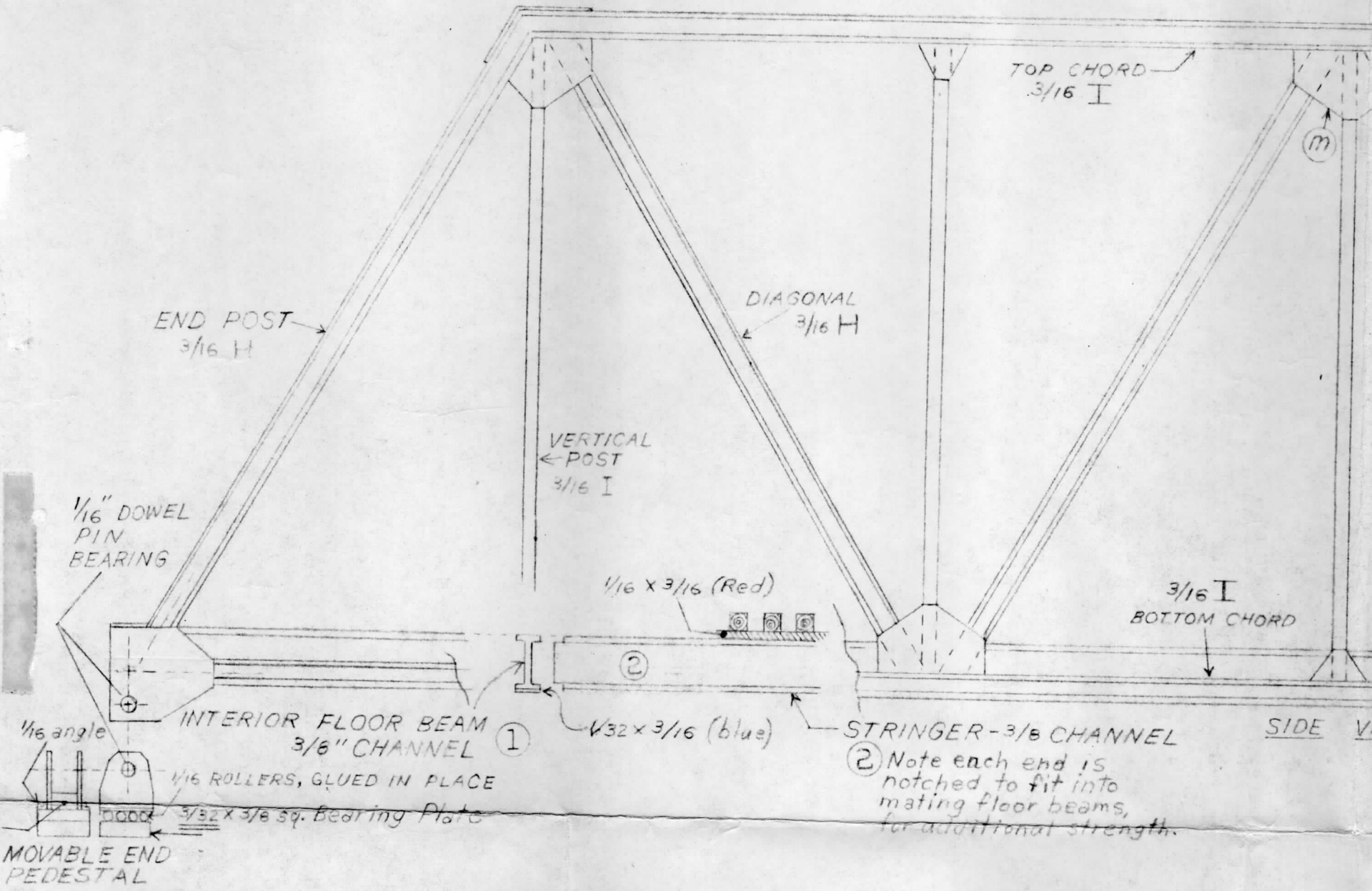
