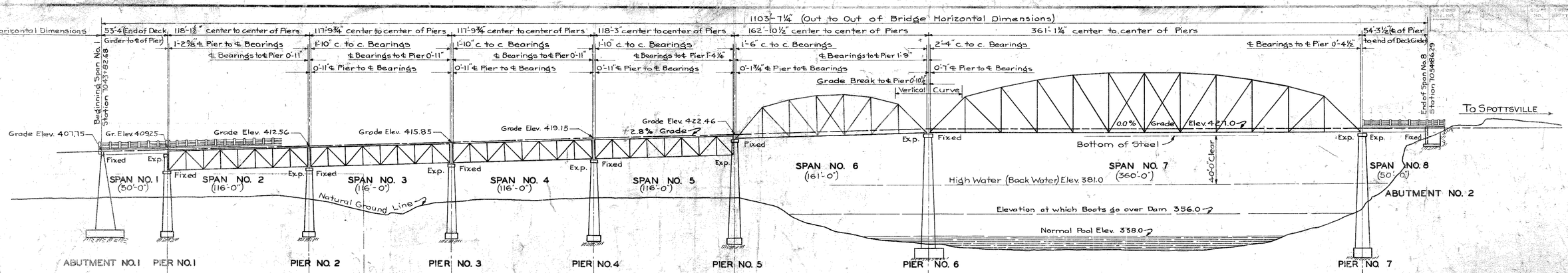
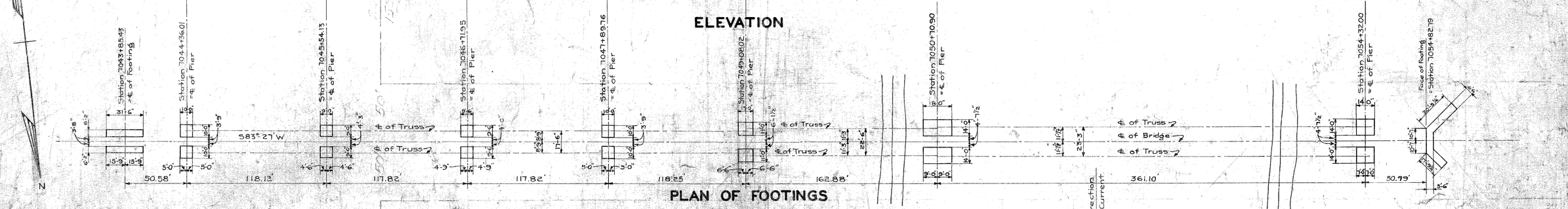


ELEVATION



PLAN OF FOOTINGS

BRIDGE OVER GREEN RIVER
NEAR SPOTTSVILLE

REFERENCES:

For details of Abutment No. 1 see Sheet No. 2 of 20.
For details of Abutment No. 2 see Sheets No. 3 and 4 of 20.
For details of Pier No. 1 see Sheet No. 5 and 6 of 20.
For details of Pier No. 2 see Sheet No. 7 of 20.
For details of Pier No. 3 see Sheet No. 8 of 20.
For details of Pier No. 4 see Sheet No. 9 of 20.
For details of Pier No. 5 see Sheet No. 10 of 20.
For details of Pier No. 6 see Sheet No. 11 of 20.
For details of Pier No. 7 see Sheet No. 12 and 13 of 20.
For details of 50'-0" R.C. Deck Girders for Spans No. 1 and 8 see Sheets No. 14 and 15 of 20.
~~For details of Catch Basin see Sheet No. 16 of 20.~~
For details of Handrail for Spans No. 1 and 8 and Abutment No 2 see Sheet No. 17 of 20.
For details of Borings see Sheet No. 18 of 20.
For details of Handrail for Spans No 2, 3, 4 and 5 see Standard Drawing No. S-60
For details of 116'-0" Steel Spans No. 2, 3, 4 and 5 see Standard Drawing No. S-60
For details of 161'-0" Steel Span No. 6 see Standard Drawing No. S-61
For details of 360'-0" Steel Span No. 7 see Standard Drawing No. S-62
For details of Expansion Devices and Shims see Sheet No. 19 of 20.
For details of Special Floor Beams and Connections for Spans No. 6 and 7 at Pier No. 6 see Sheet No. 20 of 20.
For details of Navigation Light Fixtures see Sheet No. 20-A of 20

Sta 7044

S-47
S-50
S-60
S-61
S-62

GENERAL NOTE

Specifications: Kentucky State Highway Commission - Special Toll Bridges.
Expansion Angles (Concrete Spans): Expansion Angles for concrete approach spans to be furnished by Contractor for Steel Superstructure and placed by Contractor for Concrete Superestructure. For details see Sheet No. 19 of 20. Contractor to notify Engineer at least Sixty days in advance of need of Steel Expansion Angles
Name Plates: Two Name Plates to be furnished by State Highway Department and placed by Contractor on Approach Spans.

