

INDEX OF SHEETS  
NOTE: REFER TO SHEET NO. 2  
FOR INDEX OF SHEETS  
& SPECIAL PROVISIONS

DESIGN DATA

DESIGN YEAR 1992  
1972 ADT = 1 to 2 = 24,580  
2 to 3 = 15,060  
3 to 4 = 10,220  
1992 ADT = 1 to 2 = 53,300  
2 to 3 = 40,840  
3 to 4 = 31,140  
1992 DHV = 1 to 2 = 5.663  
2 to 3 = 4.492  
3 to 4 = 3.425  
D = 60%  
T = 73%  
V = 70 MPH.

1 to 2 = I-630 TO COLONEL GLENN RD.  
2 to 3 = COLONEL GLENN RD. TO ST. HWY. 5  
3 to 4 = ST. HWY. 5 TO INTERSTATE 30

"A FULLY CONTROLLED ACCESS FACILITY"

STATE OF ARKANSAS  
STATE HIGHWAY COMMISSION

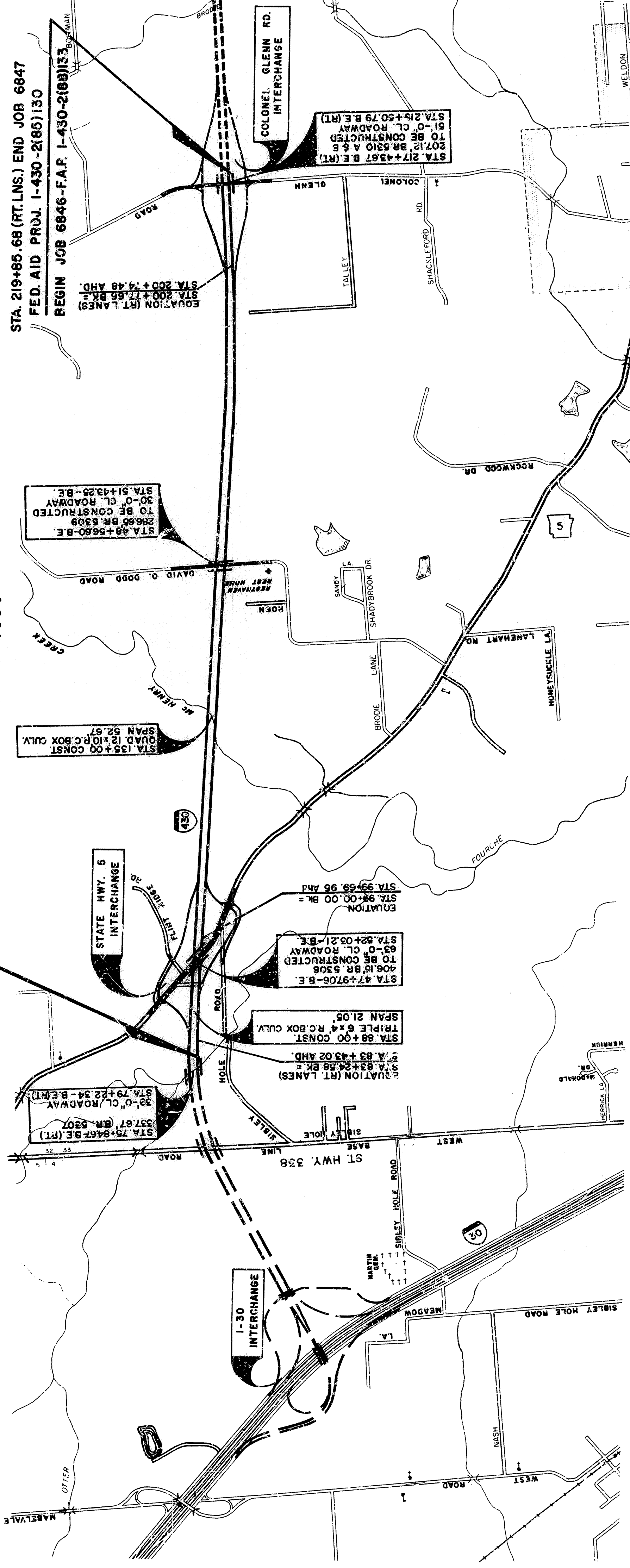
PLAN AND PROFILE OF PROPOSED  
STATE HIGHWAY  
FOURCHE CR. - COL. GLENN RD.  
GRADING & STRUCTURES  
PULASKI  
COUNTY

ROUTE 430 SECTION 4  
F.A.P. I-430-2(85)130

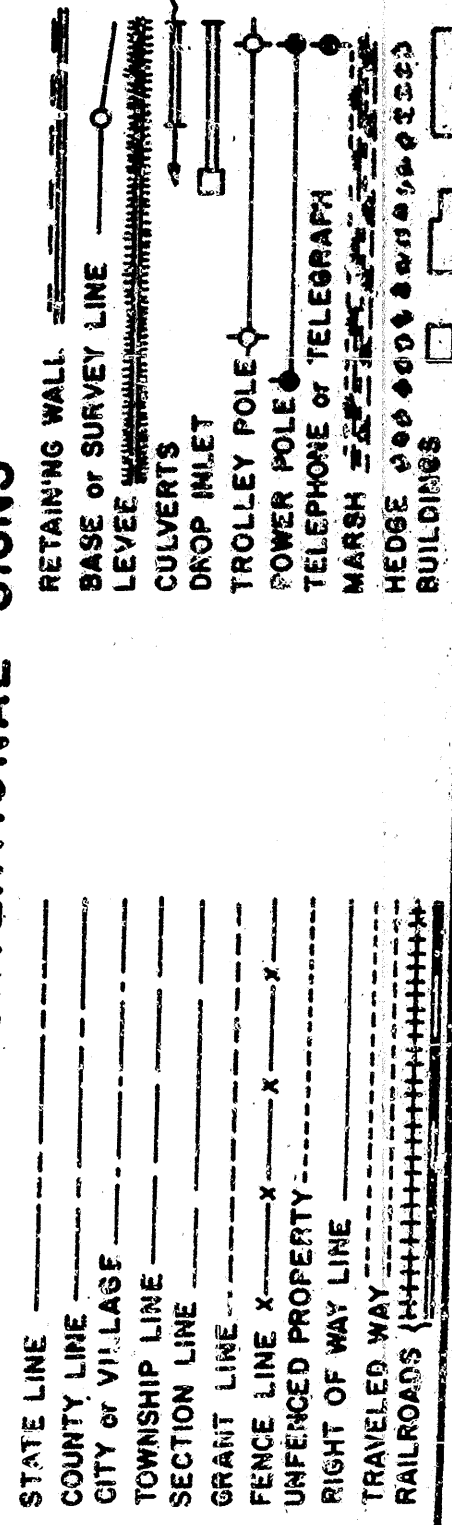
JOB 6847

LAYOUT SCALE 1"=1000'

STA. 79+20.51 (RT. LNS.) BEGIN JOB 6847  
FED. AID PROJ. I-430-2(85)130  
END JOB 6848- F.A.P. I-430-2(105)130



CONVENTIONAL SIGNS

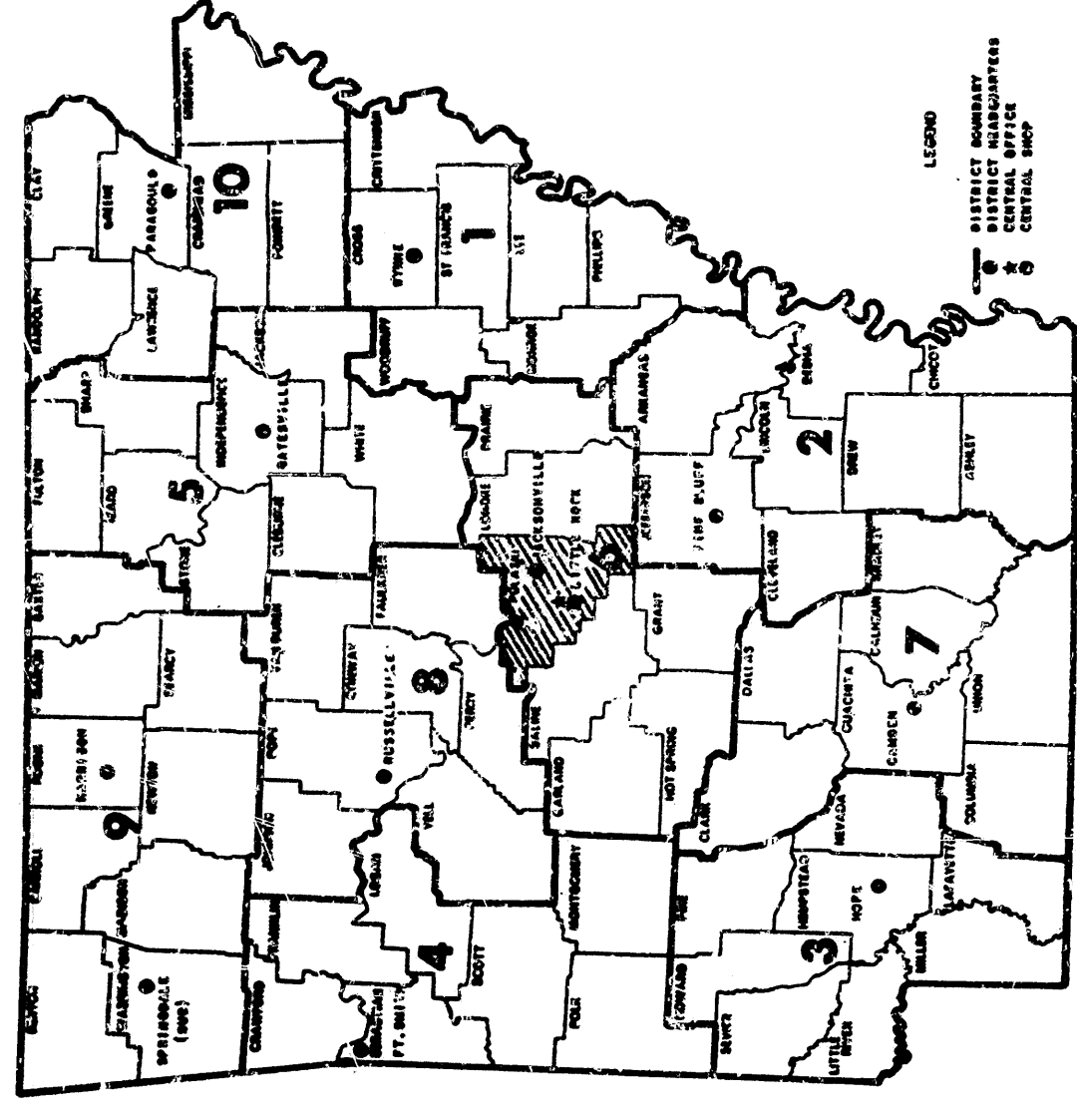


NOTE: LENGTH COMPUTED ALONG 1/2 RIGHT LANES  
GROSS LENGTH OF PROJECT 13,979.96 FEET OR 2.648 MILES  
NET " " ROADWAY 13,699.12 " " 2.565 " "  
NET " " BRIDGES 280.84 " " 0.053 " "  
NET " " PROJECTS 13,979.96 " " 2.648 " "

PLAN 1"=100'  
SCALES (PROFILE HORIZ. 1"=100' VERTICAL 1"=10')

P&S JOB 1365  
FAP I-430-2(50)130

DATE	REVISED	DATE	FILED	DATE	FILED	DATE	FILED	DATE	FILED
10-2-72		10-2-72		10-2-72		10-2-72		10-2-72	
10-2-72		10-2-72		10-2-72		10-2-72		10-2-72	
10-2-72		10-2-72		10-2-72		10-2-72		10-2-72	
10-2-72		10-2-72		10-2-72		10-2-72		10-2-72	
10-2-72		10-2-72		10-2-72		10-2-72		10-2-72	
10-2-72		10-2-72		10-2-72		10-2-72		10-2-72	
10-2-72		10-2-72		10-2-72		10-2-72		10-2-72	
10-2-72		10-2-72		10-2-72		10-2-72		10-2-72	
10-2-72		10-2-72		10-2-72		10-2-72		10-2-72	



PULASKI COUNTY

RECOMMENDED FOR APPROVAL	BRIDGE DESIGN ENGINEER
RECOMMENDED FOR APPROVAL	ROADWAY DESIGN ENGINEER
RECOMMENDED FOR APPROVAL	TRACT ENGINEER
APPROVED	CHIEF ENGINEER
U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION	
RECOMMENDED FOR APPROVAL	
APPROVED	
DIVISION ENGINEER	

JOB 6847







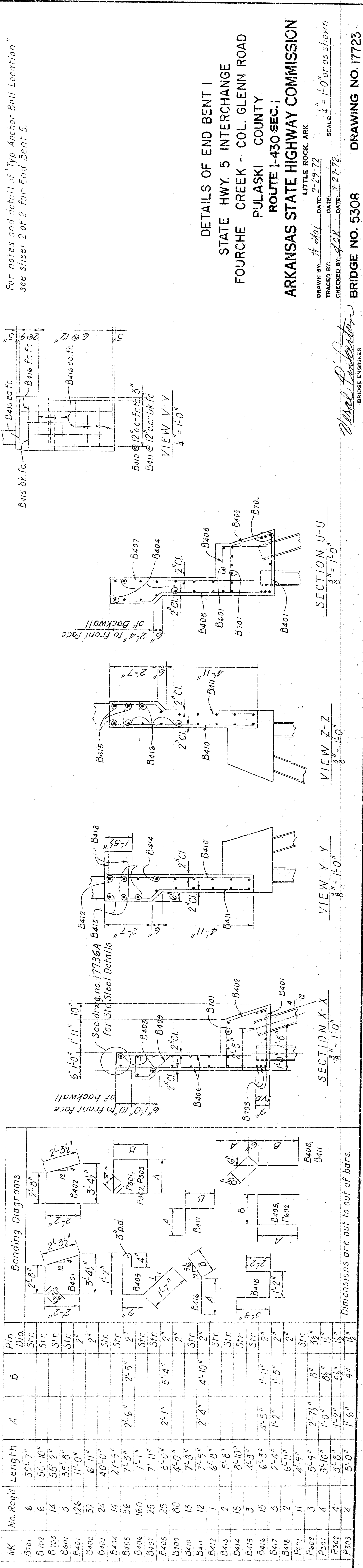
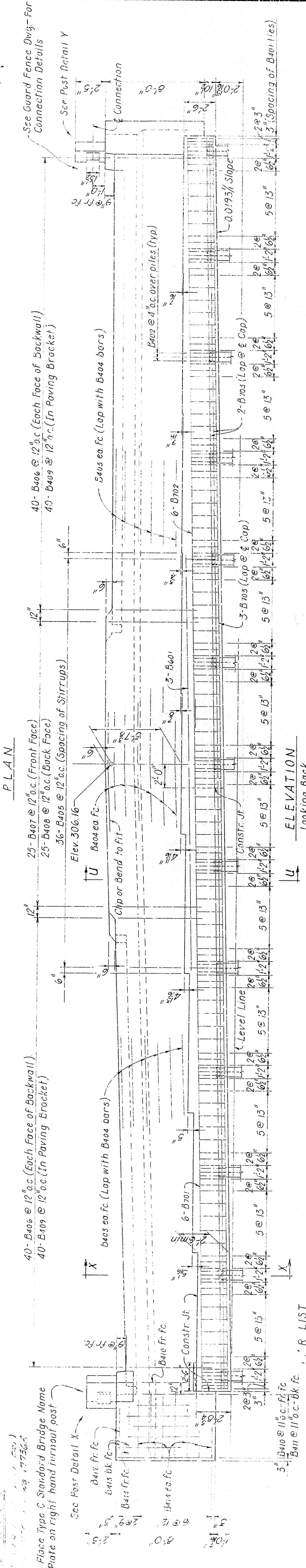
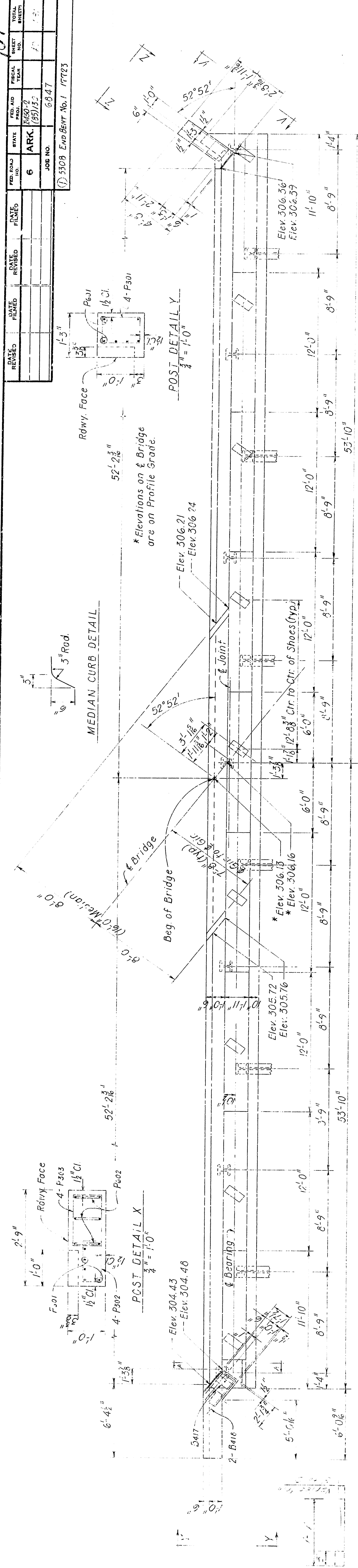




197

REVISED	DATE	REVISION	FILED	PROJ. NO.	STATE	PROJ. YEAR	TOTAL SHEETS
				6	ARK.	1950-2	12
						6847	

JOB NO. 5308  
 END BENT NO. 1 17723



AK	No. Reqd.	Length	A	B	Pin Dia.	Reinforcement
B701	6	55'-7"			2"	Sir.
B702	6	50'-10"			2"	Sir.
B703	14	55'-2"			2"	Sir.
B401	3	35'-6"			2"	Sir.
B402	126	11'-0"			2"	Sir.
B403	39	6'-11"			2"	Sir.
B404	24	40'-0"			2"	Sir.
B405	14	27'-9"			2"	Sir.
B406	36	7'-5"			2"	Sir.
B407	160	7'-11"			2"	Sir.
B408	25	8'-0"			2"	Sir.
B409	80	4'-0"			2"	Sir.
B410	13	7'-8"			2"	Sir.
B411	12	6'-8"			2"	Sir.
B412	2	5'-6"			2"	Sir.
B413	15	8'-10"			2"	Sir.
B414	3	4'-3"			2"	Sir.
B415	15	6'-3"			2"	Sir.
B416	3	2'-4"			2"	Sir.
B417	11	4'-9"			2"	Sir.
B418	3	5'-9"			2"	Sir.
P301	4	3'-10"			1 1/2"	Sir.
P302	4	3'-8"			1 1/2"	Sir.
P303	4	5'-0"			1 1/2"	Sir.

