

# SUNDERLAND ENGINE WORKS

## BOILER

TRACING 4211 SCALE 1/4" = 1' SCHEDULE 'L'

WRITTEN DIMENSIONS ONLY TO BE TAKEN



Rivet Holes 1 3/8" dia.

PLATE 1 1/2" THICK  
Rivet Holes 1 3/8" dia.  
Pitch 9"

PLATE SECTION 86 212  
Rivet " " - 86 52

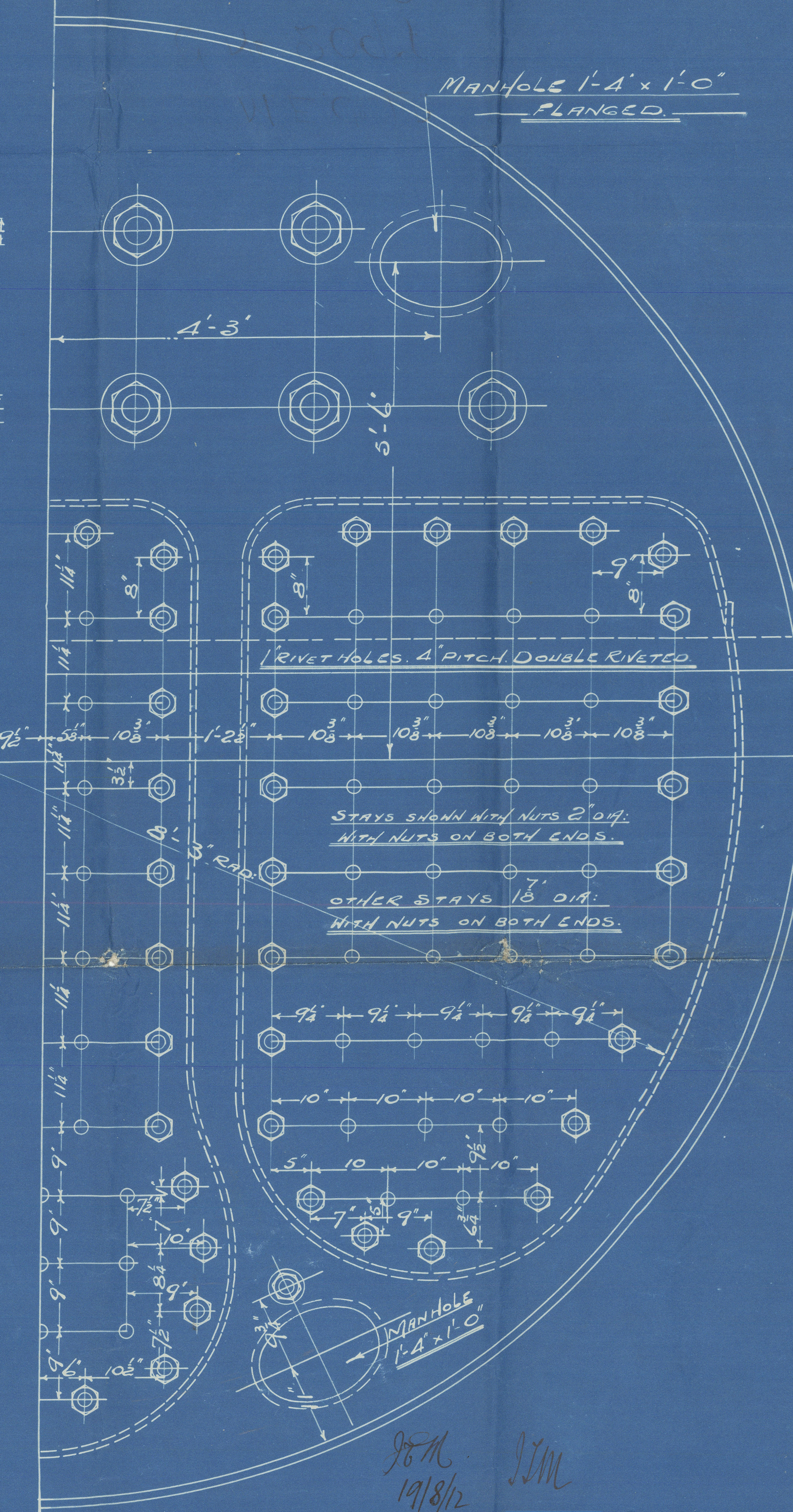
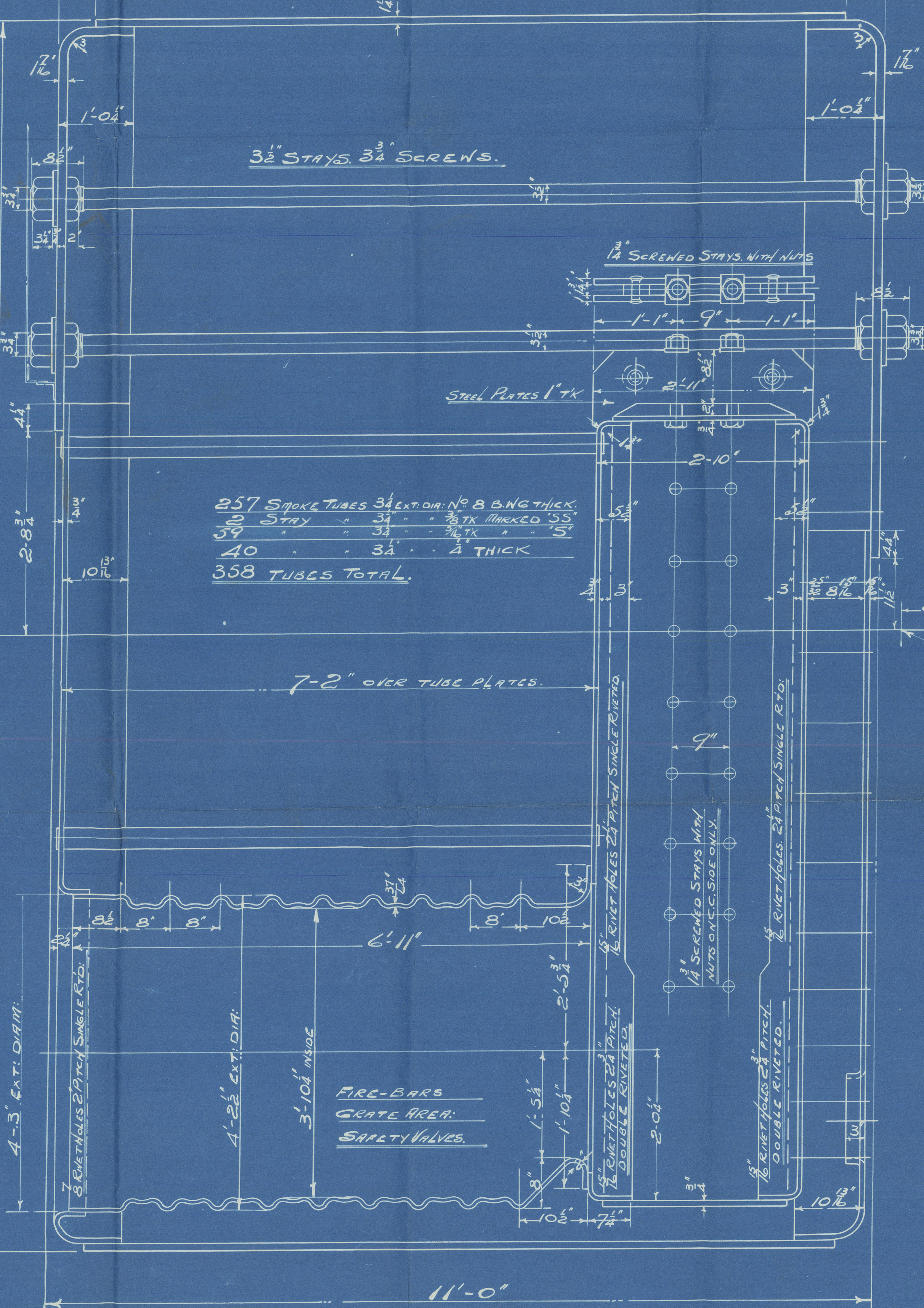
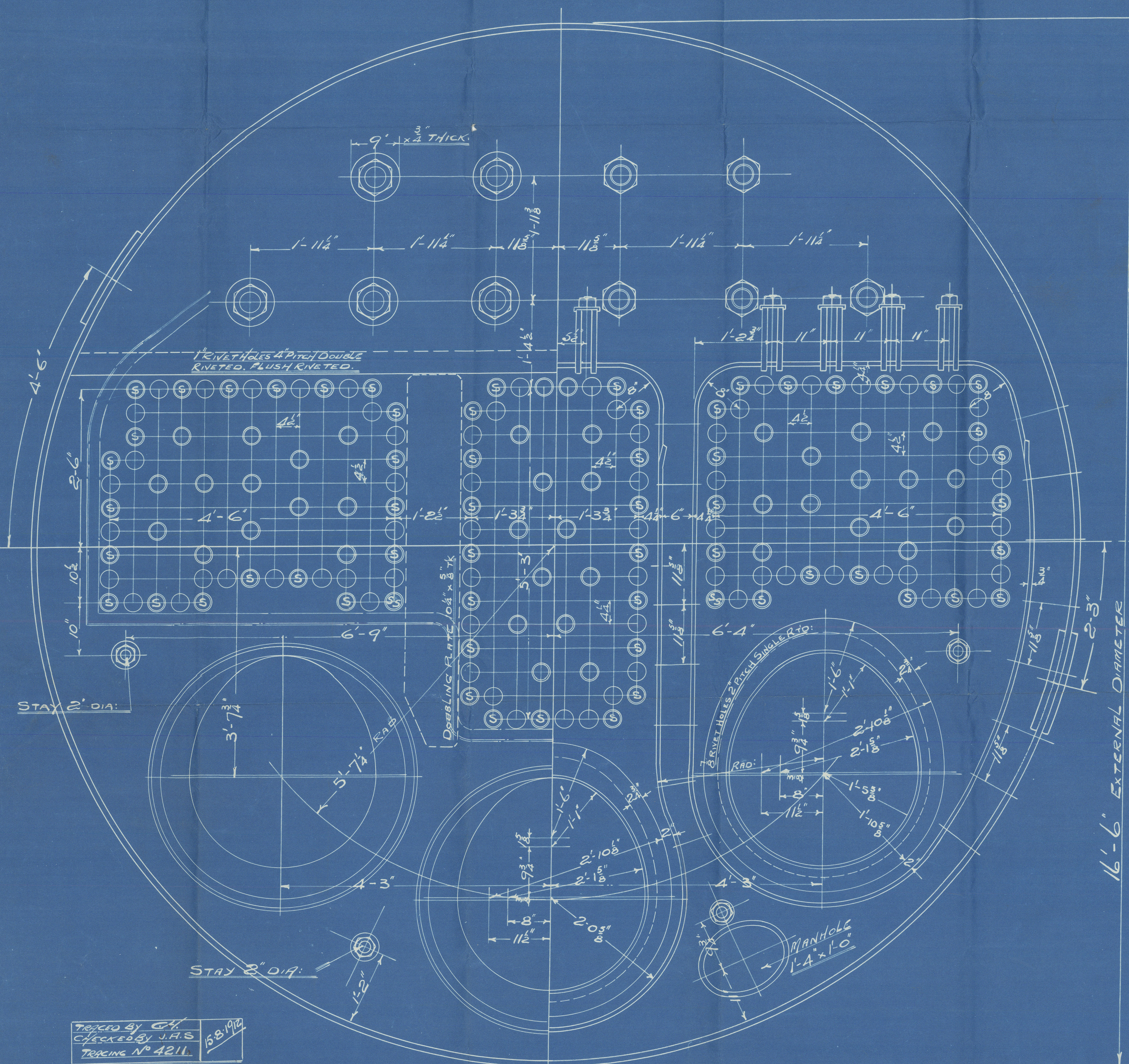
Rivet Holes 1 3/8" dia.

