

FED. ROAD DIST. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	ARK.	F 239 (5)		1	9
STATE JOB NO. 10300					

INDEX OF SHEETS

Sheet No.	Drawg. No.
1	6781 Title Sheet Job No 10300
2	6782 Summary of Quantities
3	6783 Layout of Bridge No 2459
4	6784 Layout of Bridge No 2460
5	5252-A Details of Bents
6	5252 Details of 30' I-Beam Spans
7	2387 Details of Bridge Name Plates
8	1888 Backfill for Structures
9	1891 Basis for Computing Excavation for Structures

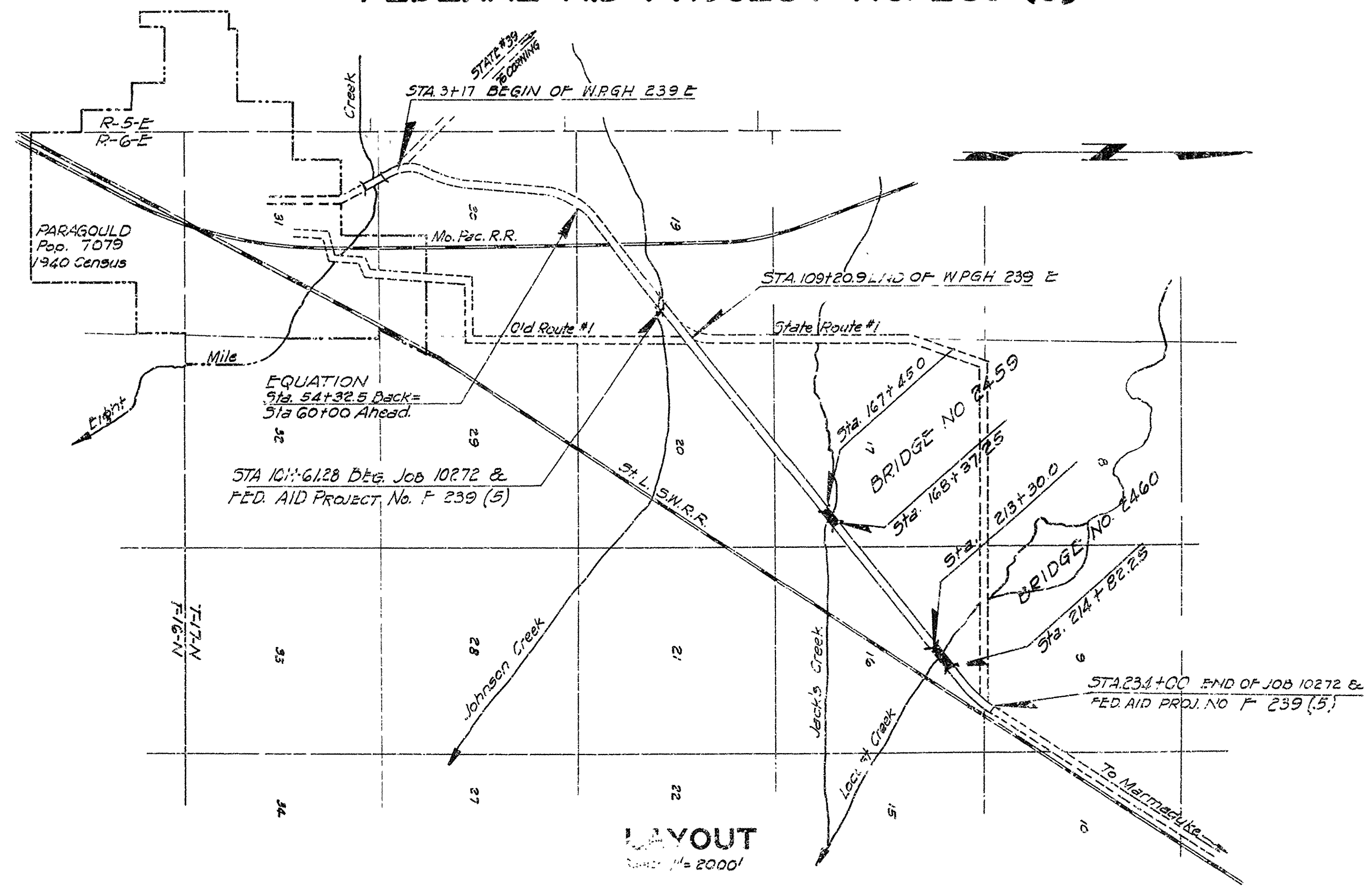
STATE OF ARKANSAS
STATE HIGHWAY COMMISSION

PLAN OF PROPOSED BRIDGES
PARAGOULD-MARMADUKE
GREENE COUNTY
ROUTE 1 SEC. 20
JOB NO 10300
FEDERAL AID PROJECT NO. 239 (5)

SPECIFICATIONS: ARKANSAS STATE HIGHWAY COMMISSION
STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION
ADOPTED MARCH 1, 1940 WITH THE SPECIAL PROVISIONS LISTED BELOW

PAMPHLETS	
DIVISION	PART
I	
II	1, 84, 88, 9
III	
IV	

No.	SPECIAL PROVISIONS TITLE	No. SHEETS
	Required Special Provisions	11
	Wages of Labor	1
2-1	Revision of Article 2.11	2
2-2	Equipment List Required	1
2-4	State License for Contractors	1
4-1	Revision of Article 4.9	1
8-3	Employment Centers for Labor	1
9-5	Partial Payments	1
803-1	Revision of Article 803.21	1
807-4	Revision of Article 807.29	1
807-5	Revision of Article 807.29 (e)	1
850-1	Engineers Field Office	1
853-1	Machine Mixing	1
Job 10272 & Job 10300	Coordination of Work	2



LAYOUT
Scale: 1" = 2000'
LENGTH OF PROJECT= 244.50 FEET OR 0.046 MILES
LENGTH OF BRIDGES= 244.50 FEET OR 0.046 MILES
LENGTH OF EMBANKMENT= 244.50 FEET OR 0.046 MILES
LENGTH OF JOB= 244.50 FEET OR 0.046 MILES

N.B. Larver
PRINCIPAL HIGHWAY ENGINEER - BRIDGES

APPROVED
CHIEF ENGINEER-STATE HIGHWAY COMMISSION

APPROVED
CHAIRMAN-STATE HIGHWAY COMMISSION

RECOMMENDED FOR APPROVAL
DISTRICT ENGINEER
PUBLIC ROADS ADMINISTRATION
FEDERAL WORKS AGENCY

APPROVED
COMMISSIONER
PUBLIC ROADS ADMINISTRATION
FEDERAL WORKS AGENCY

FED. ROAD DIST. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	ARK.	F 239 (5)		2	7
STATE JOB NO. 10300					

