

FED. ROAD DIST. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	ARK.				
STATE JOB NO. 11407				1	6

STATE OF ARKANSAS
STATE HIGHWAY COMMISSION

INDEX OF SHEETS

SHEET NO.	DRWG. NO.	TITLE
1	7727	Title Sheet
2	7727-A	Summary Sheets
3	7728	Layout
4	7729	Details of 15' Timber Spans
5	7730	Details of Bents 3-6 Incl.
6	7731	Details of Lift Span

SPECIFICATIONS: ARKANSAS STATE HIGHWAY COMMISSION
STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION
ADOPTED MARCH 1, 1910 WITH THE SPECIAL PROVISIONS LISTED BELOW

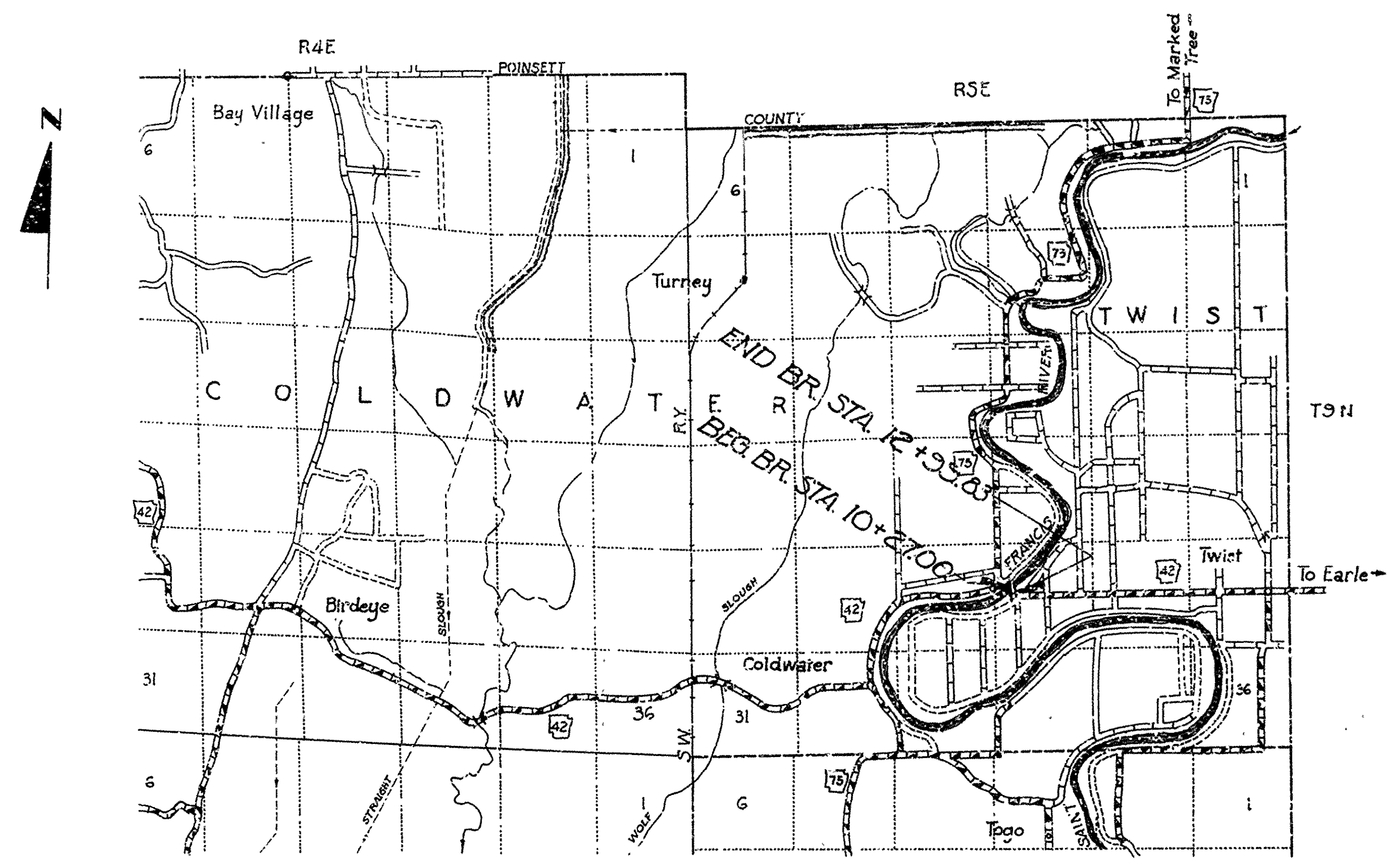
PAMPHLETS

DIVISION	PART
II	8A, 8B, 8C
III	

SPECIAL PROVISIONS

No.	TITLE	No. SHEETS
353-1	Machine Mixing	1

PLAN OF PROPOSED BRIDGE
ST. FRANCIS RIVER
CHERRY VALLEY-TWIST
CROSS COUNTY
ROUTE 42 SEC. 3
JOB NO 11407



LAYOUT
Scale: 1" = 1 Mi.