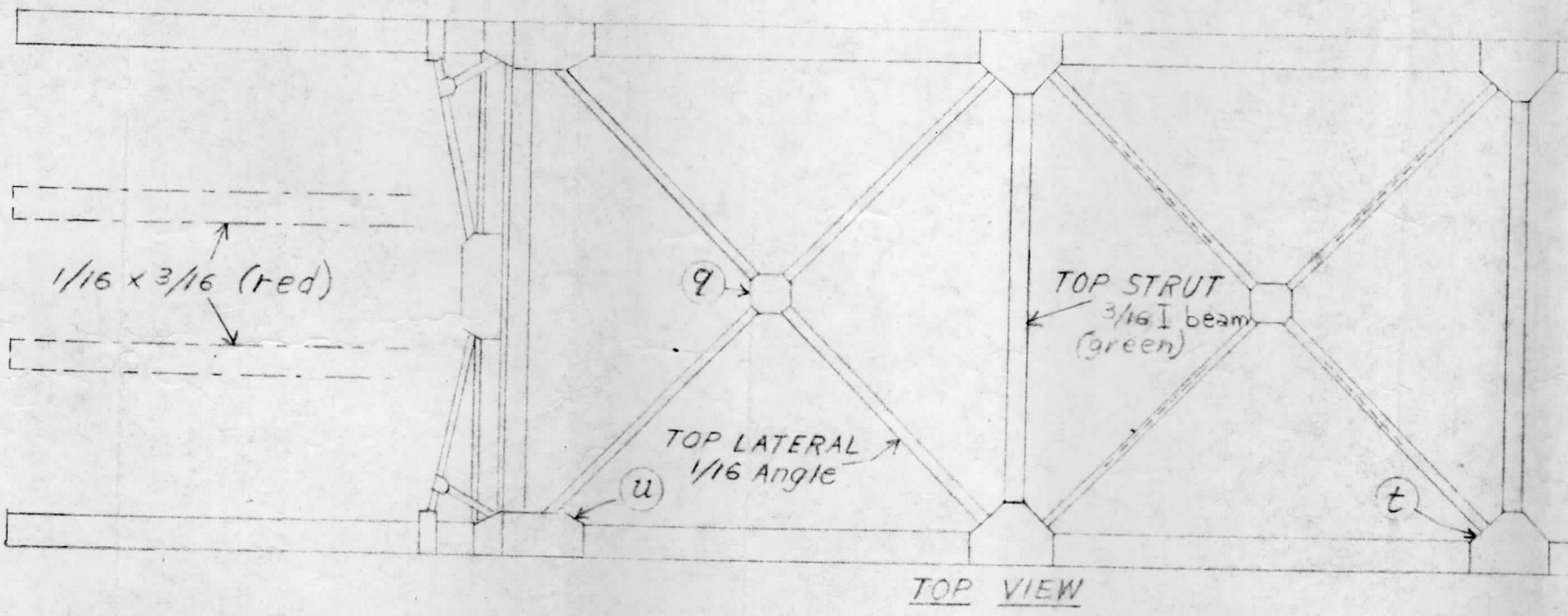
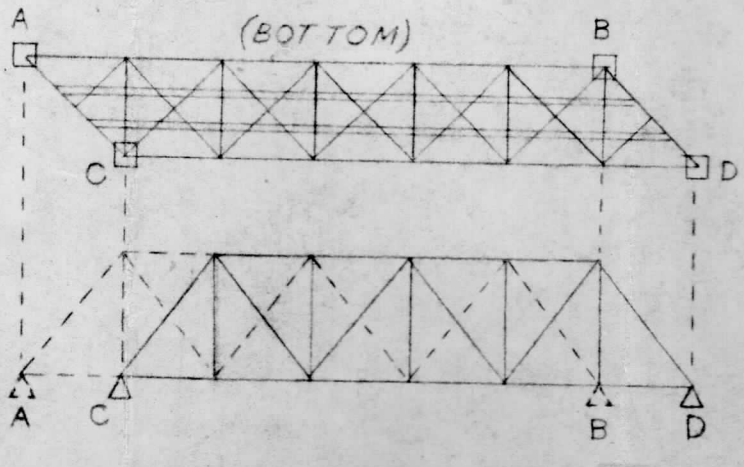