SUMMARY OF ESTIMATED QUANTITIES

CONCRETE SUBSTRUCTURE AND APPROACHES	
Concrete, Class "A"	2455.0 cu. yds.
Concrete, Class "D"	100 cu. yds
Concrete, Class "F"	1690 cu. yds.
Reinforcement	246530 lbs.
STEEL SPANS	
Concrete, Class "D"	312 cu. yds
Concrete, Class "F"	5793 cu. yds
Reinforcement	130,850 lbs.
Structural Steel	1,732,220 lbs.

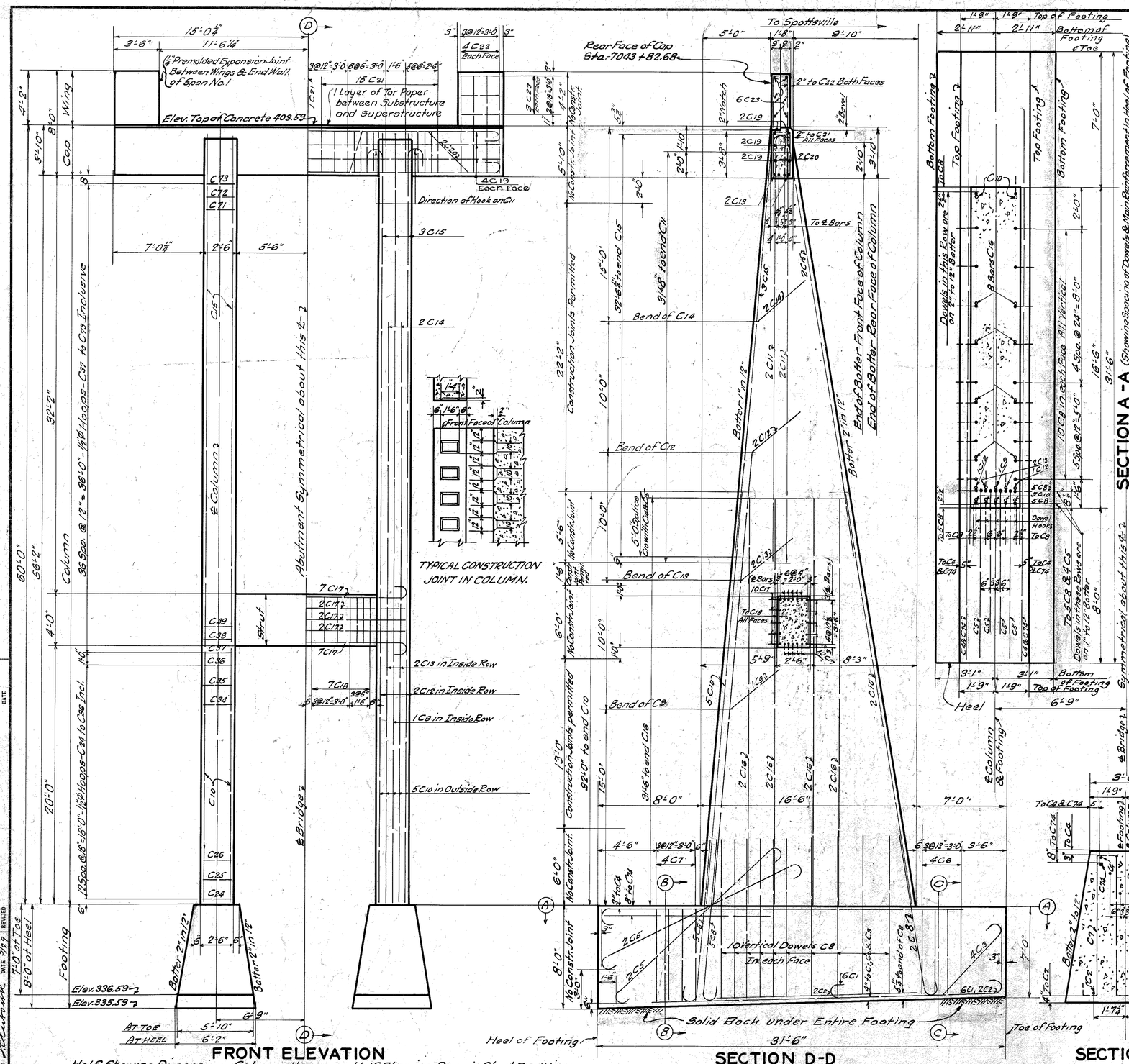
APPROVED - STATE HIGHWAY COMMISSION
BY Ben Johnson CHAIRMAN
DATE June 25 1930 BOOK No. 7 PAGE 291

