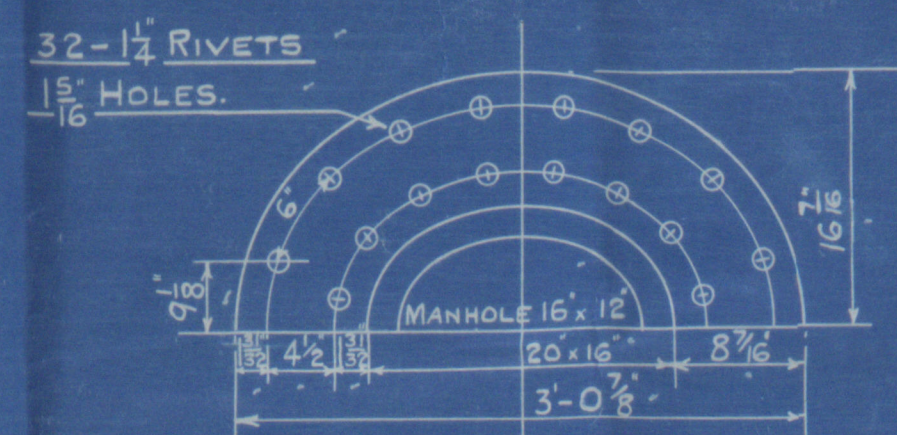


# TENSILE STRENGTH OF MATERIALS.

GYLVE SHELL & BUTT STRAPS	30 TO 34 TONS/D
GIRDER PLATES	28 TO 32 TONS/D
MANHOLE DOUBLING	27 TO 30 TONS/D
ALL OTHER PLATES & FURNACES	26 TO 30 TONS/D
LONG I STEEL STAYS	28 TO 32 TONS/D
SCREW STAYS & RIVET BARS	26 TO 30 TONS/D

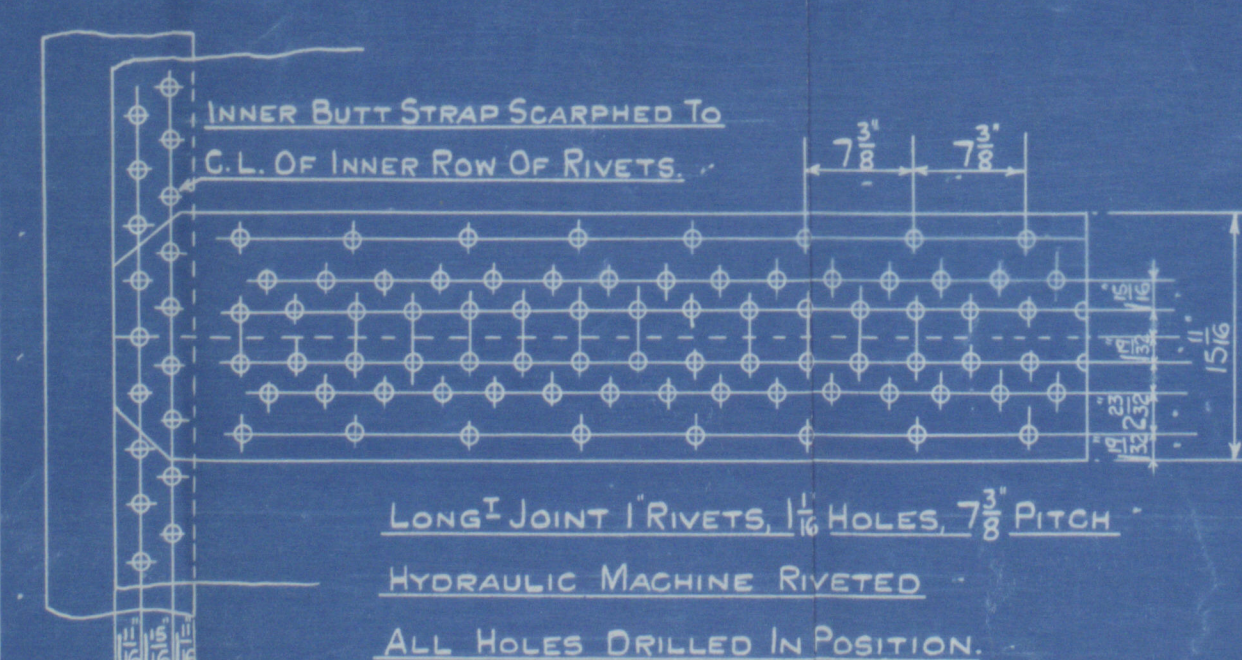
WORKING PRESSURE 180 LBS/D  
TEST PRESSURE 320 LBS/D

ALL PLATES OF STEEL  
ALL RIVETS OF STEEL  
ALL STAYS OF STEEL  
ALL TUBES OF IRON.



