

SUMMARY OF BRIDGE QUANTITIES JOB 2616

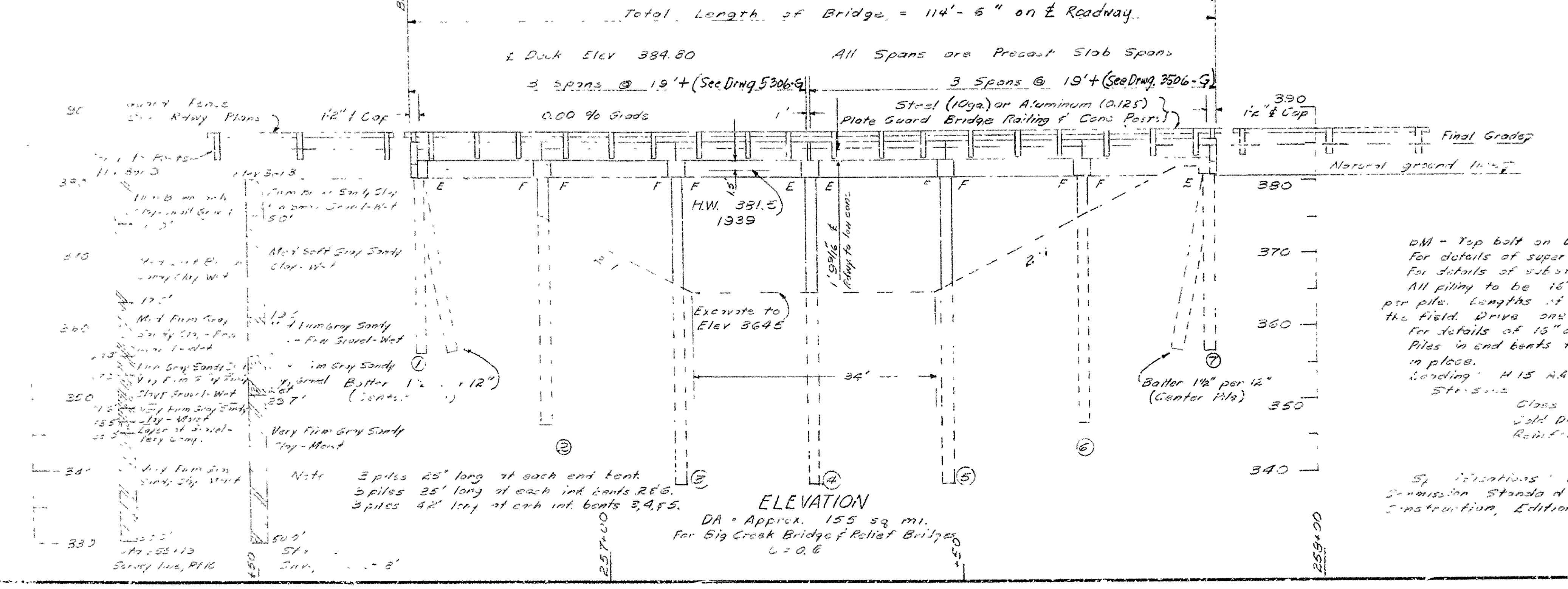
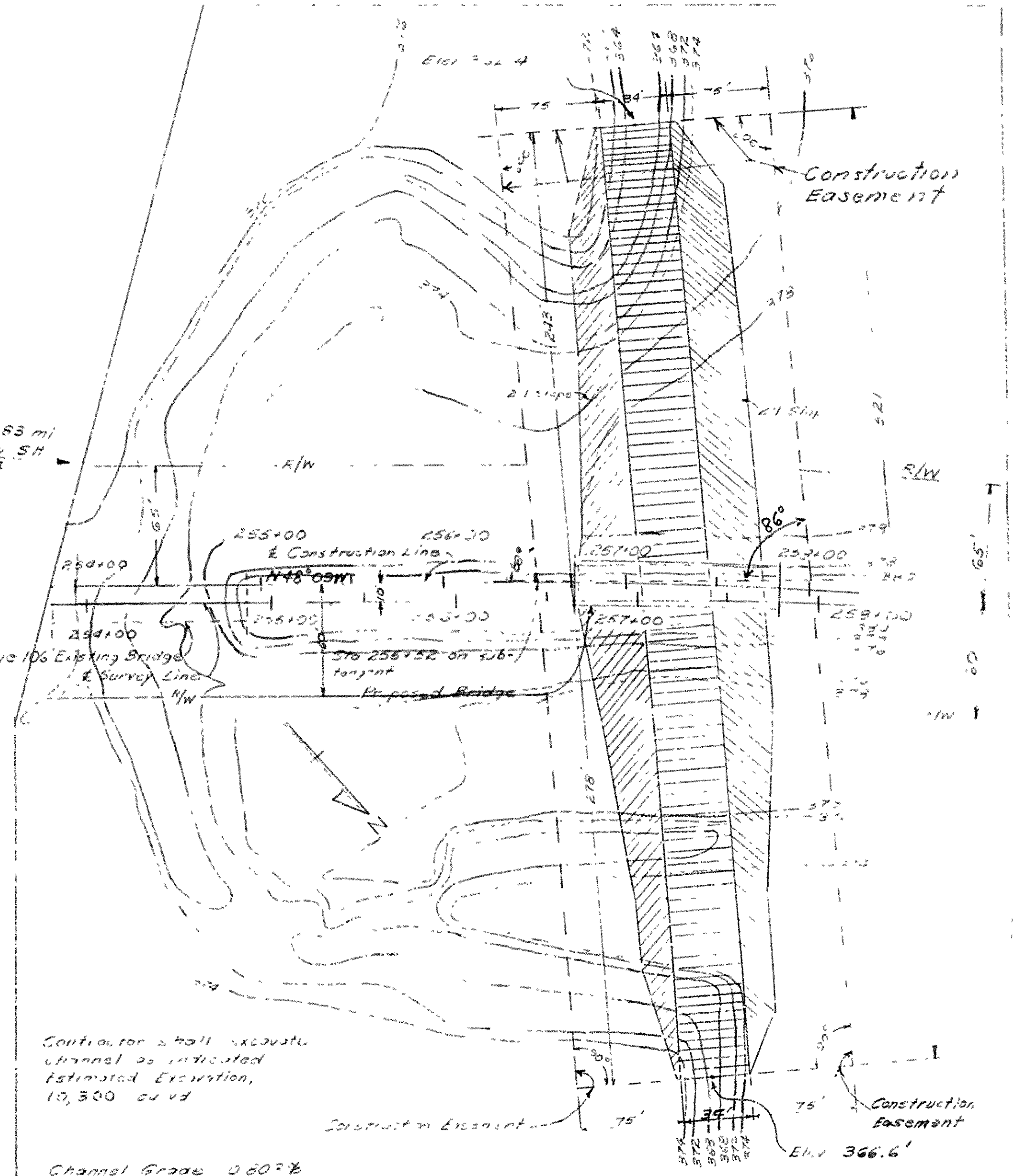
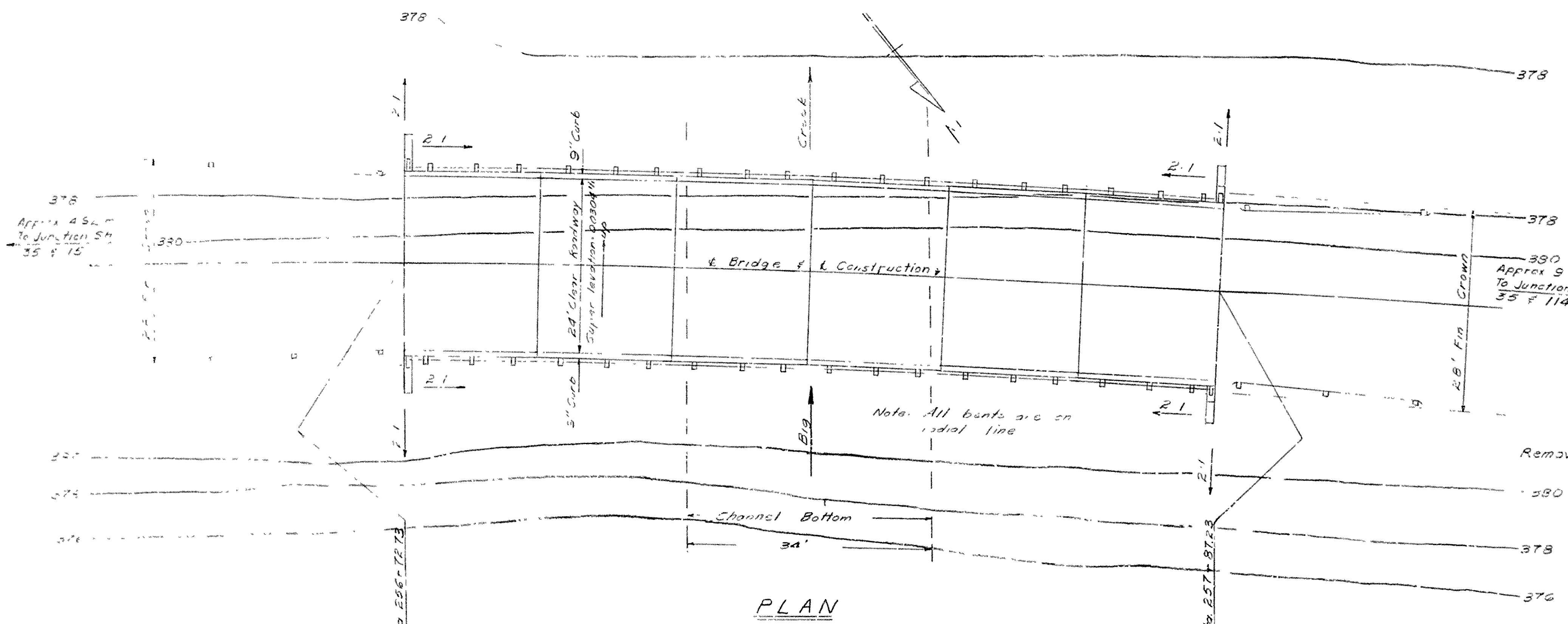
NAME PLATE TITLE	BRIDGE No.	CODE No.	ITEM No		802	802	802	803	SP 804	SP 805-7	812	1007
			ITEM	COMMON EXCAVATION FOR STRUCTURES	CLASS 5 CONCRETE	PRECAST SLAB CURB UNITS 19'	PRECAST SLAB INTERIOR UNITS 19'	REINFORCING STEEL	PRECAST CONCRETE PILING (6" OCTAGONAL)	STEEL (11GA) OR ALUMINUM (.125") PLATE GUARD BRIDGE RAILING	BRIDGE NAME PLATES (TYPE C)	REMOVAL OF EXISTING BRIDGE STRUCTURES & MAINTENANCE OF TRAFFIC
BIG CREEK	3415	X020	END BENTS 1 & 7	42	13.63	-	-	1895	150	-	1	
			BENTS 2,3,5 & 6	0	22.67	-	-	3445	467	-	-	
			BENT 4	0	5.75	-	-	850	126	-	-	
			SPANS 1-6	-	-	12	30	-	-	234	-	
			TOTALS FOR BRIDGE 3415	42	42.00	12	30	6190	743	234	1	20.0 %
BIG CREEK RELIEF	3416	X020	END BENTS 1 & 8	42	13.94	-	-	1904	150	-	1	
			BENTS 2,4,5 & 7	0	22.16	-	-	3320	430	-	-	
			BENTS 3 & 6	0	11.30	-	-	1636	210	-	-	
			SPANS 1-7	-	-	14	35	-	-	271	-	
			TOTALS FOR BRIDGE 3416	42	47.40	14	35	6860	790	271	1	12.5 %
BIG CREEK RELIEF	3417	X020	END BENTS 1 & 7	42	13.94	-	-	1904	150	-	1	
			BENTS 2,3,5 & 6	0	22.16	-	-	3320	425	-	-	
			BENT 4	0	5.65	-	-	816	105	-	-	
			SPANS 1-6	-	-	12	30	-	-	233	-	
			TOTALS FOR BRIDGE 3417	42	41.75	12	30	6040	680	233	1	15.5 %
TOTALS FOR JOB 2616				126	131.15	38	95	19,090	2213	738	3	48.0 % *