SPOTTSVILLE TOLL BRIDGE SHEET 1 OF 20

COMMONWEALTH OF KENTUCKY
STATE HIGHWAY DEPARTMENT
FRANKFORT
COUNTY OF
HENDERSON
HENDERSON-OWENSBORO ROAD
STATION PROJECT NO.
SUBMITTED BY BRIDGE ENGR.
APPROVED BY CHIEF ENGR.
DRAWING No. 4053
INDEX

TRACED BY C.C. Bailey DATE 5/13/30 REVISED DATE
CHECKED BY DATE REVISED DATE
Approved G.S.M. DATE 10/2/30 REVISED DATE

MICROFILMED 70



FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	KY.				

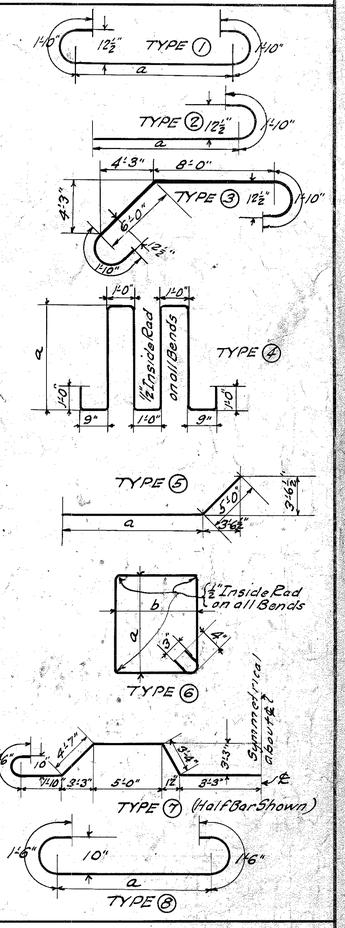
BILL OF BENT REINFORCEMENT

MARK	TYPE	NO	SIZE	LENGTH FT	LENGTH IN	LOCATION	a FT	a IN	b FT	b IN
C1	(1)	12	1¼"□	15	8	Footing Toe	12	0	–	–
C2	(2)	4	"	28	4	" "	26	6	–	–
C3	(3)	8	"	17	7	" "	–	–	–	–
C4	(2)	4	"	29	4	" Heel	27	6	–	–
C5	(1)	8	"	19	8	" "	16	0	–	–
C6	(4)	8	7/8"Ø	32	8	" Toe	6	9	–	–
C7	"	8	"	35	4	" Heel	7	5	–	–
C8	(2)	64	1¼"□	13	8	Footing & Columns	11	10	–	–
C9	(5)	2	1¼"□	20	0	Columns (Rear Face)	15	1	–	–
C11	(7)	8	1¼"Ø	33	1	" (Sides)	31	3	–	–
C12	(5)	4	"	40	0	" (Rear Faces)	35	1	–	–
C13	"	4	"	30	0	" "	25	1	–	–
C14	"	4	"	23	0	" "	18	1	–	–
C15	(2)	10	"	33	11	" "	32	1	–	–
C17	(8)	20	1"□	17	9	Strut	14	9	–	–
C18	(6)	14	1¼"Ø	12	4	"	3	8	2	2
C19	(8)	8	1"□	31	8	Cap	28	8	–	–
C20	(7)	2	"	38	4	"	–	–	–	–
C21	(6)	31	1½"Ø	10	0	"	3	4	1	4
C24	"	2	"	37	1	Columns	16	0½	2	2
C25	"	2	"	36	4	"	15	8	2	2
C26	"	2	"	35	7	"	15	3½	2	2
C27	"	2	"	34	10	"	14	11	2	2
C28	"	2	"	33	8	"	14	4	2	2
C29	"	2	"	32	11	"	13	11½	2	2
C30	"	2	"	32	2	"	13	7	2	2
C31	"	2	"	31	5	"	13	2½	2	2
C32	"	2	"	30	8	"	12	10	2	2
C33	"	2	"	29	11	"	12	5½	2	2
C34	"	2	"	29	2	"	12	1	2	2
C35	"	2	"	28	5	"	11	8½	2	2
C36	"	2	"	27	8	"	11	4	2	2
C37	"	2	"	27	2	"	11	1	2	2
C38	"	2	1½"Ø	26	8	"	10	10	2	2
C39	"	2	"	26	2	"	10	7	2	2
C40	"	2	"	25	8	"	10	4	2	2
C41	"	2	"	25	2	"	10	1	2	2
C42	"	2	"	24	8	"	9	10	2	2
C43	"	2	"	24	2	"	9	7	2	2
C44	"	2	"	23	8	"	9	4	2	2
C45	"	2	"	23	7	"	9	3½	2	2
C46	"	2	"	23	1	"	9	0½	2	2
C47	"	2	"	22	7	"	8	9½	2	2
C48	"	2	"	22	1	"	8	6½	2	2
C49	"	2	"	21	7	"	8	3½	2	2
C50	"	2	"	21	1	"	8	0½	2	2
C51	"	2	"	20	7	"	7	9½	2	2
C52	"	2	"	20	1	"	7	6½	2	2
C53	"	2	"	19	7	"	7	3½	2	2
C54	"	2	"	19	1	"	7	0½	2	2
C55	"	2	"	18	7	"	6	9½	2	2
C56	"	2	"	18	1	"	6	6½	2	2
C57	"	2	"	17	7	"	6	3½	2	2
C58	"	2	"	17	1	"	6	0½	2	2
C59	"	2	"	16	7	"	5	9½	2	2
C60	"	2	"	16	1	"	5	6½	2	2
C61	"	2	"	15	7	"	5	3½	2	2
C62	"	2	"	15	1	"	5	0½	2	2
C63	"	2	"	14	7	"	4	9½	2	2
C64	"	2	"	14	1	"	4	6½	2	2
C65	"	2	"	13	7	"	4	3½	2	2
C66	"	2	"	13	1	"	4	0½	2	2
C67	"	2	"	12	7	"	3	9½	2	2
C68	"	2	"	12	1	"	3	6½	2	2
C69	"	2	"	11	7	"	3	3½	2	2
C70	"	2	"	11	1	"	3	0½	2	2
C71	"	2	"	10	7	"	2	9½	2	2
C72	"	2	"	10	1	"	2	6½	2	2
C73	"	2	"	9	7	"	2	3½	2	2

