

FED. ROAD NO.	STATE	FED. AID PROJECT	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	Ark.	S5014	1953		
JOB No.	10326	3	102		

SCHEDULE OF BRIDGE QUANTITIES

BRIDGE NO.	CODE NO.	ITEM NO.	103	SP& 802	S. 103	SP& 804	SP-805-3	807	929	S.P.	
		ITEM UNIT OF BRIDGE	DRY EXCAVATION FOR STRUCTURES	CLASS "B" CONCRETE FOR BRIDGES	REINFORCING STEEL	CONCRETE PILING 16" OCTAGONAL	STEEL PLATE GUARD RAIL (10 GA.)	STRUCTURAL STEEL IN BEAM SPANS	BRIDGE NAME PLATES TYPE "C"	REMOVAL OF EXISTING BRIDGE STRUCTURES	
			UNIT	CU. YD.	CU. YD.	LB.	LIN. FT.	LIN. FT.	LB.	EACH	COMPLETE ITEM
2884	X031	End Bent No. 1	38	9.98	1353	180	7.82	389	1		
		Intermediate Bents No. 2-5		20.68	3380	565					
		End Bent No. 6	38	9.98	1353	180	7.82	389			
		Five 30'-0" I-Beam Spans		88.48	15165		300.00	59825			
		Totals for Bridge No. 2884	76	129.12	21251	925	315.64	60633	1	6%	
2885	X031	End Bent No. 1	48	11.92	1440	280	9.06	442	1		
		Intermediate Bents No. 2-7		35.28	5436	1399					
		End Bent No. 8	48	11.92	1440	280	9.06	442			
		Seven 40'-0" I-Beam Spans		164.04	28452		560.00	153100			
		Totals for Bridge No. 2885	96	223.16	36768	1959	578.12	153984	1	30%	
2886	X031	End Bent No. 1	40	10.53	1356	252	9.42	414	1		
		Intermediste Bents No. 2-5		22.56	3264	805					
		End Bent No. 6	38	10.53	1356	252	9.42	414			
		Five 30'-0" I-Beam Spans		88.60	15225		300.00	60275			
		Totals for Bridge No. 2886	78	132.22	21201	1309	319.84	61103	1	64%	
Totals for Job No. 10326			250	484.50	77220	4193	1212.60	275720	3	100%	

SCHEDULE OF
BRIDGE QUANTITIES
BEASLEY - LEPANTO
POINSETT COUNTY
ROUTE 143 SEC. 0

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.
Drawn By: J.E.H. Date: 8-26-53
Traced By: _____ Date: _____
Checked By: _____ Date: _____
Scale: _____
BRIDGE NO. 2884, 2885 DRAWING NO. 8768
2886

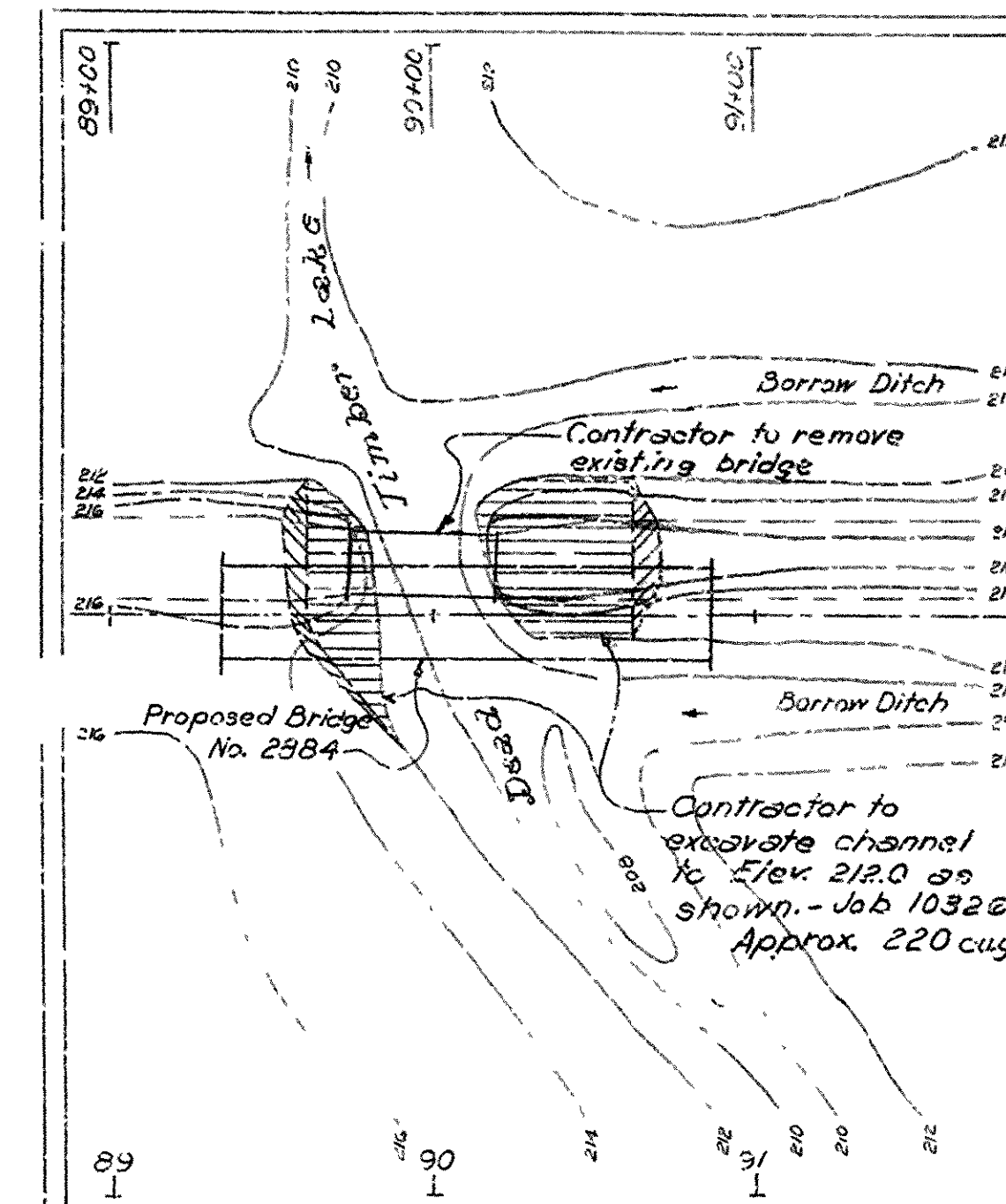
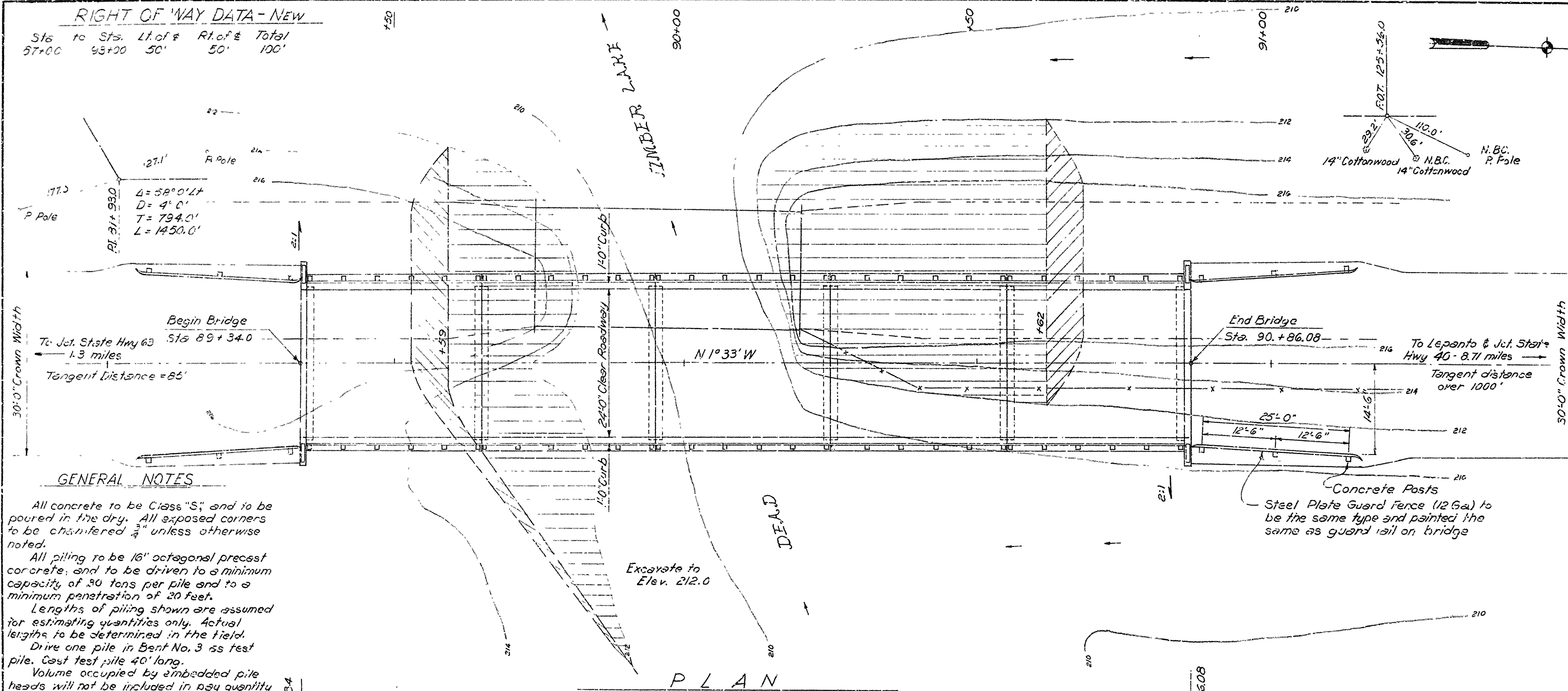
Revised
9-1-53 - H.B. R. 2884.