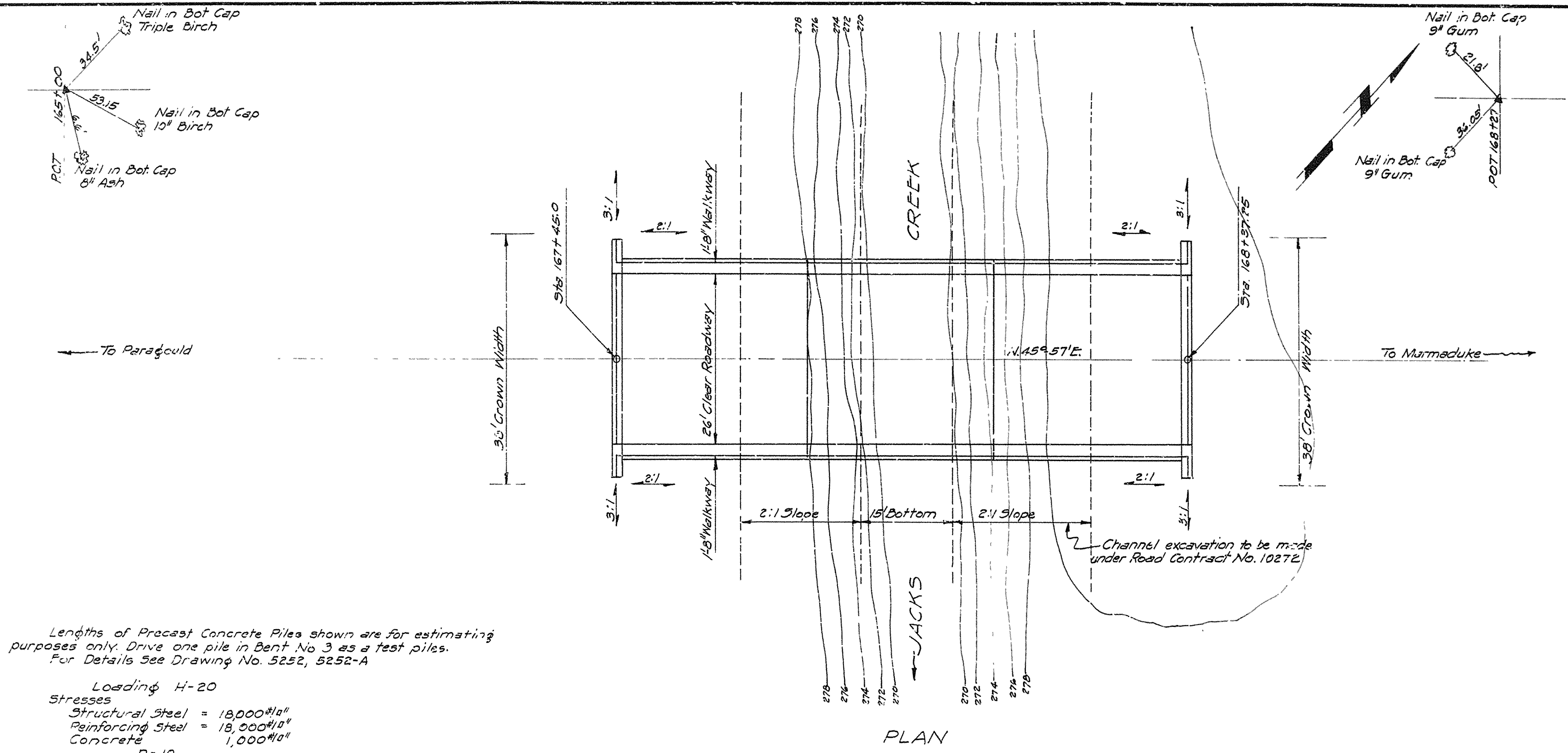
SUMMARY OF BRIDGE QUANTITIES CODE NO. 924

ITEM NO.	ITEM	UNIT	BRIDGE NO. 2459				BRIDGE NO. 2460				TOTAL JOB NO. 10300.
			BENTS 1 & 4	BENTS 2 & 3	SPANS	TOTAL	BENTS 1 & 6	BENTS 2-5 INCL	SPANS	TOTAL	
103	DRY EXCAVATION FOR STRUCTURES	CUYD	10.			10.	10.			10	20
SP&802	CLASS "S" CONCRETE FOR BRIDGES	CUYD	26.14	10.54	75.36	112.04	26.14	21.08	125.60	172.82	284.86
SP&803	REINFORCING STEEL	LB.	2880.	1440.	15,820.	20,140.	2880.	2880.	26,360.	32,120.	52,260.
804	CONCRETE PILING	LIN.FT.	476.	272.		748.	448	584.		1,032.	1,780.
805	CONCRETE RAILING	LIN.FT.	12.		180	192.	12		300.	312.	504
SP&807	STRUCT. STEEL IN BEAM SPANS	LB.	1,040		46,940	47,980	1,040		78,570	79,610.	127,590
929	BRIDGE NAME PLATE (TYPE-B)	EACH	1			1	1			1	2

SUMMARY OF QUANTITIES
 BRIDGES ON
 PARAGOULD-MARMADUKE ROAD
 GREENE COUNTY
 ROUTE 1. SEC. 20
 ARKANSAS STATE HIGHWAY COMMISSION
 LITTLE ROCK, ARK.
 Drawn By: L.D.C. Date: 2/19/46
 Traced By: G.W.B. Date: 2/19/46
 Checked By: _____ Date: _____
 Scale: _____ in. = ft.
 BRIDGE NO. 2459-2460 DRAWING NO. 6762

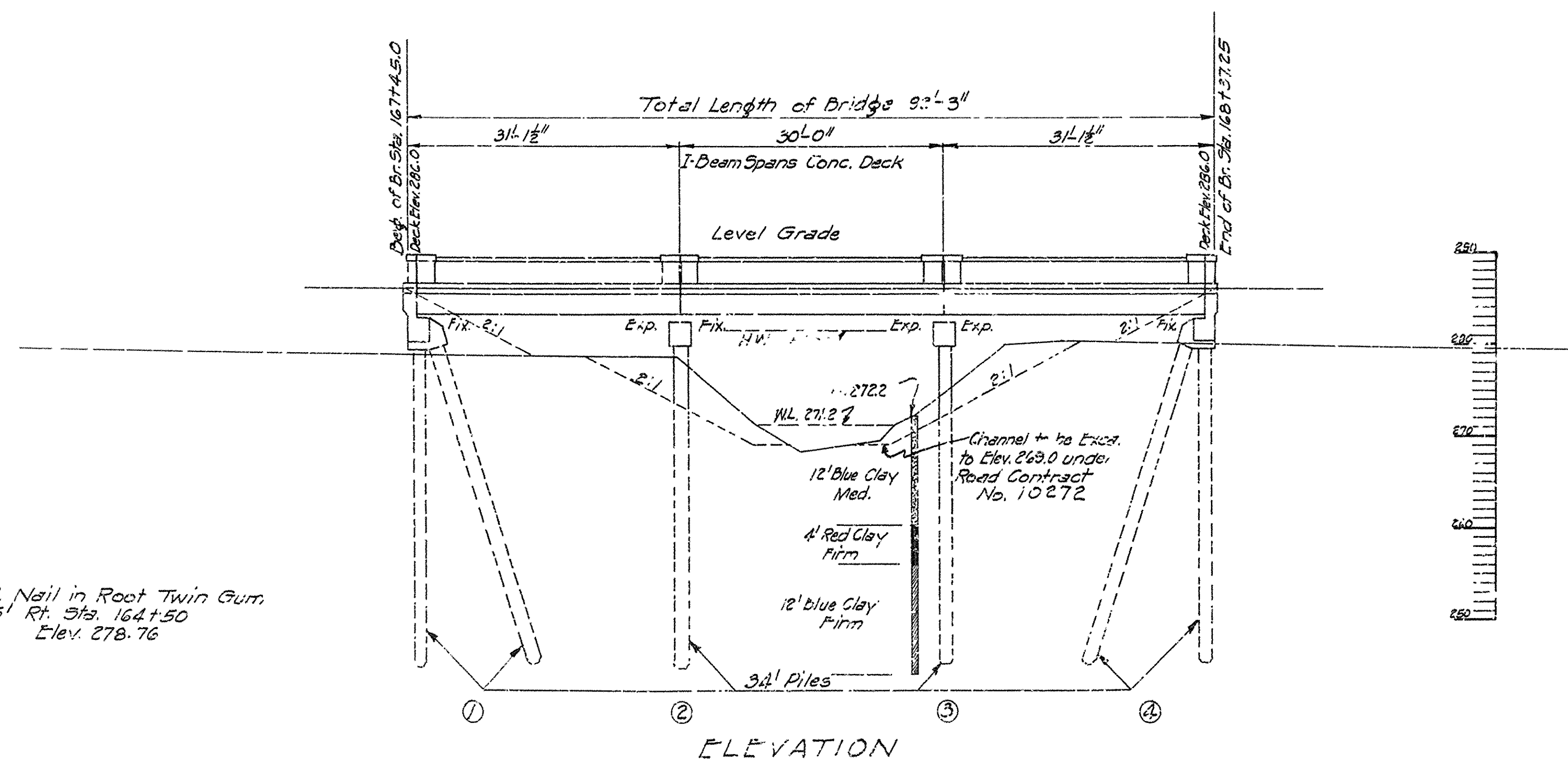
M.B. Hancock
 PRINCIPAL HIGHWAY ENGINEER - BRIDGES

FED. ROAD DIST. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	ARK.	2459		3	4
STATE JOB NO. 2459					



Lengths of Precast Concrete Piles shown are for estimating purposes only. Drive one pile in Bent No. 3 as a test pile. For Details See Drawing No. 5252, 5252-A

