

STATE OF ARKANSAS  
STATE HIGHWAY DEPARTMENT

PLAN OF PROPOSED BRIDGES  
ON  
ST. PAUL-THOMPSON ROAD  
MADISON COUNTY

FISCAL YEAR	JOB No	SHEET No	TOTAL SHEETS
1929	920	1	12

INDEX OF SHEETS

Sheet No	Drwg. No	Title
1.	1547	Title Sheet
2.	1548	Layout Bridge 1069
3.	1549	Details of Substructures for Bridge No. 1069
4.	1550	" " 30' R.C.D. Girder span on curve 20' Rdwy. 10 T capacity
5.	1551	" " 40' " " " " " " " " " "
6.	1552	Layout of Bridge 1077
7.	1553	Details of Abutment No. 1 for Bridge No. 1077
8.	1554	Details of Piers for Bridge No. 1077
9.	1555	Details of Abutment No. 2 for Bridge No. 1077
10.	1556	" " " " " " " " " " " "
11.	1557	" " 45' I-beam Spans. Conc. Floor, 18' Rdwy 10 T. capacity
12.		Plan - Profile Sheet

ROUTE 23 SEC. 5  
16 4  
JOB No 920  
FEDERAL AID PROJECT No.

QUANTITIES

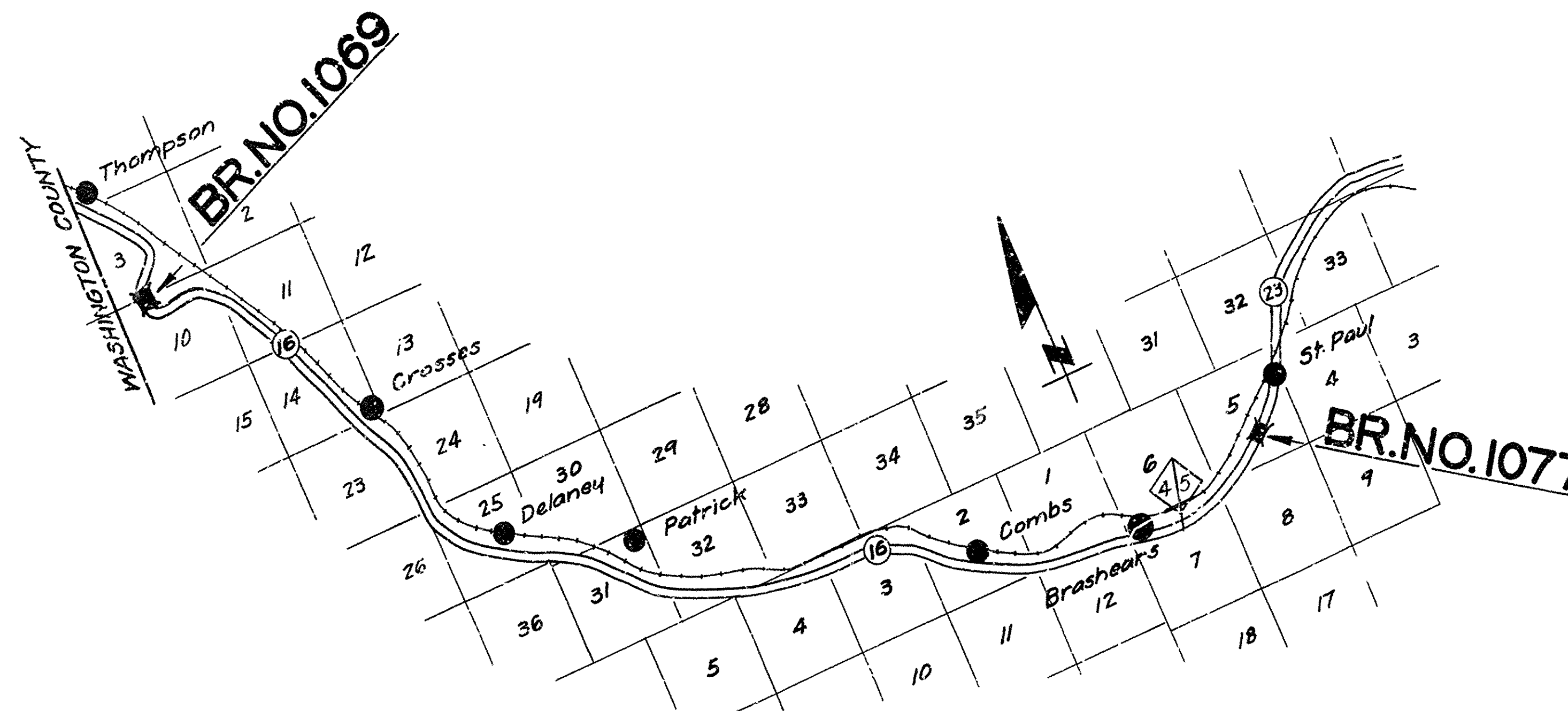
Item No. 13	Dry Excavation for Structures	224 cu. yds
" " 13	Wet " " "	437 " "
" " 13	Rock " " "	66 " "
" " 17	Borrow	1226 " "
" " 54	Class "A" Concrete	285.02 " "
" " 54	" "S" "	210.95 " "
" " 55	Reinforcing Steel	69,106 lbs
" " 56	Structural Steel in Beams	68,367 " "
" " 69	Rip Rap	35 sq. yds.
" " 74	Concrete Railing for Strs.	5718 lin. ft.

Specifications approved by Chief, Bureau of Public Roads, September 28, 1927, and adopted by State Highway Commission May 11, 1931, with approved revisions and special provisions as follows:

SPECIAL PROVISIONS

Revision to Part 117, 4, 173

1 sheet



LAYOUT

Scale: 1/2" = 1 Mi.

GROSS LENGTH OF PROJECT = 279'-11" = 0.053 mi.  
NET LENGTH OF PROJECT = 279'-11" = 0.053 mi.

APPROVED [Signature]  
COMMISSIONER - STATE LANDS, HIGHWAYS AND IMPROVEMENTS

APPROVED [Signature]  
STATE HIGHWAY ENGINEER

RECOMMENDED FOR APPROVAL [Signature]  
DISTRICT ENGINEER - D. S. BUREAU OF PUBLIC ROADS

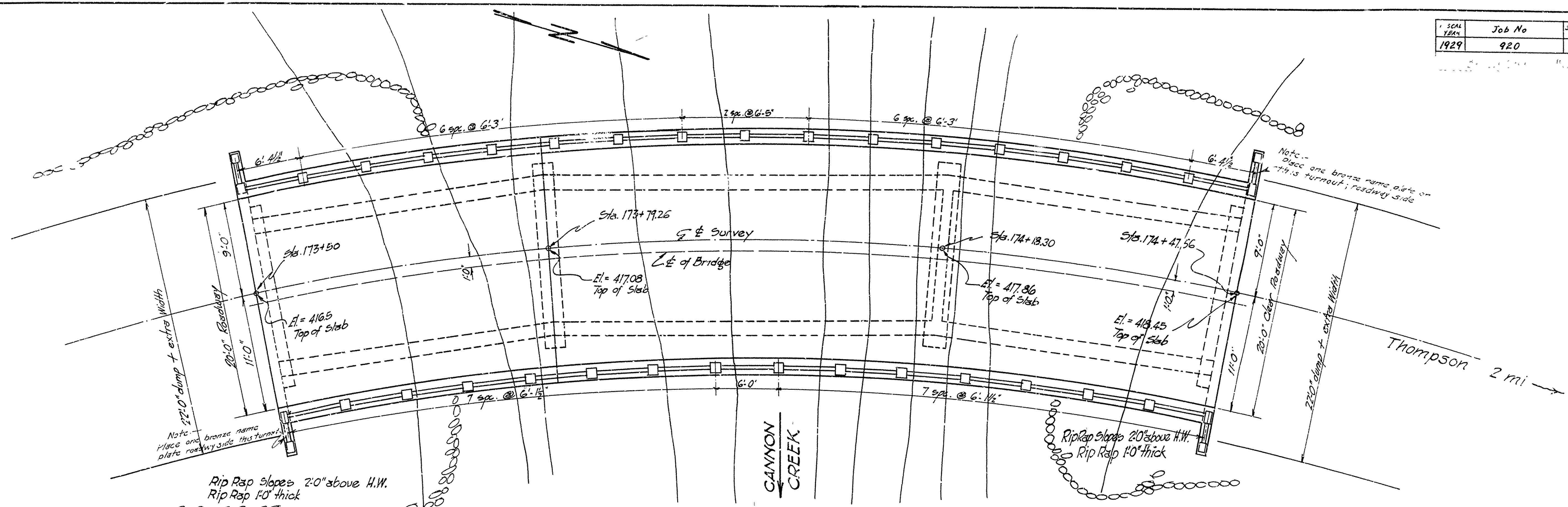
RECOMMENDED FOR APPROVAL [Signature]  
CHIEF ENGINEER - D. S. BUREAU OF PUBLIC ROADS

