

STATE OF ARKANSAS
STATE HIGHWAY DEPARTMENT

FISCAL YEAR	JOB No	SHEET No.	TOTAL SHEETS
1928	1007	1	18

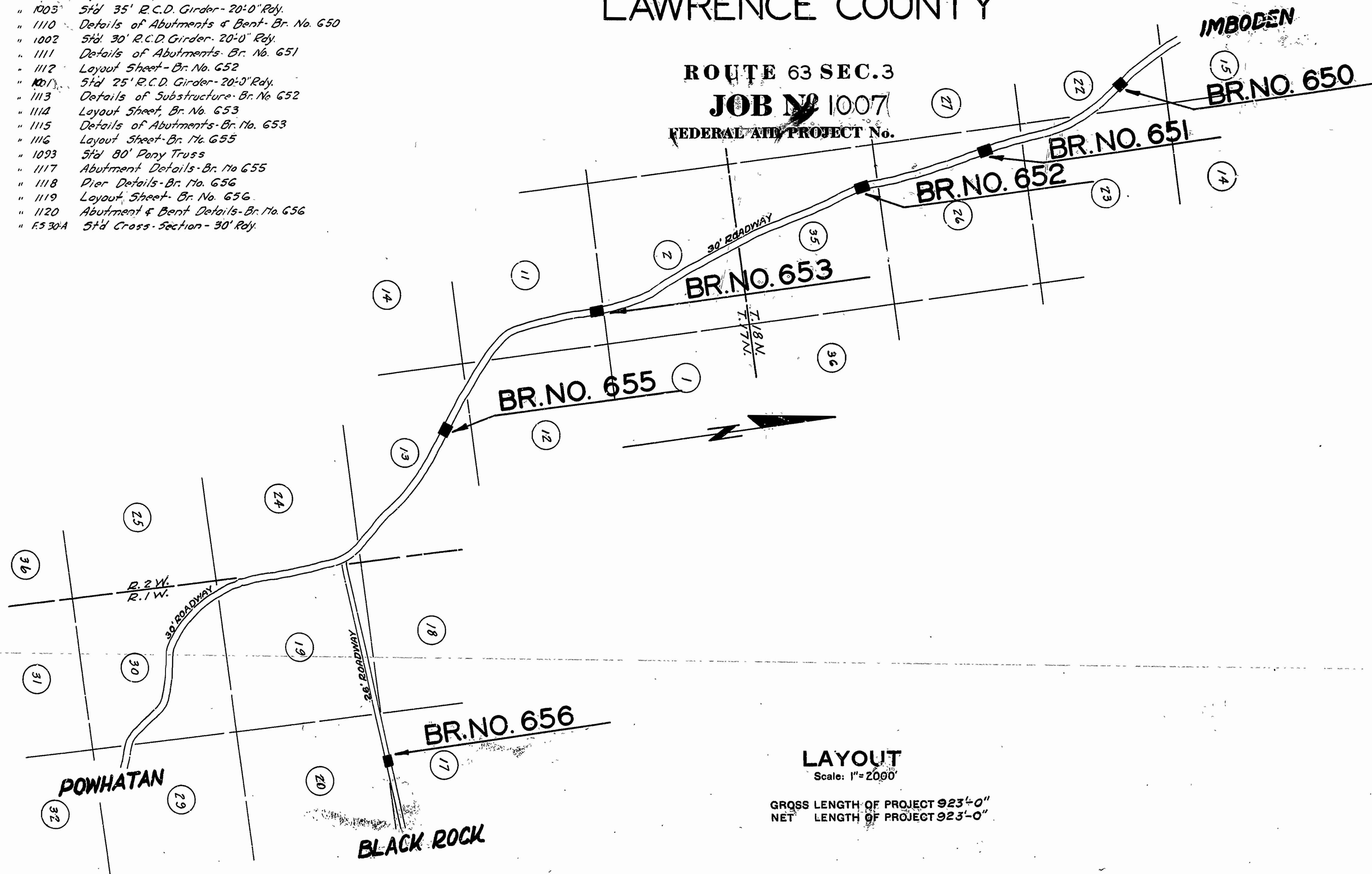
PLAN OF PROPOSED BRIDGES
ON
BLACK ROCK - IMBODEN ROAD
LAWRENCE COUNTY

INDEX OF SHEETS

Sheet No.	Dwg. No.	Title Sheet
1	1108	Title Sheet
2	1109	Layout Sheet, Br. No's 650 & 651
3	1003	Std 35' R.C.D. Girder - 20'0" Rdy.
4	1110	Details of Abutments & Bent - Br. No. 650
5	1002	Std 30' R.C.D. Girder - 20'0" Rdy.
6	1111	Details of Abutments - Br. No. 651
7	1112	Layout Sheet - Br. No. 652
8	1001	Std 25' R.C.D. Girder - 20'0" Rdy.
9	1113	Details of Substructure - Br. No. 652
10	1114	Layout Sheet, Br. No. 653
11	1115	Details of Abutments - Br. No. 653
12	1116	Layout Sheet - Br. No. 655
13	1093	Std 80' Pony Truss
14	1117	Abutment Details - Br. No. 655
15	1118	Pier Details - Br. No. 656
16	1119	Layout Sheet - Br. No. 656
17	1120	Abutment & Bent Details - Br. No. 656
18	E.330A	Std Cross-Section - 30' Rdy.

QUANTITIES

Item No.	Description	Quantity
13	Dry Excavation for Struct's	738 Cu. Yds
13	Wet Excavation for Struct's	1550 " "
13	Solid Rock Excav for Struct's	23 " "
17	Borrow	8038 " "
54	Class A Concrete	810.08 " "
54	Class 5 Concrete	328.6 " "
55	Reinforcing Steel	163,459 Lbs
56	Structural Steel (Trusses)	55,230 " "
66	Untreated Timber Piling	2,925 Lin. Ft.
74	Concrete Railing for Struct's	710 " "



LAYOUT
Scale: 1" = 2000'

GROSS LENGTH OF PROJECT 923'-0"
NET LENGTH OF PROJECT 923'-0"

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

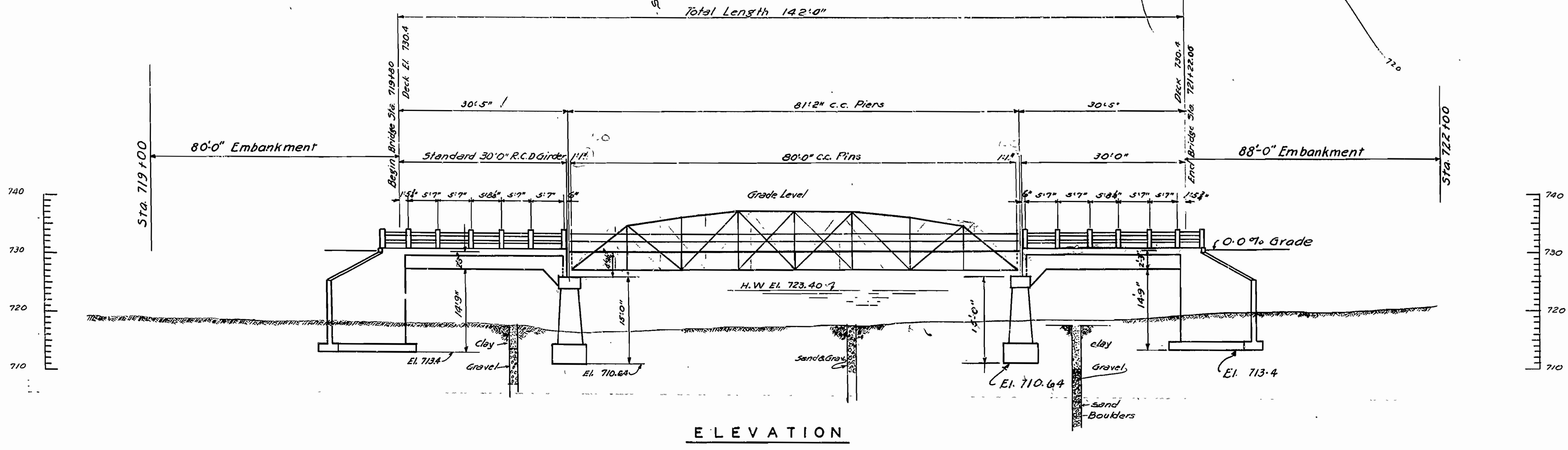
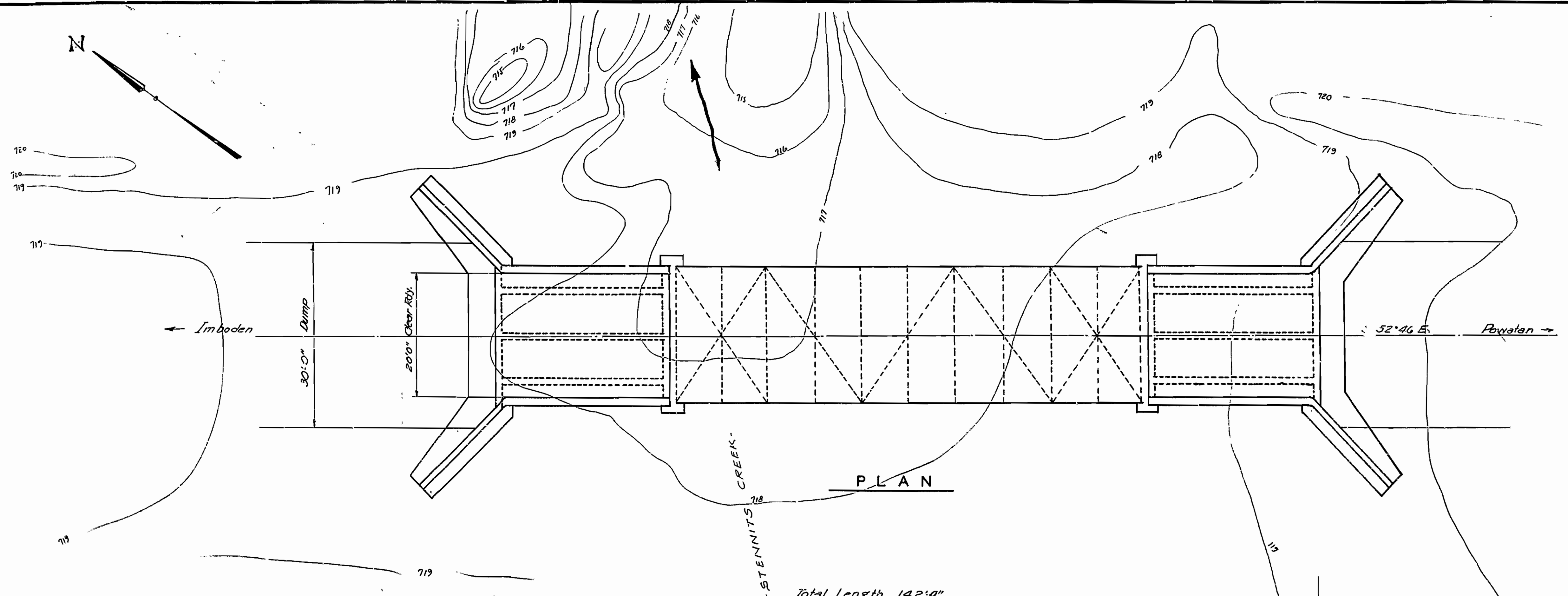
M.B. Gammie
BRIDGE ENGINEER

BRIDGE No. 650-651-652-653-655-656 DRAWING No. 1108

FISCAL YEAR	Job No.	SHEET TOTAL
1928	1007	12 18
LAYOUT STENNIT CREEK BRIDGE		116

QUANTITIES

Item 17	BORROW	3792 Cu. Yds.
"	WET EXCAVATION	391 "
"	ROCK EXCAVATION	"
11-m SA	CLASS #1 CONCRETE	189.1 "
"	CLASS #3 CONCRETE	113.6 "
Item 55	REINFORCING STEEL	46,699 LBS.
Item 56	STRUCTURAL STEEL	55,230 "
Item 74	CONCRETE HANDRAIL	140' L.F.



