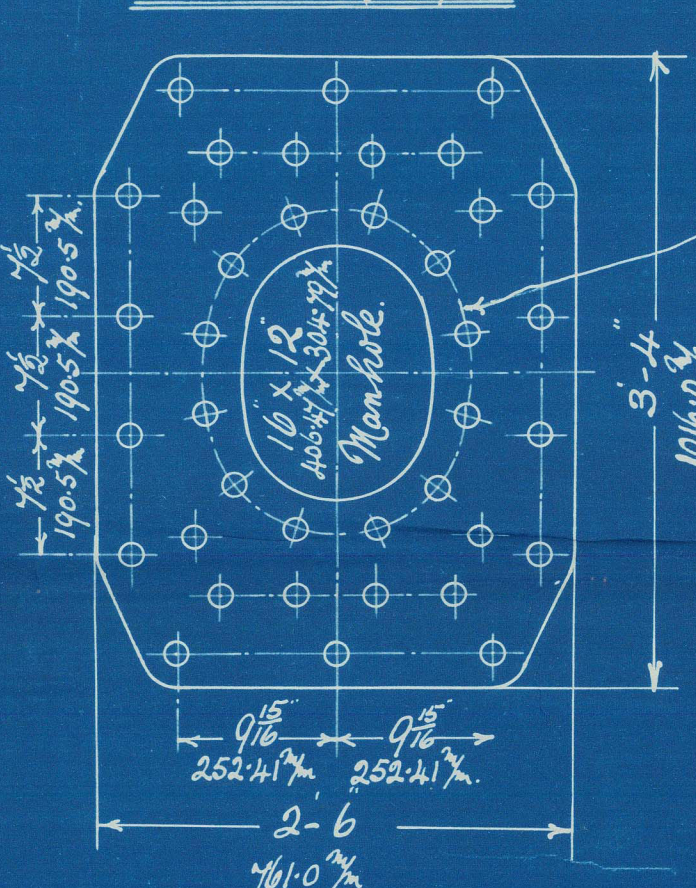
Note:

All plates, stays, rivets to be of Siemens Martin Steel.  
The shell plates & butt straps to be from 28 to 32 tons per sq. inch (or 44.09 K.G. per Sq. Cm.) to 50.3 K.G. per Sq. Cm.) Inside strength.  
All rivet holes to be drilled in place after the plates are bent.  
All flanged plates to be annealed after flanging.  
The tubes are of iron, the ordinary tubes are 3 1/2 inch diam (88.9 mm) x 1/8 inch thick swelled at front end to 3 3/4 inch diam (90.48 mm).  
The stay tubes are 2 1/8 inch (51.8 mm) diam x 1/8 inch (3.18 mm) thick effective.  
Screwed at ends to 3 3/4 inch (90.48 mm) x 3/8 inch (9.52 mm) diam 10 threads per inch.  
The screw stays are 1 1/2 inch (38.1 mm) x 1 1/8 inch (31.75 mm) effective diam screwed into both plates and nutted at each end, screwed 10 threads per inch.  
A manhole in shell 16 x 12 inch (406.4 mm x 304.8 mm) with shorter axis longitudinally and a doubling plate 3' 4" x 2' 6" 1/2 inch (1016 mm x 762 mm x 38.1 mm) fitted round it.

Makers of steel plates & stay bars:



Doubling plate round Manhole  
1 1/2 inch thick (38.1 mm)



All 1 1/2 inch (38.1 mm) holes  
inner row countersunk  
+ flush riveted  
hydraulic riveted