Bridge Design Engineer

RIGHT OF WAY DATA - New

Sta. to Sta. L.O.F. R.O.F. Total
57+00 93+00 50' 50' 100'

NO.	STATE	PROJECT	YEAR	SHEET	TOTAL
6	ARK.	S-50(4)	1953	23	102
JOB No.	10326				



LOCATION MAP
SHOWING CHANNEL IMPROVEMENT
Scale: 1" = 50'

GENERAL NOTES

All concrete to be Class "S" and to be poured in the dry. All exposed corners to be chamfered $\frac{3}{8}$ " unless otherwise noted.

All piling to be 16" octagonal precast concrete, and to be driven to a minimum capacity of 30 tons per pile and to a minimum penetration of 20 feet.

Lengths of piling shown are assumed for estimating quantities only. Actual lengths to be determined in the field.

Drive one pile in Bent No. 3 as test pile. Cast test pile 40' long.

Volume occupied by embedded pile heads will not be included in pay quantity of concrete caps.

The Contractor shall remove the existing bridge, approximately 45' long consisting of three 15'-0" timber spans on mud sills; 19'-0" clear roadway; 3" oak deck.

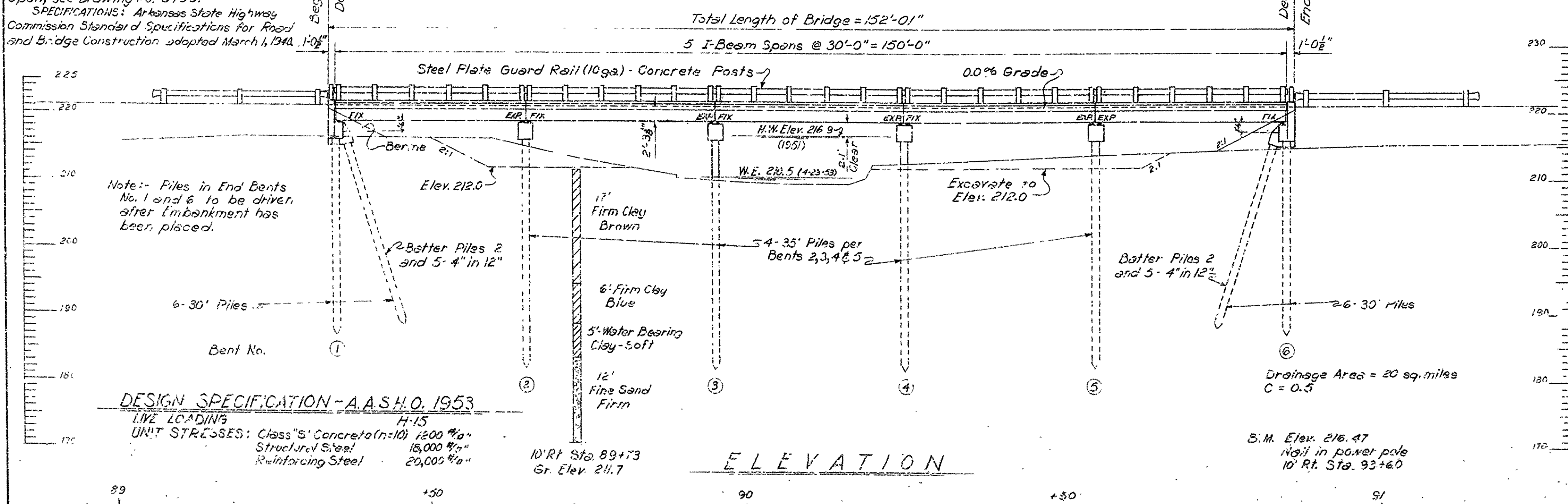
For Details of Standard Pile Bents, see Drawing No. 5300 A.

For Details of Standard 30'-0" I-Beam Span, see Drawing No. 5499.

SPECIFICATIONS: Arkansas State Highway Commission Standard Specifications for Road and Bridge Construction, adopted March 4, 1944.

QUANTITIES

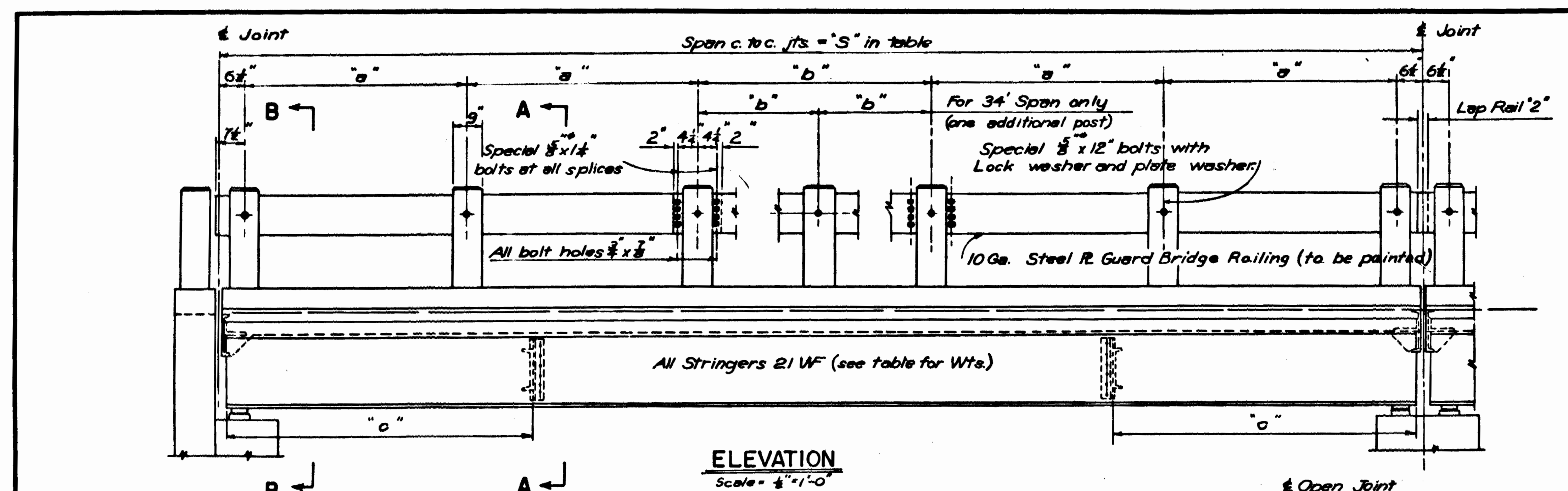
ITEM NO.	ITEM	QUANTITY	UNIT
103	Dry Excavation for Structures	76	Cu.Yd.
SP & 802	Class "S" Concrete for Bridges	129.12	Cu.Yd.
SP & 803	Reinforcing Steel	2125.1	Lb.
SP & 804	Concrete Filling - 16" Octagonal	925	Lin.Ft.
SP - 805-3	Steel Plate Guard Rail (10 Ga)	315.64	Lin.Ft.
807	Structural Steel in Beam Spans	506.33	Lb.
929	Bridge Name Plates (Type "C")	1	Each
SF	Removal of Existing Bridge Structures	6%	Complete item



LAYOUT OF BRIDGE
OVER DEAD TIMBER LAKE
BEASLEY - LEAPANTO
POINSETT COUNTY
ROUTE 123 SEC. 0

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

Drawn By: J.E.H. Date: 3-1-53
Traced By: J.E.H. Date: 3-1-53
Checked By: J.E.H. Date: 3-1-53
BRIDGE No. 2884
Scale: 1 in. = 10 ft.
DRAWING No. 8363

