

REVISED
MAY 1957

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8

GENERAL ATTORNEY
J. B. OSBORNE

THE NEW YORK, CHICAGO AND ST. LOUIS RAILROAD COMPANY

NICKEL PLATE ROAD

LOCOMOTIVE DIAGRAMS

MECHANICAL DEPARTMENT

CLEVELAND, OHIO

N. K. P. — ENGINES BY NUMBERS

ENG.	CLASS	PAGE
1	DE-3	3
2	"	"
3	"	"
4	"	"
5	"	"
6	"	"
7	DE-2	2
8	"	"
9	"	"
10	"	"
11	DS-5	5
12	"	"
13	"	"
14	"	"
15	"	"
16	"	"
17	"	"
18	"	"
19	"	"
20	"	"

ENG.	CLASS	PAGE
21	DS-5	5
22	"	"
25	DS-4	4
26	"	"
27	"	"
28	"	"
29	"	"
30	"	"
31	"	"
32	"	"
33	"	"
34	"	"
35	"	"
36	"	"
37	"	"
38	"	"
39	"	"
40	"	"

ENG.	CLASS	PAGE
41	DS-4	4
42	"	"
43	"	"
44	DS-12	
45	"	
50	B-11A	26
51	"	"
55	"	"
57	"	"
60	B-11B	27
62	"	"
63	"	"
64	"	"
66	"	"
68	"	"

ENG.	CLASS	PAGE
71	B-11C	28
73	"	"
74	"	"
75	"	"
77	"	"
79	"	"
80	B-11D	29
81	"	"
85	DS-13	
90	DS-9	9
100	DS-6	6
101	"	"

			A
ENG.	CLASS	PAGE	
125	DS-7	7	
126	"	"	
127	"	"	
128	"	"	
129	"	"	
130	"	"	
131	"	"	
132	"	"	
133	"	"	

N.K.P. — ENGINES BY NUMBERS

ENG.	CLASS	PAGE
379	G-44	50
380	"	"
384	"	51
486	G-16V	48
488	"	"
493	"	"
500	H-5A	52
501	"	53
502	"	"
503	"	"
504	"	52
505	"	55
506	"	53
507	"	"
508	"	52
509	"	54
510	H-5B	56
511	"	57

ENG.	CLASS	PAGE
512	H-5B	62
513	"	57
514	"	61
515	"	62
516	"	"
517	"	"
518	"	57
519	"	58
520	"	63
521	"	62
522	"	"
523	"	57
524	"	63
525	"	59
526	"	62
527	"	63
528	"	57
529	"	61
530	"	58
531	"	60

ENG.	CLASS	PAGE
532	H-5B	56
533	"	63
534	"	61
587	H-6-0	93
599	"	"
602	H-6A	64
611	H-6B	65
612	"	66
613	"	67
614	"	68
615	"	69
617	H-6D	70
618	"	"
619	"	71
620	"	76
621	"	70
622	"	76

ENG.	CLASS	PAGE
623	H-6D	70
624	"	72
625	"	73
626	"	75
627	"	72
628	"	74
629	"	73
631	"	70
633	H-6E	77
639	"	88
640	"	"
641	"	78
642	"	79
643	"	80
644	"	79
645	"	81
646	"	82
647	"	77
648	"	80

			C
ENG.	CLASS	PAGE	
650	H-6E	80	
651	"	83	
652	"	84	
653	"	78	
654	"	88	
655	"	"	
656	"	79	
657	"	85	
659	"	86	
661	"	87	
662	H-6F	89	
663	"	90	
665	"	91	
667	"	92	
700	S	102	
701	"	"	
702	"	"	
703	"	"	
704	"	"	

N.K.P. — ENGINES BY NUMBERS

ENG.	CLASS	PAGE
705	S	102
706	"	"
707	"	"
708	"	"
709	"	"
710	"	"
711	"	"
712	"	"
713	"	"
714	"	"
715	S-1	103
716	"	"
717	"	"
718	"	"
719	"	"
720	"	"
721	"	"
722	"	"
723	"	"
724	"	"

ENG.	CLASS	PAGE
725	S-1	103
726	"	"
727	"	"
728	"	"
729	"	"
730	"	"
731	"	"
732	"	"
733	"	"
734	"	"
735	"	"
736	"	"
737	"	"
738	"	"
739	"	"
740	S-2	104
741	"	"
742	"	"
743	"	"
744	"	"

ENG.	CLASS	PAGE
745	S-2	104
746	"	"
747	"	"
748	"	"
749	"	"
750	"	"
751	"	"
752	"	"
753	"	"
754	"	"
755	"	"
756	"	"
757	"	"
758	"	"
759	"	"
760	"	"
761	"	"
762	"	"
763	"	"
764	"	"

ENG.	CLASS	PAGE
765	S-2	104
766	"	"
767	"	"
768	"	"
769	"	"
770	S-3	105
771	"	"
772	"	"
773	"	"
774	"	"
775	"	"
776	"	"
777	"	"
778	"	"
779	"	"
860	G-10A	47
861	"	"
863	"	"
871	"	"

		D
ENG.	CLASS	PAGE
890	G-7	43
891	"	"
892	"	"
893	"	44
894	"	43
901	G-8	45
902	"	"
903	"	"
904	"	"
905	"	"
906	G-9	46
907	"	"
908	"	"
909	"	"
910	"	"
911	"	"
912	"	"
914	"	"
915	"	"
916	"	"

N. K. P. — ENGINES BY NUMBERS

ENG.	CLASS	PAGE
D-1	DS-10	10
D-2	"	"
D-3	"	"
D-4	"	"
3951	B-5	20
3952	"	"
3953	"	"
3954	"	"
3955	"	"
3956	"	"
3957	"	"
3958	"	"
3959	"	21
3960	"	"
3961	"	"
3962	"	"
3963	"	"
3964	"	"
3965	"	22
3966	"	"

ENG.	CLASS	PAGE
3967	B-5	22
3968	"	23
3969	"	24
3970	"	"
3971	"	"
3972	"	"
3973	"	23
3974	"	"
3975	"	"
3976	"	24
3977	"	23
3978	"	"
3979	"	24
3980	"	"
3981	"	25
3982	"	"
3983	"	"
3984	"	"
3985	"	"
3986	"	"

ENG.	CLASS	PAGE
4156	G-1	38
4301	G-2	39
4302	"	40
4303	"	39
4304	H	39
4305	H	39
4306	H	H
4307	H	H
4308	G-2	39
4309	H	39
4310	G-2	40
4311	H	39
4312	H	H
4313	H	H
4314	G-2	40
4315	H	39
4316	H	39
4317	H	39
4318	H	H
4320	G-2	39

ENG.	CLASS	PAGE
5101	C-1	30
5102	"	"
5103	"	"
5104	"	"
5105	"	"
5106	C-1A	31
5107	"	"
5108	"	"
5109	"	"
5110	"	"
5111	"	"
5112	"	"
5113	"	"
5114	"	"
5115	"	"
5116	"	"
5117	"	"
5118	"	"
5119	"	"
5120	"	"

			E
ENG.	CLASS	PAGE	
5121	C-1A	31	
5122	"	"	
5123	"	"	
5124	"	"	
5125	"	"	
6001	M-1	94	
6002	"	"	
6003	"	"	
6004	"	"	
6005	"	"	
6006	"	"	
6007	"	"	
6008	"	"	
6009	"	"	
6010	"	"	
6011	"	"	
6012	"	"	
6013	"	"	
6014	"	"	

N. K.P. ENGINES BY NUMBERS

F

ENG.	CLASS	PAGE
6015	M-1	94
6016	"	"
6017	"	"
6018	"	"
6019	"	"
6020	"	"
6053	G-3	41
6054	//	//
6055	//	//
6056	//	//
6401	K-1	106
6402	"	"
6403	"	"
6404	"	107
6405	"	106
6406	"	107
6407	"	106
6408	"	107

ENG.	CLASS	PAGE
6409	K-1	107
6410	"	"
6411	"	"
6412	"	"
6413	"	"
6414	"	"
6415	"	"
6416	"	108
6417	"	"
6418	"	"
6419	"	"
6420	"	"
6421	"	"
6422	"	"
6423	"	109
6424	"	"
6425	"	"
6426	"	"
6427	"	"
6428	"	"

ENG.	CLASS	PAGE
6429	K-1	109
6430	"	"
6431	"	"
6432	"	"
6801	J-1	100
6802	"	"
6803	"	"
6804	"	101
6805	"	100
6806	"	101
6807	"	100
6808	"	101
6809	"	100
6810	"	"
8001	I-3	110
8002	"	"
8003	"	"
8009	"	"

TOTAL ENGINES				
DATE	DISTRICT	DIESEL	STEAM	TOTAL
MAR. 1, 1950.	N.K.P.	68	261	329
	W.&L.E.	4	151	155
	TOTAL SYSTEM	72	412	484
AUG. 1, 1950.	N.K.P.	75	261	336
	W.&L.E.	4	136	140
	TOTAL SYSTEM	79	397	476
				•

PLATE ROAD DIESEL PASSENGER LOCOMOTIVE CLASS DP-1 INFORMATION AND DESCRIPTION FROM BUILDER'S SPECIFICATION

IDENTIFICATION OF PARTS SHOWN ON DIAGRAM SHEET

- | | |
|----------------------------|-----------------------------------|
| 1 MAIN GENERATOR | 22 STEAM GENERATOR |
| 2 EXCITER | 23 BATTERIES |
| 4 AUXILIARY GENERATOR | 24 TOILET |
| 5 TRACTION MOTORS | 25 FUEL TANK |
| 6 CONTACTOR COMPARTMENT | 26 FUEL TANK FILLING CONNECTION |
| 7 TURBOSUPERCHARGER | 27 FUEL TANK GAUGE |
| 8 " FILTERS & SILENCERS | 28 EMERGENCY FUEL CUT OFF |
| 9 ENGINE CONTROL PANEL | 29 WATER TANKS |
| 10 CONTROL STAND | 30 WATER TANK FILLING CONNECTIONS |
| 11 BRAKE VALVES | 31 SAND BOXES |
| 12 TRACTION MOTOR BLOWERS | 32 SAND BOX FILLING HOLES |
| 13 RADIATORS | 33 GENERATOR AIR DUCT |
| 14 RADIATOR SHUTTERS | 34 HAND BRAKE |
| 15 RADIATOR FAN | 35 CAB HEATERS |
| 16 RADIATOR FAN CLUTCH | 36 SEAT |
| 17 LUBRICATING OIL COOLER | 37 HORN |
| 18 LUBRICATING OIL FILTERS | 38 BELL |
| 19 ENGINE WATER TANK | 39 NUMBER BOX |
| 20 AIR COMPRESSOR | 40 TOOL BOX |
| 21 MAIN AIR RESERVOIRS | 41 HEADLIGHT—MARS SIGNAL |
| | 42 HEADLIGHT—CONVENTIONAL TYPE |

ENGINE—ALCO SERIES 244 DIESEL, 16 CYLINDER, VEE TYPE, 4 CYCLE, 9" BORE, 10 1/2" STROKE, SINGLE ACTING, TURBOSUPERCHARGED, 2000 H.P. 1 ENGINE PER UNIT

GENERATOR—G.E. TYPE 6T-566, 600 VOLTS 1 PER UNIT

AUX. GENERATOR—G.E. TYPE 6Y-27 2 PER UNIT

EXCITER—G.E. TYPE AM-808, AMPLIDYNE 1 PER UNIT

TRACTION MOTORS—G.E. TYPE 6E-752-A1 4 PER UNIT

BATTERIES—GOULD TYPE 32 CELL, KMH 25

AIR BRAKE EQUIPMENT—24 RL WITH F-3-D FEED VALVES, DEADMAN'S CONTROL, MAXIMUM SPEED CONTROL.

AIR COMPRESSOR—WESTINGHOUSE TYPE 3CDB, 2 STAGE, 3 CYL., AIR COOLED. 1 PER UNIT

JOURNAL BEARINGS—TIMKEN ROLLER BEARING 6 1/2" DIA. JOURNALS

COMPLERS—A. A. R. TIGHTLOCK

GEAR RATIO—62-21

MAX. SPEED—90 M.P.H.

STEAM GENERATOR—CLARKSON DK-4530, 3000 LBS. PER HOUR STEAM GENERATOR WITH REMOTE CONTROL FOR FIREMAN. FUEL SUPPLY FROM MAIN FUEL TANK. 1 PER UNIT

SUPPLIES—COOLING WATER _____ 300 GAL. PER UNIT
 STEAM HEAT WATER _____ 1300 GAL. PER UNIT
 FUEL OIL _____ 1200 GAL. PER UNIT
 LUBRICATING OIL _____ 230 GAL. PER UNIT
 SAND _____ 22 CU. FT. PER UNIT

WEIGHT OF ONE GENERATOR _____ 11 500 LBS.

WEIGHT OF ONE COMPLETE TRUCK WITH MOTORS _____ 58 800 LBS.

WEIGHT OF ONE ENGINE—DRY _____ 37 000 LBS.

LIGHT WEIGHT ON FRONT TRUCK _____ 147 500 LBS.

LIGHT WEIGHT ON REAR TRUCK _____ 134 600 LBS.

LIGHT WEIGHT OF ONE UNIT _____ 282 100 LBS.

BUILDER—AMERICAN LOCOMOTIVE CO.

YEAR BUILT—1947-1948

TRACTIVE EFFORT STARTING—51 350 LBS. AT 25% ADHESION PER UNIT
 TRACTIVE EFFORT CONTINUOUS—30 500 LBS. AT 20 M.P.H. PER UNIT

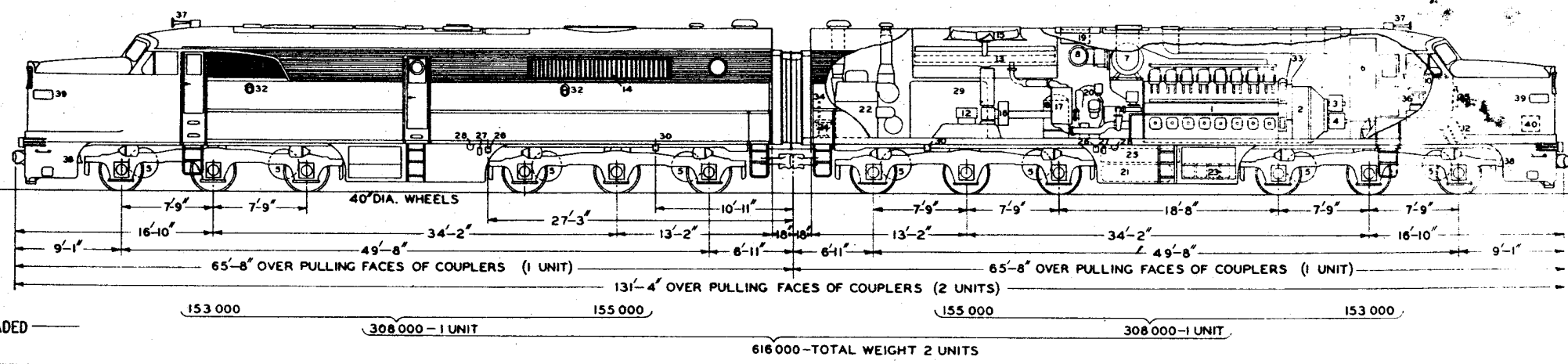
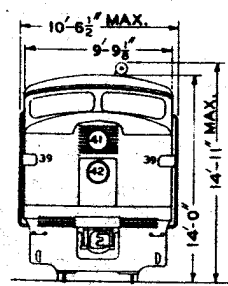
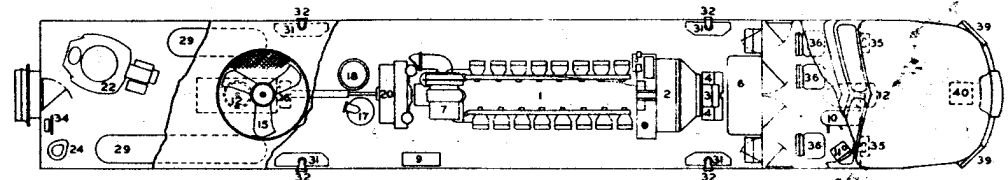
NUMBER OF ENGINES—11

NKP

DIESEL LOCO. CLASS DP-1
 2000 H.P. PASSENGER LOCOMOTIVE
 ENGINE DESIGNED FOR 21° CURVE

ENG. NO
 180-19C

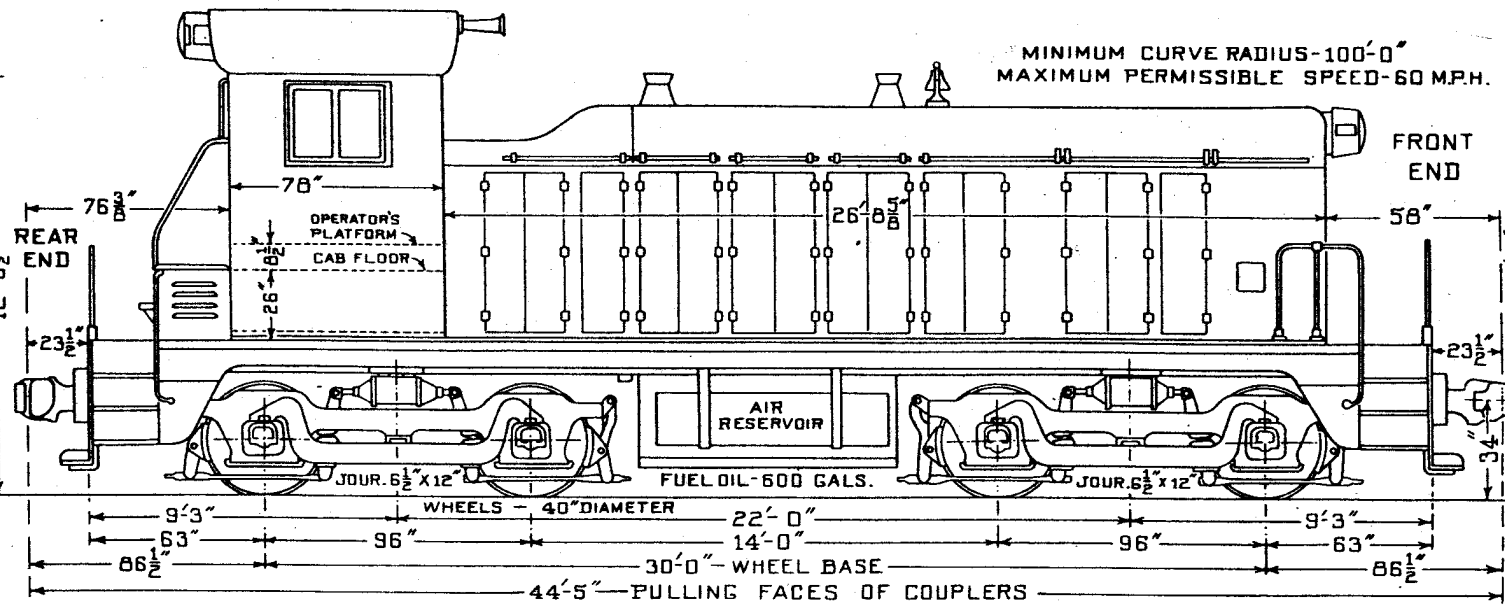
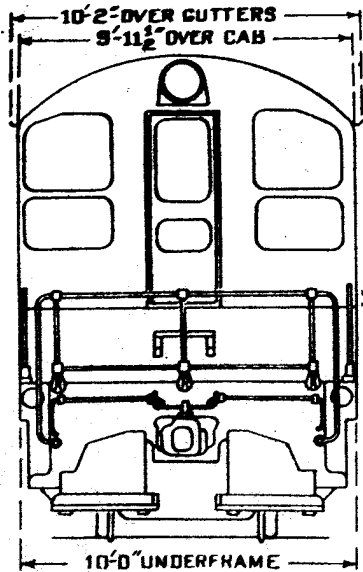
NOTE:—FUEL OIL AND BOILER WATER MAY BE TAKEN ON FROM EITHER SIDE
 OF LOCOMOTIVE AT LOCATIONS SHOWN.
 FUEL OIL CONN.—26 BOILER WATER CONN.—30



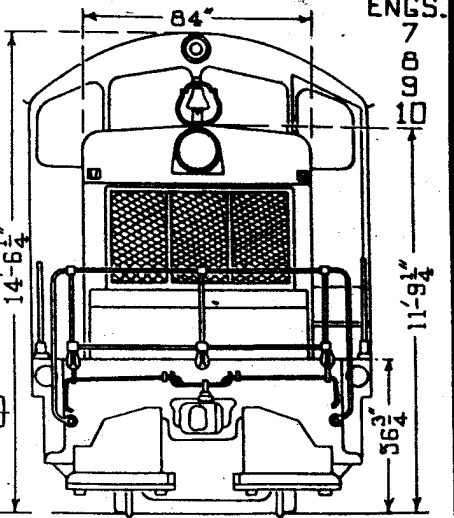
TRACTIVE POWER 62500 LBS. AT 25% ADHESION

NO. OF ENGINES - 4

N.K.P. DIESEL-CLASS DE-2 **2**



MINIMUM CURVE RADIUS - 100'-0"
MAXIMUM PERMISSIBLE SPEED - 60 M.P.H.



ENGS. 7

DATA FROM BLORS. SPECIFICATION

3-7-1946
6-1-1942
APR-1942

WEIGHTS

TOTAL LOADED WEIGHT - 247 640 LBS.
TOTAL LIGHT WEIGHT - 243 000 LBS.
JOURNAL LOAD PER AXLE - 56 000 LBS.
TRACTIVE POWER

AT 3.0 M.P.H. _____ 62 500 LBS.
AT 25 M.P.H. _____ 12 700 LBS.
AT 35 M.P.H. _____ 5 500 LBS.

ENGINE

G.M. DIESEL - MODEL 12-567 TWO CYCLE.
CYLINDERS - 12, 8 1/2" BORE X 10" STROKE.
HORSEPOWER - 1000 AT 800 R.P.M.

GENERATOR

E.M.C. - TYPE D-4 - 600 VOLT, D.C.

AUXILIARY GENERATOR

10 K.W. - 74 TO 78 VOLT, D.C.

TRACTION MOTORS

FOUR E.M.C. TYPE D-7C, D.C.

STORAGE BATTERY

EXIDE IRON CLAD - 32 CELL - MVAH - 25 PLATE

AIR BRAKE EQUIPMENT

SCHEDULE - 14 EL
AIR COMPRESSOR - 3 CYL. 2 STAGE, AIR COOLED,
CLASP BRAKE, TWO SHOES PER WHEEL.
FOUR BRAKE CYLINDERS.

SUPPLIES

FUEL OIL - 600 GALS.
COOLING WATER - 195 GALS.
LUBRICATING OIL - 100 GALS.
SAND - 28 CU. FT.

BUILDER - ELECTRO-MOTIVE CORP., YEAR BUILT - 1942
BUILDER'S SPECIFICATION NO. 595-F
BUILDER'S MODEL - NW-2.

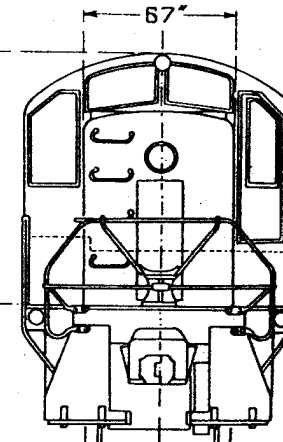
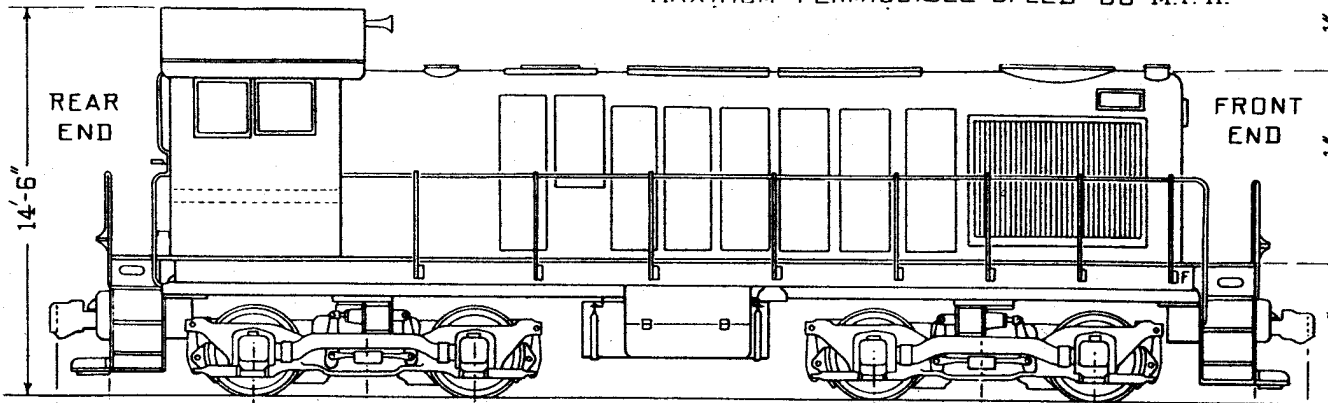
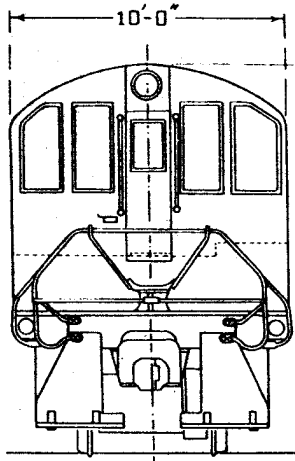
TRACTIVE POWER 69000 LBS. AT 30% ADHESION

NO. OF ENGINES - 6

N.K.P. DIESEL-CLASS DE-3

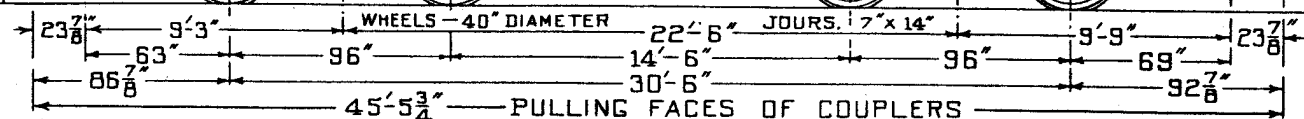
3

MINIMUM CURVE RADIUS - 50 FT.
MAXIMUM PERMISSIBLE SPEED - 60 M.P.H.



ENGS.
1
2
3
4
5
6

BLDRS. NO.	R.R. NO.
69924	1
69925	2
69926	3
69927	4
69928	5
69929	6



DRG. AND DATA FROM BLDRS. SPECIFICATION

3-6-1946
7-1-1942
APR.-1942

WEIGHTS

TOTAL LOADED WEIGHT - 230 000 LBS.
ACTUAL LIGHT WEIGHT - 219 600 LBS.

TRACTIVE POWER

AT STARTING _____ 69 000 LBS.
AT 3.8 M.P.H. _____ 60 000 LBS.
AT 25 M.P.H. _____ 12 200 LBS.
AT 35 M.P.H. _____ 8 000 LBS.

ENGINE

A.L.CO. DIESEL, VERTICAL, FOUR CYCLE.
CYLINDERS - 6 - 12 1/2" BORE X 13" STROKE.
HORSEPOWER 1000 AT 740 R.P.M.

GENERATOR

ONE MAIN, GEN'L. ELECTRIC - GT-953-C

AUXILIARY GENERATOR

GEN'L. ELECTRIC BELT DRIVEN EXCITER-AUXILIARY
GENERATOR SET - 75 VOLT.

TRACTION MOTORS

GEN'L. ELECTRIC - FOUR-AXLE HUNG, GE-731

STORAGE BATTERY

PHILCO - TYPE 35-N.R.V.

AIR BRAKE EQUIPMENT

SCHEDULE E.L.-14, AIR COMPRESSOR - 2 STAGE
TYPE 3-CD, AIR COOLED WESTINGHOUSE, DRIVEN
OFF MAIN ENGINE. CLASP BRAKE, 2 SHOES PER
WHEEL, 4 BRAKE CYLINDERS - 10" X 10"

SUPPLIES

FUEL OIL _____ 635 GALS.
COOLING WATER _____ 240 GALS.
LUBRICATING OIL _____ 80 GALS.
SAND _____ 27 CU. FT.

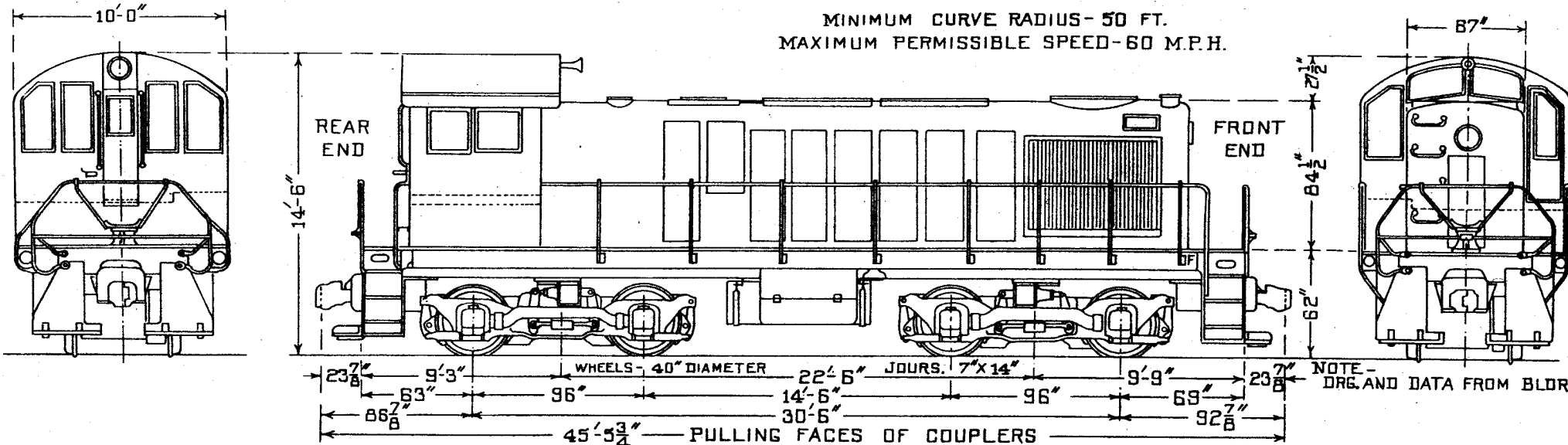
BUILDER - A.L.CO. YEAR BUILT - 1942.
BUILDER'S SPECIFICATION NUMBER - E-1540
BUILDER'S GENERAL DESIGN - DRG. NO. 981-N-93310

TRACTIVE POWER 69000 LBS. AT 30% ADHESION

NO. OF ENGINES - 19

N.K.P. DIESEL-CLASS DS-4 4

MINIMUM CURVE RADIUS - 50 FT.
 MAXIMUM PERMISSIBLE SPEED - 60 M.P.H.



ENGS.	
25	34
26	35
27	36
28	37
29	38
30	39
31	40
32	41
33	42
	43

NOTE - DRG. AND DATA FROM BLDG. SPECIFICATION

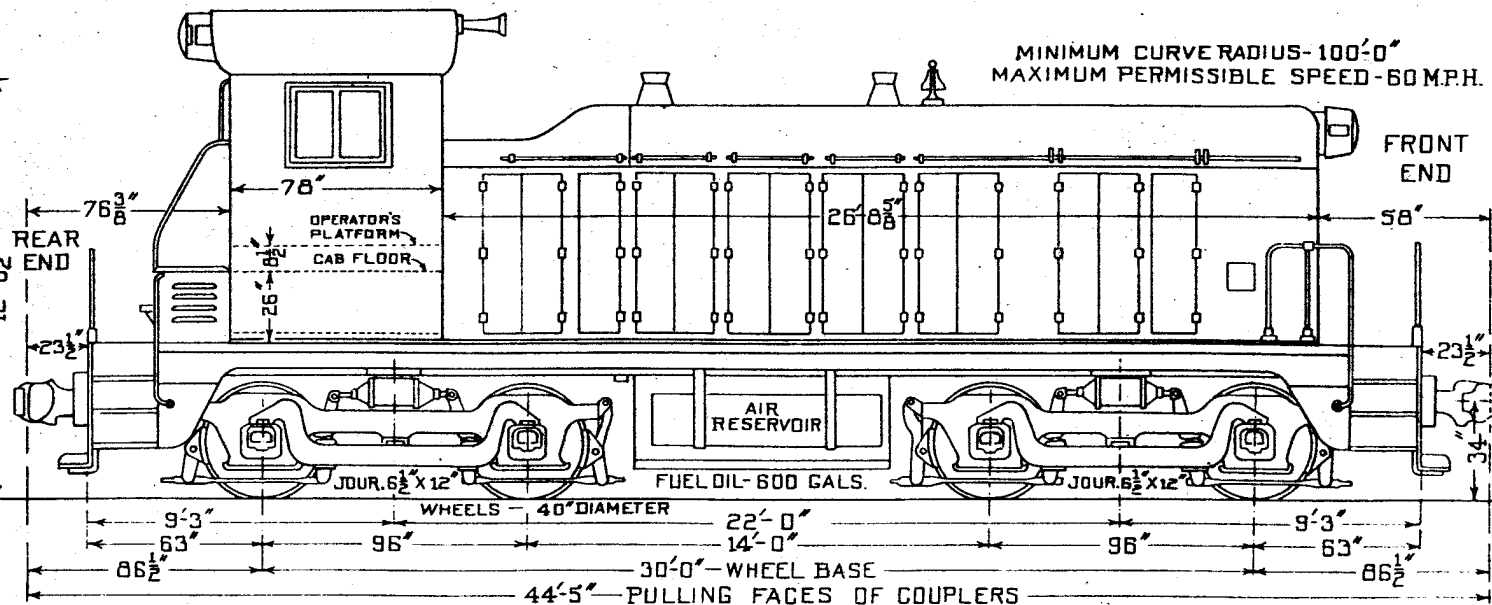
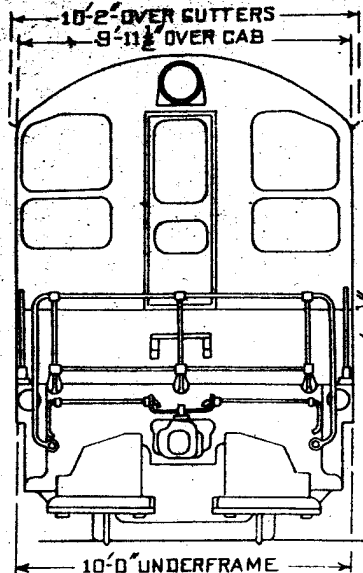
WEIGHTS	ENGINE	TRACTION MOTORS	SUPPLIES MAR-6-1947
TOTAL LOADED WEIGHT - 230 000 LBS. ACTUAL LIGHT WEIGHT - 219 600 LBS.	A.L.CO. DIESEL, VERTICAL, FOUR CYCLE. CYLINDERS-6-12 1/2" BORE X 13" STROKE HORSEPOWER 1000 AT 740 R.P.M.	GEN'L. ELECTRIC - FOUR-AXLE HUNG, GE-731	FUEL OIL _____ 635 GALS. COOLING WATER _____ 240 GALS.
TRACTIVE POWER	GENERATOR	STORAGE BATTERY	LUBRICATING OIL _____ 80 GALS. SAND _____ 27 CU.FT.
AT STARTING _____ 69 000 LBS.	ONE MAIN, GEN'L. ELECTRIC - GT-553-A	AIR BRAKE EQUIPMENT	BUILDER - A.L.CO. SCHENECTADY - YEAR BUILT - 1947
AT 3.8 M.P.H. _____ 60 000 LBS.	AUXILIARY GENERATOR	SCHEDULE E.L-14, AIR COMPRESSOR - 2 STAGE	BUILDER'S SPECIFICATION _____ NUMBER E-1540
AT 25 M.P.H. _____ 12 200 LBS.	GEN'L. ELECTRIC BELT DRIVEN EXCITER-AUXILIARY	TYPE 3-CD, AIR COOLED WESTINGHOUSE, DRIVEN	BUILDER'S GENERAL DESIGN-DRG. NO. 981-N-93310
AT 35 M.P.H. _____ 8 000 LBS.	GENERATOR SET - 75 VOLT.	OFF MAIN ENGINE, CLASP BRAKE, 2 SHOES PER WHEEL, 4 BRAKE CYLINDERS - 10 X 10.	

TRACTIVE POWER 61900 LBS. AT 25% ADHESION

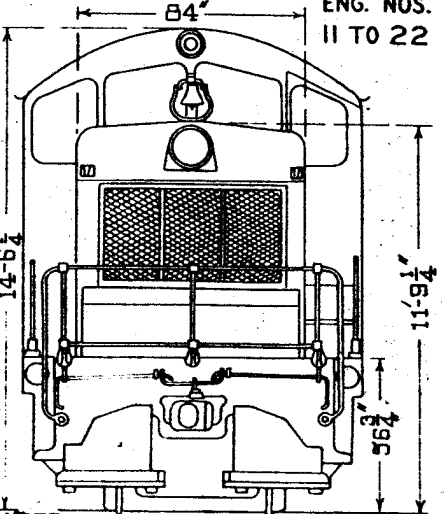
NO. OF ENGINES - 12

N.K.P. DIESEL-CLASS DS-5 **5**

ENG. NOS.
11 TO 22



MINIMUM CURVE RADIUS - 100'-0"
MAXIMUM PERMISSIBLE SPEED - 60 M.P.H.



NOTE - DATA FROM BLDRS. SPECIFICATION
FEB-1947

<u>WEIGHTS</u>	
TOTAL LOADED WEIGHT	247640 LBS.
TOTAL LIGHT WEIGHT	241000 LBS.
<u>TRACTIVE POWER</u>	
AT 3.8 M.P.H.	61900 LBS.
AT 25 M.P.H.	12700 LBS.
AT 35 M.P.H.	5500 LBS.

<u>ENGINE</u>
G.M. DIESEL - MODEL 12-567 - TWO CYCLE. CYLINDERS - 12, 8 3/8" BORE X 10" STROKE. HORSEPOWER - 1000 AT 800 R.P.M.
<u>GENERATOR</u>
E.M.D. FORCE VENTILATED NOMINALLY 600 VOLTS D.C. <u>AUXILIARY GENERATOR</u> 10 K.W. - 74 TO 78 VOLT, D.C.

<u>TRACTION MOTORS</u>
FOUR E.M.C. TYPE D-7C, D.C.
<u>STORAGE BATTERY</u>
GOULD
<u>AIR BRAKE EQUIPMENT</u>
SCHEDULE - 14 E L AIR COMPRESSOR - 3 CYL. 2 STAGE, AIR COOLED CLASP BRAKE, TWO SHOES PER WHEEL. FOUR BRAKE CYLINDERS.

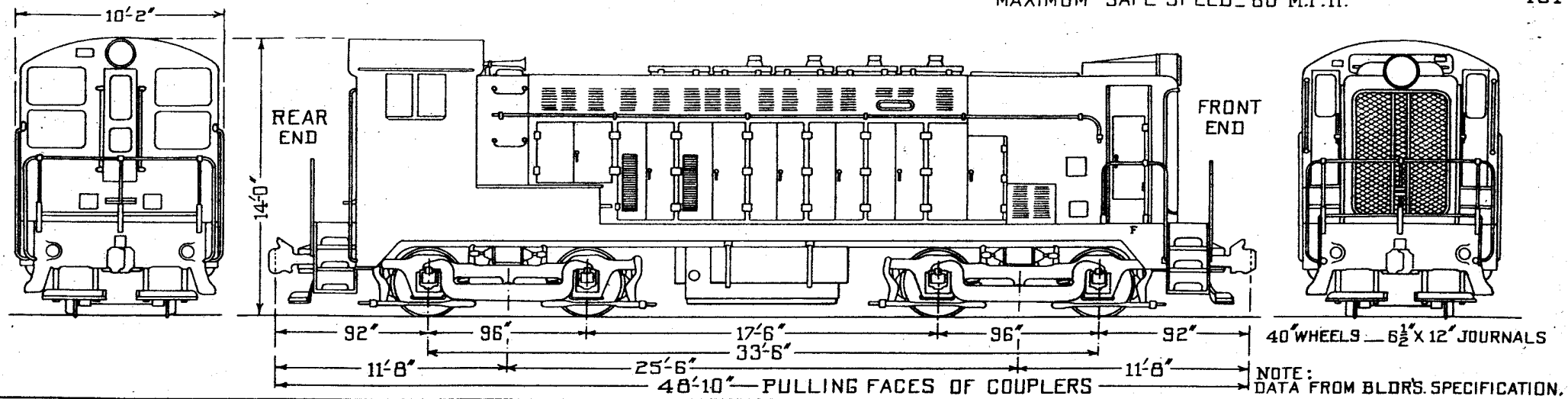
<u>SUPPLIES</u>
FUEL OIL - 600 GALS. COOLING WATER 195 GALS. LUBRICATING OIL - 100 GALS. SAND - 28 CU. FT.
BUILDER - ELECTRO-MOTIVE CORP., YEAR BUILT - 1947 BUILDER'S SPECIFICATION NO. NW-8009 BUILDER'S MODEL - NW-2 BUILDER'S ORDER NO. E-854

NO. OF ENGINES - 2
BALDWIN DIESEL ELECTRIC - 1000 H.P.

N.K.P. DIESEL-CLASS DS-6 6

MINIMUM CURVE LOCOMOTIVE WITH TRAIN 130 FT - 44°
MAXIMUM SAFE SPEED - 60 M.P.H.

ENGS.
100
101



NOTE: DATA FROM BLDG'S SPECIFICATION.

WEIGHTS	
IN WORKING ORDER	243 800 LBS.
ON DRIVERS	243 800 LBS.
ENG. LIGHT	232 000 LBS.
TRACTIVE POWER	
AT STARTING (30% ADHESION)	73 140 LBS.
AT 5 M.P.H.	52 000 LBS.
AT 25 M.P.H.	12 500 LBS.
AT 35 M.P.H.	9 000 LBS.
CONTINUOUS RATING T.E.	34 000 LBS.
CONTINUOUS RATING SPEED	9 M.P.H.

ENGINE	
BALDWIN VERTICAL, 8 CYLINDER IN LINE, FOUR CYCLE, 12 3/4" BORE X 15 1/2" STROKE, DEVELOPING RATED POWER AT 625 R.P.M. 1000 H.P. MODEL 608-NA.	
GENERATOR	
D.C. INTERPOLE SELF VENTILATING.	
AUXILIARY GENERATOR	
D.C. DRIVEN FROM MAIN GENERATOR	

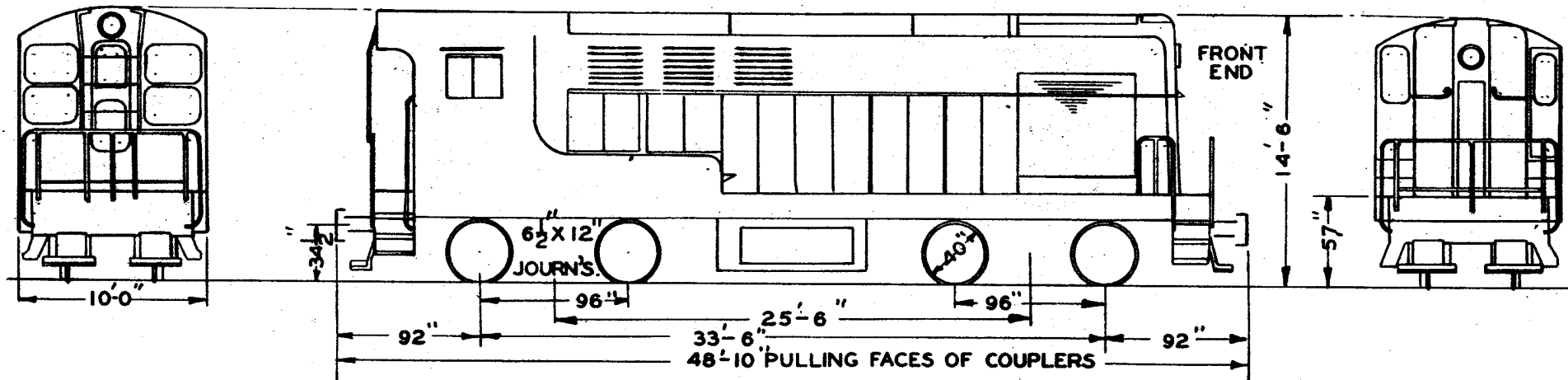
TRACTION MOTORS	
SERIES WOUND, AXLE HUNG, 1 PER AXLE - TYPE-362	
STORAGE BATTERY - GOULD	
AIR BRAKE EQUIPMENT	14-EL
GEAR RATIO	14:68

SUPPLIES	
FUEL OIL - 700 GALS.	
LUBRICATING OIL - 135 GALS.	
ENG. COOLING WATER - 300 GALS.	
SAND - 30 CU. FT.	
BUILDER - BALDWIN LOCO. WORKS - YEAR BUILT - 1947	
BUILDER'S SPECIFICATION - DS-4-4-10-2	

MARCH-1947

TRACTIVE POWER 61735 LBS. AT 25% ADHESION NO. OF ENGS. - 9 N.K.P. CLASS DS-7
 ENGS. 125-133

MINIMUM CURVE RADIUS 100' = 57°-18'
 MAXIMUM PERMISSIBLE SPEED - 60 M.P.H.

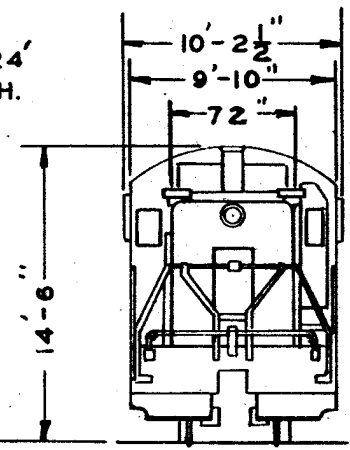
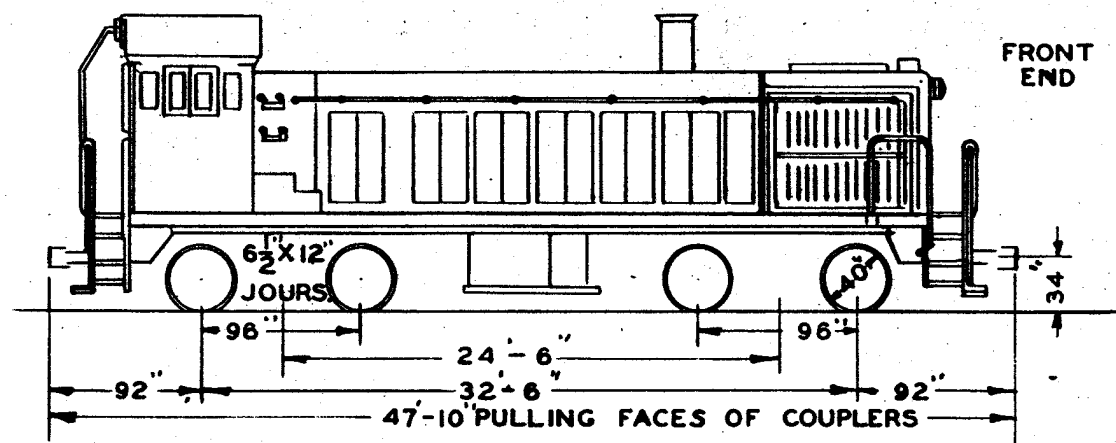
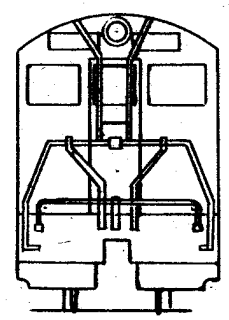


DR. No. CH. No. DATE 3-3-50

<u>WEIGHTS</u>	<u>ENGINE</u>	<u>TRACTION MOTORS</u>	<u>SUPPLIES</u>
TOTAL LOADED 246940 LBS	F.M. & CO. MODEL 38D8-1/8, 2 CYCLE, OPP. PIST.	FOUR F.M. & CO. TYPE 1815-B, ENGS. 125-126	FUEL OIL - 750 GALS.
TOTAL LIGHT 236310 LBS	CYLS. - 6, 8-1/8 BORE X 10" STROKE, EA. PIST.	FOUR WESTINGHOUSE, 362D, ENGS. 127-133	COOLING WATER - 100 GALS.
<u>TRACTIVE POWER</u>	HORSEPOWER - 1000 AT 800 R.P.M.	<u>STORAGE BATTERY</u>	LUBRICATING OIL - 140 GALS.
AT 3.8 M.P.H. 61735 LBS	<u>GENERATOR</u>	GOULD - TYPE KMH-25R	SAND - 28 CU. FT.
AT 25 M.P.H. 12000 LBS	F.M. & CO. TYPE DGZJ	<u>AIR BRAKE EQUIPMENT</u>	BUILDER - FAIRBANKS-MORSE - YEAR BUILT - 1949
AT 35 M.P.H. 8500 LBS	<u>AUXILIARY GENERATOR</u>	SCHEDULE - 14 EL	BUILDER'S SPECIFICATION - ALT. - 100.6
	F.M. & CO. TYPE DGZD	AIR COMPRESSOR - W.A.B. CO., TYPE 3CD	

TRACTIVE POWER 59565 LBS. AT 25% ADHESION NO. OF ENGS. - 4 NK.P. CLASS DS-8
 ENGS. 305-308

MINIMUM CURVE RADIUS $75' = 76^{\circ} - 24'$
 MAXIMUM PERMISSIBLE SPEED - 60 M.P.H.

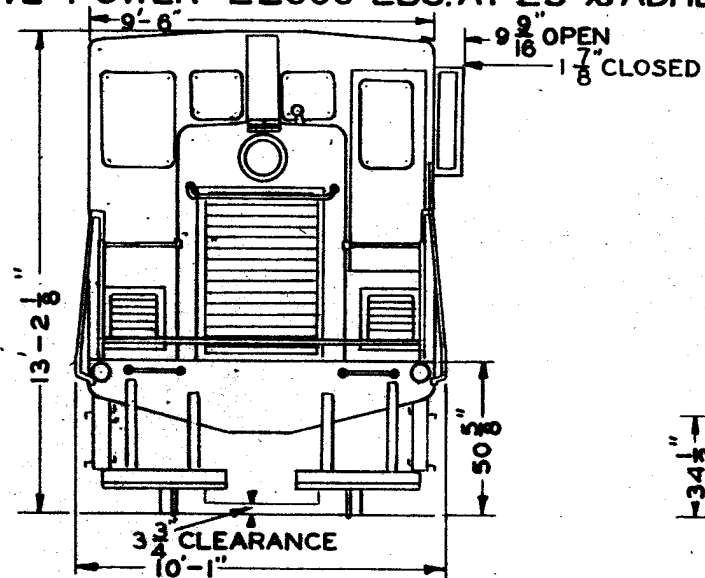


DR. DATE 3-6-50

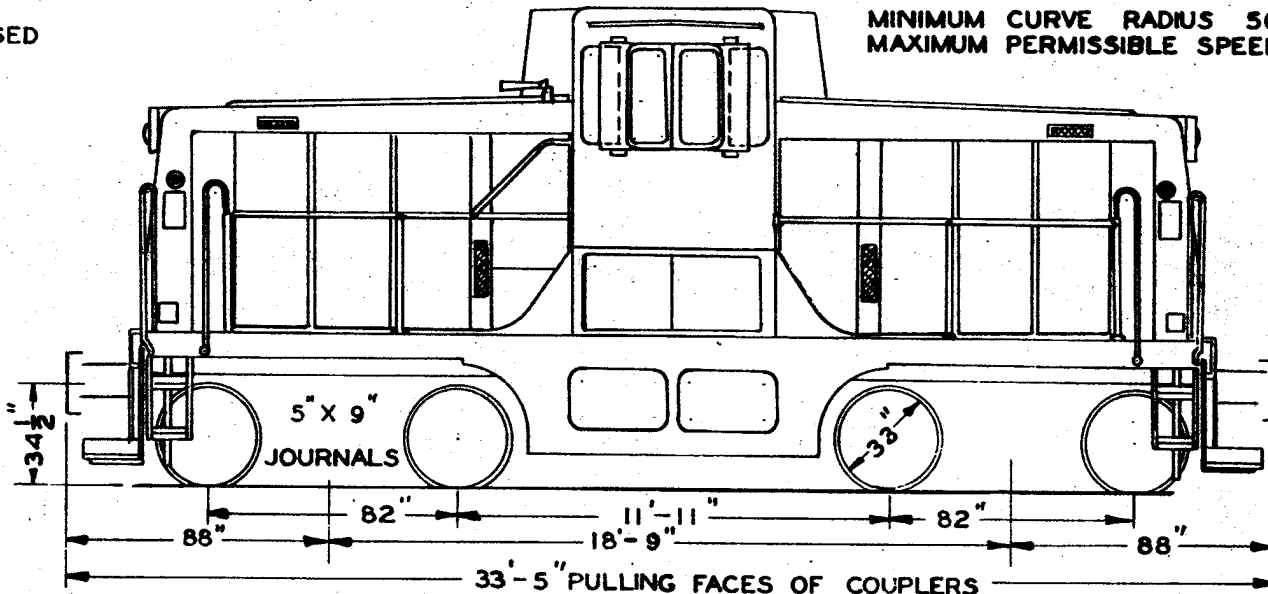
DR. DATE 3-6-50 CH.	WEIGHTS TOTAL LOADED 238260 LBS. TOTAL LIGHT 227590 LBS.	ENGINE LIMA-HAMILTON, TYPE T895A, 4 CYCLE. CYLS. - 8, 9 BORE X 12" STROKE HORSEPOWER - 1000 AT 950 R.P.M.	TRACTION MOTORS FOUR WESTINGHOUSE 362 D	SUPPLIES FUEL OIL - 600 GALS. COOLING WATER - 225 GALS. LUBRICATING OIL - 145 GALS. SAND - 30 CU.FT.
	TRACTIVE POWER AT 3.8 M.P.H. 59565 LBS. AT 25 M.P.H. 12500 LBS. AT 35 M.P.H. 8500 LBS.	GENERATOR WESTINGHOUSE TYPE 499 A	AIR BRAKE EQUIPMENT SCHEDULE - 6 DS AIR COMPRESSOR - GARDNER-DENVER TYPE WXO - 9100 CLASP BRAKE - TWO SHOES PER WHEEL FOUR BRAKE CYLINDERS	BUILDER - LIMA-HAMILTON CORP - YEAR BUILT - 1949 BUILDERS SPECIFICATION - NO. A-3080

TRACTIVE POWER 22000 LBS. AT 25 % ADHESION NO. OF ENGINES - 1 N.K.P. CLASS DS-9 ENG. 90

9



MINIMUM CURVE RADIUS 50' = 114°-36'
 MAXIMUM PERMISSIBLE SPEED - 35 M.P.H.



