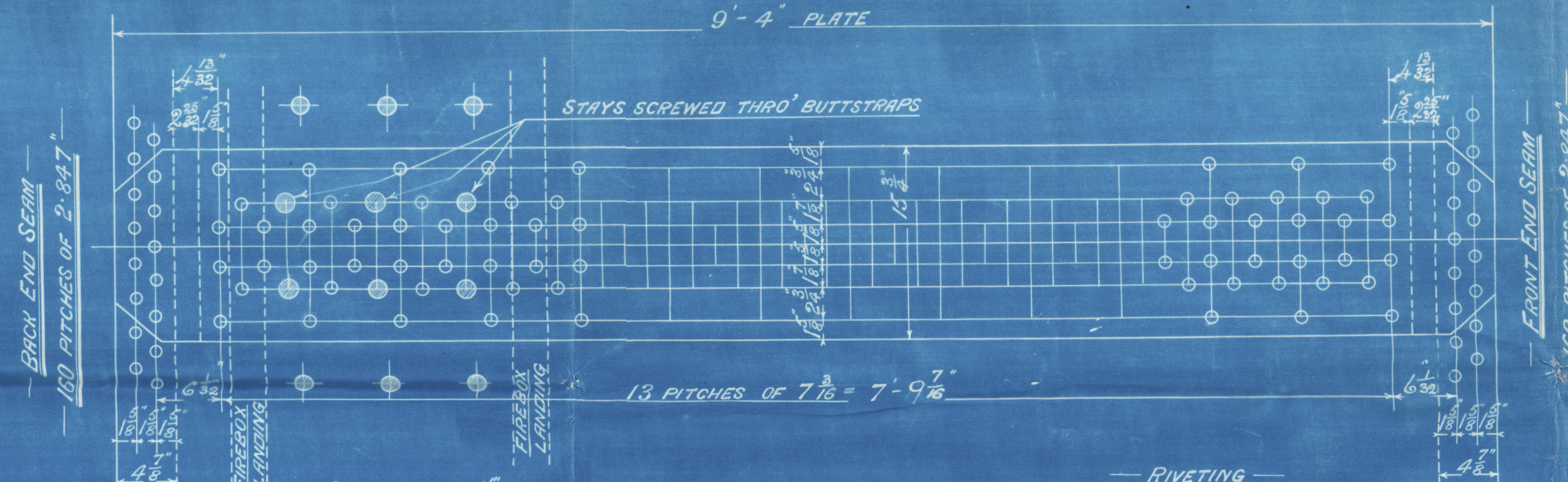


THICKNESSES	
SHELL	$\frac{1}{32}$ "
INNER BUTTSTRAP	$\frac{15}{16}$ "
OUTER "	$\frac{1}{16}$ "
TOP, FRONT & BACK	$\frac{7}{8}$ "
FRONT TUBE PLATE	$\frac{7}{8}$ "
BOTTOM BACK	$\frac{13}{16}$ "
BACK TUBE PLATE	$\frac{13}{16}$ "
FIREBOX BACK	$\frac{5}{8}$ "
" TOP & SIDES	$\frac{7}{8}$ "
" BOTTOM	$\frac{11}{16}$ "
FURNACES	$\frac{3}{4}$ "
GIRDERS	$\frac{3}{4}$ "
MANHOLE DOUBLING	$\frac{1}{16}$ "