* Remaining 52 % is Roadway Item.

SUMMARY OF BRIDGE QUANTITIES
PANSY - NORTHWEST
CLEVELAND COUNTY
ROUTE 35 SEC. 5
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.
DRAWN BY FMH DATE 10-17-60
TRACED BY JEM DATE 10-19-60
CHECKED BY JEM DATE 10-19-60
BRIDGE NO. 3415-3417 DRAWING NO. 11178
SCALE: _____
BRIDGE DESIGN ENGINEER

Channel is to be excavated to Elev 364.5 approx 34' channel bottom, within Construction Easement limits 2:1 side slopes. Approx 10,300 cu yd. minimum excavation. Construct below at new bridge site. See section 1027 of the Specifications

Curve Data:
Δ = 7° 32' RT
D = 2° 00'
T = 188.6'
L = 376.7'
PC Sta. 256+27.5
PI Sta. 258+16.1
PT Sta. 260+04.2



GENERAL NOTES

DM - Top bolt on Bridge curb NE 1/4 sec. 12' RT Sta. 254+56, Elev. 363.77
For details of superstructure see Eng. 5306-G, 5306-A, 5306-B.
For details of substructure see Eng. 5306-A, 5306-B.
All piling to be 18" octagonal precast concrete piles driven to a maximum bearing capacity of 50 tons per pile. Lengths of piling shown are for estimating purposes only, actual lengths to be determined in the field. Drive one 47' test pile at least 3' from details of 18" octagonal piles see Eng. 2-62.
Piles in end bents to be driven after subbanking is in place.
Loading: H-15 AASHO 1957
Str. 5-112
Class 5 Concrete (4-11) 1200 p.s.i.
Cold Drawn Wire Mesh 30265 p.s.i.
Reinforcing Steel 23000 p.s.i.

**LAYOUT OF
BRIDGE OVER BIG CREEK
PANSY — NORTHWEST
CLEVELAND COUNTY
ROUTE 35 SEC. 5
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.**

