

| | | | |
|-------------|--------|----------|--------------|
| FISCAL YEAR | Job No | SHEET No | TOTAL SHEETS |
| 1928 | 386 | 1 | 12 |

STATE OF ARKANSAS
STATE HIGHWAY DEPARTMENT

PLAN OF PROPOSED BRIDGE
ON
KIRBY-DIERKS ROAD
PIKE & HOWARD COUNTIES

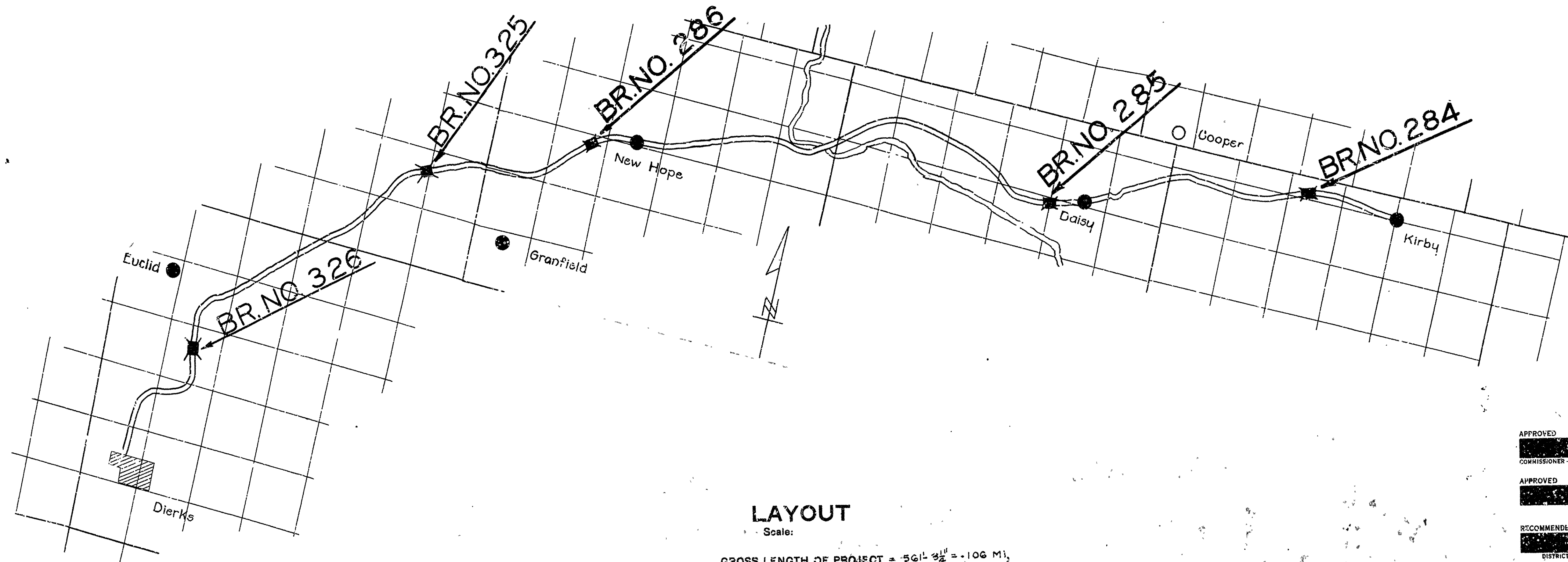
ROUTE 70 SEC. 3&4
JOB No 386
FEDERAL AID PROJECT No.

INDEX OF SHEETS

| Sheet No | Div. No. | Title Sheet |
|----------|----------|------------------------------------------|
| 1 | 1101 | Title Sheet |
| 2 | 1102 | Layout Sheet, Bridge Nos 325 & 326 |
| 3 | 15 | Details - 19' Std Timber Trestle |
| 4 | 16 | Details - 19' Std Timber Trestle |
| 5 | 1103 | Layout Sheet - Bridge No. 286 |
| 6 | 1104 | Layout Sheet - Bridge No. 284 |
| 7 | 1015 | Std 30' R.C.D. Girder - 18' Rd |
| 8 | 1051 | Std 60' Low Truss Steel Span |
| 9 | 1105 | Details of Substructure - Bridge No. 284 |
| 10 | 1106 | Layout Sheet - Bridge No. 285 |
| 11 | 1054 | Std 90' Low Truss Steel Span |
| 12 | 1107 | Details of Substructure - Bridge No. 285 |

QUANTITIES

| Item No. | Description | Quantity |
|----------|-----------------------------------|---------------|
| 13 | Dry Excavation for Structures | 305 Cu Yds |
| 13 | Wet Excavation for Structures | 406 " " |
| 13 | Solid Rock Excavation for Strct's | 48 " " |
| 52 | Untreated Timber | 1480 Ft. 8M |
| 52 | Treated Timber | 46,855 " " |
| 54 | Class "A" Concrete | 297.43 Cu Yds |
| 54 | Class "B" Concrete | 16.49 " " |
| 54 | Class "S" Concrete | 296.28 " " |
| 55 | Reinforcing Steel | 90,677 Lbs |
| 56 | Structural Steel (Trusses) | 95,182 " " |
| 67 | Treated Timber Piling | 462 Lin. Ft |
| 69 | Rip Rap 1' Thick | 595 Sq Yds. |
| 74 | Concrete Railing for Strct's | 440 Lin. Ft |



LAYOUT

Scale:
GROSS LENGTH OF PROJECT = 561' 3/4" = .106 MI.
NET LENGTH OF PROJECT = 561' 3/4" = .106 MI.

APPROVED
COMMISSIONER - STATE LANDS, HIGHWAYS AND IMPROVEMENTS

APPROVED
STATE HIGHWAY ENGINEER

RECOMMENDED FOR APPROVAL
DISTRICT ENGINEER - U. S. BUREAU OF PUBLIC ROADS

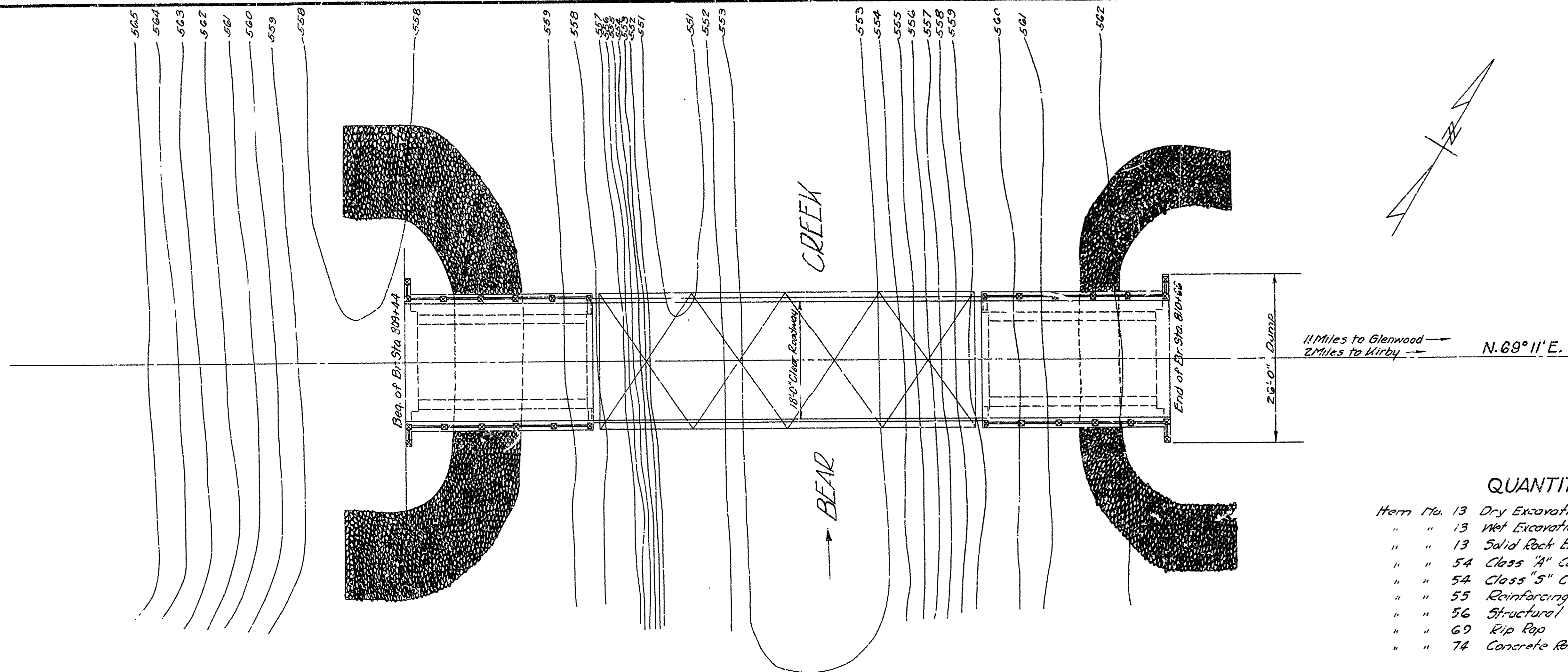
RECOMMENDED FOR APPROVAL
CHIEF ENGINEER - U. S. BUREAU OF PUBLIC ROADS

