

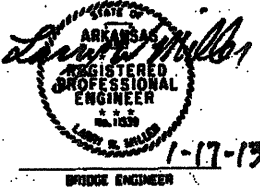
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FILED NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		B80109	46	86
				AAB3131 02808, A2808		QUANTITIES		53539

SCHEDULE OF BRIDGE QUANTITIES - JOB B80109

LOG MILE	UNIT OF STRUCTURE	ITEM NO.	509	802	803	SS & 804	SP JOB B80109	SP JOB B80109	SP JOB B80109	SP JOB B80109	SP JOB B80109
		ITEM	JOINT REHABILITATION (TYPE A)	GROOVING	CLASS 3 PROTECTIVE SURFACE TREATMENT	REINFORCING STEEL - BRIDGE (GRADE 60)	HYDRODEMOLITION	BRIDGE DECK REPAIR	VERY EARLY STRENGTH LATEX MODIFIED CONCRETE OVERLAY (1½" THICK)	VERY EARLY STRENGTH LATEX MODIFIED CONCRETE (VARIABLE DEPTH)	SILICONE JOINT SEALANT
		UNIT	LIN. FT.	SQ. YD.	LIN. FT.	LBS.	SQ. YD.	SQ. FT.	SQ. YD.	CJ. YD.	LIN. FT.
112.5	EXISTING BRIDGE NO. A3131			1997	971	500	2104.5	2841	2109.0	29.2	316
112.5	EXISTING BRIDGE NO. B3131			1997	971	500	2104.5	2841	2109.0	29.2	316
104.8	EXISTING BRIDGE NO. 02808		79	333	162		351.0		351.8	4.9	
104.8	EXISTING BRIDGE NO. A2808		79	333	162		351.0		351.8	4.9	
TOTALS FOR JOB NO. B80109			158	4,660	2,266	1,000 ①	4,911.0	5,682 ①	4,921.6	68.2 ①	632

① This quantity shown is for estimating and bidding purposes only. Actual quantity, if any, will be determined in the field.

SCHEDULE OF BRIDGE QUANTITIES
1-40 - JERICHO (S)
CRITTENDEN COUNTY
ROUTE 1-55 SEC.
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.



DRAWN BY: JLM DATE: 11-12 FILENAME: bbb0109.q1.dgn
CHECKED BY: SSP DATE: 12-12 SCALE: None
DESIGNED BY: JLM DATE: 11-12
BRIDGE NO. AAB3131
02808, A2808 DRAWING NO. 53539

Hand tools shall be used as required to remove concrete adjacent to curbs and joints (Typ.)

Apply Class 3 Protective Surface Treatment

1½" Very Early Strength Latex Modified Concrete Overlay (Req'd. Min. Thickness) to match existing deck surface elevations.

Remove 1½" of existing concrete using Hydrodemolition.

C.L. Lanes

2'-0"

1'-11"

2'-0"

C.L. Bridge

12'-0" Traffic Lane (Min.)

Shoulder

Temporary Precast Concrete Barrier *

W-Beam Spans (See Existing Bridge Details, Dwg. Nos. 53544-53549)

INSIDE LANE VERY EARLY STRENGTH LATEX MODIFIED CONCRETE OVERLAY
(Looking in direction of traffic)

NOTE:
The minimum overlay placement length shall be

See Std. Dwg. TC-4.

Shoulder

12'-0" Traffic Lane (Min.)

* Temporary Precast Concrete Barrier

2'-0"

2'-0"

C.L. Lanes

2'-0"

C.L. Bridge

Outside Lane Overlay

Saw cut and remove 1" of initial VESLMC Overlay when preparing surface for adjacent Overlay

Long. Const. Joint See Detail, Dwg. No. 53542

1 1/2" Very Early Strength Latex Modified Concrete Overlay (Req'd. Min. Thickness) to match existing deck surface elevations.

Remove 1 1/2" of existing concrete using Hydromolition.

Apply Class 3 Protective Surface Treatment

W-Beam Spans (See Existing Bridge Detail Is, Dwg. Nos. 53544-53549)

OUTSIDE LANE VERY EARLY STRENGTH LATEX MODIFIED CONCRETE OVERLAY

(Looking In direction of traffic).

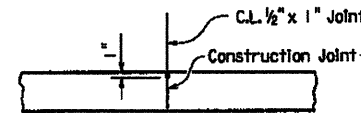
PROTECTIVE SURFACE TREATMENT: The longitudinal joint between the VESLMC overlay and the adjacent existing concrete curb or rail shall be given a Class 3 Protective Surface Treatment as specified in Section 803 and in accordance with Job Special Provision "Very Early Strength Latex Modified Concrete Overlay".

The diagram illustrates the cross-section of a bridge deck repair. Key components and labels include:

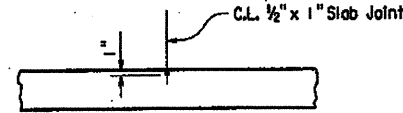
- Maximum Removal by Hydromatolition (As directed by the Engineer)**: Indicated by a vertical arrow on the left side of the deck.
- 1/2" Min. Cir.**: A circular feature on the left side of the deck.
- 1 1/2" Removal (Entire Surface)**: A vertical arrow indicating the removal of the top surface layer.
- Top of Existing Deck & Finished surface of VESLMC Overlay**: A horizontal line at the top of the existing deck.
- Top Mat of Reinforcing Steel**: A horizontal line below the top surface layer.
- 1" Min. to surface of secure coarse aggregate**: A vertical arrow indicating the thickness of the coarse aggregate layer.
- 1 1/2" VESLMC Overlay (Req'd. Min. Thickness)**: A horizontal line indicating the thickness of the VESLMC overlay.
- Variable Depth VESLMC (As directed by the Engineer.)**: A horizontal line indicating the variable depth of the VESLMC overlay.
- Bridge Deck Repair (As directed by the Engineer, Depth Variable)**: A horizontal line indicating the depth of the bridge deck repair.
- Pay Limit of Bridge Deck Repair**: A horizontal line indicating the pay limit of the bridge deck repair.
- Bottom Mat of Reinforcing Steel**: A horizontal line at the bottom of the deck.

STATE OF
ARKANSAS
REGISTERED
PROFESSIONAL
ENGINEER
No. 10330
LEWIS W. MILLER
1-17-1
BRIDGE ENGINEER

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0109	50	80
						A3131, B3132	VESLMC OVERLAY	53542



Use 1/2 x 1 inch Type 3, 4 or 6 Joint Sealer. See subsections 501.02 (h) and 501.05 (j). Backer Rod shall not be installed. Joint Sealer shall be measured and paid for as VESLMC Overlay. Sealant must be gray or other color similar to concrete.



Use 1/2 x 1 inch Type 3, 4 or 6 Joint Sealer. See subsections 501.02 (h) and 501.05 (j). Backer rod shall not be installed. Joint Sealer shall be measured and paid for as VESLMC Overlay. Slab joints shall extend to the outside edge of the deck slab. Slab joints shall be placed at all pouring sequence construction joints and are required at existing slab joint locations.

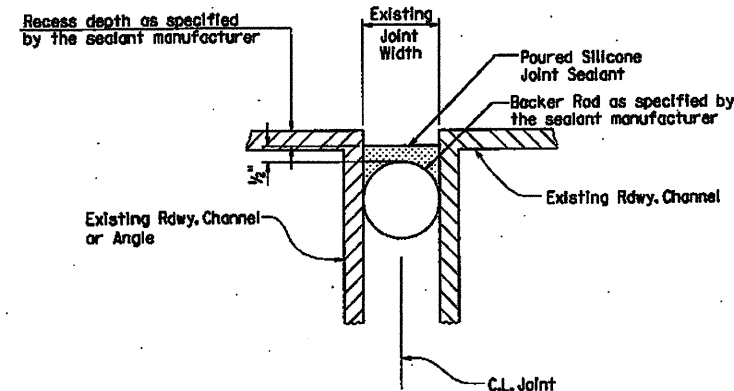
Slab joints and longitudinal construction joints shall be sawed as soon as the concrete has sufficiently set to allow sawing of the joint without damage to the Overlay.

LONGITUDINAL OVERLAY CONSTRUCTION JOINT DETAIL

No Scale

OVERLAY JOINT DETAIL

No Scale



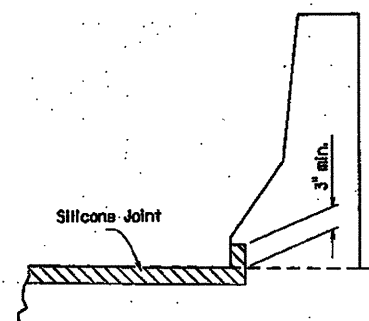
Notes: Backer rods shall be extended beyond the length of the poured joint in the initial joint rehabilitation area so that the two pieces can be properly spliced together prior to installing sealant for the adjacent joint rehabilitation. Manufacturer's recommendations shall be followed to prevent sealant leakage during rehabilitation work.

Existing Joint Seal shall be completely removed, backer rods placed, and Silicone Joint Sealant installed across the entire width of the bridge deck in accordance with these details and Manufacturer's instructions. Removal of existing Joint Seal will not be paid for directly, but shall be considered incidental to the item "Silicone Joint Sealant".

POURED SILICONE JOINT SEAL DETAILS

TYPE B JOINT REHABILITATION

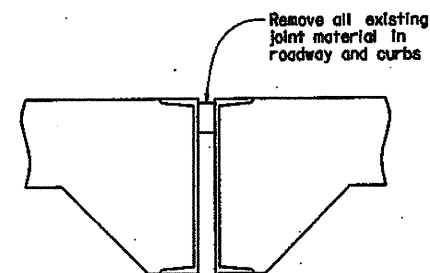
No Scale



Notes: Vertical joints may require forming. The clearance from deck surface to joint material shall be maintained.