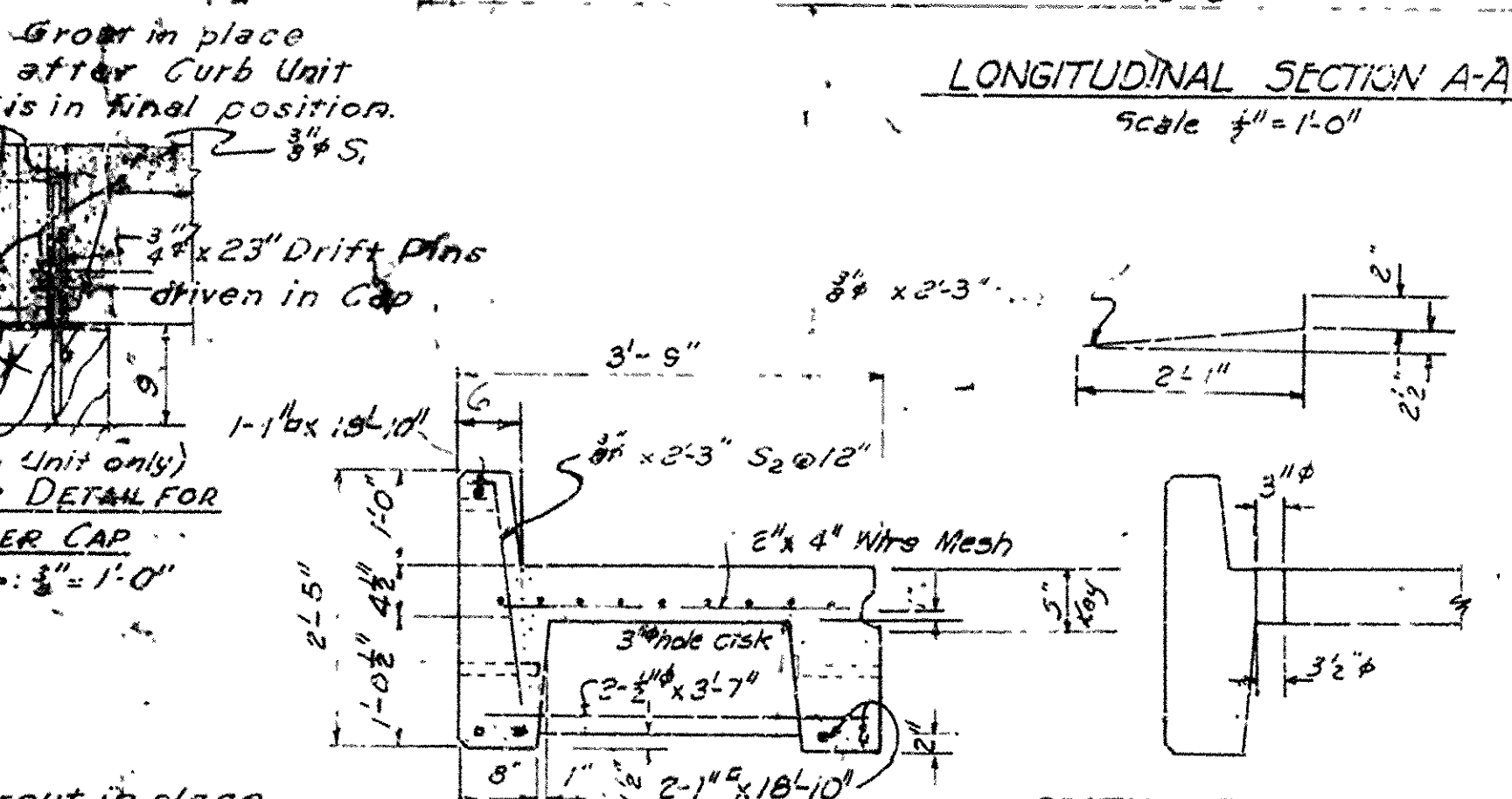
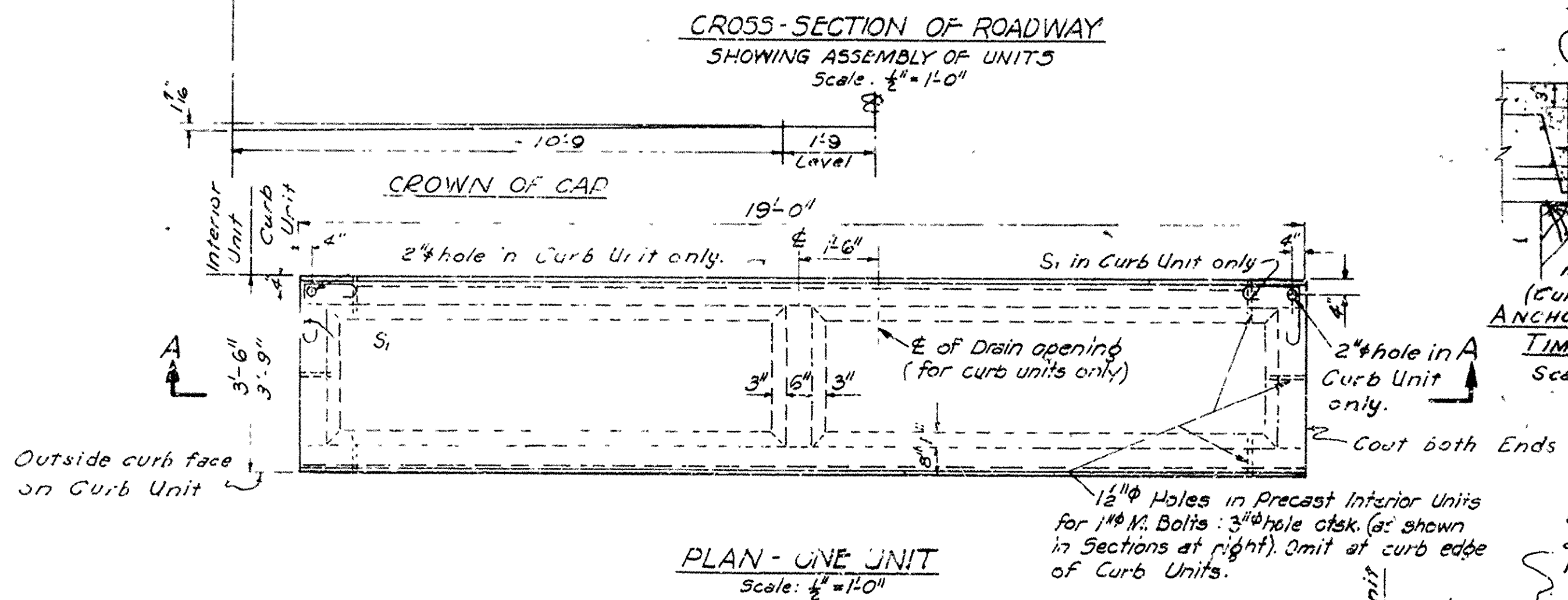
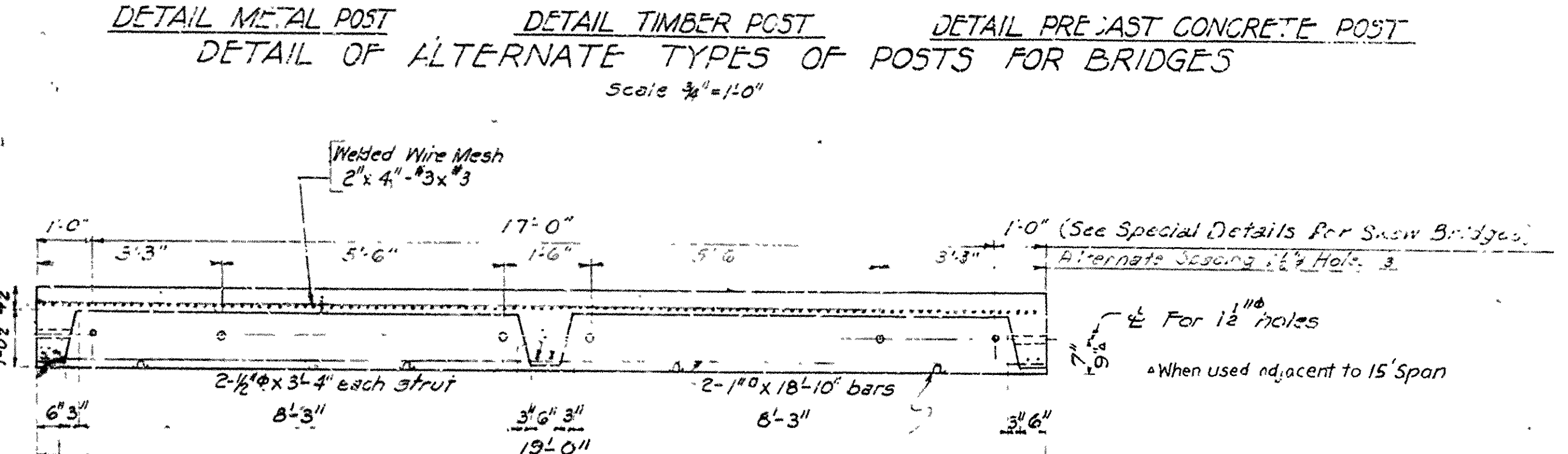
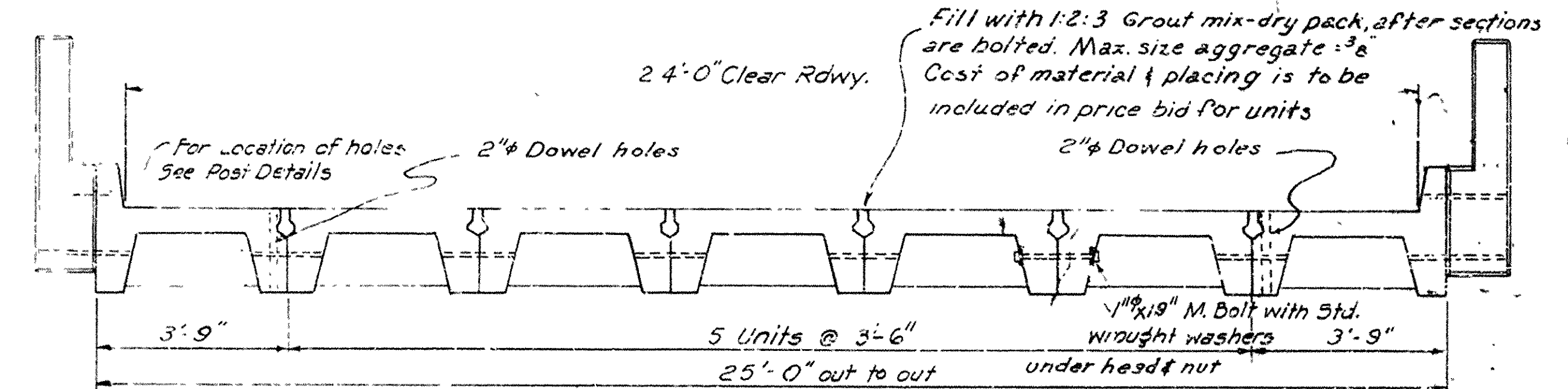
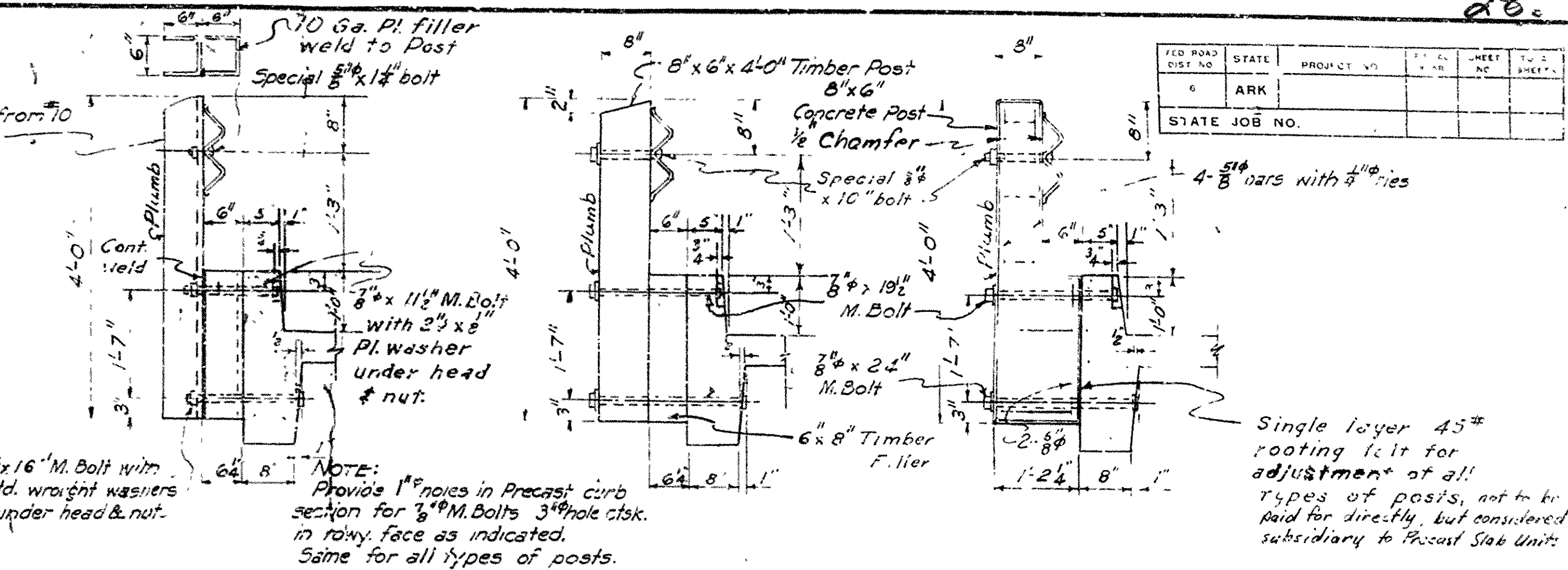
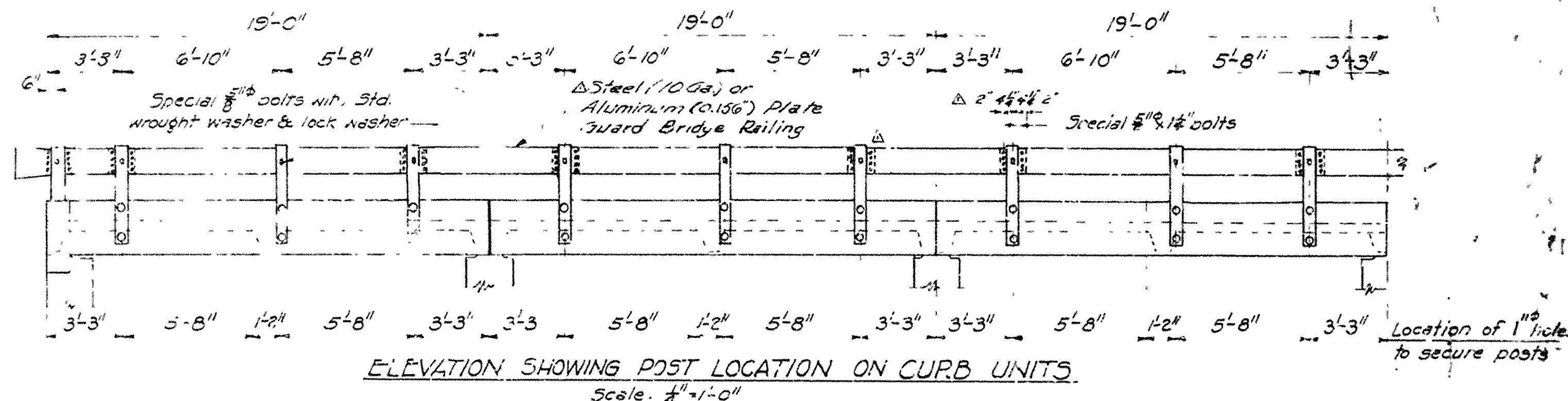
BRIDGE NO. 3415 DRAWING NO. 11179

DRAWN BY: J.D.B. DATE: 12-3-60
TRACED BY: DATE: 10-10-60
CHECKED BY: J.E.M. DATE: 10-10-60
SCALE: 1" = 50'

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

L.P. Carlson
BRIDGE DESIGN ENGINEER

STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
ARK			
STATE JOB NO.			