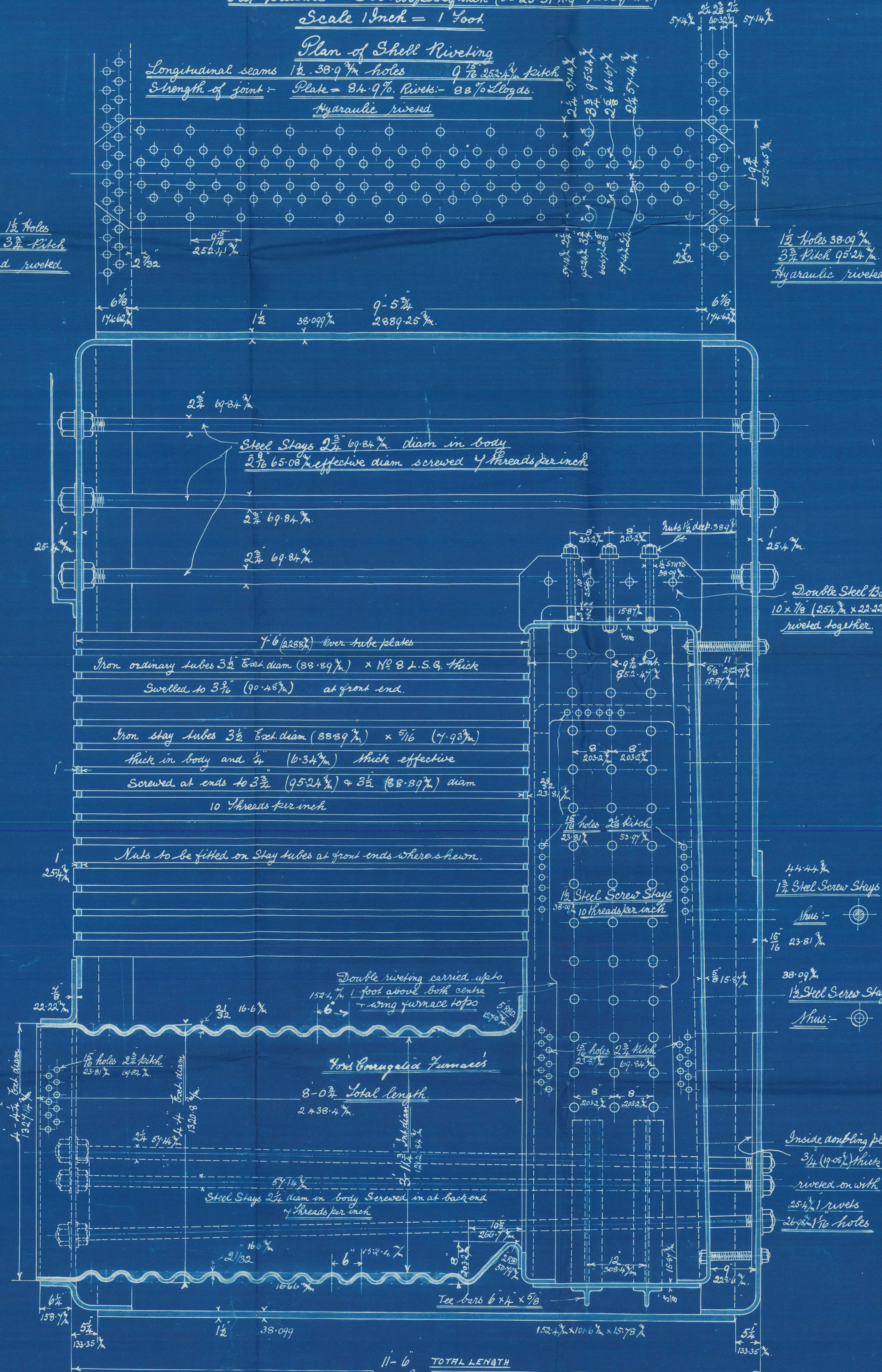
38.1 mm 1 1/2 inch holes  
95.24 mm 3 3/8 inch thick  
hand riveted

Working Pressure = 180 LBS Sgals  
12.655 K.G. per Sq. Cm. Baupolizei Behörde of Hamburg  
Test pressure = 360 lbs per sq. inch (or 25.31 K.G. per Sq. Cm.)

