

264

I-692.5(10)  
11603 3 52

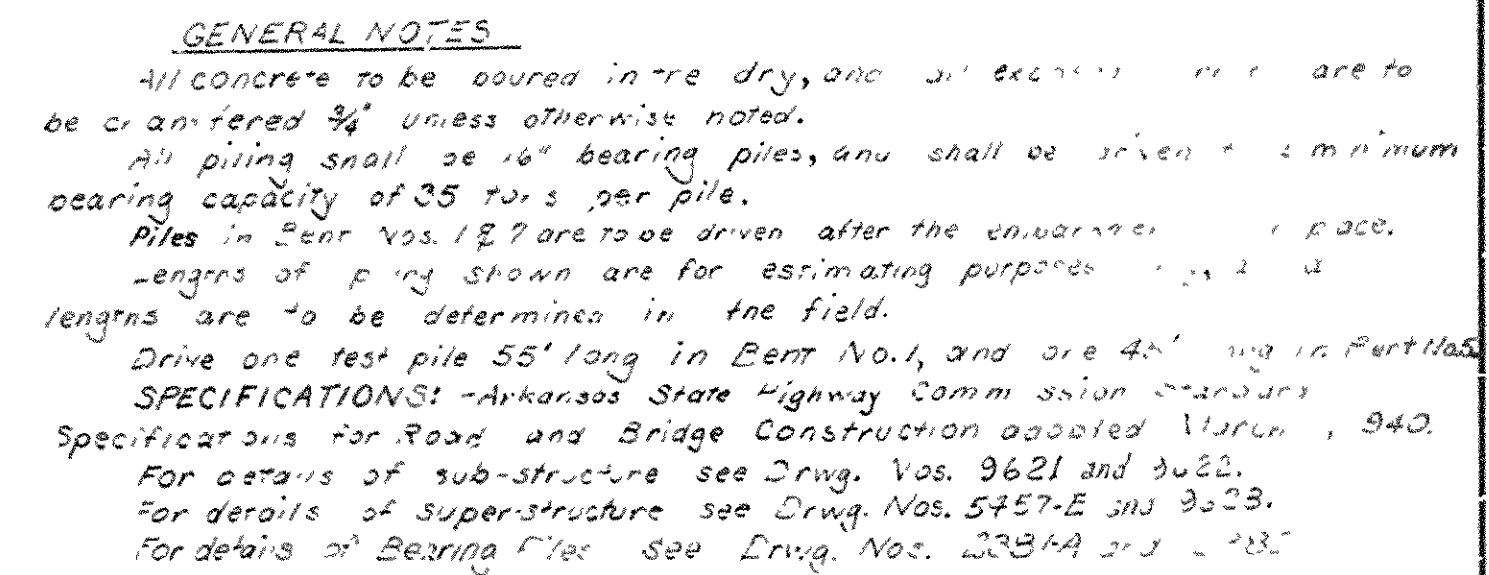
SCHEDULE OF BRIDGE QUANTITIES

NAME PLATE TITLE	CODE	BRIDGE NO.	UNIT OF BRIDGE	ITEM NO.	SP-801-2	SP-801-2	SP & 802	SP & 802	SP & 803	SP-804-4	SP-805-5	SP & 807	SP-909-5	929
				ITEM	DRY EXCAVATION FOR STRUCTURES	WET EXCAVATION FOR STRUCTURES	CLASS A CONCRETE FOR BRIDGES	CLASS S CONCRETE FOR BRIDGES	REINFORCING STEEL	BEARING PILES (16")	ALUMINUM BRIDGE RAILING	STRUCTURAL STEEL IN BEAM SPANS	CONCRETE RIPRAP	BRIDGE NAME PLATES (TYPE C)
					UNIT	CU. YD.	CU. YD.	CU. YD.	CU. YD.	LB.	LIN. FT.	LIN. FT.	LB.	CU. YD.
7TH STREET INTERCHANGE	X 731	3130	END BENT NO. 1		62	-	-	15.55	1960	355	-	795	25.06	1
			INTERMEDIATE BENT NOS. 2, 3, 4, 5 & 6		336	30	125.84	56.82	17740	2005	-	-	-	-
			END BENT NO. 7		62	-	-	15.55	1960	350	-	795	25.64	-
			2- 55' END COMPOSITE I-BEAM SPANS		-	-	-	87.90	14060	-	220.0	99310	-	-
			2- 65' INTERIOR COMPOSITE I-BM. SPANS		-	-	-	103.42	16700	-	260.0	128070	-	-
			2- 70' INTERIOR COMPOSITE I-BM. SPANS		-	-	-	111.06	17980	-	280.0	145830	-	-
TOTALS FOR BRIDGE NO. 3130, AND JOB NO. 11603					460	30	125.84	390.30	70400	2710	760.0	374800	50.70	1

SCHEDULE OF BRIDGE QUANTITIES  
7TH STREET INTERCHANGE  
AT EXPRESSWAY STA. 145+20  
WEST MEMPHIS BYPASS EAST  
CRITTENDEN COUNTY

ROUTE 31 SEC. 1  
ARKANSAS STATE HIGHWAY COMMISSION  
LITTLE ROCK, ARK.  
DRAWN BY: JA DATE: 12/16/57 SCALE: None  
TRACED BY: W.C.H. DATE: 1-3-58  
CHECKED BY: W.C.H. DATE: 1-3-58  
BRIDGE NO. 3130 DRAWING NO. 9519

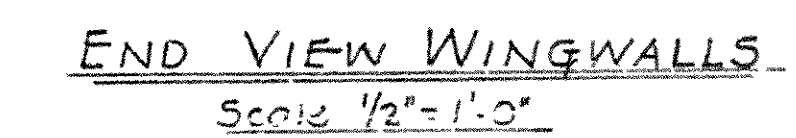
L.P. Wilson  
BRIDGE DESIGN ENGINEER



DRAWN BY: VP DATE: 8-6-57  
 TRACED BY: \_\_\_\_\_ DATE: \_\_\_\_\_  
 CHECKED BY: W.C.H. DATE: 12-3-57  
 SCALE: 1"=20' & As noted  
 BRIDGE NO. 3130 DRAWING NO. 9620

L. P. Carlson  
BRIDGE DESIGN ENGINEER



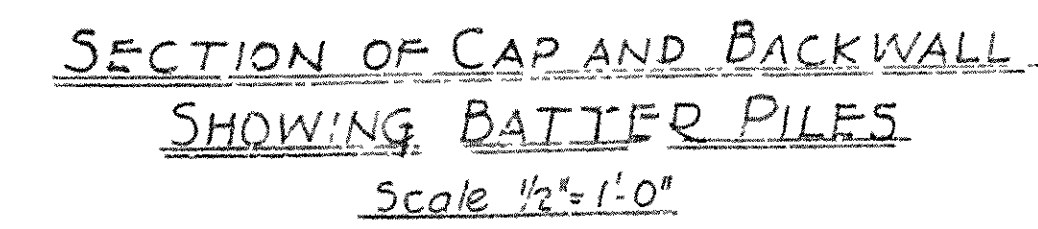


## NOTES

DETAILS OF END BENTS  
BRIDGE NO. 3130

ROUTE 6 SEC. 1  
ARKANSAS STATE HIGHWAY COMMISSION  
LITTLE ROCK, ARK.