JOINT SEAL PLACEMENT AT CURB

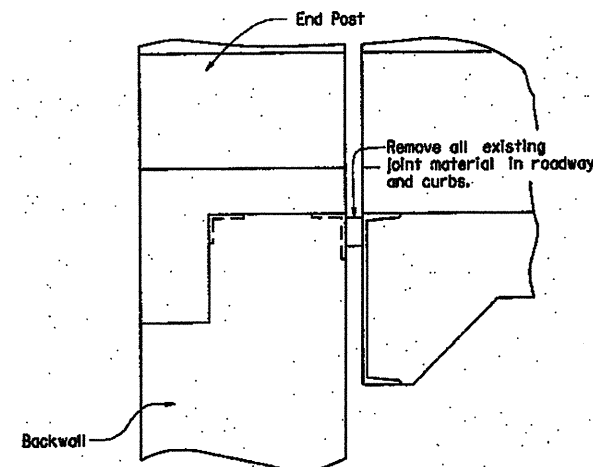
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REMOVAL DETAILS AT INT. BENTS

TYPE B JOINT REHABILITATION

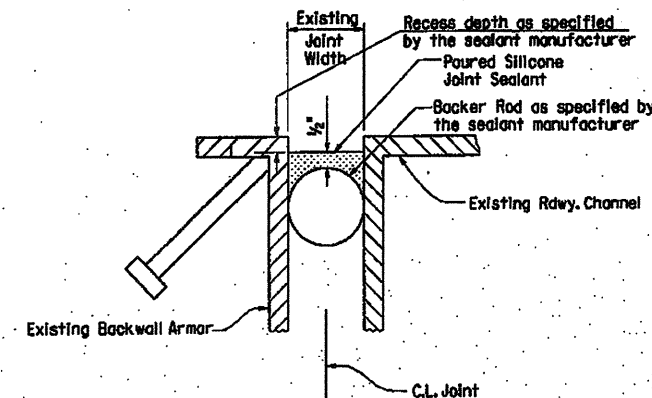
Scale: 1/2" = 1'-0"



REMOVAL DETAILS AT END BENTS

TYPE B JOINT REHABILITATION

No Scale



POURED SILICONE JOINT SEAL DETAILS

AT END BENTS

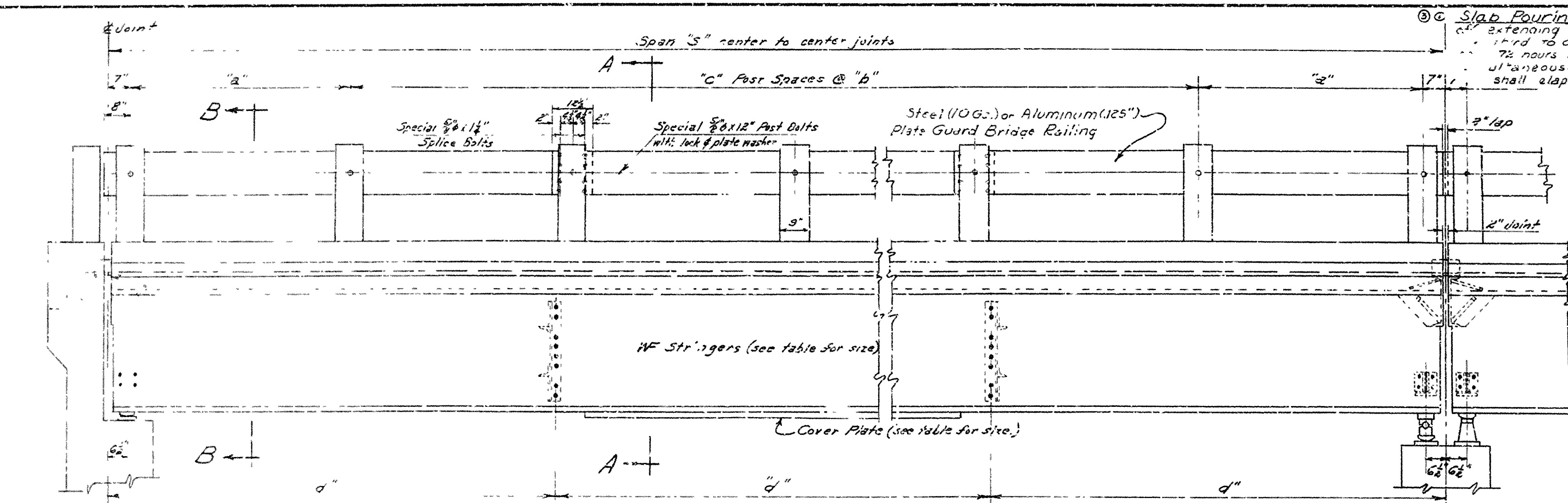
No Scale

SHEET 2 OF 3
DETAILS OF VERY EARLY STRENGTH
LATEX MODIFIED CONCRETE OVERLAY
I-40 - JERICHO (S)

ROUTE 1-55 SEC.
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: L.M. DATE: 11-12 FILENAME: bbb0109.d2.dgn
CHECKED BY: SSP DATE: 12-12-12 SCALE: As Shown
DESIGNED BY: L.M. DATE: 11-12
BRIDGE NO. A3131, B3131 DRAWING NO. 53542





Notes: Floor slab may be poured in one continuous operation with no stress at the whole length, or may be poured in increments with the center (or half span length) poured first. After the center section is poured, not less than 48 hours before pouring the end sections. The end sections may be poured if not poured simultaneously, 48 hours between end section pours.

GENERAL NOTES

All concrete to be Class "S". All exposed corners to be chamfered $\frac{3}{8}$ " flat. Connections for diaphragms to be riveted or bolted with high strength bolts. Rivets: $\frac{3}{4}$ ". Open holes $\frac{1}{2}$ " except where noted otherwise.

Structural shapes of equal or greater strength may be substituted for shapes shown, but payment will be made on the basis of shapes shown or those actually used, whichever is less.

All welded connections to be shop welded except as noted. All welding shall conform to the American Institute of Steel Construction, Inc. Specification for Welded Highway and Railway Bridges, 3rd Edition 1950.

Shop Rivets: All structural steel except surfaces in contact with concrete shall be given one coat of red lead and one 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 a manner as 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.

Reinforcing steel is to be deformed bars of intermediate grade unless modified by special provisions. The reinforcing steel is to be accurately located in the forms and, firmly held in place by wire supports, sufficient in number and size to prevent displacement during the course of construction. 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 secured before fabrication is begun.

Handrail to be steel plate g-irons of the type shown or an equivalent rigid type as approved by the Engineer. Handrail, including caps and fastenings shall be paid for at the unit price bid per linear foot for "Steel Plate Guard Bridge Rail."

SPECIFICATIONS: Arkansas State Highway Commission Standard Specifications for Highway Construction, Edition of 1959.

LOADING: 420 516 A.A.S.H.O. 1957			UNIT STRESSSES
DEAD LOAD:	INTERIOR STRINGERS	EXTERIOR STRINGERS	Class 3 Conc. (110) 1800 psi
To W Beam	526% + 105% (W.F. & Cover R)	769% + 105% (W.F. & Cover R)	Structural Steel 18,000 psi
To Composite Beam	90%	90%	Reinforcing Steel 20,000 psi
LIVE LOAD:			
To each Comp. Beam	1.182 wheels + I	1.156 wheels + I	

VARIABLES - 55' THRU 100' SPANS

SPAN "5"	STRINGER REQUIRED	COVER PLATES		POST BRACINGS			STANCHION NO. @ 6"	"C"	LEAD TO DEFLECTION	
		INTERIOR	EXTERIOR	"A"	"B"	"C"			INTER.	EXTER.
55'	3"	150	—	5-11	6-0	7	3 @ 16'-4"	3'-5 1/2"	1/8"	1/8"
60'	3 1/2"	150	3/4" x 10'-0"	5-11	5-10 1/2	8	3 @ 20'-0"	3'-5 1/2"	1/8"	1/8"
65'	3 1/2"	160	3/4" x 6" x 25'-0"	5-8	5-10	9	4 @ 16'-3"	3'-5 1/2"	1/8"	1/8"
70'	3 1/2"	170	3/4" x 6" x 30'-0"	5-8	5-9	10	4 @ 17'-6"	3'-5 1/2"	1/8"	1/8"
75'	3 1/2"	182	3/4" x 10" x 40'-0"	6-1	6-2	10	4 @ 18'-9"	3'-5 1/2"	1/8"	1/8"
80'	3 1/2"	194	1" x 10" x 44'-0"	5-11	6-1	11	4 @ 20'-0"	3'-5 1/2"	1/8"	2
85'	3 1/2"	220	3/4" x 10" x 40'-0"	5-11	6-0	12	5 @ 17'-0"	3'-5 1/2"	1/8"	2
90'	3 1/2"	230	1" x 12" x 50'-0"	5-11 1/2	5-11	13	5 @ 19'-0"	3'-5 1/2"	2 1/8"	2 1/8"
95'	3 1/2"	230	1" x 14" x 58'-0"	5-11 1/2	5-13 1/2	14	5 @ 19'-0"	3'-5 1/2"	2 1/8"	3 1/8"
100'	3 1/2"	230	1" x 16" x 64'-0"	5-11 1/2	6-2	14	5 @ 20'-0"	3'-5 1/2"	2 1/8"	3 1/8"

* Steel for these beams and cover plates shall conform to the specifications for Structural Steel, by McKinnon, A.S.T.M. Specification A.333.

BAF LIST - ONE SPAN.

Set 110 of drain 1" long and transverse size to meet.

Drain opening 3" x 7" located to 3 1/2" x 7 1/2". Pipes at equal 20" centers on low side of support roadway & each side of crowned roadway. Omit drains on over spans unless called for on the plans.