DR. N. J. V. CH. 9. DATE 5-1-50

WEIGHTS

TOTAL LOADED 88000 LBS.
 TOTAL LIGHT 84000 LBS.

TRACTIVE POWER

AT 3.8 M.P.H. 22000 LBS.
 AT 25 M.P.H. 4000 LBS.
 AT 35 M.P.H. 2500 LBS.

ENGINES

2-CATERPILLAR TYPE-D-17000, V TYPE,
 4 CYCLE.
 CYLS.-EA. ENG-8, 5-3/4 BORE X 8" STROKE
 HORSEPOWER - 380 AT 1000 R.P.M.

GENERATORS

TWO TYPE GT-555

AUXILIARY GENERATORS

TWO TYPE GMG-140
 1.75 K.W. 76 VOLTS D.C.

TRACTION MOTORS

FOUR TYPE GE-733

AIR BRAKE EQUIPMENT

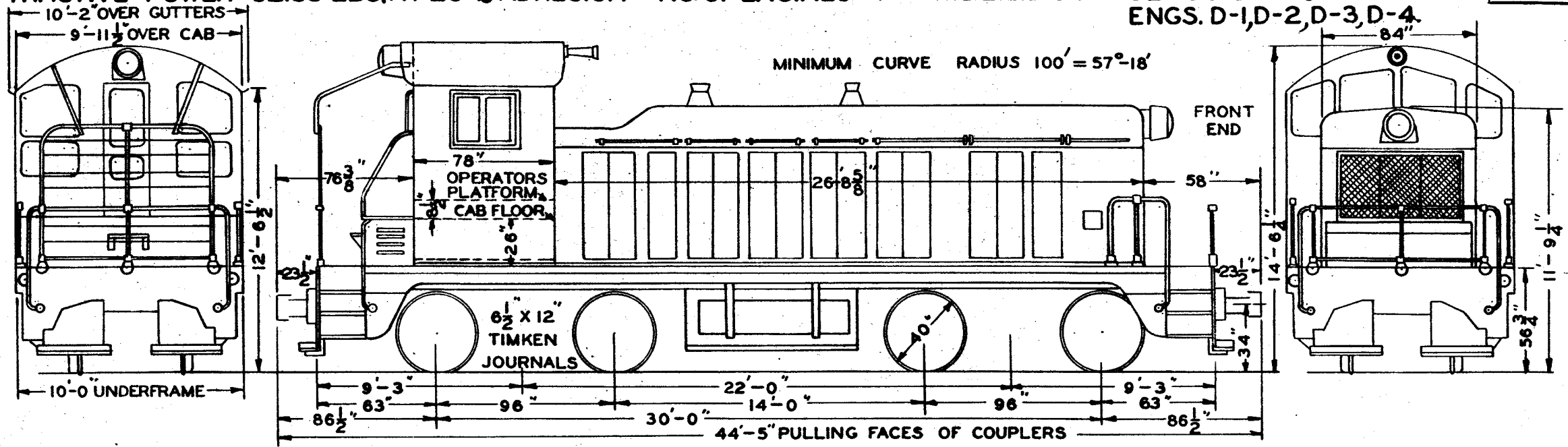
SCHEDULE - 14 EL
 AIR COMPRESSORS - 2 GARDNER-DENVER-ADS
 ONE BRAKE SHOE PER WHEEL
 FOUR BRAKE CYLINDERS

SUPPLIES

FUEL OIL - 250 GALS.
 COOLING WATER - 80 GALS.
 LUBRICATING OIL - 100 GALS.
 SAND - 8 CU.FT.

BUILDER - G.E. CO. YEAR BUILT - 1949
 BUILDER'S SPECIFICATION NUMBER RY-24147-H

TRACTIVE POWER 62135 LBS. AT 25 % ADHESION **NO. OF ENGINES-4** **W.&L.E. DIST** **CLASS DS-10** **10**
ENGS. D-1, D-2, D-3, D-4



DR. M. J. V.
 CH. S.
 DATE 2-24-57

WEIGHTS	
TOTAL LOADED	248540 LBS.
TOTAL LIGHT	238710 LBS.
TRACTIVE POWER	
AT 3.8 M.P.H.	62135 LBS.
AT 25 M.P.H.	12700 LBS.
AT 35 M.P.H.	5500 LBS.

ENGINE	
GM. DIESEL-MODEL 12-567-TWO CYCLE.	
CYLINDERS-12, 8-1/2" BORE X 10" STROKE.	
HORSEPOWER-1000 AT 800 R.P.M.	
GENERATOR	
E.M.D. FORCE VENTILATED	
NOMINALLY 600 VOLTS D.C.	
AUXILIARY GENERATOR	
10 K.W. - 74 TO 78 VOLT, D.C.	

TRACTION MOTORS	
FOUR E.M.C. TYPE D-7C, D.C.	
AIR BRAKE EQUIPMENT	
SCHEDULE -14 EL	
AIR COMPRESSOR - GARDNER-DENVER-WXE	
CLASP BRAKE - TWO SHOES PER WHEEL.	
FOUR BRAKE CYLINDERS.	

SUPPLIES				
FUEL OIL - 600 GALS.				
COOLING WATER - 200 GALS.				
LUBRICATING OIL - 130 GALS.				
SAND - 30 CU. FT.				
BUILDER - ELECTRO-MOTIVE CORP.				
BUILDER'S MODEL-NW-2	D-1	D-2	D-3	D-4
YEAR BUILT	1940	1940	1941	1941
BUILDERS ORDER NO.	998	1089	1422	1423

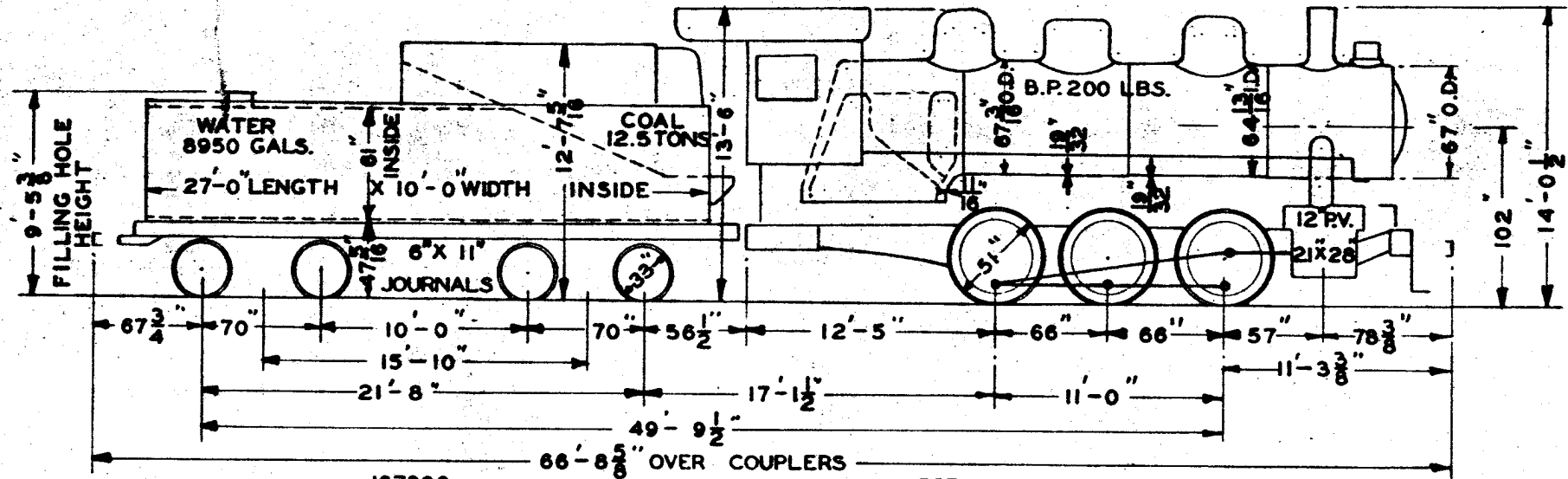
TRACTIVE POWER 41200 LBS.
MAX. CURVE 19°

NO. OF ENGINES - 8

W.&L.E. DIST.

CLASS B-5
ENGS. 3951-3958

20



WEIGHTS-WORK ORDER

WT. DRIVERS	164900 LBS.
WT. ENG. TRUCK	LBS.
WT. TRL. TRUCK	LBS.
WT. ENG. TOTAL	164900 LBS.
WT. TENDER-FULL	167800 LBS.
WT. ENG. & TENDER	332700 LBS.
TUBES, NO.	156
FLUES, NO.	24
TUBES & FLUES, LENGTH	15'-0"
ARCH TUBES, NO.	O.D.
SUPERHTR. TUBES, NO.	O.D.

FIREBOX	72-1/8" X 66-1/4"
TUBES & FLUES	1733 SQ. FT.
HEATING SURFACES	
FIREBOX	130 SQ. FT.
ARCH TUBES	SQ. FT.
SYPHONS	30 SQ. FT.
TOTAL	1893 SQ. FT.
SUPERHTR. H.S.	409 SQ. FT.
GRATE AREA	33 SQ. FT.

JOURNALS, DRIVING, MAIN	9" X 12"
JOURNALS, DRIVING, OTHERS	9" X 12"
JOURNALS, ENG. TRUCK	
JOURNALS, TRL. TRUCK, F.	
JOURNALS, TRL. TRUCK, B.	
VALVE GEAR	BAKER
TRAVEL	6" LAP 7/8"
LEAD	1/8" EXH. CL. L. & L.
FACTOR OF ADHESION	4.00
CYLINDER H.P.	1588
PERCENT BOILER TO CYL. H.P.	80.8

TENDER FRAME	CAST
TENDER TRUCK FRAME	
TENDER TRUCK BOLSTER	STEEL
SUPERHTR.	S.H.CO. TYPE - A
FWHEATER	TYPE -
STOKER	TYPE -
REVERSE GEAR	ALCO TYPE - G
SAFETY VALVES	2 - 3
ENG. FRAME	BAR TYPE - C. STEEL
THROTTLE CHAMBERS	FRONT END

INJECTOR R.&L. CHICAGO NO. 11
AIR BRAKE 6 ET EQUIPMENT
LUB. NATHAN HYD. NO. 9 3 FEED

NOTE - 1
ENGS. 3951-3955 BUILT 1929
ENGS. 3956-3958 BUILT 1930

BUILDER _____ W. & L. E.
YEAR BUILT - SEE NOTE - 1

DR. DATE 3-24-30

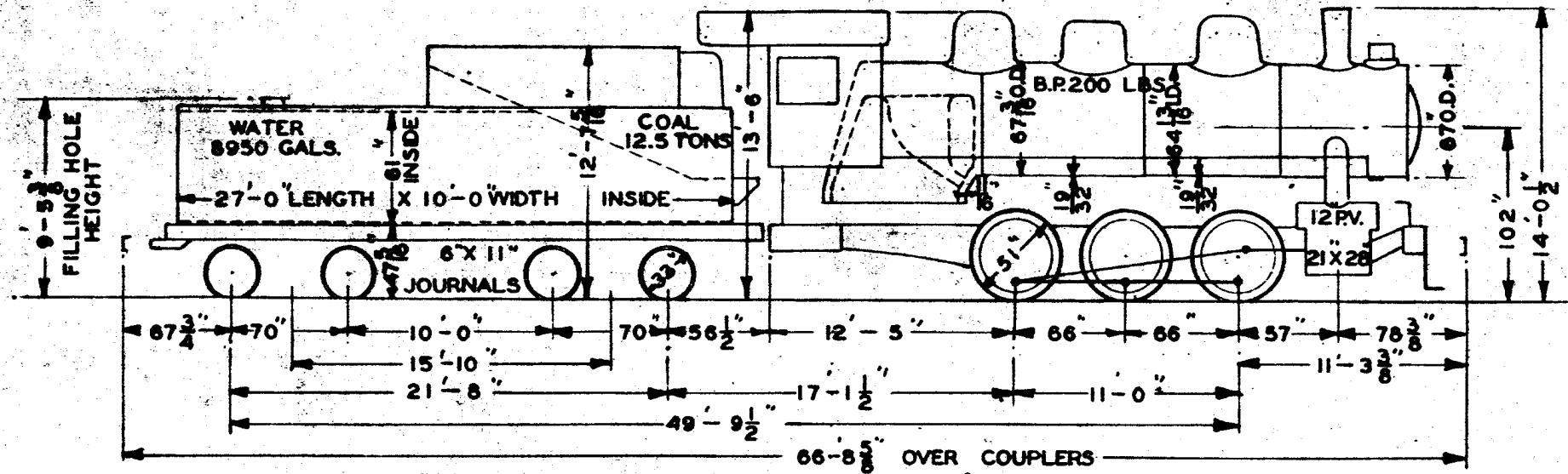
TRACTIVE POWER 41200 LBS.
MAX. CURVE 19°

NO. OF ENGINES - 6

W.&L.E. DIST.

CLASS B-5
ENGS. 3959 - 3964

21



WEIGHTS-WORK ORDER

167800

66'-8 5/8" OVER COUPLERS
55700 55000 54200

DATE
CH
BY
DR

WT. DRIVERS	164900 LBS.
WT. ENG. TRUCK	LBS.
WT. TRL. TRUCK	LBS.
WT. ENG. TOTAL	164900 LBS.
WT. TENDER-FULL	167800 LBS.
WT. ENG. & TENDER	332700 LBS.
TUBES, NO.	152 2" O.D.
FLUES, NO.	24 5-1/2" O.D.
TUBES & FLUES, LENGTH	15'-0"
ARCH TUBES, NO.	O.D.
SUPERHTR. TUBES, NO.	O.D.

FIREBOX	72-1/8" X 66-1/4"
HEATING SURFACES	
TUBES & FLUES	1702 SQ.FT.
FIREBOX	130 SQ.FT.
ARCH TUBES	SQ.FT.
SYPHONS	30 SQ.FT.
TOTAL	1862 SQ.FT.
SUPERHTR. H.S.	409 SQ.FT.
GRATE AREA	33 SQ.FT.

JOURNALS, DRIVING MAIN	9 X 12"
JOURNALS, DRIVING OTHERS	9 X 12"
JOURNALS, ENG. TRUCK	
JOURNALS, TRL. TRUCK, F.	
JOURNALS, TRL. TRUCK, B.	
VALVE GEAR	BAKER
TRAVEL	6" LAP-7/8"
LEAD	1/8" EXH. CL.-L&L.
FACTOR OF ADHESION	4.00
CYLINDER H.P.	1588
PERCENT BOILER TO CYL. H.P.	80.0

TENDER FRAME	} CAST
TENDER TRUCK FRAME	
TENDER TRUCK BOLSTER	STEEL
SUPERHTR.	S.H.CO. TYPE-A
FWHEATER	TYPE
STOKER	TYPE
REVERSE GEAR	ALCO TYPE-G
SAFETY VALVES	2 - 3"
ENG. FRAME	BAR TYPE - C-STEEL
THROTTLE-CHAMBERS	FRONT END

INJECTOR	R.&L. CHICAGO NO. 11
AIR BRAKE	6 ET EQUIPMENT
LUB.	
	NATHAN HYD. 3 FEED - 3959
	CHICAGO HYD. 3 FEED - OTHERS
BUILDER	W. & L. E.
YEAR BUILT	1935

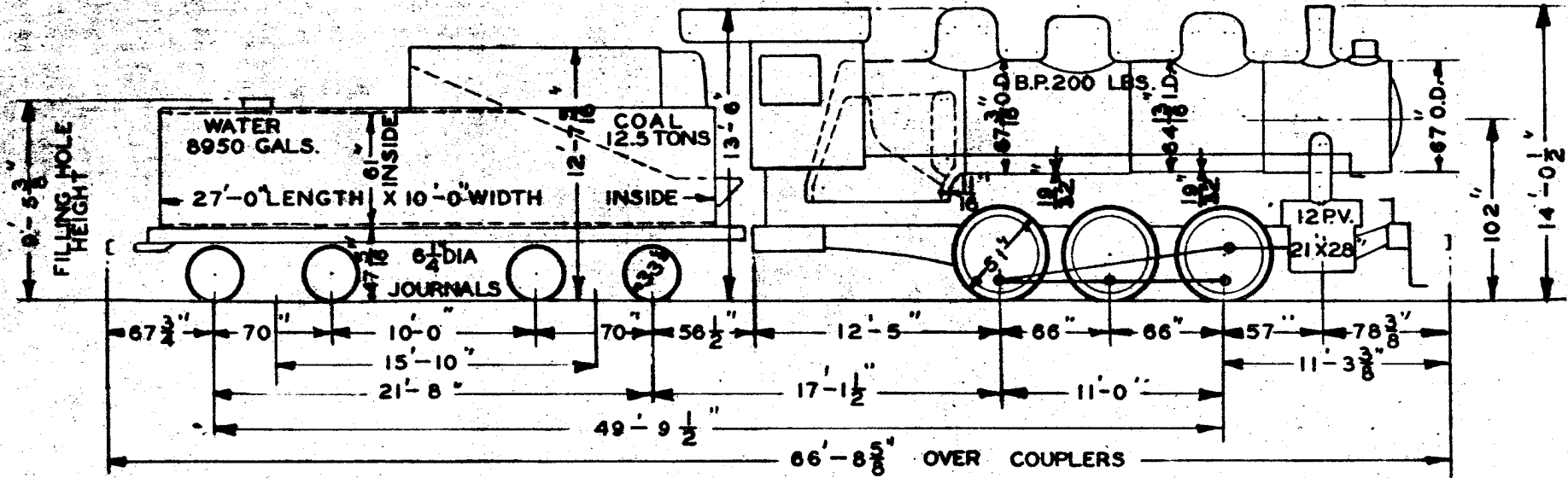
TRACTIVE POWER 41200 LBS.
MAX. CURVE 19°

NO. OF ENGINES 3

W.&L.E. DIST.

CLASS B-5
ENGS. 3965-3967

22



DR. DATE CH. V. CH. 2-27-30

WEIGHTS-WORK ORDER

WT. DRIVERS	187900	LBS.
WT. ENGR. TRUCK		LBS.
WT. TRL. TRUCK	187900	LBS.
WT. ENG. TOTAL	187900	LBS.
WT. TENDER-FULL	157100	LBS.
WT. ENG. & TENDER	325000	LBS.
TUBES, NO.	152	2" O.D.
FLUES, NO.	24	5-1/2" O.D.
TUBES & FLUES, LENGTH	15'-0"	
ARCH TUBES, NO.		O.D.
SUPERHTR. TUBES, NO.		O.D.

FIREBOX	72-1/8" X 66-1/4"	
HEATING SURFACES		
TUBES & FLUES	1702	SQ. FT.
FIREBOX	130	SQ. FT.
ARCH TUBES		SQ. FT.
SYPHONS	30	SQ. FT.
TOTAL	1862	SQ. FT.
SUPERHTR. H.S.	409	SQ. FT.
GRATE AREA	33	SQ. FT.
ALL JOURNALS	TIMKEN	

JOURNALS, DRIVING MAIN	8 1/2" DIA.
JOURNALS, DRIVING OTHERS	8 1/2" DIA.
JOURNALS, ENGR. TRUCK	
JOURNALS, TRL. TRUCK, F.	
JOURNALS, TRL. TRUCK, B.	
VALVE GEAR	BAKER
TRAVEL	6" LAP-7/8"
LEAD	1/8" EXH. CL. L.&L.
FACTOR OF ADHESION	4.08
CYLINDER	H.P. 1588
PERCENT BOILER TO CYL. H.P.	80.0

TENDER FRAME	CAST STEEL
TENDER TRUCK FRAME	
TENDER TRUCK BOLSTER	
SUPERHTR.	S.H.CO. TYPE-A
FW. HEATER	TYPE
STOKER	TYPE
REVERSE GEAR	ALCO TYPE-G
SAFETY VALVES	2 - 3"
ENG. FRAME BAR TYPE	C-STEEL
THROTTLE CHAMBERS	FRONT END

INJECTOR	R. & L. CHICAGO NO. 11
AIR BRAKE	6 ET EQUIPMENT
LUB.	NATHAN HYD. 3FEED - 3967
	CHICAGO HYD. 3FEED - OTHERS
NOTE - 1	
	3965-3966 BUILT - 1935
	3967 BUILT - 1937
BUILDER	W. & L. E.
YEAR BUILT	SEE NOTE - 1

157100

56700 56000 55200

TRACTIVE POWER 41200 LBS.
MAX. CURVE 19°

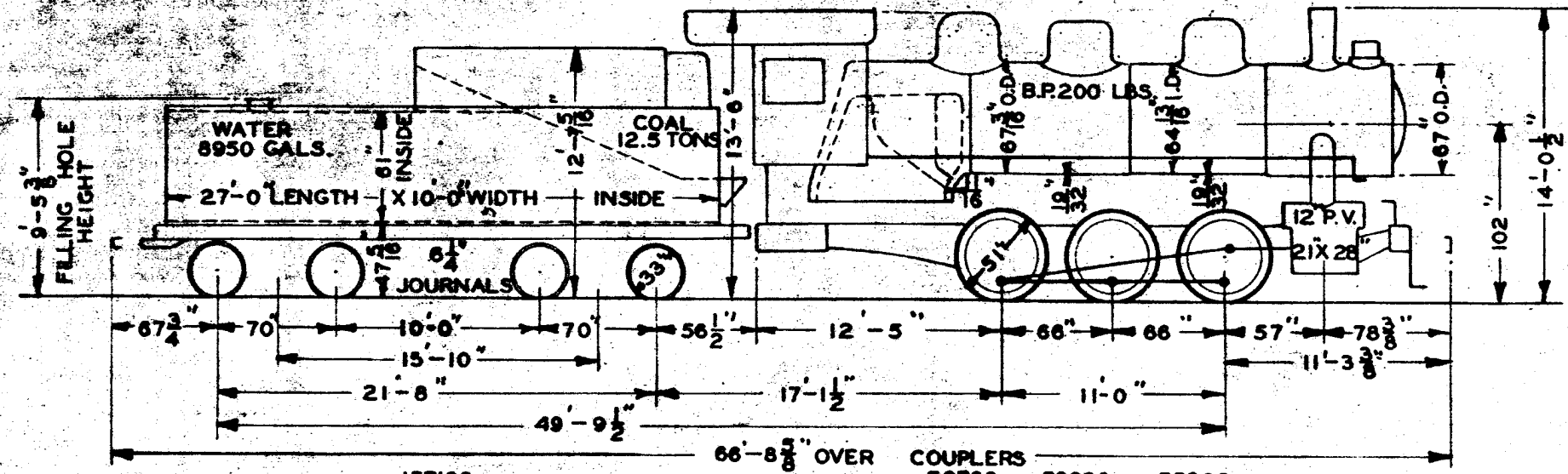
NO. OF ENGINES 6

W.&L.E. DIST.
ENGS.

CLASS B-5

23

3968, 3973-3975, 3977-3978.



DR. DATE 2-27-38
M.V. CH.

WEIGHTS-WORK ORDER

WT. DRIVERS	167900	LBS.
WT. ENGR. TRUCK		LBS.
WT. TRL. TRUCK		LBS.
WT. ENGR. TOTAL	167900	LBS.
WT. TENDER-FULL	157100	LBS.
WT. ENGR. & TENDER	325000	LBS.
TUBES, NO.	148	2" O.D.
FLUES, NO.	24	5-1/2" O.D.
TUBES & FLUES, LENGTH	15'-0"	
ARCH TUBES, NO.		O.D.
SUPERHTR. TUBES, NO.		O.D.

FIREBOX	72-1/8" X 66-1/4"
HEATING SURFACES	
TUBES & FLUES	1671 SQ. FT.
FIREBOX	130 SQ. FT.
ARCH TUBES	
SYPHONS	30 SQ. FT.
TOTAL	1831 SQ. FT.
SUPERHTR. H.S.	409 SQ. FT.
GRATE AREA	33 SQ. FT.
ALL JOURNALS	TIMKEN

JOURNALS, DRIVING, MAIN	
JOURNALS, DRIVING, OTHERS	8 1/2" DIA.
JOURNALS, ENGR. TRUCK	
JOURNALS, TRL. TRUCK, F.	
JOURNALS, TRL. TRUCK, B.	
VALVE GEAR	BAKER
TRAVEL	6" LAP 7/8"
LEAD	1/8" EXH. CL. L&L
FACTOR OF ADHESION	4.08
CYLINDER H.P.	1588
PERCENT BOILER TO CYL. H.P.	79.0

TENDER FRAME	
TENDER TRUCK FRAME	CAST STEEL
TENDER TRUCK BOLSTER	STEEL
SUPERHTR.	SH. CO. TYPE - A
FWHEATER	TYPE
STOKER	TYPE
REVERSE GEAR	ALCO TYPE - G
SAFETY VALVES	2 3"
ENG. FRAME	BAR TYPE - C. STEEL
THROTTLE	CHAMBERS-FRONT END

INJECTOR	R. & L. CHICAGO NO. 11
AIR BRAKE	6 ET EQUIPMENT
LUB. NATHAN HYD.	3 FEED
NOTE - 1	
3968 3973-3975	BUILT - 1937
3977 3978	BUILT - 1940
BUILDER	W. & L. E.
YEAR BUILT	SEE NOTE - 1

157100

66'-8 3/8" OVER COUPLERS
56700 58000 55200

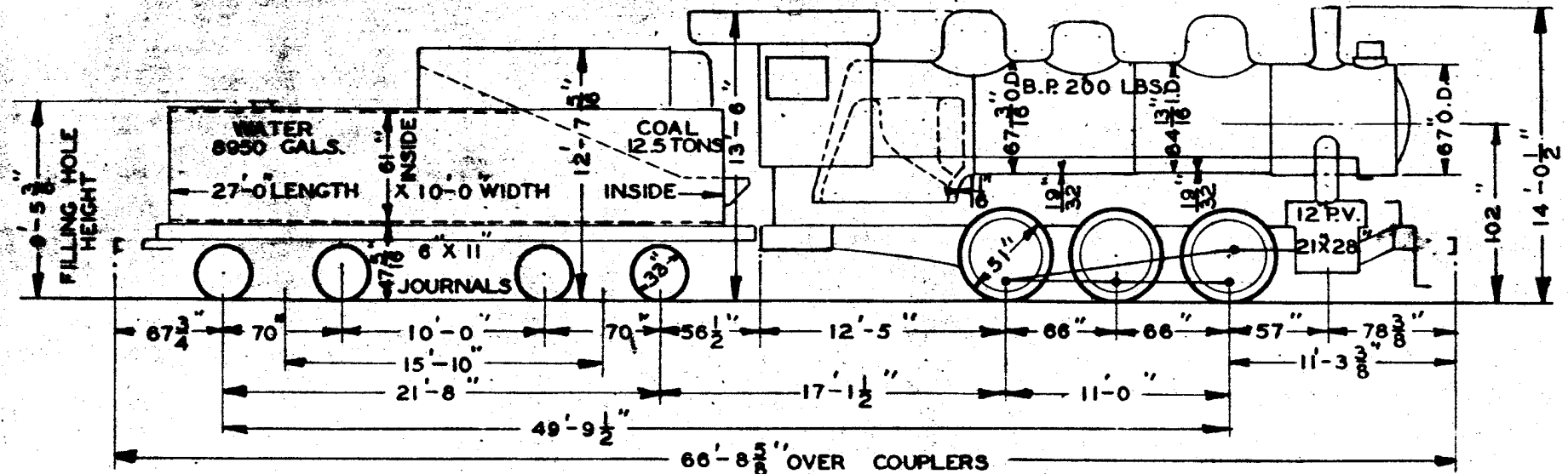
TRACTIVE POWER 41200 LBS.
MAX. CURVE 19°

NO. OF ENGINES 7

W.&L.E. DIST.
ENGS.

CLASS B-5
3969-3972, 3976, 3979-3980.

24



DR. V. CH. DATE
2-28-39

WEIGHTS-WORK ORDER

WT. DRIVERS	167900	LBS.
WT. ENG. TRUCK		LBS.
WT. TRL. TRUCK		LBS.
WT. ENG. TOTAL	167900	LBS.
WT. TENDER-FULL	161700	LBS.
WT. ENG. & TENDER	329600	LBS.
TUBES, NO.	148	2" O.D.
FLUES, NO.	24	5-1/2" O.D.
TUBES & FLUES, LENGTH		15'-0"
ARCH TUBES, NO.		O.D.
SUPERHTR. TUBES, NO.		O.D.

FIREBOX	72-1/8" X 66-1/4"
HEATING SURFACES	
TUBES & FLUES	1671 SQ.FT.
FIREBOX	130 SQ.FT.
ARCH TUBES	
SYPHONS	30 SQ.FT.
TOTAL	1831 SQ.FT.
SUPERHTR. H.S.	409 SQ.FT.
GRATE AREA	33 SQ.FT.

JOURNALS, DRIVING, MAIN	8 5/8" DIA.
JOURNALS, DRIVING, OTHERS	TIRKEN
JOURNALS, ENG. TRUCK	
JOURNALS, TRL. TRUCK, F.	
JOURNALS, TRL. TRUCK, B.	
VALVE GEAR	BAKER
TRAVEL	6" LAP-7/8"
LEAD	1/8" EXH. CL.-L.&L.
FACTOR OF ADHESION	4.08
CYLINDER H.P.	1588
PERCENT BOILER TO CYL. H.P.	79.0

TENDER FRAME	CAST STEEL
TENDER TRUCK FRAME	
TENDER TRUCK BOLSTER	
SUPERHTR.	S.H. CO. TYPE-A
FW. HEATER	TYPE
STOKER	TYPE
REVERSE GEAR	ALCO TYPE-G
SAFETY VALVES	2-3"
ENG. FRAME-BAR	TYPE-C STEEL
THROTTLE-CHAMBERS	FRONT END

INJECTOR	R. & L. CHICAGO NO. 11
AIR BRAKE	6 ET EQUIPMENT
LUB.	NATHAN HYD. 3 FEED
NOTE-1	
3969-3972	BUILT 1937
3976	BUILT 1938
3979-3980	BUILT 1940
BUILDER	W. & L. E.
YEAR BUILT	SEE NOTE-1

161700

66'-8 5/8" OVER COUPLERS

56700 56000 55200

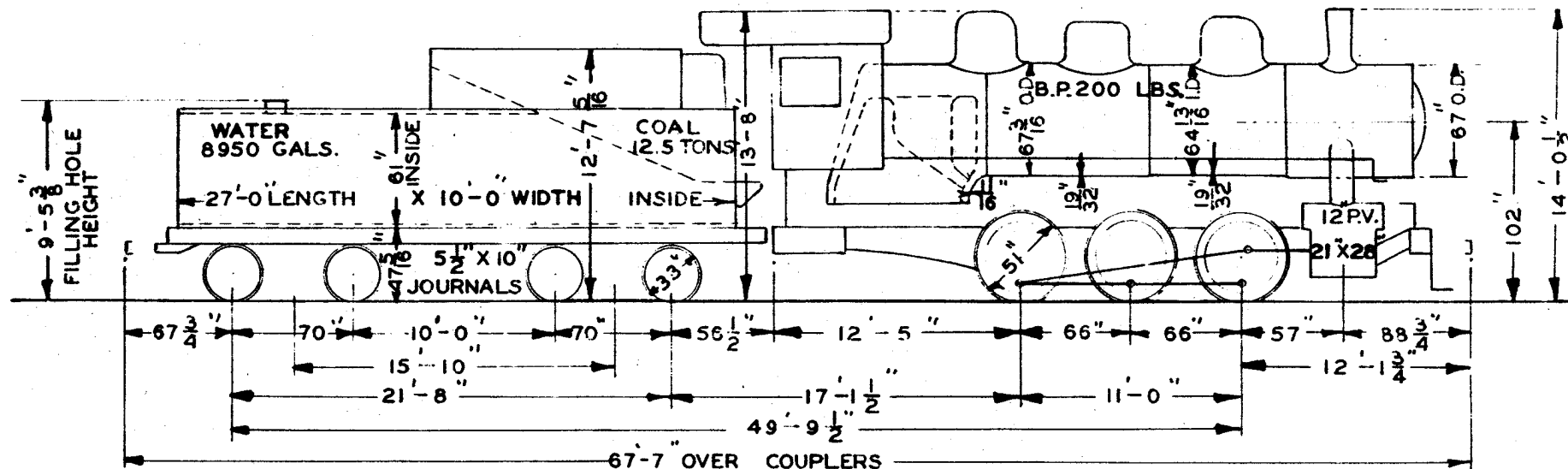
TRACTIVE POWER 41200 LBS.
MAX. CURVE 19°

NO. OF ENGINES 6

W.&L.E. DIST.

CLASS B-5
ENGS. 3981-3986

25



WEIGHTS-WORK ORDER

163100

60700

59700

47600

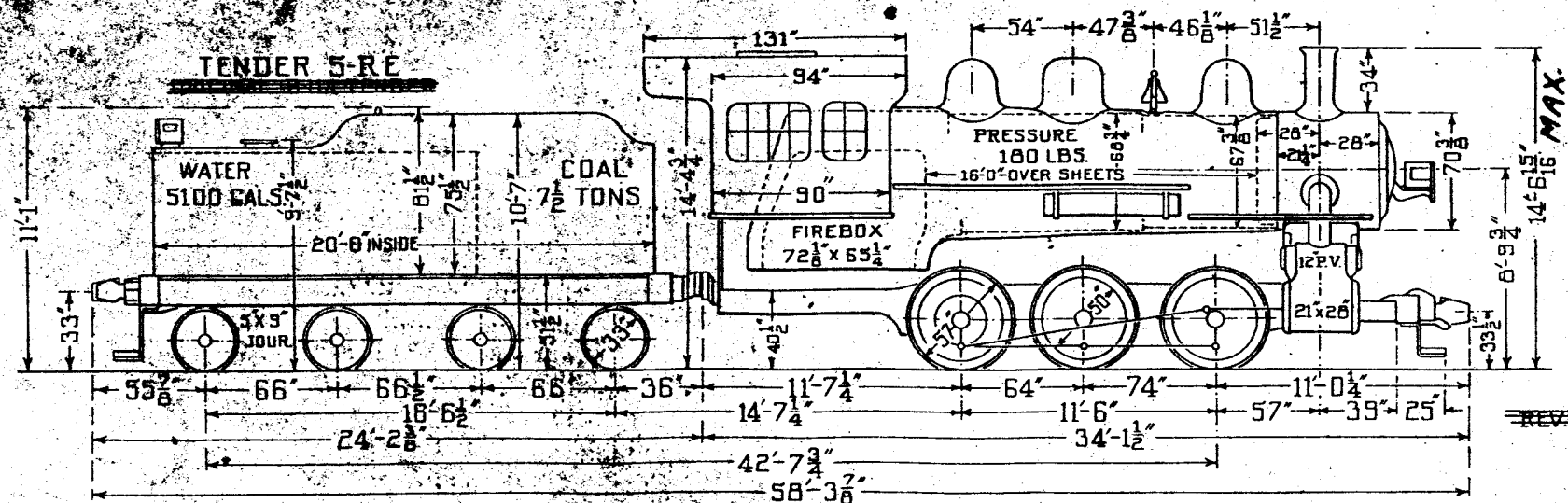
DR	DATE	WT. DRIVERS	168000	LBS.	FIREBOX	72-1/8" X 66-1/4"	JOURNALS, DRIVING, MAIN	9" X 12"	TENDER FRAME	} CAST	INJECTOR	R. & L. CHICAGO STD. T-35
CH	DATE	WT. ENG. TRUCK		LBS.	HEATING SURFACES		JOURNALS, DRIVING, OTHERS	9" X 12"	TENDER TRUCK FRAME		} STEEL	AIR BRAKE
CH	DATE	WT. TRL. TRUCK		LBS.	TUBES & FLUES	1671	JOURNALS, ENG. TRUCK		TENDER TRUCK BOLSTER	} S.H.CO. TYPE-A		LUB. CHICAGO MECH. NA
CH	DATE	WT. ENG. TOTAL	168000	LBS.	FIREBOX	122	JOURNALS, TRL. TRUCK, F.		SUPERHTR.		} TYPE	
CH	DATE	WT. TENDER-FULL	163100	LBS.	ARCH TUBES		JOURNALS, TRL. TRUCK, B.		FW. HEATER	} TYPE		
CH	DATE	WT. ENG. & TENDER	331100	LBS.	SYPHONS	30	VALVE GEAR	BAKER	STOKER		} TYPE	
CH	DATE	TUBES, NO.	148	2" O.D.	TOTAL	1823	TRAVEL	6" LAP-7/8"	REVERSE GEAR	} ALCO TYPE-G		
CH	DATE	FLUES, NO.	24	5-1/2" O.D.	SUPERHTR. H.S.	435	LEAD	1/8" EXH. CL-L. & L.	SAFETY VALVES		} 2 - 3"	
CH	DATE	TUBES & FLUES, LENGTH		15'-0"	GRATE AREA	33.1	FACTOR OF ADHESION	4.08	ENG. FRAME	} BAR TYPE - C. STEEL		BUILDERS ORDER NO.
CH	DATE	ARCH TUBES, NO.		O.D.			CYLINDER H.P.	1588	THROTTLE		} AMER. MULT. FRONT END	BUILDER
CH	DATE	SUPERHTR. TUBES, NO.		O.D.			PERCENT BOILER TO CYL. H.P.	77.8				YEAR BUILT

350 LBS. 60 INCHES

N.K.P. CLASS B-11A 26

ENGS. DESIGNED FOR 18°-30' CURVE

ENGS.
50
51
55
57



REV. 5-1942

58 500 57 000 57 500

WEIGHTS

WEIGHTS IN WORKING ORDER	
ON DRIVERS	173 000 LBS.
ON ENGINE TRUCK	
ON TRAILING TRUCK	
ENGINE TOTAL	173 000 LBS.
TENDER	101 000 LBS.
ENG. & TENDER	274 000 LBS.
TUBES, NO. 155	2" O.D.
FLUES, NO. 24	5 3/8" O.D.
TUBES & FLUES, LENGTH	16'-0"
ARCH TUBES, NO. 3	O.D. 3"

FIREBOX LENGTH	72 1/8"
" WIDTH	65 1/4"
" HEATING SURFACE	
TUBES & FLUES	1828 SQ. FT.
FIREBOX AND ARCH TUBES	142.3 SQ. FT.
SYPHONS	SQ. FT.
TOTAL HEATING SURFACE	1970.3 SQ. FT.
SUPERHEATER H.S.	441 SQ. FT.
GRATE AREA	32.7 SQ. FT.

JOURNALS-DRIVING MAIN	9" x 12"
" OTHERS	9" x 12"
ENG. TRUCK	
VALVE DATA	
TRAVEL	5 3/4" — LAP 7/8"
LEAD	3/16" — EXH. CL. L & L

VALVE GEAR	WALSCHAERT
FACTOR OF ADHESION	5.21
CYLINDER HORSE POWER	1429
PERCENT BOILER TO CYL. H.P.	88.3

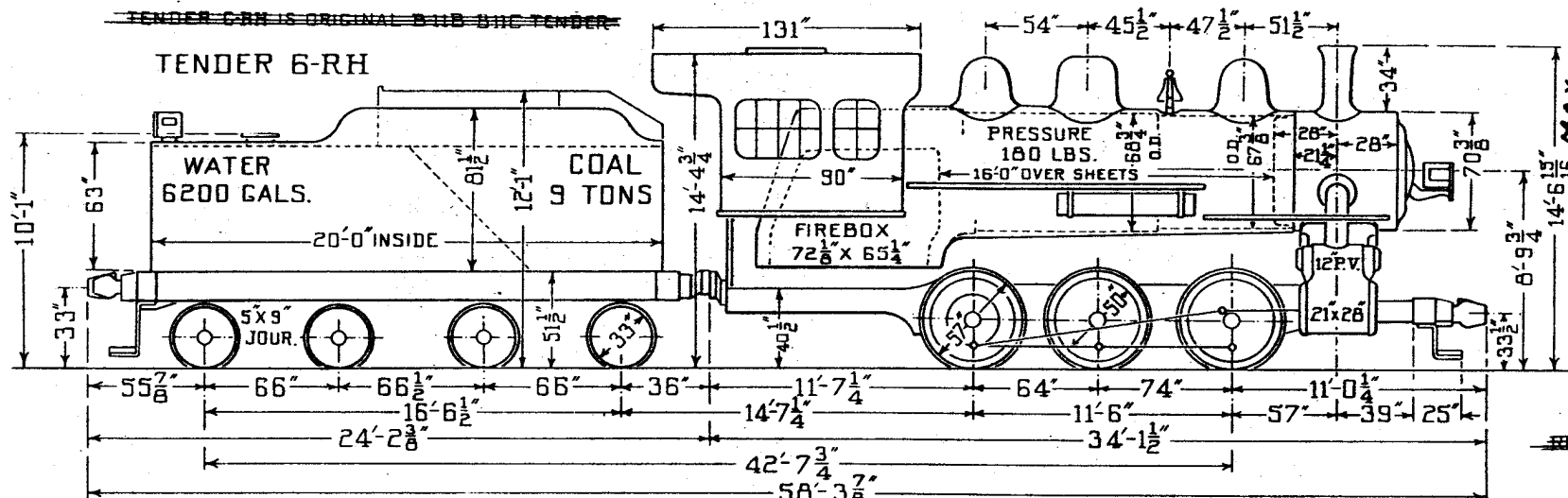
SUPERHEATER-TYPE	A
F.W. HEATER	
STOKER	
REVERSE GEAR	WALNUT ON ENG. 50
MELLIN ON ENGS. 50	51, 55, 57
BLDRS. ORDER NO.	B-1413
BUILDER	A. L. CO. — BROOKS
YEAR BUILT	OCT. - 1916

TRACTIVE POWER - 33150 LBS.

NO. OF ENGINES - ~~15~~ 6

N. K.P. CLASS B-11B 27

ENGS. DESIGNED FOR 18°30' CURVE



- ENGS.
 60
 62
 63
 64
 66
 68

WEIGHTS-

58 500 57 000 57 500

WEIGHTS IN WORKING ORDER	
ON DRIVERS	173 000 LBS.
ON ENGINE TRUCK	
ENGINE TOTAL	173 000 LBS.
TENDER	115 800 LBS.
ENG. & TENDER	288 800 LBS.
TUBES, NO. 155 - 2" O.D.	
FLUES, NO. 24 - 5 3/8" O.D.	
TUBES & FLUES, LENGTH	16'-0"
ARCH TUBES, NO. 3	O.L. 3"

FIREBOX LENGTH	72 7/8"
" WIDTH	65 1/4"
HEATING SURFACE	
TUBES & FLUES	1828 SQ. FT.
FIREBOX AND ARCH TUBES	142.3 SQ. FT.
SYPHONS	SQ. FT.
TOTAL HEATING SURFACE	1970.3 SQ. FT.
SUPERHEATER H.S.	441 SQ. FT.
GRATE AREA	32.7 SQ. FT.

JOURNALS - DRIVING MAIN	9" x 12"
" " OTHERS	9" x 12"
" " ENG. TRUCK	
VALVE DATA	
TRAVEL	5 3/4"
LEAD	3/16"
LAP	7/8"
EXH. CL.	L & L

VALVE GEAR	WALSCHAERT
FACTOR OF ADHESION	5.21
CYLINDER HORSE POWER	1429
PERCENT BOILER TO CYL. H.P.	88.3

SUPERHEATER - TYPE	A
F.W. HEATER	
STOKER	
BOOSTER	
REVERSE GEAR	RAGONNET

BLDRS. ORDER NO. - 5564 - 5573
 BUILDER - LIMA LOCO. WKS.
 YEAR BUILT - MAY - 1917

TRACTIVE POWER - 33 150 LBS.

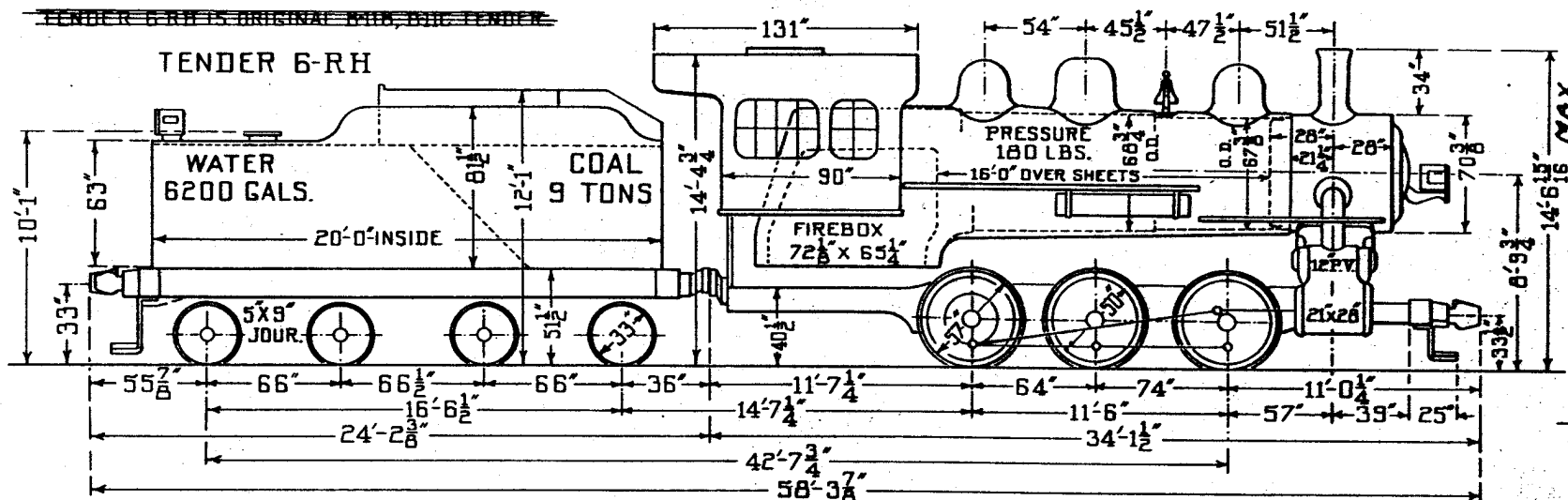
NO. OF ENGINES - ~~1~~ 6

N. K.P. CLASS B-11C 28

ENG. 74 HAS TENDER-BRX AS ON P-53

ENGS. DESIGNED FOR 18° 30' CURVE

ENGS.



- ~~70~~
- ~~71~~
- ~~72~~
- ~~73~~
- ~~74~~
- ~~75~~
- ~~76~~
- ~~77~~
- ~~78~~
- 79

58 500 57 000 57 500

WEIGHTS-

REVISED 3-17-30

WEIGHTS IN WORKING ORDER	
ON DRIVERS	173 000 LBS.
ON ENGINE TRUCK	
ON TRAILING TRUCK	
ENGINE TOTAL	173 000 LBS.
TENDER	115 800 LBS.
ENG. & TENDER	288 800 LBS.
TUBES, NO. 155 - 2" O.D.	
FLUES, NO. 24 - 5 3/8 O.D.	
TUBES & FLUES, LENGTH	16'-0"
ARCH TUBES, NO. 3 - O.D. 3"	

FIREBOX LENGTH	72 3/8"
" WIDTH	65 1/4"
HEATING SURFACE	
TUBES & FLUES	1828 SQ. FT.
FIREBOX AND ARCH TUBES	142.3 SQ. FT.
SYPHONS	
TOTAL HEATING SURFACE	1970.3 SQ. FT.
SUPERHEATER H.S.	441 SQ. FT.
GRATE AREA	32.7 SQ. FT.

JOURNALS-DRIVING MAIN	9" X 12"
" " OTHERS	9" X 12"
" " ENG. TRUCK	
VALVE DATA	
TRAVEL	5 3/4" - LAP 7/8"
LEAD	3/16" - EXH. CL. L&L.

VALVE GEAR	WALSCHAERT
FACTOR OF ADHESION	5.21
CYLINDER HORSE POWER	1429
PERCENT BOILER TO CYL. H.P.	88.3

SUPERHEATER-TYPE	A
F.W. HEATER	
STOKER	
BOOSTER	
REVERSE GEAR	RAGONNET

BLDRS. ORDER NO. - 5676-5685
 BUILDER LIMA LOCO. WORKS
 YEAR BUILT - APR.-1918

TRACTIVE POWER- 33150 LBS.

NO. OF ENGINES - 2

N. K.P.

CLASS B-11D

29

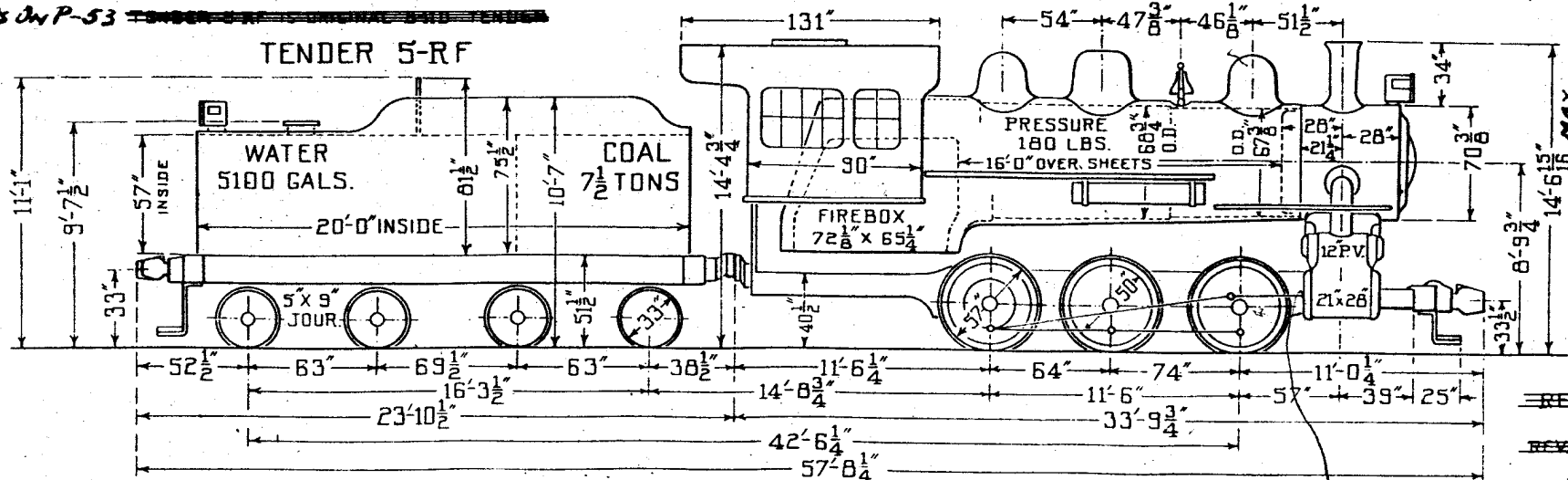
~~ENGS. 81 AND 82 HAVE TENDER BOX AS ON PAGE 27~~
 ENG. 80 HAS TENDER - BRX AS ON P. 53

ENGS. DESIGNED FOR 18°30' CURVE

ENGS.

80

81



REV 5 1942

REV AUG 1942

1946

WEIGHTS -

62620 60760 48980

REVISOR 347-SD

WEIGHTS IN WORKING ORDER	
ON DRIVERS	172 360 LBS.
ON ENGINE TRUCK	
ON TRAILING TRUCK	
ENGINE TOTAL	172 360 LBS.
TENDER	102 840 LBS.
ENG. & TENDER	275 200 LBS.
TUBES, NO. 163	2" O.D.
FLUES, NO. 22	5 1/2" O.D.
TUBES & FLUES, LENGTH	16' 0"
ARCH TUBES, NO. 3	O.D. 3"

FIREBOX LENGTH	72 1/8"
" WIDTH	65 1/4"
HEATING SURFACE	
TUBES & FLUES	18614 SQ. FT.
FIREBOX AND ARCH TUBES	142.3 SQ. FT.
SYPHONS	SQ. FT.
TOTAL HEATING SURFACE	20037 SQ. FT.
SUPERHEATER H.S.	382 SQ. FT.
GRATE AREA	32.7 SQ. FT.

JOURNALS - DRIVING MAIN	9" x 12"
" " OTHERS	9" x 12"
ENG. TRUCK	
VALVE DATA	
TRAVEL	5 3/4" - LAF 7/8
LEAD	3/16" - EXH. CL. L. & L.

VALVE GEAR	WALSCHAERT
FACTOR OF ADHESION	5.20
CYLINDER HORSE POWER	1429
PERCENT BOILER TO CYL. H.P.	89.2

SUPERHEATER - TYPE	A
F.W. HEATER	
STOKER	
BOOSTER	
REVERSE GEAR	RAGONNET
BLDRS. ORDER	
BUILDER	A.L.CO. - AT SCHENECTADY
YEAR BUILT	1913

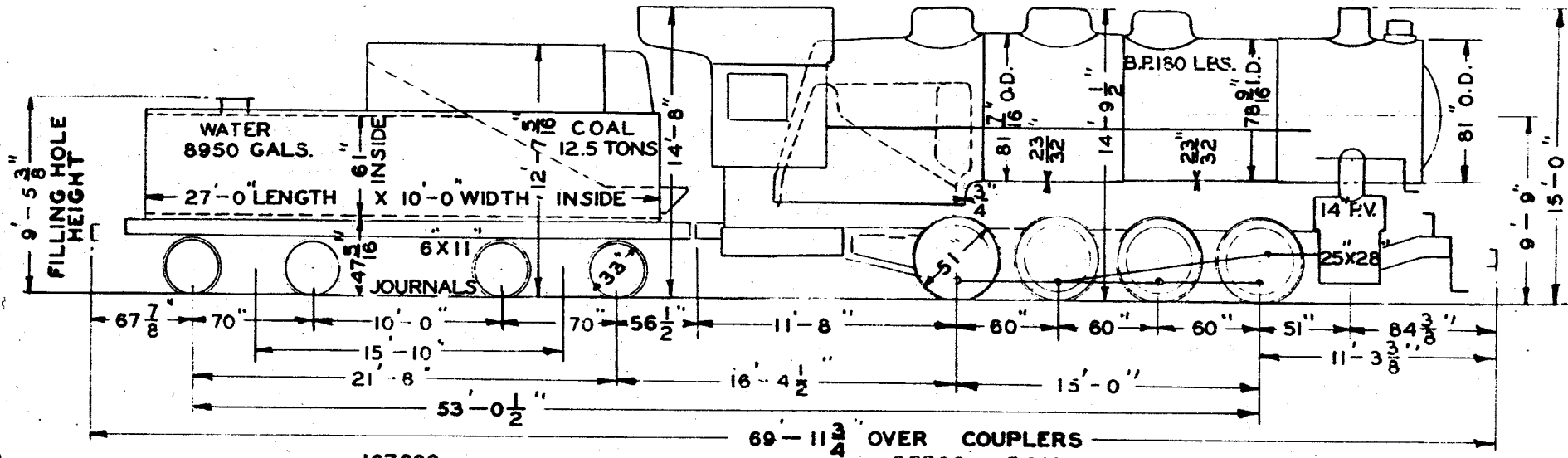
TRACTIVE POWER 52500 LBS.
MAX. CURVE 19°

NO. OF ENGINES 20

W.&L.E. DIST.