NOTES

All concrete to be Class "5". All exposed corners to be chamfered 3/4" unless noted. All other corners rounded to 4" radius. Reinforcing dimensions are to 1/2" of bars.

All reinforcing steel shall be accurately located in the forms and firmly held in place by means of steel wire supports. The wire supports will not be paid for directly but will be considered subsidiary to the item of Reinforcing Steel.

Wire mesh shall conform to the Specification for Welded Steel Wire Fabric for Concrete Reinforcement of the A.A.S.H.O. Specifications for Highway Materials, Designation M 55-37, (A.S.T.M. Designation A 185-37).

All machine bolts connecting rail posts to curb sections and special bolts shall be considered as subsidiary to the item of "Steel or Aluminum Plate Guard Bridge Railing."

Paint heads and nuts with aluminum paint after assembly is complete.

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

Reinforcing steel shall be deformed bars, 2" infer or hard grade. Bolts connecting units will not be paid for directly but will be considered subsidiary to the bid price per slab unit.

A deviation of more than 1/8" in dimension or line will be cause for rejection of the unit.

SEE LAYOUT FOR SPECIAL DETAILS.

H-15 Loading

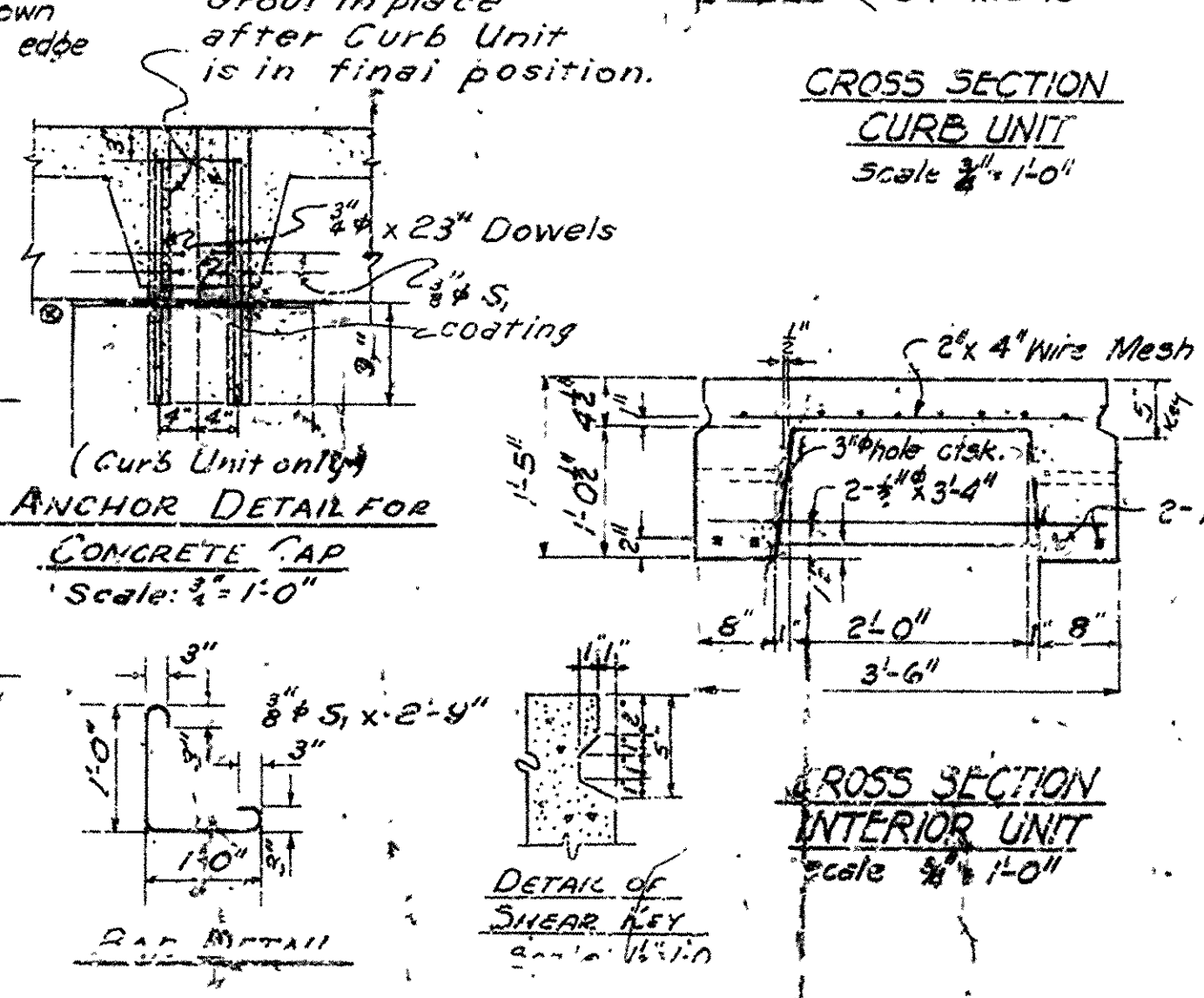
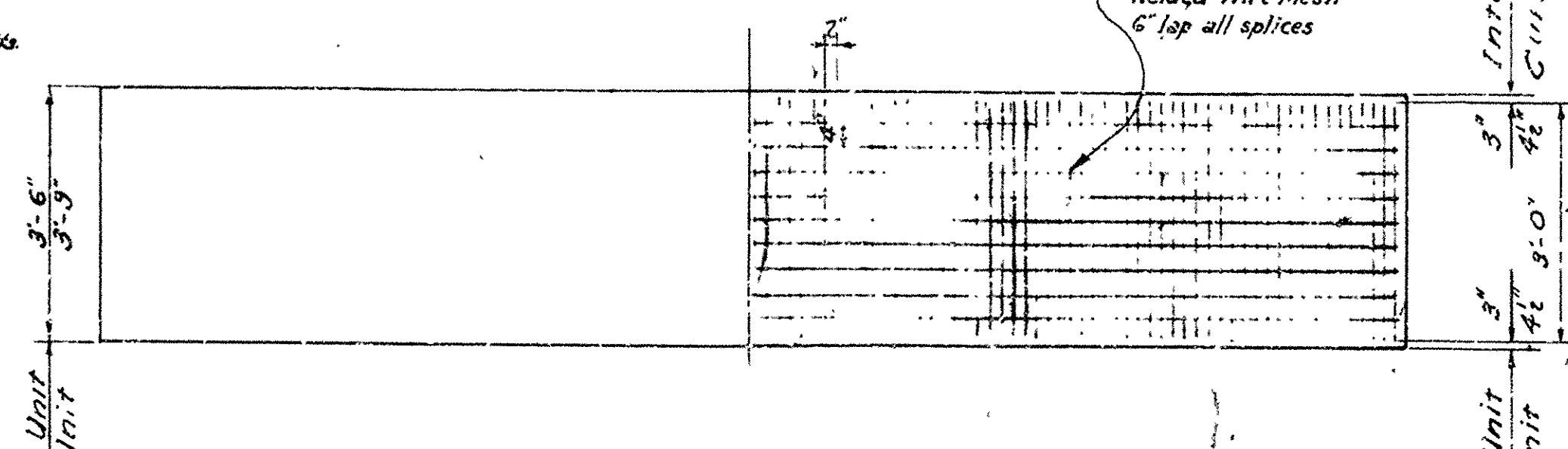
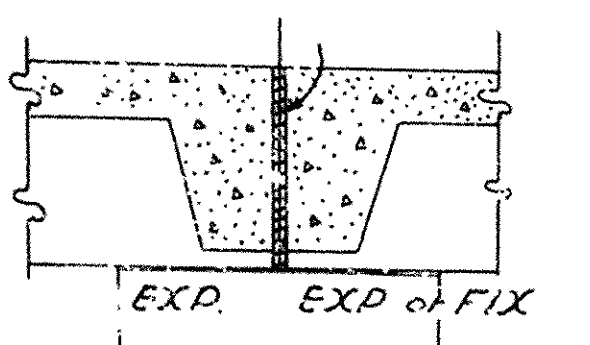
Stresses

Class "5" Concrete (n=10) 1200 #/sq"

Reinforcing Steel 20,000 #/sq"

Cold Drawn Wire Mesh 30,000 #/sq"

1/4" Sponge Rubber compressed to and sealed with asphalt joint filler; not to be paid for directly but considered as subsidiary to Precast Slab Units.



Coating to be applied between ends of adjacent units shall consist of an asphaltic paint with asbestos fibers which will produce a filler on each surface of 1/4".

The coating shall adhere and set firm to the vertical surfaces of the concrete. The softening point shall be not less than 140°F.

Revised: Wire Mesh 3-1-61 A.F.

Revised: 1 1/2" bolt hole in end of unit. FMH 6-4-67

Revised: Exp. Jt. 3-17-58 V.P.

Revised: F.R.B. 1-20-53

" : Bar S₂ 8-G-53

" : Asphalt Coating 10-7-53

" : Bolt Holes 10-7-53

" : Note for Special Details 4-27-54

" : Carb Thickness & Shear Key 11-16-61 H.B.

" : Curb height for 55,000 lb. 1-8-57

Bid items for Precast Slab Units are "Precast Slab Curb Unit" "Precast Slab Interior Unit"

DETAILS OF STANDARD PRECAST SLAB BRIDGE 19'-0" SPAN 24'-0" CLEAR ROADWAY

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

Traced By: _____ Date: _____

Checked By: _____ Date: _____

BRIDGE NO. _____

DRAWING NO. 5306

NOTE: Place Type C Name Plate flush in top of right hand wing or on turnout post

5'-2 1/4"

12'-6 1/4"

Symm abt & Rdwy.