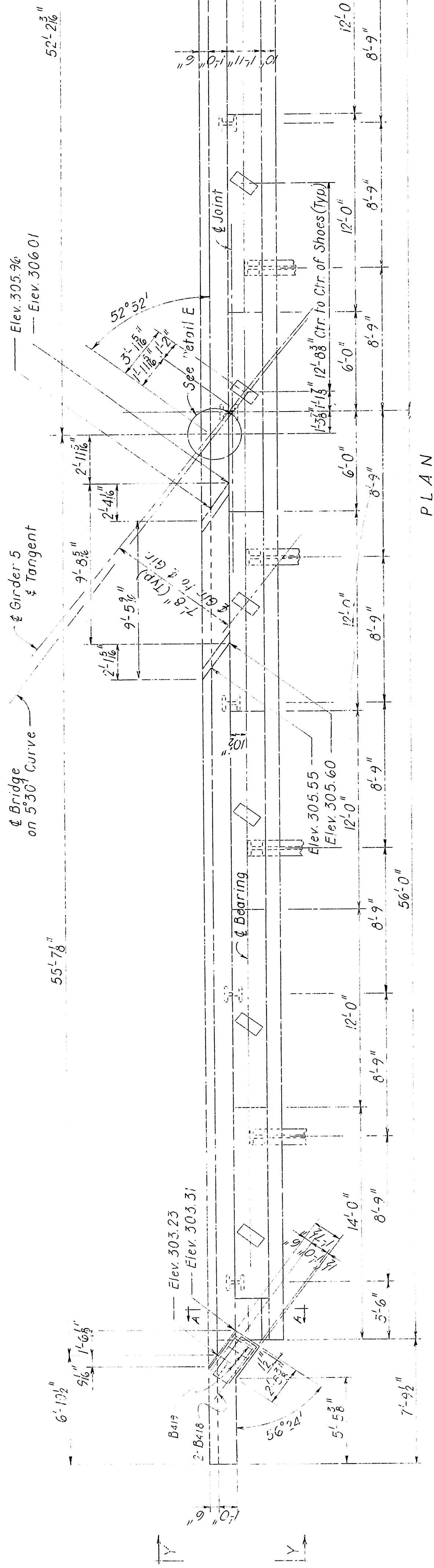
Dimensions are out to out of bars

DETAILS OF END BENT I  
 STATE HWY 5 INTERCHANGE  
 FOURCHE CREEK - COL. GLENN ROAD  
 PULASKI COUNTY  
 ROUTE 1-430 SEC. 1  
 ARKANSAS STATE HIGHWAY COMMISSION

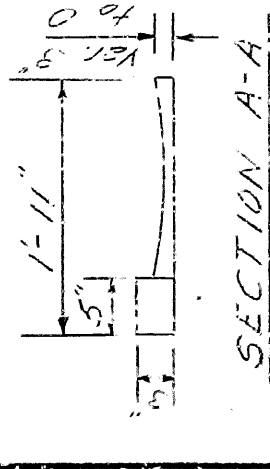
LITTLE ROCK, ARK.  
 DRAWN BY: A. J. J. DATE: 2-29-72  
 CHECKED BY: J. E. K. DATE: 3-27-72  
 SCALE: 1" = 1'-0" or as shown

BRIDGE NO. 5308  
 DRAWING NO. 17723





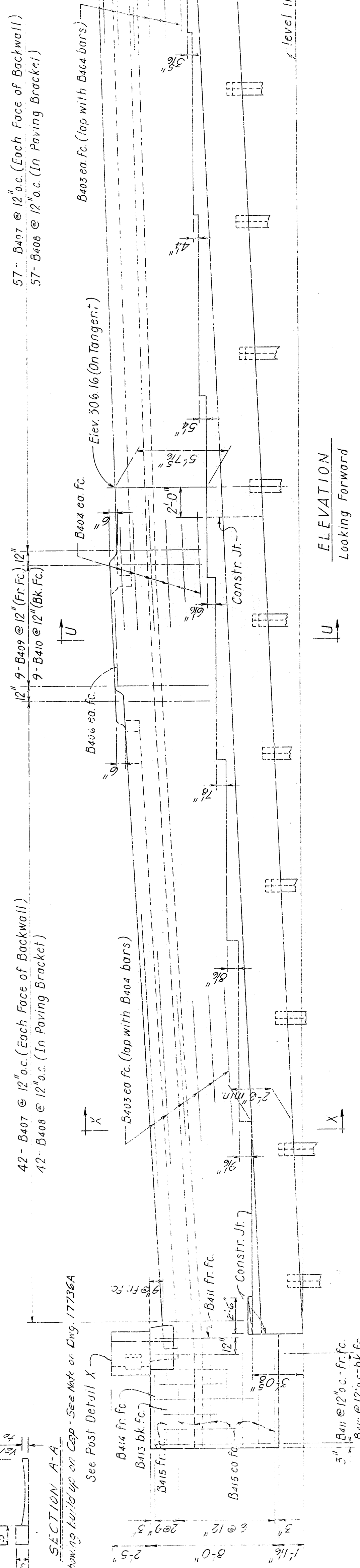
# PLAN



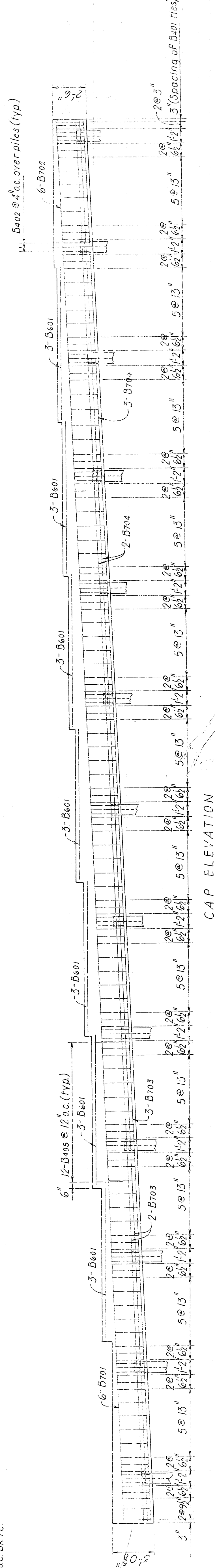
SECTION A-A

Finishing build up on Cap - See Note or Eng. 177368.

See Post Detail X

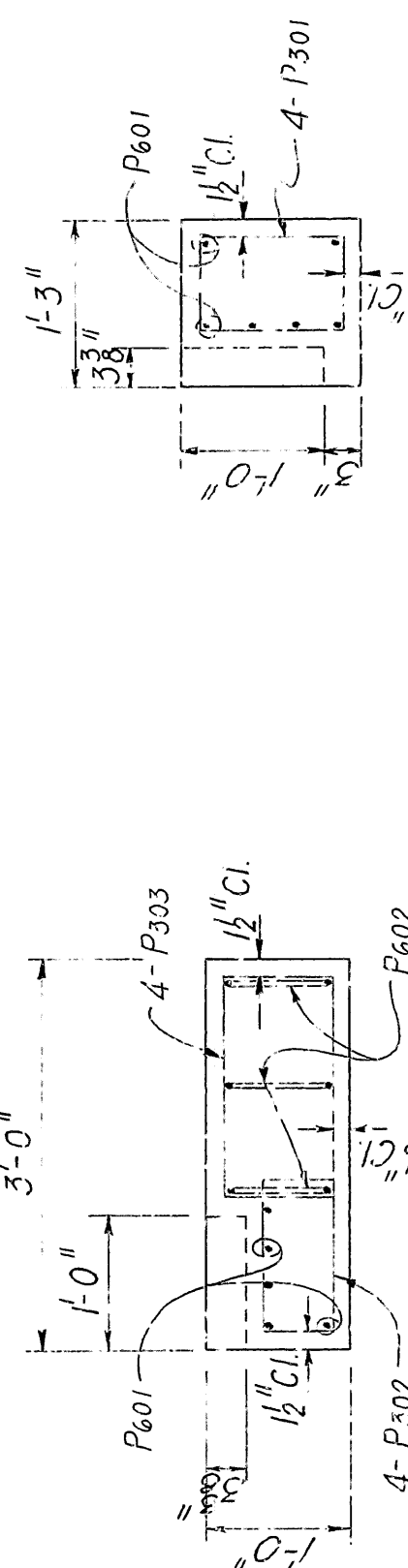


## ELEVATION

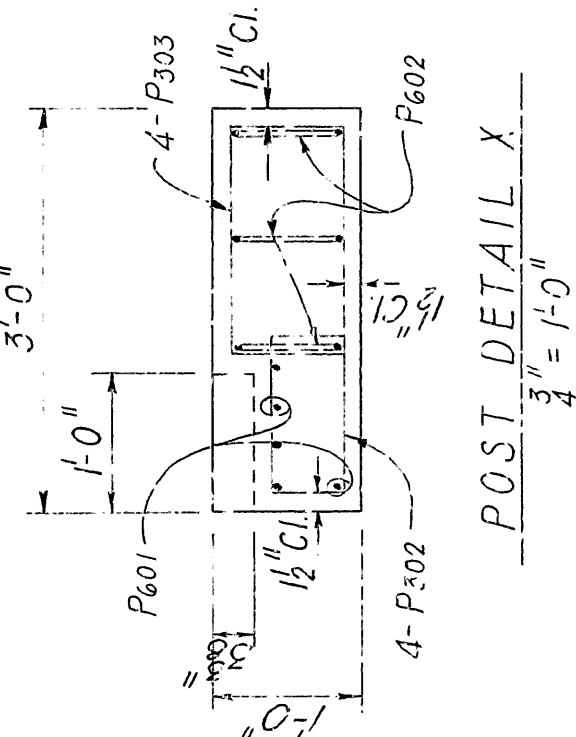


CAP ELEVATION

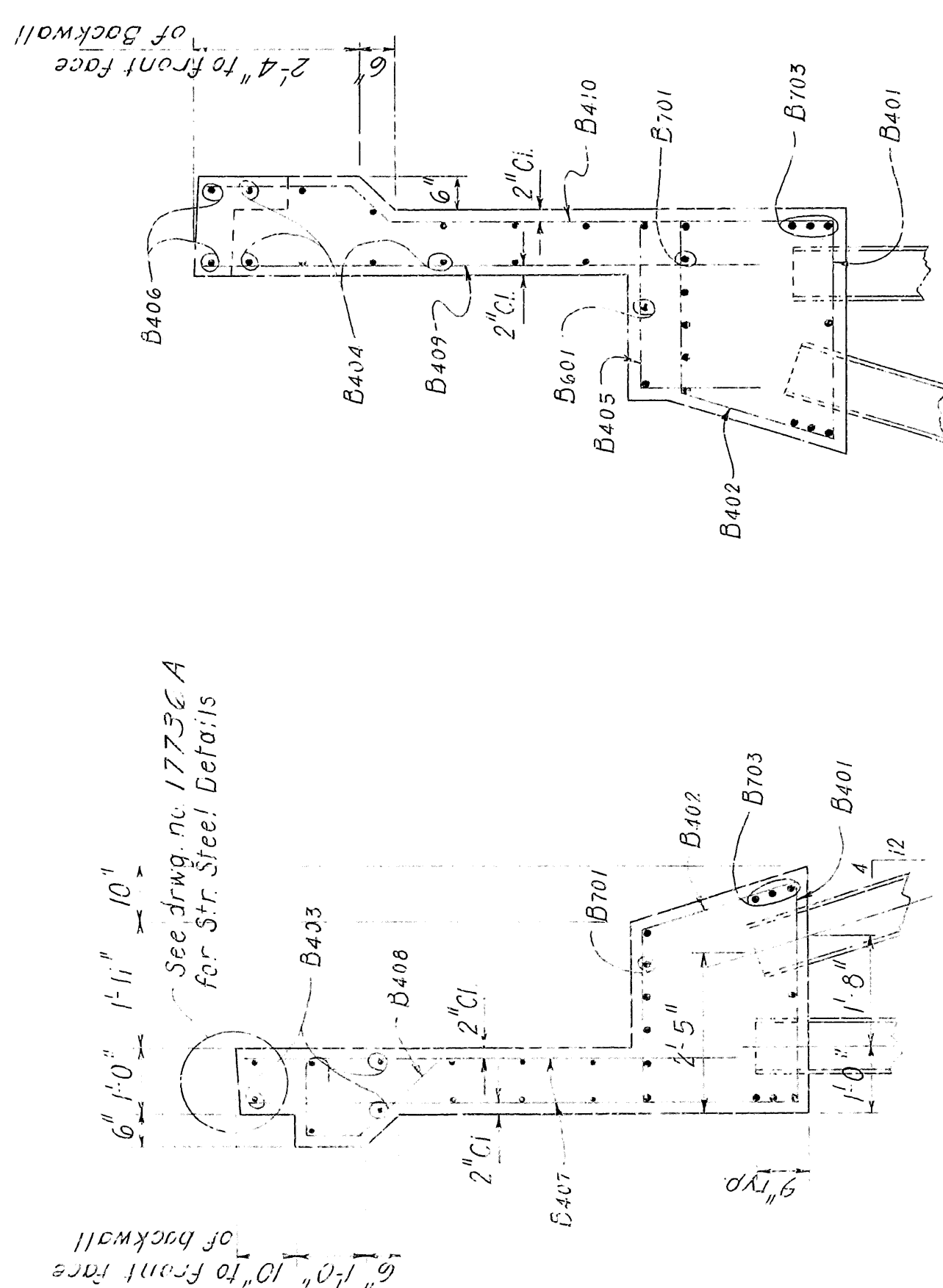




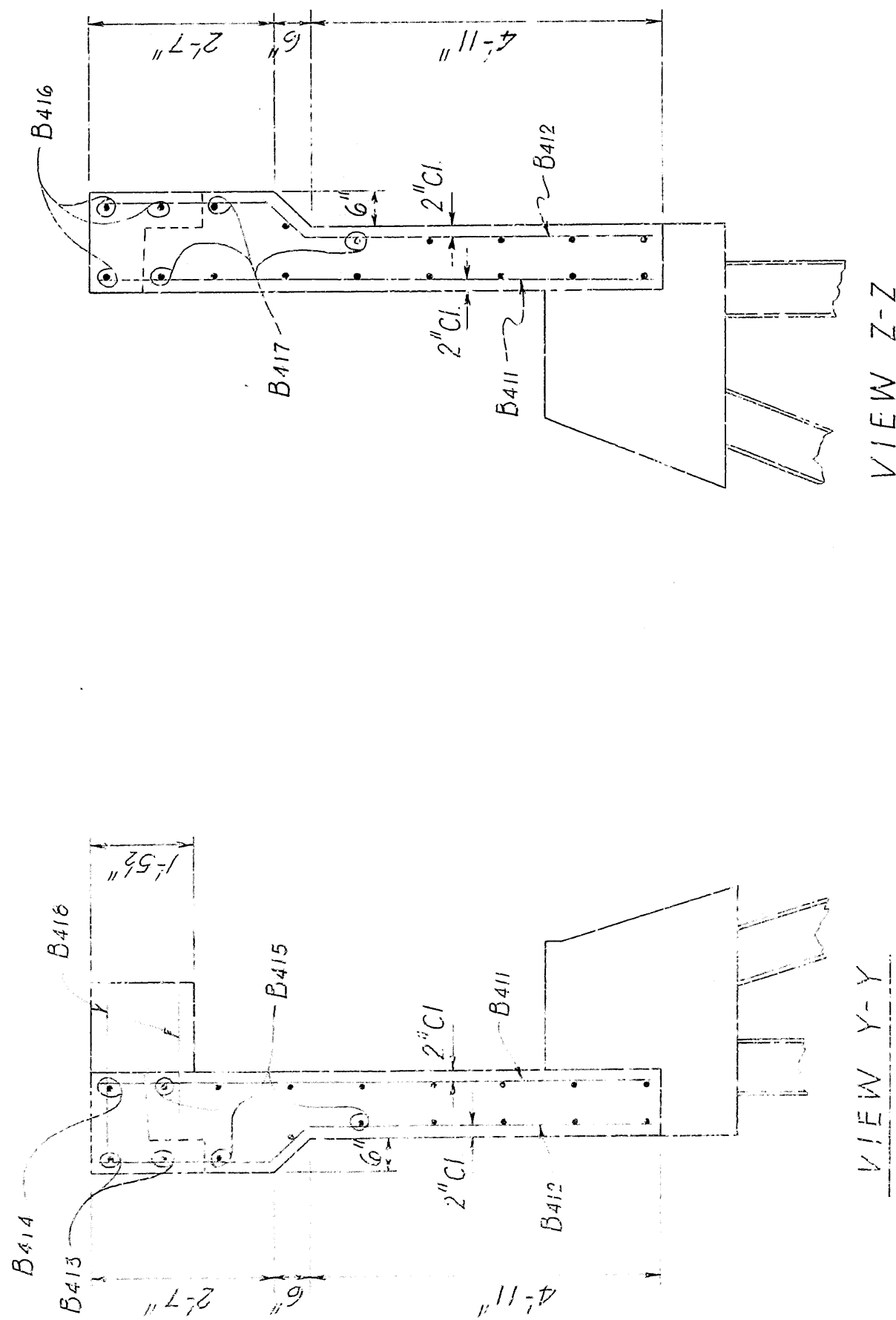
POST DETAIL



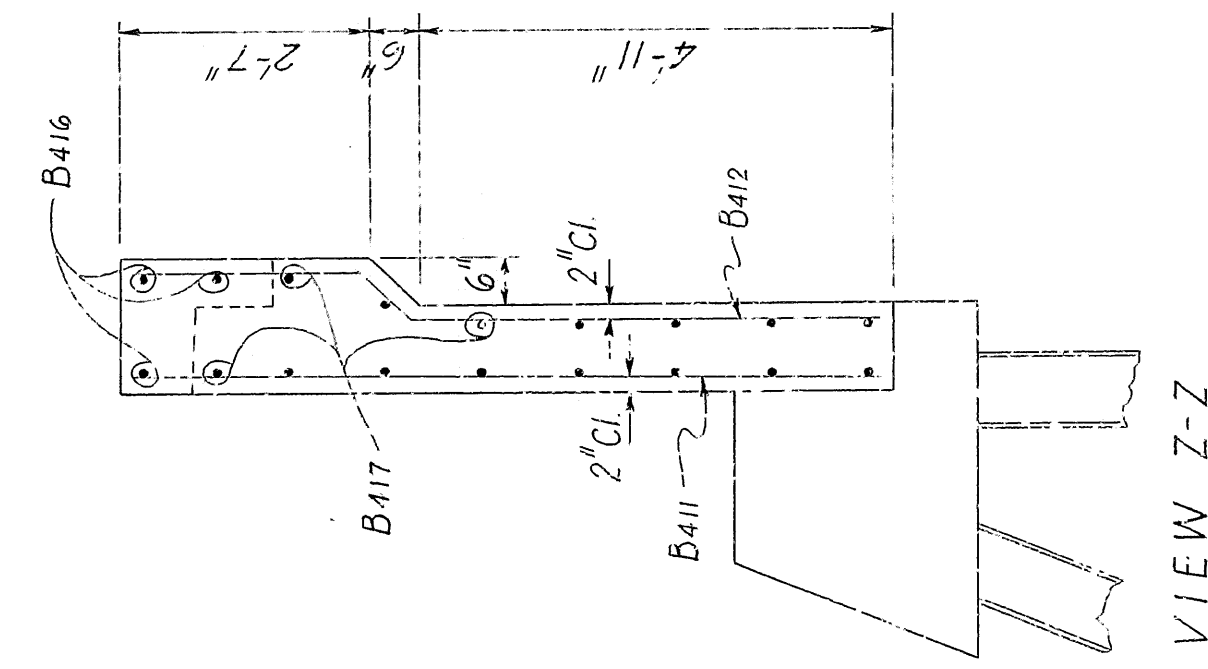
POST DETAIL X  
3" = 1'-0"



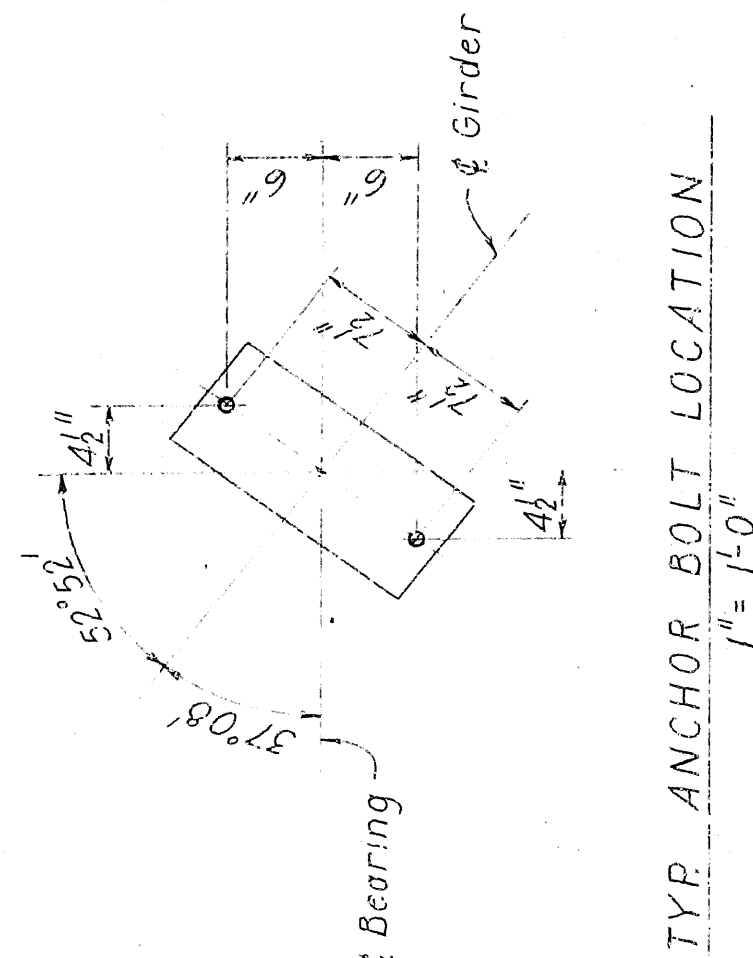
SECTION U-U



VIEW Y-Y



11 E.W. 7-7



TYP ANCHOR BOLT LOCATION

BAR LIST

MK	No Reqd	Length	A	B	Pin Dia
B701	6	52'-11"			Sfr.
B702	6	59'-6"			Sfr.
B703	7	57'-4"			Sfr.
B704	7	55'-2"			Sfr.
B601	21	11'-10"			2"
B401	123	11'-0"			2"
B402	39	6'-11"			2"
B403	24	4'-0"-0"			Sfr.
B404	12	31'-2"			Sfr.
B405	64	7'-3"	2'-6"	2'-5"	2"
B406	2	7'-6"			Sfr.
B407	198	7'-2"			Sfr.
B408	99	4'-0"			2"
B409	9	8'-0"			Sfr.
B410	9	8'-1"	2'-1"	5'-5"	2"
B411	13	7'-8"			Sfr.
B412	12	7'-5"	2'-4"	4'-10"	2"
B413	2	6'-0"			Sfr.
B414	1	7'-6"			Sfr.
B415	15	9'-5"			Sfr.
B416	3	4'-3"			Sfr.
B417	15	6'-3"	4'-5"	1'-11"	2"
B418	2	7'-3"			2"
B419	3	2'-4"	1'-2"	1'-3"	2"
P601	11	4'-9"			Sfr.
P602	3	5'-9"	2'-7 1/2"	8"	3 1/2"
P301	4	3'-10"	1'-0"	6 1/2"	1 1/2"
P302	4	3'-3"	1'-2"	5 1/2"	1 1/2"
P303	4	5'-6"	1'-9"	9"	1 1/2"

Dimensions are out to out of bars.

*Dimensions are out to out of bars.*

NOTES: ALL CONCRETE SHALL BE CLASS S. ALL EXPOSED CORNERS TO BE CHAMFERED 3/4". REINFORCING STEEL TO BE ASTM A 615, GRADE 40. SHOP LISTS AND BENDING DIAGRAMS MUST BE SUBMITTED AND APPROVAL ASSURED BEFORE FABRICATION IS BEGUN. BACKWALL SHALL NOT BE POURED UNTIL GIRDERS HAVE SET IN PLACE ON BENT.

ALL STRUCTURAL STEEL TO BE ASTM A36.

PILING SHALL BE HP10X42 STEEL BEARING PILES. SEE DRAWING NO. 14995-A FOR DETAILS OF PILE TIP REINFORCING. PILING SHALL BE DRIVEN TO A MINIMUM BEARING CAPACITY OF 55 TONS PER PILE.

