

# Western Pacific Railroad Maintenance of Way Cars

*presented by*

**Kerry Cochran**

*at the*

**2018 Western Pacific Historic Convention**

**Salt Lake City, UT**

**Friday April 20<sup>th</sup>, 2018**





# Western Pacific Railroad Maintenance of Way Cars



Celebrating 100 Years  
of the Feather River  
Route



[www.wplives.org](http://www.wplives.org)

Celebrating 25 Years of  
Presenting & Preserving  
the legacy of the  
Western Pacific  
Railroad.



# Maintenance of Way Cars

- **Maintenance of Way, Company Service cars or Roadway car, all are about the same.**
- These are railroad cars that have outlived their revenue service days and are reused by the railroads to keep cost down. These cars in many cases are older rolling stock that have been set-aside or replaced by newer equipment.
- These cars allow the railroad to move and store almost anything that involves maintenance to the right of way, grade crossings, bridge's and other railroad facilities.
- Older freight cars is easily adapted to the MoW fleet, especially if it's continuing in a similar job like an older tank car to move water or fuel, former coal car turned into a ballast car. Most all of this equipment in most cases are painted into a special color to differentiate the cars from revenue service and are renumbered.
- Flat cars also work well as low-sided gondolas by adding side and end boards to keep ties, timbers short pieces of rail on the deck.

- 
- ▶ Box cars served as tool cars containing workshops, materials, hand tools, hardware, kegs of spikes, tie plates, rail joiners, bolts and nuts.
  - ▶ Some box cars were modified, adding windows, doors and vents, heaters and made into bunk cars, some into kitchen cars, dining cars and foreman's quarters.
  - ▶ Old passenger cars were converted to maintenance of way cars stripping them of the amenities and turning them in to large bunk cars, passenger dining cars turned into Kitchen and Dining cars, baggage cars turned into workshops and material cars using their large doors.
  - ▶ Most maintenance of way cars traveled in one train or on the end of a freight consist, being dropped off on a siding close to the work at hand. Tracks were "Blue Flagged" and had the switches lined away from the main line and spiked to prevent movement to the main line.

# Types of Maintenance of Way Cars

- ▶ As an example, a gang of 50 men, the car equipment would look something like this:
- ▶ One Foreman's car
- ▶ One Commissary and Office car
- ▶ One Kitchen car
- ▶ Two Dining cars
- ▶ Six Bunk cars
- ▶ One Store and Refrigerator car
- ▶ One Tool Car

- ▶ While I will go into more on the WP's line-up of car equipment during this presentation, the above give an example of some other railroads and how they handled a work crew.
- ▶ The Western Pacific Railroad was no exception. Taking older 40' and 50" boxcars and stock cars turning them into maintenance of way cars along with some older coach, dinning and RPO cars.
- ▶ While there is little information to be found on the WP Maintenance of Way fleet, there is information on the general use of mow equipment that can be found in various web sites and historical societies across the county.
- ▶ While I am in no way an expert in any of these car fleets, I will attempt to show some of the common types of MoW cars that the Western Pacific made use of.

## ARRG'MT OF CARS IN OUTFITS.

A  B FOR COOK & 4 MEN.

D  C  H  H FOR 16 MEN, COOK & FOREMAN. CAN BE INCREASED TO 40 MEN BY ADDING 1 CAR "G" FOR DINER & 1 CAR "H" FOR EACH 8 MEN.

B  F  C  G ADD ONE CAR "H" FOR EACH 8 MEN.  
20-55 MAN OUTFIT.

B  G  E  G  F ADD 1 CAR "H" FOR EACH 8 MEN  
55 TO 80 OR MORE MAN OUTFIT. ADD 1 CAR "G" FOR EACH 36 MEN OVER 80.  
OVER 80 MEN ADD ONE CAR "H" FOR COOKS.

# Type of Cars

Car Type	Use of Car
Type A	Kitchen Car
Type B	Office Car
Type C	Kitchen and Diner
Type D	Foreman, Time Keeper, Commissary and Cooks Quarters
Type E	Kitchen Car
Type F	Supply and Cooks Quarters
Type G	Diner
Type H	8 Man Bunk Car
Type J	Divided Bunk Car, Foreman's, Engine Crew Car
Type JB	Divided Bunk Car, Single Shower
Type K	2 Shower Bath Car with Water Tank and Tool Compartment
Type L	6 Shower Bath Car with Tool Compartment
Type M	Combination Kitchen/Diner/Bunk Car

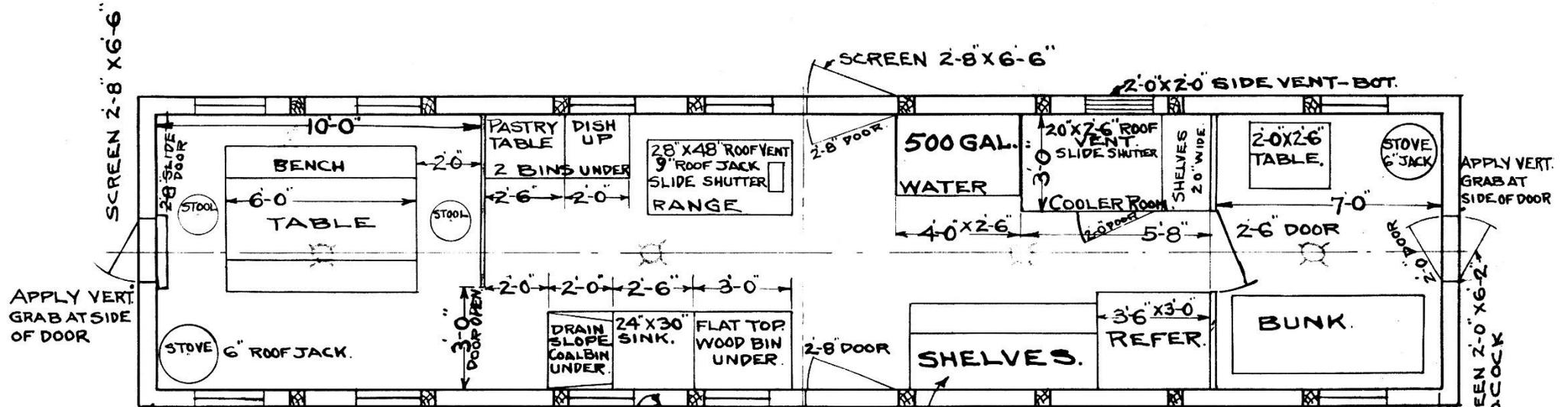
Car Type	Use of Car
Type N	Bunk Car with 500 Gallon Water Tank
Type ST	Tool Car for Ditcher # 49 and 50
Type X1	Electrician Supply and Quarters
Type CD	Kitchen and Diner Car
Type EG	Kitchen and Diner Car
Type H8	Bunk Car with Foreman's Compartment
Type H11	11 Man Bunk Car
Type H12	12 Man Bunk Car with Foreman's Compartment
Type M2	2 Man Living Quarters
Type M4	4 Man Living Quarters
Type TW	Combination Tool and Water Car
Type V	Track Vacuum Cleaner Car
Type X	Engine and Trainmen's Car
Type X	Engine and Trainmen's Car
	Emergency Tool Car
	Tool Car
Type T	Ventilated Tool Car