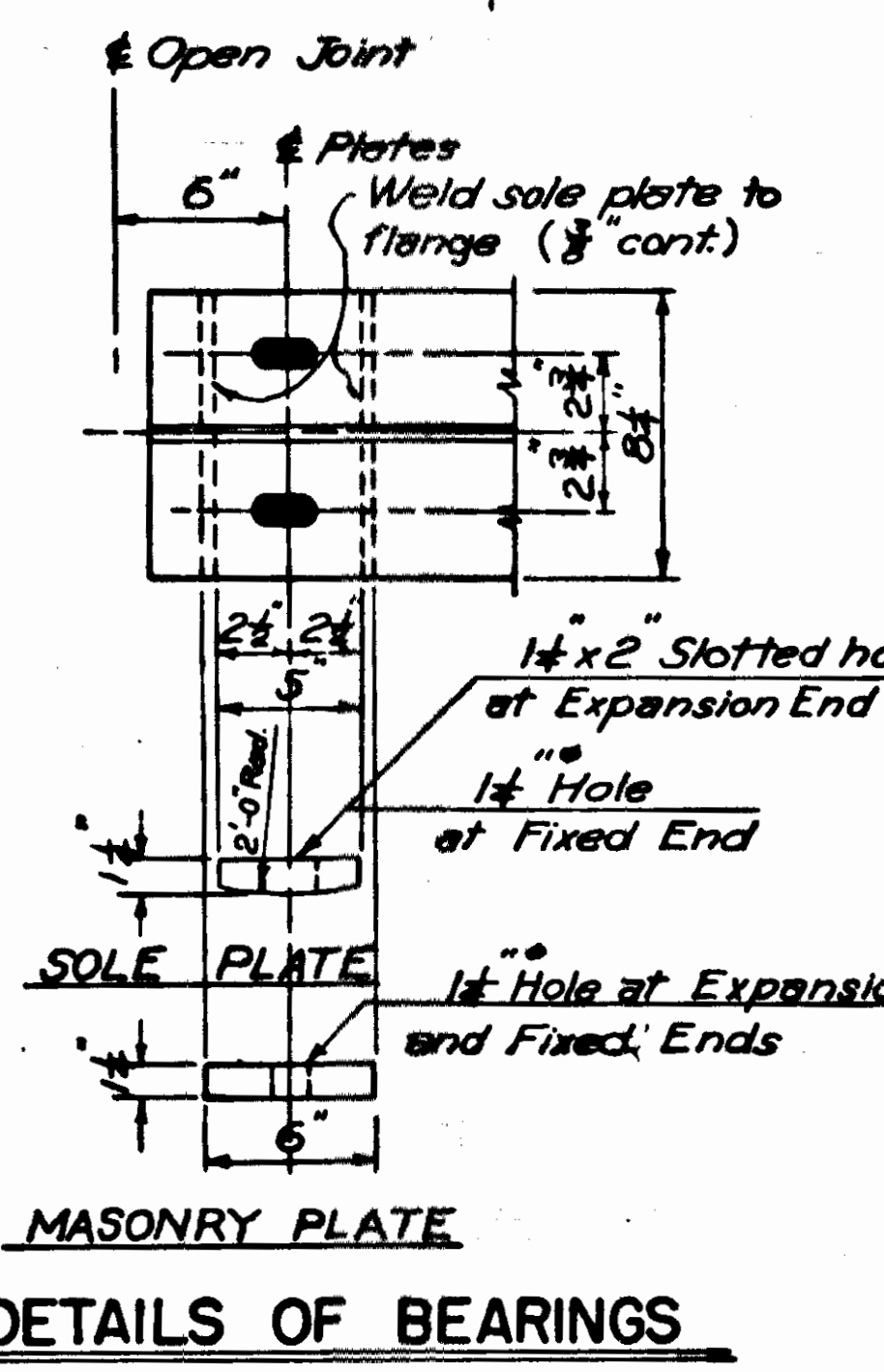
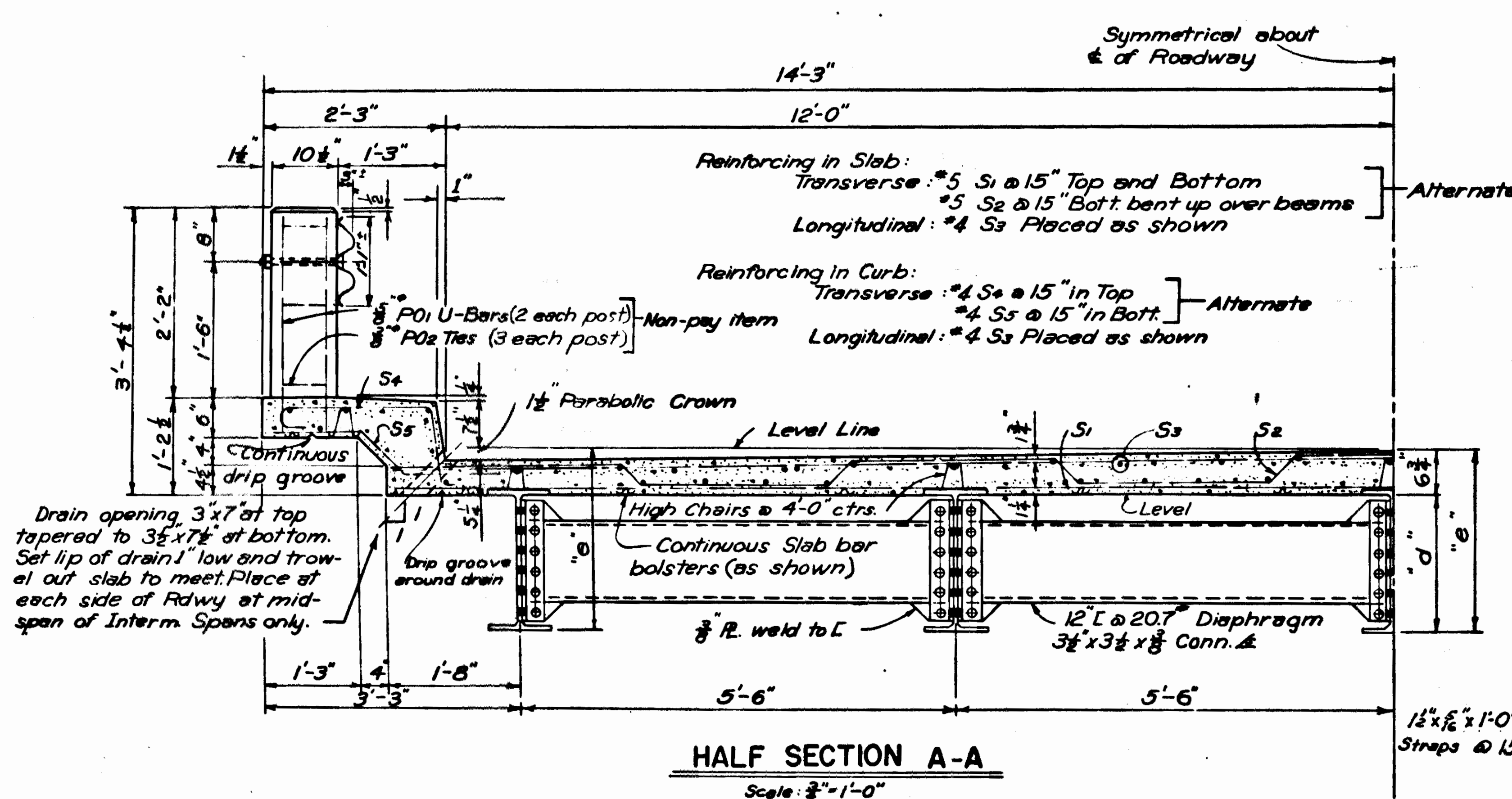
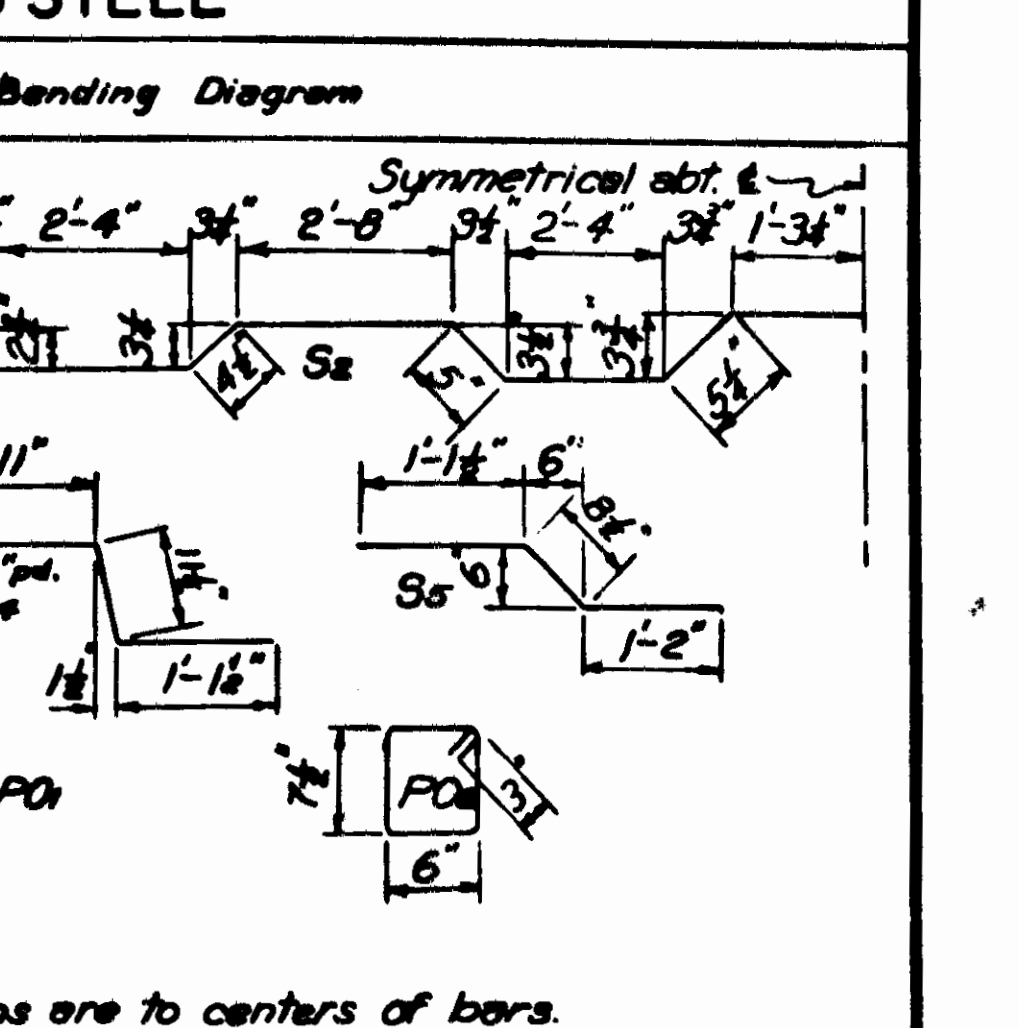


LIST OF VARIABLES 30'-34' SPANS

Span S	Reqd. Stringers	Post Spacing a	Strut b	Vert. Dims. @ d	D.L. Def.
30'	21WF62	5'-9"	5'-11"	7'-6"	1'-0 1/8" 2'-3 1/8"
31'	21WF62	5'-11"	6'-3"	7'-9"	1'-0 1/8" 2'-3 1/8"
32'	21WF62	6'-2"	6'-3"	8'-0"	1'-0 1/8" 2'-3 1/8"
33'	21WF73	6'-2 1/2"	7'-1"	8'-3"	1'-0 1/8" 2'-3 1/8"
34'	21WF73	5'-5"	5'-7 1/2"	8'-6"	1'-0 1/8" 2'-3 1/8"

