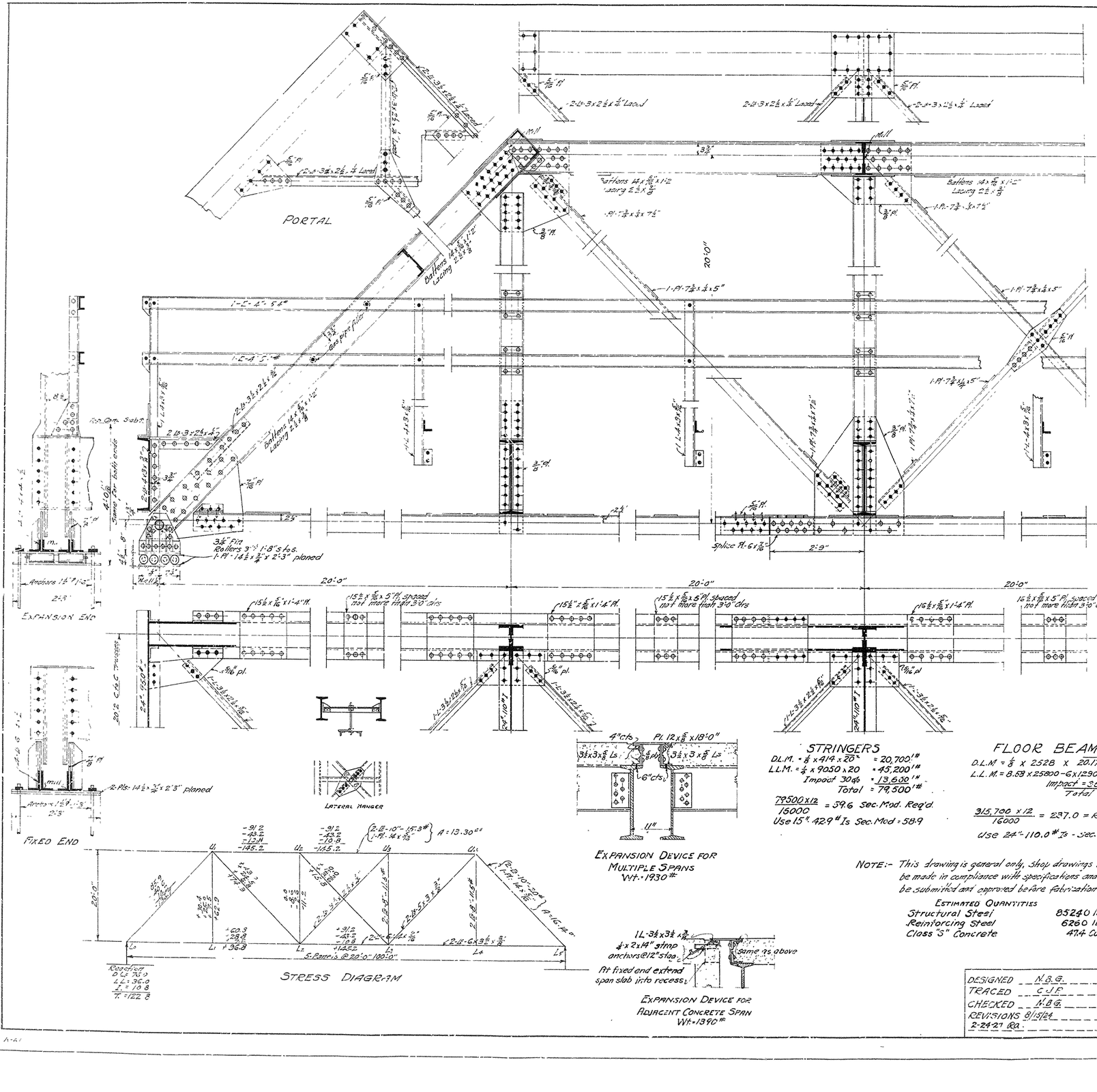
FED. AID PROJ. NO.	STATE	FED. AID PROJECT	F. SEC. & YEAR	SHEET NO.	TOTAL SHEETS
G	ARK.				



STRINGERS

D.L.M. = 1/8 x 414 x 20² = 20,700'#
L.L.M. = 1/4 x 9050 x 20 = 45,200'#
Impact 30% = 13,630'#
Total = 79,500'#

79500 x 12 / 15000 = 39.6 Sec. Mod. Req'd.
Use 15" 42.9# Is Sec. Mod = 58.9

FLOOR BEAMS

D.L.M. = 1/8 x 2.528 x 20.17² = 123,500'#
L.L.M. = 8.58 x 25800 - 6 x 12900 = 144,000
Impact = 30% = 43,200
Total = 315,700'#

315,700 x 12 / 16000 = 237.0 = Reqd Sec. Mod.
Use 24"-110.0# Is - Sec. Mod. = 239.1

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

ESTIMATED QUANTITIES

Structural Steel	85240 lbs
Reinforcing Steel	6260 lbs
Class "S" Concrete	474 Cu Yds.

DESIGNED	N.B.G.
TRACED	C.J.F.
CHECKED	N.B.G.
REVISIONS	8/15/24
	2-24-27 RA.

SPECIFICATIONS.

Live Load:- Uniform - 90 lbs. per square foot of Roadway
Concentrated:- 2-15 Ton Trucks as shown

Impact = 100 S / L + 300

Unit Stresses:- See Arkansas Highway Department Specifications
Rivets:- 3/4" diam.
Open Holes:- 13/16" diam.
All field connections riveted. Rivet holes in tension members shall be so spaced that not more than one hole is deducted from area of cross-section of each angle at point of maximum stress.
Shop Paint:- One coat red lead and raw linseed oil
Field Paint:- Two coats of different colors as approved by the engineer
Batten plates spaced not over 3'-0" C. to C. on tension members.
Concrete:- Floor slab to be Class "S" Concrete. 1" extra thickness has been added for wear.

STANDARD PLAN

100-FT. STEEL HIGHWAY BRIDGE
18' ROADWAY - CONC. FLOOR

ARKANSAS HIGHWAY DEPARTMENT
LITTLE ROCK, ARK.

Approved:- Chairman, Arkansas State Highway Commission

By:- State Highway Engineer

Mar. 1924.

STATE STANDARD No. F-7/10-A