Loading H-20
Stresses
Structural Steel = 18,000#10"
Reinforcing Steel = 18,000#10"
Concrete = 1,000#10"
n = 10



Drainage Area 14.0 Sq. Miles
C = 0.7 Area Req'd = 500'²

D.M. Nail in Root Twin Gum
6.5' Rt. Sta. 164+50
Elev. 278.76

LAYOUT OF BRIDGE OVER JACKS CREEK PARAGOULD-MARMADUKE GREENE COUNTY

ROUTE 1 SEC. 20
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.
Drawn By: L.A.M. Date: 6-26-45
Traced By: L.A.M. Date: 7-3-45
Checked By: _____ Date: _____
BRIDGE NO. 2459 DRAWING NO. 6783

W.D. Gantt
PRINCIPAL HIGHWAY ENGINEER (BRIDGE)

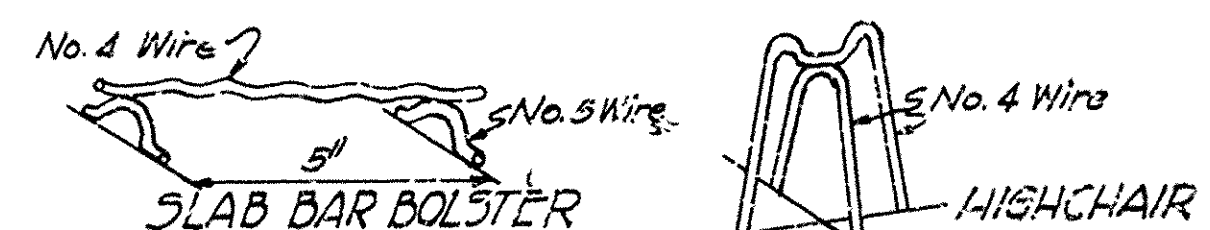
FED. ROAD DIST. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	ARK.				
STATE JOB NO.					

LOADING H-20
 Load Distribution Outside Girders—
 Dead Load Per Ft. = 1450 #
 Roadway Live Load Per Ft. = 366 #
 Conc. Live Load = { 10800 # Mom.
 14900 # Shear.
 Truck Live Load = 1.13 Wheel
 Load Distribution Inside Girders—
 Dead Load Per Ft. = 1000 #
 Roadway Live Load Per Ft. = 480 #
 Conc. Live Load = { 13500 # Mom.
 19500 # Shear.
 Truck Live Load = 1.50 Wheel

STRENGTHS
 Structural Steel = 18000 #/sq in
 Reinforcing Steel = 18000 #/sq in
 Concrete = 1000 #/sq ft
 n = 10

GENERAL NOTES

All concrete to be Class "S" All exposed corners to have 3" chamfer unless otherwise noted.
 Rivets 3/4" Open holes 1 1/2". Where bolts are indicated use machine bolts.
 Structural shapes of equal or greater strength may be substituted for shapes shown but payment will be made on basis of shapes shown or those actually used whichever is the lesser.
 All welded connections to be 3/8" fillet shop welds except as noted.
 Shop Paint: All structural steel except surfaces in contact with concrete shall be given one coat of red lead and raw linseed oil before shipment.
 Field Paint: First White Lead tinted with lampblack, Second coat Aluminum.
 All bearing and roadway expansion devices to be paid for as Structural Steel in Beam Spans.
 Care shall be exercised to obtain 90° in the angle between flange and web of beams at bearing points.
 This drawing shows general features of design only. Shop drawings shall be made in accordance with the Specifications, submitted and approval secured before fabrication is begun.
 In order to secure a good riding surface it will be required that the floor slab be struck off from curb to curb with a half span length longitudinal strike-off. The strike-off shall be sufficiently stiff so as to have no appreciable vertical deflection.
SPECIFICATIONS: Arkansas State Highway Commission Standard Specifications for Road and Bridge Construction, Adopted March 15, 1940



All reinforcing steel shall be accurately located in the forms and firmly held in place by means of steel wire chair supports adequate to prevent displacement during the course of construction and to keep the steel a proper distance from the forms.
 Bar supports are to be sufficient in number and sufficiently heavy to properly carry the steel they support. Wire sizes shall not be less than shown.
 Wire supports will not be paid for directly but will be considered subsidiary to the item of "Reinforcing Steel" Shop lists and diagrams must be submitted for approval.

LIST OF BENT BARS

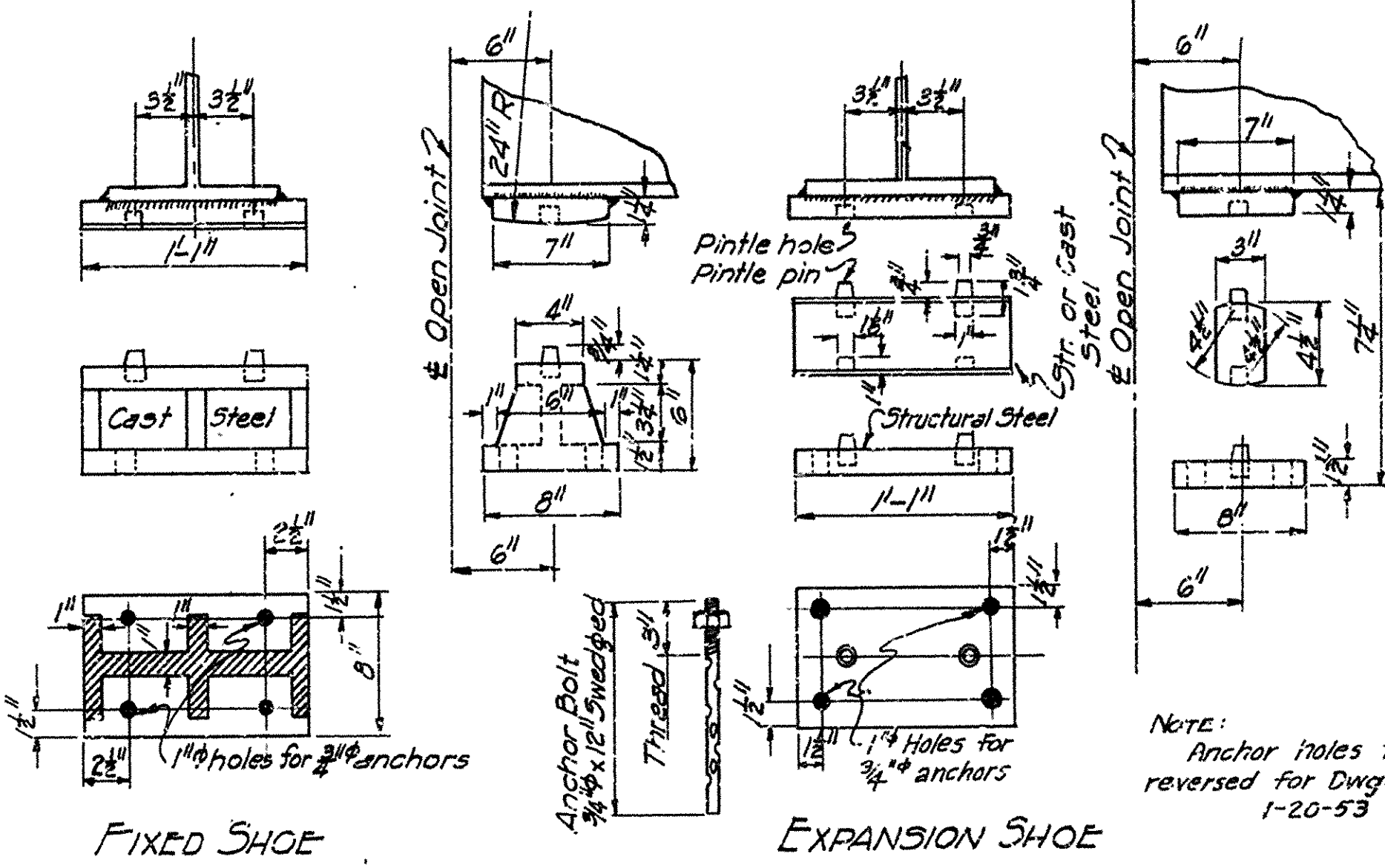
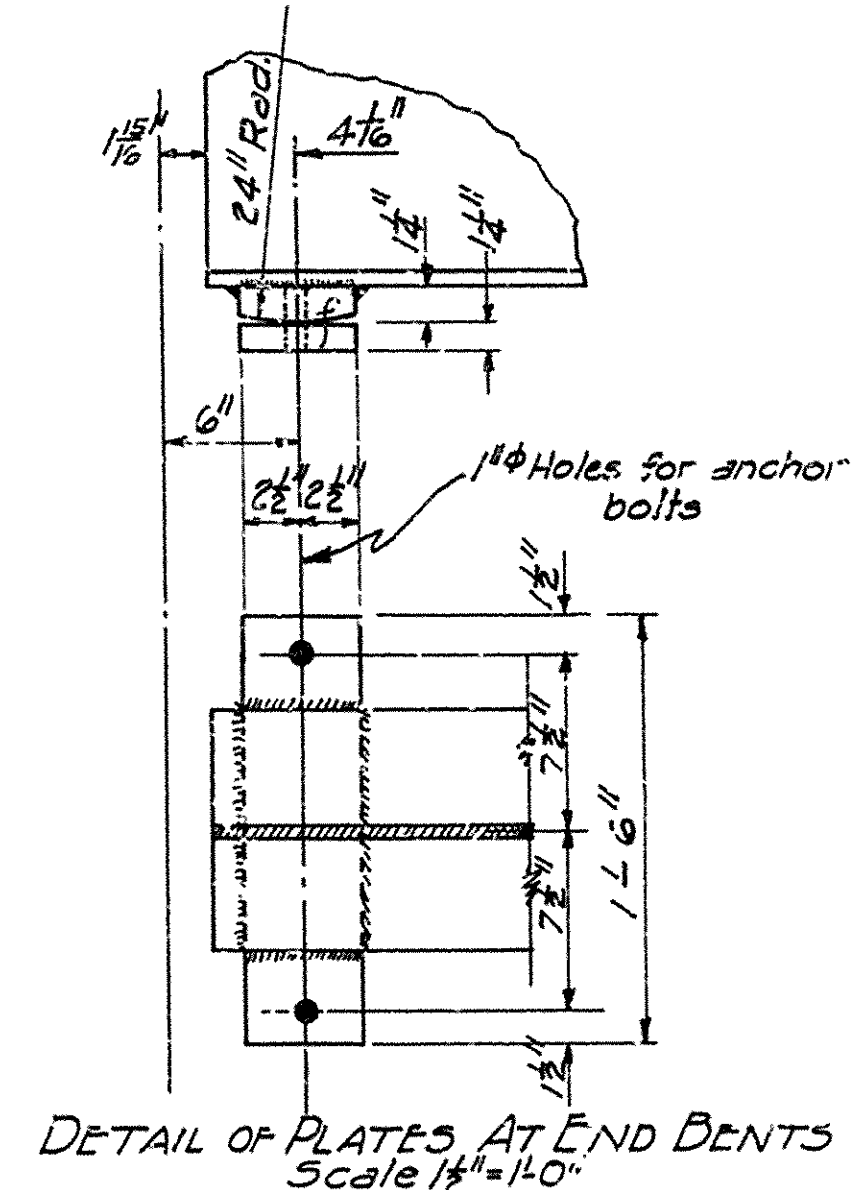
Mark	Size	Length	A	B	C
S1	3/4"	30'-11"	25'-4"	7'-11"	1'-9"
S2	3/4"	30'-11"	27'-6"	5'-8"	1'-3 1/2"
S3	3/4"	28'-10"	3'-4 1/2"	3'-9"	3'-0"

