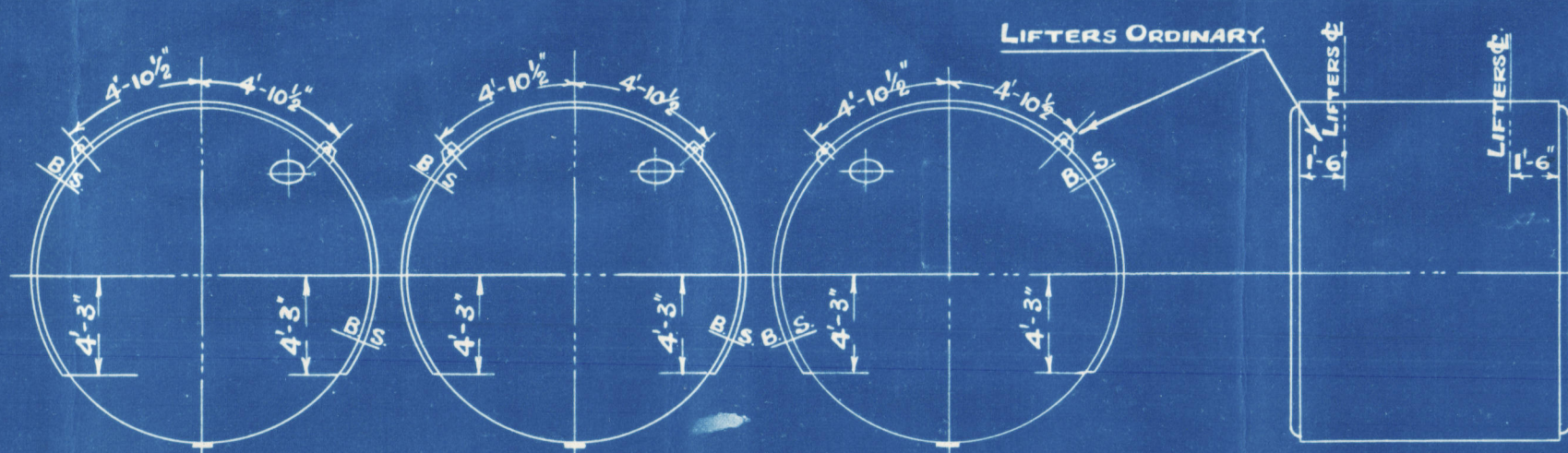


THE NORTH EASTERN MARINE ENGINEERING CO LTD
SUNDERLAND
BOILER.

SCALE = 1 INCH TO A FOOT. SCHEDULE "L"

WRITTEN DIMENSIONS ONLY TO BE TAKEN.



POSITION OF MANHOLES, BUTT STRAPS, LIFTERS ETC.
LOOKING ON BACK OF BOILERS.



RIVET HOLES $1\frac{5}{32}$ DIA.

PLATE $1\frac{1}{8}$ THICK.
RIVET HOLES $1\frac{5}{32}$ DIA.
PITCH = $8\frac{3}{8}$

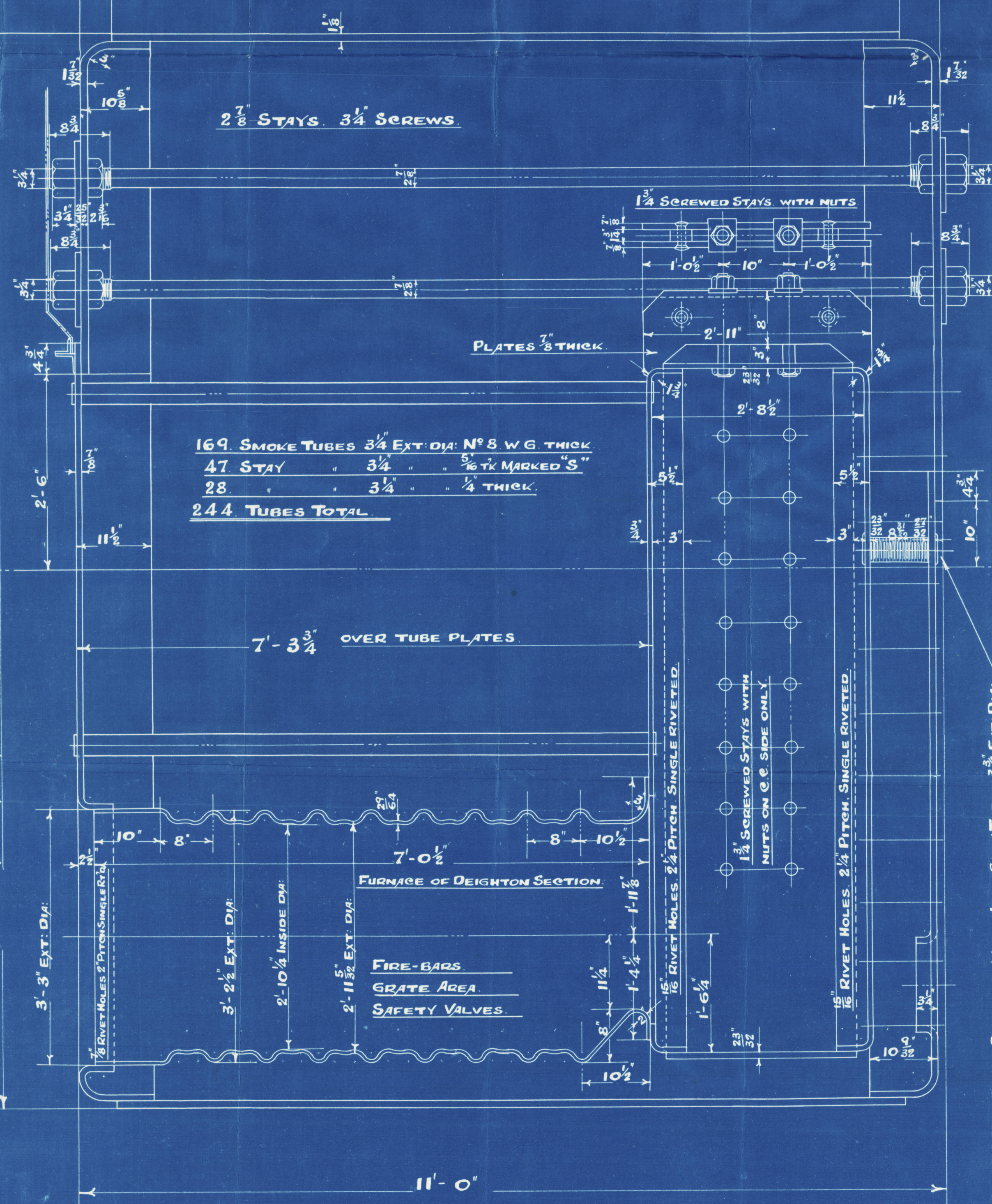
PLATE SECTION = 86.1%
RIVET = 85.8%
COMBINED PLATE & RIVET SECTION = 89.7%