APPROVED
DIRECTOR - U. S. BUREAU OF PUBLIC ROADS

M. B. Garcia
BRIDGE ENGINEER

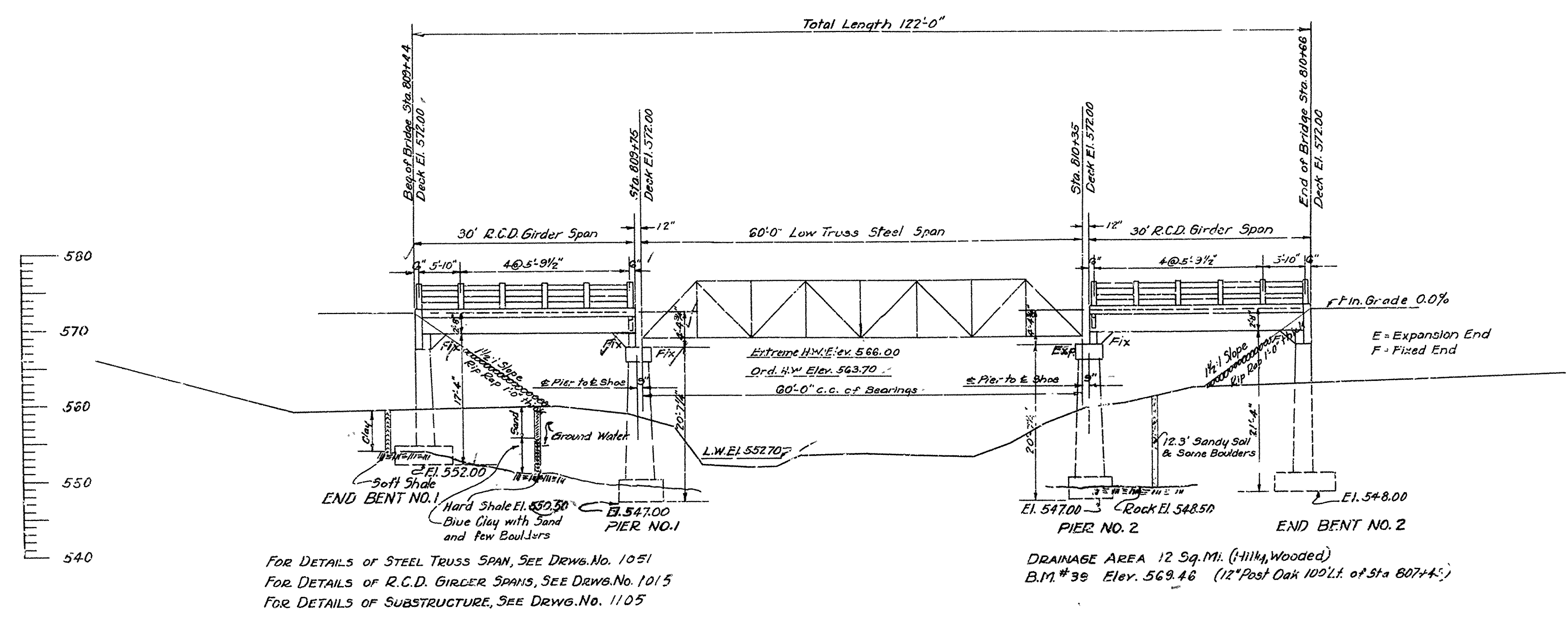
BRIDGE NO. 284, 285 & 286 DRAWING NO. 1101

| | | | |
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| FISCAL YEAR | JOB No. | SHEET No. | TOTAL SHEETS |
| 1928 | 386 | G | 12 |



QUANTITIES

| | | |
|----------|----------------------------------|--------------|
| Item No. | Description | Quantity |
| 13 | Dry Excavation for Struts | 153 Cu Yds. |
| 13 | Wet Excavation for S. 's | 155 " " |
| 13 | Solid Rock Excavation for Struts | 21 " " |
| 54 | Class "A" Concrete | 11,449 " " |
| 54 | Class "5" Concrete | 96.55 " " |
| 55 | Reinforcing Steel | 30,061 Lbs |
| 56 | Structural Steel (Trusses) | 33,182 " " |
| 69 | Rip Rap | 220 Sq. Yds. |
| 74 | Concrete Railing for Struts | 130 Lin. Ft. |

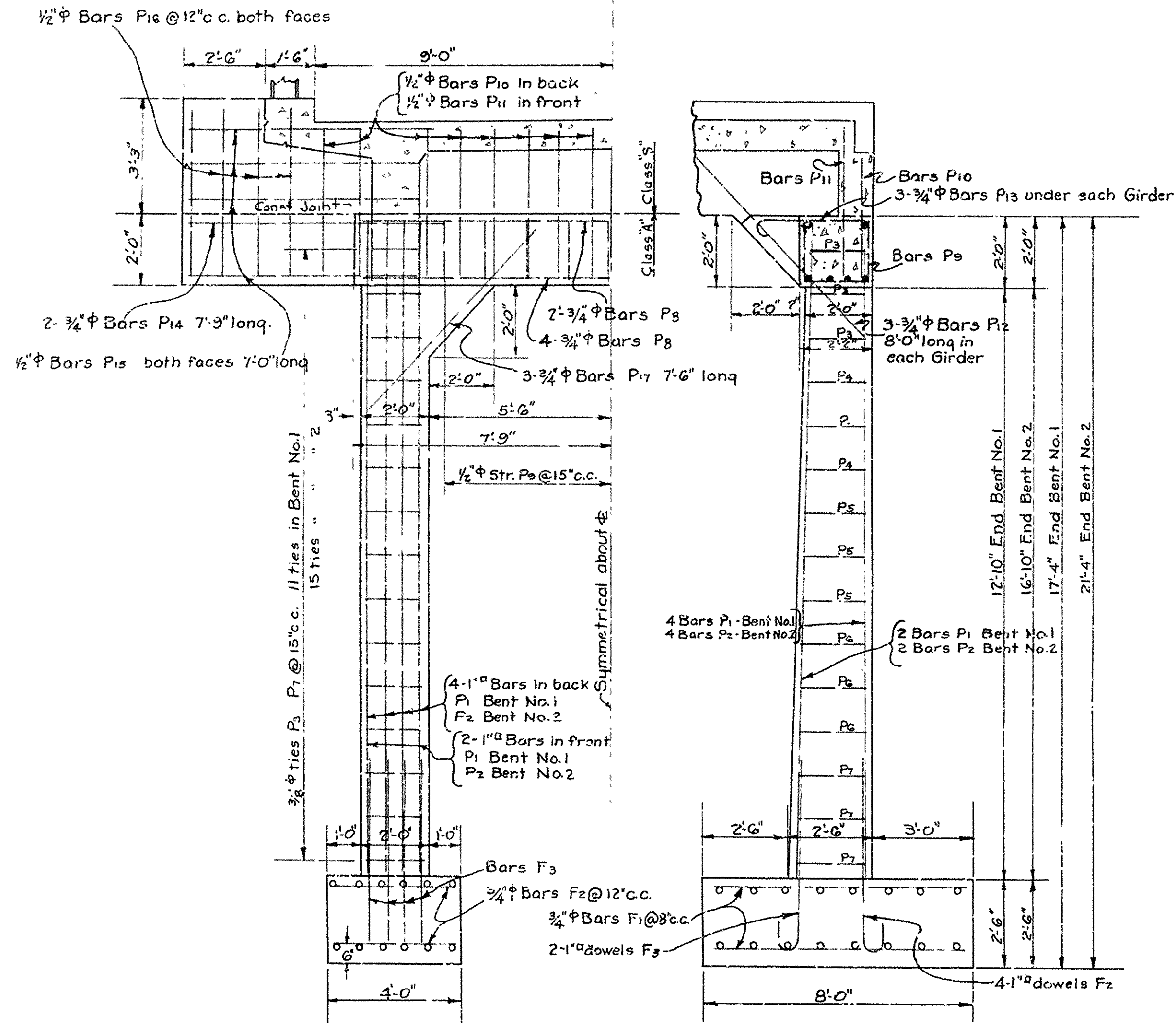


LAYOUT OF BRIDGE OVER BEAR CREEK KIRBY-DIERKS ROAD PIKE COUNTY
 ROUTE 70 SEC. 4
ARKANSAS STATE HIGHWAY DEPARTMENT
 LITTLE ROCK, ARK.
 Drawn By: *AS* Date: *12/1/27*
 Traced By: *GA* Date: *7/27/27*
 Checked By: *Arch* Date: *8-12-28*
 Scale: 1 in. = 10 ft.
BRIDGE NO. 284 DRAWING NO. 1104

