

# THE PENNSYLVANIA RAILROAD

## LONG ISLAND RAILROAD

### NO. 109-I

ISSUED ALTOONA, PA.

DECEMBER 20, 1933

## CLASSIFICATION AND DESCRIPTION OF LOCOMOTIVES AND TENDERS

(SUPERSEDING CLASSIFICATION AND DESCRIPTION OF LOCOMOTIVES AND TENDERS NO. 109-H, DATED NOVEMBER 16, 1925)

### Locomotives—Classification and Description

In this classification, locomotives are grouped into typical classes according to the arrangement of the wheels used under them, irrespective of the service for which they are intended, using a primary letter to designate the type. Successive designs of a type are designated by numbers following the primary letter, and small suffix letters are used to indicate modifications of any particular class of locomotive. The suffix letter "s" after the numeral in a classification indicates that the locomotive is equipped with a fire tube superheater. The use of the letter "s" in classification has been discontinued for designs made after January 1st, 1923, although the superheater is used.

Heating surfaces given herein are actual areas. Arch tube heating surface is included in item number 27 for all superheated steam locomotives except those for which the arch tubes are not standard, but it is not included for saturated steam locomotives, although some are so equipped.

Except where otherwise noted, the tractive power given for steam locomotives is based on a mean effective pressure equal to 85 per cent. of the boiler pressure.

| Class   | Wheel Arrangement                                                                   | Class    | Wheel Arrangement                                                                    |
|---------|-------------------------------------------------------------------------------------|----------|--------------------------------------------------------------------------------------|
| A 0-4-0 |  | I 2-10-0 |  |
| B 0-6-0 |  | K 4-6-2  |  |
| C 0-8-0 |  | L 2-8-2  |  |
| D 4-4-0 |  | M 4-8-2  |  |
| E 4-4-2 |  | N 2-10-2 |  |
| G 4-6-0 |  | O 4-4-4  |  |
| H 2-8-0 |  | P 4-6-4  |  |

| Class      | Wheel Arrangement                                                                    |
|------------|--------------------------------------------------------------------------------------|
| AA 0-4-4-0 |   |
| BB 0-6-6-0 |  |
| CC 0-8-8-0 |  |
| DD 4-4-4-4 |  |
| FF 2-6-6-2 |  |

## STEAM LOCOMOTIVE CLASSES

Class A 3 a.  
 Class A 4.  
 Class A 5 s.

Class B 6.  
 Class B 6 s.  
 Class B 6 s a.  
 Class B 6 s b.  
 Class B 8.  
 Class B 8 a, formerly class B8, with saddle tank applied.  
 Class B 28 s, formerly U. S. S. 0-6-0-a.

Class C 1.

Class D 16 s b.

Class E 3 s a.  
 Class E 3 s d.  
 Class E 5 s.  
 Class E 6 s.  
 Class E 7 s. converted from former class E 2 a, E 2 b or E 2 c.

Class G 5 s.

Class H 6 a.  
 Class H 6 b.  
 Class H 6 s a.  
 Class H 6 s b.  
 Class H 8 a.  
 Class H 8 b.  
 Class H 8 c.  
 Class H 8 s.  
 Class H 8 s a.  
 Class H 8 s b.  
 Class H 8 s c.  
 Class H 9, converted from class H 8 b.  
 Class H 9 s.  
 Class H 9 s a, converted from class H 8 a.  
 Class H 9 s c, converted from class H 8 c.  
 Class H 10 s.

Class I 1 s.  
 Class I 1 sa.

Class K 2 s.  
 Class K 2 s a.  
 Class K 2 s b.  
 Class K 3 s.  
 Class K 4 s.  
 Class K 5.  
 Class K 5, No. 5699, Caprotti poppet valve.

Class L 1 s.  
 Class L 1 s, No. 2361, Emerson boiler.  
 Class L 1 s, Nos. 1028 and 1306 with Syphon and Standard Stoker.  
 Class L 2 s, formerly U. S. S. 2-8-2-a (G. R. & I. class GL 1 s.)

Class M 1  
 Class M 1 a.

Class N 1 s.  
 Class N 2 sa. formerly U. S. S. 2-10-2-b—Modified.

Class CC 2 s.

# **ELECTRIC LOCOMOTIVE CLASSES**

Class A6—Gas-Electric.  
Class A6b—Gas-Electric.

Class B1.  
Class BB2.

Class DD1.  
Class DD—Odd Nos. 3996 to 3999 Incl.

Class FF1.

Class L5paw—(No. 3930).  
Class L5pdb.  
Class L5pdg.  
Class L5pdw.  
Class L6—(No. 5938).  
Class L6—(No. 5939).  
Class L6a.

Class 01.  
Class 01a.  
Class 01b.  
Class 01c.

Class P5, Nos. 4700, 4791.  
Class P5a.

Odd—(No. 3951) Formerly Gearless Odd (Old No. 9).

## **LONG ISLAND R. R. Steam Locomotives**

Class C51s.  
Class C51sa.  
Class D16sb.  
Class G53sd.  
Class H6sb.

## **Electric Locomotives**

Class A1.  
Class AA1.  
Class AA2.  
Class AA3.  
Class AA4.  
Class B3.  
Class DD 1.

**F. W. HANKINS,**  
Chief of Motive Power.

## STEAM LOCOMOTIVES

|    | CLASSIFICATION                           | A 3 a                               | A 4                                | A 5 s                                |  |  |  |    |
|----|------------------------------------------|-------------------------------------|------------------------------------|--------------------------------------|--|--|--|----|
| 1  | Wheel Arrangement                        | 0-4-0                               | 0-4-0                              | 0-4-0                                |  |  |  | 1  |
| 2  | Wheel Diameters In.                      | 50                                  | 50                                 | 50                                   |  |  |  | 2  |
| 3  | Journal, Engine Truck In.                | —                                   | —                                  | —                                    |  |  |  | 3  |
| 4  | " Drivers In.                            | 8 x 7 $\frac{1}{2}$                 | $\frac{9}{16}$ x 12                | $\frac{9}{16}$ x 12                  |  |  |  | 4  |
| 5  | " Trailer Truck In.                      | —                                   | —                                  | —                                    |  |  |  | 5  |
| 6  | Wheel Base, Driver Ft. In.               | 7-0                                 | 7-0                                | 7-3                                  |  |  |  | 6  |
| 7  | " " Engine Ft. In.                       | 7-0                                 | 7-0                                | 7-3                                  |  |  |  | 7  |
| 8  | " " Engine & Tender Ft. In.              | —                                   | 42-9 $\frac{1}{2}$                 | 43-8 $\frac{1}{2}$                   |  |  |  | 8  |
| 9  | Height, Deck Plate In.                   | 51                                  | 66 $\frac{1}{2}$                   | 66 $\frac{1}{2}$                     |  |  |  | 9  |
| 10 | " Bottom of Drawbar Pocket In.           | —                                   | 34 $\frac{1}{2}$                   | 34 $\frac{1}{2}$                     |  |  |  | 10 |
| 11 | Cylinder Spread In.                      | 84                                  | 86                                 | 86                                   |  |  |  | 11 |
| 12 | " Dimensions In.                         | 17 x 24                             | 18 $\frac{1}{2}$ x 24              | 20 x 24                              |  |  |  | 12 |
| 13 | Steam Port Dimensions In.                | 1 $\frac{1}{2}$ x 15 $\frac{1}{2}$  | 1 $\frac{1}{2}$ x 15 $\frac{1}{2}$ | 2 $\frac{1}{2}$ Wide                 |  |  |  | 13 |
| 14 | Valve Travel In.                         | 5 $\frac{1}{8}$                     | 5                                  | 5                                    |  |  |  | 14 |
| 15 | " Lap In.                                | $\frac{1}{2}$                       | $\frac{1}{2}$                      | $\frac{1}{2}$                        |  |  |  | 15 |
| 16 | " Type                                   | D                                   | D                                  | 8" Piston                            |  |  |  | 16 |
| 17 | " Gear Type                              | Steph'n                             | Steph'n                            | Wals'h't                             |  |  |  | 17 |
| 18 | Steam Pressure Lb. per Sq. In.           | 160                                 | 185                                | 185                                  |  |  |  | 18 |
| 19 | Boiler Type                              | Belpaire<br>Narrow Firebox          | Belpaire<br>Wide Firebox           | Belpaire<br>Wide Firebox             |  |  |  | 19 |
| 20 | " Diam., Minimum Internal In.            | 51 $\frac{1}{2}$                    | 60                                 | 60                                   |  |  |  | 20 |
| 21 | Flues and Tubes, Number                  | 144                                 | 247                                | 140, 18, 72                          |  |  |  | 21 |
| 22 | " " " O. Diam. In.                       | 2                                   | 2                                  | 2, 5 $\frac{1}{2}$ , 1 $\frac{1}{2}$ |  |  |  | 22 |
| 23 | " Length between Sheets In.              | 128 $\frac{1}{2}$                   | 106 $\frac{1}{2}$                  | 106 $\frac{1}{2}$                    |  |  |  | 23 |
| 24 | " Fire Area Sq. Ft.                      | 2.43                                | 4.17                               | 3.80                                 |  |  |  | 24 |
| 25 | Heating Surface, Ext. Flues Sq. Ft.      | 809                                 | 1148                               | 881                                  |  |  |  | 25 |
| 26 | " " Int. Super'h'ter Sq. Ft.             | —                                   | —                                  | 163                                  |  |  |  | 26 |
| 27 | " " Firebox Sq. Ft.                      | 90                                  | 97                                 | 130                                  |  |  |  | 27 |
| 28 | " " Total Sq. Ft.                        | 899                                 | 1245                               | 1174                                 |  |  |  | 28 |
| 29 | Grate Dimensions In.                     | 34 $\frac{1}{2}$ x 59 $\frac{1}{2}$ | 66 x 60                            | 80 x 69                              |  |  |  | 29 |
| 30 | " Area Sq. Ft.                           | 14.23                               | 27.5                               | 38.33                                |  |  |  | 30 |
| 31 | Wt. on Rail, Engine Truck Lb.            | —                                   | —                                  | —                                    |  |  |  | 31 |
| 32 | " " " 1st Drivers Lb.                    | 47600                               | 60000                              | 67000                                |  |  |  | 32 |
| 33 | " " " 2nd Drivers Lb.                    | 51000                               | 56500                              | 64750                                |  |  |  | 33 |
| 34 | " " " 3rd Drivers Lb.                    | —                                   | —                                  | —                                    |  |  |  | 34 |
| 35 | " " " 4th Drivers Lb.                    | —                                   | —                                  | —                                    |  |  |  | 35 |
| 36 | " " " 5th Drivers Lb.                    | —                                   | —                                  | —                                    |  |  |  | 36 |
| 37 | " " " 6th Drivers Lb.                    | —                                   | —                                  | —                                    |  |  |  | 37 |
| 38 | " " " 7th Drivers Lb.                    | —                                   | —                                  | —                                    |  |  |  | 38 |
| 39 | " " " 8th Drivers Lb.                    | —                                   | —                                  | —                                    |  |  |  | 39 |
| 40 | " " " All Drivers Lb.                    | 98600                               | 116500                             | 131750                               |  |  |  | 40 |
| 41 | " " " Trailer Truck Lb.                  | —                                   | —                                  | —                                    |  |  |  | 41 |
| 42 | Wt. of Engine, Working Order Lb.         | 98600                               | 116500                             | 131750                               |  |  |  | 42 |
| 43 | " " " Empty Lb.                          | 77600                               | 105500                             | 120850                               |  |  |  | 43 |
| 44 | Tractive Power Lb.                       | 18866                               | 25833                              | 30192                                |  |  |  | 44 |
| 45 | Ratio: Wt. All Drivers to Tractive Power | 5.23                                | 4.51                               | 4.36                                 |  |  |  | 45 |
| 46 |                                          |                                     |                                    |                                      |  |  |  | 46 |
| 47 |                                          |                                     |                                    |                                      |  |  |  | 47 |
| 48 |                                          |                                     |                                    |                                      |  |  |  | 48 |
| 49 |                                          |                                     |                                    |                                      |  |  |  | 49 |
| 50 |                                          |                                     |                                    |                                      |  |  |  | 50 |
| 51 |                                          |                                     |                                    |                                      |  |  |  | 51 |
| 52 | Class of Tender                          | Saddle Tank                         | 55 S 66A                           | 55 S 66b                             |  |  |  | 52 |

## STEAM LOCOMOTIVES

5

|    | B 6                      | B 6 s                                | B 6 s a                              | B 6 s b                              | B 8                                | B 8 a                              | B 28 s                               |  |  |    |
|----|--------------------------|--------------------------------------|--------------------------------------|--------------------------------------|------------------------------------|------------------------------------|--------------------------------------|--|--|----|
| 1  | 0-6-0                    | 0-6-0                                | 0-6-0                                | 0-6-0                                | 0-6-0                              | 0-6-0                              | 0-6-0                                |  |  | 1  |
| 2  | 56                       | 56                                   | 56                                   | 56                                   | 56                                 | 56                                 | 51                                   |  |  | 2  |
| 3  | —                        | —                                    | —                                    | —                                    | —                                  | —                                  | —                                    |  |  | 3  |
| 4  | $9\frac{1}{4} \times 12$ | $9\frac{1}{4} \times 12$             | $9\frac{1}{4} \times 12$             | $9\frac{1}{4} \times 12$             | $9\frac{1}{4} \times 12$           | $9\frac{1}{4} \times 12$           | 9 x 12                               |  |  | 4  |
| 5  | —                        | —                                    | —                                    | —                                    | —                                  | —                                  | —                                    |  |  | 5  |
| 6  | 11-6                     | 11-6                                 | 11-6                                 | 11-6                                 | 11-6                               | 11-6                               | 11-0                                 |  |  | 6  |
| 7  | 11-6                     | 11-6                                 | 11-6                                 | 11-6                                 | 11-6                               | 11-6                               | 11-0                                 |  |  | 7  |
| 8  | 48-3 $\frac{1}{2}$       | 48-6 $\frac{1}{2}$                   | 40-3 $\frac{1}{2}$                   | 49-3 $\frac{1}{2}$                   | 47-0 $\frac{1}{2}$                 | —                                  | 49-9 $\frac{1}{2}$                   |  |  | 8  |
| 9  | 66 $\frac{1}{2}$         | 66 $\frac{1}{2}$                     | 66 $\frac{1}{2}$                     | 66 $\frac{1}{2}$                     | 66 $\frac{1}{2}$                   | 66 $\frac{1}{2}$                   | 66                                   |  |  | 9  |
| 10 | 34 $\frac{1}{2}$         | 34 $\frac{1}{2}$                     | 34 $\frac{1}{2}$                     | 34 $\frac{1}{2}$                     | 34 $\frac{1}{2}$                   | —                                  | 31 $\frac{1}{2}$                     |  |  | 10 |
| 11 | 86                       | 86                                   | 86                                   | 86                                   | 86                                 | 86                                 | 86                                   |  |  | 11 |
| 12 | 22 x 24                  | 22 x 24                              | 22 x 24                              | 22 x 24                              | 20 x 24                            | 20 x 24                            | 21 x 28                              |  |  | 12 |
| 13 | 2 $\frac{1}{2}$ Wide     | 2 Wide                               | 2 $\frac{1}{2}$ Wide                 | 2 $\frac{1}{2}$ Wide                 | 1 $\frac{1}{2}$ x 15 $\frac{1}{2}$ | 1 $\frac{1}{2}$ x 15 $\frac{1}{2}$ | 1 $\frac{1}{2}$ Wide                 |  |  | 13 |
| 14 | 5                        | 5                                    | 5                                    | 5                                    | 5                                  | 5                                  | 6                                    |  |  | 14 |
| 15 | $\frac{1}{2}$            | $\frac{1}{2}$                        | $\frac{1}{2}$                        | $\frac{1}{2}$                        | $\frac{1}{2}$                      | $\frac{1}{2}$                      | $\frac{1}{2}$                        |  |  | 15 |
| 16 | 10" Piston               | 10" Piston                           | 8" Piston                            | 8" Piston                            | D                                  | D                                  | 12" Piston                           |  |  | 16 |
| 17 | Steph'n                  | Steph'n                              | Wals'h't                             | Wals'h't                             | Steph'n                            | Steph'n                            | Baker                                |  |  | 17 |
| 18 | 205                      | 205                                  | 205                                  | 205                                  | 205                                | 205                                | 190                                  |  |  | 18 |
| 19 | Belpaire Sloping Top     | Belpaire Sloping Top                 | Radial Stay Wide Firebox             | Belpaire Wide Firebox                | Belpaire Wide Firebox              | Belpaire Wide Firebox              | Radial Stay Wide Firebox             |  |  | 19 |
| 20 | 67 $\frac{1}{2}$         | 67 $\frac{1}{2}$                     | 67 $\frac{1}{2}$                     | 67 $\frac{1}{2}$                     | 60                                 | 60                                 | 64 $\frac{1}{2}$                     |  |  | 20 |
| 21 | 323                      | 180, 26, 104                         | 194, 26, 104                         | 194, 26, 104                         | 247                                | 247                                | 158, 24, 96                          |  |  | 21 |
| 22 | 2                        | 2, 5 $\frac{1}{2}$ , 1 $\frac{1}{2}$ | 2, 5 $\frac{1}{2}$ , 1 $\frac{1}{2}$ | 2, 5 $\frac{1}{2}$ , 1 $\frac{1}{2}$ | 2                                  | 2                                  | 2, 5 $\frac{1}{2}$ , 1 $\frac{1}{2}$ |  |  | 22 |
| 23 | 166 $\frac{1}{2}$        | 166 $\frac{1}{2}$                    | 148                                  | 148                                  | 163 $\frac{1}{2}$                  | 163 $\frac{1}{2}$                  | 178 $\frac{1}{2}$                    |  |  | 23 |
| 24 | 5.46                     | 5.12                                 | 5.35                                 | 5.35                                 | 4.17                               | 4.17                               | 4.59                                 |  |  | 24 |
| 25 | 2343                     | 1824                                 | 1715                                 | 1715                                 | 1762                               | 1762                               | 1749                                 |  |  | 25 |
| 26 | —                        | 404                                  | 354                                  | 354                                  | —                                  | —                                  | 416                                  |  |  | 26 |
| 27 | 152                      | 172                                  | 190                                  | 195                                  | 106                                | 106                                | 152                                  |  |  | 27 |
| 28 | 2495                     | 2400                                 | 2259                                 | 2264                                 | 1868                               | 1868                               | 2317                                 |  |  | 28 |
| 29 | 66 x 90                  | 66 x 90                              | 80 x 111                             | 79 $\frac{1}{2}$ x 111               | 66 x 69                            | 66 x 69                            | 66 $\frac{1}{2}$ x 72 $\frac{1}{2}$  |  |  | 29 |
| 30 | 41.25                    | 41.25                                | 61.67                                | 61.57                                | 31.62                              | 31.62                              | 33.18                                |  |  | 30 |
| 31 | —                        | —                                    | —                                    | —                                    | —                                  | —                                  | —                                    |  |  | 31 |
| 32 | 60000                    | 62500                                | 63250                                | 61400                                | 48100                              | 50400                              | 47600                                |  |  | 32 |
| 33 | 59500                    | 56000                                | 60870                                | 62200                                | 47100                              | 59400                              | 57900                                |  |  | 33 |
| 34 | 50500                    | 52000                                | 56580                                | 56700                                | 48250                              | 57900                              | 61700                                |  |  | 34 |
| 35 | —                        | —                                    | —                                    | —                                    | —                                  | —                                  | —                                    |  |  | 35 |
| 36 | —                        | —                                    | —                                    | —                                    | —                                  | —                                  | —                                    |  |  | 36 |
| 37 | —                        | —                                    | —                                    | —                                    | —                                  | —                                  | —                                    |  |  | 37 |
| 38 | —                        | —                                    | —                                    | —                                    | —                                  | —                                  | —                                    |  |  | 38 |
| 39 | —                        | —                                    | —                                    | —                                    | —                                  | —                                  | —                                    |  |  | 39 |
| 40 | 170000                   | 170500                               | 180700                               | 180300                               | 143450                             | 167700                             | 167200                               |  |  | 40 |
| 41 | —                        | —                                    | —                                    | —                                    | —                                  | —                                  | —                                    |  |  | 41 |
| 42 | 170000                   | 170500                               | 180700                               | 180300                               | 143450                             | 167700                             | 167200                               |  |  | 42 |
| 43 | 146000                   | 150000                               | 162450                               | 161500                               | 128100                             | 139400                             | 152000                               |  |  | 43 |
| 44 | 36144                    | 36144                                | 36144                                | 36144                                | 29871                              | 29871                              | 39102                                |  |  | 44 |
| 45 | 4.70                     | 4.72                                 | 4.99                                 | 4.99                                 | 4.80                               | 5.61                               | 4.28                                 |  |  | 45 |
| 46 | —                        | —                                    | —                                    | —                                    | —                                  | —                                  | —                                    |  |  | 46 |
| 47 | —                        | —                                    | —                                    | —                                    | —                                  | —                                  | —                                    |  |  | 47 |
| 48 | —                        | —                                    | —                                    | —                                    | —                                  | —                                  | —                                    |  |  | 48 |
| 49 | —                        | —                                    | —                                    | —                                    | —                                  | —                                  | —                                    |  |  | 49 |
| 50 | —                        | —                                    | —                                    | —                                    | —                                  | —                                  | —                                    |  |  | 50 |
| 51 | —                        | —                                    | —                                    | —                                    | —                                  | —                                  | —                                    |  |  | 51 |
| 52 | 55 S 66a                 | 55 S 66d                             | 60 S 66                              | 60 S 66a                             | 55S 66A                            | *SaddleTank                        | 80 S 65                              |  |  | 52 |

\*Water capacity 1596 Gallons.  
Coal capacity 2500 Pounds.

## STEAM LOCOMOTIVES

|    | CLASSIFICATION                           | C 1                      |  |  | D 16 s b                   |  |  |  |    |
|----|------------------------------------------|--------------------------|--|--|----------------------------|--|--|--|----|
| 1  | Wheel Arrangement                        | 0-8-0                    |  |  | 4-4-0                      |  |  |  | 1  |
| 2  | Wheel Diameters In.                      | 56                       |  |  | 33, 68                     |  |  |  | 2  |
| 3  | Journal, Engine Truck In.                | —                        |  |  | 5½ x 10                    |  |  |  | 3  |
| 4  | " Drivers In.                            | 11½ x 16                 |  |  | 9½ x 12½                   |  |  |  | 4  |
| 5  | " Trailer Truck In.                      | —                        |  |  | —                          |  |  |  | 5  |
| 6  | Wheel Base, Driver Ft. In.               | 15-9                     |  |  | 7-9                        |  |  |  | 6  |
| 7  | " " Engine Ft. In.                       | 15-9                     |  |  | 22-9½                      |  |  |  | 7  |
| 8  | " " Engine & Tender Ft. In.              | 53-5½                    |  |  | 55-0½                      |  |  |  | 8  |
| 9  | Height, Deck Plate In.                   | 66½                      |  |  | 55½                        |  |  |  | 9  |
| 10 | " Bottom of Drawbar Pocket In.           | 34½                      |  |  | 37                         |  |  |  | 10 |
| 11 | Cylinder Spread In.                      | 93                       |  |  | 78                         |  |  |  | 11 |
| 12 | " Dimensions In.                         | 27 x 30                  |  |  | 20½ x 26                   |  |  |  | 12 |
| 13 | Steam Port Dimensions In.                | 2¼ WIDE<br>¼ x 1¼ AUX.   |  |  | 1½ & 1½ Wide               |  |  |  | 13 |
| 14 | Valve Travel In.                         | 6                        |  |  | 6                          |  |  |  | 14 |
| 15 | " Lap In.                                | 1½                       |  |  | 1½                         |  |  |  | 15 |
| 16 | " Type                                   | 8" Piston                |  |  | 8" Piston                  |  |  |  | 16 |
| 17 | " Gear Type                              | Wals'h't                 |  |  | Steph'n                    |  |  |  | 17 |
| 18 | Steam Pressure Lb. per Sq. In.           | 250                      |  |  | 175                        |  |  |  | 18 |
| 19 | Boiler Type                              | Belpaire<br>Wide Firebox |  |  | Belpaire<br>Narrow Firebox |  |  |  | 19 |
| 20 | " Diam., Minimum Internal In.            | 76½                      |  |  | 58½                        |  |  |  | 20 |
| 21 | Flues and Tubes, Number                  | 269, 40, 160             |  |  | 159, 21, 84                |  |  |  | 21 |
| 22 | " " " O. Diam. In.                       | 2, 5½, 1½                |  |  | 1½, 5½, 1½                 |  |  |  | 22 |
| 23 | " Length between Sheets In.              | 180                      |  |  | 135½                       |  |  |  | 23 |
| 24 | " Fire Area Sq. Ft.                      | 7.74                     |  |  | 4.00                       |  |  |  | 24 |
| 25 | Heating Surface, Ext. Flues Sq. Ft.      | 2977                     |  |  | 1219                       |  |  |  | 25 |
| 26 | " " Int. Superh'ter Sq. Ft.              | 741                      |  |  | 253                        |  |  |  | 26 |
| 27 | " " Firebox Sq. Ft.                      | 237                      |  |  | 181                        |  |  |  | 27 |
| 28 | " " Total Sq. Ft.                        | 3955                     |  |  | 1653                       |  |  |  | 28 |
| 29 | Grate Dimensions In.                     | 79½ x 111                |  |  | 40 x 119½                  |  |  |  | 29 |
| 30 | " Area Sq. Ft.                           | 61.57                    |  |  | 33.23                      |  |  |  | 30 |
| 31 | Wt. on Rail, Engine Truck Lb.            | —                        |  |  | 42600                      |  |  |  | 31 |
| 32 | " " " 1st Drivers Lb.                    | 74000                    |  |  | 51800                      |  |  |  | 32 |
| 33 | " " " 2nd Drivers Lb.                    | 67000                    |  |  | 46700                      |  |  |  | 33 |
| 34 | " " " 3rd Drivers Lb.                    | 71000                    |  |  | —                          |  |  |  | 34 |
| 35 | " " " 4th Drivers Lb.                    | 66000                    |  |  | —                          |  |  |  | 35 |
| 36 | " " " 5th Drivers Lb.                    | —                        |  |  | —                          |  |  |  | 36 |
| 37 | " " " 6th Drivers Lb.                    | —                        |  |  | —                          |  |  |  | 37 |
| 38 | " " " 7th Drivers Lb.                    | —                        |  |  | —                          |  |  |  | 38 |
| 39 | " " " 8th Drivers Lb.                    | —                        |  |  | —                          |  |  |  | 39 |
| 40 | " " " All Drivers Lb.                    | 278000                   |  |  | 98500                      |  |  |  | 40 |
| 41 | " " " Trailer Truck Lb.                  | —                        |  |  | —                          |  |  |  | 41 |
| 42 | Wt. of Engine, Working Order Lb.         | 278000                   |  |  | 141100                     |  |  |  | 42 |
| 43 | " " " Empty Lb.                          | 251800                   |  |  | 124900                     |  |  |  | 43 |
| 44 | Tractive Power Lb.                       | *76154                   |  |  | 23902                      |  |  |  | 44 |
| 45 | Ratio: Wt. All Drivers to Tractive Power | 3.65                     |  |  | 4.12                       |  |  |  | 45 |
| 46 |                                          |                          |  |  |                            |  |  |  | 46 |
| 47 |                                          |                          |  |  |                            |  |  |  | 47 |
| 48 |                                          |                          |  |  |                            |  |  |  | 48 |
| 49 |                                          |                          |  |  |                            |  |  |  | 49 |
| 50 |                                          |                          |  |  |                            |  |  |  | 50 |
| 51 |                                          |                          |  |  |                            |  |  |  | 51 |
| 52 | Class of Tender                          | 70 S 66                  |  |  | 55 P 55a                   |  |  |  | 52 |