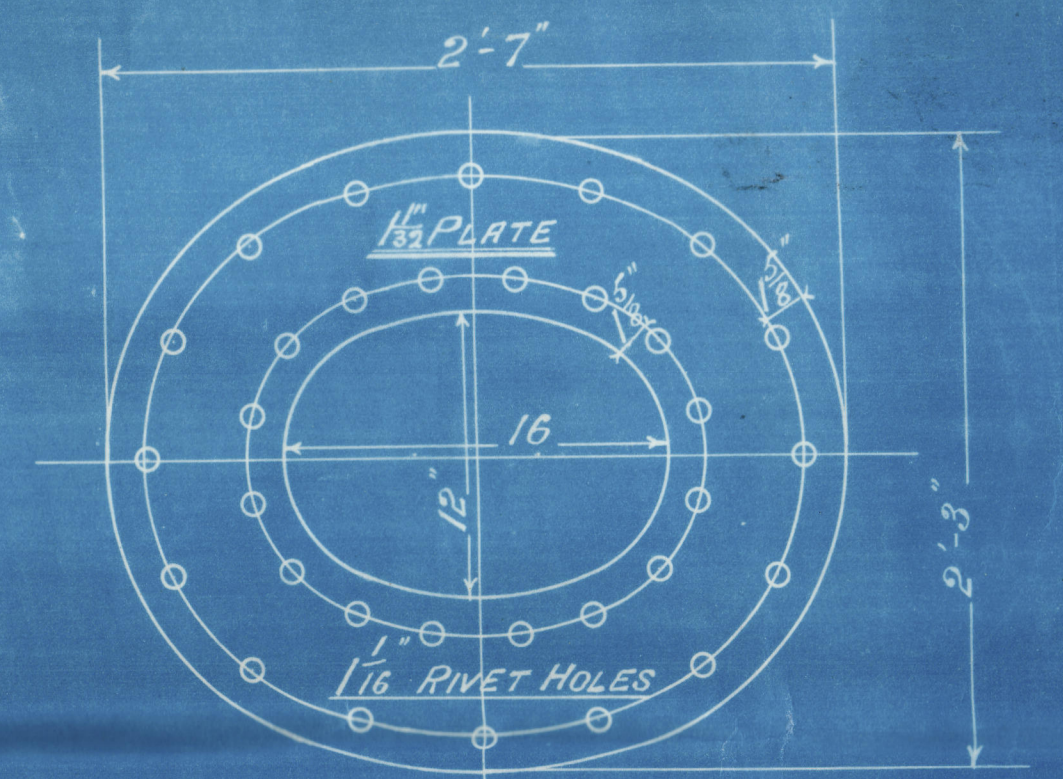
SURFACES	
178 TUBES, $\frac{3}{4}$ " EXT. DIA.	995 $\frac{1}{2}$
FIREBOXES	176 "
FURNACES	89 "
TOTAL HEATING SURFACE	1260 "
GRATE AREA	215 "
WATER AREA	109 "
TUBE AREA	8 "
STEAM SPACE	215 $\frac{1}{2}$
RATIO GRATE AREA TO HEATING SURFACE	1:30.36
" " " " TUBE	1:23.97
" " " " AREA	1:192
" " " " WATER	1:2.62