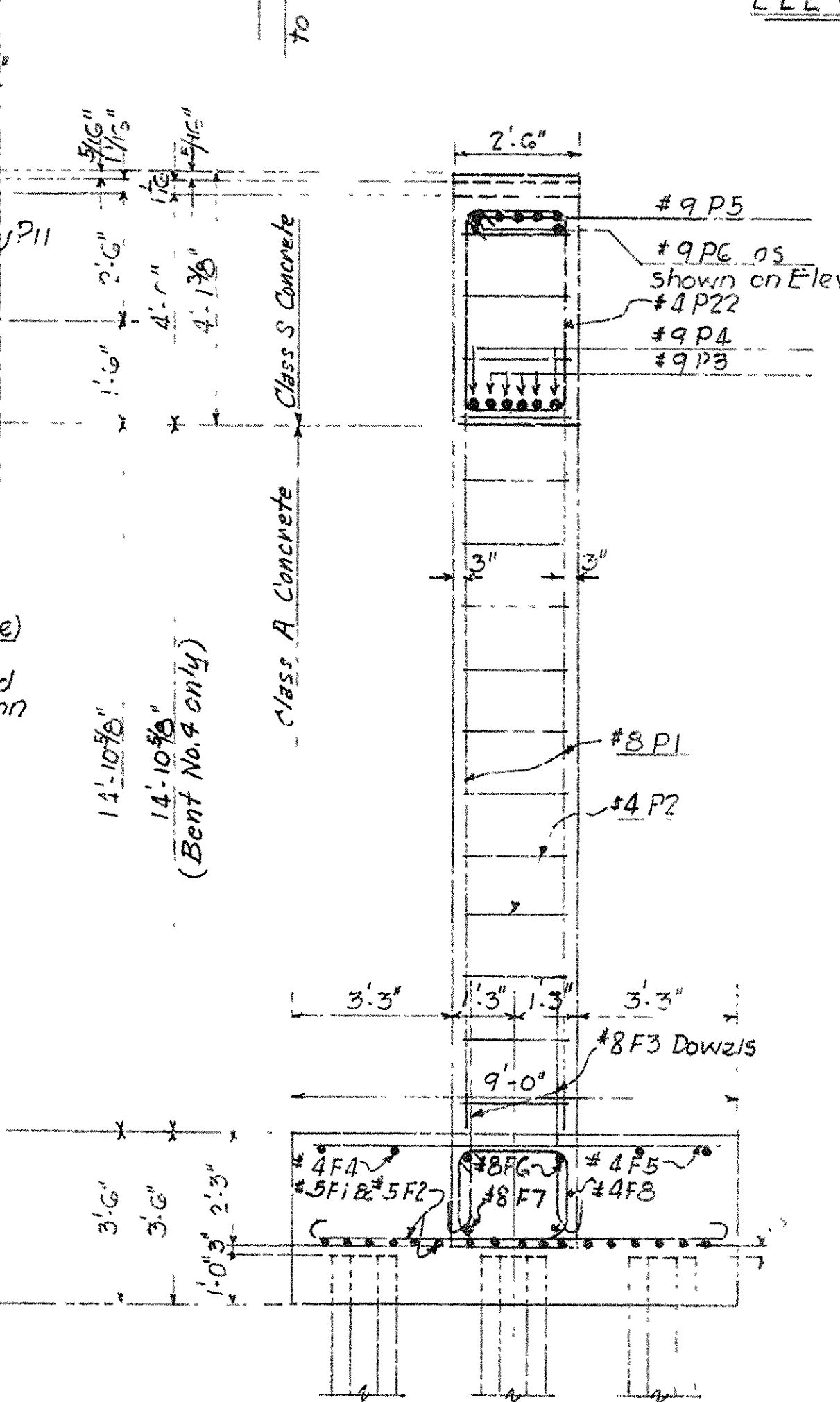
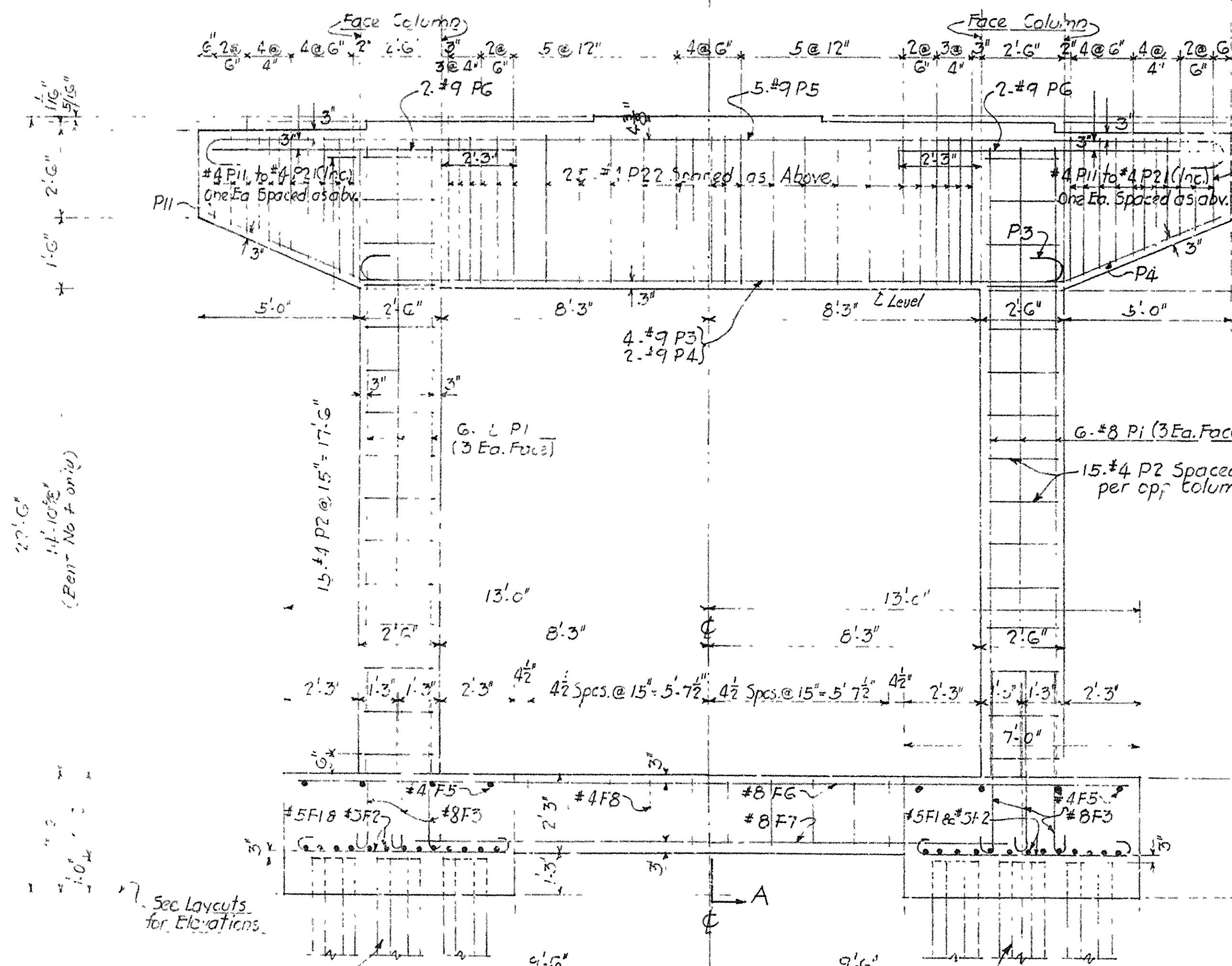
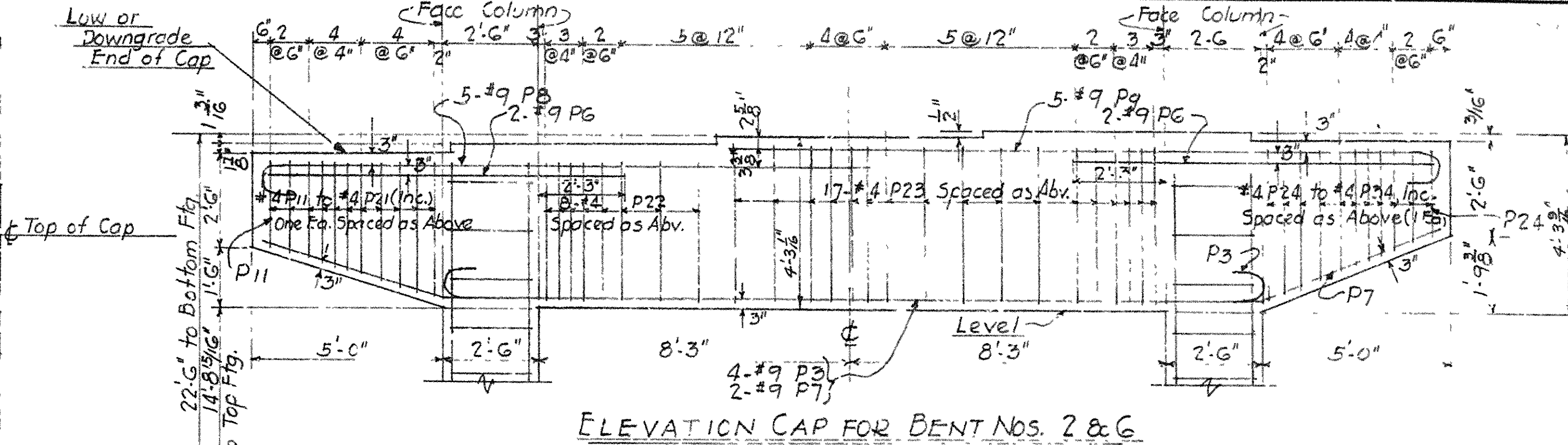
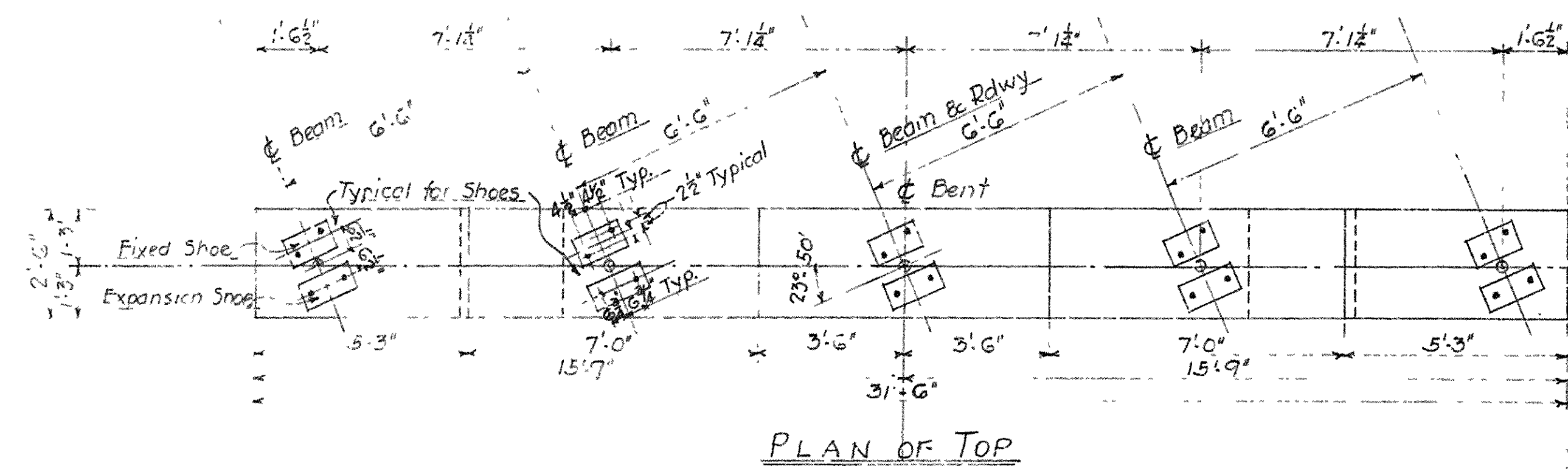
DRAWN BY: wt DATE: \_\_\_\_\_  
 FRACED BY: \_\_\_\_\_ DATE: \_\_\_\_\_  
 CHECKED BY: WCH DATE: 12-30-52  
 BRIDGE NO. 3130 SCALE: 3/4" = 1'-0"  
Exhibit "A" Attached  
 DRAWING NO. 9621



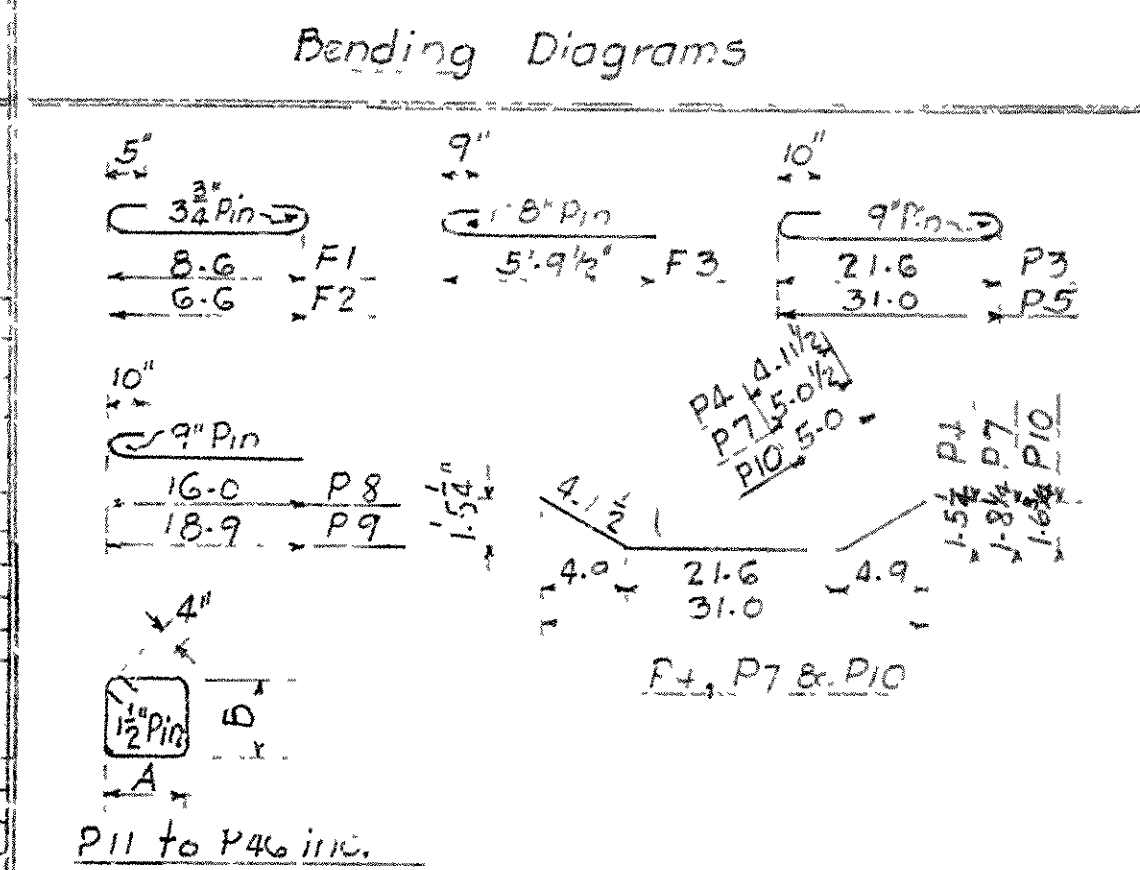
\* Note:- Unless otherwise noted, all rebars in the Wingwalls marked with no suffix are in the back face, while those marked with the suffix "A" are in the front face.