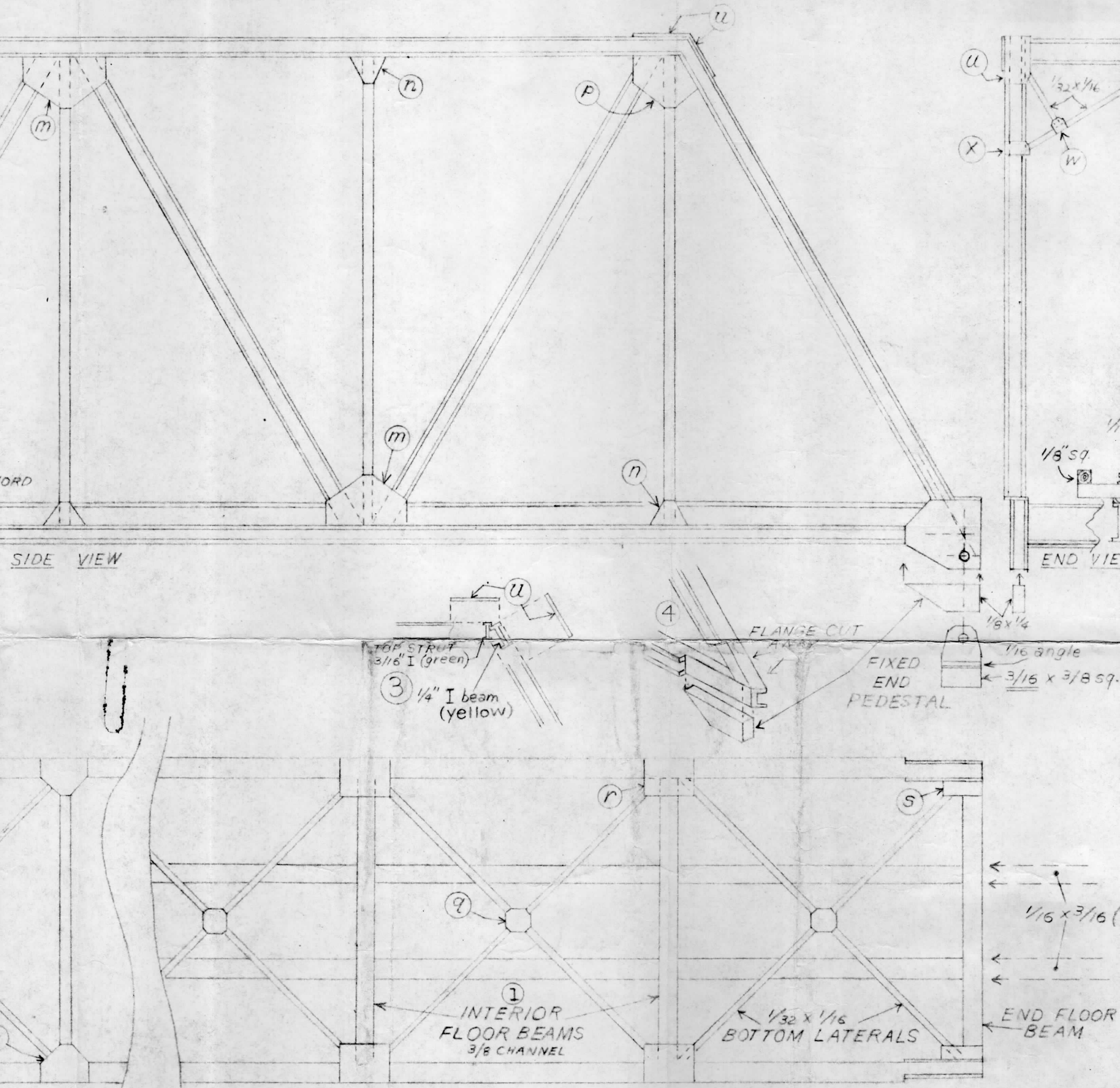