SECTION THRU DRAIN

Scale: 1" = 1'-0"

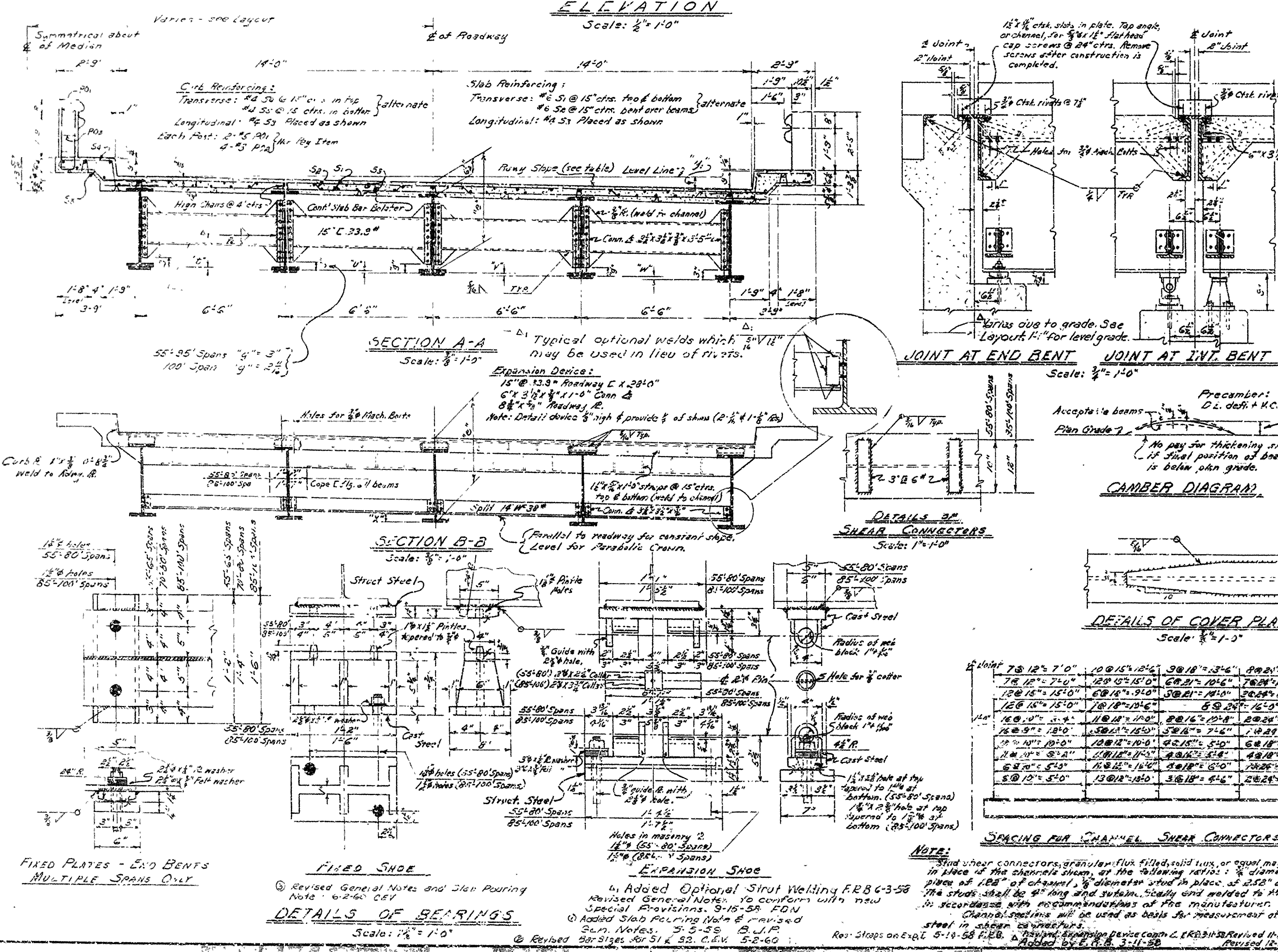
MARK	SIZE	NUMBER REQUIRED EACH SPAN						LENGTH	PIN DIA.	BENDING DIAGRAM		No. REQ. EACH SPAN			
		55'	60'	65'	70'	75'	80'					85'	90'	95'	100'
S ₁	#6	90	98	106	114	122	130	29'-2"	5/8"			138	146	154	162
S ₂	#6	88	98	106	114	122	130	29'-10"	3/4"			62	72	76	80
S ₃	#4	159						54"	1 1/2" x 1 1/2"			159			
S ₄	#4	90	98	106	114	122	130	5'-3"	3"			138	146	154	162
S ₅	#4	88	96	104	112	120	128	4'-3"	3"			15	144	152	160
P01	#5	40	44	48	52	56	60	5'-10"	1 1/2"			60	64	68	68
P02	#3	80	88	96	104	112	120	2'-2"	1 1/2"			120	125	136	136

The diagram shows a cross-section of a symmetrical box girder bridge. The bridge has a total width of 30' at the base. The piers are 15' wide and 33.9' high. The bridge deck is 15' wide and 33.9' high. The bridge is symmetrical about the centerline of the roadway. The table below provides variables for sloped or crowned piers.