APPROVED [Signature]  
DIRECTOR - D. S. BUREAU OF PUBLIC ROADS

*M. B. Gower*  
BRIDGE ENGINEER

BRIDGE NO. 1077-1069 DRAWING NO. 1547

SCALE YEAR	Job No	SHEET NO.	TOTAL SHEETS
1929	920	2	12



**PLAN**

Quantities

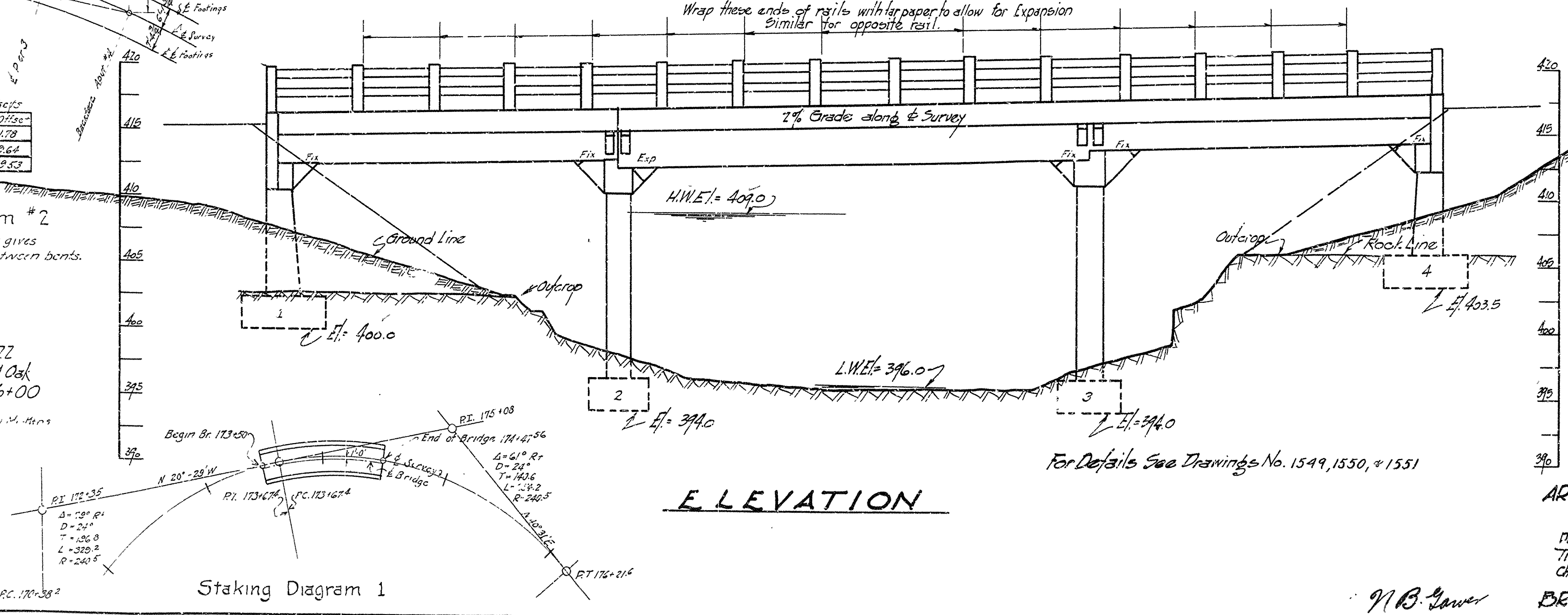
Item No. 13 Dry Excavation	35 cu. yds.
" " 13 Wet Excavation	27 " "
" " 13 Rock Excavation	20 " "
" " 54 Class "A" Conc.	52.05 " "
" " 54 Class "S" Conc.	115.41 " "
" " 55 Reinforcing Steel	337.59 lbs.
" " 69 Rip Rap	35 sq. yds.
" " 74 Concrete Hand Rail	207.4 lin. ft.
" " 17 Borrow	100 cu. yds.

Staking Diagram #2

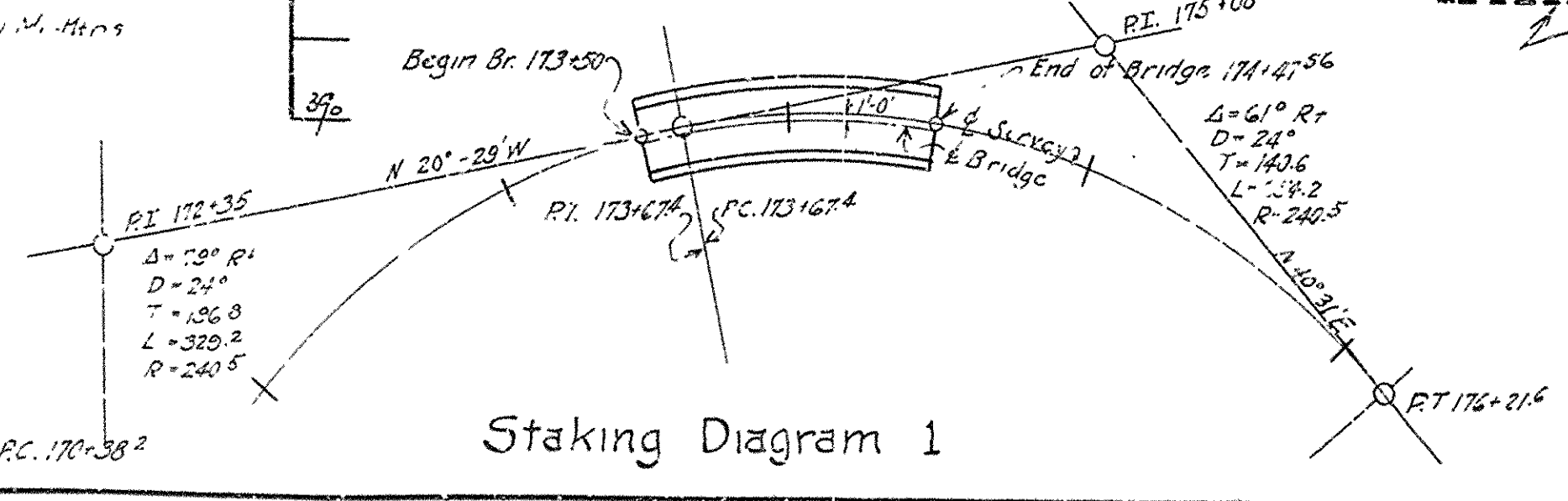
Dist.	Angle	Dist.	Offset
17.25	29° 25'	29.25	1.78
17.25	8° 0'	68.00	9.64
17.25	11° 37'	56.01	19.53

Check to see that this gives correct distances between bents.

B.M. El. = 422.22  
N.I.R. 12" Red Oak  
60' Rt. Sta. 176+00  
Drainage Area: 854 sq. ft.



**ELEVATION**



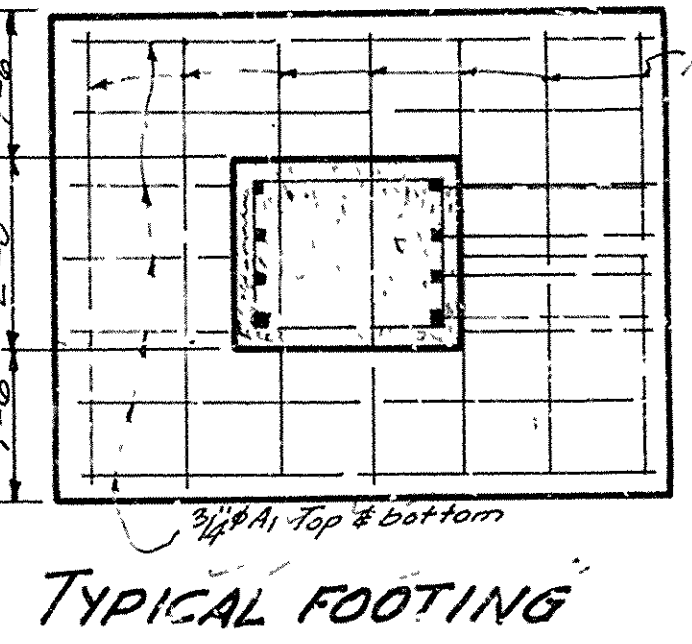
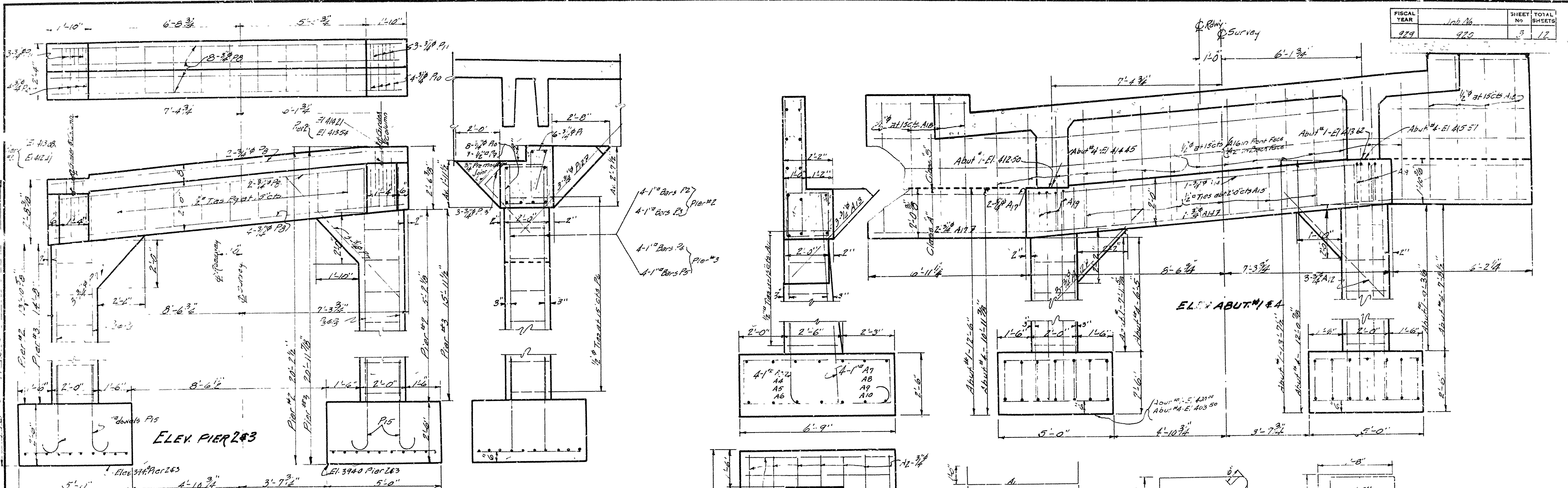
For Details See Drawings No. 1549, 1550, & 1551