$\frac{42"}{2} \quad 1'-5" @ 3' \quad 3 @ 13\frac{3}{4}" \quad 4 @ 3' \quad 1'-8" @ 3' \quad 3 @ 13\frac{3}{4}" \quad 4 @ 3' \quad 1'-8" @ 3' \quad 3 @ 13\frac{3}{4}" \quad 4 @ 3' \quad 1'-8" @ 3' \quad \frac{42"}{2}$  Spacing of #4 Bars  
ELEVATION END BENT NOS. 1 & 7



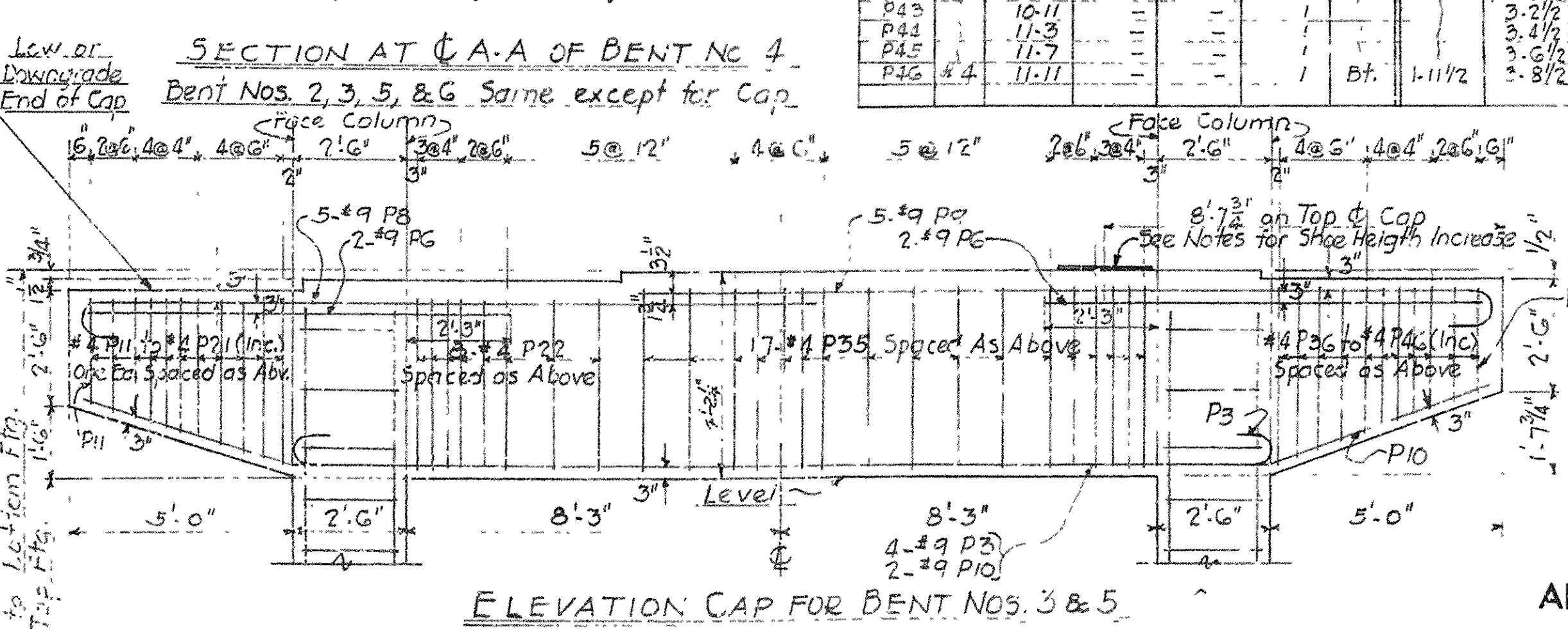
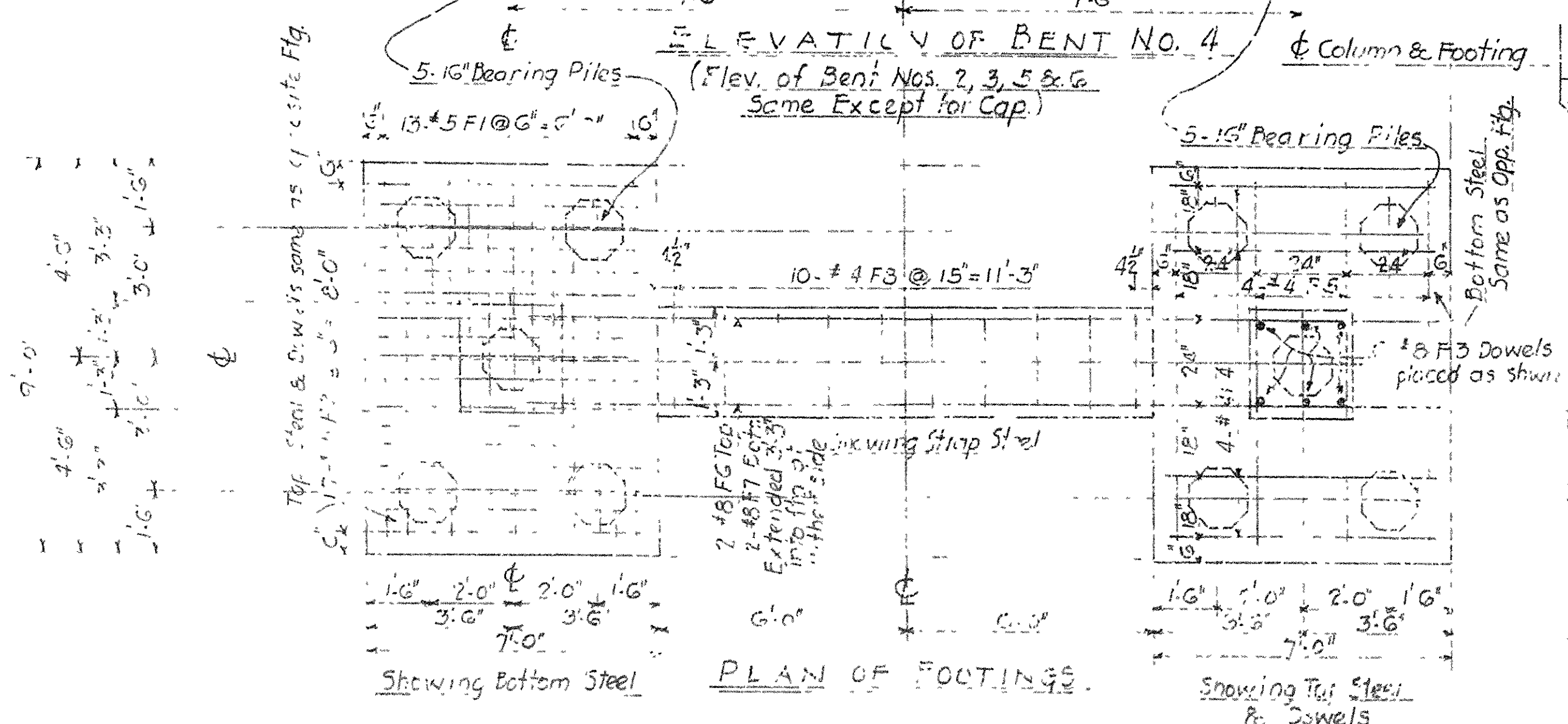


Mark	Size	Length	Number			Str.	A	B
			No. 4	Bt. 5 2 cc 6	Bt. Nos. 3 & 5			
F1	#5	9-9	26	26	26	Bt.	-	-
F2	#5	7-9	34	34	34	Bt.	-	-
F3	#8	6-11	12	12	12	Bt.	-	-
F4	#4	6-6	8	8	8	Str.	-	-
F5	#4	8-6	8	8	8	{	-	-
FG	#8	25-6	2	2	2	{	-	-
F7	#8	18-6	2	2	2	Str.	-	-
F8	#4	8-7	10	10	10	Bt.	-	-
P1	#8	18-6	12	12	12	Str.	-	-
P2	#4	9-1	30	30	30	Bt.	2.1 1/2	2.1 1/2
P3	#9	28-0	4	4	4	{	-	-
P4		31-5	2	2	2	{	-	-
P5		33-6	5	5	5	{	-	-
P6		10-6	4	4	4	Str.	-	-
P7		31-6	4	4	4	Bt.	-	-
P8		17-3	-	5	5	Bt.	-	-
P9		20-0	-	5	5	{	-	-
P10	#9	31-5	-	2	2	{	-	-
P11	#4	9-1	2	1	1	{	1-1 1/2	2.3 1/2
P12		8-4	2	1	1	{	-	2.5
P13		9-10	1	1	1	{	-	2.7
P14		10-1	2	1	1	{	-	2.8
P15		10-3	2	1	1	{	-	2.9 1/2
P16		10-6	2	1	1	{	-	3.0
P18		10-9	2	1	1	{	-	3.1 1/2
P19		11-1	2	1	1	{	-	3.2 1/2
P20		11-4	2	1	1	{	-	3.5
P21		11-8	2	1	1	{	-	3.7
P22		11-9	2.5	8	8	{	-	3.7 1/2
P23		12-2	-	17	-	{	-	3.11
P24		9-1	-	-	-	{	-	3.2 1/2
P25		9-6	-	-	-	{	-	3.6
P26		9-10	-	-	-	{	-	2.8
P27		10-1	-	-	-	{	-	2.9 1/2
P28		10-4	-	-	-	{	-	2.11
P29		10-7	-	-	-	{	-	3.0 1/2
P30		10-10	-	-	-	{	-	3.2
P31		11-2	-	-	-	{	-	3.4
P32		11-6	-	-	-	{	-	3.6
P33		11-10	-	-	-	{	-	3.8
P34		12-3	-	-	-	{	-	3.10 1/2
P35		12-1	-	-	17	{	-	3.9 1/2
P36		9-1	-	-	-	{	-	2.3 1/2
P37		9-5	-	-	-	{	-	2.5 1/2
P38		9-9	-	-	-	{	-	2.7 1/2
P39		10-0	-	-	-	{	-	2.0
P40		10-2	-	-	-	{	-	2
P41		10-5	-	-	-	{	-	2.1 1/2
P42		10-7	-	-	-	{	-	3.0 1/2
P43		10-11	-	-	-	{	-	3.2 1/2
P44		11-7	-	-	-	{	-	3.4 1/2
P45		11-9	-	-	-	{	-	3.6 1/2
P46	#4	11-11	-	-	1	Bt.	1-1 1/2	3.8 1/2