# Kitchen Car

KITCHEN CAR.

TYPE A

7-25-27  
2-29-28.  
5-7-47



C.O. COCK

UTENSIL SHELVING ABOVE PASTRY TABLE & SINK.

1" WATER LINE

SHELF SLOPE 3" IN 12"

ALL SHELVES SAS.

WALLS & FLOOR AROUND STOVES LINED WITH OLD CAR ROOFING.

APPLY 2 COATS GRAY PAINT INSIDE.

ALL SASH 25" X 29"

T&G FLOORING LENGTHWISE.

T&G WALL LINING

STEEL SIDE DOOR LADDERS.

6 LAMPS PER CAR.

3'-0" DOOR OPEN

3/4" RISER WITH COCK AT SINK.

SCREEN 2-8" X 6-6"

17'-0"

FIRST SHELF 2-6" WIDE 2-8" FROM FLOOR.

SECOND SHELF 20" WIDE 16" ABOVE FIRST SHELF.

BALANCE OF SHELVING 20" WIDE 12" CLEAR HT.

C.O. COCK

4 LIGHTS

CAR INSIDE 8'-6" WIDE & 40'-0" LONG.

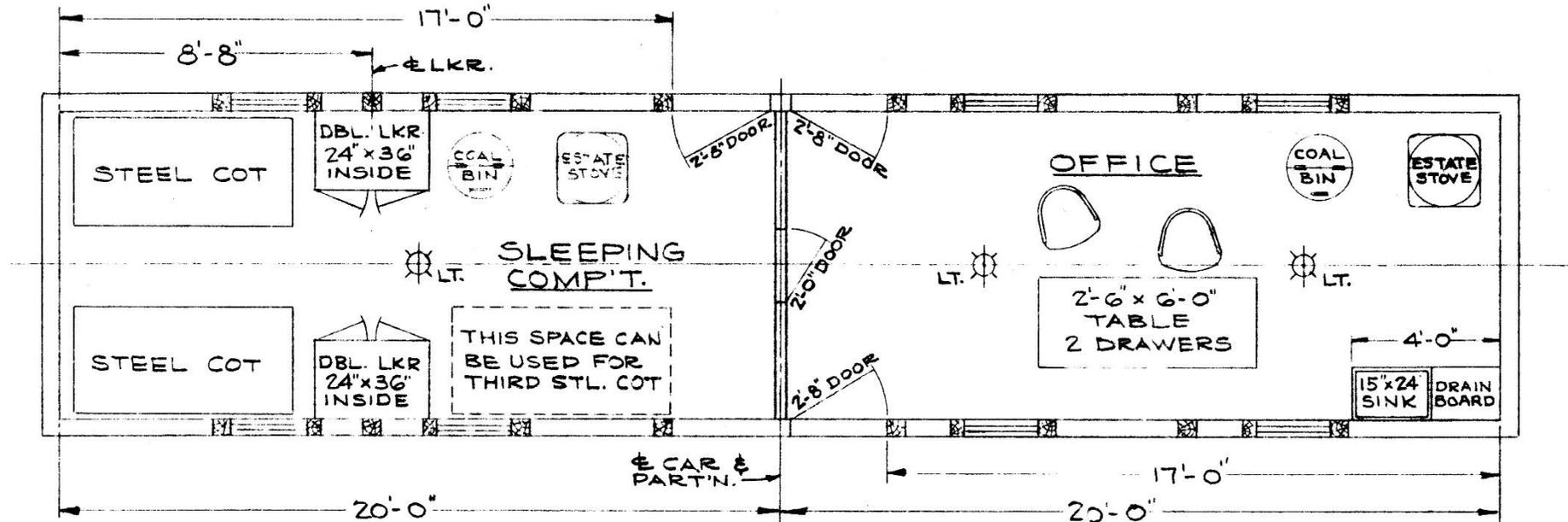
SCALE 1/4" = 1 FT. C.S. 7-6-27.

# Office Car

REV. 3-8-54

## OFFICE CAR

TYPE B



ALL WINDOW SASH 25" x 29"  
 WALLS AND FLOOR AROUND STOVES LINED.  
 BOTTOM OF WINDOW FRAME OPENING 38" ABOVE OLD FLOOR.  
 STEEL SIDE DOOR LADDERS.

CAR INSIDE 8'-6" WIDE x 40'-0" LONG.