3'-0"

2'-2 1/4"

Beginning or end of bridge

2'-4"

1'-4"

2'-0"

2'-2 1/2"

2'-2 1/2"

12'

12'-9"

25'-6"

35'-6"

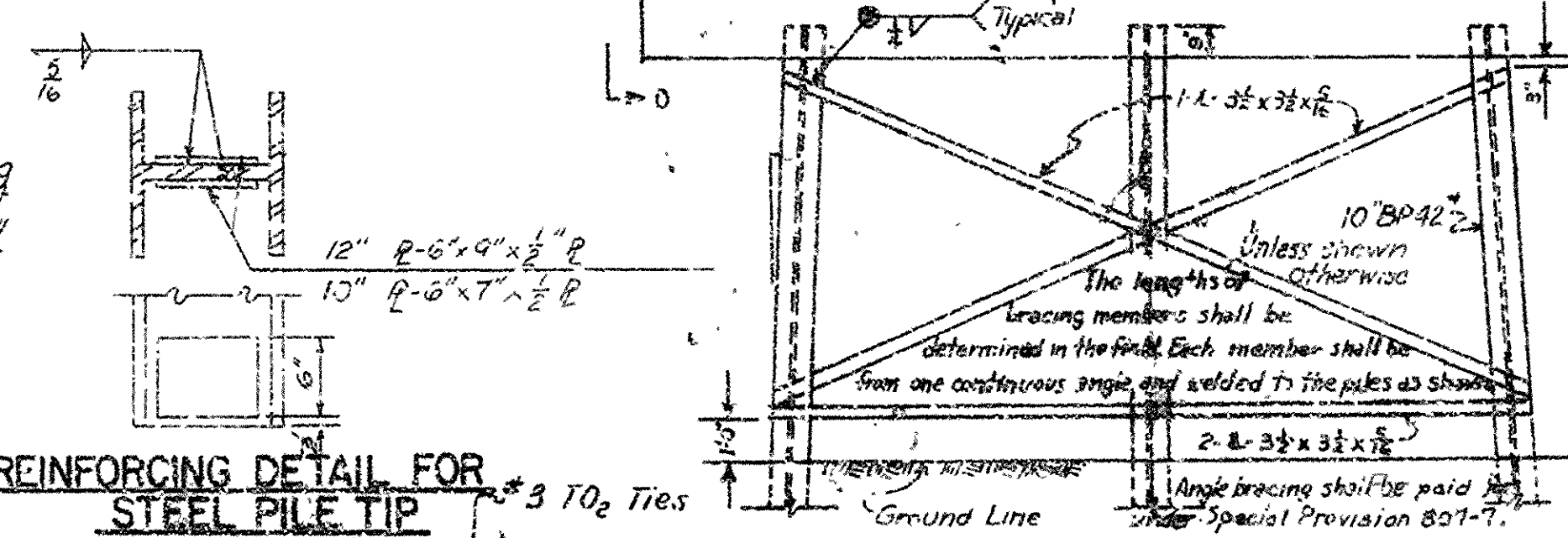
Cap & Piles

Balter center, pile 1 1/2" per foot

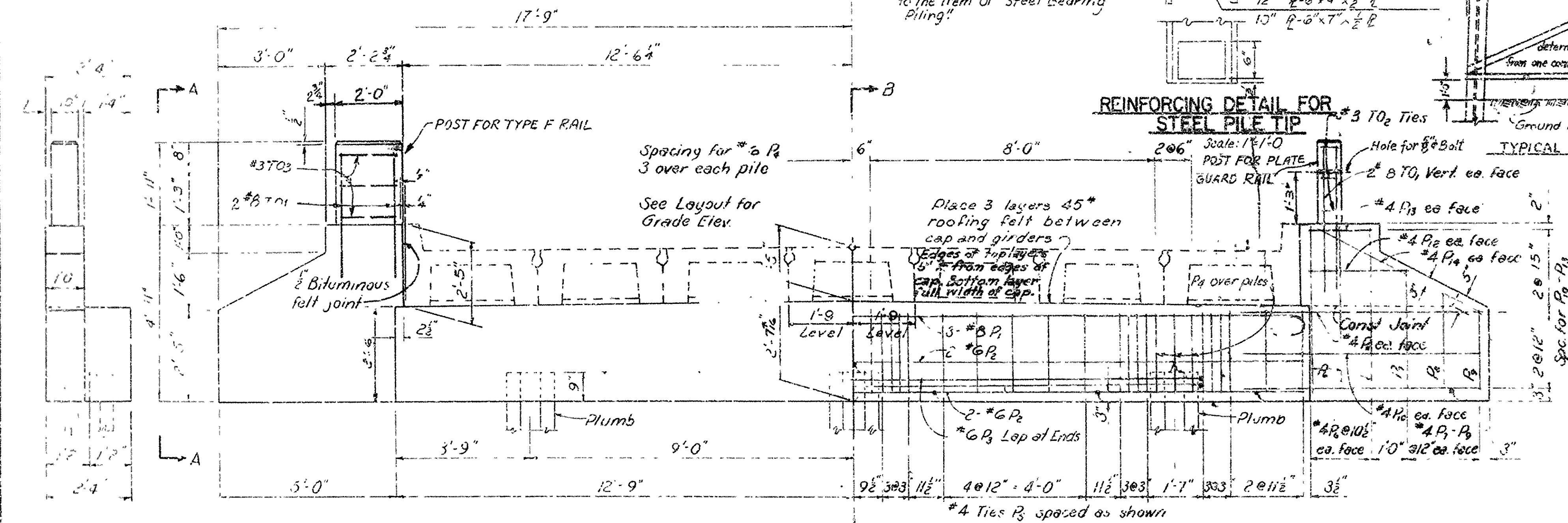
2" Bituminous felt joint

* At Fixed Bents only.

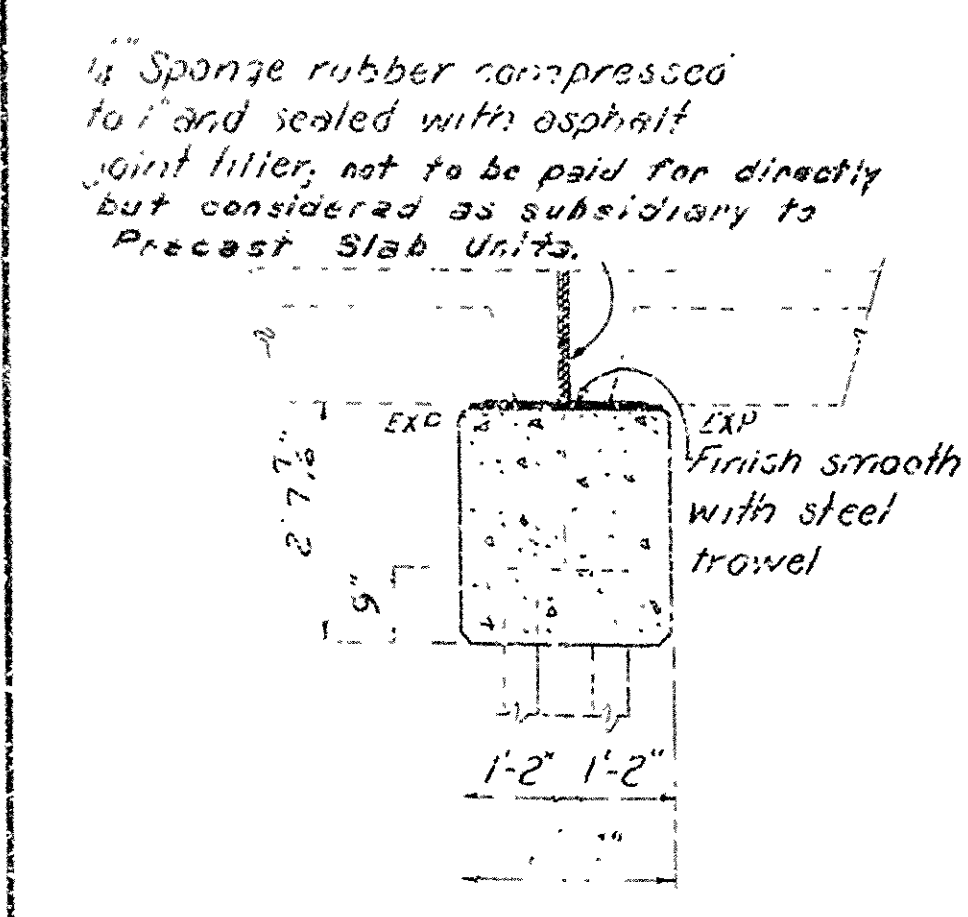
REINFORCING DETAIL FOR
STEEL PILE TIP



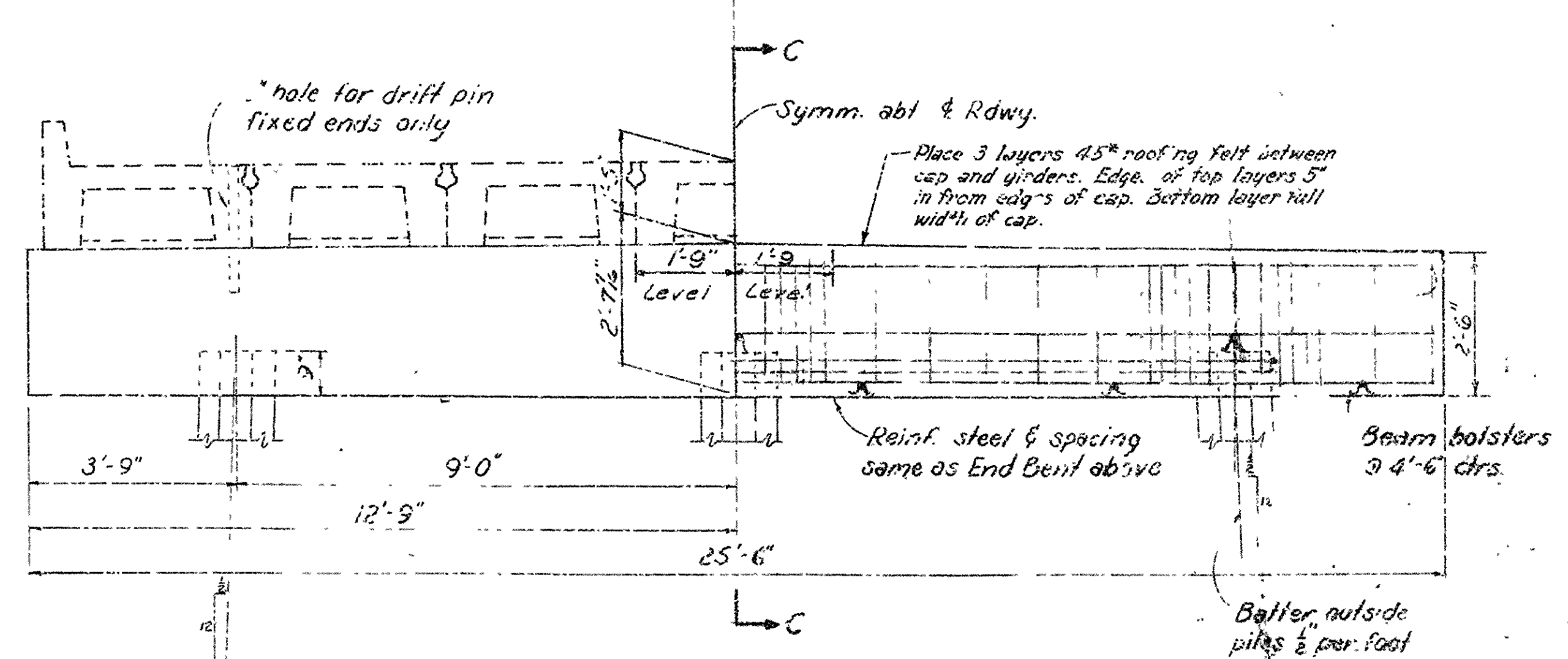
DING INT. STEEL PILE BENT
SCALE: $\frac{1}{8}" = 1'0"$