NOTES

All dimensions pertaining to rebar are  
Concrete in columns, footings and footings  
to be Class A, and that in caps to be Class S.  
Increase in Height of Beam Beading Strips  
either by the use of steel forms, or by  
increasing the thickness of the Shoe Sole  
Plates: - (See Sect. DD on Drwg. No. 9623)  
Expansion Shoes. Only for one beam each  
of Bent Nos. 3&5 from the std. 9" to 9 1/2"  
located as shown on "Elevation Cap  
for Bent Nos. 3&5". (Total 2 shoes).  
Fixed Shoes. All shoes for Bent Nos. 2&6  
from the std. 9" to 9 1/4", and all shoes  
for Bent Nos. 3&5 from the std. 9" to 9 1/2",  
EXCEPT for the shoes for one beam each  
bent located as shown on "Elevation  
Cap for Bent Nos. 3&5", which two shoes  
are to be increased from the standard  
9" height to 9 1/4".  
For General Notes and for Details of  
Superstructure. see Drwg. Nos. 5457-E & 9623.



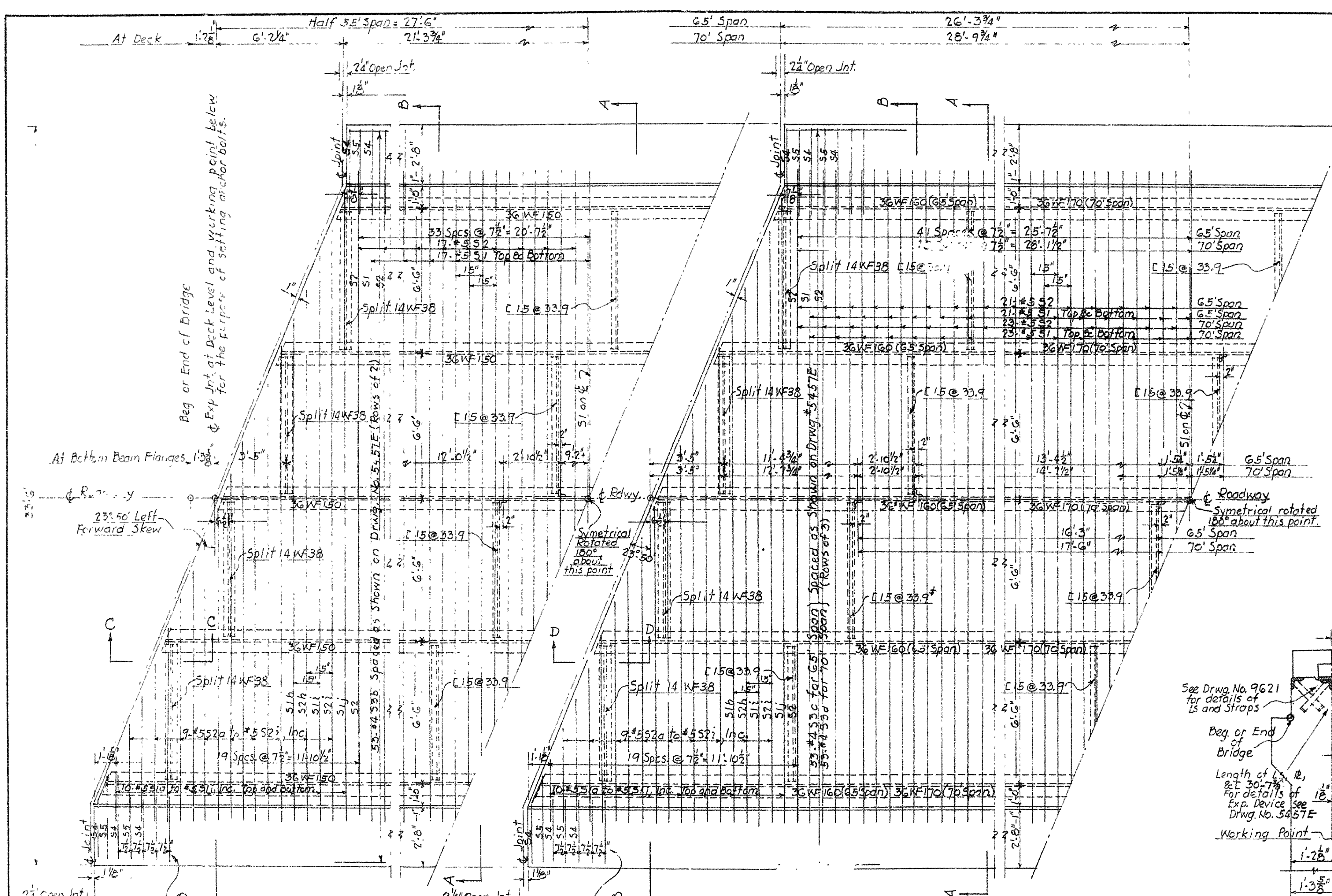
DETAILS OF INTERMEDIATE BENTS  
BENT NO 3130.  
WEST MEMPHIS BYPASS, EAST  
CRITTENDEN COUNTY

ROUTE 61 SEC. 1  
ARKANSAS STATE HIGHWAY COMMISSION  
LITTLE ROCK, ARK.  
DRAWN BY: JA DATE: 1-16-57  
CHECKED BY: W. H. DATE: 12-19-57 SCALE: 1/2" = 1'-0"  
BRIDGE NO. 3130 DRAWING NO. 9622



2107

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REBAR LIST FOR ONE SPAN

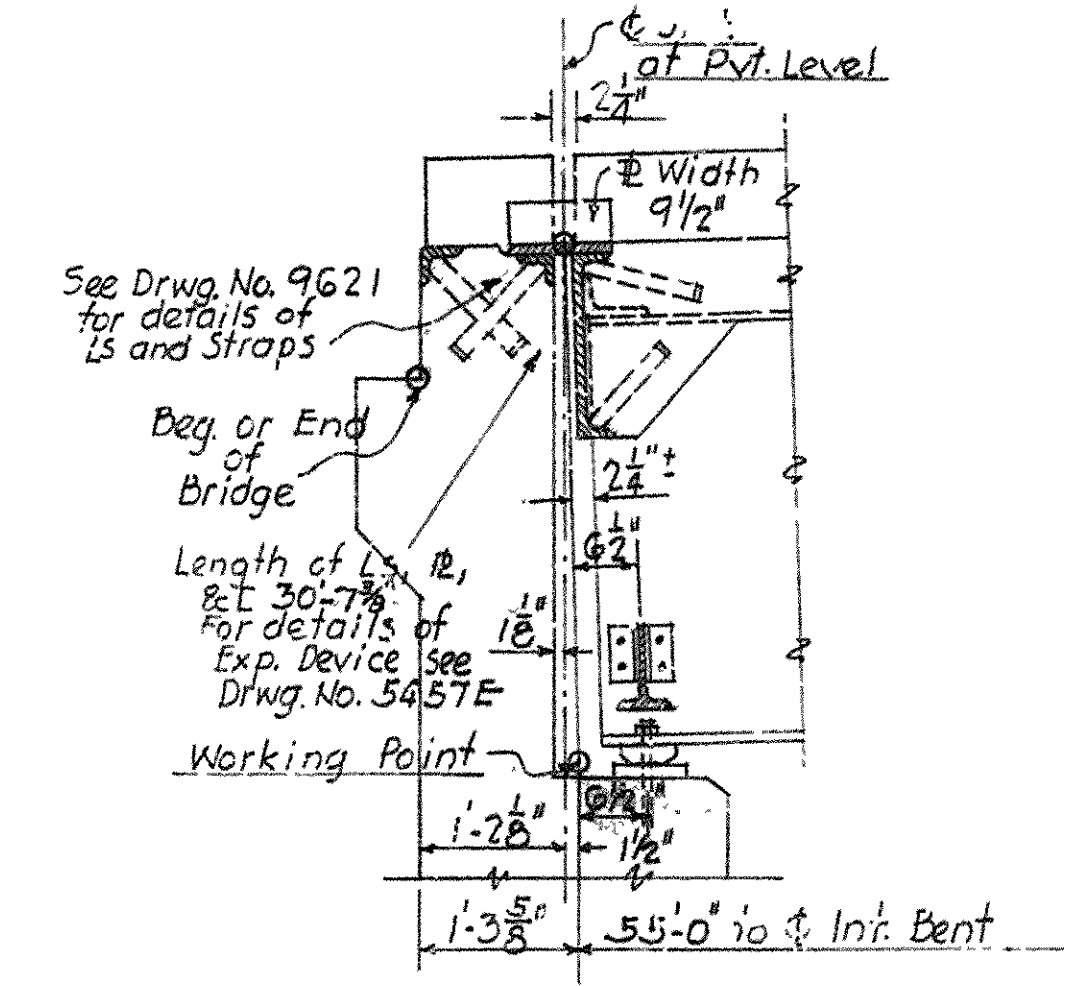
Mark	Size	N <sub>1</sub> Span	N <sub>2</sub> Span	N <sub>3</sub> Span	Length	Str. or. Bent	Pin Dia.	Bending Diagrams
S1	#5	66	82	90	29.2	Str.	-	
S1a		4	4	4	2.9			
S1b		4	4	4	5.7			
S1c		4	4	4	8.5			
S1d		4	4	4	11.3			
S1e		4	4	4	14.1			
S1f		4	4	4	16.11			
S1g		4	4	4	19.7			
S1h		4	4	4	22.7			
S1i		4	4	4	25.5			
S1j		4	4	4	28.3	Str.		
S2		34	42	46	29.10	Bt.	3 3/4"	
S2a		2	2	2	4.3			
S2b		2	2	2	7.1			
S2c		2	2	2	10.0			
S2d		2	2	2	12.11			
S2e		2	2	2	15.10			
S2f		2	2	2	18.9			
S2g		2	2	2	21.8			
S2h		2	2	2	24.7			
S2i	#5	2	2	2	27.6	Bt.	3 3/4"	
S3a1	#4	12	-	-	17.9	Str.	-	
S3a2	-	12	-	-	21.1	-	-	
S3a3	-	-	12	-	27.9	-	-	
S3b	106	-	-	-	28.2	-	-	
S3c	-	159	-	-	22.7	-	-	
S3d	-	-	159	-	24.3	Str.	-	
S4		90	106	114	5.2	Bt.	3"	
S5		88	104	112	4.3	Bt.	3"	
S6	#4	90	106	114	5.4	Bt.	1 1/2"	

2.9 3.3 3.4 2.8 3.3 3.4 2.8 3.4 3.3

For balance of Bending Diagrams, namely for Rebars marked S2, S4, S5 & S6, see Drawing No. 5457-E.