POSITION OF MANHOLE  
FIXED LATER.

CIRC JOINT 1/2 RIVETS 1/2 HOLES  
136 PITCHES AT 3.58 42.57%

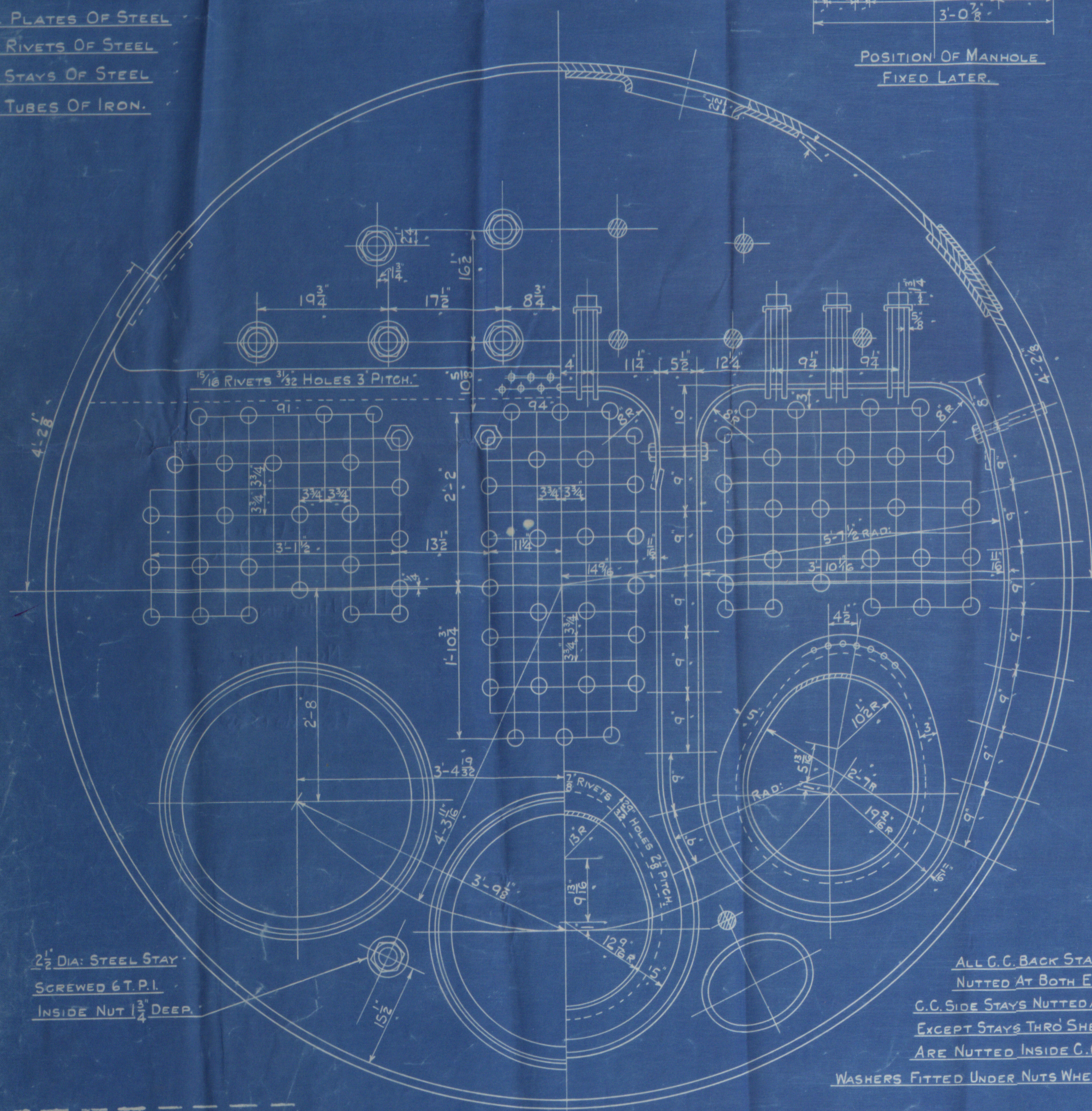


INNER BUTT STRAP 29/32 THICK  