LENGTH OF PROJECT =
LENGTH OF BRIDGE = 272'-10"
LENGTH OF EMBANKMENT =
LENGTH OF JOB =

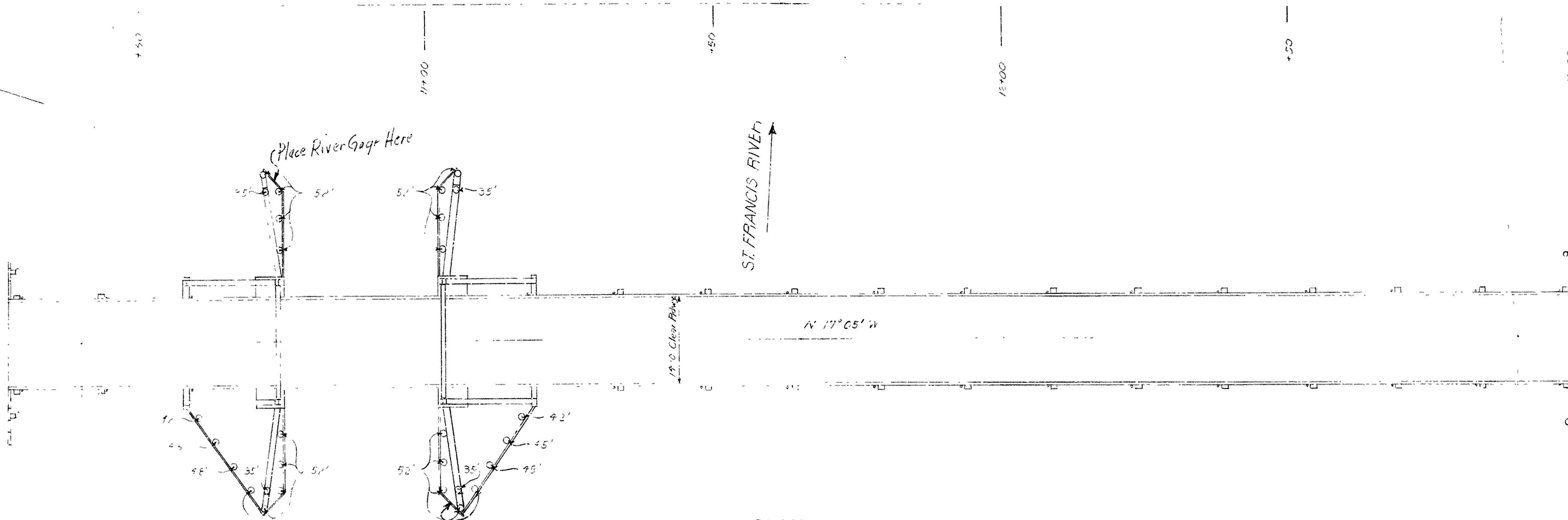
APPROVED	CHIEF ENGINEER-STATE HIGHWAY COMMISSION
APPROVED	CHAIRMAN-STATE HIGHWAY COMMISSION
RECOMMENDED FOR APPROVAL	DISTRICT ENGINEER
APPROVED	DIVISION ENGINEER

[Signature]
BRIDGE DESIGN ENGINEER

BRIDGE No. 2720

DRAWING No. 7727

FED. ROAD DIST. NO.	STATE	PROJECT NO.	FIN. YEAR	SHEET NO.	TOTAL SHEETS
6	ARK.			3	6
STATE JOB NO. 11407					



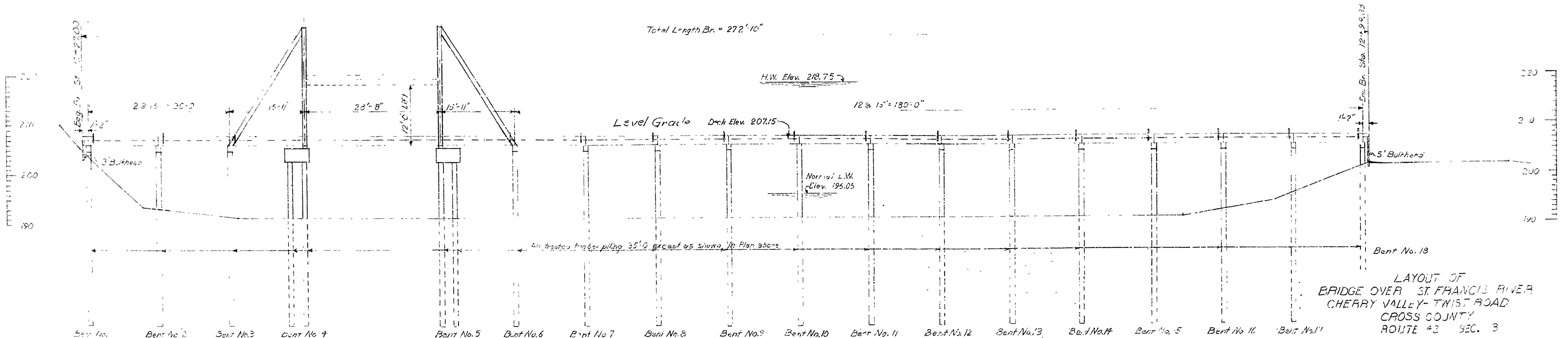
PLAN

GENERAL NOTES:

Lengths of treated timber piling shown are for purposes only.
 Drive one test pile in each of Bents 2, 10 and 17.
 SPECIFICATIONS: Arkansas State Highway Commission Standard Specifications for Road and Bridge Construction, adopted March 1, 1947, Division II, Parts 8A8B, 8C and Division III with Spec. Provision 853-1 Minimum
 DESIGN LIVE LOAD: H-10 Loading
 UNIT STRESSES:
 Class "S" concrete (n=10) 1300 #/sq in.
 Reinforcing Steel 20,000 #/sq in.
 Structural Steel 15 #/sq in.
 Timber 160 #/sq in.

For details see Drwgs. 7129-7731 Incl.

40" Willow
 B.M. Vol.
 Elev. 33.29



ELEVATION

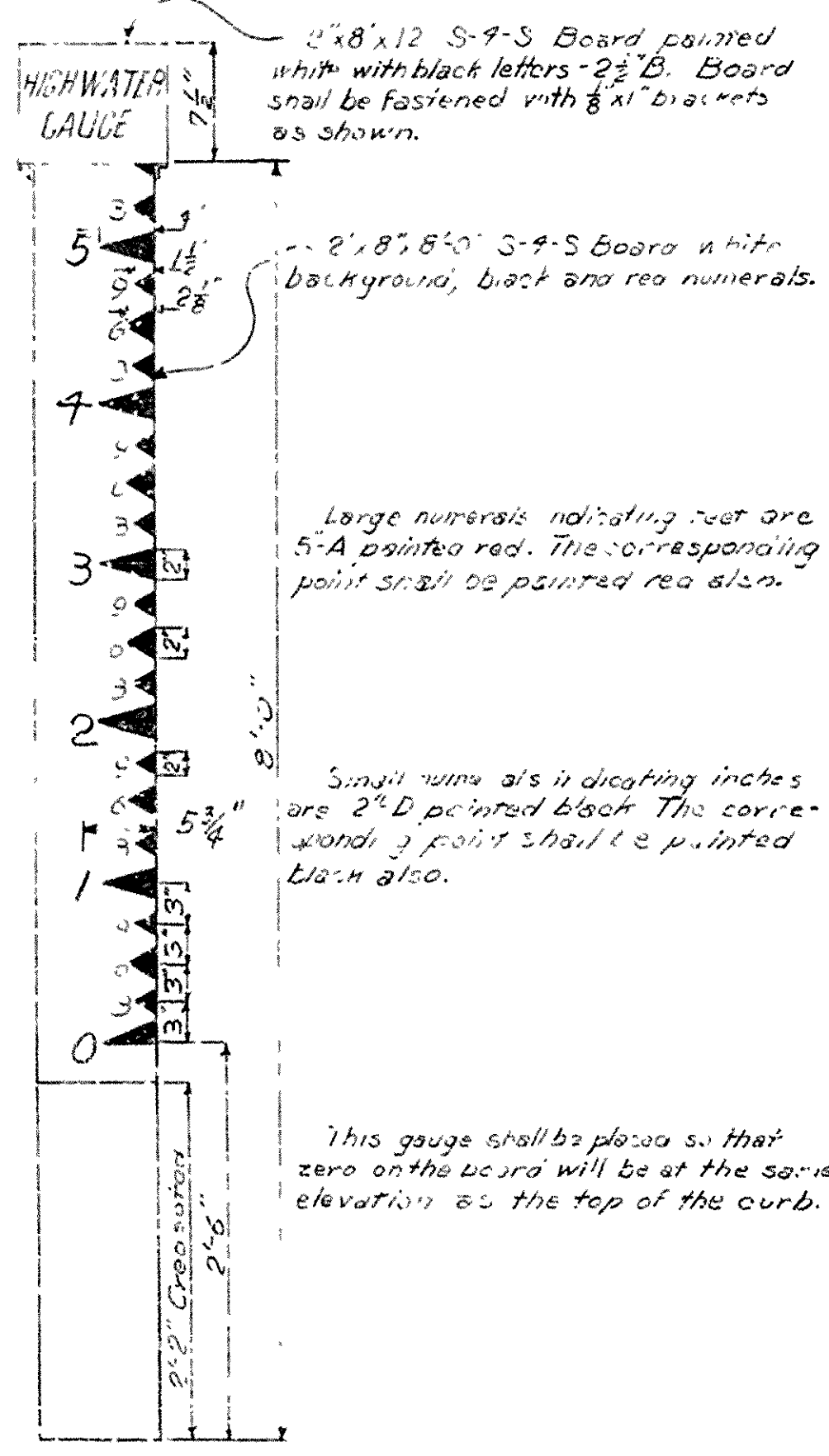
LAYOUT OF
 BRIDGE OVER ST. FRANCIS RIVER
 CHERRY VALLEY-TWIST ROAD
 CROSS COUNTY
 ROUTE 42 SEC. 3

