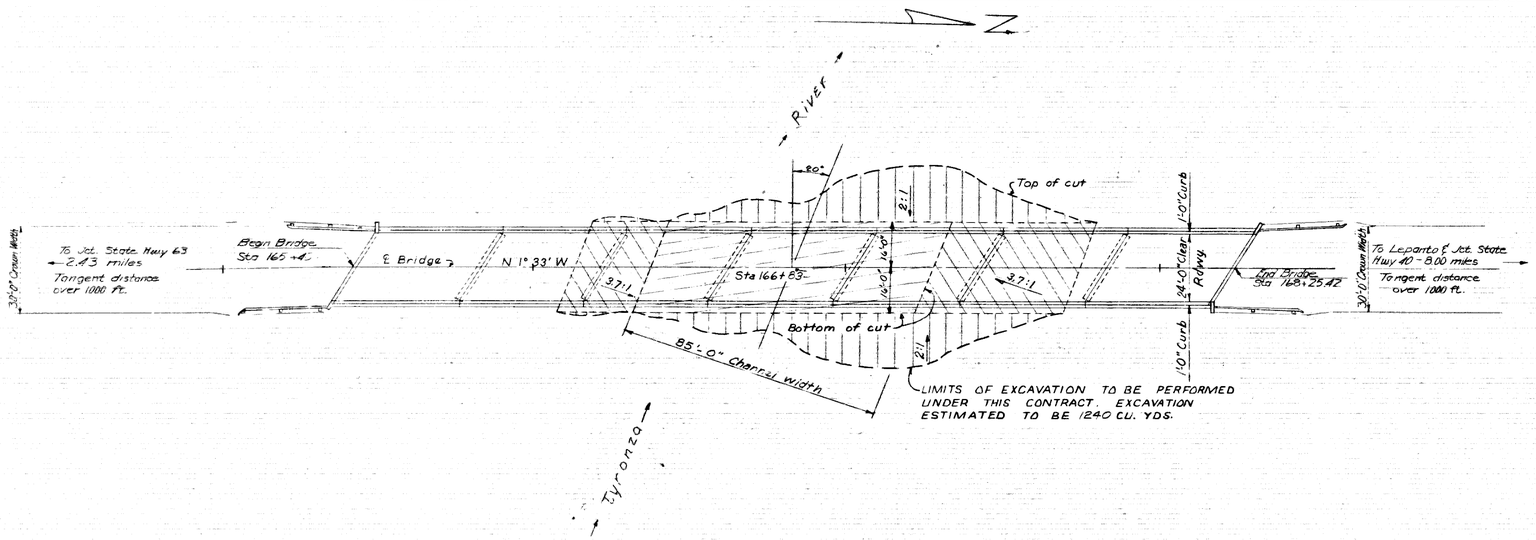
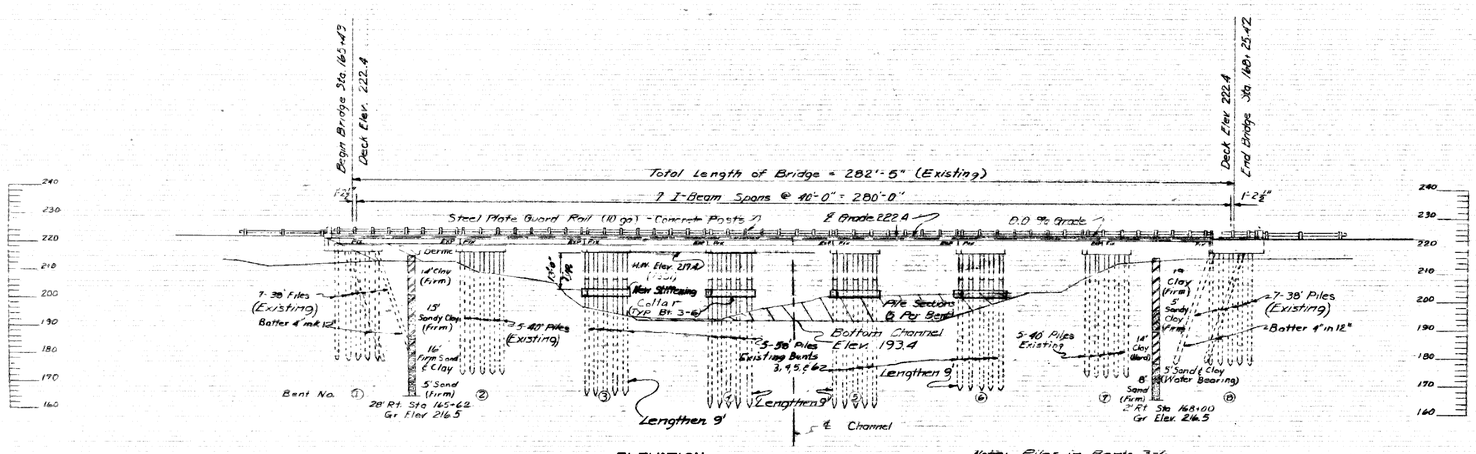
33