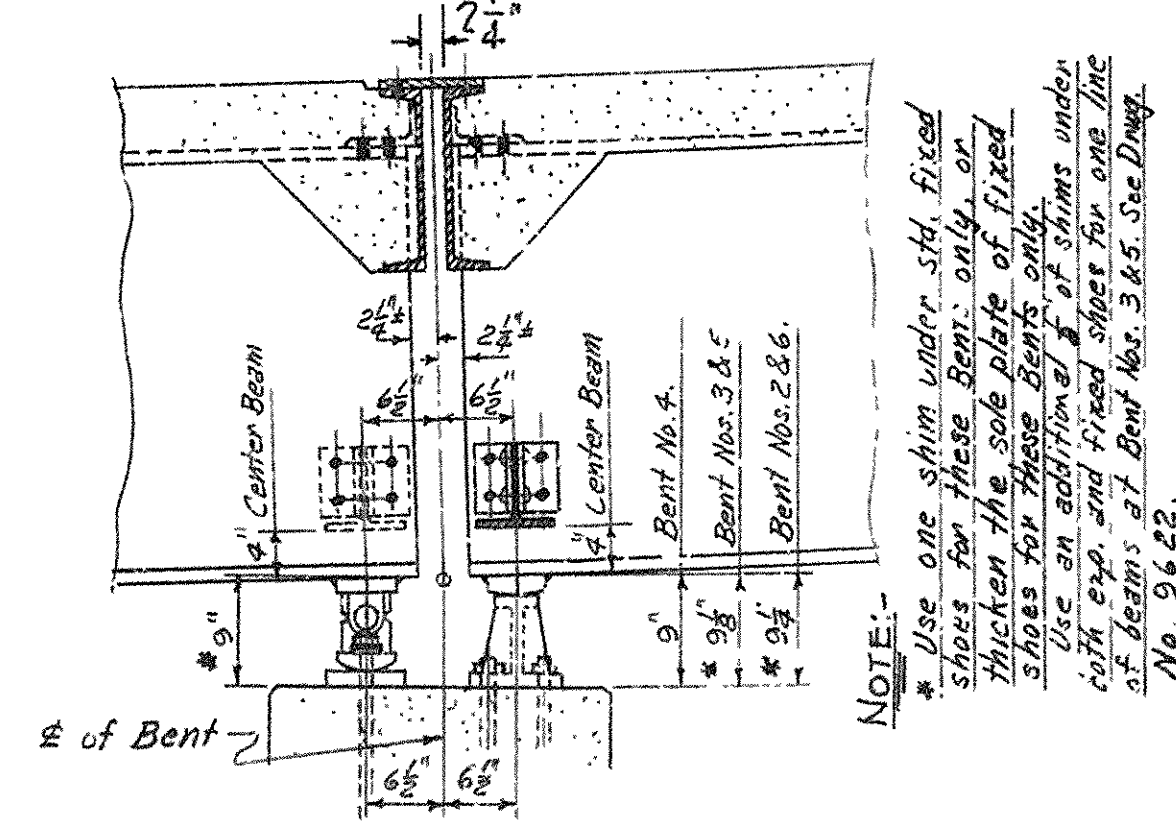
NOTES

All dimensions pertaining to Rebars are to  $\phi$  of bar.  
This Drwg. to be used in conjunction with Drwg. No. 5457-E.  
For substructure details, see Drwg. Nos. 9621 and 9622.

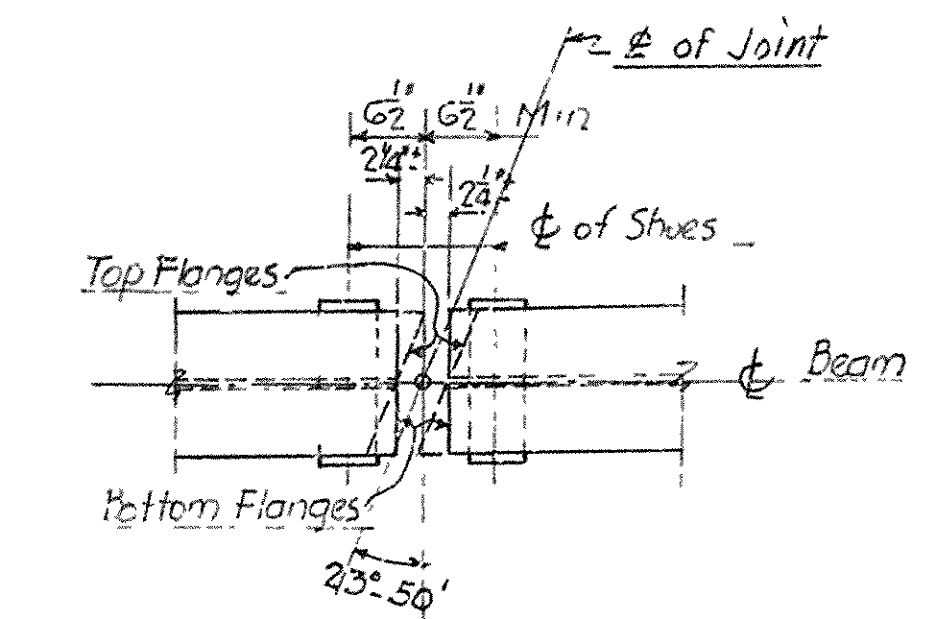


SECTION C-C  
Scale 3/4" = 1'-0"

NOTE: For details not shown see Drawing No. 5457-E



SECTION D-D AT INT. BENTS  
Scale: 3/4" = 1'-0"



ENDS OF BEAMS AT ROADWAY JOINTS  
Scale 3/4" = 1'-0"

SUPPLEMENTARY  
DETAILS OF SUPERSTRUCTURE  
BRIDGE NO. 3130  
WEST MEMPHIS BYPASS-EAST  
CRITTENDEN COUNTY

ROUTE 61 SEC. 1  
ARKANSAS STATE HIGHWAY COMMISSION  
LITTLE ROCK, ARK.  
DRAWN BY: *WA* DATE: 12/2/57  
TRACED BY: DATE: 12/13/57  
CHECKED BY: *M.C.H.* DATE: 12/13/57  
BRIDGE NO. 3130  
DRAWING NO. 9623