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, AR.
 Drawn By: J.H.K. Date: 5-28-50
 Traced By: J.H.K. Date: 5-31-50
 Checked By: J.H.K. Date: 5-31-50
 BRIDGE NO. 2720 DRAWING NO. 7123

Ward
 BRIDGE DESIGN ENGINEER

STANDARD HIGHWATER GAUGE



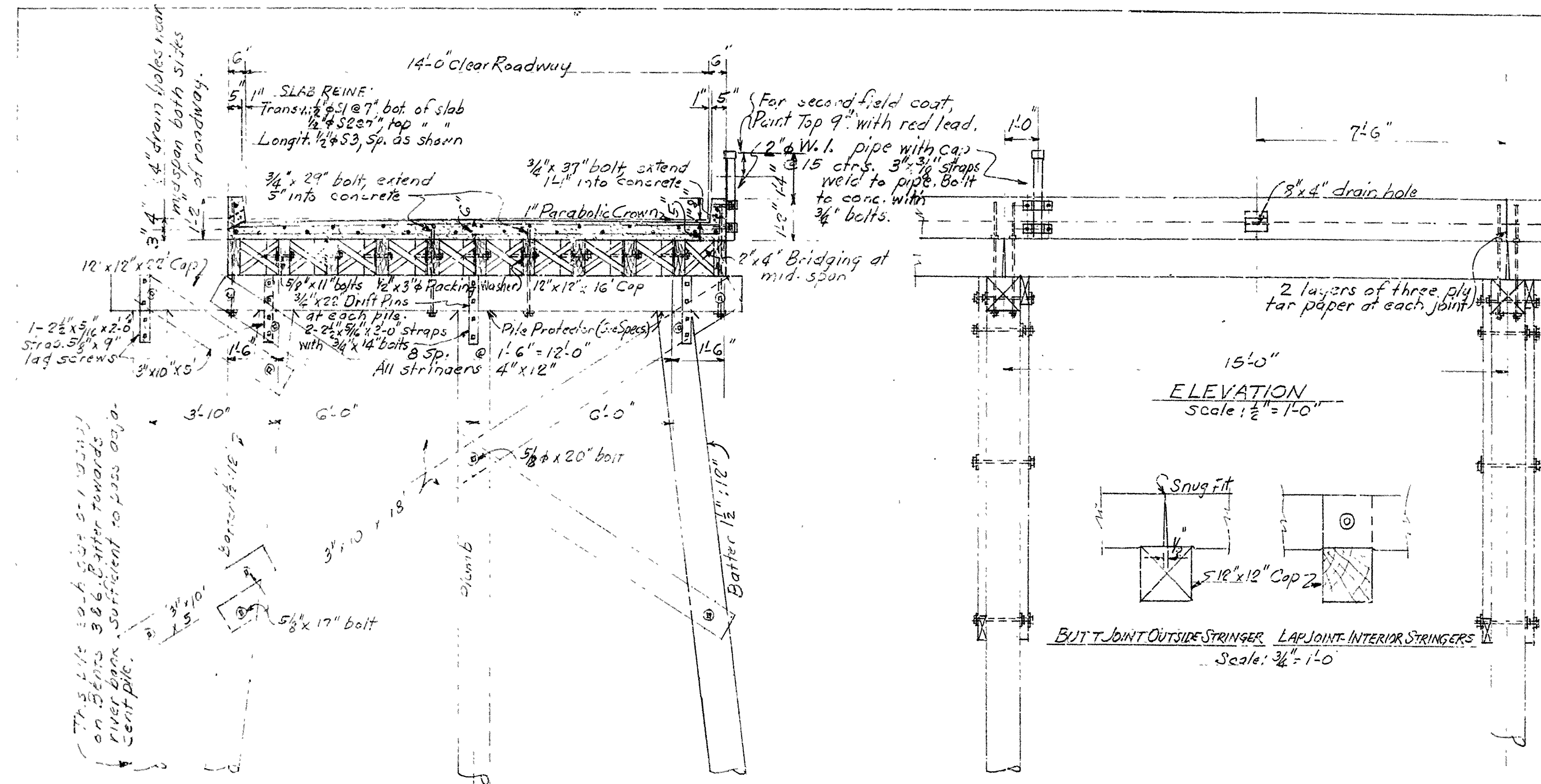
SUMMARY OF BRIDGE QUANTITIES

ITEM NO.	ITEM	UNIT	Bent No. 1	Bents No. 2, 7-17	Bents No. 3 & 6	Bents No. 4 & 5	Bent No. 18	Spans No. 1 & 17	Spans No. 2, 4-16	Spans No. 3 & 5	Span No. 7	TOTAL
SP#802	Class "S" Concrete for Bridges	Cu. Yd				17.57		9.24	5.43	9.67	8.92	93.80
803	Reinforcing Steel	Lb				1390		1646	966	1858	1410	15720
801	Structural Steel in Beam Spans	Lb						110	670	290	24780	25800
805	Treated Bridge Timber	MFEM	0.760	3.384	2.808	2.513	1.108	1.440	5.592	1.440		26.050
810	Treated Timber Piling	Lin. Ft	175	1260	350	1976	175					3936
810	Treated Timber Pile Cut-off	Lin. Ft	10	72	20	92	10					204
SP	Lifting Machinery	Compl. Item										100%
SP	Standard High Water Gauge	Each										2