CLASS C-1A
ENGS. 5106-5125

31



WEIGHTS-WORK ORDER

167800

69'-11 3/4" OVER COUPLERS

55500 54600 54800 54300

DR	M.	CH.	DATE
			2-23-30
WT. DRIVERS	219	200	LBS.
WT. ENG. TRUCK			LBS.
WT. TRL. TRUCK			LBS.
WT. ENG. TOTAL	219	200	LBS.
WT. TENDER-FULL	167	800	LBS.
WT. ENG. & TENDER	387	000	LBS.
TUBES, NO.	224		2" O.D.
FLUES, NO.	36		5-1/2" O.D.
TUBES & FLUES, LENGTH	15'-0"		
ARCH TUBES, NO.	2		3" O.D.
SUPERHTR. TUBES, NO.			O.D.

FIREBOX	102-1/8" X 66-1/4"
TUBES & FLUES	2522 SQ.FT.
FIREBOX HEATING SURFACES	190 SQ.FT.
ARCH TUBES	12 SQ.FT.
SYPHONS	57 SQ.FT.
TOTAL	2781 SQ.FT.
SUPERHTR. H.S.	637 SQ.FT.
GRATE AREA	46.6 SQ.FT.

JOURNALS, DRIVING, MAIN	10" X 12"
JOURNALS, DRIVING, OTHERS	9" X 12"
JOURNALS, ENG. TRUCK	
JOURNALS, TRL. TRUCK, F.	
JOURNALS, TRL. TRUCK, B.	
VALVE GEAR	BAKER
TRAVEL	6-3/4" LAP 1"
LEAD	1/8" EXH. CL. L.&L.
FACTOR OF ADHESION	4.17
CYLINDER H.P.	2027
PERCENT BOILER TO CYL. H.P.	96.8

TENDER FRAME	
TENDER TRUCK FRAME	CAST
TENDER TRUCK BOLSTER	STEEL
SUPERHTR.	S.H.CO. TYPE A
FW. HEATER	TYPE
STOKER	TYPE
REVERSE GEAR	ALCO TYPE G
SAFETY VALVES	3 3"
ENG. FRAME - BAR TYPE	C. STEEL
THROTTLE - CHAMBERS	FRONT END

INJECTOR R.&L. CHICAGO NO. 11
AIR BRAKE 6 ET EQUIPMENT

NOTE - 1

5106-5110	1928
5111-5115	1929
5116-5125	1930

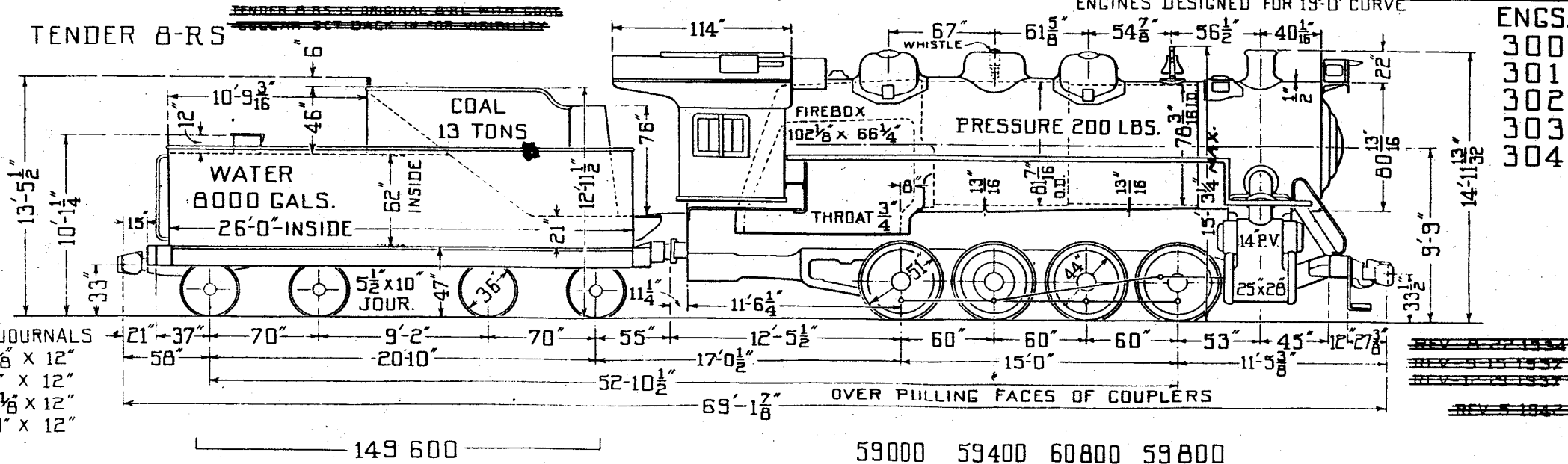
BUILDER _____ W.&L.E.
YEAR BUILT _____ SEE NOTE - 1

TRACTION POWER 58 350 LBS.

NO. OF ENGS.-5

N. K. P. CLASS C-17 32

ENGINES DESIGNED FOR 19° 0' CURVE



- ENGS.
300
301
302
303
304

NOTE 1-DRIVING JOURNALS
RIGHT MAIN - 11 1/8" X 12"
LEFT MAIN - 11" X 12"
R. OTHERS - 10 1/8" X 12"
L. OTHERS - 10" X 12"

WEIGHTS-

149 600

59000 59400 60800 59800

WEIGHTS IN WORKING ORDER	
ON DRIVERS	239 000 LBS.
ON ENGINE TRUCK	
ENGINE TOTAL	239 000 LBS.
TENDER	149 600 LBS.
ENG. & TENDER	388 600 LBS.
TUBES, NO. 181	2 1/2" O.D.
FLUES, NO. 36	5 1/2" O.D.
TUBES & FLUES, LENGTH	15'-0"
ARCH TUBES, NO.	O.D.
SUPERHEATER TUBES,	O.D. 1 1/2"

FIREBOX LENGTH	102 1/8"
" WIDTH	66 1/4"
HEATING SURFACES	
TUBES & FLUES	2360 SQ. FT.
FIREBOX	186 SQ. FT.
ARCH TUBES	54 SQ. FT.
SYPHONS	54 SQ. FT.
TOTAL HEATING SURFACE	2600 SQ. FT.
SUPERHEATER H.S.	637 SQ. FT.
GRATE AREA	46.9 SQ. FT.

JOURNALS-DRIVING MAIN	5 1/2"
" " OTHERS	5"
" " ENG. TRUCK	5"
VALVE DATA	
TRAVEL	6 3/4"
LEAD	1/8"
LAP	1"
EXH. CL. L & L.	

NOTE-1	
CRANK PINS-MAIN	7 1/2" x 8" & 8 1/2" x 6"
VALVE GEAR	BAKER
FACTOR OF ADHESION	4.09
CYL. HORSE POWER	2252
PERCENT BOILER TO CYL. H.P.	82.9
TENDER FRAME	CAST STEEL
TENDER TRUCK FRAME	CAST STEEL
" " BOLSTER	CAST STEEL

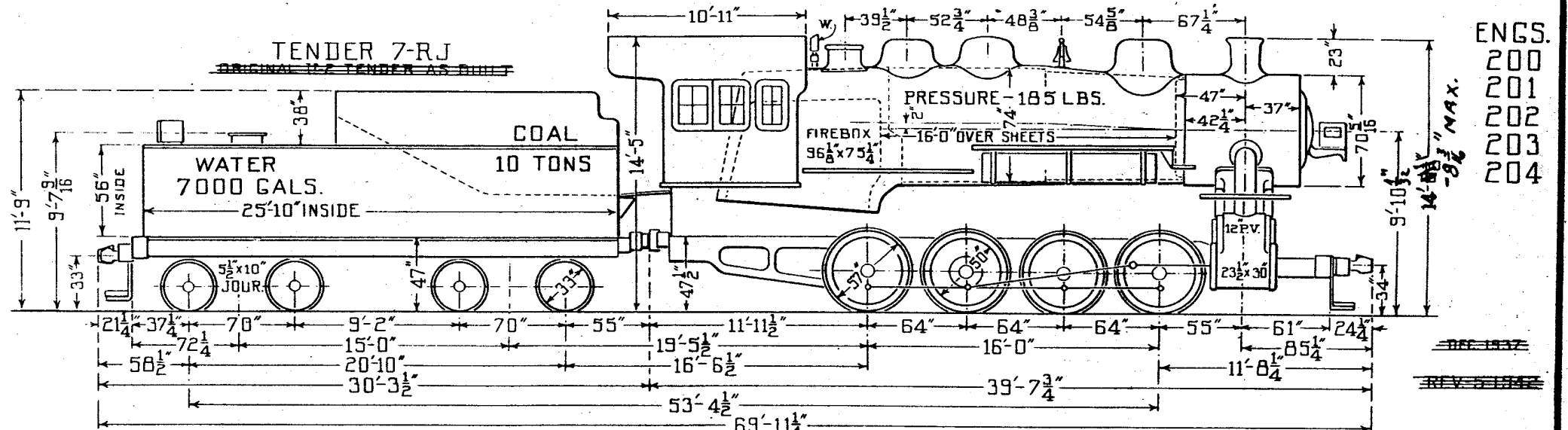
SUPERHEATER-TYPE	A
F.W. HEATER	
STOKER	
BOOSTER	
REVERSE GEAR	ALCO. TYPE-E
SAFETY VALVES	3 OF 3" COALE
BUILDERS ORDER	CO-1129
BUILDER	LIMA LOCO. WORKS
YEAR BUILT	1934

TRACTIVE POWER - 45 700 LBS.

NO. OF ENGINES - 5

N. K.P.

CLASS U-2 33



WEIGHTS -

54100 54200 54200 54000

3-20-50

REVISED

WEIGHTS IN WORKING ORDER	
ON DRIVERS	216 500 LBS.
ON ENGINE TRUCK	
ON TRAILING TRUCK	
ENGINE TOTAL	216 500 LBS.
TENDER	137 300 LBS.
ENG. & TENDER	353 800 LBS.
TUBES, NO. - 177 - 2" O.D.	
FLUES, NO. - 28 - 5 1/2" O.D.	
TUBES & FLUES, LENGTH	16'-0"
ARCH TUBES, NO. 4 - O.D. 3"	

FIREBOX LENGTH	36 7/8"
" WIDTH	75 1/4"
HEATING SURFACE	
TUBES & FLUES	2115.4 SQ. FT.
FIREBOX AND ARCH TUBES	187 SQ. FT.
SYPHONS	
TOTAL HEATING SURFACE	2302.4 SQ. FT.
SUPERHEATER H.S.	526 SQ. FT.
GRATE AREA	50.2 SQ. FT.

JOURNALS - DRIVING MAIN	10" x 17"
" " OTHERS	9" x 12"
ENG. TRUCK	
VALVE DATA	
TRAVEL	6" LAP 1"
LEAD	1/16" EXH. CL. L & L.

VALVE GEAR	WALSCHAERT
FACTOR OF ADHESION	4.74
CYLINDER HORSE POWER	1841
PERCENT BOILER TO CYL. H.P.	82.7

SUPERHEATER - TYPE	A
F.W. HEATER	
STOKER	
BOOSTER	
REVERSE GEAR	RAGONNET
R.R. LOT NO.	204
BLDRS. ORDER NO.	123
BUILDER	LIMA LOCO. WORKS
YEAR BUILT	MAY - 1918

TRACTIVE POWER - 53950 LBS.

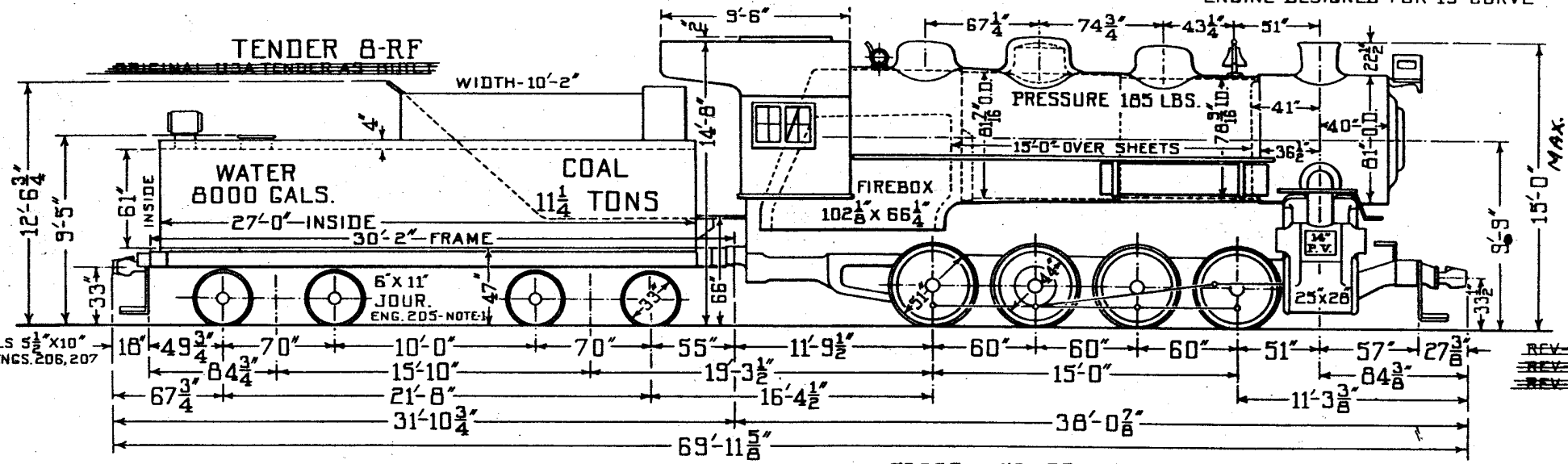
NO. OF ENGINES - 3

N. K.P. CLASS U-3A

ENGINE DESIGNED FOR 15° CURVE

34

ENGS.
205
206
207



NOTE-1: JOURNALS 5 1/2" X 10" ON TENDERS OF ENGS. 206, 207

REV. 11-8-1940
REV. AUG. 1942
REV. MAR. 1947

WEIGHTS-

53300 53400 54200 53100

WEIGHTS IN WORKING ORDER
ON DRIVERS 214 000 LBS.
ON ENGINE TRUCK
ON TRAILING TRUCK
ENGINE TOTAL 214 000 LBS.
TENDER 154 000 LBS.
ENG. & TENDER 368 000 LBS.
TUBES, NO. - 230 - 2" O. D.
FLUES, NO. - 36 - 5 1/2" O. D.
TUBES & FLUES, LENGTH 15'-0"
ARCH TUBES, NO. 3 - O. D. 3"

FIREBOX LENGTH 102 1/8"
" WIDTH 66 1/4"
" HEATING SURFACE
TUBES & FLUES 25685 SQ. FT.
FIREBOX AND ARCH TUBES - 208 SQ. FT.
SYPHONS SQ. FT.
TOTAL HEATING SURFACE - 27765 SQ. FT.
SUPERHEATER H.S. 662 SQ. FT.
GRATE AREA 47 SQ. FT.

JOURNALS - DRIVING MAIN 10" x 12"
" " OTHERS 9" x 12"

VALVE DATA
TRAVEL 5 3/4" - LAP 1"
LEAD 1/8" - EXH. CL. L. & L.

VALVE GEAR BAKER
FACTOR OF ADHESION 3.97
CYLINDER HORSE POWER 2083
PERCENT BOILER TO CYL. H.P. - 88.53

SUPERHEATER - TYPE A
F.W. HEATER
STOKER
BOOSTER
REVERSE GEAR LEWIS

BLDRS. ORDER NO. 226
BUILDER LIMA LOCO. WORKS
YEAR BUILT 1920

TRACTIVE POWER - 53950 LBS.

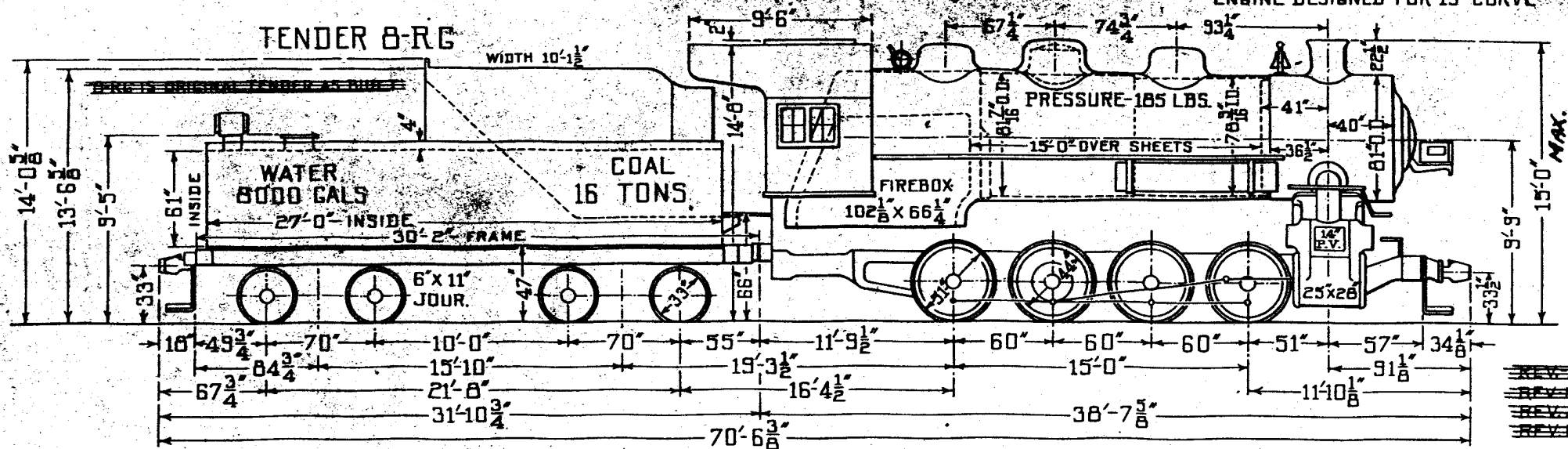
NO. OF ENGINES 1

N. K. P.

CLASS U-3B

ENGINE DESIGNED FOR 19° CURVE

35



- ENGS
- 210
- 211
- 212
- 213
- ~~214~~
- 215
- 216
- 217
- 218
- 219

~~REV. AUG 1946~~
~~REV. MAR 1946~~
~~REV. JAN 1947~~
~~REV. MAR 1947~~

WEIGHTS-

55700 55800 53000 52000

REVISED 3-17-50

WEIGHTS IN WORKING ORDER	
ON DRIVERS	216 500 LBS.
ON ENGINE TRUCK	
ON TRAILING TRUCK	
ENGINE TOTAL	216 500 LBS.
TENDER	167 000 LBS.
ENR. & TENDER	383 500 LBS.
TUBES, NO. - 230 - 2" O.D.	
FLUES, NO. - 36 - 5 1/2" O.D.	
TUBES & FLUES, LENGTH	15'-0"
ARCH TUBES, NO. 4 - O.D. 3"	

FIREBOX LENGTH	102 1/8"
" WIDTH	66 1/4"
" HEATING SURFACE	
TUBES & FLUES	2568.6 SQ. FT.
FIREBOX AND ARCH TUBES	214 SQ. FT.
SYPHONS	47 SQ. FT.
TOTAL HEATING SURFACE	2782.6 SQ. FT.
SUPERHEATER H.S.	662 SQ. FT.
GRATE AREA	47 SQ. FT.

JOURNALS - DRIVING MAIN	10" x 12"
" " OTHERS	9" x 12"
ENG. TRUCK	
VALVE DATA	
TRAVEL	5 3/4"
LEAD	1/8"
LAP	1"
EXH. CL.	L. & L.

VALVE GEAR	BAKER
FACTOR OF ADHESION	4.01
CYLINDER HORSE POWER	2083
PERCENT BOILER TO CYL. H.P.	89.29

SUPERHEATER - TYPE	A
F.W. HEATER	
STOKER	
BOOSTER	
REVERSE GEAR	RAGONNET
R.R. LOT NO.	211
BLDRS. ORDER NO.	1067
BUILDER	LIMA LOCO. WORKS
YEAR BUILT	JUNE-1924

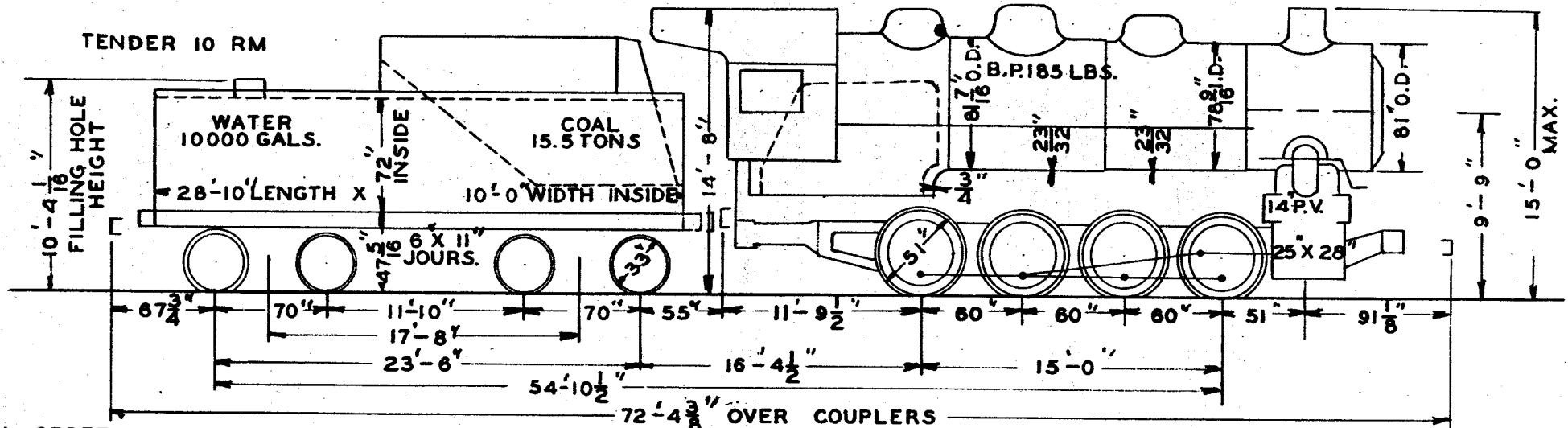
TRACTIVE POWER 53950 LBS. .
MAX. CURVE -19°

NO. OF ENGINES -1

N.K.P.

CLASS -U-3B
ENG. 214.

36



WEIGHTS-WORK ORDER

92500

91500

55700

55800

53000

52000

WT. DRIVERS 216500 LBS.
WT. ENG. TRUCK _____ LBS.
WT. TRAIL TRUCK _____ LBS.
WT. ENG. TOTAL 216500 LBS.
WT. TENDER-FULL 184000 LBS.
WT. ENG. & TENDER 400500 LBS.
TUBES, NO. 230 2" O.D.
FLUES, NO. 36 5-1/2" O.D.
ARCH TUBES, NO. 4 3" O.D.
TUBES & FLUES, LENGTH-15'-0"

FIREBOX 102-1/8" X 66-1/4"
HEATING SURFACES _____
TUBES & FLUES 2568.6 SQ. FT.
FIREBOX _____ SQ. FT.
ARCH TUBES } 214 SQ. FT.
SYPHONS _____ SQ. FT.
TOTAL 2782.6 SQ. FT.
SUPERHTR. 662 SQ. FT.
GRATE AREA 47 SQ. FT.

JOURNALS DRIVING MAIN 10" X 12"
JOURNALS DRIVING OTHERS 9" X 12"
JOURNALS ENG. TRUCK _____
JOURNALS TRL. TRUCK _____
VALVE GEAR _____ BAKER
TRAVEL 6-3/4" LAP-1"
LEAD 1/8" EXH. CL. L. & L.
FACTOR OF ADHESION 4.01
CYLINDER H.P. 2083
PERCENT BOILER TO CYL. H.P. 89.3

TENDER FRAME
TENDER TRUCK FRAME } CAST
TENDER TRUCK BOLSTER } STEEL
SUPERHTR. S.H. CO. TYPE-A
F.W. HEATER
STOKER
REVERSE GEAR RAGONNET
SAFETY VALVES 3 3"
ENG. FRAME BARTYPE-C STEEL
THROTTLE DOME TYPE

INJECTOR
AIR BRAKE 6 ET EQUIPMENT

BUILDERS ORDER NO. 1067
BUILDER LIMA LOCO. WORKS
YEAR BUILT 1924

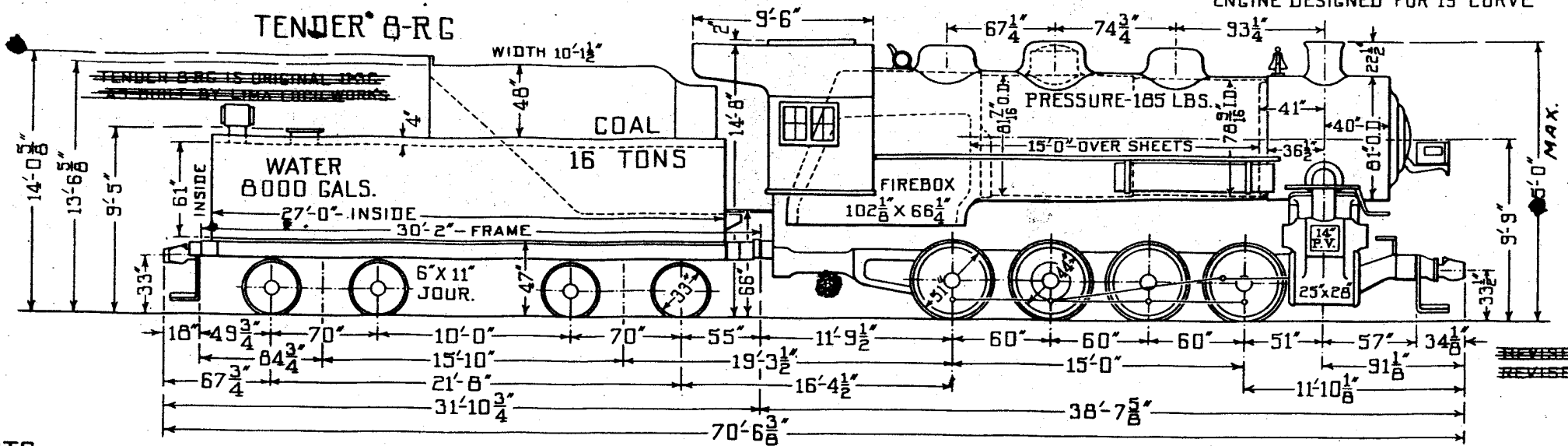
DR. M. CH. DATE

TRACTIVE POWER - 53950 LBS.

• NO. OF ENGINES - 10

N. K.P. CLASS U-3C

ENGINE DESIGNED FOR 19° CURVE



- ENGR 220
- 221
- 222
- 223
- 224
- 225
- 226
- 227
- 228
- 229

~~REVISED 3-1947~~
~~REVISED 3-1947~~

WEIGHTS -

WEIGHTS IN WORKING ORDER	
ON DRIVERS	221 000 LBS.
ON ENGINE TRUCK	
ON TRAILING TRUCK	
ENGINE TOTAL	221 000 LBS.
TENDER	167 000 LBS.
ENG. & TENDER	388 000 LBS.
TUBES, NO. - 230 - 2" O.D.	
FLUES, NO. - 36 - 5 1/2" O.D.	
TUBES & FLUES, LENGTH	15'-0"
ARCH TUBES, NO. 4 - O.D. 3"	

FIREBOX LENGTH	102 1/8"
" WIDTH	66 1/4"
" HEATING SURFACE	
TUBES & FLUES	2568.65 SQ. FT.
FIREBOX AND ARCH TUBES	214 SQ. FT.
SYPHONS	
TOTAL HEATING SURFACE	2782.5 SQ. FT.
SUPERHEATER H.S.	662 SQ. FT.
GRATE AREA	47 SQ. FT.

JOURNALS - DRIVING MAIN	10" X 12"
" " OTHERS	9" X 12"
ENG. TRUCK	
VALVE DATA	
TRAVEL	5 3/4" LAP 1"
LEAD	1/8" EXH. CL. L. & L.

VALVE GEAR	BAKER
FACTOR OF ADHESION	4.10
CYLINDER HORSE POWER	2083
PERCENT BOILER TO CYL. H.P.	89.28

SUPERHEATER - TYPE	A
F.W. HEATER	
STOKER	
BOOSTER	
REVERSE GEAR	RAGONNET
R.R. LOT NO.	212
BLDRS. ORDER NO.	1078
BUILDER	LIMA LOCO. WORKS
YEAR BUILT	JUNE-1923

56 825 56 925 54 125 53 125

R.L.A.

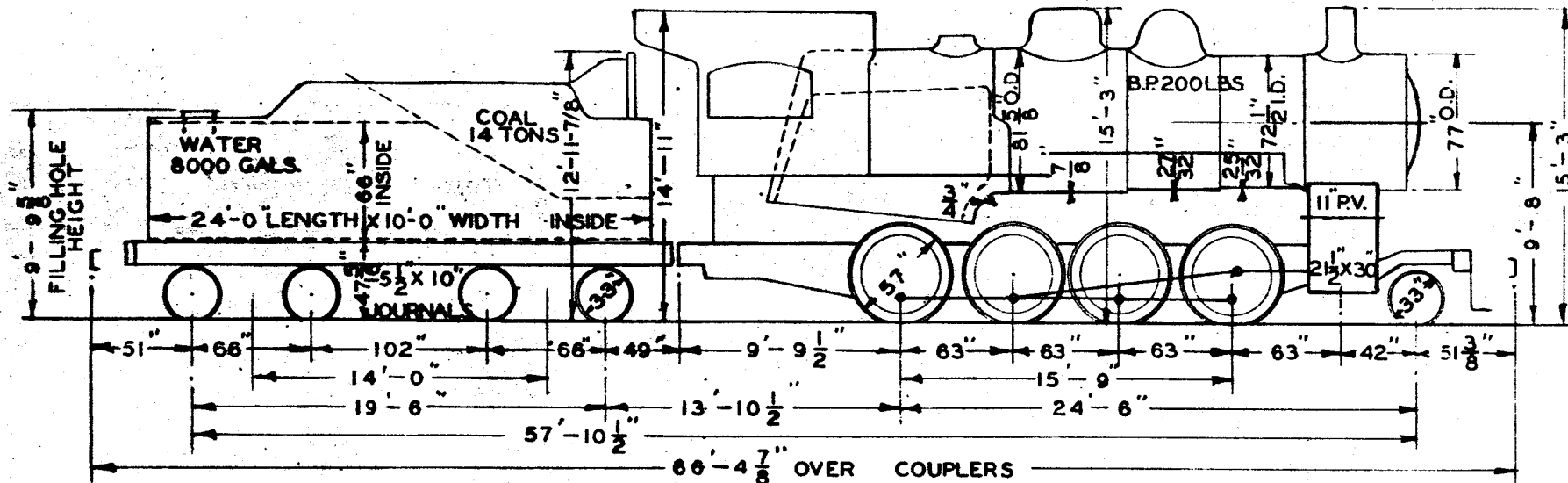
TRACTIVE POWER 41400 LBS.
MAX. CURVE 18°

NO. OF ENGINES 1

W.&L.E. DIST.

CLASS G-1
ENGS. 4156

38



WEIGHTS-WORK ORDER

153000

47200 46800 47200 46900 21500

[W.&L.E. CLASS H-6C]

WT. DRIVERS 188100 LBS.
WT. ENG. TRUCK 21500 LBS.
WT. TRL. TRUCK _____ LBS.
WT. ENG. TOTAL 209600 LBS.
WT. TENDER-FULL 153000 LBS.
WT. ENG. & TENDER 382600 LBS.
TUBES, NO. 188 2-1/4" O.D.
FLUES, NO. 32 5-1/2" O.D.
TUBES & FLUES, LENGTH 14'-6"
ARCH TUBES, NO. 3 3" O.D.
SUPERHTR. TUBES, NO. O.D.

FIREBOX 108-1/4" X 67-1/4"
HEATING SURFACES
TUBES & FLUES 2258 SQ.FT.
FIREBOX 188 SQ.FT.
ARCH TUBES 19.5 SQ.FT.
SYPHONS _____ SQ.FT.
TOTAL 2465.5 SQ.FT.
SUPERHTR. H.S. 527 SQ.FT.
GRATE AREA 50.5 SQ.FT.

JOURNALS, DRIVING, MAIN 9-1/2" X 12"
JOURNALS, DRIVING, OTHERS 9-1/2" X 12"
JOURNALS, ENG. TRUCK 6-1/2" X 12"
JOURNALS, TRL. TRUCK, F. _____
JOURNALS, TRL. TRUCK, B. _____
VALVE GEAR STEPHENSON _____
TRAVEL 5-1/2" LAP
LEAD EXH. CL.
FACTOR OF ADHESION 4.55
CYLINDER H.P. 1664
PERCENT BOILER TO CYL. H.P. 106.9

TENDER FRAME BUILT UP
TENDER TRUCK FRAME ARCH BAR
TENDER TRUCK BOLSTER C. STEEL
SUPERHTR. S.H.CO. TYPE A
FW. HEATER TYPE _____
STOKER TYPE _____
REVERSE GEAR LEWIS TYPE
SAFETY VALVES 3 3"
ENG. FRAME BAR TYPE C. STEEL
THROTTLE CHAMBERS DOME TYPE

INJECTOR R.&L. NATHAN MON. NO. 1
AIR BRAKE NO. 1 EQUIPMENT
LUB. CHICAGO HYD. 3 FEED

BUILDERS ORDER NO. _____
BUILDER A.L. CO.
YEAR BUILT 1905

DR. CH. DATE 2-21-50

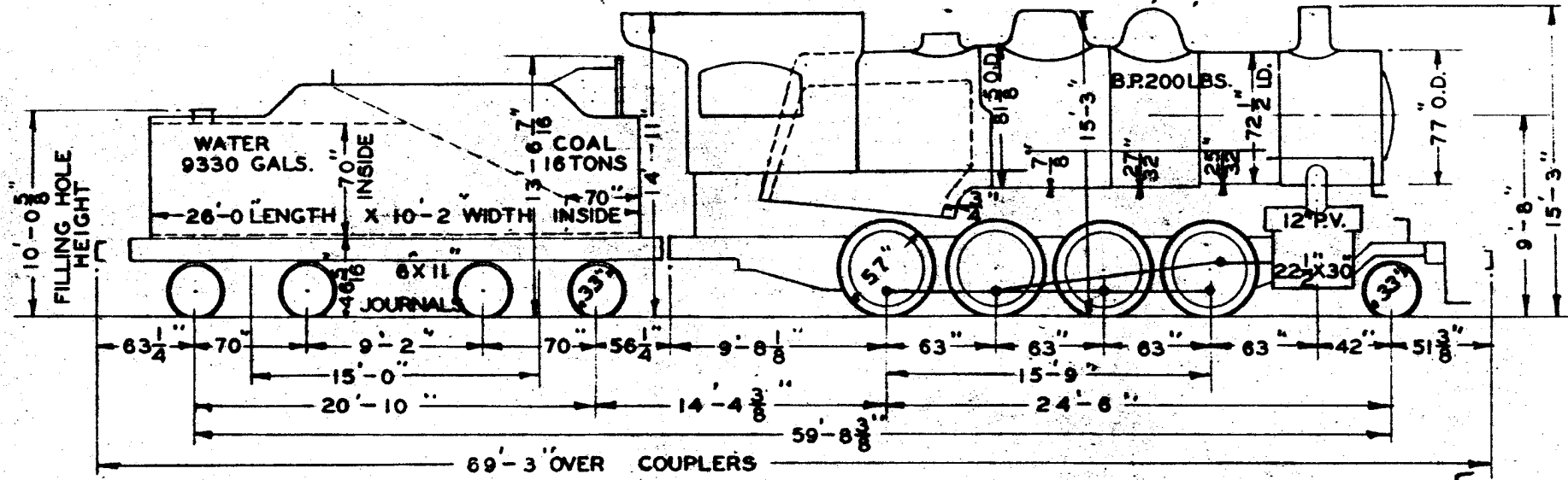
TRACTIVE POWER 45300 LBS.
MAX. CURVE 18°

NO. OF ENGINES ~~4~~ 4
ENGS. 4301, 4303, ~~4305~~ 4308, ~~4311~~ ~~4313~~ ~~4315~~ ~~4317~~ ~~4318~~ 4320.

W.&L.E. DIST.

CLASS G-2

39



WEIGHTS-WORK ORDER

WT. DRIVERS	193700 LBS.
WT. ENG. TRUCK	23100 LBS.
WT. TRL. TRUCK	LBS.
WT. ENG. TOTAL	216800 LBS.
WT. TENDER-FULL	180300 LBS.
WT. ENG. & TENDER	397100 LBS.
TUBES, NO.	188 2-1/4" O.D.
FLUES, NO.	32 5-1/2" O.D.
TUBES & FLUES, LENGTH	14'-6"
ARCH TUBES, NO.	3 3" O.D.
SUPERHTR. TUBES, NO.	O.D.

FIREBOX	108-1/8" X 67-1/4"
HEATING SURFACES	
TUBES & FLUES	2258 SQ.FT.
FIRE BOX	188 SQ.FT.
ARCH TUBES	19.5 SQ.FT.
SYPHONS	SQ.FT.
TOTAL	2485.5 SQ.FT.
SUPERHTR. H.S.	527 SQ.FT.
GRATE AREA	50.5 SQ.FT.

JOURNALS, DRIVING, MAIN	9-1/2" X 12"
JOURNALS, DRIVING, OTHERS	9-1/2" X 12"
JOURNALS, ENG. TRUCK	6-1/2" X 12"
JOURNALS, TRL. TRUCK, F.	
JOURNALS, TRL. TRUCK, B.	
VALVE GEAR	BAKER
TRAVEL	6-1/4" LAP 1"
LEAD	1/8" EXH. CL. L. & L.
FACTOR OF ADHESION	4.28
CYLINDER	H.P. 1822
PERCENT BOILER TO CYL. H.P.	97.6

TENDER FRAME	BUILT UP
TENDER TRUCK FRAME	CAST
TENDER TRUCK BOLSTER	STEEL
SUPERHTR.	S.H.CO. TYPE A
FW. HEATER	TYPE
STOKER	TYPE
REVERSE GEAR	LEWIS TYPE
SAFETY VALVES	3 3"
ENG. FRAME	BAR TYPE C. STEEL
THROTTLE CHAMBERS	DOME TYPE

INJECTOR	R. & L. NATHAN MON. NO. 11
AIR BRAKE	6 ET EQUIPMENT
LUB.	
	CHICAGO HYD. 3 FEED / 4317, 4318
	DETROIT MOD. 5 FEED / 4307
	CHICAGO HYD. D-4.5 FEED / OTHERS
BUILDERS ORDER NO.	
BUILDER	A. L. CO.
YEAR BUILT	1305

[W.&L.E. CLASS H-6B]

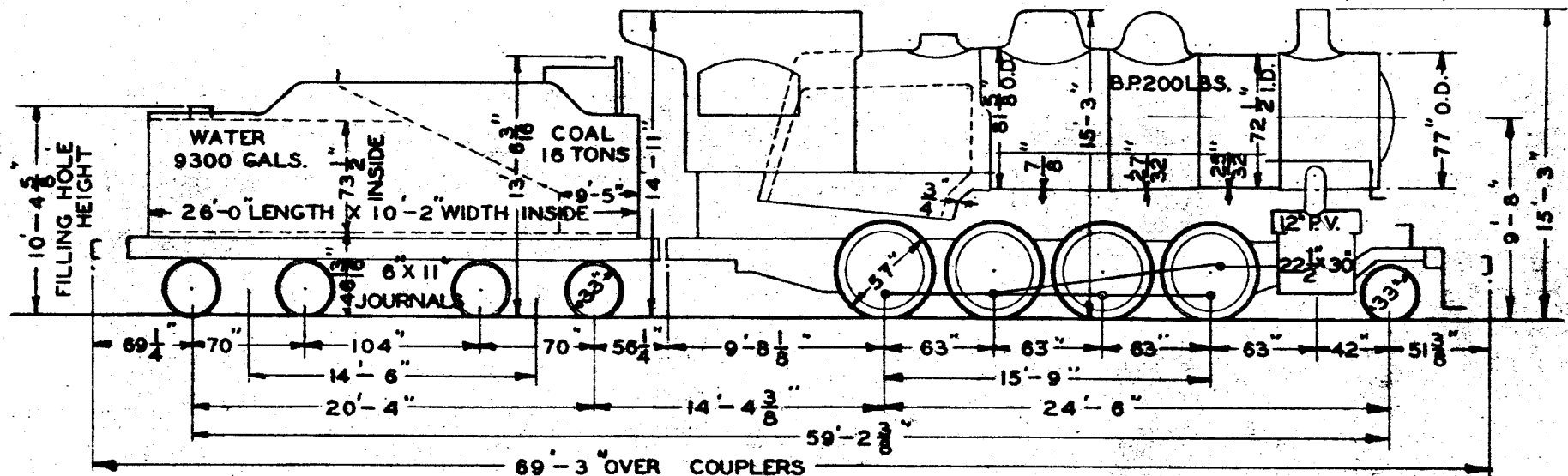
DR. CH. DATE

TRACTIVE POWER 45300 LBS.
MAX. CURVE 18°

NO. OF ENGINES ~~6~~ 3

W.&L.E. DIST. CLASS G-2
ENGS. 4302, ~~4304, 4309, 4310, 4314, 4316~~

40



DATE 2-21-50
CH. 10
DR. 1

WEIGHTS-WORK ORDER		178100	48600	48300	48600 + 48200	23100	[W.&L.E. CLASS H-6B]	
WT. DRIVERS	193700 LBS.	FIREBOX	108-1/8" X 67-1/4"	JOURNALS, DRIVING	MAN 9-1/2 X 12	TENDER FRAME	BUILT UP	
WT. ENG. TRUCK	23100 LBS.	HEATING SURFACES		JOURNALS, DRIVING OTHERS	9-1/2 X 12	TENDER TRUCK FRAME	CAST	
WT. TRL. TRUCK	LBS.	TUBES & FLUES	2258 SQ.FT.	JOURNALS, ENG. TRUCK	6-1/2 X 12	TENDER TRUCK BOLSTER	STEEL	
WT. ENG. TOTAL	216800 LBS.	FIREBOX	188 SQ.FT.	JOURNALS, TRL. TRUCK, F.		SUPERHTR.	S.H.CO. TYPE A	
WT. TENDER-FULL	178100 LBS.	ARCH TUBES	19.5 SQ.FT.	JOURNALS, TRL. TRUCK, B.		FWHEATER	TYPE	
WT. ENG. & TENDER	394900 LBS.	SYPHONS	SQ.FT.	VALVE GEAR	BAKER	STOKER	TYPE	
TUBES, NO.	188	TOTAL	24655 SQ.FT.	TRAVEL	6-1/4" LAP 1"	REVERSE GEAR	LEWIS TYPE	
FLUES, NO.	32	SUPERHTR. H.S.	527 SQ.FT.	LEAD	1/8" EXH.CL. L.&L.	SAFETY VALVES	3-3"	
TUBES & FLUES, LENGTH	14'-6"	GRATE AREA	50.5 SQ.FT.	FACTOR OF ADHESION	4.28	ENG. FRAME	BAR TYPE C. STEEL	
ARCH TUBES, NO.	3			CYLINDER H.P.	1822	THROTTLE	CHAMBERS DOME TYPE	
SUPERHTR. TUBES, NO.	O.D.			PERCENT BOILER TO CYL. H.P.	97.6			
							BUILDERS ORDER NO.	
							BUILDER	A.L.CO.
							YEAR BUILT	1905

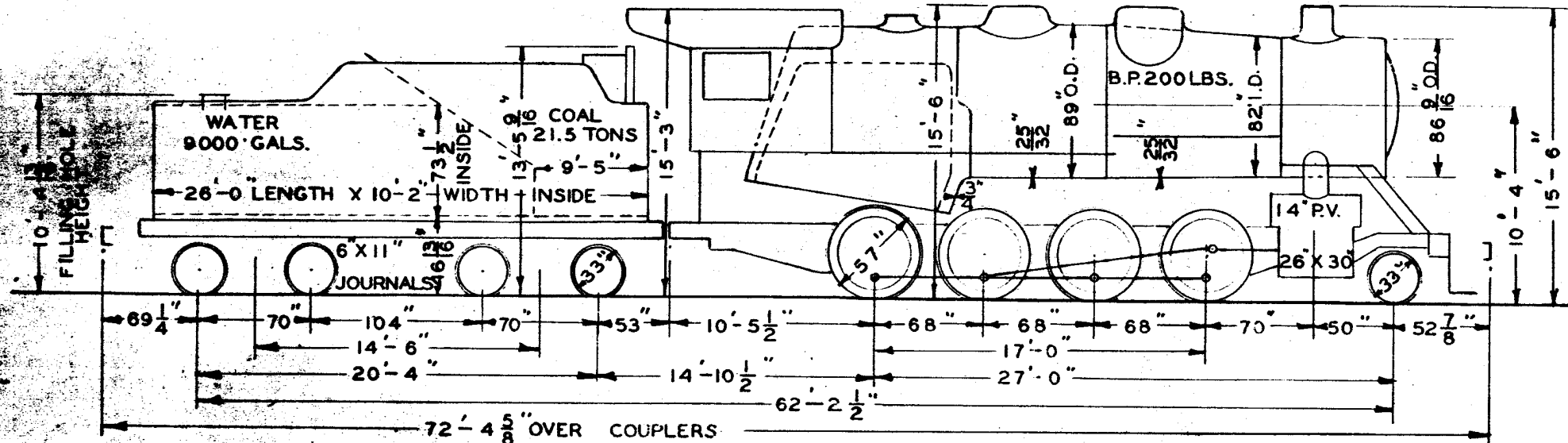
TRACTIVE POWER 60500 LBS.
MAX. CURVE 17°

NO. OF ENGINES ~~1~~ 1

W.&L.E. DIST.

CLASS G-3
ENGS. 6053, ~~6056, 6067~~

41



WEIGHTS-WORK ORDER

WT. DRIVERS	242800 LBS.
WT. ENG. TRUCK	30500 LBS.
WT. TRL. TRUCK	LBS.
WT. ENG. TOTAL	273300 LBS.
WT. TENDER-FULL	189300 LBS.
WT. ENG. & TENDER	462600 LBS.
TUBES, NO. — 293	2" O.D.
FLUES, NO. — 43	5-1/2" O.D.
TUBES & FLUES, LENGTH	15-6"
ARCH TUBES, NO. — 4	3" O.D.
SUPERHTR. TUBES, NO.	O.D.

FIREBOX	114-1/8" X 84-1/4"
HEATING SURFACES	
TUBES & FLUES	3293 SQ.FT.
FIREBOX	253 SQ.FT.
ARCH TUBES	28.4 SQ.FT.
SYPHONS	SQ.FT.
TOTAL	3574.4 SQ.FT.
SUPERHTR. H.S.	776 SQ.FT.
GRATE AREA	66.6 SQ.FT.

JOURNALS, DRIVING, MAIN	11" X 13"
JOURNALS, DRIVING, OTHERS	10-1/2" X 13"
JOURNALS, ENG. TRUCK	6-1/2" X 13"
JOURNALS, TRL. TRUCK, F.	
JOURNALS, TRL. TRUCK, B.	
VALVE GEAR	WALSCHAERT.
TRAVEL	6-1/2" LAP 1-1/16"
LEAD	1/8" EXH. CL. L.&L.
FACTOR OF ADHESION	4.01
CYLINDER H.P.	2434
PERCENT BOILER TO CYL. H.P.	97.7

TENDER FRAME	BUILT UP
TENDER TRUCK FRAME	CAST
TENDER TRUCK BOLSTER	STEEL
SUPERHTR.	S.H.CO. TYPE A
FWHEATER	TYPE
STOKER	STANDARD TYPE DS
REVERSE GEAR	RAGONNET TYPE B
SAFETY VALVES	3 3-1/2"
ENG. FRAME	BAR TYPE - C. STEEL
THROTTLE	CHAMBERS DOME TYPE

INJECTOR	R.&L. OHIO NO. 12-1/2
AIR BRAKE	6 ET EQUIPMENT
LUB.	DETROIT HYD. 5 FEED
BUILDERS ORDER NO.	S-976-K
BUILDER	A.L.CO.
YEAR BUILT	1913

DR. N.Y. CH. DATE 2-N. 50

TRACTIVE POWER-37 500

NO. OF ENGINES - 4

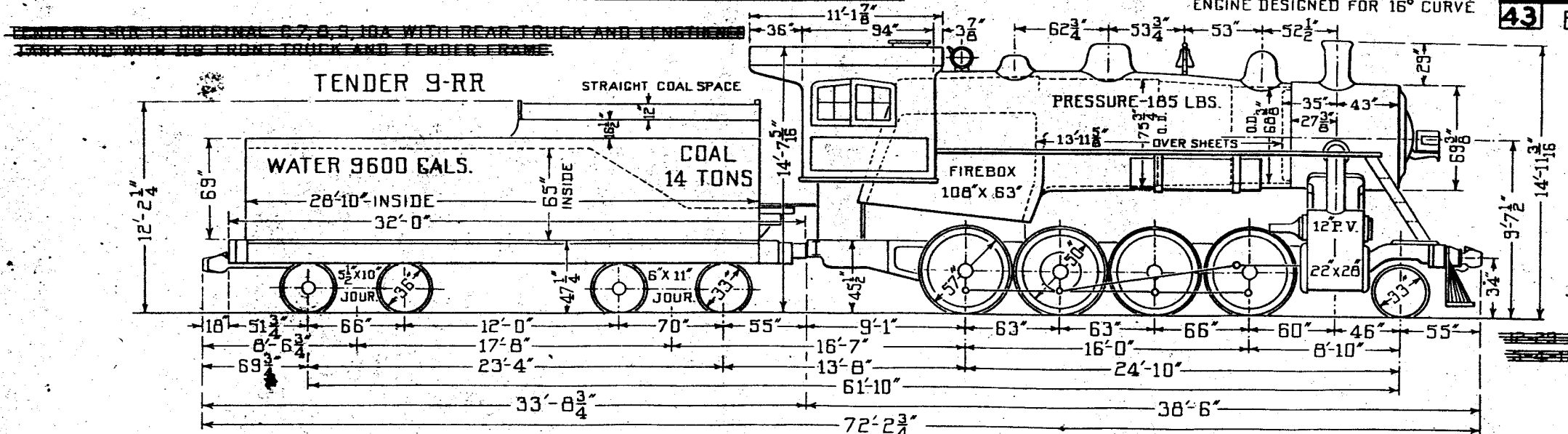
N. K.P.

CLASS G-7

ENGINE DESIGNED FOR 16° CURVE

43

ENG.
890
891
892
894



WEIGHTS-

81100

96500

44500 45000

38400 43000

25800

<p>WEIGHTS IN WORKING ORDER</p> <p>ON DRIVERS 170 900 LBS.</p> <p>ON ENGINE TRUCK 25 800 LBS.</p> <p>ON TRAILING TRUCK</p> <p>ENGINE TOTAL 196 700 LBS.</p> <p>TENDER 177 600 LBS.</p> <p>ENG. & TENDER 374 300 LBS.</p> <p>TUBES, NO. - 171 - 2" O.D.</p> <p>FLUES, NO. - 27 - 5 3/8" O.D.</p> <p>TUBES & FLUES, LENGTH 13'-11 5/8"</p> <p>ARCH TUBES, NO. 3 - O.D. 3"</p>	<p>FIREBOX LENGTH 108"</p> <p>" WIDTH 63"</p> <p>" HEATING SURFACE</p> <p>TUBES & FLUES 1769 SQ. FT.</p> <p>FIREBOX AND ARCH TUBES 176 SQ. FT.</p> <p>SYPHONS SEE NOTE 1</p> <p>TOTAL HEATING SURFACE 1945 SQ. FT.</p> <p>SUPERHEATER H.S. 470 SQ. FT.</p> <p>GRATE AREA 47.25 SQ. FT.</p>	<p>JOURNALS-DRIVING MAIN 3 1/2" X 12"</p> <p>" " OTHERS 9" X 12"</p> <p>ENG. TRUCK 6" X 12"</p> <p>VALVE DATA</p> <p>TRAVEL 5/4" LAP 7/8"</p> <p>LEAD 1/8" EXH. CL. L & L.</p>	<p>VALVE GEAR BAKER</p> <p>FACTOR OF ADHESION 4.55</p> <p>CYLINDER HORSE POWER 1512</p> <p>PERCENT BOILER TO CYL. H.P. 89.0</p> <p>SEE NOTE 1</p>	<p>SUPERHEATER-TYPE A</p> <p>F.W. HEATER</p> <p>STOKER</p> <p>BOOSTER</p> <p>REVERSE GEAR BAG-B ON 890 ONLY, FRANKLIN-E-ON OTHERS</p> <p>NOTE 1: ENG. 894 WITH SYPHONS, HTG. SURF. OF 58 SQ. FT.; TOTAL H. SURF. IS 19316 SQ. FT. PERCENT BOILER TO CYL. H.P. IS 98.5</p> <p>BLDRS. ORDER-GENL. NO. 10-36 E-1261 TO 1265.</p> <p>BUILDER BALDWIN LOCO. WORKS</p> <p>YEAR BUILT 1913</p>
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10-17

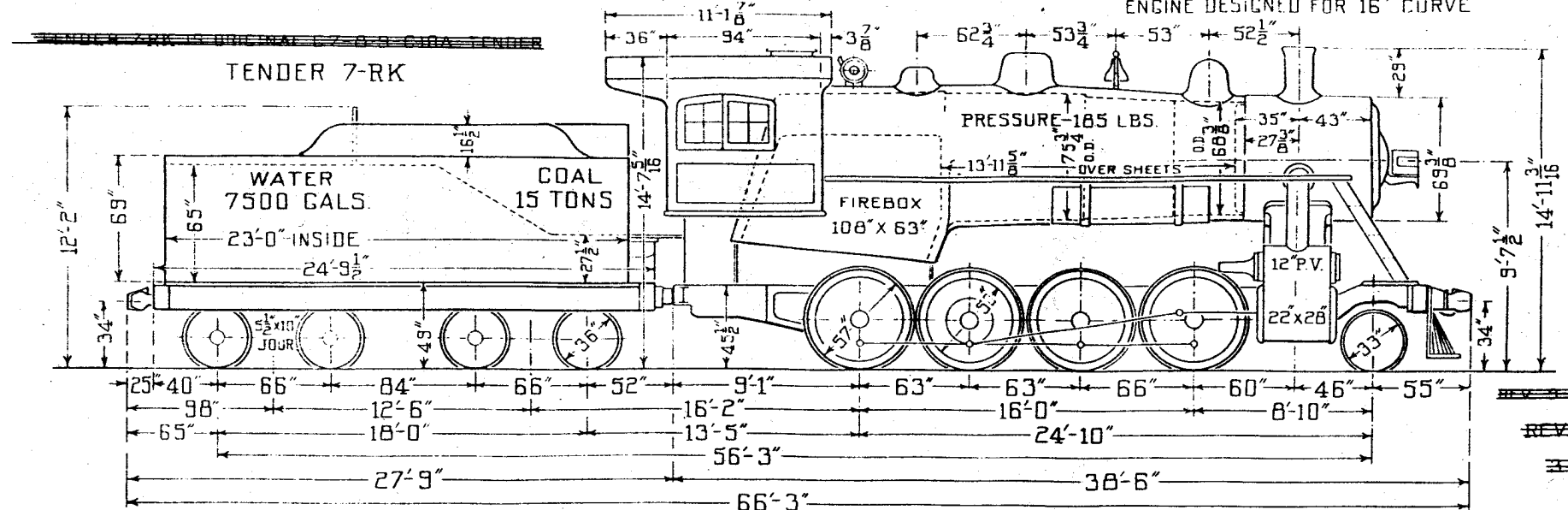
TRACTIVE POWER - 37 500 LBS

NO. OF ENGINES - 1

N. K.P. CLASS G-7
ENGINE DESIGNED FOR 16° CURVE

44

ENGS.
893



WEIGHTS -

74 500 74 000 44 500 45 000 38 400 43 000 25 800

WEIGHTS IN WORKING ORDER	
ON DRIVERS	170 900 LBS.
ON ENGINE TRUCK	25 800 LBS.
ON TRAILING TRUCK	
ENGINE TOTAL	196 700 LBS.
TENDER	148 500 LBS.
ENG. & TENDER	345 200 LBS.
TUBES, NO. - 171	2" O.D.
FLUES, NO. - 27	5 3/8 O.D.
TUBES & FLUES, LENGTH	13'-11 5/8"
ARCH TUBES, NO. 3	0.0. 3"

FIREBOX LENGTH	108"
" WIDTH	63"
HEATING SURFACE	
TUBES & FLUES	1769 SQ. FT.
FIREBOX AND ARCH TUBES	176 SQ. FT.
SYPHONS -	
TOTAL HEATING SURFACE	1945 SQ. FT.
SUPERHEATER H.S.	470 SQ. FT.
GRATE AREA	47.25 SQ. FT.