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.	BRW 66-74-C-0029		
				JOB NO.		10756	7	30

2885A LAYOUT - 18476



PLAN



ELEVATION

Note: See Special Provision "Remodeling of Existing Bridges"

Note: Piles in Bents 3-6 Shall be Lengthened Amount Show by Jetting and Jacking - Minimum Bearing Capacity Shall be 30 Tons Per Pile

Bench Mark
Elev. 222.40
℄ CONCRETE DECK
at BEGINNING of BRIDGE

GENERAL NOTES

BENCH MARK: CENTERLINE CONCRETE DECK AT BEGINNING OF BRIDGE AT STATION 165+43, ELEV. 222.40.

ALL CONCRETE TO BE CLASS 'S' AND TO BE POURED IN THE DRY. ALL EXPOSED CORNERS TO BE CHAMFERED 3/4" UNLESS OTHERWISE NOTED.

FOR DETAILS OF REMODELING BENTS, SEE DWG. NO. 18483
FOR DETAILS OF EXISTING PILE BENTS, SEE DWG. NO. 5497A
FOR DETAILS OF EXISTING 40' I-BEAM SPANS, SEE DWG. NOS. 5495 AND 5497

HALF SIZE DETAILS OF EXISTING BRIDGE MAY BE HAD ON REQUEST.

ALL PILING TO BE 16" OCTAGONAL PRECAST CONCRETE AND SHALL BE DRIVEN TO A MINIMUM CAPACITY OF 32 TONS PER PILE.

SPECIFICATIONS; ARKANSAS STATE HIGHWAY COMMISSION STANDARD SPECIFICATIONS FOR CONSTRUCTION, EDITION OF 1972 AND APPLICABLE SPECIAL PROVISIONS.

DESIGN SPECIFICATIONS: AASHO 1973

LIVE LOADING: H15

UNIT STRESSES:

EXISTING STRUCTURE;	
CLASS "S" CONCRETE (N=10)	1,200 PSI
REINFORCING STEEL	20,000 PSI
STRUCTURAL STEEL	18,000 PSI
NEW CONSTRUCTION	
CLASS "S" CONCRETE (N=10)	1,200 PSI
REINFORCING STEEL	20,000 PSI

LAYOUT OF BRIDGE
OVER TYRONZA RIVER
POINSETT COUNTY
ROUTE 135 SEC. 1

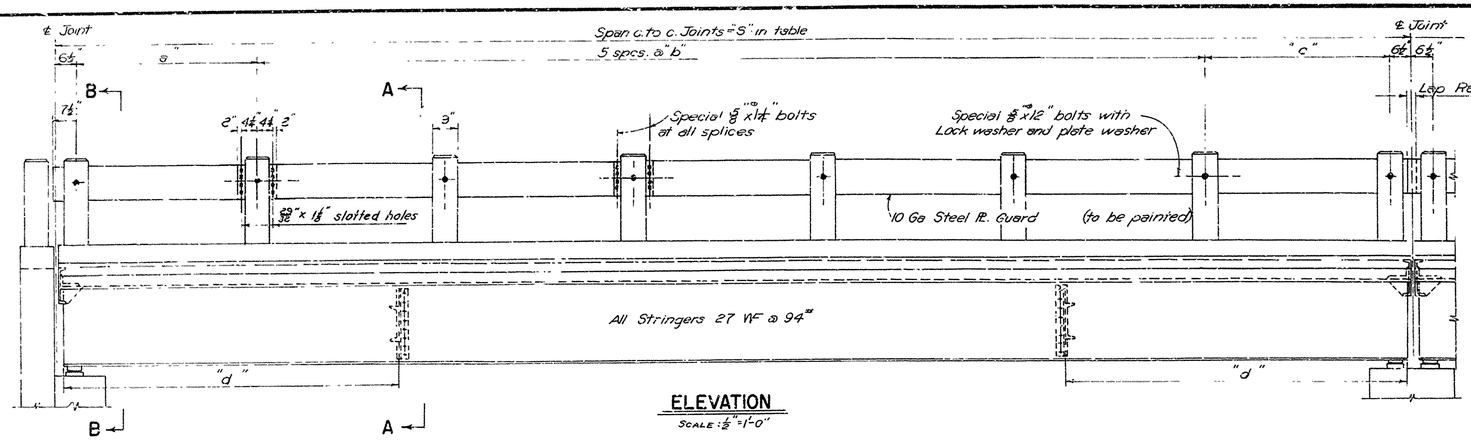
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: TEB DATE: 12-20-73
CHECKED BY: JED DATE: 1-7-74
DESIGNED BY: JED DATE: Dec 73
SCALE: 1" = 20'

BRIDGE ENGINEER

BRIDGE NO. 2885A DRAWING NO. 18476

FED. ROAD DIST. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
8	ARK.				
STATE JOB NO.					