*L.P. Carlson*  
BRIDGE DESIGN ENGINEER

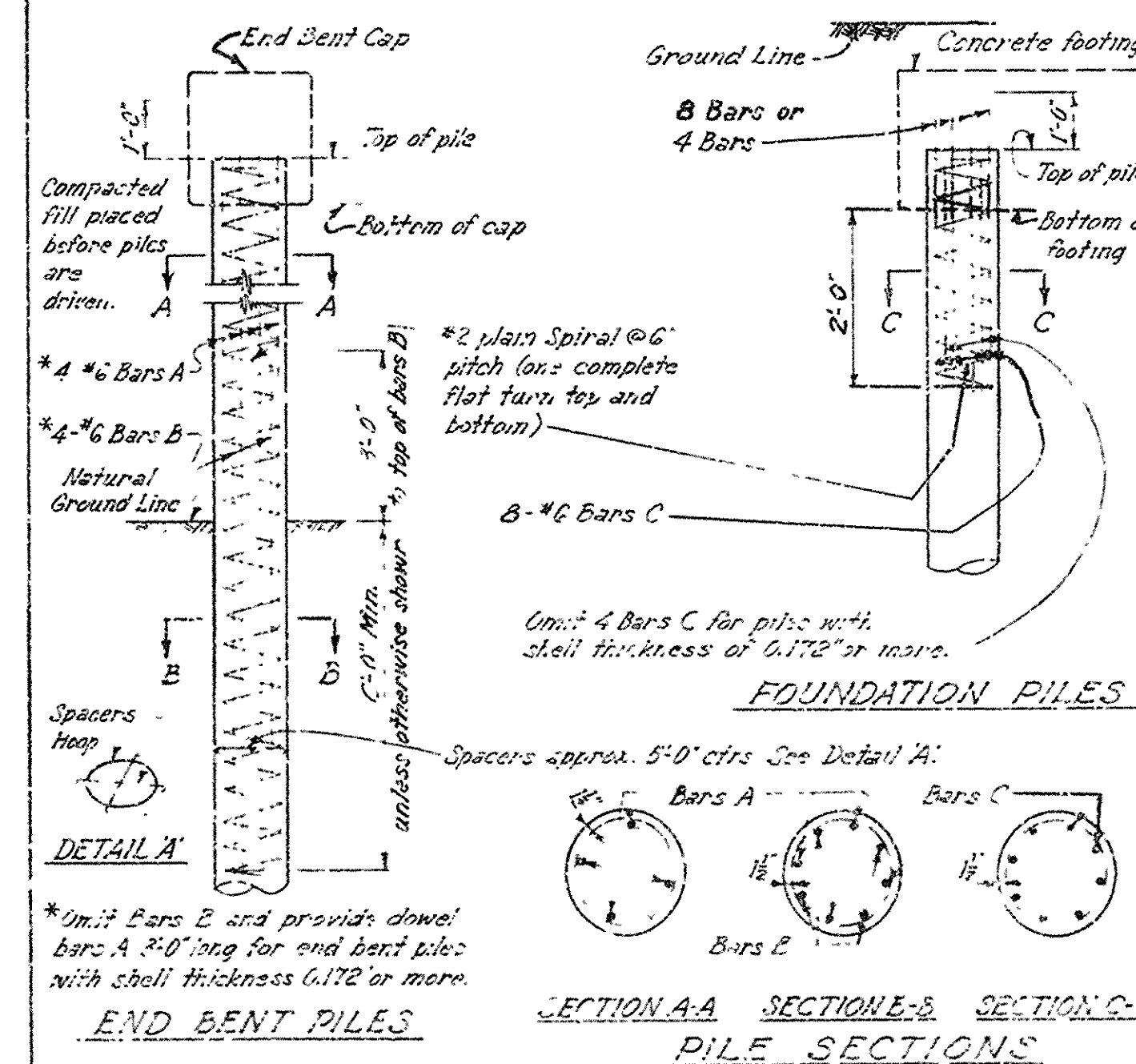
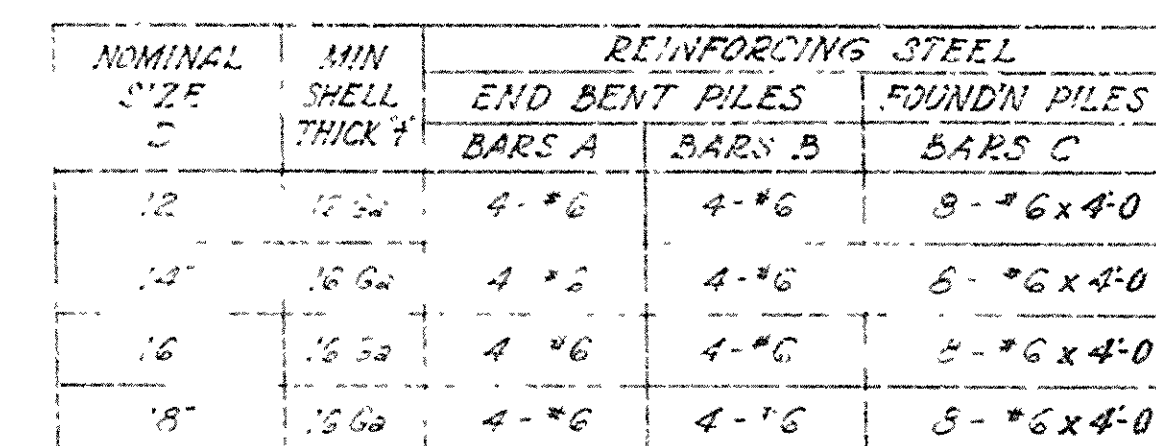
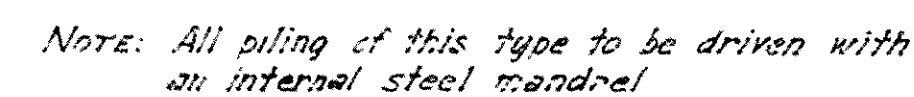
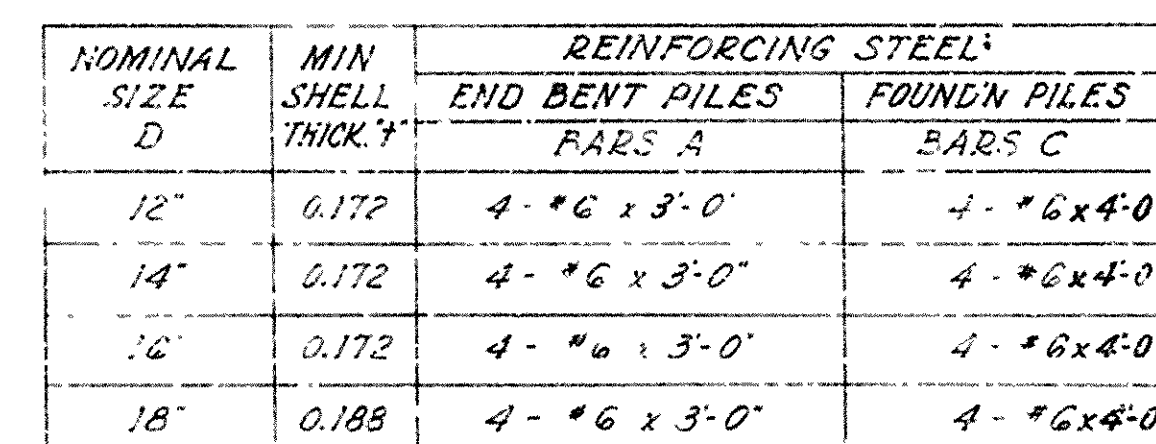
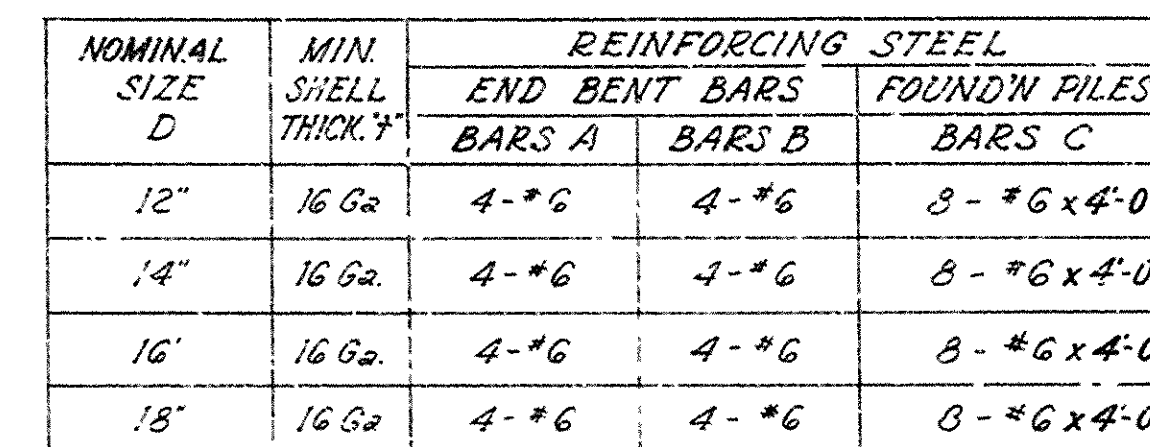
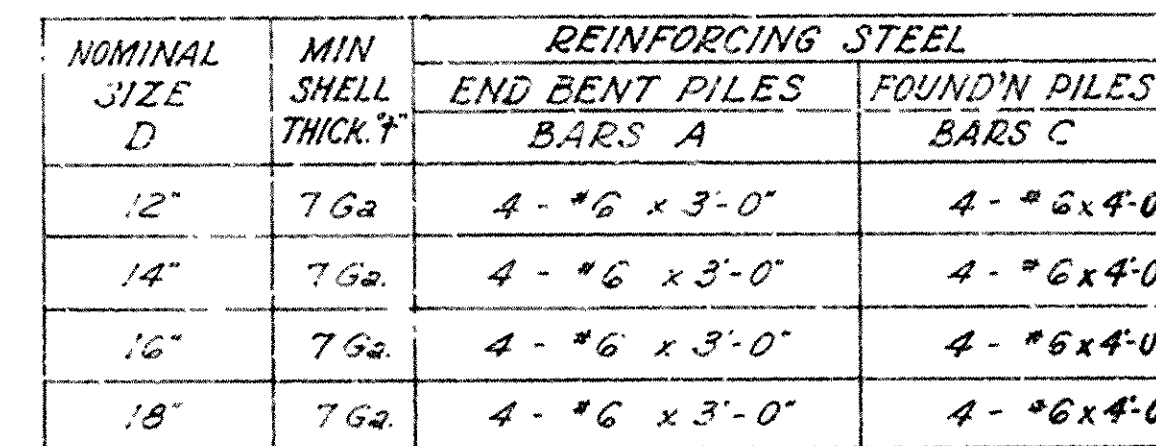
PARTIAL HALF PLAN END SPANS

PARTIAL HALF PLAN INTERIOR SPANS

Continue #454 bars in top and #455 bars in bottom, alternating as shown @ 7 1/2" o.c., with the S4 bars spliced to the S1 bars and the S4 bars spliced to the S2 bars.  
See Drwg. No. 5457-E for the balance of the curb rebars, namely the #456 and the #453a bars.  
For Sections AA and BB above, see Drwg. No. 5457-E, and on Section BB use length of 30'-3" for the Roadway. E15@33.9" and for the Roadway R, and a width of 9 1/2" for the curb portion of the Roadway R.

NOTE: Use one shim under each fixed shoe for these bents only or thicken the sole plate of fixed shoes in addition to shims under both exp. and fixed shoes for one line of beams at Bent No. 345. See Drwg. No. 9622.





GENERAL NOTES

Metal shells shall be filled with Class S Concrete after driving has been completed.

Reinforcing steel, except spirals, shall be deformed bars of ASTM A615 Grade 60 unless otherwise modified by Special Provisions. Spiral reinforcing shall be plain bars of ASTM A82. Dimensions relating to reinforcing steel are to centers of bars. Payment for all reinforcing steel to be included in the unit price per linear foot bid for "Bearing Piles".

Pile size designated on the Bridge Layout is nominal diameter of pile. Gages of metal shown are in accordance with U.S. Standard Gage.

Splices, where necessary, shall be made as shown, or as recommended by the Manufacturer and approved by the Engineer. \*Cutoff or buildup will be paid for in accordance with the Standard Specifications.

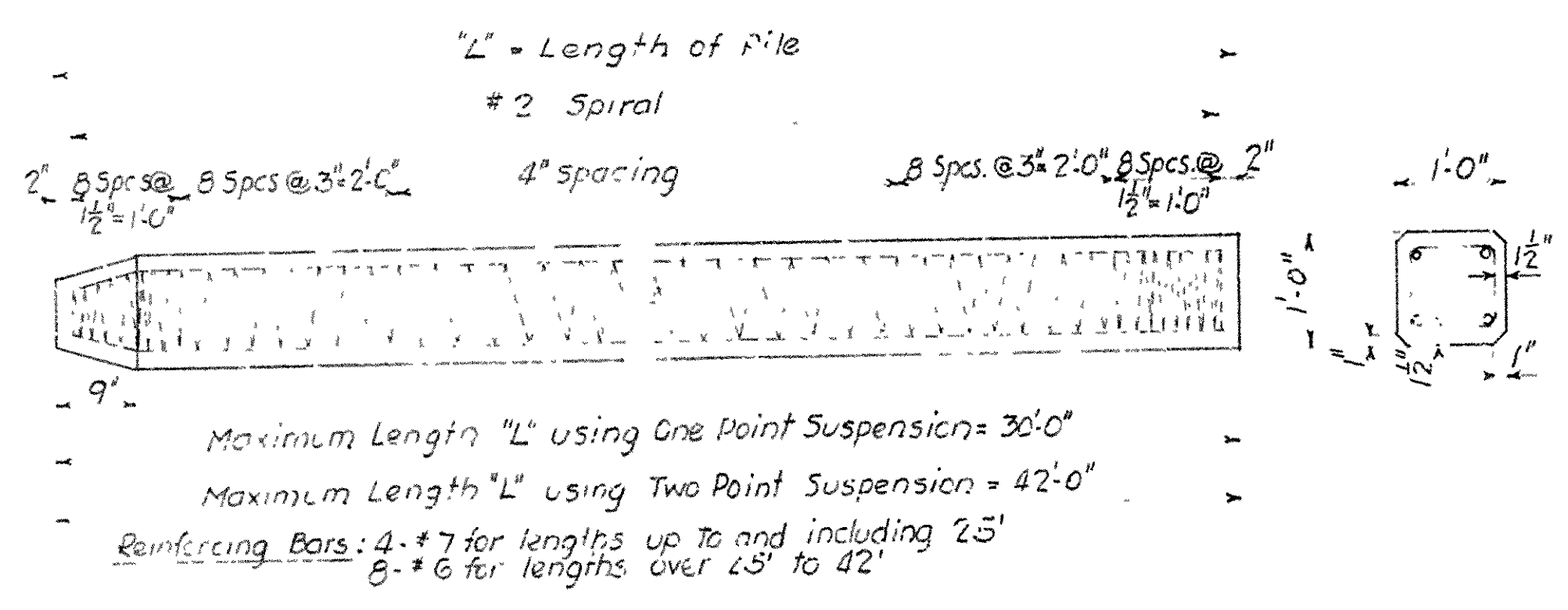
*SPECIFICATIONS. Arkansas State Highway Commission Standard Specifications for Highway Construction, Edition of 1977 and applicable Special Provisions.*

Revisions:  
Added notes 6-12-57 H.E.  
7-14-57 H.B.  
Reinf. Det. 4-24-59 A.J.  
The Great Landlord Soci<sup>ty</sup> File -  
6-5-56 A.E.  
545 Specs. inc. + 4-1-57  
Specs. 4-7-58 A.J.  
\* Revised: 7-14-67 U.S.  
Reinf. Det. 7-24-67 A.J.  
Reinf. Designation Rev.  
12-21-77 J.W.B.  
8-8-72. Revised for  
1972 Specs.