Rev. 6-10-50

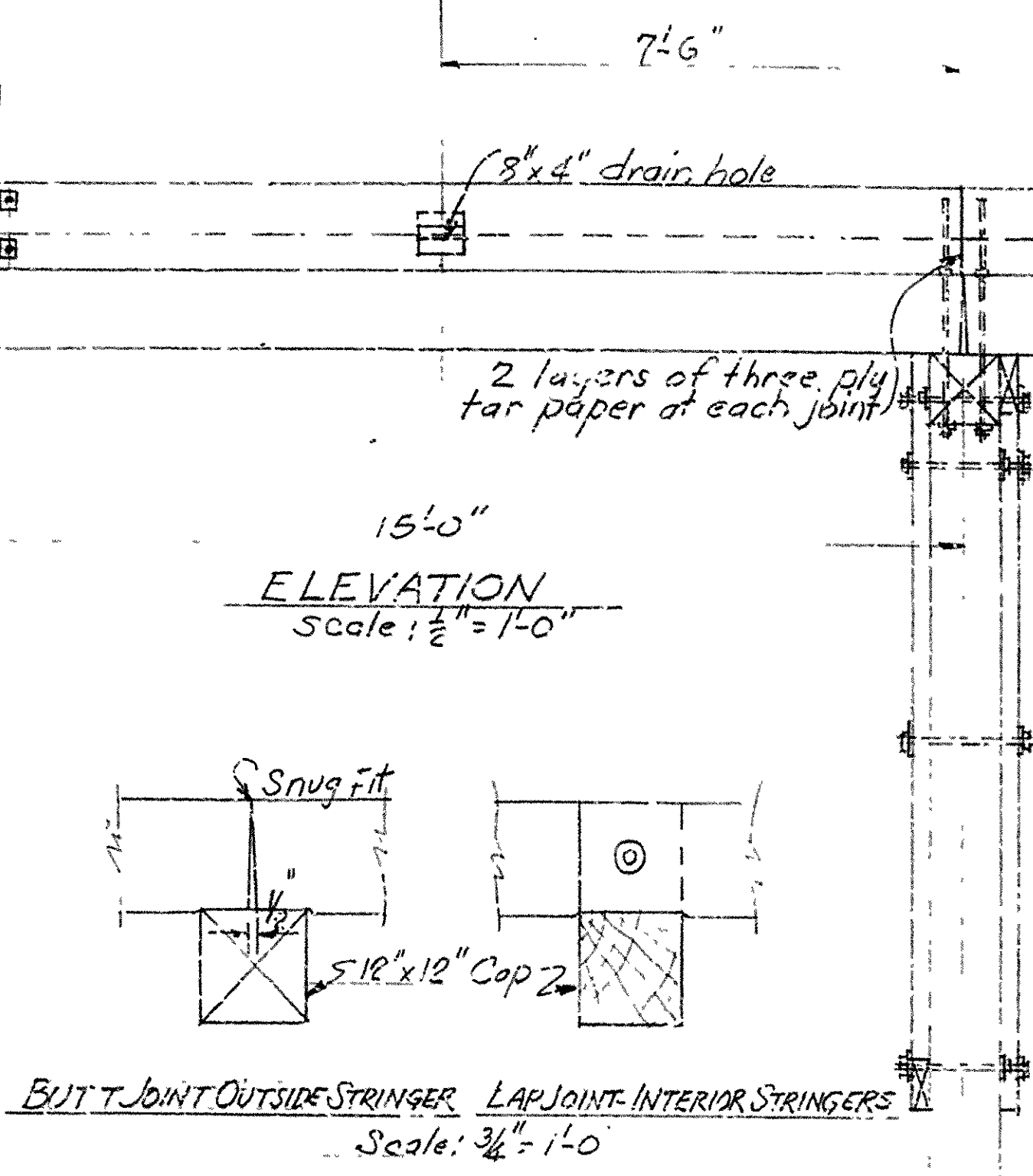
SUMMARY OF QUANTITIES
 BRIDGE OVER ST. FRANCIS RIVER
 CHERRY VALLEY - TWIST ROAD
 CROSS COUNTY
 ROUTE 42 SEC. 3
 ARKANSAS STATE HIGHWAY COMMISSION
 LITTLE ROCK, ARK.
 Drawn By: *W. B. Borden* Date: 6-5-50
 Traced By: *W. B. Borden* Date: 6-5-50
 Checked By: *W. B. Borden* Date: 6-5-50
 BRIDGE NO. 2720 DRAWING NO. 7727A

NO. ROAD	STATE	PROJECT NO.
6	ARK.	
STATE JOB NO. 11407		4 6



GENERAL NOTES

All timber and piling to be Southern Yellow Pine or Pacific Coast Douglas Fir. (Timber Rough)
 Concrete to be Class "S". All exposed corners to be chamfered 3/4".
 Reinforcing steel to be deformed bars of structural or intermed. grade. Shop list and bending diagrams to be submitted and approval secured before fabrication is begun.
 All timber to be given an eight pound treatment and all piling a twelve pound treatment of grade I creosote oil by the empty cell process.
 Stringers to be dapped at ends and spiked to cap with 2-60d spikes in each end of stringers.
 Malleable or cast iron washers to be used under bolt heads and nuts bearing on wood except as noted.
 All bolts and hardware connections to be painted with red lead prior to construction. All exposed portions of such to be painted with asphaltic paint after construction is completed.
 The payment for all hardware, bolts, washers, spikes, drift pins, lag screws, wrought iron straps, etc. shall be included in price bid for timber in place.
 Specifications: Arkansas State Highway Commission Standard Specifications for Road and Bridge Construction, adopted March 1, 1940