**LAYOUT OF  
BRIDGE OVER CANNON CK.  
MADISON COUNTY  
ROUTE 16 SEC. 4  
ARKANSAS STATE HIGHWAY DEPARTMENT  
LITTLE ROCK, ARK.**

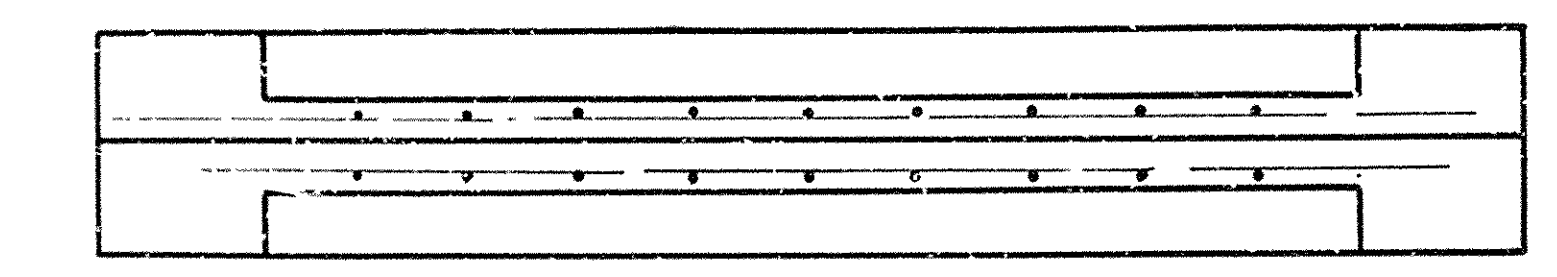
Drawn by: C.A.D. 4-12-29  
Traced by: E.A.M. 4-12-29  
Checked by: H.B. 4-3-29  
Scale: 1" = 5'-0"  
BRIDGE No 1069  
DRAWING No 1548

M.B. Lawler

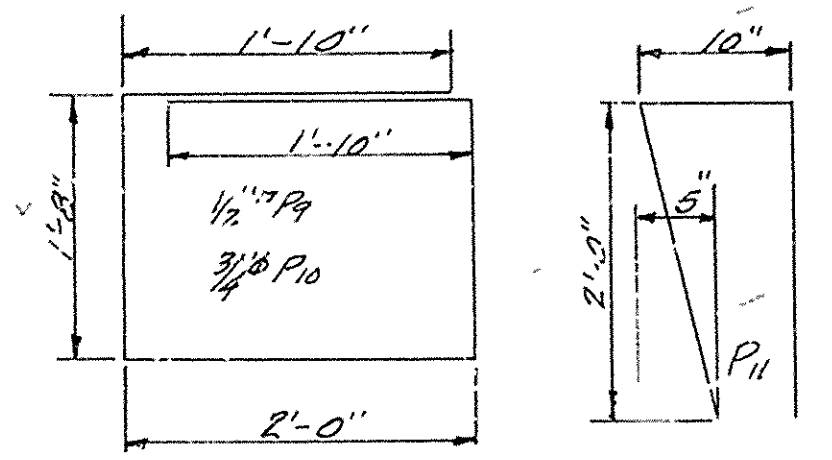
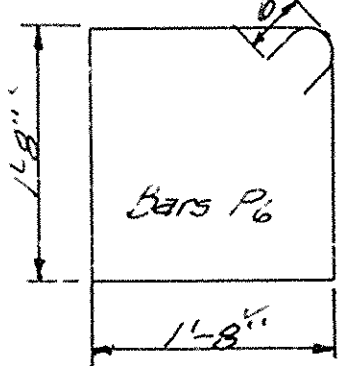
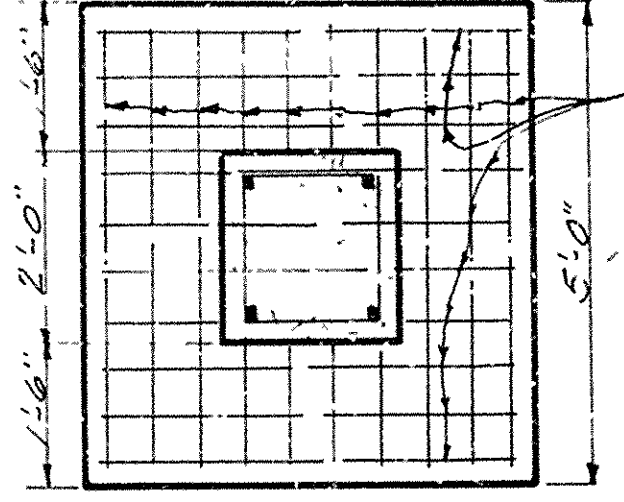
FISCAL YEAR	Job No	SHEET	TOTAL SHEETS
1929	472	5	12



PLAN SHOWING EXP. PLATE IN PLACE PIER #2



TYPICAL FOOTINGS



BAR LIST PIER #3

MR.	PIER No	LOCATION	SIZE	LENGTH		MR.	Abut No	Location	SIZE	LENGTH
P1	283 80	Footings	3/4"	8'-7"	Straight	A1	1#4	56 Footings	3/4"	8'-3"
P2	2 4	Column	1"	15'-4"	"	A2	1#4	56 Footings	3/4"	4'-8"
P3	2 4	"	1"	16'-9"	"	A3	1	4 Flyntical	1"	16'-11"
P4	3 4	"	1"	16'-8"	"	A4	1	4	"	18'-0"
P5	3 4	"	1"	17'-6"	"	A5	4	4	"	15'-5"
P6	283 60	"	1/2"	7'-2"	Bent	A6	4	4	"	16'-5"
P7	283 12	Knee Braces	3/4"	7'-0"	Straight	A7	1	4	"	11'-7"
P8	283 16	Cap	3/4"	15'-6"	"	A8	1	4	"	12'-9"
P9	283 18	"	1/2"	9'-0"	Bent	A9	4	4	"	10'-0"
P10	283 16	"	3/4"	9'-0"	"	A10	4	4	"	11'-0"
P11	283 12	"	3/4"	5'-0"	"	A11	1#4	28 Column	1/2"	8'-8"
P12	283 12	Haunch	3/4"	7'-7"	Straight	A12	"	12 Knee Brace	3/4"	7'-0"
P13	2 6	"	3/4"	5'-10"	Bent	A13	"	12 Haunch	"	7'-0"
P14	3 4	"	3/4"	7'-0"	Straight	A14	"	4 Cap	"	15'-6"
P15	283 16	Flyntical	1"	6'-9"	Bent	A15	"	12	1/2"	8'-6"
P16	2 18	Curtnell	1/2"	5'-3"	Straight	A16	"	60 B.Wall	1/2"	4'-10"
						A17	"	8	"	28'-6"
						A18	"	32	"	5'-8"
						A19	"	16 Cap	3/4"	8'-6"