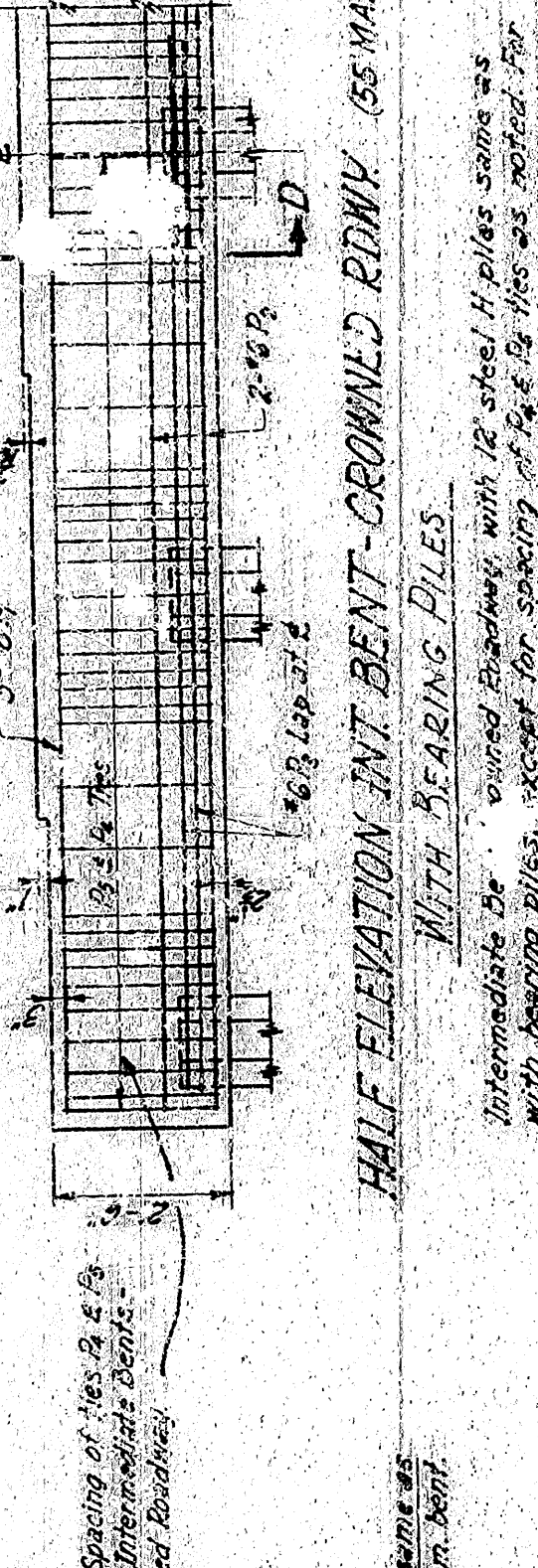
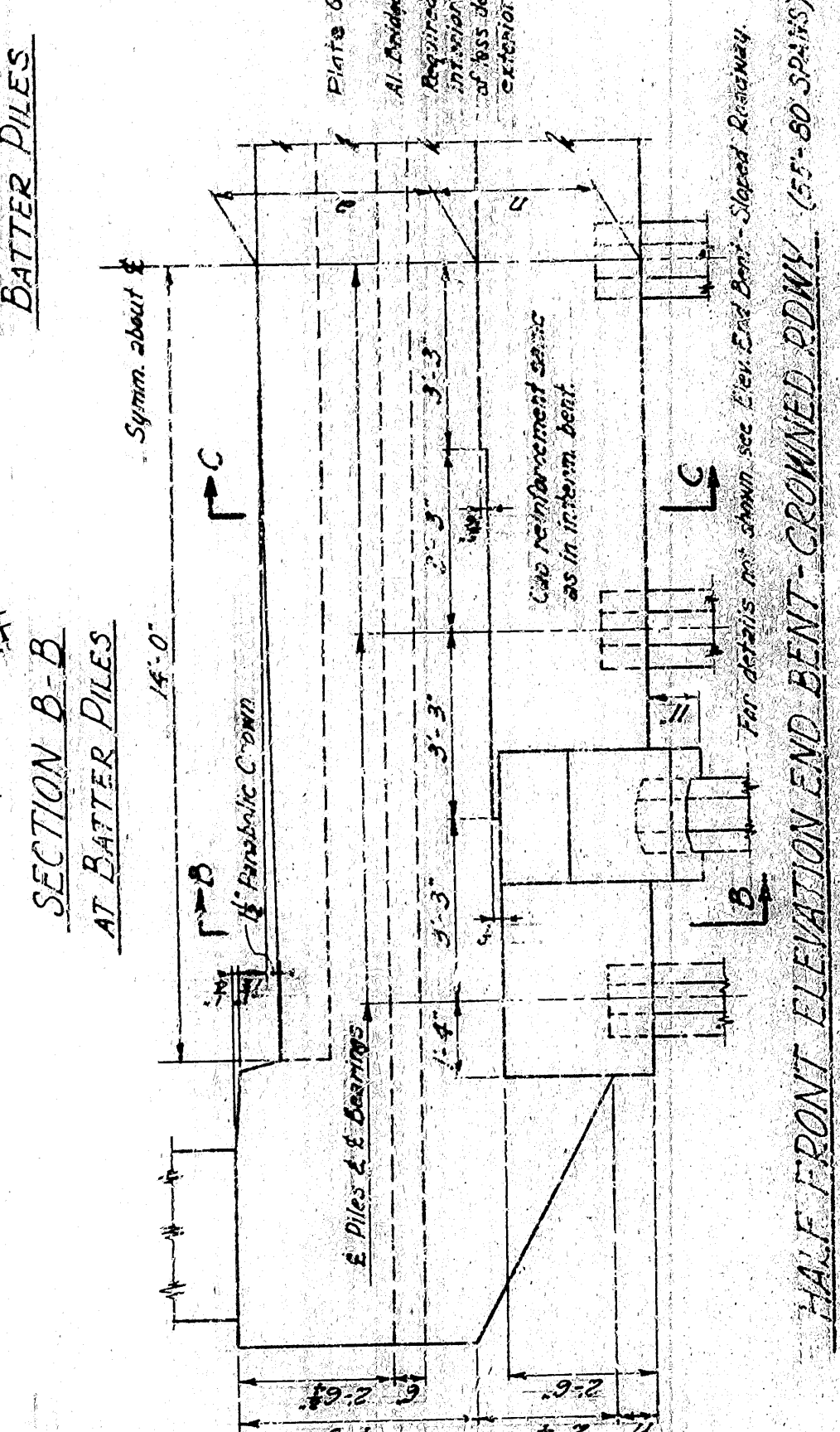
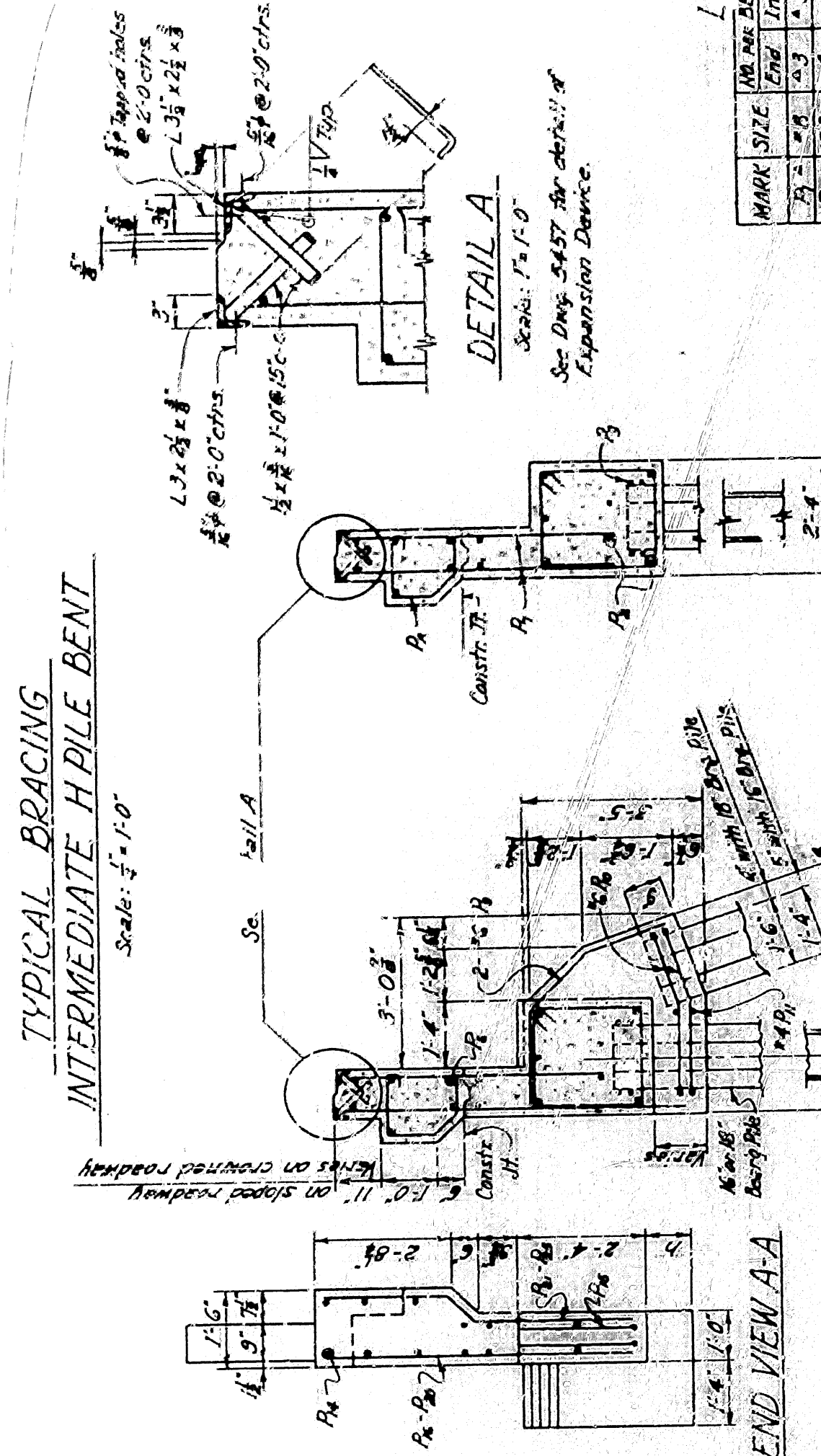
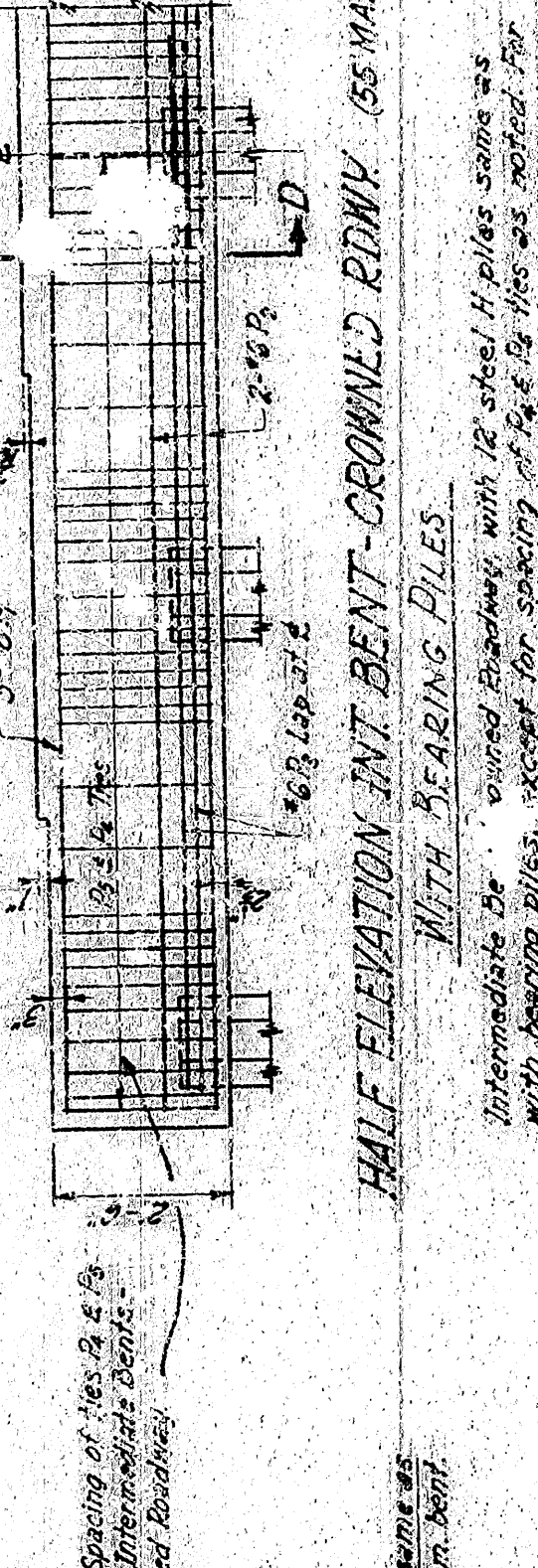
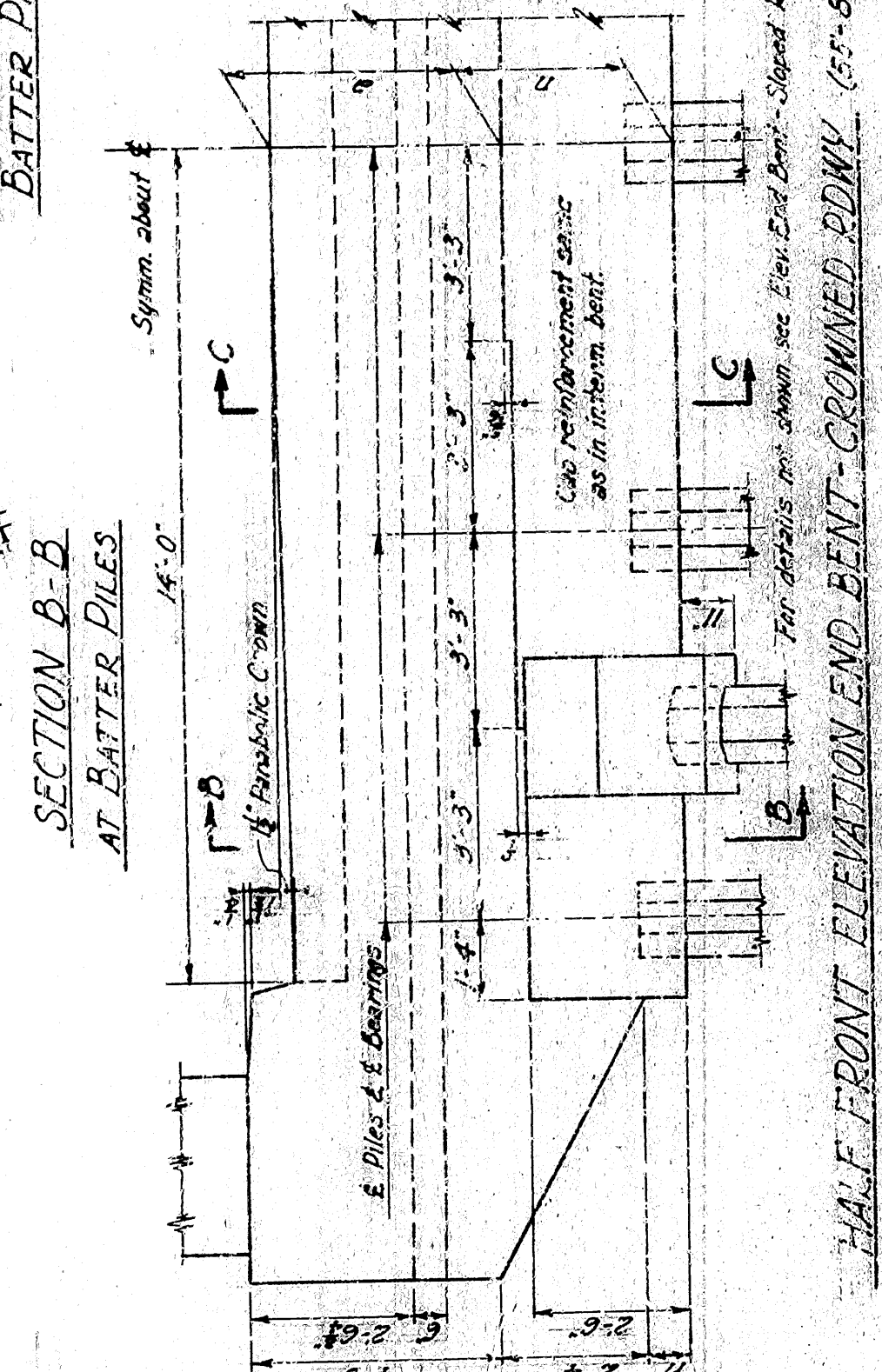
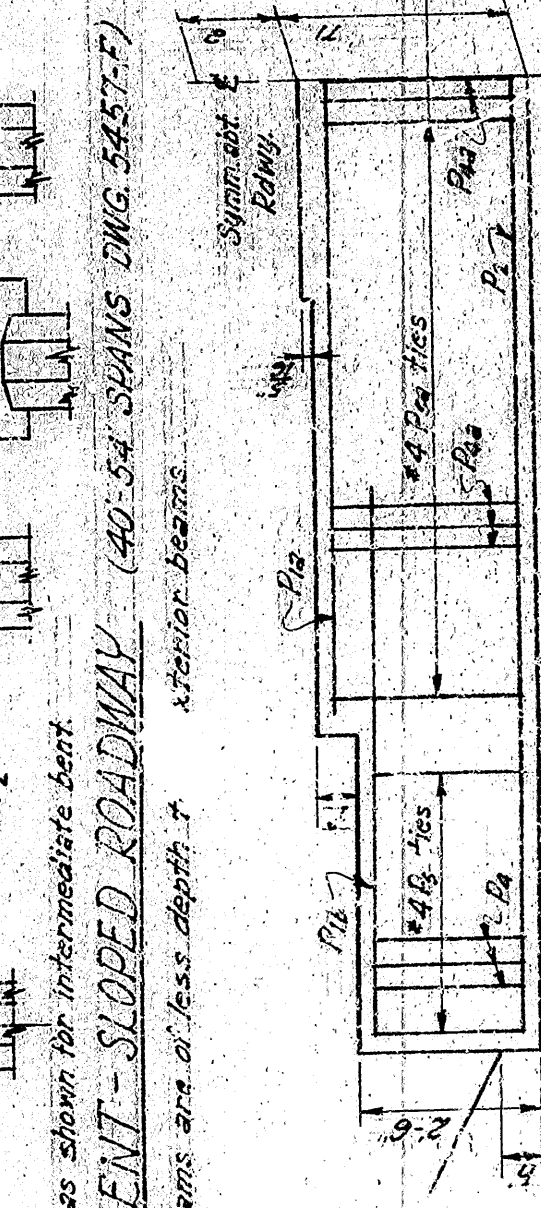
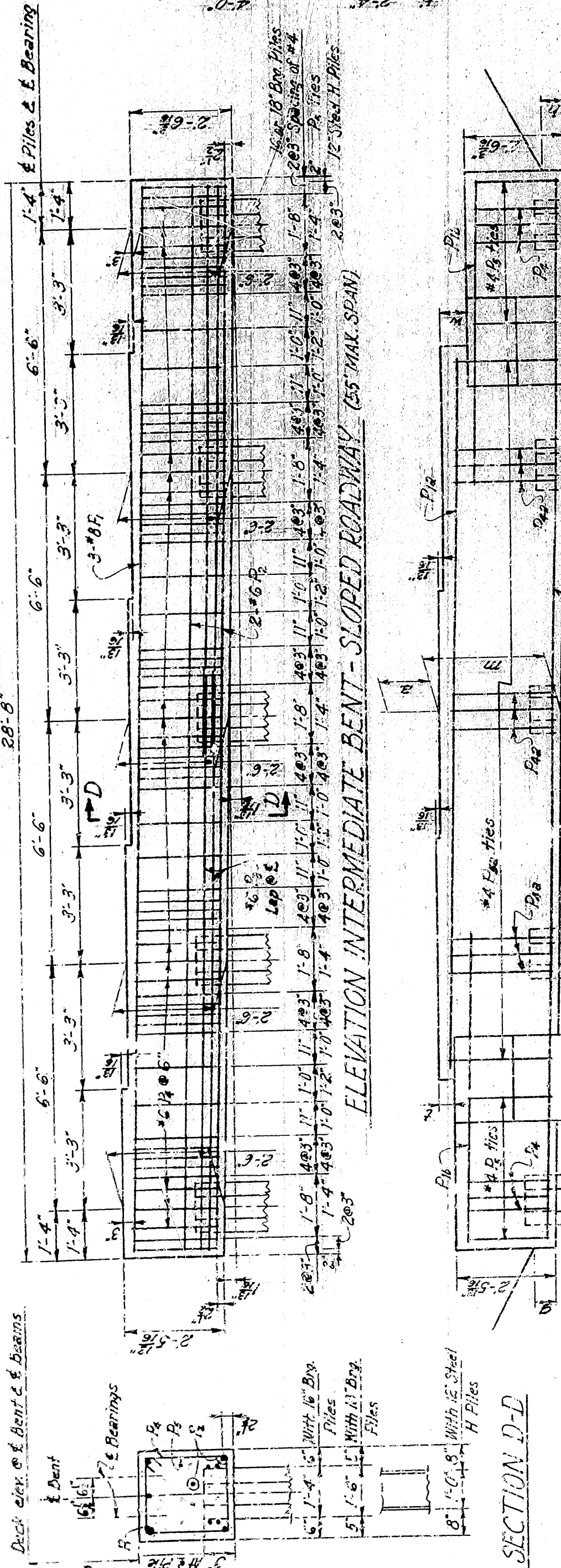
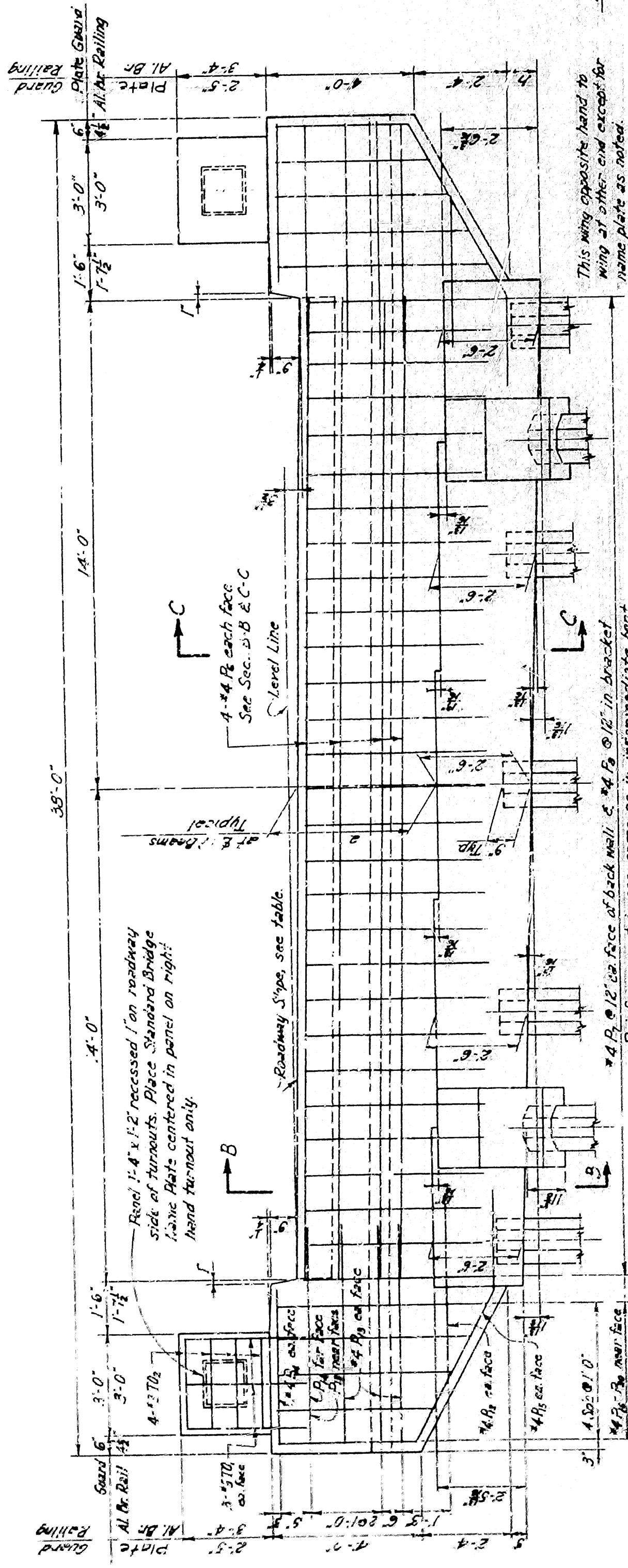