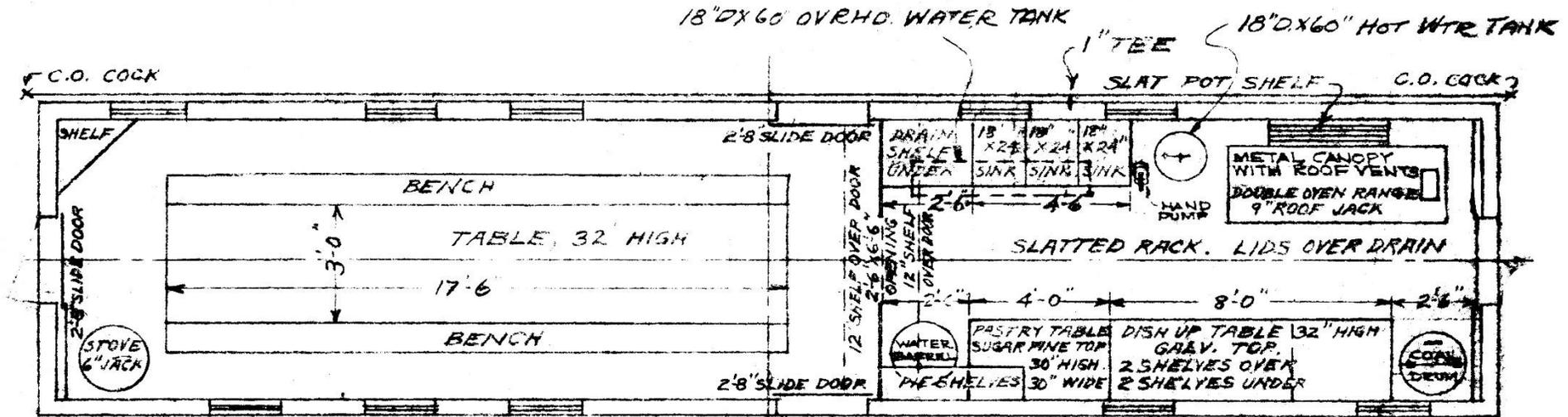
J.R.L. 2-15-54

# Kitchen and Diner

5-7-47  
5-23-50  
1-16-51  
5-18-53

## KITCHEN & DINER

TYPE C



ALL SASH 25" X 29", BOTTOM 38" ABOVE FLOOR  
WALLS & FLOOR AROUND STOVES  
LINED WITH OLD CAR ROOFING  
APPLY 2 COAT GRAY PAINT INSIDE  
T&G FLOORING & WALL LINING  
STEEL SIDE DOOR LADDERS  
VERTICAL GRABS AT END DOORS.  
2'-8" X 6'-6" SLIDING END DOOR SCREENS  
BOTTOM OF SINKS 24" ABOVE FLOOR  
2'-8" X 6'-6" SIDE DOOR SCREENS  
CAR INSIDE 8-6 X 10-6

SHELVES OVER DOOR TO SLOPE BACK

6 LAMPS PER CAR.

WT. 47700\*

SCALE  $\frac{1}{4}'' = 1 \text{ FT.}$  MWB 2-29-36

REV. 3-25-53

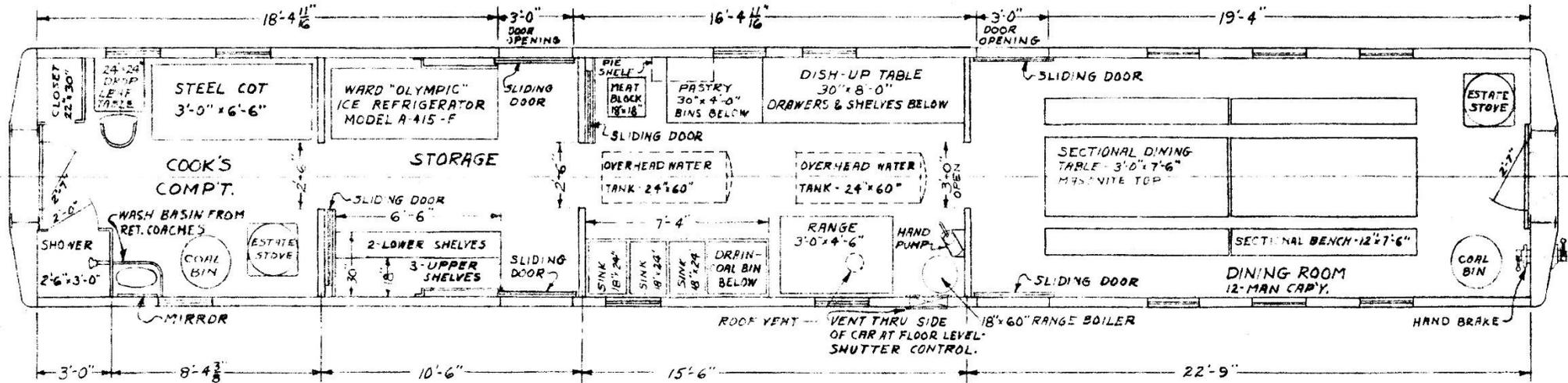
REFERENCE DWG:  
FLOOR PLAN 423-F-9000

# KITCHEN & DINING CAR

CONVERTED FROM BAGGAGE  
CARS ON AFE 39-52 & 11-53

TYPE CD

FIVE CARS	
00911	- CD
00912	- CD
00914	- CD
00915	- CD



BOTTOM OF WINDOW FRAME OPENING TO BE 37 1/2" ABOVE FLOOR.  
ALL SASH TO BE STD. 25" x 29".  
SIDE DOORS TO BE 6'-6" HIGH; INSIDE DOORS TO BE 6'-8" HIGH.  
G.T. & 3 FLOORING LENGTHWISE.  
KITCHEN & DINING ROOM FLOORS COVERED WITH LINOLEUM.  
ALL SHELVES S4S.

PAINTING SCHEME:

CEILING - RADIANT CREAM  
WALLS - SURF  
FLOOR - BATTLESHIP GRAY  
OUTSIDE - CMHA ORANGE  
ROOF - ALUMINUM

STEEL SIDE DOOR LADDERS  
ELECTRIC LIGHTS - 110 VOLTS  
INSIDE DIMENSIONS OF CAR: 9'-1 1/4" x 60'-1 3/8"  
FOR OUTSIDE DIMENSIONS SEE PAGE 1  
OF PASSENGER EQUIP. BOOK.