SHEET 2 OF 2

DETAILS OF END BENT 5

STATE HWY. 5 INTERCHANGE

FOURCHE CREEK - COL. GLENN ROAD

PULASKI COUNTY

ROUTE I-430 SEC. I

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

44 May. 3-15-72 DATE. 11 1 21

DRAWN BY: \_\_\_\_\_ DATE: \_\_\_\_\_  
 TRACED BY: \_\_\_\_\_  
 SCALE:  $2 = 1-0$  OF JS SNOOW  
 2 = 1-0 OF JS SNOOW

CHECKED BY: ACK DATE: 3-24-72

BRIDGE NO. 6308 DRAWING NO. 17725

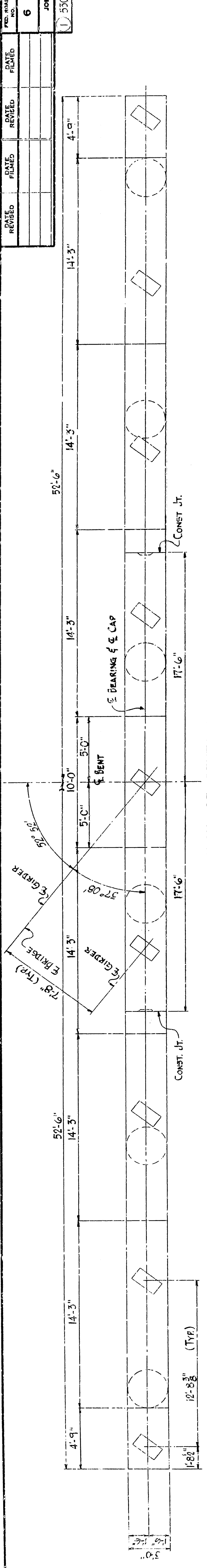
BRIDGE NO. 3308  
DRAWING NO. 1123



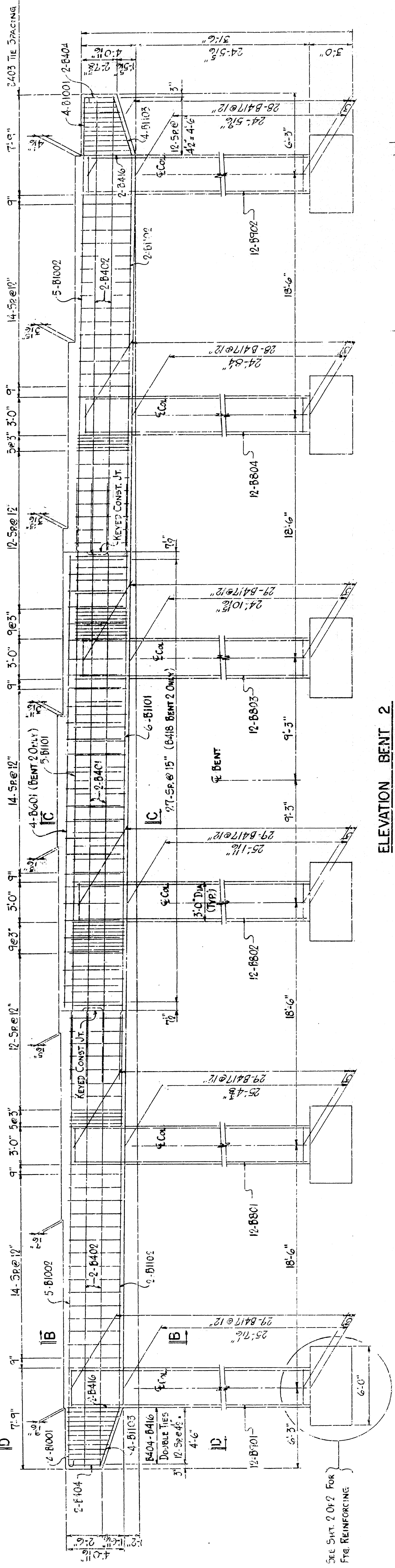




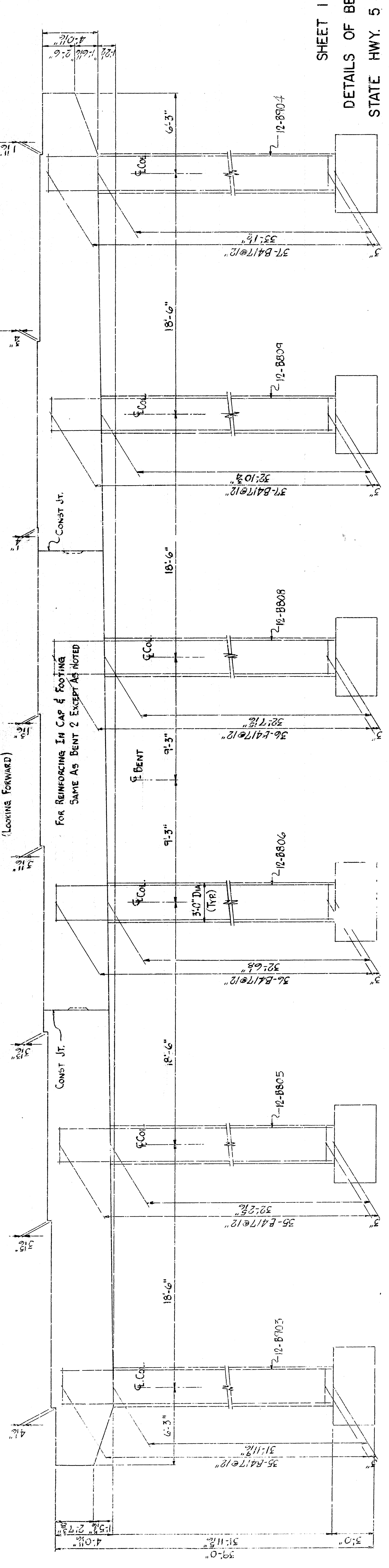
DATE	REVISION	FILED	REVISED	DATE	FILED	PROJ. NO.	STATE	PROJ. YEAR	TOTAL SHEETS
						6	ARK.	1-430-2	1-2
								6847	
								1-3508 BENTS 2 & 4	17725



PLAN OF BENTS 2 & 4



ELEVATION BENT 2  
(LOOKING FORWARD)



ELEVATION BENT 4  
(LOOKING FORWARD)

SHEET 1 OF 2

DETAILS OF BENTS 2 & 4

STATE HWY. 5 INTERCHANGE

FOURCHE CREEK — COL. GLENN ROAD

PULASKI COUNTY

ROUTE I-430 SEC. 1

ARKANSAS STATE HIGHWAY COMMISSION

DRAWN BY: D. S. DATE: 5-22-72  
CHECKED BY: J. R. DATE: 3-30-72  
LITTLE ROCK, ARK.

BRIDGE NO. 5308  
BRIDGE ENGINEER  
SCALE: 1" = 1'-0"

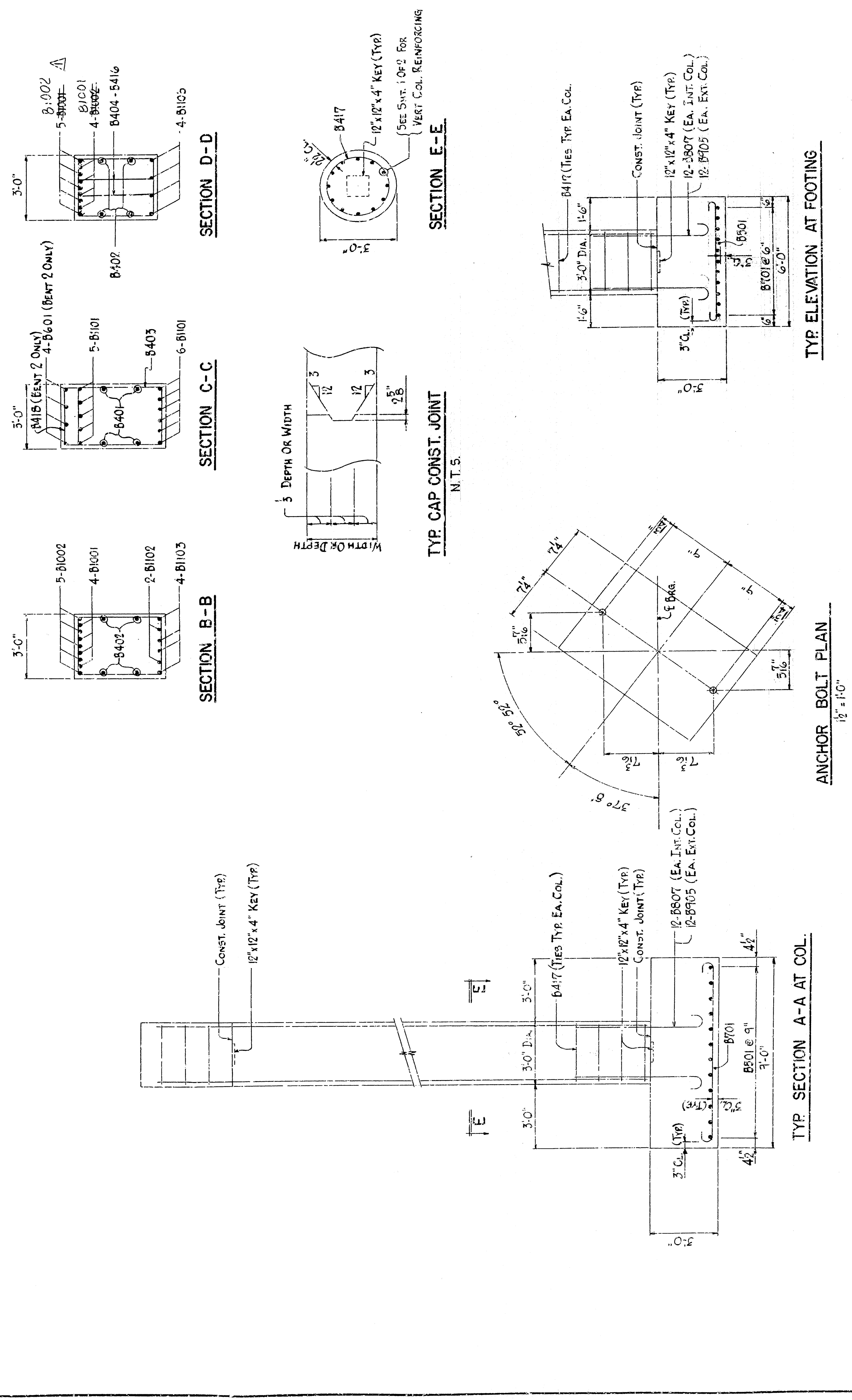
BRIDGE NO. 17727



202

DATE REVISED	DATE FILED	DATE ISSUED	DATE FILED	REV. NO.	STATE NO.	PROJ. NO.	PIECES IN SET
1-12-73	5/10-1-12-73			6	ARK.	1-28-2 (85)/50	7
				JOB NO. 6847			
① 5308 BENTS 2 & 4 1-7-78							

BAR LIST FOR BENTS 2 & 4						
MARK	NO. REOD.	LENGTH	A	B	PIN DIA.	BENDING DIAGRAM
B101	11	45'-0"			5TR	A
B102	4	30'-0"			5TR	B
B103	8	34'-10"	30'-1"	4'-9 3/4"	8"	A
B1001	8	13'-3"	11'-7"	0'-11 1/2"	10"	B101, B501
B1002	10	36'-1"	34'-8"	0'-11 1/2"	10"	A
B101	12	29'-1"			5TR	B
B501	12	28'-10"			5TR	A
B502	12	28'-8"			5TR	B
B503	12	28'-6"			5TR	A
B504	12	28'-2"			5TR	B
B505	12	28'-0"			5TR	A
B507	43	6'-9"	5'-10"	8"	6"	B101, B1001, B1002, B507
B503	12	35'-6"			5TR	A
B506	12	36'-0"			5TR	B
B508	12	36'-2"			5TR	A
B509	12	36'-6"			5TR	B
B504	12	36'-8"			5TR	A
B505	24	7'-6"	6'-2"	10"	5"	B101, B417, B414, B416
B501	66	10'-2"	8'-6"	7"	54"	A
B601	4	34'-8"			5TR	B
B501	72	6'-8"	5'-6"	5"	34"	A
B401	4	38'-8"			5TR	B
B402	8	34'-8"			5TR	A
B403	105	13'-2"	2'-8"	3'-8"	2"	B103
B404	4 EA.	8'-4"	1'-7 1/2"	2'-3"	2"	A
B416	4 EA.	11'-2"	1'-7 1/2"	3'-3"	2"	B
B417	172	2'-6"	2'-7"	1'-3"	2"	A
B419	28	9'-10"	2'-8"	3'-8"	2"	B
DIMENSIONS ARE OUT TO OUT OF BARS						



SHEET 2 OF 2

DETAILS OF BENTS 2 & 4

STATE HWY. 5 INTERCHANGE

FOURCHE CREEK — COL. GLENN ROAD

PULASKI COUNTY

ROUTE 1-430 SEC. 1

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

DRAWN BY: D.S. DATE: 1-27-78 SCALE: 3/8" = 1'-0" OR AS NOTED

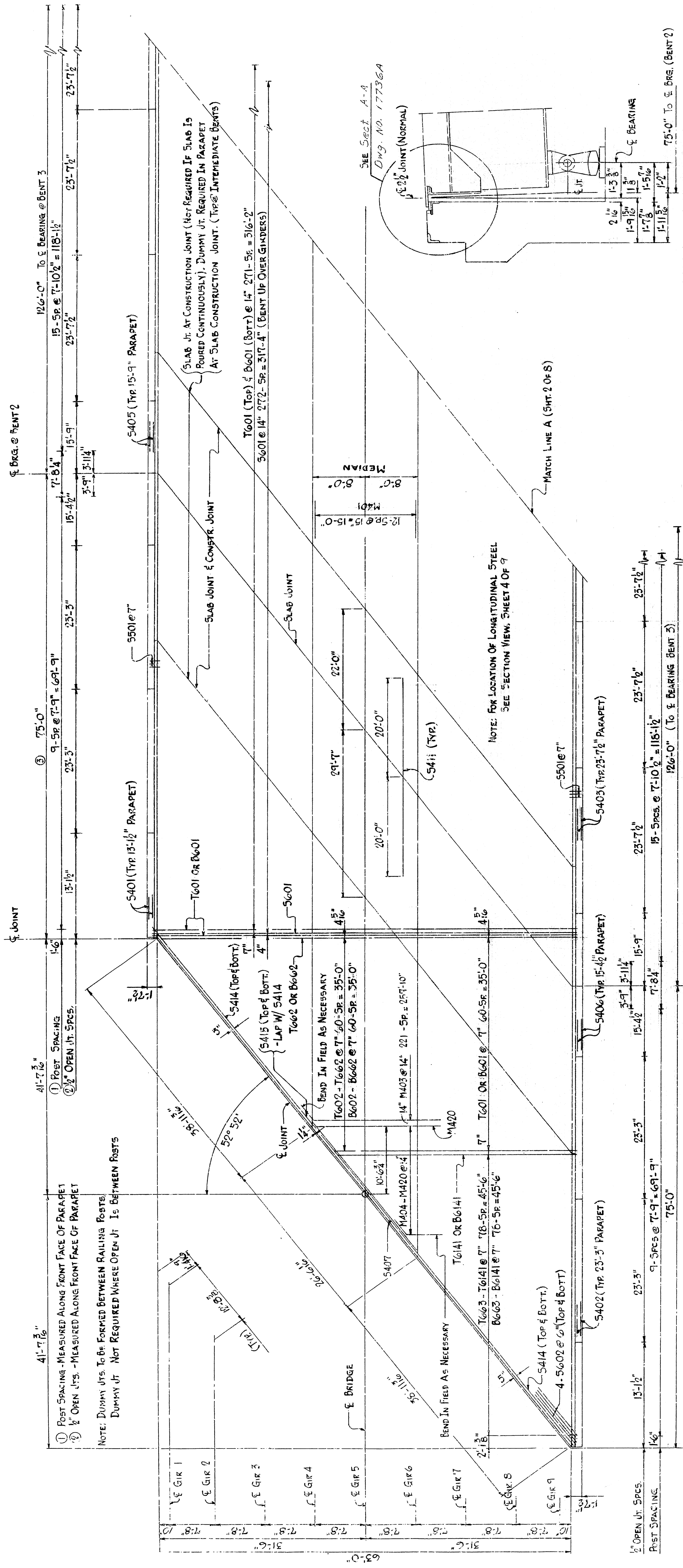
CHECKED BY: J.E.K. DATE: 2-16-78

BRIDGE NO. 5308

DRAWING NO. 17728



DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD NO.	STATE	FED. AID PROJ.	FISCAL YEAR	BEST EST. NO.	TOTAL INVEST.
				6	ARK.	65130	75		131
JOB NO. 6847									
① 3308 SPAN DETAILS 17709									



SECTION ALONG C BRIDGE  
AT END BENT NO. 1  
N.T.S.

Technical drawing of a mechanical part, likely a bracket or support, showing dimensions and annotations. The drawing includes a central rectangular section with a cross-hatch pattern, surrounded by irregular, possibly cast, material. Key dimensions and features include:

- Top Left:** A dimension of  $1\frac{1}{2}''$  is shown for a sloped edge.
- Top Center:** A dimension of  $1.0''$  is shown for a horizontal section.
- Top Right:** A dimension of  $1\frac{1}{2}''$  is shown for a horizontal section.
- Right Side:** A dimension of  $1\frac{1}{2}''$  is shown for a horizontal section.
- Bottom Right:** A dimension of  $1\frac{1}{2}''$  is shown for a horizontal section.
- Bottom Center:** A dimension of  $1\frac{1}{2}''$  is shown for a horizontal section.
- Bottom Left:** A dimension of  $1\frac{1}{2}''$  is shown for a horizontal section.
- Left Side:** A dimension of  $5\frac{1}{2}''$  is shown for a vertical section.
- Center:** A dimension of  $1\frac{1}{2}''$  is shown for a horizontal section.
- Annotations:**
  - "CLIP BOTTOM FL. AS SHOWN TO PROVIDE CLEARANCE" (top left)
  - "BEG. OF BR." (bottom left)
  - "END OF BR." (bottom center)
  - "END OF BR." (bottom right)
  - "END OF BR." (bottom right)
  - "END OF BR." (bottom right)

PLAN OF BEARING AT END BENT NO. 1

SHEET 1 OF 9

DETAILS OF CONTINUOUS WELDED

STATE HWY. 5 INTERCHANGE

FOURCHE CREEK — COL GLENN ROAD

PULASKI COUNTY

ROUTE 1-430SEC. 1

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

DRAWN BY: 1.5

DATE: 2-11-72

TRACED BY: ✓ C K

DATE: 9-20-72

CHECKED BY: ✓ C K

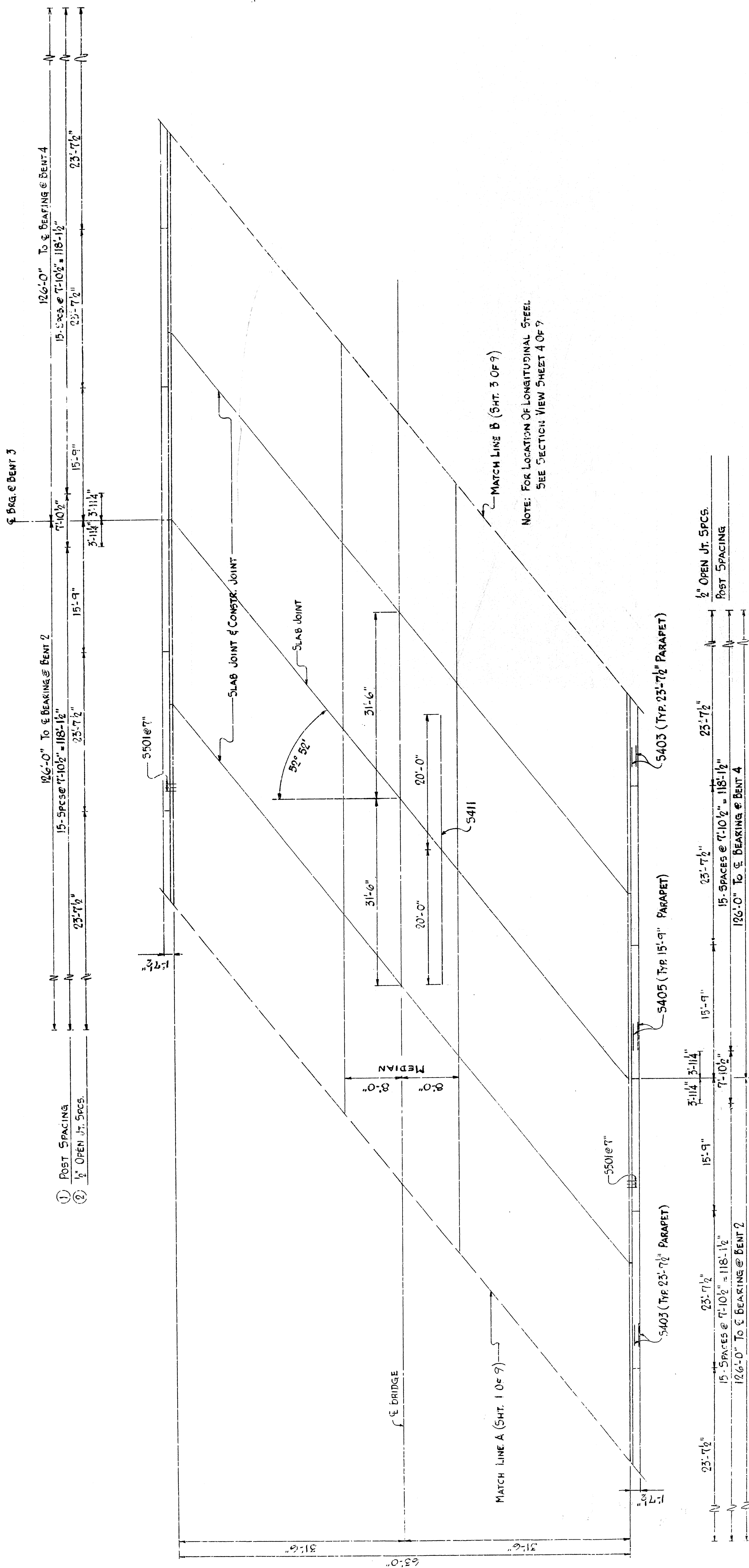
DATE: 9-20-72

SCALE: AS SHOWN

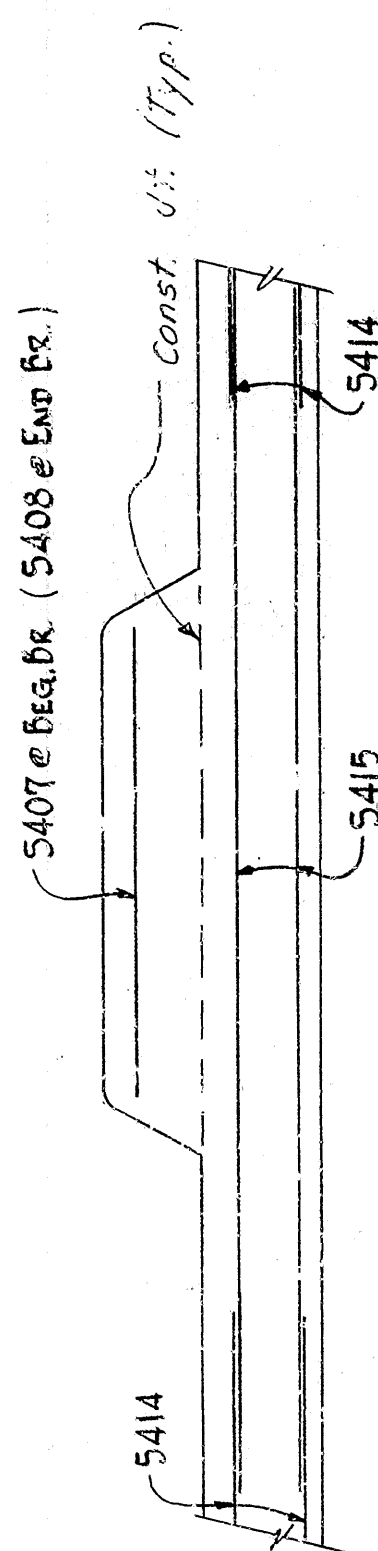
BRIDGE NO. 5308

DRAWING NO. 17729





PART SLAB PLAN

$$\frac{1}{8} = 12.5\%$$


**END SECTION**

SHEET 2 OF 9  
DETAILS OF CONTINUOUS WELDED  
PLATE GIRDER UNIT  
STATE HWY. 5 INTERCHANGE  
COURCHE CREEK --- COL. GLENN ROAD  
PULASKI COUNTY  
ROUTE I-430 SEC. 1

LITTLE ROCK, ARK.