\*Based on formula  $T = \frac{.78PC^2S}{D}$

# STEAM LOCOMOTIVES

|    |  | E 3 s a                  | E 3 s d                  | E 5 s                    | E 6 s                    | E 7 s                    |  |  |  |    |
|----|--|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--|--|--|----|
| 1  |  | 4-4-2                    | 4-4-2                    | 4-4-2                    | 4-4-2                    | 4-4-2                    |  |  |  | 1  |
| 2  |  | 36, 80, 50               | 36, 80, 50               | 36, 80, 50               | 36, 80, 50               | 36,80, 50                |  |  |  | 2  |
| 3  |  | 5½ x 10                  | 5½ x 10                  | 5½ x 10                  | 6½ x 12                  | 5½ x 10                  |  |  |  | 3  |
| 4  |  | 9½ x 13                  | 9½ x 13                  | 9½ x 13                  | 9½ x 13                  | 10<br>10½ x 14           |  |  |  | 4  |
| 5  |  | 7 x 12                   | 7 x 12                   | 6½ x 12                  | 6½ x 12                  | 7 x 12                   |  |  |  | 5  |
| 6  |  | 7-5                      | 7-5                      | 7-5                      | 7-5                      | 7-5                      |  |  |  | 6  |
| 7  |  | 30-9½                    | 30-9½                    | 29-7½                    | 29-9                     | 30-9½                    |  |  |  | 7  |
| 8  |  | 60-6½                    | 60-6½                    | 63-6½                    | 64-0                     | 63-6½                    |  |  |  | 8  |
| 9  |  | 58½                      | 58½                      | 58½                      | 66½                      | 58½                      |  |  |  | 9  |
| 10 |  | 34½                      | 34½                      | 34½                      | 34½                      | 34½                      |  |  |  | 10 |
| 11 |  | 85½                      | 85½                      | 85½                      | 85½                      | 85½                      |  |  |  | 11 |
| 12 |  | 22 x 26                  | 22 x 26                  | 22 x 26                  | 23½ x 26                 | 22½ x 26                 |  |  |  | 12 |
| 13 |  | 2½&2½ Wide               | 2½&2½ Wide               | 2½&2½ Wide               | 2½&2½ Wide               | 1½ Wide                  |  |  |  | 13 |
| 14 |  | 7                        | 7                        | 7                        | 7                        | 7                        |  |  |  | 14 |
| 15 |  | 1½                       | 1½                       | 1½                       | 1½                       | 1½                       |  |  |  | 15 |
| 16 |  | 12" Piston               | 12" Piston               | 12" Piston               | 12" Piston               | 12" Piston               |  |  |  | 16 |
| 17 |  | Wals'h't                 | Wals'h't                 | Wals'h't                 | Wals'h't                 | Steph'n                  |  |  |  | 17 |
| 18 |  | 195<br>205               | 195<br>205               | 205                      | 205                      | 195<br>205               |  |  |  | 18 |
| 19 |  | Belpaire<br>Wide Firebox | Belpaire<br>Wide Firebox | Belpaire<br>Wide Firebox | Belpaire<br>Wide Firebox | Belpaire<br>Wide Firebox |  |  |  | 19 |
| 20 |  | 65½                      | 65½                      | 65½                      | 76½                      | 65½                      |  |  |  | 20 |
| 21 |  | 170, 24, 96              | 170, 24, 96              | 170, 24, 96              | 242, 36, 144             | 170, 24, 96              |  |  |  | 21 |
| 22 |  | 2, 5½, 1½                | 2, 5½, 1½                | 2, 5½, 1½                | 2, 5½, 1½                | 2, 5½, 1½                |  |  |  | 22 |
| 23 |  | 180                      | 180                      | 180                      | 180                      | 180                      |  |  |  | 23 |
| 24 |  | 4.79                     | 4.79                     | 4.79                     | 6.96                     | 4.79                     |  |  |  | 24 |
| 25 |  | 1854                     | 1854                     | 1854                     | 2678                     | 1854                     |  |  |  | 25 |
| 26 |  | 412                      | 412                      | 412                      | 613                      | 412                      |  |  |  | 26 |
| 27 |  | 187                      | 187                      | 187                      | 218                      | 187                      |  |  |  | 27 |
| 28 |  | 2453                     | 2453                     | 2453                     | 3509                     | 2453                     |  |  |  | 28 |
| 29 |  | 72 x 111                 | 72 x 111                 | 72 x 111                 | 72 x 110½                | 72 x 111                 |  |  |  | 29 |
| 30 |  | 55.5                     | 55.5                     | 55.5                     | 55.19                    | 55.5                     |  |  |  | 30 |
| 31 |  | 35000                    | 35500                    | 39300                    | 55200                    | 35000                    |  |  |  | 31 |
| 32 |  | 62200                    | 62700                    | 61500                    | 68000                    | 57000                    |  |  |  | 32 |
| 33 |  | 63900                    | 64500                    | 67400                    | 68000                    | 64000                    |  |  |  | 33 |
| 34 |  | —                        | —                        | —                        | —                        | —                        |  |  |  | 34 |
| 35 |  | —                        | —                        | —                        | —                        | —                        |  |  |  | 35 |
| 36 |  | —                        | —                        | —                        | —                        | —                        |  |  |  | 36 |
| 37 |  | —                        | —                        | —                        | —                        | —                        |  |  |  | 37 |
| 38 |  | —                        | —                        | —                        | —                        | —                        |  |  |  | 38 |
| 39 |  | —                        | —                        | —                        | —                        | —                        |  |  |  | 39 |
| 40 |  | 126100                   | 127200                   | 128900                   | 136000                   | 121000                   |  |  |  | 40 |
| 41 |  | 33900                    | 33900                    | 40500                    | 52400                    | 35000                    |  |  |  | 41 |
| 42 |  | 195000                   | 196600                   | 208700                   | 243600                   | 191000                   |  |  |  | 42 |
| 43 |  | 175000                   | 175400                   | 188800                   | 215000                   | 170000                   |  |  |  | 43 |
| 44 |  | 28072<br>27409           | 28072<br>27409           | 27409                    | 31275                    | 27271<br>28670           |  |  |  | 44 |
| 45 |  | 4.68<br>4.44             | 4.88<br>4.65             | 4.70                     | 4.35                     | 4.44<br>4.22             |  |  |  | 45 |
| 46 |  |                          |                          |                          |                          |                          |  |  |  | 46 |
| 47 |  |                          |                          |                          |                          |                          |  |  |  | 47 |
| 48 |  |                          |                          |                          |                          |                          |  |  |  | 48 |
| 49 |  |                          |                          |                          |                          |                          |  |  |  | 49 |
| 50 |  |                          |                          |                          |                          |                          |  |  |  | 50 |
| 51 |  |                          |                          |                          |                          |                          |  |  |  | 51 |
| 52 |  | 55 P 58a                 | 55 P 58a                 | 70 P 58a                 | 70 P 66                  | 70P 58F                  |  |  |  | 52 |

## STEAM LOCOMOTIVES

#8542 Tank

|    | CLASSIFICATION                           | G 5 s                    | G-31              | H-31  | H 6 a                    | H 6 b                    | H 6 s a                  | H 6 s b                  |    |
|----|------------------------------------------|--------------------------|-------------------|-------|--------------------------|--------------------------|--------------------------|--------------------------|----|
| 1  | Wheel Arrangement                        | 4-6-0                    | 0-8-0             | 2-8-0 | 2-8-0                    | 2-8-0                    | 2-8-0                    | 2-8-0                    | 1  |
| 2  | Wheel Diameters In.                      | 33.68                    |                   |       | 30, 56                   | 30, 56                   | 30, 56                   | 30, 56                   | 2  |
| 3  | Journal, Engine Truck In.                | 6½ x 12                  | Belt for          |       | 5½ x 10                  | 5½ x 10                  | 5½ x 10                  | 5½ x 10                  | 3  |
| 4  | " Drivers In.                            | 9½ x 13                  | ELK Mtn RR.       |       | 9 x 13                   | 9 x 13                   | 9 x 13                   | 9 x 13                   | 4  |
| 5  | " Trailer Truck In.                      | —                        | Baldwin July 1892 |       | —                        | —                        | —                        | —                        | 5  |
| 6  | Wheel Base, Driver Ft. In.               | 14-3                     |                   |       | 16-6½                    | 16-3                     | 16-6½                    | 16-3                     | 6  |
| 7  | " " Engine Ft. In.                       | 26-6                     | rebuilt June 1905 |       | 24-9                     | 24-9                     | 24-9                     | 24-9                     | 7  |
| 8  | " " Engine & Tender Ft. In.              | 62-7½                    | ✓                 |       | 57-11½                   | 57-11½                   | 57-11½                   | 57-11½                   | 8  |
| 9  | Height, Deck Plate In.                   | 83                       | 46" diameter      |       | 66½                      | 66½                      | 66½                      | 66½                      | 9  |
| 10 | " Bottom of Drawbar Pocket In.           | 34½                      | cyl. 20 x 24      |       | 34½                      | 34½                      | 34½                      | 34½                      | 10 |
| 11 | Cylinder Spread In.                      | 85½                      | used on           |       | 88                       | 88                       | 88                       | 88                       | 11 |
| 12 | " Dimensions In.                         | 24 x 28                  | Madison hill      |       | 22 x 28                  | 22 x 28                  | 23 x 28                  | 22 x 28<br>23 x 28       | 12 |
| 13 | Steam Port Dimensions In.                | 2½ & 2½ Wide             |                   |       | 1½ x 21                  | 2½ & 2½ Wide             | 2 & 1½ Wide              | 2½ & 2½ Wide             | 13 |
| 14 | Valve Travel In.                         | 7                        |                   |       | 6                        | 6                        | 6                        | 6                        | 14 |
| 15 | " Lap In.                                | 1½                       |                   |       | 1                        | 1                        | 1                        | 1                        | 15 |
| 16 | " Type                                   | 12" Piston               |                   |       | D                        | 12" Piston               | 12" Piston               | 12" Piston               | 16 |
| 17 | " Gear Type                              | Wals'h't                 |                   |       | Steph'n                  | Wals'h't                 | Steph'n                  | Wals'h't                 | 17 |
| 18 | Steam Pressure Lb. per Sq. In.           | 205                      |                   |       | 205                      | 205                      | 195                      | 205*                     | 18 |
| 19 | Boiler Type                              | Belpaire<br>Wide Firebox |                   |       | Belpaire<br>Wide Firebox | Belpaire<br>Wide Firebox | Belpaire<br>Wide Firebox | Belpaire<br>Wide Firebox | 19 |
| 20 | " Diam., Minimum Internal In.            | 76½                      |                   |       | 69½                      | 69½                      | 69½                      | 69½                      | 20 |
| 21 | Flues and Tubes, Number                  | 242, 36, 144             |                   |       | 373                      | 373                      | 208, 28, 112             | 208, 28, 112             | 21 |
| 22 | " " " O. Diam. In.                       | 2, 5½, 1½                |                   |       | 2                        | 2                        | 2, 5½, 1½                | 2, 5½, 1½                | 22 |
| 23 | " Length between Sheets In.              | 180                      |                   |       | 164½                     | 164½                     | 164½                     | 164½                     | 23 |
| 24 | " Fire Area Sq. Ft.                      | 6.96                     |                   |       | 6.30                     | 6.30                     | 5.75                     | 5.75                     | 24 |
| 25 | Heating Surface, Ext. Flues Sq. Ft.      | 2678                     |                   |       | 2677                     | 2677                     | 2046                     | 2046                     | 25 |
| 26 | " " " Int. Super'h'ter Sq. Ft.           | 613                      |                   |       | —                        | —                        | 429                      | 429                      | 26 |
| 27 | " " " Firebox Sq. Ft.                    | 177                      |                   |       | 167                      | 167                      | 188                      | 188                      | 27 |
| 28 | " " " Total Sq. Ft.                      | 3468                     |                   |       | 2844                     | 2844                     | 2663                     | 2663                     | 28 |
| 29 | Grate Dimensions In.                     | 72 x 110½                |                   |       | 65½ x 107                | 65½ x 107                | 65½ x 107                | 65½ x 107                | 29 |
| 30 | " Area Sq. Ft.                           | 55.19                    |                   |       | 48.95                    | 48.95                    | 48.95                    | 48.95                    | 30 |
| 31 | Wt. on Rail, Engine Truck Lb.            | 59000                    |                   |       | 18800                    | 22000                    | 20700                    | 23900                    | 31 |
| 32 | " " " 1st Drivers Lb.                    | 59000                    |                   |       | 43000                    | 45000                    | 45000                    | 47000                    | 32 |
| 33 | " " " 2nd Drivers Lb.                    | 63000                    |                   |       | 44000                    | 44000                    | 45100                    | 45100                    | 33 |
| 34 | " " " 3rd Drivers Lb.                    | 56000                    |                   |       | 46000                    | 46000                    | 45400                    | 45400                    | 34 |
| 35 | " " " 4th Drivers Lb.                    | —                        |                   |       | 42700                    | 43700                    | 42400                    | 43400                    | 35 |
| 36 | " " " 5th Drivers Lb.                    | —                        |                   |       | —                        | —                        | —                        | —                        | 36 |
| 37 | " " " 6th Drivers Lb.                    | —                        |                   |       | —                        | —                        | —                        | —                        | 37 |
| 38 | " " " 7th Drivers Lb.                    | —                        |                   |       | —                        | —                        | —                        | —                        | 38 |
| 39 | " " " 8th Drivers Lb.                    | —                        |                   |       | —                        | —                        | —                        | —                        | 39 |
| 40 | " " " All Drivers Lb.                    | 178000                   |                   |       | 175700                   | 178700                   | 177900                   | 180900                   | 40 |
| 41 | " " " Trailer Truck Lb.                  | —                        |                   |       | —                        | —                        | —                        | —                        | 41 |
| 42 | Wt. of Engine, Working Order Lb.         | 237000                   |                   |       | 194500                   | 200700                   | 198600                   | 204800                   | 42 |
| 43 | " " " Empty Lb.                          | 212000                   |                   |       | 171600                   | 179000                   | 177800                   | 185200                   | 43 |
| 44 | Tractive Power Lb.                       | 41328                    |                   |       | 42168                    | 42168                    | 43841                    | *42168<br>43841          | 44 |
| 45 | Ratio: Wt. All Drivers to Tractive Power | 4.31                     |                   |       | 4.17                     | 4.24                     | 4.06                     | *4.29<br>4.13            | 45 |
| 46 |                                          |                          |                   |       |                          |                          |                          |                          | 46 |
| 47 |                                          |                          |                   |       |                          |                          |                          |                          | 47 |
| 48 |                                          |                          |                   |       |                          |                          |                          |                          | 48 |
| 49 |                                          |                          |                   |       |                          |                          |                          |                          | 49 |
| 50 |                                          |                          |                   |       |                          |                          |                          |                          | 50 |
| 51 |                                          |                          |                   |       |                          |                          |                          |                          | 51 |
| 52 | Class of Tender                          | 70 P 82a                 |                   |       | 70 F 66                  | 70 F 66                  | 70F 66A                  | 70F 66A                  | 52 |

\*For Engines Equipped with 22" Cylinders.

# STEAM LOCOMOTIVES

|    | H 8 a                    | H 8 b                    | H 8 c                    | H 8 s                    | H 8 s a                  | H 8 s b                  | H 8 s c                  | H 9                      | H 9 s                    |    |
|----|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|----|
| 1  | 2-8-0                    | 2-8-0                    | 2-8-0                    | 2-8-0                    | 2-8-0                    | 2-8-0                    | 2-8-0                    | 2-8-0                    | 2-8-0                    | 1  |
| 2  | 33, 62                   | 33, 62                   | 33, 62                   | 33, 62                   | 33, 62                   | 33, 62                   | 33, 62                   | 33, 62                   | 33, 62                   | 2  |
| 3  | 5½ x 10                  | 5½ x 10                  | 5½ x 10                  | 5½ x 10                  | 5½ x 10                  | 5½ x 10                  | 5½ x 10                  | 5½ x 10                  | 5½ x 10                  | 3  |
| 4  | 9¼ x 13                  | 9¼ x 13                  | 9¼ x 13                  | 9¼ x 13                  | 9¼ x 13                  | 9¼ x 13                  | 9¼ x 13                  | 9¼ x 13                  | 9¼ x 13                  | 4  |
| 5  | —                        | —                        | —                        | —                        | —                        | —                        | —                        | —                        | —                        | 5  |
| 6  | 17-0½                    | 17-0½                    | 17-0½                    | 17-0½                    | 17-0½                    | 17-0½                    | 17-0½                    | 17-0½                    | 17-0½                    | 6  |
| 7  | 25-9½                    | 25-9½                    | 25-9½                    | 25-9½                    | 25-9½                    | 25-9½                    | 25-9½                    | 25-9½                    | 25-9½                    | 7  |
| 8  | 59-5½                    | 59-5½                    | 59-2½                    | 59-5½                    | 59-5½                    | 62-4½                    | 59-2½                    | 59-2½                    | 62-4½                    | 8  |
| 9  | 70½                      | 70½                      | 70½                      | 70½                      | 70½                      | 70½                      | 70½                      | 70½                      | 70½                      | 9  |
| 10 | 34½                      | 34½                      | 34½                      | 34½                      | 34½                      | 34½                      | 34½                      | 34½                      | 34½                      | 10 |
| 11 | 90                       | 90                       | 90                       | 90                       | 90                       | 90                       | 90                       | 90                       | 90                       | 11 |
| 12 | 24 x 28                  | 24 x 28                  | 24 x 28                  | 24 x 28                  | 24 x 28                  | 24 x 28                  | 24 x 28                  | 25 x 28                  | 25 x 28                  | 12 |
| 13 | 2½ Wide                  | 2½ Wide                  | 2½ Wide                  | 2½ Wide                  | 2½ Wide                  | 2½ Wide                  | 2½ Wide                  | 2½ Wide                  | 2½ Wide                  | 13 |
| 14 | 6                        | 6                        | 6                        | 6                        | 6                        | 6                        | 6                        | 6                        | 6                        | 14 |
| 15 | ½                        | ½                        | ½                        | ½                        | ½                        | ½                        | ½                        | ½                        | ½                        | 15 |
| 16 | *12" Piston              | 12" Piston               | *12" Piston              | 12" Piston               | *12" Piston              | 12" Piston               | *12" Piston              | 12" Piston               | 12" Piston               | 16 |
| 17 | Wals'h't                 | Wals'h't                 | Wals'h't                 | Wals'h't                 | Wals'h't                 | Wals'h't                 | Wals'h't                 | Wals'h't                 | Wals'h't                 | 17 |
| 18 | 205                      | 205                      | 205                      | 205                      | 205                      | 205                      | 205                      | 205                      | 205                      | 18 |
| 19 | Belpaire<br>Wide Firebox | Belpaire<br>Wide Firebox | Belpaire<br>Wide Firebox | Belpaire<br>Wide Firebox | Belpaire<br>Wide Firebox | Belpaire<br>Wide Firebox | Belpaire<br>Wide Firebox | Belpaire<br>Wide Firebox | Belpaire<br>Wide Firebox | 19 |
| 20 | 76½                      | 76½                      | 76½                      | 76½                      | 76½                      | 76½                      | 76½                      | 76½                      | 76½                      | 20 |
| 21 | 465                      | 465                      | 465                      | 265, 36, 144             | 265, 36, 144             | 265, 36, 144             | 265, 36, 144             | 465                      | 265, 36, 144             | 21 |
| 22 | 2                        | 2                        | 2                        | 2, 5½, 1½                | 2, 5½, 1½                | 2, 5½, 1½                | 2, 5½, 1½                | 2                        | 2, 5½, 1½                | 22 |
| 23 | 180                      | 180                      | 180                      | 180                      | 180                      | 180                      | 180                      | 180                      | 180                      | 23 |
| 24 | 7.85                     | 7.85                     | 7.85                     | 7.35                     | 7.35                     | 7.35                     | 7.35                     | 7.85                     | 7.35                     | 24 |
| 25 | 3652                     | 3652                     | 3652                     | 2859                     | 2859                     | 2859                     | 2859                     | 3652                     | 2859                     | 25 |
| 26 | —                        | —                        | —                        | 613                      | 613                      | 613                      | 613                      | —                        | 613                      | 26 |
| 27 | 190                      | 190                      | 190                      | 211                      | 211                      | 211                      | 211                      | 190                      | 211                      | 27 |
| 28 | 3842                     | 3842                     | 3842                     | 3683                     | 3683                     | 3683                     | 3683                     | 3842                     | 3683                     | 28 |
| 29 | 71½ x 110½               | 71½ x 110½               | 71½ x 110½               | 71½ x 110½               | 71½ x 110½               | 71½ x 110½               | 71½ x 110½               | 71½ x 110½               | 71½ x 110½               | 29 |
| 30 | 55.09                    | 55.09                    | 55.09                    | 55.09                    | 55.09                    | 55.09                    | 55.09                    | 55.09                    | 55.09                    | 30 |
| 31 | 24000                    | 29800                    | 25000                    | 27200                    | 24000                    | 27500                    | 24500                    | 29900                    | 27700                    | 31 |
| 32 | 52000                    | 57700                    | 52000                    | 59700                    | 52000                    | 61000                    | 52600                    | 57700                    | 62300                    | 32 |
| 33 | 53000                    | 47600                    | 54000                    | 53400                    | 55500                    | 55000                    | 57300                    | 47700                    | 54600                    | 33 |
| 34 | 54000                    | 54600                    | 56000                    | 55300                    | 57000                    | 59000                    | 58700                    | 54600                    | 55700                    | 34 |
| 35 | 52000                    | 51000                    | 52500                    | 49200                    | 55000                    | 50000                    | 56400                    | 51000                    | 50700                    | 35 |
| 36 | —                        | —                        | —                        | —                        | —                        | —                        | —                        | —                        | —                        | 36 |
| 37 | —                        | —                        | —                        | —                        | —                        | —                        | —                        | —                        | —                        | 37 |
| 38 | —                        | —                        | —                        | —                        | —                        | —                        | —                        | —                        | —                        | 38 |
| 39 | —                        | —                        | —                        | —                        | —                        | —                        | —                        | —                        | —                        | 39 |
| 40 | 211000                   | 210900                   | 214500                   | 217600                   | 219500                   | 225000                   | 225000                   | 211000                   | 223300                   | 40 |
| 41 | —                        | —                        | —                        | —                        | —                        | —                        | —                        | —                        | —                        | 41 |
| 42 | 235000                   | 240700                   | 239500                   | 244800                   | 243500                   | 252500                   | 249500                   | 240900                   | 251000                   | 42 |
| 43 | 204000                   | 216000                   | 207800                   | 219900                   | 211800                   | 225500                   | 224800                   | 214000                   | 225500                   | 43 |
| 44 | 45327                    | 45327                    | 45327                    | 45327                    | 45327                    | 45327                    | 45327                    | 49183                    | 49183                    | 44 |
| 45 | 4.66                     | 4.65                     | 4.73                     | 4.80                     | 4.84                     | 4.96                     | 4.84                     | 4.29                     | 4.54                     | 45 |
| 46 | —                        | —                        | —                        | —                        | —                        | —                        | —                        | —                        | —                        | 46 |
| 47 | —                        | —                        | —                        | —                        | —                        | —                        | —                        | —                        | —                        | 47 |
| 48 | —                        | —                        | —                        | —                        | —                        | —                        | —                        | —                        | —                        | 48 |
| 49 | —                        | —                        | —                        | —                        | —                        | —                        | —                        | —                        | —                        | 49 |
| 50 | —                        | —                        | —                        | —                        | —                        | —                        | —                        | —                        | —                        | 50 |
| 51 | —                        | —                        | —                        | —                        | —                        | —                        | —                        | —                        | —                        | 51 |
| 52 | 70 F 70                  | 70 F 70                  | 70 F 70c                 | 70 F 70                  | 70 F 70                  | 70 F 70a                 | 70 F 70c                 | 70 F 70c                 | 70 F 70a                 | 52 |

\*Originally Equipped with 14" Piston Valve.

## STEAM LOCOMOTIVES

|    | CLASSIFICATION                           | H 9 s a                  | H 9 s c                  | H 10 s                   | 11 s<br>TYPE "A"<br>Superheater | 11 s<br>TYPE "E"<br>Superheater | 11 s a<br>TYPE "E"<br>Superheater |  |    |
|----|------------------------------------------|--------------------------|--------------------------|--------------------------|---------------------------------|---------------------------------|-----------------------------------|--|----|
| 1  | Wheel Arrangement                        | 2-8-0                    | 2-8-0                    | 2-8-0                    | 2-10-0                          | 2-10-0                          | 2-10-0                            |  | 1  |
| 2  | Wheel Diameters In.                      | 33, 62                   | 33, 62                   | 33, 62                   | 33, 62                          | 33, 62                          | 33, 62                            |  | 2  |
| 3  | Journal, Engine Truck In.                | 5½ x 10                  | 5½ x 10                  | 5½ x 10                  | 6½ x 12                         | 6½ x 12                         | 6½ x 12                           |  | 3  |
| 4  | " Drivers In.                            | 9¼<br>10½ x 13           | 9¼<br>10½ x 13           | 9¼<br>10½ x 13           | 11<br>12 x 16                   | 11<br>12 x 16                   | 11<br>12 x 16                     |  | 4  |
| 5  | " Trailer Truck In.                      | —                        | —                        | —                        | —                               | —                               | —                                 |  | 5  |
| 6  | Wheel Base, Driver Ft. In.               | 17-0½                    | 17-0½                    | 17-0½                    | 22-8                            | 22-8                            | 22-8                              |  | 6  |
| 7  | " " Engine Ft. In.                       | 25-9½                    | 25-9½                    | 25-9½                    | 32-2                            | 32-2                            | 32-2                              |  | 7  |
| 8  | " " Engine & Tender Ft. In.              | 59-2½                    | 59-2½                    | 62-4½                    | 73-4½                           | 73-4½                           | 73-4½                             |  | 8  |
| 9  | Height, Deck Plate In.                   | 70½                      | 70½                      | 81                       | 83                              | 83                              | 83                                |  | 9  |
| 10 | " Bottom of Drawbar Pocket In.           | 34½                      | 34½                      | 34½                      | 34½                             | 34½                             | 34½                               |  | 10 |
| 11 | Cylinder Spread In.                      | 90                       | 90                       | 90                       | 91½                             | 91½                             | 91½                               |  | 11 |
| 12 | " Dimensions In.                         | 25 x 28                  | 25 x 28                  | 26 x 28                  | 30½ x 32                        | 30½ x 32                        | 30½ x 32                          |  | 12 |
| 13 | Steam Port Dimensions In.                | 2½ Wide                  | 2½ Wide                  | 2½ Wide                  | 2¾ Wide<br>¾ x 1½ (AUX.)        | 2¾ Wide<br>¾ x 1½ (AUX.)        | 3¾ Wide<br>¾ x 1½ (AUX.)          |  | 13 |
| 14 | Valve Travel In.                         | 6                        | 6                        | 6                        | 6                               | 6                               | 6                                 |  | 14 |
| 15 | " Lap In.                                | ½                        | ½                        | ½                        | 2                               | 2                               | 1½                                |  | 15 |
| 16 | " Type                                   | *12" Piston              | *12" Piston              | *12" Piston              | 12" Piston                      | 12" Piston                      | 12" Piston                        |  | 16 |
| 17 | " Gear Type                              | Wals'h't                 | Wals'h't                 | Wals'h't                 | Wals'h't                        | Wals'h't                        | Wals'h't                          |  | 17 |
| 18 | Steam Pressure Lb. per Sq. In.           | 205                      | 205                      | 205                      | 250                             | 250                             | 250                               |  | 18 |
| 19 | Boiler Type                              | Belpaire<br>Wide Firebox | Belpaire<br>Wide Firebox | Belpaire<br>Wide Firebox | Belpaire<br>Wide Firebox        | Belpaire<br>Wide Firebox        | Belpaire<br>Wide Firebox          |  | 19 |
| 20 | " Diam., Minimum Internal In.            | 76½                      | 76½                      | 76½                      | 82                              | 82                              | 82                                |  | 20 |
| 21 | Flues and Tubes, Number                  | 265, 36, 144             | 265, 36, 144             | 265, 36, 144             | 244, 48, 192                    | 120, 170, 340                   | 120, 170, 340                     |  | 21 |
| 22 | " " " O. Diam. In.                       | 2, 5½, 1½                | 2, 5½, 1½                | 2, 5½, 1½                | 2½, 5½, 1½                      | 2½, 3½, 1½                      | 2½, 3½, 1½                        |  | 22 |
| 23 | " Length between Sheets In.              | 180                      | 180                      | 180                      | 228                             | 228                             | 228                               |  | 23 |
| 24 | " Fire Area Sq. Ft.                      | 7.35                     | 7.35                     | 7.35                     | 9.21                            | 8.73                            | 8.73                              |  | 24 |
| 25 | Heating Surface, Ext. Flues Sq. Ft.      | 2859                     | 2859                     | 2859                     | 4044                            | 4303                            | 4303                              |  | 25 |
| 26 | " " Int. Superh'ter Sq. Ft.              | 613                      | 613                      | 613                      | 1133                            | 1634                            | 1634                              |  | 26 |
| 27 | " " Firebox Sq. Ft.                      | 211                      | 211                      | 211                      | 287                             | 287                             | 287                               |  | 27 |
| 28 | " " Total Sq. Ft.                        | 3683                     | 3683                     | 3683                     | 5464                            | 6224                            | 6224                              |  | 28 |
| 29 | Grate Dimensions In.                     | 71½ x 110½               | 71½ x 110½               | 71½ x 110½               | 79½ x 126                       | 79½ x 126                       | 79½ x 126                         |  | 29 |
| 30 | " Area Sq. Ft.                           | 55.09                    | 55.09                    | 55.09                    | 69.89                           | 69.89                           | 69.89                             |  | 30 |
| 31 | Wt. on Rail, Engine Truck Lb.            | 26625                    | 24495                    | 24500                    | 30000                           | 33600                           | 33600                             |  | 31 |
| 32 | " " " 1st Drivers Lb.                    | 62575                    | 52800                    | 56000                    | 66000                           | 71500                           | 71500                             |  | 32 |
| 33 | " " " 2nd Drivers Lb.                    | 48200                    | 54750                    | 57000                    | 66000                           | 67000                           | 67000                             |  | 33 |
| 34 | " " " 3rd Drivers Lb.                    | 49025                    | 53900                    | 60000                    | 73000                           | 72600                           | 72600                             |  | 34 |
| 35 | " " " 4th Drivers Lb.                    | 50775                    | 55000                    | 50000                    | 68000                           | 68800                           | 68800                             |  | 35 |
| 36 | " " " 5th Drivers Lb.                    | —                        | —                        | —                        | 68000                           | 72600                           | 72600                             |  | 36 |
| 37 | " " " 6th Drivers Lb.                    | —                        | —                        | —                        | —                               | —                               | —                                 |  | 37 |
| 38 | " " " 7th Drivers Lb.                    | —                        | —                        | —                        | —                               | —                               | —                                 |  | 38 |
| 39 | " " " 8th Drivers Lb.                    | —                        | —                        | —                        | —                               | —                               | —                                 |  | 39 |
| 40 | " " " All Drivers Lb.                    | 210575                   | 216450                   | 223000                   | 341000                          | 352500                          | 352500                            |  | 40 |
| 41 | " " " Trailer Truck Lb.                  | —                        | —                        | —                        | —                               | —                               | —                                 |  | 41 |
| 42 | Wt. of Engine, Working Order Lb.         | 237200                   | 240945                   | 247500                   | 371000                          | 386100                          | 386100                            |  | 42 |
| 43 | " " " Empty Lb.                          | 211100                   | 209450                   | 216400                   | 336900                          | 354250                          | 354250                            |  | 43 |
| 44 | Tractive Power Lb.                       | 49183                    | 49183                    | 53197                    | †90024                          | †90024                          | †96026                            |  | 44 |
| 45 | Ratio: Wt. All Drivers to Tractive Power | 4.28                     | 4.40                     | 4.19                     | 3.79                            | 3.92                            | 3.67                              |  | 45 |
| 46 |                                          |                          |                          |                          |                                 |                                 |                                   |  | 46 |
| 47 |                                          |                          |                          |                          |                                 |                                 |                                   |  | 47 |
| 48 |                                          |                          |                          |                          |                                 |                                 |                                   |  | 48 |
| 49 |                                          |                          |                          |                          |                                 |                                 |                                   |  | 49 |
| 50 |                                          |                          |                          |                          |                                 |                                 |                                   |  | 50 |
| 51 |                                          |                          |                          |                          |                                 |                                 |                                   |  | 51 |
| 52 | Class of Tender                          | 70 F 70c                 | 70 F 70c                 | 80 F 81                  | 90 F 82                         | 90 F 82                         | 90 F 82                           |  | 52 |

\*Originally Equipped with 14" Piston Valve.