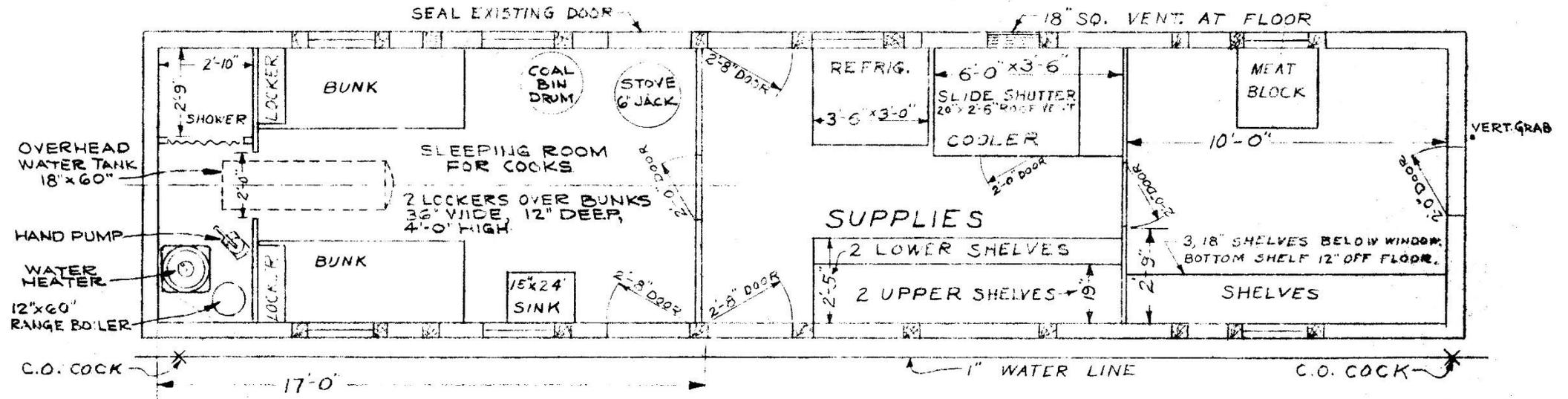
SCALE: 3/16" = 1'  
WEIGHT: 102,800 LBS.  
RDC 8-20-52

# Commissary and Cooks Quarters

REV. 8-18-52  
REV. 8-21-52  
REV. 2-23-54

## COMMISSARY & COOKS QUARTERS

TYPE D  
(WITH SHOWER)



ALL SASH 25' X 29"  
WALLS 3' FLOOR AROUND STOVE LINED  
WITH OLD CAR ROOFING.  
APPLY 2 COATS GRAY PAINT INSIDE.  
ALL SHELVES S4S.  
T&G FLOORING LENGTHWISE.  
T&G WALL LINING.  
4 LAMPS PER CAR.

CAR INSIDE: 8'-6" WIDE, 40'-0" LONG.

~~2'-8" X 6'-6" SIDE SCREEN DOORS~~  
~~2'-0" X 6'-0" END SCREEN DOORS~~  
STEEL SIDE DOOR LADDERS.

BOTTOM OF WINDOW FRAME OPENING 38" ABOVE OLD FLOOR.

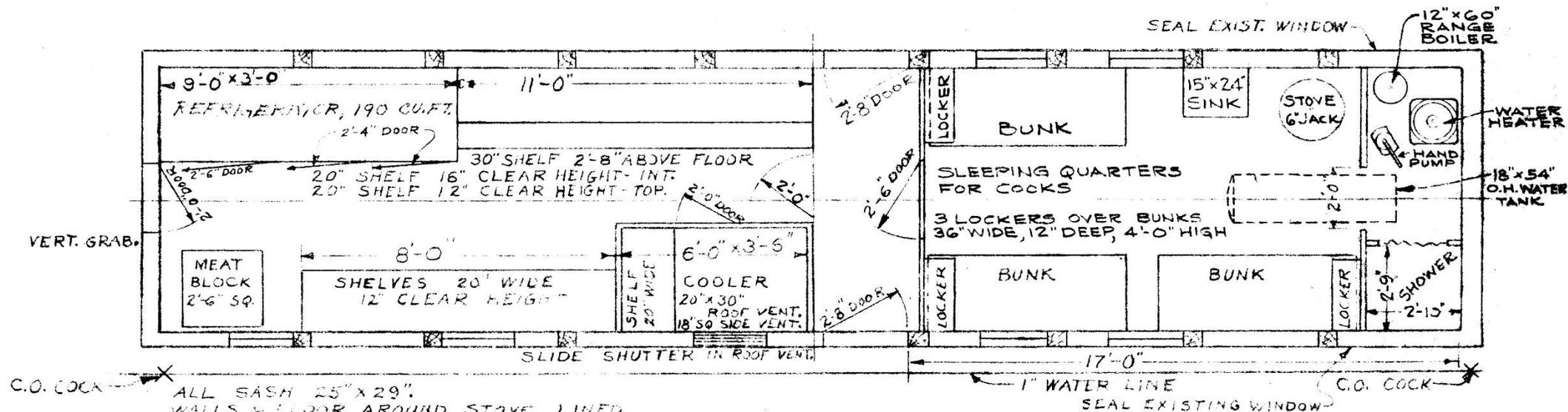
SCALE:  $\frac{1}{4}" = 1'$   
WEIGHT - 47300 LBS.  
RDC 2-6-51

# Supply and Cooks Quarters

REV. 8-18-52  
REV. 8-21-52  
REV. 12-17-52

## SUPPLY & COOKS QUARTERS

TYPE F  
(WITH SHOWER)



C.O. COCK

ALL SASH 25" X 29".  
WALLS & FLOOR AROUND STOVE LINED  
WITH OLD CAR ROOFING.  
APPLY 2 COATS GRAY PAINT INSIDE.  
ALL SHELVES S4S.  
T&G FLOORING LENGTHWISE.  
T&G WALL LINING.  
~~2'-8" X 6'-6" SIDE SCREEN DOORS.~~  
~~2'-0" X 6'-2" END SCREEN DOORS.~~  
STEEL SIDE DOOR LADDERS.  
4 LAMPS PER CAR.

CAR INSIDE: 8'-6" WIDE, 40'-0" LONG.

NOTE: THIS ARRGT. OF SLEEPING  
QUARTERS FOR USE WITH STEEL  
FRAME CARS ONLY.