OUTER BUTT STRAP 25/32 THICK

PLATE = 85.59%  
RIVETS = 86.4%  
COMBINED = 88.46%

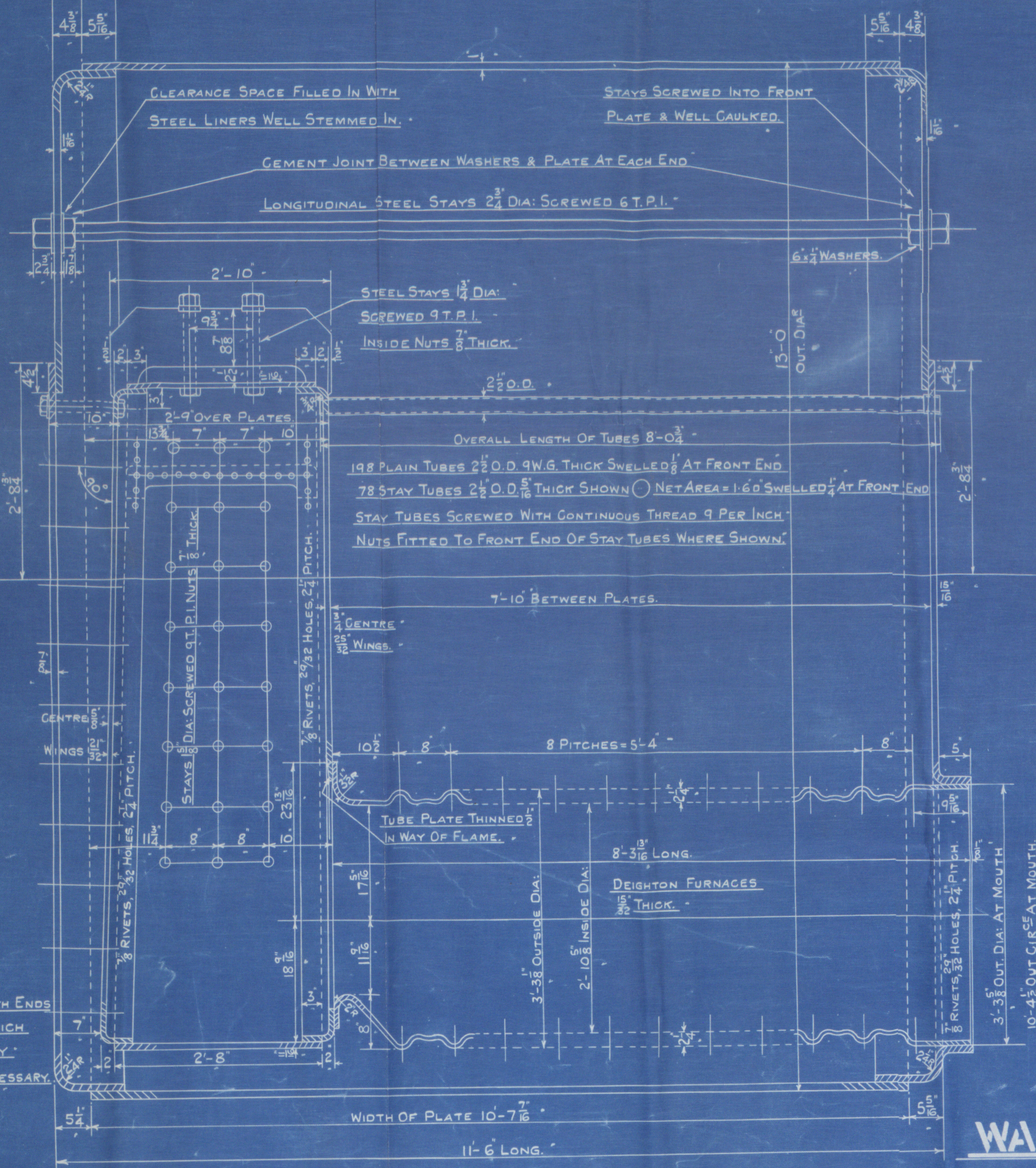
1766.  
TOTAL HEATING SURFACE = 17900 FT.