DRAWN BY: D.S. DATE: 2-15-72  
 TRACED BY: \_\_\_\_\_ DATE: \_\_\_\_\_  
 CHECKED BY: JCK DATE: 3-22-72

SCALE: A5 SHOWN

*Neal P. Kelton*  
BRIDGE ENGINEER

BRIDGE NO. 5308







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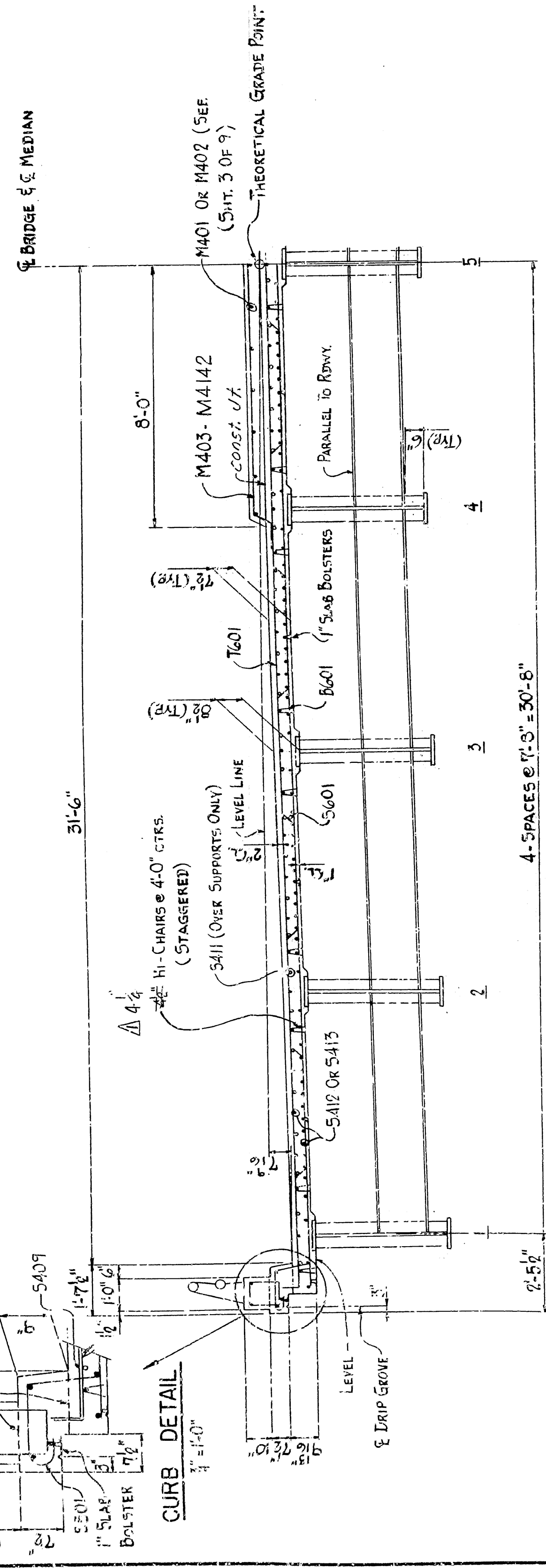
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2	12-73	SM	17732	2	12-73	SM	17732	2	12-73	SM	17732	2
3	12-73	SM	17732	3	12-73	SM	17732	3	12-73	SM	17732	3
4	12-73	SM	17732	4	12-73	SM	17732	4	12-73	SM	17732	4
5	12-73	SM	17732	5	12-73	SM	17732	5	12-73	SM	17732	5
6	12-73	SM	17732	6	12-73	SM	17732	6	12-73	SM	17732	6
7	12-73	SM	17732	7	12-73	SM	17732	7	12-73	SM	17732	7
8	12-73	SM	17732	8	12-73	SM	17732	8	12-73	SM	17732	8
9	12-73	SM	17732	9	12-73	SM	17732	9	12-73	SM	17732	9
10	12-73	SM	17732	10	12-73	SM	17732	10	12-73	SM	17732	10

5308 SPAN DETAILS 17732

MEDIAN REINFORCING  
TRANSVERSE: T601 - T6223 (PLACED  
5407 & 5408 PLACED AS SHOWN  
LONGITUDINAL: M401 & M402 PLACED AS SHOWN

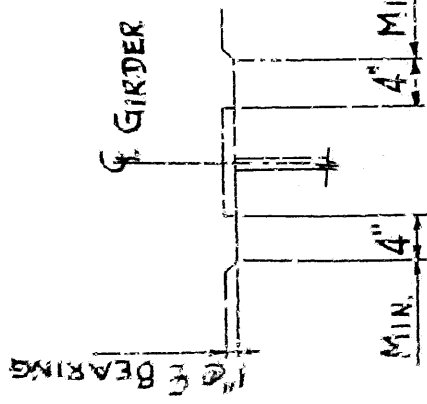
SLAB REINFORCING:  
TRANSVERSE: T601 - T6223 (PLACED  
5407 & 5408 PLACED AS SHOWN  
5401 @ 14"  
5411, 5412, 5413, 5414, 5415 PLACED AS SHOWN  
NOTE: 5411 PLACED OVER INT. BENTS  
LONGITUDINAL: 5401 - 5406 AS SHOWN

CURE REINFORCING:  
TRANSVERSE: 5501 @ 7"  
5409 @ 14"  
5410 TIES @ 14"  
LONGITUDINAL: 5401 - 5406 AS SHOWN



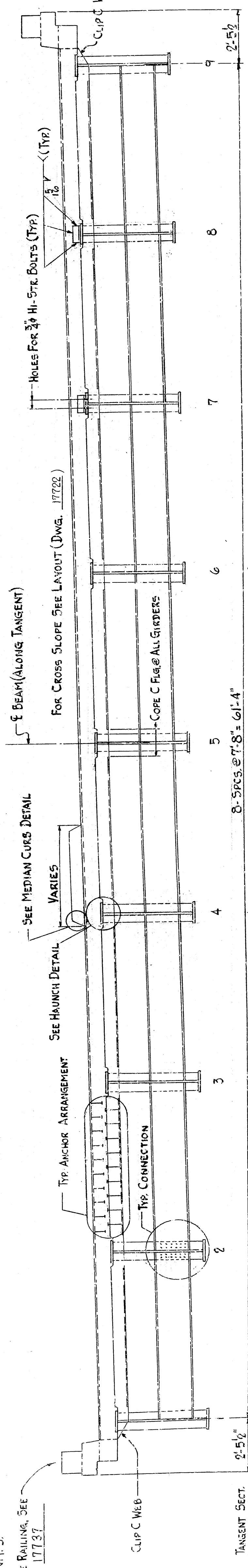
HALF ROADWAY AT MID-SPAN

SHOWN FOR TANGENT SECTION  
SECTION IN TRANSITION SIMILAR  
3" = 1'-0"



HAUNCH DETAIL

FOR BRIDGE RAILING, SEE  
DWG. NO. 17737



ROADWAY SECTION AT END SPAN

3" = 1'-0"

NOTES:

ALL GIRDERS SHALL BE BLOCKED IN THEIR TRUE POSITION, WITH WEB PLATES HORIZONTAL, IN THE SHOP TO FORM EACH COMPLETE UNIT. THE CAMBER, LENGTH OF SECTIONS, DISTANCE BETWEEN BEAMS AND OPENING OF JOINTS SHALL BE MEASURED WITH THE BEAMS IN THIS POSITION AND THIS INFORMATION SHALL BECOME A PART OF THE PERMANENT RECORD OF THIS JOB. THE COMPONENT PARTS SHALL BE MATCH MARKED IN THIS ASSEMBLY AND THESE MARKS SHALL BE SHOWN ON THE ERECTION DIAGRAM. ALL GIRDER DIMENSIONS ARE BASED ON A TEMPERATURE OF 60°F. A TOLERANCE OF  $\pm 1/4"$  IS ALLOWED FOR CAMBER.

DIAPHRAGMS AT BEARING STIFFENERS SHALL BE INSTALLED AS GIRDERS ARE ERECTED. ALL DIAPHRAGMS SHALL BE INSTALLED AND COMPLETELY BOLTED PRIOR TO POURING OF FLOOR SLABS.

UNIT STRESSES:

- CLASS (SAE) CONCRETE (N=40)
- REINFORCING STEEL (A36)
- STRUCTURAL STEEL (A572, GRADE 50)

DESIGN SPECIFICATIONS - AASHTO 1969 AND INTERIM SPECIFICATIONS

DESIGN LIVE LOAD - HS20

LOAD DISTRIBUTION

DEAD LOAD TO GIRDER (INCLUDES 162 PLF FOR WEIGHT OF GIRDER)

DEAD LOAD TO COMP. GIRDER (INCLUDES 104 PLF FOR WEIGHT OF FUTURE SURFACES)

LIVE LOAD TO COMP. GIRDER

1.2957 WHEELS + IMPACT

1.3939 WHEELS + IMPACT

Revised - Changed 4 1/2" dia. to 4 1/4"  
Changed 5501, 5407 & 5408  
As Shown, LDF 1-12-73

SHEET 4 OF 9  
DETAILS OF CONTINUOUS WELDED  
PLATE GIRDER UNIT

STATE HWY 5 INTERCHANGE  
FOURCHE CREEK - COL GLENN ROAD  
PULASKI COUNTY

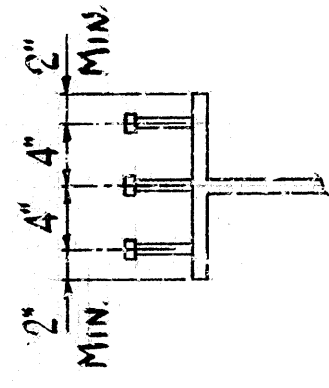
ROUTE 1-430 SEC. 1  
ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.  
DRAWN BY: D.S.  
DATE: 2-9-72  
CHECKED BY: J.K.K.  
DATE: 3-20-72  
BRIDGE NO. 5308  
DRAWING NO. 17732



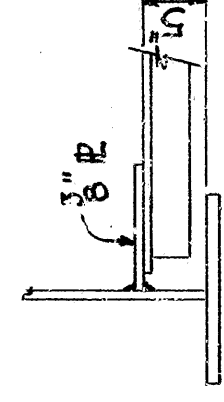
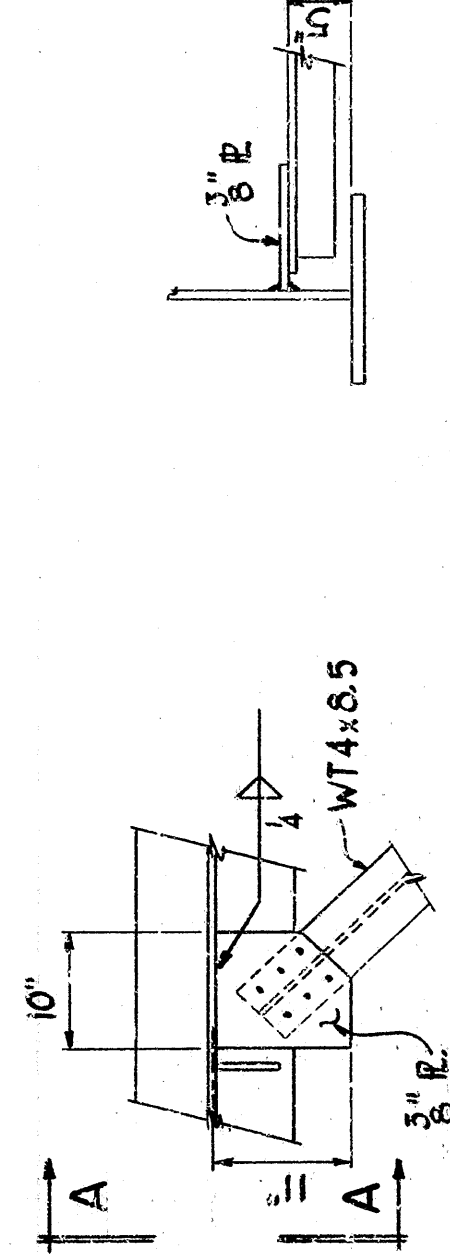
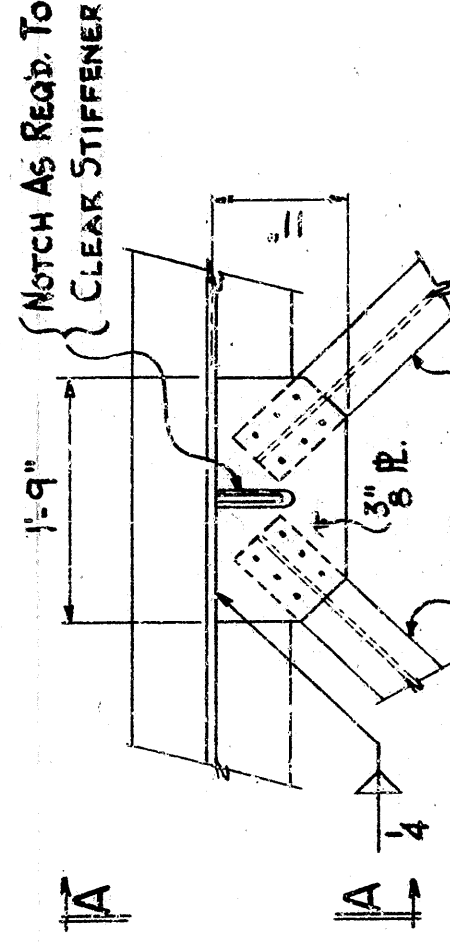
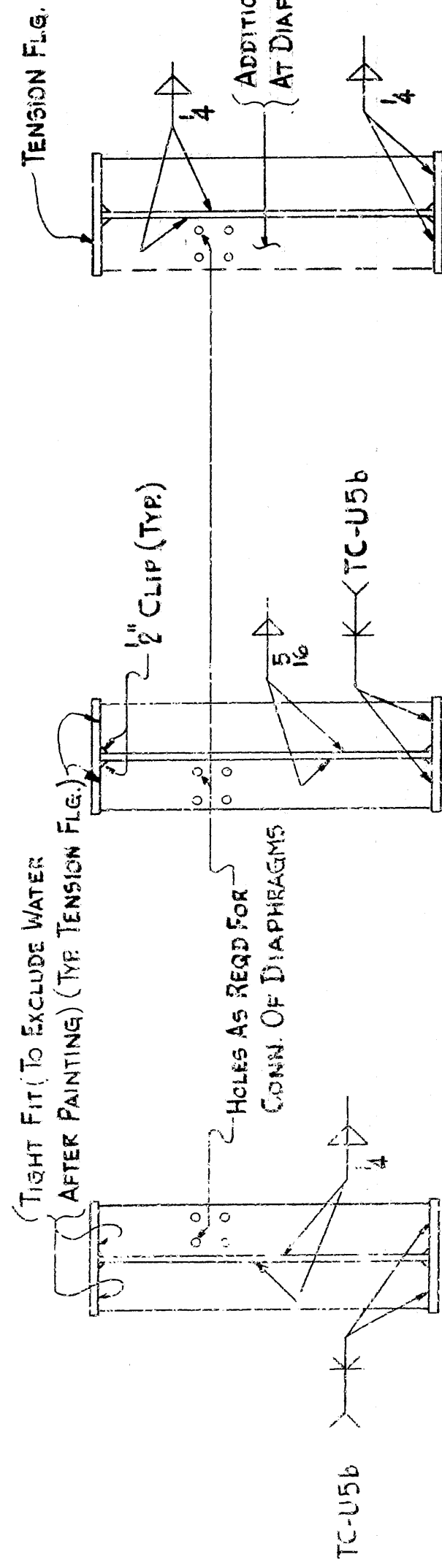






**N.T.S.**

STEEL SHIELD CONNECTORS SHOWN SHALL BE 5" LONG, GRANULAR FLUX FILLED, SOLID FLOWED OR EQUAL, AND AUTOMATICALLY END WELDED TO GIRDER FLANGES IN ACCORDANCE WITH RECOMMENDATIONS OF THE MANUFACTURER. 7/8" DIAMETER STUDS MAY BE SUBSTITUTED FOR THE 3/4" DIAMETER STUDS SHOWN AT THE RATIO OF 3, 7/8" STUDS IN PLACE OF 1 - 3/4" STUDS. THE 2/4" STUDS SHALL BE USED AS THE BASIS OF PAYMENT OF 74.0 LBS. PER ONE HUNDRED STUDS.



BEARING STIFFENERS AT END BENTS	BEARING STIFFENERS AT INT. BENTS
N.T.S.	N.T.S.