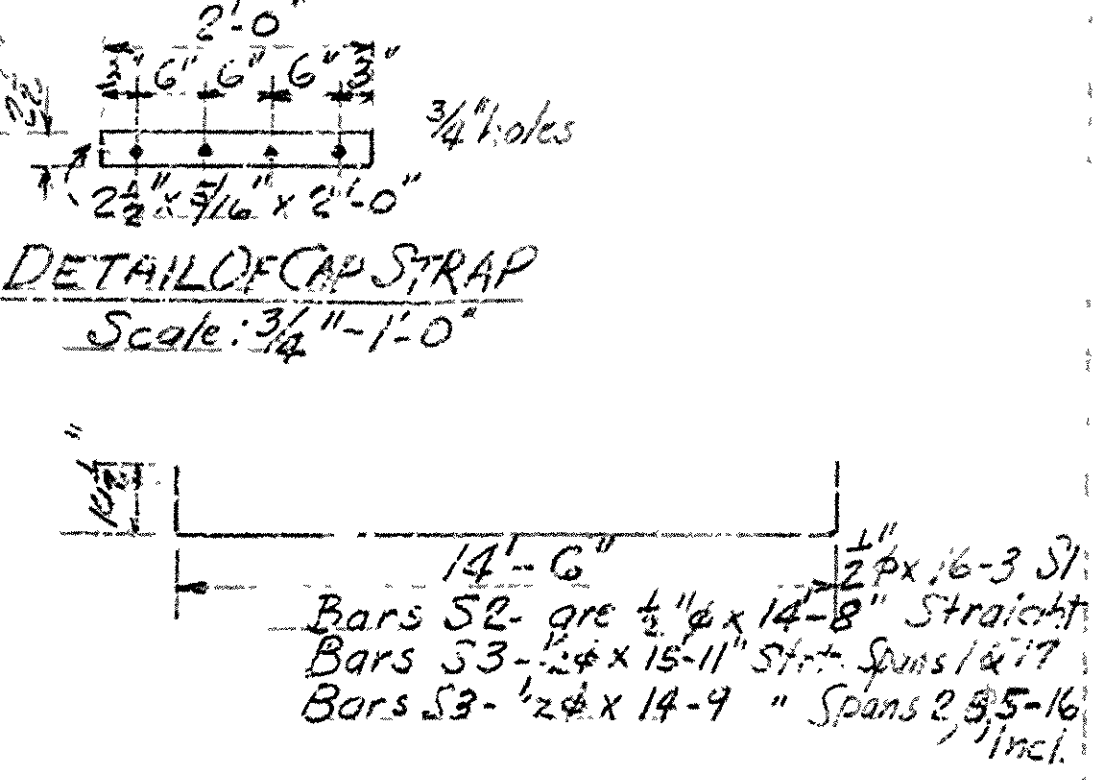
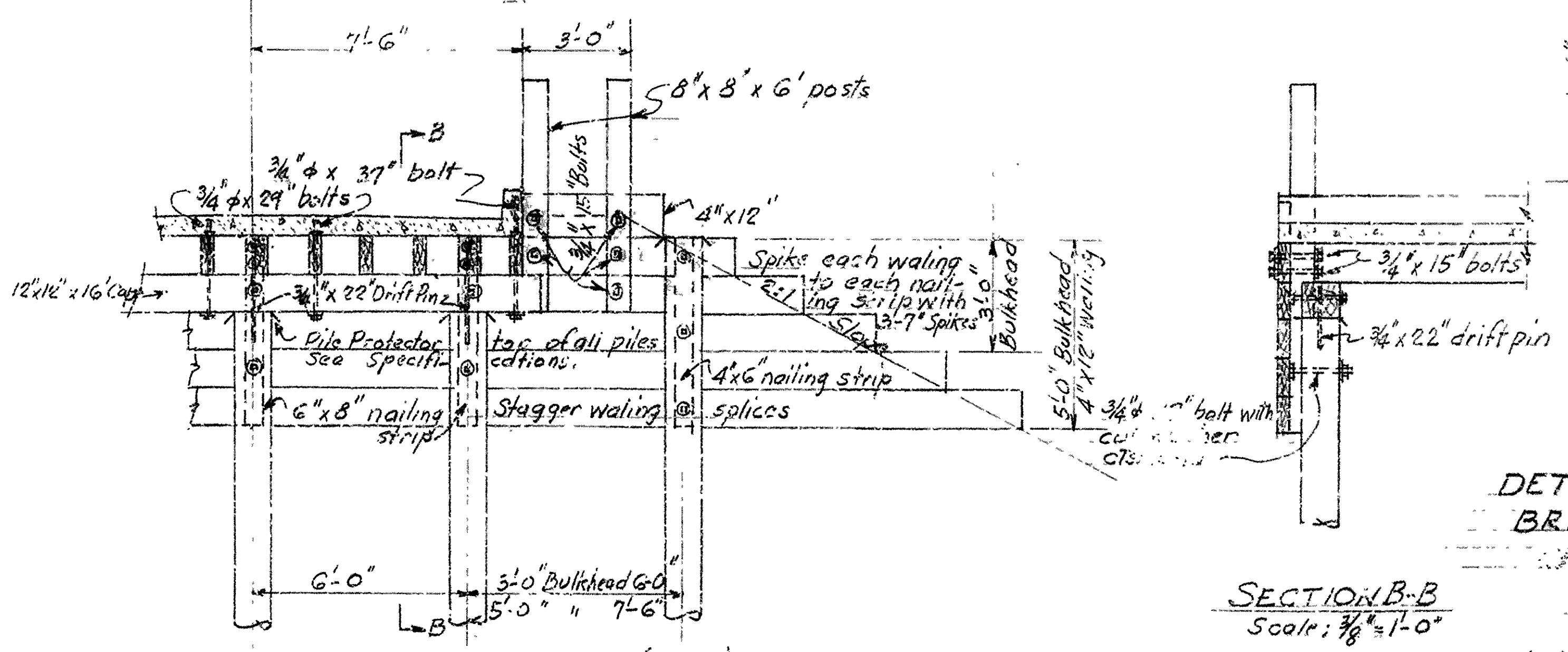
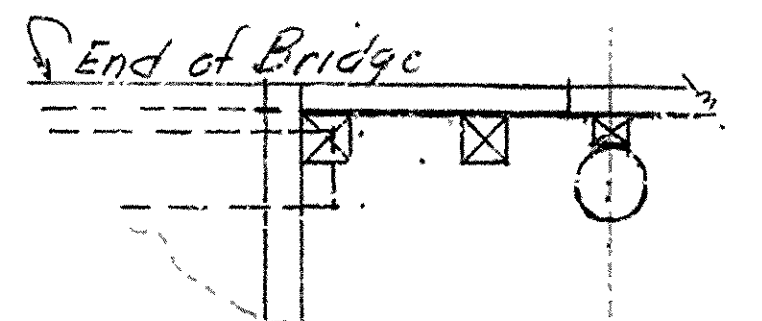
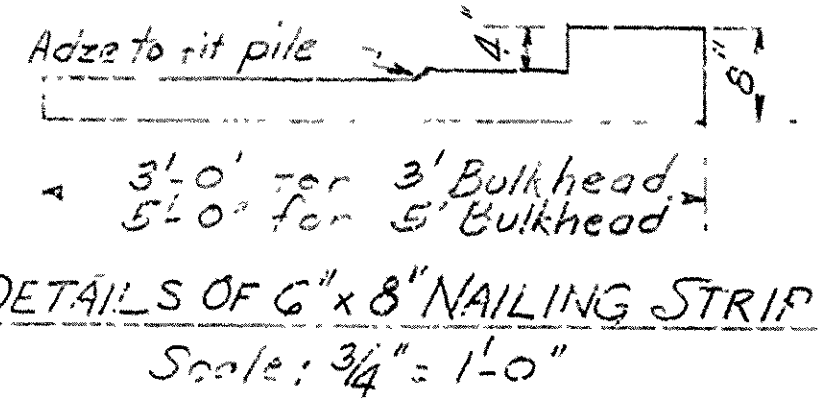