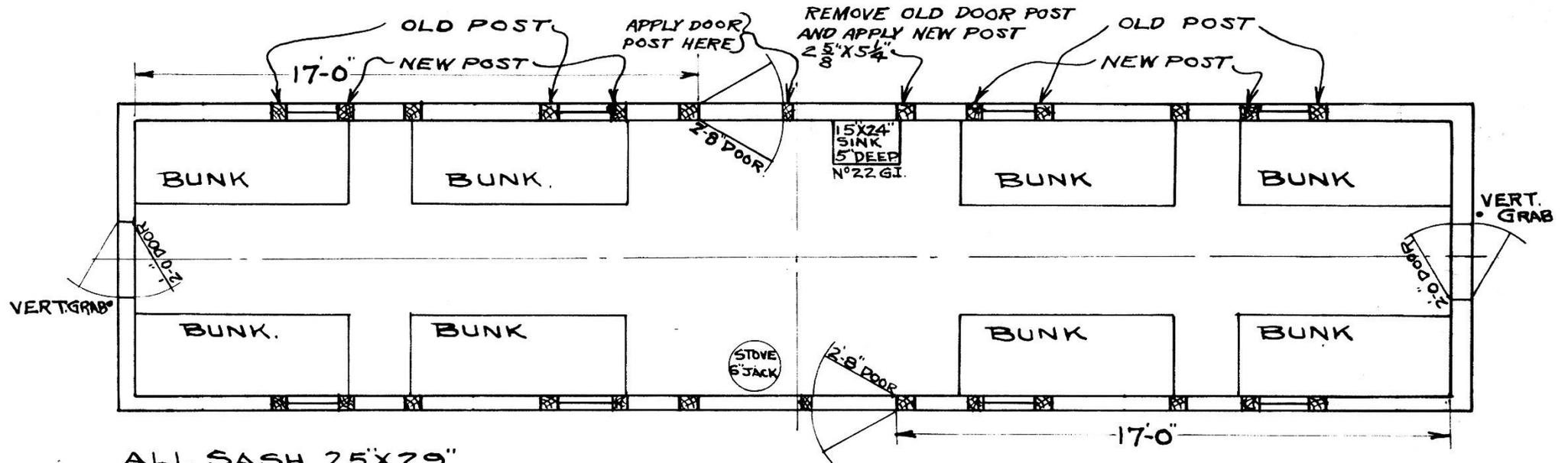
SCALE:  $\frac{1}{4}" = 1'$   
WEIGHT - 45,600 LBS.  
RDC 2-6-51

# Bunk Car

7-25-27.  
5-7-47

BUNK CAR.

TYPE H



ALL SASH 25" X 29"  
WALLS & FLOOR AROUND STOVE LINED  
WITH OLD CAR ROOFING.  
APPLY 2 COATS GRAY PAINT INSIDE.  
T&G WALL LINING.  
2-8' X 6-6" SIDE SCREEN DOORS.  
2-0' X 6-2" END SCREEN DOORS.  
STEEL SIDE DOOR LADDERS  
4 LAMPS PER CAR.

BOTTOM OF WINDOW FRAME OPENING 34" ABOVE OLD FLOOR

CAR INSIDE 8'-6" WIDE 40'-0" LONG.

WT. 44200 #

SCALE  $\frac{1}{4}$ " = 1 FT. C.S. 6-8-27

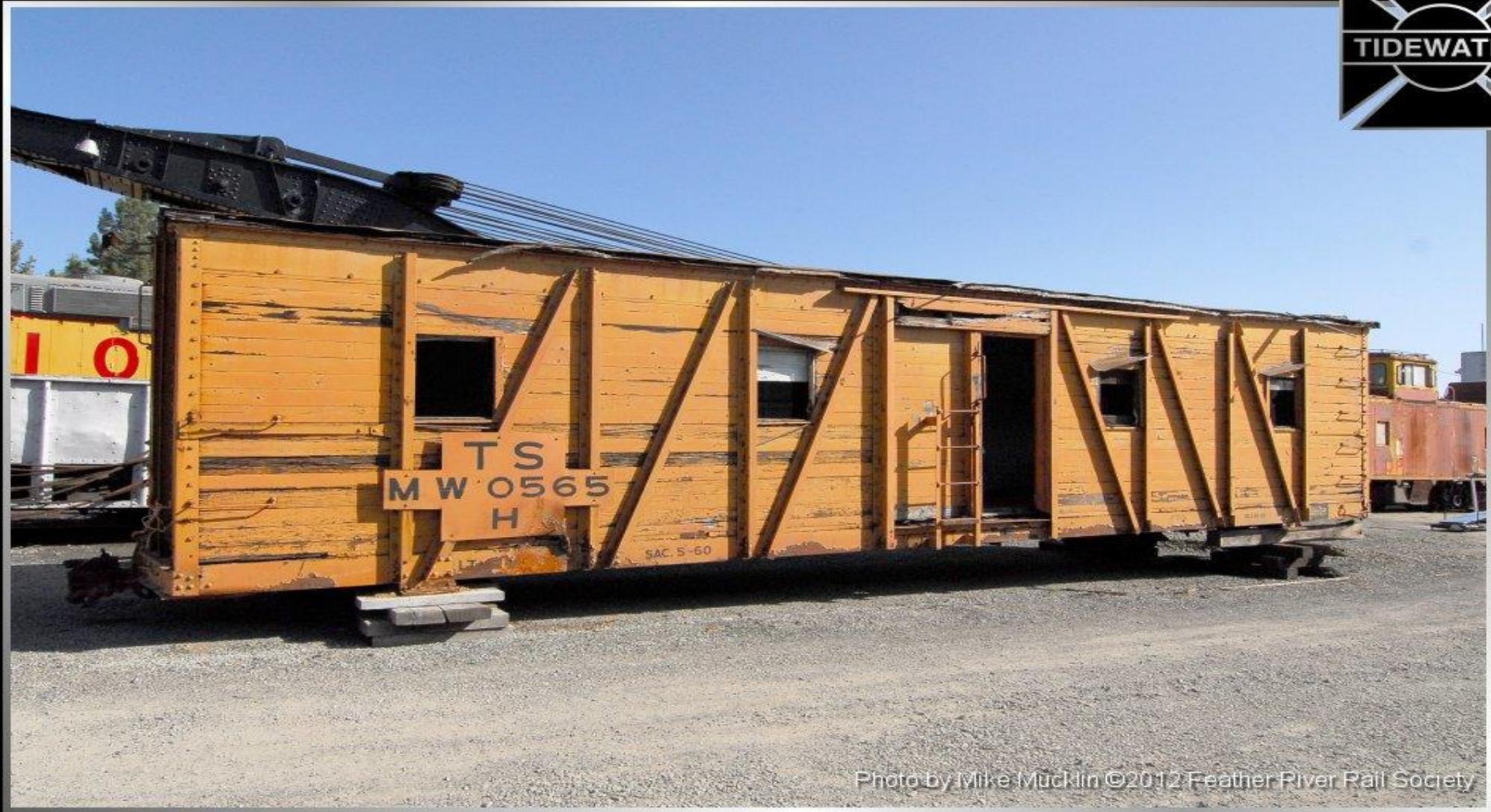


Photo by Mike Mucklin ©2012 Feather River Rail Society



### Tidewater Southern MW 0565-H

Pullman / WP MOW crew bunk car built ?