INTERMEDIATE  
STIFFENERS

## LATERAL CONNECTIONS

**NTS**

SECTION A-A

*David L. Kantor*  
BRIDGE ENGINEER

DRAWN BY: D.5 DATE: 2-8-72  
 TRACED BY: \_\_\_\_\_ DATE: \_\_\_\_\_  
 CHECKED BY: gck DATE: 3-20-72

SCALE:  $\frac{3}{4} = 1'-0"$  OR AS NOTED

BRIDGE NO. 5308 DRAWING NO. 17734

Doral Tankerton  
BRIDGE ENGINEER

Ball Park  
BIBBET ENGINEER

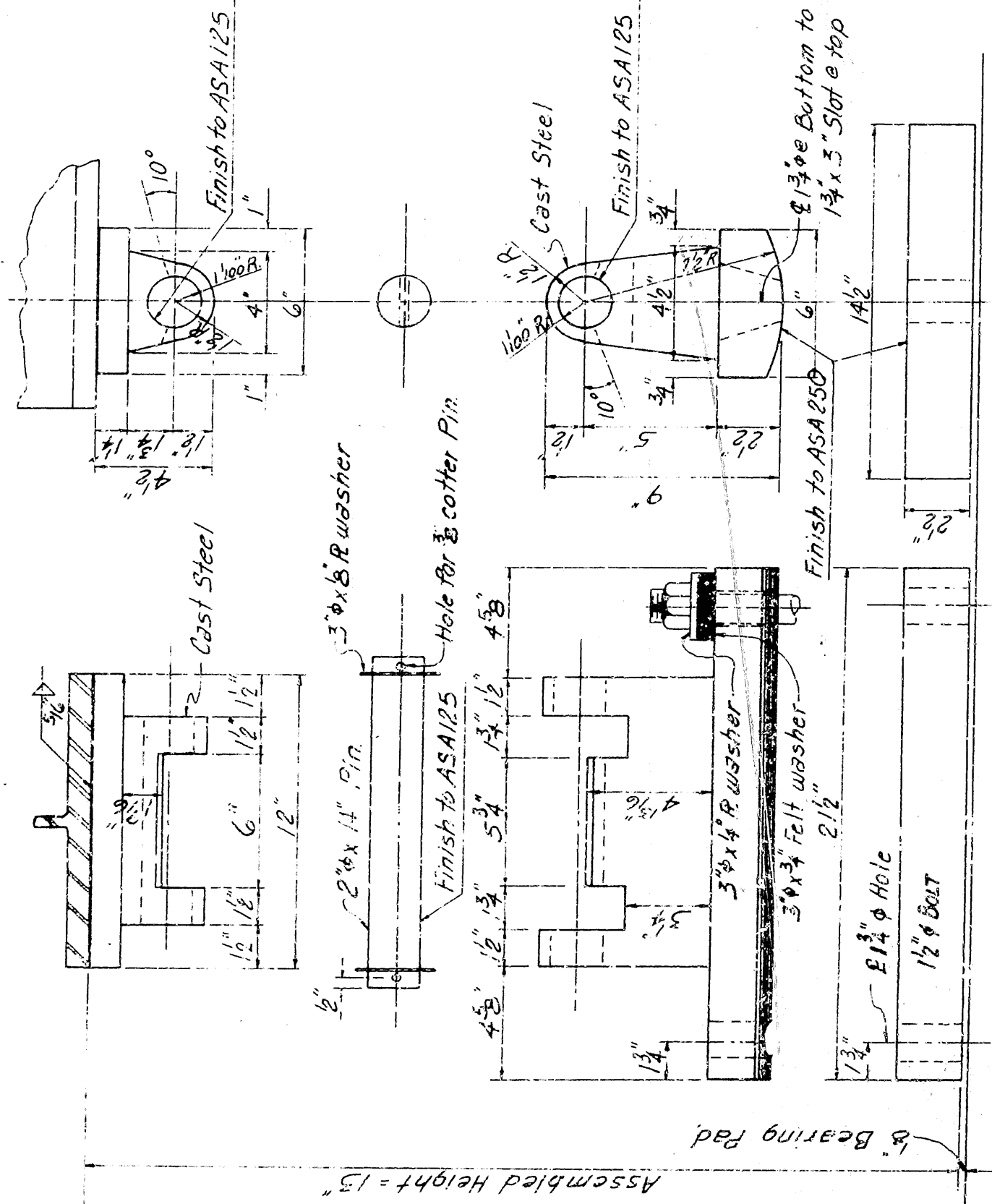
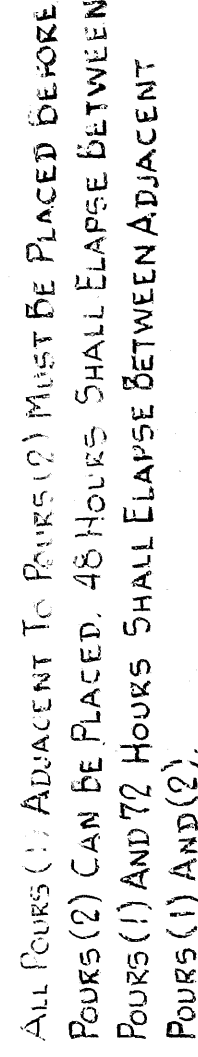
BRIDGE NO. 5308

**DRAWING NO. 17734**



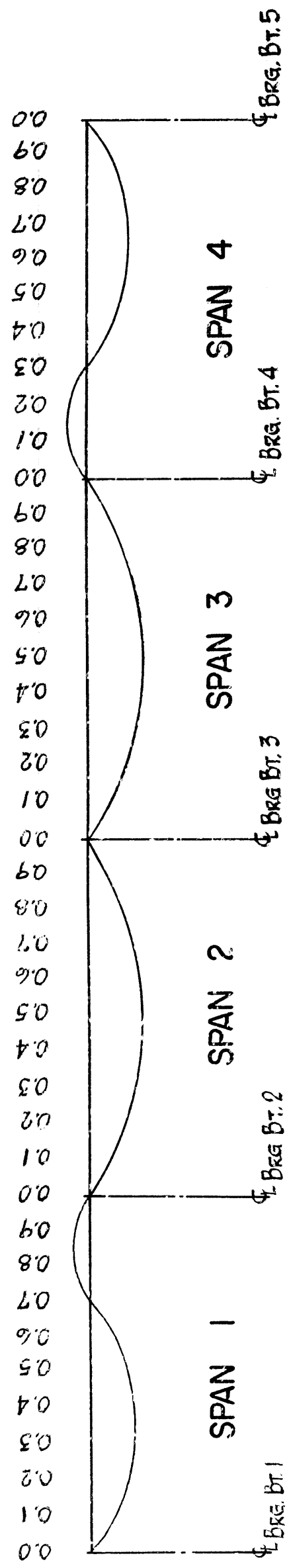
ASTM A27, GRADE 75-40 STEEL SHOE CASTINGS SHALL BE PAID FOR AT THE RATE SHOWN PER POUND FOR "STRUCTURAL STEEL IN PLATE GIRDER SPANS A36".

## BRIDGE NO. 5308 DRAWING NO. 17735



*Material: Steel Castings ASTM A27 Grade 70-40, P ASTM A-36*





DEAD LOAD DEFLECTIONS DIAGRAM

[illegible]

CAMBER FOR DEAD LOAD DEFLECTION PLUS VERTICAL CURVE + 1/4" TOLERANCE. DEFLECTIONS SHOWN ARE FROM A CHORD FROM CENTERLINE BEARING TO CENTERLINE BEARING. VERTICAL CURVE CORRECTIONS NOT INCLUDED. NEGATIVE SIGN (-) INDICATES POINT ABOVE CHORD.

\*INCLUDES WEIGHT OF CROSS FRAMES, DIAGONAL BRACING, ETC.

\*\*\*ELEVATIONS ARE 8-1/2' BELOW SURFACE OF PAVEMENT (BOTTOM OF HAUNCH).

Revised - Changed Deflections & Elevations  
As Shown 5-9-73 LDF

**SHEET 8 OF 9**  
**DETAILS OF CONTINUOUS WELDED**  
**PLATE GIRDER UNIT**

STATE HWY. 5 INTERCHANGE  
FOURCHE CREEK — COL GLENN ROAD  
PULASKI COUNTY  
ROUTE 1-430 SEC. 1  
ARKANSAS STATE HIGHWAY COMMISSION

DRAWN BY: D.S. DATE: 2-21-12

TRACED BY: 1812 DATE: 0000

**BRIDGE NO. 5308**

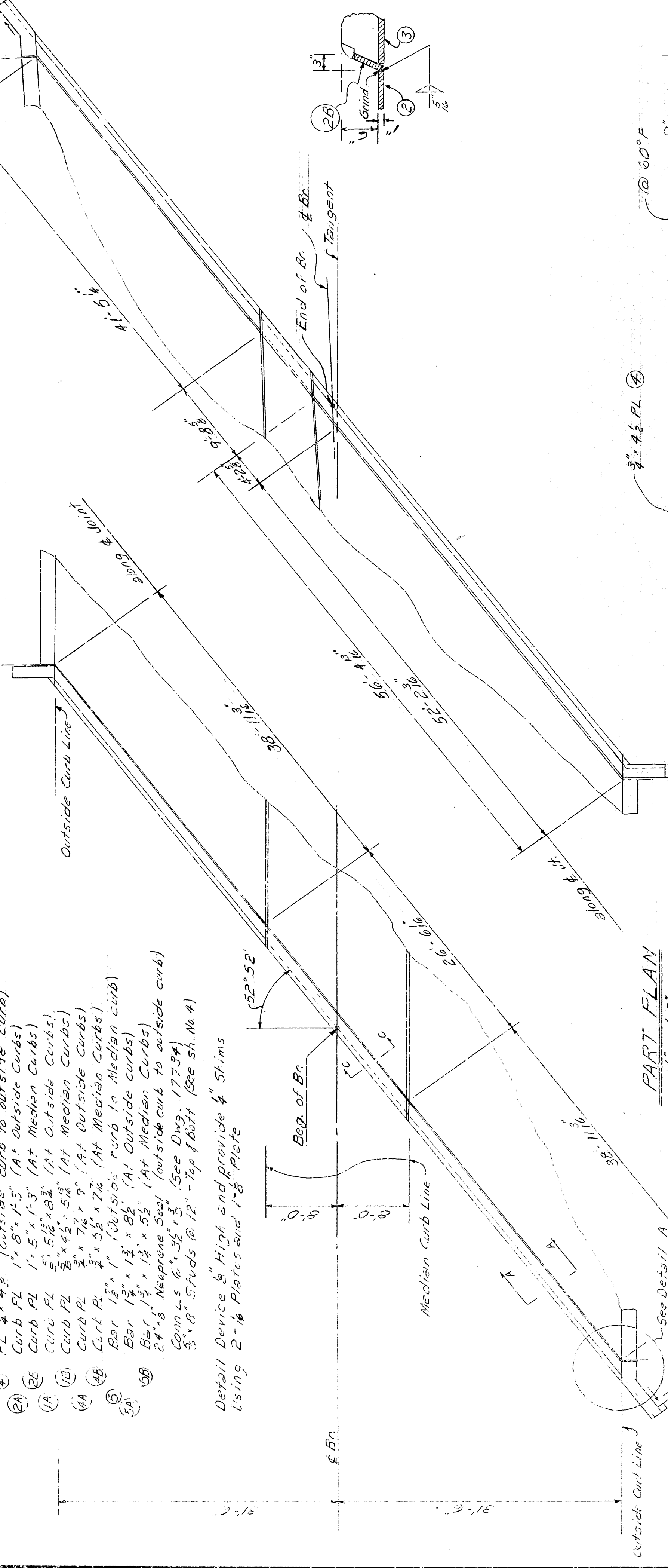
**DRAWING NO. 17736**



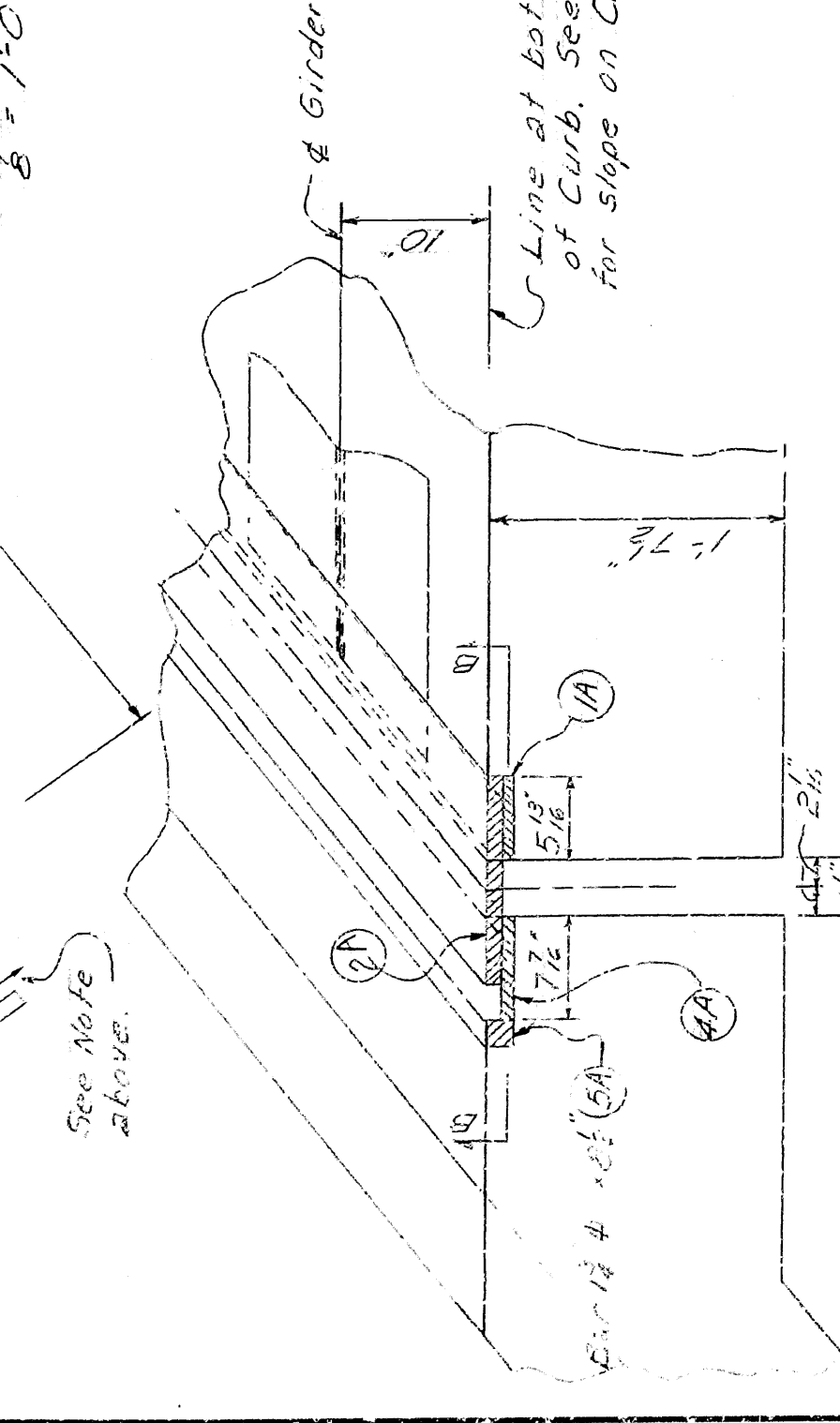
# EXPANSION DEVICE

- ① Rdwy. C15 x 33.9 (outside curb to outside curb)
- ② Rdwy. PL 1" x 9" (outside curb to median curb)
- ③ Median PL 1" x 3" (median curb to median curb)
- ④ PL 3" x 4" (outside curb to median curb)
- ⑤ Curb PL 1" x 8" x 15" (At Outside Curbs)
- ⑥ Curb PL 1" x 5" x 15" (At Median Curbs)
- ⑦ Curb PL 5" x 4" x 8" (At Median Curbs)
- ⑧ Curb PL 3" x 7" x 9" (At Outside Curbs)
- ⑨ Curb PL 3" x 5" x 7" (At Median Curbs)
- ⑩ Bar 13" x 1" (Outside curb to Median curb)
- ⑪ Bar 13" x 1" (At Outside Curbs)
- ⑫ Bar 13" x 1" (At Median Curbs)
- ⑬ 24" x 8" Neoprene Seal (outside curb to outside curb)
- ⑭ Conn L's 6" x 3" x 1/2" (See DWG. 17734)
- ⑮ 3" x 8" Studs @ 12" - Top of Box (See Sh. No. 4)

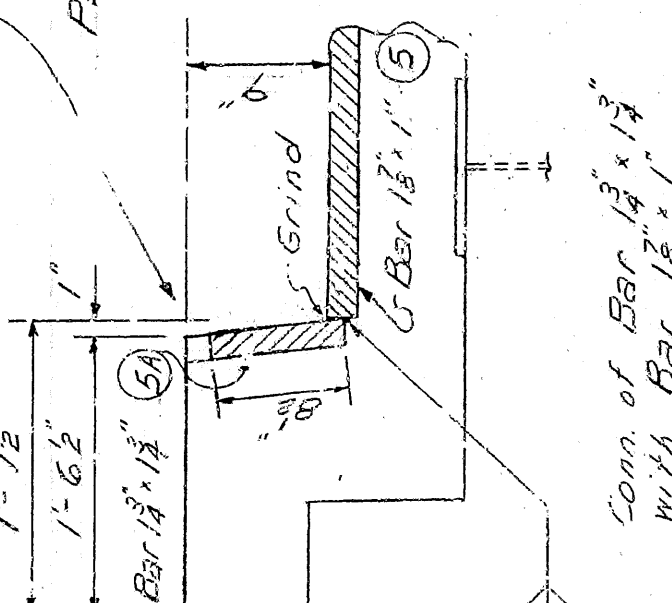
Detail Device 8" High and provide 4" Skins  
Using 2-1/4" Plates and 1-1/8" Plate



## PART PLAN 8' x 1'-0"



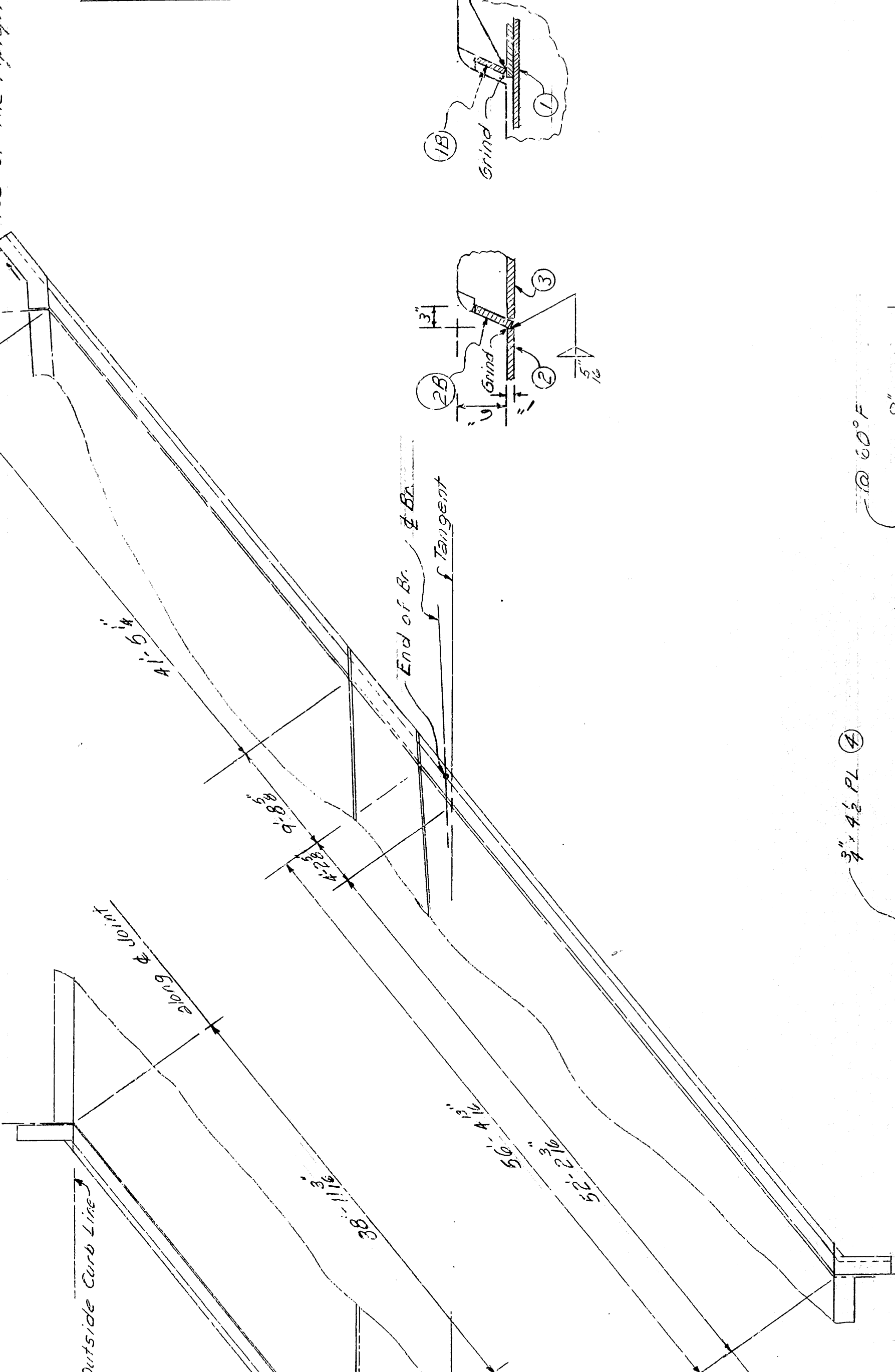
Note: Do not place concrete above curb PLs in order to facilitate removal of plates for future maintenance.



Conn. of Bar 13" x 1" with Bar 13" x 1"

Rdwy. channel may be fabricated in parts and field welded using V groove weld. Back up plates on channel may be used if desired.

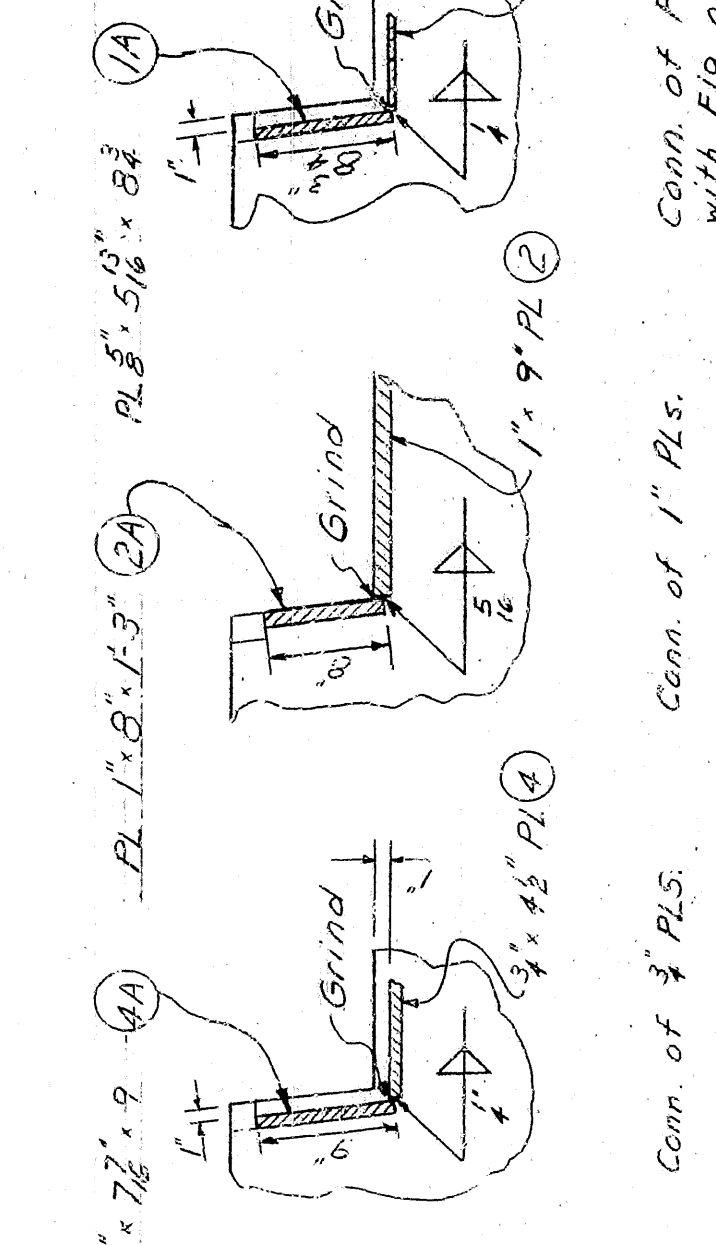
Note: See Bent detail, dwg. for detail at end of cap that will catch the drainage from the end of the Neoprene Seal and carry it to the end of the cap. Travel out a small recessed section in the concrete riprap to provide for drainage from the end of the curb section and along the curb to the toe of the riprap.