" " " " STEAM SPACE	1:5.18
% BOILER ABOVE FIREBOX	29.86
LENGTH OF FIREBARS	5'-0"
WEIGHT OF WATER	15 TONS

49.8



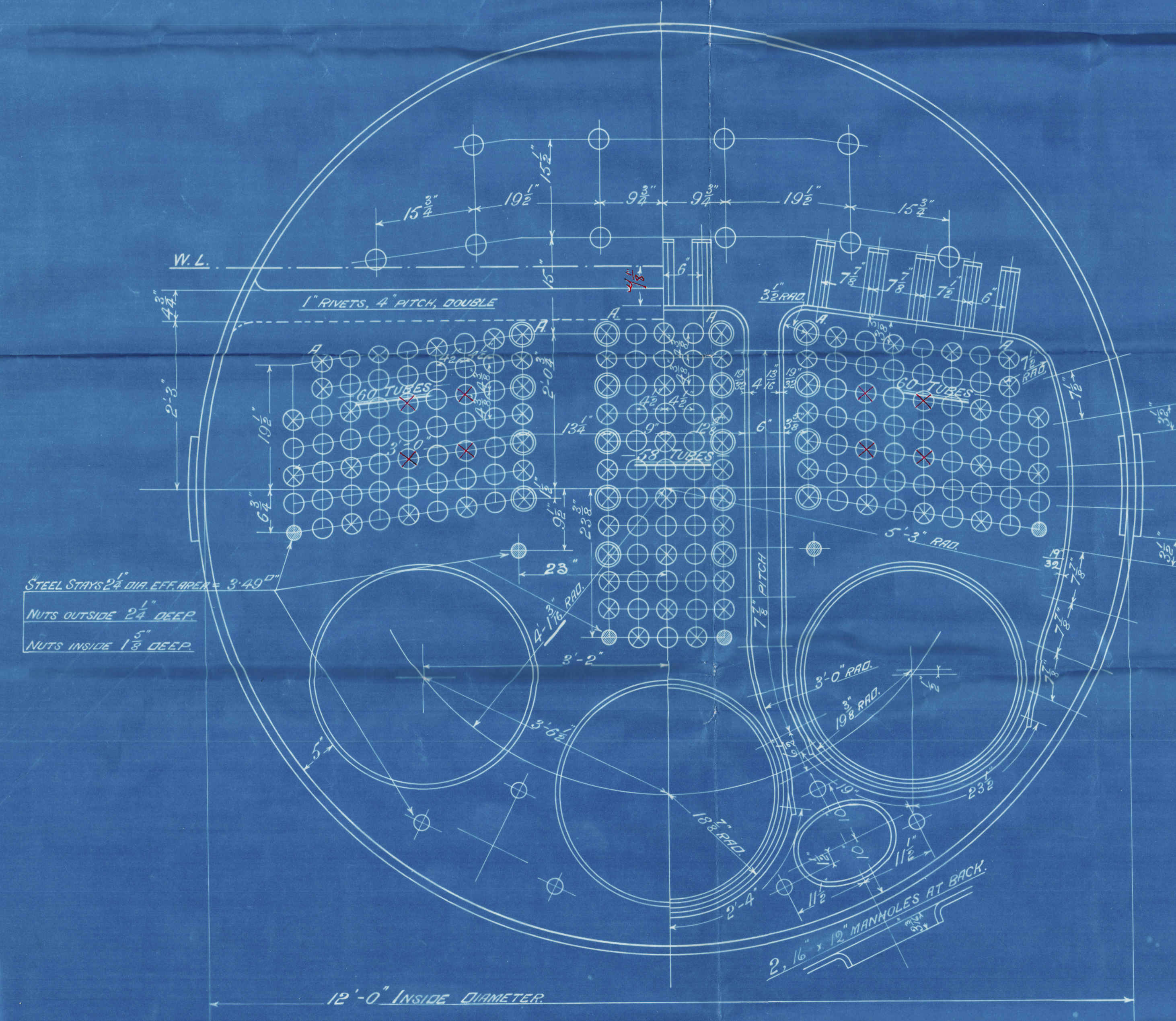
SHELL PLATES $\frac{1}{16}$ " THICK.
 INNER BUTTSTRAP $\frac{15}{16}$ " THICK.
 OUTER BUTTSTRAP $\frac{1}{16}$ " THICK.
 ALL PLATES & RIVETS OF SIEMENS MARTIN
 MILD STEEL.
 ALL RIVET HOLES DRILLED IN PLACE.