Rebuilt by the Western Pacific shops in Sacramento, California from a WP boxcar built in 1916

Used as Escalon Depot in 1960s, Donated to FRRS



# Bunk Car with Foreman's Compartment

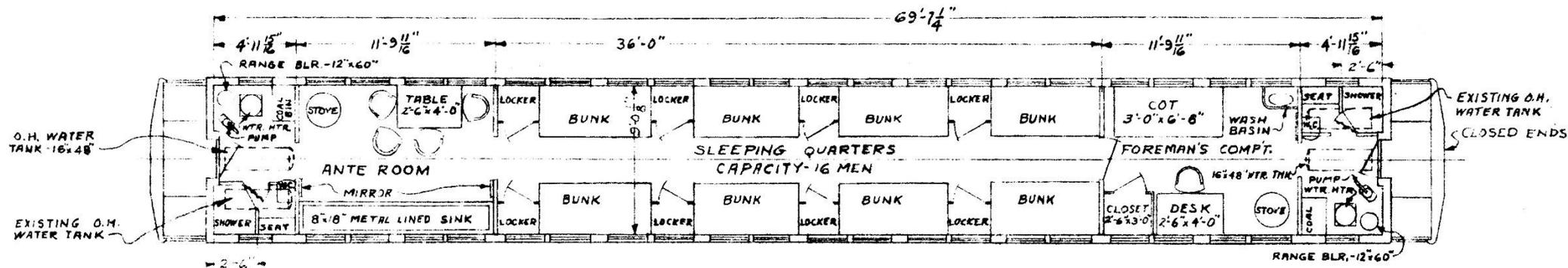
REV. 3-25-53

## BUNK CAR WITH FOREMAN'S COMPT.

8-MAN CAPACITY  
CONVERTED FROM W.P.  
COACH ON AFE 67-50

TYPE H-8

ONE CAR  
0902-H8



ALL WINDOWS AT LOCKERS AND CLOSET TO BE BLANKED OFF WITH FALSE PANELING.  
ALL OTHER WINDOWS TO HAVE OUTSIDE REMOVABLE SCREENS.  
SCREEN PANELS ON END DOORS.  
DIAPHRAMS REMOVED-12 GA STEEL PL. RIVETED IN PLACE.  
ELECTRIC LIGHTS-110 V.

### COLOR SCHEME:

CEILING --- RADIANT CREAM  
WALLS --- SURF  
FLOOR --- BATTLESHIP GRAY  
OUTSIDE --- OMAHA ORANGE  
ROOF --- ALUMINUM

INSIDE DIMENSIONS: 9'-0 3/8" x 69'-7 1/4"

FOR OUTSIDE DIMENSIONS SEE PAGE 3 IN PASSENGER EQUIP. BOOK.

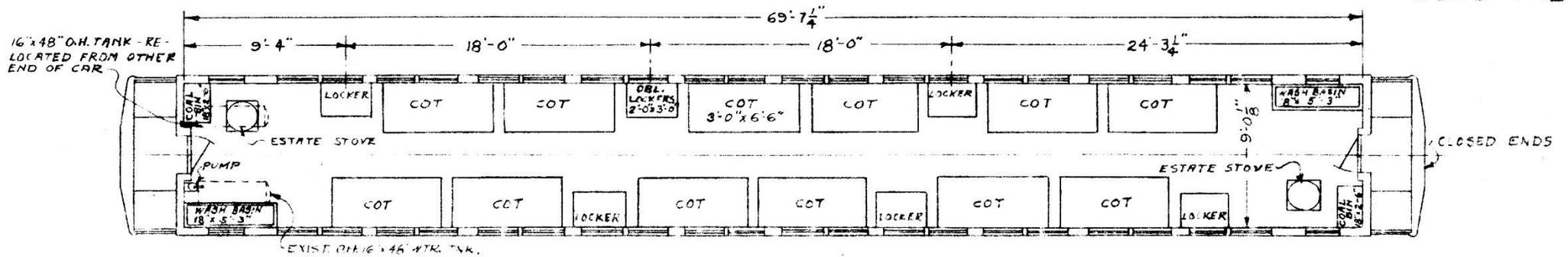
SCALE: 1/8" = 1'-0"  
WEIGHT: 127,400 LBS.  
RDC 8-22-52

# Bunk Car

REV. 3-25-53

BUNK CAR  
12-MAN CAPACITY  
CONVERTED FROM W.P.  
COACHES ON AFE 63-51

TYPE H-12  
FOUR CARS  
0903 - H-12  
0904 - H-12  
0905 - H-12  
0906 - H-12



ALL WINDOWS AT LOCKERS TO BE BLANKED OFF WITH FALSE PANNELING.  
ALL OTHER WINDOWS TO HAVE OUTSIDE REMOYABLE SCREENS.  
SCREEN PANELS ON END DOORS.  
DIAPHRAMS REMOVED - 12 GA. STEEL PL. RIVETED IN PLACE.  
ELECTRIC LIGHTS - 110 V.

COLOR SCHEME:

CEILING -- RADIANT CREAM  
WALLS --- SURF  
FLOOR --- BATTLESHIP GRAY  
OUTSIDE -- OMAHA ORANGE  
ROOF -- -- ALUMINUM

INSIDE DIMENSION: 9'-0 3/8" x 69'-7 1/4".

FOR OUTSIDE DIMENSIONS SEE PAGE 3 IN PASSENGER CAR EQUIP. BOOK.