NOTES
 Drainage Area 12 Sq. Miles.
 B.M. West Roof 12' El. 100.27 Sta. 722+50 El. 718.26
 Details Concrete Girders DWG No. 1095 - 90' Pony Truss - DWG No. 1095
 Piers DWG No. 1118. Abutments DWG No. 1117

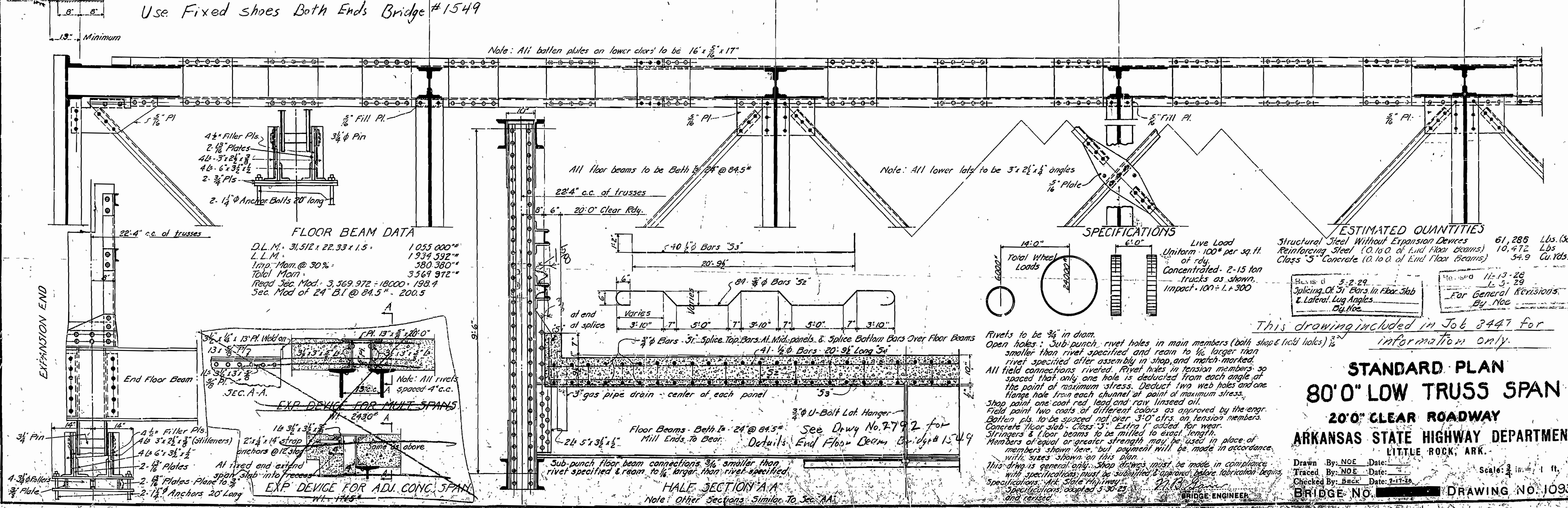
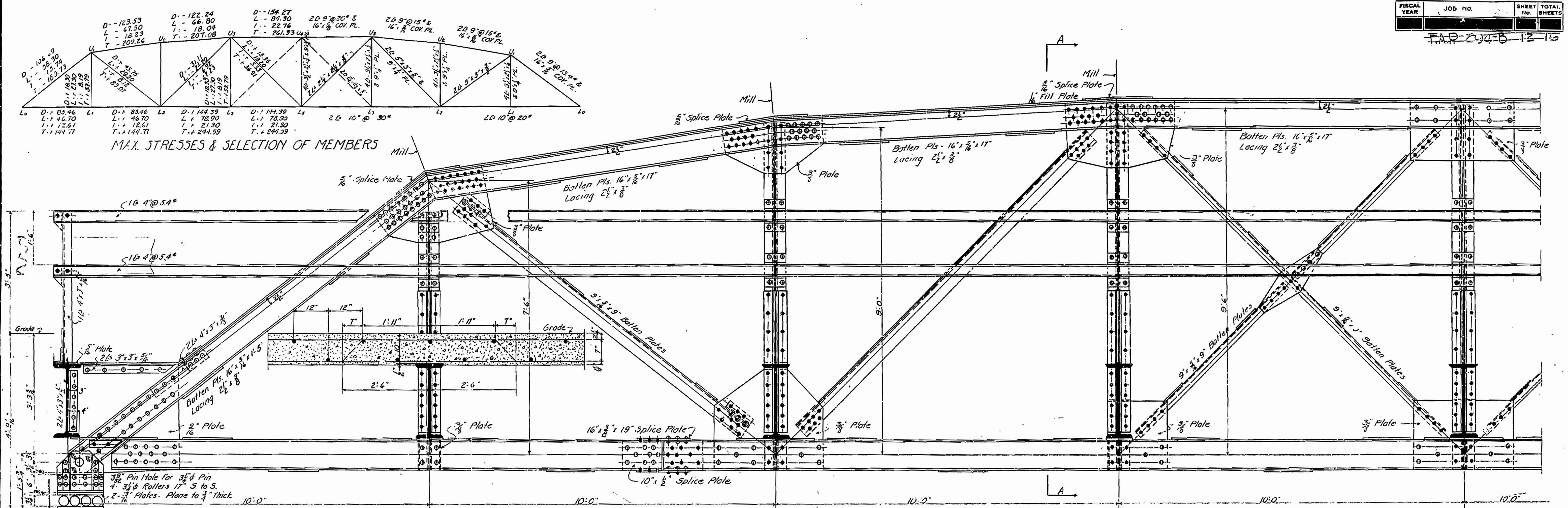
LAYOUT
STENNIT CREEK BRIDGE
 LAWRENCE COUNTY

ROUTE 63 SEC. 3
ARKANSAS STATE HIGHWAY DEPARTMENT
 LITTLE ROCK, ARK.

Drawn By: *Beck* Date: *Aug 1928*
 Traced By: *Beck* Date: *2/1928*
 Checked By: *Beck* Date: *8/1928*

Scale: 1 in. = 10 ft.
BRIDGE NO. 655 **DRAWING NO. 1116**

M.B. Gamm
 BRIDGE ENGINEER

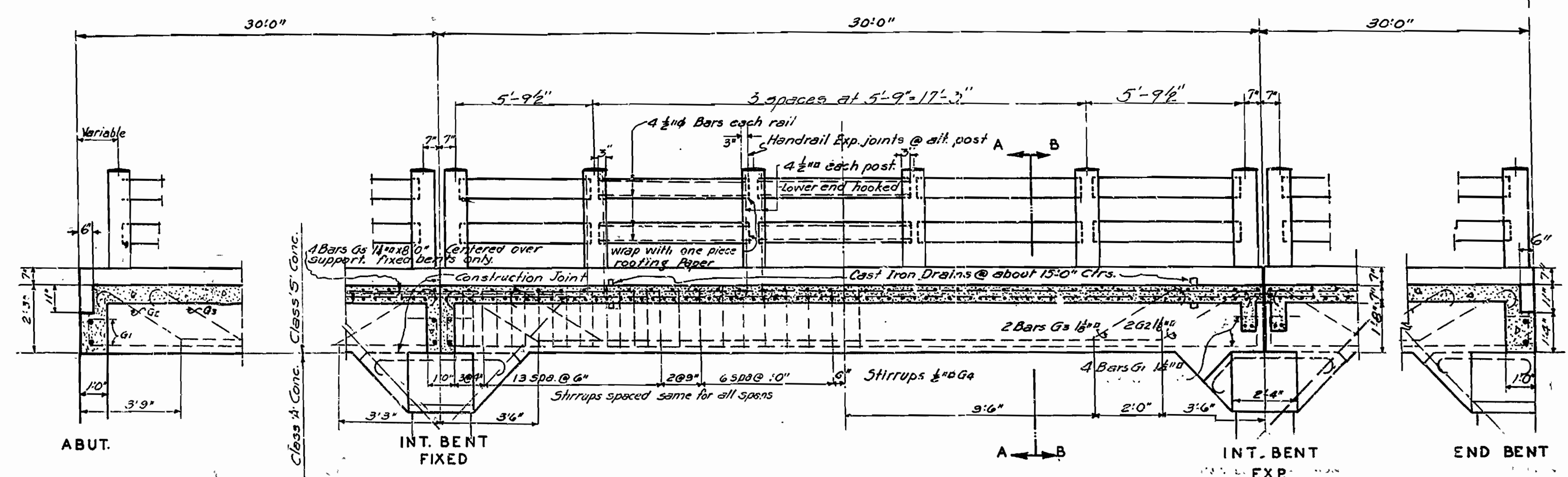


STANDARD PLAN
80'0" LOW TRUSS SPAN
20'0" CLEAR ROADWAY
ARKANSAS STATE HIGHWAY DEPARTMENT
 LITTLE ROCK, ARK.

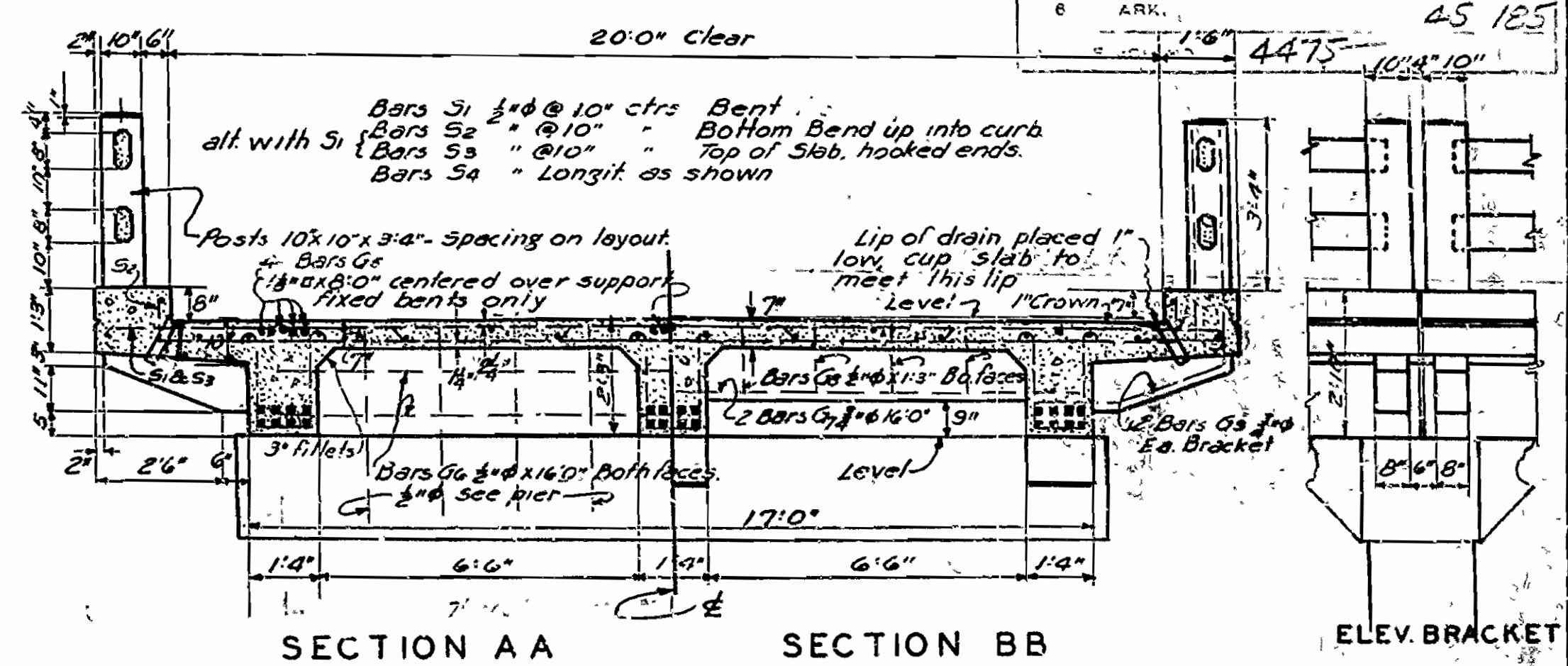
Drawn By: NOE Date: 11-13-28
 Traced By: NOE Date: 1-5-29
 Checked By: BAC Date: 1-17-28