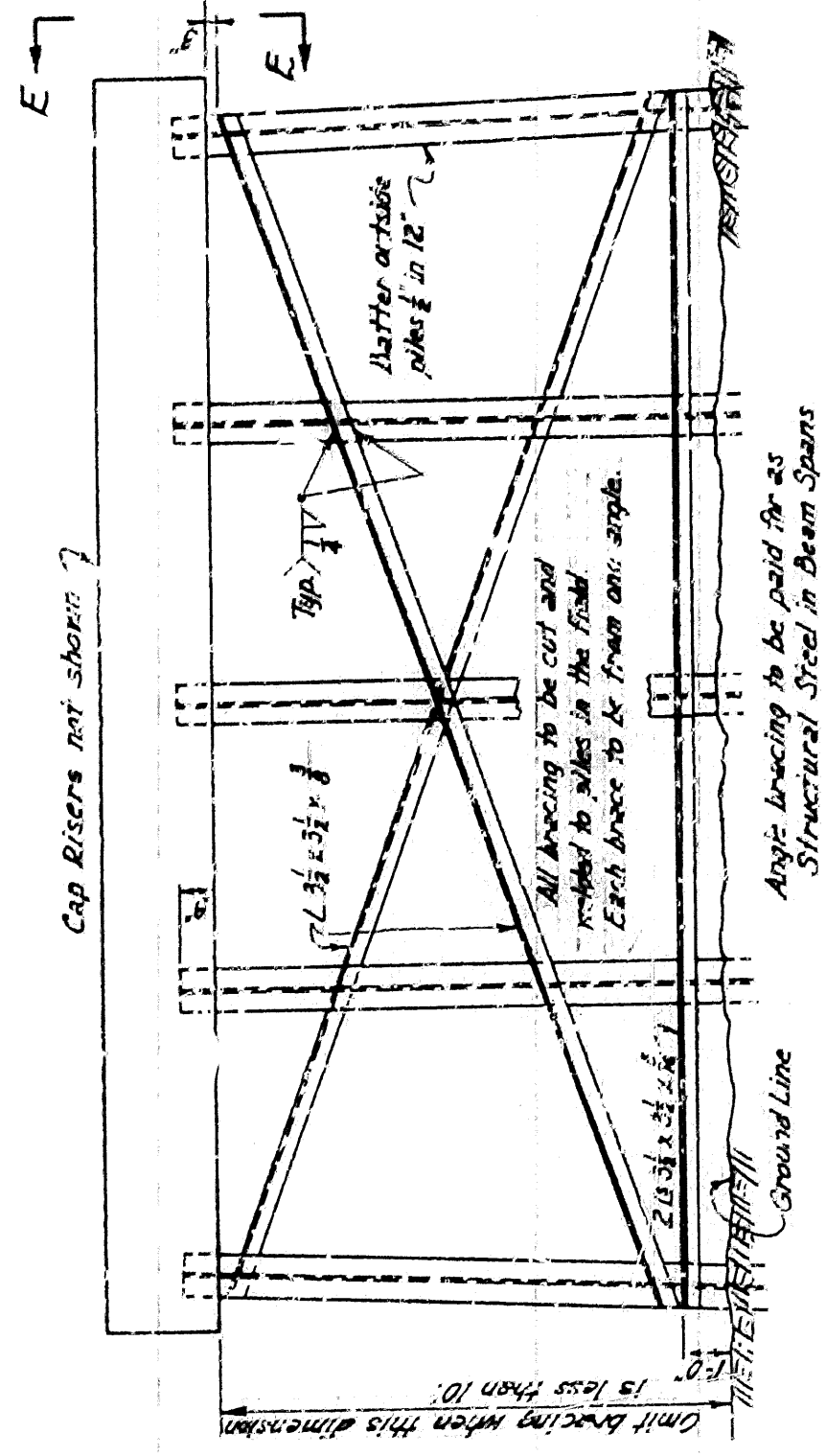
VARIABLES FOR SLOPED OR CROWNED PIERS							
SPAN	SLOPE CHAINS	"u"	"v"	"w"	"x"	"y"	"z"
55'	1/2" 1/4" 1/8"	1"	5"	—	4"	1"	1"
75'	0.0104	1 1/2"	5 1/2"	1 1/2"	4"	3"	1"
95'	0.0154	1 3/4"	6"	1 3/4"	4"	5"	1"
100'	1/2" 1/4" 1/8"	1 1/2"	6"	—	4"	1"	1"
	0.01248	1 3/4"	6 1/2"	1 3/4"	4"	5"	1"
	0.0154	1 3/4"	7"	1 3/4"	4"	5"	1"