†Based on formula  $T = \frac{.75PC^2S}{D}$ ‡Based on formula  $T = \frac{.8PC^2S}{D}$

## STEAM LOCOMOTIVES

11

|    | K 2 s                    | K 2 s a                  | K 2 s b                  | K 3 s                    | K 4 s                    | K 5                      | K 5<br>No. 5699          | K 21             |  |    |
|----|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|------------------|--|----|
| 1  | 4-6-2                    | 4-6-2                    | 4-6-2                    | 4-6-2                    | 4-6-2                    | 4-6-2                    | 4-6-2                    | 4-6-2            |  | 1  |
| 2  | 36, 80, 56               | 36, 80, 56               | 33, 72, 50               | 36, 80, 56               | 36, 80, 50               | 36, 80, 50               | 36, 80, 50               | from<br>Vandalia |  | 2  |
| 3  | 6½ x 12                  | 6½ x 12                  | 6½ x 12                  | 6½ x 12                  | 6½ x 12                  | 6½ x 12                  | 6½ x 12                  |                  |  | 3  |
| 4  | 10½ x 15                 | 10½ x 15                 | 10½ x 15                 | 10½ x 15                 | 11 x 15                  | 11½ x 15                 | 11½ x 15                 | 4 let 1910       |  | 4  |
| 5  | 8 x 14                   | 8 x 14                   | 6½ x 12                  | 8 x 14                   | 6½ x 12                  | 6½ x 12                  | 6½ x 12                  | 4 • 1912         |  | 5  |
| 6  | 13-10                    | 13-10                    | 13-10                    | 13-10                    | 13-10                    | 13-10                    | 13-10                    | 4 • 1913         |  | 6  |
| 7  | 35-2½                    | 35-2½                    | 35-4½                    | 35-2½                    | 36-2                     | 36-10½                   | 36-10½                   | Not 870          |  | 7  |
| 8  | 70-3                     | 70-5                     | 70-5                     | 69-11½                   | 72-4                     | 79-5                     | 79-5                     | 67712            |  | 8  |
| 9  | 66½                      | 78                       | 66½                      | 79½                      | 70½                      | 70½                      | 70½                      |                  |  | 9  |
| 10 | 33½                      | 33½                      | 33½                      | 33½                      | 34½                      | 34½                      | 34½                      |                  |  | 10 |
| 11 | 88                       | 88                       | 88                       | 88                       | 89                       | 89                       | 89                       |                  |  | 11 |
| 12 | 24 x 26                  | 24 x 26                  | 24 x 26                  | 26 x 26                  | 27 x 28                  | 27 x 30                  | 27 x 30                  |                  |  | 12 |
| 13 | 1½ Wide                  | 1½ Wide                  | 1½ Wide                  | 1½ Wide                  | 2½&2½ Wide               | 2½                       | 8" Diam.                 |                  |  | 13 |
| 14 | 7                        | 7                        | 7                        | 7                        | 7                        | 7                        | △—                       |                  |  | 14 |
| 15 | 1½                       | 1½                       | 1½                       | 1½                       | 1½                       | 1½                       | △—                       |                  |  | 15 |
| 16 | *12" Piston              | *12" Piston              | 12" Piston               | *12" Piston              | 12" Piston               | 12" Piston               | Poppet                   |                  |  | 16 |
| 17 | Wals'h't                 | Wals'h't                 | Wals'h't                 | Wals'h't                 | Wals'h't                 | Wals'h't                 | Caprotti                 |                  |  | 17 |
| 18 | 205                      | 205                      | 205                      | 205                      | 205                      | 250                      | 250                      |                  |  | 18 |
| 19 | Belpaire<br>Wide Firebox | Belpaire<br>Wide Firebox | Belpaire<br>Wide Firebox | Belpaire<br>Wide Firebox | Belpaire<br>Wide Firebox | Belpaire<br>Wide Firebox | Belpaire<br>Wide Firebox |                  |  | 19 |
| 20 | 78                       | 78                       | 78                       | 78                       | 76½                      | 82½                      | 82½                      |                  |  | 20 |
| 21 | 202, 32, 128             | 202, 32, 128             | 202, 32, 128             | 202, 32, 128             | 236, 40, 160             | 90, 170, 340             | 90, 170, 340             |                  |  | 21 |
| 22 | 2½, 5½, 1½               | 2½, 5½, 1½               | 2½, 5½, 1½               | 2½, 5½, 1½               | 2½, 5½, 1½               | 2½, 3½, 1½               | 2½, 3½, 1½               |                  |  | 22 |
| 23 | †252½                    | 250½                     | 252½                     | 250½                     | 228                      | 228                      | 228                      |                  |  | 23 |
| 24 | 7.00                     | 7.00                     | 7.00                     | 7.00                     | 8.39                     | 8.00                     | 8.00                     |                  |  | 24 |
| 25 | 3471                     | 3450                     | 3471                     | 3450                     | 3736                     | 3980                     | 3980                     |                  |  | 25 |
| 26 | 791                      | 791                      | 791                      | 791                      | 943                      | 1634                     | 1634                     |                  |  | 26 |
| 27 | 220                      | 220                      | 220                      | 220                      | 305                      | 305                      | 305                      |                  |  | 27 |
| 28 | 4482                     | 4461                     | 4482                     | 4461                     | 4984                     | 5919                     | 5919                     |                  |  | 28 |
| 29 | 72 x 110½                | 72 x 110½                | 72 x 110½                | 72 x 110½                | 79½ x 126                | 79½ x 126                | 79½ x 126                |                  |  | 29 |
| 30 | 55.38                    | 55.38                    | 55.38                    | 55.38                    | 69.89                    | 69.89                    | 69.89                    |                  |  | 30 |
| 31 | 42500                    | 46000                    | 46200                    | 43000                    | 53640                    | 54200                    | 64685                    |                  |  | 31 |
| 32 | 62000                    | 62000                    | 61200                    | 66600                    | 67550                    | 68600                    | 68645                    |                  |  | 32 |
| 33 | 64000                    | 65000                    | 65400                    | 68850                    | 67630                    | 71800                    | 72865                    |                  |  | 33 |
| 34 | 62000                    | 64000                    | 65900                    | 60850                    | 66650                    | 67200                    | 66860                    |                  |  | 34 |
| 35 | —                        | —                        | —                        | —                        | —                        | —                        | —                        |                  |  | 35 |
| 36 | —                        | —                        | —                        | —                        | —                        | —                        | —                        |                  |  | 36 |
| 37 | —                        | —                        | —                        | —                        | —                        | —                        | —                        |                  |  | 37 |
| 38 | —                        | —                        | —                        | —                        | —                        | —                        | —                        |                  |  | 38 |
| 39 | —                        | —                        | —                        | —                        | —                        | —                        | —                        |                  |  | 39 |
| 40 | 188000                   | 191000                   | 192500                   | 196300                   | 201830                   | 207600                   | 208370                   |                  |  | 40 |
| 41 | 52500                    | 60000                    | 47900                    | 54300                    | 53420                    | 56900                    | 58500                    |                  |  | 41 |
| 42 | 283000                   | 297000                   | 286600                   | 293600                   | 308890                   | 318700                   | 331555                   |                  |  | 42 |
| 43 | 252500                   | 265400                   | 257000                   | 263050                   | 274500                   | 283600                   | 295120                   |                  |  | 43 |
| 44 | 32620                    | 32620                    | 36244                    | 38283                    | 44460                    | **54675                  | 58092                    |                  |  | 44 |
| 45 | 5.76                     | 5.86                     | 5.31                     | 5.13                     | 4.54                     | 3.80                     | 3.59                     |                  |  | 45 |
| 46 | —                        | —                        | —                        | —                        | —                        | —                        | —                        |                  |  | 46 |
| 47 | —                        | —                        | —                        | —                        | —                        | —                        | —                        |                  |  | 47 |
| 48 | —                        | —                        | —                        | —                        | —                        | —                        | —                        |                  |  | 48 |
| 49 | —                        | —                        | —                        | —                        | —                        | —                        | —                        |                  |  | 49 |
| 50 | —                        | —                        | —                        | —                        | —                        | —                        | —                        |                  |  | 50 |
| 51 | —                        | —                        | —                        | —                        | —                        | —                        | —                        |                  |  | 51 |
| 52 | 70 P 66                  | 70 P 77e                 | 70 P 66                  | 70 P 78                  | 70 P 70d                 | 130 P 70                 | 130 P 70                 |                  |  | 52 |

†Former Lines West 250½  
\*Originally Equipped with 16" Piston Valve.

\*\* Based on Formula  $T = \frac{.8PC^2S}{D}$

△ Valve Lift Admission = 2½  
Valve Lift Exhaust = 1½  
Max. Cut Off = 80%  
Max. Release = 80%

## STEAM LOCOMOTIVES

|    | CLASSIFICATION                           | L 1 s                    | L 1 s<br>Standard<br>Stoker | L 1 s<br>No. 2861      | L 1 s Nos.<br>1028 & 1306 | L 2 s                       |  |  |    |
|----|------------------------------------------|--------------------------|-----------------------------|------------------------|---------------------------|-----------------------------|--|--|----|
| 1  | Wheel Arrangement                        | 2-8-2                    | 2-8-2                       | 2-8-2                  | 2-8-2                     | 2-8-2                       |  |  | 1  |
| 2  | Wheel Diameters In.                      | 33, 62, 50               | 33, 62, 50                  | 33, 62, 50             | 33, 62, 50                | 33, 63, 43                  |  |  | 2  |
| 3  | Journal, Engine Truck In.                | 6½ x 12                  | 6½ x 12                     | 6½ x 12                | 6½ x 12                   | 6½ x 12                     |  |  | 3  |
| 4  | " Drivers In.                            | 11 x 15                  | 11 x 15                     | 11 x 15                | 11 x 15                   | 10<br>11 x 13               |  |  | 4  |
| 5  | " Trailer Truck In.                      | 6½ x 12                  | 6½ x 12                     | 6½ x 12                | 6½ x 12                   | 9 x 14                      |  |  | 5  |
| 6  | Wheel Base, Driver Ft. In.               | 17-0½                    | 17-0½                       | 17-0½                  | 17-0½                     | 16-9                        |  |  | 6  |
| 7  | " " Engine Ft. In.                       | 36-4½                    | 36-4½                       | 36-4½                  | 36-4½                     | 36-1                        |  |  | 7  |
| 8  | " " Engine & Tender Ft. In.              | 73-9½                    | 73-9½                       | 73-9½                  | 73-9½                     | 71-4½                       |  |  | 8  |
| 9  | Height, Deck Plate In.                   | 66½                      | 76                          | 76                     | 76                        | 79                          |  |  | 9  |
| 10 | " Bottom of Drawbar Pocket In.           | 34½                      | 34½                         | 34½                    | 34½                       | 31½                         |  |  | 10 |
| 11 | Cylinder Spread In.                      | 90                       | 90                          | 90                     | 90                        | 89                          |  |  | 11 |
| 12 | " Dimensions In.                         | 27 x 30                  | 27 x 30                     | 27 x 30                | 27 x 30                   | 26 x 30                     |  |  | 12 |
| 13 | Steam Port Dimensions In.                | 2½ Wide                  | 2½ Wide                     | 2½ Wide                | 2½ Wide                   | 1½ Wide                     |  |  | 13 |
| 14 | Valve Travel In.                         | 6                        | 6                           | 6                      | 6                         | 6½                          |  |  | 14 |
| 15 | " Lap In.                                | ⅞                        | ⅞                           | ⅞                      | ⅞                         | 1                           |  |  | 15 |
| 16 | " Type                                   | 12" Piston               | 12" Piston                  | 12" Piston             | 12" Piston                | 14" Piston                  |  |  | 16 |
| 17 | " Gear Type                              | Wals'h't                 | Wals'h't                    | Wals'h't               | Wals'h't                  | Wals'h't                    |  |  | 17 |
| 18 | Steam Pressure Lb. per Sq. In.           | 205                      | 205                         | 205                    | 205                       | 200                         |  |  | 18 |
| 19 | Boiler Type                              | Belpaire<br>Wide Firebox | Belpaire<br>Wide Firebox    | Water and<br>Fire Tube | Belpaire<br>Wide Firebox  | Radial Stay<br>Wide Firebox |  |  | 19 |
| 20 | " Diam., Minimum Internal In.            | 76½                      | 76½                         | 76½                    | 76½                       | 76½                         |  |  | 20 |
| 21 | Flues and Tubes, Number                  | 236, 40, 160             | 236, 40, 160                | 187, 42, 168           | 236, 40, 160              | 216, 40, 160                |  |  | 21 |
| 22 | " " " O. Diam. In.                       | 2½, 5½, 1½               | 2½, 5½, 1½                  | 2½, 5½, 1½             | 2½, 5½, 1½                | 2½, 5½, 1½                  |  |  | 22 |
| 23 | " Length between Sheets In.              | 228                      | 228                         | 267                    | 228                       | 226½                        |  |  | 23 |
| 24 | " Fire Area Sq. Ft.                      | 8.39                     | 8.39                        | 7.47                   | 8.39                      | 7.95                        |  |  | 24 |
| 25 | Heating Surface, Ext. Flues Sq. Ft.      | 3736                     | 3736                        | 3796                   | 3736                      | 3495                        |  |  | 25 |
| 26 | " " Int. Superh'ter Sq. Ft.              | 943                      | 943                         | 1201                   | 943                       | 901                         |  |  | 26 |
| 27 | " " Firebox Sq. Ft.                      | 305                      | 305                         | *567                   | 397                       | 253                         |  |  | 27 |
| 28 | " " Total Sq. Ft.                        | 4984                     | 4984                        | 5564                   | 5076                      | 4649                        |  |  | 28 |
| 29 | Grate Dimensions In.                     | 79½ x 126                | 79½ x 126                   | 84 x 120½              | 79½ x 126                 | 84½ x 114½                  |  |  | 29 |
| 30 | " Area Sq. Ft.                           | 69.89                    | 69.89                       | 70.14                  | 69.89                     | 66.77                       |  |  | 30 |
| 31 | Wt. on Rail, Engine Truck Lb.            | 29600                    | 31000                       | 27720                  | 31000                     | 20100                       |  |  | 31 |
| 32 | " " " 1st Drivers Lb.                    | 56200                    | 57500                       | 59840                  | 57500                     | 55200                       |  |  | 32 |
| 33 | " " " 2nd Drivers Lb.                    | 57200                    | 57000                       | 61350                  | 57000                     | 54800                       |  |  | 33 |
| 34 | " " " 3rd Drivers Lb.                    | 62000                    | 59000                       | 59650                  | 59000                     | 55200                       |  |  | 34 |
| 35 | " " " 4th Drivers Lb.                    | 64800                    | 59000                       | 61850                  | 59000                     | 54800                       |  |  | 35 |
| 36 | " " " 5th Drivers Lb.                    | —                        | —                           | —                      | —                         | —                           |  |  | 36 |
| 37 | " " " 6th Drivers Lb.                    | —                        | —                           | —                      | —                         | —                           |  |  | 37 |
| 38 | " " " 7th Drivers Lb.                    | —                        | —                           | —                      | —                         | —                           |  |  | 38 |
| 39 | " " " 8th Drivers Lb.                    | —                        | —                           | —                      | —                         | —                           |  |  | 39 |
| 40 | " " " All Drivers Lb.                    | 240200                   | 232500                      | 242690                 | 232500                    | 220000                      |  |  | 40 |
| 41 | " " " Trailer Truck Lb.                  | 50900                    | 61200                       | 63360                  | 61200                     | 51900                       |  |  | 41 |
| 42 | Wt. of Engine, Working Order Lb.         | 320700                   | 324700                      | 333770                 | 324700                    | 292000                      |  |  | 42 |
| 43 | " " " Empty Lb.                          | 286500                   | 290100                      | 300900                 | 290100                    | 261000                      |  |  | 43 |
| 44 | Tractive Power Lb.                       | 61465                    | 61465                       | 61465                  | 61465                     | 54724                       |  |  | 44 |
| 45 | Ratio: Wt. All Drivers to Tractive Power | 3.91                     | 3.78                        | 3.95                   | 3.78                      | 4.01                        |  |  | 45 |
| 46 |                                          |                          |                             |                        |                           |                             |  |  | 46 |
| 47 |                                          |                          |                             |                        |                           |                             |  |  | 47 |
| 48 |                                          |                          |                             |                        |                           |                             |  |  | 48 |
| 49 |                                          |                          |                             |                        |                           |                             |  |  | 49 |
| 50 |                                          |                          |                             |                        |                           |                             |  |  | 50 |
| 51 |                                          |                          |                             |                        |                           |                             |  |  | 51 |
| 52 | Class of Tender                          | 90 F 66                  | 90 F 75                     | 90 F 75                | 90 F 75                   | 100 F 78                    |  |  | 52 |

\*Includes 452 Sq. Ft. Water Tube Area.

|    | M 1                      | M 1 a                    |  |  | N 1 s                    | N 2 s a                  |  | CC 2 s                         |  |    |
|----|--------------------------|--------------------------|--|--|--------------------------|--------------------------|--|--------------------------------|--|----|
| 1  | 4-8-2                    | 4-8-2                    |  |  | 2-10-2                   | 2-10-2                   |  | 0-8-8-0                        |  | 1  |
| 2  | 33, 72, 50               | 33, 72, 50               |  |  | 33, 62, 36               | 33, 63, 43               |  | 51                             |  | 2  |
| 3  | 6½ x 12                  | 6½ x 12                  |  |  | 6½ x 12                  | 6½ x 12                  |  | —                              |  | 3  |
| 4  | 11½ x 16                 | 11½ x 16                 |  |  | 11½ x 15                 | 10½ x 13                 |  | 10½ x 14                       |  | 4  |
| 5  | 6½ x 12                  | 6½ x 12                  |  |  | 7½ x 14                  | 9 x 14                   |  | —                              |  | 5  |
| 6  | 18-10                    | 18-10                    |  |  | 22-2                     | 22-4                     |  | 14-9 x 10-7½ x 14-9            |  | 6  |
| 7  | 41-0½                    | 41-9½                    |  |  | 41-11½                   | 42-2                     |  | 40-1½                          |  | 7  |
| 8  | 79-3½                    | 96-6½                    |  |  | 82-9½                    | 82-10                    |  | 78-8½                          |  | 8  |
| 9  | 76                       | 76                       |  |  | 84                       | 79                       |  | 84                             |  | 9  |
| 10 | 34½                      | 34½                      |  |  | 33½                      | 31½                      |  | 33½                            |  | 10 |
| 11 | 91½                      | 91½                      |  |  | 92                       | 92                       |  | 88                             |  | 11 |
| 12 | 27 x 30                  | 27 x 30                  |  |  | 30 x 32                  | 30 x 32                  |  | 26 x 28 H. P.<br>40 x 28 L. P. |  | 12 |
| 13 | 2 Wide                   | 2 Wide                   |  |  | 2 Wide                   | 1½ Wide                  |  | 2½ Wide H. P.<br>2½ Wide L. P. |  | 13 |
| 14 | 7                        | 7                        |  |  | 8½                       | 7                        |  | 6 H. P.<br>6½ L. P.            |  | 14 |
| 15 | 1⅞                       | 1⅞                       |  |  | 1½                       | 1½                       |  | ¾ H. P.<br>1 L. P.             |  | 15 |
| 16 | 12" Piston               | 12" Piston               |  |  | 14" Piston               | 14" Piston               |  | 14" Piston                     |  | 16 |
| 17 | Wals'h't                 | Wals'h't                 |  |  | Wals'h't                 | Wals'h't                 |  | Wals'h't                       |  | 17 |
| 18 | 250                      | 250                      |  |  | 215                      | 190                      |  | 225                            |  | 18 |
| 19 | Belpaire<br>Wide Firebox | Belpaire<br>Wide Firebox |  |  | Belpaire<br>Wide Firebox | Belpaire<br>Wide Firebox |  | Radial Stay<br>Wide Firebox    |  | 19 |
| 20 | 82½                      | 82½                      |  |  | 88½                      | 86⅞                      |  | 86½                            |  | 20 |
| 21 | 120, 170, 340            | 120, 170, 340            |  |  | 196, 54, 216             | 257, 50, 200             |  | 209, 52, 208                   |  | 21 |
| 22 | 2½, 3½, 1⅞               | 2½, 3½, 1⅞               |  |  | 2½, 5½, 1½               | 2½, 5½, 1½               |  | 2½, 5½, 1½                     |  | 22 |
| 23 | 228                      | 228                      |  |  | 250½                     | 244½                     |  | 262½                           |  | 23 |
| 24 | 8.73                     | 8.73                     |  |  | 9.77                     | 9.65                     |  | 9.98                           |  | 24 |
| 25 | 4303                     | 4303                     |  |  | 4305                     | 4560                     |  | 4635                           |  | 25 |
| 26 | 1634                     | 1634                     |  |  | 1364                     | 1222                     |  | 1379                           |  | 26 |
| 27 | 395                      | 395                      |  |  | 422                      | 420                      |  | 378                            |  | 27 |
| 28 | 6332                     | 6332                     |  |  | 6091                     | 6202                     |  | 6392                           |  | 28 |
| 29 | 79½ x 125½               | 79½ x 125½               |  |  | 80 x 143½                | 96½ x 132½               |  | 96 x 144                       |  | 29 |
| 30 | 69.86                    | 69.86                    |  |  | 79.93                    | 88.27                    |  | 96                             |  | 30 |
| 31 | 60000                    | 59000                    |  |  | 25000                    | 26700                    |  | —                              |  | 31 |
| 32 | 63100                    | 67000                    |  |  | 70300                    | 57400                    |  | 61550                          |  | 32 |
| 33 | 72500                    | 70000                    |  |  | 69000                    | 55600                    |  | 56000                          |  | 33 |
| 34 | 67300                    | 67000                    |  |  | 75600                    | 60400                    |  | 58400                          |  | 34 |
| 35 | 64100                    | 67000                    |  |  | 65500                    | 63200                    |  | 62100                          |  | 35 |
| 36 | —                        | —                        |  |  | 70600                    | 60400                    |  | 60300                          |  | 36 |
| 37 | —                        | —                        |  |  | —                        | —                        |  | 55680                          |  | 37 |
| 38 | —                        | —                        |  |  | —                        | —                        |  | 54920                          |  | 38 |
| 39 | —                        | —                        |  |  | —                        | —                        |  | 49200                          |  | 39 |
| 40 | 267000                   | 271000                   |  |  | 351000                   | 297000                   |  | 458150                         |  | 40 |
| 41 | 58000                    | 60000                    |  |  | 59000                    | 57000                    |  | —                              |  | 41 |
| 42 | 385000                   | 390000                   |  |  | 435000                   | 380700                   |  | 458150                         |  | 42 |
| 43 | 343850                   | 344000                   |  |  | 389000                   | 336900                   |  | 409800                         |  | 43 |
| 44 | 64550                    | 64550                    |  |  | 84890                    | 73829                    |  | †99792                         |  | 44 |
| 45 | 4.14                     | 4.19                     |  |  | 4.13                     | 4.02                     |  | 4.59                           |  | 45 |
| 46 |                          |                          |  |  |                          |                          |  |                                |  | 46 |
| 47 |                          |                          |  |  |                          |                          |  |                                |  | 47 |
| 48 |                          |                          |  |  |                          |                          |  |                                |  | 48 |
| 49 |                          |                          |  |  |                          |                          |  |                                |  | 49 |
| 50 |                          |                          |  |  |                          |                          |  |                                |  | 50 |
| 51 |                          |                          |  |  |                          |                          |  |                                |  | 51 |
| 52 | 110 P 75                 | 210 F 75                 |  |  | 100 F 85                 | 120 F 78                 |  | 100 F 85                       |  | 52 |