RIVET HOLES $1\frac{5}{32}$ DIA.

BUTT STRAPS
INSIDE $1\frac{1}{8}$ Tk
OUTSIDE $7\frac{1}{8}$ Tk

12 PITCHES @ $8\frac{3}{8}$ = 8'-4"

ALL RIVETS TO BE PUT
IN BOTH ENDS OF BOILER.



169. SMOKE TUBES $3\frac{1}{4}$ EXT. DIA. N° 8 W.G. THICK
47 STAY $3\frac{1}{4}$ " $\frac{5}{16}$ Tk MARKED "S"
28 $3\frac{1}{4}$ " $\frac{1}{4}$ THICK.
244 TUBES TOTAL

7'-3 3/4" OVER TUBE PLATES

13'-9" EXTERNAL DIA.

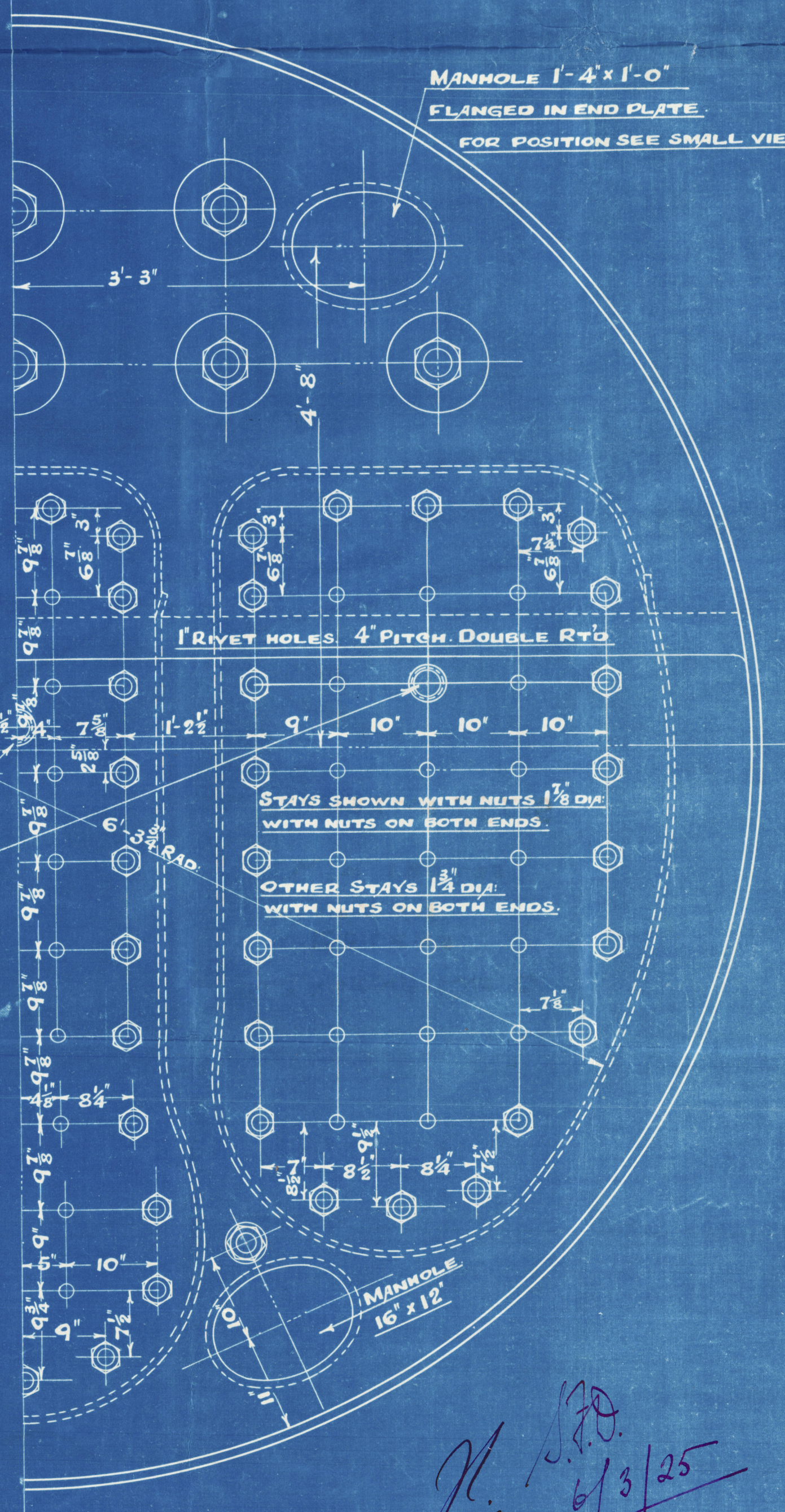
3'-3" EXT. DIA.