HALF SECTION A-A
PARABOLIC TOWER
 For additional details see Section A-A at left.
 Scale: $\frac{1}{4}" = 1'-0"$

55'-10" Composite I-Beam Spans
 28' Clear Roadway 1'-6" Curbs
 12" x 14" S-shaped
 14" x 6" S-shaped
 3" Threaded
 2 full bars: as noted
DETAIL OF ANCHOR BOLT



100-443886-1000



VERTICAL DIMENSIONS									
SPAN	SLOPE ON CROWN	a	f	N	t	g	h	to	r
40'	0.000411 1/4 Parabolic	3'-2 1/2"	6 1/8"	—	5'	7 1/2"	7 1/2"	2'-0 1/2"	1"
41'	—	—	6 1/8"	—	—	7'	—	2'-0 1/2"	—
42'	0.000411 1/4 Parabolic	3'-2 1/2"	6 1/8"	—	4 1/8"	7 1/2"	7 1/2"	2'-0 1/2"	—
44'	—	—	6 1/8"	—	—	7'	—	2'-0 1/2"	—
45'	0.000411 1/4 Parabolic	3'-5 1/2"	3'	—	3 1/2"	7 1/2"	7 1/2"	2'-0 1/2"	—
46'	—	—	3'	—	—	7'	—	2'-10"	—
55'	0.010411 1/4 Parabolic	3'-1 1/2"	1"	—	—	7 1/2"	7 1/2"	—	—
60'	—	—	3'-7 1/2"	—	—	7'	—	2'-0 1/2"	—
65'	0.010411 1/4 Parabolic	3'-5"	—	—	—	7 1/2"	7 1/2"	—	—
70'	—	—	3'-9"	—	—	—	—	2'-0 1/2"	—
75'	0.010411 1/4 Parabolic	3'-0 1/2"	—	—	—	7 1/2"	7 1/2"	—	—
80'	—	—	3'-0 1/2"	—	—	—	—	2'-0 1/2"	—
85'	0.010411 1/4 Parabolic	3'-0 1/2"	—	—	—	7 1/2"	7 1/2"	—	—
90'	—	—	3'-0 1/2"	—	—	—	—	2'-0 1/2"	—

LIST OF REINFORCING STEEL

BENDING DIAGRAM


MARK	SIZE	NO REIN	BLVD	LENGTH	4	B
		End	Int			
P ₁	4	2	2	25'-8"	50%	
P ₂	4	3	2	20'-4"	50%	
P ₃	4	4	4	20'-4"	50%	
P ₄	4	4	4	31'-4"	15-25'	
P ₅	4	4	4	31'-4"	20-25'	
P ₆	4	4	4	6'-5"	20-25'	
P ₇	4	4	4	0'-11"	20-25'	
P ₈	4	4	4	28'-0"	50%	
P ₉	4	4	4	5'-0"	50%	
P ₁₀	4	4	4	3'-9"	50%	
P ₁₁	4	4	4	3'-0"	50%	
P ₁₂	4	4	4	11'-2"	See Diag.	
P ₁₃	4	4	4	11'-2"	See Diag.	
P ₁₄	4	4	4	5'-3"	50%	
P ₁₅	4	4	4	4'-9"	50%	
P ₁₆	4	4	4	6'-8"	50%	
P ₁₇	4	4	4	4'-9"	50%	
P ₁₈	4	4	4	6'-11"	50%	
P ₁₉	4	4	4	6'-11"	50%	
P ₂₀	4	4	4	6'-11"	50%	
P ₂₁	4	4	4	6'-11"	50%	
P ₂₂	4	4	4	6'-11"	50%	
P ₂₃	4	4	4	6'-11"	50%	
P ₂₄	4	4	4	6'-11"	50%	
P ₂₅	4	4	4	6'-11"	50%	
P ₂₆	4	4	4	6'-11"	50%	
P ₂₇	4	4	4	6'-11"	50%	
P ₂₈	4	4	4	6'-11"	50%	
P ₂₉	4	4	4	6'-11"	50%	
P ₃₀	4	4	4	6'-11"	50%	
P ₃₁	4	4	4	6'-11"	50%	
P ₃₂	4	4	4	6'-11"	50%	
P ₃₃	4	4	4	6'-11"	50%	
P ₃₄	4	4	4	6'-11"	50%	
P ₃₅	4	4	4	6'-11"	50%	
P ₃₆	4	4	4	6'-11"	50%	
P ₃₇	4	4	4	6'-11"	50%	
P ₃₈	4	4	4	6'-11"	50%	
P ₃₉	4	4	4	6'-11"	50%	
P ₄₀	4	4	4	6'-11"	50%	
P ₄₁	4	4	4	6'-11"	50%	
P ₄₂	4	4	4	6'-11"	50%	
P ₄₃	4	4	4	6'-11"	50%	
P ₄₄	4	4	4	6'-11"	50%	
P ₄₅	4	4	4	6'-11"	50%	
P ₄₆	4	4	4	6'-11"	50%	
P ₄₇	4	4	4	6'-11"	50%	
P ₄₈	4	4	4	6'-11"	50%	
P ₄₉	4	4	4	6'-11"	50%	
P ₅₀	4	4	4	6'-11"	50%	
P ₅₁	4	4	4	6'-11"	50%	
P ₅₂	4	4	4	6'-11"	50%	
P ₅₃	4	4	4	6'-11"	50%	
P ₅₄	4	4	4	6'-11"	50%	
P ₅₅	4	4	4	6'-11"	50%	
P ₅₆	4	4	4	6'-11"	50%	
P ₅₇	4	4	4	6'-11"	50%	
P ₅₈	4	4	4	6'-11"	50%	
P ₅₉	4	4	4	6'-11"	50%	
P ₆₀	4	4	4	6'-11"	50%	
P ₆₁	4	4	4	6'-11"	50%	
P ₆₂	4	4	4	6'-11"	50%	

Dimensions are o.c. of bars.

① Make $A = 1'-7"$ & $B = 14'-11"$ when 19-beam piles are used.
 ② When interior beams are of less depth than exterior beams, use: 0'-6", 1'-0", 1'-6", and 1'-9" with Fig. 10b, 10c & 10d as shown in Elevations and in Bar List.

DETAILS OF STANDARD PILE BENTS:
FOR 40'-54' I-BEAM SPANS AND
55'-80' COMPOSITE I-BEAM SPANS
28' CLEAR ROADWAY 1'-6" or 1'-7" CURBS
ROADWAY: 1/4" Parabolic Crown; Slope per ft. 0.004"
BEAMS and STEEL PILING

P₂₁ ROUTE SEC. DRAWING NO. 5457-B
 ARKANSAS STATE HIGHWAY COMMISSION
 LITTLE ROCK, ARK.
 SCALE: 1" = 10' or noted
 DATE: 4-24-53
 DRAWN BY: V.P.
 CHECKED BY: A.T.
 DATE: 7-3-57
 DATE: 7-10-59
 BRIDGE NO.