ELEVATION

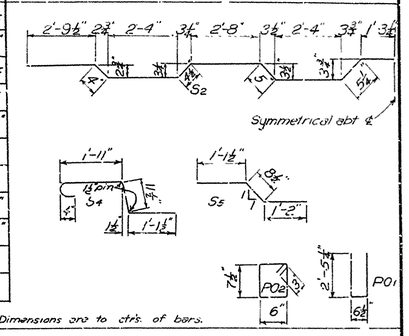
SCALE: 1/8" = 1'-0"

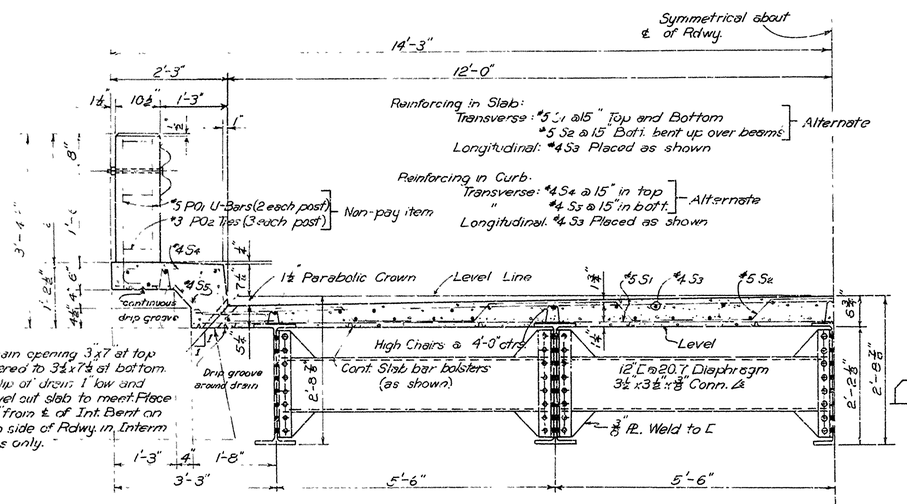
LIST OF REINFORCING STEEL

MARK	SIZE	NO. IN EACH SPAN 40'	41'	42'	43'	44'	45'	LENGTH	PIN DIA.
S1	#5	54	66	68	70	72	72	25'-0"	Str.
S2	"	31	32	33	34	35	35	25'-9"	1 1/2"
S3	#4	47						"S"-5"	Str.
S4	"	64	66	68	70	72	72	4'-5"	3"
S5	"	62	64	66	68	70	70	3'-0"	1 1/2"
*P01	#5	32						5'-4"	1 1/2"
*P02	#3	48						2'-8"	1 1/4"

*Non-pay Item

BENDING DIAGRAM



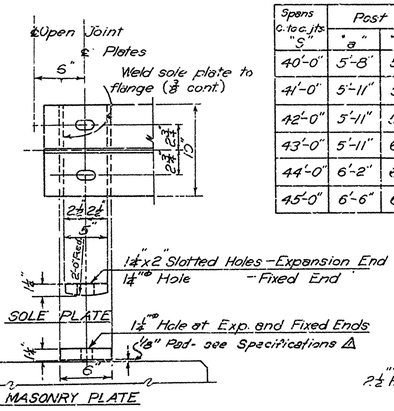


HALF SECTION A-A

SCALE: 3/8" = 1'-0"

LIST OF VARIABLES

Spans c. to c. jts. "S"	Post Spacing "a"	"b"	"c"	Strut Spacing "d"	D.L. Defl.
40'-0"	5'-8"	5'-6 1/2"	5'-6 1/2"	10'-0"	7/16"
41'-0"	5'-11"	5'-8"	5'-8"	10'-3"	1/2"
42'-0"	5'-11"	5'-10"	5'-10"	10'-6"	9/16"
43'-0"	5'-11"	6'-0"	6'-0	10'-9"	5/8"
44'-0"	6'-2"	6'-1 1/2"	6'-1 1/2"	11'-0"	11/16"
45'-0"	6'-6"	6'-3"	6'-2"	11'-3"	3/4"



DETAILS OF BEARINGS

SCALE: 1 1/2" = 1'-0"

DETAIL OF ANCHOR BOLT

SCALE: 1 1/2" = 1'-0"

GENERAL NOTES

All concrete to be Class S. All exposed corners to have 3/4" chamfer unless otherwise noted.