LIST OF REINFORCING STEEL

Mark	Size	No in Each Span	Length in Dia
S1	#5	48 50 52 54 56	25'-0" 25'-0" 25'-0" 25'-0" 25'-0"
S2	#5	23 24 25 26 27	25'-9" 15'
S3	#4	47 47 47 47 47	5'-5" 5'-5" 5'-5" 5'-5" 5'-5"
S4	#4	48 50 52 54 56	4'-5" 16"
S5	#4	46 48 50 52 54	3'-0" 16"
P01	#5	24 24 24 24 28	5'-4" 12"
P02	#3	36 36 36 36 42	2'-8" 14"



LOADING HIS (AASHO 1957)

Load Distribution Outside Stringer
Dead Load = 7600# (Wt per ft of WF used)
Live Load = 1800#
Conc. Live Load = 3100# for moment
Truck Live Load = 2300# for shear

Load Distribution Inside Stringer
Dead Load = 5460# (Wt per ft of WF used)
Live Load = 2650#
Conc. Live Load = 7400# for moment
Truck Live Load = 10720# for shear

Unit Stresses
Structural Steel 18,000 psi
Reinforcing Steel 20,000 psi
Class 5 Concrete (n=10) 1,200 psi

GENERAL NOTES

All concrete to be Class S. All exposed corners to have 1/4" chamfer unless otherwise noted.

Field Connections for diaphragms to be riveted or bolted with high strength bolts.

Rivets: 3/4" Open holes 1 1/2" except where noted otherwise.

Structural shapes 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, whichever is the lesser.

All welded connections to be 3/8" fillet shop welds except as noted. All welding shall conform to the American Welding Society Standard Specifications for Welded Highway and Railway Bridges, 5th Edition 1956.

Shop Paint: All structural steel, except surfaces in contact with concrete shall be given one coat of red lead and raw linseed oil before shipment.

Field Paint: 1st Coat - Red lead tinted with lamp black.

End Coat - Aluminum Paint.

All bearing plates and roadway expansion devices to be paid for as "Structural Steel in Beam Spans."

Bearings shall be finally seated in a manner set forth by the Specifications. This work and material are to be considered as subsidiary to the item Structural Steel in Beam Spans and will not be paid for directly.

This drawing shows general features of design only. Shop drawings shall be made in accordance with the Specifications, submitted and approval secured before fabrication is begun.

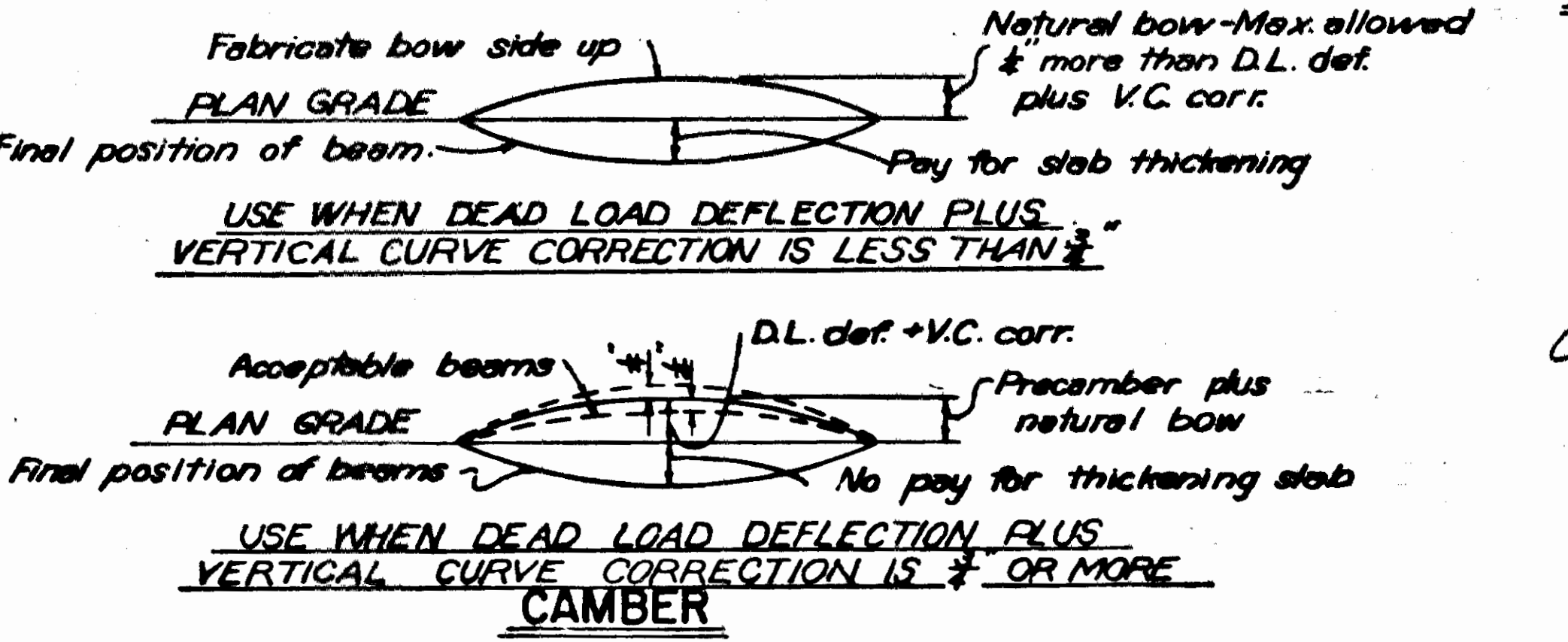
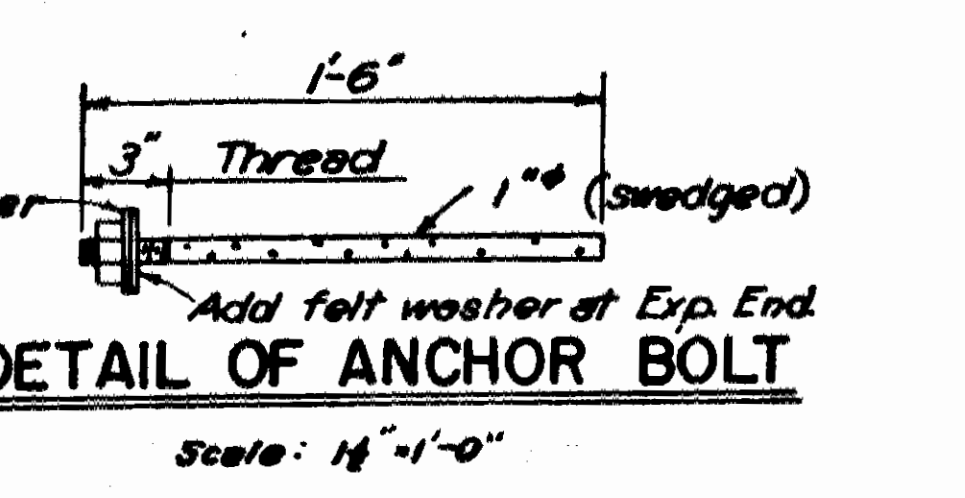
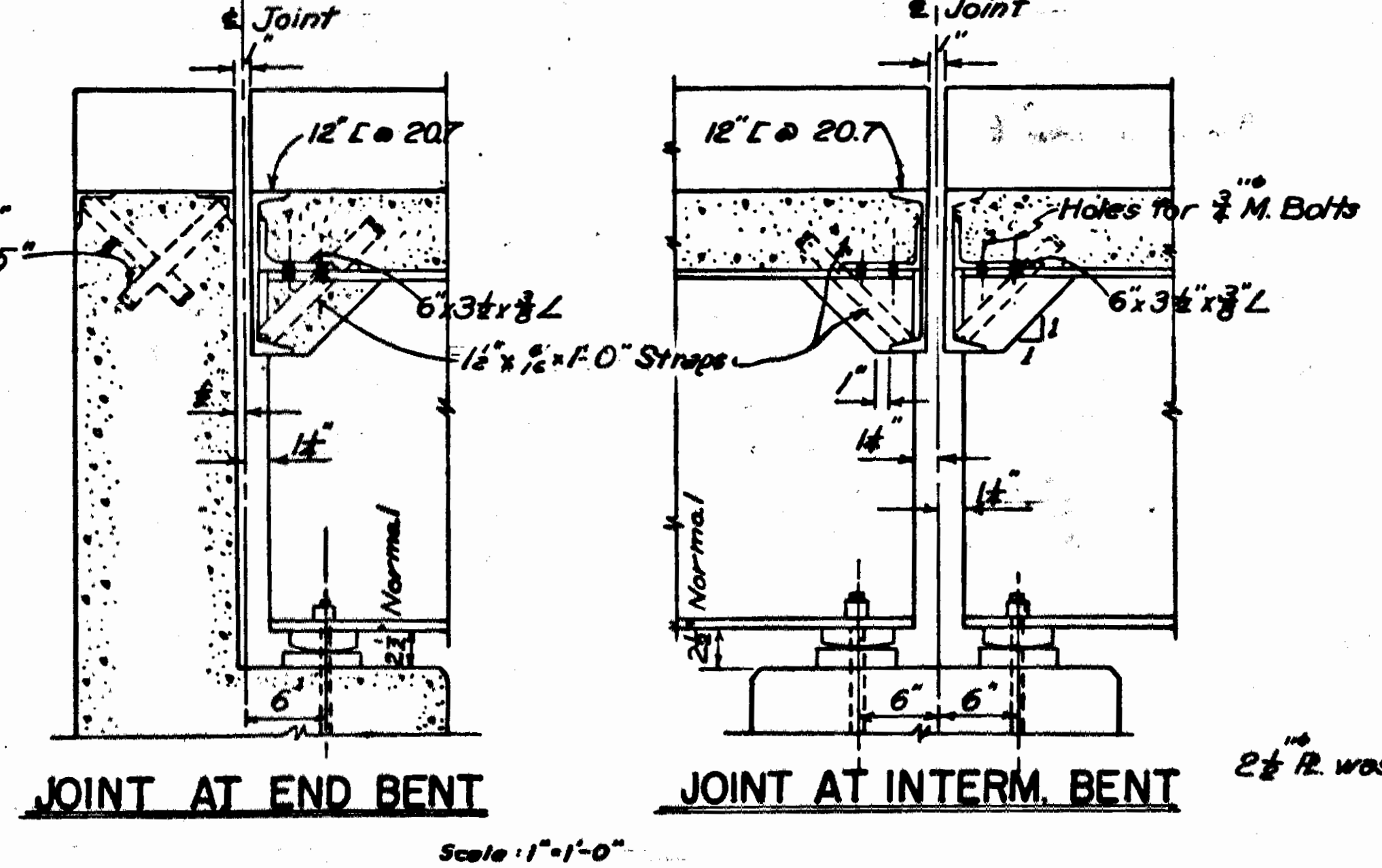
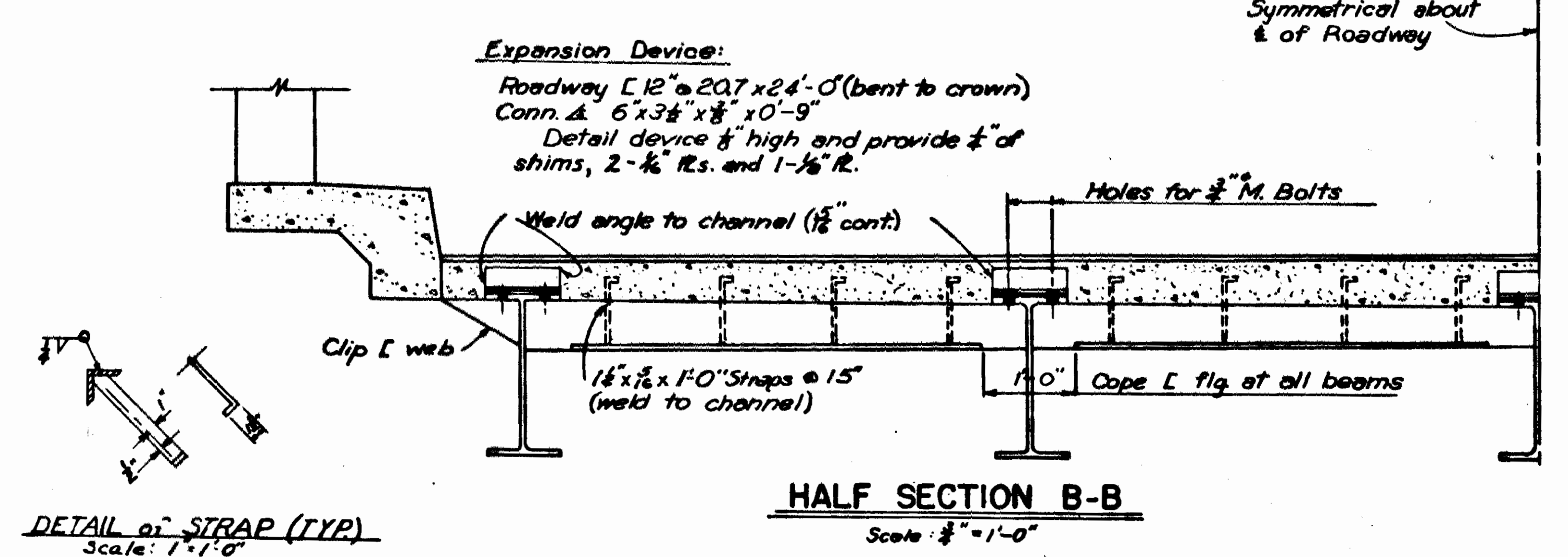
In order to secure a good riding surface it will be required that the floor slab be struck off from curb to curb with a full span length longitudinal strike-off. The strike-off shall be sufficiently stiff so as to have no appreciable vertical deflection.