Intermediate bearing piles with 12 steel 14 piles same as
 with bearing piles, except for setting of 4 ft. 6 in. as noted for
 steel 14 pile details see Interim. Bent Sloped Bend with 12 steel 14 piles.

14" DIA. PILE
 4" THICK CONCRETE CASING
 48" WIDE PILE CAP
 36" HIGH PILE CAP

Pile
 Pile Cap

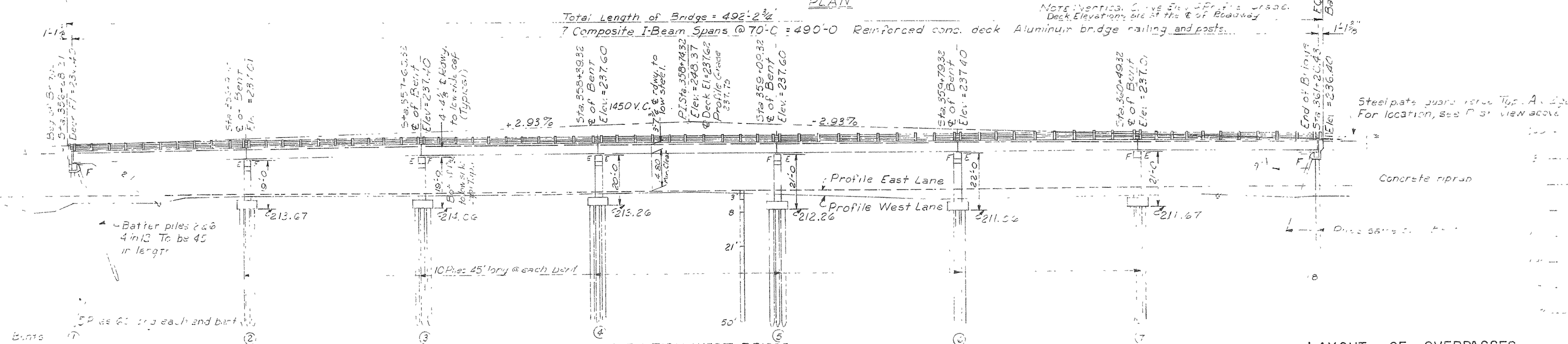
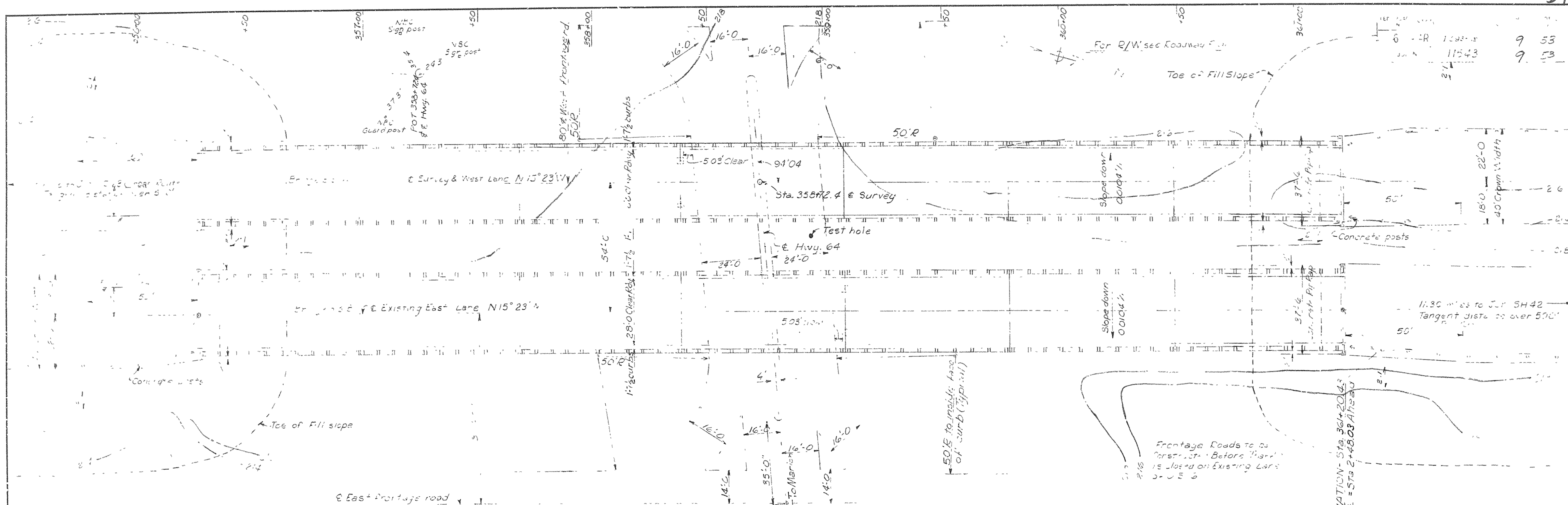
NOTES

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

For additional details and general notes see drawing No. 5457 or 5457-E, 2321-A, 2382 or 5457-1.

Steel H piles are to be driven to refusal. Concrete and concrete-filled metal shell piles are to be driven to a minimum capacity of 36 tons per pile.

Intermediate bents not to be used for spans over 55 feet.



NOTES

Be on Mark - Nulin power pole 182' Rt Sta 358+20 EL. = 217.03
For details of Sub-structure, see Drawings 545-A & 545-B
For details of Super-structure, see Drawing 545-C
Piles in Bents 1 & 2 to be driven after embankment has been placed.
Length of piling shown are for estimating purposes only.
Piles, lengths to be determined in the field.
Drive one 12" test pile in each land O, also one 50' test pile
in Bent 4 and 6. Piles to be driven to minimum bearing of 30 tons.
Piles are to be driven to a minimum bearing of 30 tons.
Piles are to be driven to a minimum bearing of 30 tons.
Piles are to be driven to a minimum bearing of 30 tons.

Design H 20-S16, AASHTO, 1958 &
Special Interstate Loading of
2.24,000 lbs. 4' on center
Stresses: Class "A" Concrete (n=13)
Class "S" Concrete (n=10)
Reinforcing Steel
Structural Steel

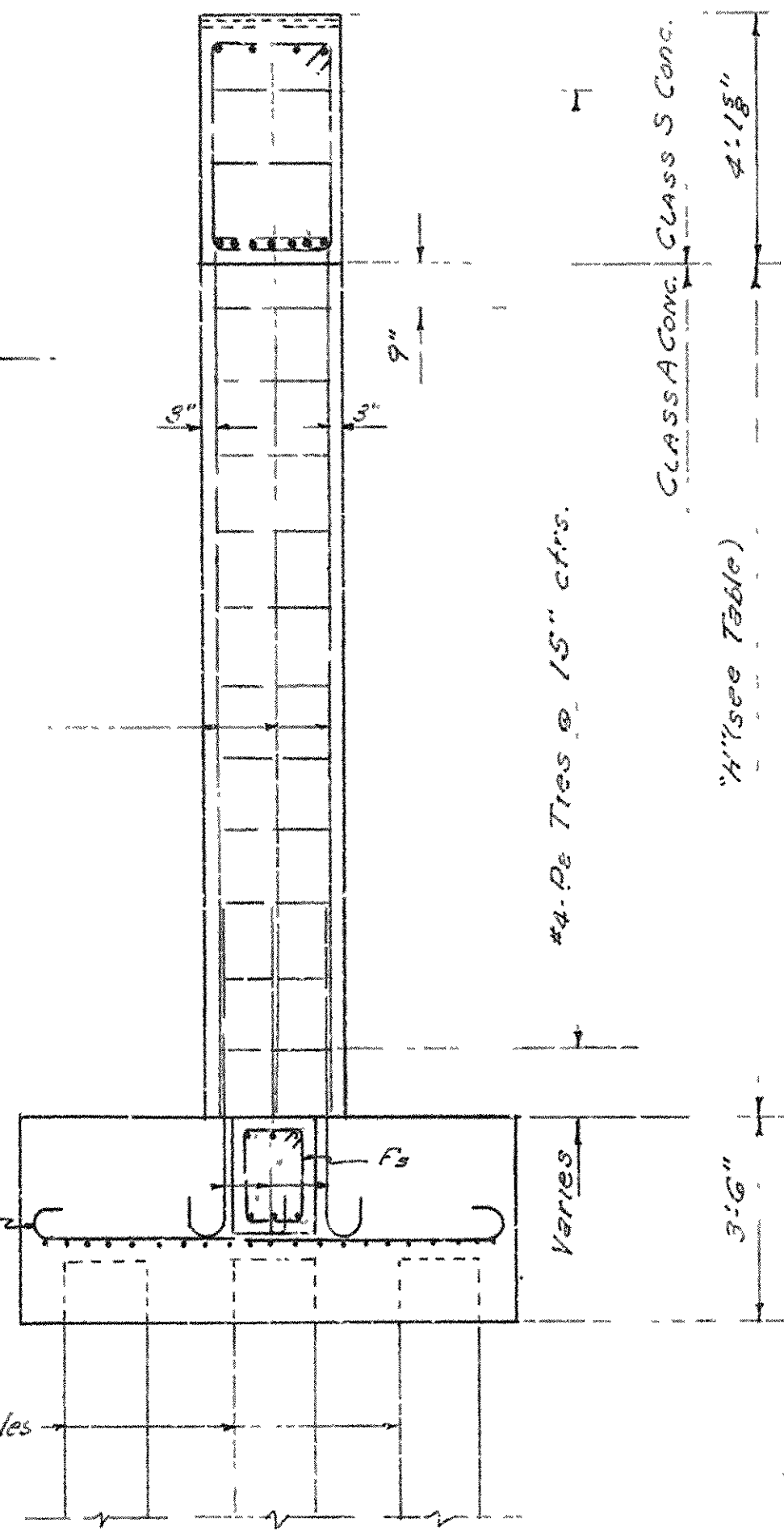
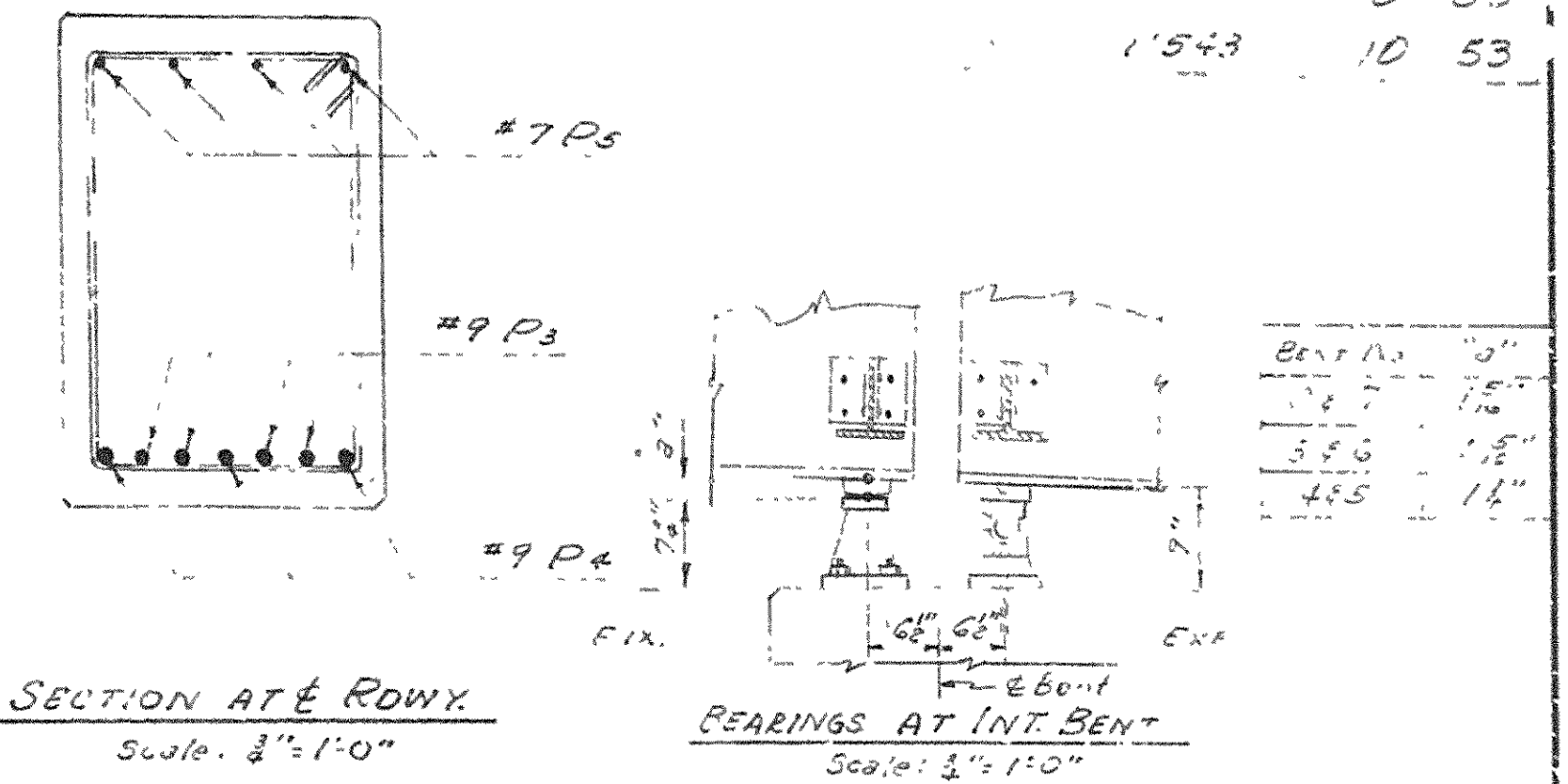
840 #4
1200 #6
20,000 #8
18,000 #8