1.7Pc8S

†Based on formula,  $T = \frac{C^3}{C^3 + 1} D$

|    | CLASSIFICATION                           | C 51 s                | C 51 s a              | D 16 s b             | D 16 s b             | G 5 s                 | G 53 s d              | H 6 s b               |    |
|----|------------------------------------------|-----------------------|-----------------------|----------------------|----------------------|-----------------------|-----------------------|-----------------------|----|
| 1  | Wheel Arrangement                        | 0-8-0                 | 0-8-0                 | 4-4-0                | 4-4-0                | 4-6-0                 | 4-6-0                 | 2-8-0                 | 1  |
| 2  | Wheel Diameters In.                      | 56                    | 56                    | 33, 68               | 33, 68               | 33, 68                | 30, 60½               | 30, 56                | 2  |
| 3  | Journal, Engine Truck In.                | —                     | —                     | 5½ x 10              | 5½ x 10              | 6½ x 12               | 5½ x 10               | 5½ x 10               | 3  |
| 4  | " Drivers In.                            | 9½ x 12               | 9½ x 12               | 9½ x 12              | 9½ x 12              | 9½ x 13               | 9½ x 10               | 9 x 13                | 4  |
| 5  | " Trailer Truck In.                      | —                     | —                     | —                    | —                    | —                     | —                     | —                     | 5  |
| 6  | Wheel Base, Driver Ft. In.               | 15-0                  | 15-0                  | 7-9                  | 7-9                  | 14-3                  | 13-7                  | 16-3                  | 6  |
| 7  | " " Engine Ft. In.                       | 15-0                  | 15-0                  | 22-9½                | 22-9½                | 26-6                  | 24-0                  | 24-9                  | 7  |
| 8  | " " Engine & Tender Ft. In.              | 53-5½                 | 53-5½                 | 54-9½                | 54-9½                | 64-11½                | 54-4½                 | 58-1½                 | 8  |
| 9  | Height, Deck Plate In.                   | 68½                   | 73½                   | 55½                  | 55½                  | 83                    | 64½                   | 66½                   | 9  |
| 10 | " Bottom of Drawbar Pocket In.           | 29                    | 29                    | 37                   | 37                   | 34½                   | 29½                   | 34½                   | 10 |
| 11 | Cylinder Spread In.                      | 88                    | 88                    | 78                   | 78                   | 85½                   | 86                    | 88                    | 11 |
| 12 | " Dimensions In.                         | 23 x 28               | 23 x 28               | 20 x 26              | 20 x 26              | 24 x 28               | 21½ x 26              | 22 x 28               | 12 |
| 13 | Steam Port Dimensions In.                | 1½ Wide               | 1½ Wide               | 1½ Wide              | 1½ Wide              | 2½ & 2½ Wide          | 1½ Wide               | 2½ & 2½ Wide          | 13 |
| 14 | Valve Travel In.                         | 6                     | 6                     | 6                    | 6                    | 7                     | 6                     | 6                     | 14 |
| 15 | " Lap In.                                | 1                     | 1                     | 1½                   | 1½                   | 1⅞                    | 1                     | ⅞                     | 15 |
| 16 | " Type                                   | 12" Piston            | 12" Piston            | 8" Piston            | 12" Piston           | 12" Piston            | 12" Piston            | 12" Piston            | 16 |
| 17 | " Gear Type                              | Wals'h't              | Wals'h't              | Steph'n              | Steph'n              | Wals'h't              | Wals'h't              | Wals'h't              | 17 |
| 18 | Steam Pressure Lb. per Sq. In.           | 200                   | 200                   | 175                  | 175                  | 205                   | 200                   | 195                   | 18 |
| 19 | Boiler Type                              | Straight Wide Firebox | Straight Wide Firebox | Belpaire Sloping Top | Belpaire Sloping Top | Belpaire Wide Firebox | Straight Wide Firebox | Belpaire Wide Firebox | 19 |
| 20 | " Diam., Minimum Internal In.            | 70½                   | 70½                   | 58½                  | 58½                  | 76½                   | 70½                   | 69½                   | 20 |
| 21 | Flues and Tubes, Number                  | 191, 30, 120          | 191, 30, 120          | 167, 19, 76          | 167, 19, 76          | 242, 36, 144          | 198, 28, 112          | 208, 28, 112          | 21 |
| 22 | " " " O. Diam. In.                       | 2, 5½, 1½             | 2, 5½, 1½             | 1½, 5½, 1½           | 1½, 5½, 1½           | 2, 5½, 1½             | 2, 5½, 1½             | 2, 5½, 1½             | 22 |
| 23 | " Length between Sheets In.              | 169⅞                  | 169⅞                  | 136½                 | 136½                 | 180                   | 159⅞                  | 164½                  | 23 |
| 24 | " Fire Area Sq. Ft.                      | 7.62                  | 7.62                  | 5.078                | 5.078                | 6.96                  | 7.25                  | 5.71                  | 24 |
| 25 | Heating Surface, Ext. Flues Sq. Ft.      | 1409                  | 1409                  | 930                  | 930                  | 2678                  | 1375.4                | 2046                  | 25 |
| 26 | " " Int. Super'h'ter Sq. Ft.             | 1095                  | 1095                  | 535.43               | 535.43               | 613                   | 938.12                | 800                   | 26 |
| 27 | " " Firebox Sq. Ft.                      | 157.88                | 152.67                | 166.2                | 166.2                | 177                   | 165.5                 | 188                   | 27 |
| 28 | " " Total Sq. Ft.                        | 2661.88               | 2656.67               | 1631.63              | 1631.63              | 3468                  | 2479.02               | 3034                  | 28 |
| 29 | Grate Dimensions In.                     | 83½ x 119½            | 85½ x 112½            | 40 x 119½            | 40 x 119½            | 72 x 110½             | 85½ x 112½            | 66 x 107              | 29 |
| 30 | " Area Sq. Ft.                           | 68.88                 | 66.72                 | 33.23                | 33.23                | 55.19                 | 65.22                 | 48.04                 | 30 |
| 31 | Wt. on Rail, Engine Truck Lb.            | —                     | —                     | 43950                | 43950                | 59000                 | 38300                 | 23900                 | 31 |
| 32 | " " " 1st Drivers Lb.                    | 50400                 | 48400                 | 51450                | 51450                | 59000                 | 46000                 | 47100                 | 32 |
| 33 | " " " 2nd Drivers Lb.                    | 54200                 | 48800                 | 46700                | 46700                | 63000                 | 54300                 | 45100                 | 33 |
| 34 | " " " 3rd Drivers Lb.                    | 49500                 | 57600                 | —                    | —                    | 56000                 | 50200                 | 45400                 | 34 |
| 35 | " " " 4th Drivers Lb.                    | 48900                 | 53900                 | —                    | —                    | —                     | —                     | 43400                 | 35 |
| 36 | " " " 5th Drivers Lb.                    | —                     | —                     | —                    | —                    | —                     | —                     | —                     | 36 |
| 37 | " " " 6th Drivers Lb.                    | —                     | —                     | —                    | —                    | —                     | —                     | —                     | 37 |
| 38 | " " " 7th Drivers Lb.                    | —                     | —                     | —                    | —                    | —                     | —                     | —                     | 38 |
| 39 | " " " 8th Drivers Lb.                    | —                     | —                     | —                    | —                    | —                     | —                     | —                     | 39 |
| 40 | " " " All Drivers Lb.                    | 203000                | 208700                | 98150                | 98150                | 178000                | 150500                | 180900                | 40 |
| 41 | " " " Trailer Truck Lb.                  | —                     | —                     | —                    | —                    | —                     | —                     | —                     | 41 |
| 42 | Wt. of Engine, Working Order Lb.         | 203000                | 208700                | 142100               | 142100               | 237000                | 188800                | 204800                | 42 |
| 43 | " " " Empty Lb.                          | —                     | —                     | —                    | —                    | 212000                | —                     | —                     | 43 |
| 44 | Tractive Power Lb.                       | 44965                 | 44965                 | 22750                | 22750                | 41328                 | 33771                 | 40111                 | 44 |
| 45 | Ratio: Wt. All Drivers to Tractive Power | 4.51                  | 4.64                  | 4.314                | 4.314                | 4.31                  | 4.456                 | 4.50                  | 45 |
| 46 |                                          |                       |                       |                      |                      |                       |                       |                       | 46 |
| 47 |                                          |                       |                       |                      |                      |                       |                       |                       | 47 |
| 48 |                                          |                       |                       |                      |                      |                       |                       |                       | 48 |
| 49 |                                          |                       |                       |                      |                      |                       |                       |                       | 49 |
| 50 |                                          |                       |                       |                      |                      |                       |                       |                       | 50 |
| 51 |                                          |                       |                       |                      |                      |                       |                       |                       | 51 |
| 52 | Class of Tender                          | 60 S 68               | 60 S 73               | 55 P 55              | 55 P 55              | 110 P 82 A            | 60 F 64               | 70 F 66               | 52 |

# LONG ISLAND R. R.—STEAM LOCOMOTIVES

|    | H 10 s                  |  |  |  |  |  |  |  |  |    |
|----|-------------------------|--|--|--|--|--|--|--|--|----|
| 1  | 2-8-0                   |  |  |  |  |  |  |  |  | 1  |
| 2  | 33, 62                  |  |  |  |  |  |  |  |  | 2  |
| 3  | 5½ x 10                 |  |  |  |  |  |  |  |  | 3  |
| 4  | 8½ x 13<br>10½          |  |  |  |  |  |  |  |  | 4  |
| 5  | —                       |  |  |  |  |  |  |  |  | 5  |
| 6  | 17-0½                   |  |  |  |  |  |  |  |  | 6  |
| 7  | 25-9½                   |  |  |  |  |  |  |  |  | 7  |
| 8  | 62-4½                   |  |  |  |  |  |  |  |  | 8  |
| 9  | 81                      |  |  |  |  |  |  |  |  | 9  |
| 10 | 34½                     |  |  |  |  |  |  |  |  | 10 |
| 11 | 90                      |  |  |  |  |  |  |  |  | 11 |
| 12 | 26 x 28                 |  |  |  |  |  |  |  |  | 12 |
| 13 | 2½ Wide                 |  |  |  |  |  |  |  |  | 13 |
| 14 | 6                       |  |  |  |  |  |  |  |  | 14 |
| 15 | ½                       |  |  |  |  |  |  |  |  | 15 |
| 16 | *12" Piston             |  |  |  |  |  |  |  |  | 16 |
| 17 | Wals'h't                |  |  |  |  |  |  |  |  | 17 |
| 18 | 205                     |  |  |  |  |  |  |  |  | 18 |
| 19 | Belmont<br>Wide Firebox |  |  |  |  |  |  |  |  | 19 |
| 20 | 76½                     |  |  |  |  |  |  |  |  | 20 |
| 21 | 265, 36, 144            |  |  |  |  |  |  |  |  | 21 |
| 22 | 2, 5½, 1½               |  |  |  |  |  |  |  |  | 22 |
| 23 | 180                     |  |  |  |  |  |  |  |  | 23 |
| 24 | 7.35                    |  |  |  |  |  |  |  |  | 24 |
| 25 | 2859                    |  |  |  |  |  |  |  |  | 25 |
| 26 | 613                     |  |  |  |  |  |  |  |  | 26 |
| 27 | 211                     |  |  |  |  |  |  |  |  | 27 |
| 28 | 3683                    |  |  |  |  |  |  |  |  | 28 |
| 29 | 71½ x 110½              |  |  |  |  |  |  |  |  | 29 |
| 30 | 55.09                   |  |  |  |  |  |  |  |  | 30 |
| 31 | 24500                   |  |  |  |  |  |  |  |  | 31 |
| 32 | 56000                   |  |  |  |  |  |  |  |  | 32 |
| 33 | 57000                   |  |  |  |  |  |  |  |  | 33 |
| 34 | 60000                   |  |  |  |  |  |  |  |  | 34 |
| 35 | 50000                   |  |  |  |  |  |  |  |  | 35 |
| 36 | —                       |  |  |  |  |  |  |  |  | 36 |
| 37 | —                       |  |  |  |  |  |  |  |  | 37 |
| 38 | —                       |  |  |  |  |  |  |  |  | 38 |
| 39 | —                       |  |  |  |  |  |  |  |  | 39 |
| 40 | 223000                  |  |  |  |  |  |  |  |  | 40 |
| 41 | —                       |  |  |  |  |  |  |  |  | 41 |
| 42 | 247500                  |  |  |  |  |  |  |  |  | 42 |
| 43 | 216400                  |  |  |  |  |  |  |  |  | 43 |
| 44 | 53197                   |  |  |  |  |  |  |  |  | 44 |
| 45 | 4.19                    |  |  |  |  |  |  |  |  | 45 |
| 46 |                         |  |  |  |  |  |  |  |  | 46 |
| 47 |                         |  |  |  |  |  |  |  |  | 47 |
| 48 |                         |  |  |  |  |  |  |  |  | 48 |
| 49 |                         |  |  |  |  |  |  |  |  | 49 |
| 50 |                         |  |  |  |  |  |  |  |  | 50 |
| 51 |                         |  |  |  |  |  |  |  |  | 51 |
| 52 | 80 F 81                 |  |  |  |  |  |  |  |  | 52 |

\*Originally Equipped with 14" Piston Valve.



## ELECTRIC LOCOMOTIVES

|    | CLASSIFICATION                           | A 6                  | A 6 B                | B 1                  | B B 2                        |                     |    |
|----|------------------------------------------|----------------------|----------------------|----------------------|------------------------------|---------------------|----|
| 1  | Wheel Arrangement                        | 0-4-0                | 0-4-0                | 0-6-0                | 0-6-0 + 0-6-0                | 1                   | 1  |
| 2  | " Diameters In.                          | 50                   | 50                   | 62                   | 62                           | Blt Apr 1905        | 2  |
| 3  | Journal, End Trucks In.                  | —                    | —                    | —                    | —                            | Aero. repd July '37 | 3  |
| 4  | " Drivers In.                            | 6½ x 12              | 6½ x 12              | 6½ x 12              | 6½ x 12                      |                     | 4  |
| 5  | " Inside Trucks In.                      | —                    | —                    | —                    | —                            |                     | 5  |
| 6  | Wheel Base, Rigid Ft. In.                | 10-0                 | 10-0                 | 12-8                 | 12-8                         |                     | 6  |
| 7  | " Base Total Ft. In.                     | 10-0                 | 10-0                 | 12-8                 | 38-1½                        |                     | 7  |
| 8  | Length Coupled Ft. In.                   | 26-10                | 26-10                | 31-6                 | 60-5½                        |                     | 8  |
| 9  | Width, Maximum.. Ft. In.                 | 10-6½                | 10-6½                | 10-1                 | 10-1                         |                     | 9  |
| 10 | Max. Height over Cab Equipment Ft. In.   | 14-7½                | 14-7½                | 14-4½                | 14-4½                        |                     | 10 |
| 11 | Max. Height Trolley Down Ft. In.         | —                    | —                    | 15-0                 | 14-8½                        |                     | 11 |
| 12 | Drive, Type of                           | Gears                | Gears                | Gears                | Gears                        |                     | 12 |
| 13 | Current Collectors                       | —                    | —                    | Pantograph           | Pantograph and 3rd Rail Shoe |                     | 13 |
| 14 | Line Voltage                             | —                    | —                    | 11000 A.C.           | 650 D.C.                     |                     | 14 |
| 15 | Main Motors, Class & Voltage             | D.C. 600             | D.C. 600             | A.C. 235             | D.C. 216                     |                     | 15 |
| 16 | " " Make & Type                          | Westinghouse 355     | W. E. & M. Co. 355   | Westinghouse 137-B   | Westinghouse 137-B           |                     | 16 |
| 17 | " " Number of                            | 2                    | 2                    | 3                    | 6                            |                     | 17 |
| 18 | " " Ventilation                          | Natural              | Natural              | Forced               | Natural                      |                     | 18 |
| 19 | " " Gear Ratio                           | 16 to 76             | 16 to 76             | 16-87                | 16 to 87                     |                     | 19 |
| 20 | " " Gear, Type of                        | Spur                 | Spur                 | Spur                 | Spur                         |                     | 20 |
| 21 | " " Rotor, Diam. In.                     | —                    | —                    | 36                   | 36                           |                     | 21 |
| 22 | " " Rotor, Weight Lb.                    | —                    | —                    | 5400                 | 5400                         |                     | 22 |
| 23 | " " Weight Lb.                           | —                    | —                    | 13060                | 13060                        |                     | 23 |
| 24 | Control, Master Type                     | Electro Pneumatic    | Electro Pneumatic    | Electro Pneumatic    | Electro Pneumatic            |                     | 24 |
| 25 | " " Master Operating Current             | 32V.                 | 32 V                 | 32-V.                | 32-V.                        |                     | 25 |
| 26 | " " Main Type                            | Variable Eng. Speeds | Variable Eng. Speeds | Transformer Switches | Grids                        |                     | 26 |
| 27 | Compressors, No. and Type                | One D-4-P            | One D-4-P            | 1-6BM-150            | 2-C-60 2 Stage               |                     | 27 |
| 28 | " " Capacity Cu. Ft.                     | 50                   | 50                   | 150                  | 60                           |                     | 28 |
| 29 | Main Blowers, No. and H.P.               | —                    | —                    | 1-10                 | —                            |                     | 29 |
| 30 | " " Capacity Cu. ft.                     | —                    | —                    | —                    | —                            |                     | 30 |
| 31 | Wt. on Rail, End Truck Lb.               | —                    | —                    | —                    | —                            |                     | 31 |
| 32 | " " " 1st Drivers Lb.                    | 65000                | 65000                | 53000                | 52000                        |                     | 32 |
| 33 | " " " 2nd Drivers Lb.                    | 65000                | 65000                | 51515                | 54500                        |                     | 33 |
| 34 | " " " 3rd Drivers Lb.                    | —                    | —                    | 52530                | 50000                        |                     | 34 |
| 35 | " " " 4th Drivers Lb.                    | —                    | —                    | —                    | 50000                        |                     | 35 |
| 36 | " " " 5th Drivers Lb.                    | —                    | —                    | —                    | 54500                        |                     | 36 |
| 37 | " " " 6th Drivers Lb.                    | —                    | —                    | —                    | 52000                        |                     | 37 |
| 38 | " " " 7th Drivers Lb.                    | —                    | —                    | —                    | —                            |                     | 38 |
| 39 | " " " 8th Drivers Lb.                    | —                    | —                    | —                    | —                            |                     | 39 |
| 40 | " " " All Drivers Lb.                    | 130000               | 130000               | 157045               | 313000                       |                     | 40 |
| 41 | " " " Inside Truck Lb.                   | —                    | —                    | —                    | —                            |                     | 41 |
| 42 | Wt. of Engine, Total Lb.                 | ‡130000              | ‡130000              | 157045               | 313000                       |                     | 42 |
| 43 | " " Mechanical Parts Lb.                 | 93000                | 93000                | —                    | —                            |                     | 43 |
| 44 | " " Equipment Parts* Lb.                 | 30500                | 30500                | —                    | —                            |                     | 44 |
| 45 | Rating Continuous H. P. at Rail          | 320                  | 375                  | 570                  | 1160                         |                     | 45 |
| 46 | " " Tractive Pr. Lb.                     | 7500                 | 8500                 | 13500                | 37800                        |                     | 46 |
| 47 | " " Speed M.P.H.                         | 16                   | 16.5                 | 15.9                 | 11.5                         |                     | 47 |
| 48 | Ratio Wt. on Drivers to Continuous T. P. | 17.3                 | 15.3                 | 11.6                 | 8.3                          |                     | 48 |
| 49 | Max. Tractive Pr. Lb.                    | 40000                | 40000                | 50000                | 100000                       |                     | 49 |
| 50 | Ratio Wt. on Drivers to Max. Trac. Power | 3.24                 | 3.25                 | 3.14                 | 3.13                         |                     | 50 |
| 51 | Compressor H.P. Rating                   | 10                   | 10                   | 35                   | 15                           |                     | 51 |
| 52 | Maximum Speed M.P.H.                     | 20                   | 20                   | 25                   | 25                           |                     | 52 |

\*Includes all Electrical Equipment and Air Brake Parts Except Foundation Brake, and Air Brake Cylinder.

‡Including Window Guards.

‡Weight of Loco. in Working Order, Including Fuel, Water and Sand.

## ELECTRIC LOCOMOTIVES

|    | CLASSIFICATION                     | D D 1                         | ODD DD<br>3996 TO<br>3999 Incl. |  |  | FF 1                 |  |    |
|----|------------------------------------|-------------------------------|---------------------------------|--|--|----------------------|--|----|
| 1  | Wheel Arrangement                  | 4-4-0+0-4-4                   | 4-4-0+0-4-4                     |  |  | 2-6-0+0-6-2          |  | 1  |
| 2  | " Diameters In.                    | 36-72-36                      | 36-68-36                        |  |  | 36-72-36             |  | 2  |
| 3  | Journal, End Trucks In.            | 6½ x 12                       | 5½ x 10                         |  |  | 6½ x 12              |  | 3  |
| 4  | " Drivers In.                      | 10 x 13½                      | 10 x 13½                        |  |  | 11 x 15              |  | 4  |
| 5  | " Inside Trucks In.                | —                             | —                               |  |  | —                    |  | 5  |
| 6  | Wheel Base, Rigid Ft. In.          | 7-2                           | 7-2                             |  |  | 13-4                 |  | 6  |
| 7  | " " Total Ft. In.                  | 55-11                         | 55-11                           |  |  | 63-11                |  | 7  |
| 8  | Length Coupled Ft. In.             | 64-11                         | 64-11                           |  |  | 76-6½                |  | 8  |
| 9  | Width, Maximum† Ft. In.            | 11-2½                         | 10-7                            |  |  | 10-1½                |  | 9  |
| 10 | Max. Ht. Over Cab Ft. In.          | 14-8½                         | 14-8½                           |  |  | 15-2½                |  | 10 |
| 11 | Max. Ht. Trolley Down Ft. In.      | 14-8½                         | 14-8½                           |  |  | 15-6                 |  | 11 |
| 12 | Drive, Type of                     | Jack Shaft                    | Jack Shaft                      |  |  | Gears and Jack Shaft |  | 12 |
| 13 | Current Collectors                 | 3rd Rail Shoes and Pantograph | 3rd Rail Shoes and Pantograph   |  |  | Pantograph           |  | 13 |
| 14 | Line Voltage                       | 650 D.C.                      | 650 D.C.                        |  |  | 11000 A.C.           |  | 14 |
| 15 | Main Motors, Class & Voltage       | D.C. 650                      | D.C. 650                        |  |  | 3 Phase 850          |  | 15 |
| 16 | " " Make & Type                    | Westinghouse 315-A            | Westinghouse 315                |  |  | Westinghouse 461     |  | 16 |
| 17 | " " Number of                      | 2                             | 2                               |  |  | 4                    |  | 17 |
| 18 | " " Ventilation                    | Natural                       | Natural                         |  |  | Forced               |  | 18 |
| 19 | " " Gear Ratio                     | —                             | —                               |  |  | 21 to 106            |  | 19 |
| 20 | " " Gear, Type of                  | —                             | —                               |  |  | Double Helical       |  | 20 |
| 21 | " " Rotor, Diam. In.               | 56                            | 56                              |  |  | 41½                  |  | 21 |
| 22 | " " Rotor, Weight Lb.              | —                             | —                               |  |  | —                    |  | 22 |
| 23 | " " Weight Lb.                     | —                             | —                               |  |  | —                    |  | 23 |
| 24 | Control, Master Type               | Electro Pneumatic             | Electro Pneumatic               |  |  | Electro Pneumatic    |  | 24 |
| 25 | " " Oper. Cur.                     | 20V.                          | 20V.                            |  |  | 32V.                 |  | 25 |
| 26 | " Main Type                        | Grids                         | Grids                           |  |  | Water Rheostats      |  | 26 |
| 27 | Compressors, No. and Type          | 2-C-60 2-Stage                | 2-C-60 2-Stage                  |  |  | 2-Vertical 2-Stage   |  | 27 |
| 28 | " Capacity Cu. Ft.                 | 60                            | 60                              |  |  | 150                  |  | 28 |
| 29 | Main Blowers, No. and H.P.         | —                             | —                               |  |  | 2-50                 |  | 29 |
| 30 | " Capacity Cu. Ft.                 | —                             | —                               |  |  | —                    |  | 30 |
| 31 | Wt. on Rail, End Truck No. 1 Lb.   | 57000                         | 62000                           |  |  | 38250                |  | 31 |
| 32 | " " " 1st Drivers Lb.              | 49750                         | 52000                           |  |  | 73000                |  | 32 |
| 33 | " " " 2nd Drivers Lb.              | 49750                         | 52000                           |  |  | 72000                |  | 33 |
| 34 | " " " 3rd Drivers Lb.              | 49750                         | 52000                           |  |  | 70500                |  | 34 |
| 35 | " " " 4th Drivers Lb.              | 49750                         | 52000                           |  |  | 73000                |  | 35 |
| 36 | " " " 5th Drivers Lb.              | —                             | —                               |  |  | 74500                |  | 36 |
| 37 | " " " 6th Drivers Lb.              | —                             | —                               |  |  | 76500                |  | 37 |
| 38 | " " " 7th Drivers Lb.              | —                             | —                               |  |  | —                    |  | 38 |
| 39 | " " " 8th Drivers Lb.              | —                             | —                               |  |  | —                    |  | 39 |
| 40 | " " " All Drivers Lb.              | 199000                        | 208000                          |  |  | 439500               |  | 40 |
| 41 | " " " End Truck No. 2 Lb.          | —                             | —                               |  |  | —                    |  | 41 |
| 42 | Wt. of Engine, Total Lb.           | 313000                        | 332000                          |  |  | 516000               |  | 42 |
| 43 | " " Mechanical Parts Lb.           | 194000                        | 205000                          |  |  | 258400               |  | 43 |
| 44 | " " Equipment Parts* Lb.           | 119000                        | 127000                          |  |  | 257600               |  | 44 |
| 45 | Rating Continuous, H.P. at Rail    | 1580                          | 1580                            |  |  | 4000                 |  | 45 |
| 46 | " " Tractive Effort Lb.            | 10200                         | 10800                           |  |  | 73000                |  | 46 |
| 47 | " " Speed M.P.H.                   | 58                            | 54.8                            |  |  | 20.5                 |  | 47 |
| 48 | Ratio Wt. on Drivers to Cont. T.E. | 19.5                          | 19.2                            |  |  | 6.02                 |  | 48 |
| 49 | Max. Tractive Effort Lb.           | 66000                         | 69000                           |  |  | 140000               |  | 49 |
| 50 | Ratio Wt. on Drivers to Max. T.E.  | 3.02                          | 3.02                            |  |  | 3.14                 |  | 50 |
| 51 | Compressor H.P. Rating             | —                             | —                               |  |  | —                    |  | 51 |
| 52 | Maximum Speed M.P.H.               | 80                            | 80                              |  |  | 20.5                 |  | 52 |

\*Includes all Electrical Equipment and Air Brake Parts Except Foundation Brake, and Air Brake Cylinder.

†Including Window Guards.

## ELECTRIC LOCOMOTIVES

|    | L 5 P A W               | L 5 P D B                       | L 5 P D G                       | L 5 P D W                       | L 6<br>5938                 | L 6<br>5939                 | L 6 a<br>5940               |  |  |    |
|----|-------------------------|---------------------------------|---------------------------------|---------------------------------|-----------------------------|-----------------------------|-----------------------------|--|--|----|
| 1  | 2-8-2                   | 2-8-2                           | 2-8-2                           | 2-8-2                           | 2-8-2                       | 2-8-2                       | 2-8-2                       |  |  | 1  |
| 2  | 33-80-33                | 33-80-33                        | 33-80-33                        | 33-80-33                        | 36-62-36                    | 36-62-36                    | 36-62-36                    |  |  | 2  |
| 3  | 7 x 12                  | 7 x 12                          | 7 x 12                          | 7 x 12                          | 6½ x 9½ Tim.                | 6½ x 9½ Tim.                | 6½ x 9½ Tim.                |  |  | 3  |
| 4  | 11 x 15                 | 11 x 15                         | 11 x 15                         | 11 x 15                         | 8½ x 12½ Tim                | 8½ x 12½ Tim.               | 8½ x 12½ Tim                |  |  | 4  |
| 5  | —                       | —                               | —                               | —                               | —                           | —                           | —                           |  |  | 5  |
| 6  | 22-3                    | 22-3                            | 22-3                            | 22-3                            | 20-0                        | 20-0                        | 20-0                        |  |  | 6  |
| 7  | 54-11                   | 54-11                           | 54-11                           | 54-11                           | 36-0                        | 36-0                        | 36-0                        |  |  | 7  |
| 8  | 68-2½                   | 68-2½                           | 68-2½                           | 68-2½                           | 51-10                       | 51-10                       | 51-10                       |  |  | 8  |
| 9  | 10-7                    | 10-7                            | 10-7                            | 10-7                            | 10-8½                       | 10-8½                       | 10-8½                       |  |  | 9  |
| 10 | 13-8½                   | 14-4½                           | 14-4½                           | 14-4½                           | 12-8                        | 12-8                        | 12-8                        |  |  | 10 |
| 11 | 15-6½                   | 14-8½                           | 14-8½                           | 14-8½                           | 15-0                        | 15-0                        | 15-0                        |  |  | 11 |
| 12 | Gears and<br>Jack Shaft | Gears and<br>Jack Shaft         | Gears and<br>Jack Shaft         | Gears and<br>Jack Shaft         | Flexible Gear               | Flexible Gear               | Flexible Gear               |  |  | 12 |
| 13 | Pantograph              | Pantograph and<br>3rd Rail Shoe | Pantograph and<br>3rd Rail Shoe | Pantograph and<br>3rd Rail Shoe | Pantograph                  | Pantograph                  | Pantograph                  |  |  | 13 |
| 14 | 11000 A.C.              | 650 D.C.                        | 650 D.C.                        | 650 D.C.                        | 11,000—25 Cycle             | 11,000—25 Cycle             | 11,000—25 Cycle             |  |  | 14 |
| 15 | A.C. 340                | D.C. 325                        | D.C. 325                        | D.C. 325                        | A.C. 275                    | A.C. 275                    | A.C. 275                    |  |  | 15 |
| 16 | Westinghouse<br>418     | Brown Boveri<br>Elm 1434-a-24   | General Electric<br>G E A 616-A | Westinghouse<br>418-A           | W. E. M. Co.<br>425-B       | G. E. Co.<br>GEA 625-B      | WEM Co. 425-B               |  |  | 16 |
| 17 | 4                       | 4                               | 4                               | 4                               | 4                           | 4                           | 4                           |  |  | 17 |
| 18 | Forced                  | Natural                         | Natural                         | Natural                         | Forced                      | Forced                      | Forced                      |  |  | 18 |
| 19 | 50 to 98                | 53 to 95                        | 53 to 95                        | 50 to 98<br>53 to 95            | 20-86                       | 23-98                       | 20-86                       |  |  | 19 |
| 20 | Spur                    | Spur                            | Spur                            | Spur                            | Spur                        | Spur                        | Spur                        |  |  | 20 |
| 21 | 55                      | 56½                             | 54.99                           | 55                              | 37.465                      | 37.465                      | 37.465                      |  |  | 21 |
| 22 | 12000                   | 10700                           | 14500                           | 12000                           | 5544                        | 5544                        | 5544                        |  |  | 22 |
| 23 | 21000                   | 21500                           | 25160                           | 21000                           | 16000                       | 16000                       | 16000                       |  |  | 23 |
| 24 | Electro<br>Pneumatic    | Electro<br>Pneumatic            | Electro<br>Pneumatic            | Electro<br>Pneumatic            | Electro<br>Pneumatic        | Electro<br>Pneumatic        | Electro<br>Pneumatic        |  |  | 24 |
| 25 | 32V.                    | 32V.                            | 32V.                            | 32V.                            | 32V                         | 32V                         | 32V                         |  |  | 25 |
| 26 | Transformer<br>Switches | Grids                           | Grids                           | Grids                           | Transformer<br>Tap Switches | Transformer<br>Tap Switches | Transformer<br>Tap Switches |  |  | 26 |
| 27 | 1-CA 150<br>2-Stage     | 1-Vertical<br>2-Stage           | 1-Vertical<br>2-Stage           | 1-CA 150<br>2-Stage             | 1-CA 150-A<br>2-Stage       | 1-CA 150-A<br>2-Stage       | 1-CA 150<br>2-Stage         |  |  | 27 |
| 28 | 150                     | 150                             | 150                             | 150                             | 150                         | 150                         | 150                         |  |  | 28 |
| 29 | 3-12                    | —                               | —                               | —                               | 3-18½                       | 3-18½                       | 3-18½                       |  |  | 29 |
| 30 | 2-16000<br>1- 8000      | —                               | —                               | —                               | 2-10750<br>1- 8000          | 2-10750<br>1- 8000          | 2-13000<br>1- 8000          |  |  | 30 |
| 31 | 50000                   | 49000                           | No. 1-52000<br>No. 2-60800      | 48450                           | 40000                       | 40000                       | 43300                       |  |  | 31 |
| 32 | 79000                   | 74650                           | 78500                           | 74625                           | 55000                       | 55000                       | 57300                       |  |  | 32 |
| 33 | 76000                   | 74650                           | 76700                           | 74625                           | 55000                       | 55000                       | 53790                       |  |  | 33 |
| 34 | 75300                   | 74650                           | 76600                           | 74625                           | 55000                       | 55000                       | 54700                       |  |  | 34 |
| 35 | 78300                   | 74650                           | 76600                           | 74625                           | 55000                       | 55000                       | 55100                       |  |  | 35 |
| 36 | —                       | —                               | —                               | —                               | —                           | —                           | —                           |  |  | 36 |
| 37 | —                       | —                               | —                               | —                               | —                           | —                           | —                           |  |  | 37 |
| 38 | —                       | —                               | —                               | —                               | —                           | —                           | —                           |  |  | 38 |
| 39 | —                       | —                               | —                               | —                               | —                           | —                           | —                           |  |  | 39 |
| 40 | 308600                  | 298600                          | 308400                          | 298500                          | 220000                      | 220000                      | 220890                      |  |  | 40 |
| 41 | —                       | —                               | —                               | —                               | 40000                       | 40000                       | 40810                       |  |  | 41 |
| 42 | 408600                  | 396600                          | 411000                          | 395400                          | 300000                      | 300000                      | 305000                      |  |  | 42 |
| 43 | —                       | —                               | —                               | —                               | 192000                      | 192000                      | —                           |  |  | 43 |
| 44 | —                       | —                               | —                               | —                               | 108000                      | 108000                      | —                           |  |  | 44 |
| 45 | 3070                    | 3120                            | 1780                            | 1560                            | 2500                        | 2500                        | 2500                        |  |  | 45 |
| 46 | 25000                   | 19000                           | 10000                           | 9800<br>8800                    | 25000                       | 25000                       | 25000                       |  |  | 46 |
| 47 | 46                      | 61.5                            | 66.8                            | 61<br>60.8                      | 37.5                        | 37.5                        | 37.5                        |  |  | 47 |
| 48 | 12.34                   | 15.7                            | 30.8                            | 31.1<br>34                      | 8.8                         | 8.8                         | 8.85                        |  |  | 48 |
| 49 | 54000                   | 71800                           | 80400                           | 82500<br>76400                  | 55000                       | 55000                       | 55250                       |  |  | 49 |
| 50 | 5.72                    | 4.16                            | 3.83                            | 3.82<br>3.66                    | 4.00                        | 4.00                        | 3.98                        |  |  | 50 |
| 51 | 35                      | 35                              | 35                              | 35                              | 35                          | 35                          | 35                          |  |  | 51 |
| 52 | 70                      | 78                              | 80                              | 70<br>76.5                      | 54                          | 54                          | 54                          |  |  | 52 |