JOURNALS - DRIVING MAIN	9 1/2" X 12"
" " OTHERS	9" X 12"
" ENG. TRUCK	6" X 12"
VALVE DATA	
TRAVEL	5 1/4" - LAP 7/8"
LEAD	1/8" EXH. CL. L.&L.

VALVE GEAR	BAKER
FACTOR OF ADHESION	4.55
CYLINDER HORSE POWER	1612
PERCENT BOILER TO CYL. H.P.	89.0

SUPERHEATER - TYPE	A
F.W. HEATER	
STOKER	
BOOSTER	
REVERSE GEAR	RAGONNET
BLDRS. ORDER - GENL. NO. 10-36E-1261 TO 1265.	
BUILDER	BALDWIN LOCO. WKS.
YEAR BUILT	1913

TRACTIVE POWER - 37 500 LBS.

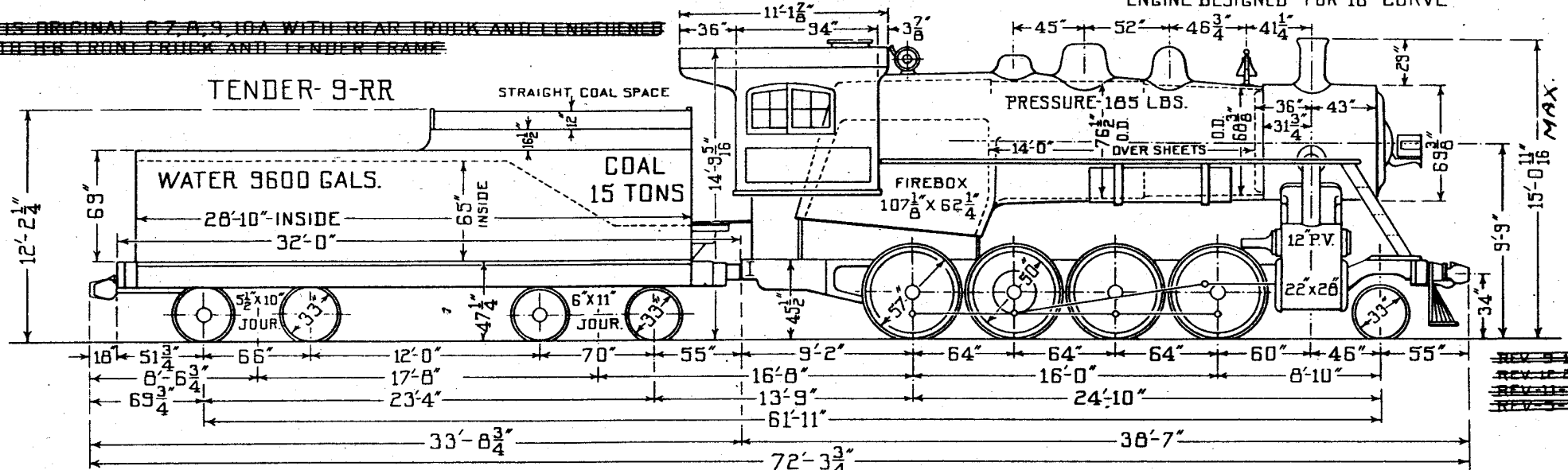
NO. OF ENGINES - 5

N. K. P. CLASS G-8

ENGINE DESIGNED FOR 16° CURVE

45

~~TENDER 9-RR IS ORIGINAL C 7, 8, 9 10A WITH REAR TRUCK AND LENGTHENED TANK AND WITH HEATER TRUCK AND TENDER FRAME.~~



- ENGS.
- 901
- 902
- 903
- 904
- 905

WEIGHTS -

81100

96500

47170

51670

48060

38000

24250

WEIGHTS IN WORKING ORDER
 ON DRIVERS — 184 900 LBS.
 ON ENGINE TRUCK — 24 250 LBS.
 ON TRAILING TRUCK —
 ENGINE TOTAL — 209 150 LBS.
 TENDER — 177 600 LBS.
 ENG. & TENDER — 386 750 LBS.
 TUBES, NO. 188 - 2" O.D.
 FLUES, NO. 27 - 5 3/8" O.D.
 TUBES & FLUES, LENGTH — 14'-0"
 ARCH TUBES, NO. 3 - O.D. 3"

FIREBOX LENGTH — 107 1/8"
 " WIDTH — 62 1/4"
 " HEATING SURFACE —
 TUBES & FLUES — 18955 SQ. FT.
 FIREBOX AND ARCH TUBES — 178 SQ. FT.
 SYPHONS — SQ. FT.
 TOTAL HEATING SURFACE — 20735 SQ. FT.
 SUPERHEATER H.S. — 470 SQ. FT.
 GRATE AREA — 46.2 SQ. FT.

JOURNALS - DRIVING MAIN — 10" x 12"
 " " OTHERS — 9" x 12"
 " " ENG. TRUCK — 6" x 12"

VALVE DATA
 TRAVEL 6 1/4" — LAP 7/8"
 LEAD 1/8" — EXH. CL. L & L.

VALVE GEAR — BAKER
 FACTOR OF ADHESION — 4.93
 CYLINDER HORSE POWER — 1612
 PERCENT BOILER TO CYL. H.P. — 92.4

SUPERHEATER - TYPE — A
 F.W. HEATER —
 STOKER — B K
 BOOSTER —
 REVERSE GEAR — FRANKLIN-E

BLDRS. ORDER NO. — 5221
 BUILDER — LIMA LOCO. WORKS
 YEAR BUILT — 1916

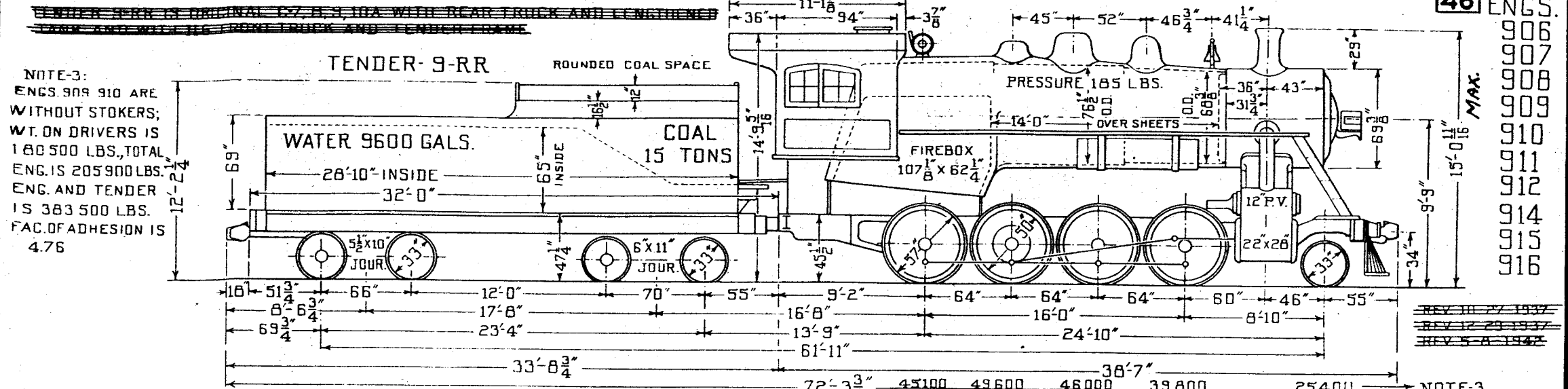
~~REV. 5-15-1934~~
~~REV. 12-29-1937~~
~~REV. 11-19-40~~
~~REV. 5-13-42~~

TRACTIVE POWER-37 500 LBS.

NO. OF ENGINES - 10

N. K. P. CLASS G-9
ENGINE DESIGNED FOR 16° CURVE

46 ENGS.



NOTE-3:
ENGS. 909 910 ARE
WITHOUT STOKERS;
WT. ON DRIVERS IS
180 500 LBS., TOTAL
ENG. IS 205 900 LBS.
ENG. AND TENDER
IS 383 500 LBS.
FAC. OF ADHESION IS
4.76

WEIGHTS-	81100	96 500	47170	51670	48060	38000	25400	NOTE-3
-----------------	-------	--------	-------	-------	-------	-------	-------	--------

WEIGHTS IN WORKING ORDER	
ON DRIVERS	184 900 LBS.
ON ENGINE TRUCK	24 250 LBS.
ON TRAILING TRUCK	
ENGINE TOTAL	209 150 LBS.
TENDER	177 600 LBS.
ENG. & TENDER	386 750 LBS.
TUBES, NO. 188 - 2" O.D.	NOTE-3
FLUES, NO. 27 - 5 3/8" O.D.	
TUBES & FLUES, LENGTH	14'-0"
ARCH TUBE, NO. 3 - O.D. 3"	

FIREBOX LENGTH	107 1/8"
" WIDTH	62 1/4"
" HEATING SURFACE	
TUBES & FLUES	1895.5 SQ. FT.
FIREBOX AND ARCH TUBES	178 SQ. FT.
SYPHONS - SEE NOTE NO. 1	SQ. FT.
TOTAL HEATING SURFACE	2073.5 SQ. FT.
SUPERHEATER H.S.	470 SQ. FT.
GRATE AREA	46.2 SQ. FT.

JOURNALS-DRIVING MAIN	
"	10" x 12"
" OTHERS	9" x 12"
ENG. TRUCK	
"	6" x 12"
VALVE DATA	
TRAVEL	5/4" - LAP 7/8"
LEAD	1/8" - EXH. CL. L. & L.

VALVE GEAR	
"	BAKER
FACTOR OF ADHESION	NOTE-3 4.93
CYLINDER HORSE POWER	1612
PERCENT BOILER TO CYL. H.P.	92.4
NOTE-2-REV. GEARS:	
RAGONNET ON	906, 909, 910, 916.
FRANKLIN-E ON	907, 908, 911, 912, 914, 915.

SUPERHEATER-TYPE	
"	A
F.W. HEATER	
STOKER	B K-ON (906, 907, 908, 911, 912, 914, 915, 916)
BOOSTER	NONE
REVERSE GEAR	SEE NOTE-2
NOTE-1; ENG. 916 WITH SYPHONS-HEATG.	
SURF. OF 62 SQ. FT.-TOTAL H.S. = 2135.5 SQ. FT.	
PERCENT BOILER TO CYL. H.P. = 102.6	
BLDRS. ORDER NO. 1024	
BUILDER LIMA LOCO. WORKS	
YEAR BUILT-906 TO 911-1921; OTHERS-IN 1922	

TRACTIVE POWER - 37 500 LBS.

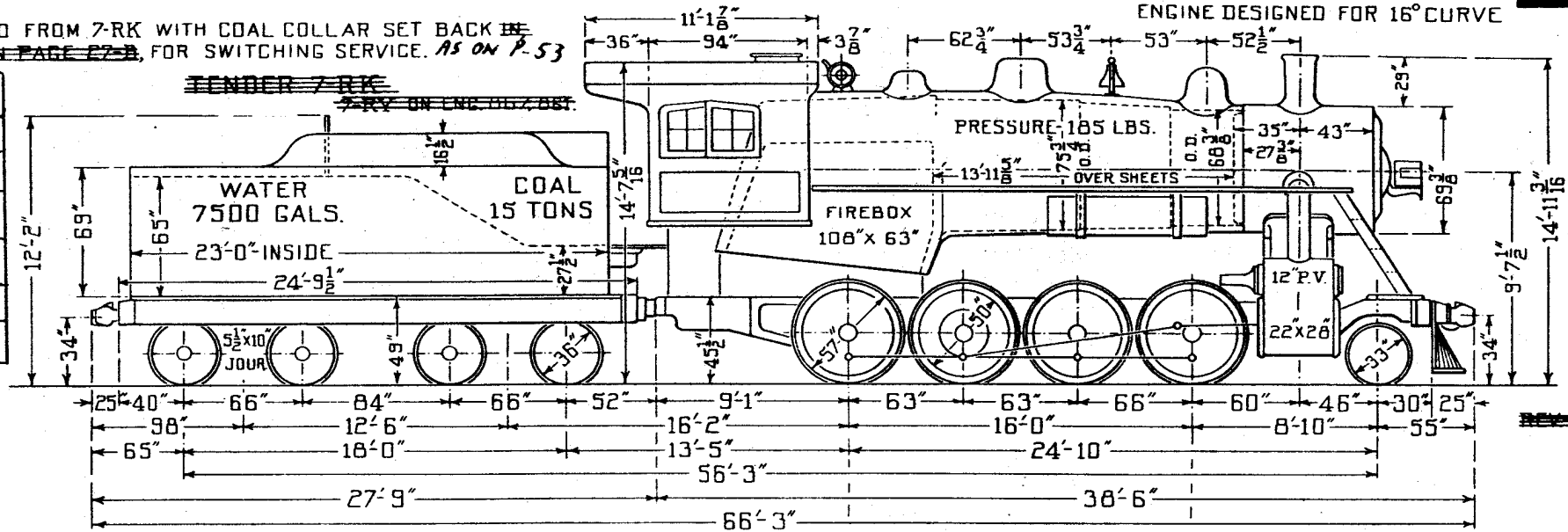
NO. OF ENGINES - 4

N. K.P. CLASS G-10A

ENGINE DESIGNED FOR 16° CURVE

NOTE-2:
TENDER 7-RY IS CONVERTED FROM 7-RK WITH COAL COLLAR SET BACK ~~IN~~
~~IN MANNER AS SHOWN ON PAGE 27-B, FOR SWITCHING SERVICE. AS ON P. 53~~

ENG.	860, 863	861
	871	
TEND.	7RK	7RY
COAL-TONS	15	14
WT. RET. TRK. TEND.	74000	72000
WT. BK. TRK. TEND.	74500	74500
WT. TEND.	148500	146500
WT. E.C.T.	345500	343500



47
ENGS.
860
861
863
867
871

WEIGHTS-

~~TABLE~~ TABLE ~~TABLE~~

172 000

25 000

3-17-50

REVISED

WEIGHTS IN WORKING ORDER	
ON DRIVERS	172 000 LBS.
ON ENGINE TRUCK	25 000 LBS.
ON TRAILING TRUCK	
ENGINE TOTAL	197 000 LBS.
TENDER	248 000 LBS.
ENG. & TENDER	445 000 LBS.
TUBES, NO - 175 - 2" O.D.	
FLUES, NO 27 - 5 3/8"	
TUBES & FLUES, LENGTH	13'-11 5/8"
ARCH TUBES, NO. 3	O.D. 3" ENG. 861

FIREBOX LENGTH	108"
" WIDTH	63"
HEATING SURFACE	
TUBES & FLUES	1797.6 SQ. FT.
FIREBOX AND SYPHONS	176 SQ. FT.
SYPHONS - SEE NOTE-1	
TOTAL HEATING SURFACE	1973.6 SQ. FT.
SUPERHEATER h.s	470 SQ. FT.
CRATE AREA	47.25 SQ. FT.

JOURNALS-DRIVING MAIN	9 1/2" X 12"
" " OTHERS	9" X 12"
" ENG. TRUCK	6" X 12"
VALVE DATA	
TRAVEL	5 1/4"
LEAD	1/8"
LAP	7/8"
EXH. CL.	L & L.

VALVE GEAR	BAKER
FACTOR OF ADHESION	4.58
CYLINDER HORSE POWER	1612
PERCENT BOILER TO CYL. H.P.	98.5

SUPERHEATER - TYPE	A
F.W. HEATER	
STOKER	
BOOSTER	
REVERSE GEAR-FRANKLIN-E ON 860, 863;	
RAGONNET-ON 860 861, 871.	
NOTE-1; ENG. 861-NO SYPHONS-TOTAL HTG. SURF. = 1915.6 SQ. FT. - PERCENT BOILER TO CYL. H.P. = 89.0	
BLDRS. ORDER NO.	1006
BUILDER	A. L. CO. BROOKS
YEAR BUILT	1905

TRACTIVE POWER - 48 600 LBS.

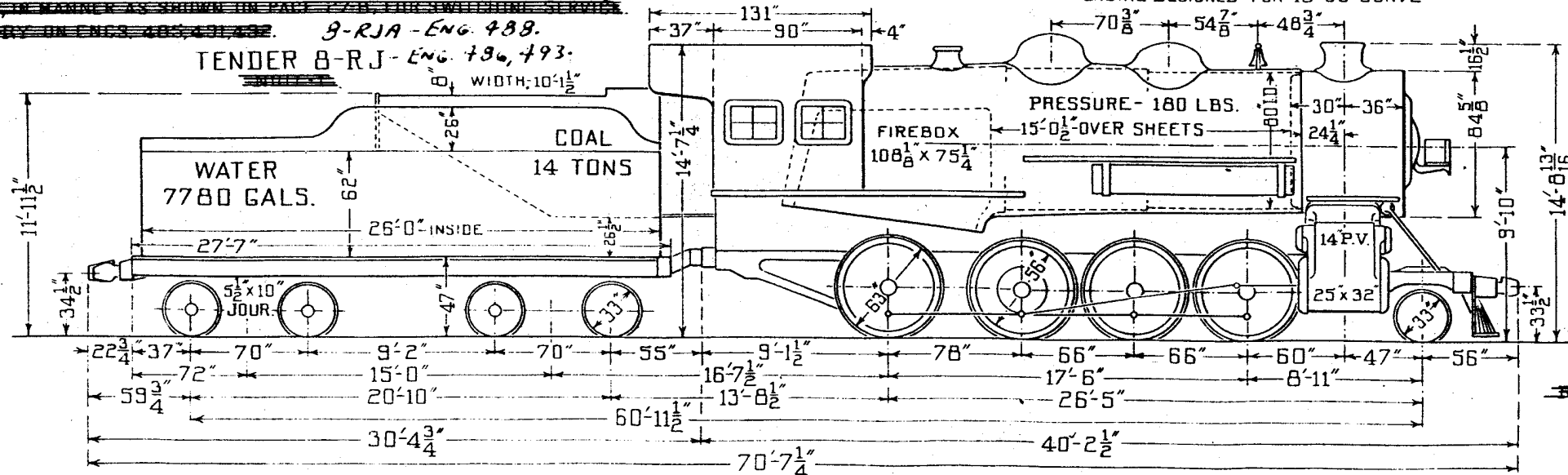
NO. OF ENGINES - 3

N. K.P. CLASS G-16V

48

~~WATER TENDER BODY IS CONVEYED FROM FRONT WITH COAL COLLECTOR~~
~~DRIVER'S DOOR IS SHOWN IN POSITION FOR SWITCHING SERVICE~~
~~TENDER BODY ON ENGS. 485 & 491~~

9-RJA - ENG. 488.
 TENDER 8-RJ - ENG. 486, 493.



- ENGS.
~~485~~
 486
 488
~~491~~
~~492~~
 493

~~REV. 4-21-1932~~

~~REV. 5-19-32~~

3-17-50
 REVISED

WEIGHTS -

70 166

82 366

51 100

52 450

52 890

54 110

26 180

WEIGHTS IN WORKING ORDER	
ON DRIVERS	210 550 LBS.
ON ENGINE TRUCK	26 180 LBS.
ENGINE TOTAL	236 730 LBS.
TENDER	152 533 LBS.
ENG. & TENDER	389 263 LBS.
TUBES, NO - 262	2" O. D.
FLUES, NO - 34	5 3/8"
TUBES & FLUES LENGTH	15'-0 1/2"
ARCH TUBES, NO 4	O. D. 3"

FIREBOX LENGTH	108 3/8"
" WIDTH	75 1/4"
HEATING SURFACE	
TUBES & FLUES	2765.5 SQ. FT.
FIREBOX AND ARCH TUBES	212 SQ. FT.
SYPHONS	SQ. FT.
TOTAL HEATING SURFACE	2977.5 SQ. FT.
SUPERHEATER H.S.	858 SQ. FT.
GRATE AREA	56.5 SQ. FT.

JOURNALS - DRIVING MAIN	10 1/2" x 14"
" " F. & B.	9 1/2" x 12"
" " INT.	9 1/2" x 14"
EPG. TRUCK	6" x 12"
VALVE DATA	
TRAVEL	6 1/2" LAP 1"
LEAD	3/16" EXH. CL. L & L.

VALVE GEAR	WALSCHAERT
FACTOR OF ADHESION	4.44
CYLINDER HORSE POWER	2027
PERCENT BOILER TO CYL. H.P.	95.9

SUPERHEATER - TYPE	A
F.W. HEATER	
STOKER	
BOOSTER	
REVERSE GEAR	RAGONNET
BLDRS. ORDER	B-1270
BUILDER	A. L. CO.
YEAR BUILT	1911

TRACTIVE POWER - 36 600 LBS.

NO. OF ENGINES ~~3~~ 2

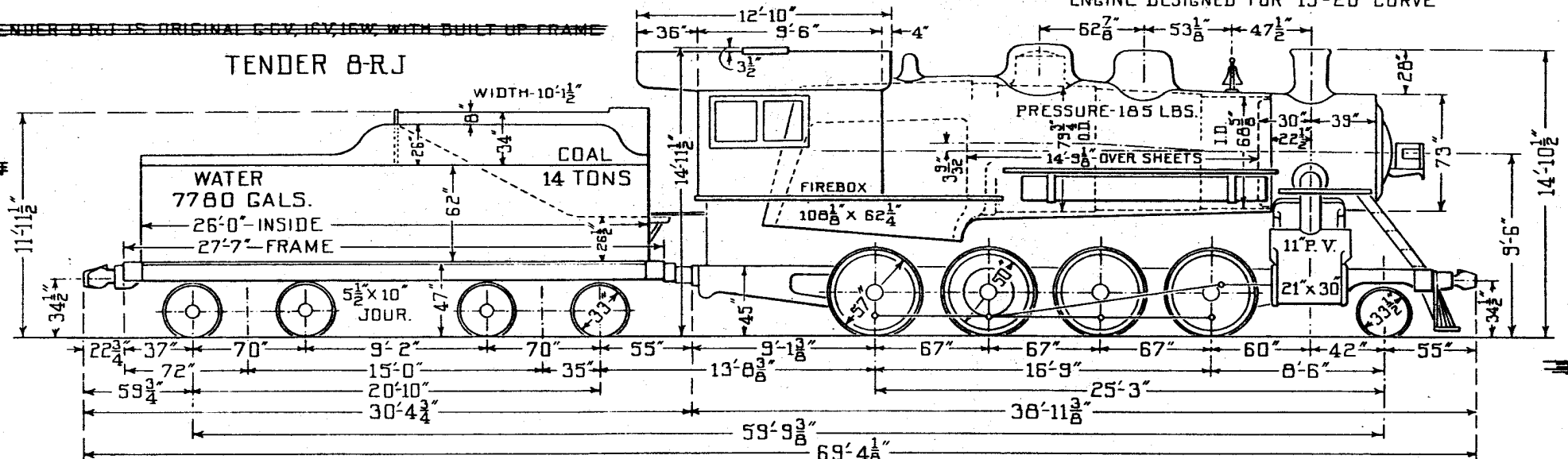
SEE ALSO OTHER PAGES OF 26

N. K.P. CLASS G-44 50

ENGINE DESIGNED FOR 15°-20' CURVE

~~TENDER 8-RJ IS ORIGINAL G.V. 16V. 16W WITH BUILT UP FRAME~~

TENDER 8-RJ



ENGS.
379
380
~~381~~

WEIGHTS -

70 166

82 366

47 750

44 900

45 220

44 770

23 360

— WEIGHTS IN WORKING ORDER —
ON DRIVERS 182 640 LBS.
ON ENGINE TRUCK 23 360 LBS.
ON TRAILING TRUCK
ENGINE TOTAL 206 000 LBS.
TENDER 152 532 LBS.
ENG. & TENDER 358 532 LBS.
TUBES, NO. - 227 - 2" O.D.
FLUES, NO. - 30 - 5 3/8" O.D.
TUBES & FLUES, LENGTH 14'-9 1/8"
ARCH TUBES, NO. 4 — O.D. 3"

FIREBOX LENGTH 108 1/8"
" WIDTH 62 1/4"
" HEATING SURFACE
TUBES & FLUES 2360.5 SQ. FT.
FIREBOX AND ARCH TUBES 200 SQ. FT.
SYPHONS SQ. FT.
TOTAL HEATING SURFACE 2560.5 SQ. FT.
SUPERHEATER H.S. 628 SQ. FT.
GRATE AREA 46.7 SQ. FT.

JOURNALS - DRIVING MAIN 9 1/2" x 12"
" " OTHERS 9" x 12"
" " ENG. TRUCK 6" x 12"
VALVE DATA
TRAVEL 5 1/4" — LAP 15/16"
LEAD 1/4" — EXH. CL. L & L.

VALVE GEAR BAKER
FACTOR OF ADHESION 4.99
CYLINDER HORSE POWER 1469
PERCENT BOILER TO CYL. H.P. 114.7

SUPERHEATER - TYPE A
F.W. HEATER
STOKER
BOOSTER
REVERSE GEAR - FRANKLIN-B ON ENG. 379,
RAGONNET-7" ON 380, ~~381~~
BLDRS. ORDER NO. B-976
BUILDER A.L.CO. BROOKS WKS.
YEAR BUILT 1904

TRACTIVE POWER - 36 600 LBS.

NO. OF ENGINES - 1

N. K.P. - CLASS G-44

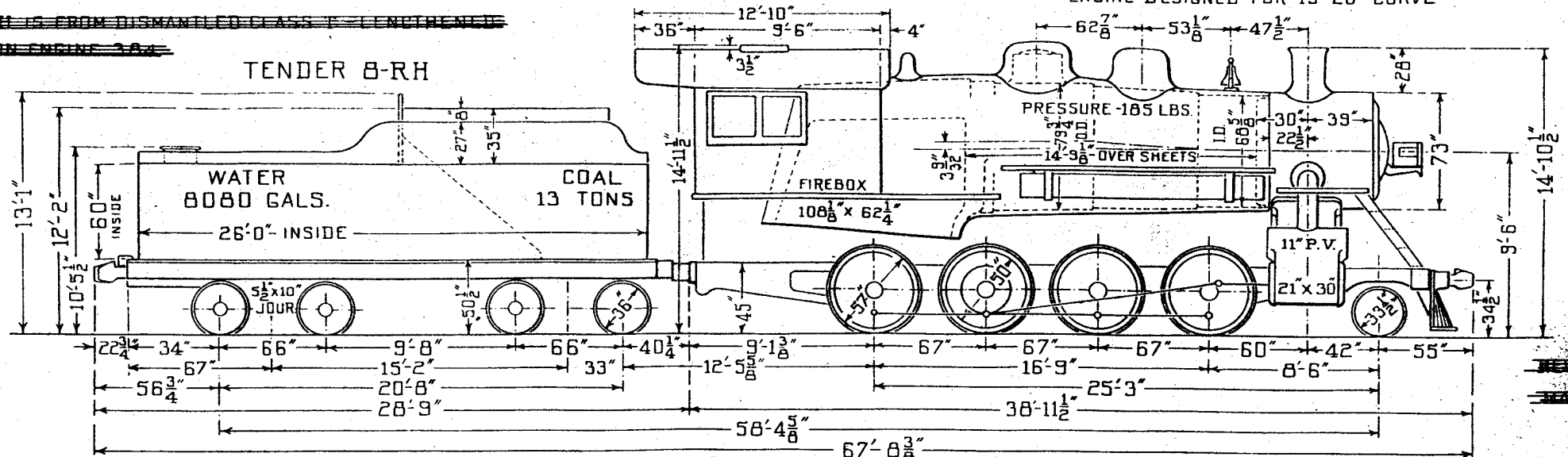
51

ENGINE DESIGNED FOR 15° 20' CURVE

SEE ALSO OTHER PAGES OF 26

~~TENDER B-RH IS FROM DISMANTLED CLASS F LENGTHENED~~

~~NEW BOILER ON ENGINE 384~~



ENGS

384

~~385~~

WEIGHTS-

47750 44900 45220 44770 23360

WEIGHTS IN WORKING ORDER	
ON DRIVERS	182 640 LBS.
ON ENGINE TRUCK	23 360 LBS.
ON TRAILING TRUCK	
ENGINE TOTAL	206 000 LBS.
TENDER	150 233 LBS.
ENG. & TENDER	356 500 LBS.
TUBES, NO. - 227 - 2" O.D.	
FLUES, NO. - 30 - 5 3/8" O.D.	
TUBES & FLUES, LENGTH	14'-9 1/8"
ARCH TUBES, NO. 4	O.D. 3"

FIREBOX LENGTH	108 1/8"
" WIDTH	62 1/4"
" HEATING SURFACE	
TUBES & FLUES	2360.5 SQ. FT.
FIREBOX AND ARCH TUBES	200 SQ. FT.
SYPHONS	SQ. FT.
TOTAL HEATING SURFACE	2560.5 SQ. FT.
SUPERHEATER H.S.	628 SQ. FT.
GRATE AREA	46.7 SQ. FT.

JOURNALS - DRIVING MAIN	3 1/2" X 12"
" " OTHERS	3" X 12"
" ENG. TRUCK	6" X 12"
VALVE DATA	
TRAVEL	6 1/4" - LAP 15/16"
LEAD	1/4" - EXH. CL. L. & L.

VALVE GEAR	BAKER
FACTOR OF ADHESION	4.99
CYLINDER HORSE POWER	1469
PERCENT BOILER TO CYL. H.P.	114.7

SUPERHEATER - TYPE	A
F.W. HEATER	
STOKER	
BOOSTER	
REVERSE GEAR	RACONNET-7" ON ENG. 384.
FRANKLIN P. ON ENG.	385
ORDER B-975-ENGS. 384,	385
BUILDER	A.L.CO. - BROOKS WKS.
YEAR BUILT	1904

TRACTIVE POWER - 49 750 LBS.

NO. OF ENGINES - 3

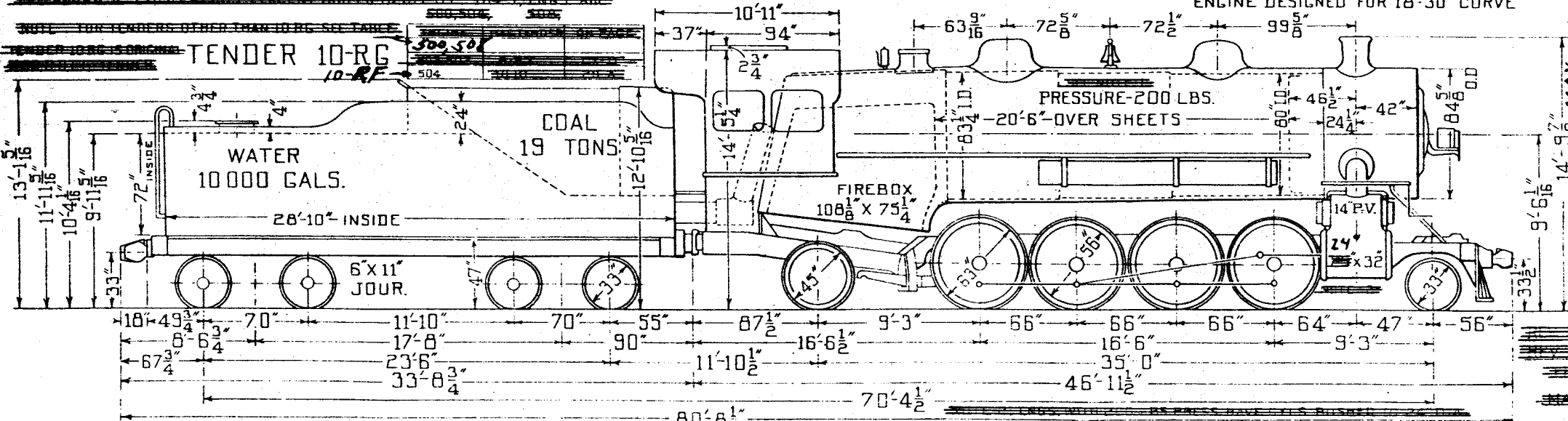
N. K.P.

CLASS H-5A

52

ENGINE DESIGNED FOR 18°-30' CURVE

ENGS.
500



304
308

WEIGHTS - 94568 96432 43600 58450 62680 52380 51460 23200

REVISED 3-17-50

WEIGHTS IN WORKING ORDER	
ON DRIVERS	224950 LBS.
ON ENGINE TRUCK	23200 LBS.
ON TRAILING TRUCK	43600 LBS.
ENGINE TOTAL	291750 LBS.
TENDER	181000 LBS.
ENG. & TENDER	472750 LBS.
TUBES, NO.	35
FLUES, NO.	35
TUBES & FLUES LENGTH	100 FT.
DIAMETER	4 6.5"

FIREBOX LENGTH	108 1/8'
WIDTH	75 1/4"
HEATING SURFACE	
TUBES & FLUES	37737 SQ. FT.
FIREBOX AND ARCH TUBES	230 SQ. FT.
SYPHONS	
TOTAL HEATING SURFACE	40037 SQ. FT.
SUPERHEATER H.S.	893 SQ. FT.
GRATE AREA	56.5 SQ. FT.

JOURNALS-DRIVING MAIN	
10 1/2" x 17"	
OTHERS	
9 1/2" x 12"	
ENG. TRUCK	
6" x 12"	
TRAILER	
8" x 14"	
VALVE DATA	
TRAVEL 5 3/8"	LAP 1"
LEAD 5/32"	EXH. CL. 1 & 1"

VALVE GEAR	BAKER
FACTOR OF ADHESION	4.52
CYLINDER HORSE POWER	2876
PERCENT BOILER TO CYL. H.P.	104.6

SUPERHEATER-TYPE	
A	
F.W. HEATER	
STOKER-D1 ON ENGS. 500	504
STOKER-D1 ON ENGS. 500	504
REVERSE GEAR RAGONNET ON	500
FRANKLIN ON ENGS. 500	504
BLDRS. ORDER NO. 5428	
BUILDER - LIMA Locomotive WORKS	
YEAR BUILT - APRIL 1917	

TRACTION POWER 49 750 LBS. - ~~AT 200 LBS PRESS~~

NO. OF ENGINES - ~~3~~ 5

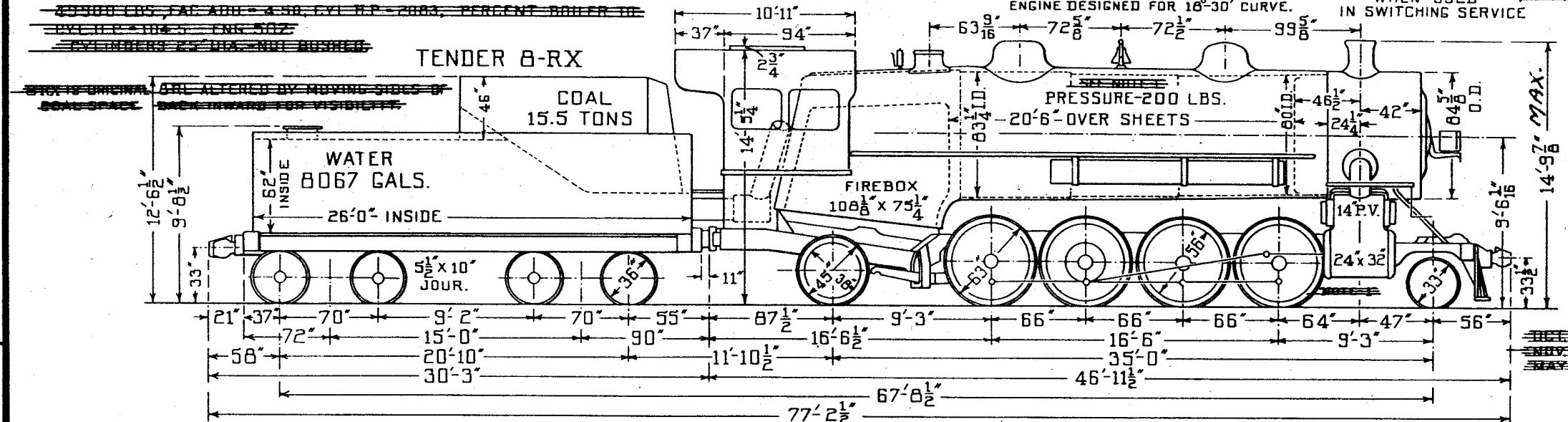
N. K. P. CLASS H-5A 53

~~NOTE: ENGS. WITH 145 LBS. PRESSURE HAVE TRACTIVE POWER OF 49 500 LBS. AT 450 C.V.M. H.P. - 2683 PERCENT BOILER TO CYL. H.P. - 114.5 C.V.M. 502 CYLINDERS 25 DIA. NO. 1000~~

~~SEE ALSO OTHER PAGES OF 27~~

ENGINE DESIGNED FOR 18°-30' CURVE. WHEN USED IN SWITCHING SERVICE

ENGS.
501
506
507
502
503



WEIGHTS- 71 300 88 950 43 600 58 450 62 660 52 380 51 460 23 200

3-8-50

REVISED

WEIGHTS IN WORKING ORDER	
ON DRIVERS	224 950 LBS.
ON ENGINE TRUCK	23 200 LBS.
ON TRAILING TRUCK	43 600 LBS.
ENGINE TOTAL	291 750 LBS.
ENG. & TENDER	452 000 LBS.
TENDER	160 250 LBS.
FLUES, NO. 36-5 1/2 O.D.; TUBES-257 2" O.D.	
TUBES & FLUES, LENGTH	20'-6"
ARCH TUBES, NO. 4 - O.D. 3"	

FIREBOX LENGTH	108 1/8"
" WIDTH	75 1/4"
" HEATING SURFACES	
TUBES & FLUES	3779.7 SQ. FT.
FIREBOX AND ARCH TUBES	230 SQ. FT.
SYMPHONS	SQ. FT.
TOTAL HEATING SURFACE	4009.7 SQ. FT.
SUPERHEATER H.S.	893 SQ. FT.
GRATE AREA	56.5 SQ. FT.

JOURNALS DRIVING-MAIN	10 1/2" x 17"
" " OTHERS	9 1/2" x 12"
" ENG. TRUCK	6" x 12"
" TRAILER	8" x 14"
VALVE DATA	
TRAVEL	8 3/8"
LEAD	5/32"
VALVE GEAR	BAKER
FACTOR OF ADHESION	4.52
CYL. HORSE POWER	2076
PERCENT BOILER TO CYL. H. P.	104.6

SUPERHEATER-TYPE	A
F. W. HEATER	
STOKER	D-2
BOOSTER	
REVERSE GEAR	RACONNET ON 501, 503
REVERSE GEAR	ALCO. ON 506, 507, 502

BLDG. ORDER NO. 5428
BUILDER - LIMA LOCO. WORKS
YEAR BUILT - APRIL-1917

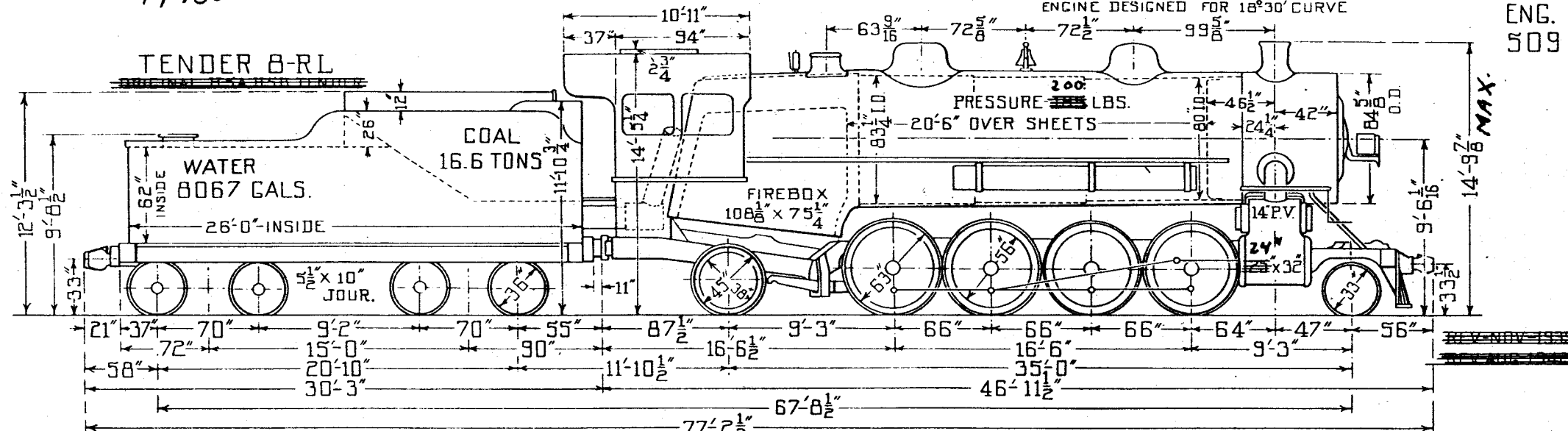
TRACTIVE POWER - ~~49,900~~ LBS.
49,750

NO. OF ENGINES - 1

N. K.P. CLASS H-5A 54

ENGINE DESIGNED FOR 18°30' CURVE

ENG.
509



WEIGHTS- 71300 90950 43600 58450 62660 52380 51460 23200

WEIGHTS IN WORKING ORDER	
ON DRIVERS	224,950 LBS.
ON ENGINE TRUCK	23,200 LBS.
ON TRAILING TRUCK	43,600 LBS.
ENGINE TOTAL	291,750 LBS.
TENDER	162,250 LBS.
ENG. & TENDER	454,000 LBS.
TUBES, NO. - 257 - 2" O.D.	
FLUES, NO. - 35 - 5 3/8 O.D.	
TUBES & FLUES, LENGTH	20'-6"
ARCH TUBES, NO. 4 - O.D. 3"	

FIREBOX LENGTH	108 1/8"
" WIDTH	75 1/4"
" HEATING SURFACE	
TUBES & FLUES	3779.7 SQ. FT.
FIREBOX AND ARCH TUBES	230 SQ. FT.
SYPHONS	SQ. FT.
TOTAL HEATING SURFACE	4009.7 SQ. FT.
SUPERHEATER H.S.	893 SQ. FT.
GRATE AREA	56.5 SQ. FT.

JOURNALS - DRIVING MAIN	10 1/2" x 17"
" OTHERS	9 1/2" x 12"
" ENG. TRUCK	5" x 12"
" TRAILER	8" x 14"
VALVE DATA	
TRAVEL	6 3/8" - LAP 1"
LEAD	5/32" - EXH. CL. L. & L.

VALVE GEAR	BAKER
FACTOR OF ADHESION	4.52
CYLINDER HORSE POWER	2003 2076
PERCENT BOILER TO CYL. H.P.	104.8
	104.8

SUPERHEATER - TYPE	A
F.W. HEATER	
STOKER	D-2
BOOSTER	
REVERSE GEAR - RAGONNET	BAKER

BLDGS. ORDER NO. 5428
BUILDER LIMA LOCO. WORKS
YEAR BUILT APRIL - 1917

3-17-50

REVISED

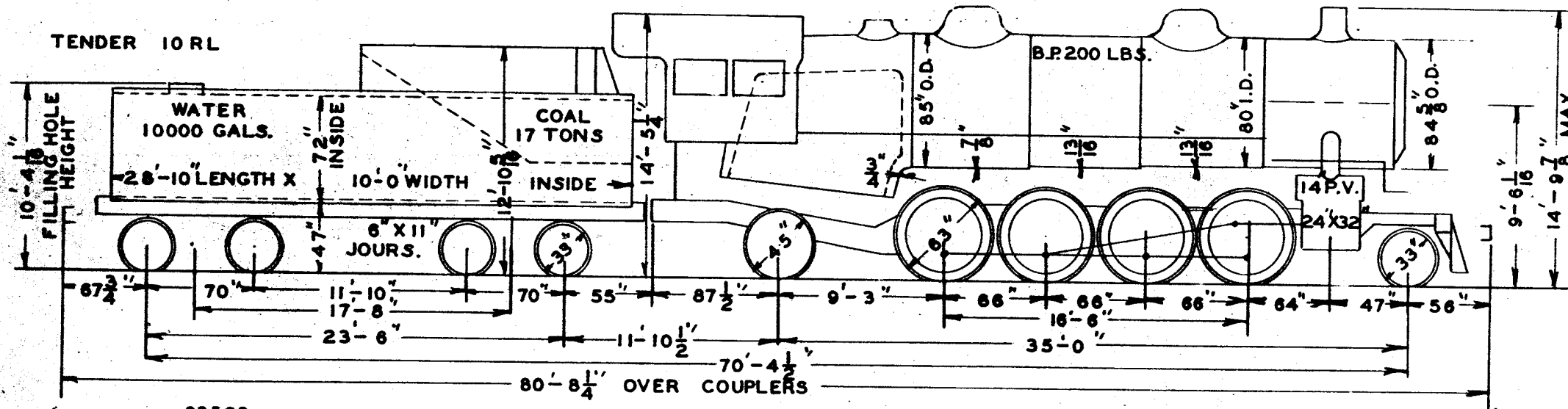
TRACTIVE POWER 49750 LBS.
MAX. CURVE 18° - 30'

NO. OF ENGINES - 1

N.K.P.

CLASS H-5A
ENGS. 505

55



DR. CH. DATE

WEIGHTS-WORK ORDER 93568

93432

43600

58450

62660

52380

51460

23200

WT. DRIVERS 224950 LBS.
WT. ENG. TRUCK 23200 LBS.
WT. TRL. TRUCK 43600 LBS.
WT. ENG. TOTAL 291750 LBS.
WT. TENDER-FULL 187000 LBS.
WT. ENG. & TENDER 478750 LBS.
TUBES, NO. 257 2" O.D.
FLUES, NO. 36 5-3/8" O.D.
TUBES & FLUES, LENGTH 20'-6"
ARCH TUBES, NO. 4 3" O.D.
SUPERHTR. TUBES, NO. O.D.

FIREBOX 108-1/8" X 75-1/4"
HEATING SURFACES
TUBES & FLUES 3779.7 SQ.FT.
FIREBOX 230 SQ.FT.
ARCH TUBES }
SYPHONS SQ.FT.
TOTAL 4009.7 SQ.FT.
SUPERHTR. H.S. 893 SQ.FT.
GRATE AREA 58.5 SQ.FT.

JOURNALS, DRIVING, MAIN 10-1/2" X 17"
JOURNALS, DRIVING, OTHERS 9-1/2" X 12"
JOURNALS, ENG. TRUCK 6" X 12"
JOURNALS, TRL. TRUCK, F. 8" X 14"
JOURNALS, TRL. TRUCK, B.
VALVE GEAR BAKER-
TRAVEL 8-3/8" LAP 1"
LEAD 5/32" EXH. CL. L. & L.
FACTOR OF ADHESION 4.52
CYLINDER H.P. 2078
PERCENT BOILER TO CYL. H.P. 104.8

TENDER FRAME }
TENDER TRUCK FRAME } CAST
TENDER TRUCK BOLSTER } STEEL
SUPERHTR. S.H. COTYPE-A
FW. HEATER TYPE
STOKER DUPLEX TYPE D-2
REVERSE GEAR FRANKLIN-TYPE-E
SAFETY VALVES 2 3-1/2"
ENG. FRAME BAR TYPE-C STEEL
THROTTLE DOME TYPE

INJECTOR
AIR BRAKE 8 ET EQUIPMENT
LUB. R.S.
LUB. L.S.

BUILDERS ORDER NO. 5428
BUILDER LIMA LOCO. WORKS
YEAR BUILT 1917

TRACTIVE POWER 49750 LBS.

NO. OF ENGINES - 5

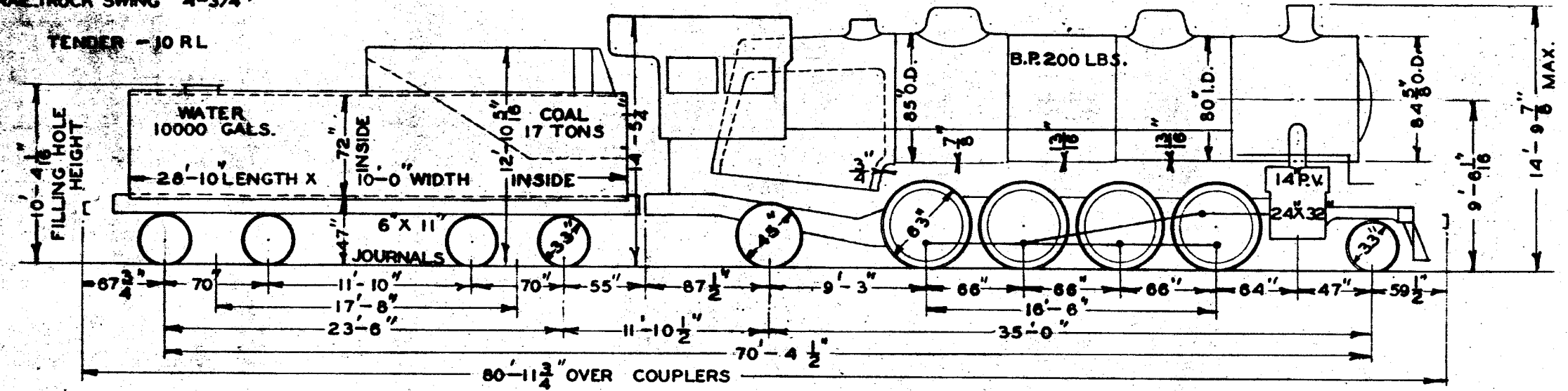
N.K.P.

CLASS H-5B
ENGS. 511,513,518,523,528.

57

MAX. CURVE 18° 30'
ENG. TRUCK SWING - 4-3/4"
TRL. TRUCK SWING - 4-3/4"

TENDER - 10 RL



DR. V. CH. 3/13/50

WEIGHTS-WORK ORDER 93568	
WT. DRIVERS	224950 LBS.
WT. ENG. TRUCK	23200 LBS.
WT. TRL. TRUCK	43600 LBS.
WT. ENG. TOTAL	291750 LBS.
WT. TENDER-FULL	187000 LBS.
WT. ENG. & TENDER	478750 LBS.
TUBES, NO. 257	20" O.D.
FLUES, NO. 36	5-3/8" O.D.
TUBES & FLUES, LENGTH	20'-6"
ARCH TUBES, NO. 4	3" O.D.
SUPERHTR. TUBES, NO.	O.D.

93432	
FIREBOX	108-1/8" X 75-1/4"
HEATING SURFACES	
TUBES & FLUES	3779.7 SQ.FT.
FIREBOX	230 SQ.FT.
ARCH TUBES	230 SQ.FT.
SYPHONS	SQ.FT.
TOTAL	4009.7 SQ.FT.
SUPERHTR. H.S.	893 SQ.FT.
GRATE AREA	58.5 SQ.FT.

43600	
JOURNALS, DRIVING, MAIN	10-1/2 X 17"
JOURNALS, DRIVING, OTHERS	9-1/2 X 12"
JOURNALS, ENG. TRUCK	6 X 12"
JOURNALS, TRL. TRUCK, F.	8 X 14"
JOURNALS, TRL. TRUCK, B.	
VALVE GEAR	BAKER
TRAVEL	7" LAP-1"
LEAD	5/32" EXH. CL. L.&L.
FACTOR OF ADHESION	4.52
CYLINDER	H.P. 2076
PERCENT BOILER TO CYL. H.P. 104.8	

58450	
62660	
52380	
51460	
23200	
TENDER FRAME	} CAST STEEL
TENDER TRUCK FRAME	
TENDER TRUCK BOLSTER	
SUPERHTR.	S.H. CO. TYPE-A
FW. HEATER	TYPE
STOKER	DUPLEX TYPE NOTE-2
REVERSE GEAR	NOTE-1
SAFETY VALVES	2 3-1/2"
ENG. FRAME	BAR TYPE - C. STEEL
THROTTLE	DOME TYPE

INJECTOR	
AIR BRAKE	6 ET EQUIPMENT
LUB. R.S.	
LUB. L.S.	
NOTE-1	RAGONNET - 511,513,528.
	PRECISION - 518,523.
NOTE-2	D-1 - 518,523
	D-2 - 511,513,528.
BUILDERS ORDER NO.	B-1448
BUILDER	A.L. CO.
YEAR BUILT	1917

TRACTIVE POWER 49750 LBS.