BILL OF STRAIGHT REINFORCEMENT

MARK	NO	SIZE	LENGTH FT	LENGTH IN	LOCATION
C10	14	1¼"□	32	1	Columns
C16	16	"	31	6	"
C22	12	½"Ø	7	9	Wings
C23	16	"	3	3	"
C74	4	1¼"□	13	0	Footing

TYPES OF BENT REINFORCEMENT



ESTIMATE OF QUANTITIES

Concrete, Class "A"	194.7 cu.yds
Reinforcement	24530 lbs

SPOTTSVILLE TOLL BRIDGE — SHEET 2 OF 20

COMMONWEALTH OF KENTUCKY
STATE HIGHWAY DEPARTMENT
FRANKFORT
COUNTY OF
HENDERSON
HENDERSON — OWENSBORO
ROAD
STATION — PROJECT NO.

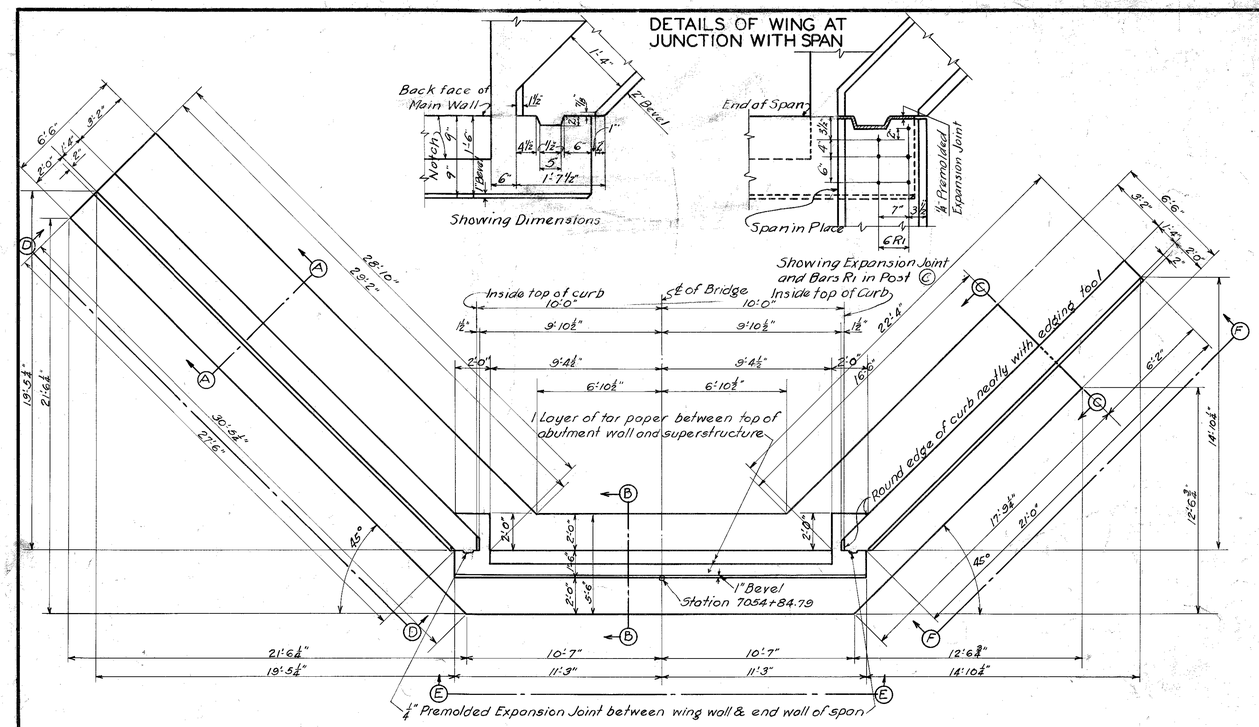
SUBMITTED BY — BRIDGE ENGR.
APPROVED BY — STATE HIGHWAY ENGR.
DRAWING No. 4053
INDEX