PITCH	RIVETING	
	LONG JOINT	END SEAMS
	$7\frac{1}{8}$ "	2:84.7"
DIA. RIVET HOLE	$\frac{1}{16}$ "	$\frac{1}{16}$ "
% PLATE	85.91	62.7
% RIVET	88.8	74.4

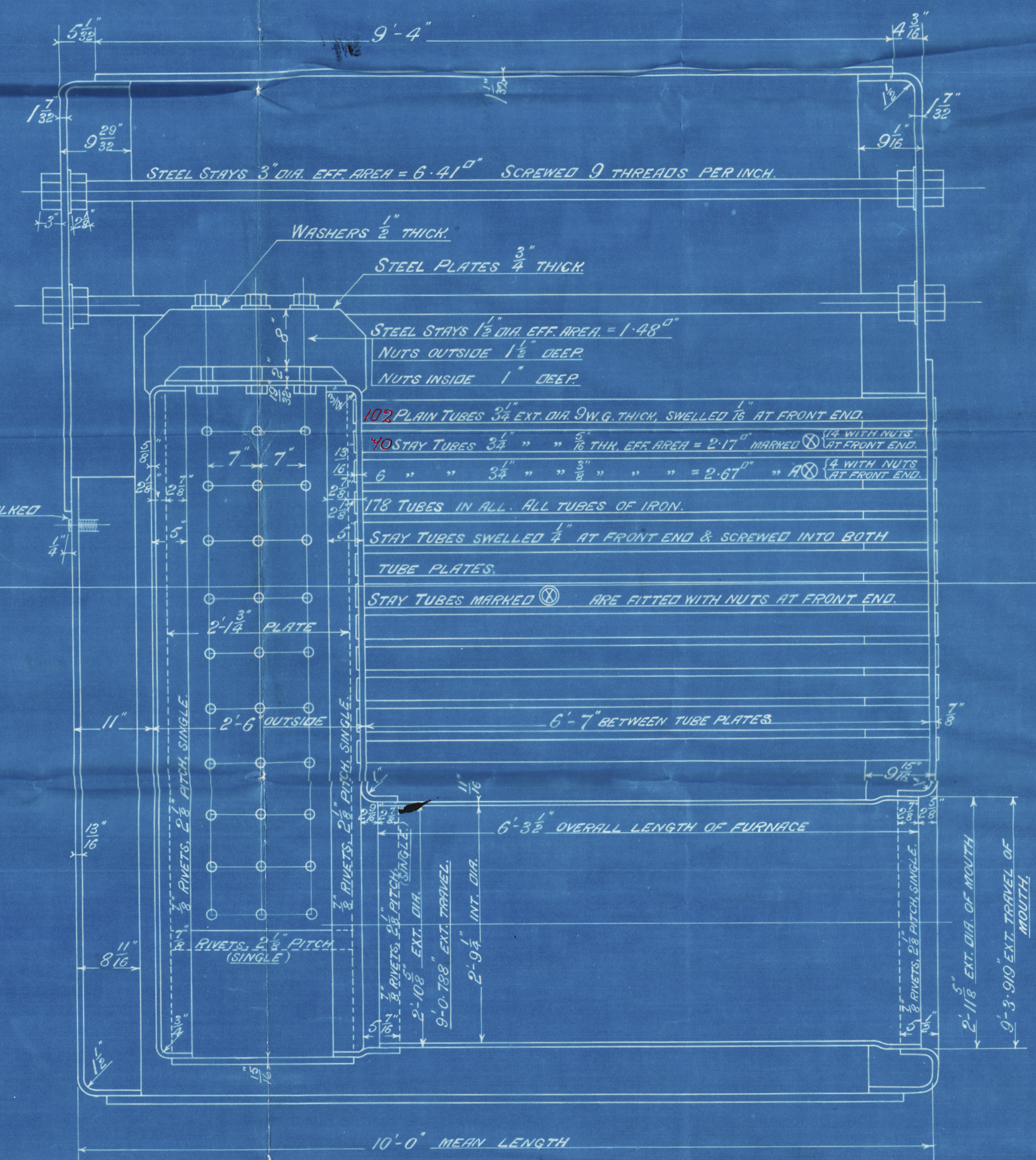


SHELL MANHOLE COMPENSATING RING.

LIMITS OF TENSILE STRENGTH	
SHELL, GIRDERS & BUTTSTRAPS	28.2 TO 31.7 TONS
OTHER PLATES	25.5 " 29 "
MAIN STAYS	25.5 " 29 "
SCREWED STAYS	25.5 " 29 "
FURNACES	25.5 " 29 "
RIVET BARS	25.5 " 29 "