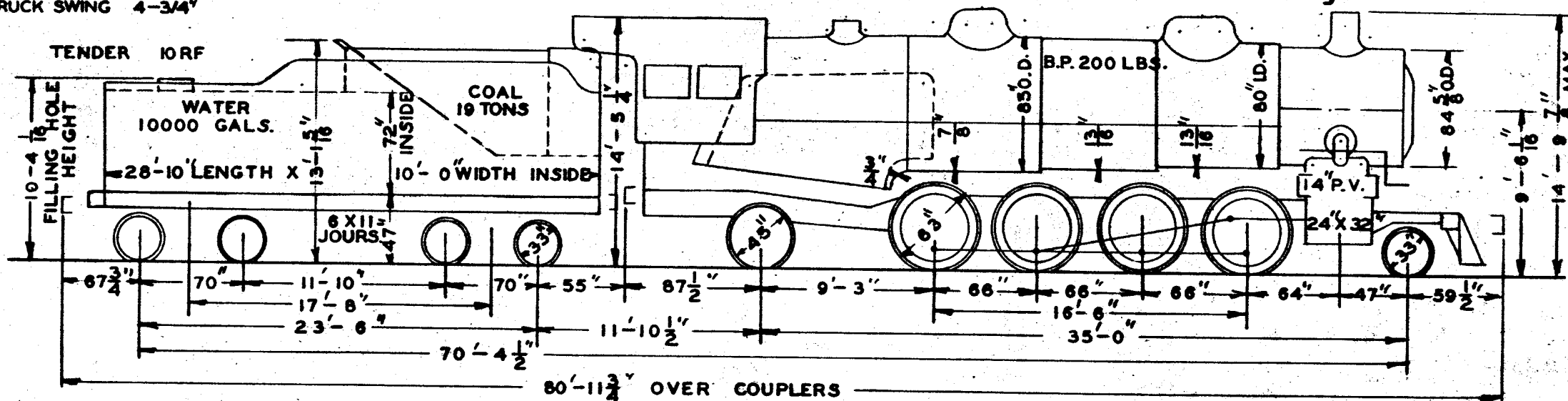
NO. OF ENGINES - 2

N.K.P.

**CLASS H-5B
ENGS. 519,530.**

58

MAX. CURVE 18°-30'
ENG. TRUCK SWING 4-3/4"
TRAIL TRUCK SWING 4-3/4"



DR. CH. DATE 3-31-50

WEIGHTS-WORK ORDER 94588		96432		43600		58450 62660		52380 51460		23200	
WT. DRIVERS	224950 LBS.	FIREBOX	108-1/8" X 75-1/4"	JOURNALS, DRIVING	MAIN-10-1/2" X 17"	TENDER FRAME		INJECTOR			
WT. ENG. TRUCK	23200 LBS.	HEATING SURFACES		JOURNALS, DRIVING OTHERS	9-1/2" X 12"	TENDER TRUCK FRAME	CAST	AIR BRAKE	6 ET EQUIPMENT		
WT. TRL. TRUCK	43600 LBS.	TUBES & FLUES	3779.7 SQ.FT.	JOURNALS, ENG. TRUCK	6" X 12"	TENDER TRUCK BOLSTER	STEEL	LUB. R.S.			
WT. ENG. TOTAL	291750 LBS.	FIREBOX	230 SQ.FT.	JOURNALS, TRL. TRUCK, F.	8" X 14"	SUPERHTR.	S.H.CO. TYPE-A	LUB. L.S.			
WT. TENDER-FULL	191000 LBS.	ARCH TUBES		JOURNALS, TRL. TRUCK, B.		FWHEATER	TYPE	NOTE-1			
WT. ENG. & TENDER	482750 LBS.	SYPHONS		VALVE GEAR	BAKER	STOKER	DUPLEX-TYPE-D-2	PRECISION	ENG. 519		
TUBES, NO. 257	2 O.D.	TOTAL	4009.7 SQ.FT.	TRAVEL	7" LAP-1"	REVERSE GEAR	NOTE-1 TYPE	ALCO	ENG. 530		
FLUES, NO. 36	5-3/8" O.D.	SUPERHTR. H.S.	893 SQ.FT.	LEAD	5/32" EXH.CL.L.&L.	SAFETY VALVES	2 3-1/2"	BUILDERS ORDER NO.	B-1448		
TUBES & FLUES, LENGTH	20'-6"	GRATE AREA	56.5 SQ.FT.	FACTOR OF ADHESION	4.52	ENG. FRAME	BAR TYPE-C STEEL	BUILDER	A.L. CO.		
ARCH TUBES, NO. 4	3" O.D.			CYLINDER	H.P. 2076	THROTTLE	— DOME TYPE	YEAR BUILT	1917		
SUPERHTR. TUBES, NO.	O.D.			PERCENT BOILER TO CYL.H.P.	104.8						

TRACTIVE POWER 49750 LBS.

NO. OF ENGINES - 1

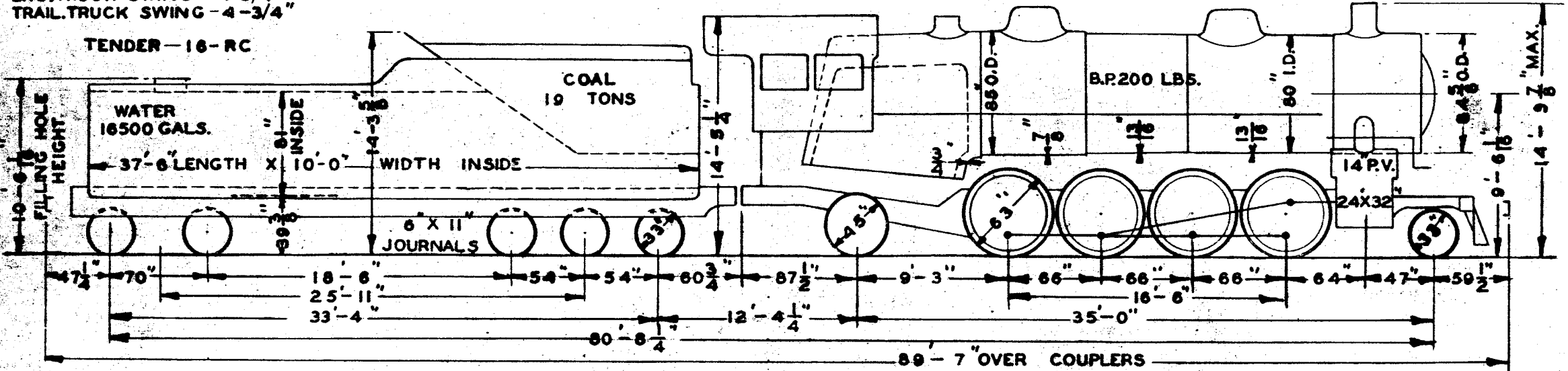
N.K.P.

CLASS H-5B

59

MAX. CURVE - 18°-30'
 ENG. TRUCK SWING - 4-3/4"
 TRAIL. TRUCK SWING - 4-3/4"

ENGS. 525



DR. M. V. CH. 3-9-50

WEIGHTS - WORK ORDER 103766		160087	43600	58450	62660	52380	51460	23200
WT. DRIVERS	224950 LBS.	FIREBOX	108-1/8" X 75-1/4"	JOURNALS, DRIVING, MAIN	10-1/2" X 17"	TENDER FRAME - C.S.	WATER BOTTOM	INJECTOR
WT. ENG. TRUCK	23200 LBS.	HEATING SURFACES		JOURNALS, DRIVING, OTHERS	9-1/2" X 12"	TENDER TRUCK FRAME	CAST	AIR BRAKE - 6 ET EQUIPMENT
WT. TRAIL. TRUCK	43600 LBS.	TUBES & FLUES	3779.7 SQ.FT.	JOURNALS, ENG. TRUCK	6" X 12"	TENDER TRUCK BOLSTER	STEEL	LUB. R.S. - NATHAN TYPE DV-7
WT. ENG. TOTAL	291750 LBS.	FIREBOX	230 SQ.FT.	JOURNALS, TRAIL. TRUCK, F.	8" X 14"	SUPERHTR.	SH. CO. TYPE A	LUB. L.S.
WT. TENDER - FULL	286853 LBS.	ARCH TUBES	230 SQ.FT.	JOURNALS, TRAIL. TRUCK, B.		FWHEATER	TYPE	
WT. ENG. & TENDER	558603 LBS.	SYPHONS		VALVE GEAR	BAKER	STOKER	DUPLEX TYPE D-2	
TUBES, NO.	257	TOTAL	4009.7 SQ.FT.	TRAVEL	7" LAP	REVERSE GEAR	RAGONNET	
FLUES, NO.	36	SUPERHTR. H.S.	893 SQ.FT.	LEAD	5/32" EXH. C.L. & L.	SAFETY VALVES	2 - 3-1/2"	
TUBES & FLUES, LENGTH	20'-6"	GRATE AREA	56.5 SQ.FT.	FACTOR OF ADHESION	4.52	ENG. FRAME	BAR TYPE - C. STEEL	BUILDERS ORDER NO. - B-1448
ARCH TUBES, NO.	4			CYLINDER H.P.	2076	THROTTLE	DOME TYPE	BUILDER - A.L. CO.
SUPERHTR. TUBES, NO.	O.D.			PERCENT BOILER TO CYL. H.P.	104.8			YEAR BUILT - 1917

TRACTIVE POWER 49900 LBS.

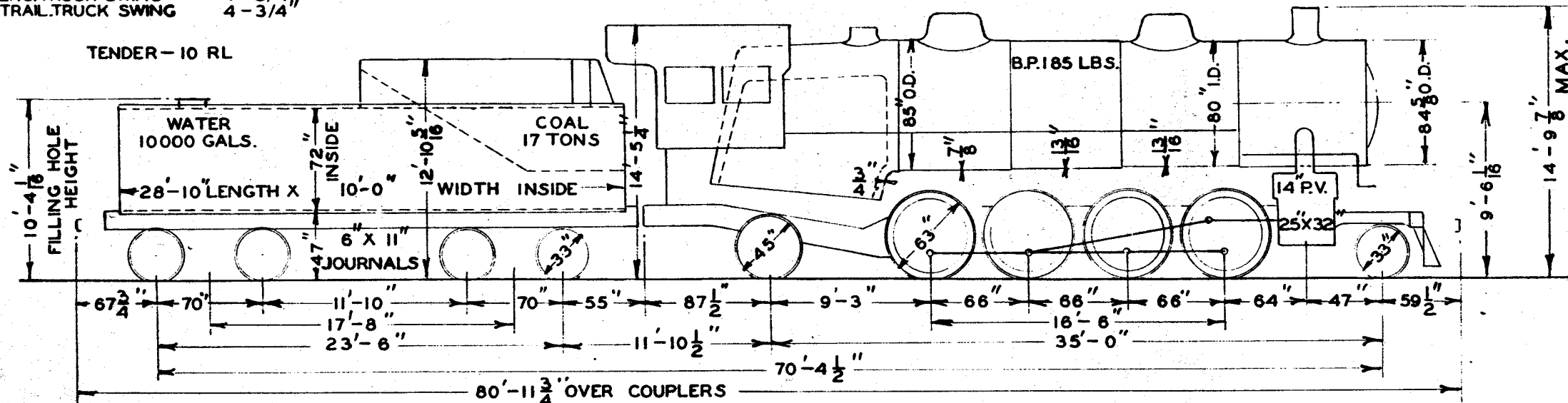
NO. OF ENGINES - 1

N.K.P.

**CLASS H-5B
ENGS. 531**

60

MAX. CURVE 18°-30'
ENG. TRUCK SWING 4-3/4"
TRAIL TRUCK SWING 4-3/4"



WEIGHTS - WORK ORDER 93568

93432

43600

58450

62660

52380

51460

23200

DR. CH. DATE

WT. DRIVERS	224950 LBS.
WT. ENG. TRUCK	23200 LBS.
WT. TRL. TRUCK	43600 LBS.
WT. ENG. TOTAL	291750 LBS.
WT. TENDER - FULL	187000 LBS.
WT. ENG. & TENDER	478750 LBS.
TUBES, NO. 257	2 O.D.
FLUES, NO. 36	5-3/8 O.D.
TUBES & FLUES, LENGTH	20'-6"
ARCH TUBES, NO. 4	3 O.D.
SUPERHTR. TUBES, NO.	O.D.

FIREBOX	108-1/8" X 75-1/4"
HEATING SURFACES	
TUBES & FLUES	3779.7 SQ. FT.
FIREBOX	230 SQ. FT.
ARCH TUBES	230 SQ. FT.
SYPHONS	SQ. FT.
TOTAL	4009.7 SQ. FT.
SUPERHTR. H.S.	893 SQ. FT.
GRATE AREA	56.5 SQ. FT.

JOURNALS, DRIVING, MAIN	10-1/2 X 17
JOURNALS, DRIVING, OTHERS	9-1/2 X 12
JOURNALS, ENG. TRUCK	8 X 12
JOURNALS, TRL. TRUCK, F.	8 X 14
JOURNALS, TRL. TRUCK, B.	
VALVE GEAR	BAKER
TRAVEL	7" LAP 1"
LEAD	5/32" EXH. CL. L. & L.
FACTOR OF ADHESION	4.50
CYLINDER H.P.	2083
PERCENT BOILER TO CYL. H.P.	104.5

TENDER FRAME	} CAST
TENDER TRUCK FRAME	
TENDER TRUCK BOLSTER	STEEL
SUPERHTR.	S.H. CO. TYPE - A
FW. HEATER	TYPE
STOKER	DUPLEX TYPE D-2
REVERSE GEAR	PRECISION
SAFETY VALVES	2 - 3-1/2"
ENG. FRAME	BARTYPE - C. STEEL
THROTTLE	DOMED TYPE

INJECTOR	
AIR BRAKE	6 ET EQUIPMENT
LUB. R.S.	
LUB. L.S.	

BUILDERS ORDER NO. B-1448
BUILDER A.L. CO.
YEAR BUILT 1917

TRACTIVE POWER-49750 LBS.

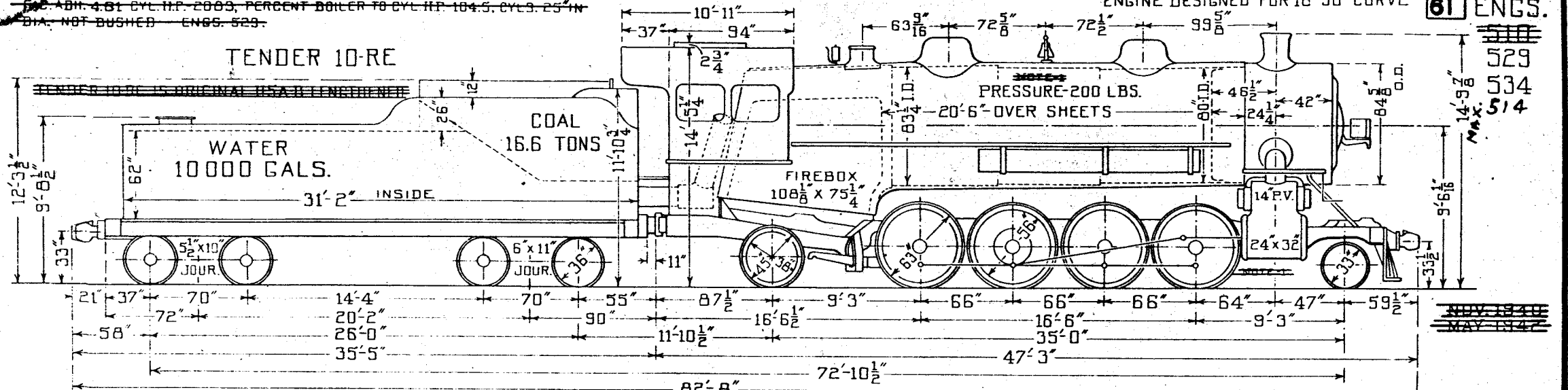
NO. OF ENGINES - 61

N. K.P. CLASS H-5 B

ENGINE DESIGNED FOR 18'-30" CURVE

61 ENGS.

NOTE: ENGS WITH 105 LBS. PRESSURE HAVE TRACTIVE POWER OF 48900 LBS.
 P.C. ADH. 4.81 CYL. H.P. 2000, PERCENT BOILER TO CYL. H.P. 104.5, CYL. 9.25" IN DIA. NOT BUSHED ENGS. 529.



WEIGHTS - 79000

97000

~~44800~~
43600

~~50800~~
58450

~~64000~~
62660

~~53300~~
52380

~~52450~~
51460

~~23600 WTS. ENCL. 529~~
23200 WTS. ENCS. 510, 534

3-8-50

REVISED

WEIGHTS IN WORKING ORDER	
ON DRIVERS	224 950 224 950 LBS.
ON ENGINE TRUCK	23 200 LBS.
ON TRAILING TRUCK	43 600 LBS.
ENGINE TOTAL	291 750 LBS.
TENDER	176 000 LBS.
ENG. & TENDER	467 750 LBS.
TUBES, NO. 257	2" O.D. SEE NOTE 2
FLUES, NO. 36	5 3/8" O.D.
TUBES & FLUES, LENGTH	20'-6"
ARCH TUBES, NO. 4	3" O.D.

FIREBOX LENGTH	108 1/8"
" WIDTH	75 1/4"
HEATING SURFACES	
TUBES & FLUES	3779.7 SQ. FT.
FIREBOX AND ARCH TUBES	230 SQ. FT.
SYPHONS	SQ. FT.
TOTAL HEATING SURFACE	4009.7 SQ. FT.
SUPERHEATER H.S.	893 SQ. FT.
GRATE AREA	56.5 SQ. FT.

JOURNALS DRIVING MAIN	10 1/2" X 17"
" OTHERS	9 1/2" X 12"
ENG. TRUCK	6" X 12"
TRAILER	8" X 14"
VALVE DATA	
TRAVEL	7" LAP 1"
LEAD	5/32 EXH. CL. L.B.L.
VALVE GEAR	BAKER
FACTOR OF ADHESION	NOTE 1 - 4.88 & 62
CYL. HORSE POWER	2076
PERCENT BOILER TO CYL. H. P.	104.8

SUPERHEATER-TYPE	A
F.W. HEATER	NOTE 2
STOKER	D-2
BOOSTER	
REVERSE GEAR	FRANKLINE ON SID RAGONNET ON 529, 534.
	ALCO-514

NOTE 2: WORTHINGTON 3-B F.W. HTR. ON 529.
 WEIGHT ON DRIVERS 230 250 LBS.
 WT. TOTAL ENGINE 296 750 LBS.
 TOTAL ENCL. & TENDER 474 750 LBS.
 BUILDERS ORDER B-144 B
 BUILDER BROOKS
 YEAR BUILT AUG. 1917

NOV. 1940
MAY 1942

TRACTIVE POWER-49750 LBS. SEE NOTE 1-2.
 NOTE-1 ENGS. WITH 185 LBS. PRESSURE, TRACTIVE POWER OF 49900 LBS., FAC. ADH. OF 4.50, CYL. H.P.=2083, PERCENT BOILER TO CYL. H.P.=104.5; ENGS-515.
 ENGS-526, ~~517~~ - CYLINDERS ARE 25" DIA.
 PRESSURE-200 LBS. ON 517, 522, ~~515, 516, 517, 518, 519, 521, 522~~
 TENDER 10-RC

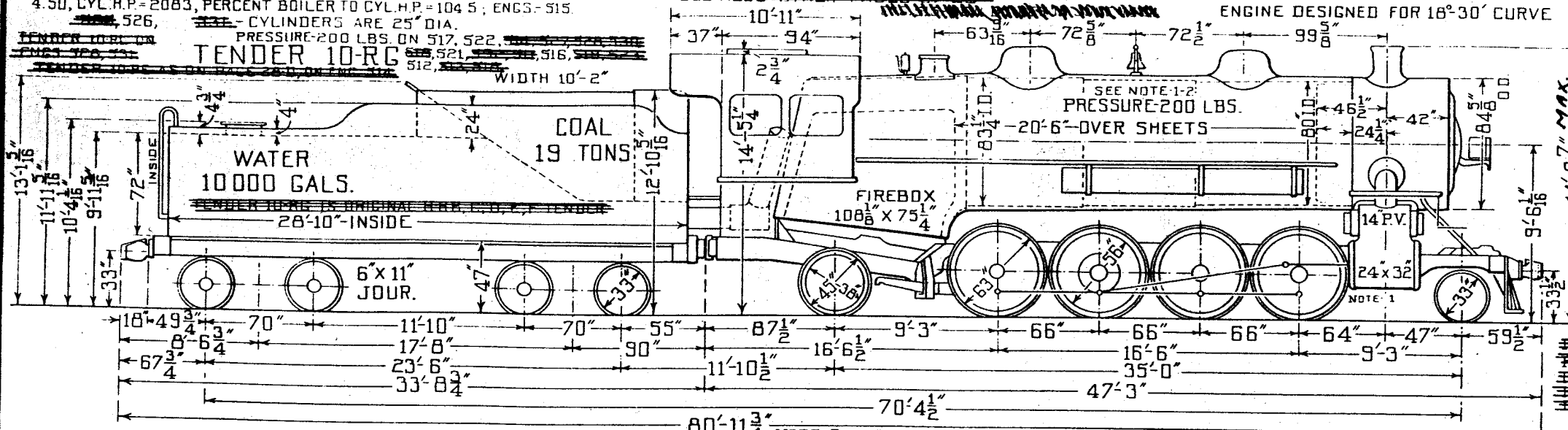
NO. OF ENGINES - ~~3977~~ 7

N.K.P. CLASS H-5 B

ENGINE DESIGNED FOR 18°-30' CURVE

62 ENGS.

- 512
- 513
- 514
- 515
- 516
- 517
- 518
- 519
- 521
- 522



WEIGHTS- 94568

96432

80'-11 3/4"

NOTE-2: ENGS. WITH 200 LBS. PRESS.-T. POWER-49750, FAC. ADH. 4.52, CYL. H.P. 2076, PERCENT BOILER TO CYL. H.P.=104.8
 43600 58450 62660 52380 51460 23200

REVISED 3-14-SP

WEIGHTS IN WORKING ORDER	
ON DRIVERS	224950 LBS.
ON ENGINE TRUCK	23200 LBS.
ON TRAILING TRUCK	43600 LBS.
ENGINE TOTAL	291750 LBS.
TENDER	191000 LBS.
ENG. & TENDER	482750 LBS.
TUBES, 36 - 25 1/2" O.D.	
FLUES, 36 - 5 3/8" O.D.	
TUBES & FLUES LENGTH	20'-6"
ARCH TUBES, 4 - O.D. 3"	

FIREBOX LENGTH	108 1/8"
" WIDTH	75 1/4"
" HEATING SURFACE	
TUBES & FLUES	3779.7 SQ. FT.
FIREBOX AND ARCH TUBES	230 SQ. FT.
DRIVERS	SQ. FT.
TOTAL HEATING SURFACE	4009.7 SQ. FT.
GRATE AREA	893 SQ. FT.
GRATE AREA	56.5 SQ. FT.

JOURNALS-DRIVING MAIN	10 1/2" X 17"
" OTHERS	9 1/2" X 12"
" ENG. TRUCK	6" X 12"
" TRAILER	8" X 14"
VALVE DATA	
TRAVEL	7" LAP 1"
LEAD	5/32" EXH. CL. L & L.

VALVE GEAR - BAKER
 FACTOR OF ADHESION - 4.52
 CYLINDER HORSE POWER - 2076
 PERCENT BOILER TO CYL. H.P. - 104.8

SUPERHEATER-TYPE - A
 F.W. HEATER -
 STOKER -
 BOOSTER -
 REVERSE GEAR - PRECISION ON-
 515, 522, 526, 521, 516
 ALCO. ON - 517
 RAGONNET ON - 512
 BLDRS. ORDER NO. - B-1448
 BUILDER - BROOKS
 YEAR BUILT - AUG. - 1917

REV. DEC 1917
 REV. APR 1918
 REV. MAY 1918
 REV. JAN 1918
 REV. FEB 1918

TRACTIVE POWER ~~2076~~ ²⁰⁷⁶ LBS. ~~NOTE~~

NO. OF ENGINES ~~3~~ ⁴

N. K. P.

CLASS H-5B

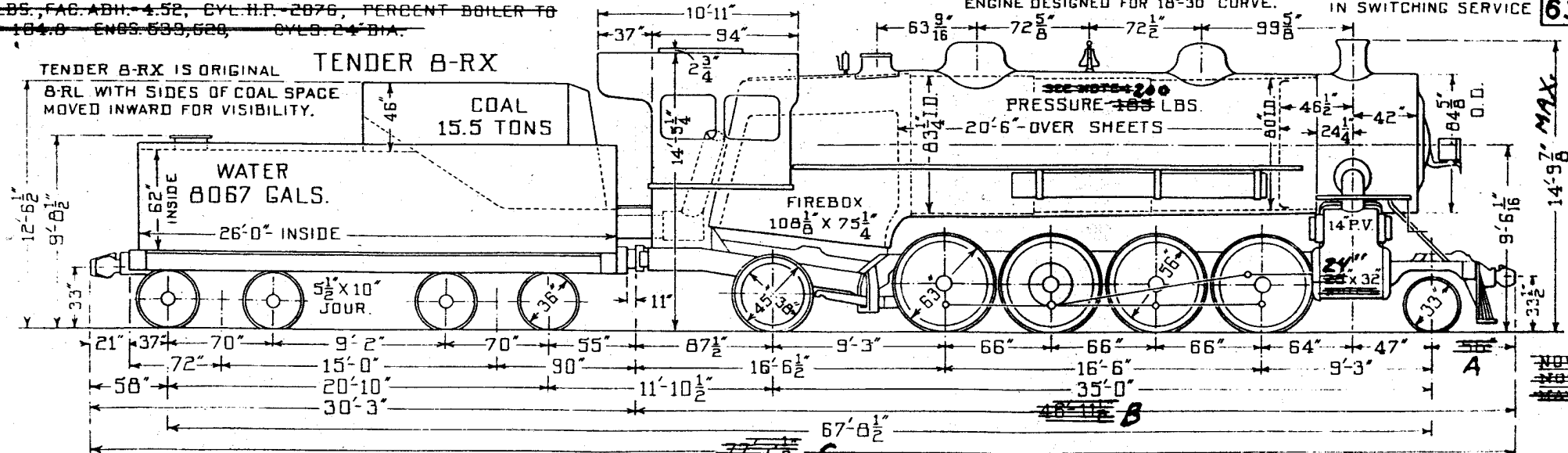
NOTE 1 ENGS. WITH 200 LBS. PRESSURE HAVE TRACTIVE POWER OF
~~43750 LBS., FAC. ADH. 4.52, CYL. H.P. 2076, PERCENT BOILER TO~~
~~CYL. H.P. 104.8 ENGS. 533, 520, CYLS. 24 DIA.~~

SEE ALSO OTHER PAGES OF THIS

ENGINE DESIGNED FOR 18°-30' CURVE.

WHEN USED IN SWITCHING SERVICE

63 ENGS.



520
 524
 533
 527

NOV 1933
 NOV 1940
 NOV 1940

WEIGHTS- 71300 88950 43600 58450 62660 52380 51460 23200

3-8-50

REVISED

WEIGHTS IN WORKING ORDER	
ON DRIVERS	224 950 LBS.
ON ENGINE TRUCK	23 200 LBS.
ON TRAILING TRUCK	43 500 LBS.
ENGINE TOTAL	291 750 LBS.
ENG. & TENDER	452 000 LBS.
TENDER	160 250 LBS.
FLUES, NO. 35-5 3/8 O.D. TUBES 257-2" O.D.	
TUBES & FLUES, LENGTH	20'-6"
ARCH TUBES, NO. 4 O.D. 3"	

FIREBOX LENGTH	108 1/8"
" WIDTH	75 1/4"
" HEATING SURFACES	
TUBES & FLUES	3779.7 SQ. FT.
FIREBOX AND ARCH TUBES	230 SQ. FT.
SYPHONS	SQ. FT.
TOTAL HEATING SURFACE	4009.7 SQ. FT.
SUPERHEATER H.S.	893 SQ. FT.
GRATE AREA	56.5 SQ. FT.

JOURNALS DRIVING-MAIN	10 1/2" X 17"
" " OTHERS	9 1/2" X 12"
" ENG. TRUCK	6" X 12"
" TRAILER	8" X 14"
VALVE DATA	
TRAVEL	7"
LEAD	5/32"
VALVE GEAR	EXH. CL. L & L BAKER
FACTOR OF ADHESION	4.50
CYL. HORSE POWER	NOTE-1 2076
PERCENT BOILER TO CYL. H. P.	104.8

SUPERHEATER-TYPE _____ A
 F. W. HEATER _____
 STOKER _____ D-2
 BOOSTER _____
 REVERSE GEAR _____ RAGONNET

ENGS.	A	B	C
527	59 1/2"	47'-3"	77'-6"
OTHERS	56"	46'-11 1/2"	77'-2 1/2"

BLDRS. ORDER NO. _____ B-144B
 BUILDER _____ A.L.CO. _____ BROOKS WORKS
 YEAR BUILT _____ AUG. 1917

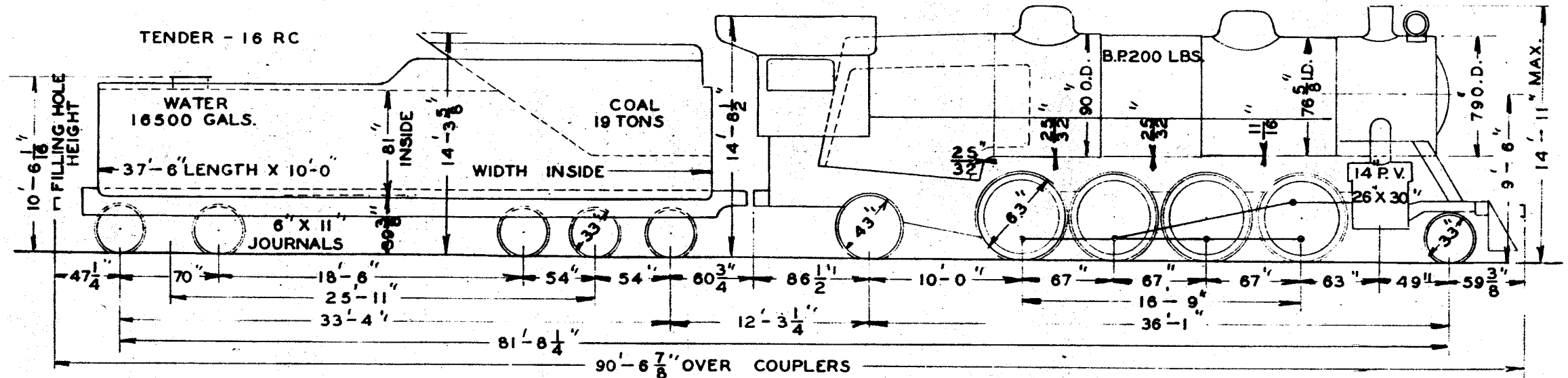
TRACTIVE POWER 54700 LBS.
MAX. CURVE 19°

NO. OF ENGINES - 1

N.K.P.

CLASS H-6A
ENGS. 602

64



DR. V. CH. DATE
 3-20-50

WEIGHTS-WORK ORDER 106766		160087	55170	58750	57950	55400	56350	23800	
WT. DRIVERS	228450 LBS.	FIREBOX	114-1/8" X 84-1/4"	JOURNALS, DRIVING, MAIN	11" X 13"	TENDER FRAME - WATER BOTTOM	C.S.	INJECTOR	
WT. ENG. TRUCK	23800 LBS.	HEATING SURFACES		JOURNALS, DRIVING, OTHERS	10" X 13"	TENDER TRUCK FRAME	CAST	AIR BRAKE	6 ET EQUIPMENT
WT. TRL. TRUCK	55170 LBS.	TUBES & FLUES	3481.1 SQ. FT.	JOURNALS, ENG. TRUCK	6-1/2" X 12"	TENDER TRUCK BOLSTER	STEEL	LUB. R. S.	
WT. ENG. TOTAL	307420 LBS.	FIREBOX	256 SQ. FT.	JOURNALS, TRL. TRUCK, F.	9" X 14"	SUPERHTR.	S.H. CO. TYPE-A	LUB. L. S.	
WT. TENDER-FULL	266853 LBS.	ARCH TUBES	27 SQ. FT.	JOURNALS, TRL. TRUCK, B.		FWHEATER	WORTHINGTON-TYPE B		
WT. ENG. & TENDER	574273 LBS.	SYPHONS		VALVE GEAR	WALSCHAERT	STOKER	DUPLEX TYPE-D-1		
TUBES, NO. 213	2-1/4" O.D.	TOTAL	3744.1 SQ. FT.	TRAVEL GEAR	6-1/2" LAP-1"	REVERSE GEAR	PRECISION		
FLUES, NO. 40	5-1/2" O.D.	SUPERHTR. H.S.	882 SQ. FT.	LEAD	3/16" EXH. CL. L. & L.	SAFETY VALVES	3 3"		
TUBES & FLUES, LENGTH	19'-0"	GRATE AREA	66.7 SQ. FT.	FACTOR OF ADHESION	4.17	ENG. FRAME - BAR TYPE	C. STEEL	BUILDERS ORDER NO.	S-1259
ARCH TUBES, NO. 4	3 O.D.			CYLINDER H.P.	2434	THROTTLE	DOMED TYPE	BUILDER	A.L. CO.
SUPERHTR. TUBES, NO.	O.D.			PERCENT BOILER TO CYL. H.P.	94.7			YEAR BUILT	1918

TRACTIVE POWER 54700 LBS. WITHOUT BOOSTER
 MAX. CURVE 19° 64100 LBS. WITH BOOSTER

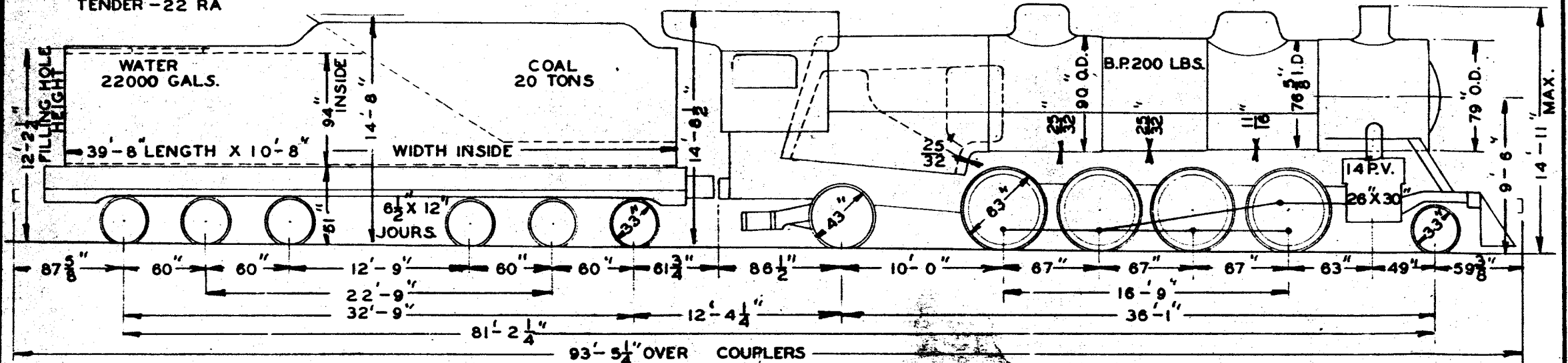
NO. OF ENGINES - 1

N.K.P.

CLASS H - 6B
 ENGS. 611

65

TENDER - 22 RA



WEIGHTS - WORK ORDER 185500		169500	61000	64050	63200	54250	54700	22800
DR	DATE	WT. DRIVERS	FIREBOX	JOURNALS, DRIVING MAN	TENDER FRAME - WATER BOTTOM - C.S.	INJECTOR	AIR BRAKE - 6 ET EQUIPMENT	
CH		WT. ENG. TRUCK	HEATING SURFACES	JOURNALS, DRIVING OTHERS	TENDER TRUCK FRAME	LUB. R.S.	LUB. L.S.	
V		WT. TRL. TRUCK	TUBES & FLUES	JOURNALS, ENG. TRUCK	TENDER TRUCK BOLSTER	LUB. L.S.	BOOSTER - YES	
		WT. ENG. TOTAL	FIREBOX	JOURNALS, TRL. TRUCK, F.	SUPERHTR.	BOOSTER		
		WT. TENDER - FULL	ARCH TUBES	JOURNALS, TRL. TRUCK, B.	FWHEATER			
		WT. ENG. & TENDER	SYPHONS	VALVE GEAR	STOKER			
		TUBES, NO. 213	TOTAL	TRAVEL	REVERSE GEAR			
		FLUES, NO. 40	SUPERHTR. H.S.	LEAD	SAFETY VALVES			
		TUBES & FLUES, LENGTH	GRATE AREA	FACTOR OF ADHESION	ENG. FRAME			
		ARCH TUBES, NO. 2		CYLINDER H.P.	THROTTLE			
		SUPERHTR. TUBES, NO.		PERCENT BOILER TO CYL. H.P.			BUILDERS ORDER NO. 1022	
							BUILDER - LIMA LOCO. WORKS	
							YEAR BUILT 1920	

TRACTIVE POWER 54700 LBS.
MAX. CURVE 19°

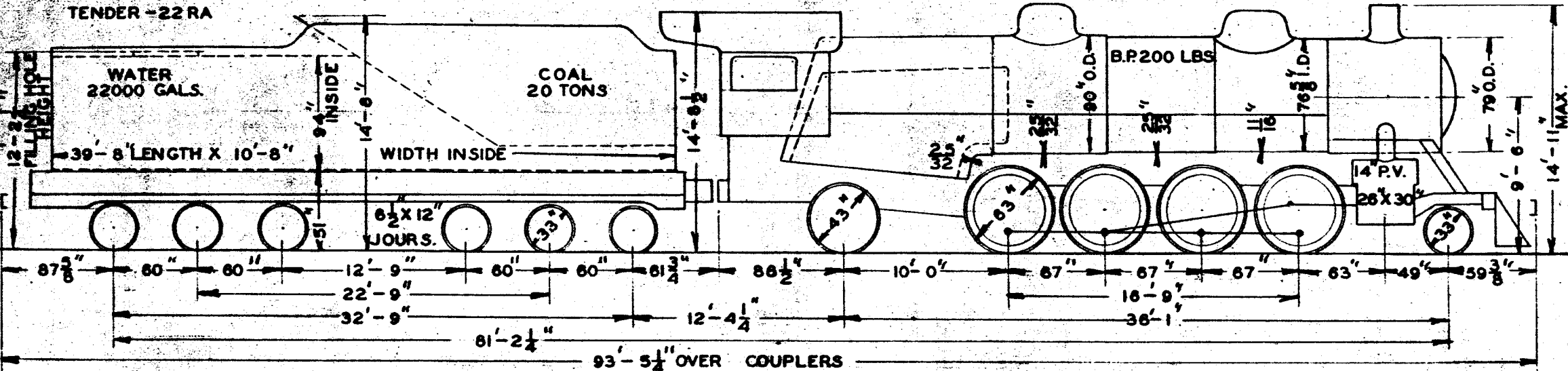
NO. OF ENGINES - 1

N.K.P.

CLASS H-6B
ENGS. 612

66

TENDER - 22 RA



DR. 3-7-65

WEIGHTS - WORK ORDER 185500		169500	54600	58500	58400	55100	55600	23200	
WT. DRIVERS	227600 LBS.	FIREBOX	114-1/8" X 84-1/4"	JOURNALS, DRIVING MAIN	11" X 13"	TENDER FRAME - WATER BOTTOM	C.S.	INJECTOR	2 - NO. 11 N.L.
WT. ENG. TRUCK	23200 LBS.	HEATING SURFACES		JOURNALS, DRIVING OTHERS	10" X 13"	TENDER TRUCK FRAME	7 CAST	AIR BRAKE	6 ET EQUIPMENT
WT. TRL. TRUCK	54600 LBS.	TUBES & FLUES	3461.1 SQ. FT.	JOURNALS, ENG. TRUCK	8-1/2" X 12"	TENDER TRUCK BOLSTER	STEEL	LUB. R.S.	
WT. ENG. TOTAL	305400 LBS.	FIREBOX	256 SQ. FT.	JOURNALS, TRL. TRUCK, F.	9" X 14"	SUPERHTR.	S.H. CO. TYPE - A	LUB. L.S.	
WT. TENDER - FULL	355000 LBS.	ARCH TUBES	27 SQ. FT.	JOURNALS, TRL. TRUCK, B.		FWHEATER	TYPE		
WT. ENG. & TENDER	660400 LBS.	SYPHONS	SQ. FT.	VALVE GEAR	WALSCHAERT	STOKER	DUPLEX TYPE - D-1		
TUBES, NO. 213	2-1/4" O.D.	TOTAL	3744.1 SQ. FT.	TRAVEL	6-1/2" LAP - 1"	REVERSE GEAR	PRECISION		
FLUES, NO. 40	5-1/2" O.D.	SUPERHTR. H.S.	882 SQ. FT.	LEAD	3/16" EXH. CL. L. & L.	SAFETY VALVES	3		
TUBES & FLUES, LENGTH	19'-0"	GRATE AREA	66.75 SQ. FT.	FACTOR OF ADHESION	4.16	ENG. FRAME BAR TYPE	C. STEEL	BUILDERS ORDER NO.	1022
ARCH TUBES, NO. 4	3" O.D.			CYLINDER H.P.	2434	THROTTLE	DOME TYPE	BUILDER	LIMA LOCO. WORKS
SUPERHTR. TUBES, NO.	O.D.			PERCENT BOILER TO CYL. H.P.	94.7			YEAR BUILT	1920

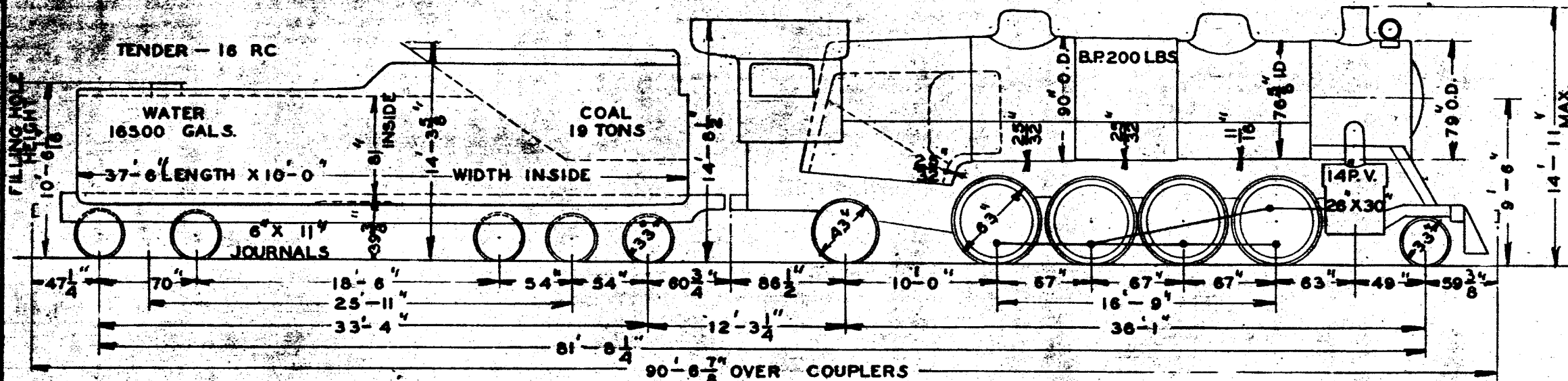
TRACTIVE POWER 54700 LBS.
MAX. GRADE 18°

NO. OF ENGINES - 1

N. K. P.

CLASS H-6B
ENGS. 614

68



WEIGHTS - WORK ORDER 106766

160087

56400

60400

60000

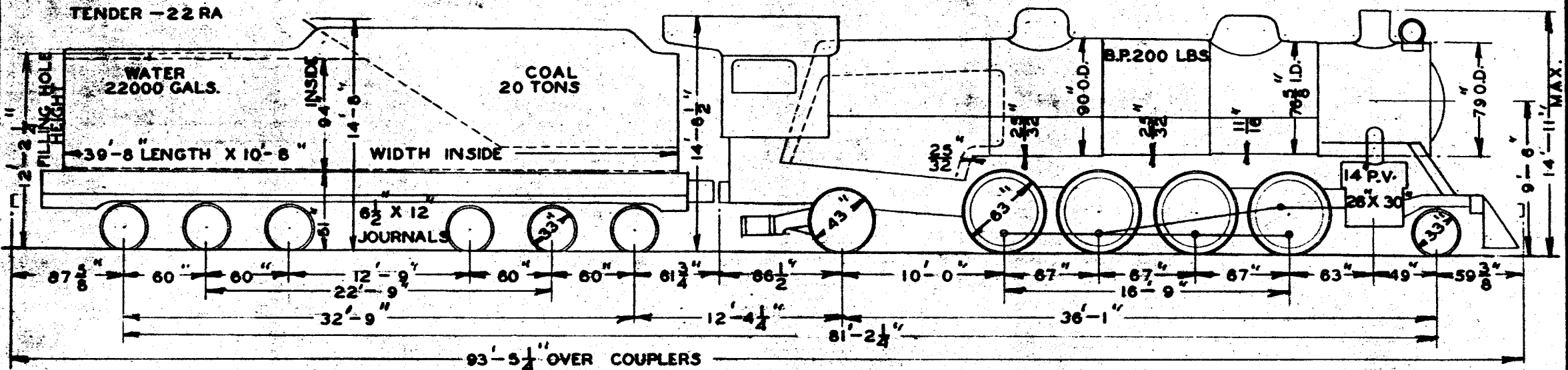
55400

55700

23200

DR. V. CH. 105	DATE	WT. DRIVERS 231500 LBS.	FIREBOX 114-1/8" X 84-1/4"	JOURNALS, DRIVING MAIN 11 X 13"	TENDER FRAME - WATER BOTTOM C.S.	INJECTOR
		WT. ENG. TRUCK 23200 LBS.	HEATING SURFACES	JOURNALS, DRIVING OTHERS 10 X 13"	TENDER TRUCK FRAME 7 CAST	AIR BRAKE 6 ET EQUIPMENT
		WT. TRL. TRUCK 56400 LBS.	TUBES & FLUES 3461.1 SQFT.	JOURNALS, ENG. TRUCK 6-1/2" X 12"	TENDER TRUCK BOLSTER 1 STEEL	LUB. R.S.
		WT. ENG. TOTAL 311100 LBS.	FIREBOX 256 SQFT.	JOURNALS, TRL. TRUCK, F. 9" X 14"	SUPERHTR. S.H. CO. TYPE - A	LUB. L.S.
		WT. TENDER - FULL 266853 LBS.	ARCH TUBES 27 SQFT.	JOURNALS, TRL. TRUCK, B.	FWHEATER - WORTHINGTON TYPE BL	
		WT. ENG. & TENDER 577853 LBS.	SYPHONS SQFT.	VALVE GEAR WALSCHAERT	STOKER DUPLEX TYPE D-1	
		TUBES, NO. 213 2-1/4" O.D.	TOTAL 3744.1 SQFT.	TRAVEL 6-1/2" LAP 1"	REVERSE GEAR PRECISION	
		FLUES, NO. 40 5-1/2" O.D.	SUPERHTR. H.S. 882 SQFT.	LEAD 3/16" EXH. CL. L & L	SAFETY VALVES 3 3"	
		TUBES & FLUES, LENGTH 19'-0"	GRATE AREA 66.7 SQFT.	FACTOR OF ADHESION 4.23	ENG. FRAME BAR TYPE - C. STEEL	BUILDERS ORDER NO. 1022
		ARCH TUBES, NO. 4 3" O.D.		CYLINDER H.P. 2434	THROTTLE - DOME TYPE	BUILDER LIMA LOCO. WORKS
		SUPERHTR. TUBES, NO. O.D.		PERCENT BOILER TO CYL. H.P. 94.7		YEAR BUILT 1920

TRACTIVE POWER 54700 LBS. WITHOUT BOOSTER **NO. OF ENGINES** - 1 **N.K.P.** **CLASS** H-6B **69**
MAX. CURVE 19° **64100 LBS. WITH BOOSTER** **ENGS.** 615



DR. DATE CH. PH. 3-14-30

WEIGHTS-WORK ORDER 185500		169500	61000	64050	63200	54250	54700	22800	
WT. DRIVERS	236200 LBS.	FIREBOX	114-1/8" X 84-1/4"	JOURNALS, DRIVING, MAIN	11" X 13"	TENDER FRAME-WATER BOTTOM	C.S.	INJECTOR	
WT. ENG. TRUCK	22800 LBS.	HEATING SURFACES		JOURNALS, DRIVING, OTHERS	10" X 13"	TENDER TRUCK FRAME	CAST	AIR BRAKE	6 ET EQUIPMENT
WT. TRL. TRUCK	61000 LBS.	TUBES & FLUES	3461.1 SQ.FT.	JOURNALS, ENG. TRUCK	6-1/2" X 12"	TENDER TRUCK BOLSTER	STEEL	LUB. R.S.	
WT. ENG. TOTAL	320000 LBS.	FIREBOX	258 SQ.FT.	JOURNALS, TRL. TRUCK, F.	9" X 14"	SUPERHTR.	S. H. CO. TYPE-A	LUB. L.S.	
WT. TENDER-FULL	355000 LBS.	ARCH TUBES	27 SQ.FT.	JOURNALS, TRL. TRUCK, B.		F.W. HEATER-WORTHINGTON TYPE	BL	BOOSTER	YES
WT. ENG. & TENDER	675000 LBS.	SYPHONS		VALVE GEAR	" WALSCHAERT.	STOKER	DUPLEX - TYPE-D-1		
TUBES, NO. 213	2-1/4" O.D.	TOTAL	3744.1 SQ.FT.	TRAVEL	6-1/2" LAP-1"	REVERSE GEAR	PRECISION		
FLUES, NO. 40	5-1/2" O.D.	SUPERHTR. H.S.	882 SQ.FT.	LEAD	3/16" EXH. CL-L.A.L.	SAFETY VALVES	3 3"		
TUBES & FLUES, LENGTH	19'-0"	GRATE AREA	66.7 SQ.FT.	FACTOR OF ADHESION	4.31	ENG. FRAME-BAR TYPE	C.S.	BUILDERS ORDER NO.	1022
ARCH TUBES, NO. 4	3" O.D.			CYLINDER H.P.	2434	THROTTLE	DOME TYPE	BUILDER	LIMA LOCO. WORKS
SUPERHTR. TUBES, NO.	O.D.			PERCENT BOILER TO CYL. H.P.	94.7			YEAR BUILT	1920

TRACTIVE POWER 54700 LBS. WITHOUT BOOSTER
 MAX. CURVE - 18°
 ENG. TRUCK SWING - 4-3/4"
 TRAIL TRUCK SWING - 5-1/2"

NO. OF ENGS. - 5

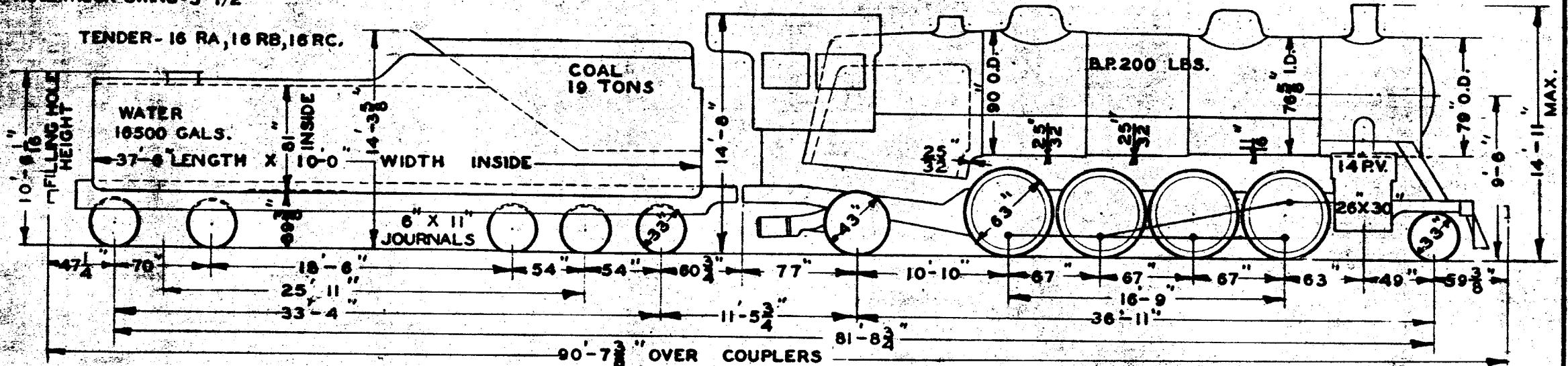
N.K.P.

CLASS H-6D
 ENGS. 617, 618, 621, 623, 631.

70

64100 LBS. WITH BOOSTER

TENDER - 16 RA, 16 RB, 16 RC.



WEIGHTS - WORK ORDER 106766

160087

57400

64000 63000

54450

54950

23000

DR	DATE	WT. DRIVERS — 236400 LBS.	FIREBOX — 114-1/8" X 84-1/4"	JOURNALS, DRIVING MAN — 11" X 13"	TENDER FRAME - C.S. WATER BOT.	INJECTOR
		WT. ENG. TRUCK — 23000 LBS.	HEATING SURFACES	JOURNALS, DRIVING OTHERS — 10" X 13"	TENDER TRUCK FRAME } CAST	AIR BRAKE — 6 ET EQUIPMENT
		WT. TRL. TRUCK — 57400 LBS.	TUBES & FLUES — 3481.1 SQ.FT.	JOURNALS, ENG. TRUCK — 6-1/2" X 12"	TENDER TRUCK BOLSTER } STEEL	LUB. R.S.
		WT. ENG. TOTAL — 316800 LBS.	FIREBOX — 256 SQ.FT.	JOURNALS, TRL. TRUCK, F. — 9" X 14"	SUPERHTR. — S.H.CO. TYPE A	LUB. L.S.
		WT. TENDER - FULL — 266853 LBS.	ARCH TUBES — 27 SQ.FT.	JOURNALS, TRL. TRUCK, B.	FWHEATER WORTHINGTON TYPE - BL	BOOSTER — YES.
		WT. ENG. & TENDER — 583653 LBS.	SYPHONS — SQ.FT.	VALVE GEAR — WALSCHAERT	STOKER — DUPLEX TYPE - D-1	
		TUBES, NO. — 213 — 2-1/4" O.D.	TOTAL — 3744.1 SQ.FT.	TRAVEL — 6-1/2" LAP — 1"	REVERSE GEAR — PRECISION	
		FLUES, NO. — 40 — 5-1/2" O.D.	SUPERHTR. H.S. — 882 SQ.FT.	LEAD — 3/16" EXH. CL. L & L.	SAFETY VALVES — 3-3	BUILDERS ORDER NO. — 1033
		TUBES & FLUES, LENGTH — 19'-0"	GRATE AREA — 68.7 SQ.FT.	FACTOR OF ADHESION — 4.32	ENG. FRAME — BAR TYPE - C. STEEL	BUILDER — LIMA LOCO. WORKS
		ARCH TUBES, NO. — 4 — 3" O.D.		CYLINDER H.P. — 2434	THROTTLE — DOME TYPE	YEAR BUILT — 1922
		SUPERHTR. TUBES, NO. — O.D.		PERCENT BOILER TO CYL. H.P. — 94.7		

TRACTIVE POWER 54700 LBS.

