

SURFACES	ONE BOILER	TWO BOILERS
TUBES	2100	4200
FIREBOX TOP & SIDES	158	316
BACK	82	164
TUBE PLATE	55	110
FURNACES	161	322
TOTAL HEATING SURFACE	2556	5112
GRATE AREA (6.0" BARS)	69.4	138
TUBE AREA	11.65	23.30
WATER	160	320
STEAM SPACE	514	1028
GRATE AREA HEATING SURFACE	1:40:0	
TUBE	1:39:2	
WATER	5:49:1	
STEAM SPACE	1:2:52	
% BOILER ABOVE FIREBOX	32.2	
WEIGHT OF WATER	26 TONS	52 TONS

RIVETING	LONG	BACK END CIRC	FRONT END CIRC
RIVET HOLE DIA	1 1/8	1 1/8	1 1/8
RIVEN	9.125	3.54	3.19
1/4 PLATE	85.6	63	63
1/4 RIVET	88.3	51.9	46.5

LIMITS OF TENSILE STRENGTH & MATERIAL	
SHELL, BUTTSTRAP & GIRDERS	28 TO 32 TONS
OTHER PLATES	26 TO 30
FURNACES	26 TO 30
MAIN STAYS	28 TO 32
SCREWED STAYS	26 TO 30
RIVET BARS	26 TO 30

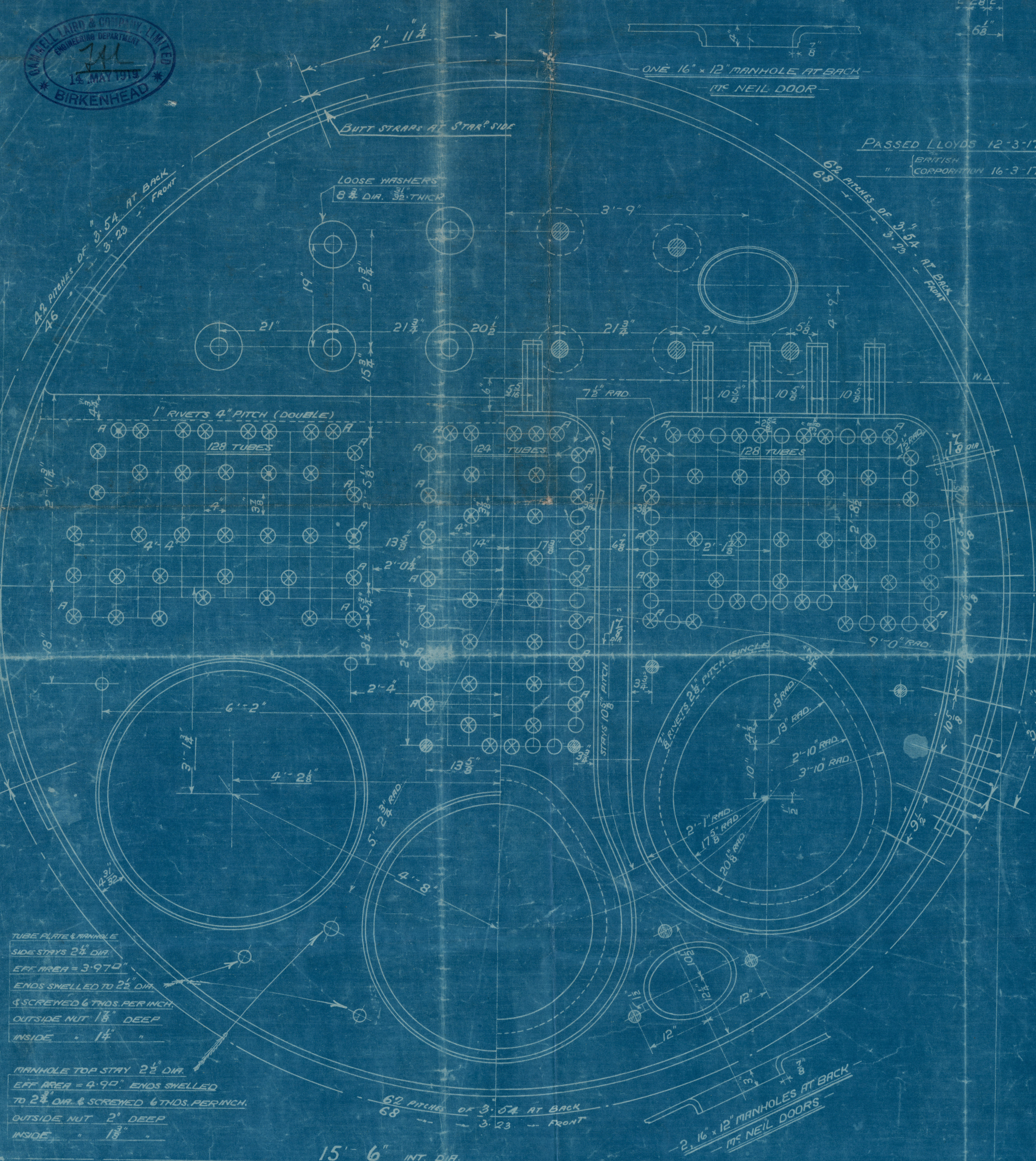
ALL RIVET HOLES DRILLED IN PLACE
MAIN STAYS SWELLED AT ENDS BY
HYDRAULIC PRESSURE AND ANNEALED