## ELECTRIC LOCOMOTIVES

|    | CLASSIFICATION                     | O 1                      | O 1 A                           | O 1 B                       | O 1 C                                   |  |  |  |    |
|----|------------------------------------|--------------------------|---------------------------------|-----------------------------|-----------------------------------------|--|--|--|----|
| 1  | Wheel Arrangement                  | 4-4-4                    | 4-4-4                           | 4-4-4                       | 4-4-4                                   |  |  |  | 1  |
| 2  | " Diameters In.                    | 36-72-36                 | 36-72-36                        | 36-72-36                    | 36-72-36                                |  |  |  | 2  |
| 3  | Journal, End Trucks In.            | 6 x 9 Skf.               | 6 x 9 Skf.                      | 6 x 9 Skf.                  | 6 x 9 Tim.                              |  |  |  | 3  |
| 4  | " Drivers In.                      | 8½ x 12½ Skf.            | 8½ x 12½ Skf.                   | 8½ x 12½ Skf.               | 8½ x 12½ Tim.                           |  |  |  | 4  |
| 5  | " Inside Trucks In.                | —                        | —                               | —                           | —                                       |  |  |  | 5  |
| 6  | Wheel Base, Rigid Ft. In.          | 10-0                     | 10-0                            | 10-0                        | 10-0                                    |  |  |  | 6  |
| 7  | " " Total Ft. In.                  | 39-10                    | 39-10                           | 39-10                       | 39-10                                   |  |  |  | 7  |
| 8  | Length Coupled Ft. In.             | 52-8                     | 52-8                            | 52-8                        | 52-8                                    |  |  |  | 8  |
| 9  | Width, Maximum† Ft. In.            | 10-8½                    | 10-8½                           | 10-8½                       | 10-8½                                   |  |  |  | 9  |
| 10 | Max. Ht. Over Cab Ft. In.          | 12-8                     | 12-8                            | 12-8                        | 12-8                                    |  |  |  | 10 |
| 11 | Max. Ht. Trolley Down Ft. In.      | 15-0                     | 15-0                            | 15-0                        | 15-0                                    |  |  |  | 11 |
| 12 | Drive, Type of                     | Morch                    | Flexible Spring & Balanced Yoke | A.B.B.                      | Flexible Spring & Fletcher              |  |  |  | 12 |
| 13 | Current Collectors                 | Pantograph               | Pantograph                      | Pantograph                  | Pantograph                              |  |  |  | 13 |
| 14 | Line Voltage                       | 11,000—25 Cycle          | 11,000—25 Cycle                 | 11,000—25 Cycle             | 11,000—25 Cycle                         |  |  |  | 14 |
| 15 | Main Motors, Class & Voltage       | A.C. 275                 | A.C. 225                        | A.C. 285                    | A.C. 275                                |  |  |  | 15 |
| 16 | " " Make & Type                    | W. E. M. Co. 422-A       | G. E. Co. GEA 618-A             | A. B. B. Co. ELM 1051       | W. E. M. Co. 425A<br>G. E. Co. GEA 625A |  |  |  | 16 |
| 17 | " " Number of                      | 4                        | 4                               | 4                           | 4                                       |  |  |  | 17 |
| 18 | " " Ventilation                    | Forced                   | Forced                          | Forced                      | Forced                                  |  |  |  | 18 |
| 19 | " " Gear Ratio                     | 31-91                    | 36-103                          | 49-114                      | 31-91                                   |  |  |  | 19 |
| 20 | " " Gear, Type of                  | Spur                     | Spur                            | Spur                        | Spur                                    |  |  |  | 20 |
| 21 | " " Rotor, Diam. In.               | 37.372                   | 37.48                           | 41.5                        | 37.465                                  |  |  |  | 21 |
| 22 | " " Rotor, Weight Lb.              | 5139                     | 5700                            | 6500                        | 5544                                    |  |  |  | 22 |
| 23 | " " Weight Lb.                     | 28500                    | 30500                           | 27670                       | 30000                                   |  |  |  | 23 |
| 24 | Control, Master Type               | Electro Pneumatic        | Electro Pneumatic               | Electro & Electro Pneumatic | Electro Pneumatic                       |  |  |  | 24 |
| 25 | " Master, Oper. Cur.               | 32 V                     | 32 V                            | 32 V                        | 32 V                                    |  |  |  | 25 |
| 26 | " Main Type                        | Transformer Tap Switches | Transformer Tap Switches        | Transformer Tapping Switch  | Transformer Tap Switches                |  |  |  | 26 |
| 27 | Compressors, No. and Type          | 1 6BM-150 3-Stage        | 1 6BM-150 3-Stage               | 1 6BM-150 3-Stage           | 1-CA-150-A 2-Stage                      |  |  |  | 27 |
| 28 | " Capacity Cu. Ft.                 | 150                      | 150                             | 150                         | 150                                     |  |  |  | 28 |
| 29 | Main Blowers, No. and H.P.         | 2-28<br>1-16             | 3-15                            | 3-15                        | 3-18½                                   |  |  |  | 29 |
| 30 | " Capacity Cu. Ft.                 | 12000<br>10000           | 10000                           | 10000                       | 10750<br>8000                           |  |  |  | 30 |
| 31 | Wt. on Rail, End Truck No. 1 Lb.   | 80500                    | 74600                           | 75300                       | 75000                                   |  |  |  | 31 |
| 32 | " " " 1st Drivers Lb.              | 73000                    | 76300                           | 75200                       | 75000                                   |  |  |  | 32 |
| 33 | " " " 2nd Drivers Lb.              | 75000                    | 79800                           | 75200                       | 75000                                   |  |  |  | 33 |
| 34 | " " " 3rd Drivers Lb.              | —                        | —                               | —                           | —                                       |  |  |  | 34 |
| 35 | " " " 4th Drivers Lb.              | —                        | —                               | —                           | —                                       |  |  |  | 35 |
| 36 | " " " 5th Drivers Lb.              | —                        | —                               | —                           | —                                       |  |  |  | 36 |
| 37 | " " " 6th Drivers Lb.              | —                        | —                               | —                           | —                                       |  |  |  | 37 |
| 38 | " " " 7th Drivers Lb.              | —                        | —                               | —                           | —                                       |  |  |  | 38 |
| 39 | " " " 8th Drivers Lb.              | —                        | —                               | —                           | —                                       |  |  |  | 39 |
| 40 | " " " All Drivers Lb.              | 148500                   | 156100                          | 150400                      | 150000                                  |  |  |  | 40 |
| 41 | " " " End Truck No. 2 Lb.          | 78000                    | 78700                           | 76000                       | 75000                                   |  |  |  | 41 |
| 42 | Wt. of Engine, Total Lb.           | 307000                   | 309400                          | 301700                      | 300000                                  |  |  |  | 42 |
| 43 | " " Mechanical Parts Lb.           | 198000                   | 199000                          | 200000                      | 196000                                  |  |  |  | 43 |
| 44 | " " Equipment Parts* Lb.           | 102000                   | 101000                          | 100000                      | 104000                                  |  |  |  | 44 |
| 45 | Rating Continuous, H.P. at Rail    | 2000                     | 2500                            | 2200                        | 2500                                    |  |  |  | 45 |
| 46 | " " Tractive Effort Lb.            | 13200                    | 14900                           | 17800                       | 14900                                   |  |  |  | 46 |
| 47 | " " Speed M.P.H.                   | 56                       | 63                              | 46                          | 63                                      |  |  |  | 47 |
| 48 | Ratio Wt. on Drivers to Cont. T.E. | 11.2                     | 10.4                            | 8.44                        | 10.0                                    |  |  |  | 48 |
| 49 | Max. Tractive Effort Lb.           | 33500                    | 33500                           | 33500                       | 33500                                   |  |  |  | 49 |
| 50 | Ratio Wt. on Drivers to Max. T.E.  | 4.43                     | 4.66                            | 4.78                        | 4.47                                    |  |  |  | 50 |
| 51 | Compressor H.P. Rating             | 38.5                     | 38.5                            | 38.5                        | 35                                      |  |  |  | 51 |
| 52 | Maximum Speed M.P.H.               | 90                       | 90                              | 90                          | 90                                      |  |  |  | 52 |

\*Includes all Electrical Equipment, and Air Brake Parts Except Foundation Brake, and Air Brake Cylinder.

†Including Window Guards.

## ELECTRIC LOCOMOTIVES

|    | P 5                                   | P 5 A                                 |  |  | ODD<br>3951                 |  |  |  |    |
|----|---------------------------------------|---------------------------------------|--|--|-----------------------------|--|--|--|----|
| 1  | 4-6-4                                 | 4-6-4                                 |  |  | 0-4+4-0                     |  |  |  | 1  |
| 2  | 36-72-36                              | 36-72-36                              |  |  | 56                          |  |  |  | 2  |
| 3  | 6 x 9 Tim.                            | 6 x 9 Tim.                            |  |  | —                           |  |  |  | 3  |
| 4  | 8½ x 12½ Tim                          | 8½ x 12½ Tim                          |  |  | 6 x 11                      |  |  |  | 4  |
| 5  | —                                     | —                                     |  |  | —                           |  |  |  | 5  |
| 6  | 20-0                                  | 20-0                                  |  |  | 8-6                         |  |  |  | 6  |
| 7  | 49-10                                 | 49-10                                 |  |  | 26-1                        |  |  |  | 7  |
| 8  | 62-8                                  | 62-8                                  |  |  | 38-9                        |  |  |  | 8  |
| 9  | 10-8½                                 | 10-8½                                 |  |  | 10-1½                       |  |  |  | 9  |
| 10 | 12-8                                  | 12-8                                  |  |  | 14-1½                       |  |  |  | 10 |
| 11 | 15-0                                  | 15-0                                  |  |  | 14-8½                       |  |  |  | 11 |
| 12 | Flexible Spring & Fletcher            | Flexible Spring                       |  |  | Gearless                    |  |  |  | 12 |
| 13 | Pantograph                            | Pantograph                            |  |  | 3rd Rail                    |  |  |  | 13 |
| 14 | 11,000—25 Cycle                       | 11,000—25 Cycle                       |  |  | 650 D.C.                    |  |  |  | 14 |
| 15 | A.C. 275                              | A.C. 275                              |  |  | D.C. 325                    |  |  |  | 15 |
| 16 | W. E. M. Co. 425A<br>G.E. Co. GEA825A | W. E. M. Co. 425A<br>G.E. Co. GEA825A |  |  | Westinghouse<br>2-103 2-129 |  |  |  | 16 |
| 17 | 6                                     | 6                                     |  |  | 4                           |  |  |  | 17 |
| 18 | Forced                                | Forced                                |  |  | Forced                      |  |  |  | 18 |
| 19 | 31-91                                 | 31-91                                 |  |  | —                           |  |  |  | 19 |
| 20 | Spur                                  | Spur                                  |  |  | —                           |  |  |  | 20 |
| 21 | 37.465                                | 37.465                                |  |  |                             |  |  |  | 21 |
| 22 | 5544                                  | 5544                                  |  |  |                             |  |  |  | 22 |
| 23 | 30000                                 | 30000                                 |  |  |                             |  |  |  | 23 |
| 24 | Electro<br>Pneumatic                  | Electro<br>Pneumatic                  |  |  | Electro<br>Pneumatic        |  |  |  | 24 |
| 25 | 32V                                   | 32V                                   |  |  | 20 V.                       |  |  |  | 25 |
| 26 | Transformer<br>Tap Switches           | Transformer<br>Tap Switches           |  |  | Grids                       |  |  |  | 26 |
| 27 | 1 CA 150-A<br>2-Stage                 | 1-CA-150-A<br>2-Stage                 |  |  | 1-C-60<br>2-Stage           |  |  |  | 27 |
| 28 | 150                                   | 150                                   |  |  | 60                          |  |  |  | 28 |
| 29 | 4-18½                                 | 3-35<br>1-18½                         |  |  |                             |  |  |  | 29 |
| 30 | 10750<br>8000                         | 11000<br>10750                        |  |  |                             |  |  |  | 30 |
| 31 | 75000                                 | 70000                                 |  |  | —                           |  |  |  | 31 |
| 32 | 75000                                 | 82000                                 |  |  | 51090                       |  |  |  | 32 |
| 33 | 75000                                 | 82000                                 |  |  | 47950                       |  |  |  | 33 |
| 34 | 75000                                 | 82000                                 |  |  | 45180                       |  |  |  | 34 |
| 35 | —                                     | —                                     |  |  | 50920                       |  |  |  | 35 |
| 36 | —                                     | —                                     |  |  | —                           |  |  |  | 36 |
| 37 | —                                     | —                                     |  |  | —                           |  |  |  | 37 |
| 38 | —                                     | —                                     |  |  | —                           |  |  |  | 38 |
| 39 | —                                     | —                                     |  |  | —                           |  |  |  | 39 |
| 40 | 225000                                | 246000                                |  |  | 195140                      |  |  |  | 40 |
| 41 | 75000                                 | 70000                                 |  |  | —                           |  |  |  | 41 |
| 42 | 375000                                | 386000                                |  |  | 195140                      |  |  |  | 42 |
| 43 | 227000                                | 227000                                |  |  | 100000                      |  |  |  | 43 |
| 44 | 148000                                | 148000                                |  |  | 95140                       |  |  |  | 44 |
| 45 | 3750                                  | 3750                                  |  |  | 423                         |  |  |  | 45 |
| 46 | 22300                                 | 22300                                 |  |  | 10940                       |  |  |  | 46 |
| 47 | 63                                    | 63                                    |  |  | 14.5                        |  |  |  | 47 |
| 48 | 10.0                                  | 11.0                                  |  |  | 17.8                        |  |  |  | 48 |
| 49 | 50250                                 | 56250                                 |  |  | 38400                       |  |  |  | 49 |
| 50 | 4.47                                  | 4.37                                  |  |  | 5.08                        |  |  |  | 50 |
| 51 | 35                                    | 35                                    |  |  |                             |  |  |  | 51 |
| 52 | 90                                    | 90                                    |  |  |                             |  |  |  | 52 |

## LONG ISLAND R. R.—ELECTRIC LOCOMOTIVES

|    | CLASSIFICATION                     | A 1                                 | A A 1                | A A 2                          | A A 3                  | A A 4                  |  |  |    |
|----|------------------------------------|-------------------------------------|----------------------|--------------------------------|------------------------|------------------------|--|--|----|
| 1  | Wheel Arrangement                  | 0-4-0                               | 0-4-4-0              | 0-4-4-0                        | 0-4-4-0                | 0-4-0+0-4-0            |  |  | 1  |
| 2  | " Diameters In.                    | 33                                  | 56                   | 36                             | 40                     | 38                     |  |  | 2  |
| 3  | Journal, End Trucks In.            |                                     |                      |                                |                        |                        |  |  | 3  |
| 4  | " Drivers In.                      | 5 x 9                               | 6 x 11½              | 6½ x 12                        | 8 x 14                 | 6 x 11                 |  |  | 4  |
| 5  | " Inside Trucks In.                |                                     |                      |                                |                        |                        |  |  | 5  |
| 6  | Wheel Base, Rigid Ft. In.          | 6-0                                 | 26-1                 | 36-2                           | 28-4                   | 9-6                    |  |  | 6  |
| 7  | " " Total Ft. In.                  | 6-0                                 | 26-1                 | 36-2                           | 28-4                   | 32-2                   |  |  | 7  |
| 8  | Length Coupled Ft. In.             | 13-6                                | 38-9                 | 46-4½                          | 40-0                   | 46-10                  |  |  | 8  |
| 9  | Width, Maximum† Ft. In.            | 9-4½                                | 10-1½                | 10-2                           | 10-2                   | 10-2                   |  |  | 9  |
| 10 | Max. Ht. Over Cab Ft. In.          | 10-8                                | 13-4                 | 12-7½                          | 14-10<br>Total Height  | 14-11<br>Total Height  |  |  | 10 |
| 11 | Max. Ht. Trolley Down Ft. In.      | 12-2                                | 13-4                 | 14-10<br>Total Height          |                        |                        |  |  | 11 |
| 12 | Drive, Type of                     | Gears                               | Gears                | Gears                          | Gears                  | Gears                  |  |  | 12 |
| 13 | Current Collectors                 | 3rd Rail Shoe<br>S. Battery         | 3rd Rail<br>Shoes    | Oil Engine<br>Generator        | 4-C-Diesel<br>Electric | 4-C-Diesel<br>Electric |  |  | 13 |
| 14 | Line Voltage                       | 650 D. C. Rail<br>300 D. C. Battery | 650 D.C.             | 600 D.C.                       | 600 D.C.               | 600 D.C.               |  |  | 14 |
| 15 | Main Motors, Class & Voltage       | 600 & 300                           | D.C. 600             | D.C. 600                       | 600 D.C.               | 750<br>Max.            |  |  | 15 |
| 16 | " " Make & Type                    | Westinghouse<br>562-A               | Westinghouse<br>98   | G.E. 69                        | G. E. 287<br>D. C.     | W. E.<br>308-II        |  |  | 16 |
| 17 | " " Number of                      | 2                                   | 4                    | 4                              | 4                      | 4                      |  |  | 17 |
| 18 | " " Ventilation                    | Natural                             | Forced               | Natural                        | Natural                | Natural                |  |  | 18 |
| 19 | " " Gear Ratio                     | 15 to 62                            | 22 to 70             | 16 to 70                       | 16 to 68               | 16 to 66               |  |  | 19 |
| 20 | " " Gear, Type of                  | Helical                             | Spur                 | Spur                           | Spur                   | Spur                   |  |  | 20 |
| 21 | " " Rotor, Diam. In.               |                                     |                      |                                |                        |                        |  |  | 21 |
| 22 | " " Rotor, Weight Lb.              |                                     |                      |                                |                        |                        |  |  | 22 |
| 23 | " " Weight Lb.                     |                                     |                      |                                |                        |                        |  |  | 23 |
| 24 | Control, Master Type               | Electro<br>Pneumatic                | Electro<br>Pneumatic | Electro<br>Pneumatic           | Electro<br>Pneumatic   | Electro<br>Pneumatic   |  |  | 24 |
| 25 | " Master, Oper. Cur.               | 32 V.                               | 14                   | 32 V.                          | 32 V.                  | 64 V.                  |  |  | 25 |
| 26 | " Main Type                        | Grids                               | Grids                | Generator<br>Winding           | Generator<br>Winding   | Generator<br>Winding   |  |  | 26 |
| 27 | Compressors, No. and Type          | 1-DH 16                             | 4-D-2-EZ             | 1-G. E. CP-30<br>1-G. E. CP-36 | 2-2-CP-26              | 4-D.H.-20              |  |  | 27 |
| 28 | " Capacity Cu. Ft.                 | 16                                  | 22.5                 | 100<br>50                      | 100                    | 80                     |  |  | 28 |
| 29 | Main Blowers, No. and H.P.         |                                     |                      |                                |                        |                        |  |  | 29 |
| 30 | " " Capacity Cu. Ft.               |                                     |                      |                                |                        |                        |  |  | 30 |
| 31 | Wt. on Rail, End Truck No. 1 Lb.   |                                     |                      |                                |                        |                        |  |  | 31 |
| 32 | " " " 1st Drivers Lb.              | 25000                               | 43950                | 50825                          | 54500                  | 43500                  |  |  | 32 |
| 33 | " " " 2nd Drivers Lb.              | 25000                               | 43950                | 50825                          | 54500                  | 43500                  |  |  | 33 |
| 34 | " " " 3rd Drivers Lb.              |                                     | 43950                | 50825                          | 54500                  | 43500                  |  |  | 34 |
| 35 | " " " 4th Drivers Lb.              |                                     | 43950                | 50825                          | 54500                  | 43500                  |  |  | 35 |
| 36 | " " " 5th Drivers Lb.              |                                     |                      |                                |                        |                        |  |  | 36 |
| 37 | " " " 6th Drivers Lb.              |                                     |                      |                                |                        |                        |  |  | 37 |
| 38 | " " " 7th Drivers Lb.              |                                     |                      |                                |                        |                        |  |  | 38 |
| 39 | " " " 8th Drivers Lb.              |                                     |                      |                                |                        |                        |  |  | 39 |
| 40 | " " " All Drivers Lb.              | 50000                               | 175800               | 203300                         | 218000                 | 174000                 |  |  | 40 |
| 41 | " " " End Truck No. 2 Lb.          |                                     |                      |                                |                        |                        |  |  | 41 |
| 42 | Wt. of Engine, Total Lb.           | 50000                               | 175800               | 203300                         | 218000                 | 174000                 |  |  | 42 |
| 43 | " " Mechanical Parts Lb.           | 30500                               | 114640               |                                |                        |                        |  |  | 43 |
| 44 | " " Equipment Parts* Lb.           | 19500                               | 61160                |                                |                        |                        |  |  | 44 |
| 45 | Rating Continuous H.P. at Rail     | 65                                  | 560                  |                                |                        | 450                    |  |  | 45 |
| 46 | " " Tractive Effort Lb.            | 2800                                | 8400                 | 12600                          |                        | 6500                   |  |  | 46 |
| 47 | " " Speed M.P.H.                   | 8.7                                 | 25                   | 13                             |                        | 26                     |  |  | 47 |
| 48 | Ratio Wt. on Drivers to Cont. T.E. | 17.8                                | 20.9                 | 16                             |                        | 26.7                   |  |  | 48 |
| 49 | Max. Tractive Effort Lb.           | 15000                               | 43950                | 60000                          | 60000                  | 49500                  |  |  | 49 |
| 50 | Ratio Wt. on Drivers to Max. T.E.  | 3.33                                | 4.0                  | 3.38                           | 3.63                   | 3.51                   |  |  | 50 |
| 51 | Compressor H.P. Rating             |                                     |                      |                                |                        |                        |  |  | 51 |
| 52 | Maximum Speed M.P.H.               |                                     |                      |                                |                        | 30                     |  |  | 52 |

\*Includes all Electrical Equipment and Air Brake Parts Except Foundation Brake, and Air Brake Cylinder.

†Including Window Guards.

**LONG ISLAND R. R.—ELECTRIC LOCOMOTIVES**

|    | B 3                         |  |  | D D 1                         |  |  |  |  |  |    |
|----|-----------------------------|--|--|-------------------------------|--|--|--|--|--|----|
| 1  | 0-6-0                       |  |  | 4-4-0-0-4-4                   |  |  |  |  |  | 1  |
| 2  | 62                          |  |  | 36-72-36                      |  |  |  |  |  | 2  |
| 3  |                             |  |  | 6½ x 12                       |  |  |  |  |  | 3  |
| 4  | 6½ x 12                     |  |  | 10 x 13½                      |  |  |  |  |  | 4  |
| 5  |                             |  |  | —                             |  |  |  |  |  | 5  |
| 6  | 12-8                        |  |  | 7-2                           |  |  |  |  |  | 6  |
| 7  | 12-8                        |  |  | 55-11                         |  |  |  |  |  | 7  |
| 8  | 31-6                        |  |  | 64-11                         |  |  |  |  |  | 8  |
| 9  | 10-1                        |  |  | 11-2½                         |  |  |  |  |  | 9  |
| 10 | 14-4½                       |  |  | 14-8½                         |  |  |  |  |  | 10 |
| 11 | 15-0                        |  |  | 14-8½                         |  |  |  |  |  | 11 |
| 12 | Gears                       |  |  | Jack Shaft                    |  |  |  |  |  | 12 |
| 13 | Pantograph                  |  |  | 3rd Rail Shoes and Pantograph |  |  |  |  |  | 13 |
| 14 | 11000 A.C.                  |  |  | 650 D. C.                     |  |  |  |  |  | 14 |
| 15 | A.C. 235                    |  |  | D. C. 650                     |  |  |  |  |  | 15 |
| 16 | W. E.<br>137-B              |  |  | Westinghouse<br>315-A         |  |  |  |  |  | 16 |
| 17 | 3                           |  |  | 2                             |  |  |  |  |  | 17 |
| 18 | Forced                      |  |  | Natural                       |  |  |  |  |  | 18 |
| 19 | 16 to 87                    |  |  | —                             |  |  |  |  |  | 19 |
| 20 | Spur                        |  |  | —                             |  |  |  |  |  | 20 |
| 21 | 36                          |  |  | 56                            |  |  |  |  |  | 21 |
| 22 | 5400                        |  |  |                               |  |  |  |  |  | 22 |
| 23 | 13060                       |  |  |                               |  |  |  |  |  | 23 |
| 24 | Electro<br>Pneumatic        |  |  | Electro<br>Pneumatic          |  |  |  |  |  | 24 |
| 25 | 32 V.                       |  |  | 20V                           |  |  |  |  |  | 25 |
| 26 | Transformer<br>and Switches |  |  | Grids                         |  |  |  |  |  | 26 |
| 27 | 1-C-75<br>2-Stage           |  |  | 2-C-80<br>2-Stage             |  |  |  |  |  | 27 |
| 28 | 75                          |  |  | 60                            |  |  |  |  |  | 28 |
| 29 | 1-10                        |  |  | —                             |  |  |  |  |  | 29 |
| 30 |                             |  |  | —                             |  |  |  |  |  | 30 |
| 31 |                             |  |  | 57000                         |  |  |  |  |  | 31 |
| 32 | 53000                       |  |  | 49750                         |  |  |  |  |  | 32 |
| 33 | 55000                       |  |  | 49750                         |  |  |  |  |  | 33 |
| 34 | 50000                       |  |  | 49750                         |  |  |  |  |  | 34 |
| 35 |                             |  |  | 49750                         |  |  |  |  |  | 35 |
| 36 |                             |  |  | —                             |  |  |  |  |  | 36 |
| 37 |                             |  |  | —                             |  |  |  |  |  | 37 |
| 38 |                             |  |  | —                             |  |  |  |  |  | 38 |
| 39 |                             |  |  | —                             |  |  |  |  |  | 39 |
| 40 | 158000                      |  |  | 199000                        |  |  |  |  |  | 40 |
| 41 |                             |  |  | —                             |  |  |  |  |  | 41 |
| 42 | 158000                      |  |  | 313000                        |  |  |  |  |  | 42 |
| 43 |                             |  |  | 194000                        |  |  |  |  |  | 43 |
| 44 |                             |  |  | 119000                        |  |  |  |  |  | 44 |
| 45 | 570                         |  |  | 1580                          |  |  |  |  |  | 45 |
| 46 | 13500                       |  |  | 10200                         |  |  |  |  |  | 46 |
| 47 | 15.9                        |  |  | 58                            |  |  |  |  |  | 47 |
| 48 | 11.7                        |  |  | 19.5                          |  |  |  |  |  | 48 |
| 49 | 50000                       |  |  | 66000                         |  |  |  |  |  | 49 |
| 50 | 3.16                        |  |  | 3.02                          |  |  |  |  |  | 50 |
| 51 | 16.25                       |  |  |                               |  |  |  |  |  | 51 |
| 52 | 25                          |  |  | 80                            |  |  |  |  |  | 52 |

## Tenders—Classification and Description

In this classification, tenders are given a primary number to designate the approximate water capacity in hundreds of gallons for the original design, a letter to denote the service, another number to indicate the height of deck in even inches above the rail, small suffix letters are used to indicate modifications in class of tender.

