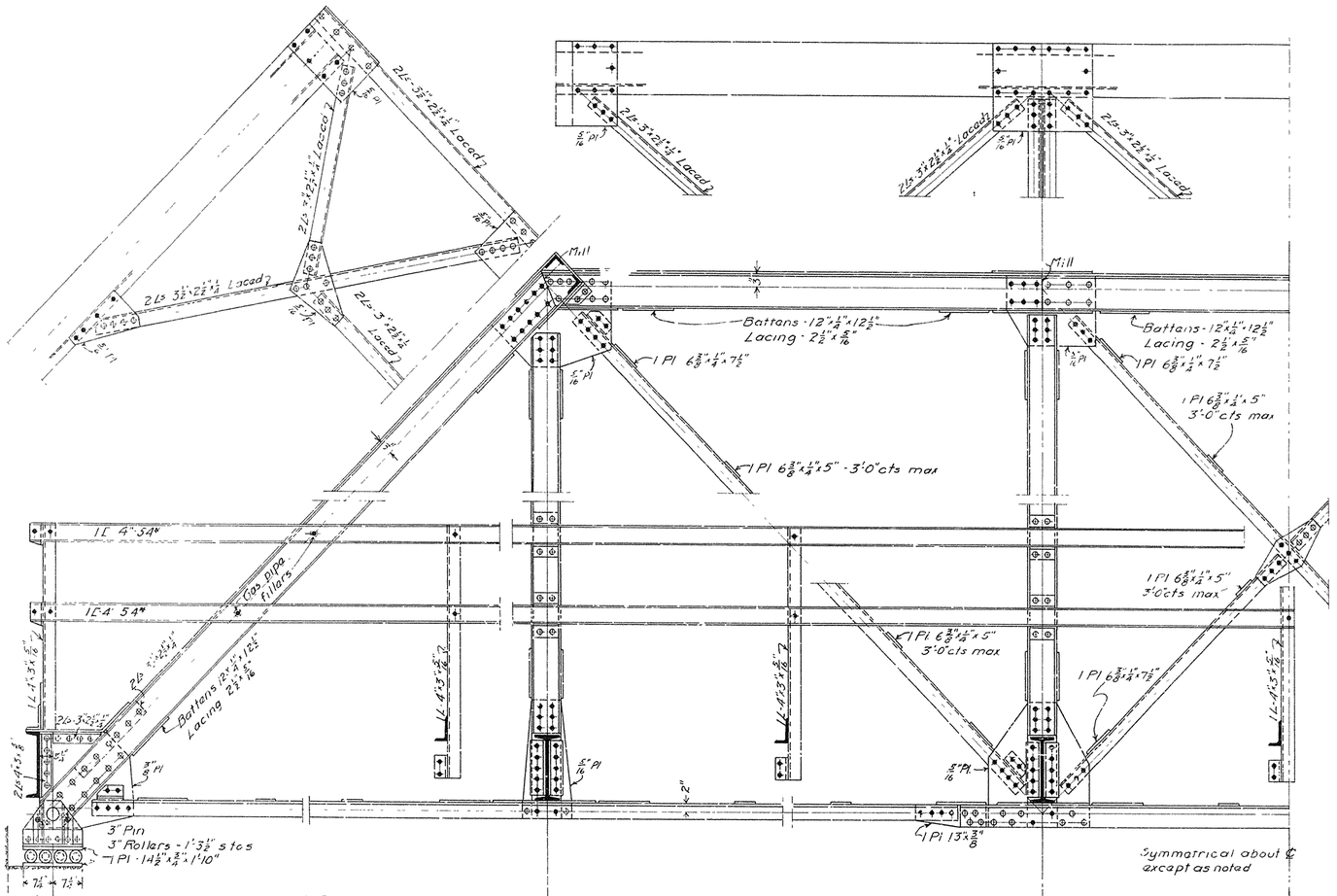
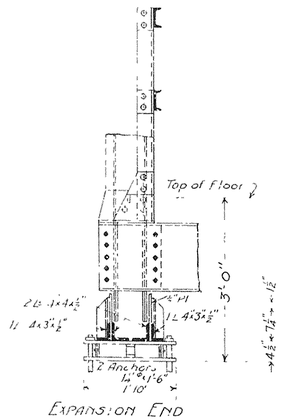
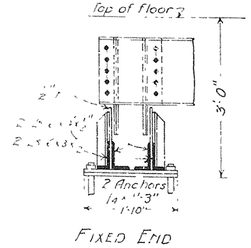
FED ROAD DIST. NO.	STATE	FED AID PROJ. NO.	FISCAL YEAR	SHEL. NO.	TOTAL SHEETS
6	ARK				