Reinforcing steel to be deformed bars of intermediate or hard grade, see Special Provisions. Steel to be accurately located in the forms and firmly held in place by means of steel wire supports, sufficient in number and size to prevent displacement during the course of construction and to keep the steel a proper distance from the forms. The wire supports will not be paid for directly but will be considered subsidiary to the item of Reinforcing Steel.

Shop lists and bending diagrams of reinforcing steel, including wire supports, shall be submitted and approved before fabrication is begun.

Handrail to be steel plate guard bridge railing of the type shown or an equivalent rigid type approved by the Engineer. The rail including posts and fastenings shall be paid for at the unit price bid per linear foot for Steel Plate Guard Bridge Railing.

SPECIFICATIONS: Arkansas State Highway Commission Standard Specifications for Road and Bridge Construction, adopted March 1, 1940.



REVISIONS

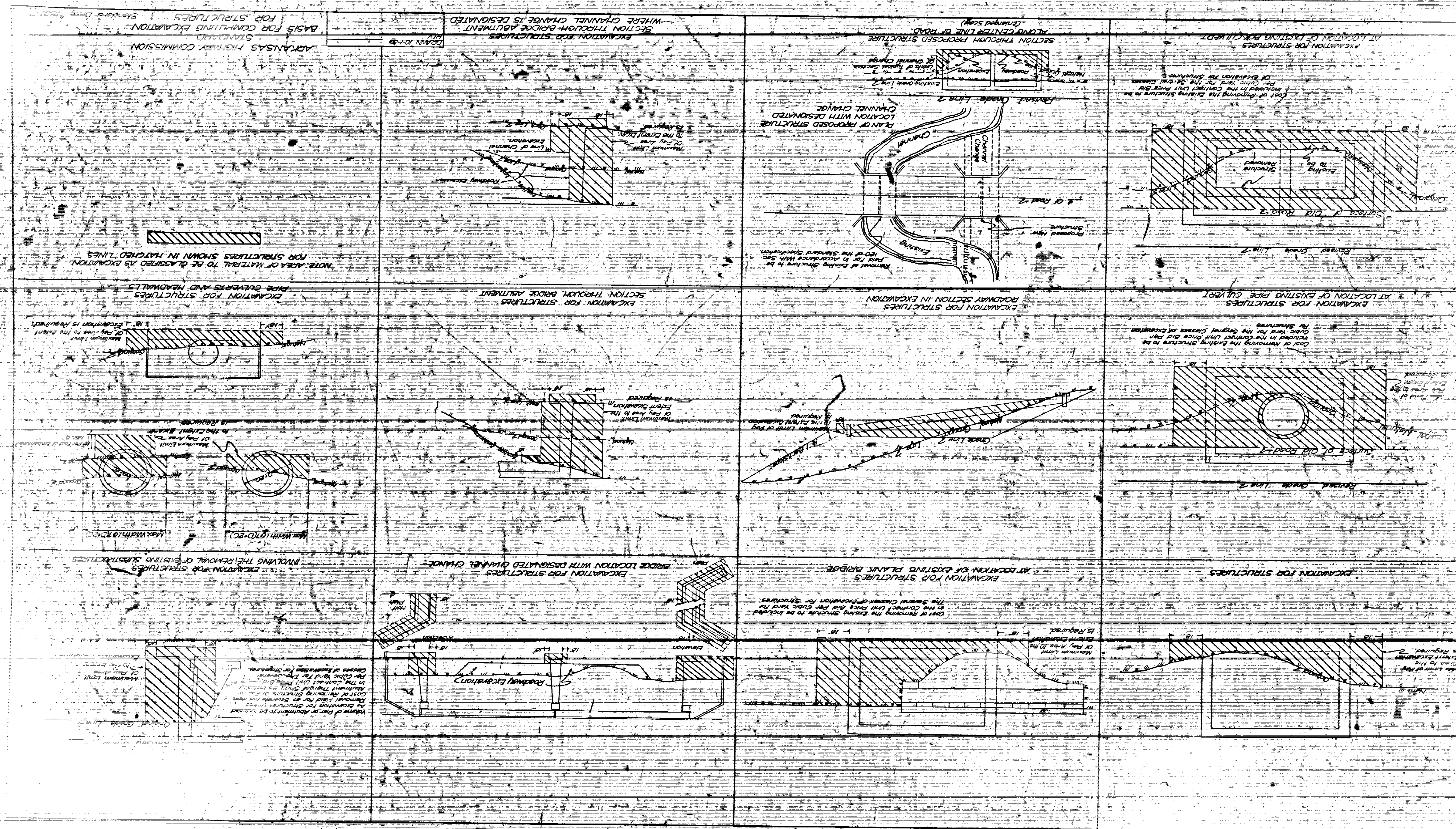
Changed Camber Diagram WWM 6-25-54
Rdwy. Width, Bar Designations & Exp. Device Anchors F.R.B. 3-14-58
General Notes, Anchor Strap Detail, & Rail Dimensions B.U.R. 3-24-59