M.B. Gorman
 BRIDGE ENGINEER

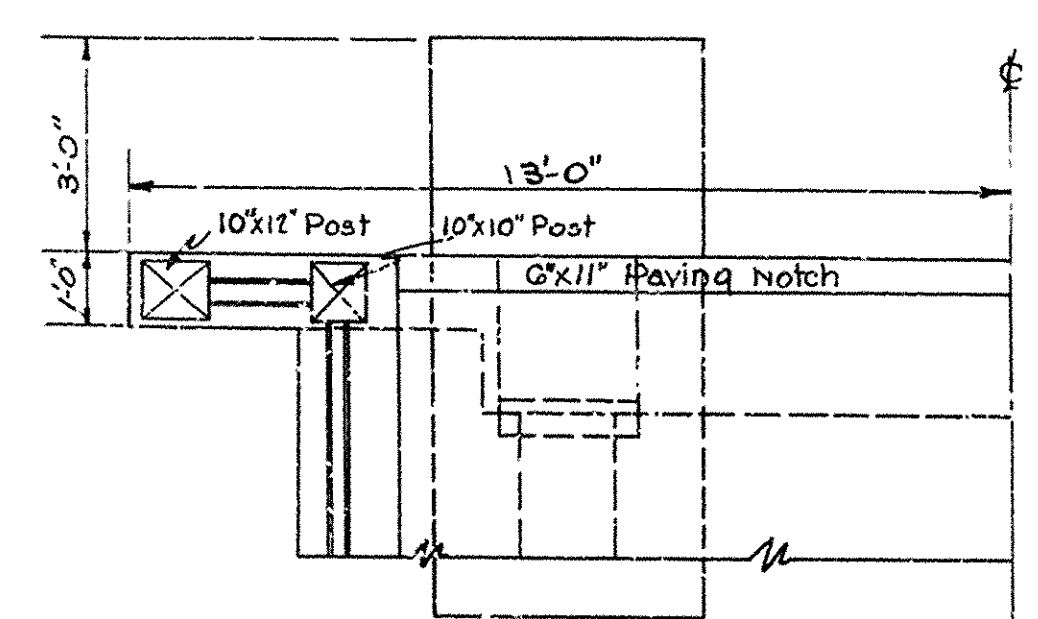
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| FISCAL YEAR | Job No. | SHEET NO. | TOTAL SHEETS |
| 1928 | 386 | 9 | 12 |