5
SPAN PLACEMENT FOR SKEW BRIDGE
It can be skewed in other direction in same manner.



Property of
NASG Inc.

Gerard Rails
60' beyond end of bridge
8"-10" inside running rails

TYPES OF
ABUTMENTS

STRAIGHT

WARREN TRUSS BRIDGE

for S Gauge - 3/16" Scale = 1 ft.

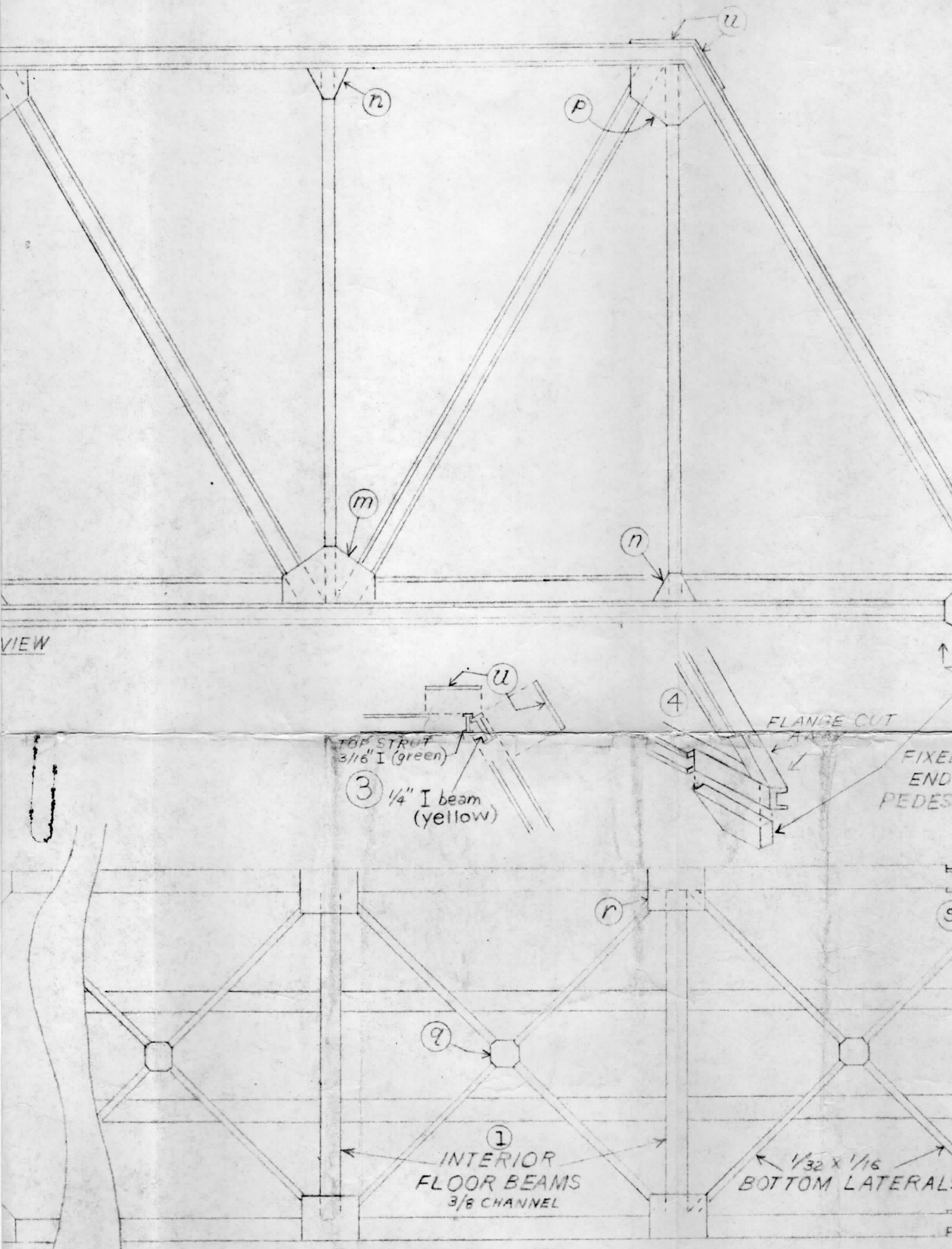
Plus a few
odd, Total
Parts 329

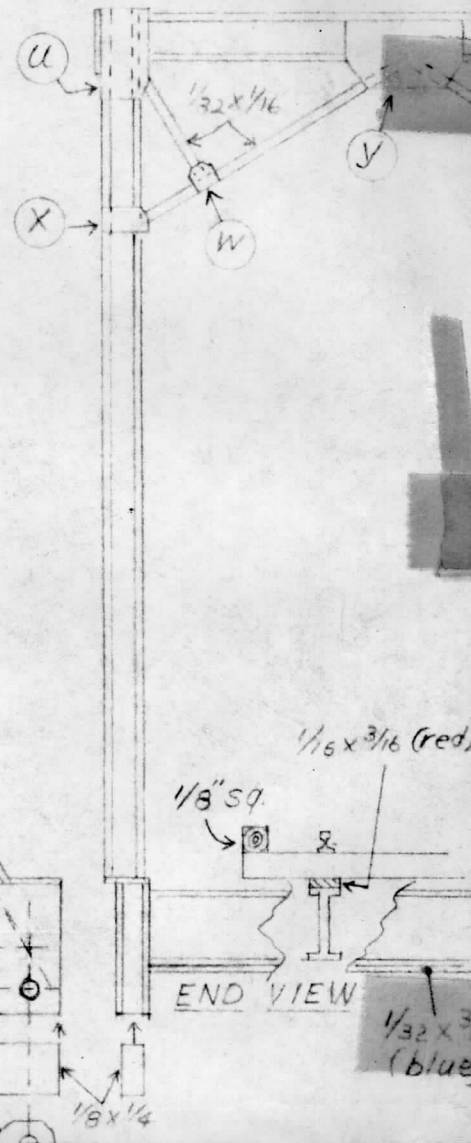
