

Yard No. 575

ENG N°/515

MAIN BOILER

J. READHEAD

& SONS LTD.

"Thornliebank"

~~W130-0071~~

NWC 97322.

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Lloyd's Register
Foundation

W130-0071

SURFACES ETC.	ONE BOILER.	2 BOILERS.
TUBES.	2285 sq.ft.	4570 sq.ft.
COMBUSTION CHAMBERS.	238 " "	476 " "
FURNACES.	172 " "	344 " "
TUBE PLATES.	90 " "	180 " "
TOTAL HEATING SURFACE.	2785 " "	5570 " "
GRATE AREA. (5'-6" BARS).	60 sq.ft.	120 sq.ft.
STEAM SPACE.	460 cu.ft.	920 cu.ft.
WEIGHT OF WATER.	28 TONS.	56 TONS.

MATERIAL	TENSILE STRENGTH	ELONGATION.
SHELL PLATES.	29 TO 33 TONS " "	NOT LESS THAN 20% IN 8"
BUTT STRAPS & GIRDERS	29 TO 33 " " "	" " " 20% IN 8"
ALL OTHER PLATES	26 TO 30 " " "	" " " 23% IN 8"
FURNACES	26 TO 30 " " "	" " " 23% IN 8"
MAIN STAY BARS	28 TO 32 " " "	" " " 20% IN 8"
RIVET BARS.	26 TO 30 " " "	" " " 25% IN 8 DIAS

MATERIAL OF SIEMENS-MARTIN STEEL.
ALL RIVET HOLES DRILLED IN PLACE.

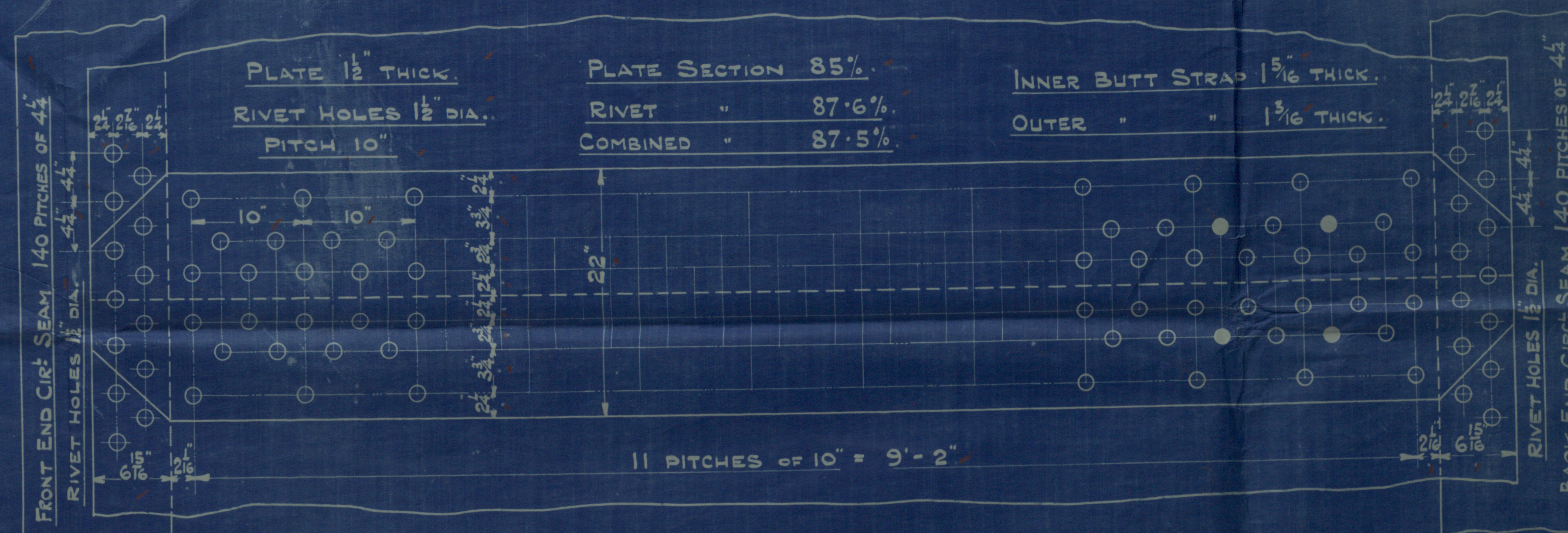
LLOYDS HEATING SURFACE = 5486 sq.ft.

WORKING PRESSURE = 220 LBS/SQ. IN.