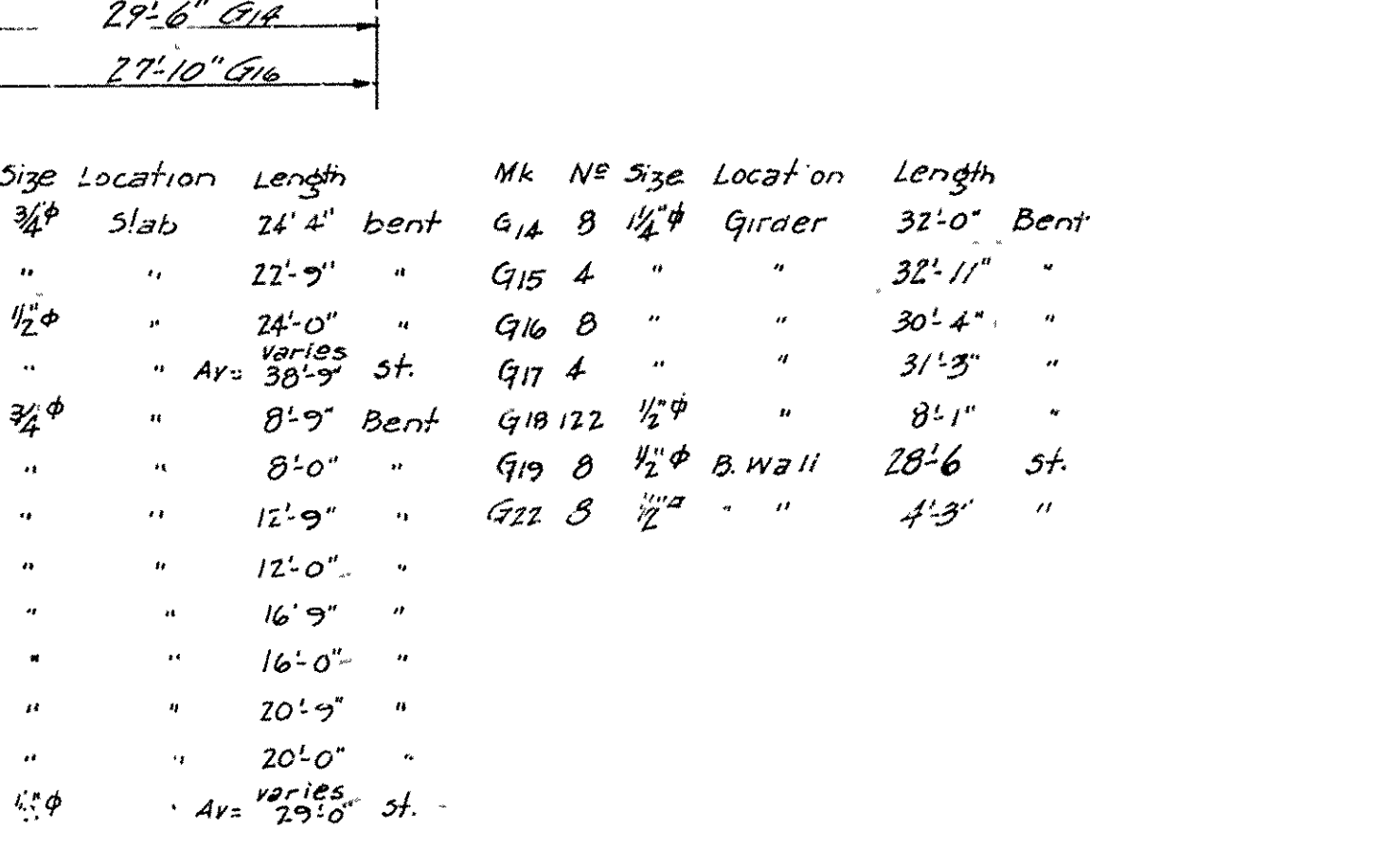
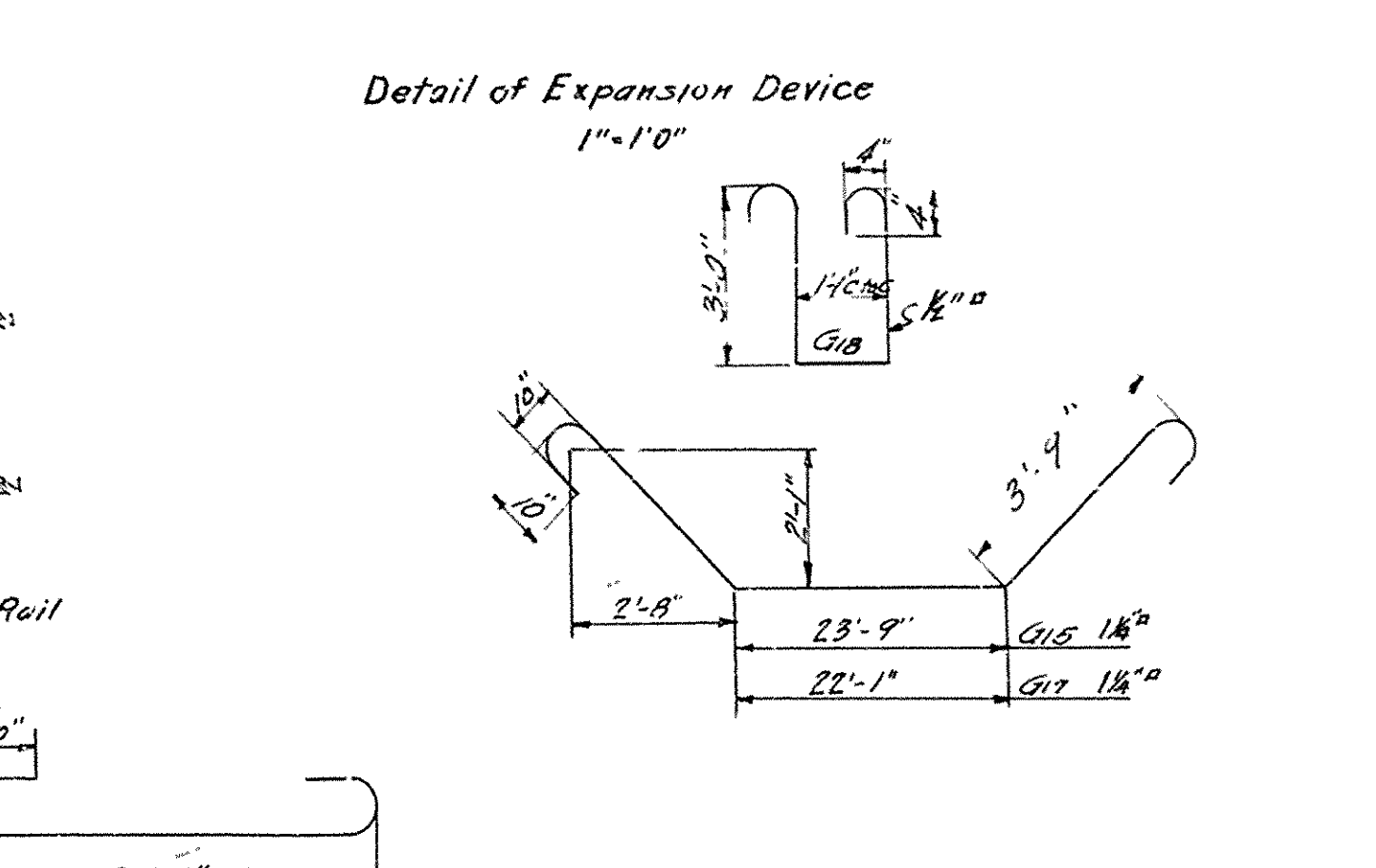
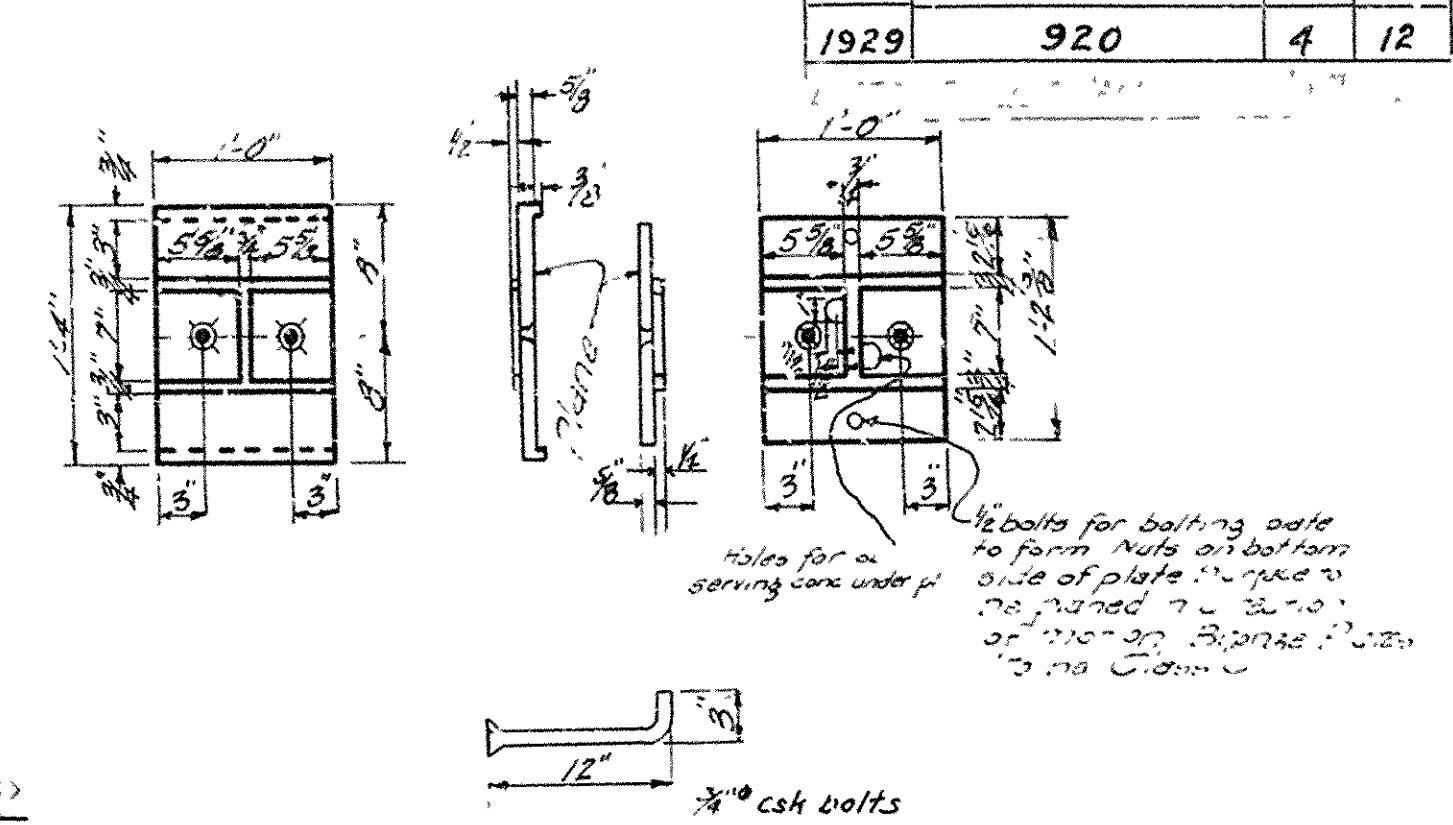
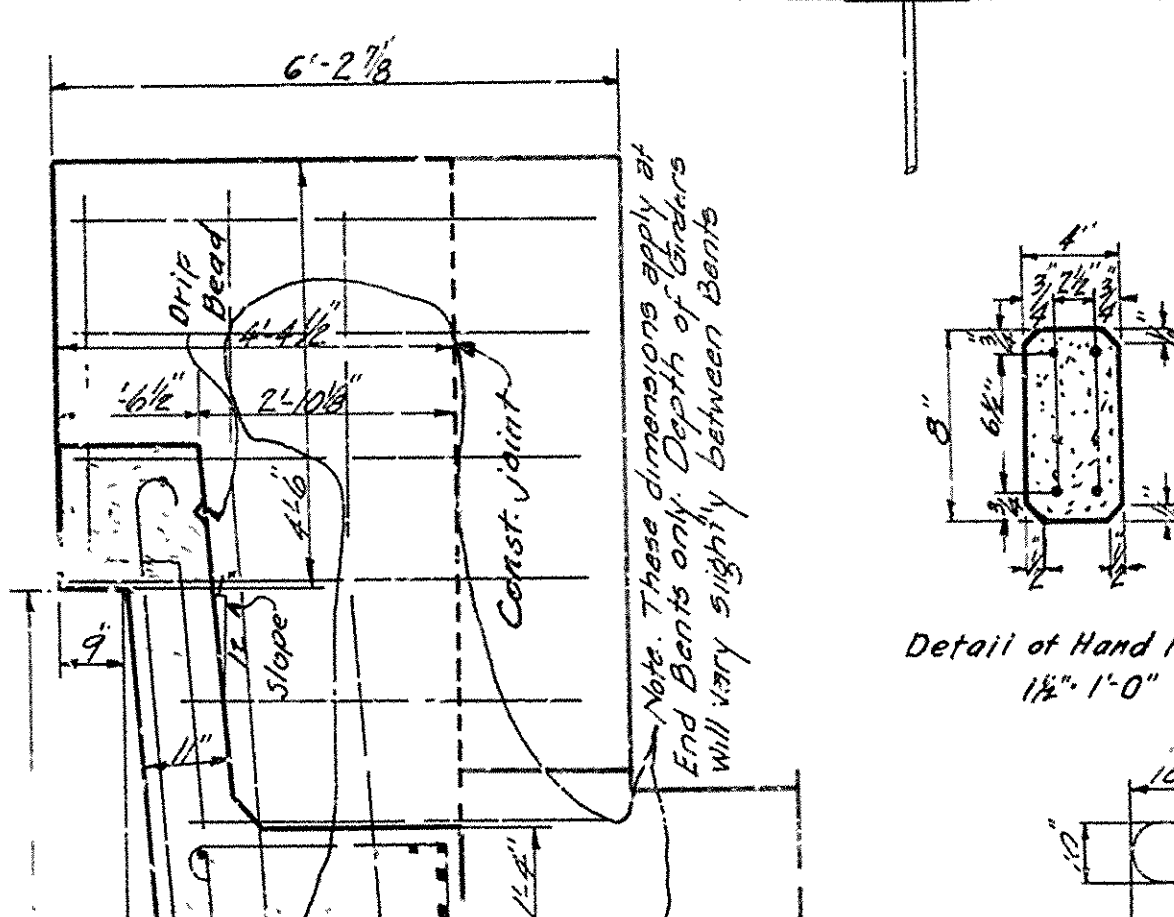
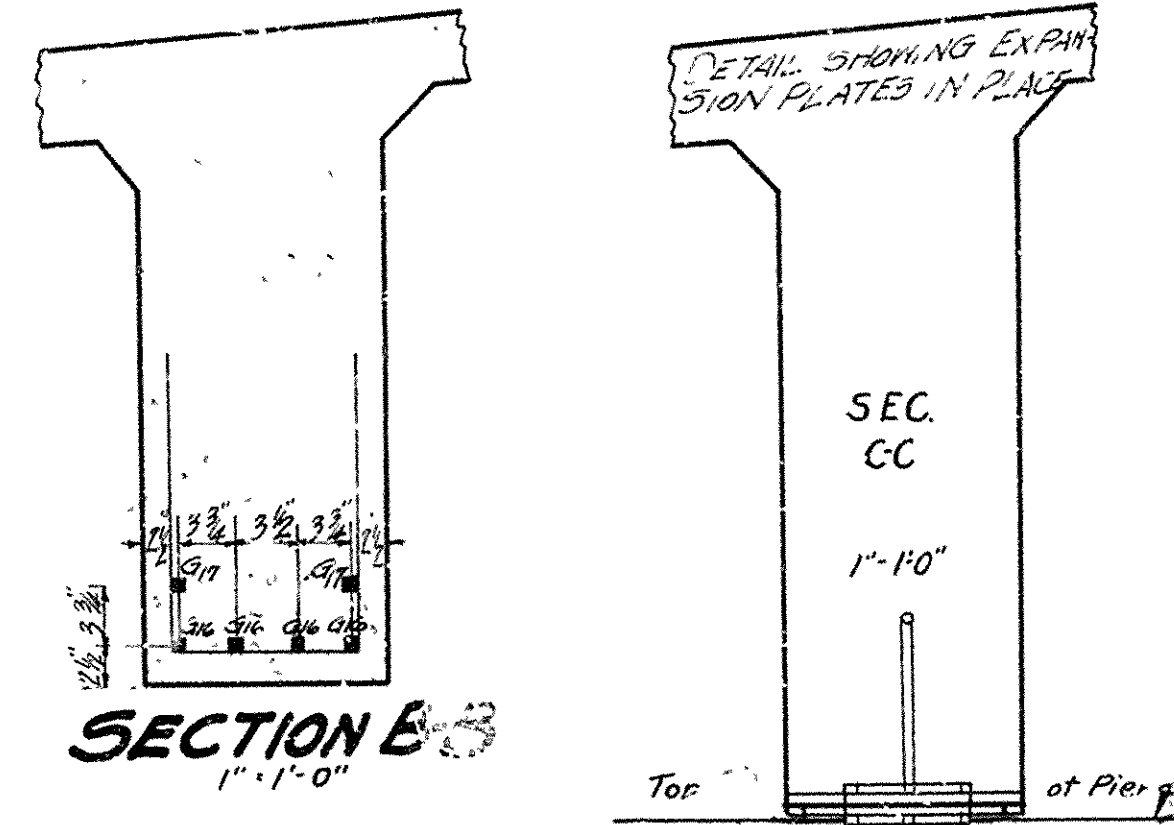
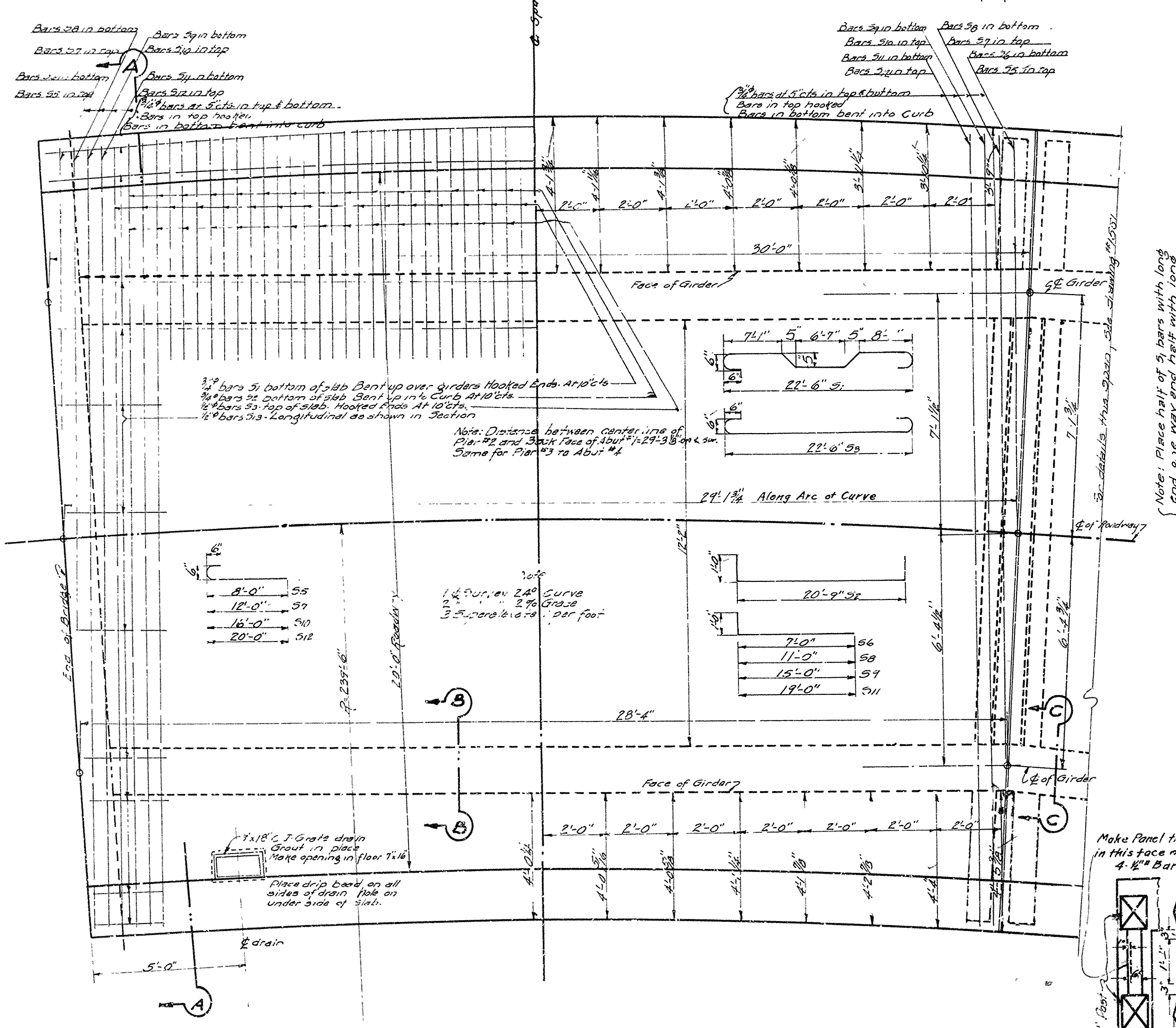
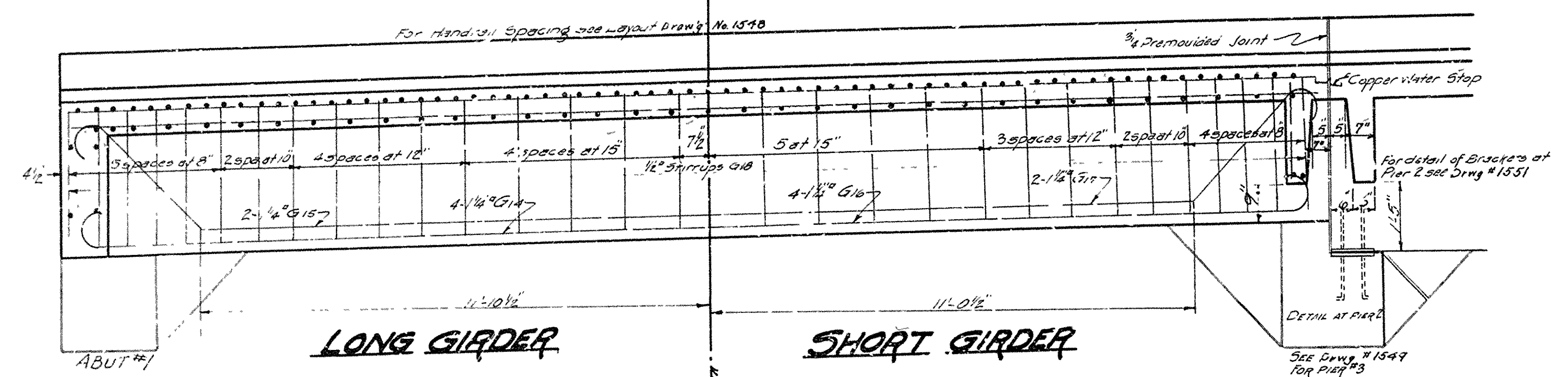
SEVERAL NOTES:  
 All exposed corners to have 1/2" chamfer unless otherwise noted.  
 Precast Concrete Reinforcement to be 1/3" Min. Max. egg 1/2".  
 Reil Posts to be Class "3" concrete.  
 Concrete above top of Column Caps except Abutment to be Class "3" Below, this point Class "A".  
 All concrete to be poured in the dry.  
 Reinforcing Steel to be deformed bars of Structural or Intermediate Grade. Shop Lists and Bending Diagrams shall be submitted by Contractor before fabrication is begun.  
 Roadway drains and Expansion devices to be paid for at unit prices bid for reinforcement & steel.  
 Specifications Arkansas Standard Road & Bridge specifications adopted May 30, 1915 & revised.  
 UNIT STRESSES:  
 Class "3" concrete = 8,000 psi  
 Reinforcing Steel = 80,000 psi  
 n = 2