3'-2 1/2" EXT. DIA.
2'-10 1/2" INSIDE DIA.
2'-11 1/2" EXT. DIA.

FURNACE OF DEIGHTON SECTION
FIRE-BARS
GRATE AREA
SAFETY VALVES.

16 RIVET HOLES $2\frac{1}{2}$ PITCH SINGLE RIVETED.
1 1/2 SCREWED STAYS WITH NUTS ON @ SIDE ONLY
16 RIVET HOLES $2\frac{1}{2}$ PITCH SINGLE RIVETED.

SCREWED WROGHT-IRON STAY TUBES $3\frac{1}{4}$ EXT. DIA.
 $\frac{3}{8}$ THICK, FITTED FOR DIAMOND BLOWERS.
TUBES SCREWED 9 THREADS PER INCH.



MANHOLE 1'-4" x 1'-0"
FLANGED IN END PLATE
FOR POSITION SEE SMALL VIEW.

1 RIVET HOLES 4 PITCH DOUBLE RIVETED

STAYS SHOWN WITH NUTS $1\frac{1}{8}$ DIA.
WITH NUTS ON BOTH ENDS.
OTHER STAYS $1\frac{1}{2}$ DIA.
WITH NUTS ON BOTH ENDS.

MANHOLE
16" x 12"

7/3/25

TO PASS THE SURVEY OF "LLOYDS"	
SHELL = $\frac{28(36-2)85.8}{2.75 \times 162.75}$	182 LBS PER SQ. IN.
WORKING PRESSURE	180 " " " "
TEST	320 " " " "
HEATING SURFACE ON TUBES.	1482 SQ. FEET.
OTHER PARTS	372 " " " "
TOTAL	1854 " " " "
EX. FRONT TUBE PLATE	1822 " " " "
EFFECTIVE AREA OF STAYS	
3/4 STAY TUBES $\frac{5}{16}$ Tk 9 THREADS PER INCH	2.17 SQ. INCHES
3/4 " " " " " " " "	1.64 " " " "
2 7/8 MAIN STAYS 6 " " " "	6.49 " " " "
2 1/2 " " " " " " " "	4.11 " " " "
2 1/4 " " " " " " " "	3.26 " " " "
1 1/2 SCREWED 9 " " " "	2.36 " " " "
1 1/2 " " " " " " " "	2.03 " " " "
ALL PLATES, RIVETS & STAYS = STEEL.	
TUBES - WROUGHT IRON.	
HOLES TO BE DRILLED IN PLATE AFTER BENDING.	
TENSILE STRENGTH OF SHELL PLATES 28 TO 32 TONS "	
GIRDER	28 TO 32 " " " "
MAIN STAYS	28 TO 32 " " " "

DRAWN BY J.A.S.
TRACED BY M.R. A.D.
CHECKED BY J.A.S.
12.6.24

DRAWING NO 7761.

CONTRACT 2592. 3 OFF.
CONTRACT 2611. 3 OFF.

Lloyd's Register
W 431-01/48

N.E. MARINE ENG. Co

3 BOILERS.

Nº 2 G11

W.P. 180 LBS

W. PICKERSGILL'S SS 215

No. 3925
LLOYD'S TEST
320 lbs.
W.P. 180 lbs
G.A.H. 25.8.25

SUNDERLAND RPT. NO. 29/58

Lloyds

RETAI



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Lloyd's Register
Foundation

W431-0148