For Details of Superstructure See Drawg. No. 1015

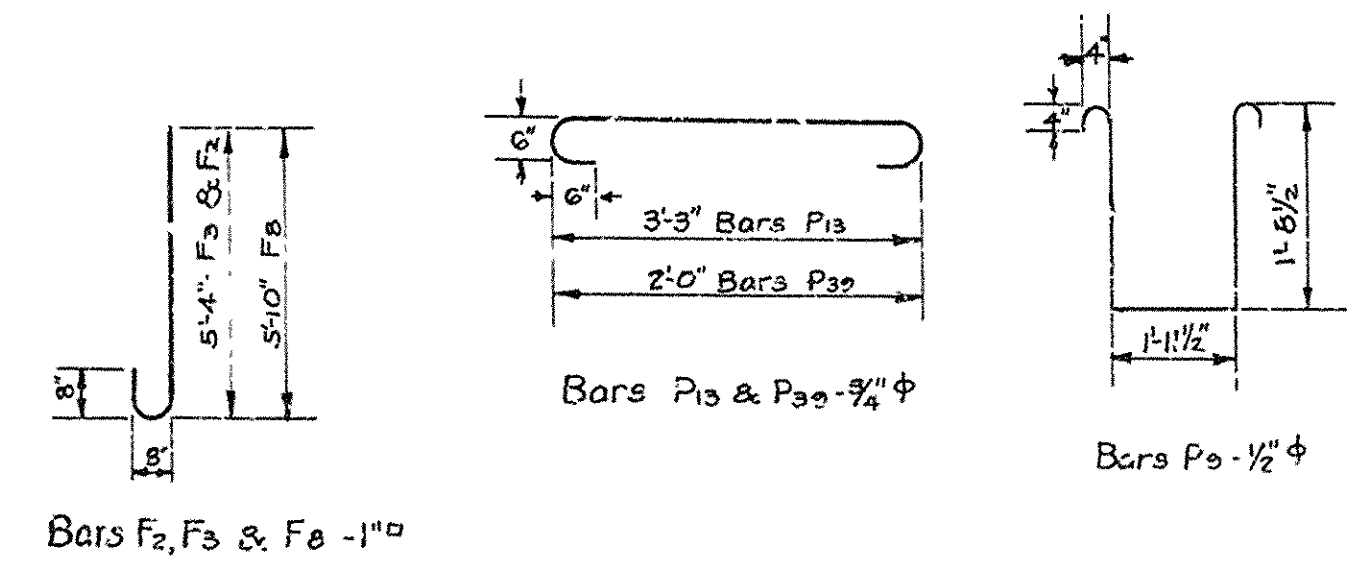


HALF ELEV. OF END BENTS

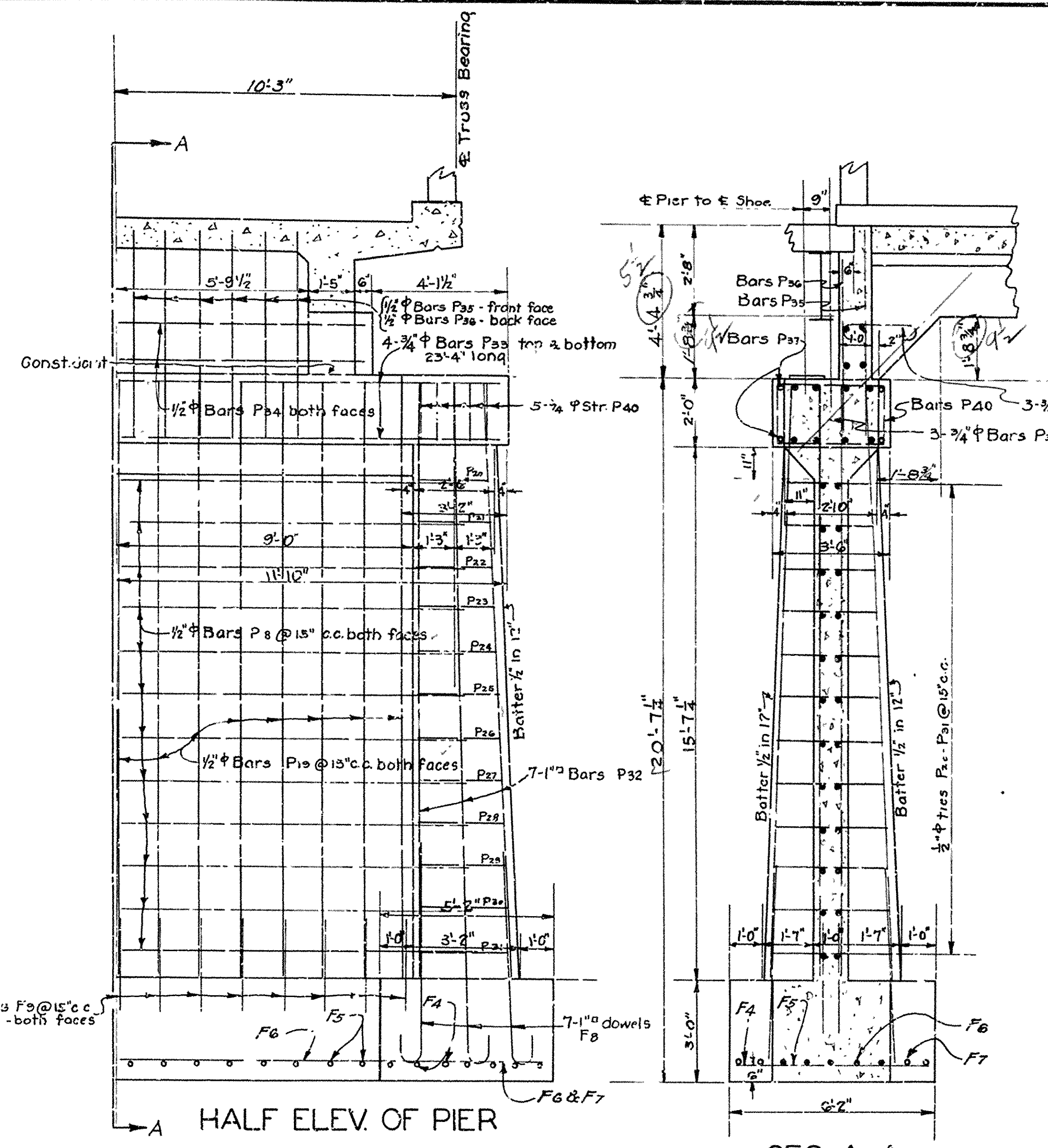
SECTION ON C-C



HALF PLAN OF END BENTS

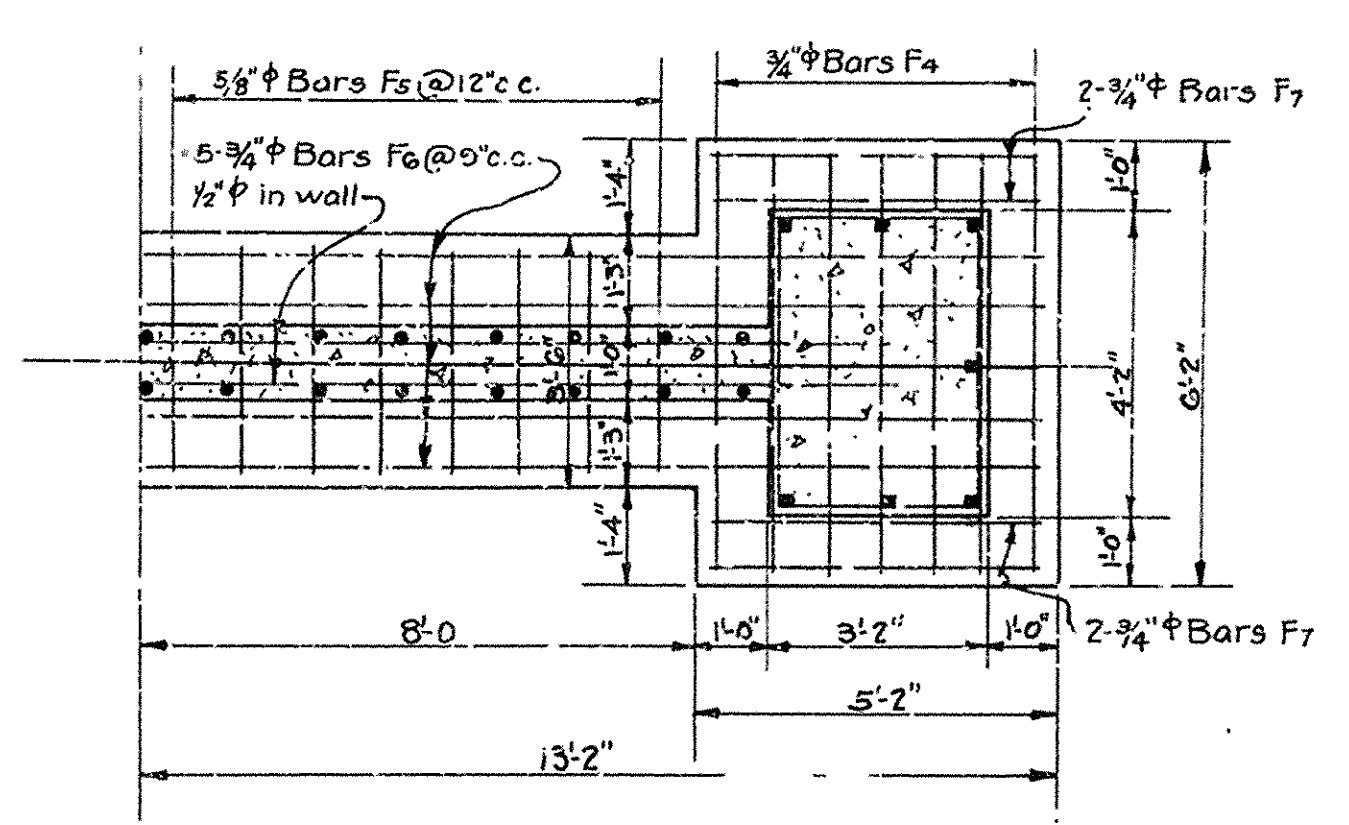


| | |
|----------------|--------|
| 1'-8 1/2" P1 | 3/4" Φ |
| 1'-10" P4 | 1" Φ |
| 1'-11 1/2" P5 | 1" Φ |
| 2'-1 1/2" P6 | 1" Φ |
| 2'-2" P7 | 1" Φ |
| 2'-8" P20 | 1/2" Φ |
| 2'-9" P21 | 1/2" Φ |
| 2'-10 1/2" P22 | 1/2" Φ |
| 2'-11 1/2" P23 | 1/2" Φ |
| 3'-1" P24 | 1/2" Φ |
| 3'-2" P25 | 1/2" Φ |
| 3'-3 1/2" P26 | 1/2" Φ |
| 3'-4 1/2" P27 | 1/2" Φ |
| 3'-6" P28 | 1/2" Φ |
| 3'-7" P29 | 1/2" Φ |
| 3'-8 1/2" P30 | 1/2" Φ |
| 3'-9 1/2" P31 | 1/2" Φ |
| 3'-2 1/2" P30 | 3/4" Φ |

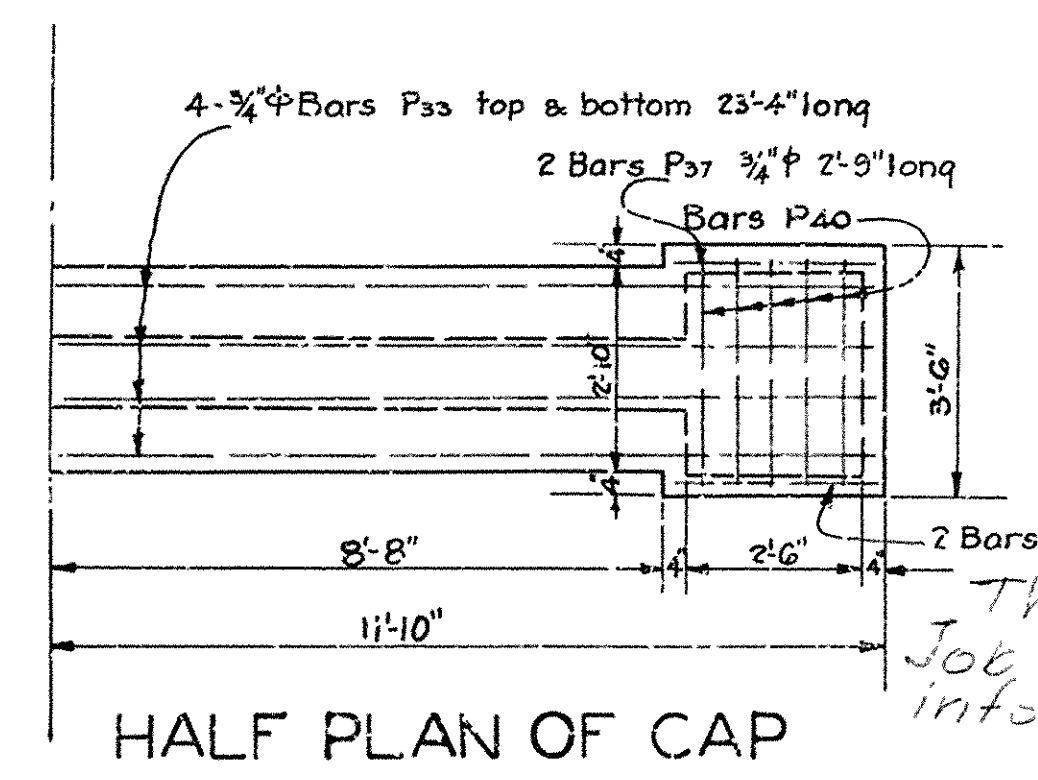


HALF ELEV. OF PIER

SEC. A-A



HALF FOOTING PLAN



HALF PLAN OF CAP

This drawing included in Job No. 3454 for general information only

**DETAILS OF SUBSTRUCTURE
 BRIDGE OVER BEAR CREEK
 KIRBY-DIERKS ROAD
 PIKE COUNTY
 ROUTE TO SEC. 4**

ARKANSAS STATE HIGHWAY DEPARTMENT
 LITTLE ROCK, ARK.