**DETAILS OF SUBSTRUCTURE FOR BRIDGE OVER CANNON CREEK MADISON COUNTY**

ROUTE 16 SEC. 4  
 ARKANSAS STATE HIGHWAY DEPARTMENT  
 LITTLE ROCK, ARK.

Drawn By: C.A.D. Date: \_\_\_\_\_  
 Traced By: \_\_\_\_\_ Date: 4-15-29  
 Checked By: T.B. Date: 4-11-29  
 Scale: 1/4" = 1 ft.  
 BRIDGE NO. 1069 DRAWING NO. 1549

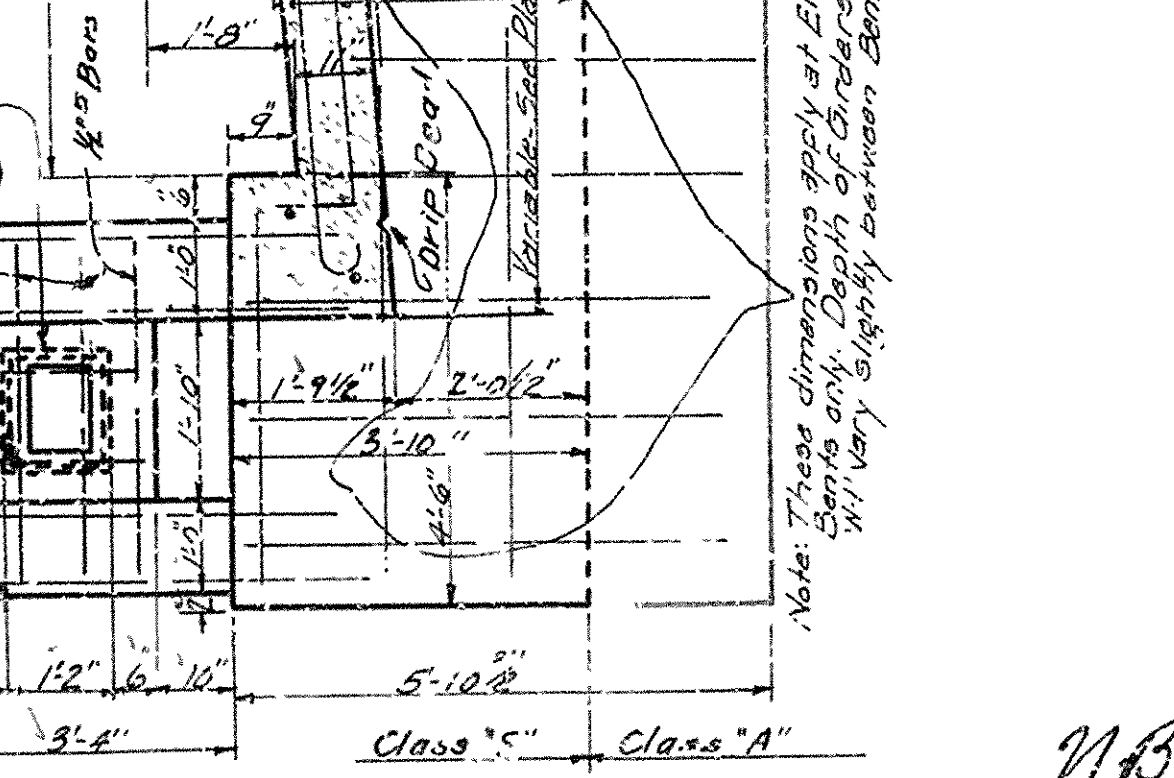
N.B. Jones  
 BRIDGE ENGINEER



Mk No	Size	Location	Length
51	109 3/4"	Slab	24'-4" bent
52	106 "	"	22'-9" "
53	112 "	"	24'-0" "
54	11 "	Av	30'-9" st
55	6 3/4"	"	8'-9" bent
56	6 "	"	8'-0" "
57	"	"	12'-9" "