Scale 1 inch = 1 foot

Plan of Shell Riveting

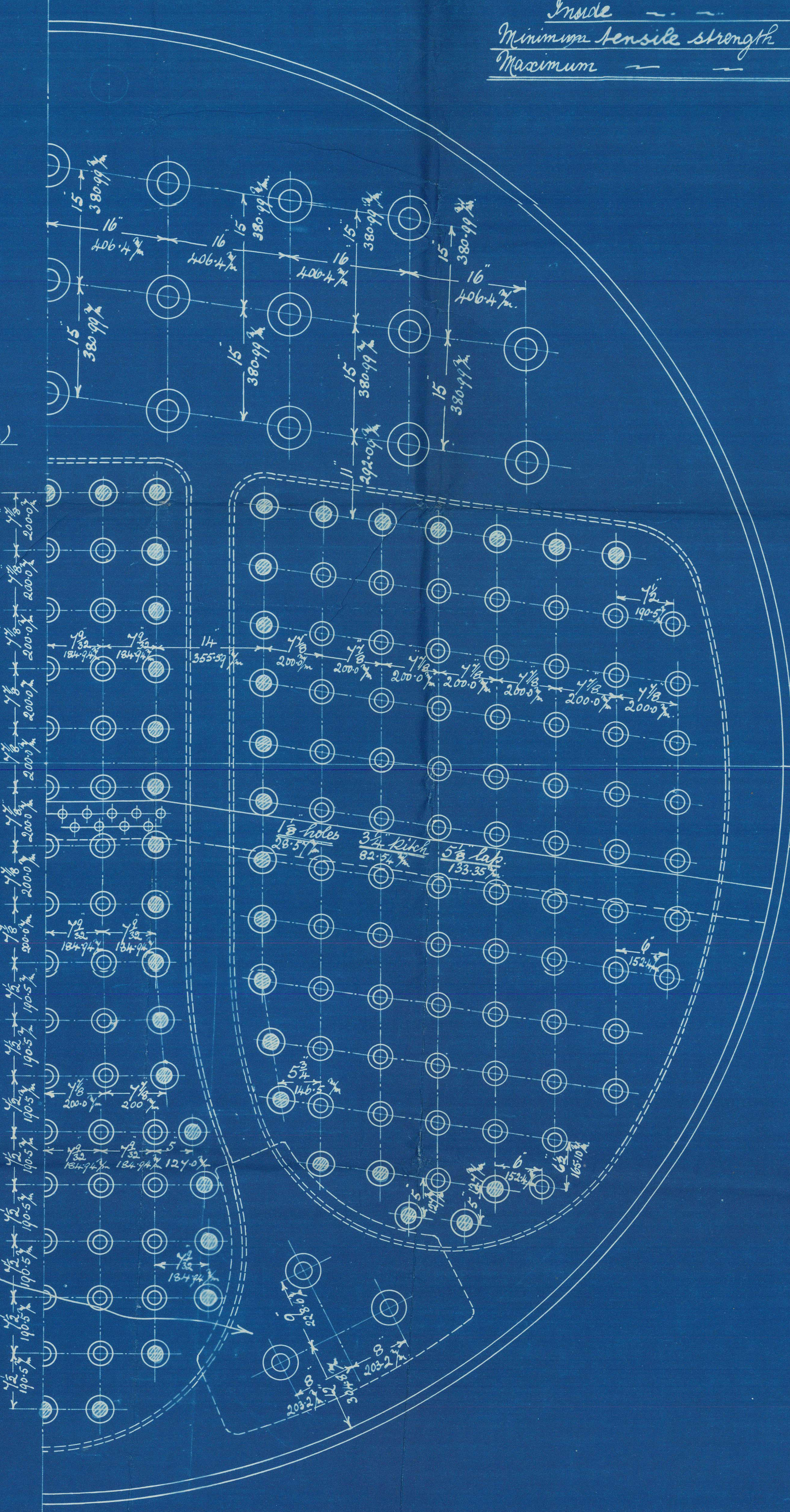
Longitudinal seams 1/2 inch 38.1 mm holes  
Strength of joint - Plate = 84.9% Rivets = 88% Sgals  
Hydraulic riveted



## DIMENSIONS

1 BOILER	2 BOILERS	1 BOILER	2 BOILERS
5' 6"	5' 6"	167 1/4"	167 1/4"
6' 6"	132"	6.13 Sq. Meters	12.26 Sq. Meters
3 1/2"	3 1/2"	88.89 mm	88.89 mm
4' 6"	4' 6"	2288.0 mm	2288.0 mm
298	596	298	596
15' 5"	31"	1.44 Sq. Meters	2.88 Sq. Meters
200.5"	401.0"	186.27 Sq. Meters	372.54 Sq. Meters
252.5"	505.0"	234.5 Sq. Meters	469.0 Sq. Meters
180 LBS	180 LBS	12.655 K.G.	12.655 K.G.

Shell = 1 1/2 inch thick (or 38.09 mm)  
Outside butt strap = 1 1/2 inch (or 31.75 mm)  
Inside = 1 1/2 inch (or 38.09 mm)  
Minimum tensile strength = 28 tons per sq. inch (or 44.09 K.G. per Sq. Cm.)  
Maximum = 32 (or 50.3 K.G. per Sq. Cm.)



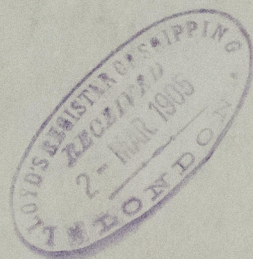
N<sup>o</sup> 494



Amended  
Maini Bolers  
Earle's to be

to 494 s/s -

180 lbs. W.P.



s/s "Phoenix"  
Hull Report No. 17135

RETAIN

W1332 - 0135



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Foundation