REGAL

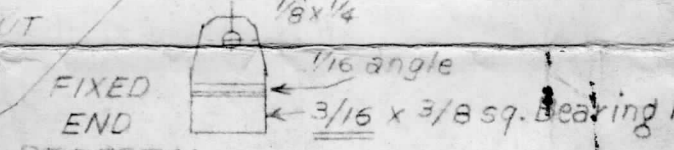
P.O. BOX 923
CHAMPAIGN, ILL. 61820

9-6-67

Kits



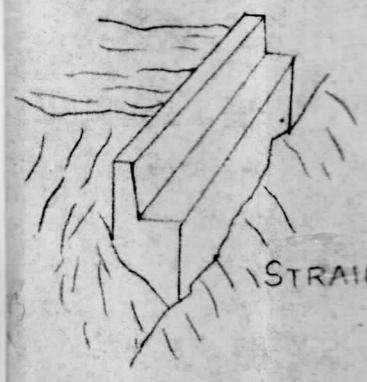




Property of
NASG Inc.

Gerard Rails
60' beyond end of bridge
8"-10" inside running rails

TYPES OF
ABUTMENTS



WARREN TRUSS BRIDGE

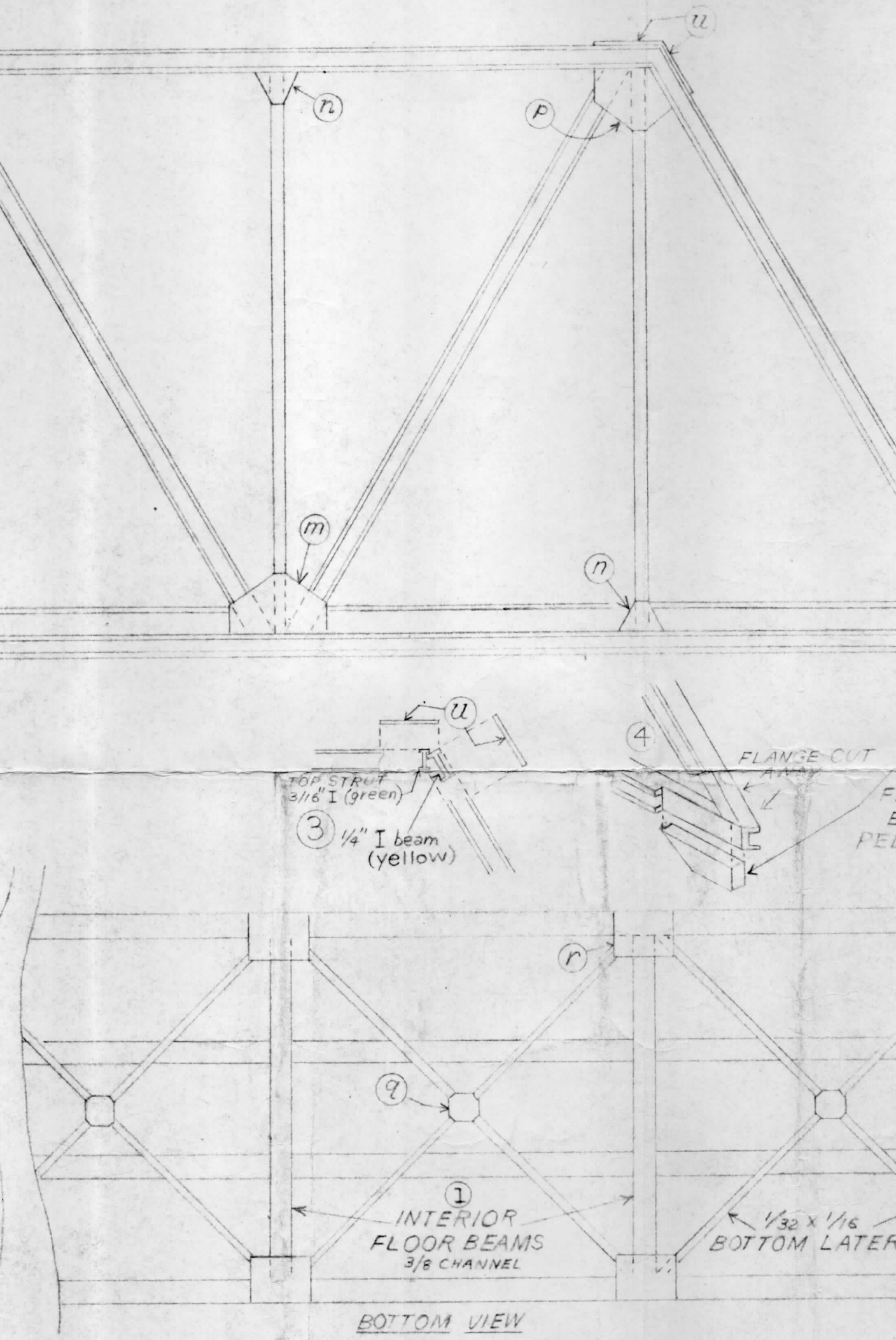
for S Gauge - 3/16" Scale = 1 ft.

