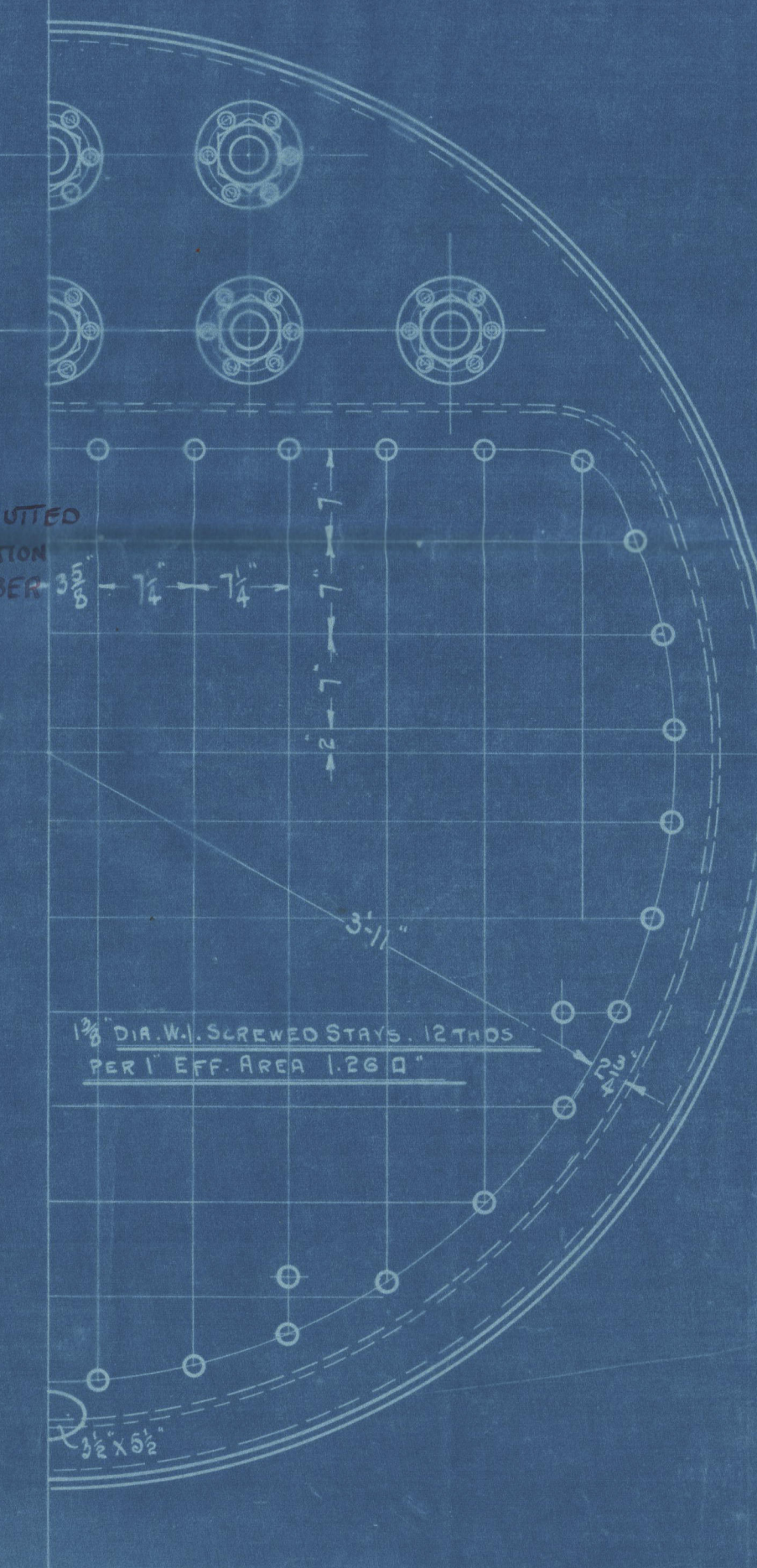
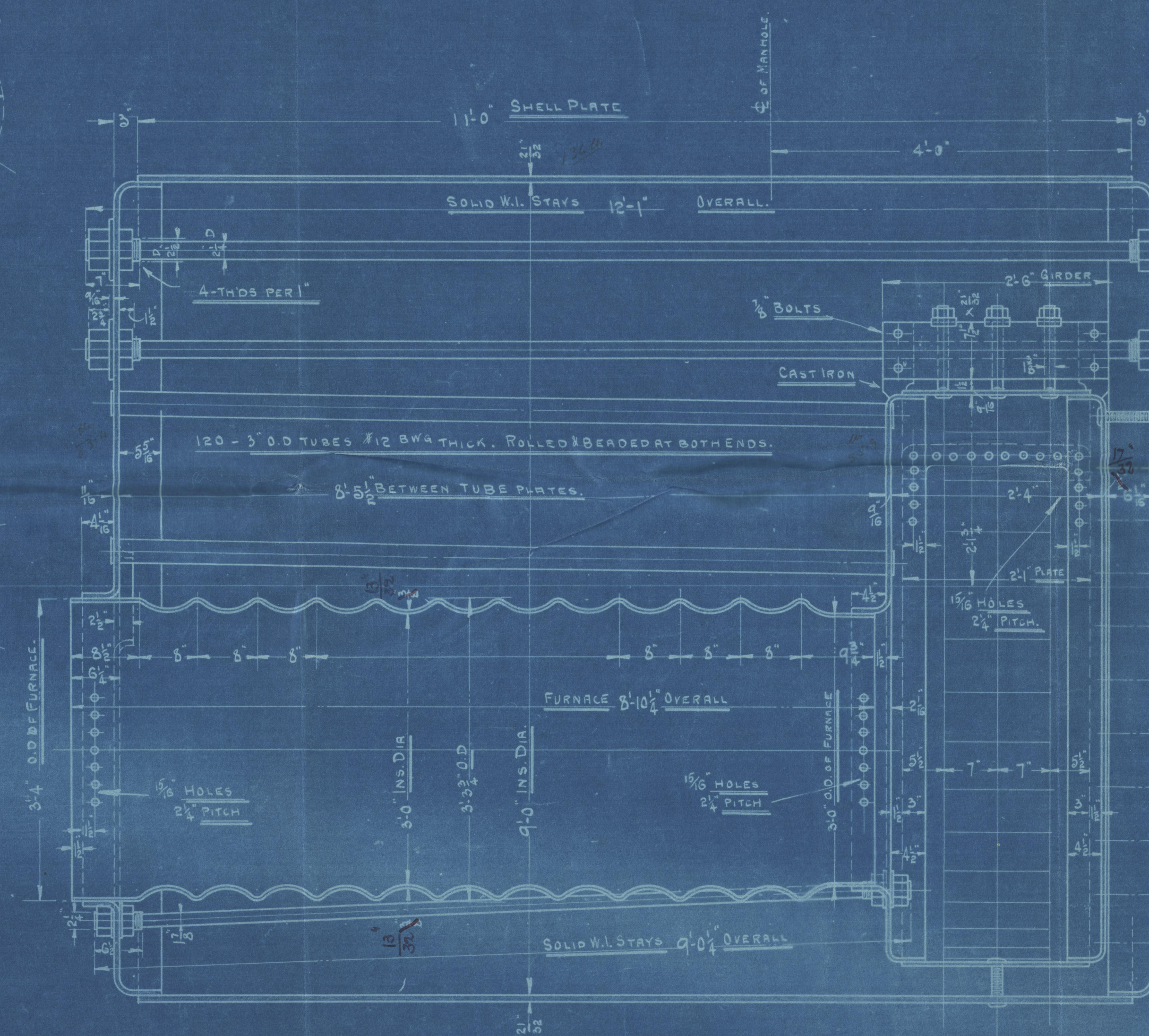