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

Rivets: - 3/4". Open holes 13/16" ø 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 Ed 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
2nd 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 the manner set forth in 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 at least a half 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 approval secured before fabrication is begun.

Handrail to be steel plate guard rail of the type shown or an equivalent rigid type as 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".

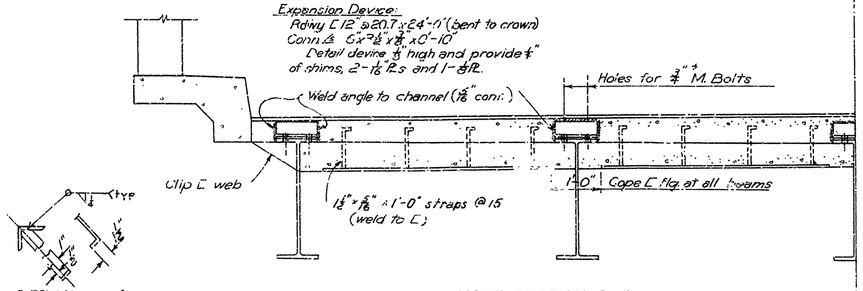
SPECIFICATIONS: Arkansas State Highway Commission Standard Specifications for Road and Bridge Construction, adopted March 1, 1940.

Unit Stresses:

Structural Steel	18,000 #/□"
Reinforcing Steel	20,000 #/□"
Class S Concrete (n=10)	1,200 #/□"

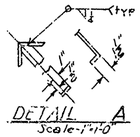
Loading H15 (AASHO 1957)

Dead Load	850 #/'	Outside Stringers
Truck L.L.	0.80 wheels	
Dead Load	640 #/'	Inside Stringers
Truck L.L.	1.1 wheels	



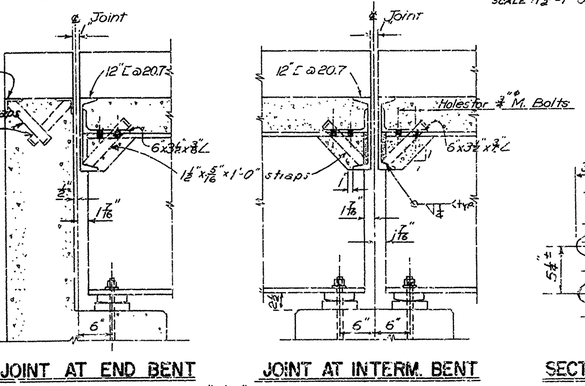
HALF SECTION B-B

SCALE: 3/8" = 1'-0"



DETAIL A

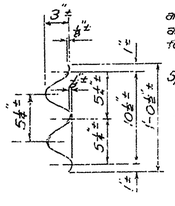
Scale - 1" = 1'-0"



JOINT AT END BENT

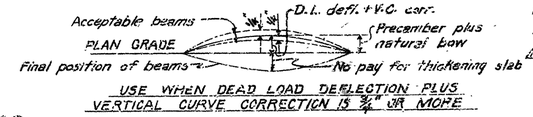
JOINT AT INTERM. BENT

SCALE: 1" = 1'-0"

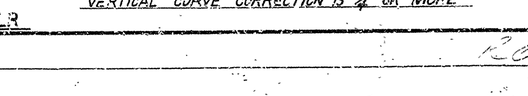


SECTION OF RAIL

SCALE: 1 1/2" = 1'-0"



USE WHEN DEAD LOAD DEFLECTION PLUS VERTICAL CURVE CORRECTION IS LESS THAN 3/4"



USE WHEN DEAD LOAD DEFLECTION PLUS VERTICAL CURVE CORRECTION IS 3/4" OR MORE

CAMBER

REVISIONS

Changed Camber Diagram. WWH 9-29-54
Bar nos., Rdwy Width, Straps, and Steel Plate Guard. FDN 7-24-58
Notes on Field Joint, Bearings and Bridge Railing. FDN 1-27-59
△ Added bearing pad. RLC 5-4-59

DETAILS OF
STANDARD 40'-45' I-BEAM SPANS
24'-0" CLEAR RDWY. 1'-0" CURBS

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

Drawn By: W.W.H. Date: 9-16-52
Traced By: L.W.L. Date: 7-29-54
Checked By: R.H. Date: 7-28-54
Scale: as noted

BRIDGE ENGINEER

DRAWING NO. 5495

Revise before using