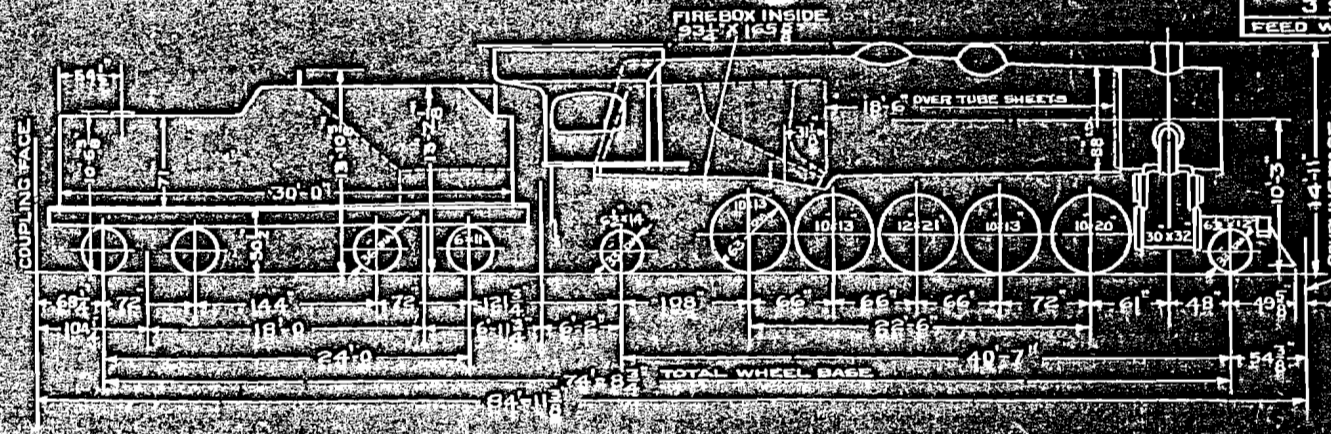
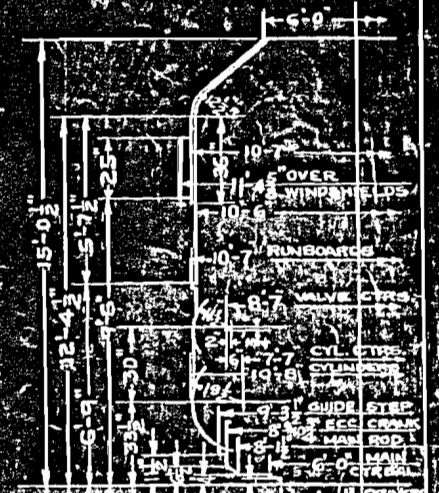
W-11-A TENDER	ENGS. 3200-3249	CLASS T-1-A LOCOS.
	TYPE A SUPERHEATER	DIAGRAM
	3 SYPHONS	SK. NO. 8088
	FEED WATER HEATER	





ALL WEIGHTS FOR ENGINE AND TENDER IN WORKING ORDER

CORRECT B.R. Jones C.D.

APPROVED A.M.E.

NO.	BOILER	HEATING SURFACE	LENGTH	DIA.	GAUGE OR THICK.
1	BOILER TUBES — 244 SPACING 2"	2645	18'-6"	2¼"	12 MIN.
2	BOILER FLUES — 52 SPACING 2"	1378	18'-6"	5½"	10 MIN.
3	TOTAL TUBES & FLUES	4023			
4	FIRE BOX PROPER	266			
5	SYPHONS-3	154			
6	TOTAL FIRE BOX	420			
7	TOTAL EVAPORATING HEATING SURFACE	4443			
8	TOTAL SUPERHEATING HEATING SURFACE	1115			
9	TUBE SHEETS - F.-⅝" BK.-½"				
10	GRATE AREA 82.59 SQ. FT.				
11	WEIGHT WATER 2½" GAUGES				
12					
13					

DESIGN DATA	
CALCULATED EVAPORATION LBS./HR.	
TUBES @ 9.28 LBS.	24570 LBS.
FLUES @ 10.44 LBS.	14390 LBS.
SYPHONS @ 55 LBS.	8470 LBS.
FIRE BOX @ 55 LBS.	14630 LBS.
TOTAL EVAPORATION	62060 LBS.
ST. CONSUMPTION (3244 × 20.8)	67500 LBS.
BOILER FACTOR	91.8 %
FIRE BOX H.S. TO GRATE AREA	5.12
TOTAL H.S. TO FIRE BOX H.S.	16.58
TOTAL H.S. TO SUPERHEATER H.S.	3.98
FRAME CTRS. 41" FRAME WIDTH 6"	

GENERAL DATA	
BOILER PRESSURE	200 LBS.
TRACTIVE EFFORT	77800 LBS.
FACTOR OF ADHESION	3.85
MAX. CURVATURE	6°
ENGINE TRUCK SWING	6"
TRAILING TRUCK SWING	4"
COAL CAPACITY	16 TONS
WATER CAPACITY	10000 GALS.
VALVE GEAR	BAKER
STOKER	LT-1 CONVERSION
MAX. CUT OFF	80.6 %
THROTTLE-CHAMBERS DOME TYPE-OUT. CONN.	
F.T. LATERAL DRIV. BOX	1" PLAY
FIRE BOX ARCH	GAINES

N.Y.N.H. & H.R.R. CO. OFFICE OF MECHANICAL ENGR. JUNE 5, 1931

SK. NO. 8088