TO LLOYDS SURVEY.

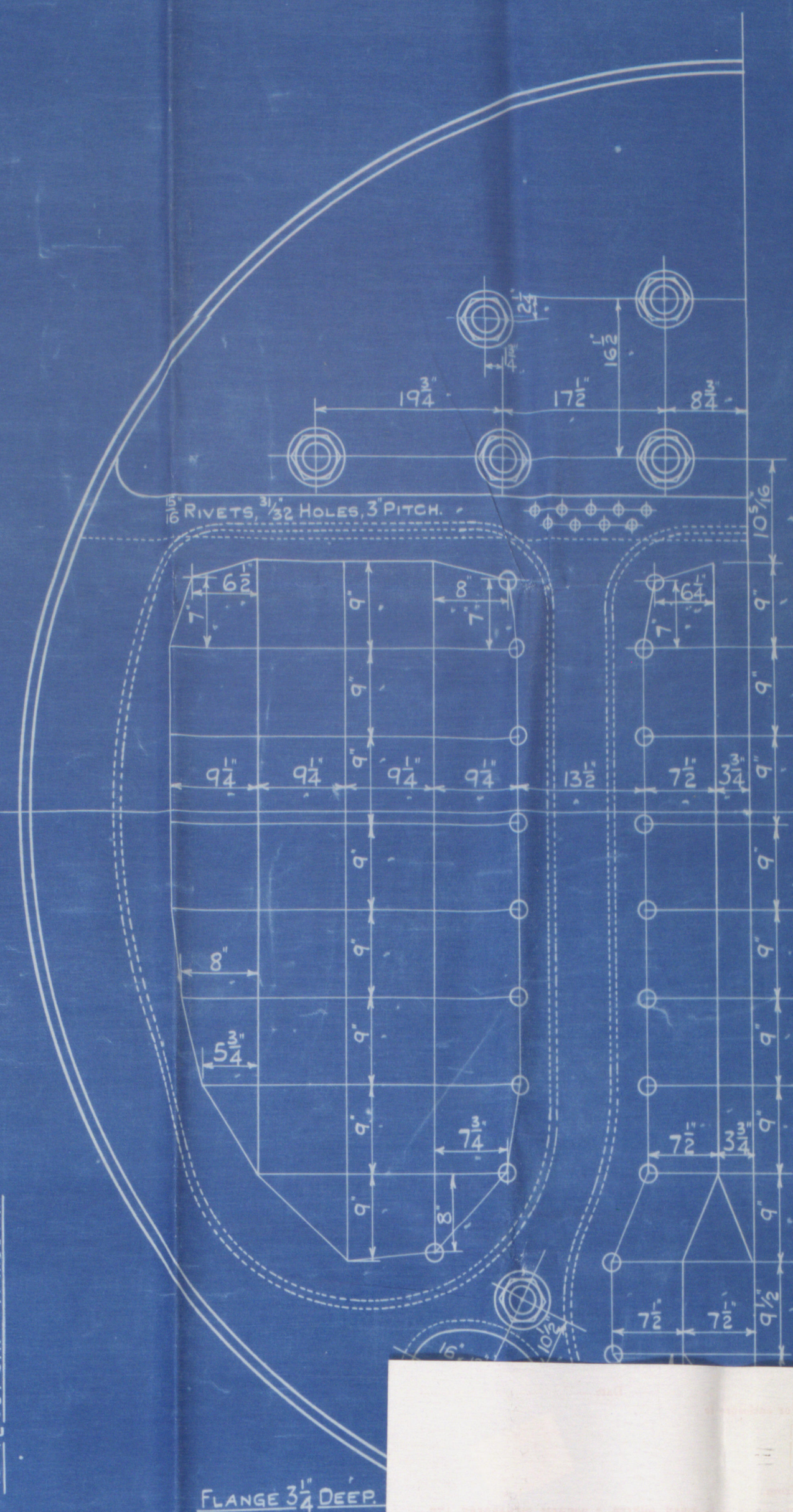


ALL C.C. BACK STAYS  
NUTTED AT BOTH ENDS.  
C.C. SIDE STAYS NUTTED AT BOTH ENDS  
EXCEPT STAYS THRO SHELL WHICH  
ARE NUTTED INSIDE C.C. ONLY.