REVISED 6-6-46 Wt. of 27" C.B. Vert. Rail bars
 REVISED 4-5-47 Ribbed Bolts
 REVISED 11-29-47 Sealing Shoes
 REVISED 8-25-48 Handrail & Curb Also 2-11-50
 See also Drwg. No. 5252-C or 6214-R

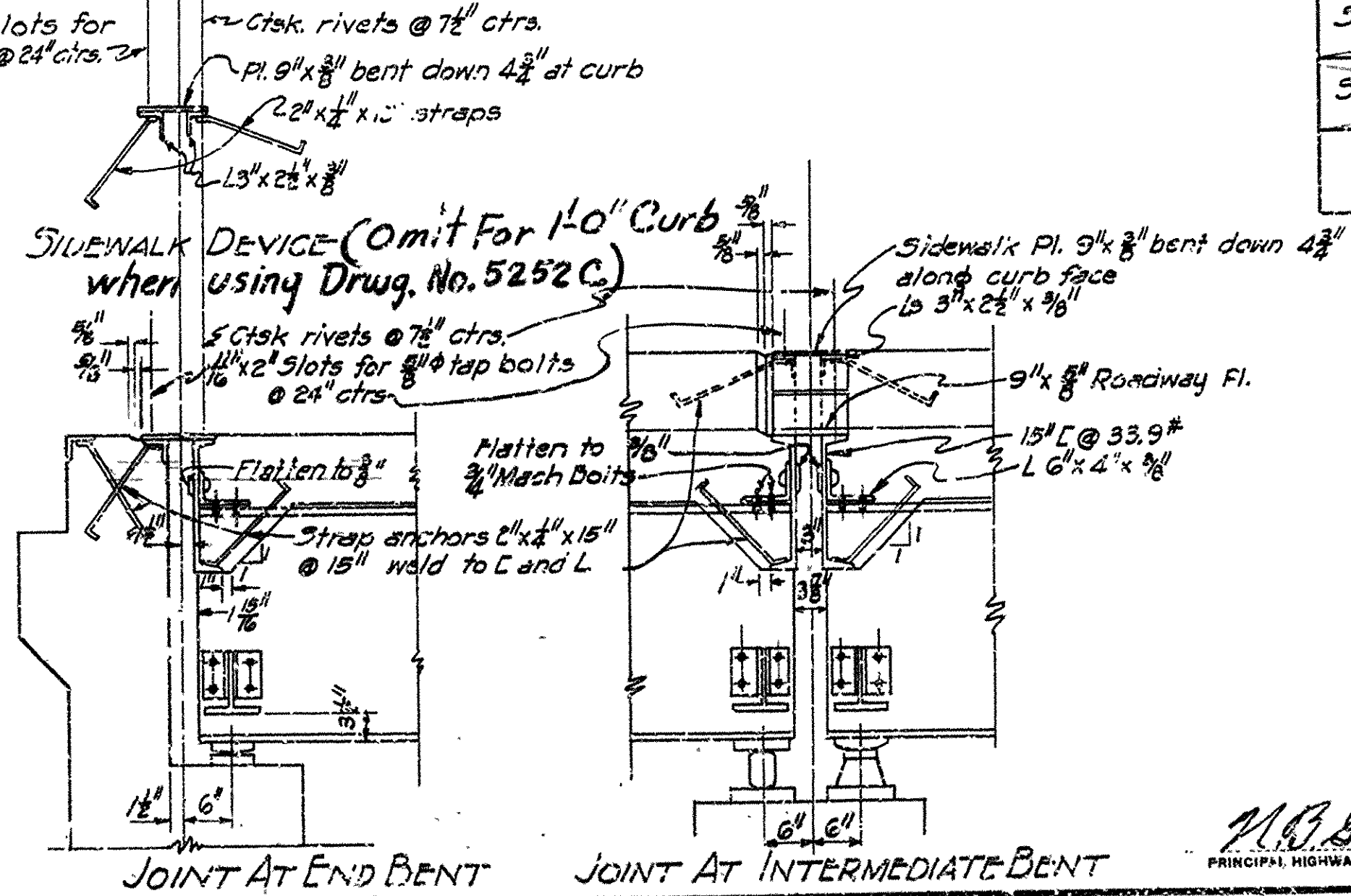
DETAILS OF STANDARD 30'-0" I-BEAM SPAN
 26'-0" CLEAR ROADWAY 18" WALKWAYS

ROUTE SEC.
ARKANSAS STATE HIGHWAY COMMISSION
 LITTLE ROCK, ARK.
 Drawn By: L.A.M.S. Date: 1-14-44
 Traced By: L.A.M.S. Date: 1-15-44
 Checked By: _____ Date: _____
 BRIDGE NO. _____ DRAWING NO. 5252