SCALE: 1/8" = 1'-0"  
WT. 122,800 LBS.  
RDC 8-25-52



Sacramento, CA Oct 1972 Copyright Peter F. Arnold

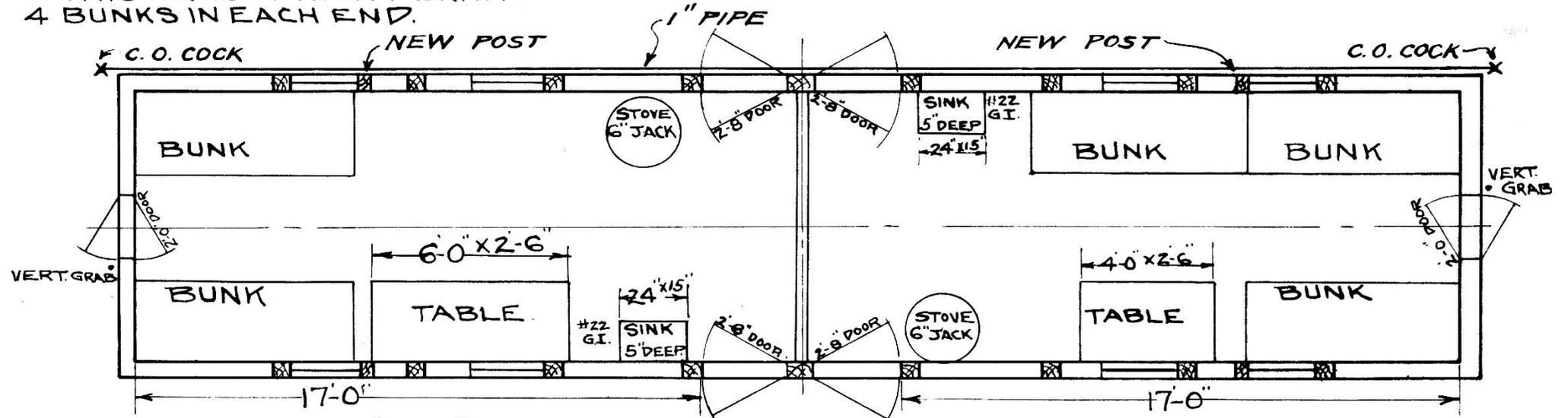
# Divided Bunk Car

7-29-27  
5-7-47

## DIVIDED BUNK CAR. FOREMAN & ENGINE CREW.

TYPE J

NOTE:  
THIS ARR'GMT. WILL PERMIT.  
4 BUNKS IN EACH END.



ALL SASH 25" X 29"  
WALLS & FLOOR AROUND STOVES LINED  
WITH OLD CAR ROOFING.  
APPLY 2 COATS GRAY PAINT INSIDE.  
T&G FLOORING LENGTHWISE, OFFICE END ONLY.  
T&G WALL LINING.  
2-8' X 6-6" SIDE DOOR SCREENS.  
2-0' X 6-2" END DOOR SCREENS.  
STEEL SIDE DOOR LADDERS.  
4 LAMPS PER CAR.

BOTTOM OF WINDOW FRAME OPENING  
34" ABOVE OLD FLOOR OF CAR

CAR INSIDE 8'-6" WIDE 40'-0" LONG.

SCALE  $\frac{1}{4}$ " = 1 FT. CS. 7-9-27.





Keddie, CA Sept 1974 Copyright Peter F. Arnold

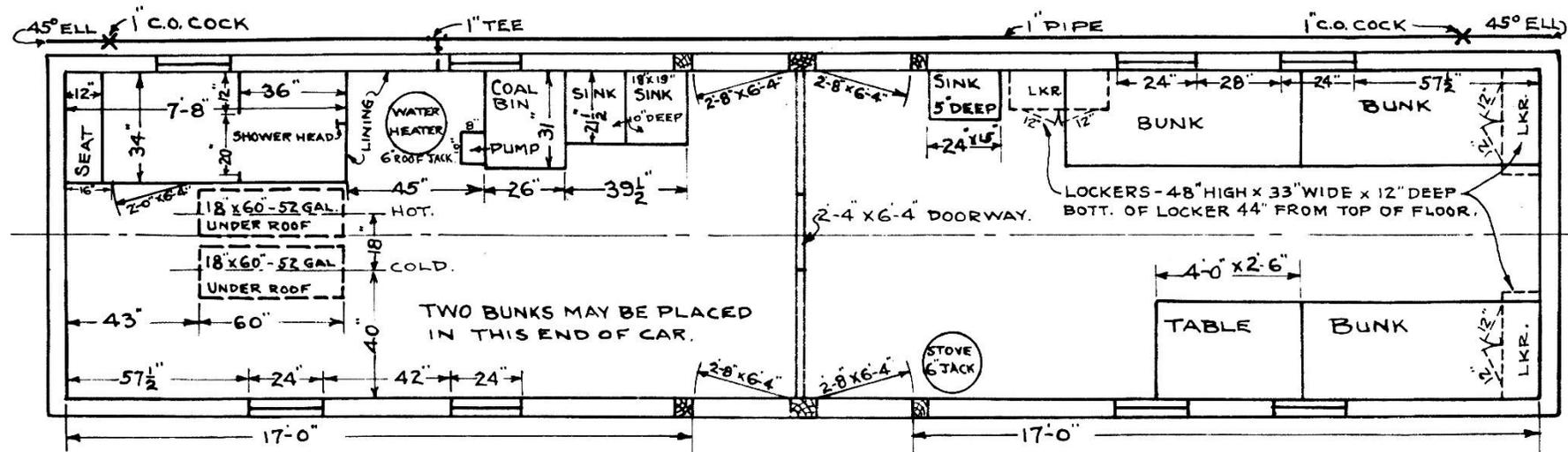
# Divided Bunk Car with Single Shower

5-7-47  
12-9-55

AFE, 67-39  
069-JB  
082-JB  
0100-JB  
0108-JB

## DIVIDED BUNK CAR WITH SINGLE SHOWER STALL

TYPE JB



ALL SASH 25" X 29" - SLIDE UP.  
WALLS & FLOOR AROUND HEATER & STOVE LINED WITH OLD CAR ROOFING.  
SHOWER STALL LINED WITH GALVANIZED IRON.  
T&G FLOORING LENGTHWISE, T&G WALL LINING.  
GLASS FABRIC ROOFING.

STEEL SIDE DOOR LADDERS.  
BOTTOM OF WINDOW FRAME OPENING 34" ABOVE OLD FLOOR.

SHOWER ROOM WALLS EXTEND FROM FLOOR TO ROOF.  
4 LAMPS PER CAR.

CAR INSIDE 8'-6" WIDE & 40'-0" LONG.

WT. 45900 #

SCALE  $\frac{1}{4}" = 1 FT$

7-12-39.