Thus: 70 F 66 indicates 7000 gallons of water, freight tender, and 66" deck; while 70 F 66a indicates a change of original design.

Heights given above rail are for empty tenders.

Coal capacity is heaped load.

The letter "P" represents "Passenger Service."

The letter "F" represents "Freight Service."

The letter "S" represents "Switching Service."

Tender trucks are classified with five symbols as follows:

1. Number of axles per truck.

2. A. R. A. Axle classification as follows:

| A. R. A. Class    | C       | D         | E        | F         |
|-------------------|---------|-----------|----------|-----------|
| Size of Journal   | 5" x 9" | 5½" x 10" | 6" x 11" | 6½" x 12" |
| Capacity per Axle | 32000   | 40000     | 50000    | 60000     |

3. Dash for standard A. R. A. axle or number for deviation therefrom.

4. "T" indicating tender truck.

5. Serial number of design.

Thus: 2F-T2 indicates truck with two axles having 6½" x 12" journals A. R. A. standard, designed for tender service and the second design for same capacity and service.

Class 55 P 55a, formerly 5500 gallons, 54½" deck. 14'-8" T. C. Channel Frame—Lines East.  
 Class 55 P 58a, formerly 5500 gallons, 58" deck. 14'-8" T. C. Channel Frame—Lines East.  
 Class 55 P 58b, formerly 5500 gallons, 58" deck. 14'-8" T. C. H-Beam Frame—Lines East.  
 Class 55 S 66a, formerly 5500 gallons sloping, 66" deck. Channel Frame—Lines East. Also 5A Lines West.  
 Class 55 S 66b, formerly 5500 gallons sloping, 66" deck. H-Beam Frame—Lines East.  
 Class 55 S 66c, formerly class 3A—Lines West—Straight Tender.  
 Class 55 S 66d, formerly class 3A—Lines West—Straight Tender.  
 Class 55 S 66e, formerly class 5A—Lines West—24" Steel Side boards.

Class 60 S 66, formerly 6000 gallons sloping, 66" deck. Channel Frame—Lines East.  
 Class 60 S 66a, formerly 6000 gallons sloping, 66" deck. H-Beam Frame—Lines East.

Class 70 P 55, formerly 7000 gallons, 54½" deck. 14'-8" T. C. Channel Frame—Lines East.  
 Class 70 P 55a, formerly 7000 gallons, 54½" deck. 17'-8" T. C. Channel Frame—Lines East.  
 Class 70 P 58, formerly 7000 gallons, 58" deck. 14'-8" T. C.  
 Class 70 P 58a, formerly 7000 gallons, 58" deck. 17'-8" T. C. Channel Frame—Lines East.  
 Class 70 P 58b, formerly 7000 gallons, 58" deck. 17'-8" T. C. H-Beam Frame—Lines East.  
 Class 70 P 58c, formerly 3B1, 3B2—Lines West—Channel Frame.  
 Class 70 P 58f,  
 Class 70 F 66, formerly 7000 gallons, 66" deck. 14'-8" T. C. Narrow Frame—Lines East.  
 Class 70 F 66a, formerly 7000 gallons, 66" deck. 14'-8" T. C. Channel Frame—Lines East.  
 Class 70 F 66b, formerly 7000 gallons, 66" deck. 17'-8" T. C. Channel Frame—Lines East.  
 Class 70 F 66c, formerly 3C—Lines West.  
 Class 70 F 66d, formerly 3C1, 3C2—Lines West—Narrow Frame.  
 Class 70 F 66e, formerly 3C1, 3C2—Lines West—Channel Frame.

|                 |                                                                                        |
|-----------------|----------------------------------------------------------------------------------------|
| Class 70 F 66f, | formerly 7000 gallons, 66" deck. 14'-8" T. C. Narrow Frame—Lines East.                 |
| Class 70 F 66g, | formerly 7000 gallons, 66" deck. 14'-8" T. C. Channel Frame—Lines East.                |
| Class 70 F 66h, | formerly 7000 gallons, 66" deck. 14'-8" T. C. H-Beam Frame—Lines East.                 |
| Class 70 F 66k, | formerly 7000 gallons, 66" deck. 14'-8" T. C. H-Beam Frame—Lines East.                 |
| Class 70 F 66m, | formerly 3C—Lines West—H-Beam Frame.                                                   |
| Class 70 P 66,  | formerly 7000 gallons, 66" deck. 17'-8" T. C. Channel Frame—Lines East.                |
| Class 70 P 66a, | formerly 7000 gallons, 66" deck. 17'-8" T. C. H-Beam Frame—Lines East.                 |
| Class 70 P 66b, | formerly 3C—Lines West—Narrow Frame.                                                   |
| Class 70 P 66c, | formerly 3C1, 3C2—Lines West—Channel Frame.                                            |
| Class 70 P 66d, | formerly 7000 gallons, 66" deck. 14'-8" T. C. Narrow Frame—Lines East.                 |
| Class 70 P 66e, | formerly 7000 gallons, 66" deck. 14'-8" T. C. Channel Frame—Lines East.                |
| Class 70 P 66f, |                                                                                        |
| Class 70 P 66g, | formerly 7000 gallons, 66" deck. 14'-8" T. C. Channel Frame—Lines East.                |
| Class 70 P 66h, | formerly 7000 gallons, 66" deck. 14'-8" T. C. H-Beam Frame—Lines East.                 |
| Class 70 S 66   | converted for switching service with "C1" Locomotives.<br>Straight Tenders.            |
| Class 70 S 66a  |                                                                                        |
| Class 70 S 66b  |                                                                                        |
| Class 70 S 66c  |                                                                                        |
| Class 70 F 70,  | formerly 7000 gallons, 70" deck. 14'-8" T. C. Channel Frame—Lines East.                |
| Class 70 F 70a, | formerly 7000 gallons, 70" deck. 17'-8" T. C. Channel Frame—Lines East.                |
| Class 70 F 70b, | formerly 7000 gallons, 70" deck. 17'-8" T. C. H-Beam Frame—Lines East.                 |
| Class 70 F 70c, | formerly 3D—Lines West.                                                                |
| Class 70 F 70d, | formerly 7000 gallons, 70" deck. 14'-8" T. C. H-Beam Frame—Lines East.                 |
| Class 70 F 70e  |                                                                                        |
| Class 70 F 70f  |                                                                                        |
| Class 70 P 70,  | formerly 7000 gallons, 70" deck. 17'-8" T. C. Channel Frame—Lines East.                |
| Class 70 P 70a, | formerly 7000 gallons, 70" deck. 17'-8" T. C. H-Beam Frame—Lines East.                 |
| Class 70 P 70b, | formerly 7000 gallons, 70" deck. 17'-8" T. C. H-Beam Frame—Lines East.                 |
| Class 70 P 70c, | formerly 7000 gallons, 70" deck. 14'-8" T. C. Channel Frame—Lines East.                |
| Class 70 P 70d, |                                                                                        |
| Class 70 F 77,  | formerly 6A—Lines West—Channel Frame.                                                  |
| Class 70 F 77a, | formerly H9SC—Vandalia.                                                                |
| Class 70 F 77b, | formerly 6A—Lines West—H-Beam Frame.                                                   |
| Class 70 P 77,  | formerly 7000 gallons, 77 $\frac{1}{4}$ " deck. 17'-8" T. C. Channel Frame—Lines East. |
| Class 70 P 77a, | formerly 6A—Lines West.                                                                |
| Class 70 P 77c, | formerly 7000 gallons, 77 $\frac{1}{4}$ " deck. 17'-8" T. C. H-Beam Frame—Lines East.  |
| Class 70 P 77d, |                                                                                        |
| Class 70 P 77e, |                                                                                        |
| Class 70 P 78,  | formerly 7A—Lines West.                                                                |
| Class 70 P 82,  | formerly 7000 gallons, 82 $\frac{1}{4}$ " deck. 17'-8" T. C.—Lines East.               |
| Class 70 P 82a, |                                                                                        |
| Class 75 F 70a, | formerly 7500 gallons—Vandalia.                                                        |
| Class 80 S 65,  | formerly 8A, U. S. Standard—Straight Tender.                                           |
| Class 80 P 79,  | formerly (7B, Columbus)—Lines West.                                                    |
| Class 80 F 81,  | formerly (7B, Fort Wayne)—Lines West.                                                  |
| Class 80 P 81,  | formerly (7B, Fort Wayne)—Lines West.                                                  |
| Class 90 F 66,  | formerly 9000 gallons, 66" deck—Lines East.                                            |
| Class 90 F 66a, |                                                                                        |
| Class 90 F 75,  | formerly 9000 gallons, with Standard or Duplex Stoker. (Converted from 90-F-66.)       |
| Class 90 F 75a, | formerly 90 F 80 Modified.                                                             |
| Class 90 F 80,  | formerly 7D—Lines West.                                                                |

Class 90 F 82, formerly 9000 gallons, 82¼" deck. Lines East.  
 Class 90 P 70, formerly 90 F 82 modified.  
 Class 90 P 84, formerly 7E—Lines West.

Class 100 F 78, formerly 8C, U. S. Standard.  
 Class 100 F 85, formerly 7F—Lines West. Also CC2s.

Class 110 P 70,  
 Class 110 P 75,  
 Class 110 P 75a,  
 Class 110 P 82,  
 Class 110 P 82a,

Class 120 F 78, formerly 8B, U. S. Standard.

Class 130 P 70,  
 Class 130 F 82, formerly 13000 gallons, 82¼" deck—Lines East.  
 Class 130 F 82a,  
 Class 130 P 82,

Class 180 F 82,

Class 210 F 75,  
 Class 210 F 78,  
 Class 210 F 82,

Class 250 P 75,

## LONG ISLAND RAILROAD

### Tenders

Class 50P51A  
 Class 50P54A  
 Class 55P55  
 Class 60F60  
 Class 60F64  
 Class 60S68  
 Class 60S73  
 Class 60S73A

Class 70F66  
 Class 70F66B  
 Class 70F66G  
 Class 70P70E  
 Class 70P82  
 Class 70P82A  
 Class 110P82A



## TENDERS

|    | CLASSIFICATION                          | 55 P 55a | 55 P 58a | 55 P 58b | 55 S 66a | 55 S 66b |  |  |    |
|----|-----------------------------------------|----------|----------|----------|----------|----------|--|--|----|
| 1  | Water Capacity, Gallons                 | 5600     | 5800     |          | 5700     | 5700     |  |  | 1  |
| 2  | Coal " Pounds                           | 26000    | 31200    |          | 15150    | 14700    |  |  | 2  |
| 3  | Frame, Type of                          | Channel  | Channel  | H-Beam   | Channel  | H-Beam   |  |  | 3  |
| 4  | " Width Ft. In.                         | 9-8      | 9-8      | 9-8      | 9-8      | 9-8      |  |  | 4  |
| 5  | " Length Ft. In.                        | 26-3     | 26-3     | 26-3     | 26-3     | 26-3     |  |  | 5  |
| 6  | Truck Classification                    | 2D-T4    | 2D-T4    | 2D-T4    | 2D-T1    | 2D-T1    |  |  | 6  |
| 7  | " Type of                               | Pedestal | Pedestal | Pedestal | Diamond  | Diamond  |  |  | 7  |
| 8  | " Wheel Diameter In.                    | 36       | 36       | 36       | 36       | 36       |  |  | 8  |
| 9  | " " Base Ft. In.                        | 6-5      | 6-5      | 6-5      | 6-0      | 6-0      |  |  | 9  |
| 10 | " Size of Journal In.                   | 5½ x 10  | 5½ x 10  | 5½ x 10  | 5½ x 10  | 5½ x 10  |  |  | 10 |
| 11 | Length of Truck Centers Ft. In.         | 14-8     | 14-8     | 14-8     | 14-8     | 14-8     |  |  | 11 |
| 12 | " Front Truck to Chafing Plate Ft. In.  | 6-10     | 6-10     | 6-10     | 7-4      | 7-4      |  |  | 12 |
| 13 | " Rear Truck to Face of Coupler Ft. In. | 6-8½     | 6-8½     | 6-8½     | 6-8½     | 6-8½     |  |  | 13 |
| 14 | " of Tender, Total Ft. In.              | 28-2½    | 28-2½    | 28-2½    | 28-2½    | 28-2½    |  |  | 14 |
| 15 | " " Wheel Base Ft. In.                  | 21-1     | 21-1     | 21-1     | 20-8     | 20-8     |  |  | 15 |
| 16 | Height Rail to Center Plate In.         | 27½      | 27½      | 27½      | 27½      | 27½      |  |  | 16 |
| 17 | " " " Bottom of Frame In.               | 31       | 31       | 31       | 31       | 31       |  |  | 17 |
| 18 | " " " Bottom of Tank In.                | 44       | 44       | 44       | 44       | 44       |  |  | 18 |
| 19 | " " " Deck Plate In.                    | 54½      | 58       | 58       | 66       | 66       |  |  | 19 |
| 20 | Weight, Empty Lb.                       | 66800    | 72350    |          | 58500    | 59300    |  |  | 20 |
| 21 | " Loaded Lb.                            | 139000   | 151900   |          | 121150   | 121500   |  |  | 21 |
| 22 |                                         |          |          |          |          |          |  |  | 22 |
| 23 |                                         |          |          |          |          |          |  |  | 23 |
| 24 |                                         |          |          |          |          |          |  |  | 24 |
| 25 |                                         |          |          |          |          |          |  |  | 25 |

## TENDERS

|    | CLASSIFICATION                          | 55 S 66c | 55 S 66d | 55 S 66e |  |  |  |  |    |
|----|-----------------------------------------|----------|----------|----------|--|--|--|--|----|
| 1  | Water Capacity, Gallons                 | 6000     | 6150     | 5700     |  |  |  |  | 1  |
| 2  | Coal " Pounds                           | 22300    | 24400    | 17200    |  |  |  |  | 2  |
| 3  | Frame, Type of                          | Narrow   | Channel  | Channel  |  |  |  |  | 3  |
| 4  | " Width Ft. In.                         | 7-0      | 9-8      | 9-8      |  |  |  |  | 4  |
| 5  | " Length Ft. In.                        | 26-3     | 26-3     | 26-3     |  |  |  |  | 5  |
| 6  | Truck Classification                    | 2D-F1    | 2D-T1    | 2D-T1    |  |  |  |  | 6  |
| 7  | " Type of                               | Diamond  | Diamond  | Diamond  |  |  |  |  | 7  |
| 8  | " Wheel Diameter In.                    | 33       | 36       | 36       |  |  |  |  | 8  |
| 9  | " " Base Ft. In.                        | 5-6      | 6-0      | 6-0      |  |  |  |  | 9  |
| 10 | " Size of Journal In.                   | 5½ x 10  | 5½ x 10  | 5½ x 10  |  |  |  |  | 10 |
| 11 | Length of Truck Centers Ft. In.         | 14-8     | 14-8     | 14-8     |  |  |  |  | 11 |
| 12 | " Front Truck to Chafing Plate Ft. In.  | 6-10     | 6-10     | 6-10     |  |  |  |  | 12 |
| 13 | " Rear Truck to Face of Coupler Ft. In. | 6-8½     | 6-8½     | 6-8½     |  |  |  |  | 13 |
| 14 | " of Tender, Total Ft. In.              | 28-2½    | 28-2½    | 28-2½    |  |  |  |  | 14 |
| 15 | " " Wheel Base Ft. In.                  | 20-2     | 20-8     | 20-8     |  |  |  |  | 15 |
| 16 | Height Rail to Center Plate In.         | 28       | 27½      | 27½      |  |  |  |  | 16 |
| 17 | " " " Bottom of Frame In.               | 32½      | 31       | 31       |  |  |  |  | 17 |
| 18 | " " " Bottom of Tank In.                | 43½      | 44       | 44       |  |  |  |  | 18 |
| 19 | " " " Deck Plate In.                    | 66       | 66       | 66       |  |  |  |  | 19 |
| 20 | Weight, Empty Lb.                       | 46800    | 61900    | 58100    |  |  |  |  | 20 |
| 21 | " Loaded Lb.                            | 119100   | 137550   | 122800   |  |  |  |  | 21 |
| 22 |                                         |          |          |          |  |  |  |  | 22 |
| 23 |                                         |          |          |          |  |  |  |  | 23 |
| 24 |                                         |          |          |          |  |  |  |  | 24 |
| 25 |                                         |          |          |          |  |  |  |  | 25 |

## TENDERS

29

|    | 60 S 66 | 60 S 66a |  |  |  | 70 P 55  | 70 P 55a |  | 70 P 58  |    |
|----|---------|----------|--|--|--|----------|----------|--|----------|----|
| 1  | 6300    | 6350     |  |  |  | 7000     | 6700     |  |          | 1  |
| 2  | 12950   | 13200    |  |  |  | 37900    | 25900    |  |          | 2  |
| 3  | Channel | H-Beam   |  |  |  | Channel  | Channel  |  | Channel  | 3  |
| 4  | 9-8     | 9-8      |  |  |  | 9-8      | 9-8      |  | 9-8      | 4  |
| 5  | 26-3    | 26-3     |  |  |  | 26-3     | 29-3     |  | 26-3     | 5  |
| 6  | 2D-T1   | 2D-T1    |  |  |  | 2D-T3    | 2D-T4    |  | 2D-T4    | 6  |
| 7  | Diamond | Diamond  |  |  |  | Pedestal | Pedestal |  | Pedestal | 7  |
| 8  | 36      | 36       |  |  |  | 36       | 36       |  | 36       | 8  |
| 9  | 6-0     | 6-0      |  |  |  | 5-10     | 6-5      |  | 6-5      | 9  |
| 10 | 5½ x 10 | 5½ x 10  |  |  |  | 5½ x 10  | 5½ x 10  |  | 5½ x 10  | 10 |
| 11 | 14-8    | 14-8     |  |  |  | 14-8     | 17-8     |  | 14-8     | 11 |
| 12 | 7-4     | 7-4      |  |  |  | 6-10     | 6-10     |  | 6-10     | 12 |
| 13 | 6-8½    | 6-8½     |  |  |  | 6-8½     | 6-8½     |  | 6-8½     | 13 |
| 14 | 28-8½   | 28-8½    |  |  |  | 28-2½    | 31-2½    |  | 28-2½    | 14 |
| 15 | 20-8    | 20-8     |  |  |  | 20-6     | 24-1     |  | 21-1     | 15 |
| 16 | 27½     | 27½      |  |  |  | 27½      | 27½      |  | 27½      | 16 |
| 17 | 31      | 31       |  |  |  | 31       | 31       |  | 31       | 17 |
| 18 | 44      | 44       |  |  |  | 44       | 44       |  | 44       | 18 |
| 19 | 66      | 66       |  |  |  | 54½      | 54½      |  | 58       | 19 |
| 20 | 57950   | 58900    |  |  |  | 66100    | 74500    |  |          | 20 |
| 21 | 123500  | 125000   |  |  |  | 162350   | 156200   |  |          | 21 |
| 22 |         |          |  |  |  |          |          |  |          | 22 |
| 23 |         |          |  |  |  |          |          |  |          | 23 |
| 24 |         |          |  |  |  |          |          |  |          | 24 |
| 25 |         |          |  |  |  |          |          |  |          | 25 |

## TENDERS

|    | 70 P 58a | 70 P 58b | 70 P 58e | 70 P 58f          |  |  | 70 F 66 | 70 F 66a | 70 F 66b   |    |
|----|----------|----------|----------|-------------------|--|--|---------|----------|------------|----|
| 1  | 6800     | 6800     | 7300     | 7050              |  |  | 7200    | 7200     | 7100       | 1  |
| 2  | 34200    | 34700    | 33300    | 26200             |  |  | 29200   | 34350    | 36800      | 2  |
| 3  | Channel  | H-Beam   | Channel  | H-Beam            |  |  | Narrow  | Channel  | Channel    | 3  |
| 4  | 9-8      | 9-8      | 9-8      | 9-8               |  |  | 7-0     | 9-8      | 9-8        | 4  |
| 5  | 29-3     | 29-3     | 26-3     | 29-3              |  |  | 26-3    | 26-3     | 29-3       | 5  |
| 6  | 2D-T4    | 2D-T4    | 2D-T3    | 2D-T4             |  |  | 2D-F1   | 2D-F1    | 2E-T2      | 6  |
| 7  | Pedestal | Pedestal | Pedestal | Pedestal          |  |  | Diamond | Diamond  | Crown S.C. | 7  |
| 8  | 36       | 36       | 36       | 36                |  |  | 33      | 33       | 33         | 8  |
| 9  | 6-5      | 6-5      | 5-10     | 6-5               |  |  | 5-6     | 5-6      | 5-10       | 9  |
| 10 | 5½ x 10  | 5½ x 10  | 5½ x 10  | 6 x 11<br>5½ x 10 |  |  | 5½ x 10 | 5½ x 10  | 6 x 11     | 10 |
| 11 | 17-8     | 17-8     | 14-8     | 17-8              |  |  | 14-8    | 14-8     | 17-8       | 11 |
| 12 | 6-10     | 6-10     | 6-10     | 6-10              |  |  | 6-10    | 6-10     | 6-10       | 12 |
| 13 | 6-8½     | 6-8½     | 6-8½     | 6-8½              |  |  | 6-8½    | 6-8½     | 6-8½       | 13 |
| 14 | 31-2½    | 31-2½    | 28-2½    | 31-2½             |  |  | 28-2½   | 28-2½    | 31-2½      | 14 |
| 15 | 24-1     | 24-1     | 20-6     | 24-1              |  |  | 20-2    | 20-2     | 23-6       | 15 |
| 16 | 27½      | 27½      | 27½      | 27½               |  |  | 28      | 27½      | 27½        | 16 |
| 17 | 31       | 31       | 31       | 31                |  |  | 32½     | 31       | 31         | 17 |
| 18 | 44       | 44       | 44       | 44                |  |  | 43½     | 44       | 44         | 18 |
| 19 | 58       | 58       | 58       | 58                |  |  | 66      | 66       | 66         | 19 |
| 20 | 75800    | 77800    | 68200    | 77750             |  |  | 49600   | 58650    | 68500      | 20 |
| 21 | 166700   | 169200   | 162300   | 162650            |  |  | 138800  | 153000   | 164400     | 21 |
| 22 |          |          |          |                   |  |  |         |          |            | 22 |
| 23 |          |          |          |                   |  |  |         |          |            | 23 |
| 24 |          |          |          |                   |  |  |         |          |            | 24 |
| 25 |          |          |          |                   |  |  |         |          |            | 25 |

## TENDERS

|    | CLASSIFICATION                          | 70 F 66c | 70 F 66d | 70 F 66e | 70 F 66f | 70 F 66g | 70 F 66h | 70 F 66k |    |
|----|-----------------------------------------|----------|----------|----------|----------|----------|----------|----------|----|
| 1  | Water Capacity, Gallons                 | 7300     | 7300     | 7300     | 7400     | 7200     | 7400     |          | 1  |
| 2  | Coal " Pounds                           | 30400    | 32400    | 30800    | 29500    | 29500    | 31900    |          | 2  |
| 3  | Frame, Type of                          | Narrow   | Narrow   | Channel  | Narrow   | Channel  | H-Beam   | H-Beam   | 3  |
| 4  | " Width Ft. In.                         | 7-0      | 7-0      | 9-8      | 7-0      | 9-8      | 9-8      | 9-8      | 4  |
| 5  | " Length Ft. In.                        | 26-3     | 26-3     | 26-3     | 26-3     | 26-3     | 26-3     | 26-3     | 5  |
| 6  | Truck Classification                    | 2D-F1    | 2D-F1    | 2D-F1    | 2D-F1    | 2D-F1    | 2D-F1    | 2D-F1    | 6  |
| 7  | " Type of                               | Diamond  | Diamond  | Diamond  | Diamond  | Diamond  | Diamond  | Diamond  | 7  |
| 8  | " Wheel Diameter In.                    | 33       | 33       | 33       | 33       | 33       | 33       | 33       | 8  |
| 9  | " " Base Ft. In.                        | 5-6      | 5-6      | 5-6      | 5-6      | 5-6      | 5-6      | 5-6      | 9  |
| 10 | " Size of Journal In.                   | 5½ x 10  | 5½ x 10  | 5½ x 10  | 5½ x 10  | 5½ x 10  | 5½ x 10  | 5½ x 10  | 10 |
| 11 | Length of Truck Centers Ft. In.         | 14-8     | 14-8     | 14-8     | 14-8     | 14-8     | 14-8     | 14-8     | 11 |
| 12 | " Front Truck to Chafing Plate Ft. In.  | 6-10     | 6-10     | 6-10     | 6-10     | 6-10     | 6-10     | 6-10     | 12 |
| 13 | " Rear Truck to Face of Coupler Ft. In. | 6-8½     | 6-8½     | 6-8½     | 6-8½     | 6-8½     | 6-8½     | 6-8½     | 13 |
| 14 | " of Tender, Total Ft. In.              | 28-2½    | 28-2½    | 28-2½    | 28-2½    | 28-2½    | 28-2½    | 28-2½    | 14 |
| 15 | " " Wheel Base Ft. In.                  | 20-2     | 20-2     | 20-2     | 20-2     | 20-2     | 20-2     | 20-2     | 15 |
| 16 | Height Rail to Center Plate In.         | 28       | 28       | 27½      | 28       | 27½      | 27½      | 27½      | 16 |
| 17 | " " " Bottom of Frame In.               | 32½      | 32½      | 31       | 32½      | 31       | 31       | 31       | 17 |
| 18 | " " " Bottom of Tank In.                | 43½      | 43½      | 44       | 43½      | 44       | 44       | 44       | 18 |
| 19 | " " " Deck Plate In.                    | 66       | 66       | 66       | 66       | 66       | 66       | 66       | 19 |
| 20 | Weight, Empty Lb.                       | 49050    | 54000    | 58400    | 51000    | 56500    | 54500    |          | 20 |
| 21 | " Loaded Lb.                            | 140250   | 147200   | 150000   | 142200   | 146000   | 148300   |          | 21 |
| 22 |                                         |          |          |          |          |          |          |          | 22 |
| 23 |                                         |          |          |          |          |          |          |          | 23 |
| 24 |                                         |          |          |          |          |          |          |          | 24 |
| 25 |                                         |          |          |          |          |          |          |          | 25 |