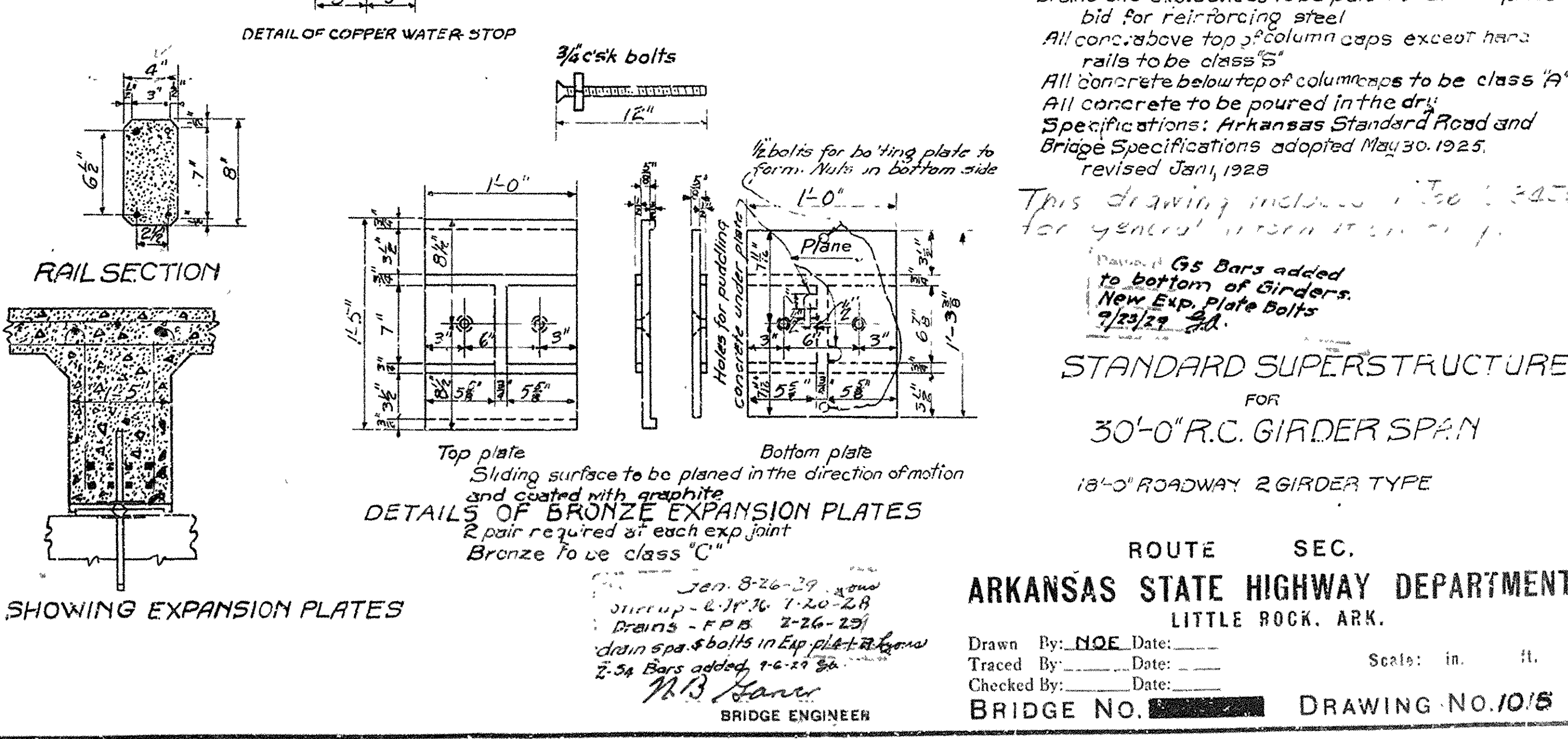
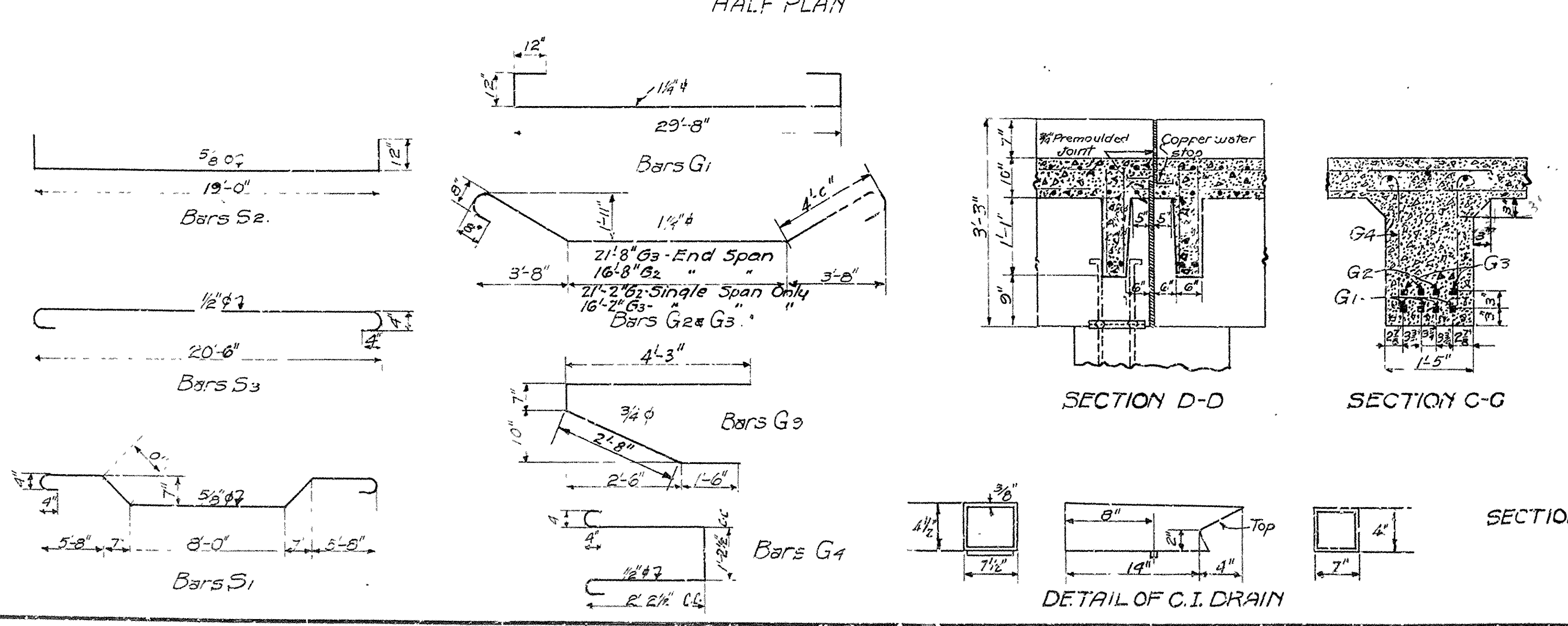
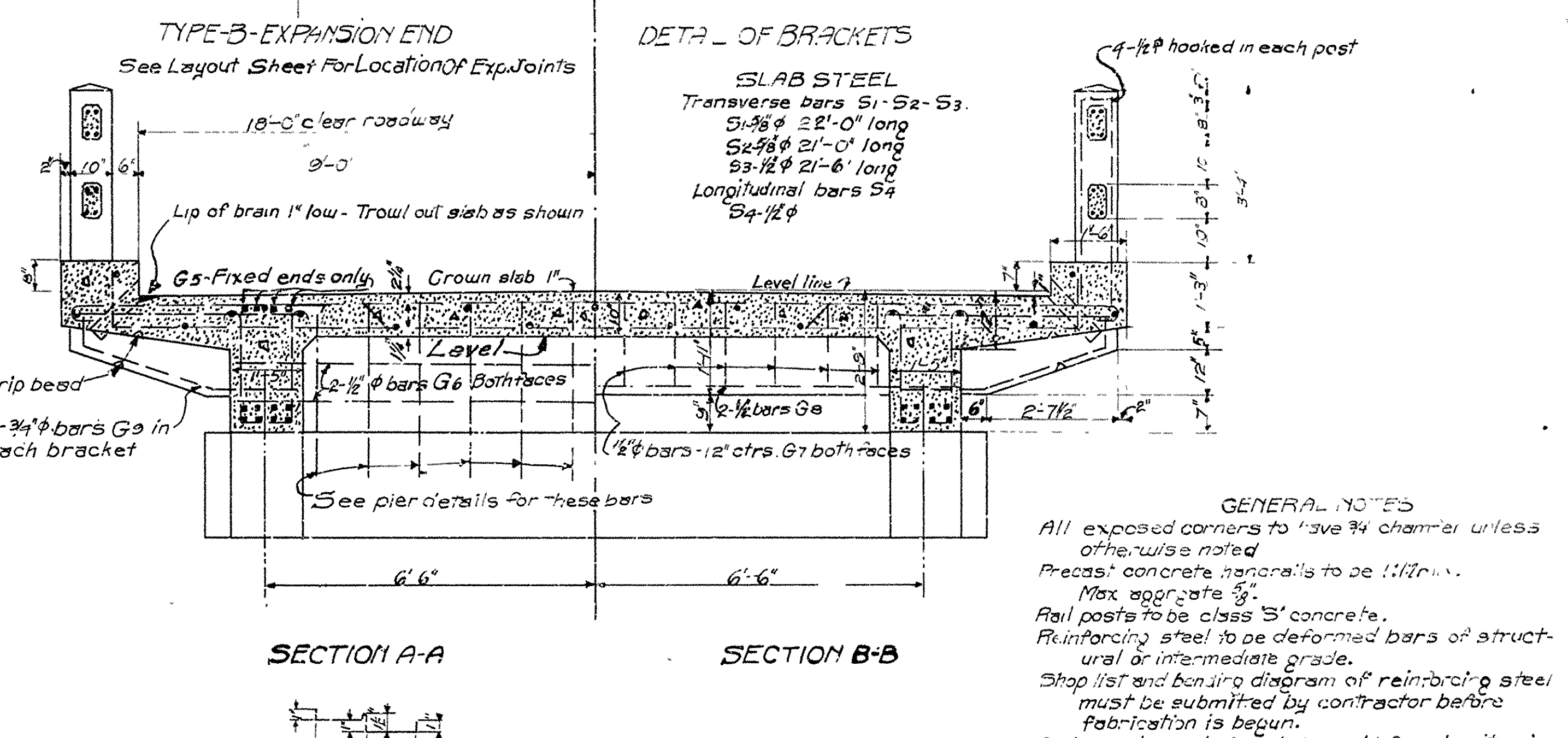
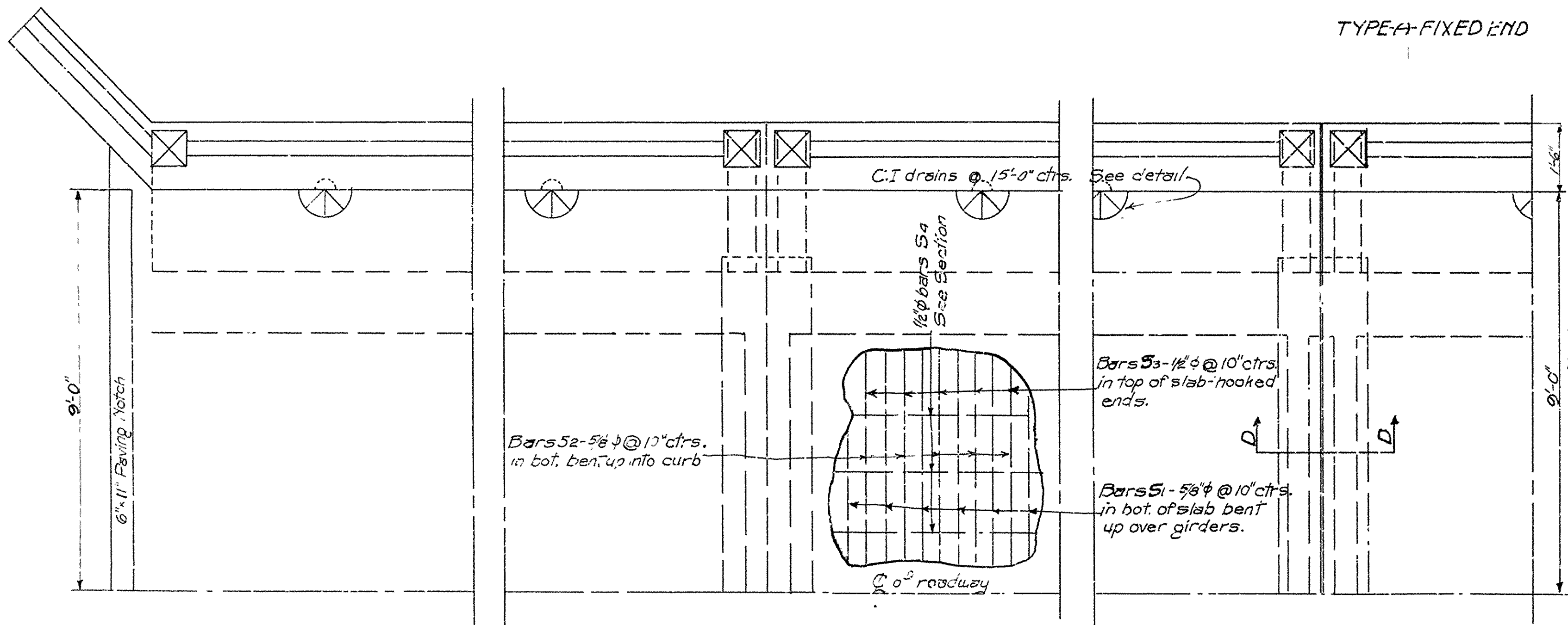