DESIGNED BY M.H. Easley — DATE 5-24-29
TRACED BY Gibbs — DATE 7-29-29
CHECKED BY T.E.C. Frank — DATE 5-29-29
REVISED — DATE
REVISED — DATE
REVISED — DATE

DETAILS OF ABUTMENT NO. 1

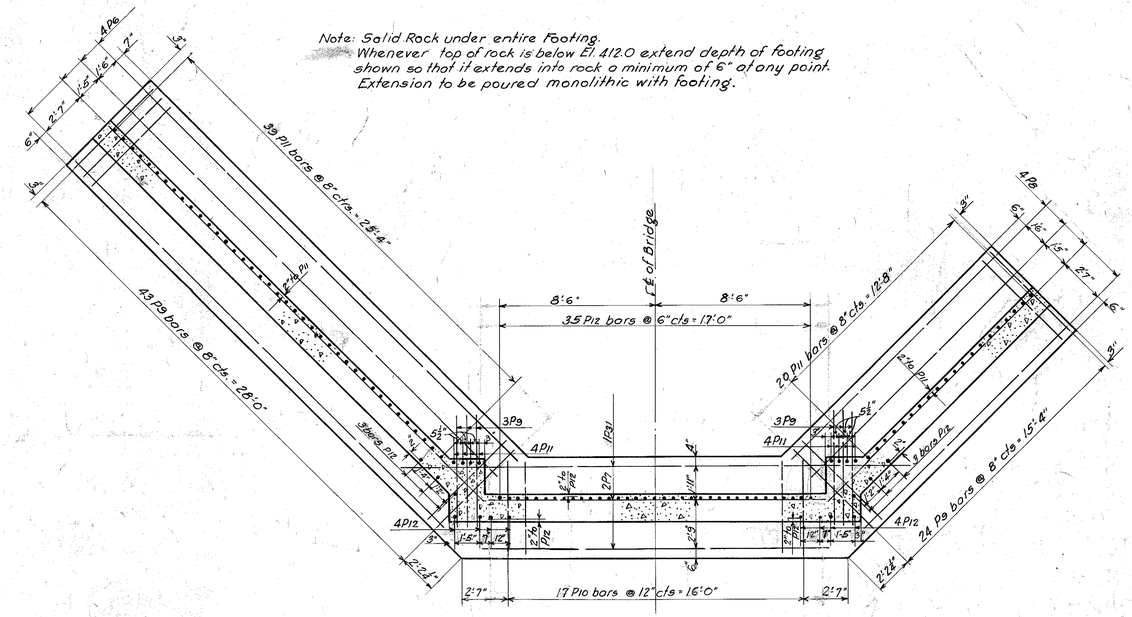
Fed. Road Dist. No.	State	Fed. Aid Proj. No.	Fiscal Year	Sheet No.	Total Sheets
7	Ky.				