Scale: 3/8" = 1' ft.
 BRIDGE NO. [] DRAWING NO. 1093

FISCAL YEAR	2000	SHEET NO.	5
FED. ROAD DIST. No.	8	STATE	ARK.
FED. AID PROJ. No.	2000	SHEET TOTAL	10
PROJECT NO.	4475	DATE	10/14/00
NO.	6	SCALE	AS SHOWN

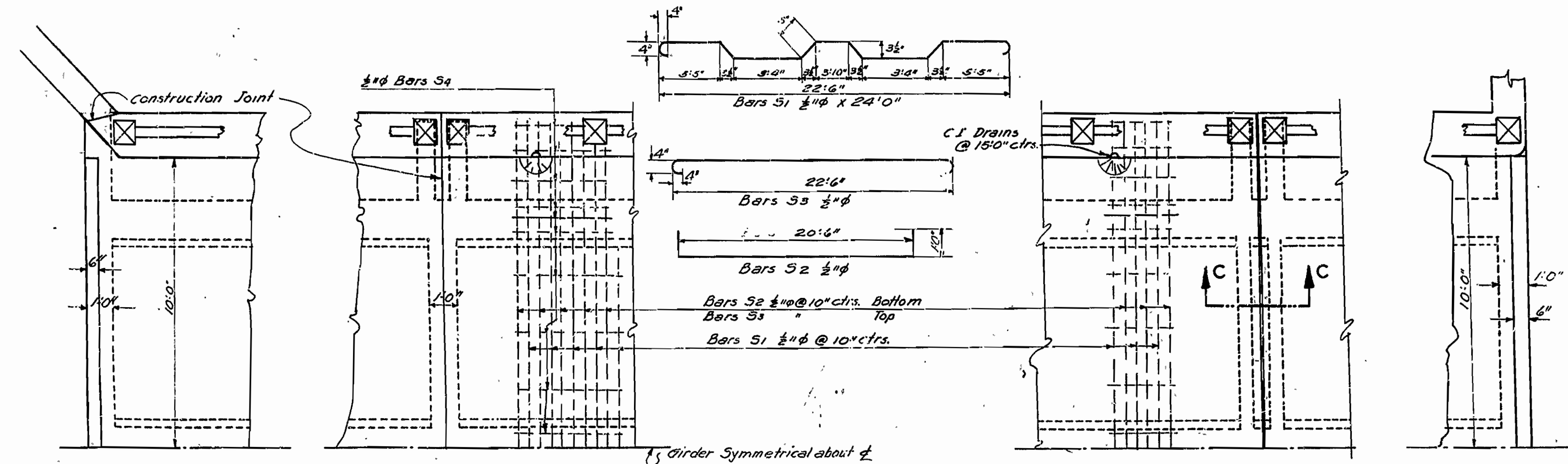


LONGITUDINAL SECTION

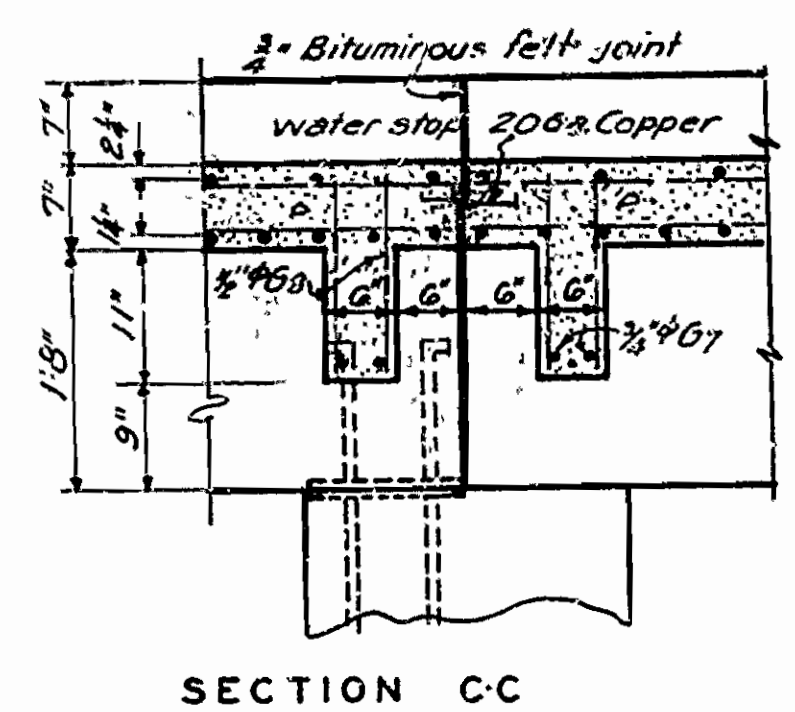


SECTION A A SECTION B B ELEV. BRACKET

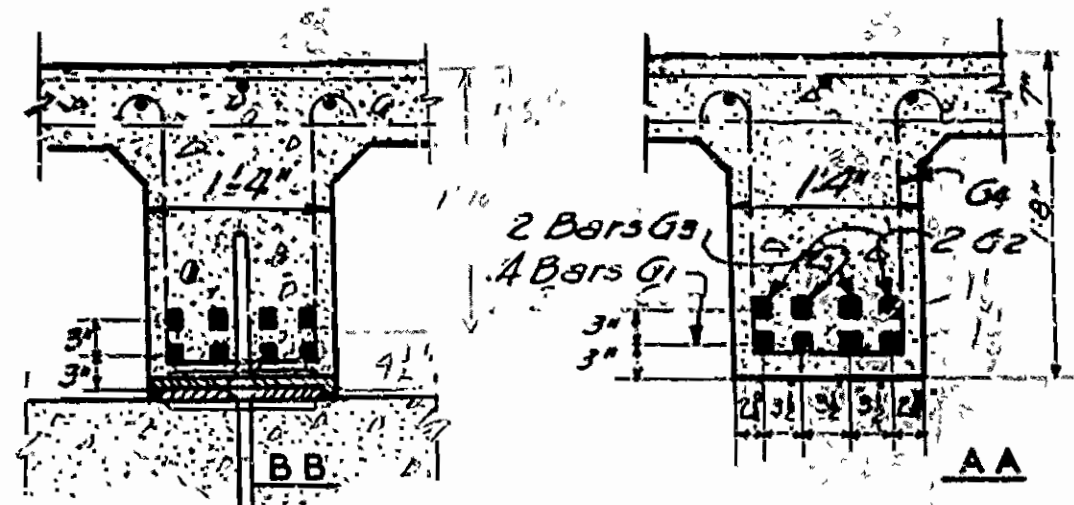
See layout sheet for location of expansion joints.