DETAILS OF STANDARD 30' TO 34' I-BEAM SPANS
24'-0" CLEAR RDWY. 1'-0" CURBS

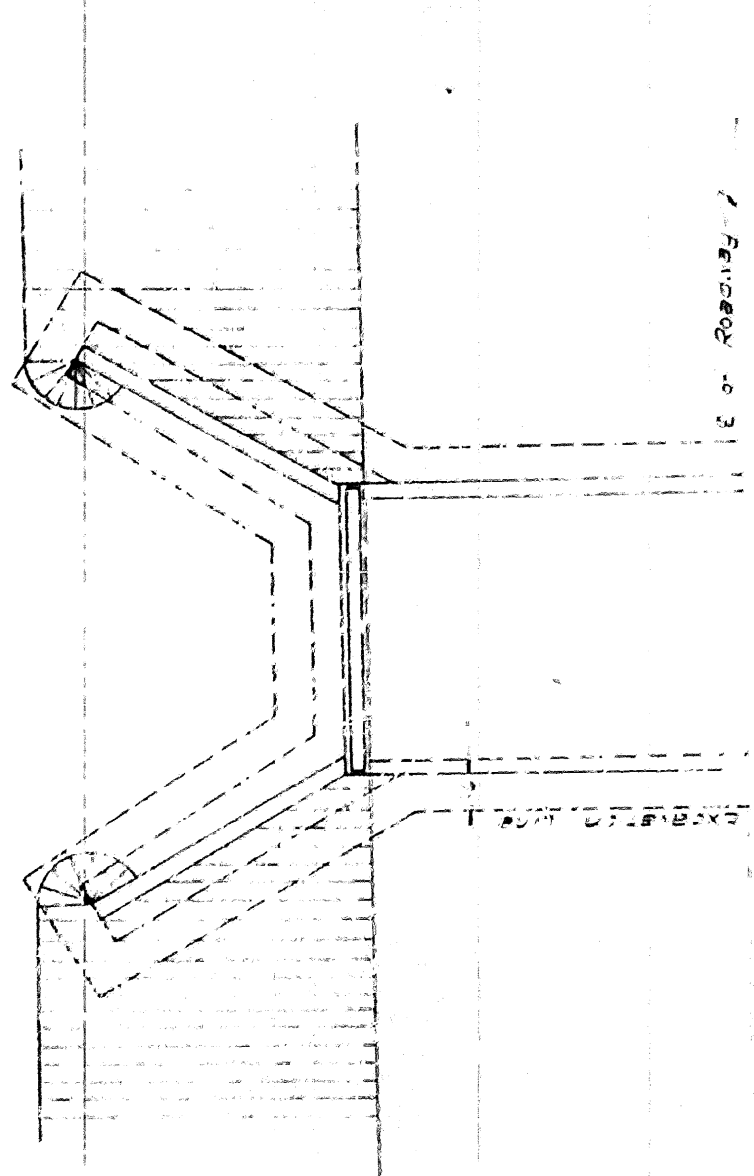
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

Drawn By: WWM Date: 12-1-52
Traced By: LKH Date: 2-21-54
Checked By: JKH Date: 7-22-54

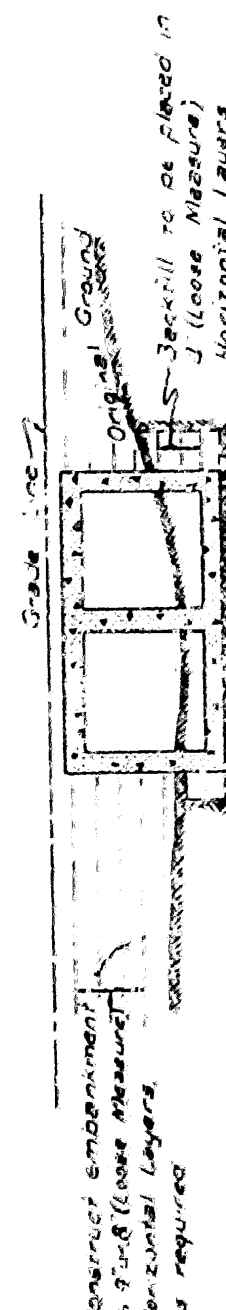
BRIDGE NO. DRAWING NO. 5499



DESIGNED BY	CHECKED BY	DATE	SCALE	NO.	REV.	DATE	BY	NO.
6	ARK							
JOB NO.								