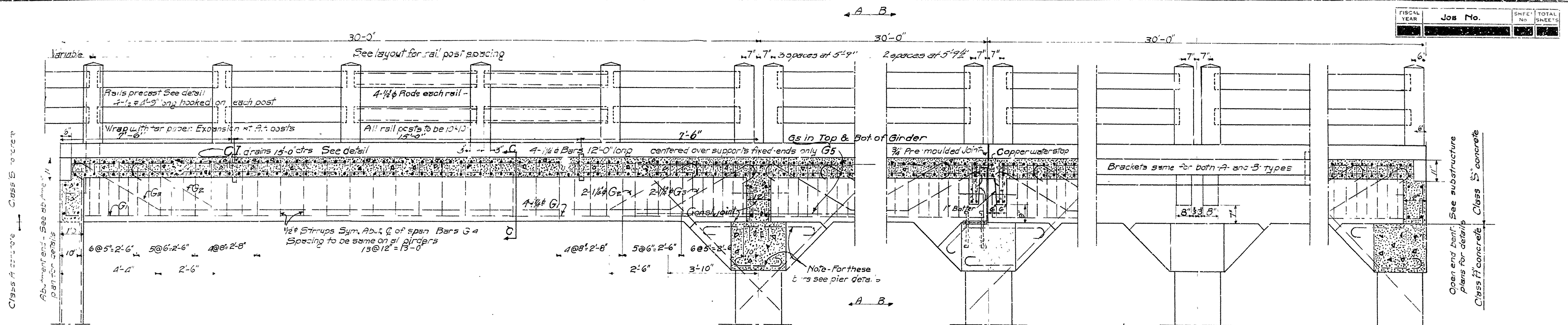
Drawn By: *HE* Date: 7-24-27
 Traced By: *HE* Date: 7-26-27
 Checked By: *HE* Date: 8-17-28
 Scale: 3/8" = 1 ft.