BUTT STRAIPS  
INSIDE 1 1/8" THK  
OUTSIDE 1 1/8" THK

ALL RIVETS TO BE PUT IN  
FRONT END OF BOILER

EVERY ALTERNATE RIVET TO BE LEFT OUT OF THE  
INSIDE RUN FOR 3" CIRC. TOP OF BOILER & ALL RIVETS  
TO BE PUT IN FOR 3" CIRC. AT BOTTOM AT BACK END OF BOILER

To Pass 'LLOYD'S' SURVEY		
SHELL - 28 1/2 STAYS (20-2) 86 21	28 x 195.5	180 LBS PER SQ
WORKING PRESSURE	180	"
TEST	360	"
HEATING SURFACE ON TUBES	2180	SQ. FT.
" " OTHER PARTS	520	"
TOTAL	2700	"
EX. FRONT TUBE PLATE	2650	"
EFFECTIVE AREA OF STAYS	217	SQ. INCHES
3 1/2" STAY TUBES 8" X 9" THREADS PER INCH	217	"
3 1/2" " " " " " " " "	1.64	"
3 1/2" MAIN STAYS	9.62	"
2' " " " " " " " "	2.51	"
2' SCREENED " " " " " " " "	2.79	"
1 1/2" " " " " " " " "	2.43	"
1 1/2" " " " " " " " "	2.1	"
ALL PLATES RIVETS & STAYS - STEEL -		
TUBES - WROUGHT IRON -		
HOLES TO BE DRILLED IN PLACE AFTER BENDING.		
TENSILE STRENGTH OF SHELL PLATES NOT LESS THAN 28 TONS		
" " GIRDER	28	"
" " MAIN STAYS	28	"



DESIGNED BY G.H.  
CHECKED BY J.H.S.  
TRACING NO 4211

19/8/12

CONTRACT 2097 2 OFF.



N. E. M. E. C<sup>o</sup> L<sup>d</sup>

C. N<sup>o</sup> 2097

MAIN BOILERS. 2 OFF.

No 3084  
LLOYDS TEST.  
360 LBS.  
28-113 W.B.



R. THOMPSON & SONS 278. <sup>5</sup>/<sub>16</sub>

Sorsifoglu

Std. Rpt. No 25632

W60-0113

Lloyd's Register  
Foundation