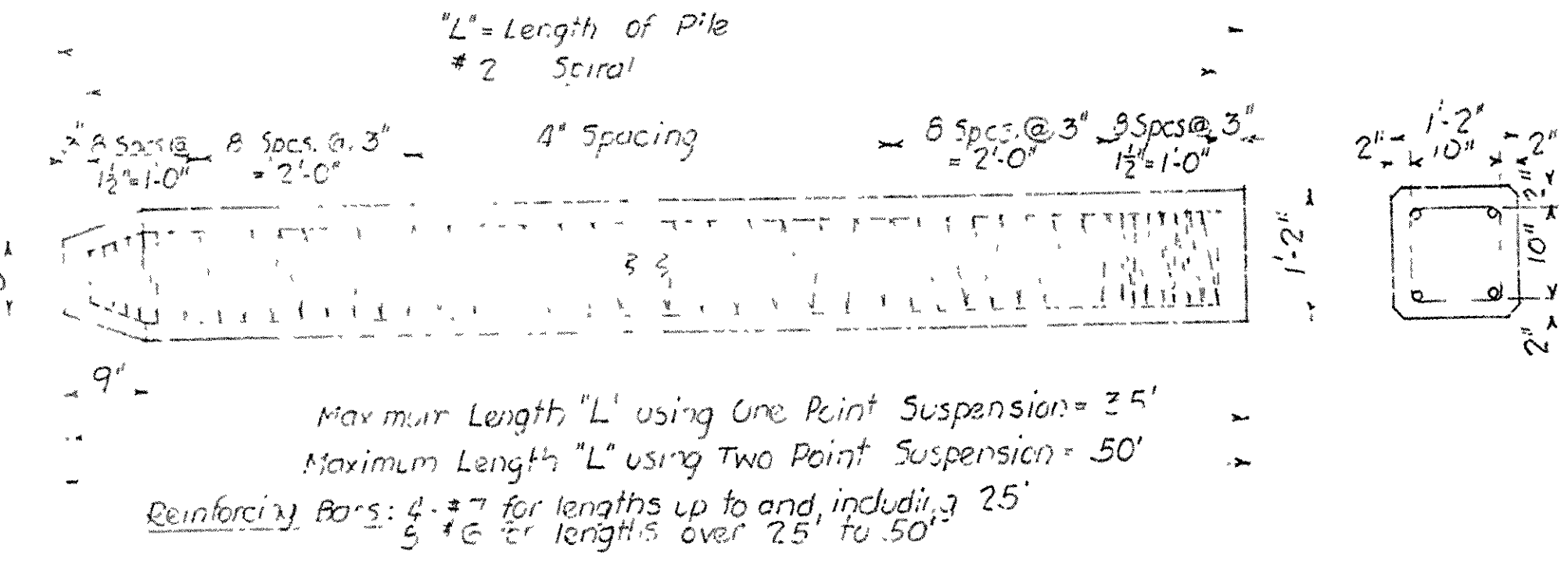
1. DETAILS OF  
CONCRETE FILLED METAL SHELL PILES  
12", 14", 16" & 18" NOMINAL SIZE

ROUTE SEC.  
ARKANSAS STATE HIGHWAY COMMISSION

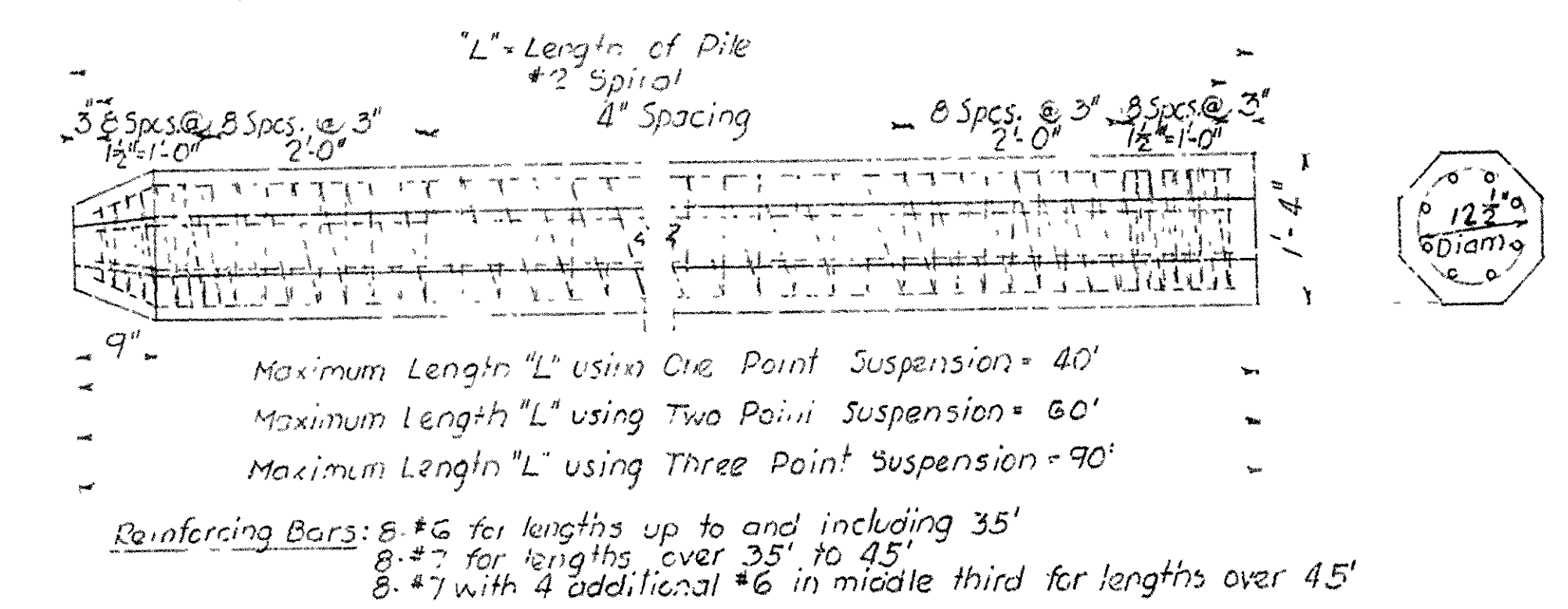
DRAWN BY: H.B. DATE: 5-6-57  
 TRACED BY: A.J. DATE: 4-28-59 SCALE: \_\_\_\_\_  
 CHECKED BY: J.M.K. DATE: 5-19-57  
 TRACING: T.M.H. DATE: 4-27-59  
 BRIDGE NO. \_\_\_\_\_ DRAWING NO. 2381A