DETAILS OF WING AT JUNCTION WITH SPAN



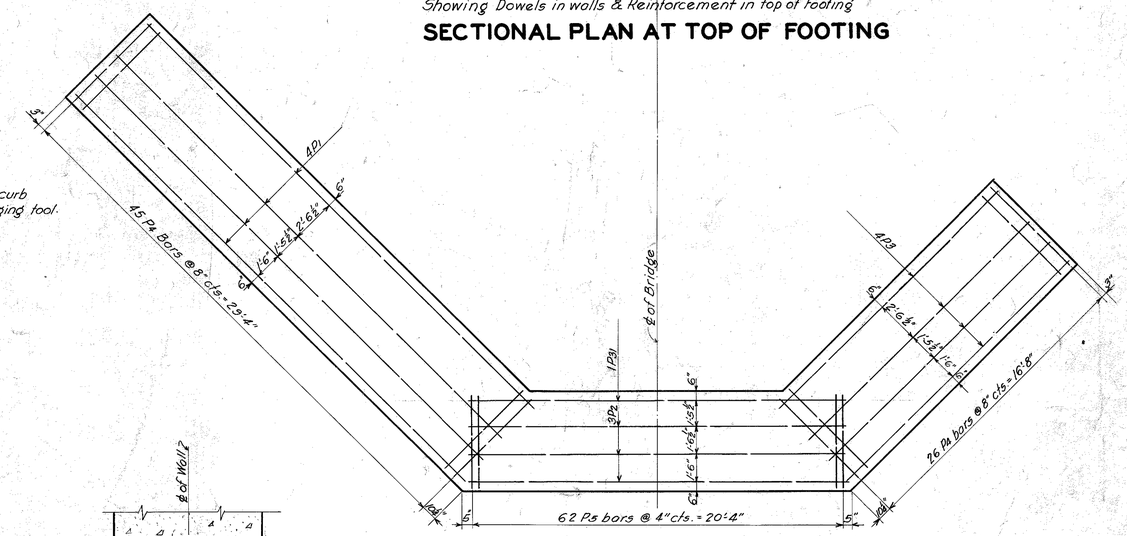
Showing Dimensions

LAYOUT PLAN



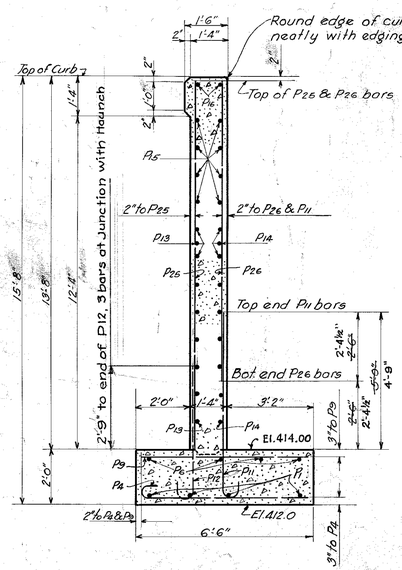
Showing Dowels in walls & Reinforcement in top of Footing

SECTIONAL PLAN AT TOP OF FOOTING

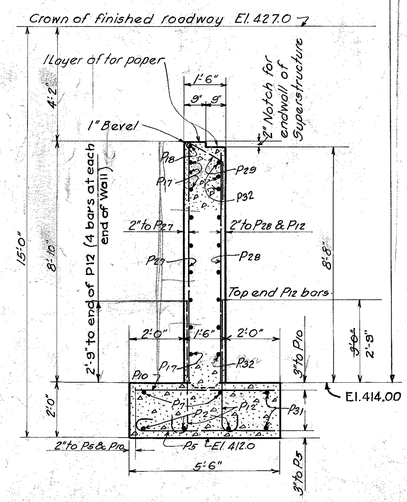


Showing Reinforcement in bottom of Footing

PLAN OF FOOTING

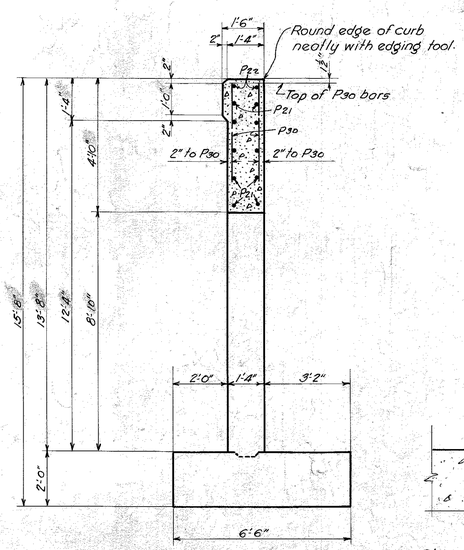


SECTION A-A

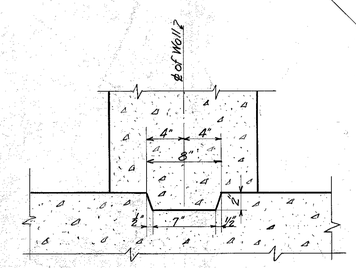


SECTION B-B

Note: Abutment revised below El. 414.00
For details see Sh. No 3-A



SECTION C-C



Showing Beveled Key in top of Footing

TYPICAL CROSS SECTION AT JUNCTION OF WALL WITH FOOTING

Note: At junction of Main & Wing Walls Place dowel bars P12 as indicated on Sections A-A & B-B and shown on Sectional Plan of Top of Footing

DETAILS OF ABUTMENT NO. 2 (2 Sheets)