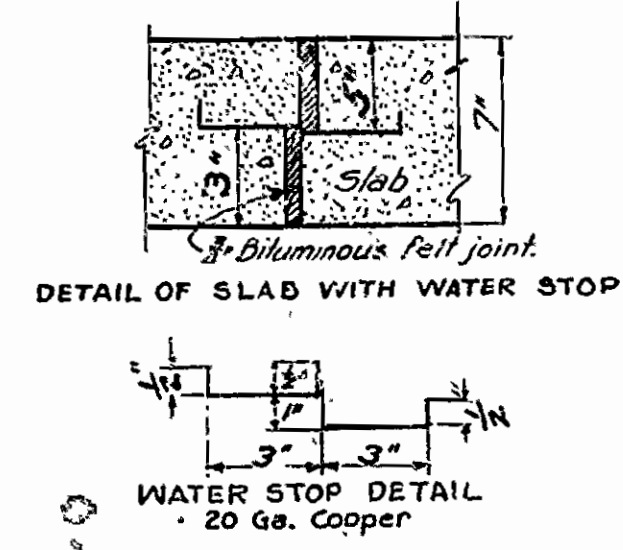
TYPICAL PLAN DETAILS



SECTION C C

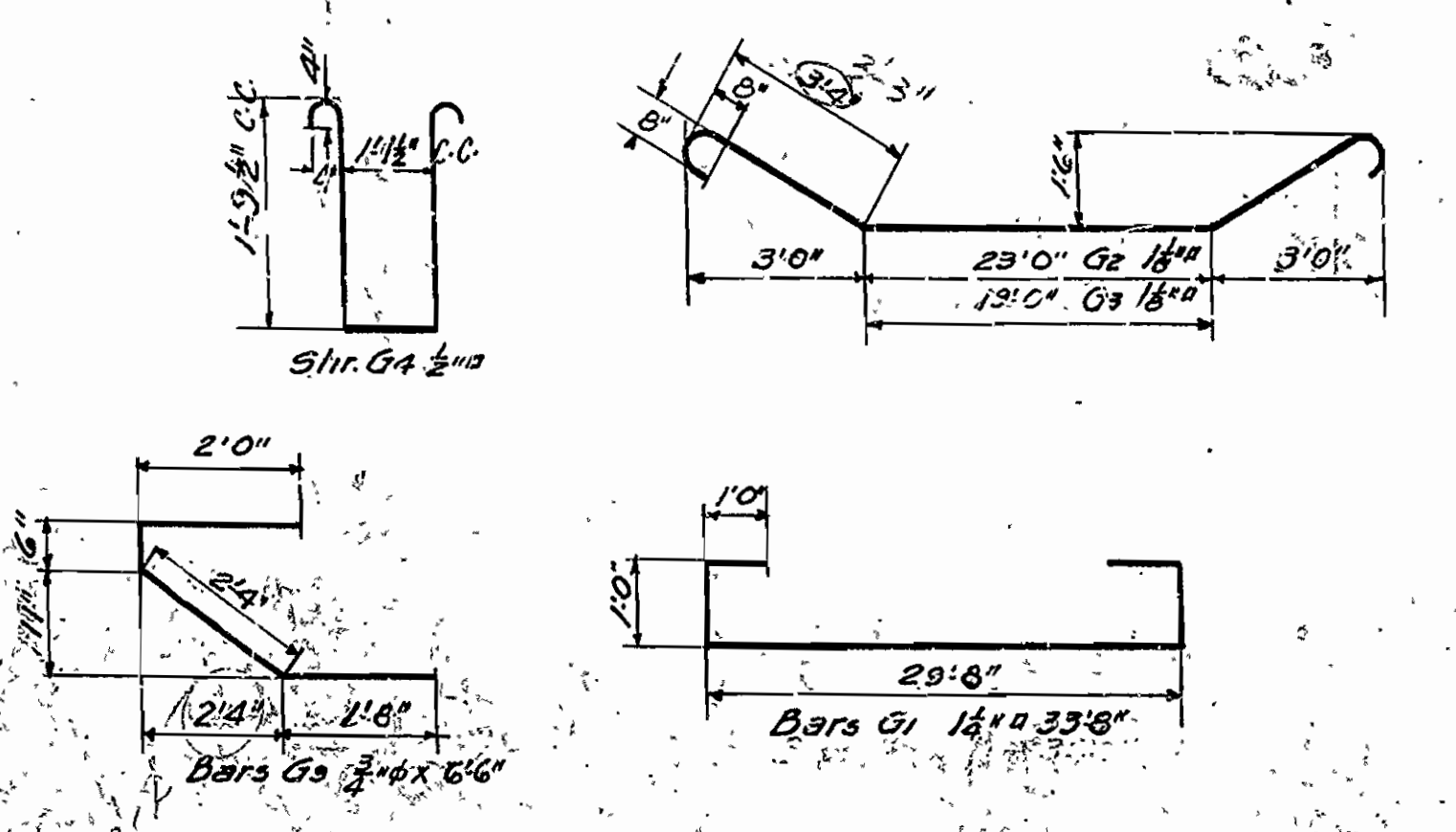


TYPICAL SECTIONS THRU GIRDERS

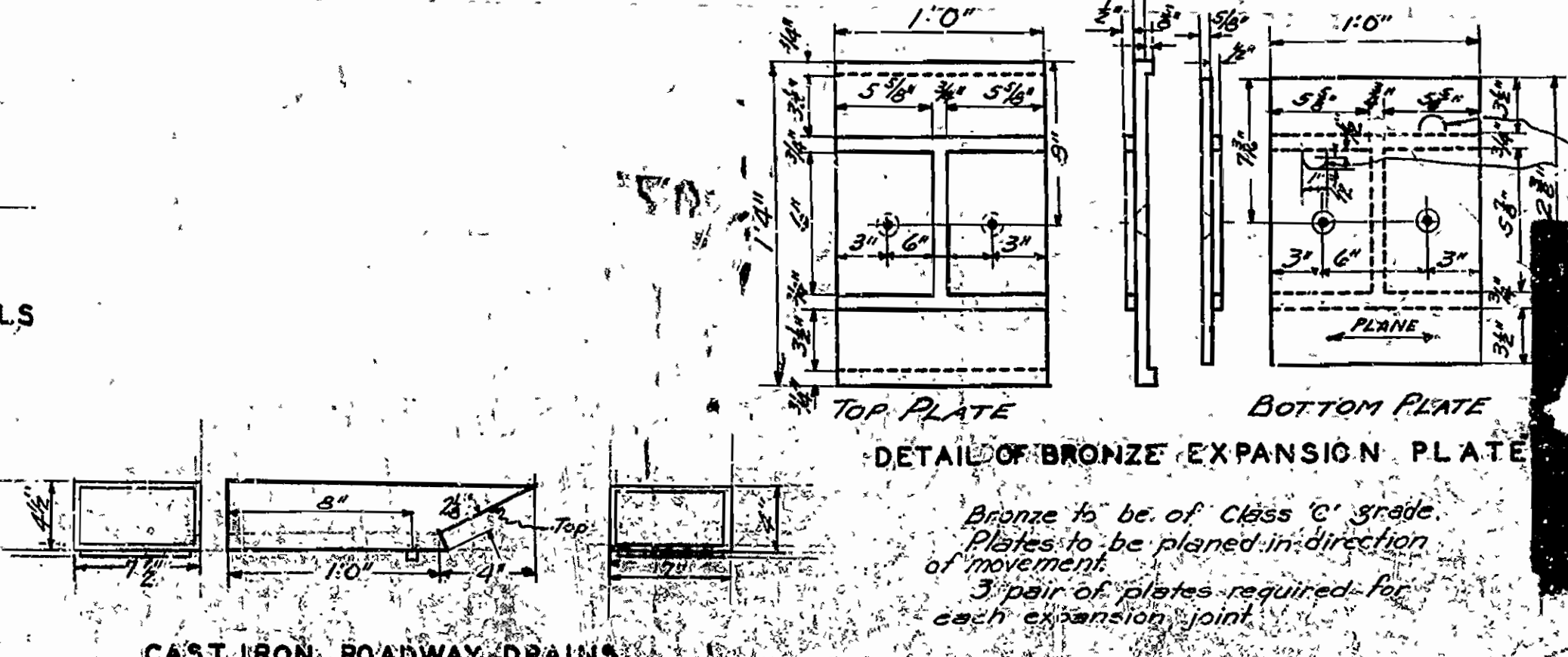


GENERAL NOTES
 All exposed corners to have 3/4" chamfer unless noted otherwise.
 Precast Concrete Handrails to be 1:3 Mix, Maximum Agg. 1/2". Rail Posts to be Class 5 Concrete. Concrete above top of Column caps, except Handrail to be Class 5. Below this joint class 4.
 All concrete to be poured in the dry.
 Reinforcing steel to be deformed bars of structural or intermediate grade. Shop lists and bending diagrams shall be submitted by contractor before fabrication is begun. Roadway drains and expansion devices to be paid for at unit price bid for reinforcing steel.
 Specifications: Arkansas Standard Road and Bridge Specifications, Adopted standards and revised.

Note: This Drawing included in Job No. 4475 for reference only.



SEC. THRU RAILS



DETAIL OF BRONZE EXPANSION PLATE

CAST IRON ROADWAY DRAINS

DETAILS STANDARD
30' R.C. DECK GIRDER
 20'-0" ROADWAY

ARKANSAS STATE HIGHWAY DEPARTMENT
LITTLE ROCK, ARK.

Drawn By: *Beck* Date: *May 12, 00*
 Traced By: *Beck* Date: *May 12, 00*
 Checked By: *Beck* Date: *May 12, 00*
 BRIDGE NO. *4475* DRAWING NO. *1002*

BRIDGE ENGINEER

FED. ROAD No.	STATE	FED. AID PROJECT	FISCAL YEAR	SHEET No.	TOTAL SHEETS
6	ARK.	F455(4)	1953		
JOB No.		10462	2	19	

SCHEDULE OF BRIDGE QUANTITIES

BRIDGE NO.	CODE NO.	ITEM NO.	ITEM	UNIT	103	103	103	SP & 802	SP & 802	SP & 803	SP & 803	SP-805-3	929	SP-Job 10462	
					DRY EXCAVATION FOR STRUCTURES	WET EXCAVATION FOR STRUCTURES	SOLID ROCK EXCAVATION FOR STRUCTURES	CLASS "A" CONCRETE FOR BRIDGES	CLASS "S" CONCRETE FOR BRIDGES	REINFORCING STEEL	REINFORCING STEEL	STEEL PLATE GUARD RAIL	BRIDGE NAME PLATES TYPE "C"	REMODELING EXISTING BRIDGES	
UNIT OF BRIDGE					Cu. Yd.	Cu. Yd.	Cu. Yd.	Cu. Yd.	Cu. Yd.	Lb.	Lb.	Lin. Ft.	Each	Complete Item	
G50A	X021		Abutments No. 1 & 2	4									1		
			Bent No. 1		32	1	13.73			144#	1440				
			Two 35' R.C.D. Girder Spans						38.56	806#	8060	157.8			
			Totals for Bridge No. G50A	4	32	1	13.73	38.56	950#	9500	157.8	1	27%		
G51A	X021		Abutments No. 1 & 2	4									1		
			One 30' R.C.D. Girder Span					17.30	340#	3400	78.8				
			Totals for Bridge No. G51A	4				17.30	340#	3400	78.8	1	14%		
G52A	X021		Abutments No. 1 & 2	4									1		
			Bent No. 1		12	1	9.02		108#	1080					
			Two 25' R.C.D. Girder Spans					26.4	52#	5230	118.8				
			Totals for Bridge No. G52A	4	12	1	9.02	26.4	63#	6310	118.8	1	21%		
G53A	X021		Abutments No. 1 & 2	4									1		
			One 35' R.C.D. Girder Spans					21.07	42#	4240	91.0				
			Totals for Bridge No. G53A	4				21.07	42#	4240	91.0	1	15%		
G55A	X021		Abutments No. 1 & 2	4									1		
			Piers No. 1 & 4	4			12.17		1#	11.5					
			Piers No. 2 & 3	13	116		64.28		80#	8015					
			Two 30' R.C.D. Girder Spans					32.10	65#	6510	137.8				
			Three 27'4" R.C.D. Girder Spans					93.77	228#	22860	164.0				
	Totals for Bridge No. G55A	17	116		76.45	125.87	385#	38500	301.8	1	23%				
	Totals for Job No. 10462	33	160	2	99.20	229.20	615#	61550	748.2	5	100%				

SUMMARY OF QUANTITIES

ITEM NO.	ITEM	QUANTITY	UNIT
SP-925-2	Guard Fence Moved and Reconstructed	57	Lin. Ft.
STRUCTURES OVER 20' SPAN			
103	Dry Excavation for Structures	33	Cu. Yd.
103	Wet Excavation for Structures	160	Cu. Yd.
103	Solid Rock Excavation for Structures	2	Cu. Yd.
SP-802	Class "A" Concrete for Bridges	99.2	Cu. Yd.
SP-802	Class "S" Concrete for Bridges	229.2	Cu. Yd.
SP-803	Reinforcing Steel	61950	Lb.
SP-805-3	Steel Plate Guard Rail	748.2	Lin. Ft.
929	Bridge Name Plates-Type "C"	5	Each
SP-Job 10462	Remodeling Existing Bridges	100%	Complete Item

GUARD FENCE MOVED & RECONSTRUCTED

STATION	STATION	LOCATION	LIN. FT.
25+99.25	26+27.75	Rt. & Lt.	57
27+04.25	27+32.75	"	57
82+07.50	82+36.00	"	57
82+73.00	83+01.50	"	57
127+15.90	127+44.40	"	57
128+01.40	128+29.90	"	57
231+20.75	231+49.25	"	57
231+90.75	232+19.25	Rt.	28.5
231+33.50	232+22.00	Lt.	28.5
303+30.50	303+59.00	Rt. & Lt.	57
305+08.00	305+36.50	"	57
Total			570

CONTROLLED MATERIALS (STEEL)

02	02	Reinforcing Bars	32.2 Tons
17	17	Other Mill Products	0.51
Total			32.71 Tons
80	80	Class "B" Products (Information only)	3.45 Tons