## SECTION A-A 3' x 1'-0"

Note: All stud Anchors are automatically welded granular Flux Filled, solid Fluted or equal and the 8" x 8" studs in the backwall are in the End Bent Gwent.

The 6" x 4" x 3" L, the 3" x 2" x 3" L and the 8" x 8" studs in the backwall are in the End Bent Gwent.

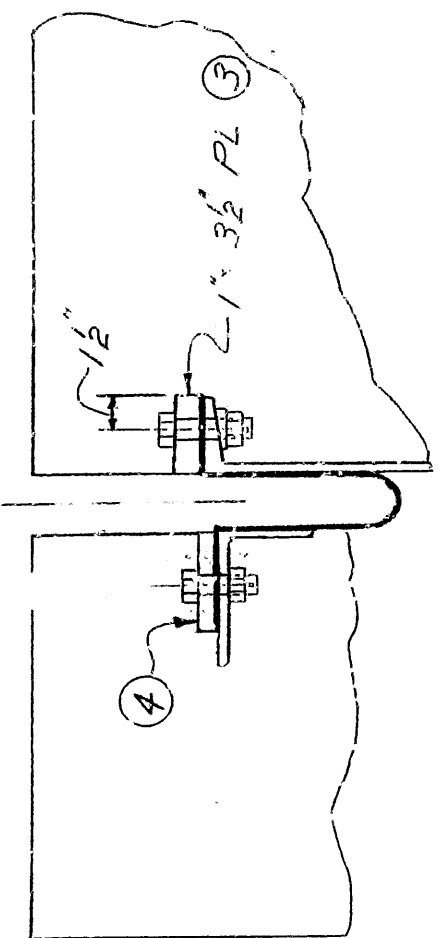


Conn. of 3" PLs.

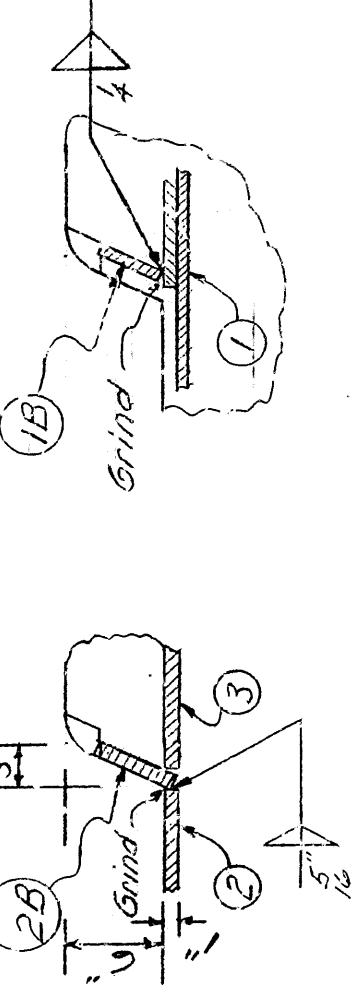
Conn. of 1" PLs.

Conn. of PL 5" x 5 1/2"

with Fig. of L



## SECTION C-C 1 1/2' x 1'-0"



## SECTION THRU CURB AT MEDIAN 1 1/2' x 1'-0"

NOTE: Details and Sections are shown based on level grade. Adjustments, where necessary, shall be made for grade and crown.

The Neoprene Seal shall be considered subsidiary to the item "Class 5 (A-E) Concrete."

SHEET NO. 9 OF 9  
DETAILS OF CONTINUOUS WELDED  
PLATE GIRDER UNIT  
STATE HWY. 5 INTERCHANGE  
FOURCHE CREEK - COL. GLENN ROAD  
PULASKI COUNTY  
ROUTE I-430SEC. 1  
ARKANSAS STATE HIGHWAY COMMISSION  
LITTLE ROCK, ARK.

DRAWN BY: JAS DATE: 8-22-72 SCALE: AS SHOWN  
CHECKED BY: JCK DATE: 8-22-72  
BRIDGE NO. 5308 DRAWING NO. 17736A

## SECTIONS THRU CURB 1'-0" x 1'-0"

BRIDGE ENGINEER







## GENERAL NOTES

Riveting components may be either aluminum or steel. Stainless steel fasteners shall be used on either aluminum or steel systems, except that the exceptions noted herein and in the Material Data, and material designations of aluminum and steel parts is permitted, for lists of material designations & specifications of various rivets, visit Material Data.

Rail tubes, pipes or extrusions must be fabricated to attach to at least three posts. Shop drawings of railing shall be submitted and approved secured before fabrication is begun.

Steel rail members shall be galvanized in accordance with ASTM A123 after fabrication. Steel fasteners shall meet or exceed the requirements galvanized according to ASTM 153.

*Specifications for Highway Construction, Edition of 1972, AND APPLICABLE SPECIAL PROVISIONS.*

**TONGUE BOLT ASSEMBLY**

The entire assembly shall be capable of with standing a tensile load of 9000 pounds applied through its whole. The materials for components will be specified by recognized ASTM designations. No shop drawings submitted for approval and will be accepted by manufacturer's certification or approval by the engineer.

- \* *Threads on bolts, screws and nuts shall conform to American Standard coarse Series, Class 24 for screws, Class 2B for nuts. F<sub>u</sub> = 54,000 psi.*
- † *Minimum yield strength - 80,000 psi*
- *Con. mercia! Designation 356 F*

*Steel posts to be Galvalume in accordance with ASTM A-123*

ROUTE 1.430 SEC.1

ARKANSAS STATE HIGHWAY COMMISSION

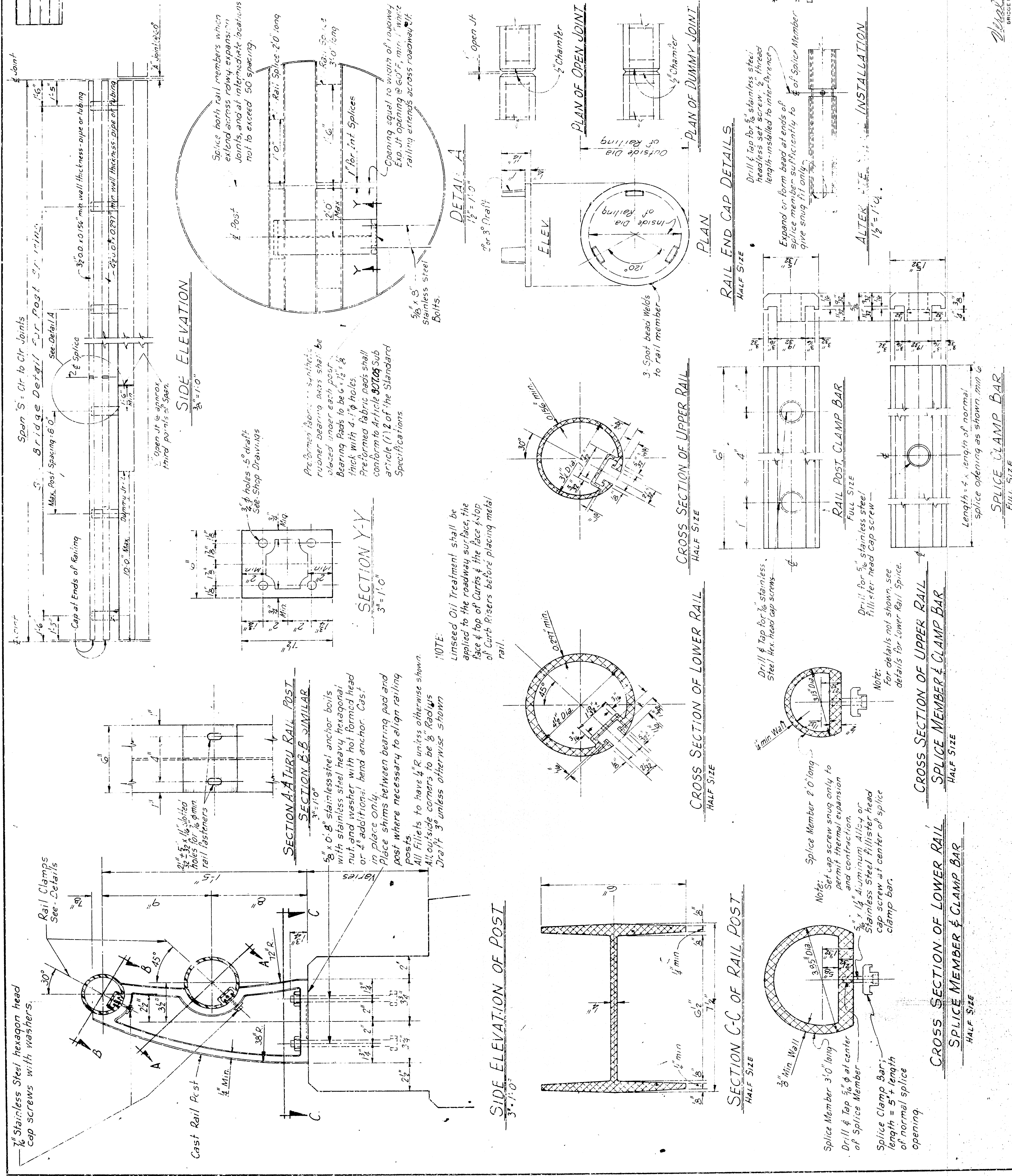
**LITTLE ROCK, ARK.**

DRAWN BY D.S. DATE 3-29-12 *As Noted*

TRACED BY \_\_\_\_\_  
 CHECKED BY WAS  
 DATE \_\_\_\_\_  
 SCALE \_\_\_\_\_

BRIDGE NO 5308.5309 DRAWING NO 17737

BRIDGE ENGINEER







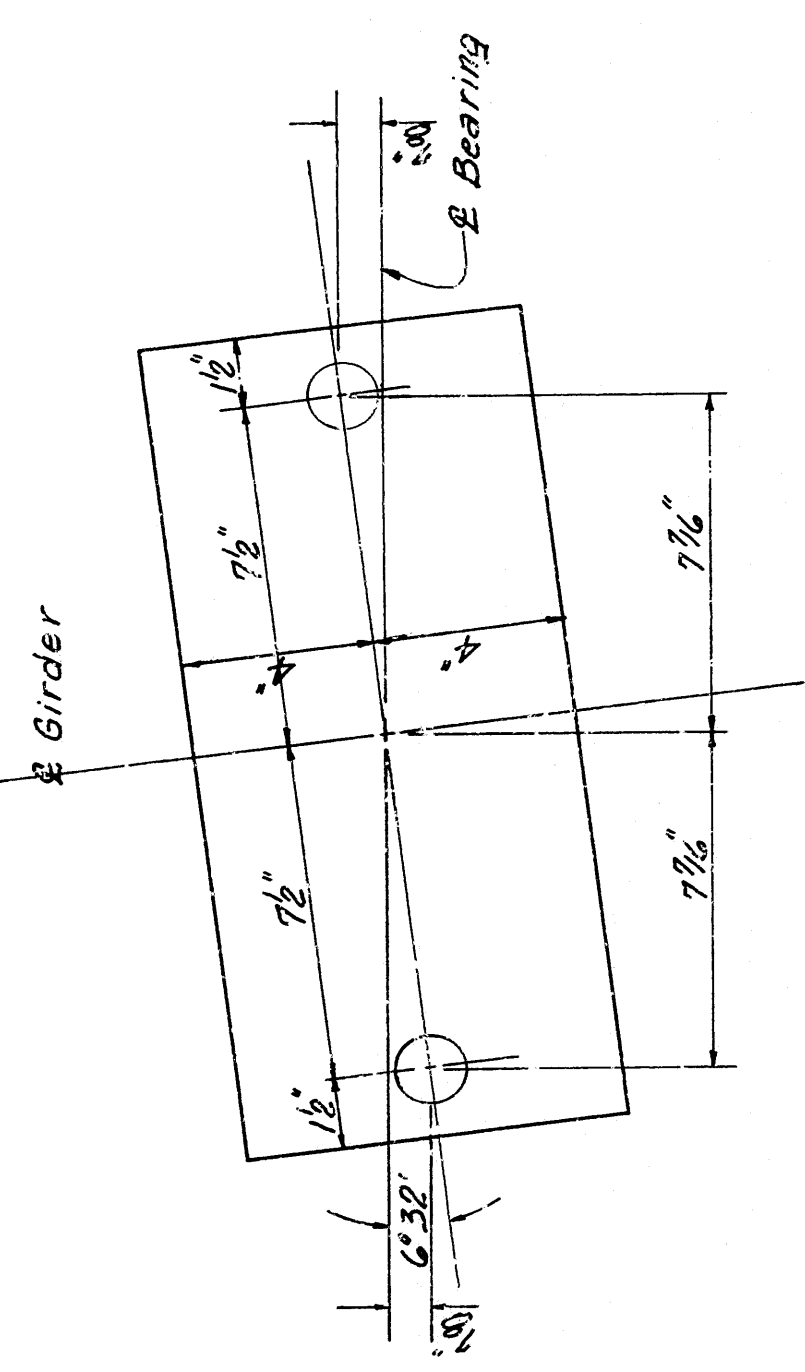


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BAR LIST (ONE BENT)

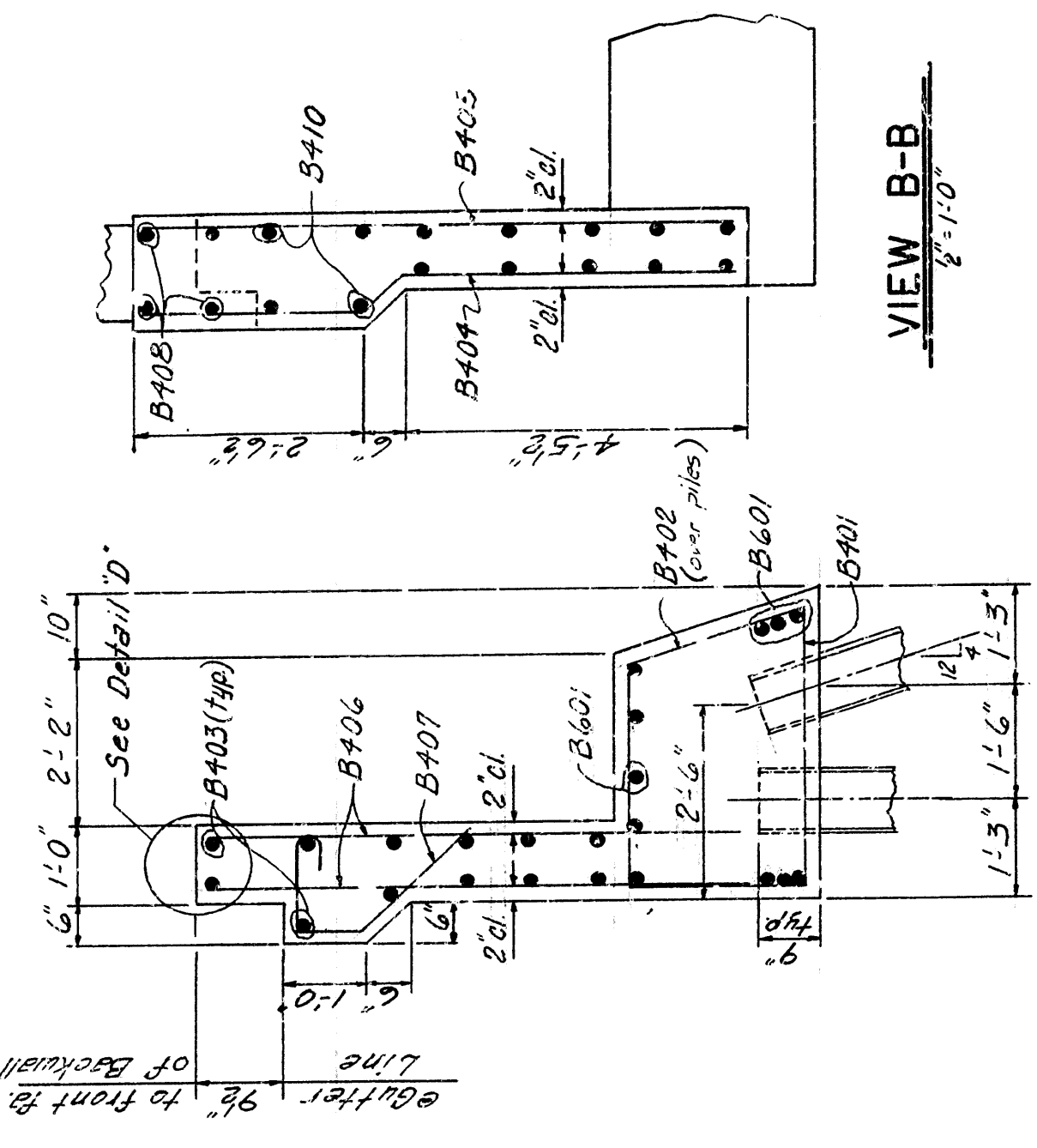
MARK	NO REQ'D	LENGTH	A	B	PIN DIA	BENDING DIAGRAMS
B601	11	31'-2"	-	-	5 1/2"	2'-10"
B602	12	4'-0"	-	-	5 1/2"	2'-10"
B301	8	31'-11"	1'-0"	8'-2"	12"	2'-3 1/2"
B401	28	11'-6"	See Diagram	2"	See Diagram	2'-3 1/2"
B402	21	7'-2"	See Diagram	2"	See Diagram	2'-3 1/2"
B403	12	31'-0"	-	-	5 1/2"	3'-7 1/2"
B404	10	7'-3"	See Diagram	2"	See Diagram	3'-0"
B405	10	7'-2"	-	-	5 1/2"	3'-0"
B406	62	6'-8"	-	-	5 1/2"	3'-0"
B407	31	31'-11"	See Diagram	2"	See Diagram	3'-0"
B408	6	4'-2"	-	-	5 1/2"	3'-0"
B409	15	6'-0"	-	-	5 1/2"	3'-0"
B410	15	6'-1"	1'-8"	4'-5"	2"	3'-0"

Dimensions are out to out of bars



ANCHOR BOLT PLAN

3'-7 1/2"



SECTION A-A

VIEW B-B

2'-10"

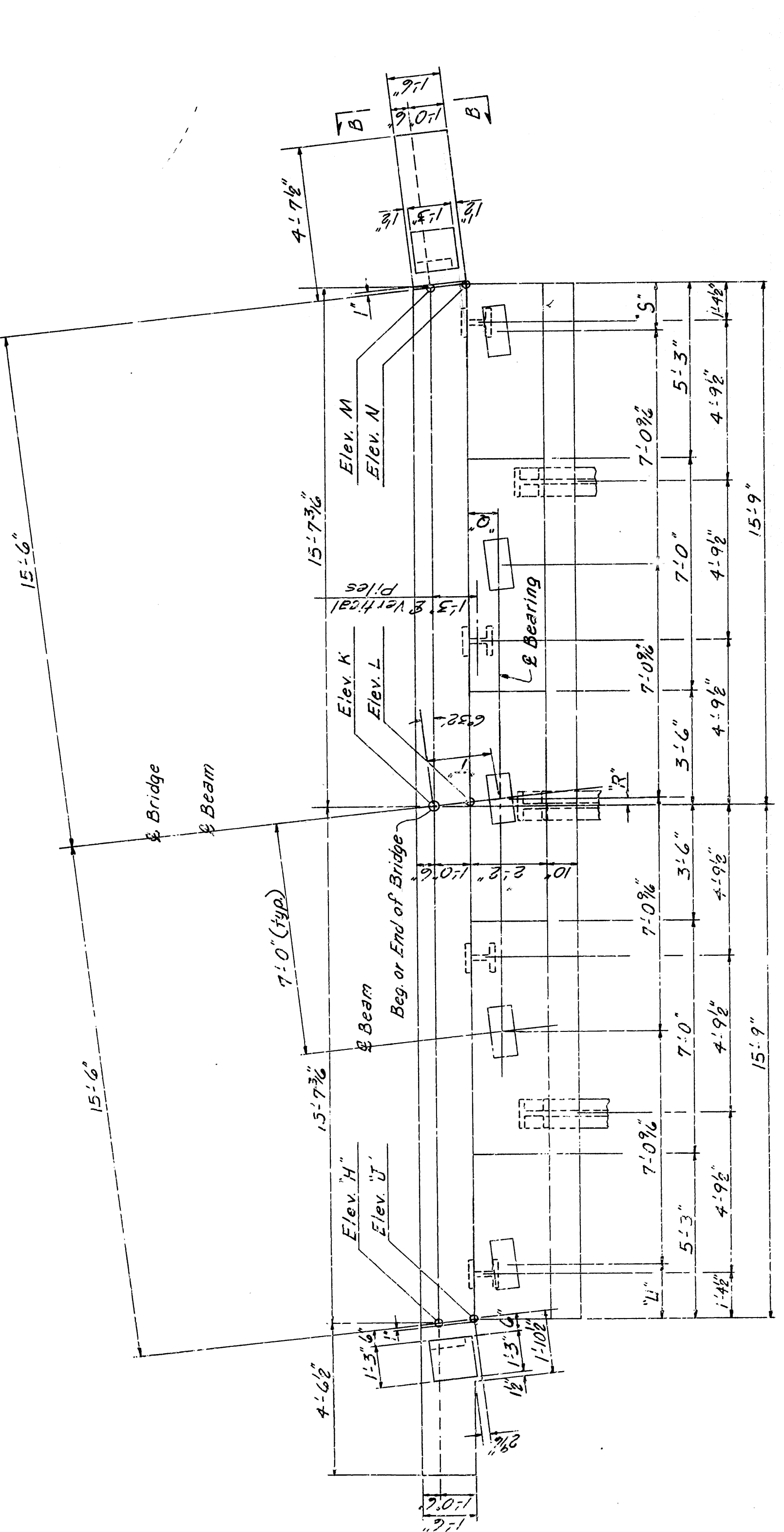
TABLE OF VARIABLES

VARIABLE	BENT 1	BENT 5
A	2"	1 1/2"
B	2"	1 1/2"
C	1 3/8"	1 1/2"
D	1 3/8"	1 1/2"
E	2'-7 1/2"	2'-0"
F	10"	10 3/8"
G	11 3/8"	10 3/8"
Elev. H	352.53	357.19
Elev. J	352.56	357.19
Elev. K	352.89	357.50
Elev. L	352.93	357.50
Elev. M	352.64	357.19
Elev. N	352.62	357.19
P	52'-7 1/2"	52'-7 1/2"
Q	10 3/8"	8 3/8"
R	2'-0"	2'-0"
S	1'-5 1/2"	1'-5 1/2"
T	1'-10 3/4"	1'-9"
U	1'-10 3/4"	1'-10 3/4"

NOTES: ALL CONCRETE SHALL BE CLASS S. ALL EXPOSED CORNERS TO BE CHAMFERED 3/4". REINFORCING STEEL TO BE ASTM A615, GRADE 40. SHOP LISTS AND BENDING DIAGRAMS MUST BE SUBMITTED AND APPROVAL SECURED BEFORE FABRICATION IS BEGUN. BACKWALL SHALL NOT BE POURED UNTIL GIRDERS HAVE BEEN PLACED ON BENT.