TEST PRESSURE = 380 LBS/SQ. IN.

TO PASS LLOYDS SURVEY.

APPROVED BY LLOYDS. 21.2.33.

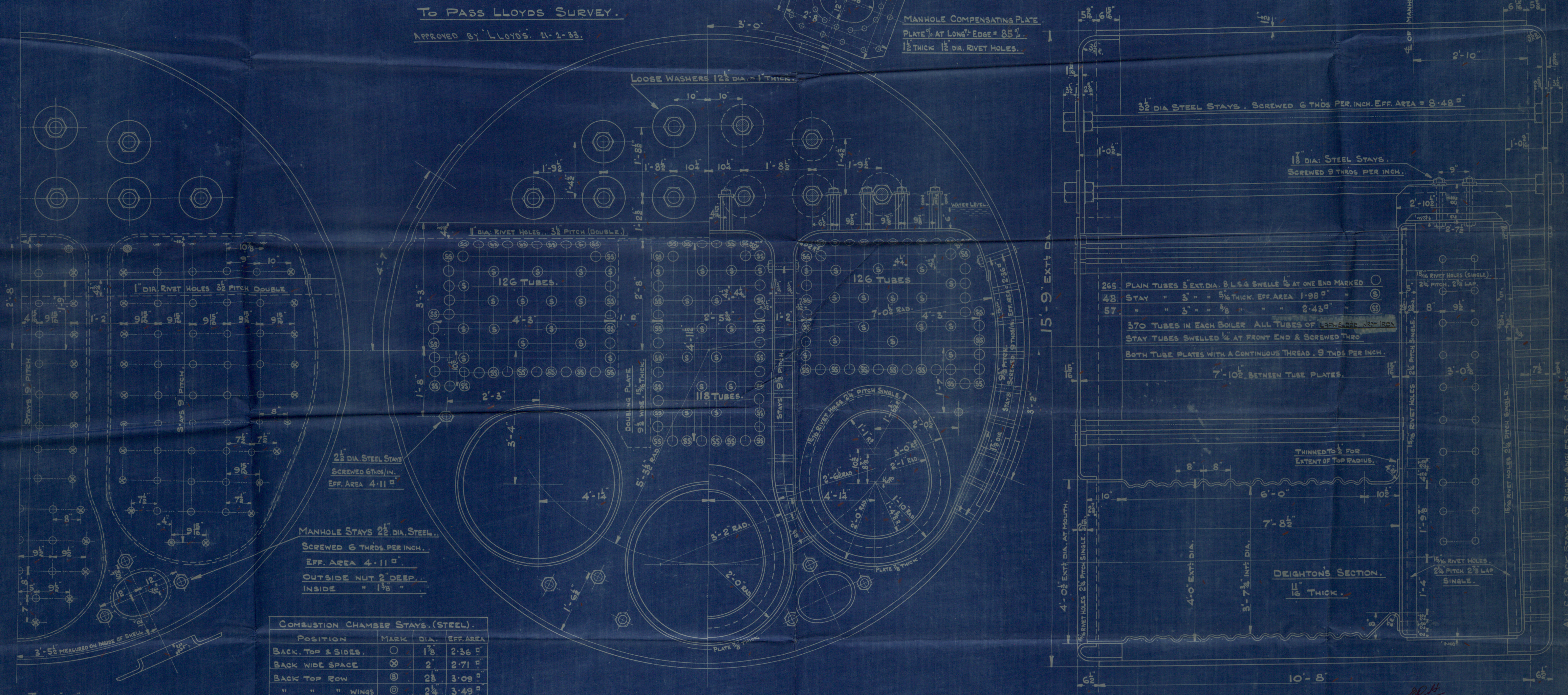


BUTT STRAP SCARFED TO CENTRE LINE OF INNER ROW OF RIVETS.

DETAIL OF LONGITUDINAL JOINT.

SCALE: 1/2" = 1 FOOT.

POSITION OF WING CC. STAYS
THRO' BUTT STRAP AS SHOWN THUS.



COMBUSTION CHAMBER STAYS. (STEEL).				
POSITION	MARK	DIA.	EFF. AREA	
BACK, TOP & SIDES.	○	1 7/8"	2.36 sq.	
BACK WIDE SPACE	⊗	2"	2.71 sq.	
BACK TOP ROW	⊙	2 1/8"	3.09 sq.	
" " " WINGS	⊙	2 1/4"	3.49 sq.	