LAYOUT OF OVERPASSES
OVER HWY. 64
MARION INTERCHANGE

CRITTENDEN COUNTY
ROUTE 61 SEC. 1
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: SP DATE: 6-4-57
TRACED BY: SP DATE: 7-12-57
CHECKED BY: SP DATE: 7-12-57
BRIDGE NO. 3131-A & 3131-B DRAWING NO. 9467

L.P. Carlson
BRIDGE DESIGN ENGINEER



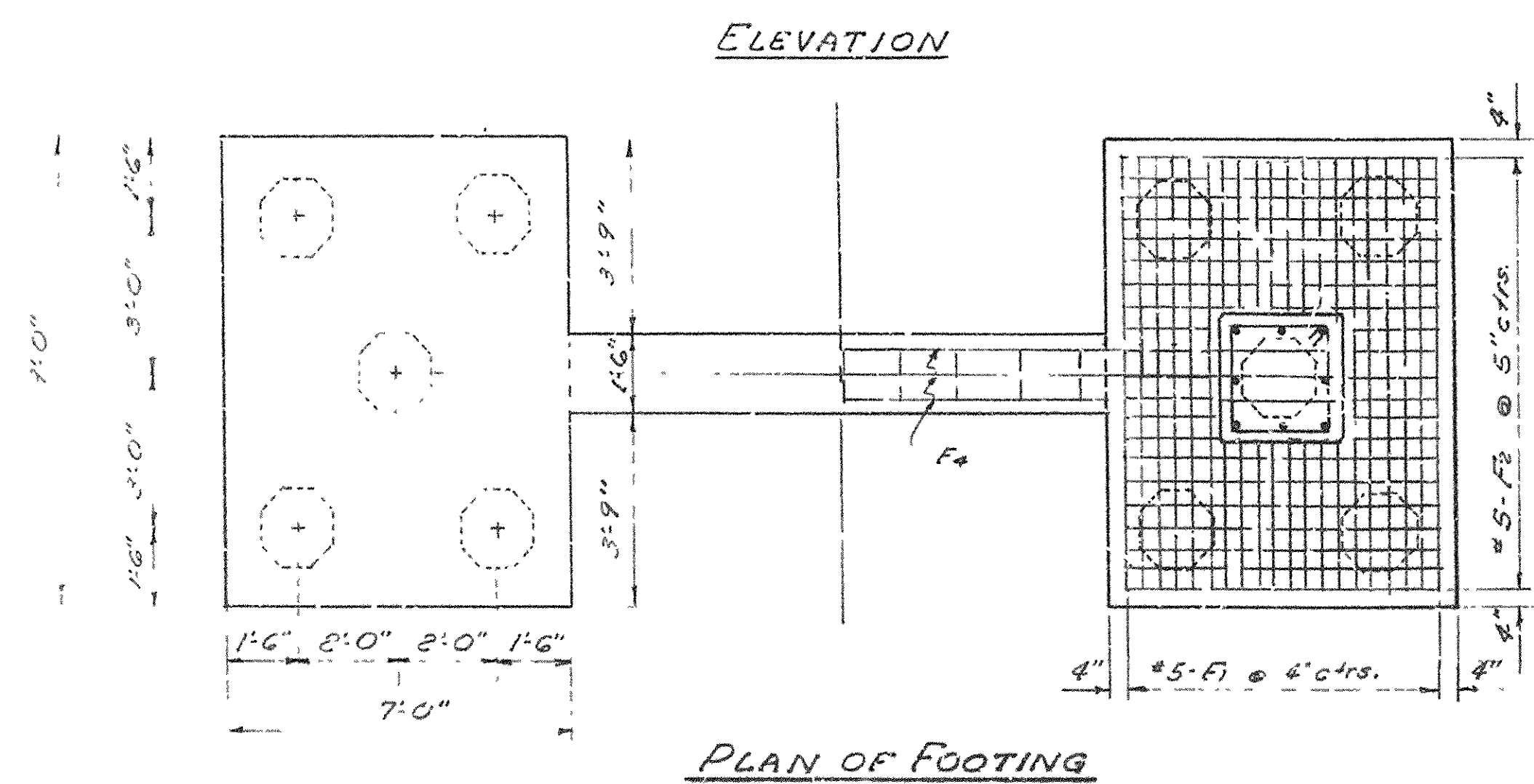
BAR LIST FOR ONE INT. BENT

MARK.	SIZE	NUMBER	LENGTH	A	B	PIN DIA.
F1	#5	40	9'-9"	8'-6"	5"	3 3/8"
F2	#5	42	7'-9"	6'-6"	5"	3 3/8"
F3	#8	16	7'-0"	5'-10 1/4"	9"	8"
F4	#7	6	21'-8"	20'-0"	7"	5 1/4"
F5	#4	9	6'-1"	1'-7 1/8"	1'-1 1/2"	1 1/2"
P1	#8	16	H13'-6"	STR.		
P2	#4	Varies	9'-1"	2'-1 1/2"	2'-1 1/2"	1 1/2"
P3	#9	4	23'-0"	20'-6"	10"	9"
P4	#9	3	28'-8"	20'-6"	4'-1"	9"
P5	#7	4	29'-40"	28'-2"	7"	5 1/4"
P6	#7	10	9'-1"	8'-3"	7"	5 1/4"
P7	#4	29	12'-2"	3'-8"	2'-1 1/2"	1 1/2"
P8	#4	20 each	Var. 9'-4"	Var. 2'-3"	Var. 2'-3"	1 1/2"
P9	#4	20 each	to 10'-6"	to 2'-10"	2'-1 1/2"	1 1/2"
P10	#4	20 each	Var. 11'-2"	Var. 3'-2"	2'-1 1/2"	1 1/2"
P11	#4	20 each	to 11'-11"	to 3'-6 1/2"	2'-1 1/2"	1 1/2"
P12	#4	6	6'-1"	2'-0"	2'-1 1/2"	1 1/2"

BENDING DIAGRAM

The bending diagrams show the profile of each reinforcement bar. For top bars (F1-F5), the dimension A is the distance from the end to the bend, and B is the distance from the bend to the end. For bottom bars (P1-P15), the dimension A is the distance from the end to the bend, and B is the distance from the bend to the end. The pin diameter is indicated by a vertical line with a circle at the end.

Dimensions are to ctrs. of bars



DETAILS OF INT. BENTS
OVERPASS OVER U.S. HWY. 64
MARION INTERCHANGE
CRITTENDEN COUNTY
ROUTE 61 SEC. 1
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.
DRAWN BY: F.R.B. DATE: 7-23-57
TRACED BY: _____ DATE: _____
CHECKED BY: AYM DATE: 7-29-57
SCALE: $\frac{3}{8}" = 1'-0"$ or as shown
BRIDGE NO. 3131-A 83131-B DRAWING NO. 9468