BACK END CIRC
166 PITCHES OF 3.54

FRONT END CIRC
182 PITCHES OF 3.23

2. BOILERS FOR MESS GRAYSON'S STATION
VESSEL NO 108

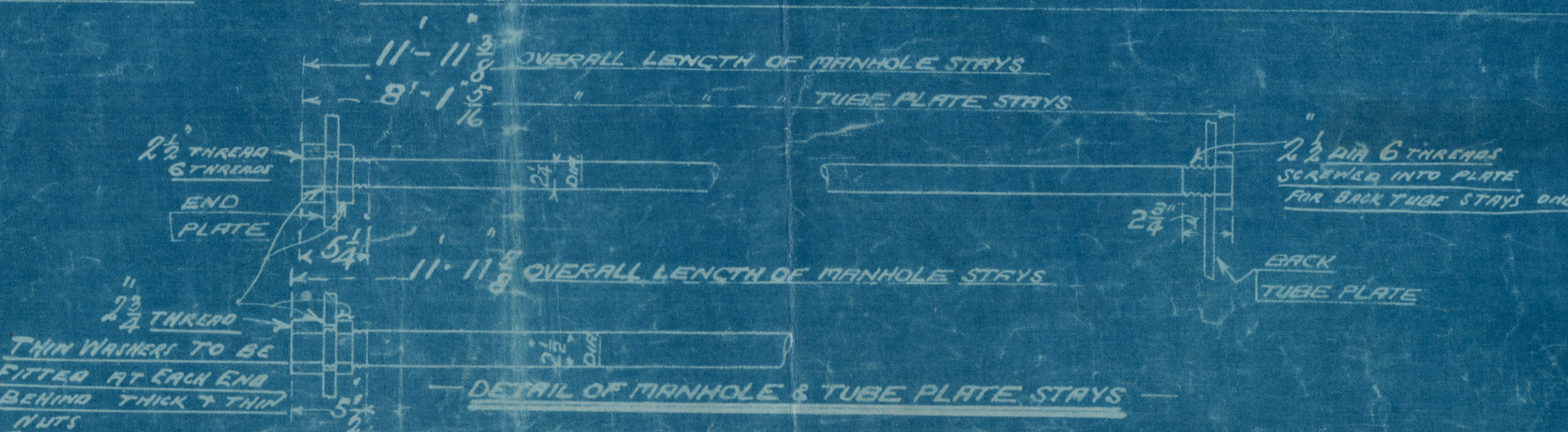
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TUBE PLATE MINOR
SIDE STAYS 2 1/2" DIA
EFF AREA = 3.972
ENDS SWELLED TO 2 1/2" DIA
SCREWED 6 THDS PER INCH
OUTSIDE NUT 1 1/2" DEEP
INSIDE 1 1/4"

MAINHOLE TOP STAY 2 1/2" DIA
EFF AREA = 4.972
ENDS SWELLED
TO 2 1/2" DIA & SCREWED 6 THDS PER INCH
OUTSIDE NUT 2" DEEP
INSIDE 1 1/2"

62 PITCHES OF 3.54 AT BACK
3.23 FRONT



MAIN BOILER (SECOND SERIES)

TWO BOILERS IN VESSEL

WORKING PRESSURE = 180 LBS PER SQ INCH
TO PASS LLOYDS SURVEY
SCALES 1/8 & 1/2 = ONE FOOT



FIREBOX STAYS - STEEL			
POSITION	MARK	DIA	EFF AREA
BACK TOP & SIDES	1/8	2 1/8	3.36 1/4
WIDE SPACE	2	2	2.71 1/2
TOP ROW	2 1/2	2 1/2	3.49 1/4

ALL FIREBOX STAYS SCREWED THRO' BOTH PLATES & NUT FITTED AT EACH END
EXCEPT STAYS FROM WING FIREBOX TO SHELL WHICH PROJECT 8 & ARE ORIENTED
ALL 1 1/2" NUTS 1 1/2" DEEP EXCEPT ON GIRDER TOPS WHERE THE OUTSIDE NUTS ARE 1 1/2" DEEP
ALL 2 1/2" & 2 3/4" NUTS 1 1/2" DEEP

"Main Boilers"

sp. Colon.

Div. Rpt 79652

RETAIN



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Boyd's Register
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