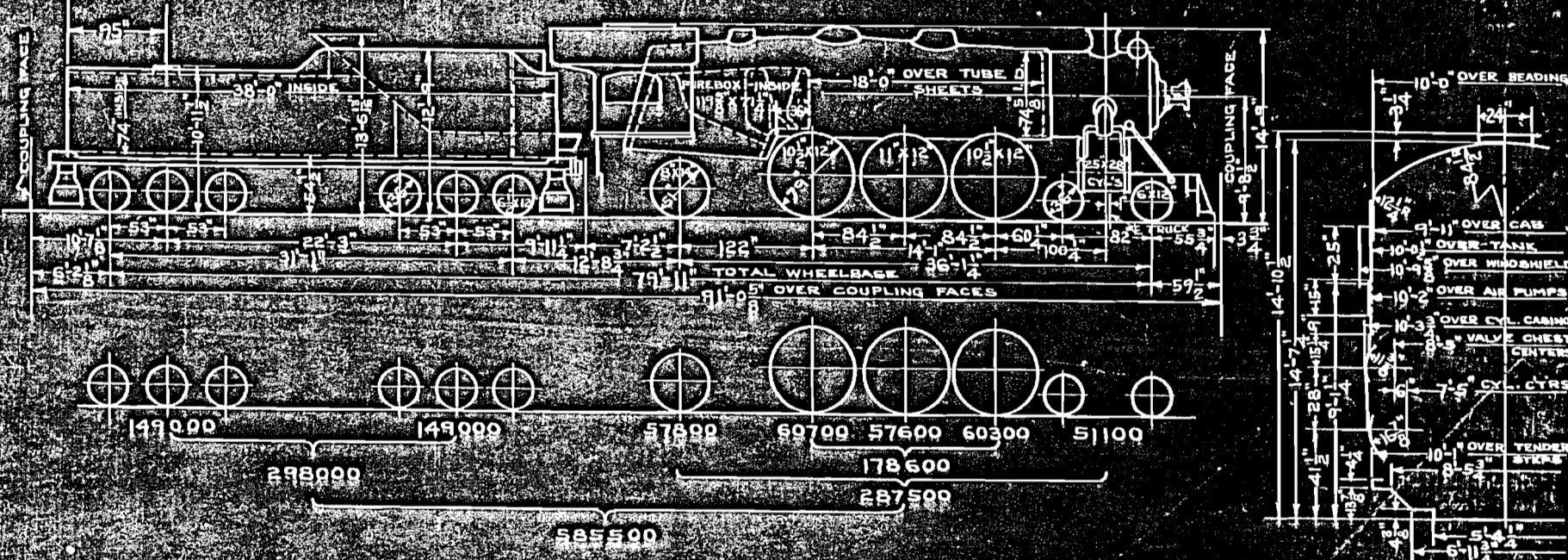


AUG-15-1940

N.Y.N.Y. E. H. R. R. - OFFICE OF MECH. ENGR.

TENDER W-12-C	ENG. NO'S. 1390, 1351, 1392, 1393	CLASS I-4-E
	TYPE 'A' SUPER,	DIAGRAM
	STOKER	SK. NO. -8379



ALL WEIGHTS FOR ENGINE AND TENDER IN WORKING ORDER

CORRECT APPROVED
B. Jones ASST. M.E. *Amstutz* M.E.

ITEM NO.	BOILER	HEATING SURFACE	LENGTH OVER TUBE SHEETS	DIA	GAUGE OR THICK.	DESIGN DATA	GENERAL DATA
1	BOILER TUBES 198 SPACING 3/4"	2089	18'-0"	2 1/2"	1/2" MIN.	CALCULATED EVAPORATION LBS./HR.	BOILER PRESSURE 200 LBS.
2	BOILER FLUES 36 SPACING 3/4"	928	18'-0"	5 1/2"	10 MIN.	TUBES @ 9.46 LBS. 19760 LBS	TRACTIVE EFFORT 37650 LBS.
3	TOTAL TUBES AND FLUES	3017				FLUES @ 10.6 LBS. 9840 LBS	FACTOR OF ADHESION 4.75
4	FIREBOX PROPER	210				FIREBOX @ 55 LBS. 11550 LBS	MAX. CURVATURE 16°
5	COMBUSTION CHAMBER	65				COMB. CHAMBER @ 55 LBS. 3580 LBS	ENGINE TRUCK SWING 3 1/2"
6	SYPHONS - 2 FIREBOX - 1 COMB. CHAMBER	91				3 SYPHONS @ 55 LBS. 5000 LBS	TRAILING TRUCK SWING 4 1/2"
7	TOTAL FIREBOX	366				TOTAL EVAPORATION 49730 LBS	COAL CAPACITY 16 TONS
8	TOTAL EVAPORATING HEATING SURFACE	3383				ST. CONSUMPTION (2252X 20.8) 46840 LBS	WATER CAPACITY 16000 GALS.
9	TOTAL SUPERHEATING HEATING SURFACE	776				BOILER FACTOR 106%	VALVE GEAR BAKER-ROLLER BEARING.
10	TUBE SHEETS 2 FT. 5/8" BK. 1/2"					FIREBOX H.S. TO GRATE AREA 6.18	STOKER
11	GRATE AREA		59.2 SQ. FT.			TOTAL EVAR H.S. TO FIREBOX H.S. 9.24	FEED WATER HEATER ELESKO
						TOTAL EVAR H.S. TO SUPHTG. H.S. 4.36	THROTTLE CHAMBERS, SIDE CONN. - COME
						ASH PAN AIR OPENING OVER FIREBOX TO AIR PUMPS 12.8%	MAX. CUT OFF 87.7%
						FRAME CENTERS 42" FRAME WIDTH 5 1/2"	

DR TR CK IN.