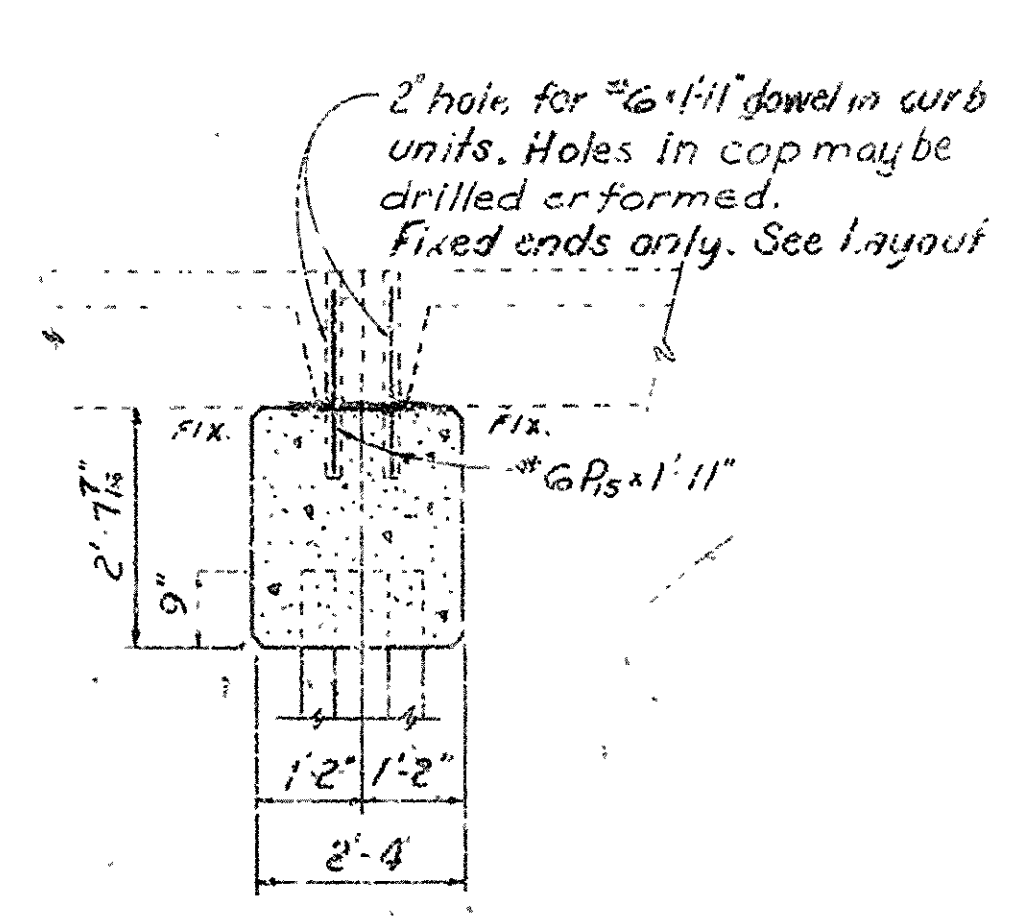
ELEVATION OF END BENT



SECTION C-C (EXP.)



ELEVATION OF INTERMEDIATE BENT



SECTION C-C (FIX)

Showing Job Details (See Dw. No.
5306 Rev. for Curb Units)
Revised Gar. Dist. Specs. 7-23-78 L.M.
Added Bar for Top Rail 7-23-78

Joint materials and roofing felt not to be paid for directly but considered subsidiary to Precast Slab Units.

DETAILS OF STANDARD
PILE BENTS
FOR 19'-0" R.C. PRECAST SLAB SPANS
24'-0" CL. RDWY. 9" CURBS

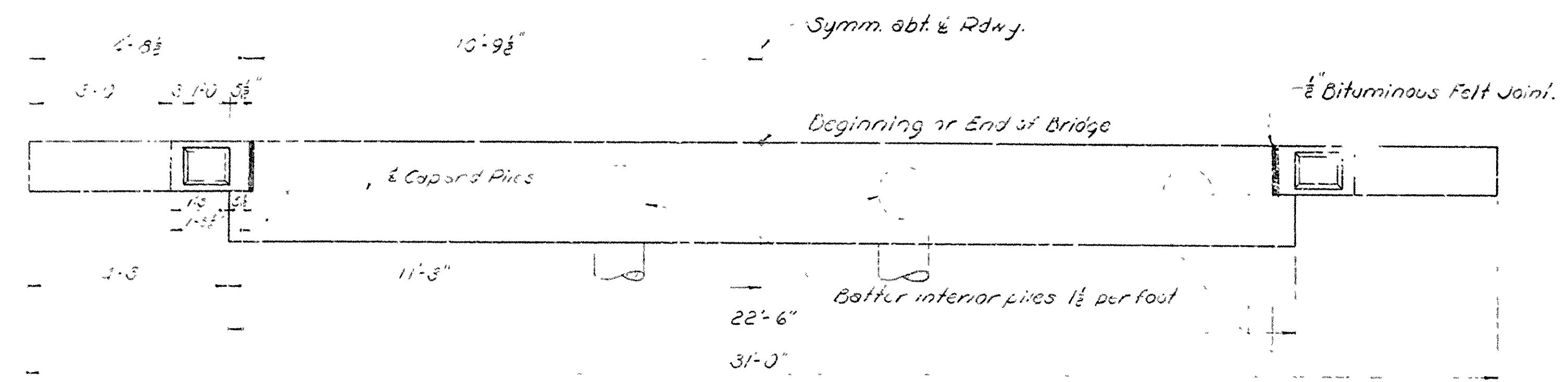
ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

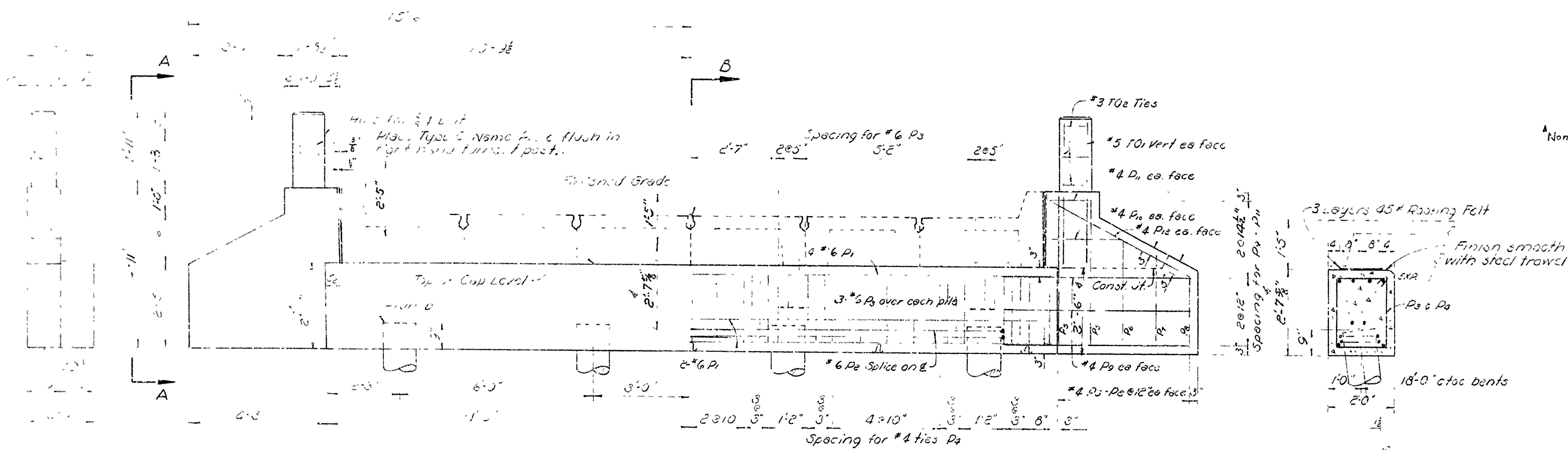
Drawn By: AS Date: 2-7-53
Traced By: AS Date: 2-7-53
Checked By: AS Date: 2-7-53

Scale: $\frac{1}{2}$ in. = 1 ft.