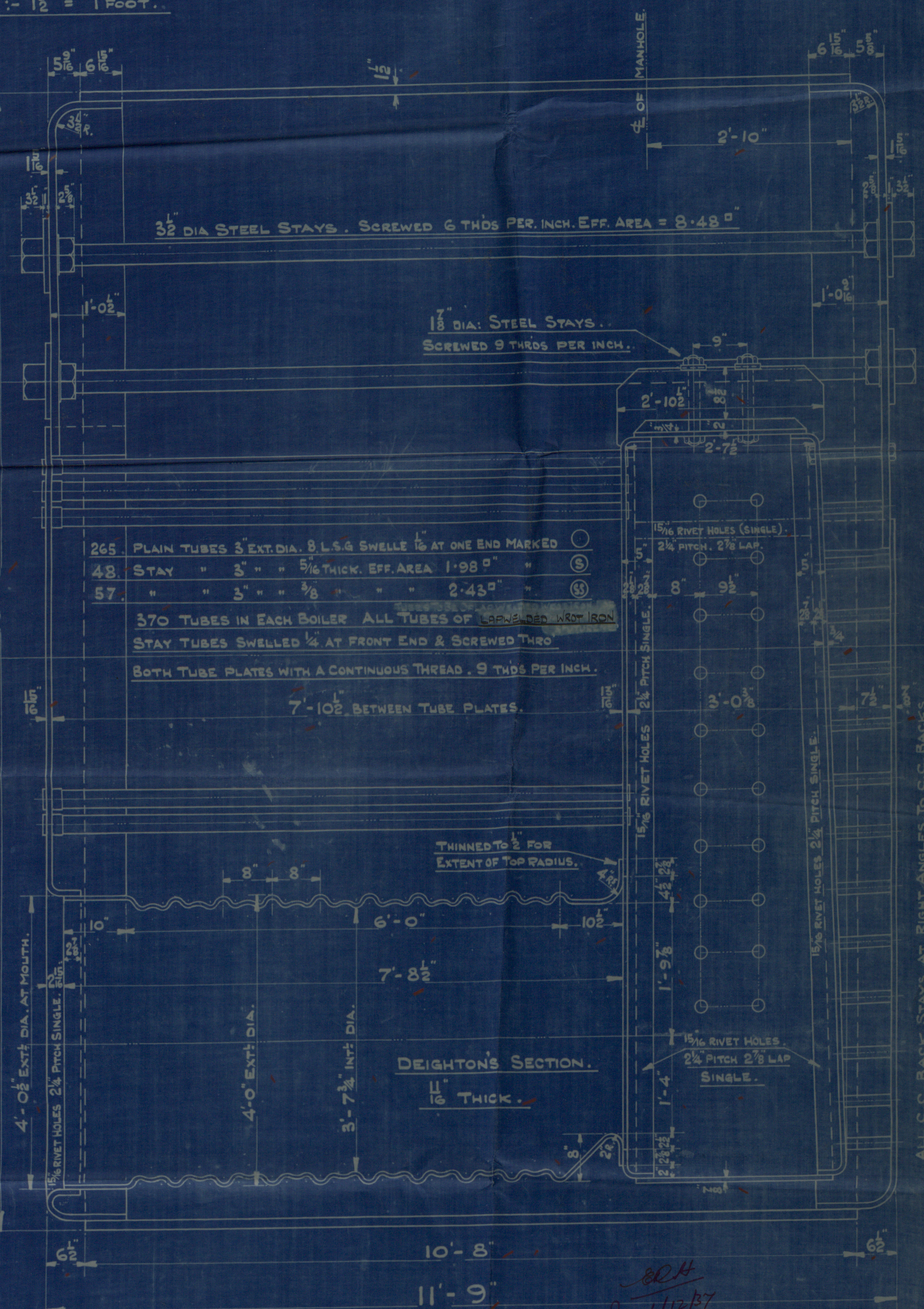
ALL SCREWED 9 THRS. PER INCH.

ALL COMBUSTION CHAMBER STAYS SCREWED THRO' BOTH PLATES.,
& NUTS FITTED AT EACH END EXCEPT STAYS FROM WING
FIREBOX TO SHELL WHICH PROJECT 1/2" & ARE CAULKED.
NUTS FOR 1 7/8" & 2" STAYS 1" DEEP. FOR 2 1/8" & 2 1/4" STAYS 1 1/2" DEEP.

MAIN BOILERS. 2-OFF FOR EACH NO.

SCALE: 1" & 1/2" = 1 FOOT.

ENGINE NO. 515, 516, 517, 518, 519, 520, 521, 522.



DWG NO. 4421.

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