M.B. Gower
 BRIDGE ENGINEER

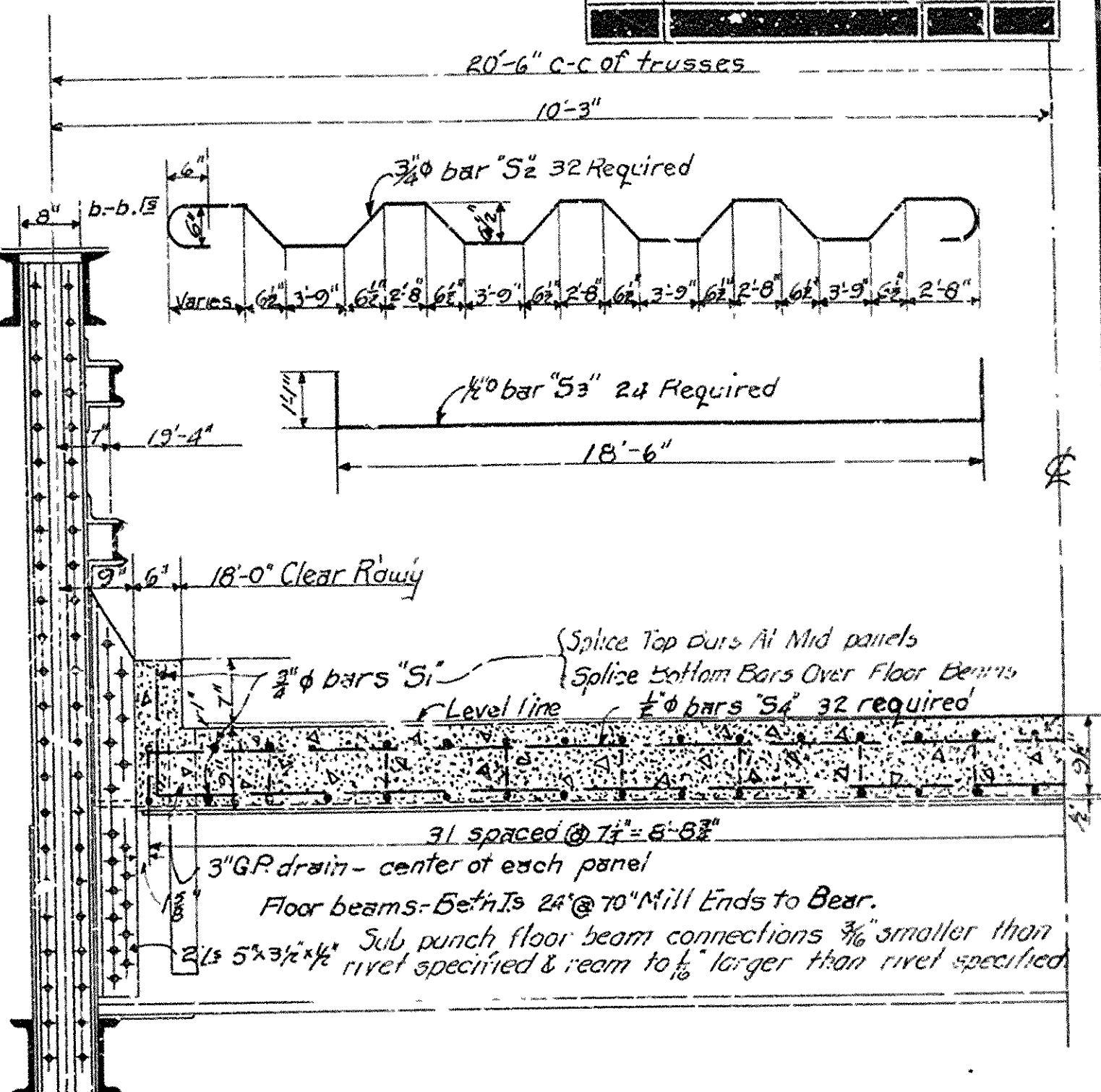
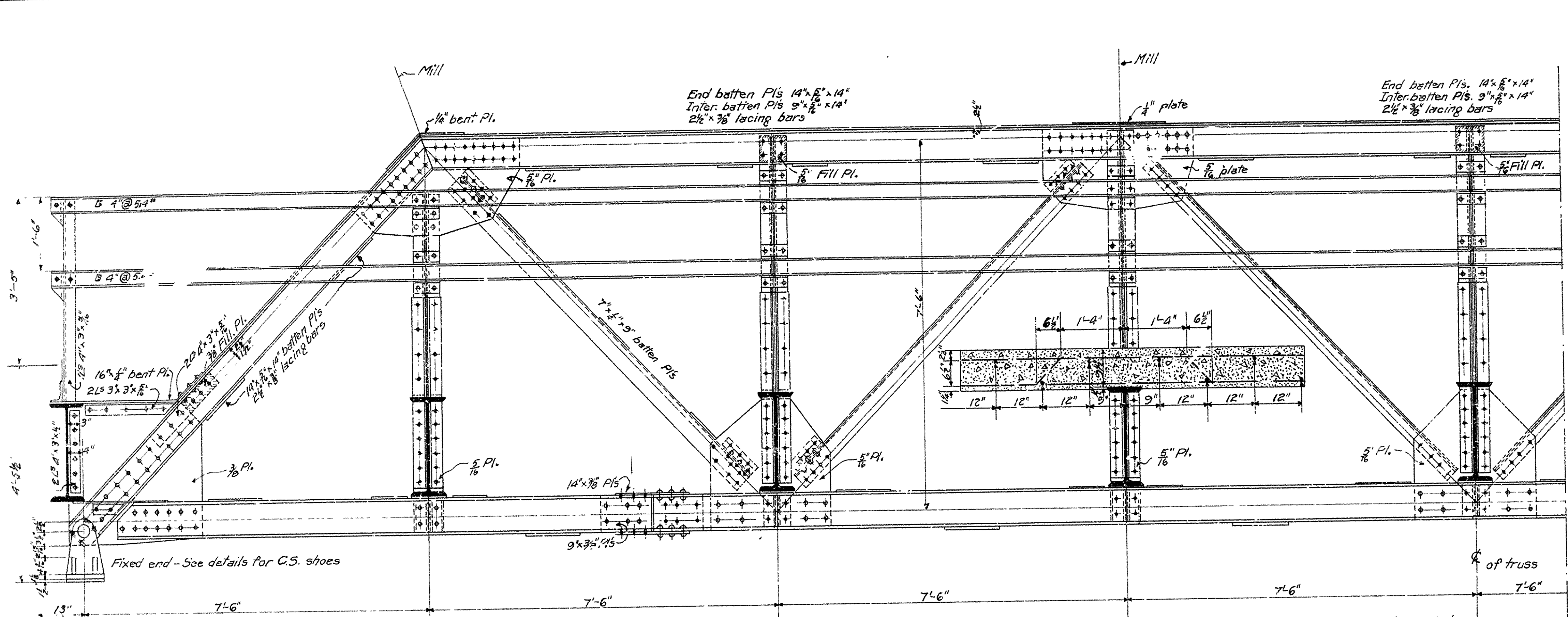
BRIDGE NO. 284

DRAWING NO. 1105

| | | | |
|-------------|---------|-----------|--------------|
| FISCAL YEAR | Job No. | SHEET NO. | TOTAL SHEETS |
| | | | |



| | | | |
|-------------|---------|-----------|--------------|
| FISCAL YEAR | Job No. | SHEET NO. | TOTAL SHEETS |
|-------------|---------|-----------|--------------|



HALF SECTION AT C OF BRIDGE

SPECIFICATIONS

TOTAL WHEEL LOADS

14'-0" 6'-0"

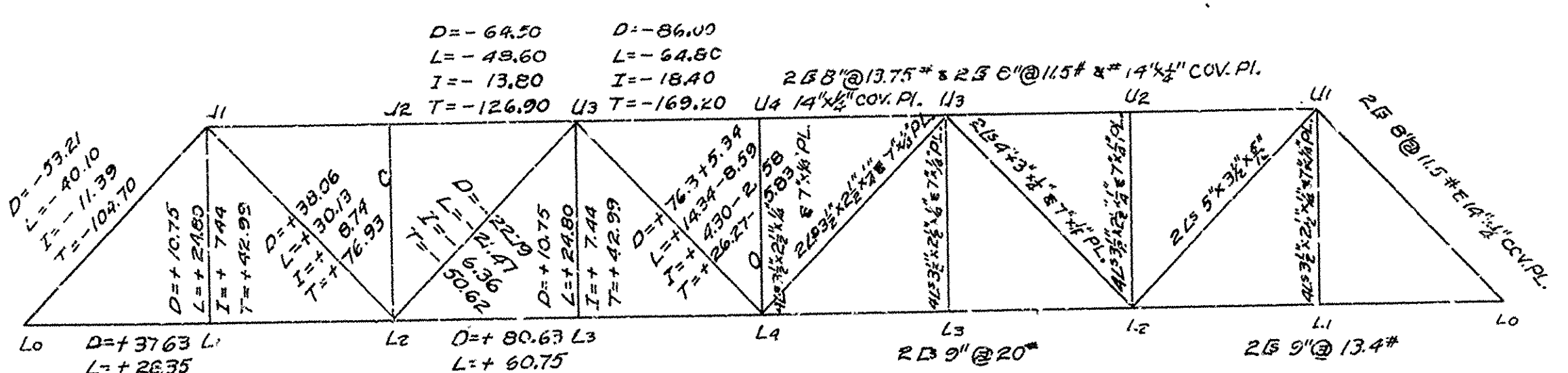
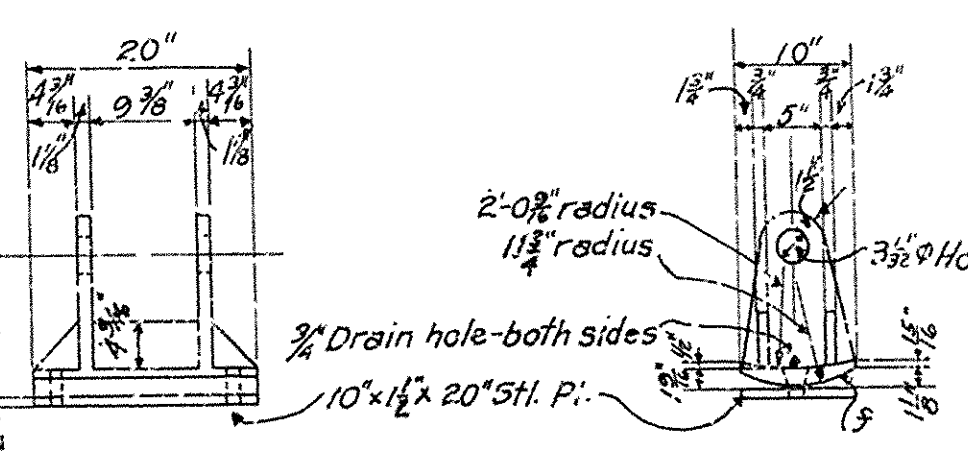
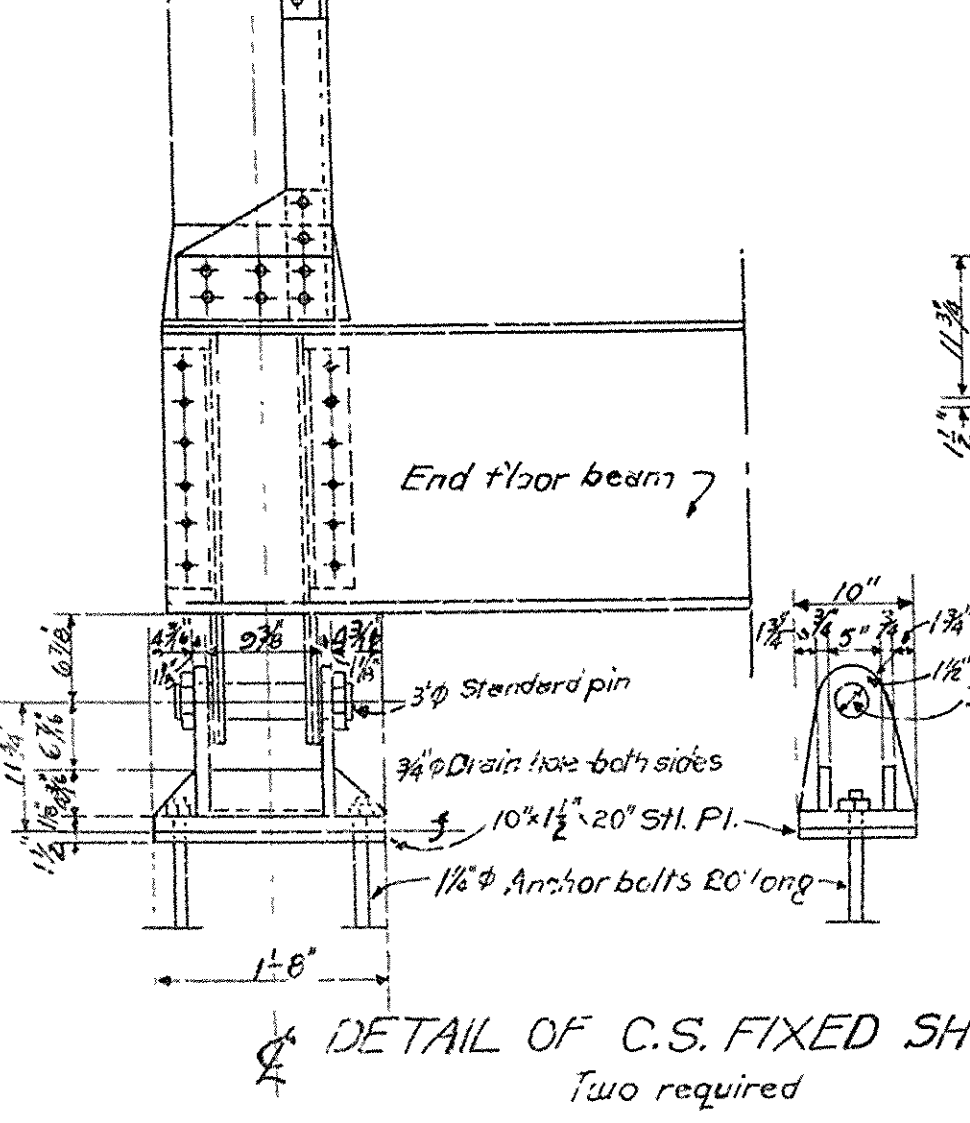
Live load - uniform - 100 Lbs. per Sq. Ft. Rdwy. Concentrated - 2-15 ton trucks as shown. Impact = 100 ± L + 300.