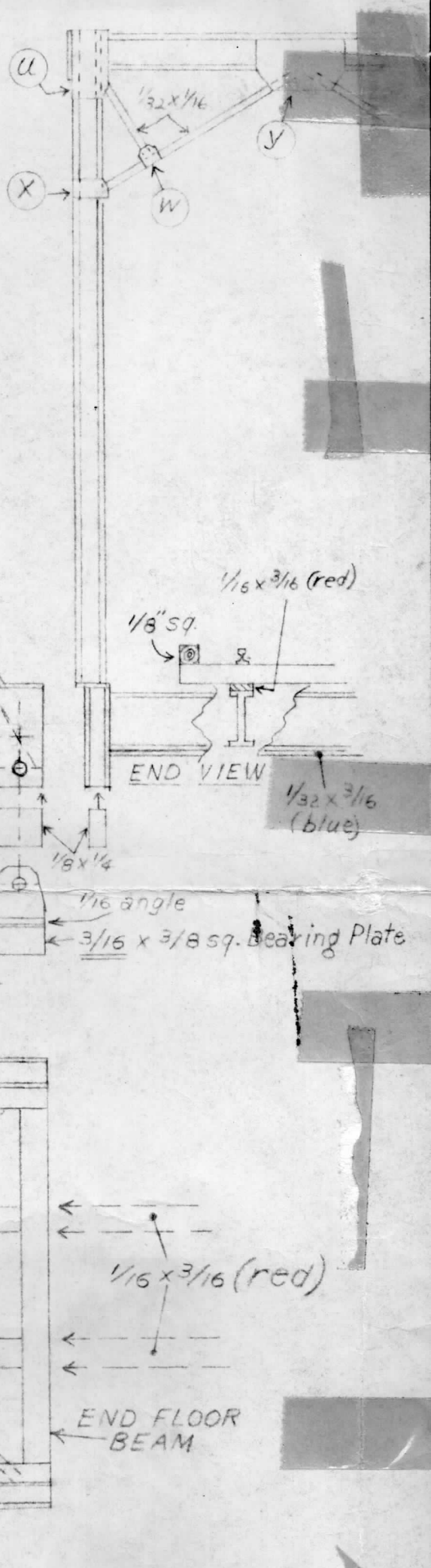
Plus a few
add. Total
Parts 329

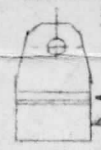
REGAL Kits

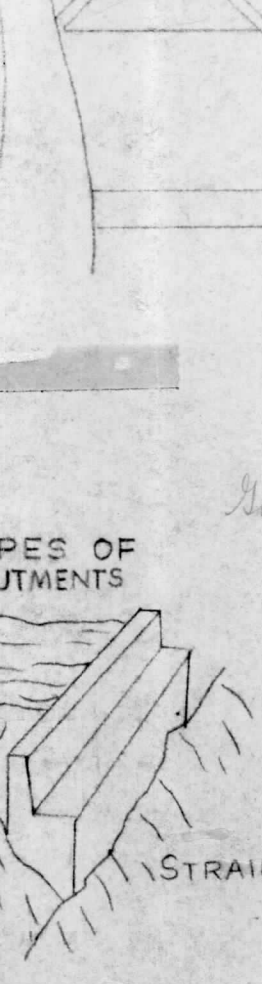
P.O. BOX 923
CHAMPAIGN, ILL. 61820

9-6-67 WFR.









Gerard Rails
60' beyond end of bridge
8"-10" inside running rails

Pkgs 2 few
odd, Total
Parts 329

Property of NASG Inc.

WARREN TRUSS BRIDGE

for S Gauge - 3/16" Scale = 1 ft.

REGAL Kits
P.O. BOX 923
CHAMPAIGN, ILL. 61820

9-6-67 WFR.

REGAL KITS WARREN TRUSS BRIDGE KIT

Read these instructions through before starting construction. These plans should be laid out upon, and taped to, a perfectly flat, (this is important) smooth surface. Cover the plans with waxed paper or Saranwrap, stretched tightly, and taped.

Assemble the two side trusses over the plan. Glue two or three Gusset Plates (r) along the bottom of each truss, so they will be ready for the floor, when it is assembled between the sides.

Build up the floor system by gluing to the waxed paper the two 1/16 x 3/16 x 18 (red). Atop these glue the Interior Floor Beams (3/8 Channel). See detail drawings 1. IMPORTANT: Two of these channels are slightly shorter. These are for the end floor beams, leave equal short space on each end, this is to allow room for the end gusset plates, which is shown in the end view.

Between these, atop the 1/16 x 3/16 red pieces, fit in the Stringers, also made of 3/8 Channel. These are left for you to cut to length so you may compensate for any slight differences in Floor Beam spacing. Notch the ends of these stringers as shown in Detail 2 side view, for neater appearance and greater strength.

Atop the Floor Beams cement 1/32 x 3/16 (blue), see Detail 1 side view, and end view. Remember, we are still working upside down, these last pieces are actually on the bottom of the floor system.

When thoroughly dry and set, pull up the completed floor, and turn over to cement the ties in place, spacing about equal to tie width.