WASHERS FITTED UNDER NUTS WHERE NECESSARY.



WIDTH OF PLATE 10-7 1/16  
11-6 LONG.



BACK STAYS MARKED THUS  
ARE 1 1/2 DIA: NUTS 7/8 THICK  
REMAINDER OF STAYS  
ARE 1 1/2 DIA: NUTS 7/8 THICK  
ALL SCREWED 9 T.P.I.

SWAN, HUNTER, &  
WIGHAM RICHARDSON LTD  
ENGINEERING DEPARTMENT  
NEPTUNE WORKS.  
NEWCASTLE-ON-TYNE.  
DATE

W.H.  
O.B.-C.B.  
R.H.  
20.7.25.

13.491.

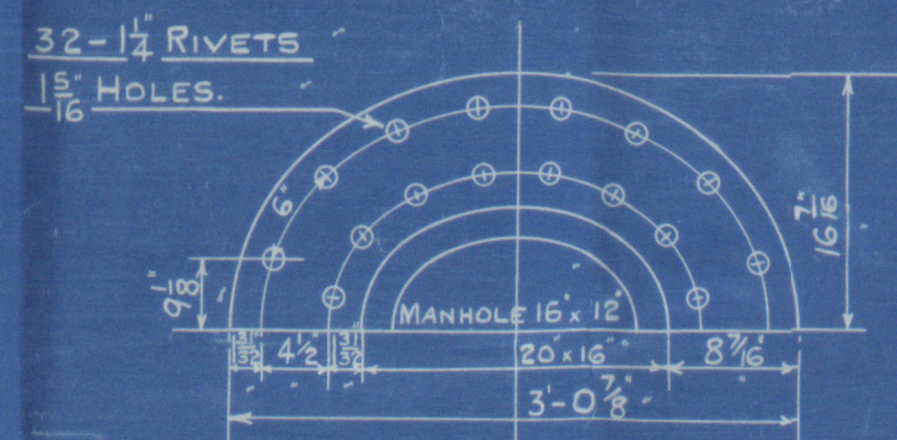
1-OFF  
WASTE HEAT & AUXILIARY  
BOILER.

SCALE:- 1/4 INCH TO A FOOT.