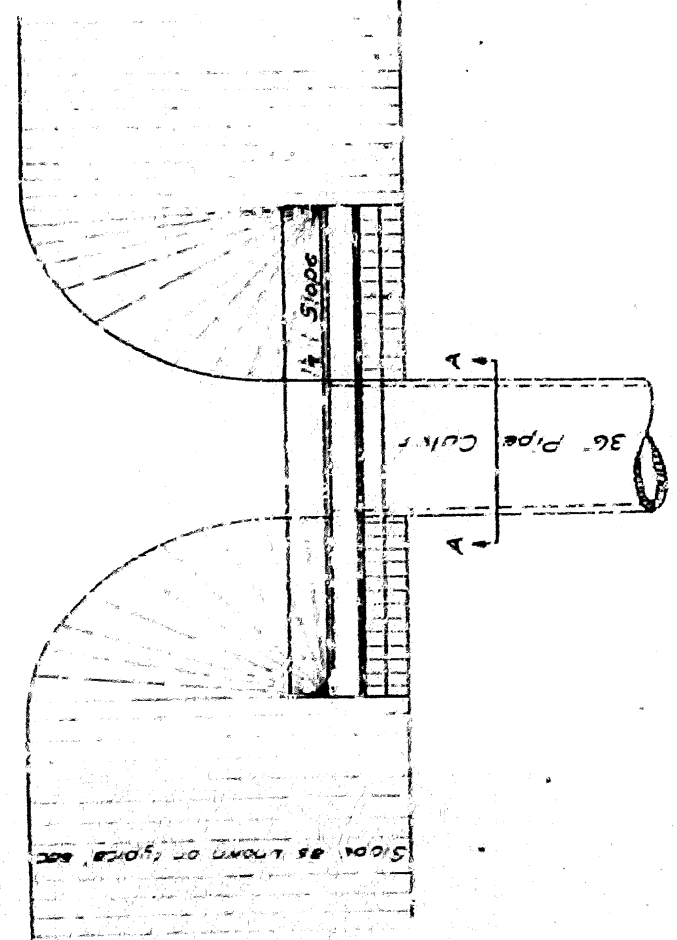


PLAN

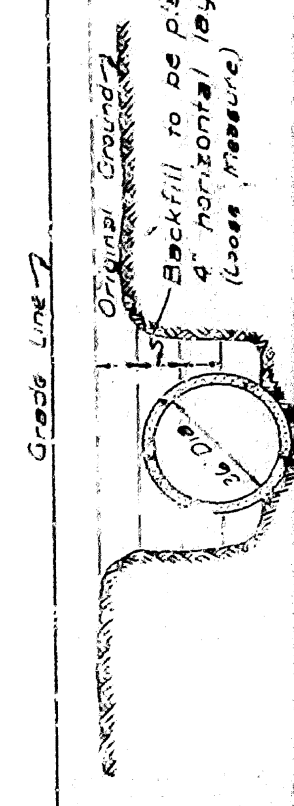


LONGITUDINAL SECTION

BOX CULVERT

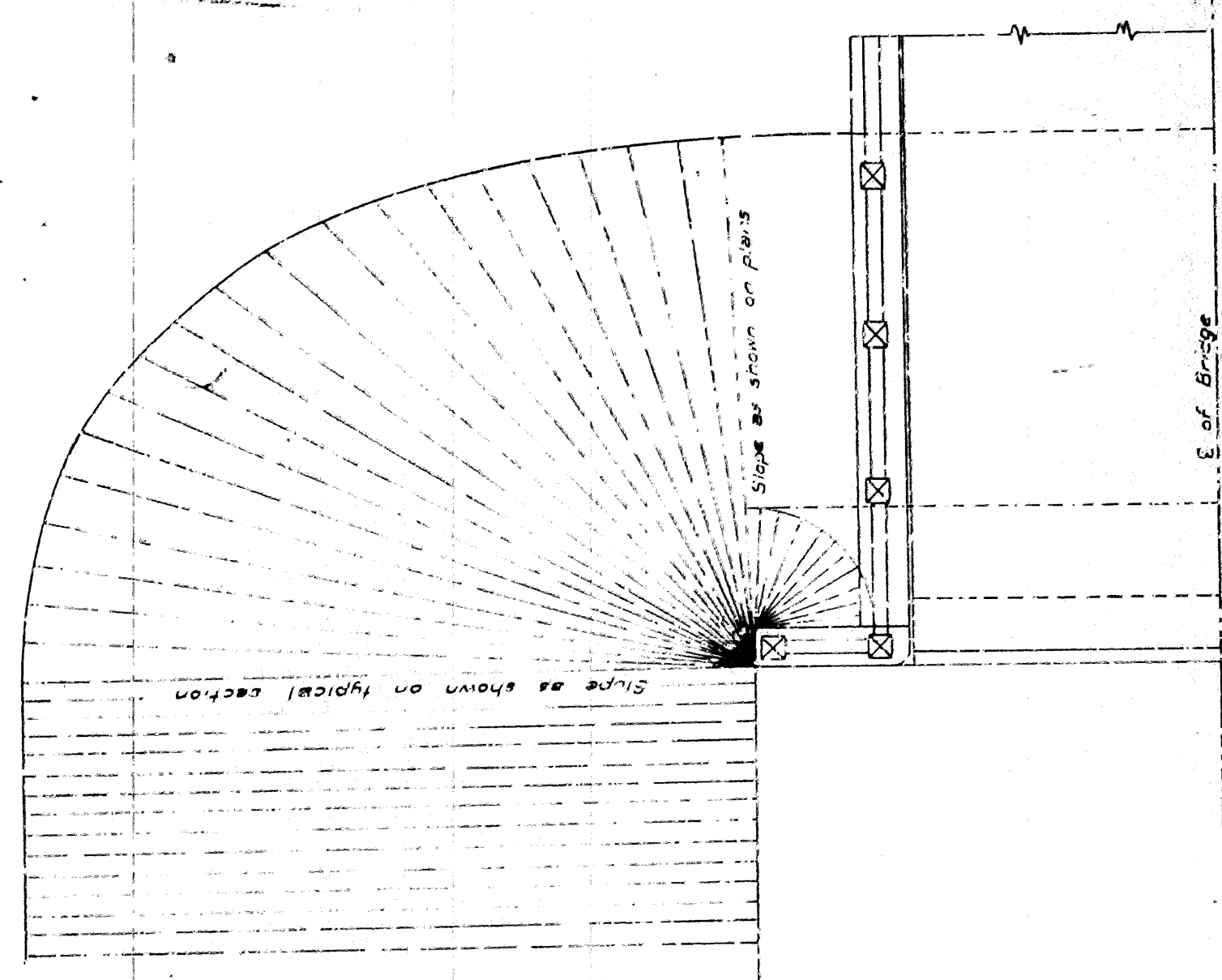


PLAN

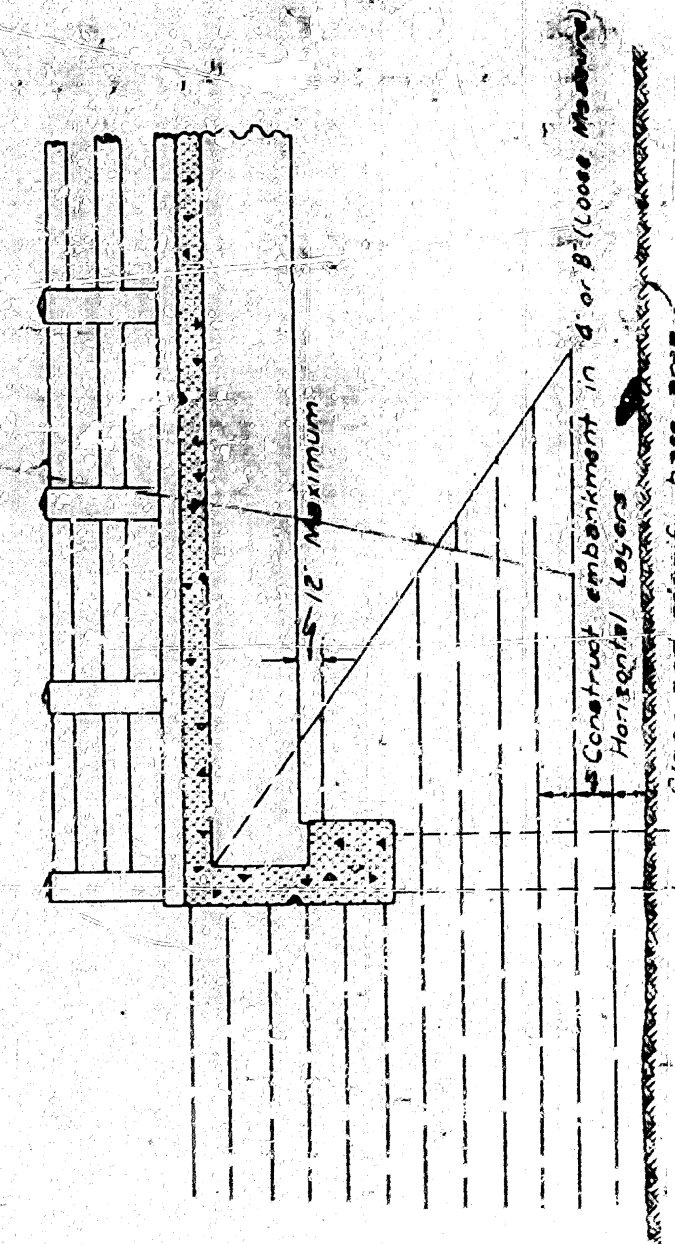


SECTION A-A

PIPE CULVERT



HALF PLAN



LONGITUDINAL SECTION

OPEN END ABUTMENT

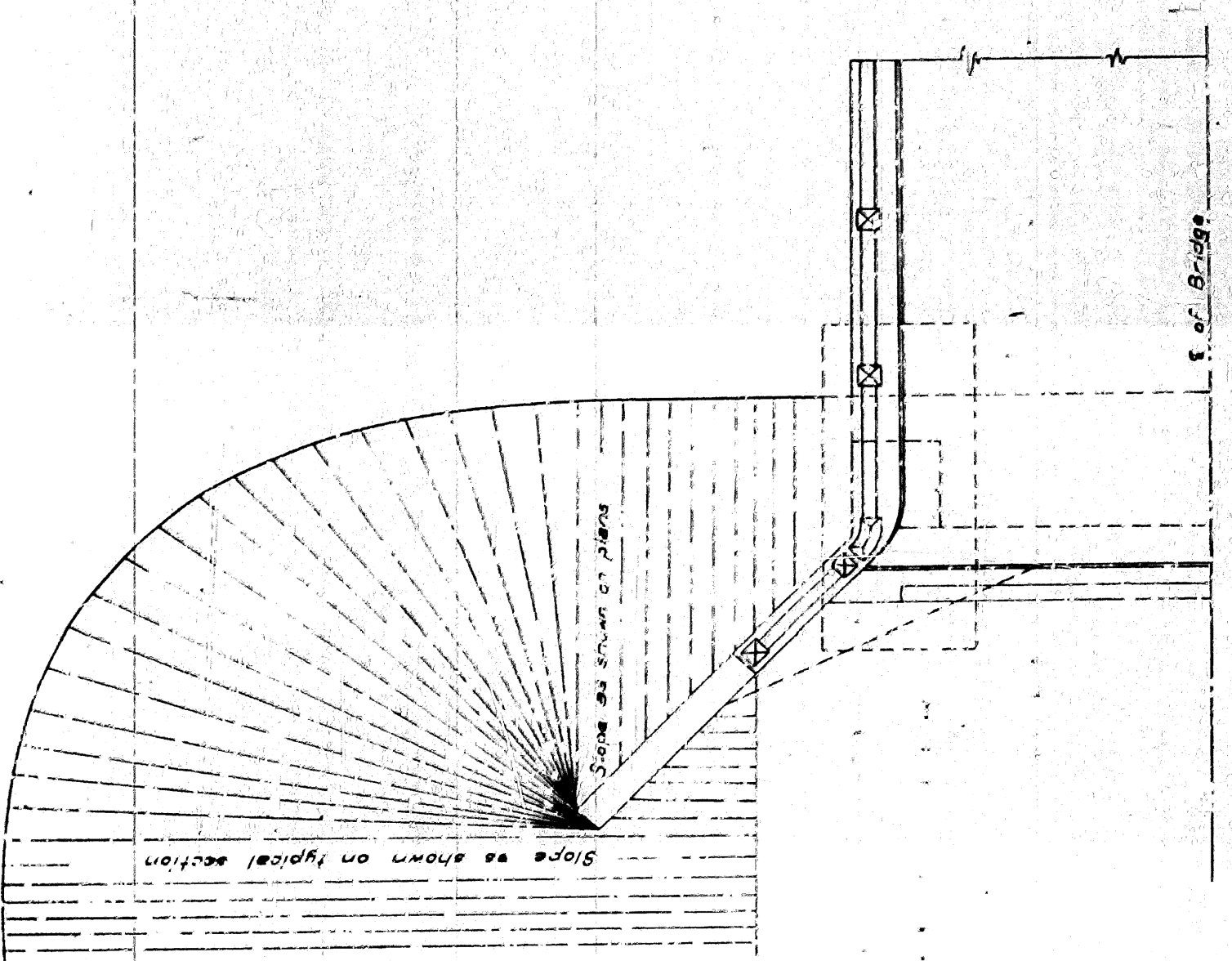
CONSTRUCTION OF THE BRIDGE - END EMBANKMENT

The bridge-end embankment shall be understood to mean not less than 20 feet of embankment adjacent to the end of the bridge roadway with the side slopes and slopes underneath the bridge-end and abutment end of wingwalls.