NO. OF ENGINES - 1

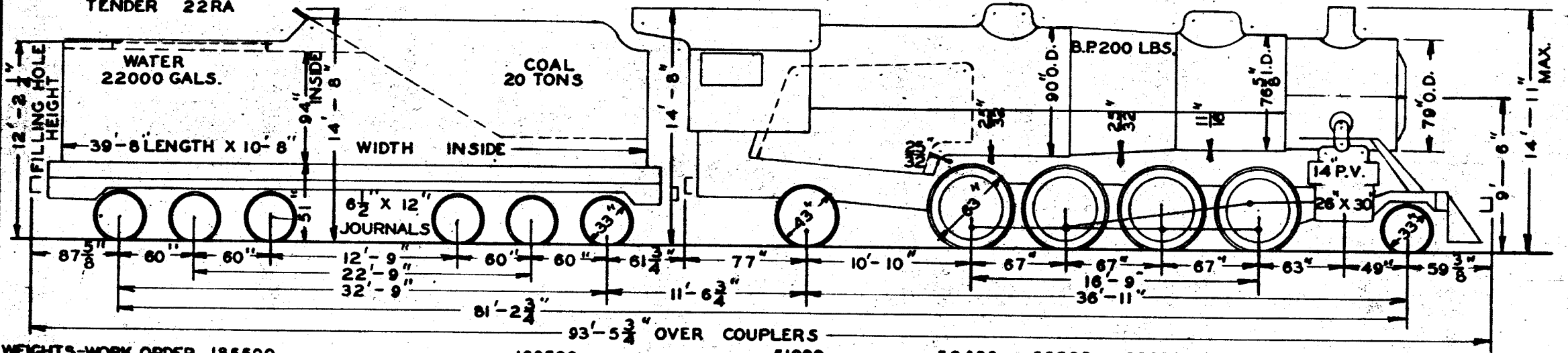
N.K.P.

CLASS H-6D
ENGS. 619.

71

MAX. CURVE 19°
ENG. TRUCK SWING 4-3/4"
TRAIL TRUCK SWING 5-1/2"

TENDER 22RA



WEIGHTS-WORK ORDER 185500

169500

51000

58400

58200

55300

55000

23400

WT. DRIVERS 227800 LBS.
WT. ENG. TRUCK 23400 LBS.
WT. TRL. TRUCK 51000 LBS.
WT. ENG. TOTAL 302200 LBS.
WT. TENDER-FULL 355000 LBS.
WT. ENG. & TENDER 657200 LBS.
TUBES, NO. 213 2-1/4" O.D.
FLUES, NO. 40 5-1/2" O.D.
TUBES & FLUES, LENGTH 19'-0"
ARCH TUBES, NO. 4 3" O.D.
SUPERHTR. TUBES, NO. O.D.

FIREBOX 114-1/8" X 84-1/4"
HEATING SURFACES
TUBES & FLUES 3481.1 SQ.FT.
FIREBOX 256 SQ.FT.
ARCH TUBES 27 SQ.FT.
SYPHONS SQ.FT.
TOTAL 3744.1 SQ.FT.
SUPERHTR. H.S. 882 SQ.FT.
GRATE AREA 66.7 SQ.FT.

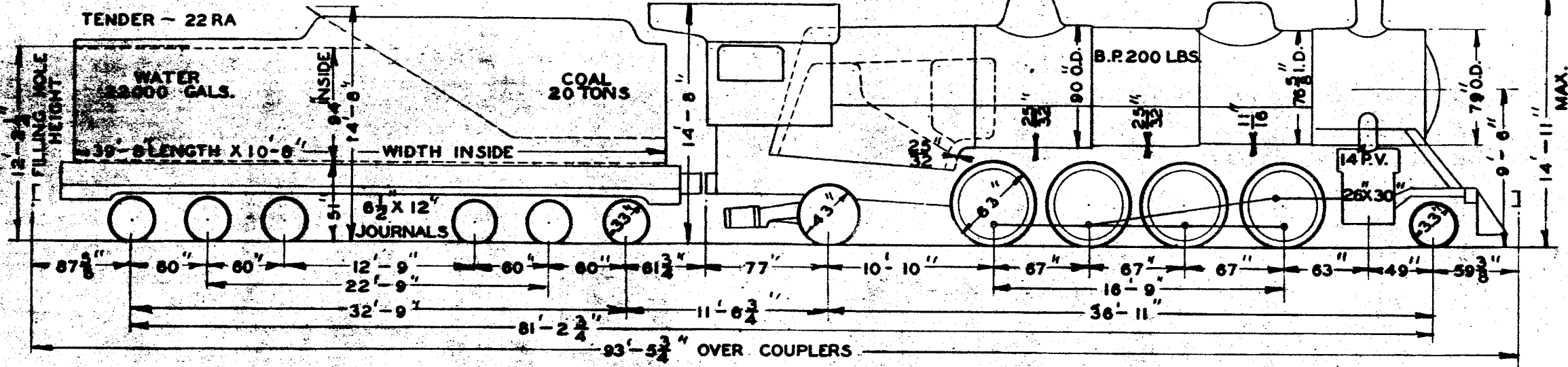
JOURNALS, DRIVING MAIN 11" X 13"
JOURNALS, DRIVING OTHERS 10" X 13"
JOURNALS, ENG. TRUCK 6-1/2" X 12"
JOURNALS, TRL. TRUCK, F. 9" X 14"
JOURNALS, TRL. TRUCK, B.
VALVE GEAR WALSCHAERT
TRAVEL 6-1/2" LAP 1"
LEAD 3/16" EXH. CL. L. & L.
FACTOR OF ADHESION 4.16
CYLINDER H.P. 2434
PERCENT BOILER TO CYL. H.P. 94.7

TENDER FRAME-WATER BOTTOM C.S.
TENDER TRUCK FRAME 2 CAST
TENDER TRUCK BOLSTER STEEL
SUPERHTR. S.H.CO. TYPE-A
FWHEATER TYPE
STOKER DUPLEX TYPE-D-1
REVERSE GEAR PRECISION
SAFETY VALVES 3
ENG. FRAME-BAR TYPE-C. STEEL
THROTTLE DOME TYPE

INJECTOR 2-NO. 11 N.L.
AIR BRAKE 6 ET EQUIPMENT
LUB. R.S.
LUB. L.S.
BUILDERS ORDER NO. 1033
BUILDER LIMA LOCO-WORKS
YEAR BUILT 1922

DR. DATE 3-24-60

TRACTIVE POWER 54700 LBS. WITHOUT BOOSTER **NO. OF ENGINES - 2** **N.K.P.** **CLASS H-6D** **73**
MAX. CURVE 19°
ENG. TRUCK SWING 4-3/4" 64100 LBS. WITH BOOSTER
TRAIL TRUCK SWING 5-1/2" **ENGS. 625,629.**



WEIGHTS - WORK ORDER		185500	169500	57200	63540	62620	56740	57300	20900
DR	DATE	WT. DRIVERS	FIREBOX	JOURNALS, DRIVING, MAIN	TENDER FRAME - WATER BOTTOM	INJECTOR			
CH		WT. ENG. TRUCK	HEATING SURFACES	JOURNALS, DRIVING, OTHERS	TENDER TRUCK FRAME	AIR BRAKE			
		WT. TRL. TRUCK	TUBES & FLUES	JOURNALS, ENG. TRUCK	TENDER TRUCK BOLSTER	6 ET EQUIPMENT			
		WT. ENG. TOTAL	FIREBOX	JOURNALS, TRL. TRUCK, F.	SUPERHTR.	LUB. R.S.			
		WT. TENDER - FULL	ARCH TUBES	JOURNALS, TRL. TRUCK, B.	F.W. HEATER - WORTHINGTON	LUB. L.S.			
		WT. ENG. & TENDER	SYPHONS	VALVE GEAR	STOKER - DUPLEX	BOOSTER			
		TUBES, NO. 213	TOTAL	TRAVEL	REVERSE GEAR	YES			
		FLUES, NO. 40	SUPERHTR. H.S.	LEAD	SAFETY VALVES				
		TUBES & FLUES, LENGTH	GRATE AREA	FACTOR OF ADHESION	ENG. FRAME - BAR TYPE	BUILDERS ORDER NO.			
		ARCH TUBES, NO. 2		CYLINDER H.P.	THROTTLE	1033			
		SUPERHTR. TUBES, NO.		PERCENT BOILER TO CYL. H.P.		BUILDER			
						LIMA LOCO. WORKS			
						YEAR BUILT			
						1922			

TRACTIVE POWER 54700 LBS.

NO. OF ENGINES - 1

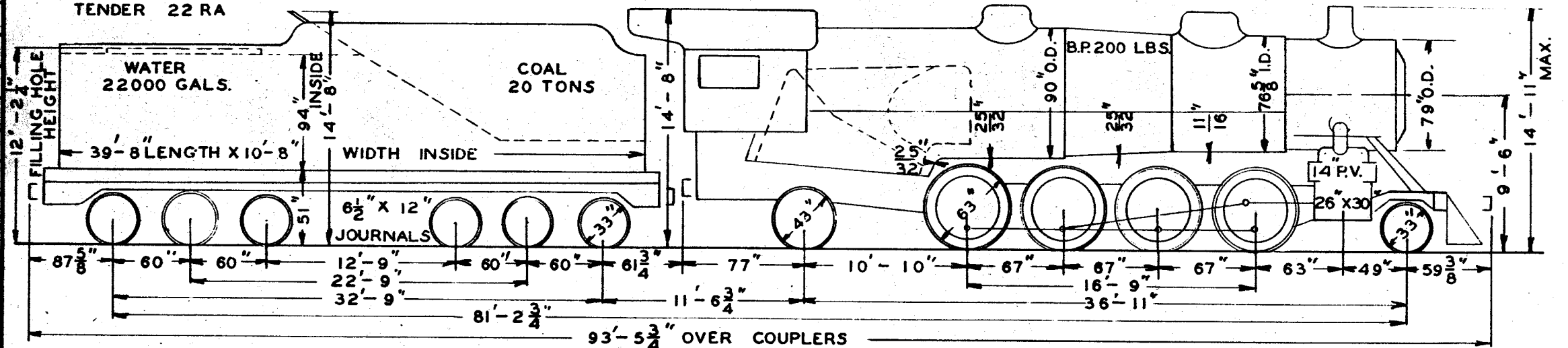
N. K. P.

CLASS H-6D
ENGS. 628

74

MAX. CURVE 19°
ENG. TRUCK SWING 4-3/4"
TRAIL TRUCK SWING 5-1/2"

TENDER 22 RA



WEIGHTS-WORK ORDER 185500		169500		50800		58000		57800		57600		58200		21300	
WT. DRIVERS	231600 LBS.	FIREBOX	114-1/8" X 84-1/4"	JOURNALS, DRIVING MAIN	11" X 13"	TENDER FRAME-WATER BOTTOM	C.S.	INJECTOR	2 - NO. 11 N.L.						
WT. ENG. TRUCK	21300 LBS.	HEATING SURFACES		JOURNALS, DRIVING OTHERS	10" X 13"	TENDER TRUCK FRAME	3 CAST	AIR BRAKE	6 ET EQUIPMENT						
WT. TRL. TRUCK	50800 LBS.	TUBES & FLUES	3461.1 SQ. FT.	JOURNALS, ENG. TRUCK	6-1/2" X 12"	TENDER TRUCK BOLSTER	STEEL	LUB. R.S.							
WT. ENG. TOTAL	303700 LBS.	FIREBOX	256 SQ. FT.	JOURNALS, TRL. TRUCK, F.	9" X 14"	SUPERHTR.	S.H.CO. TYPE-A	LUB. L.S.							
WT. TENDER-FULL	355000 LBS.	ARCH TUBES	14 SQ. FT.	JOURNALS, TRL. TRUCK, B.		F.WHEATER	TYPE								
WT. ENG. & TENDER	658700 LBS.	SYPHONS	71 SQ. FT.	VALVE GEAR	WALSCHAERT	STOKER	DUPLEX TYPE D-1								
TUBES, NO. 213	2-1/4" O.D.	TOTAL	3802.1 SQ. FT.	TRAVEL	6-1/2" LAP-1"	REVERSE GEAR	PRECISION								
FLUES, NO. 40	5-1/2" O.D.	SUPERHTR. H.S.	882 SQ. FT.	LEAD	3/16 EXH. CL. & L.	SAFETY VALVES	3								
TUBES & FLUES, LENGTH	19'-0"	GRATE AREA	66.7 SQ. FT.	FACTOR OF ADHESION	4.23	ENG. FRAME - BAR TYPE	C. STEEL								
ARCH TUBES, NO. 2	3" O.D.			CYLINDER H.P.	2434	THROTTLE	DOME TYPE								
SUPERHTR. TUBES, NO.	O.D.			PERCENT BOILER TO CYL. H.P.	100.3										
BUILDERS ORDER NO. 1033															
BUILDER LIMA LOCO. WORKS															
YEAR BUILT 1922															

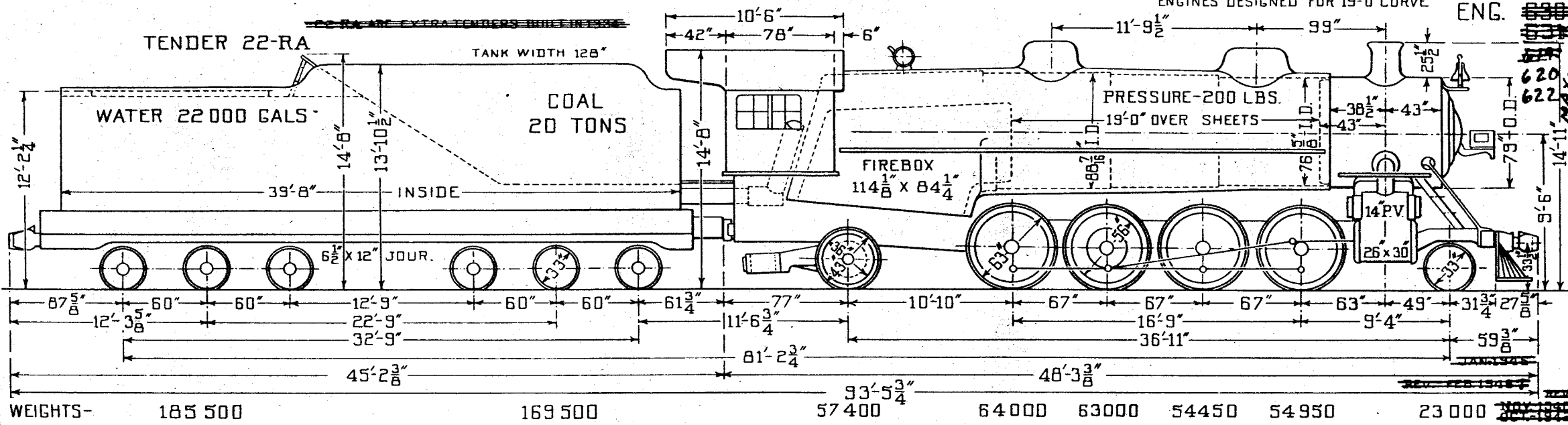
TRACTIVE POWER=54700 LBS. WITHOUT BOOSTER
 TRACTIVE POWER=64100 LBS. WITH BOOSTER

NO. OF ENGINES ~~1~~ ~~2~~ ~~3~~ ~~4~~ ~~5~~ ~~6~~ ~~7~~ ~~8~~ ~~9~~ ~~10~~ ~~11~~ ~~12~~ ~~13~~ ~~14~~ ~~15~~ ~~16~~ ~~17~~ ~~18~~ ~~19~~ ~~20~~ ~~21~~ ~~22~~ ~~23~~ ~~24~~ ~~25~~ ~~26~~ ~~27~~ ~~28~~ ~~29~~ ~~30~~ ~~31~~ ~~32~~

N. K.P. CLASS H-6 D76

ENGINES DESIGNED FOR 19° 0' CURVE

ENG.



3-8-50
REVISED

WEIGHTS IN WORKING ORDER	
ON DRIVERS	236 400 LBS.
ON ENGINE TRUCK	23 000 LBS.
ON TRAILING TRUCK	57 400 LBS.
ENGINE TOTAL	316 800 LBS.
TENDER	355 000 LBS.
ENG. & TENDER	671 800 LBS.
TUBES, NO. - 213 - 2 1/4\" O.D.	
FLUES, NO. - 40 - 5 1/2\" O.D.	
TUBES & FLUES, LENGTH	19'-0\"
ARCH TUBES, NO. 4 - O.D. 3\"	

FIREBOX LENGTH	114 1/8\"
" WIDTH	84 1/4\"
" HEATING SURFACE	
TUBES & FLUES	3461.1 SQ. FT.
FIREBOX AND ARCH TUBES	283 SQ. FT.
SYPHONS	SQ. FT.
TOTAL HEATING SURFACE	3744.1 SQ. FT.
SUPERHEATER H.S.	882 SQ. FT.
GRATE AREA	66.7 SQ. FT.

JOURNALS-DRIVING MAIN	11\" x 13\"
" " OTHERS	10\" x 13\"
" ENG. TRUCK	6 1/2\" x 12\"
" TRAILER	9\" x 14\"
VALVE DATA	
TRAVEL	6 1/2\" - LAP 1\"
LEAD	3/16\" - EXH. CL. L.&L.

VALVE GEAR	WALSCHAERT
FACTOR OF ADHESION	4.32
CYLINDER HORSE POWER	2434
PERCENT BOILER TO CYL. H.P.	94.7

SUPERHEATER-TYPE	A
F.W. HEATER	WORTHINGTON-BL
STOKER	DUPLEX-D1
BOOSTER	YES
REVERSE GEAR	PRECISION
WORTHINGTON-BL 6N6S.	
620, 622.	
BLDRS. ORDER NO.	1033
BUILDER	LIMA LOCO. WORKS
YEAR BUILT	NOV.-1922

TRACTIVE POWER 54700 LBS.
MAX. CURVE 19°

NO. OF ENGINES-2

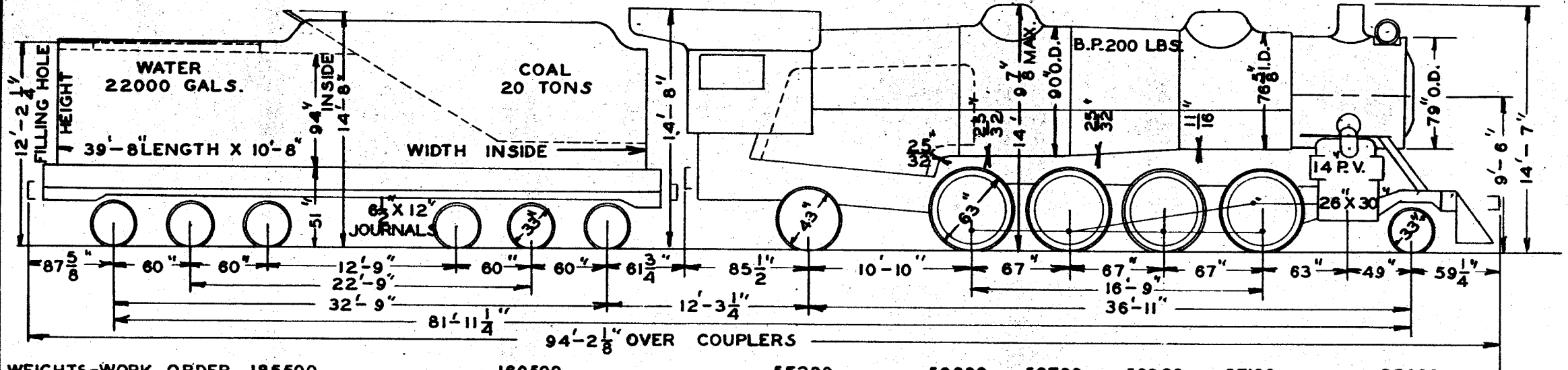
N.K.P.

CLASS H-6E
ENGS. 633, 647.

77

TENDER 22 RA

AIR PUMP ON SIDE



DR. DATE

WEIGHTS-WORK ORDER 185500		169500	55200	59000	58700	56600	57100	23900
WT. DRIVERS	231400 LBS.	FIREBOX	114-1/8" X 84-1/4"	JOURNALS, DRIVING MAIN	11" X 13"	TENDER FRAME-WATER BOTTOM C.S.		
WT. ENG. TRUCK	23900 LBS.	HEATING SURFACES		JOURNALS, DRIVING OTHERS	10" X 13"	TENDER TRUCK FRAME } CAST		
WT. TRL. TRUCK	55200 LBS.	TUBES & FLUES	3481.1 SQ. FT.	JOURNALS, ENG. TRUCK	6-1/2" X 12"	TENDER TRUCK BOLSTER } STEEL		
WT. ENG. TOTAL	310500 LBS.	FIREBOX	256 SQ. FT.	JOURNALS, TRL. TRUCK	9" X 14"	SUPERHTR - S.H.CO. TYPE - A		
WT. TENDER-FULL	355000 LBS.	ARCH TUBES	27 SQ. FT.	VALVE GEAR	BAKER	F.W. HEATER - NOTE - 1		
WT. ENG. & TENDER	665500 LBS.	SYPHONS	SQ. FT.	TRAVEL	8-3/4" LAP - 1-1/4"	STOKER - DUPLEX - TYPE - D - 2		
TUBES, NO. 213	2-1/4" O.D.	TOTAL	3744.1 SQ. FT.	LEAD	3/16" EXH. CL. - L. & L.	REVERSE GEAR - PRECISION		
FLUES, NO. 40	5-1/2" O.D.	SUPERHTR H.S.	882 SQ. FT.	FACTOR OF ADHESION	4.23	SAFETY VALVES 3 3"		
TUBES & FLUES, LENGTH	19'-0"	GRATE AREA	66.7 SQ. FT.	CYLINDER H.P.	2434	ENG. FRAME - BAR TYPE - C. STEEL		
ARCH TUBES, NO. 4	3" O.D.			PERCENT BOILER TO CYL. H.P.	94.7	THROTTLE - DOME TYPE		
						AIR BRAKE - 6 ET EQUIPMENT		
						LUB. R.S.		
						LUB. L.S.		
						NOTE - 1 ELESKO ON 633		
						WORTHINGTON ON 647		
						BUILDERS ORDER NO. 1048		
						BUILDER - LIMA LOCO. WORKS		
						YEAR BUILT 1923		

TRACTIVE POWER 54700 LBS.
MAX. CURVE 19°

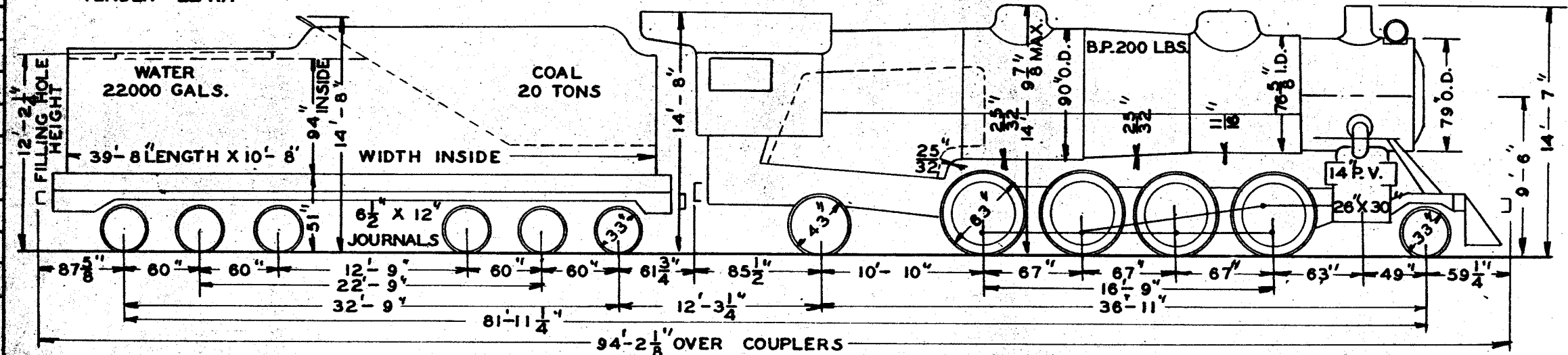
NO. OF ENGINES - 2 N.K.P.

CLASS H-6 E
ENGS. 641, 653.

78

TENDER 22 RA

AIR PUMPS ON FRONT DECK



WEIGHTS-WORK ORDER 185500		169500	53600	57400	57300	58500	59100	24600
DR	WT. DRIVERS	232300 LBS.	FIREBOX — 114-1/8" X 84-1/4"	JOURNALS, DRIVING MAIN — 11" X 13"	TENDER FRAME-WATER BOTTOM C.S.			INJECTOR
Y	WT. ENG. TRUCK	24600 LBS.	HEATING SURFACES	JOURNALS, DRIVING OTHERS — 10" X 13"	TENDER TRUCK FRAME } CAST			AIR BRAKE — 6 ET EQUIPMENT
CH	WT. TRL. TRUCK	53600 LBS.	TUBES & FLUES — 3461.1 SQ. FT.	JOURNALS, ENG. TRUCK — 6-1/2" X 12"	TENDER TRUCK BOLSTER } STEEL			LUB R.S.
DATE	WT. ENG. TOTAL	310500 LBS.	FIREBOX — 256 SQ. FT.	JOURNALS, TRL. TRUCK — 9" X 14"	SUPERHTR — S.H. CO. TYPE-A			LUB L.S.
	WT. TENDER-FULL	355000 LBS.	ARCH TUBES — 27 SQ. FT.	VALVE GEAR — BAKER	FW. HEATER — NOTE-1			NOTE-1
	WT. ENG. & TENDER	665500 LBS.	SYPHONS — SQ. FT.	TRAVEL — 8-3/4" — LAP — 1-1/4"	STOKER — DUPLEX — TYPE D-2			WORTHINGTON - 653
	TUBES, NO. 213	2-1/4" O.D.	TOTAL — 3744.1 SQ. FT.	LEAD — 3/16" — EXH. CL. L. & L.	REVERSE GEAR — PRECISION			ELESCO — 641
	FLUES, NO. 40	5-1/2" O.D.	SUPERHTR. H.S. — 882 SQ. FT.	FACTOR OF ADHESION — 4.25	SAFETY VALVES 3 — 3"			BUILDERS ORDER NO. — 1048
	TUBES & FLUES, LENGTH — 19'-0"		GRATE AREA — 66.7 SQ. FT.	CYLINDER H.P. — 2434	ENG. FRAME — BAR TYPE — C. STEEL			BUILDER — LIMA LOCO. WORKS
	ARCH TUBES, NO. 4	3" O.D.		PERCENT BOILER TO CYL. H.P. — 94.7	THROTTLE — DOME TYPE			YEAR BUILT — 1923
	SUPERHTR. TUBES, NO.	O.D.						

TRACTIVE POWER
MAX. CURVE 19°

54700 LBS. WITHOUT BOOSTER
64100 LBS. WITH BOOSTER

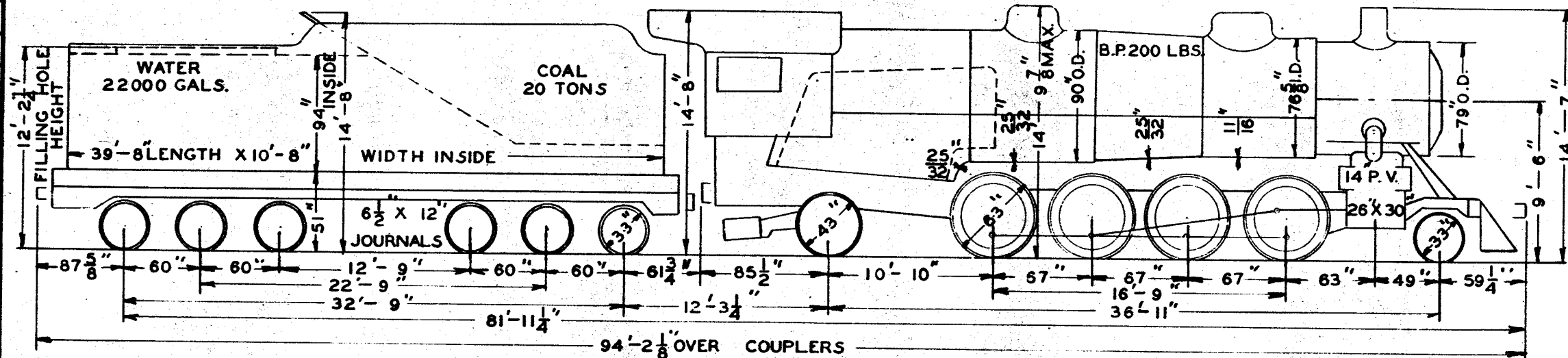
NO. OF ENGINES-3

N.K.P.

CLASS H-6E
ENGS. 642,644,656.

79

TENDER 22 RA



WEIGHTS-WORK ORDER 185500

169500

58150

61100

80500

57450

58000

24200

DR. CH. DATE
3-22-29

WT. DRIVERS	237050 LBS.
WT. ENG. TRUCK	24200 LBS.
WT. TRL. TRUCK	58150 LBS.
WT. ENG. TOTAL	319400 LBS.
WT. TENDER-FULL	355000 LBS.
WT. ENG. & TENDER	674400 LBS.
TUBES, NO. 213	2-1/4" O.D.
FLUES, NO. 40	5-1/2" O.D.
TUBES & FLUES, LENGTH	19'-0"
ARCH TUBES, NO. 4	3" O.D.
SUPERHTR. TUBES, NO.	O.D.

FIREBOX	114-1/8" X 84-1/4"
HEATING SURFACES	
TUBES & FLUES	3461.1 SQ.FT.
FIREBOX	256 SQ.FT.
ARCH TUBES	27 SQ.FT.
SYPHONS	SQ.FT.
TOTAL	3744.1 SQ.FT.
SUPERHTR. H.S.	882 SQ.FT.
GRATE AREA	66.7 SQ.FT.

JOURNALS, DRIVING, MAIN	11" X 13"
JOURNALS, DRIVING, OTHERS	10" X 13"
JOURNALS, ENG. TRUCK	6-1/2" X 12"
JOURNALS, TRL. TRUCK, F.	9" X 14"
JOURNALS, TRL. TRUCK, B.	
VALVE GEAR	BAKER
TRAVEL	8-3/4" LAP-1-1/4"
LEAD	3/16" EXH. CL-L. & L.
FACTOR OF ADHESION	4.33
CYLINDER H.P.	2434
PERCENT BOILER TO CYL. H.P.	94.7

TENDER FRAME-WATER BOTTOM	CS
TENDER TRUCK FRAME	CAST
TENDER TRUCK BOLSTER	STEEL
SUPERHTR.	S.H. CO. TYPE-A
FWHEATER	NOTE-1 TYPE
STOKER	DUPLEX TYPE-D-2
REVERSE GEAR	PRECISION
SAFETY VALVES	3
ENG. FRAME	BAR TYPE-C. STEEL
THROTTLE	DOME TYPE

INJECTOR	
AIR BRAKE	6 ET EQUIPMENT
LUB. R. S.	
LUB. L. S.	
BOOSTER	YES
NOTE-1	
WORTHINGTON-ENGS.	656.
ELESCO-ENGS.	642,644.
BUILDERS ORDER NO.	1048
BUILDER	LIMA LOCO. WORKS
YEAR BUILT	1923

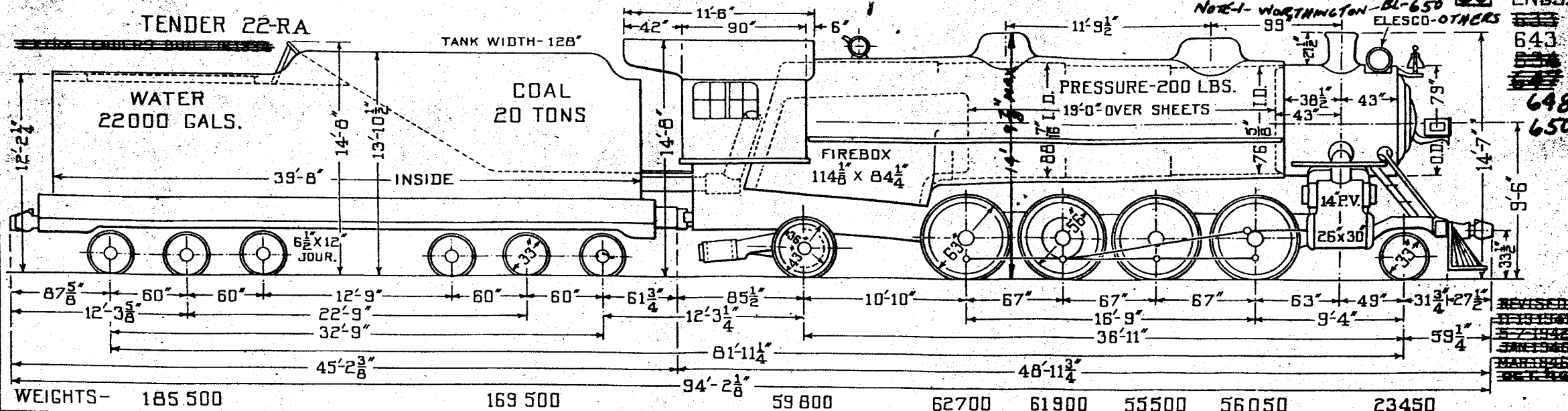
TRACTIVE POWER 54700 LBS. WITHOUT BOOSTER
 TRACTIVE POWER 64100 LBS. WITH BOOSTER

NO. OF ENGINES - ~~1~~ ~~2~~ ~~3~~ **3**
 SEE ALSO OTHER PAGES 81 82 83

N. K.P.

CLASS H-6E

ENGINES DESIGNED FOR 19° 0' CURVE
 NOTE-1-WASHINGTON-8L-650
 ELESCO-OTHERS



ENGS.
 643
 648
 650

REVISED 3-17-50

WEIGHTS IN WORKING ORDER	
ON DRIVERS	236150 LBS.
ON ENGINE TRUCK	23450 LBS.
ON TRAILING TRUCK	59800 LBS.
ENGINE TOTAL	319400 LBS.
TENDER	355000 LBS.
ENG. & TENDER	674400 LBS.
TUBES, NO.- 213-	2 1/4" O.D.
FLUES, NO.- 40-	5 1/2" O.D.
TUBES & FLUES, LENGTH	19'-0"
ARCH TUBES, NO. 4	O.D. 3"

FIREBOX LENGTH	114 1/8"
" WIDTH	84 1/4"
" HEATING SURFACE	
TUBES & FLUES	34611 SQ. FT.
FIREBOX AND ARCH TUBES	283 SQ. FT.
SYPHONS	SQ. FT.
TOTAL HEATING SURFACE	3744.1 SQ. FT.
SUPERHEATER H.S.	882 SQ. FT.
GRATE AREA	66.7 SQ. FT.

JOURNALS-DRIVING MAIN	11" X 13"
" OTHERS	10" X 13"
ENG. TRUCK	6 1/2" X 12"
TRAILER	9" X 14"
VALVE DATA	
TRAVEL	8 3/4" - LAP 1 1/4"
LEAD	3/16" - EXH. CL. L & L.

VALVE GEAR	BAKER
FACTOR OF ADHESION	4.31
CYLINDER HORSE POWER	2434
PERCENT BOILER TO CYL. H.P.	94.7

SUPERHEATER-TYPE	A
F.W. HEATER	ELESCO NOTE-1
STOKER	DUPLEX-D2
BOOSTER	YES
REVERSE GEAR	PRECISION
BLDRS. ORDER NO.	1048
BUILDER	LIMA LOCO. WORKS
YEAR BUILT	DEC-1923

TRACTIVE POWER 54700 LBS. WITHOUT BOOSTER
MAX. CURVE 19°

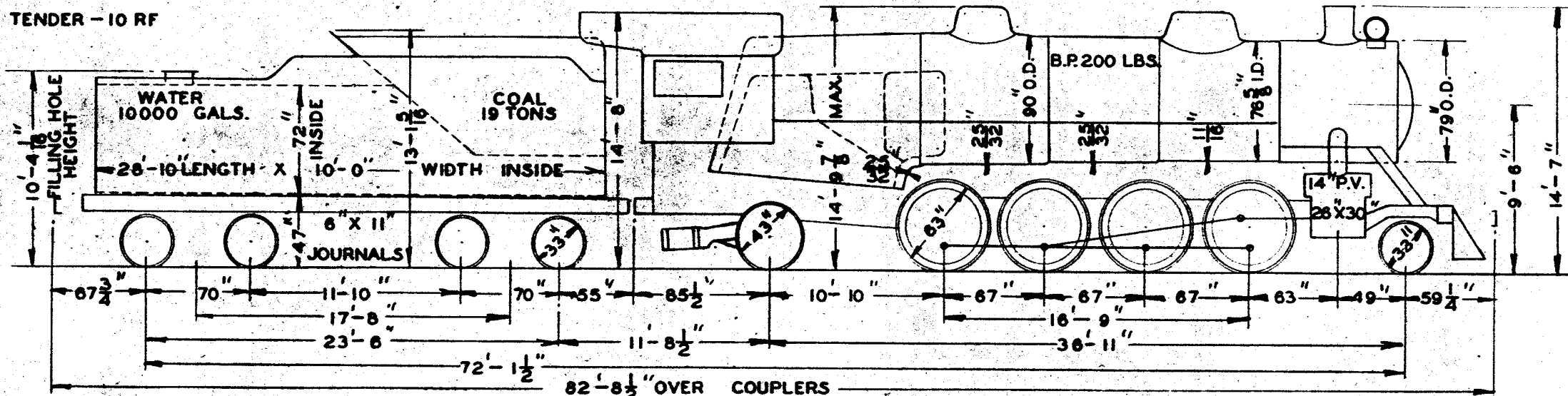
64100 LBS. WITH BOOSTER

NO. OF ENGINES - 1 N.K.P.

CLASS H-6E
ENGS. 645

81

TENDER - 10 RF



DR. DATE 3-15-39

WEIGHTS - WORK ORDER 94568		96432	58150	61100	60500	57450	58000	24200	
WT. DRIVERS	237050 LBS.	FIREBOX	114-1/8" X 84-1/4"	JOURNALS, DRIVING, MAIN	11" X 13"	TENDER FRAME		INJECTOR	
WT. ENG. TRUCK	24200 LBS.	HEATING SURFACES		JOURNALS, DRIVING, OTHERS	10" X 13"	TENDER TRUCK FRAME	} CAST STEEL	AIR BRAKE	6 ET EQUIPMENT
WT. TRL. TRUCK	58150 LBS.	TUBES & FLUES	3481.1 SQ. FT.	JOURNALS, ENG. TRUCK	8-1/2" X 12"	TENDER TRUCK BOLSTER		LUB. R.S.	
WT. ENG. TOTAL	319400 LBS.	FIREBOX	258 SQ. FT.	JOURNALS, TRL. TRUCK, F.	9" X 14"	SUPERHTR.	S.H.CO. TYPE - A	LUB. L.S.	
WT. TENDER - FULL	191000 LBS.	ARCH TUBES	14 SQ. FT.	JOURNALS, TRL. TRUCK, B.		FWHEATER	ELESCO - TYPE	BOOSTER	YES
WT. ENG. & TENDER	510400 LBS.	SYPHONS	71 SQ. FT.	VALVE GEAR	BAKER	STOKER	DUPLEX - TYPE - D-2		
TUBES, NO. 213	2-1/4" O.D.	TOTAL	3802.1 SQ. FT.	TRAVEL	8-3/4" LAP - 1-1/4"	REVERSE GEAR	PRECISION		
FLUES, NO. 40	5-1/2" O.D.	SUPERHTR. H.S.	882 SQ. FT.	LEAD	3/16" EXH. CL. L. & L.	SAFETY VALVES	3 - 3"	BUILDERS ORDER NO.	1048
TUBES & FLUES, LENGTH	19'-0"	GRATE AREA	66.7 SQ. FT.	FACTOR OF ADHESION	4.33	ENG. FRAME - BAR TYPE	C. STEEL	BUILDER	LIMA LO CO. WORKS
ARCH TUBES, NO. 2	3" O.D.			CYLINDER H.P.	2434	THROTTLE	DOME TYPE	YEAR BUILT	1923
SUPERHTR. TUBES, NO.	O.D.			PERCENT BOILER TO CYL. H.P.	100.3				

TRACTIVE POWER 54700 LBS.
MAX. CURVE 19°

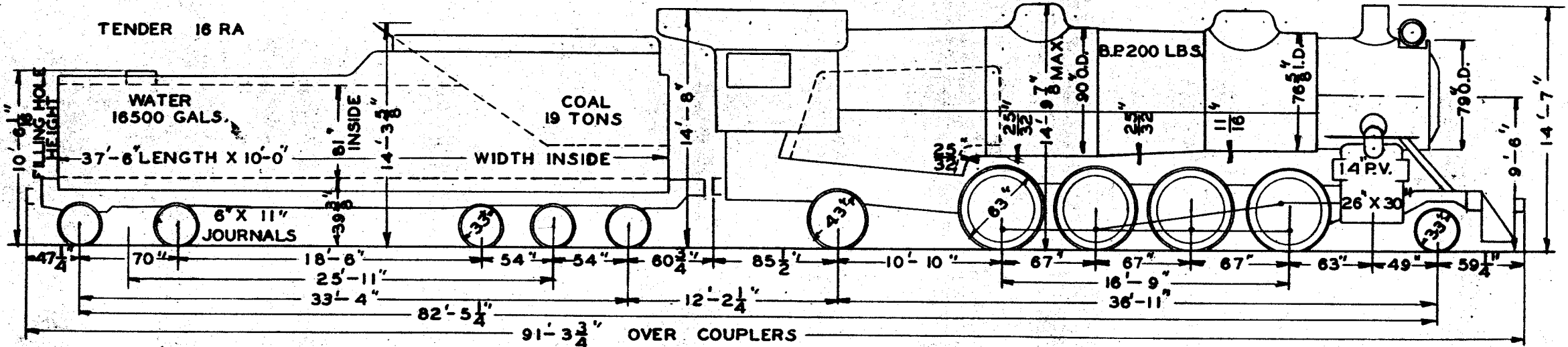
NO. OF ENGINES - 1

N.K.P.

CLASS H-6E
ENGS. 646

82

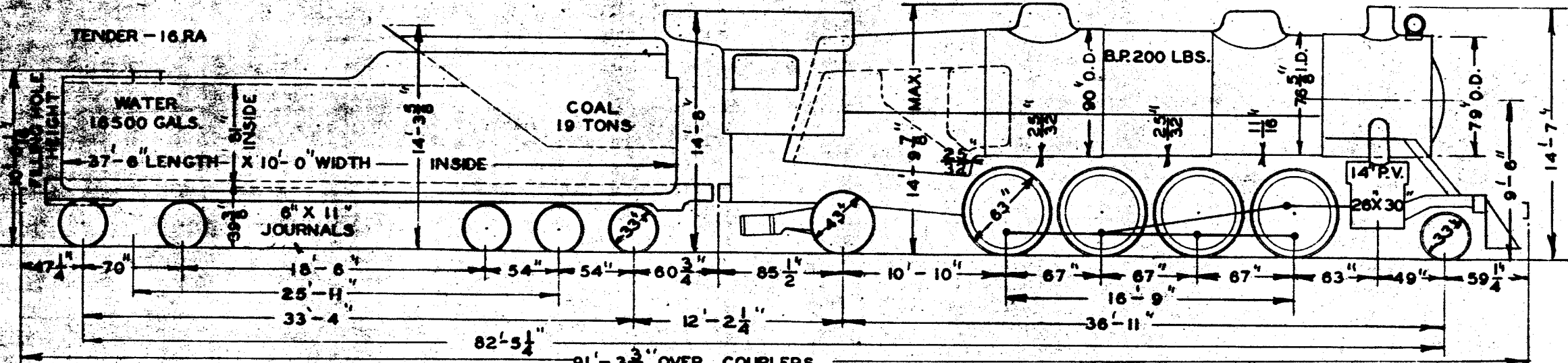
AIR PUMP ON SIDE



DR. CH. DATE

WEIGHTS-WORK ORDER 106766		160087	55200	59000	58700	56600	57100	23900
WT. DRIVERS	231400 LBS.	FIREBOX — 114-1/8" X 84-1/4"	JOURNALS, DRIVING MAIN — 11" X 13"	TENDER FRAME-WATER BOTTOM C.S.			INJECTOR	
WT. ENG. TRUCK	23900 LBS.	HEATING SURFACES	JOURNALS, DRIVING OTHERS — 10" X 13"	TENDER TRUCK FRAME } CAST			AIR BRAKE — 6 ET EQUIPMENT	
WT. TRL. TRUCK	55200 LBS.	TUBES & FLUES — 3461.1 SQ. FT.	JOURNALS, ENG. TRUCK — 6-1/2" X 12"	TENDER TRUCK BOLSTER } STEEL			LUB. R.S.	
WT. ENG. TOTAL	310500 LBS.	FIREBOX — 256 SQ. FT.	JOURNALS, TRL. TRUCK — 9" X 14"	SUPERHTR. — S.H.CO. TYPE-A			LUB. L.S.	
WT. TENDER-FULL	266853 LBS.	ARCH TUBES — 27 SQ. FT.	VALVE GEAR — BAKER	FW. HEATER — ELESKO				
WT. ENG. & TENDER	577353 LBS.	SYPHONS — SQ. FT.	TRAVEL — 8-3/4" LAP — 1-1/4"	STOKER — DUPLEX — TYPE — D-2				
TUBES, NO. 213	2-1/4" O.D.	TOTAL — 3744.1 SQ. FT.	LEAD — 3/16" EXH. CL. — L. & L.	REVERSE GEAR — PRECISION				
FLUES, NO. 40	5-1/2" O.D.	SUPERHTR. H.S. — 882 SQ. FT.	FACTOR OF ADHESION — 4.23	SAFETY VALVES 3 — 3"				
TUBES & FLUES, LENGTH — 19'-0"		GRATE AREA — 66.7 SQ. FT.	CYLINDER H.P. — 2434	ENG. FRAME — BAR TYPE — C. STEEL			BUILDERS ORDER NO. — 1048	
ARCH TUBES, NO. 4	3" O.D.		PERCENT BOILER TO CYL. H.P. 94.7	THROTTLE — DOME TYPE			BUILDER — LIMA LOCO. WORKS	
							YEAR BUILT — 1923	

TRACTIVE POWER 54700 LBS. WITHOUT BOOSTER **NO. OF ENGINES - 1** **N.K.P.** **CLASS H-6E** **83**
MAX. CURVE 19° **64100 LBS. WITH BOOSTER** **ENGS. 651**



WEIGHTS-WORK ORDER 106766

WT. DRIVERS	239180 LBS.
WT. ENG. TRUCK	21400 LBS.
WT. TRL. TRUCK	60230 LBS.
WT. ENG. TOTAL	320810 LBS.
WT. TENDER-FULL	266853 LBS.
WT. ENG. & TENDER	587663 LBS.
TUBES, NO. 213	2-1/4" O.D.
FLUES, NO. 40	5-1/2" O.D.
TUBES & FLUES, LENGTH	19'-0"
ARCH TUBES, NO. 2	3" O.D.
SUPERHTR. TUBES, NO.	O.D.

FIREBOX	114-1/8" X 84-1/4"
HEATING SURFACES	
TUBES & FLUES	3461.1 SQ.FT.
FIREBOX	256 SQ.FT.
ARCH TUBES	14 SQ.FT.
SYPHONS	71 SQ.FT.
TOTAL	3802.1 SQ.FT.
SUPERHTR. H.S.	882 SQ.FT.
GRATE AREA	66.7 SQ.FT.

JOURNALS, DRIVING MAIN	11" X 13"
JOURNALS, DRIVING OTHERS	10" X 13"
JOURNALS, ENG. TRUCK	6-1/2" X 12"
JOURNALS, TRL. TRUCK, F.	9" X 14"
JOURNALS, TRL. TRUCK, B.	
VALVE GEAR	BAKER
TRAVEL	8-3/4" LAP-1-1/4"
LEAD	3/16" EXH. CL- L.&L.
FACTOR OF ADHESION	4.37
CYLINDER H.P.	2434
PERCENT BOILER TO CYL. HP.	100.3

TENDER FRAME-WATERBOTTOM	C.S.
TENDER TRUCK FRAME	CAST STEEL
TENDER TRUCK BOLSTER	STEEL
SUPERHTR.	S.H. CO. TYPE-A
FWHEATER-WORTHINGTON	TYPE-BL
STOKER	DUPLEX TYPE-D-2
REVERSE GEAR	PRECISION
SAFETY VALVES	3 3"
ENG. FRAME-BAR TYPE	C-STEEL
THROTTLE	DOME TYPE

INJECTOR	
AIR BRAKE	6 ET EQUIPMENT
LUB. R.S.	
LUB. L.S.	
BOOSTER	YES
BUILDERS ORDER NO.	1048
BUILDER	LIMA LOCO. WORKS
YEAR BUILT	1923

DR. V. CH. DATE 1-22-23

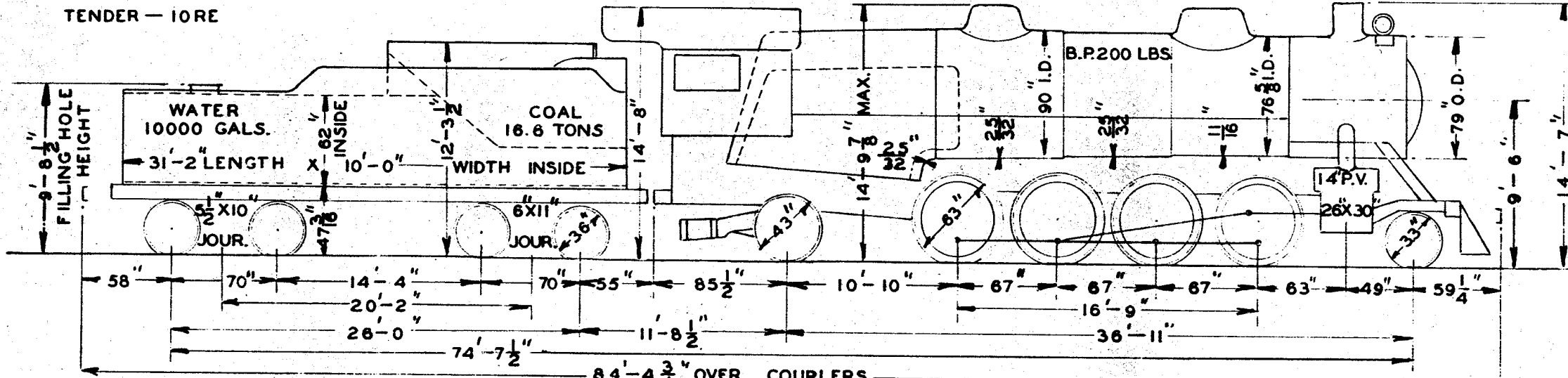
TRACTIVE POWER 54700 LBS. WITHOUT BOOSTER
 MAX. CURVE 19° 64100 LBS. WITH BOOSTER

NO. OF ENGINES - 1

N.K.P.

CLASS H-6E
 ENGS. 652.

84



WEIGHTS - WORK ORDER 79000

97000

58150

61100

60500

57450

58000

24200

WT. DRIVERS	237050 LBS.
WT. ENG. TRUCK	24200 LBS.
WT. TRL. TRUCK	58150 LBS.
WT. ENG. TOTAL	319400 LBS.
WT. TENDER - FULL	176000 LBS.
WT. ENG. & TENDER	495400 LBS.
TUBES, NO. 213	2-1/4" O.D.
FLUES, NO. 40	5-1/2" O.D.
TUBES & FLUES, LENGTH	19'-0"
ARCH TUBES, NO. 4	3" O.D.
SUPERHTR. TUBES, NO.	O.D.

FIREBOX	114-1/8" X 84-1/4"
HEATING SURFACES	
TUBES & FLUES	3461.1 SQ.FT.
FIREBOX	256 SQ.FT.
ARCH TUBES	27 SQ.FT.
SYPHONS	SQ.FT.
TOTAL	3744.1 SQ.FT.
SUPERHTR. H.S.	882 SQ.FT.
GRATE AREA	66.7 SQ.FT.

JOURNALS, DRIVING, MAIN	11" X 13"
JOURNALS, DRIVING, OTHERS	10" X 13"
JOURNALS, ENG. TRUCK	6-1/2" X 12"
JOURNALS, TRL. TRUCK, F.	9" X 14"
JOURNALS, TRL. TRUCK, B.	
VALVE GEAR	BAKER
TRAVEL	8-3/4" LAP-1-1/4"
LEAD	3/16" EXH. CL. L. & L.
FACTOR OF ADHESION	4.33
CYLINDER H.P.	2434
PERCENT BOILER TO CYL. H.P.	94.7

TENDER FRAME	} CAST
TENDER TRUCK FRAME	
TENDER TRUCK BOLSTER	
SUPERHTR.	S.H.CO. TYPE - A
FWHEATER	WORTHINGTON - TYPE - B1
STOKER	DUPLEX - TYPE - D-2
REVERSE GEAR	PRECISION
SAFETY VALVES	3 - 3"
ENG. FRAME	BAR TYPE - C. STEEL
THROTTLE	DOME TYPE

INJECTOR	
AIR BRAKE	6 ET EQUIPMENT
LUB. R. S.	
LUB. L. S.	
BOOSTER	YES
BUILDERS ORDER NO.	1048
BUILDER	LIMA LOCO. WORKS
YEAR BUILT	1923

DR. DATE 3/15/50
 V. CH. 50

TRACTIVE POWER 54700 LBS. WITHOUT BOOSTER
 TRACTIVE POWER 64100 LBS. WITH BOOSTER

NO. OF ENGINES - ~~SEE~~ **1**
 SEE ALSO OTHER PAGES OF ~~33~~

N. K. P.

CLASS **H-6 E85**

GROUP-A ENGS. 882 ~~855-858~~ 657

ENGINES DESIGNED FOR 19° 0' CURVE.