SUMMARY OF QUANTITIES

BRIDGE WIDENING
 IMBODEN-BLACK ROCK
 LAWRENCE COUNTY

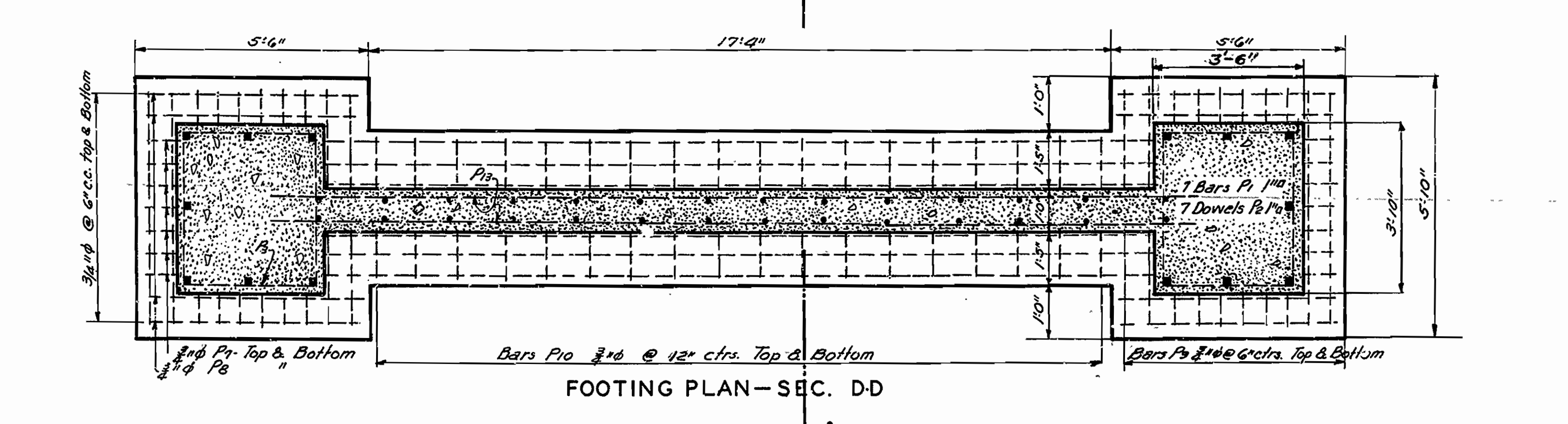
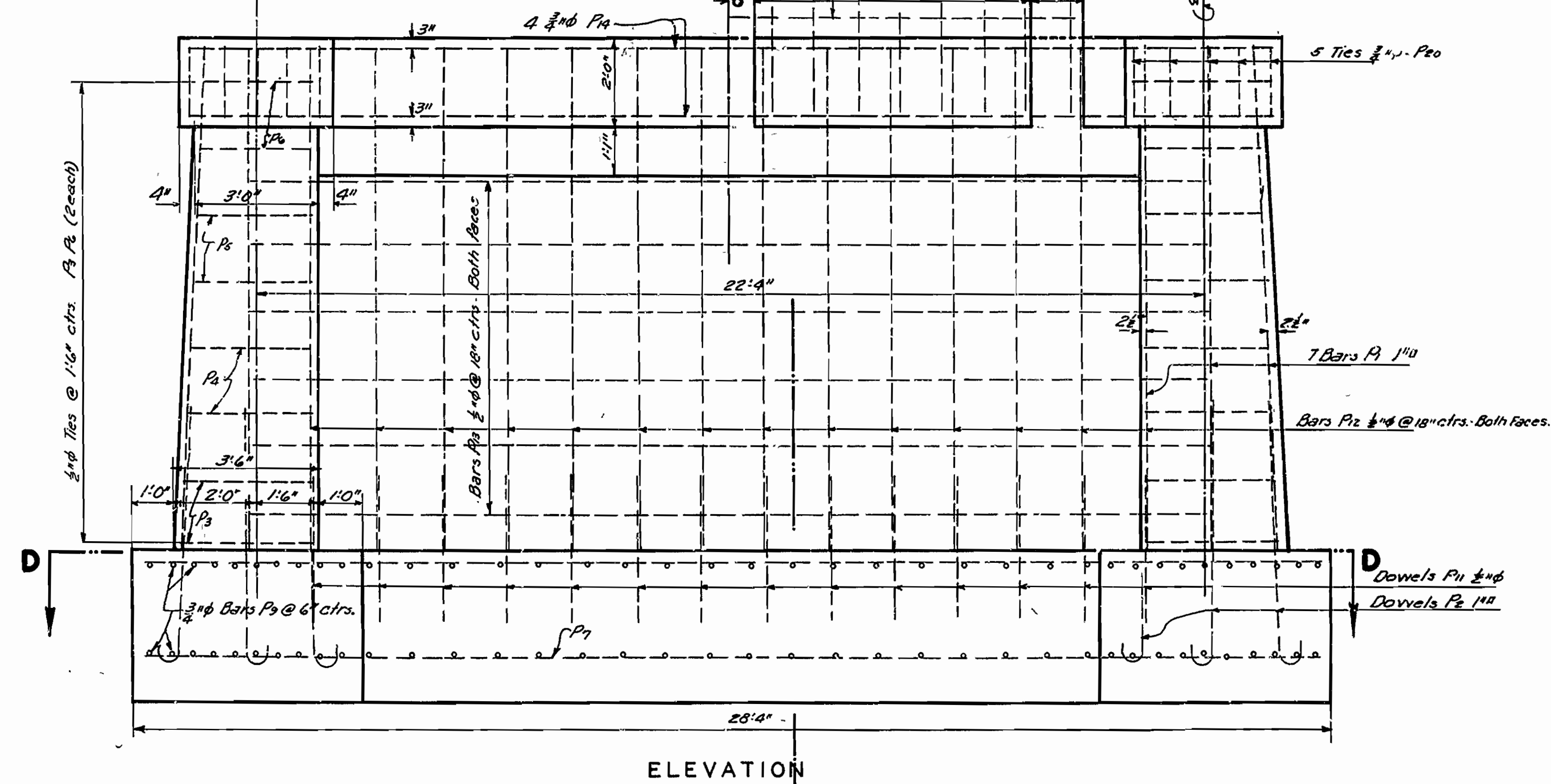
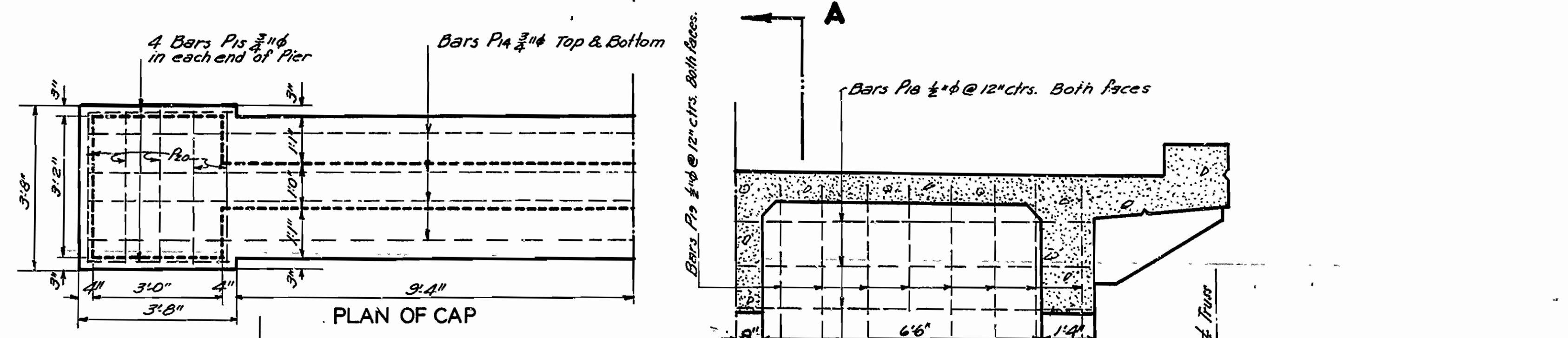
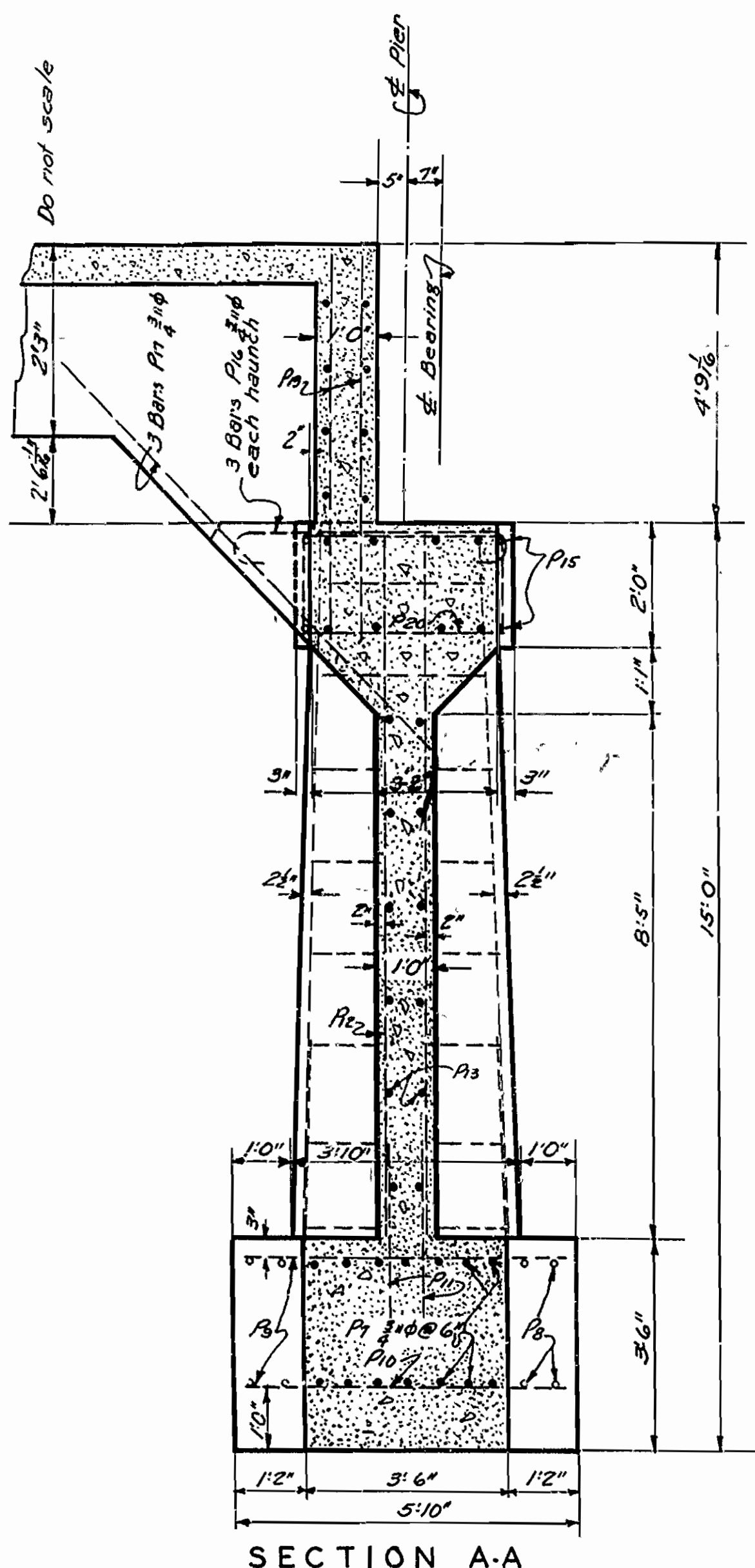
ROUTE 63 SEC. 3

ARKANSAS STATE HIGHWAY COMMISSION
 LITTLE ROCK, ARK.