DESIGN LIVE LOAD: H10

STRESSES:

5" Concrete (f _c = 10)	1300 #/sq"
Reinf. Steel	18000 #/sq"
Timber	1600 #/sq"
Structural Steel	18000 #/sq"

HALF SECTION-BENTS 3 & 6 HALF SECTION BENTS 2 & 7-17 INCL.
 Scale: 1/2" = 1'-0" Scale: 1/2" = 1'-0"



END BENT DETAILS (1 & 13)
 Scale: 3/8" = 1'-0"

DETAILS OF 15'-0" TIMBER SPANS-CONG. SLAB
 BRIDGE OVER ST. FRANCIS RIVER
 CHERRY VALLEY-TWIST ROAD
 CROSS COUNTRY
 ROUTE 42 SEC. 3

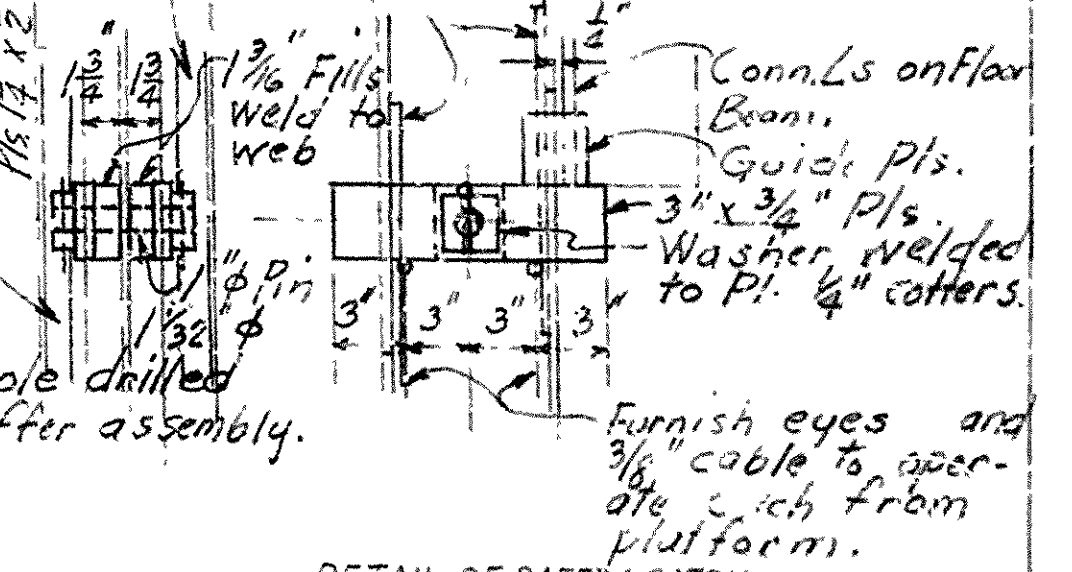
SECTION B-B
 Scale: 3/8" = 1'-0"

Bridge Design Engineer

ARKANSAS STATE HIGHWAY COMMISSION
 LITTLE ROCK, ARK.
 Drawn By: L.P.C. Date 15-30-50 Scale: As Noted
 Checked By: J.H.K. Date 15-31-50
 BRIDGE NO. 2720 DRAWING NO. 7729

Loading: H-10
 Load distribution: 165 lbs per ft
 Truck live load: 0.3 wheel
 Load distribution: 235 lbs per ft
 Truck live load: 0.7 wheel