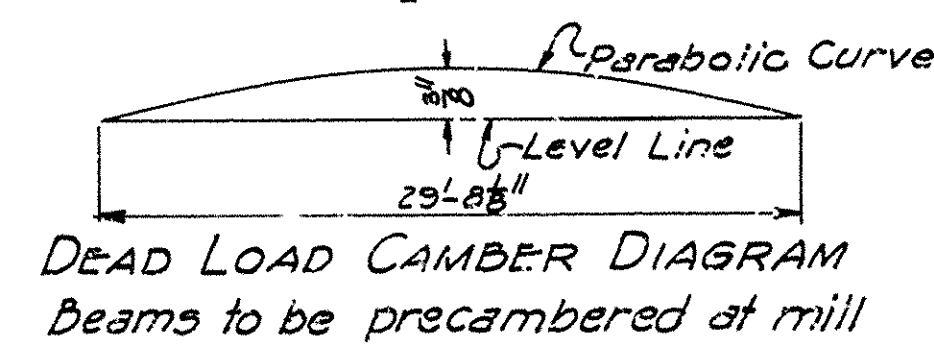
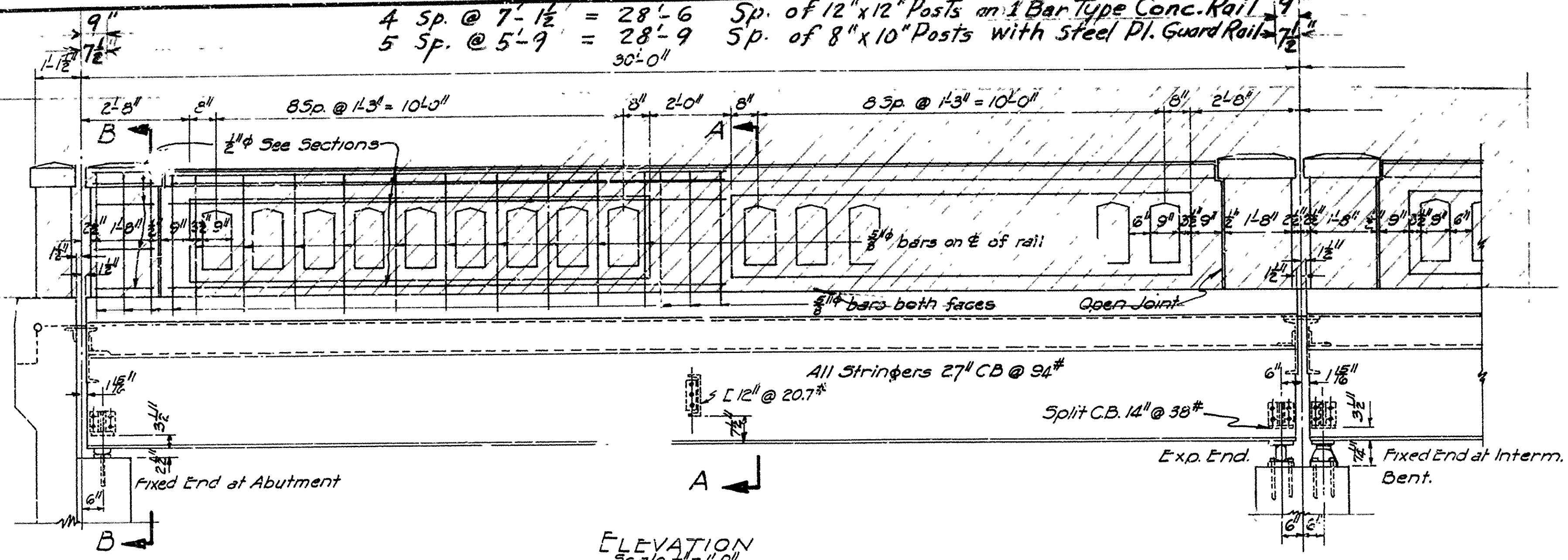
M.B. Lewis
 PRINCIPAL HIGHWAY ENGINEER (BRIDGE)



Bearings shall be finally seated on 3 layers of burrap saturated with red lead. This work and material to be included in the unit price bid for "Structural Steel in Beam Spans"

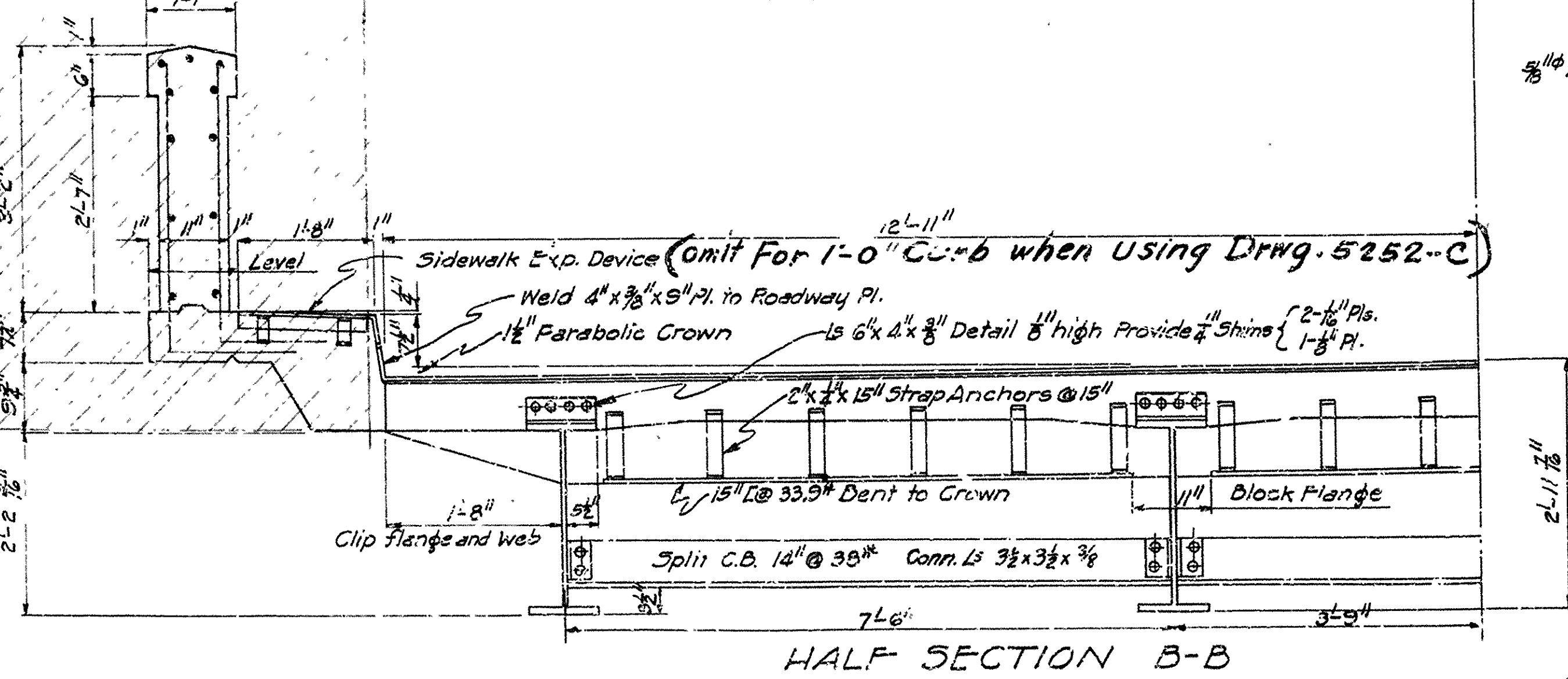
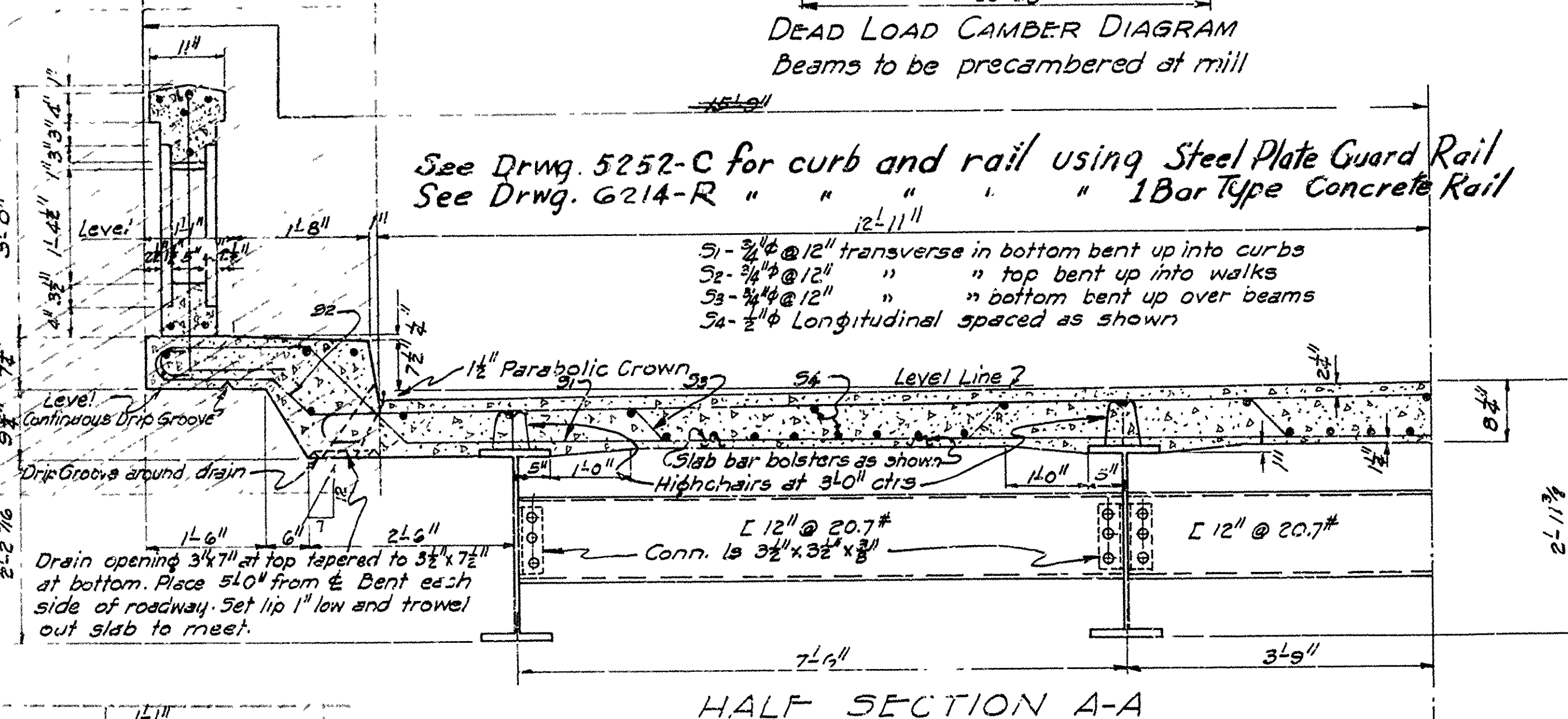