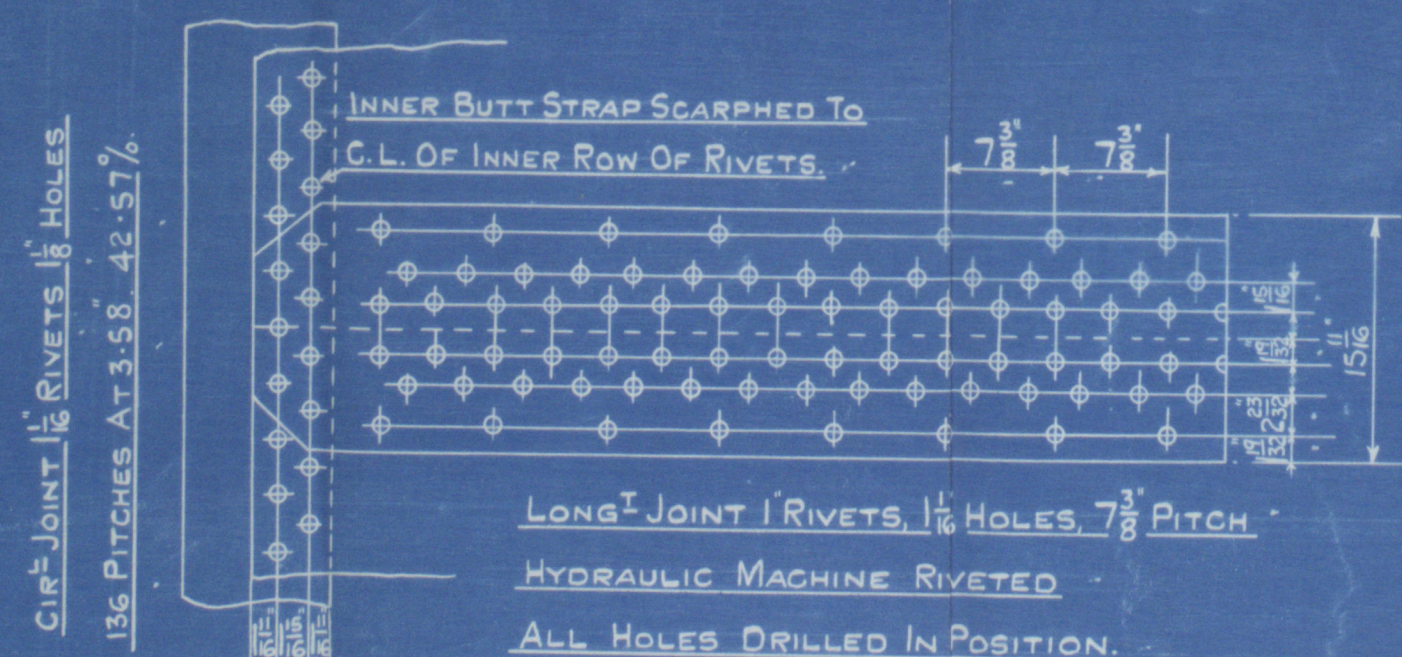
Nº	DATE
1208.	20.7.25.

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Foundation





POSITION OF MANHOLE  
FIXED LATER.



INNER BUTT STRAP  $\frac{29}{32}$ " THICK.  
OUTER BUTT STRAP  $\frac{25}{32}$ " THICK.

TOTAL HEATING SURFACE = 17900 FT.

TO LLOYDS SURVEY.

2 1/2" DIA: STEEL STAY  
SCREWED 6 T.P.I.  
INSIDE NUT 1 3/4" DEEP.

ALL C.C. BACK STAYS  
NUTTED AT BOTH ENDS.  
C.C. SIDE STAYS NUTTED AT BOTH ENDS  
EXCEPT STAYS THRO' SHELL WHICH  
ARE NUTTED INSIDE C.C. ONLY.

WASHERS FITTED UNDER NUTS WHERE NECESSARY

OVERALL LENGTH OF TUBES 8'-0"<sup>3</sup> -  
TUBES 2 1/2" O.D. 9 W.G. THICK SWELLED 1/8" AT FRONT END  
TUBES 2 1/2" O.D. 5/16" THICK SHOWN ( ) NET AREA = 1.60 SW  
SCREWED WITH CONTINUOUS THREAD 9 PER INCH  
TO FRONT END OF STAY TUBES WHERE SHOWN.

7'-10' BETWEEN PLATES.

8 PITCHES = 5' - 4" =

8'-3 $\frac{13}{16}$ " LONG.  
DEIGHTON FURNACES  
 $\frac{15}{32}$ " THICK. -

## 1—OFF. WASTE HEAT & AUXILIARY BOILER.

SCALE:- 1 INCH TO A FOOT.

BACK STAYS MARKED THUS

ARE  $1\frac{3}{4}$ " DIA: NUTS  $\frac{7}{8}$ " THICK

REMAINDER OF STAYS

ARE  $1\frac{5}{8}$ " DIA: NUTS  $\frac{7}{8}$ " THICK

ALL SCREWED Q.T.P.I.

SWAN, HUNTER, &  
WIGHAM RICHARDSON LTD  
ENGINEERING DEPARTMENT  
NEPTUNE WORKS.  
NEWCASTLE-ON-TYNE.

13.491

Date 1/4/26

For enclosure to *Claydon*

From

~~Plase return to~~ SWAN, HUNTER, & WIGHAM RICHARDSON, LTD.,  
Neptune Works, WALKER.

ENCLOSURE  
No 889

Nº	DATE
1208	24.7.25

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Waste heat & air  
Bbr.

M.S. "ATHEL KING"<sup>21</sup>

NWE 80205

Eng No 1208  
Ship No 1285

RETAIN

RETAIN



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