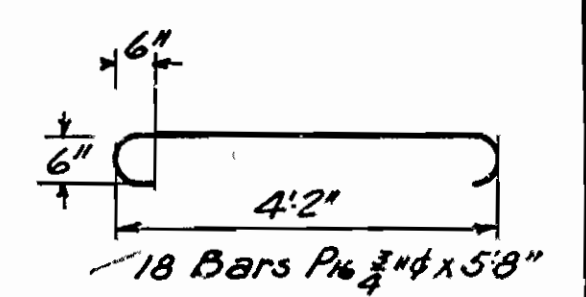
Drawn By: *U.E.* Date: 6-23-53
 Traced By: *U.E.* Date: 6-24-53
 Checked By: *U.E.* Date: 6-24-53
 Bridge Design Engineer

Scale: in. = ft.
 BRIDGE NO. G50A-G53A, G55A DRAWING NO. 8309

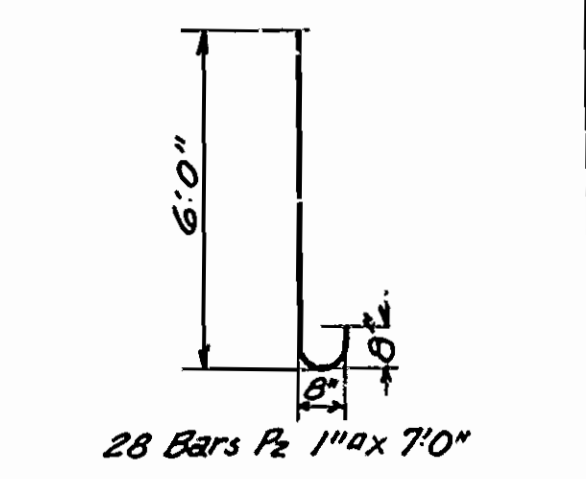
FISCAL YEAR	Job No.	SHEET TOTAL
1928	1007	15 18
PIER DETAILS, STENNIS CREEK BRIDGE		



BAR	NO.	SIZE	L	H	a	LENGTH
P16	8	1/2" #4	5'2 1/2"	5'6"	4"	14'1 1/2"
P14	8	1/2" #4	3'0 1/2"	3'3 1/2"	4"	13'4"
P15	8	1/2" #4	2'10 1/2"	3'1 1/2"	4"	12'7 1/2"
P16	8	1/2" #4	2'8 1/2"	2'10 1/2"	4"	11'10"
P10	20	3/4" #4	1'8 1/2"	3'4"	6"	11'1 1/2"



STRAIGHT - BARS			
BAR	NO.	SIZE	LENGTH
P1	20	#10	11'4"
P7	28	3/4" #4	27'10"
P8	32	3/4" #4	5'0"
P9	80	3/4" #4	5'4"
P10	72	3/4" #4	3'0"
P11	56	1/2" #4	5'4"
P12	56	1/2" #4	11'4"
P13	24	1/2" #4	22'8"
P14	16	3/4" #4	12'6"
P15	16	3/4" #4	3'2"
P17	18	3/4" #4	5'9"
P18	16	1/2" #4	16'6"
P19	68	1/2" #4	5'10"

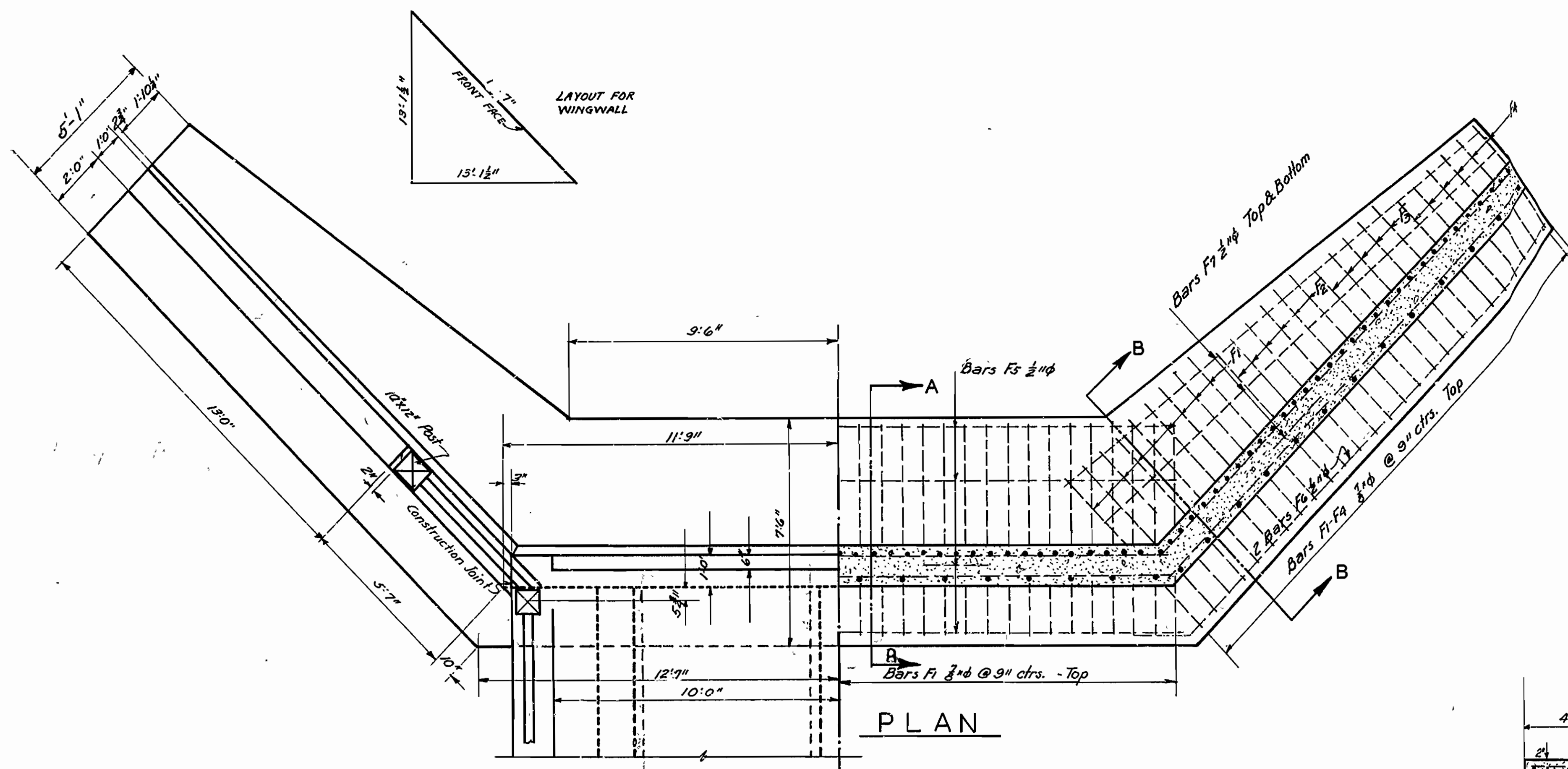


Note: Reinforcing steel shown here is complete for two piers

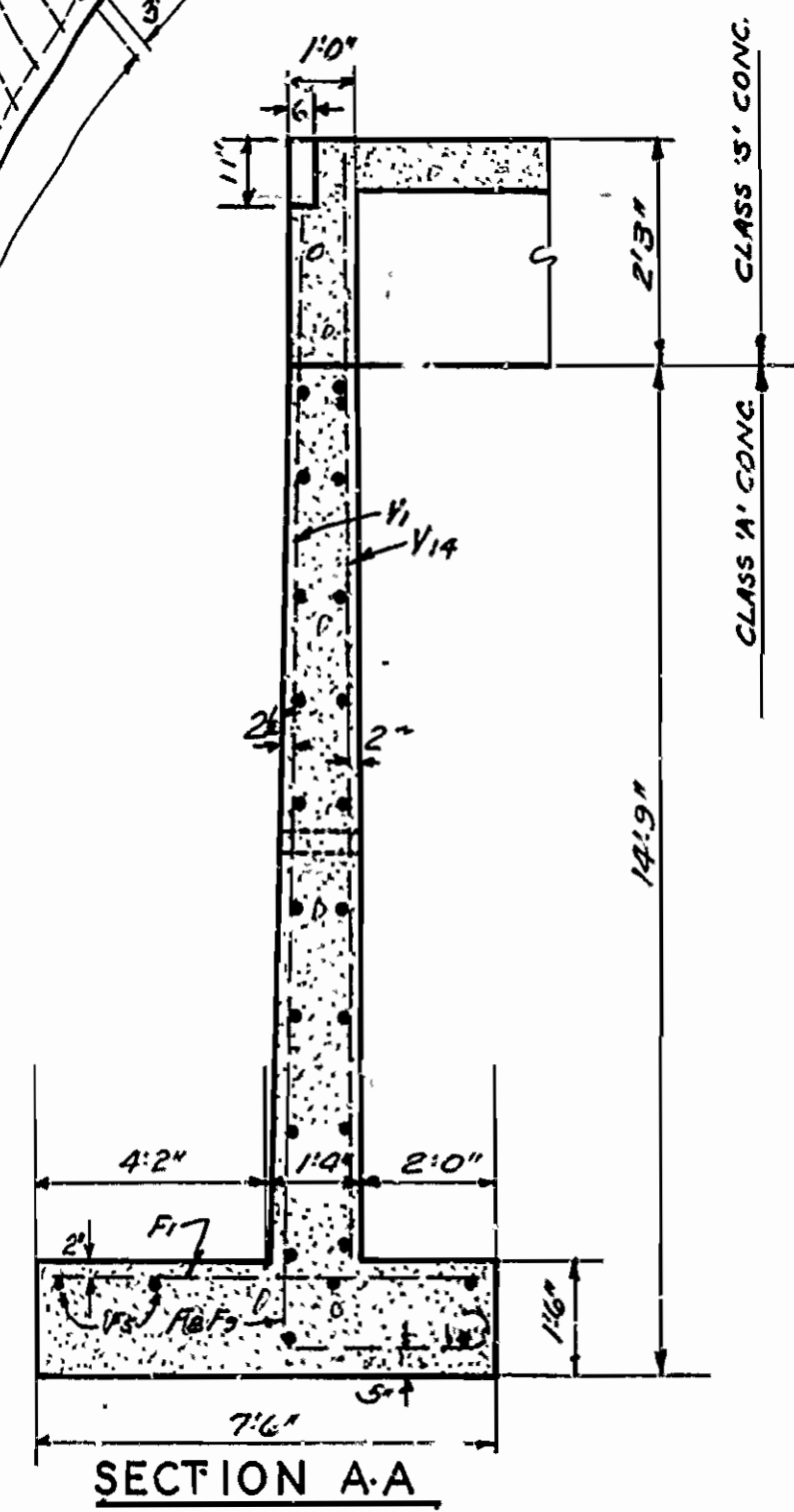
PIER DETAILS
STENNIS CREEK BRIDGE-
-LAWRENCE COUNTY-
 ROUTE 63 SEC. 3
ARKANSAS STATE HIGHWAY DEPARTMENT
 LITTLE ROCK, ARK.
 Drawn By: Beck Date: 4-18-28
 Traced By: Beck Date: 4-17-28
 Checked By: [Signature] Date: 4-18-28
 Scale: 1/2" = 1 ft.
BRIDGE NO. 655 DRAWING NO. 111B