4 Sp. @ 7'-1 1/2" = 28'-6" Sp. of 12"x12" Posts on 1 Bar Type Conc. Rail 9"
 5 Sp. @ 5'-9" = 28'-9" Sp. of 8"x10" Posts with Steel Pl. Guard Rail 1 1/2"
 30'-0"

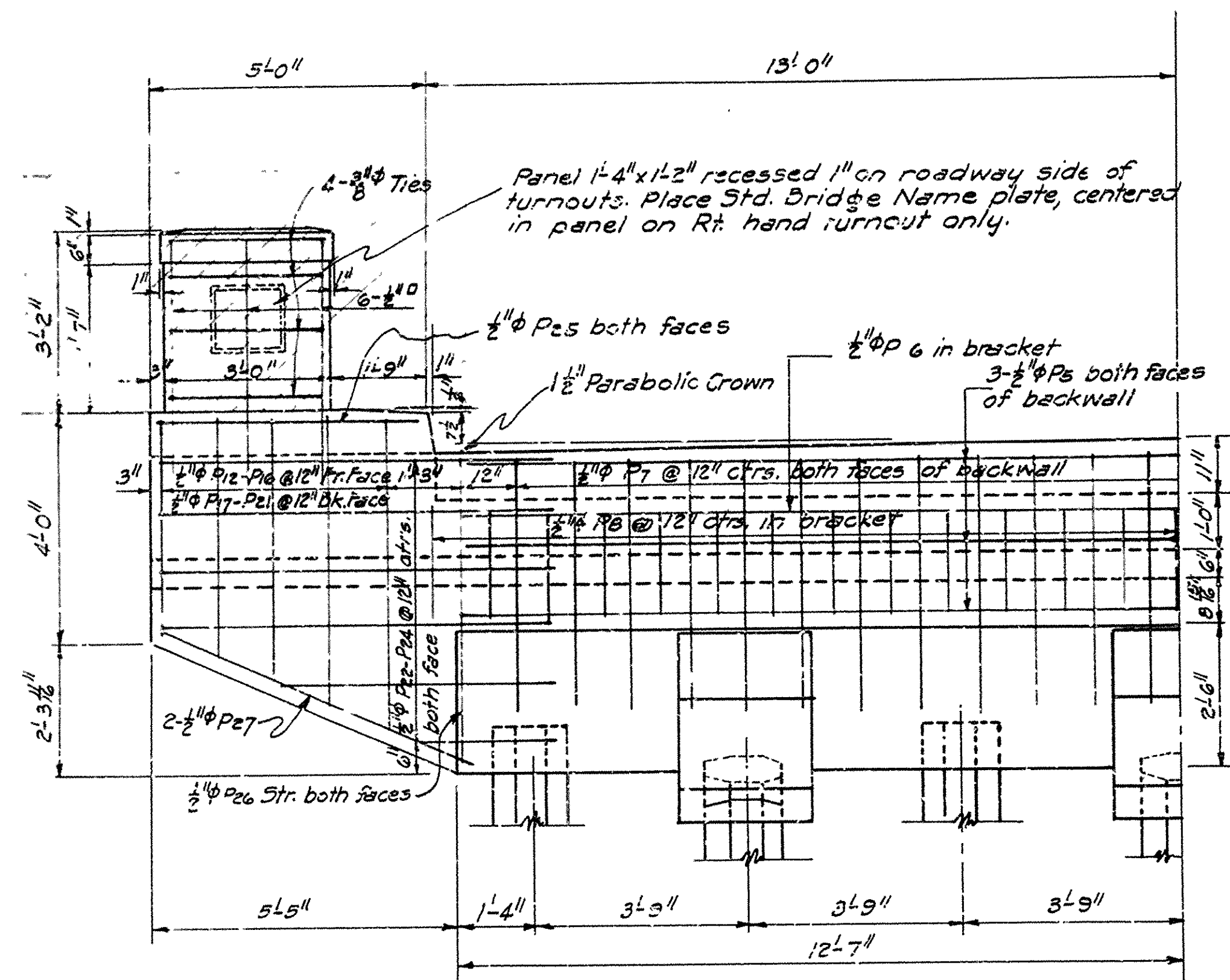


See Drwg. 5252-C for curb and rail using Steel Plate Guard Rail
 See Drwg. 6214-R " " " " " 1 Bar Type Concrete Rail