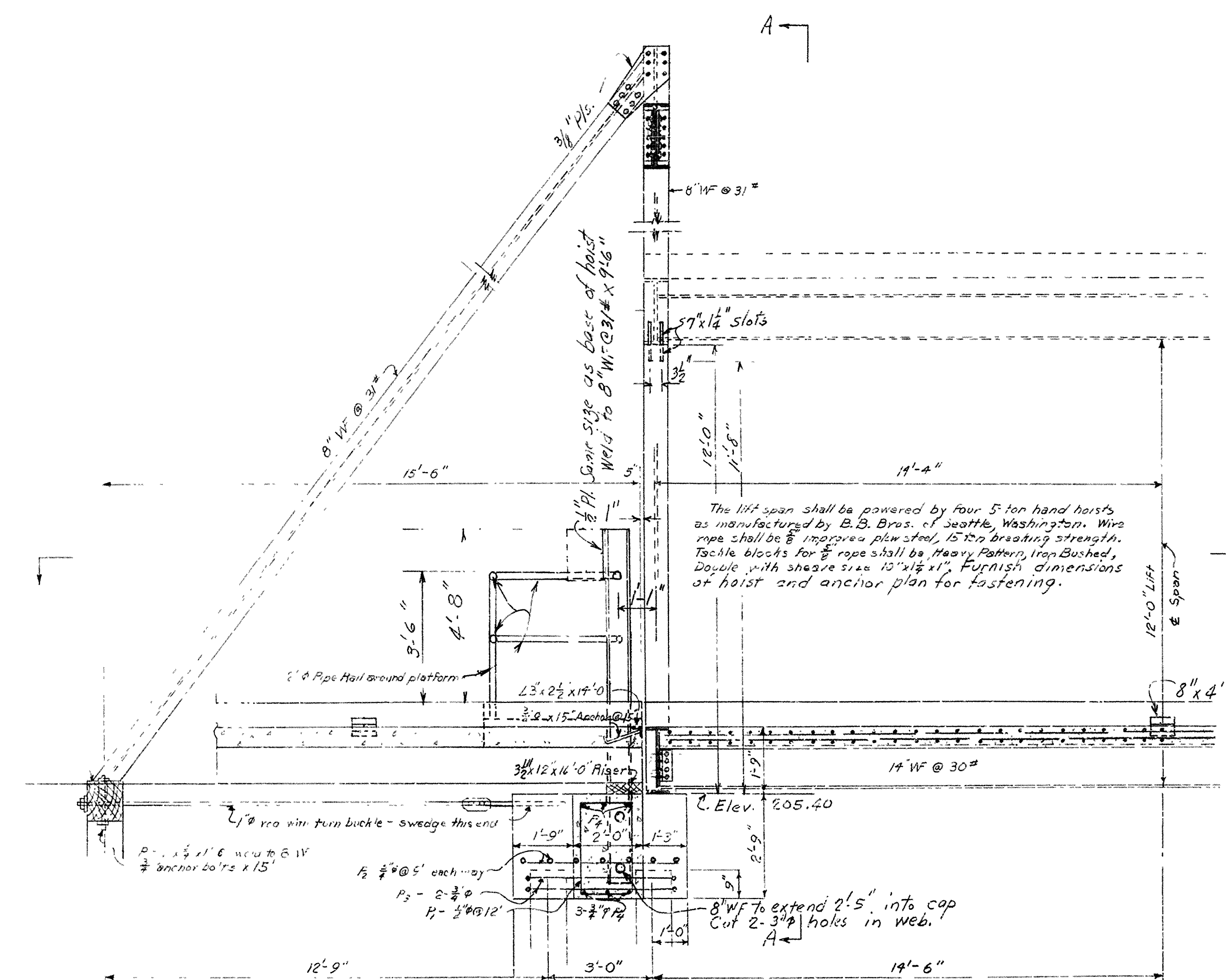
Stresses:
 Structural Steel: 18,000 #/sq in
 Reinforcing Steel: 8,000 #/sq in
 Class 1 concrete: 1,800 #/sq in



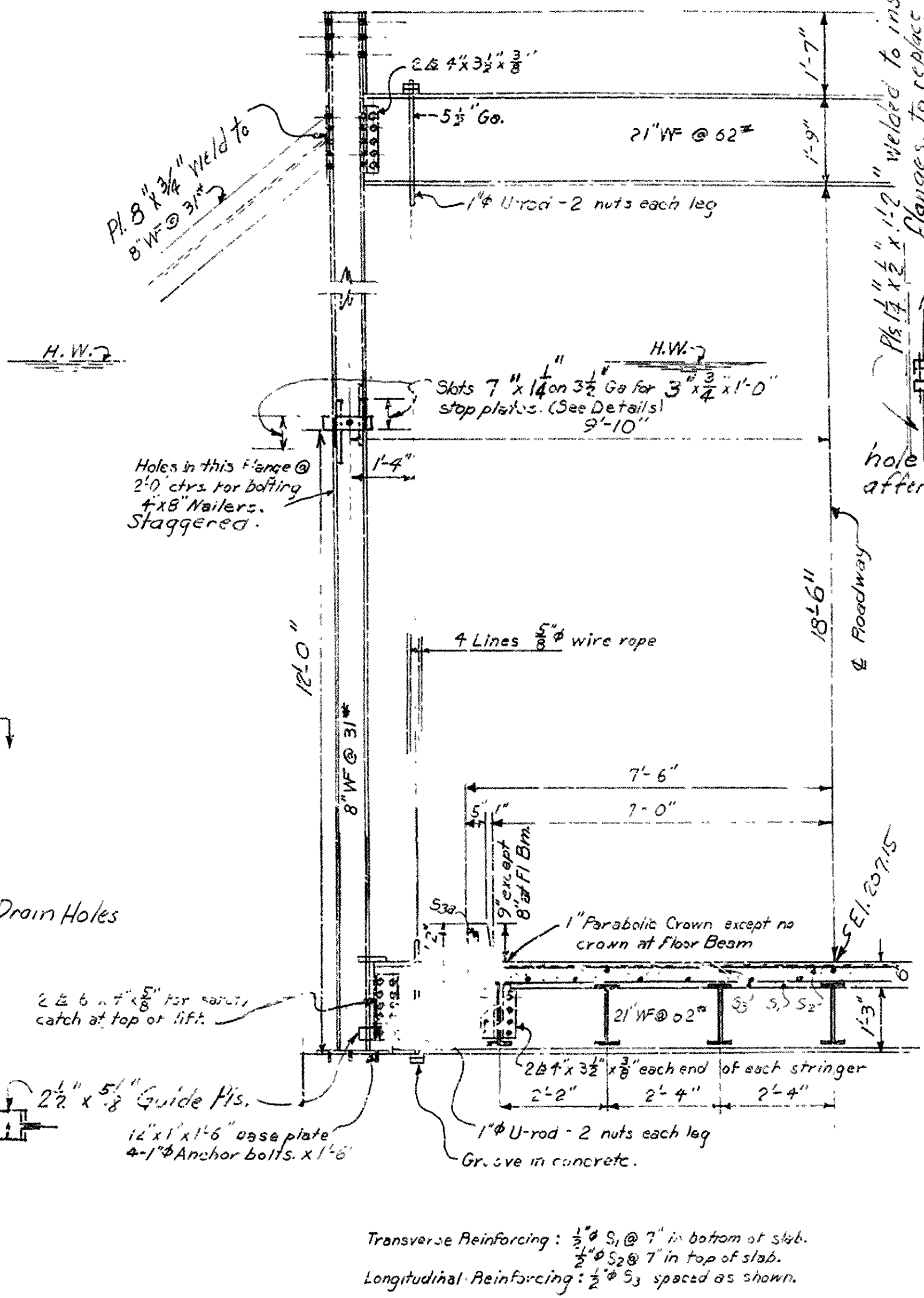
DETAIL OF SAFETY CATCH
 Scale 1/2" = 1'-0"