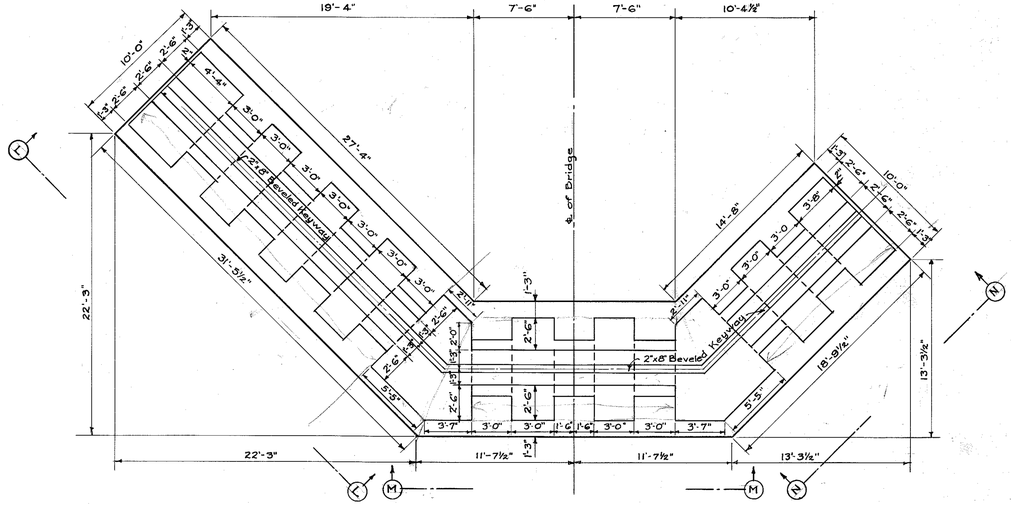
SPOTTSVILLE TOLL BRIDGE – SHEET 3 OF 20

COMMONWEALTH OF KENTUCKY
STATE HIGHWAY DEPARTMENT
FRANKFORT
COUNTY OF
HENDERSON
HENDERSON–OWENSBORO
ROAD
STATION PROJECT NO.

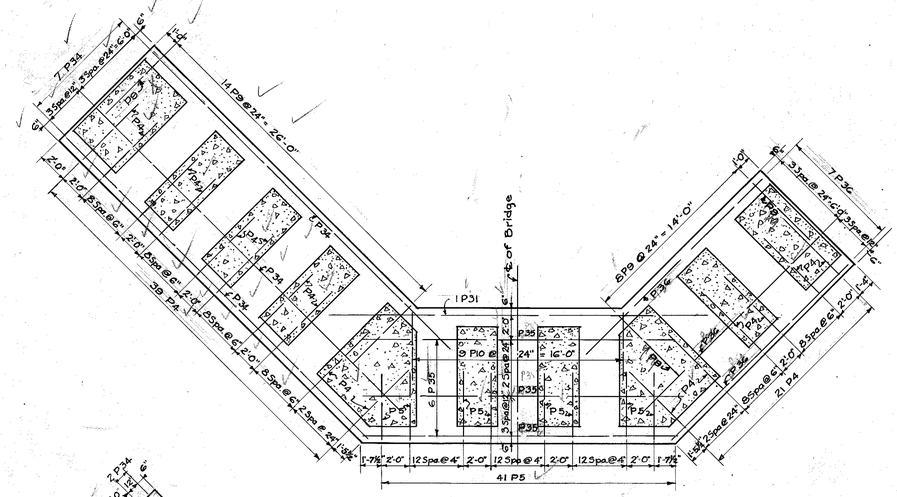
SUBMITTED BY H.R. Cox BRIDGE ENGR.
APPROVED BY STATE HIGHWAY ENGR.
DRAWING No. 4053
INDEX

DESIGNED BY H.W. Bush	DATE	REVISED Footing	DATE 4/19/51
TRACED BY L.A. Seabon	DATE 5-6-28	REVISED	DATE
CHECKED BY W.N. Downey	DATE 5/9/51	REVISED	DATE

FED. ROAD DIST. NO.	STATE	FED AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	Ky				