Unit stresses, Concrete 810 #/sq. Reinf. steel 18000 #/sq. Struct. steel 18000 #/sq. Rivets to be 3/4" in Diam.

Rivet holes: Sub punch all rivet holes in main truss connections (with shop field) 1/8" larger than rivet specified & ream to 1/8" larger than rivet specified after assembly in shop, and match marked. All field connections riveted. Rivet holes in tension members so spaced that only one hole is deducted from each angle at the point of maximum stress. Deduct two Web Holes and one Flange hole from each channel at point of maximum stress. Shop paint: One coat of "Red Lead" and raw linseed oil. Field paint: Two coats of different color as approved by the Engineer. Batten plates to be spaced not over 3'-0" Ctr's on tension members. Concrete Floor Slab - Class "S". Extra 1" added for wear. Stringers & Floor Beams to be milled to exact length. Members of equal or greater strength may be used in place of members shown here, but payment will be made in accordance with size shown on this plan. This drawing is general only. Shop drawing must be made in compliance with specifications, must be submitted and approved before fabrication begins. Specifications Arkansas State Highway Specifications adopted May 30, 1925 and Revised

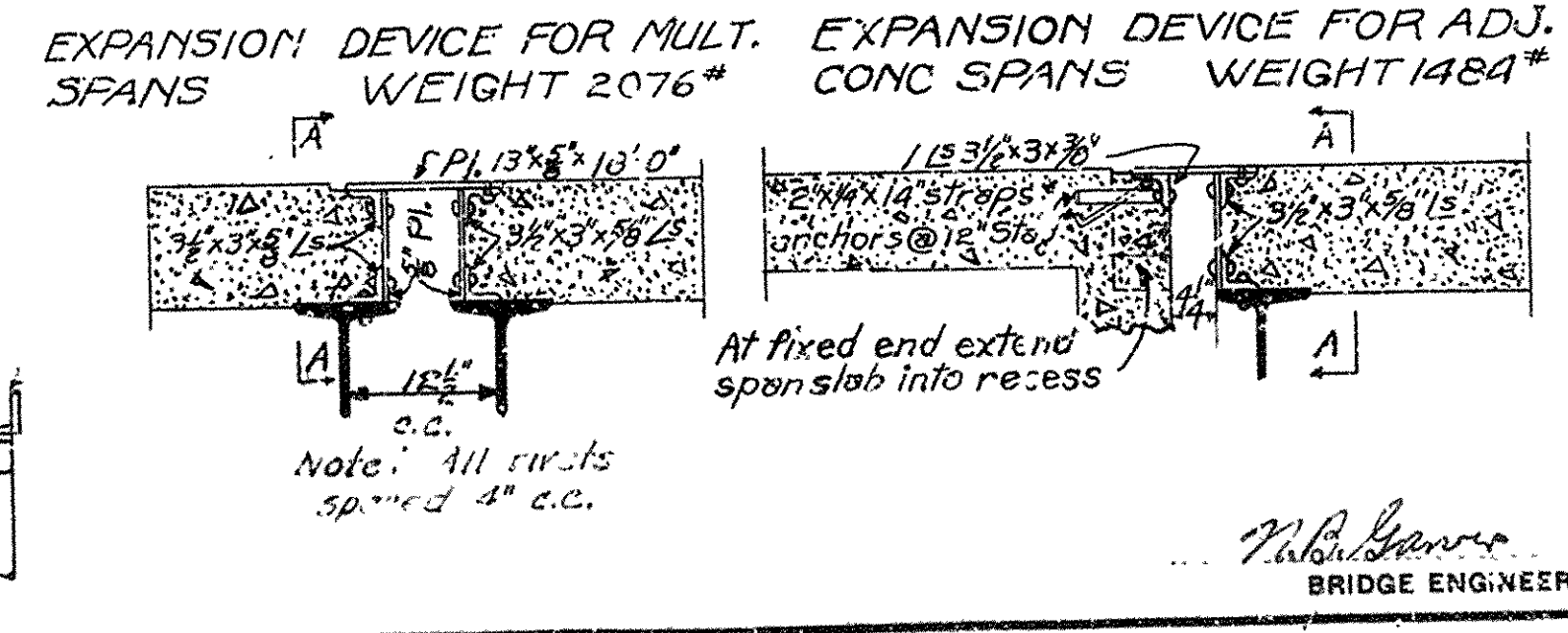
NOTES

All floor beams to be Beth's 24" @ 70"
All lower laterals to be 3" x 2 1/2" x 1/4" angles
End batten pl's to be 14" x 14"
Intermediate batten p's to be 3" x 3/8" x 14"



FLOOR BEAM DATA

D.L. Mom. = 18910 x 20.5 x 12 = 8 = 581,000 #
L.L. Mom. = 12000 x 11.5 x 12 = 1656,000 #
Impact Mom @ 30% = 496,800 #
Total Mom = 2,733,800 #
Reqd. Sec. Mod. = 2,733,800 ÷ 18000 = 151.8
Sec. Mod. of Beth's 24" @ 70" = 163.7 (OK)
Pl. 3 1/2" x 1 1/4" x 13" W. 1/2" Th.
Pl. 13" x 3/8"
1 Ls 3 1/2" x 1 1/4" x 13" W. 1/2" Th.
3/8" Pl.



ESTIMATED QUANTITIES

This drawing included in Job No. 5-1-29

general information only.

Structural steel with out expansion devices 33,102 Lbs.
Reinforcing steel (includes to outside of End Fl. Bms.) 5,618 Lbs.
Class "S" concrete (outside to outside of End Fl. Bms.) 3576 Cu Yds

5-2-29
Solving Of "S" Bars in floor Slab & lateral Lug Angles by No. 11-13-29
1-7-29
for General Revisions by No.

STANDARD PLAN
60'-0" LOW TRUSS SPAN
18'-0" CLEAR ROADWAY
ROUTE SEC.
ARKANSAS STATE HIGHWAY DEPARTMENT
LITTLE ROCK, ARK.

Drawn By: N.O.E. Date: _____
Traced By: R.P.B. Date: _____
Checked By: _____ Date: _____
Scale: 3/4" in. 1'-0" ft.
BRIDGE NO. _____ DRAWING NO. 1051

BRIDGE ENGINEER