The rails should now be Pliobonded or spiked in place. We recommend leaving the rails 1 to 2 inches long on each end for spiking to the abutment ties. This assures alignment. The use of inner guard rails is common, but actually many shorter bridges do not have them. Add the 1/8 square guard timbers along ends of ties (see end plan). This completes the floor.

Now glue together the floor system and the two side trusses. At the same time, glue in place any two of the Top Struts (green) to assure temporary but proper spacing at the top. Make absolutely certain that the entire assembly at this time is all in square, and that the floor is flat and not twisted. The side trusses must be square with the floor. This is all extremely important. Use sufficient cement here and allow ample drying time before moving the bridge at this stage.

Add the remaining Top Struts (green), top laterals, bottom laterals, end portal bracing, and finally the gusset plates, which are lettered. Detail drawing 3 shows how the top struts at the end portals are assembled. Detail 4 shows notching of sides for outer plates.

Pay particular attention to end pedestals. The pedestals themselves are built separately, slipped over the end gussets and held in place with 1/16 dowel pins thru the Pin Bearing Holes. The pedestals are then glued in place on the abutments. By removing these pins and a few spikes, the bridge can be lifted out.

Drawing of two types of abutments are shown. The height of upper back wall is equal to the distance from the bottom of the bearing plate to the bottom of the ties, assuming the same size ties are used on the approaches.

We show a 45 degree skew arrangement, which is relatively simple. This bridge can be skewed to other angles, but this can complicate construction.

This bridge has been simplified, but retains correct proportions and engineering design. The floor system prototypically would be sufficient for medium weight steam locomotives and all diesels. We assume that those who wish to super-detail this bridge, or further alter it for their special purposes, will already have the necessary technical knowledge. Please feel free to write us.