58	"	"	12'-0" "
59	"	"	16'-9" "
510	"	"	16'-0" "
511	"	"	20'-9" "
512	"	"	20'-0" "
513	22 1/2"	Av	29'-10" st

Mk No	Size	Location	Length
414	8 1/4"	Girder	32'-0" bent
415	4 "	"	32'-11" "
416	8 "	"	30'-4" "
417	4 "	"	31'-3" "
418	122 1/2"	"	8'-11" "
419	8 1/2"	B.Wall	28'-6" st
422	3 1/2"	"	4'-3" "

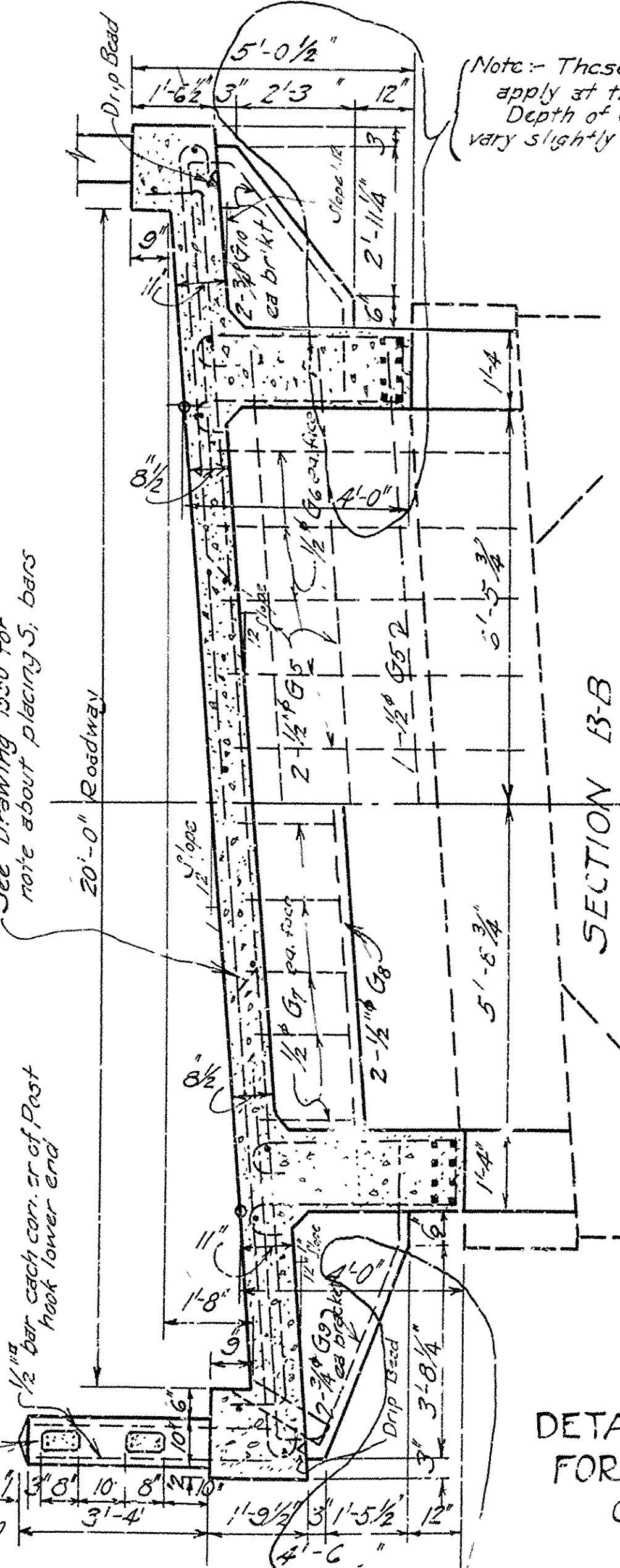
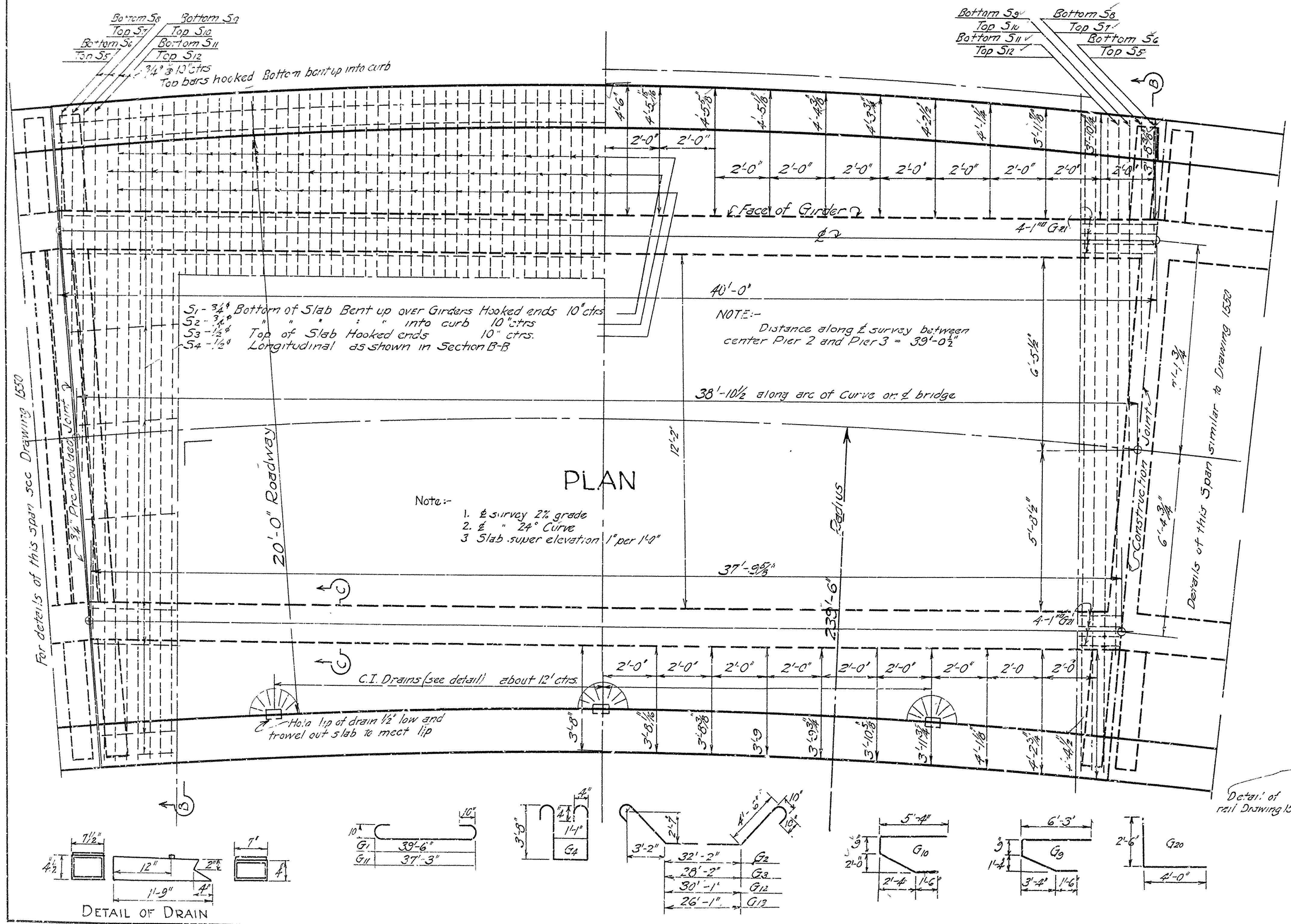
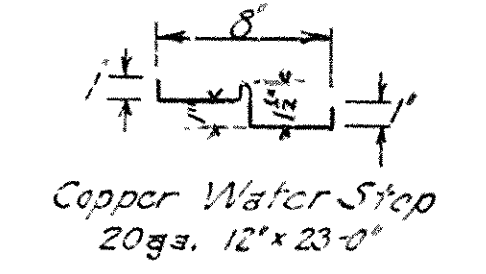
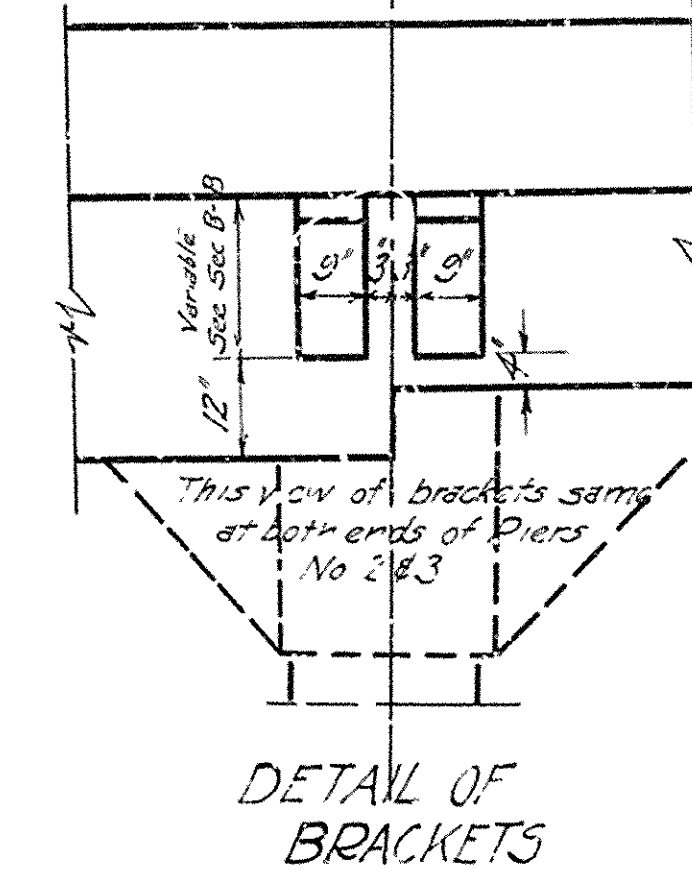
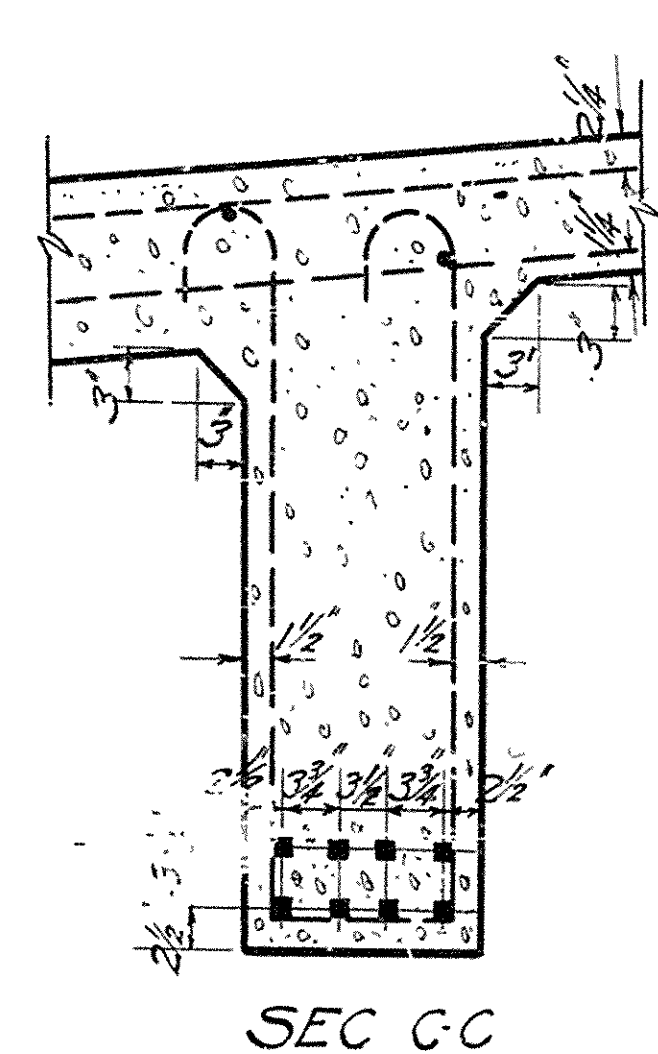
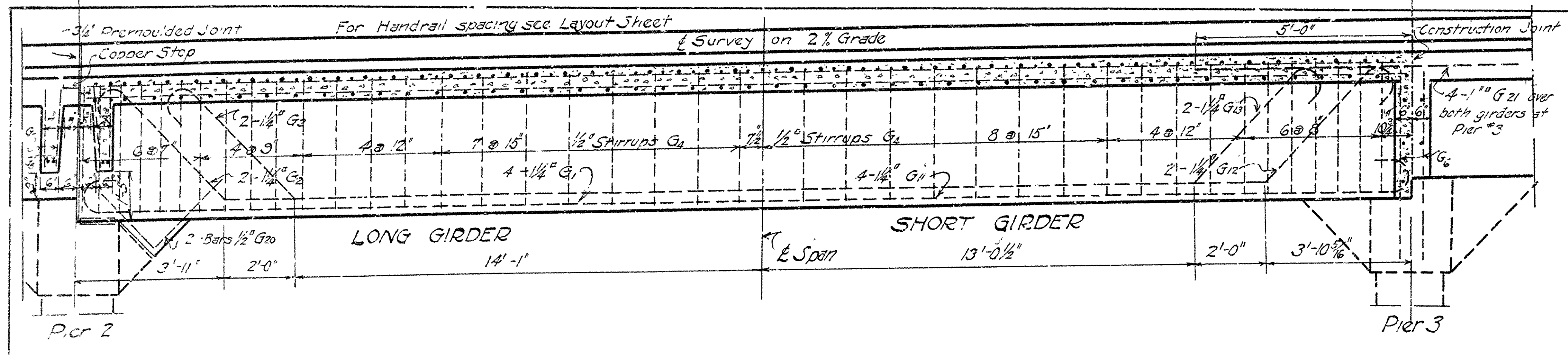