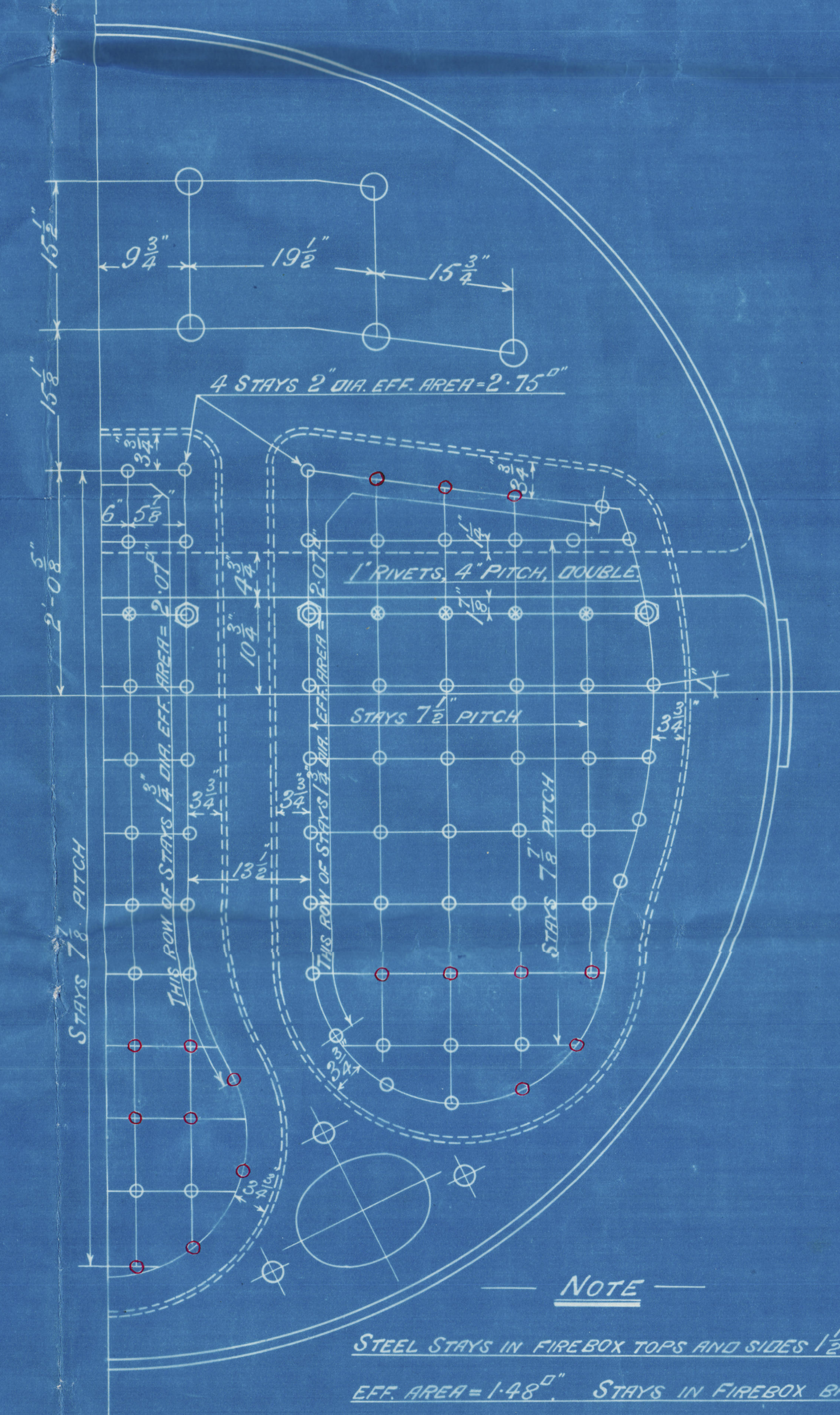


STEEL STAYS $\frac{3}{4}$ " DIA. EFF. AREA = 3.49"
 NUTS OUTSIDE $\frac{1}{2}$ " DEEP.
 NUTS INSIDE $\frac{1}{2}$ " DEEP.

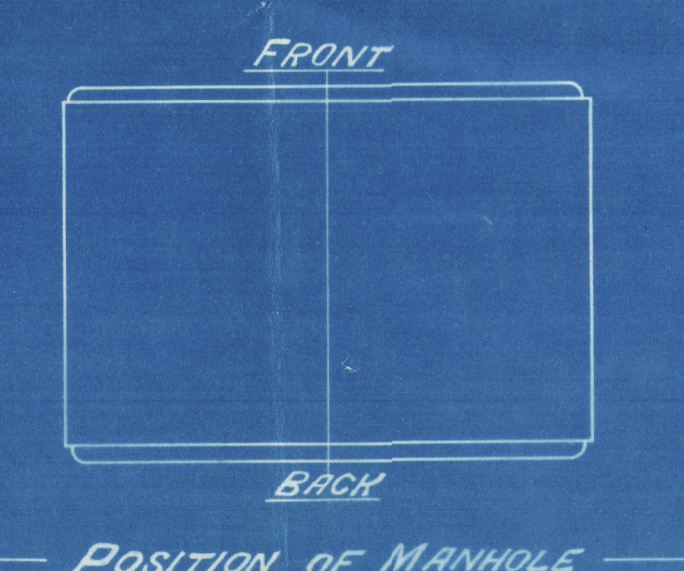


MAIN BOILER
 CONT. N^o 471
 ONE OFF

WORKING PRESSURE 180 LBS PER SQ. INCH.
 TO PASS LLOYD'S SURVEY
 AND HAMBURG BOARD OF POLICE SURVEY UP TO TEST POINT ONLY.
 SCALES 1" & $\frac{1}{2}$ " = ONE FOOT.



NOTE
 STEEL STAYS IN FIREBOX TOPS AND SIDES $\frac{1}{2}$ " DIA. EFF. AREA = 1.48". STAYS IN FIREBOX BACKS $\frac{1}{2}$ " DIA. EXCEPT WHERE OTHERWISE STATED ON DRAWING. ALL FIREBOX STAYS TO BE FITTED WITH NUTS INSIDE FIREBOX & OUTSIDE BOILER, EXCEPT 10 STAYS ON BACK, MARKED (X), WHICH WILL HAVE NO NUTS OUTSIDE BOILER BUT WILL PROJECT $\frac{1}{4}$ " THRO' PLATE AND BE CAULKED. NUTS FOR 2" STAYS TO BE $\frac{1}{2}$ " DEEP. NUTS FOR OTHER STAYS TO BE $\frac{1}{2}$ " DEEP, EXCEPT WHERE OTHERWISE STATED.



DT. 7833

David Rowan ²

7² 471.

Amended Plan
S.T. Auestung

Glasgow. Report. N^o. 25344.



BOILER

RETAIN



Lloyd's Register
Foundation

W1305-0295 1/2

From DAVID ROWAN & CO., GLASGOW.

ENCLOSURE

FOR

Messrs Lloyd's Tunnage

2/2