W.B. [Signature]
 BRIDGE ENGINEER

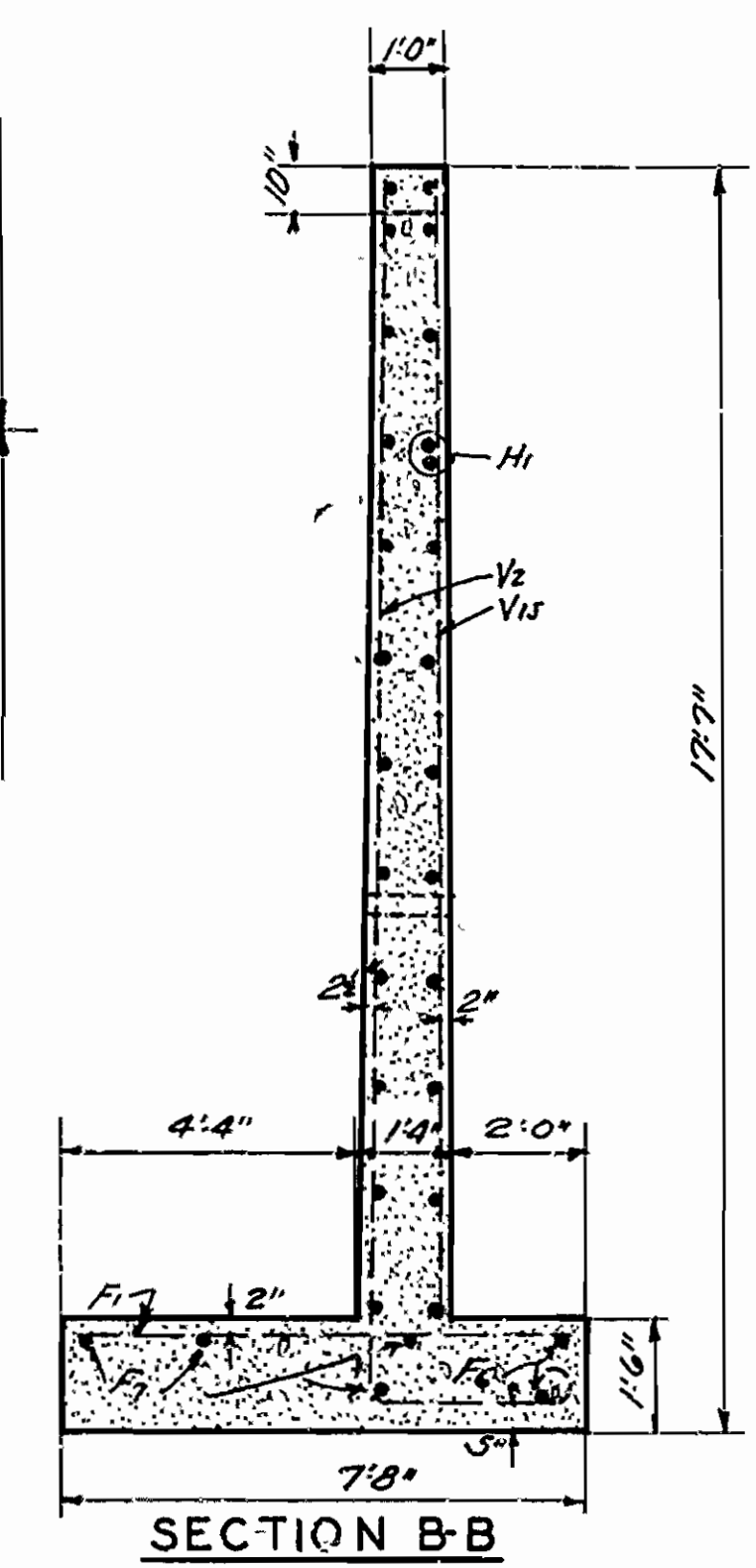
FISCAL YEAR	Job No.	SHEET TOTAL SHEETS
1928	1007	14 18
ABUTMENT DETAILS - STENNITS CREEK BRIDGE		



PLAN

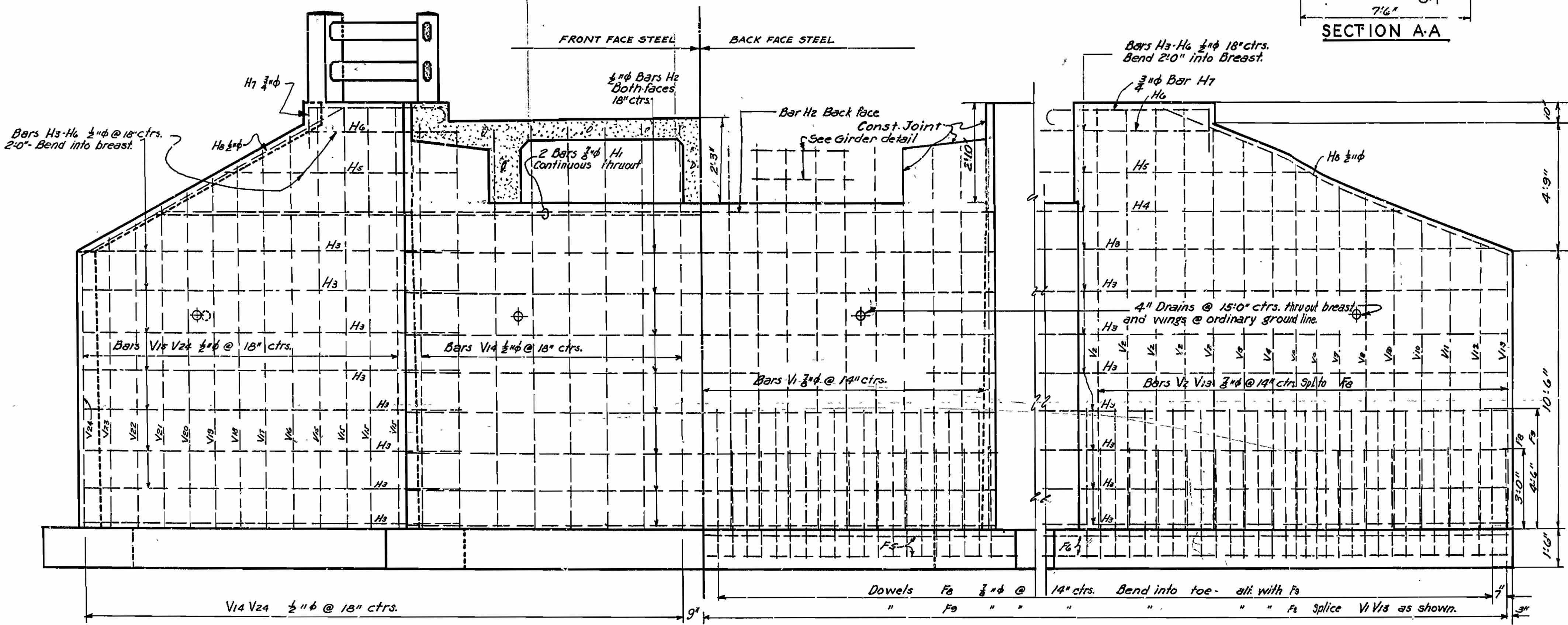
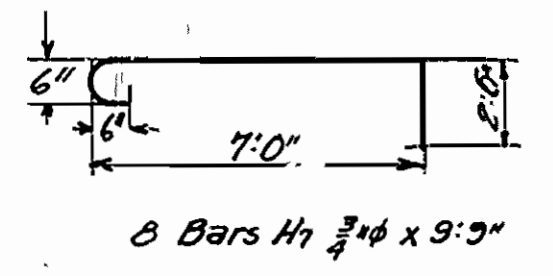
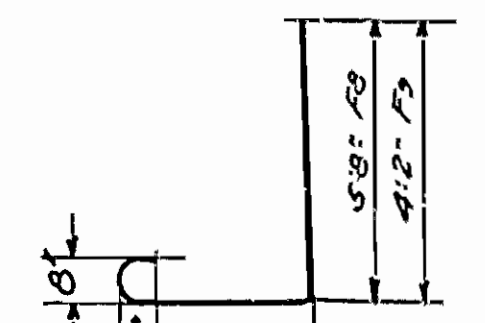
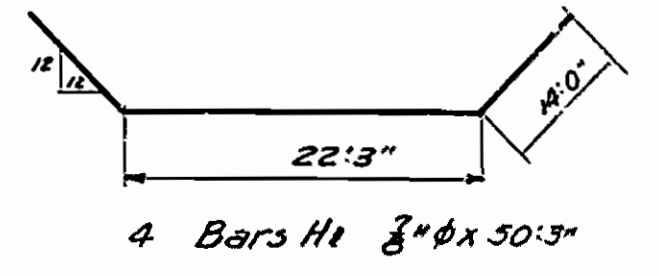


SECTION A-A



SECTION B-B

18'-6" H ₂	64 @ 20'-6"
14'-0" H ₂	4 @ 16'-0"
9'-0" H ₅	8 @ 11'-0"
5'-3" H ₆	8 @ 7'-3"
19'-0" F ₆	8 @ 21'-0"



ELEVATION

STRAIGHT BARS							
BAR	NO	SIZE	LENGTH	BAR	NO	SIZE	LENGTH
H ₂	34	1/2"	23'-3"	V ₅	4	3/4"	12'-0"
H ₈	8	"	16'-0"	V ₁₀	4	"	11'-6"
F ₁	102	3/4"	7'-2"	V ₁₁	4	"	11'-1"
F ₂	24	"	6'-5"	V ₁₂	4	"	10'-8"
F ₃	20	"	5'-7"	V ₁₃	4	"	10'-5"
F ₄	24	"	4'-9"	V ₁₄	92	1/2"	15'-0"
F ₅	12	1/2"	24'-6"	V ₁₅	16	"	15'-10"
F ₇	16	"	19'-0"	V ₁₆	4	"	14'-6"
V ₁	42	3/4"	14'-3"	V ₁₇	4	"	14'-0"
V ₂	20	"	15'-10"	V ₁₈	4	"	13'-6"
V ₃	4	"	14'-6"	V ₁₉	4	"	13'-0"
V ₄	4	"	14'-1"	V ₂₀	4	"	12'-5"
V ₅	4	"	13'-8"	V ₂₁	4	"	11'-10"
V ₆	4	"	13'-3"	V ₂₂	4	"	11'-3"
V ₁	4	"	12'-10"	V ₂₃	4	"	10'-9"
V ₈	4	"	12'-5"	V ₂₄	4	"	10'-3"

Note: Steel shown complete for two abutments.