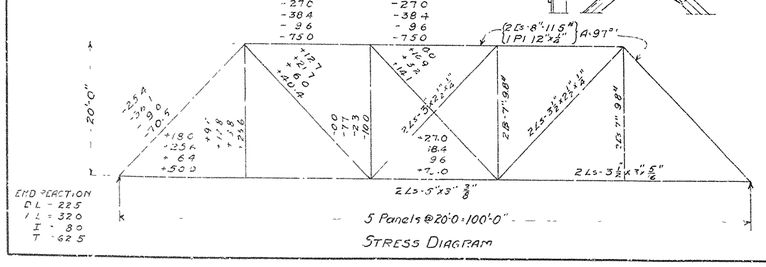




EXPANSION END



FIXED END



STRESS DIAGRAM

END REACTION
D.L - 225
L.L - 320
I - 80
T - 625

STRINGERS

D.L M = $\frac{1}{8} \times 74 \times 20^2$ = 3700'#
L.L M = $8\frac{1}{3} \times 2600$ = 21700'#
Impact = 30% = 6510'#
31910'#

$\frac{31910 \times 12}{16000}$ = 23.9 - Sec. Mod. Reqd.

Use 10" 25.4# Is. Sec. Mod = 24.4

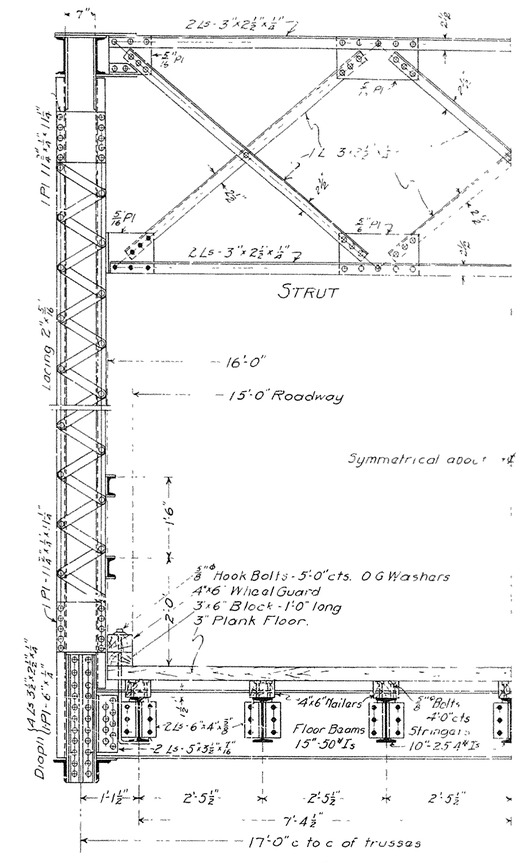
FLOOR BEAMS

D.L M = $\frac{1}{8} \times 653 \times 17^2$ = 23,600'#
L.L M = 7 x 6880 = 48,160'#
Impact = 30% = 14,448'#
Total = 86,208'#

$\frac{86,208 \times 12}{16000}$ = 64.8 - Sec. Mod Reqd.

Use 15" 50# Is . Sec Mod = 64.2

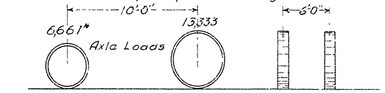
Note:- This drawing is general only. Shop drawings must be made in compliance with the specifications, submitted, and approved before fabrication is begun.



HALF SECTION

SPECIFICATIONS

Live Load - Uniform 80# per sq ft of roadway. Concentrated - 1-10 Ton truck as shown below



Impact = $\frac{100 S}{L + 300}$

Unit Stresses:- See Arkansas State Highway Department's Specifications
Rivets ¾" diam. and open holes ⅞" diam except in flanges of 7" Is.
All field connections are to be riveted
Rivet holes in tension members are to be so spaced that not more than one hole is deducted from the area of cross-section of each angle at the point of maximum stress
Shop paint - one coat of red lead and raw linseed oil
Field paint - two coats of different colors as approved by the engineer.
Batten plates to be spaced not over 3'-0" centers on tension members

ESTIMATED QUANTITIES

Structural Steel - Lbs	53,605
Lumber - Ft B.M	6830

STANDARD PLAN
100 FT. STEEL HIGHWAY BRIDGE
16 FT ROADWAY - WOOD FLOOR
ARKANSAS HIGHWAY DEPARTMENT
LITTLE ROCK, ARK.

APPROVED BY:-

CHAIRMAN, ARKANSAS STATE HIGHWAY COMMISSION

STATE HIGHWAY ENGINEER

RECOMMENDED FOR APPROVAL

STATE HIGHWAY BRIDGE ENGINEER

DESIGNED BY	H B G
DRAWN BY	D. C. E.
CHECKED BY	E. C. G
REVISIONS	

AUGUST 1924

STATE STD NO. S-210