ENGS.

NOTE-2: WORTHINGTON-BL. F.W. HTR. ON

~~FRONT TRUCK AND REAR TRUCK WITH NEW FRAME AND NEW T. WHEELS~~
~~FRONT TRUCK BUCKETS ON 15" R.R. AND 15" GAGE TRUCK ON 15" R.R.~~

TENDERS ~~16-RA~~ 16-RB

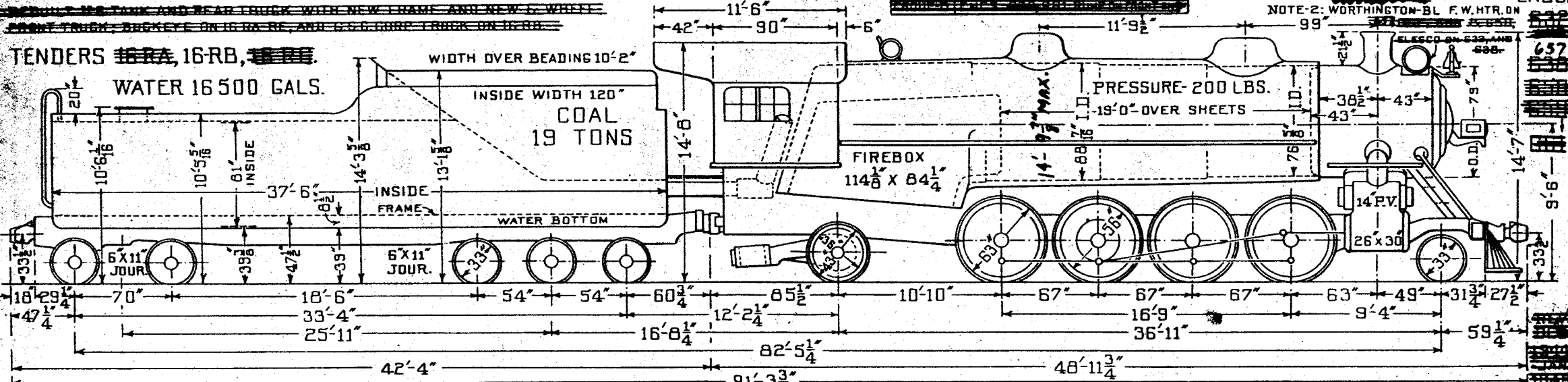
WATER 16500 GALS.

WIDTH OVER BEADING 10'-2"

INSIDE WIDTH 120"
 COAL
 19 TONS

PRESSURE-200 LBS.
 19'-0" OVER SHEETS

FIREBOX
 114 1/8 X 84 1/4



WEIGHTS - 106766

160 087

59800 62700 61900 55500 56050 GROUP-A 23450

REVISED 3-9-30

WEIGHTS IN WORKING ORDER	
ON DRIVERS	SEE TABLE LBS.
ON ENGINE TRUCK	SEE INDIVIDUAL WT. LBS.
ON TRAILING TRUCK	" " " LBS.
ENGINE TOTAL	SEE TABLE LBS.
TENDER	266853 LBS.
ENG. & TENDER	SEE TABLE LBS.
TUBES, NO.	213 2 1/4" O.D.
FLUES, NO.	40 5 1/2" O.D.
TUBES & FLUES, LENGTH	19'-0"
ARCH TUBES, NO.	4 O.D. 3"

FIREBOX LENGTH	114 1/8"
" WIDTH	84 1/4"
HEATING SURFACES	
TUBES & FLUES	3451.1 SQ. FT.
FIREBOX	256 SQ. FT.
ARCH TUBES	27 SQ. FT.
SYPHONS	NONE SQ. FT.
TOTAL HEATING SURFACE	3744.1 SQ. FT.
SUPERHEATER H.S.	882 SQ. FT.
GRATE AREA	66.7 SQ. FT.

JOURNALS DRIVING-MAIN	11" X 13"
" OTHERS	10" X 13"
" ENG. TRUCK	6 1/2" X 12"
" TRAILER	9" X 14"
VALVE DATA	
TRAVEL	8 3/4" LAP 1 1/4"
LEAD	3/16" EXH. CL. L. & L.
VALVE GEAR	BAKER
CYL. HORSE POWER	2434
PERCENT BOILER TO CYL. H. P.	84.7
FAC. OF ADHESION-GROUP-A	4.31
FAC. OF ADHESION-GROUP-B	4.33

SUPERHEATER-TYPE	A
F.W. HEATER	SEE NOTE 2 - ABOVE
STOKER	DUPLEX-D2
BOOSTER	YES
REVERSE GEAR	PRECISION
WEIGHTS IN TONS	
GROUP WT. ON DRIVERS	WT. TOTAL ENG. & TENDER
A 236150	319400 586253
B 249500	339400 586253

BUILDER'S ORDER NO. 1048
 BUILDER LIMA LOCO. WORKS
 YEAR BUILT DEC. 1923

TRACTIVE POWER 54700 LBS.
MAX. CURVE 19°

NO. OF ENGINES - 1

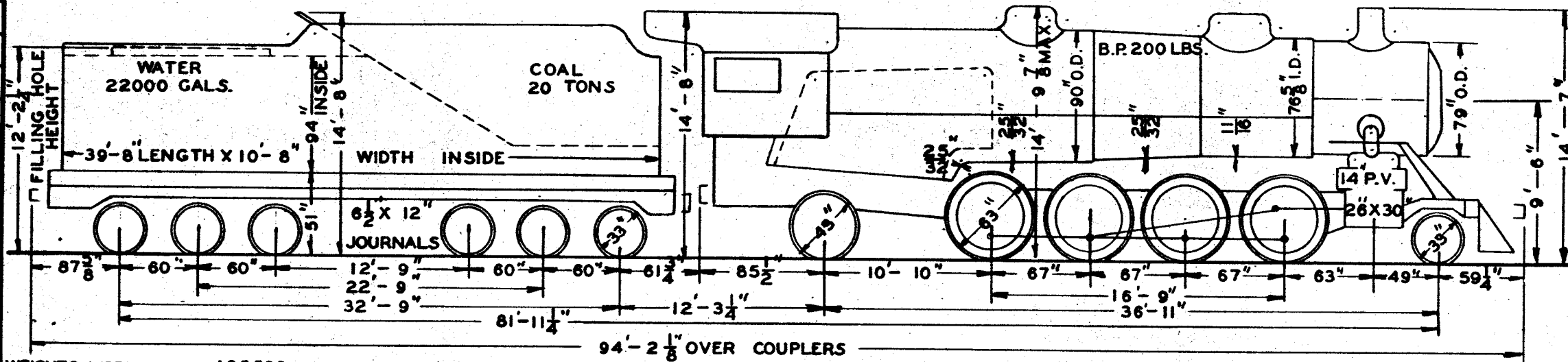
N.K.P.

CLASS H-6E
ENGS. 659

86

TENDER 22 RA

AIR PUMP ON SIDE



WEIGHTS-WORK ORDER 185500

169500

53400

57100

57100

56400

57000

23800

DR. CH. DATE 3-23-29

WT. DRIVERS	227600 LBS.
WT. ENG. TRUCK	23800 LBS.
WT. TRL. TRUCK	53400 LBS.
WT. ENG. TOTAL	304800 LBS.
WT. TENDER-FULL	355000 LBS.
WT. ENG. & TENDER	659800 LBS.
TUBES, NO. 213	2-1/4" O.D.
FLUES, NO. 40	5-1/2" O.D.
TUBES & FLUES, LENGTH	19'-0"
ARCH TUBES, NO. 4	3" O.D.
SUPERHTR. TUBES, NO.	O.D.

FIREBOX	114-1/8" X 84-1/4"
HEATING SURFACES	
TUBES & FLUES	3461.1 SQ.FT.
FIREBOX	256 SQ.FT.
ARCH TUBES	27 SQ.FT.
SYPHONS	SQ.FT.
TOTAL	3744.1 SQ.FT.
SUPERHTR. H.S.	882 SQ.FT.
GRATE AREA	66.7 SQ.FT.

JOURNALS, DRIVING, MAIN	11" X 13"
JOURNALS, DRIVING, OTHERS	10" X 13"
JOURNALS, ENG. TRUCK	6-1/2" X 12"
JOURNALS, TRL. TRUCK, F.	9" X 14"
JOURNALS, TRL. TRUCK, B.	
VALVE GEAR	BAKER
TRAVEL	8-3/4" LAP-1-1/4"
LEAD	3/16" EXH. CL. L. & L.
FACTOR OF ADHESION	4.16
CYLINDER H.P.	2434
PERCENT BOILER TO CYL. H.P.	94.7

TENDER FRAME-WATER BOTTOM	CS
TENDER TRUCK FRAME	2 CAST
TENDER TRUCK BOLSTER	1 STEEL
SUPERHTR.	S.H.CO. TYPE-A
FWHEATER	TYPE
STOKER	DUPLEX TYPE D-2
REVERSE GEAR	FRANKLIN-TYPE-E
SAFETY VALVES	3 3"
ENG. FRAME	BAR TYPE-C STEEL
THROTTLE	DOME TYPE

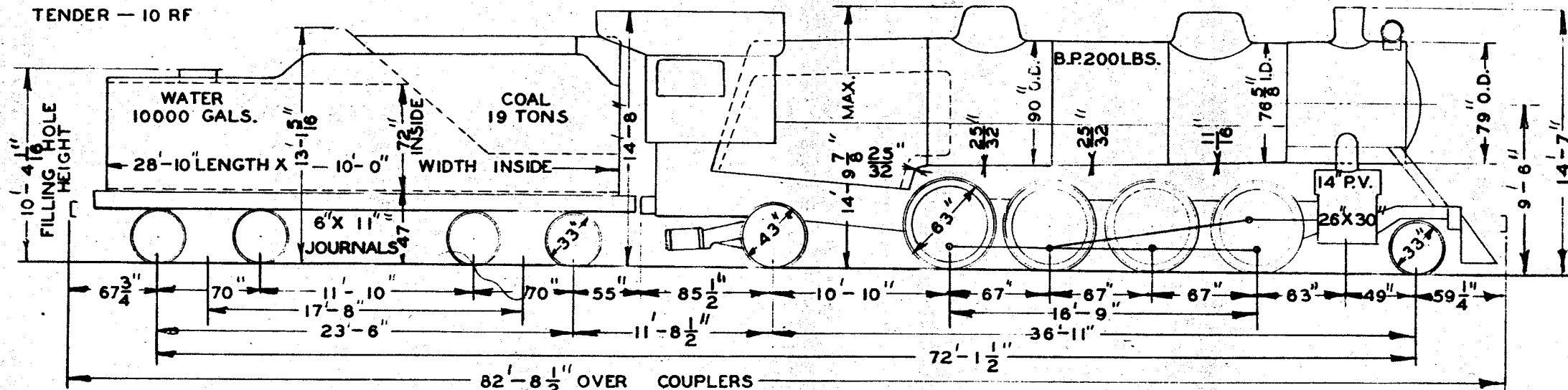
INJECTOR	2-NO. 11 N.L.
AIR BRAKE	6ET EQUIPMENT
LUB. R.S.	
LUB. L.S.	
BUILDERS ORDER NO.	1048
BUILDER	LIMA LOCO. WORKS
YEAR BUILT	1923

TRACTIVE POWER 54700 LBS. WITHOUT BOOSTER
 MAX. CURVE 19° 64100 LBS. WITH BOOSTER

NO. OF ENGINES - 1 N.K.P.

CLASS H-6E
 ENGS. 661

87



DR. DATE 3-14-50

WEIGHTS-WORK ORDER 94568

96432

58260

61150

60550

58650

59250

21540

WT. DRIVERS	239800	LBS.
WT. ENG. TRUCK	21540	LBS.
WT. TRL. TRUCK	58260	LBS.
WT. ENG. TOTAL	319400	LBS.
WT. TENDER - FULL	191000	LBS.
WT. ENG. & TENDER	510400	LBS.
TUBES, NO. 213	2-1/4"	O.D.
FLUES, NO. 40	5-1/2"	O.D.
TUBES & FLUES, LENGTH	19'-0"	
ARCH TUBES, NO. 4	3"	O.D.
SUPERHTR. TUBES, NO.		O.D.

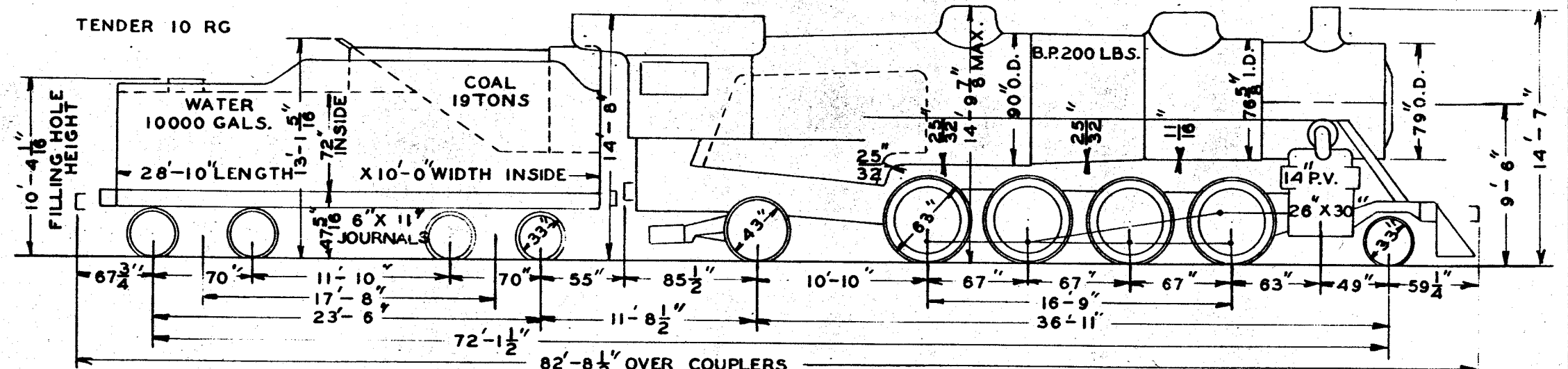
FIREBOX	114-1/8" X 84-1/4"
HEATING SURFACES	
TUBES & FLUES	3461.1 SQ. FT.
FIREBOX	256 SQ. FT.
ARCH TUBES	27 SQ. FT.
SYPHONS	SQ. FT.
TOTAL	3744.1 SQ. FT.
SUPERHTR. H.S.	882 SQ. FT.
GRATE AREA	86.7 SQ. FT.

JOURNALS, DRIVING MAIN	11" X 13 1/4"
JOURNALS, DRIVING OTHERS	10" X 13 1/4"
JOURNALS, ENG. TRUCK	8-1/2" X 12 1/2"
JOURNALS, TRL. TRUCK, F.	9" X 14"
JOURNALS, TRL. TRUCK, B.	
VALVE GEAR	BAKER
TRAVEL	8-3/4" LAP - 1-1/4"
LEAD	3/16" EXH. CL. L & L.
FACTOR OF ADHESION	4.38
CYLINDER H.P.	2434
PERCENT BOILER TO CYL. H.P.	94.7

TENDER FRAME	CAST STEEL
TENDER TRUCK FRAME	
TENDER TRUCK BOLSTER	
SUPERHTR.	S.H. CO. TYPE - A
F.W. HEATER - WORTHINGTON TYPE	BL
STOKER	DUPLEX - TYPE D-2
REVERSE GEAR	PRECISION
SAFETY VALVES	3 3"
ENG. FRAME	BAR TYPE - C. STEEL
THROTTLE	DOME TYPE

INJECTOR	
AIR BRAKE	6 ET EQUIPMENT
LUB. R.S.	
LUB. L.S.	
BOOSTER	YES
BUILDERS ORDER NO.	1048
BUILDER	LIMA LOCO. WORKS
YEAR BUILT	1923

TRACTIVE POWER 54700 LBS. WITHOUT BOOSTER **NO. OF ENGINES - 1** **N.K.P.** **CLASS H-6F**
MAX. CURVE 19° **64100 LBS. WITH BOOSTER** **ENGS. 662** **89**



3-30-50
 DR. CH. DATE

WEIGHTS-WORK ORDER	94568	98432	82'-8 1/2" OVER COUPLERS	58100	60950	60400	57350	57900	24200
WT. DRIVERS	238600 LBS.	FIREBOX	114-1/8" X 84-1/4"	JOURNALS, DRIVING, MAIN	11" X 13"	TENDER FRAME	CAST	INJECTOR	8 ET EQUIPMENT
WT. ENG. TRUCK	24200 LBS.	HEATING SURFACES		JOURNALS, DRIVING, OTHERS	10" X 13"	TENDER TRUCK FRAME	STEEL	AIR BRAKE	
WT. TRL. TRUCK	58100 LBS.	TUBES & FLUES	3461.1 SQ.FT.	JOURNALS, ENG. TRUCK	6-1/2" X 12"	TENDER TRUCK BOLSTER		LUB. R.S.	
WT. ENG. TOTAL	318900 LBS.	FIREBOX	258 SQ.FT.	JOURNALS, TRL. TRUCK, F.	9" X 14"	SUPERHTR.	S.H. CO. TYPE A	LUB. L.S.	
WT. TENDER-FULL	191000 LBS.	ARCH TUBES	27 SQ.FT.	JOURNALS, TRL. TRUCK, B.		FWHEATER	ELESCO TYPE	BOOSTER	YES
WT. ENG. & TENDER	509900 LBS.	SYPHONS		VALVE GEAR	BAKER	STOKER	STANDARD TYPE		
TUBES, NO. 213	2-1/4" O.D.	TOTAL	3744.1 SQ.FT.	TRAVEL	8-3/4" LAP-1-1/4"	REVERSE GEAR	PRECISION		
FLUES, NO. 40	5-1/2" O.D.	SUPERHTR. H.S.	882 SQ.FT.	LEAD	3/16" EXH. CL. 1/16"	SAFETY VALVES	3		
TUBES & FLUES, LENGTH	19'-0"	GRATE AREA	66.7 SQ.FT.	FACTOR OF ADHESION	4.311	ENG. FRAME BAR TYPE	C. STEEL	BUILDERS ORDER NO.	1066
ARCH TUBES, NO. 4	3" O.D.			CYLINDER H.P.	2434	THROTTLE	DOME TYPE	BUILDER	LIMA LOCO. WORKS
SUPERHTR. TUBES, NO.	O.D.			PERCENT BOILER TO CYL. H.P.	94.7			YEAR BUILT	1924

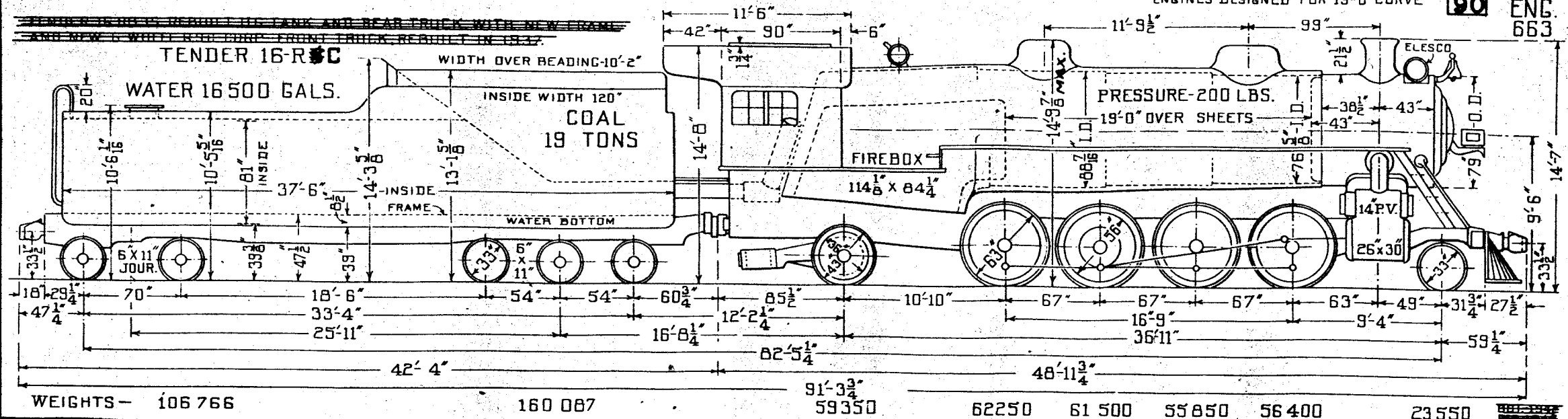
TRACTIVE POWER = 54700 LBS. WITHOUT BOOSTER
 TRACTIVE POWER = 64100 LBS. WITH BOOSTER

NO. OF ENGINES - 1

N. K.P. CLASS H-6F

ENGINES DESIGNED FOR 19°-0' CURVE

90 ENG. 663



WEIGHTS IN WORKING ORDER	
ON DRIVERS	236 000 LBS.
ON ENGINE TRUCK	23 530 LBS.
ON TRAILING TRUCK	59 350 LBS.
ENGINE TOTAL	318 900 LBS.
TENDER	286 853 LBS.
ENG. & TENDER	585 753 LBS.
TUBES, NO.- 213	2 3/4" O.D.
FLUES, NO.- 40	5 1/2" O.D.
TUBES & FLUES, LENGTH	19'-0"
ARCH TUBES, NO. 4	O.D. 3"

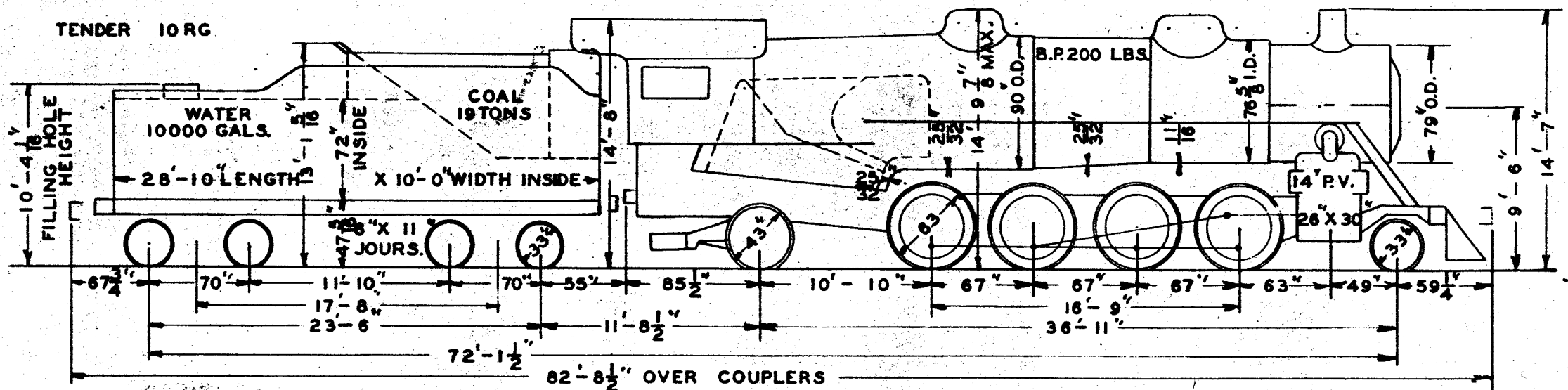
FIREBOX LENGTH	114 1/8"
" WIDTH	84 1/4"
" HEATING SURFACE	
TUBES & FLUES	3461.1 SQ. FT.
FIREBOX AND ARCH TUBES	283 SQ. FT.
SYPHONS	SQ. FT.
TOTAL HEATING SURFACE	3744.1 SQ. FT.
SUPERHEATER H.S.	882 SQ. FT.
GRATE AREA	66.7 SQ. FT.

JOURNALS-DRIVING MAIN	11" X 13"
" OTHERS	10" X 13"
ENG. TRUCK	6 1/2" X 12"
TRAILER	9" X 14"
VALVE DATA	
TRAVEL	8 3/4"
LEAD	3/16"
LAP	1 1/2"
EXH. CL.	1/16"

VALVE GEAR	BAKER
FACTOR OF ADHESION	4.31
CYLINDER HORSE POWER	2434
PERCENT BOILER TO CYL. H.P.	94.7

SUPERHEATER-TYPE	A
F.W. HEATER	ELESCO
STOKER	DUPLEX-D2
BOOSTER	YES
REVERSE GEAR	PRECISION
BLDRS. ORDER NO.	1066
BUILDER	LIMA LOCO. WORKS
YEAR BUILT	JUNE-1924

TRACTIVE POWER 54700 LBS. WITHOUT BOOSTER NO. OF ENGINES - 1 N.K.P. CLASS H-6F
MAX. CURVE 19° 64100 LBS. WITH BOOSTER ENGS. 665
91



3-30-50
 DATE
 DR. M. V. CH.

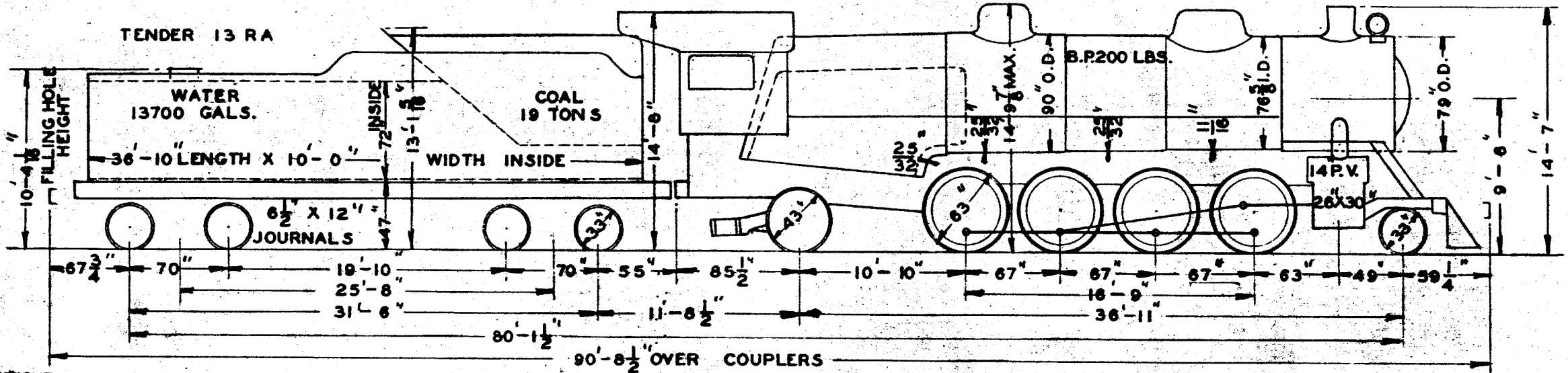
	WEIGHTS-WORK ORDER 94568	96432	59350	62250	61500	55850	56400	23550
WT. DRIVERS	236000 LBS.							
WT. ENG. TRUCK	23550 LBS.							
WT. TRL. TRUCK	59350 LBS.							
WT. ENG. TOTAL	318900 LBS.							
WT. TENDER-FULL	191000 LBS.							
WT. ENG. & TENDER	509900 LBS.							
TUBES, NO. 213	2-1/4" O.D.							
FLUES, NO. 40	5-1/2" O.D.							
TUBES & FLUES, LENGTH	19'-0"							
ARCH TUBES, NO. 2	3" O.D.							
SUPERHTR. TUBES, NO.	O.D.							
FIREBOX	114-1/8" X 84-1/4"							
HEATING SURFACES								
TUBES & FLUES	3461.1 SQ.FT.							
FIREBOX	256 SQ.FT.							
ARCH TUBES	14 SQ.FT.							
SYPHONS	71 SQ.FT.							
TOTAL	3802.1 SQ.FT.							
SUPERHTR. H.S.	882 SQ.FT.							
GRATE AREA	66.7 SQ.FT.							
JOURNALS, DRIVING MAIN	11" X 13"							
JOURNALS, DRIVING OTHERS	10" X 13"							
JOURNALS, ENG. TRUCK	6-1/2" X 12"							
JOURNALS, TRL. TRUCK, F.	9" X 14"							
JOURNALS, TRL. TRUCK, B.								
VALVE GEAR	BAKER							
TRAVEL	8-3/4" LAP-1-1/4"							
LEAD	3/16" EXH. CL. 1/16"							
FACTOR OF ADHESION	4.312							
CYLINDER H.P.	2434							
PERCENT BOILER TO CYL. H.P.	100.3							
TENDER FRAME	} CAST STEEL							
TENDER TRUCK FRAME								
TENDER TRUCK BOLSTER								
SUPERHTR.	S.H. COTYPE - A							
FWHEATER	ELESCO TYPE							
STOKER	DUPLEX TYPE D-2							
REVERSE GEAR	PRECISION							
SAFETY VALVES	3 3"							
ENG. FRAME	BAR TYPE - C. STEEL							
THROTTLE	DOME TYPE							
INJECTOR								
AIR BRAKE	6 ET EQUIPMENT							
LUB. R.S.								
LUB. L.S.								
BOOSTER	YES							
BUILDERS ORDER NO.	1066							
BUILDER	LIMA LOCO. WORKS							
YEAR BUILT	1924							

TRACTIVE POWER 54700 LBS. WITHOUT BOOSTER
 MAX. CURVE 19° 64100 LBS. WITH BOOSTER

NO. OF ENGINES - 1 N.K.P.

CLASS H-6F
 ENGS. 667

92



WEIGHTS - WORK ORDER 110050

WT. DRIVERS	236000 LBS.
WT. ENG. TRUCK	23550 LBS.
WT. TRL. TRUCK	59350 LBS.
WT. ENG. TOTAL	318900 LBS.
WT. TENDER - FULL	232800 LBS.
WT. ENG. & TENDER	551700 LBS.
TUBES, NO. 213	2-1/4" O.D.
FLUES, NO. 40	5-1/2" O.D.
TUBES & FLUES, LENGTH	19'-0"
ARCH TUBES, NO. 4	3" O.D.
SUPERHTR. TUBES, NO.	O.D.

FIREBOX	114-1/8" X 64-1/4"
HEATING SURFACES	
TUBES & FLUES	3461.1 SQ. FT.
FIREBOX	256 SQ. FT.
ARCH TUBES	27 SQ. FT.
SYPHONS	SQ. FT.
TOTAL	3744.1 SQ. FT.
SUPERHTR. H.S.	882 SQ. FT.
GRATE AREA	68.75 SQ. FT.

JOURNALS, DRIVING, MAIN	11" X 13"
JOURNALS, DRIVING, OTHERS	10" X 13"
JOURNALS, ENG. TRUCK	6-1/2" X 12"
JOURNALS, TRL. TRUCK, F.	9" X 14"
JOURNALS, TRL. TRUCK, B.	
VALVE GEAR	BAKER
TRAVEL	8-3/4" LAP-1-1/4"
LEAD	3/16" EXH. CL. - 1/16"
FACTOR OF ADHESION	4.31
CYLINDER H.P.	2434
PERCENT BOILER TO CYL. H.P.	94.7

TENDER FRAME	} CAST STEEL
TENDER TRUCK FRAME	
TENDER TRUCK BOLSTER	
SUPERHTR.	S.H. CO. TYPE - A
FWHEATER	ELESCO TYPE
STOKER	STANDARD TYPE
REVERSE GEAR	PRECISION
SAFETY VALVES	3 3"
ENG. FRAME	BAR TYPE - C. STEEL
THROTTLE	DOME TYPE

INJECTOR	
AIR BRAKE	6 ET EQUIPMENT
LUB. R.S.	
LUB. L.S.	
BOOSTER	YES
BUILDERS ORDER NO.	1066
BUILDER	LIMA LOCO. WORKS
YEAR BUILT	1924

DR. N. CH. DATE 3-2-50

TRACTIVE POWER 54700 LBS.
MAX. CURVE 19°

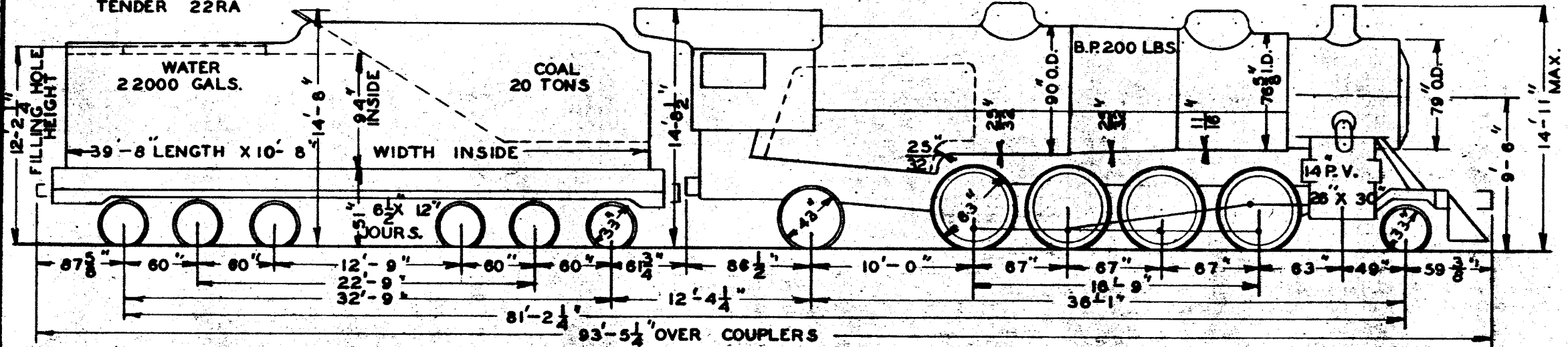
NO. OF ENGINES-2

N.K.P.

CLASS H-6-0
ENGS. 587,599.

93

TENDER 22RA



WEIGHTS-WORK ORDER 185500

WT. DRIVERS	223650 LBS.
WT. ENG. TRUCK	23300 LBS.
WT. TRL. TRUCK	53980 LBS.
WT. ENG. TOTAL	300930 LBS.
WT. TENDER-FULL	355000 LBS.
WT. ENG. & TENDER	655930 LBS.
TUBES, NO. 213	2-1/4" O.D.
FLUES, NO. 40	5-1/2" O.D.
TUBES & FLUES, LENGTH	19'-0"
ARCH TUBES, NO. 4	3' b.d.
SUPERHTR. TUBES, NO.	O.D.

FIREBOX	114-1/8" X 84-1/4"
HEATING SURFACES	
TUBES & FLUES	3461.1 SQ.FT.
FIREBOX	256 SQ.FT.
ARCH TUBES	27 SQ.FT.
SYPHONS	SQ.FT.
TOTAL	3744.1 SQ.FT.
SUPERHTR. H.S.	882 SQ.FT.
GRATE AREA	66.7 SQ.FT.

JOURNALS, DRIVING, MAIN	11" X 13"
JOURNALS, DRIVING, OTHERS	10" X 13"
JOURNALS, ENG. TRUCK	6-1/2" X 12"
JOURNALS, TRL. TRUCK, F.	9" X 14"
JOURNALS, TRL. TRUCK, B.	
VALVE GEAR	WALSCHAERT
TRAVEL	6-1/2" LAP-1"
LEAD	3/16" EXH. CL. L. & L.
FACTOR OF ADHESION	4.08
CYLINDER H.P.	2434
PERCENT BOILER TO CYL. H.P.	94.7

TENDER FRAME-WATER BOTTOM	C.S.
TENDER TRUCK FRAME	7 CAST
TENDER TRUCK BOLSTER	STEEL
SUPERHTR.	S.H. CO. TYPE-A
FWHEATER	TYPE
STOKER	DUPLEX TYPE-D-1
REVERSE GEAR	PRECISION
SAFETY VALVES	3 3"
ENG. FRAME BAR TYPE	-C. STEEL
THROTTLE	DOME TYPE

INJECTOR	
AIR BRAKE	6ET EQUIPMENT
LUB. R.S.	
LUB. L.S.	
BUILDERS ORDER NO.	
BUILDER	BALD. LOCO. WORKS
YEAR BUILT	1918

DR. CH. DATE 3-22-50

TRACTIVE POWER 62900 LBS.

NO. OF ENGINES -20

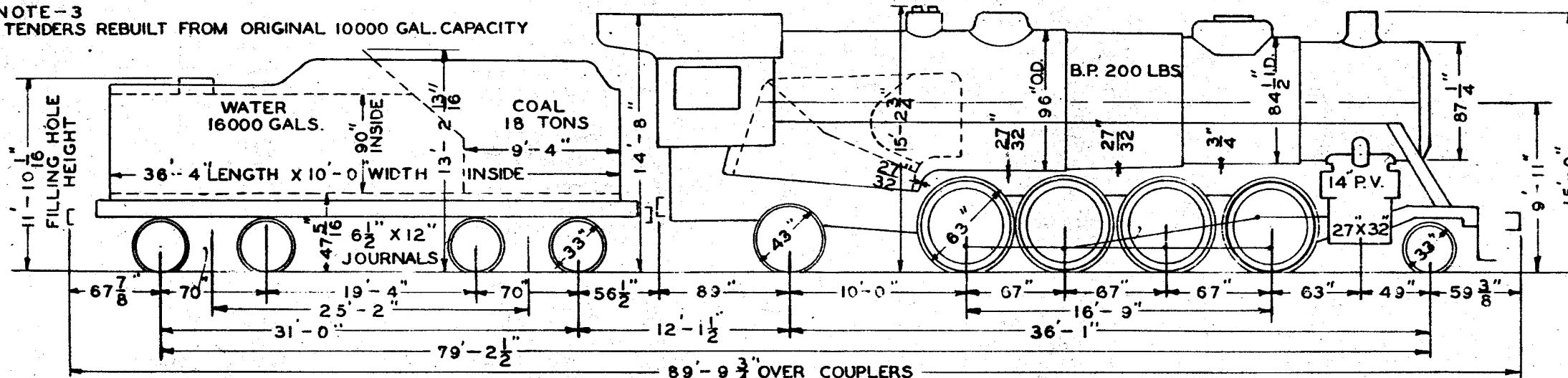
W.&L.E. DIST.

**CLASS M-1
ENGS. 6001-6020**

94

MAX. CURVE 19°
ENG. TRUCK SWING 5 3/8"
TRAIL TRUCK SWING 5 3/8"

NOTE -3
TENDERS REBUILT FROM ORIGINAL 10000 GAL. CAPACITY



NOTE -3
TYPE-HT 6002,6009,6010,6015,6016,6020.
TYPE-MB BALANCE.

DR. J. CH. DATE 2-16-30

WEIGHTS-WORK ORDER		250800	57800	61100	61400	57500	59800	24000	
WT. DRIVERS	239800 LBS.	FIREBOX	120-1/8" X 84-1/4"	JOURNALS, DRIVING, MAIN	12" X 13"	TENDER FRAME	CAST STEEL	INJECTOR	
WT. ENG. TRUCK	24000 LBS.	HEATING SURFACES		JOURNALS, DRIVING, OTHERS	10" X 13"	TENDER TRUCK FRAME	C. STEEL	AIR BRAKE	6 ET EQUIPMENT
WT. TRL. TRUCK	57800 LBS.	TUBES & FLUES	3978 SQ. FT.	JOURNALS, ENG. TRUCK	6-1/2" X 12"	TENDER TRUCK BOLSTER	C. STEEL	LUB. CHICAGO MECH.	6 FEED
WT. ENG. TOTAL	321600 LBS.	FIREBOX	279 SQ. FT.	JOURNALS, TRL. TRUCK, F.	SEE NOTE 2	SUPERHTR.	S.H. CO.	TYPE HA	
WT. TENDER-FULL	250800 LBS.	ARCH TUBES	19 SQ. FT.	JOURNALS, TRL. TRUCK, B.	NOTE 2	F.W. HEATER	TYPE	NOTE -1	
WT. ENG. & TENDER	572400 LBS.	SYPHONS	77 SQ. FT.	VALVE GEAR	WALSCHAERT	STOKER	STANDARD-TYPE-NOTE-3	STANDARD-6001,6004,6005,6006,6017.	
TUBES, NO.	247	TOTAL	4353 SQ. FT.	TRAVEL	7" LAP-1-1/8"	REVERSE GEAR	SEE NOTE 1	ALCO "K" 6009-6016	
FLUES, NO.	45	SUPERHTR. H.S.	993 SQ. FT.	LEAD	3/16" EXH. CL. L.&L.	SAFETY VALVES	4 3"	ALCO "G" BALANCE ENGINES	
TUBES & FLUES, LENGTH	19'-0"	GRATE AREA	70.8 SQ. FT.	FACTOR OF ADHESION	3.81	ENG. FRAME BAR TYPE	C. STEEL	BUILDERS ORDER NO.	
ARCH TUBES, NO.	2	NOTE-2-7" TIMKEN-6003,6005,6011,6013,6016.		CYLINDER H.P.	2624	THROTTLE	CHAMBERS-DOME	BUILDER	A.L. CO.
SUPERHTR. TUBES, NO.	O.D.	9" X 14" BALANCE ENGINES		PERCENT BOILER TO CYL. H.P.	107.2			YEAR BUILT	1918

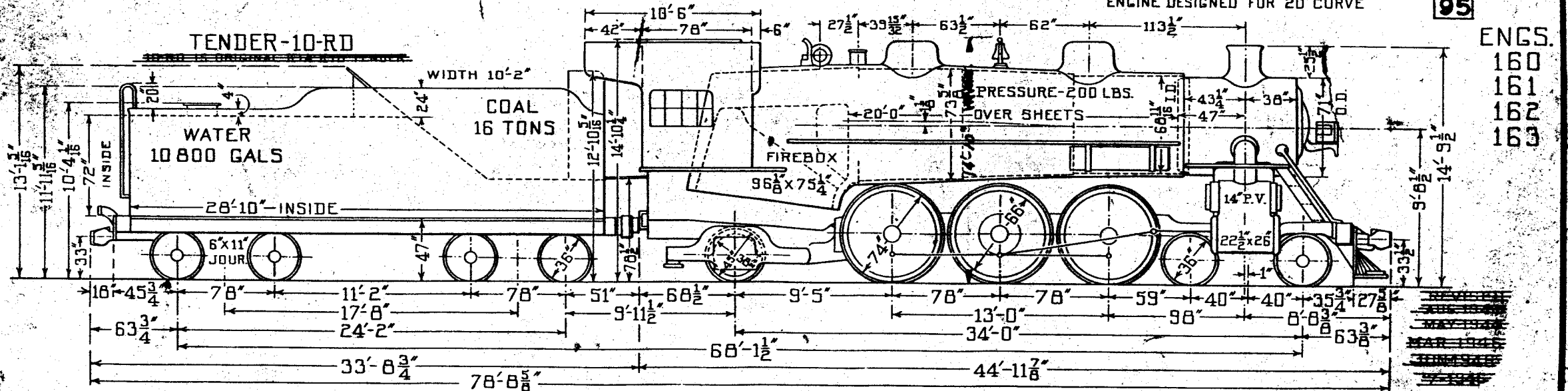
TRACTIVE POWER - 30,200 LBS.

NO. OF ENGINES - 4

N. K.P. CLASS K-1A

ENGINE DESIGNED FOR 20° CURVE

95



ENGS.
160
161
162
163

WEIGHTS - 96 300 106 600 50 700 53 050 53 200 53 050 27 550 27 550

WEIGHTS IN WORKING ORDER	
ON DRIVERS	159 300 LBS.
ON ENGINE TRUCK	55 100 LBS.
ON TRAILING TRUCK	50 700 LBS.
ENGINE TOTAL	265 100 LBS.
TENDER	202 900 LBS.
ENG. & TENDER	468 000 LBS.
TUBES, NO. - 185 - 2" O.D.	
FLUES, NO. - 32 - 5 3/8 O.D.	
TUBES & FLUES, LENGTH	20'-0"
ARCH TUBES, NO. 2	O.D. 3"

FIREBOX LENGTH	36 1/8"
" WIDTH	75 1/4"
" HEATING SURFACE	
TUBES & FLUES	2824 SQ. FT.
FIREBOX ARCH TUBES	239 SQ. FT.
SYPHONS	
TOTAL HEATING SURFACE	3063 SQ. FT.
SUPERHEATER H.S.	768 SQ. FT.
GRATE AREA	50.23 SQ. FT.

JOURNALS - DRIVING MAIN	
" OTHERS	10" X 13"
ENG. TRUCK	6 1/2" X 12"
TRAILER	8" X 14"
VALVE DATA	
TRAVEL	7" LAP 1"
LEAD	1/4" EXH. CL. 3/16"

VALVE GEAR	WALSCHAERT
FACTOR OF ADHESION	5.27
CYLINDER HORSE POWER	1822
PERCENT BOILER TO CYL. H.P.	99.3

SUPERHEATER - TYPE	A
F.W. HEATER	
STOKER	
BOOSTER	
REVERSE GEAR	PRECISION
SYPHONS ON ALL	
EXH. CL. HEATER ON ICE	
BLDRS. ORDER NO.	1034
BUILDER	LIMA LOCO. WORKS
YEAR BUILT	DEC-1922

TRACTIVE POWER 30200 LBS.
MAX. CURVE — 20°

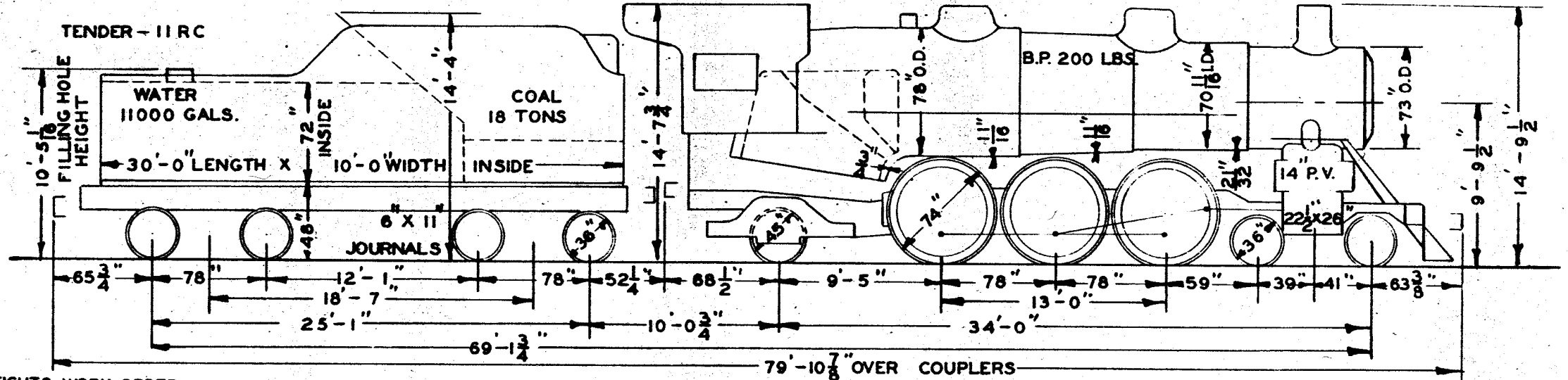
NO. OF ENGINES - 3

N.K.P.

CLASS K-18
ENGS. 164,168,169.

96

NOTE-MAX. HGT. 15'-1" (TOP OF BELL)



DR. CH. DATE 3-13-30

WEIGHTS-WORK ORDER 101700

110400

49970

52480

52290

52480

24050

24050

WT. DRIVERS	157250 LBS.
WT. ENG. TRUCK	48100 LBS.
WT. TRL. TRUCK	49970 LBS.
WT. ENG. TOTAL	255320 LBS.
WT. TENDER-FULL	212100 LBS.
WT. ENG. & TENDER	467420 LBS.
TUBES, NO. 44	2-1/4" O.D.
FLUES, NO. 132	3-1/2" O.D.
TUBES & FLUES, LENGTH	19'-8"
ARCH TUBES, NO. 2	3" O.D.
SUPERHTR. TUBES, NO.	O.D.

FIREBOX	98-1/8" X 75-1/4"
HEATING SURFACES	
TUBES & FLUES	2852 SQ.FT.
FIREBOX	SQ.FT.
ARCH TUBES	250 SQ.FT.
SYPHONS	SQ.FT.
TOTAL	3102 SQ.FT.
SUPERHTR. H.S.	1350 SQ.FT.
GRATE AREA	50.23 SQ.FT.

JOURNALS, DRIVING, MAIN	10" X 13"
JOURNALS, DRIVING, OTHERS	
JOURNALS, ENG. TRUCK	6-1/2" X 12"
JOURNALS, TRL. TRUCK, F.	8" X 14"
JOURNALS, TRL. TRUCK, B.	
VALVE GEAR	WALSCHAERT
TRAVEL	7" LAP - 1"
LEAD	1/4" EXH. CL. - 3/16"
FACTOR OF ADHESION	5.20
CYLINDER H.P.	1822
PERCENT BOILER TO CYL. H.P.	105.4

TENDER FRAME	CAST STEEL
TENDER TRUCK FRAME	
TENDER TRUCK BOLSTER	
SUPERHTR.	S.H.CO. TYPE E
FW. HEATER	NOTE-1 TYPE
STOKER	STANDARD TYPE BK
REVERSE GEAR	PRECISION TYPE
SAFETY VALVES	2 - 3"
ENG. FRAME - BAR TYPE	C. STEEL
THROTTLE	DOMED TYPE

INJECTOR	
AIR BRAKE	6 ET EQUIPMENT
LUB. R.S.	
LUB. L.S.	
NOTE-1 EXH. ST. INJ. ON ENG. 164	
BUILDERS ORDER NO.	B-1608
BUILDER	A.L.CO. AT BROOKS.WK.
YEAR BUILT	1923

TRACTIVE POWER 30200 LBS.
MAX CURVE 20°

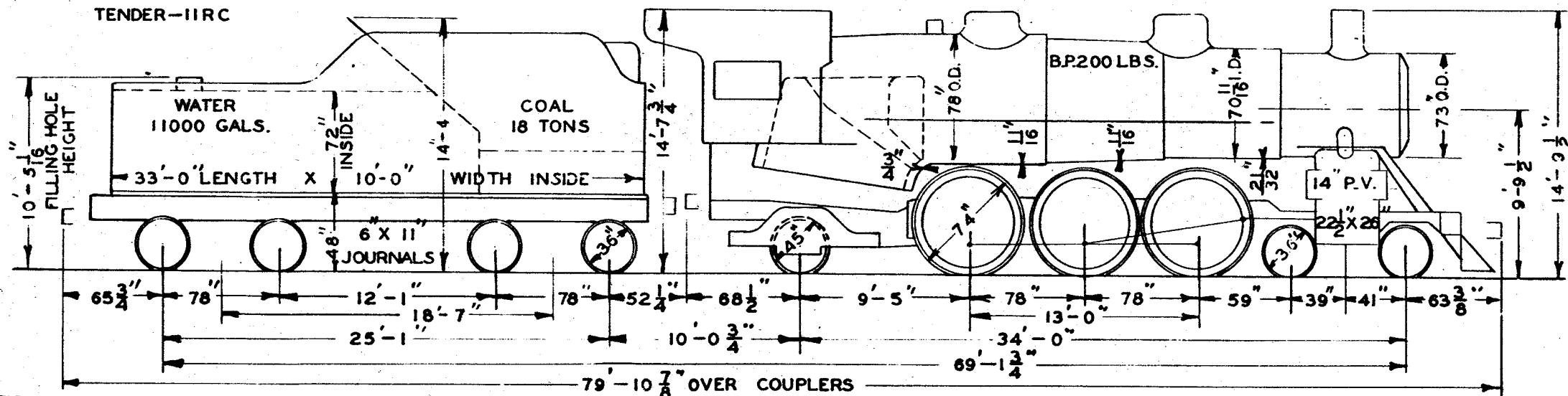
NO. OF ENGINES - 3

N.K.P.

CLASS K-1B
ENGS. 165-167

97

NOTE - MAX. HGT. 15'-1" (TOP OF BELL)



DR. DATE 3-13-50

WEIGHTS-WORK ORDER	101700	110400	49970	52480	52290	52480	24050	24050	
WT. DRIVERS	157250 LBS.	FIREBOX	96-1/8" X 75-1/4"	JOURNALS, DRIVING, MAIN	10" X 13"	TENDER FRAME	CAST	INJECTOR	
WT. ENG. TRUCK	48100 LBS.	HEATING SURFACES		JOURNALS, DRIVING, OTHERS	6-1/2" X 12"	TENDER TRUCK FRAME	STEEL	AIR BRAKE	6 ET EQUIPMENT
WT. TRL. TRUCK	49970 LBS.	TUBES & FLUES	3063 SQ. FT.	JOURNALS, ENG. TRUCK	8" X 14"	TENDER TRUCK BOLSTER		LUB. R. S.	
WT. ENG. TOTAL	255320 LBS.	FIREBOX		JOURNALS, TRL. TRUCK, F.		SUPERHTR.	S.H.CO. TYPE-A	LUB. L. S.	
WT. TENDER-FULL	212100 LBS.	ARCH TUBES	250 SQ. FT.	JOURNALS, TRL. TRUCK, B.		FWHEATER	TYPE		
WT. ENG. & TENDER	467420 LBS.	SYPHONS		VALVE GEAR	WALSCHAERT	STOKER	STANDARD TYPE-BK		
TUBES, NO. 208	2" O.D.	TOTAL	3313 SQ. FT.	TRAVEL	7" LAP	REVERSE GEAR	PRECISION		
FLUES, NO. 32	5-3/8" O.D.	SUPERHTR. H.S.	768 SQ. FT.	LEAD	1/4" EXH. CL.	SAFETY VALVES	2-3"		
TUBES & FLUES, LENGTH	20'-0"	GRATE AREA	50.23 SQ. FT.	FACTOR OF ADHESION	5.20	ENG. FRAME-BAR TYPE	C. STEEL	BUILDERS ORDER NO.	B-1608
ARCH TUBES, NO. 2	3" O.D.			CYLINDER H.P.	1822	THROTTLE	DOME TYPE	BUILDER	A.L.CO. AT BROOKS WKS.
SUPERHTR. TUBES, NO.	O.D.			PERCENT BOILER TO CYL. H.P.	107.4			YEAR BUILT	1923

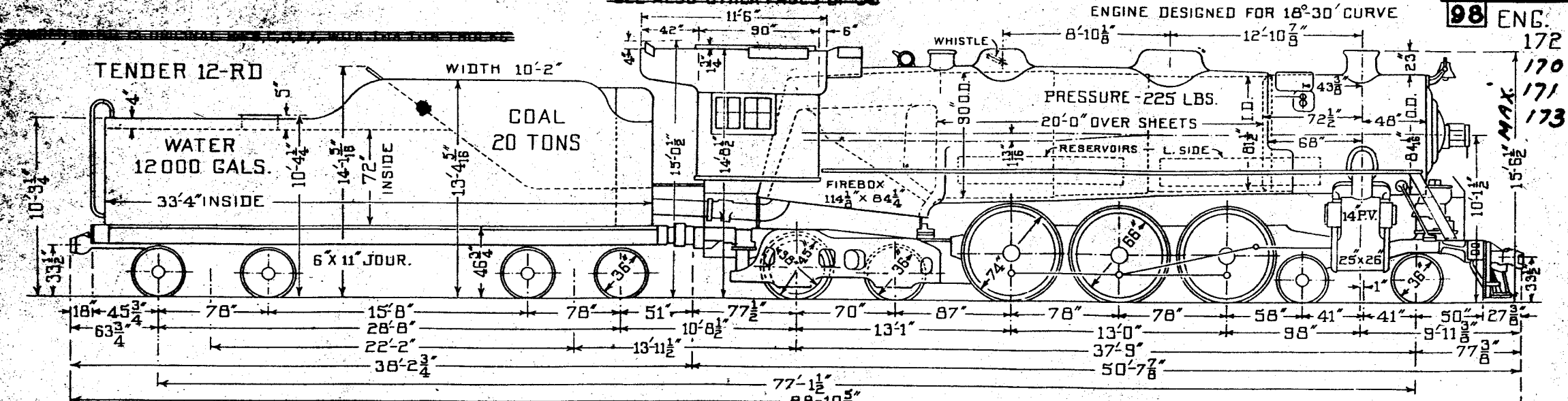
INDICATIVE POWER 42000 LBS.