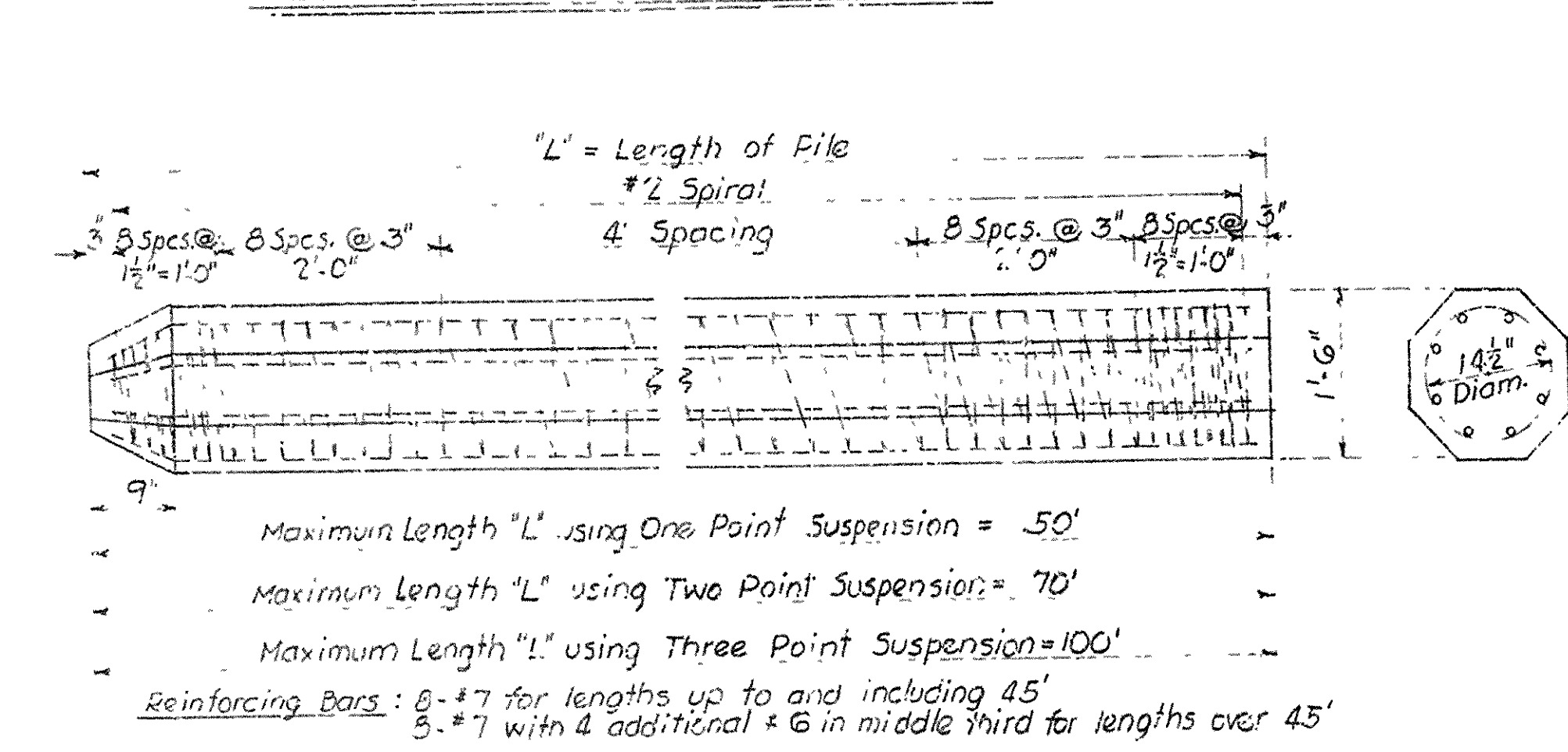
DETAILS OF 12" SQUARE PILE



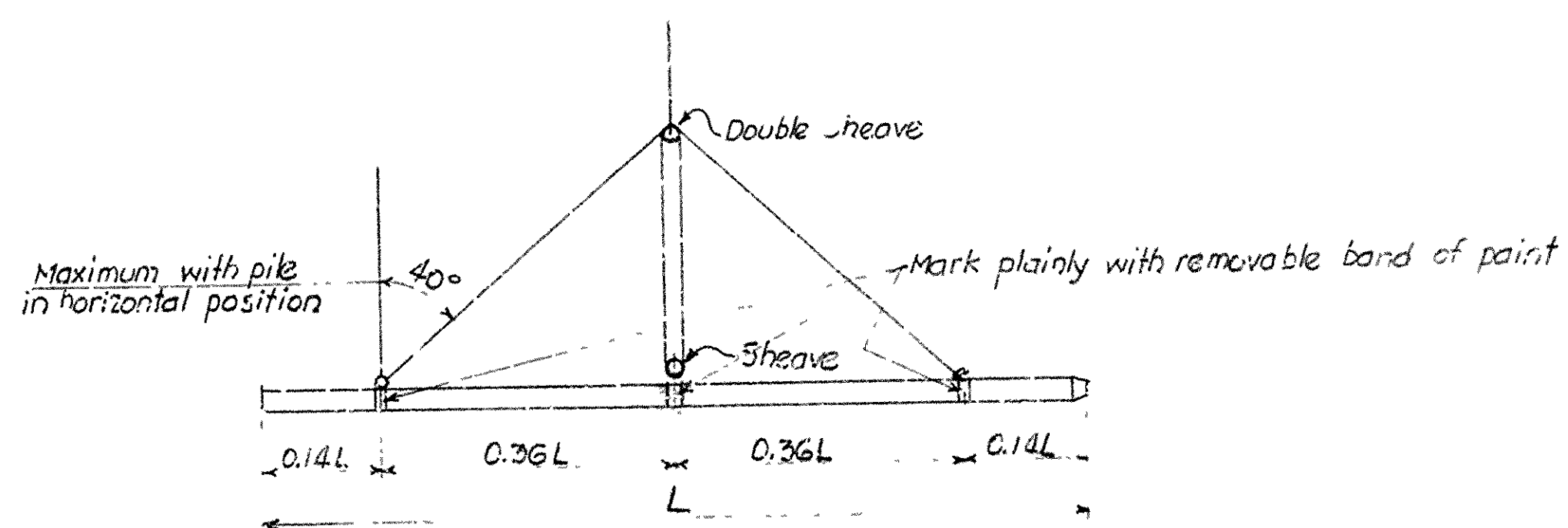
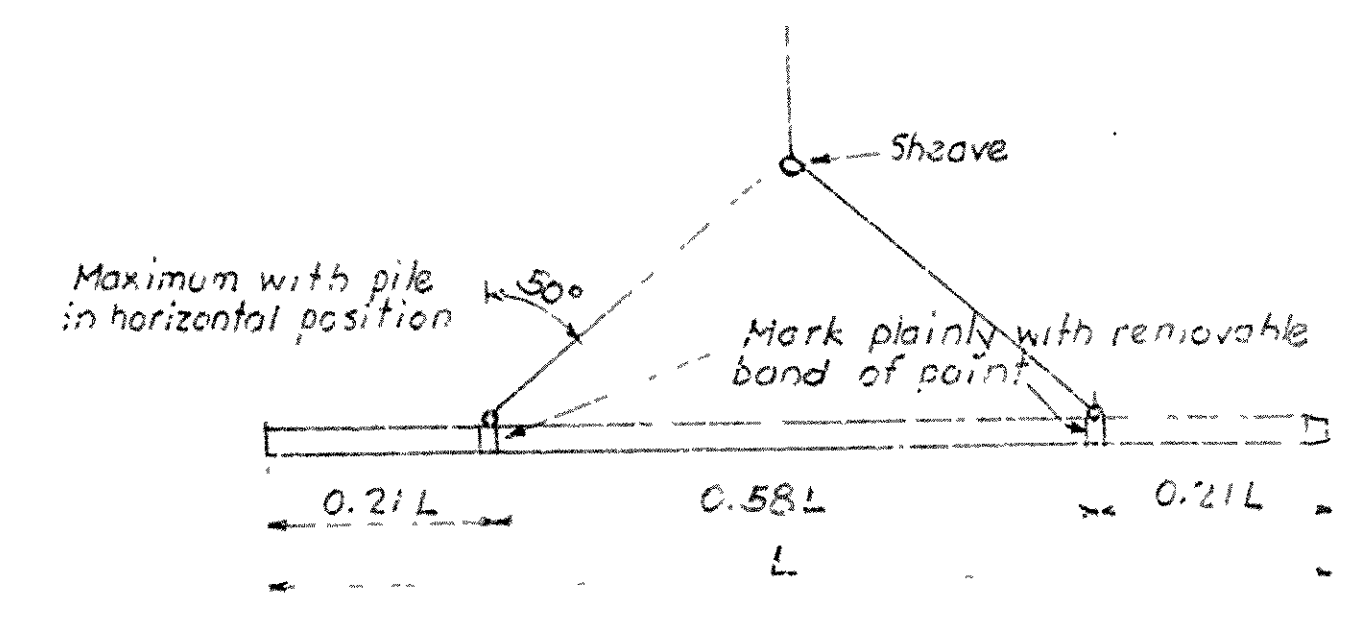
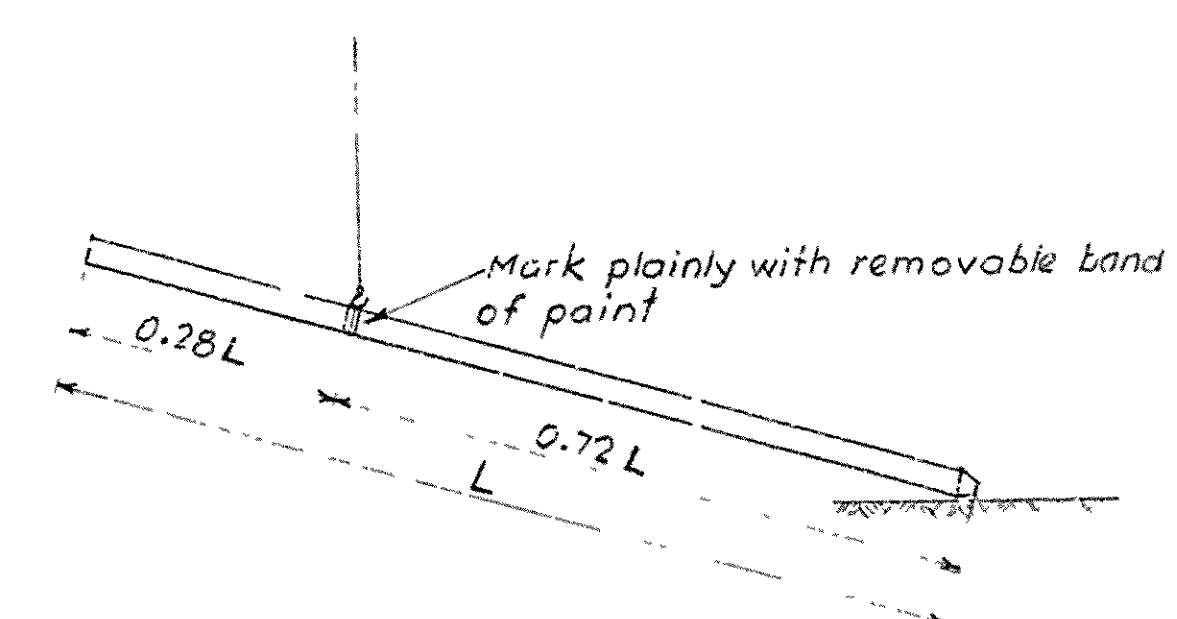
DETAILS OF 14" SQUARE PILE



DETAILS OF 16" OCTAGONAL PILE



DETAILS OF 18" OCTAGONAL PILE



GENERAL NOTES

All concrete to be Class "S"  
Longitudinal reinforcing steel shall be determined bars of intermediate grade, unless otherwise modified by Special Provisions. Spiral shall be formed from plain round billet steel reinforcing bars.  
SPECIFICATION 5: Arkansas State Highway Commission Standard Specifications for Highway Construction, Edition of 1959.

Prestressing Alternate:-

As an alternate to the reinforcement shown, these piles may be prestressed by the use of steel strands of high tensile cold-drawn uncoated stress-relieved wire strands having an ultimate tensile strength of not less than 250,000 p.s.i. and an elongation at rupture of not less than 3% in 10'; number and size of strands and prestressing load to be as follows:-

Pile Size	Wire Strands No. Nominal Dia.	* Prestressing Force Per Strand
12" Square	8 3/16"	10150*
14" Square	12 3/16"	10150*
16" Octagonal	12 3/8"	14000*
18" Octagonal	16 3/8"	14000*

\* Prestressing force to be not more than 0.7 of the ultimate value of strand.

To permit splicing for buildup, where necessary, of prestressed piles, reinforcing as shown in details shall be provided in butt end of pile for a length of 5' and 6' for No. 6 & No. 7 bars respectively.

Revisions:-  
Provisions for prestressing 1-6-58 H.B.  
Prestressing strands, forces 4-14-58 H.B.  
Number Prestressing Strands 16" Pile 10-31-58 H.B.  
General Notes 2-26-60 A.T.

DETAILS OF STANDARD PRECAST CONCRETE PILES

ROUTE SEC.  
ARKANSAS STATE HIGHWAY COMMISSION  
LITTLE ROCK, ARK.

DRAWN BY: L.W.H. DATE: 7-26-58  
TRACED BY: J.A. DATE: 4-27-58  
CHECKED BY: D.K. DATE: 7-27-58  
RETRACTED BY: J.M. DATE: 4-2-58  
BRIDGE NO. DRAWING NO. 2382

J.P. Carlson  
BRIDGE DESIGN ENGINEER

See Revised 5-22-61