DETAILS OF SUPERSTRUCTURE  
 FOR 30'-0" SPAN OF BRIDGE  
 OVER CANNON CREEK  
 MADISON COUNTY  
 ROUTE 16 SEC. 4

ARKANSAS STATE HIGHWAY DEPARTMENT  
 LITTLE ROCK, ARK.  
 Drawn By: C.A.D. Date: \_\_\_\_\_  
 Traced By: \_\_\_\_\_ Date: 8-12-29  
 Checked By: \_\_\_\_\_ Date: 11-29-29  
 BRIDGE NO. 1069 DRAWING NO. 1530

N.B. Geyer  
 BRIDGE ENGINEER

Corrections by AB + 112



MARK NO.	SIZE	LOCATION & LENGTH
G1	4 7/8	Girder 42'-0" Bent
G2	2	" 43'-8"
G3	2	" 39'-3"
G4	3/4	" 9'-5"
G5	5 1/2	Curtain W 14'-6" St
G6		See Sub-structure
G7	10 1/2	Tie Beams 2'-0" 5"
G8	4 1/2	" 14'-6"
G9	8 3/4	Bracket 12'-1" Bent
G10	8	" 10'-8"
G11	4 1/2	Girder 39'-3"
G12	2	" 4'-8"
G13	2	" 37'-8"
G20	4 1/2	Haunch 6'-6" St
G21	8	Girder 10'-0" St

For Slab Steel see Drawing 1550

**DETAILS OF SUPERSTRUCTURE FOR 40'-0" SPAN OF BRIDGE OVER CANNON CREEK MADISON COUNTY**

Route 16 Section 4  
 ARKANSAS STATE HIGHWAY DEPARTMENT  
 Little Rock Arkansas

Made by C.A.D.  
 Traced by  
 Checked by B. 4-19-29  
 Scale 1/2" = 1'-0"  
 Drawing 1551

N.B. Lower

DETAIL OF DRAIN

For details of this span see Drawing 1550

See Drawing 1550 for note about placing 5 bars

Detail of rail Drawing 1550

Details of this span similar to Drawing 1550

Note - These dimensions apply at the bents only. Depth of Girder will vary slightly between bents.

NOTE: - Distance along survey between center Pier 2 and Pier 3 = 39'-0 1/2"

Note: -  
 1. Survey 2% grade  
 2. 24" Curve  
 3. Slab super elevation 1" per 1'-0"

S1 - 3/4" Bottom of Slab Bent up over Girders Hooked ends 10" ctrs  
 S2 - 3/4" Top of Slab Hooked ends 10" ctrs  
 S3 - 1/2" Top of Slab Hooked ends 10" ctrs  
 S4 - 1/2" Longitudinal as shown in Section B-B