NO. OF ENGINES \equiv 4

N.K.P. CLASS L-1A

ENGINE DESIGNED FOR 18°-30' CURVE

98 ENG.



WEIGHTS —	104460	113800	51100	33700	58550	58700	58550	28900	28900	28900
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REVISED 3-8-50

WEIGHTS IN WORKING ORDER —	
ON DRIVERS	175800 LBS.
ON ENGINE TRUCK	57800 LBS.
ON TRAILING TRUCK	84800 LBS.
ENGINE TOTAL	318400 LBS.
TENDER	218260 LBS.
ENG. & TENDER	536660 LBS.
TUBES, NO. 224	2 1/2" O.D.
FLUES, NO. 45	5 1/2" O.D.
TUBES & FLUES, LENGTH	20'-0"
ARCH TUBES, NO. 2	O.D. 3"
SUPERHEATER TUBES,	O.D.

FIREBOX LENGTH	114 1/8"
" WIDTH	84 1/4"
HEATING SURFACES	
TUBES & FLUES	3917 SQ. FT.
FIREBOX	
ARCH TUBES	- TOTAL 302 SQ. FT.
SYPHONS	
TOTAL HEATING SURFACE	4219 SQ. FT.
SUPERHEATER H.S.	1055 SQ. FT.
GRATE AREA	66.7 SQ. FT.

JOURNALS DRIVING-MAIN	11" x 13"
" OTHERS	10" x 13"
ENG. TRUCK	
TRAILER FR-6" x 11" BACK-8" x 14"	
VALVE DATA	
TRAVEL	8 1/2"
LEAD	1/4"
VALVE GEAR	WALSCHAERT
FACTOR OF ADHESION	4.18
CYL. HORSE POWER	2529
PERCENT BOILER TO CYL. H. P.	99.8

7 5/16 DIA. TIMKEN ROLLER BEARINGS	
SUPERHEATER TYPE	A
F.W. HEATER EXHAUST ST. INJECTOR	
STOKER	STANDARD
BOOSTER	NONE
REVERSE GEAR	PRECISION

BUILDER'S ORDER B-1695
 BUILDER A.L.CO. AT DUNKIRK
 YEAR BUILT 1927

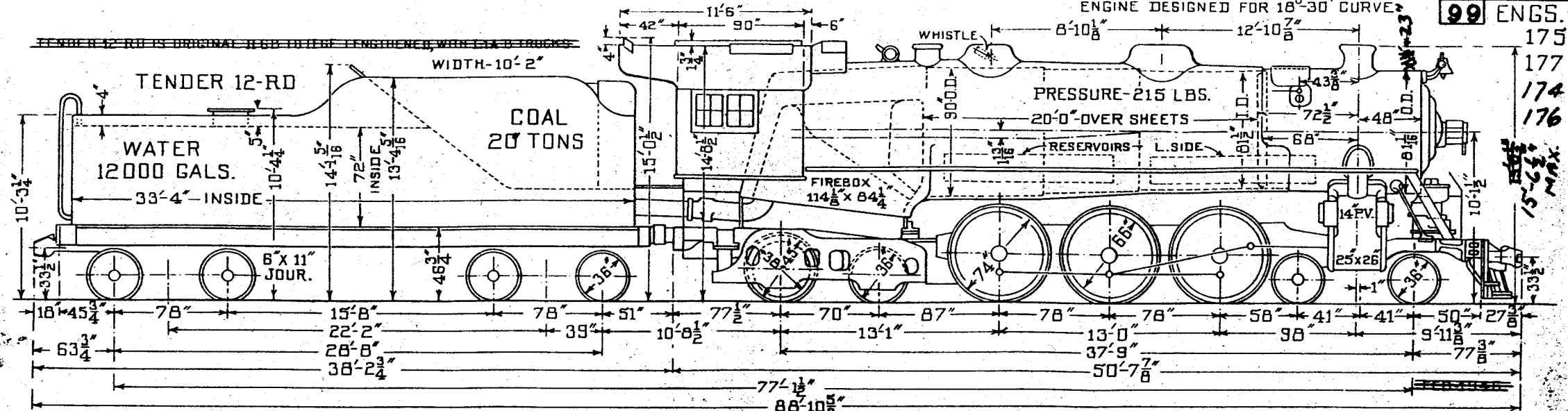
TRACTIVE POWER- 40150 LBS.

NO. OF ENGINES ~~3~~ 4

N. K. P. CLASS L-1B

ENGINE DESIGNED FOR 18°-30' CURVE

99 ENGS.



175
177
174
176
15'-6 1/2" MAX.

WEIGHTS- 104460 113800 51160 33740 58620 58760 58620 27500 27500

REVISED 3-8-54

WEIGHTS IN WORKING ORDER	
ON DRIVERS	176000 LBS.
ON ENGINE TRUCK	55000 LBS.
ON TRAILER TRUCK	84900 LBS.
ENGINE TOTAL	315900 LBS.
TENDER	218260 LBS.
ENG. & TENDER	534160 LBS.
TUBES, NO. 224	2 1/4" O.D.
FLUES, NO. 45	5 1/2" O.D.
TUBES & FLUES, LENGTH	20'-0"
ARCH TUBES, NO. 2	O.D. 3"

FIREBOX LENGTH	114 1/8"
" WIDTH	84 1/4"
HEATING SURFACES	
TUBES & FLUES	3917 SQ. FT.
FIREBOX	
ARCH TUBES	302 SQ. FT.
SYPHONS	
TOTAL HEATING SURFACE	4219 SQ. FT.
SUPERHEATER H.S.	1055 SQ. FT.
GRATE AREA	66.7 SQ. FT.

JOURNALS DRIVING-MAIN	11" x 13"
" OTHERS	10" x 13"
ENG TRUCK	8 1/2" x 13"
TRAILER FR-8" x 11" BACK-8" x 14"	
VALVE DATA	
TRAVEL	8 1/2"
LEAD	1/4"
VALVE GEAR	WALSCHAERT
FACTOR OF ADHESION	4.38
HP. HORSE POWER	2421
PERCENT BOILER TO CYL. H. P.	104.6

7 1/16" DIA. TIMKEN ROLLER BEARINGS ON	
SUPERHEATER TYPE	A
F. W. HEATER EXHAUST ST. INJECTOR	
STOKER	STANDARD - 8x
BOOSTER	NONE
REVERSE GEAR	PRECISION

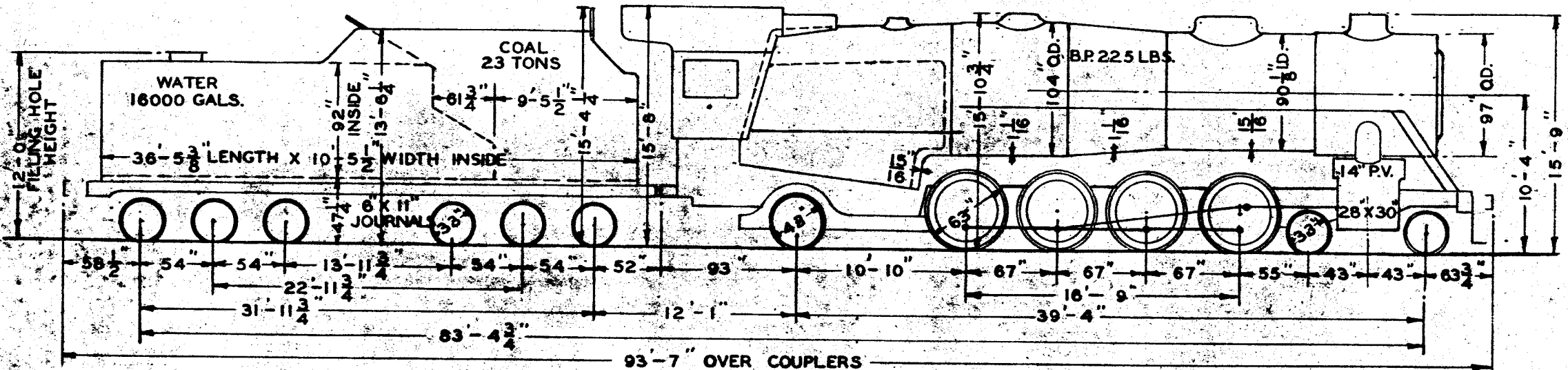
BUILDER'S ORDER 1114
 BUILDER LIMA Loco. WORKS
 YEAR BUILT NOV-1929

TRACTIVE POWER 68900 LBS.
MAX. CURVE 18°

NO. OF ENGINES 7

W.&L.E. DIST. CLASS J-1
ENGS. 6801,6802,6803,6805,6807,6809,6810.

100



WEIGHTS-WORK ORDER		285900	69100	273400	56700 [W.&L.E. CLASS K-3]
DR.	DATE	WT. DRIVERS 273400 LBS.	FIREBOX 126-3/16" X 96-1/4"	JOURNALS, DRIVING, MAIN 12-3/4" X 13"	TENDER FRAME } CAST
CH.		WT. ENG. TRUCK 56700 LBS.	HEATING SURFACES	JOURNALS, DRIVING, OTHERS 11" X 13"	TENDER TRUCK FRAME } STEEL
		WT. TRL. TRUCK 69100 LBS.	TUBES & FLUES 4424 SQ. FT.	JOURNALS, ENG. TRUCK 7" X 12"	TENDER TRUCK BOLSTER
		WT. ENG. TOTAL 399200 LBS.	FIREBOX 367 SQ. FT.	JOURNALS, TRL. TRUCK, F. 9" X 15-3/4"	SUPERHTR. S.H.CO. TYPE A
		WT. TENDER-FULL 285900 LBS.	ARCH TUBES 43 SQ. FT.	JOURNALS, TRL. TRUCK, B. 9" X 15-3/4"	FW. HEATER TYPE
		WT. ENG. & TENDER 685100 LBS.	SYPHONS SQ. FT.	VALVE GEAR BAKER	STOKER-DUPLEX TYPE
		TUBES, NO. 245 2-1/4" O.D.	TOTAL 4834 SQ. FT.	TRAVEL 8-3/4" LAP 2"	REVERSE GEAR FRANKLIN TYPE
		FLUES, NO. 58 5-1/2" O.D.	SUPERHTR. H.S. 1380 SQ. FT.	LEAD 1/4" EXH. CL. 1/16"	SAFETY VALVES 3 3-1/2"
		TUBES & FLUES, LENGTH 19'-5-5/16"	GRATE AREA 84.1 SQ. FT.	FACTOR OF ADHESION 3.97	ENG. FRAME-BAR TYPE C. STEEL
		ARCH TUBES, NO. 5 3" O.D.		CYLINDER H.P. 3173	THROTTLE CHAMBERS-DOME TYPE
		SUPERHTR. TUBES, NO. O.D.		PERCENT BOILER TO CYL. H.P. 97.7	INJECTOR RS NATHAN 1918B
					BUILDER NORFOLK & WESTERN
					YEAR BUILT 1926

TRACTIVE POWER 68900 LBS.

NO. OF ENGINES 3

W.&L.E. DIST.

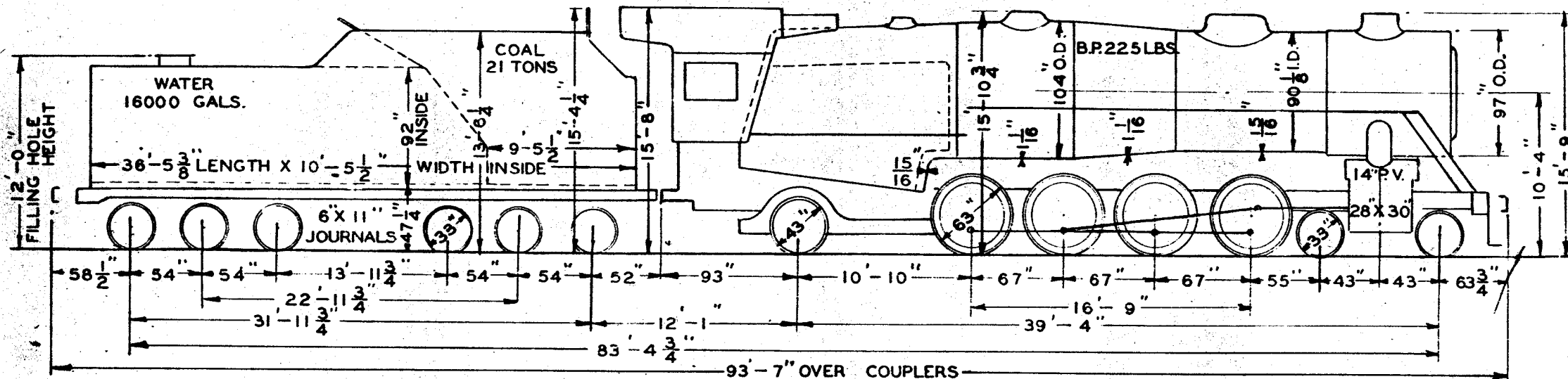
CLASS J-1

101

MAX. CURVE 18°

ENGS. 6804,6806,6808.

NOTE 1 COAL SPACE REBUILT AND CAB WIDENED.



2-77-50
 DR. V. CH. DATE
 OK \$

WEIGHTS-WORK ORDER		286200	69100	273400	56700 [W.&L.E. CLASS K-3]
WT. DRIVERS	273400 LBS.	FIREBOX	126-3/16" X 96-1/4"	JOURNALS, DRIVING, MAIN	12-3/4" X 13"
WT. ENG. TRUCK	56700 LBS.	HEATING SURFACES		JOURNALS, DRIVING, OTHERS	11" X 13"
WT. TRL. TRUCK	69100 LBS.	TUBES & FLUES	4424 SQ.FT.	JOURNALS, ENG. TRUCK	7" X 12"
WT. ENG. TOTAL	399200 LBS.	FIREBOX	367 SQ.FT.	JOURNALS, TRL. TRUCK, F.	9" X 15-3/4"
WT. TENDER-FULL	286200 LBS.	ARCH TUBES	43 SQ.FT.	JOURNALS, TRL. TRUCK, B.	
WT. ENG. & TENDER	685400 LBS.	SYPHONS	SQ.FT.	VALVE GEAR	BAKER
TUBES, NO.	245	TOTAL	4834 SQ.FT.	TRAVEL	8-3/4" LAP 2"
FLUES, NO.	58	SUPERHTR. H.S.	1380 SQ.FT.	LEAD	1/4" EXH. CL. 1/16"
TUBES & FLUES, LENGTH	19-5-5/16	GRATE AREA	84.1 SQ.FT.	FACTOR OF ADHESION	397
ARCH TUBES, NO.	5			CYLINDER	H.P. 3173
SUPERHTR. TUBES, NO.	O.D.			PERCENT BOILER TO CYL. H.P.	97.7
				TENDER FRAME	} CAST STEEL
				TENDER TRUCK FRAME	
				TENDER TRUCK BOLSTER	
				SUPERHTR.	S.H.CO. TYPE A
				F.W. HEATER	TYPE
				STOKER	STANDARD TYPE HT
				REVERSE GEAR	FRANKLIN TYPE
				SAFETY VALVES	3 3-1/2"
				ENG. FRAME	BAR TYPE C. STEEL
				THROTTLE CHAMBERS	DOME TYPE
				INJECTOR	R.S. CHICAGO T-60
				INJECTOR	L.S. NATHAN 1918-B NOTE-1
					AIR BRAKE 6 ET EQUIPMENT
					LUB NATHAN, MECH. DV4. 8 FEED
					NOTE-1 6404 INJECTORS
					R.S. NATHAN 1918-B
					L.S. CHICAGO T-60
					BUILDER NORFOLK & WESTERN
					YEAR BUILT 1926

NET POWER - 64100 LBS.

TOTAL ENGS. IN CLASS - 15

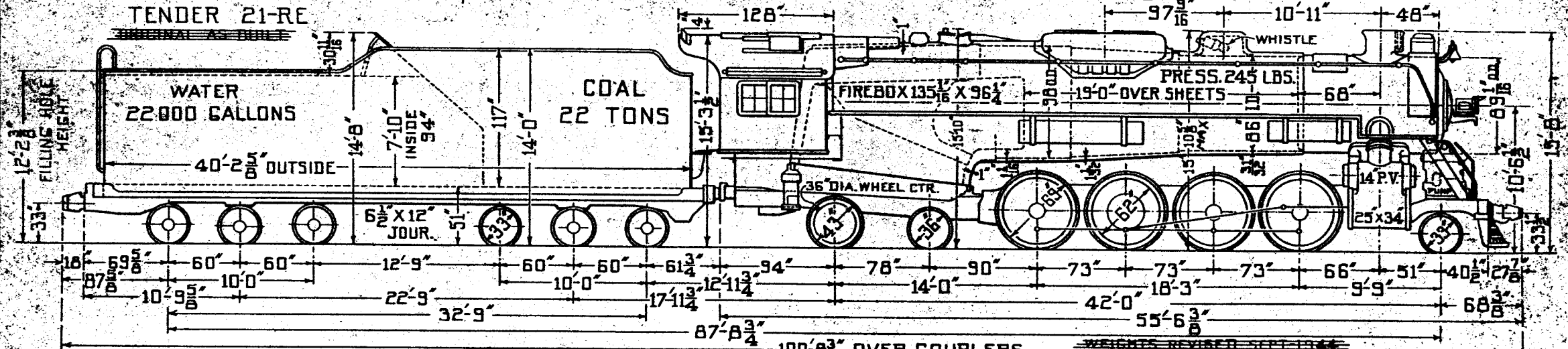
N. K. P.

CLASS S 102

~~ENGINES 700 TO 709 BUILT SEP 1934 ENGS 700 TO 711 OCT 1934 ENGS 712 TO 714 NOV 1934~~

ENGINE DESIGNED FOR 20° CURVE - ENG. TRUCK SWING 7" - TRAILER TRUCK SWING 9 1/2"

ENGS. 700 TO 714



WEIGHTS 165 000

173 000

100'-8 3/4" OVER COUPLERS

61300 52000 65600 65600 64800 65100 54500

WEIGHTS IN WORKING ORDER	
ON DRIVERS	251 100 LBS.
ON ENGINE TRUCK	54 500 LBS.
ON TRAILING TRUCK	113 300 LBS.
ENGINE TOTAL	428 900 LBS.
TENDER	358 000 LBS.
ENG. & TENDER	786 900 LBS.
TUBES, NO. 73 - O.D. 2 1/4"	
FLUES, NO. 202 - O.D. 3 1/2"	
TUBES & FLUES, LENGTH - 13'-0"	
ARCH TUBES, NO. 2 - O.D. 3 1/2"	
SUPERHEATER TUBES, O.D. 1 3/16"	

FIREBOX LENGTH	135 1/16"
" WIDTH	96 1/4"
HEATING SURFACES	
TUBES & FLUES	4312 SQ. FT.
FIREBOX	343 SQ. FT.
ARCH TUBES	19 SQ. FT.
SYPHONS	98 SQ. FT.
TOTAL HEATING SURFACE	4772 SQ. FT.
SUPERHEATER H.S.	1532 SQ. FT.
GRATE AREA	90.3 SQ. FT.

JOURNALS - DRIVING MAIN	12 1/2" x 13"
" OTHERS	11 1/2" x 13"
ENG. TRUCK	6 1/2" x 12"
TRAILER F.	7" x 14"
" B.	9" x 14"
VALVE DATA	
TRAVEL	8"
LEAD	3/16"
LAP	1 1/16"
EXH. CL.	1 1/2"

CRANK PINS - MAIN	9 1/2" x 6 1/2" x 8" x 9"
VALVE GEAR	BAKER
FACTOR OF ADHESION	3.354.07
CYL HORSE POWER	2754
PERCENT BOILER TO CYL. H.P.	114.9

SUPERHEATER - TYPE	E
F.W. HEATER	WORTHINGTON - TYPE 5-S
STOKER	MODIFIED - TYPE B
BOOSTER	
REVERSE GEAR	PRECISION - TYPE F
SAFETY VALVES	3 - 3 1/2" COALE

TENDER FRAME	CAST STEEL - WATER BOTTOM
TENDER TRUCK FRAME	CAST STEEL
" "	BOLSTER - CAST STEEL

BUILDERS ORDER NO.	S-1736
BUILDER	A.L.CO. - SCHENECTADY
YEAR BUILT	1934

TRACTIVE POWER - 64100 LBS.

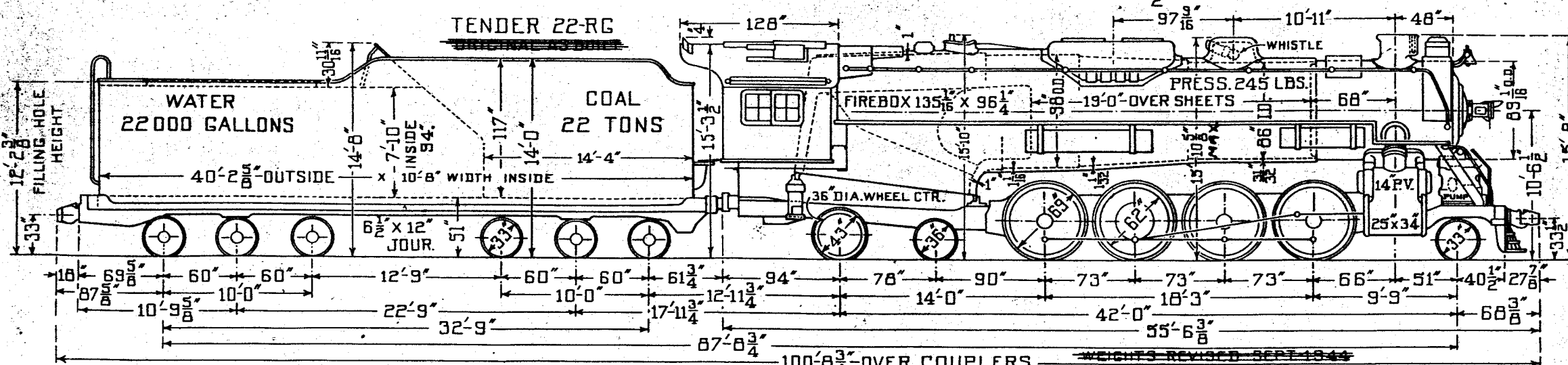
NO. OF ENGINES - 25

N. K. P.

CLASS S-1 103

ENGS. 715 TO 739

ENGINE DESIGNED FOR 20° CURVE - ENG. TRUCK SWING 7" - TRAILER TRUCK SWING 9 1/2"



WEIGHTS - 186700 175000 100'-8 3/4" OVER COUPLERS 61500 52000 66400 65900 64700 64800 54200

WEIGHTS IN WORKING ORDER	
ON DRIVERS	261800 LBS.
ON ENGINE TRUCK	54200 LBS.
ON TRAILING TRUCK	113500 LBS.
ENGINE TOTAL	429500 LBS.
TENDER	351700 LBS.
ENG. & TENDER	791200 LBS.
TUBES, NO. 73	O.D. 2 1/4"
FLUES, NO. 202	O.D. 3 1/2"
TUBES & FLUES, LENGTH	19'-0"
ARCH TUBES, NO. 2	O.D. 3 1/2"
SUPERHEATER TUBES	O.D. 1 1/16"

FIREBOX LENGTH	135 1/16"
" WIDTH	96 1/4"
HEATING SURFACES	
TUBES & FLUES	4312 SQ. FT.
FIREBOX	343 SQ. FT.
ARCH TUBES	19 SQ. FT.
SYPHONS	98 SQ. FT.
TOTAL HEATING SURFACE	4772 SQ. FT.
SUPERHEATER H.S.	1932 SQ. FT.
GRATE AREA	50.3 SQ. FT.

JOURNALS DRIVING MAIN	12 1/2" x 13"
" OTHERS	11 1/2" x 13"
" ENG. TRUCK	6 1/2" x 13"
" TRAILER - F	7" x 14"
" TRAILER - B	5" x 14"
VALVE DATA	
TRAVEL	8" 3/16"
LEAD	
VALVE GEAR	BAKER
FACTOR OF ADHESION	4.02
CYL. HORSE POWER	2754
PERCENT BOILER TO CYL. H. P.	114.9

TENDER FRAME	C. ST. WATER BOTTOM
TENDER TRUCK FRAME	CAST STEEL
" BOLSTER	CAST STEEL
SUPERHEATER - TYPE E	
F. W. HEATER	WORTHINGTON-TYPE 5-S
STOKER	STANDARD-TYPE MB.
BOOSTER	
REVERSE GEAR	PRECISION-TYPE F-2
SAFETY VALVES	3 3 1/2"

BUILDER'S ORDER NUMBERS
 ENGS. 715 TO 729 - ORDER - 1160
 ENGS. 730 TO 739 - ORDER - 1166
 BUILDER - LIMA LOCO. WORKS
 YEAR BUILT - 715 TO 729 - 1942
 YEAR BUILT - 730 TO 739 - 1943

TRACTIVE POWER - 64100 LBS.

NO. OF ENGINES - 30

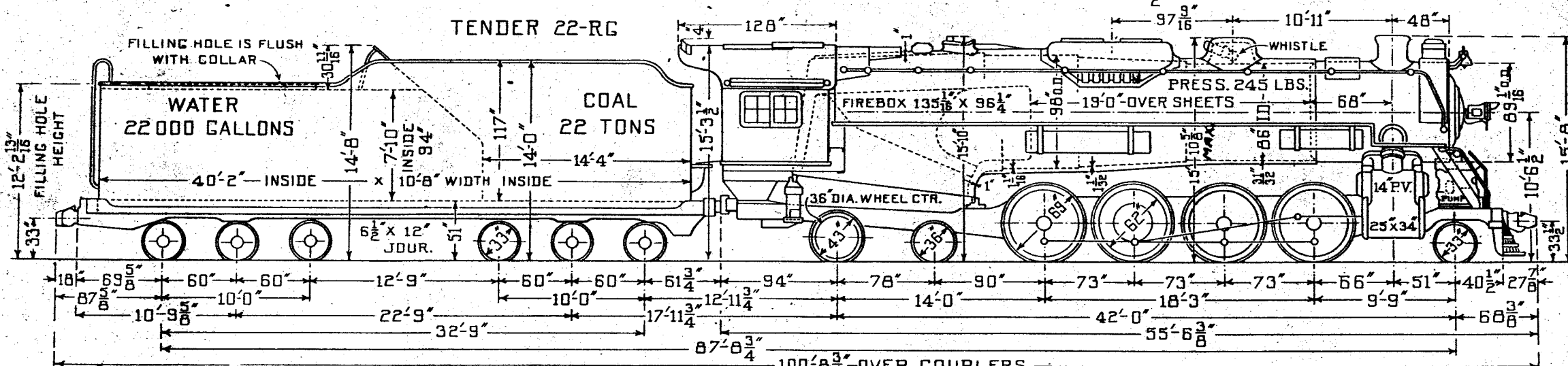
N. K.P.

CLASS S-2 104

ENGS. 740 TO 769

ENGINE DESIGNED FOR 20° CURVE - ENG. TRUCK SWING 7' - TRAILER TRUCK SWING 9 1/2'

TENDER 22-RG



WEIGHTS - 186700 175000 61200 61300 66200 65600 66200 66300 54000

WEIGHTS IN WORKING ORDER	
ON DRIVERS	264 300 LBS.
ON ENGINE TRUCK	54 000 LBS.
ON TRAILING TRUCK	122 500 LBS.
ENGINE TOTAL	440 800 LBS.
TENDER	361 700 LBS.
ENG. & TENDER	802 500 LBS.
TUBES, NO. 73	2 3/4" O.D.
FLUES, NO. 202	3 1/2" O.D.
TUBES & FLUES, LENGTH	19'-0"
ARCH TUBES, NO. 2	O.D. 3 1/2"
SUPERHEATER TUBES, 103	O.D. 1 3/16"

FIREBOX LENGTH	135 1/16"
" WIDTH	96 1/4"
HEATING SURFACES	
TUBES & FLUES	4312 SQ. FT.
FIREBOX	343 SQ. FT.
ARCH TUBES	19 SQ. FT.
SYPHONS	98 SQ. FT.
TOTAL HEATING SURFACE	4772 SQ. FT.
SUPERHEATER H.S.	1932 SQ. FT.
GRATE AREA	90.3 SQ. FT.

JOURNALS DRIVING MAIN	1 3/8" DIA. *
" OTHERS	1 1/8" DIA. * 1 1/8"
" ENG. TRUCK	1 1/8" DIA. * 1 1/8"
" TR. TRUCK 7 X 14	FRONT 9 X 14 REAR
VALVE DATA	
TRAVEL	8" LAP 1 1/16"
LEAD	3/16" EXH. CL. 8/16" L.B.
VALVE GEAR	BAKER WITH NEEDLE BEARINGS
FACTOR OF ADHESION	4.12
CYL. HORSE POWER	2754
PERCENT BOILER TO CYL. H. P.	114.9
* TIMKEN JOURNAL BEARINGS ON ENGINE TRUCK AND DRIVERS	

TENDER FRAME	C. ST. WATER BOTTOM
TENDER TRUCK FRAME	CAST STEEL
" BOLSTER	BUCKEY TYPE
SUPERHEATER	TYPE ELESKO TYPE E
F. W. HEATER	WORTHINGTON TYPE 5-SSA
STOKER	STANDARD TYPE MB
BOOSTER	NONE
REVERSE GEAR	PRECISION TYPE F-2
SAFETY VALVES	3 - 3 1/2"
ENG. FRAME	G. S. C. CO. LOCOMOTIVE BED
THROTTLE	AMERICAN MULTIPLE FRONT END
LUBRICATOR	RIGHT SIDE DETROIT MODEL B

LUBRICATOR	L. SIDE NATHAN TYPE DV-7
INJECTOR	NATHAN TYPE 4000
AIR BRAKE	6 ET EQUIPMENT
BUILDERS ORDER NUMBERS -	
ENGS. 740 TO 754	NO. 1179
ENGS. 755 TO 769	NO. 1184
BUILDER	LIMA LOCO. WORKS
YEAR BUILT	1944

TRACTIVE POWER - 64100 LBS.

NUMBER OF ENGINES - 10

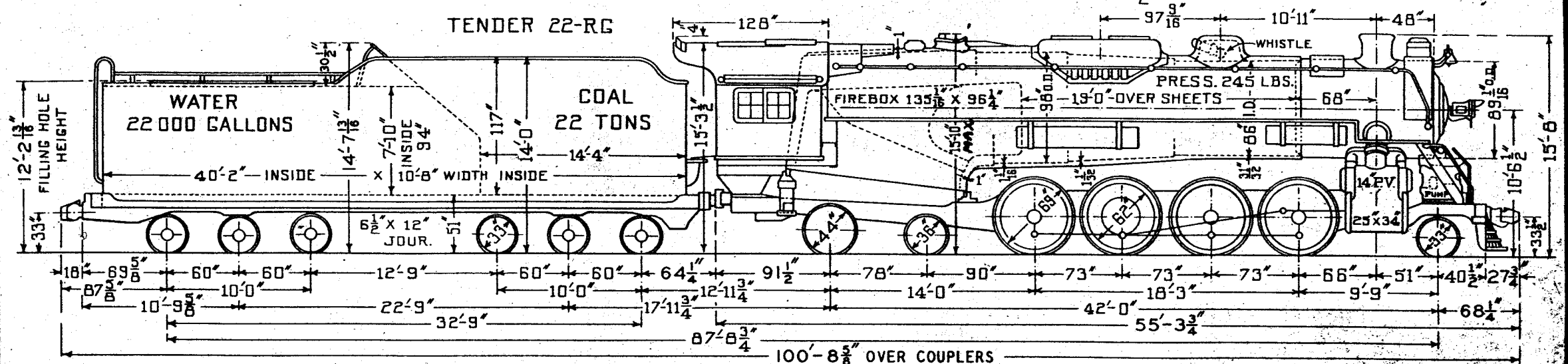
N. K.P.

CLASS S-3103

ENGINE DESIGNED FOR 20° CURVE - ENG. TRUCK SWING 7" - TRAILER TRUCK SWING 9 1/2"

ENGS. 770-779

TENDER 22-RG



WEIGHTS- 187 840 176 780 61250 61970 66850 65100 67600 66480 55040

WEIGHTS IN WORKING ORDER	
ON DRIVERS	266 030 LBS.
ON ENGINE TRUCK	55 040 LBS.
ON TRAILER TRUCK	123 220 LBS.
ENGINE TOTAL	444 290 LBS.
TENDER	364 620 LBS.
ENG. & TENDER	808 910 LBS.
TUBES, NO. 73	2 1/4" O.D.
FLUES, NO. 202	3 1/2" O.D.
TUBES & FLUES, LENGTH	19'-0"
ARCH TUBES, NO. 2	3 1/2" O.D.
SUPERHEATER TUBES	103 1 3/16" O.D.

FIREBOX LENGTH	135 1/16"
FIREBOX WIDTH	96 1/4"
HEATING SURFACES	
TUBES & FLUES	4 312 SQ. FT.
FIREBOX	343 SQ. FT.
ARCH TUBES	19 SQ. FT.
SYPHONS	98 SQ. FT.
TOTAL HEATING SURFACE	4 772 SQ. FT.
SUPERHEATER H. S.	1 932 SQ. FT.
GRATE AREA	90.3 SQ. FT.

JOURNALS, DRIVING, MAIN	13" DIA. TIMKEN
JOURNALS, DRIVING, OTHERS	12 1/8" DIA. TIMKEN
JOURNALS, ENGINE TRUCK	7 1/2" DIA. TIMKEN
JOURNALS, TR. TRUCK, FRONT	7" X 14"
JOURNALS, TR. TRUCK, REAR	9" X 14"
VALVE DATA	
TRAVEL	8"
LEAD	3/16"
LAP	1 1/16"
EXH. CL.	L. & L.
VALVE GEAR	BAKER WITH NEEDLE BEARINGS
FACTOR OF ADHESION	4.15
CYL. HORSEPOWER	2754
PERCENT BOILER TO CYL. H.P.	114.9

TENDER FRAME	C. STEEL
TENDER TRUCK FRAME	CAST STEEL
TENDER TRUCK BOLSTER	BUCKEYE TYPE
SUPERHEATER	ELESCO TYPE-E
F.W. HEATER	WORTHINGTON TYPE 5-SSA
STOKER	STANDARD TYPE MB
BOOSTER	NONE
REVERSE GEAR	PRECISION TYPE F-3
SAFETY VALVES	3 3 1/2"
ENG. FRAME	G. S. C. CO. LOCOMOTIVE BED
THROTTLE	AMERICAN MULTIPLE FRONT END

INJECTOR	SELLERS TYPE SW
AIR BRAKE	6 ET EQUIPMENT
LUBRICATOR - R. SIDE	DETROIT MODEL 8
LUBRICATOR - L. SIDE	NATHAN TYPE DV-7
BUILDER'S ORDER NO.	
BUILDER	LIMA
YEAR BUILT	

TRACTIVE POWER 65400 LBS.

NO. OF ENGINES 5

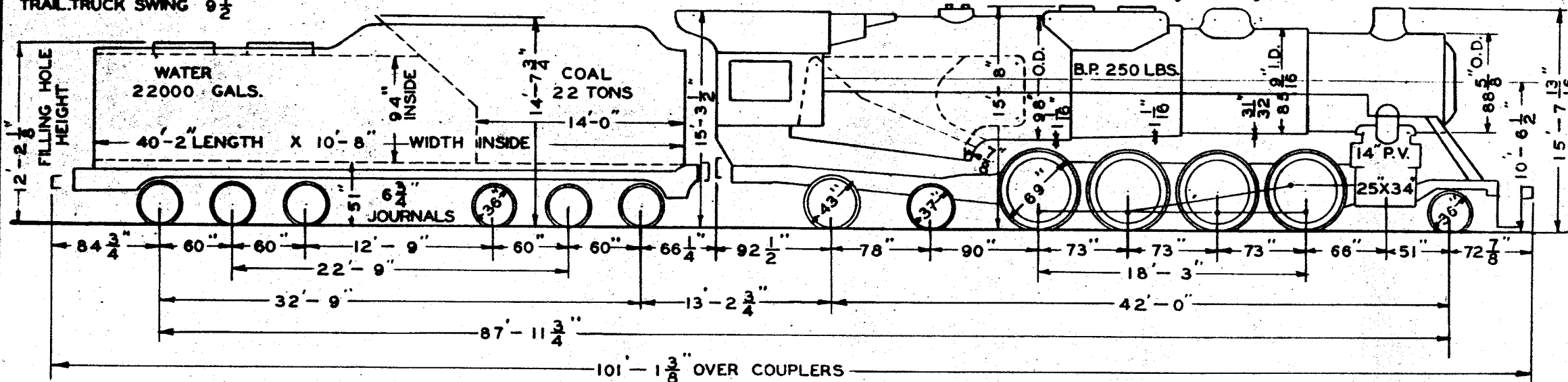
W.&L.E. DIST.

CLASS K-1

106

MAX. CURVE 20°
 ENG. TRUCK SWING 7 1/4"
 TRAIL TRUCK SWING 9 1/2"

ENGS. 6401, 6402, 6403, 6405, 6407.



WEIGHTS-WORK ORDER 364500 56700 54200 65600 65600 65900 65900 39200

DR	DATE	CH	OR	WT. DRIVERS	263000 LBS.	FIREBOX	135-1/16" X 96-1/4"	JOURNALS, DRIVING, MAIN	12-1/2" DIA.	TENDER FRAME, C.S.	WATER BOTTOM	INJECTOR	L.S. CHICAGO	T-80
				WT. ENG. TRUCK	39200 LBS.	HEATING SURFACES		JOURNALS, DRIVING, OTHERS	11-1/2" DIA.	TENDER TRUCK FRAME	C. STEEL	AIR BRAKE	6 ET EQUIPMENT	
				WT. TRL. TRUCK	110900 LBS.	TUBES & FLUES	4246 SQ. FT.	JOURNALS, ENG. TRUCK	7-1/2" DIA.	TENDER TRUCK BOLSTER	BUCKEYE	NOTE -1		
				WT. ENG. TOTAL	413100 LBS.	FIREBOX	343 SQ. FT.	JOURNALS, TRL. TRUCK, F.	7" DIA.	SUPERHTR.	ELESCO	TYPE - E		
				WT. TENDER-FULL	364500 LBS.	ARCH TUBES	19 SQ. FT.	JOURNALS, TRL. TRUCK, B.	7" DIA.	FW. HEATER	TYPE			
				WT. ENG. & TENDER	777600 LBS.	SYPHONS	100 SQ. FT.	VALVE GEAR	BAKER	STOKER	HANNA	NOTE -1		
				TUBES, NO.	67	TOTAL	4708 SQ. FT.	TRAVEL	8" LAP 1-11/16"	REVERSE GEAR	ALCO	TYPE - G		
				FLUES, NO.	202	SUPERHTR. H.S.	1924 SQ. FT.	LEAD	3/16" EXH. CL. 1/16"	SAFETY VALVES	3	3-1/2"		
				TUBES & FLUES, LENGTH	19'-0"	GRATE AREA	90.3 SQ. FT.	FACTOR OF ADHESION	4.02	ENG. FRAME	BAR TYPE	C. STEEL	BUILDERS ORDER NO.	S-1771
				ARCH TUBES, NO.	2	ALL JOURNALS	TIMKEN	CYLINDER H.P.	2810	THROTTLE	AMER. MULT. FRONT END	BUILDER	A.L.CO.	
				SUPERHTR. TUBES, NO.	O.D.			PERCENT BOILER TO CYL. H.P.	III. 67	EX. ST. INJ. R.S.	ELESCO SL-306	YEAR BUILT	1937	

TRACTIVE POWER 64100 LBS.

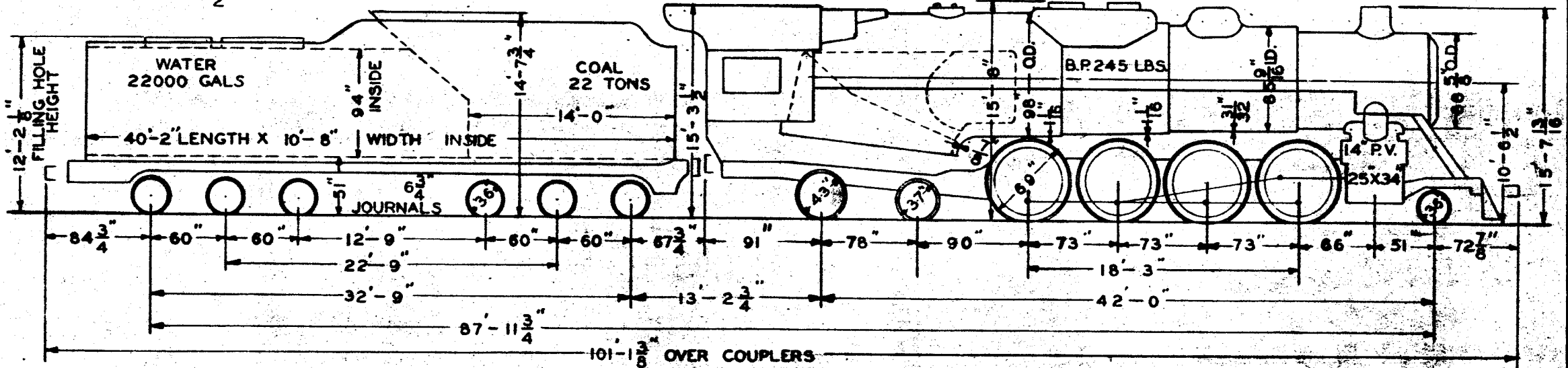
NO. OF ENGINES - 7

W.&L.E. DIST.

CLASS K-1
ENGS. 6416 - 6422

108

MAX. CURVE 20°
ENG. TRUCK SWING 7 1/2"
TRAIL TRUCK SWING 9 1/2"



DR. 2-13-50
 CH. 10
 DATE 2-13-50

WEIGHTS-WORK ORDER		364600	56500	54500	66900	66500	66100	66000	38500
WT. DRIVERS	265500 LBS.	FIREBOX	135-1/16" X 96-1/4"	JOURNALS, DRIVING MAIN	12-1/2 DIA.	TENDER FRAME C.S.	WATER BOTTOM	INJECTOR	L.S. CHICAGO T-50
WT. ENG. TRUCK	38500 LBS.	HEATING SURFACES		JOURNALS, DRIVING OTHERS	11-1/2 DIA.	TENDER TRUCK FRAME	C STEEL	AIR BRAKE	6 ET EQUIPMENT
WT. TRAIL TRUCK	111000 LBS.	TUBES & FLUES	4246 SQ.FT.	JOURNALS, ENG. TRUCK	7-1/2 DIA.	TENDER TRUCK BOLSTER	BUCKEYE	INJECTOR	R.S. ELESKO EXH. STEAM
WT. ENG. TOTAL	415000 LBS.	FIREBOX	343 SQ.FT.	JOURNALS, TRAIL TRUCK, F.	7" DIA.	SUPERHTR.	ELESKO TYPE - E		TYPE SL-306
WT. TENDER - FULL	364600 LBS.	ARCH TUBES	195 SQ.FT.	JOURNALS, TRAIL TRUCK, B.	7" DIA.	FW. HEATER			
WT. ENG. & TENDER	779600 LBS.	SYPHONS	100 SQ.FT.	VALVE GEAR	BAKER	STOKER	HANNA TYPE SF.		
TUBES, NO.	67	TOTAL	4708 SQ.FT.	TRAVEL	8" LAP - 1-11/16	REVERSE GEAR	ALCO TYPE G		
FLUES, NO.	202	SUPERHTR. H.S.	1924 SQ.FT.	LEAD	3/16" EXH. CL. - 1/16	SAFETY VALVES	3 - 3-1/2"		
TUBES & FLUES, LENGTH	19'-0"	GRATE AREA	90.3 SQ.FT.	FACTOR OF ADHESION	4.14	ENG. FRAME - BAR TYPE	C STEEL	BUILDERS ORDER NO.	S-1835
ARCH TUBES, NO.	2	ALL JOURNALS	TIMKEN	CYLINDER H.P.	2754	THROTTLE - AMER. MULT FRONT END		BUILDER	A.L.CO.
SUPERHTR. TUBES, NO.	O.D.			PERCENT BOILER TO CYL. H.P.	113.9			YEAR BUILT	1941

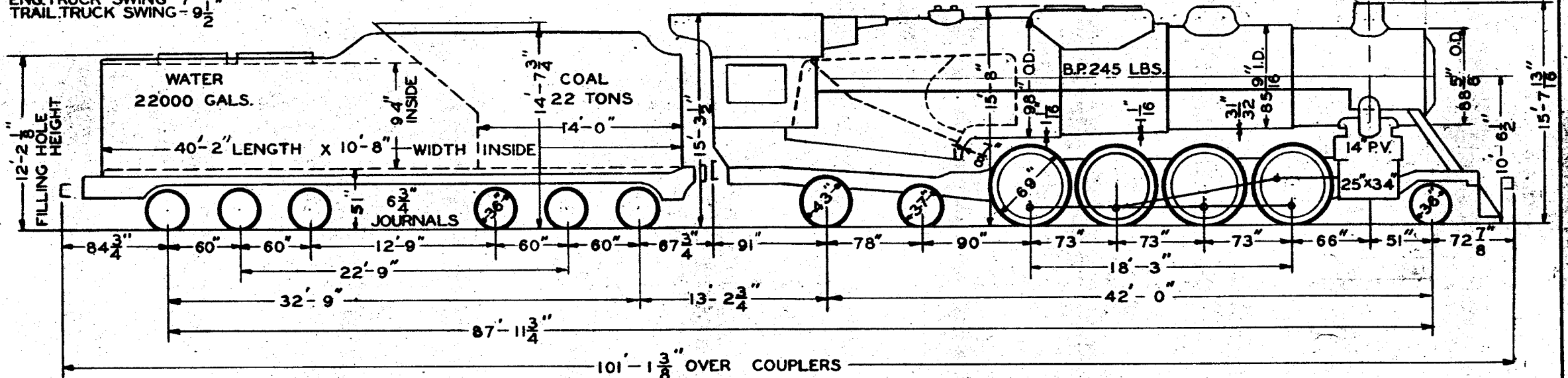
TRACTIVE POWER 64100 LBS. NO. OF ENGINES - 10

W.&L.E. DIST.

CLASS K-1
ENGS. 6423-6432

109

MAX. CURVE - 20°
ENG. TRUCK SWING - 7 1/2"
TRAIL TRUCK SWING - 9 1/2"



WEIGHTS-WORK ORDER

364600

56400 54100

66500 66400 68300

66300

38500

DR	CH	DATE	WT. DRIVERS	LBS.	FIREBOX	JOURNALS, DRIVING MAIN	TENDER FRAME C.S.	INJECTOR
			265 500		135-1/16" x 96-1/4"	12-1/2" DIA.	WATER BOTTOM	L.S. CHICAGO T-60
			38500		HEATING SURFACES	11-1/2" DIA.	C. STEEL	AIR BRAKE 6 ET EQUIPMENT
			110 500		TUBES & FLUES 4246 SQ.FT.	7-1/2" DIA.	TENDER TRUCK FRAME	
			414 500		FIREBOX 343 SQ.FT.	JOURNALS, ENG. TRUCK	TENDER TRUCK BOLSTER	BUCKEYE
			364 600		ARCH TUBES 19 SQ.FT.	7" DIA.	SUPERHTR.	ELESCO TYPE E
			779 100		SYPHONS 100 SQ.FT.	JOURNALS, TRL. TRUCK, B.	F.W. HEATER	TYPE
			67	2 1/4" O.D.	TOTAL 4708 SQ.FT.	VALVE GEAR BAKER	STOKER	STANDARD TYPE HT
			202	3 1/4" O.D.	SUPERHTR. H.S. 1924 SQ.FT.	TRAVEL 8" LAP 1-11/16"	REVERSE GEAR	ALCO. TYPE G
			19	0" O.D.	GRATE AREA 90.3 SQ.FT.	LEAD 3/16" EXH. CL. 1/16"	SAFETY VALVES	3 3-1/2"
			2	3 1/2" O.D.	ALL JOURNALS - TIMKEN	FACTOR OF ADHESION 4.14	ENG. FRAME	BAR TYPE C STEEL
						CYLINDER H.P. 275.4	THROTTLE	AMER. MULT. FRONT END
						PERCENT BOILER TO CYL. H.P. 113.9		
								BUILDERS ORDER NO. S-1869
								BUILDER A.L. CO.
								YEAR BUILT 1942

TRACTIVE POWER 79400 LBS.

NO. OF ENGINES - 4

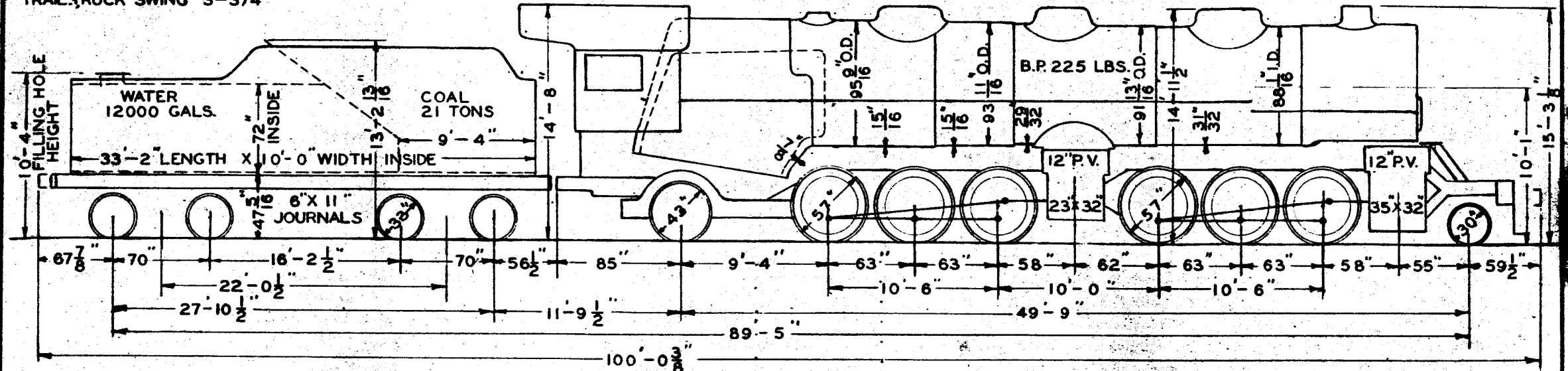
W.&L.E. DIST.

CLASS I-3

110

MAX. CURVE 20°
 ENG. TRUCK SWING 3-3/4"
 TRAIL TRUCK SWING 3-3/4"

ENGS. 8001, 8002, 8003, 8009



WEIGHTS-WORK ORDER 216000 (59900 61100 60300 59600 60500 59600 58900 32100

DR. J. V. CH. DATE 2-7-50

WT. DRIVERS	360000 LBS.
WT. ENG. TRUCK	32100 LBS.
WT. TRAIL TRUCK	59900 LBS.
WT. ENG. TOTAL	452000 LBS.
WT. TENDER-FULL	216000 LBS.
WT. ENG. & TENDER	668000 LBS.
TUBES, NO.	247
FLUES, NO.	45
TUBES & FLUES, LENGTH	24'-0"
ARCH TUBES, NO.	5
SUPERHTR. TUBES, NO.	O.D.

FIREBOX	114 - 1/8" X 96 - 1/4"
HEATING SURFACES	
TUBES & FLUES	5027 SQ. FT.
FIREBOX	382 SQ. FT.
ARCH TUBES	34 SQ. FT.
SYPHONS	SQ. FT.
TOTAL	5443 SQ. FT.
SUPERHTR. H.S.	1260 SQ. FT.
GRATE AREA	76.3 SQ. FT.

JOURNALS, DRIVING, MAIN	11" X 13"
JOURNALS, DRIVING, OTHERS	11" X 13"
JOURNALS, ENG. TRUCK	6-1/2" X 12"
JOURNALS, TRAIL TRUCK, F.	9" X 14"
JOURNALS, TRAIL TRUCK, B.	
VALVE GEAR	BAKER
TRAVEL	6" LAP
LEAD	1/8" EXH. CL. NOTE-1
FACTOR OF ADHESION	4.54
CYLINDER H.P.	2965
PERCENT BOILER TO CYL. H.P.	105.6

TENDER FRAME	CAST STEEL
TENDER TRUCK FRAME	
TENDER TRUCK BOLSTER	
SUPERHTR.	S.H.CO. TYPE - A
FWHEATER	TYPE
STOKER	STANDARD TYPE - MB
REVERSE GEAR LEWIS	TYPE
SAFETY VALVES	4 - 3"
ENG. FRAME BAR TYPE	C STEEL
THROTTLE CHAMBERS	DOMED TYPE

INJECTOR R.&L. NATHAN 1918-B
AIR BRAKE 6 ET EQUIPMENT
LUB. DETROIT MECH. 16 FEED. 8009
NATHAN HYD. 6 FEED OTHERS
NOTE - 1 H.P. ENG. 1/4"
L.P. ENG. 3/8"
BUILDERS ORDER NO.
BUILDER BALDWIN LOCO. WKS.
YEAR BUILT 1919