ALL STRUCTURAL STEEL TO BE ASTM A36.

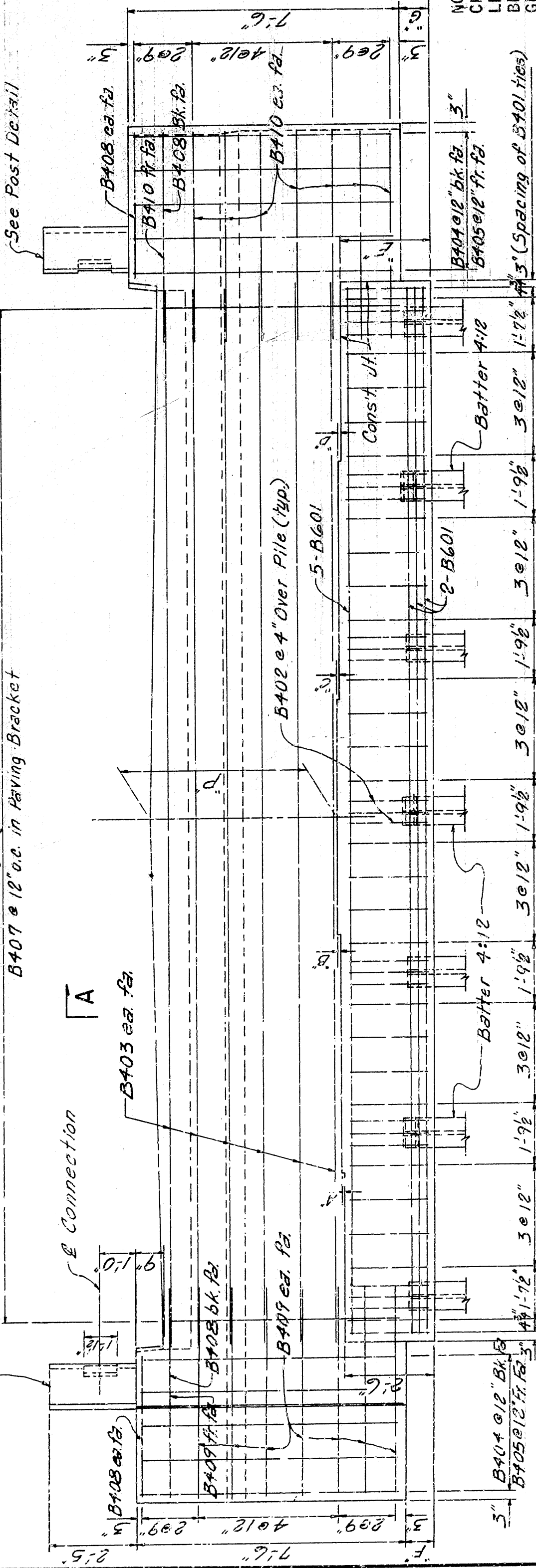
PILING SHALL BE HP10X42 STEEL BEARING PILES. SEE DWG. NO. 149954 FOR DETAILS OF PILE TIP REINFORCING. PILING SHALL BE DRIVEN TO A MINIMUM BEARING CAPACITY OF 55 TONS PER PILE.



PLAN

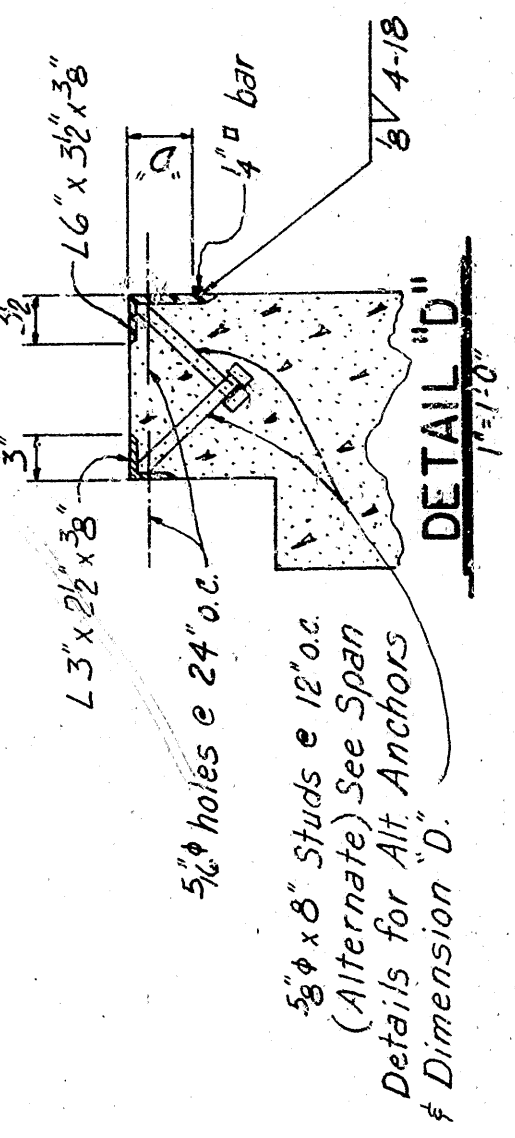
Place Type 'C' Bridge Name Plate on right-hand Turnout Post at beg. of Bridge only.

B406 @ 12" o.c. (each face of Backwall)  
B407 @ 12" o.c. in HAVING BRACKET



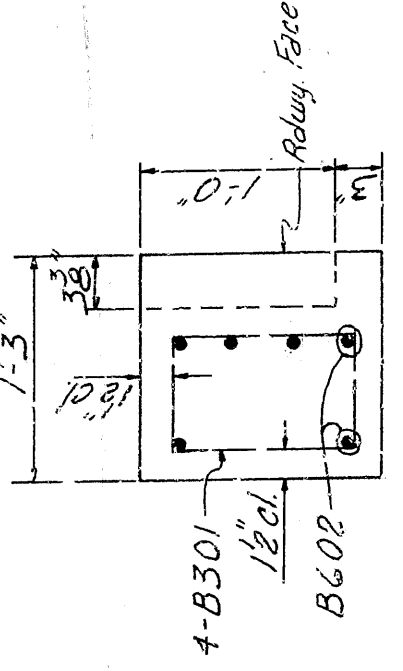
ELEVATION

LOOKING BACK - BENT 1  
LOOKING FORWARD - BENT 5



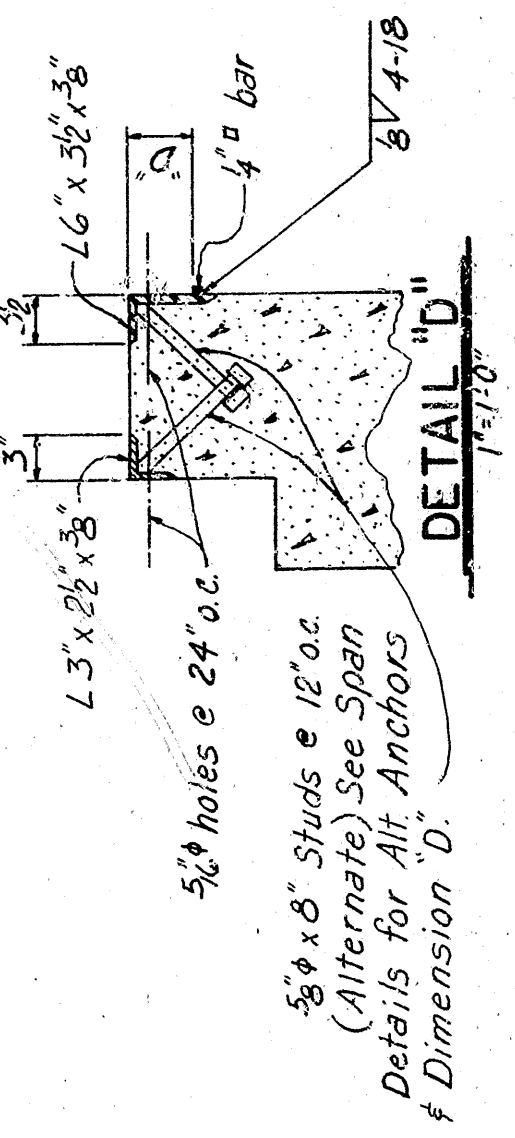
POST DETAIL

1'-10"



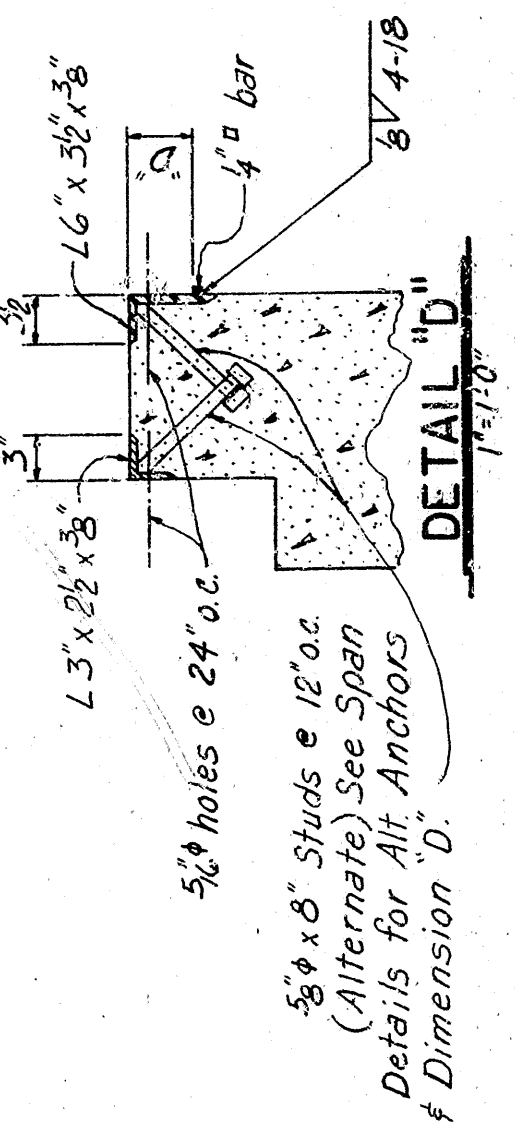
POST DETAIL

1'-10"



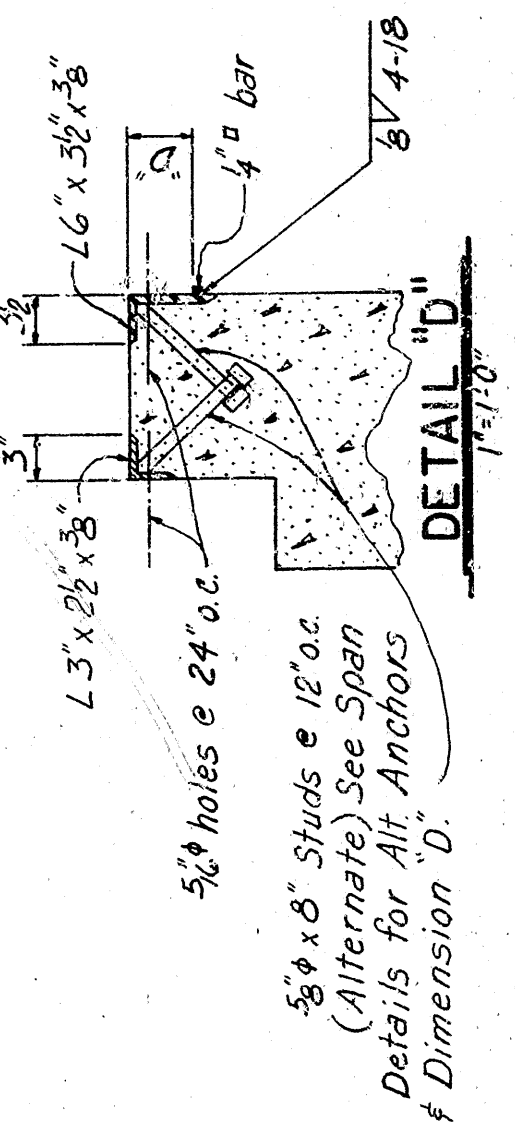
POST DETAIL

1'-10"



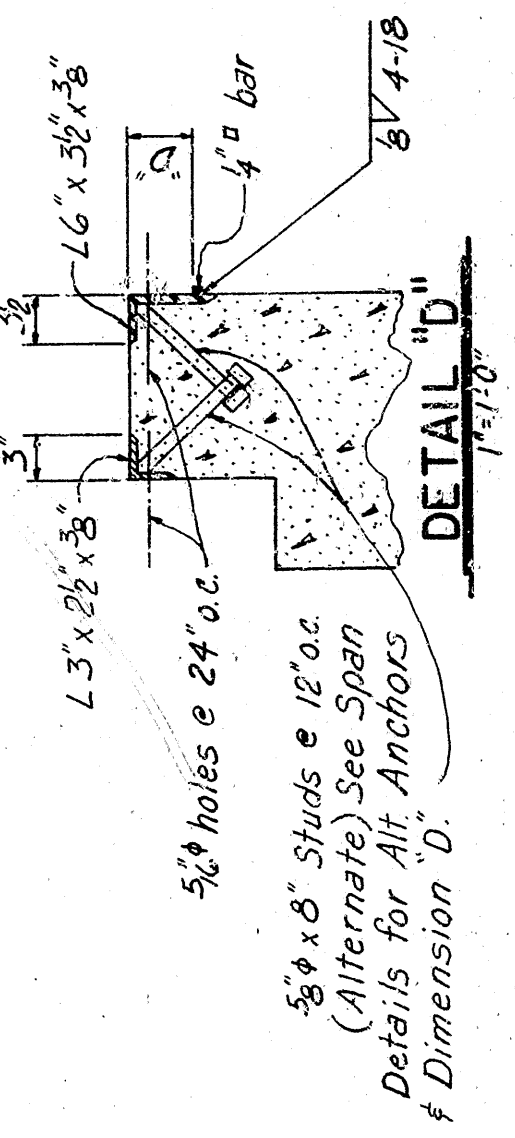
POST DETAIL

1'-10"



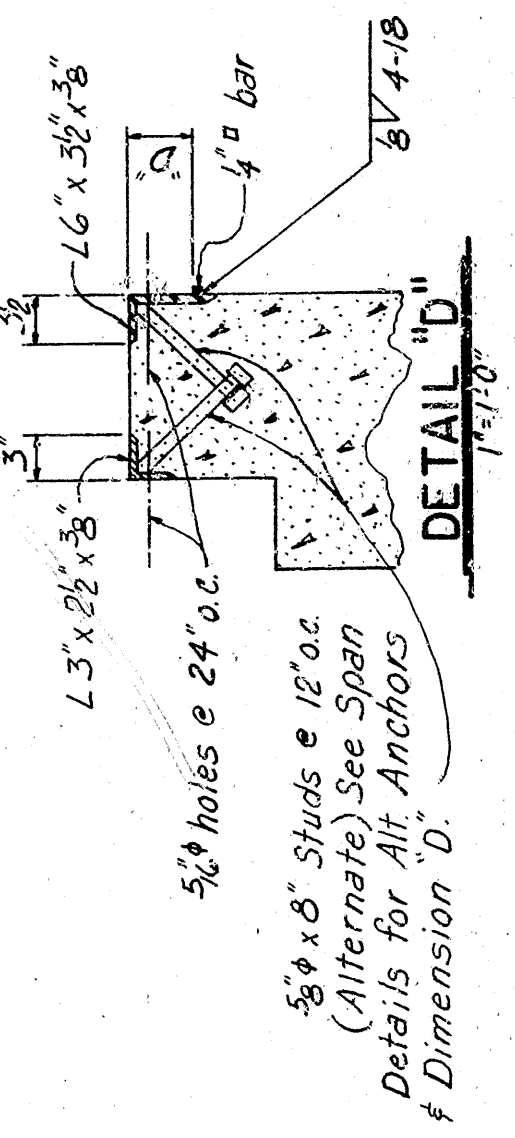
POST DETAIL

1'-10"



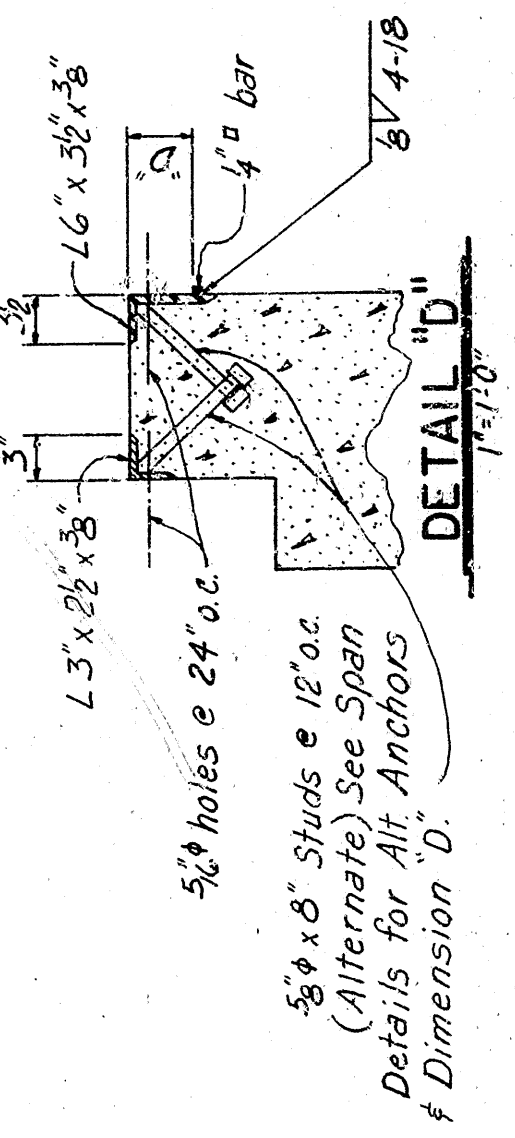
POST DETAIL

1'-10"



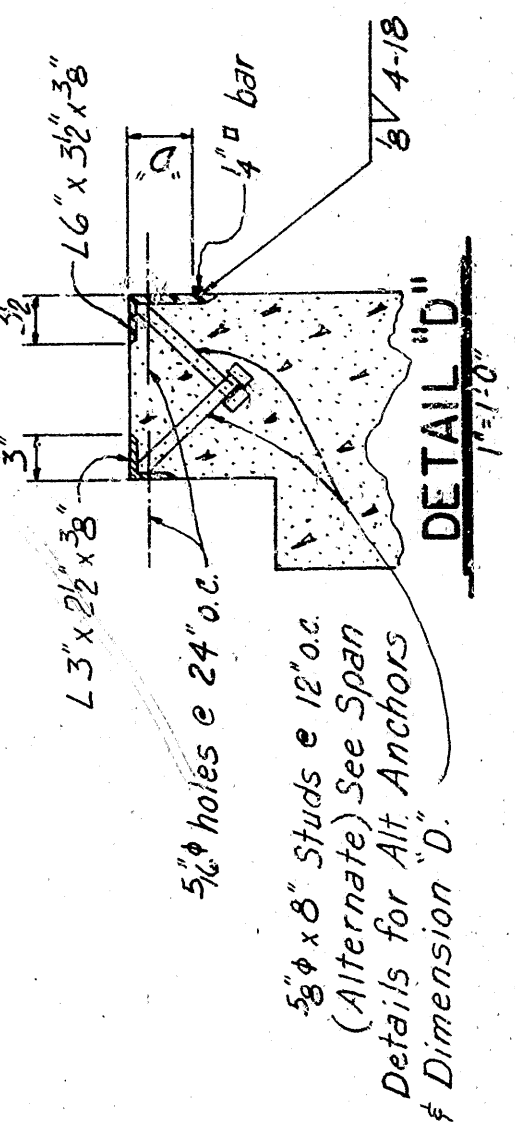
POST DETAIL

1'-10"