BRIDGE NO. DRAWING NO. 5306A

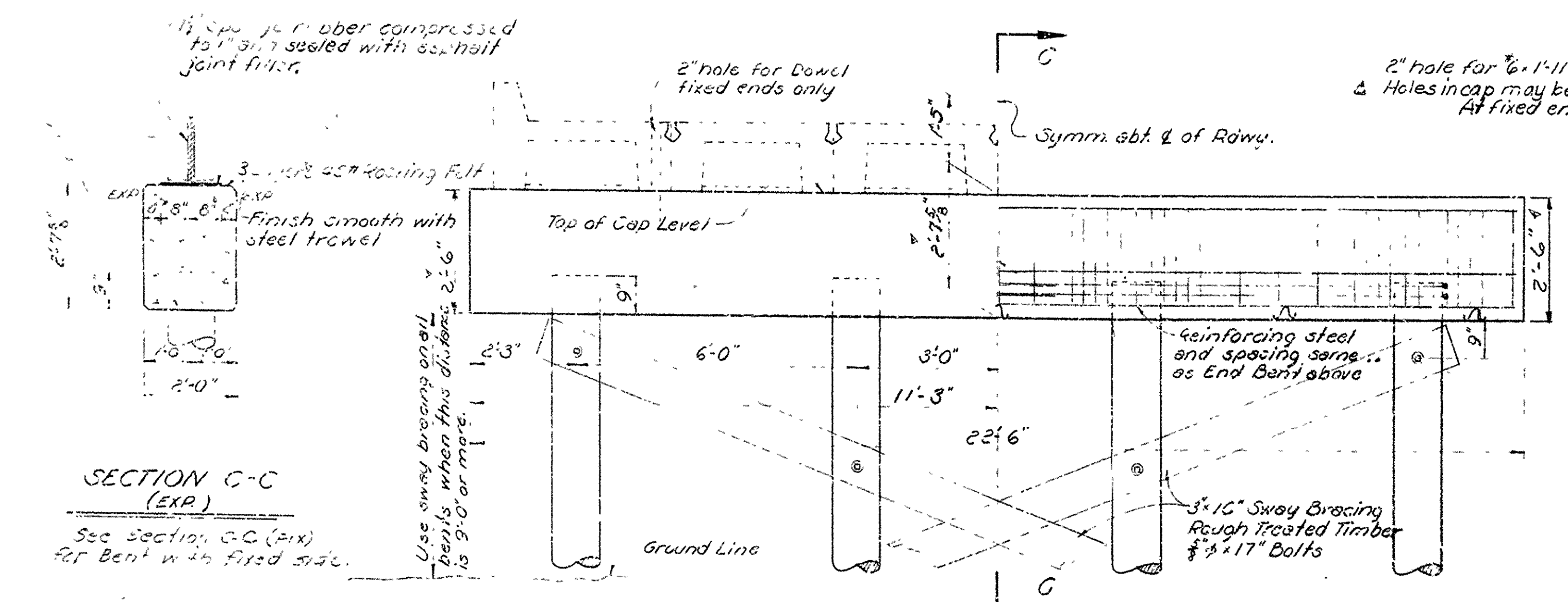


PLAN OF END BENT



ELEVATION OF END BENT

END VIEW A-A



ELEVATION OF INTERMEDIATE BENT

SECTION B-B

SECTION C-C (FIX)

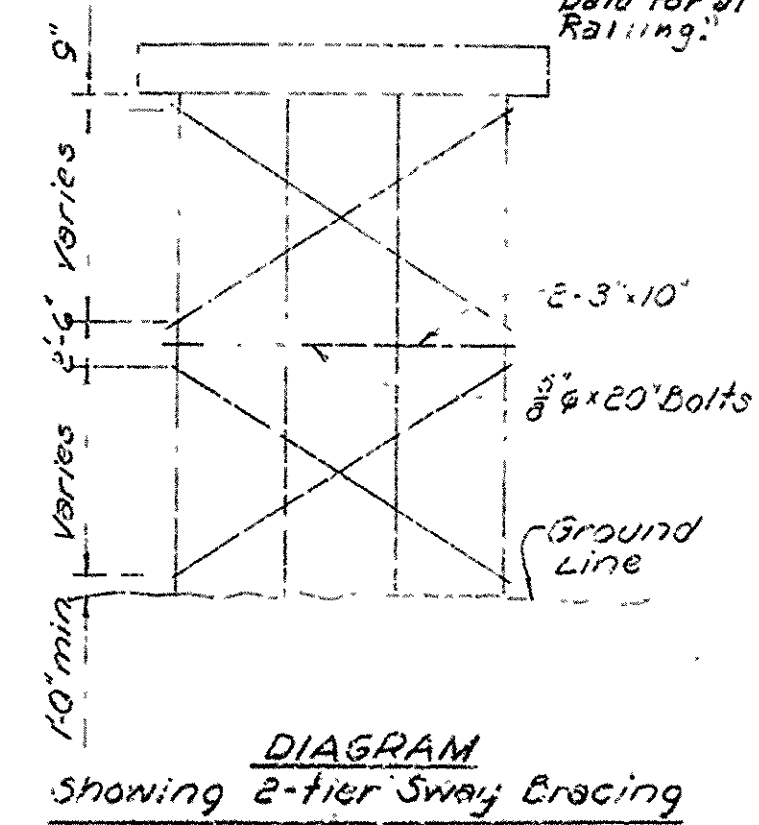


DIAGRAM Showing 2-tier Sway Bracing

***LIST OF REINFORCING STEEL**

Mark	Size	No. Req.	Length	Bending Diagram
D1	#6	8	22'-2" Str.	
D2	"	4	22'-9"	
D3	"	12	3'-10"	
D4	#4	43	8'-1"	
D5	"	8	4'-7"	
D6	"	4	3'-2"	
D7	"	4	2'-3"	
D8	"	4	2'-2"	
D9	"	12	3'-5"	
D10	"	4	2'-2"	
D11	"	4	1'-4"	
D12	"	4	4'-10"	
P13	#6	4**	1'-11"	

Non-Pay: T31 #5 3 4'-0" Str. T32 #3 6 2'-11"

Dimensions are to center line

* See Supplementary Details for Special Details
 ** For Bent 12, see detail for Bent 12 on Exp. side

GENERAL NOTES

All concrete to be Class S and to be poured in the dry. All exposed corners to be chamfered unless otherwise noted.
 For notes and details of Slab Spans see Drawing No. 5305 and clear roadway to be 20'-6"

Reinforcing steel to be deformed bars of intermediate or hard grade. Snap ties and bending dimensions shall be submitted and approved before fabrication is begun.
 Timber and piling to be Southern Yellow Pine or Pacific Coast Douglas Fir with a twelve (12) month treatment in Creosote Sol. by the empty cell process.
 All piling shall be driven to a minimum capacity of 10 tons per pile. Malleable or cast iron washers shall be used under all cap bolts and nuts.
 Exposed surfaces of bolts to be painted with red lead paint prior to erection and with asphaltic paint after erection is complete.
 Payment for all hardware including bolts and nuts will not be paid for directly, but will be considered subsidiary to the cost of Treated Bridge Timber.
 SPECIFICATIONS: Arkansas State Highway Construction, Edition of 1959.
 Joint materials and roofing to not be paid for directly, but considered subsidiary to Precast Slab Units.
 SEE LAYOUT AND SUPPLEMENTARY DETAILS FOR SPECIAL DETAILS

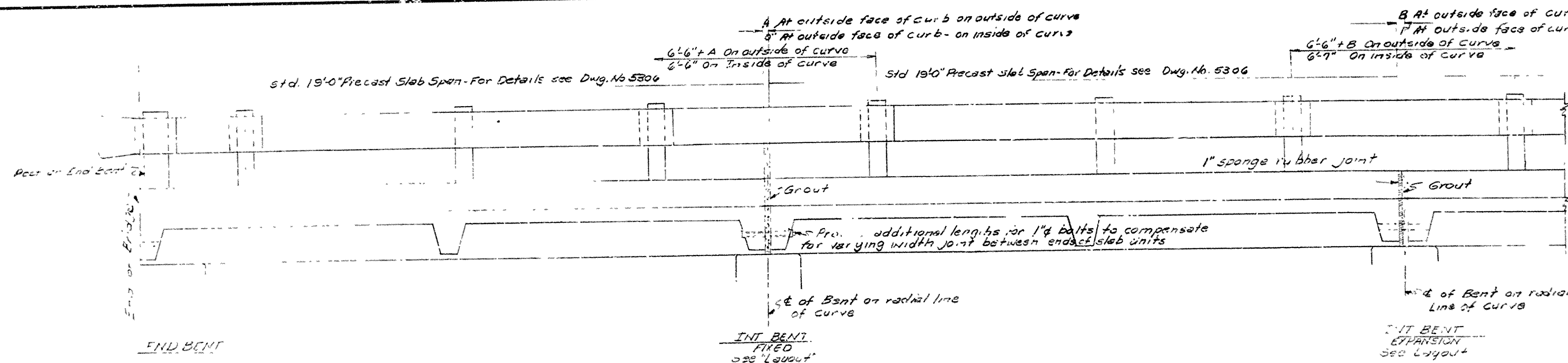
Steel or Aluminum Plate Guard shall be of the type shown or an equivalent type as approved by the Engineer. Tie rail, including all posts and fastenings, shall be paid for at the unit price bid per linear foot for Steel or Aluminum Plate Guard Bridge Railing.

DETAILS OF STANDARD TREATED TIMBER PILE BENTS CONCRETE CAPS 19'0" PRECAST SLAB UNITS 20'-6" CLEAR ROADWAY

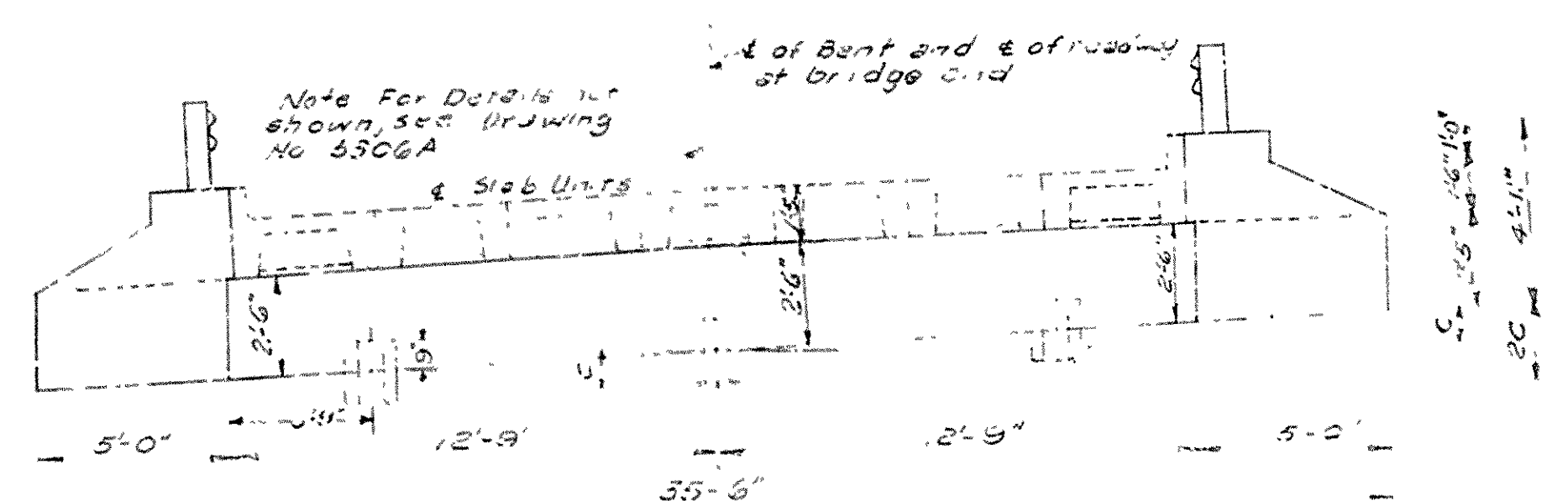
ROUTE SEC.
ARKANSAS STATE HIGHWAY COMMISSION
 LITTLE ROCK, ARK.
 Drawn By: *OW* Date: 4-7-58
 Traced By: *OW* Date: *4-7-58*
 Checked By: *OW* Date: 4-27-58
 Scale: 1/4" = 1'-0"
DRAWING NO. 5305 B