## TENDERS

|    | CLASSIFICATION                          | 70 F 66m |  |  | 70 P 66  | 70 P 66a | 70 P 66b | 70 P 66c |    |
|----|-----------------------------------------|----------|--|--|----------|----------|----------|----------|----|
| 1  | Water Capacity, Gallons                 |          |  |  | 7150     | 7100     | 7300     | 7300     | 1  |
| 2  | Coal " Pounds                           |          |  |  | 31600    | 32200    | 30400    | 30800    | 2  |
| 3  | Frame, Type of                          | H-Beam   |  |  | Channel  | H-Beam   | Narrow   | Channel  | 3  |
| 4  | " Width Ft. In.                         | 9-8      |  |  | 9-8      | 9-8      | 7-0      | 9-8      | 4  |
| 5  | " Length Ft. In.                        | 26-3     |  |  | 29-3     | 29-3     | 26-3     | 26-3     | 5  |
| 6  | Truck Classification                    | 2D-F1    |  |  | 2D-T4    | 2D-T4    | 2D-T3    | 2D-T3    | 6  |
| 7  | " Type of                               | Diamond  |  |  | Pedestal | Pedestal | Pedestal | Pedestal | 7  |
| 8  | " Wheel Diameter In.                    | 33       |  |  | 36       | 36       | 36       | 36       | 8  |
| 9  | " " Base Ft. In.                        | 5-6      |  |  | 6-5      | 6-5      | 5-10     | 5-10     | 9  |
| 10 | " Size of Journal In.                   | 5½ x 10  |  |  | 5½ x 10  | 5½ x 10  | 5½ x 10  | 5½ x 10  | 10 |
| 11 | Length of Truck Centers Ft. In.         | 14-8     |  |  | 17-8     | 17-8     | 14-8     | 14-8     | 11 |
| 12 | " Front Truck to Chafing Plate Ft. In.  | 6-10     |  |  | 6-10     | 6-10     | 6-10     | 6-10     | 12 |
| 13 | " Rear Truck to Face of Coupler Ft. In. | 6-8½     |  |  | 6-8½     | 6-8½     | 6-8½     | 6-8½     | 13 |
| 14 | " of Tender, Total Ft. In.              | 28-2½    |  |  | 31-2½    | 31-2½    | 28-2½    | 28-2½    | 14 |
| 15 | " " Wheel Base Ft. In.                  | 20-2     |  |  | 24-1     | 24-1     | 20-6     | 20-6     | 15 |
| 16 | Height Rail to Center Plate In.         | 27½      |  |  | 27½      | 27½      | 28       | 27½      | 16 |
| 17 | " " " Bottom of Frame In.               | 31       |  |  | 31       | 31       | 32½      | 31       | 17 |
| 18 | " " " Bottom of Tank In.                | 44       |  |  | 44       | 44       | 43½      | 44       | 18 |
| 19 | " " " Deck Plate In.                    | 66       |  |  | 66       | 66       | 66       | 66       | 19 |
| 20 | Weight, Empty Lb.                       |          |  |  | 76450    | 77650    | 56300    | 65650    | 20 |
| 21 | " Loaded Lb.                            |          |  |  | 167650   | 169100   | 147500   | 157250   | 21 |
| 22 |                                         |          |  |  |          |          |          |          | 22 |
| 23 |                                         |          |  |  |          |          |          |          | 23 |
| 24 |                                         |          |  |  |          |          |          |          | 24 |
| 25 |                                         |          |  |  |          |          |          |          | 25 |

## TENDERS

31

|    | 70 P 66d | 70 P 66e | 70 P 66f          | 70 P 66g | 70 P 66h |  |  | 70 S 66  | 70 S 66a |    |
|----|----------|----------|-------------------|----------|----------|--|--|----------|----------|----|
| 1  | 7200     | 7200     | 7400              | 7200     | 7400     |  |  |          |          | 1  |
| 2  | 29200    | 34350    | 26900             | 29500    | 31900    |  |  |          |          | 2  |
| 3  | Narrow   | Channel  | H-Beam            | Channel  | H-Beam   |  |  | Channel  | Narrow   | 3  |
| 4  | 7-0      | 9-8      | 9-8               | 9-8      | 9-8      |  |  | 9-8      | 7-0      | 4  |
| 5  | 26-3     | 26-3     | 29-3              | 26-3     | 26-3     |  |  | 26-3     | 26-3     | 5  |
| 6  | 2D-T3    | 2D-T3    | 2E-T4<br>2D-T4    | 2D-T3    | 2D-T3    |  |  | 2D-T3    | 2D-F1    | 6  |
| 7  | Pedestal | Pedestal | Pedestal          | Pedestal | Pedestal |  |  | Pedestal | Diamond  | 7  |
| 8  | 36       | 36       | 36                | 36       | 36       |  |  | 36       | 33       | 8  |
| 9  | 5-10     | 5-10     | 6-5               | 5-10     | 5-10     |  |  | 5-10     | 5-6      | 9  |
| 10 | 5½ x 10  | 5½ x 10  | 6 x 11<br>5½ x 10 | 5½ x 10  | 5½ x 10  |  |  | 5½ x 10  | 5½ x 10  | 10 |
| 11 | 14-8     | 14-8     | 17-8              | 14-8     | 14-8     |  |  | 14-8     | 14-8     | 11 |
| 12 | 6-10     | 6-10     | 6-10              | 6-10     | 6-10     |  |  | 7-4      | 7-4      | 12 |
| 13 | 6-8½     | 6-8½     | 6-8½              | 6-8½     | 6-8½     |  |  | 6-8½     | 6-8½     | 13 |
| 14 | 28-2½    | 28-2½    | 31-2½             | 28-2½    | 28-2½    |  |  | 28-8½    | 28-8½    | 14 |
| 15 | 20-6     | 20-6     | 24-1              | 20-6     | 20-6     |  |  | 20-6     | 20-2     | 15 |
| 16 | 28       | 27½      | 27½               | 27½      | 27½      |  |  | 27½      | 28       | 16 |
| 17 | 32½      | 31       | 31                | 31       | 31       |  |  | 31       | 32½      | 17 |
| 18 | 43½      | 44       | 44                | 44       | 44       |  |  | 44       | 43½      | 18 |
| 19 | 66       | 66       | 66                | 66       | 66       |  |  | 66       | 66       | 19 |
| 20 | 56800    | 65900    | 80650             | 63750    | 61750    |  |  |          |          | 20 |
| 21 | 146000   | 160300   | 169150            | 153300   | 155550   |  |  |          |          | 21 |
| 22 |          |          |                   |          |          |  |  |          |          | 22 |
| 23 |          |          |                   |          |          |  |  |          |          | 23 |
| 24 |          |          |                   |          |          |  |  |          |          | 24 |
| 25 |          |          |                   |          |          |  |  |          |          | 25 |

## TENDERS

|    | 70 S 66b | 70 S 66c |  |  |  | 70 F 70 | 70 F 70a   | 70 F 70b   | 70 F 70c |    |
|----|----------|----------|--|--|--|---------|------------|------------|----------|----|
| 1  |          |          |  |  |  | 7400    | 7150       | 7150       | 7250     | 1  |
| 2  |          |          |  |  |  | 35000   | 34000      | 34000      | 30100    | 2  |
| 3  | H-Beam   | Channel  |  |  |  | Channel | Channel    | H-Beam     | Channel  | 3  |
| 4  | 9-8      | 9-8      |  |  |  | 9-8     | 9-8        | 9-8        | 9-8      | 4  |
| 5  | 26-3     | 26-3     |  |  |  | 26-3    | 29-3       | 29-3       | 26-3     | 5  |
| 6  | 2D-T1    | 2D-T1    |  |  |  | 2D-T1   | 2E-T2      | 2E-T2      | 2D-F1    | 6  |
| 7  | Diamond  | Diamond  |  |  |  | Diamond | Crown S.C. | Crown S.C. | Diamond  | 7  |
| 8  | 36       | 36       |  |  |  | 36      | 33         | 33         | 33       | 8  |
| 9  | 6-0      | 6-0      |  |  |  | 6-0     | 5-10       | 5-10       | 5-6      | 9  |
| 10 | 5½ x 10  | 5½ x 10  |  |  |  | 5½ x 10 | 6 x 11     | 6 x 11     | 5½ x 10  | 10 |
| 11 | 14-8     | 14-8     |  |  |  | 14-8    | 17-8       | 17-8       | 14-8     | 11 |
| 12 | 7-4      | 7-4      |  |  |  | 6-10    | 6-10       | 6-10       | 6-10     | 12 |
| 13 | 6-8½     | 6-8½     |  |  |  | 6-8½    | 6-8½       | 6-8½       | 6-8½     | 13 |
| 14 | 28-8½    | 28-8½    |  |  |  | 28-2½   | 31-2½      | 31-2½      | 28-2½    | 14 |
| 15 | 20-8     | 20-8     |  |  |  | 20-8    | 23-6       | 23-6       | 20-2     | 15 |
| 16 | 27½      | 27½      |  |  |  | 27½     | 27½        | 27½        | 27½      | 16 |
| 17 | 31       | 31       |  |  |  | 31      | 31         | 31         | 31       | 17 |
| 18 | 44       | 44       |  |  |  | 44      | 44         | 44         | 44       | 18 |
| 19 | 66       | 66       |  |  |  | 70      | 70         | 70         | 70       | 19 |
| 20 |          |          |  |  |  | 62450   | 67200      | 68900      | 56650    | 20 |
| 21 |          |          |  |  |  | 159100  | 160600     | 162500     | 147150   | 21 |
| 22 |          |          |  |  |  |         |            |            |          | 22 |
| 23 |          |          |  |  |  |         |            |            |          | 23 |
| 24 |          |          |  |  |  |         |            |            |          | 24 |
| 25 |          |          |  |  |  |         |            |            |          | 25 |

## TENDERS

|    | CLASSIFICATION                          | 70 F 70d | 70 F 70e   | 70 F 70f   |  |  | 70 P 70  | 70 P 70a          |    |
|----|-----------------------------------------|----------|------------|------------|--|--|----------|-------------------|----|
| 1  | Water Capacity, Gallons                 |          |            |            |  |  | 7300     | 7300              | 1  |
| 2  | Coal " Pounds                           |          |            |            |  |  | 32600    | 33900             | 2  |
| 3  | Frame, Type of                          | H-Beam   | Channel    | H-Beam     |  |  | Channel  | H-Beam            | 3  |
| 4  | " Width Ft. In.                         | 9-8      | 9-8        | 9-8        |  |  | 9-8      | 9-8               | 4  |
| 5  | " Length Ft. In.                        | 26-3     | 29-3       | 29-3       |  |  | 29-3     | 29-3              | 5  |
| 6  | Truck Classification                    | 2D-T1    | 2E-T2      | 2E-T2      |  |  | 2D-T3    | 2E-T4<br>2D-T4    | 6  |
| 7  | " Type of                               | Diamond  | Crown S.C. | Crown S.C. |  |  | Pedestal | Pedestal          | 7  |
| 8  | " Wheel Diameter In.                    | 36       | 33         | 33         |  |  | 36       | 36                | 8  |
| 9  | " " Base Ft. In.                        | 6-0      | 5-10       | 5-10       |  |  | 5-10     | 6-5               | 9  |
| 10 | " Size of Journal In.                   | 5½ x 10  | 6 x 11     | 6 x 11     |  |  | 5½ x 10  | 6 x 11<br>5½ x 10 | 10 |
| 11 | Length of Truck Centers Ft. In.         | 14-8     | 17-8       | 17-8       |  |  | 17-8     | 17-8              | 11 |
| 12 | " Front Truck to Chafing Plate Ft. In.  | 6-10     | 6-10       | 6-10       |  |  | 6-10     | 6-10              | 12 |
| 13 | " Rear Truck to Face of Coupler Ft. In. | 6-8½     | 6-8½       | 6-8½       |  |  | 6-8½     | 6-8½              | 13 |
| 14 | " of Tender, Total Ft. In.              | 28-2½    | 31-2½      | 31-2½      |  |  | 31-2½    | 31-2½             | 14 |
| 15 | " " Wheel Base Ft. In.                  | 20-8     | 23-6       | 23-6       |  |  | 23-6     | 24-1              | 15 |
| 16 | Height Rail to Center Plate In.         | 27½      | 27½        | 27½        |  |  | 27½      | 27½               | 16 |
| 17 | " " " Bottom of Frame In.               | 31       | 31         | 31         |  |  | 31       | 31                | 17 |
| 18 | " " " Bottom of Tank In.                | 44       | 44         | 44         |  |  | 44       | 44                | 18 |
| 19 | " " " Deck Plate In.                    | 70       | 70         | 70         |  |  | 70       | 70                | 19 |
| 20 | Weight, Empty Lb.                       |          |            |            |  |  | 69150    | 79850             | 20 |
| 21 | " Loaded Lb.                            |          |            |            |  |  | 162800   | 174600            | 21 |
| 22 |                                         |          |            |            |  |  |          |                   | 22 |
| 23 |                                         |          |            |            |  |  |          |                   | 23 |
| 24 |                                         |          |            |            |  |  |          |                   | 24 |
| 25 |                                         |          |            |            |  |  |          |                   | 25 |

## TENDERS

|    | CLASSIFICATION                          | 70 P 70b          | 70 P 70c | 70 P 70d          |  |  | 70 F 77 | 70 F 77a |    |
|----|-----------------------------------------|-------------------|----------|-------------------|--|--|---------|----------|----|
| 1  | Water Capacity, Gallons                 | 7150              | 7400     | 7850              |  |  | 7100    | 7100     | 1  |
| 2  | Coal " Pounds                           | 32000             | 35000    | 27100             |  |  | 32500   | 30000    | 2  |
| 3  | Frame, Type of                          | H-Beam            | Channel  | H-Beam            |  |  | Channel | Channel  | 3  |
| 4  | " Width Ft. In.                         | 9-8               | 9-8      | 9-8               |  |  | 9-8     | 9-8      | 4  |
| 5  | " Length Ft. In.                        | 29-3              | 26-3     | 29-3              |  |  | 26-3    | 26-3     | 5  |
| 6  | Truck Classification                    | 2E-T4<br>2D-T4    | 2D-T3    | 2E-T4<br>2D-T4    |  |  | 2D-T1   | 2D-T1    | 6  |
| 7  | " Type of                               | Pedestal          | Pedestal | Pedestal          |  |  | Diamond | Diamond  | 7  |
| 8  | " Wheel Diameter In.                    | 36                | 36       | 36                |  |  | 36      | 36       | 8  |
| 9  | " " Base Ft. In.                        | 6-5               | 5-10     | 6-5               |  |  | 6-0     | 6-0      | 9  |
| 10 | " Size of Journal In.                   | 6 x 11<br>5½ x 10 | 5½ x 10  | 6 x 11<br>5½ x 10 |  |  | 5½ x 10 | 5½ x 10  | 10 |
| 11 | Length of Truck Centers Ft. In.         | 17-8              | 14-8     | 17-8              |  |  | 14-8    | 14-8     | 11 |
| 12 | " Front Truck to Chafing Plate Ft. In.  | 6-10              | 6-10     | 6-10              |  |  | 6-10    | 6-10     | 12 |
| 13 | " Rear Truck to Face of Coupler Ft. In. | 6-8½              | 6-8½     | 6-8½              |  |  | 6-8½    | 6-8½     | 13 |
| 14 | " of Tender, Total Ft. In.              | 31-2½             | 28-2½    | 31-2½             |  |  | 28-2½   | 28-2½    | 14 |
| 15 | " " Wheel Base Ft. In.                  | 24-1              | 20-6     | 24-1              |  |  | 20-8    | 20-8     | 15 |
| 16 | Height Rail to Center Plate In.         | 27½               | 27½      | 27½               |  |  | 27½     | 27½      | 16 |
| 17 | " " " Bottom of Frame In.               | 31                | 31       | 31                |  |  | 31      | 31       | 17 |
| 18 | " " " Bottom of Tank In.                | 44                | 44       | 44                |  |  | 44      | 44       | 18 |
| 19 | " " " Deck Plate In.                    | 70                | 70       | 70                |  |  | 77½     | 77½      | 19 |
| 20 | Weight, Empty Lb.                       | 79250             | 66650    | 78800             |  |  | 63950   | 69500    | 20 |
| 21 | " Loaded Lb.                            | 170850            | 163300   | 171400            |  |  | 155650  | 158950   | 21 |
| 22 |                                         |                   |          |                   |  |  |         |          | 22 |
| 23 |                                         |                   |          |                   |  |  |         |          | 23 |
| 24 |                                         |                   |          |                   |  |  |         |          | 24 |
| 25 |                                         |                   |          |                   |  |  |         |          | 25 |

## TENDERS

33

|    | 70 F 77b |  |  | 70 P 77           | 70 P 77a | 70 P 77c          | 70 P 77d          | 70 P 77e          |  |    |
|----|----------|--|--|-------------------|----------|-------------------|-------------------|-------------------|--|----|
| 1  |          |  |  | 6800              | 7100     |                   |                   |                   |  | 1  |
| 2  |          |  |  | 32300             | 32500    |                   |                   |                   |  | 2  |
| 3  | H-Beam   |  |  | Channel           | Channel  | H-Beam            | Channel           | H-Beam            |  | 3  |
| 4  | 9-8      |  |  | 9-8               | 9-8      | 9-8               | 9-8               | 9-8               |  | 4  |
| 5  | 26-3     |  |  | 29-3              | 26-3     | 29-3              | 29-3              | 29-3              |  | 5  |
| 6  | 2D-T1    |  |  | 2E-T4<br>2D-T4    | 2D-T4    | 2E-T4<br>2D-T4    | 2E-T4<br>2D-T4    | 2E-T4<br>2D-T4    |  | 6  |
| 7  | Diamond  |  |  | Pedestal          | Pedestal | Pedestal          | Pedestal          | Pedestal          |  | 7  |
| 8  | 36       |  |  | 36                | 36       | 36                | 36                | 36                |  | 8  |
| 9  | 6-0      |  |  | 6-5               | 6-5      | 6-5               | 6-5               | 6-5               |  | 9  |
| 10 | 5½ x 10  |  |  | 6 x 11<br>5½ x 10 | 5½ x 10  | 6 x 11<br>5½ x 10 | 6 x 11<br>5½ x 10 | 6 x 11<br>5½ x 10 |  | 10 |
| 11 | 14-8     |  |  | 17-8              | 14-8     | 17-8              | 17-8              | 17-8              |  | 11 |
| 12 | 6-10     |  |  | 6-10              | 6-10     | 6-10              | 6-10              | 6-10              |  | 12 |
| 13 | 6-8½     |  |  | 6-8½              | 6-8½     | 6-8½              | 6-8½              | 6-8½              |  | 13 |
| 14 | 28-2½    |  |  | 31-2½             | 28-2½    | 31-2½             | 31-2½             | 31-2½             |  | 14 |
| 15 | 20-8     |  |  | 24-1              | 21-1     | 24-1              | 24-1              | 24-1              |  | 15 |
| 16 | 27½      |  |  | 27½               | 27½      | 27½               | 27½               | 27½               |  | 16 |
| 17 | 31       |  |  | 31                | 31       | 31                | 31                | 31                |  | 17 |
| 18 | 44       |  |  | 44                | 44       | 44                | 44                | 44                |  | 18 |
| 19 | 77½      |  |  | 77½               | 77½      | 77½               | 77½               | 77½               |  | 19 |
| 20 |          |  |  | 81250             | 75350    |                   |                   |                   |  | 20 |
| 21 |          |  |  | 170200            | 167050   |                   |                   |                   |  | 21 |
| 22 |          |  |  |                   |          |                   |                   |                   |  | 22 |
| 23 |          |  |  |                   |          |                   |                   |                   |  | 23 |
| 24 |          |  |  |                   |          |                   |                   |                   |  | 24 |
| 25 |          |  |  |                   |          |                   |                   |                   |  | 25 |

## TENDERS

|    | 70 P 78  |  |  | 70 P 82           | 70 P 82a          |  |  | 75 F 70a |  |    |
|----|----------|--|--|-------------------|-------------------|--|--|----------|--|----|
| 1  | 6500     |  |  | 7700              | 8300              |  |  | 7800     |  | 1  |
| 2  | 32600    |  |  | 31800             | 24100             |  |  | 34250    |  | 2  |
| 3  | Channel  |  |  | H-Beam            | H-Beam            |  |  | Channel  |  | 3  |
| 4  | 9-8      |  |  | 9-8               | 9-8               |  |  | 9-8      |  | 4  |
| 5  | 29-3     |  |  | 29-3              | 29-3              |  |  | 26-3     |  | 5  |
| 6  | 2E-T1    |  |  | 2E-T4<br>2D-T4    | 2E-T4<br>2D-T4    |  |  | 2D-T1    |  | 6  |
| 7  | Pedestal |  |  | Pedestal          | Pedestal          |  |  | Diamond  |  | 7  |
| 8  | 36       |  |  | 36                | 36                |  |  | 36       |  | 8  |
| 9  | 5-10     |  |  | 6-5               | 6-5               |  |  | 6-0      |  | 9  |
| 10 | 6 x 11   |  |  | 6 x 11<br>5½ x 10 | 6 x 11<br>5½ x 10 |  |  | 5½ x 10  |  | 10 |
| 11 | 17-8     |  |  | 17-8              | 17-8              |  |  | 14-8     |  | 11 |
| 12 | 6-10     |  |  | 6-10              | 6-10              |  |  | 6-10     |  | 12 |
| 13 | 6-8½     |  |  | 6-8½              | 6-8½              |  |  | 6-8½     |  | 13 |
| 14 | 31-2½    |  |  | 31-2½             | 31-2½             |  |  | 28-2½    |  | 14 |
| 15 | 23-6     |  |  | 24-1              | 24-1              |  |  | 20-8     |  | 15 |
| 16 | 27½      |  |  | 27½               | 27½               |  |  | 27½      |  | 16 |
| 17 | 31       |  |  | 31                | 31                |  |  | 31       |  | 17 |
| 18 | 44       |  |  | 44                | 44                |  |  | 44       |  | 18 |
| 19 | 77½      |  |  | 82½               | 82½               |  |  | 70       |  | 19 |
| 20 | 70600    |  |  | 80750             | 79600             |  |  | 66350    |  | 20 |
| 21 | 160750   |  |  | 176750            | 172900            |  |  | 165400   |  | 21 |
| 22 |          |  |  |                   |                   |  |  |          |  | 22 |
| 23 |          |  |  |                   |                   |  |  |          |  | 23 |
| 24 |          |  |  |                   |                   |  |  |          |  | 24 |
| 25 |          |  |  |                   |                   |  |  |          |  | 25 |

## TENDERS

|    | CLASSIFICATION                          | 80 S 65    | 80 P 79  | 80 F 81    | 80 P 81  |  |  |  |    |
|----|-----------------------------------------|------------|----------|------------|----------|--|--|--|----|
| 1  | Water Capacity, Gallons                 | 7800       | 8100     | 8100       | 8100     |  |  |  | 1  |
| 2  | Coal " Pounds                           | 17100      | 34350    | 34350      | 34350    |  |  |  | 2  |
| 3  | Frame, Type of                          | Cast Steel | Channel  | Channel    | Channel  |  |  |  | 3  |
| 4  | " Width Ft. In.                         | 8-4½       | 9-8      | 9-8        | 9-8      |  |  |  | 4  |
| 5  | " Length Ft. In.                        | 30-2       | 29-3     | 29-3       | 29-3     |  |  |  | 5  |
| 6  | Truck Classification                    | 2E-T5      | 2E-T1    | 2E-T2      | 2E-T1    |  |  |  | 6  |
| 7  | " Type of                               | Crown S.C. | Pedestal | Crown S.C. | Pedestal |  |  |  | 7  |
| 8  | " Wheel Diameter In.                    | 33         | 36       | 33         | 36       |  |  |  | 8  |
| 9  | " " Base Ft. In.                        | 5-10       | 5-10     | 5-10       | 5-10     |  |  |  | 9  |
| 10 | " Size of Journal In.                   | 6 x 11     | 6 x 11   | 6 x 11     | 6 x 11   |  |  |  | 10 |
| 11 | Length of Truck Centers Ft. In.         | 15-10      | 17-8     | 17-8       | 17-8     |  |  |  | 11 |
| 12 | " Front Truck to Chafing Plate Ft. In.  | 7-6        | 6-10     | 6-10       | 6-10     |  |  |  | 12 |
| 13 | " Rear Truck to Face of Coupler Ft. In. | 8-3½       | 6-9½     | 6-9½       | 6-9½     |  |  |  | 13 |
| 14 | " of Tender, Total Ft. In.              | 31-7½      | 31-3½    | 31-3½      | 31-3½    |  |  |  | 14 |
| 15 | " " Wheel Base Ft. In.                  | 21-8       | 23-6     | 23-6       | 23-6     |  |  |  | 15 |
| 16 | Height Rail to Center Plate In.         | 27½        | 27½      | 27½        | 27½      |  |  |  | 16 |
| 17 | " " " Bottom of Frame In.               | 32½        | 31½      | 31½        | 31½      |  |  |  | 17 |
| 18 | " " " Bottom of Tank In.                | 47         | 44½      | 44½        | 44½      |  |  |  | 18 |
| 19 | " " " Deck Plate In.                    | 65         | 79½      | 80½        | 80½      |  |  |  | 19 |
| 20 | Weight, Empty Lb.                       | 61300      | 76700    | 74700      | 76700    |  |  |  | 20 |
| 21 | " Loaded Lb.                            | 143400     | 178550   | 176550     | 178550   |  |  |  | 21 |
| 22 |                                         |            |          |            |          |  |  |  | 22 |
| 23 |                                         |            |          |            |          |  |  |  | 23 |
| 24 |                                         |            |          |            |          |  |  |  | 24 |
| 25 |                                         |            |          |            |          |  |  |  | 25 |

## TENDERS

|    | CLASSIFICATION                          | 90 F 66    | 90 F 66a   |  |  | 90 P 70                |  |  |    |
|----|-----------------------------------------|------------|------------|--|--|------------------------|--|--|----|
| 1  | Water Capacity, Gallons                 | 9100       |            |  |  | 9900                   |  |  | 1  |
| 2  | Coal " Pounds                           | 31800      |            |  |  | 33600                  |  |  | 2  |
| 3  | Frame, Type of                          | H-Beam     | H-Beam     |  |  | H-Beam                 |  |  | 3  |
| 4  | " Width Ft. In.                         | 9-8        | 9-8        |  |  | 9-8                    |  |  | 4  |
| 5  | " Length Ft. In.                        | 30-7       | 30-7       |  |  | 30-7                   |  |  | 5  |
| 6  | Truck Classification                    | 2E-T2      | 2E-T2      |  |  | 2F-T2                  |  |  | 6  |
| 7  | " Type of                               | Crown S.C. | Crown S.C. |  |  | Side Frame Flat Spring |  |  | 7  |
| 8  | " Wheel Diameter In.                    | 33         | 33         |  |  | 36                     |  |  | 8  |
| 9  | " " Base Ft. In.                        | 5-10       | 5-10       |  |  | 6-5                    |  |  | 9  |
| 10 | " Size of Journal In.                   | 6 x 11     | 6 x 11     |  |  | 6½ x 12                |  |  | 10 |
| 11 | Length of Truck Centers Ft. In.         | 19-0       | 19-0       |  |  | 19-0                   |  |  | 11 |
| 12 | " Front Truck to Chafing Plate Ft. In.  | 6-10       | 6-10       |  |  | 6-10                   |  |  | 12 |
| 13 | " Rear Truck to Face of Coupler Ft. In. | 6-8½       | 6-8½       |  |  | 6-8½                   |  |  | 13 |
| 14 | " of Tender, Total Ft. In.              | 32-6½      | 32-6½      |  |  | 32-6½                  |  |  | 14 |
| 15 | " " Wheel Base Ft. In.                  | 24-10      | 24-10      |  |  | 25-5                   |  |  | 15 |
| 16 | Height Rail to Center Plate In.         | 27½        | 27½        |  |  | 27½                    |  |  | 16 |
| 17 | " " " Bottom of Frame In.               | 31         | 31         |  |  | 31½                    |  |  | 17 |
| 18 | " " " Bottom of Tank In.                | 44         | 44         |  |  | 44½                    |  |  | 18 |
| 19 | " " " Deck Plate In.                    | 66         | 66         |  |  | 70                     |  |  | 19 |
| 20 | Weight, Empty Lb.                       | 68700      |            |  |  | 82300                  |  |  | 20 |
| 21 | " Loaded Lb.                            | 176350     |            |  |  | 198400                 |  |  | 21 |
| 22 |                                         |            |            |  |  |                        |  |  | 22 |
| 23 |                                         |            |            |  |  |                        |  |  | 23 |
| 24 |                                         |            |            |  |  |                        |  |  | 24 |
| 25 |                                         |            |            |  |  |                        |  |  | 25 |