Keddie, CA Sept 1974 Copyright Peter F. Arnold

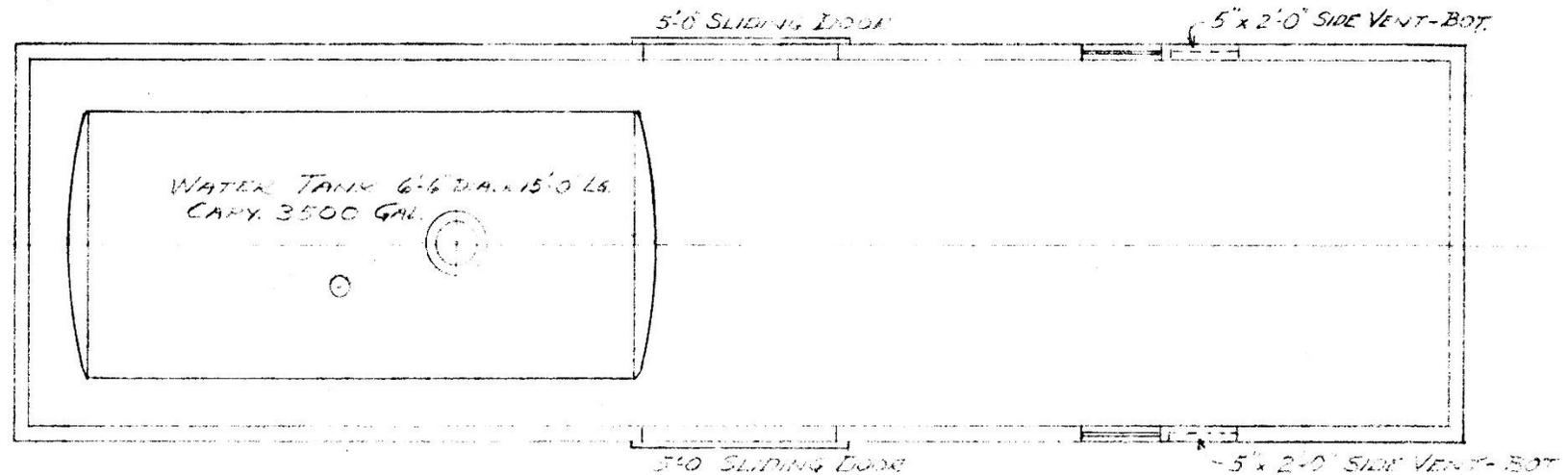


# Tool and Water Car

REF. DWG. 426-F-9010

TOOL & WATER CAR  
CONVERTED FROM STOCK CARS 75501 SERIES  
AFE 211-55

TYPE TW  
THREE CARS  
0941-TW  
0942-TW  
0943-TW



WINDOW DASH 25' x 29'  
DASH COVERED WITH WIRE MESH SCREEN.  
BOTTOM OF WINDOW FRAME 53" ABOVE FLOOR  
CAR INSIDE 8'-10" WIDE x 36'-6" LONG.

RWC 4-15-58



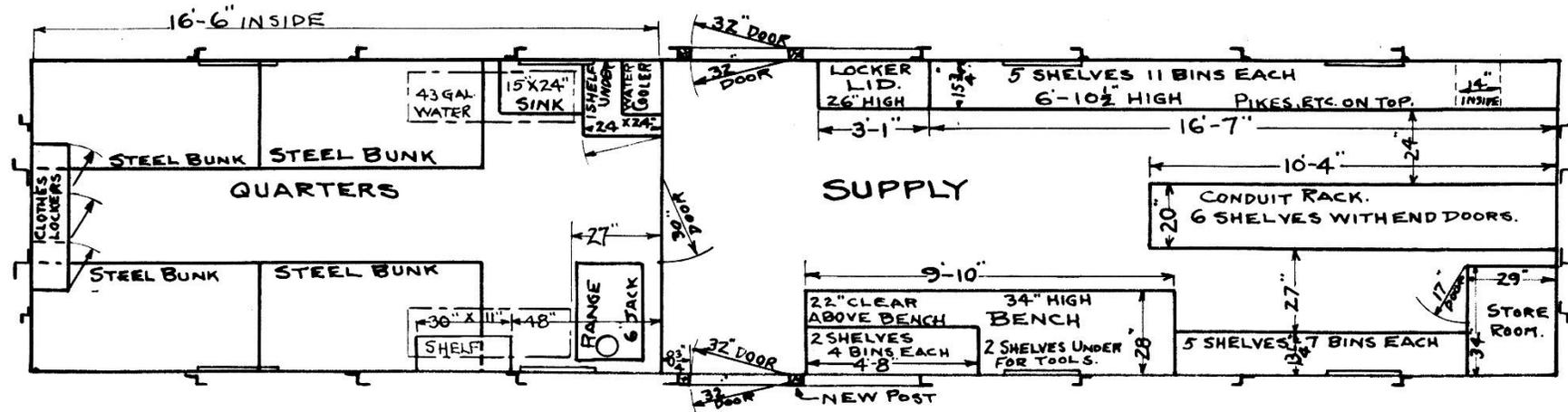


Elko, NV May 1976 Copyright Peter F. Arnold

# Electricians Supply and Quarters

## ELECTRICIANS' SUPPLY & QUARTERS CAR 0580X

X-1



DOUBLE SHEATHED ROOF.  
 FLOOR, SIDE & END WALLS T&G LINED  
 8 25" X 29" CABOOSE SASH  
 12" X 18" X 34" STD. WATER COOLER.  
 N°4 MIDWEST RANGE.  
 ALL BINS HAVE DOORS.  
 DOUBLE LINING AROUND RANGE -  $\frac{1}{8}$ " ASBESTOS &  $\frac{3}{32}$ " IRON  
 3 COMPARTMENT CLOTHES LOCKER - 48" WIDE 12" DEEP 47" HIGH.  
 MADE FROM 15001 SERIES BOX CAR.  
 2 - 16" X 50" COPPER WATER TANKS HUNG FROM ROOF CAR LINES

WATER TANKS FILLED THROUGH ROOF.  
 FAUCET AT SINK PIPED TO BOTH TANKS.  
 TOP OF BENCH LINED WITH  $\frac{3}{32}$ " IRON.  
 2 - 8" X 6 - 6" SIDE SCREEN DOORS.  
 STEEL SIDE DOOR LADDERS.  
 APPLY TWO COATS GRAY PAINT INSIDE  
 4 LAMPS PER CAR.

5-7-47  
 C.S. 12-10-16

$\frac{1}{4}$ " = 1 FT.

# Dry Sand Car



# WPMW Rotary



# WPMW Jordan Spreader # 6



# WPMW Flat Car





# Rail Crane







# CREDITS

- FRRS Archives – Ken Meeker Collection
- Peter Arnold
- Thom Anderson
- Frank Brehm
- Mike Mucklin
- Jack Palmer