ABUTMENT DETAILS
STENNITS CREEK BRIDGE

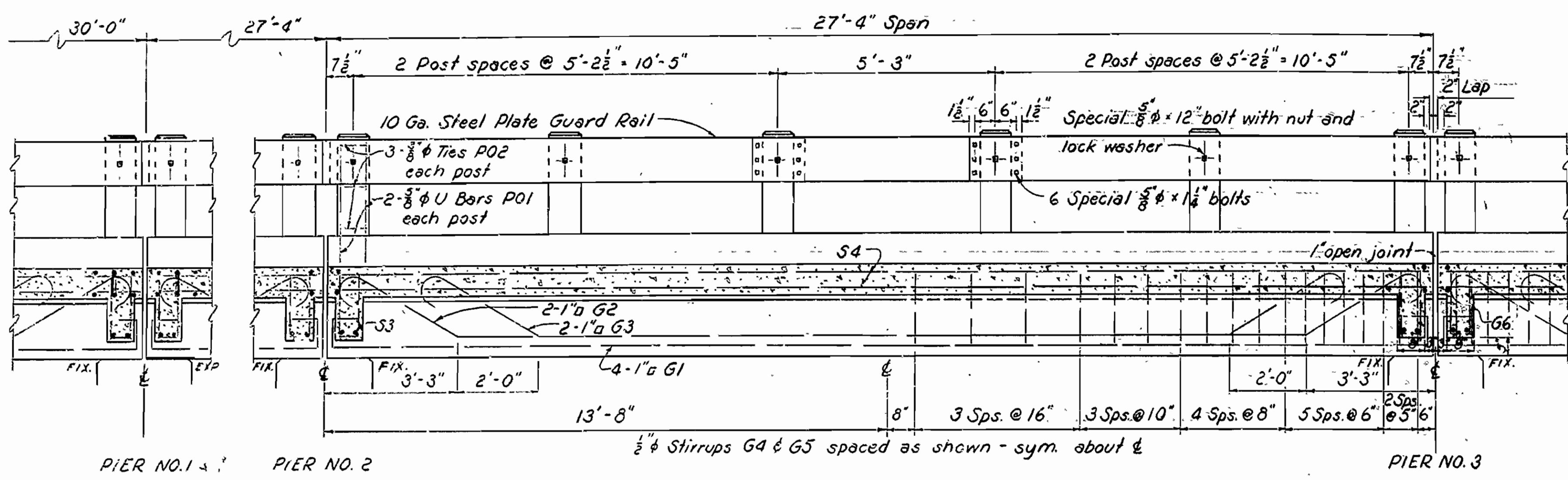
LAWRENCE COUNTY
ROUTE 63 SEC. 3
ARKANSAS STATE HIGHWAY DEPARTMENT
LITTLE ROCK, ARK.

Drawn By: Beck Date: 2-20-28
Traced By: Beck Date: 2-20-28
Checked By: [Signature] Date: 2-12-28
Scale: 3/8" = 1 ft.

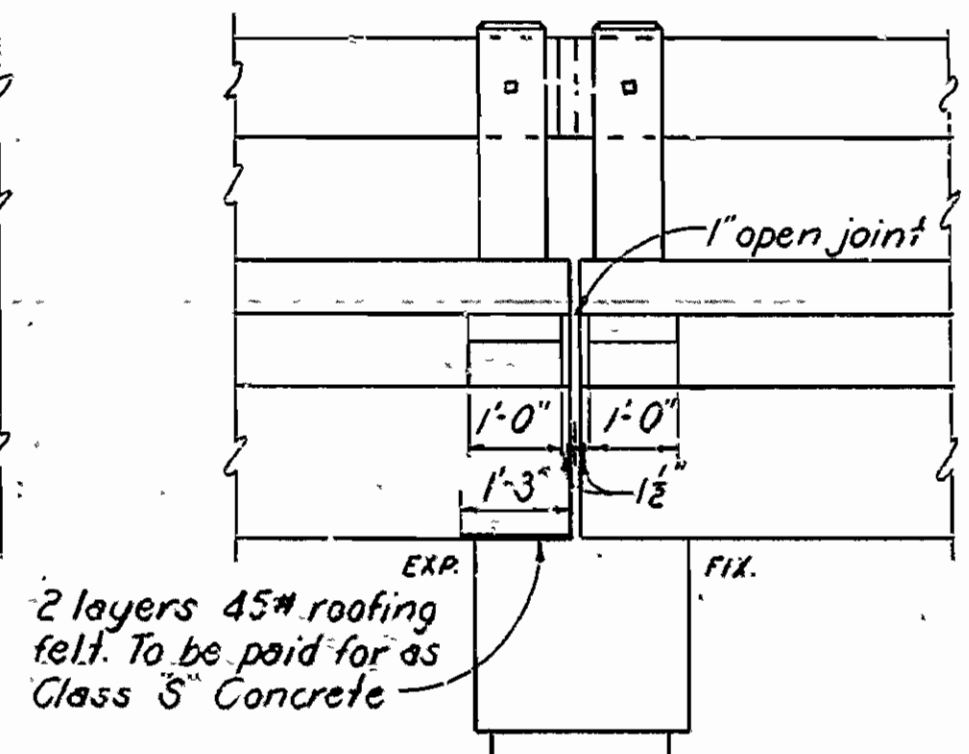
M.B. Harris
BRIDGE ENGINEER

BRIDGE No. 655 DRAWING NO. 1117

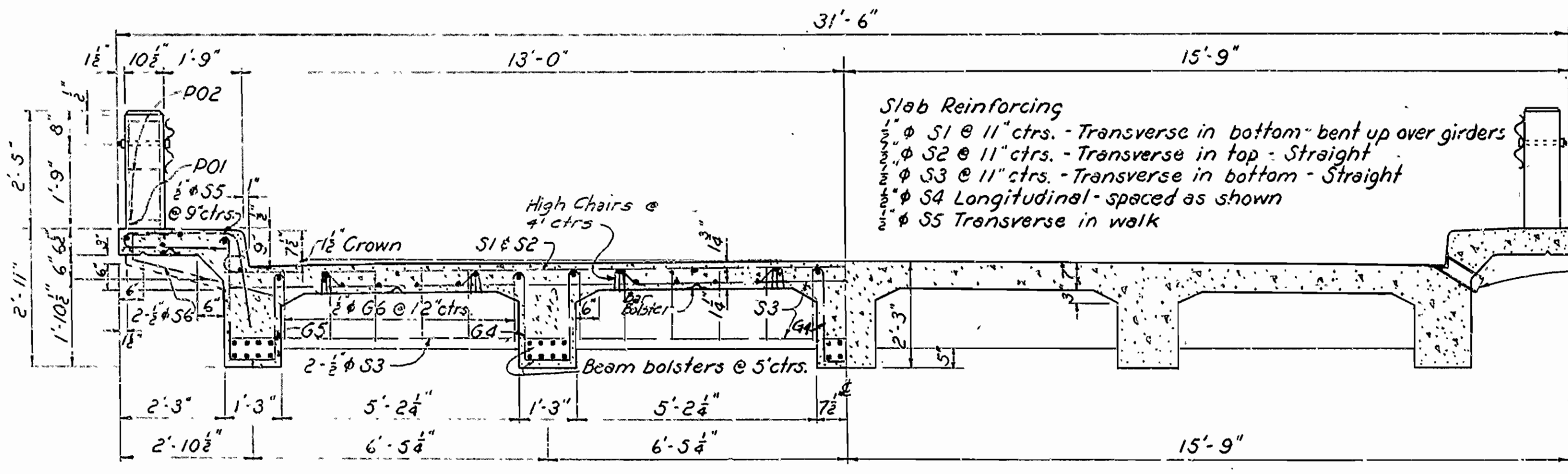
FED. ROAD No.	STATE	FED. AID PROJECT	FISCAL YEAR	SHEET No.	TOTAL SHEETS
6	ARK.	F-455(2)	1953		
JOB No.		10462	12	19	



LONGITUDINAL SECTION

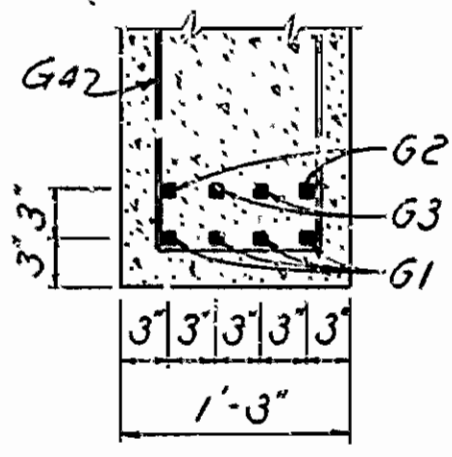


PART ELEV AT BENT BRACKET DETAIL



CROSS SECTION

GENERAL NOTES:
 All concrete to be Class S. All exposed corners to be chamfered $\frac{3}{8}$ " unless otherwise noted.
 Reinforcing steel to be deformed bars of intermediate grade unless otherwise modified by Special Provisions. Shop lists and bending diagrams must be submitted and approved secured before fabrication is begun. All reinforcing steel shall be accurately located in the forms and firmly held in place by means of steel wire supports, sufficient in size and number to prevent displacement during the course of construction.
 Wire supports will not be paid for directly, but will be considered subsidiary to the item of reinforcing steel. Shop lists and diagrams must be submitted for approval.
 The steel plate guard rail shall be of the type shown or an equivalent rigid type as approved by the Engineer. The steel plate guard rail, including all reinforced concrete posts, shall be paid for at the unit price bid per linear foot for Steel Plate Guard Rail. Steel plate to be painted the same as structural steel.
 Specifications: Arkansas State Highway Commission Standard Specifications for Road and Bridge Construction, adapted March 1, 1940.



BEAM SECTION Scale: 1"=1'-0"

For Details of roadway drains, see Dwg. No. 1002.
 Place new drains at quarter points of span on both sides of roadway. To be paid for as Reinforcing Steel.

MARK	NO. REQ. INT. SPAN	SIZE	LENGTH	A	BENDING DIAGRAM	
					Span	Post
G1	20	1" dia	29'-5"			
G2	10	1" dia	28'-11"	20'-10"		
G3	10	1" dia	24'-11"	16'-10"		
G4	108	$\frac{1}{2}$ " dia	5'-5"			
G5	72	$\frac{1}{2}$ " dia	6'-0"			
G6	48	$\frac{1}{2}$ " dia	3'-3"			
S1	29	$\frac{1}{2}$ " dia	29'-0"			
S2	30	$\frac{1}{2}$ " dia	27'-0"	Str.		
S3	34	$\frac{1}{2}$ " dia	26'-8"	Str.		
S4	46	$\frac{1}{2}$ " dia	27'-0"	Str.		
S5	72	$\frac{1}{2}$ " dia	6'-8"			
S6	8	$\frac{1}{2}$ " dia	4'-6"			
P01	24	$\frac{3}{8}$ " dia	(5'-10")	5'-10"		
P02	36	$\frac{3}{8}$ " dia	2'-9"			

NOTE: Dimensions relating to reinforcing steel a.e. to centers of bars

DESIGN SPECIFICATIONS: A.A.S.H.O. 1953
 Live Load: H-20 Loading
 Loads to Girders: Outside Int.
 Live Load-wheels 0.71 1.29
 Dead Load 1000 # 936 #
DESIGN UNIT STRESSES:
 Class S Concrete (n=10) 1200 #/sq in
 Reinforcing Steel 20,000 #/sq in

DETAILS OF
 27'-4" R.C.D. GIRDER SPAN
 BRIDGE OVER STINNETT CREEK
 IMBODEN - BLACK ROCK
 ROUTE 63 SEC. 3

ARKANSAS STATE HIGHWAY COMMISSION
 LITTLE ROCK, ARK.
 Drawn By: G.S. Date: 6-2-53
 Traced By: Date: _____
 Checked By: Date: 6-19-53
 Scale: $\frac{1}{2}$ "=1'-0"
 EXCEPT AS NOTED
 BRIDGE NO. 655 A DRAWING NO. 8313

W. B. ...
 Bridge Design Engineer