## TENDERS

35

|    | 90 F 75    | 90 F 75a   | 90 F 80    | 90 F 82    |  |  | 90 P 84                   |  |  |    |
|----|------------|------------|------------|------------|--|--|---------------------------|--|--|----|
| 1  | 8835       |            | 8900       | 10300      |  |  | 8800                      |  |  | 1  |
| 2  | 38935      |            | 26800      | 37400      |  |  | 28600                     |  |  | 2  |
| 3  | H-Beam     | H-Beam     | H-Beam     | H-Beam     |  |  | H-Beam                    |  |  | 3  |
| 4  | 9-8        | 9-8        | 9-8        | 9-8        |  |  | 9-8                       |  |  | 4  |
| 5  | 30-7       | 30-7       | 30-7       | 30-7       |  |  | 30-7                      |  |  | 5  |
| 6  | 2E-T2      | 2E-T2      | 2E-T2      | 2E-T2      |  |  | 2F-T2                     |  |  | 6  |
| 7  | Crown S.C. | Crown S.C. | Crown S.C. | Crown S.C. |  |  | Side Frame<br>Ell. Spring |  |  | 7  |
| 8  | 33         | 33         | 33         | 33         |  |  | 36                        |  |  | 8  |
| 9  | 5-10       | 5-10       | 5-10       | 5-10       |  |  | 6-5                       |  |  | 9  |
| 10 | 6 x 11     | 6 x 11     | 6 x 11     | 6 x 11     |  |  | 6½ x 12                   |  |  | 10 |
| 11 | 19-0       | 19-0       | 19-0       | 19-0       |  |  | 19-0                      |  |  | 11 |
| 12 | 6-10       | 6-10       | 6-10       | 6-10       |  |  | 6-10½                     |  |  | 12 |
| 13 | 6-8½       | 6-8½       | 6-8½       | 6-8½       |  |  | 6-9½                      |  |  | 13 |
| 14 | 32-6½      | 32-6½      | 32-6½      | 32-6½      |  |  | 32-8                      |  |  | 14 |
| 15 | 24-10      | 24-10      | 24-10      | 24-10      |  |  | 25-5                      |  |  | 15 |
| 16 | 27½        | 27½        | 27½        | 27½        |  |  | 27½                       |  |  | 16 |
| 17 | 31         | 31         | 31         | 31         |  |  | 31                        |  |  | 17 |
| 18 | 44         | 44         | 44         | 44         |  |  | 44                        |  |  | 18 |
| 19 | 75½        | 75½        | 80½        | 82½        |  |  | 84½                       |  |  | 19 |
| 20 | 77300      |            | 73900      | 81450      |  |  | 84150                     |  |  | 20 |
| 21 | 189850     |            | 174800     | 204700     |  |  | 186050                    |  |  | 21 |
| 22 |            |            |            |            |  |  |                           |  |  | 22 |
| 23 |            |            |            |            |  |  |                           |  |  | 23 |
| 24 |            |            |            |            |  |  |                           |  |  | 24 |
| 25 |            |            |            |            |  |  |                           |  |  | 25 |

## TENDERS

|    | 100 F 78   | 100 F 85   | 110 P 70                  | 110 P 75                  | 110 P 75a                 | 110 P 82                  | 110 P 82a                 |  | 120 F 78   |    |
|----|------------|------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|--|------------|----|
| 1  | 10150      | 9600       | 12150                     | 11980                     |                           | 12075                     | 12730                     |  | 12000      | 1  |
| 2  | 31700      | 39300      | 36000                     | 37000                     |                           | 34700                     | 29000                     |  | 33800      | 2  |
| 3  | Cast Steel | Cast Steel | Cast Steel                | Cast Steel                | Cast Steel                | Cast Steel                | Cast Steel                |  | Cast Steel | 3  |
| 4  | 8-4½       | 9-8        | 2-0                       | 2-0                       | 2-0                       | 2-0                       | 2-0                       |  | 8-4½       | 4  |
| 5  | 32-0       | 32-5½      | 32-1½                     | 32-1½                     | 32-1½                     | 32-1½                     | 32-1½                     |  | 36-4½      | 5  |
| 6  | 2E-T5      | 2E-T2      | 2F-T2                     | 2F-T2                     | 2F-T2                     | 2F-T2                     | 2F-T2                     |  | 2E-T5      | 6  |
| 7  | Crown S.C. | Crown S.C. | Side Frame<br>Ell. Spring | Side Frame<br>Ell. Spring | Side Frame<br>Ell. Spring | Side Frame<br>Ell. Spring | Side Frame<br>Ell. Spring |  | Crown S.C. | 7  |
| 8  | 33         | 33         | 36                        | 36                        | 36                        | 36                        | 36                        |  | 33         | 8  |
| 9  | 5-10       | 5-10       | 6-5                       | 6-5                       | 6-5                       | 6-5                       | 6-5                       |  | 5-10       | 9  |
| 10 | 6 x 11     | 6 x 11     | 6½ x 12                   | 6½ x 12                   | 6½ x 12                   | 6½ x 12                   | 6½ x 12                   |  | 6 x 11     | 10 |
| 11 | 17-8       | 20-10½     | 20-0                      | 20-0                      | 20-0                      | 20-0                      | 20-0                      |  | 22-0½      | 11 |
| 12 | 7-6        | 7-1½       | 6-10                      | 6-10                      | 6-10                      | 6-10                      | 6-10                      |  | 7-6        | 12 |
| 13 | 8-3½       | 6-8½       | 6-9½                      | 6-9½                      | 6-9½                      | 6-9½                      | 6-9½                      |  | 8-3½       | 13 |
| 14 | 33-5½      | 34-7½      | 33-7½                     | 33-7½                     | 33-7½                     | 33-7½                     | 33-7½                     |  | 37-10½     | 14 |
| 15 | 23-6       | 26-8½      | 26-5                      | 26-5                      | 26-5                      | 26-5                      | 26-5                      |  | 27-10½     | 15 |
| 16 | 27½        | 27½        | 27½                       | 27½                       | 27½                       | 27½                       | 27½                       |  | 27½        | 16 |
| 17 | 32½        | 31         | 30                        | 30                        | 30                        | 30                        | 30                        |  | 32½        | 17 |
| 18 | 47         | 44         | 43                        | 43                        | 43                        | 43                        | 43                        |  | 47         | 18 |
| 19 | 78         | 84½        | 70                        | 75½                       | 75½                       | 82½                       | 82½                       |  | 78         | 19 |
| 20 | 70700      | 86800      | 75500                     | 84210                     |                           | 82600                     | 75400                     |  | 77400      | 20 |
| 21 | 187000     | 206100     | 212725                    | 221050                    |                           | 217900                    | 211050                    |  | 211200     | 21 |
| 22 |            |            |                           |                           |                           |                           |                           |  |            | 22 |
| 23 |            |            |                           |                           |                           |                           |                           |  |            | 23 |
| 24 |            |            |                           |                           |                           |                           |                           |  |            | 24 |
| 25 |            |            |                           |                           |                           |                           |                           |  |            | 25 |

## TENDERS

|    | CLASSIFICATION                          | 130 P 70   |  |  | 130 F 82   | 130 F 82a              |  |  |    |
|----|-----------------------------------------|------------|--|--|------------|------------------------|--|--|----|
| 1  | Water Capacity, Gallons                 | 14125      |  |  | 11940      | 13910                  |  |  | 1  |
| 2  | Coal " Pounds                           | 35600      |  |  | 35700      | 37530                  |  |  | 2  |
| 3  | Frame, Type of                          | Cast Steel |  |  | H-Beam     | Cast Steel             |  |  | 3  |
| 4  | " Width Ft. In.                         | 2-0        |  |  | 9-8        | 2-0                    |  |  | 4  |
| 5  | " Length Ft. In.                        | 36-1½      |  |  | 34-7       | 36-1½                  |  |  | 5  |
| 6  | Truck Classification                    | 2F-T3      |  |  | 2F-T1      | 2F-T2                  |  |  | 6  |
| 7  | " Type of                               | Cast Steel |  |  | Crown S.C. | Side Frame Ell. Spring |  |  | 7  |
| 8  | " Wheel Diameter In.                    | 36         |  |  | 33         | 36                     |  |  | 8  |
| 9  | " " Base Ft. In.                        | 6-6        |  |  | 5-10       | 6-5                    |  |  | 9  |
| 10 | " Size of Journal In.                   | 6½ x 12    |  |  | 6½ x 12    | 6½ x 12                |  |  | 10 |
| 11 | Length of Truck Centers Ft. In.         | 24-0       |  |  | 23-0       | 24-0                   |  |  | 11 |
| 12 | " Front Truck to Chafing Plate Ft. In.  | 6-10       |  |  | 6-10       | 6-10                   |  |  | 12 |
| 13 | " Rear Truck to Face of Coupler Ft. In. | 6-9½       |  |  | 6-8½       | 6-9½                   |  |  | 13 |
| 14 | " of Tender, Total Ft. In.              | 37-7½      |  |  | 36-6½      | 37-7½                  |  |  | 14 |
| 15 | " " Wheel Base, Ft. In.                 | 30-6       |  |  | 28-10      | 30-5                   |  |  | 15 |
| 16 | Height Rail to Center Plate In.         | 27½        |  |  | 27½        | 27½                    |  |  | 16 |
| 17 | " " " Bottom of Frame In.               | 30         |  |  | 31         | 30                     |  |  | 17 |
| 18 | " " " Bottom of Tank In.                | 43         |  |  | 44         | 43                     |  |  | 18 |
| 19 | " " " Deck Plate In.                    | 70         |  |  | 82½        | 82½                    |  |  | 19 |
| 20 | Weight, Empty Lb.                       | 91600      |  |  | 83790      | 87370                  |  |  | 20 |
| 21 | " Loaded Lb.                            | 244900     |  |  | 219000     | 240770                 |  |  | 21 |
| 22 |                                         |            |  |  |            |                        |  |  | 22 |
| 23 |                                         |            |  |  |            |                        |  |  | 23 |
| 24 |                                         |            |  |  |            |                        |  |  | 24 |
| 25 |                                         |            |  |  |            |                        |  |  | 25 |

## TENDERS

|    | CLASSIFICATION                          | 130 P 82               |  |  | 180 F 82   |  |  |  |    |
|----|-----------------------------------------|------------------------|--|--|------------|--|--|--|----|
| 1  | Water Capacity, Gallons                 |                        |  |  | 18534      |  |  |  | 1  |
| 2  | Coal " Pounds                           |                        |  |  | 37530      |  |  |  | 2  |
| 3  | Frame, Type of                          | Cast Steel             |  |  | Cast Steel |  |  |  | 3  |
| 4  | " Width Ft. In.                         | 2-0                    |  |  | 2-0        |  |  |  | 4  |
| 5  | " Length Ft. In.                        | 36-1½                  |  |  | 45-3½      |  |  |  | 5  |
| 6  | Truck Classification                    | 2F-T2                  |  |  | 3E-T1      |  |  |  | 6  |
| 7  | " Type of                               | Side Frame Ell. Spring |  |  | Cast Steel |  |  |  | 7  |
| 8  | " Wheel Diameter In.                    | 36                     |  |  | 33         |  |  |  | 8  |
| 9  | " " Base Ft. In.                        | 6-5                    |  |  | 9-0        |  |  |  | 9  |
| 10 | " Size of Journal In.                   | 6½ x 12                |  |  | 6 x 11     |  |  |  | 10 |
| 11 | Length of Truck Centers Ft. In.         | 24-0                   |  |  | 28-10½     |  |  |  | 11 |
| 12 | " Front Truck to Chafing Plate Ft. In.  | 6-10                   |  |  | 9-0        |  |  |  | 12 |
| 13 | " Rear Truck to Face of Coupler Ft. In. | 6-9½                   |  |  | 8-11½      |  |  |  | 13 |
| 14 | " of Tender, Total Ft. In.              | 37-7½                  |  |  | 46-9½      |  |  |  | 14 |
| 15 | " " Wheel Base Ft. In.                  | 30-5                   |  |  | 37-10½     |  |  |  | 15 |
| 16 | Height Rail to Center Plate In.         | 27½                    |  |  | 27½        |  |  |  | 16 |
| 17 | " " " Bottom of Frame In.               | 30                     |  |  | 30         |  |  |  | 17 |
| 18 | " " " Bottom of Tank In.                | 43                     |  |  | 43         |  |  |  | 18 |
| 19 | " " " Deck Plate In.                    | 82½                    |  |  | 82½        |  |  |  | 19 |
| 20 | Weight, Empty Lb.                       |                        |  |  | 100675     |  |  |  | 20 |
| 21 | " Loaded Lb.                            |                        |  |  | 292655     |  |  |  | 21 |
| 22 |                                         |                        |  |  |            |  |  |  | 22 |
| 23 |                                         |                        |  |  |            |  |  |  | 23 |
| 24 |                                         |                        |  |  |            |  |  |  | 24 |
| 25 |                                         |                        |  |  |            |  |  |  | 25 |

## TENDERS

37

|    | 210 F 75                  | 210 F 75                  | 210 F 75                  | 210 F 78                  | 210 F 82                  |  |  | 250 P 75                  |  |    |
|----|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|--|--|---------------------------|--|----|
| 1  | 22000                     | 22090                     |                           | 22000                     |                           |  |  | 24410                     |  | 1  |
| 2  | 63000                     | 63000                     |                           | 60650                     |                           |  |  | 50240                     |  | 2  |
| 3  | Cast Steel<br>Tank Bottom | Cast Steel<br>Tank Bottom | Cast Steel<br>Tank Bottom | Cast Steel<br>Tank Bottom | Cast Steel<br>Tank Bottom |  |  | Cast Steel<br>Tank Bottom |  | 3  |
| 4  | 9-11½                     | 9-11½                     | 9-11½                     | 9-11½                     | 9-11½                     |  |  | 9-11½                     |  | 4  |
| 5  | 51-6                      | 51-6                      | 51-6                      | 51-6                      | 51-6                      |  |  | 54-0                      |  | 5  |
| 6  | 3F-T2*                    | 3F-T2*                    | 3F-T1*                    | 3F-T1*                    | 3F-T1*                    |  |  | 3F3T4                     |  | 6  |
| 7  | Cast Steel                | Cast Steel                | Cast Steel                | Cast Steel                | Cast Steel                |  |  | Cast Steel                |  | 7  |
| 8  | 33                        | 33                        | 33                        | 33                        | 33                        |  |  | 33                        |  | 8  |
| 9  | 9-0                       | 9-0                       | 8-4                       | 8-4                       | 8-4                       |  |  | 9-0                       |  | 9  |
| 10 | 6½ x 12                   | 6½ x 12                   | 6½ x 12                   | 6½ x 12                   | 6½ x 12                   |  |  | 6½ x 12                   |  | 10 |
| 11 | 32-1                      | 33-7                      | 33-7                      | 33-7                      | 33-7                      |  |  | 31-0                      |  | 11 |
| 12 | 9-5                       | 9-5                       | 9-5                       | 9-5                       | 9-5                       |  |  | 10-6                      |  | 12 |
| 13 | 11-5½                     | 9-11½                     | 9-11½                     | 9-11½                     | 9-11½                     |  |  | 13-11½                    |  | 13 |
| 14 | 52-11½                    | 52-11½                    | 52-11½                    | 52-11½                    | 52-11½                    |  |  | 55-5½                     |  | 14 |
| 15 | 41-1                      | 42-7                      | 41-11                     | 41-11                     | 41-11                     |  |  | 40-0                      |  | 15 |
| 16 | 27½                       | 27½                       | 27½                       | 27½                       | 27½                       |  |  | 27½                       |  | 16 |
| 17 | 30                        | 30                        | 30                        | 30                        | 30                        |  |  | 30                        |  | 17 |
| 18 | 30                        | 30                        | 30                        | 30                        | 30                        |  |  | 30                        |  | 18 |
| 19 | 75½                       | 75½                       | 75½                       | 78                        | 82½                       |  |  | 75½                       |  | 19 |
| 20 | 131360                    | 137020                    |                           | 146950                    |                           |  |  | 142180                    |  | 20 |
| 21 | 378360                    | 384020                    |                           | 390850                    |                           |  |  | 395835                    |  | 21 |
| 22 |                           |                           |                           |                           |                           |  |  |                           |  | 22 |
| 23 |                           |                           |                           |                           |                           |  |  |                           |  | 23 |
| 24 |                           |                           |                           |                           |                           |  |  |                           |  | 24 |
| 25 |                           |                           |                           |                           |                           |  |  |                           |  | 25 |

## TENDERS

|    |  |  |  |  |  |  |  |  |  |    |
|----|--|--|--|--|--|--|--|--|--|----|
| 1  |  |  |  |  |  |  |  |  |  | 1  |
| 2  |  |  |  |  |  |  |  |  |  | 2  |
| 3  |  |  |  |  |  |  |  |  |  | 3  |
| 4  |  |  |  |  |  |  |  |  |  | 4  |
| 5  |  |  |  |  |  |  |  |  |  | 5  |
| 6  |  |  |  |  |  |  |  |  |  | 6  |
| 7  |  |  |  |  |  |  |  |  |  | 7  |
| 8  |  |  |  |  |  |  |  |  |  | 8  |
| 9  |  |  |  |  |  |  |  |  |  | 9  |
| 10 |  |  |  |  |  |  |  |  |  | 10 |
| 11 |  |  |  |  |  |  |  |  |  | 11 |
| 12 |  |  |  |  |  |  |  |  |  | 12 |
| 13 |  |  |  |  |  |  |  |  |  | 13 |
| 14 |  |  |  |  |  |  |  |  |  | 14 |
| 15 |  |  |  |  |  |  |  |  |  | 15 |
| 16 |  |  |  |  |  |  |  |  |  | 16 |
| 17 |  |  |  |  |  |  |  |  |  | 17 |
| 18 |  |  |  |  |  |  |  |  |  | 18 |
| 19 |  |  |  |  |  |  |  |  |  | 19 |
| 20 |  |  |  |  |  |  |  |  |  | 20 |
| 21 |  |  |  |  |  |  |  |  |  | 21 |
| 22 |  |  |  |  |  |  |  |  |  | 22 |
| 23 |  |  |  |  |  |  |  |  |  | 23 |
| 24 |  |  |  |  |  |  |  |  |  | 24 |
| 25 |  |  |  |  |  |  |  |  |  | 25 |

\*Equipped with Class F1 Axles.

## LONG ISLAND R. R.—TENDERS

|    | CLASSIFICATION                          |  |  |  | 60 S 68 | 60 S 73 | 60 S 73a              | 50 P 51a                 |    |
|----|-----------------------------------------|--|--|--|---------|---------|-----------------------|--------------------------|----|
| 1  | Water Capacity, Gallons                 |  |  |  | 6000    | 6000    | 6000                  | 5000                     | 1  |
| 2  | Coal " Pounds                           |  |  |  | 30000   | 30000   | 30000                 | 24000                    | 2  |
| 3  | Frame, Type of                          |  |  |  | Channel | Channel | Cast Steel            | Cast Steel               | 3  |
| 4  | " Width Ft. In.                         |  |  |  | 9-6½    | 9-6½    | 8-10½                 | 8-5                      | 4  |
| 5  | " Length Ft. In.                        |  |  |  | 29-4½   | 29-4½   | 29-3½                 | 22-0½                    | 5  |
| 6  | Truck Classification                    |  |  |  | —       | —       | —                     | —                        | 6  |
| 7  | " Type of                               |  |  |  | Diamond | Diamond | Cast Steel Side Frame | Cast Steel Pedestal Type | 7  |
| 8  | " Wheel Diameter In.                    |  |  |  | 33      | 33      | 33                    | 33                       | 8  |
| 9  | " " Base Ft. In.                        |  |  |  | 5-10    | 5-10    | 5-10                  | 5-10                     | 9  |
| 10 | " Size of Journal In.                   |  |  |  | 5½ x 10 | 5½ x 10 | 5½ x 10               | 5 x 9                    | 10 |
| 11 | Length of Truck Centers Ft. In.         |  |  |  | 17-1½   | 17-1½   | 17-4                  | 11-8                     | 11 |
| 12 | " Front Truck to Chafing Plate Ft. In.  |  |  |  | 6-11½   | 6-11½   | 6-11½                 | 5-10½                    | 12 |
| 13 | " Rear Truck to Face of Coupler Ft. In. |  |  |  | 7-5½    | 7-5½    | 7-5½                  | 6-7                      | 13 |
| 14 | " of Tender, Total Ft. In.              |  |  |  | 31-5½   | 31-5½   | 31-8½                 | 24-1½                    | 14 |
| 15 | " " Wheel Base Ft. In.                  |  |  |  | 22-11½  | 22-11½  | 23-2                  | 17-6                     | 15 |
| 16 | Height Rail to Center Plate In.         |  |  |  | 24½     | 24½     | 24½                   | 26½                      | 16 |
| 17 | " " " Bottom of Frame In.               |  |  |  | 34½     | 34½     | 34½                   | 33½                      | 17 |
| 18 | " " " Bottom of Tank In.                |  |  |  | 46½     | 46½     | 46½                   | 47½                      | 18 |
| 19 | " " " Deck Plate In.                    |  |  |  | 67½     | 72½     | 72½                   | 50½                      | 19 |
| 20 | Weight, Empty Lb.                       |  |  |  | 55500   | 55500   |                       |                          | 20 |
| 21 | " Loaded Lb.                            |  |  |  | 135500  | 135500  |                       |                          | 21 |
| 22 |                                         |  |  |  |         |         |                       |                          | 22 |
| 23 |                                         |  |  |  |         |         |                       |                          | 23 |
| 24 |                                         |  |  |  |         |         |                       |                          | 24 |
| 25 | Class of Locomotive                     |  |  |  | C 51 S  | C 51 SA | C 51 SA               |                          | 25 |

## TENDERS

|    | CLASSIFICATION                          |  |  |  | 50 P 54a   |  |  |  |    |
|----|-----------------------------------------|--|--|--|------------|--|--|--|----|
| 1  | Water Capacity, Gallons                 |  |  |  | 5000       |  |  |  | 1  |
| 2  | Coal " Pounds                           |  |  |  | 24000      |  |  |  | 2  |
| 3  | Frame, Type of                          |  |  |  | Cast Steel |  |  |  | 3  |
| 4  | " Width Ft. In.                         |  |  |  | 8-5        |  |  |  | 4  |
| 5  | " Length Ft. In.                        |  |  |  | 22-0½      |  |  |  | 5  |
| 6  | Truck Classification                    |  |  |  |            |  |  |  | 6  |
| 7  | " Type of                               |  |  |  | Pedestal   |  |  |  | 7  |
| 8  | " Wheel Diameter In.                    |  |  |  | 33         |  |  |  | 8  |
| 9  | " " Base Ft. In.                        |  |  |  | 5-8        |  |  |  | 9  |
| 10 | " Size of Journal In.                   |  |  |  | 5 x 9      |  |  |  | 10 |
| 11 | Length of Truck Centers Ft. In.         |  |  |  | 11-8       |  |  |  | 11 |
| 12 | " Front Truck to Chafing Plate Ft. In.  |  |  |  | 5-10½      |  |  |  | 12 |
| 13 | " Rear Truck to Face of Coupler Ft. In. |  |  |  | 6-7        |  |  |  | 13 |
| 14 | " of Tender, Total Ft. In.              |  |  |  | 24-1½      |  |  |  | 14 |
| 15 | " " Wheel Base Ft. In.                  |  |  |  | 17-4       |  |  |  | 15 |
| 16 | Height Rail to Center Plate In.         |  |  |  | 26½        |  |  |  | 16 |
| 17 | " " " Bottom of Frame In.               |  |  |  | 33½        |  |  |  | 17 |
| 18 | " " " Bottom of Tank In.                |  |  |  | 47½        |  |  |  | 18 |
| 19 | " " " Deck Plate In.                    |  |  |  | 54         |  |  |  | 19 |
| 20 | Weight, Empty Lb.                       |  |  |  |            |  |  |  | 20 |
| 21 | " Loaded Lb.                            |  |  |  |            |  |  |  | 21 |
| 22 |                                         |  |  |  |            |  |  |  | 22 |
| 23 |                                         |  |  |  |            |  |  |  | 23 |
| 24 |                                         |  |  |  |            |  |  |  | 24 |
| 25 | Class of Locomotive                     |  |  |  | D 16 SB    |  |  |  | 25 |

|    | 55 P 55  |  | 60 F 60 | 60 F 64 |  | 70 F 66             |  |  |  |    |
|----|----------|--|---------|---------|--|---------------------|--|--|--|----|
| 1  | 5600     |  | 6000    | 6000    |  | 7200                |  |  |  | 1  |
| 2  | 21700    |  | 29000   | 29000   |  | 29200               |  |  |  | 2  |
| 3  | Narrow   |  | Channel | Channel |  | Narrow              |  |  |  | 3  |
| 4  | 7-0      |  | 9-0     | 9-0     |  | 7-0                 |  |  |  | 4  |
| 5  | 26-3     |  | 23-6    | 23-6    |  | 26-3                |  |  |  | 5  |
| 6  | 2D-T3    |  |         |         |  |                     |  |  |  | 6  |
| 7  | Pedestal |  | Diamond | Diamond |  | Diamond or Pedestal |  |  |  | 7  |
| 8  | 36       |  | 33      | 33      |  | 33                  |  |  |  | 8  |
| 9  | 5-10     |  | 5-10    | 5-10    |  | 5-10                |  |  |  | 9  |
| 10 | 5½ x 10  |  | 5½ x 10 | 5½ x 10 |  | 5½ x 10             |  |  |  | 10 |
| 11 | 14-8     |  | 12-0    | 12-0    |  | 14-8                |  |  |  | 11 |
| 12 | 6-10     |  | 6-9½    | 6-9½    |  | 6-10                |  |  |  | 12 |
| 13 | 6-8½     |  | 7-2½    | 7-2½    |  | 6-8½                |  |  |  | 13 |
| 14 | 28-2½    |  | 26-0½   | 26-0½   |  | 28-2½               |  |  |  | 14 |
| 15 | 20-6     |  | 17-10   | 17-10   |  | 20-6                |  |  |  | 15 |
| 16 | 28       |  | 24½     | 24½     |  | 28                  |  |  |  | 16 |
| 17 | 32½      |  | 31½     | 31½     |  | 32½                 |  |  |  | 17 |
| 18 | 43½      |  | 47      | 47      |  | 43½                 |  |  |  | 18 |
| 19 | 54½      |  | 60      | 64      |  | 66                  |  |  |  | 19 |
| 20 | 53300    |  | 52200   | 52200   |  | 49600               |  |  |  | 20 |
| 21 | 121700   |  | 131200  | 131200  |  | 138800              |  |  |  | 21 |
| 22 |          |  |         |         |  |                     |  |  |  | 22 |
| 23 |          |  |         |         |  |                     |  |  |  | 23 |
| 24 |          |  |         |         |  |                     |  |  |  | 24 |
| 25 | D 16 SB  |  | G 53 SD | G 53 SD |  | H 6 SB              |  |  |  | 25 |

## TENDERS

|    |  |  |  | 70 F 66b | 70 F 66g | 70 P 70e          | 70 P 82           | 70 P 82a          | 110 P 82a  |    |
|----|--|--|--|----------|----------|-------------------|-------------------|-------------------|------------|----|
| 1  |  |  |  | 7100     | 7200     |                   | 7700              | 8300              | 12730      | 1  |
| 2  |  |  |  | 36800    | 29500    |                   | 31800             | 24100             | 29000      | 2  |
| 3  |  |  |  | Channel  | Channel  | H-Beam            | H-Beam            | H-Beam            | Cast Steel | 3  |
| 4  |  |  |  | 9-8      | 9-8      | 9-8               | 9-8               | 9-8               | 2-0        | 4  |
| 5  |  |  |  | 29-3     | 26-3     | 29-3              | 29-3              | 29-3              | 32-1½      | 5  |
| 6  |  |  |  |          | 2D-F1    | 2E-T4<br>2D-T4    | 2E-T4<br>2D-T4    | 2E-T4<br>2D-T4    | 2F-T2      | 6  |
| 7  |  |  |  | Diamond  | Diamond  | Pedestal          | Pedestal          | Pedestal          | Cast Steel | 7  |
| 8  |  |  |  | 33       | 33       | 36                | 36                | 36                | 36         | 8  |
| 9  |  |  |  | 5-10     | 5-6      | 6-5               | 6-5               | 6-5               | 6-5        | 9  |
| 10 |  |  |  | 5½ x 10  | 5½ x 10  | 6 x 11<br>5½ x 10 | 6 x 11<br>5½ x 10 | 6 x 11<br>5½ x 10 | 6½ x 12    | 10 |
| 11 |  |  |  | 17-8     | 14-8     | 17-8              | 17-8              | 17-8              | 20-0       | 11 |
| 12 |  |  |  | 6-10     | 6-10     | 6-10              | 6-10              | 6-10              | 6-10       | 12 |
| 13 |  |  |  | 6-8½     | 6-8½     | 6-8½              | 6-8½              | 6-8½              | 6-9½       | 13 |
| 14 |  |  |  | 31-2½    | 28-2½    | 31-2½             | 31-2½             | 31-2½             | 33-7½      | 14 |
| 15 |  |  |  | 23-6     | 20-2     | 24-1              | 24-1              | 24-1              | 26-5       | 15 |
| 16 |  |  |  | 27½      | 27½      | 27½               | 27½               | 27½               | 27½        | 16 |
| 17 |  |  |  | 31       | 31       | 31                | 31                | 31                | 30         | 17 |
| 18 |  |  |  | 44       | 44       | 44                | 44                | 44                | 43         | 18 |
| 19 |  |  |  | 66       | 66       | 70                | 82½               | 82½               | 82½        | 19 |
| 20 |  |  |  | 68500    | 56500    |                   | 80750             | 79600             | 75400      | 20 |
| 21 |  |  |  | 164400   | 146000   |                   | 176750            | 172900            | 211050     | 21 |
| 22 |  |  |  |          |          |                   |                   |                   |            | 22 |
| 23 |  |  |  |          |          |                   |                   |                   |            | 23 |
| 24 |  |  |  |          |          |                   |                   |                   |            | 24 |
| 25 |  |  |  | H 6 SB   | H 6 SB   |                   | G 5 S             | G 5 S             | G 5 S      | 25 |