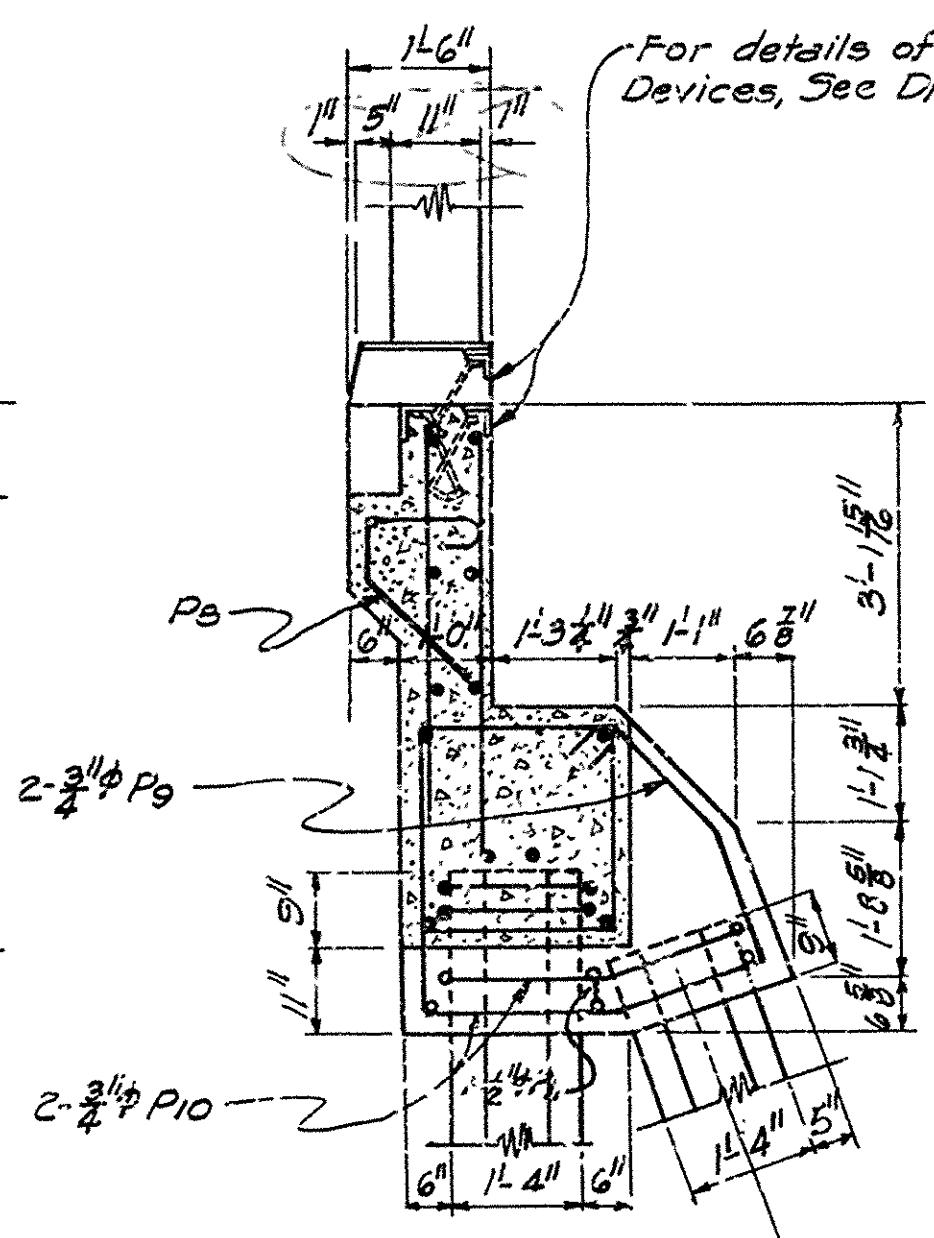
S1- 3/4" @ 12" transverse in bottom bent up into curbs
 S2- 3/4" @ 12" " " top bent up into walks
 S3- 3/4" @ 12" " " bottom bent up over beams
 S4- 2" @ 6" longitudinal spaced as shown



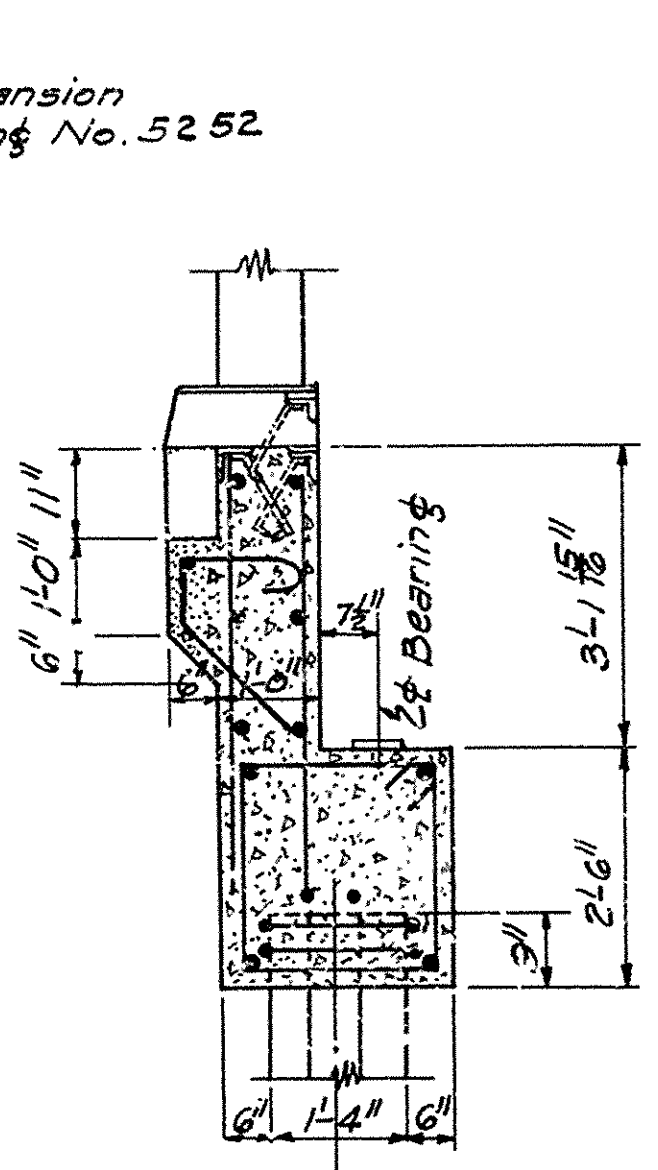
FED. ROAD DIST. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	ARK.				
STATE JC. NO.					



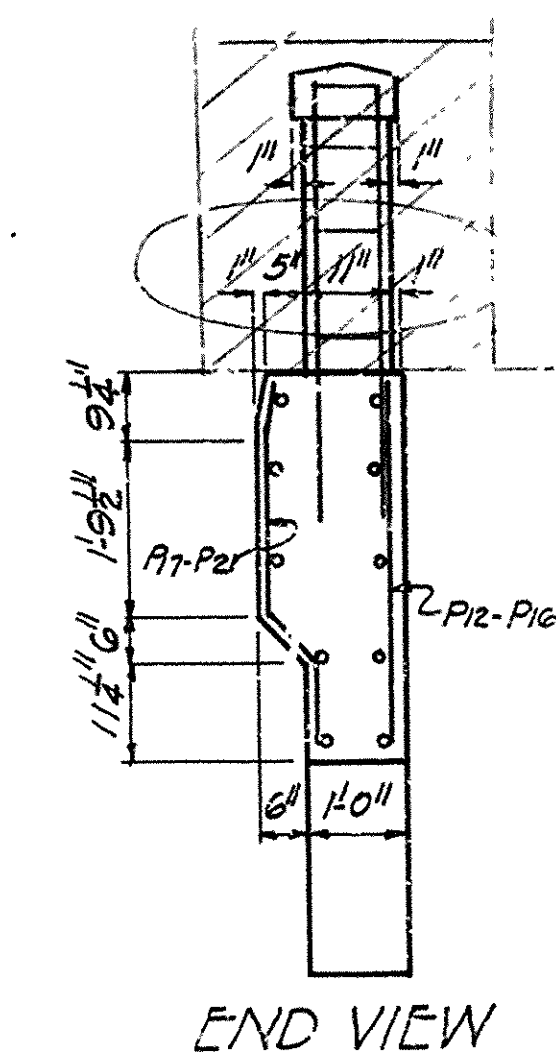
HALF FRONT ELEVATION END BENT
Cap Reinforcing same as shown for intermediate Bent