POST DETAIL

1'-10"





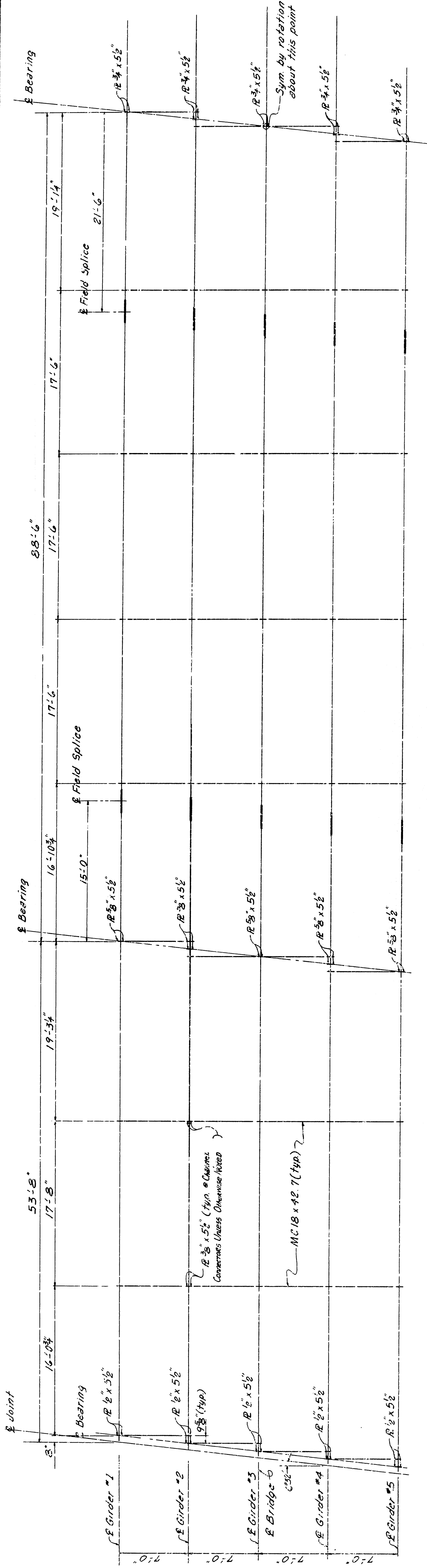




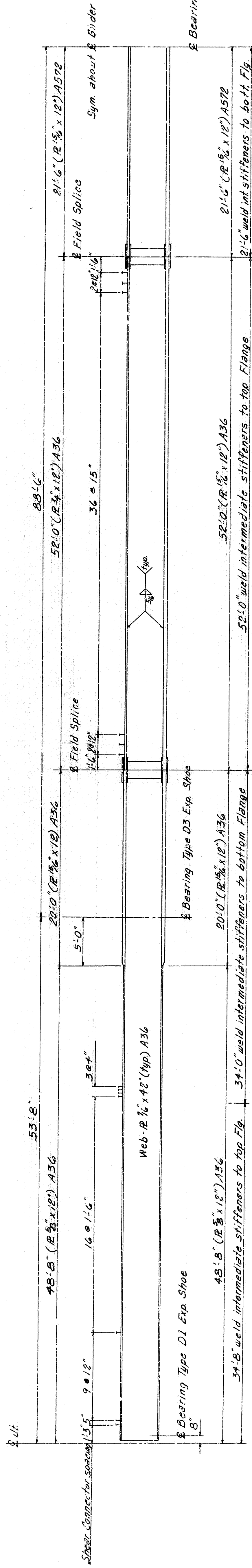




DATE REVISED	DATE PLUMED	DATE REBUILT	DATE FILLED	FOOT ROAD NO.	STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.	1430.8	70	31
						6847		
1 5309 SPAN DETAILS 17743								



FRAMING PLAN



GIRDER ELEVATION

SHEET 2 OF 4  
DETAILS OF CONTINUOUS WELDED  
PLATE GIRDER UNIT  
1430.8 RD. OVER I-430  
F. POCHS CREEK - COL. GLENN ROAD  
FILLASKI COUNTY  
ROUTE 1-430 SEC. 1  
ARKANSAS STATE HIGHWAY COMMISSION  
LITTLE ROCK, ARK.  
DRAWN BY: J.W.W. DATE: 2-10-72 SCALE: 3/8" = 1'-0"  
CHECKED BY: BCS DATE: 2-28-72  
BRIDGE NO. 5309 DRAWING NO. 17743



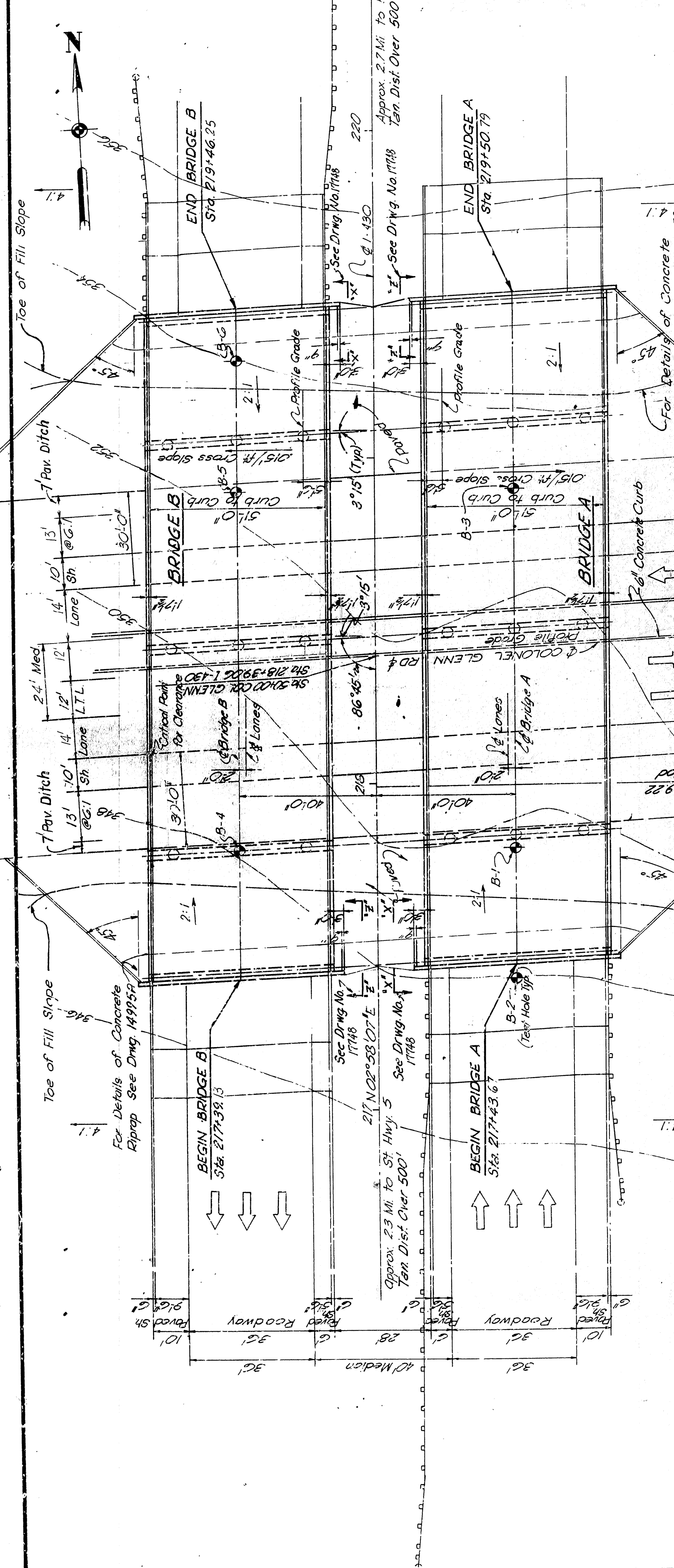








FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
6	ARK.	1-3-1-185	20	23
2-2-73	844	2-28-73		
DATE REVISION	DATE REVISION	DATE REVISION		
2-2-73	844	2-28-73		
JOB NO.	6847			
1	5510 A&B	LAYOUT 17746		



# VERTICAL CURVE DATA

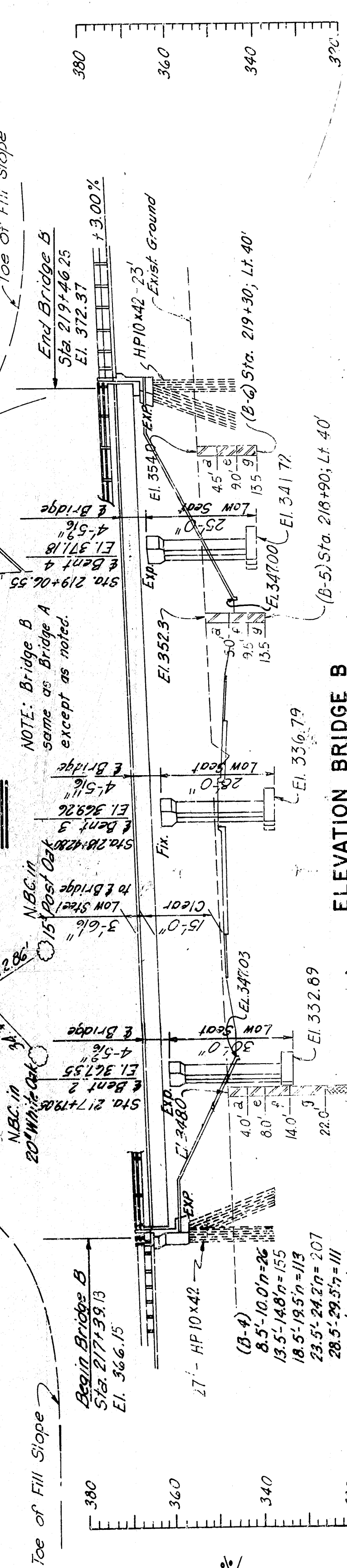
-2.40% +3.00% -3.00%  
 PVI Sta 210+00  
 Elev = 544.25  
 V.C. = 800'  
 PVI Sta 229+00  
 Elev = 401.25  
 V.C. = 1600'  
 PVI Sta 210+00  
 Elev = 544.25  
 V.C. = 800'

1-430  
 PROFILE GRADE

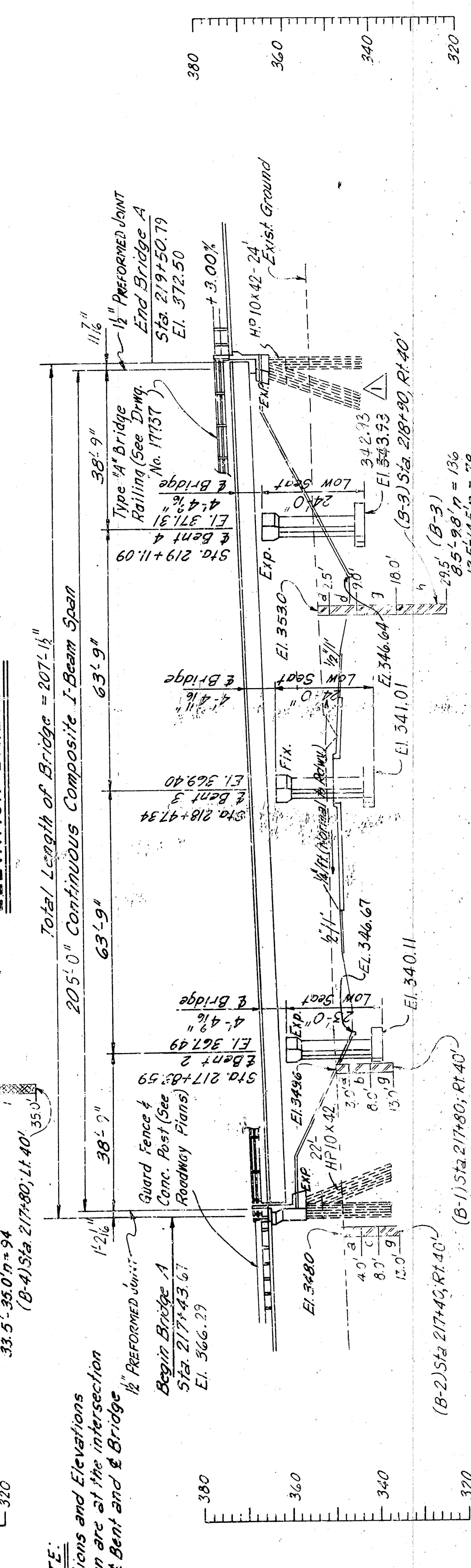
+0.40% -0.45% -2.00%  
 PVI Sta 41+50  
 Elev = 343.77  
 V.C. = 300'  
 PVI Sta 56+50  
 Elev = 347.02  
 V.C. = 200'

COLONEL GLENN RD.  
 THEORETICAL PROFILE GRADE

## PLAN



## ELEVATION BRIDGE B



## ELEVATION BRIDGE A

LAYOUT  
 I-430 OVER COLONEL GLENN RD.  
 PULASKI COUNTY  
 I-430 SEC. I  
 ARKANSAS STATE HIGHWAY COMMISSION

DRAWN BY: C.R. Babin  
 DATE: 7-23-69  
 CHECKED BY: B.V.F.  
 DATE: 3-26-71  
 BRIDGE NO. 5310 A&B  
 DRAWING NO. 17746

17746-17749  
 17749-17753  
 17753-17754

1971 AND APPLICABLE SPECIAL PROVISIONS.

Revised - Changed Elev 313.53 To 342.93 Sta. 41+50 L.D. 2-2-73

135'-9.8" = 136  
 135'-14.5" = 136  
 135'-19.5" = 136  
 235'-24.8" = 141  
 235'-29.5" = 141











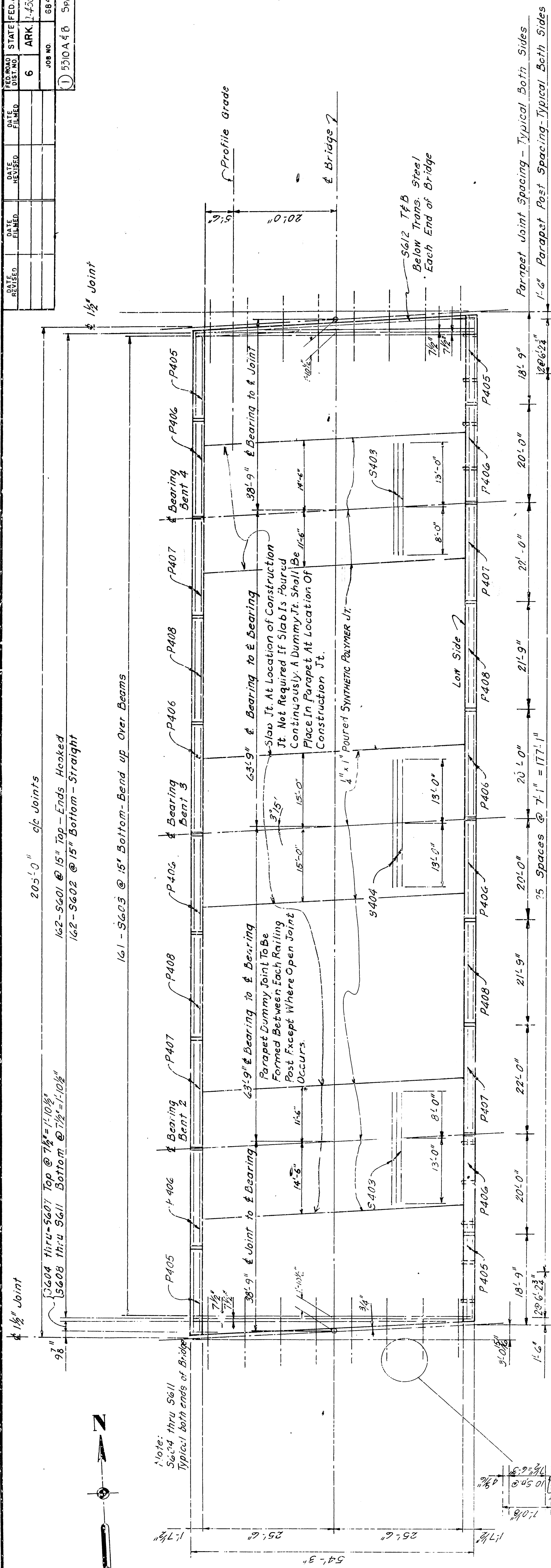








DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK	1-450-1-135172	72	
				JOB NO.		3847		
① 5310A-6B SPAN DETAILS 17751								



**SLAB PLAN**  
BRIDGE A SHOWN BRIDGE B SIMILAR  
Scale:  $\frac{3/8" = 1'-0"$

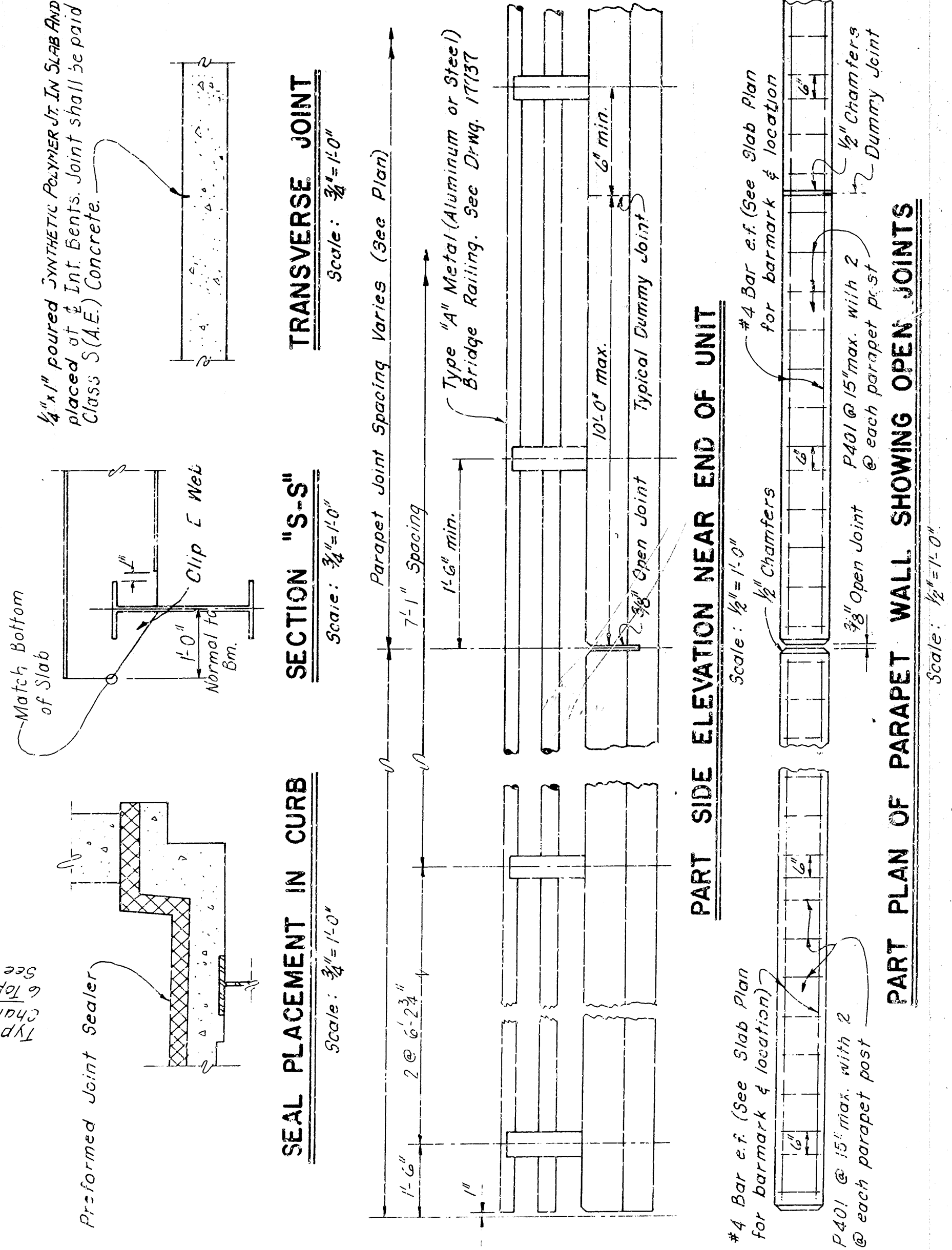
NOTES:

ALL CONCRETE SHALL BE CLASS S (A2).

REINFORCING STEEL TO BE ASTM A615, GRADE 40. SHOP LISTS AND BENDING DIAGRAM(S) ARE TO BE SUBMITTED AND APPROVAL SECURED BEFORE FABRICATION IS BEGUN.

ALL EXPOSED CORNERS SHALL HAVE 3/4" CHAMFER UNLESS NOTED.

FOR TYPICAL CROSS SECTION THRU SLAB, SEE DWG. 17763 FOR EA 17763, SEE DWG. 17763.



SLAB PLAN  
I-430 OVER COLUMBIA GLENN RD.  
FOURCREEK-COL GLENN ROAD  
PULASKI COUNTY  
I-430 SEC. I  
ARKANSAS STATE HIGHWAY COMMISSION  
LITTLE ROCK, ARK.  
DRAWN BY: *D.J. Allan* DATE: *12-4-62*  
TRACED BY: \_\_\_\_\_ DATE: \_\_\_\_\_  
CHECKED BY: *B.W.* DATE: *3-24-72*  
BRIDGE NO. **5310A8B** DRAWING NO. **1775**

Edward Finkert  
BRIDGE ENGINEER