GENERAL NOTE

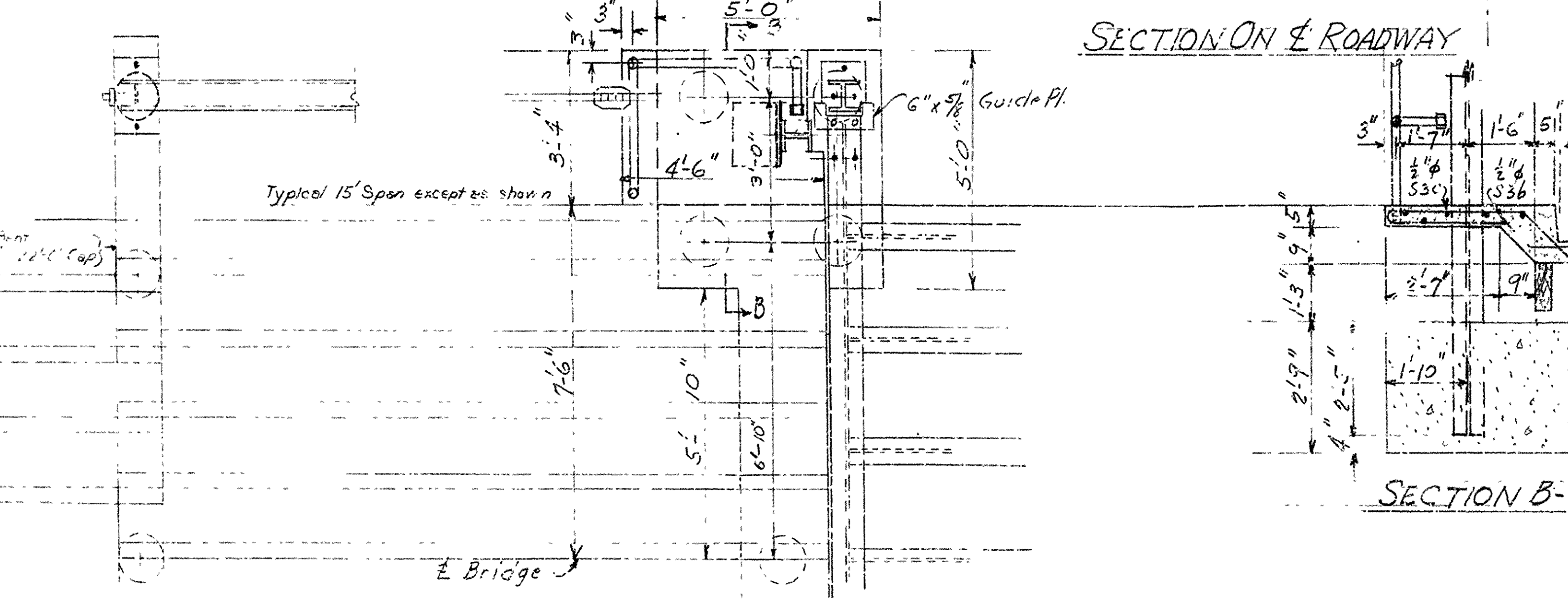
All concrete to be class 1. All exposed corners to have 1/4" chamfer unless otherwise noted.
 Rivets 3/4" open holes 1/2". Where nuts are indicated use machine bolts. Structural angles of equal or greater strength may be substituted for shapes shown, but payment will be made on basis of shapes shown or those actually used if of lesser weight.
 Welding shall conform to the American Welding Society Specifications for Welded Machinery and Shipyard Brackets, Fourth Edition, 1947. All welded connections to be 3/8" fillet unless noted.
 Shop Paint: All structural steel, steel plates, angles in contact with concrete, shall be given one coat of red lead and raw linseed oil before shipment.
 Field Paint: First coat, white lead tinted with lamp black; second coat, aluminum paint.
 All bearing plates, roadway endons, braces, pipe rails and posts, beams, columns, etc. to be paid for as "Structural Steel in Beam Spans."
 In order to secure a good riding surface, floor slabs shall be struck off from curb to curb with a full span longitudinal strike-off. Strike off shall be sufficiently stiff so as to have no appreciable vertical deflection. To provide for deflection of beams, slabs to be approximately 3/8" thicker at midspan and 1/2" thinner at qu. per points.
 This drawing shows general features at design only. Shop drawings shall be made in accordance with the specifications, submitted and approved secured before fabrication is begun.
 Reinforcing shall be accurately located in the forms and firmly held in place by steel wire bar supports. Wire supports will be considered as auxiliary to them or failure to conform to Specifications, Arkansas State Highway Commission Standard Specifications for Highway Construction adopted March 1947.



SECTION ON & ROADWAY



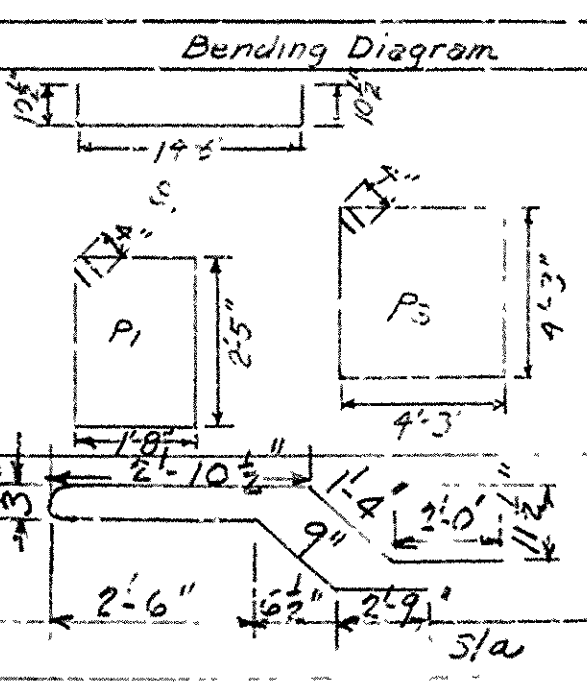
SECTION A-A



SECTION B-B

Mark	Size	Length	No.
S1	1/2" φ	16'-3"	49
S2	1/2" φ	14'-8"	47
S3	3/8" φ	28'-4"	19
S3a	1/4" φ	29'-2"	2
P1	1/2" φ	8'-11"	12
P2	3/8" φ	9'-0"	28
P3	3/8" φ	17'-9"	4
P4	3/8" φ	21'-0"	6
S3b	1/2" φ	4'-3"	12
S3c	1/2" φ	3'-9"	12
S1a	1/2" φ	12'-4"	32

* Straight bars



PART PLAN

DETAILS OF LIFT SPAN
 14'-0" CLEAR ROADWAY
 BRIDGE OVER ST FRANCIS RIVER
 CHERRY VALLEY-TWIST ROAD
 CROSS COUNTRY
 ROUTE 42 SEC. 3

ARKANSAS STATE HIGHWAY COMMISSION
 LITTLE ROCK, ARK.
 Drawn By: SVB Date: 5-31-50
 Traced By: JHK Date: 6-1-50
 Checked By: JHK Date: 6-1-50
 BRIDGE NO. 2720 DRAWING NO. 7731

Handwritten signature
 DESIGN ENGINEER

Rev. 6-12-50