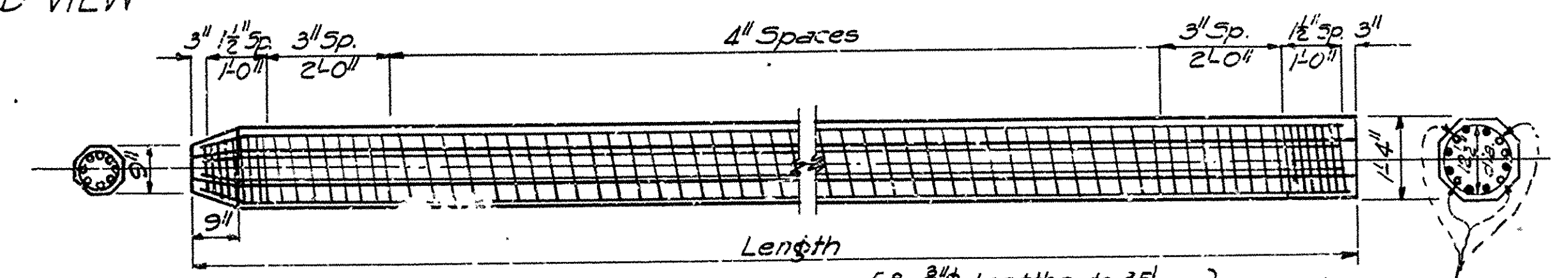
SECTION AT BATTER PILE



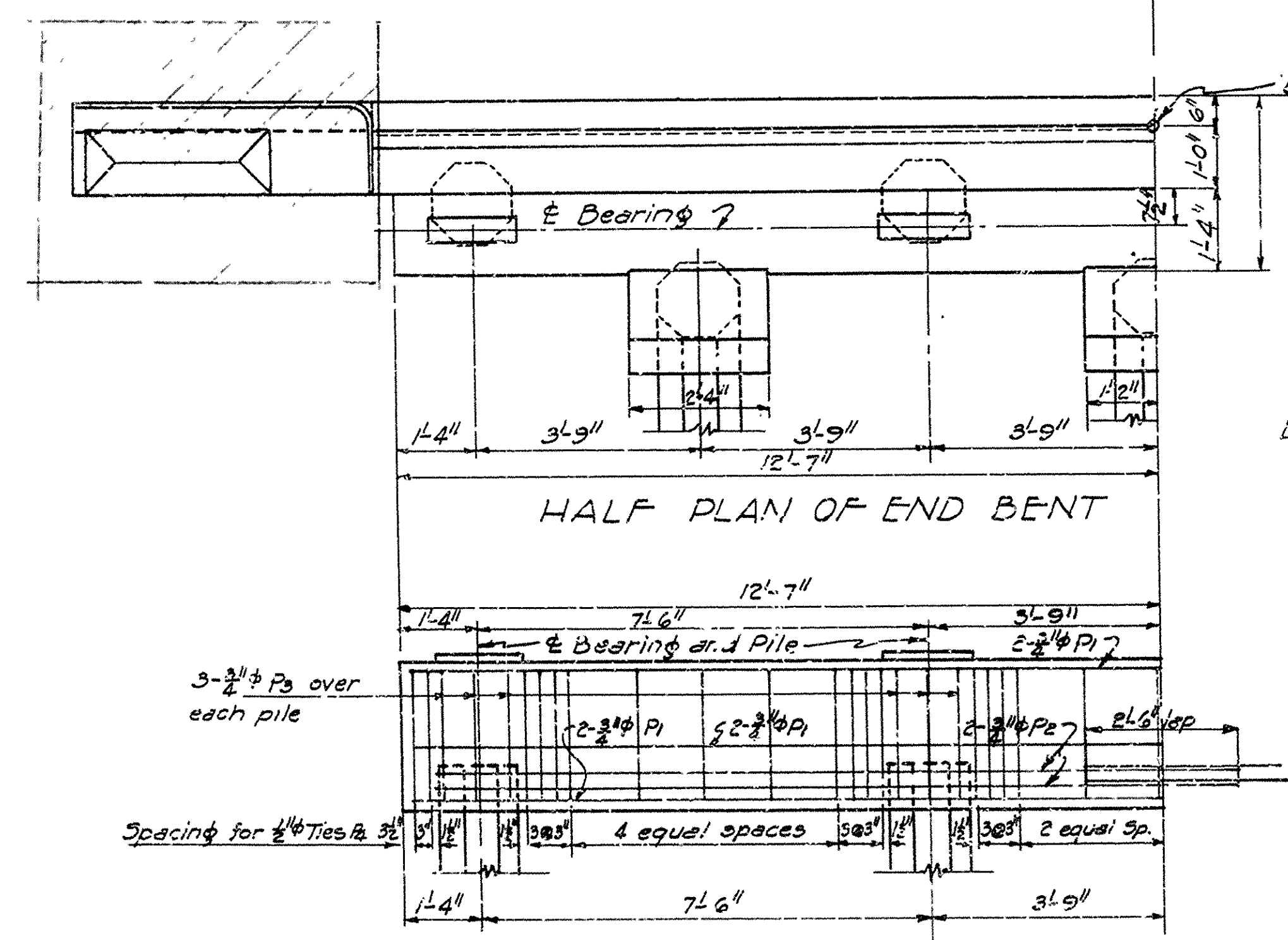
SECTION BETWEEN BATTER PILES



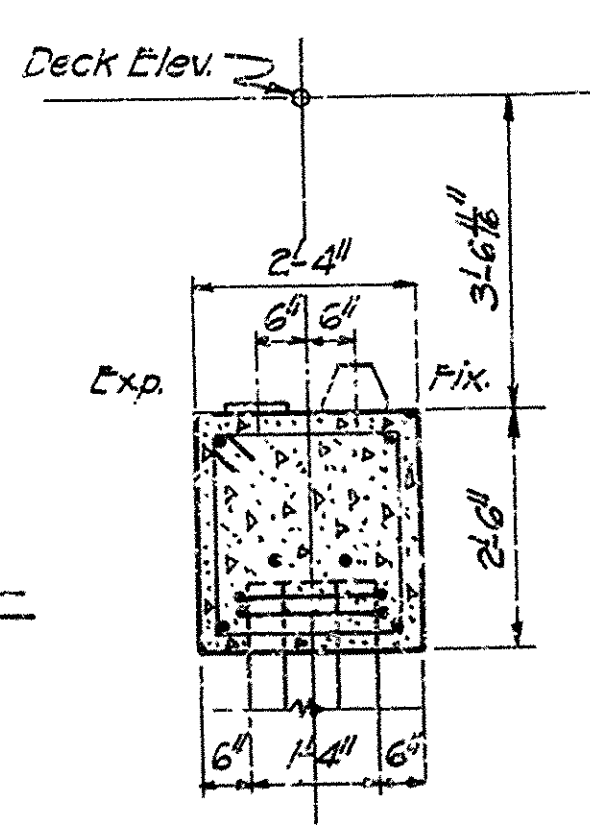
END VIEW



DETAILS OF 16" PRECAST CONCRETE PILE



HALF PLAN OF END BENT



SECTION ON C

HALF ELEVATION INTERMEDIATE BENT

Maximum Bearing Piles = 31 Tons per Pile

GENERAL NOTES:

Piles to be driven to a minimum capacity of 32 Tons.
For additional general notes, See Drwg. No. 5252

LIST OF BENT BARS

Mark	Size	Length	A	B	C	D	Diagram
P2	3/4"	28'-2"	1'-5"	10'-4"			
P3	3/4"	6'-1"	1'-11"	2'-11"			
P4	1/2"	8'-9"	1'-11"	2'-11"			
P11	1/2"	5'-5"	5"	1'-11"			
P6	1/2"	3'-9"	1'-0"	9"	1'-6"		
P9	3/4"	8'-0"	3'-0"	1'-11"	1'-6"	1'-7"	
P10	3/4"	11'-3"	1'-9"	1'-8"	3'-5"	1'-0"	
P17	1/4"	3'-11"	11"				
P18	1/4"	4'-4"	1'-4"				
P19	1/4"	4'-9"	1'-9"				
P20	1/4"	5'-2"	2'-2"				
P21	1/4"	5'-7"	2'-7"				

REVISED 10-1-48 Oak Header Out
REVISED 8-25-42 Turnout
See Drwg. 5252-C for Std. Pile 30'-0" I Beam Spans
See Drwg. 5252-B for 1'-8" Walkways

DETAILS OF
STANDARD P.C. PILE BENTS
30'-0" I BEAM SPANS
26'-0" CLEAR ROADWAY 1'-8" WALKWAYS
ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

Drawn By: L.A.M.E. Date: 1-21-44
Traced By: L.A.M.E. Date: 1-25-44
Checked By: _____ Date: _____
BRIDGE NO. _____ DRAWING NO. 5252-4

M.C. Barber
PRINCIPAL HIGHWAY ENGINEER (BRIDGES)