Revised 12-20-60 Curb height, bar P5 H.B.
 Revised joint materials note and bar list. 11-18-63 DV
 A Revised 11-14-65 JEM
 Rev. 3-13-67 PMN.

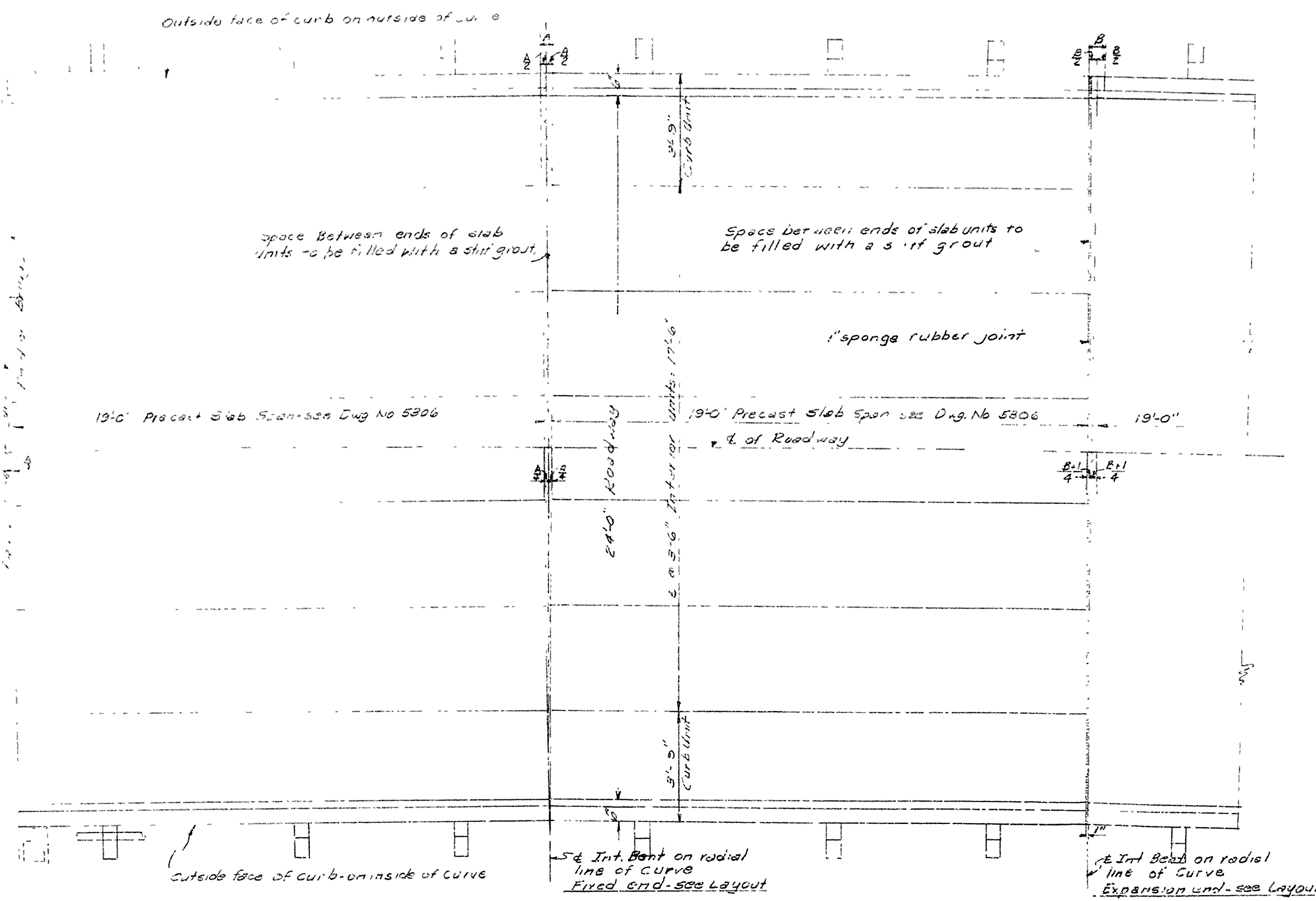
FED. ROAD DIST.	STATE	FED. AID PROJECT	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	ARK.				
JOB NO.					



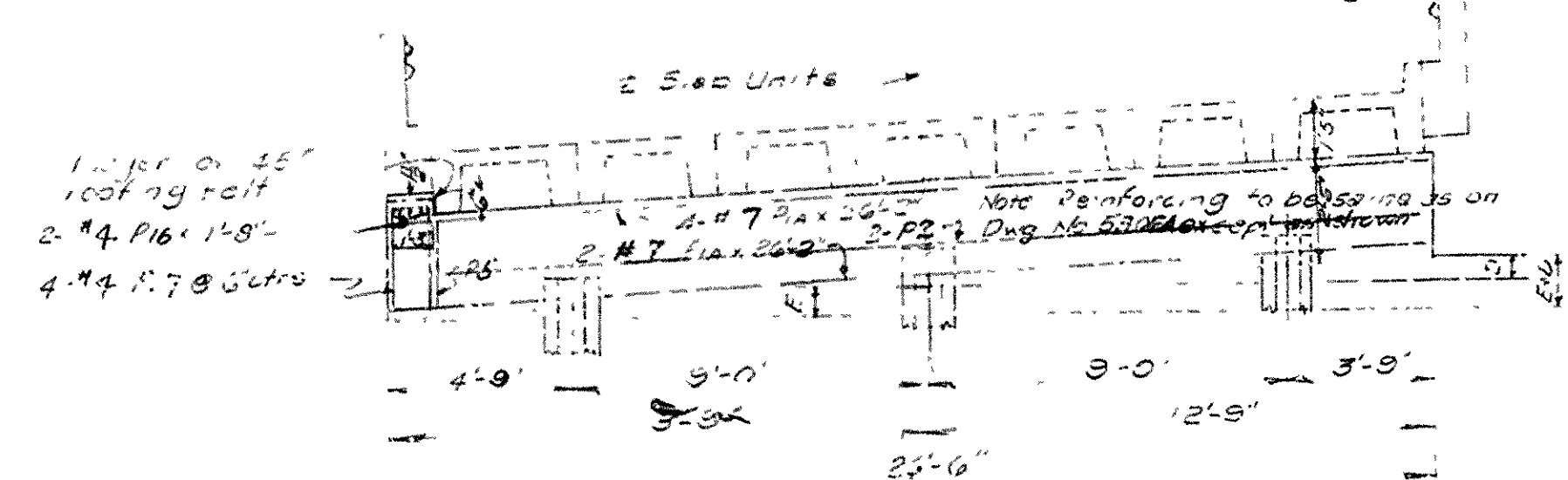
LONGITUDINAL SECTION THRU SLAB SPANS
Scale: 1/4" = 1'-0"



FRONT ELEVATION OF END BENT
Scale: 1/4" = 1'-0"



PLAN OF SLAB SPANS
Scale: 1/8" = 1'-0"



SIDE ELEVATION OF INTERIOR BENTS
Scale: 1/4" = 1'-0"

Variable Dimensions

DEGREE OF CURVE	A	B	C	D	E
1° 00'	1"	2"	4 1/8"	3 3/8"	3 3/8"
1° 30'	1 1/2"	2 1/2"	4 1/2"	3 3/8"	3 3/8"
2° 00'	2"	3"	6 1/8"	4 5/8"	5"
2° 30'	2 1/2"	3 1/2"	7 1/8"	5 5/8"	5 3/8"
3° 00'	3"	4"	8 1/8"	6 1/8"	6 3/8"
3° 30'	3 1/2"	4 1/2"	9 1/8"	6 1/2"	7"
4° 00'	4"	5"	9 3/8"	6 3/8"	7 3/8"

SUPPLEMENTAL BAR LIST
(Each Interior Bent)

MARK	NO.	SIZE	LENGTH	BENDING DIAGRAM
* P1A	6	#7	26'-2"	STR.
P1B	2	#4	1'-8"	STR.
P1C	4	#4	6'-4"	STR.

General Notes
For General Notes and details not shown see Drawing No. 5306A and 5306B.
Grout for filling joint between ends of slab units shall consist of one part Portland cement to three parts of sand. This material and work not to be paid for directly but to be considered as a part of the other items of the contract.
Joint materials and roofing felt not to be paid for directly but considered subsidiary to Precast Slab Units.

SUPPLEMENTAL DETAILS OF
STD. 19'-0" PRECAST SLABS
AND CONCRETE PILE BENTS
1°-00' TO 4°-00' CURVES
24'-0" ROADWAY
ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: D.R.V. DATE: 10-64-60
CHECKED BY: J.E.M. DATE: 10-17-60
BRIDGE NO. DRAWING NO. 5306 G

L.R. Carlson
BRIDGE DESIGN ENGINEER