| NAME | SIZE | WORKING PRESS. TO U.S. RULES. |
|-----------------|--------|----------------------------------|
| SHELL | 2 1/2" | 12000 X 65025 = 145.5 |
| HEADS | 1 1/2" | 180 X 12000 = 147.4 |
| C.C. WRAP BACK | 1/2" | 120 X 6 = 146.1 |
| C.C. TOP | 1 1/2" | 120 X 5.5 = 154.1 |
| C.C. TUBE SHEET | 1/8" | 4.25-2.75 X 5625 X 27000 = 150.5 |
| C.C. GIRDERS | 1 1/2" | 5.25 X 1.5 X 1.5 X 2.5 = 147.2 |
| FURNACES | 1/8" | 15000 X 375 = 153.9 |
| MAIN STAYS | 2 1/2" | 3.75 X 1500 = 143.0 |
| SCREWED STAYS | 1 1/2" | 1.25 X 7500 = 150.0 |



HEATING SURFACE 120 TUBES 3" DIA. 797.2 SQ. FT.
 2 FURNACES 100.5
 1 COMB. CHAMBER 86.6
 FRONT TUBE PLATE 6.0
 TOTAL I-BOILER 992.6

GRATE SURFACE (5'-6" BARS) 350.59 SQ. FT.
 RATIO HEATING SURFACE TO GRATE = 30 TO 1
 AREA THRU TUBES 727 SQ. IN. = 22.0 SQ. IN. PER SQ. FT. GRATE
 WORKING PRESSURE 140 LBS. PER SQ. IN.
 TO BE MADE TO U.S. INSPECTION

EVAPORATION 180 LBS. OF WATER PER SQ. FT. OF GRATE
 SAFETY VALVE 3 1/2" DIA.

11'-6" OVER HEADS.

SHELL PLATES 2 1/2" THICK
 BUTT STRAPS 1/2" THICK OUTSIDE 3/8" INSIDE
 RIVET HOLES 1/2" DIA.
 PLATE PERCENTAGE 82.1%
 RIVET 5/8" 4 1/2"

ALL HOLES TO BE DRILLED
 MINIMUM TENSILE STRENGTH OF SHELL PLATES 60,000 LBS.



ALL SCREWED STAYS TO BE OF WROT. IRON AND TO HAVE 1/2" HOLE DRILLED IN EACH END TO A DEPTH OF 1/2" BEYOND INSIDE SURFACE OF PLATE.
 ALL RIVETING IN THE COMBUSTION CHAMBER TO BE FINISHED WITH COUNTERSUNK HEADS.

| NAME OF PERSONSHIP | TO BE MADE | NAME OF SHIP | HULL NO. | DATE |
|--------------------|------------|---------------------|----------|-----------|
| 1 AS | DRAWN | C.D. MALASSES BARGE | 90 | 5-10-1916 |
| 1 AS | DRAWN | " | 91 | 5-10-1916 |
| 1 AS | DRAWN | MALASSES BARGE | 92 | 5-20-16 |

Range Patrols Jacksonville, W. 7
 Hall No 92 on amended plan

THE MERRILL-STEVENS CO.
 JACKSONVILLE, FLORIDA

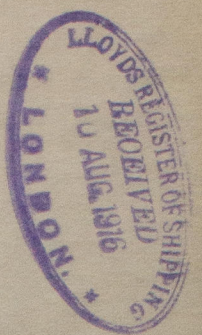
MAIN BOILER
 HULL NO 90 X 91

SCALE 1 X 5 = 1 FOOT

DESIGNED BY H. MEYER

90-40

W1237-0140



RETA



W1237-0140

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Foundation