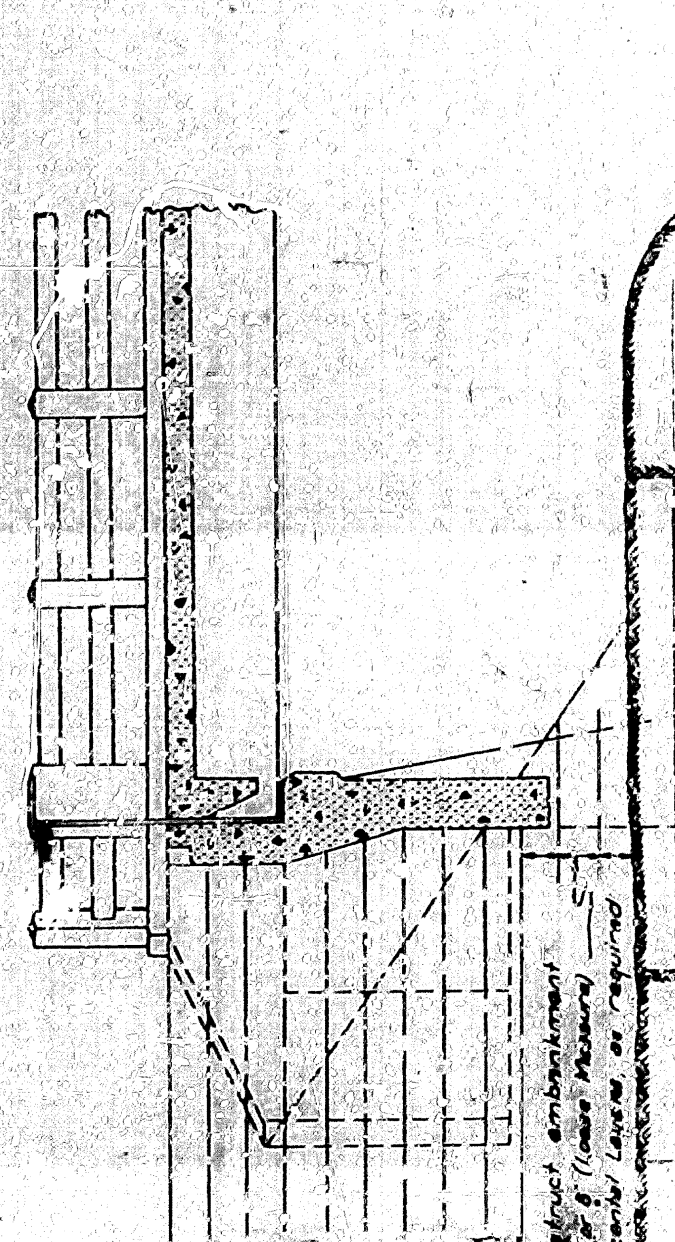
The surface area to be occupied by this embankment shall first be cleared of all debris and suitable material and then scarified so as to completely expose the raw earth. The foregoing shall be done before any of the base surface is covered by material taken from the structure excavations.

Embankment material shall be of approved quality free from light and porous or perishable matter.

The fill shall be constructed in horizontal layers to the thickness required be specified in the specifications for Embankment Material, Section 106 and shall be compacted in accordance with the specifications for Special Compaction of Embankment Section 107.



HALF PLAN



LONGITUDINAL SECTION

SEMI-OPEN ABUTMENT

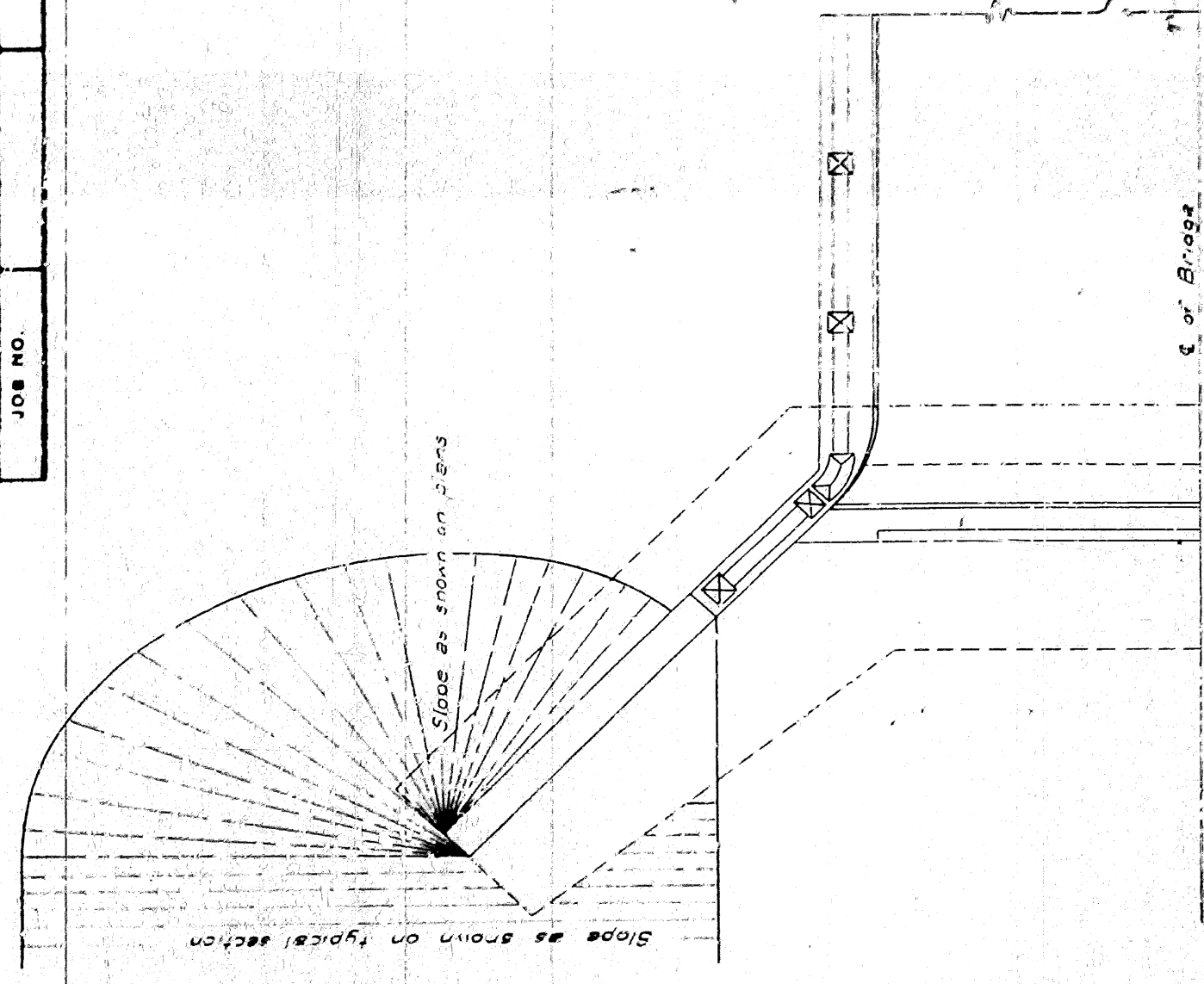
BACKFILLING EXCAVATION

In so far as is practicable, abutment excavations shall be cut to the size shown by the plans with allowance of 18 in. all sides as permitted by the specifications. Gravelly oversize and flared cuts sometimes made to avoid the use of shoring will not be permitted.

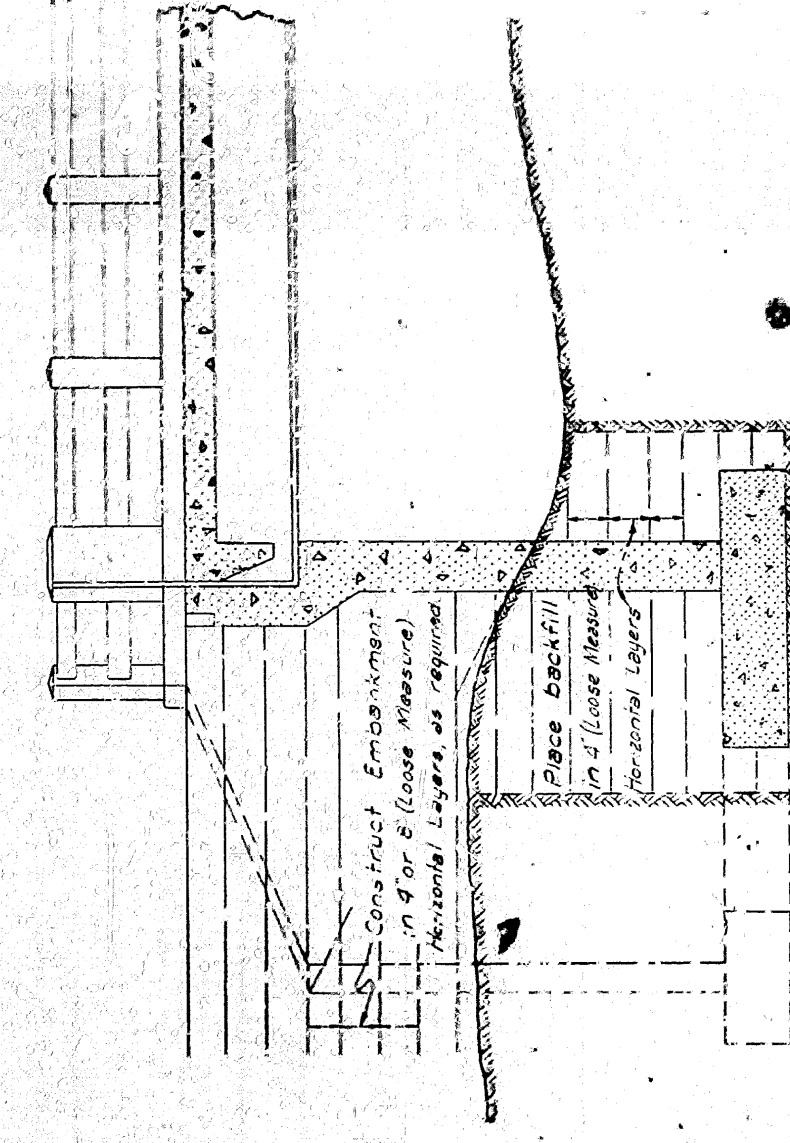
When the abutment excavation is ready for backfill, it shall be cleared of all debris and suitable material and then scarified so as to completely expose the raw earth. The foregoing shall be done before any of the base surface is covered by material taken from the structure excavations.

Embankment material shall be of approved quality free from light and porous or perishable matter.

The fill shall be constructed in horizontal layers to the thickness required be specified in the specifications for Embankment Material, Section 106 and shall be compacted in accordance with the specifications for Special Compaction of Embankment Section 107.



HALF PLAN



LONGITUDINAL SECTION

WINGWALL ABUTMENT

DETAILS OF
EMBANKMENT CONSTRUCTION AT
BRIDGE ENDS AND
BACKFILL FOR STRUCTURES

ARKANSAS STATE HIGHWAY COMMISSION