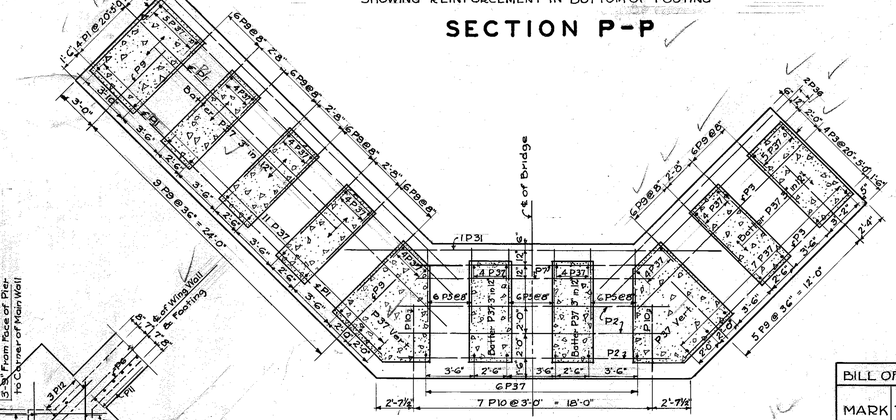


PLAN



SHOWING REINFORCEMENT IN BOTTOM OF FOOTING

SECTION P-P



SHOWING REINFORCEMENT IN TOP OF FOOTING AND DOWELS P37

SECTION P-P

End of Long Wing Wall — Battered Faces — Vert. Faces — 2 P38 & 1 P6 — 3 P38 — 1 P6 — Pier — Opening — Pier — Corners — 31'-5½"

L-L

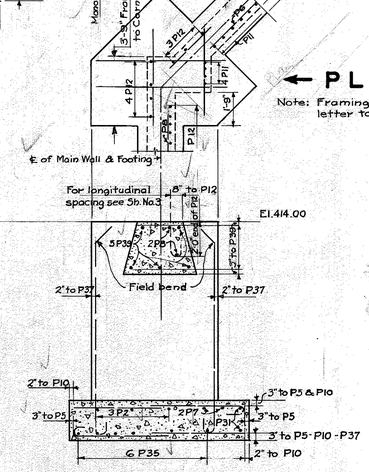
End of Short Wing Wall — Vert. Faces — Battered Faces — Vert. Faces — 2 P39 & 1 P8 — 3 P39 — 1 P8 — Pier — Opening — Pier — Corners — 11'-7½" — 11'-7½"

M-M

Vert. Faces — Battered Faces — El. Top of Footing = 414.00 — 2 P40 & 1 P8 — 3 P40 — 1 P8 — Pier — Opening — Pier — Monolithic — Min. depth of Slab increase depth to reach rock. Bottom of footing to be on solid rock. — 18'-9½"

N-N

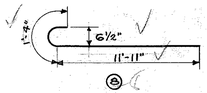
ELEVATIONS

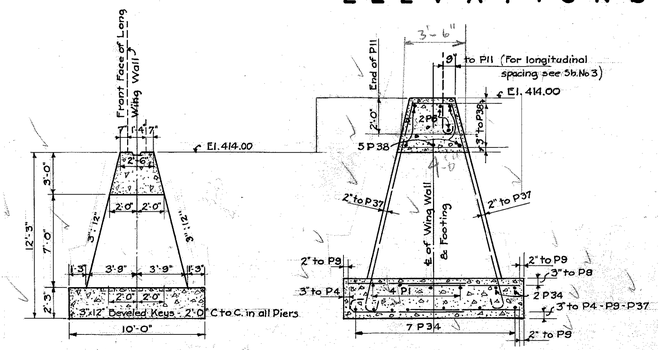


← PLAN

Note: Framing bars not designated by letter to be cut of remaining bars

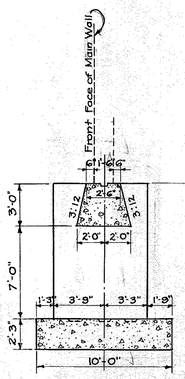
BILL OF ADDITIONAL REINFORCEMENT						
MARK	TYPE	NO.	SIZE	LENGTH FT.	LENGTH IN.	LOCATION
P34	Straight	9	⅞" ϕ	31	0	Slab
P35	"	6	"	23	0	"
P36	"	9	"	18	0	"
P37	Ⓑ	66	¾" ϕ	13	3	Dowels
P38	Straight	5	⅞" ϕ	30	0	Beam
P39	"	5	"	23	0	"
P40	"	5	"	16	0	"





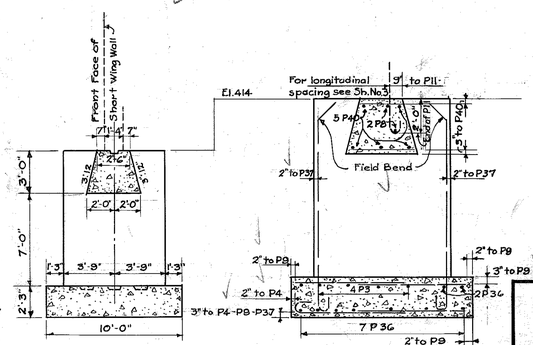
SHOWING DIMENSIONS — SHOWING REINFORCEMENT

SECTION X-X



SHOWING DIMENSIONS

SECTION Y-Y



SHOWING DIMENSIONS — SHOWING REINFORCEMENT

SECTION Z-Z

REVISION OF ABUTMENT NO. 2 BELOW EL. 414

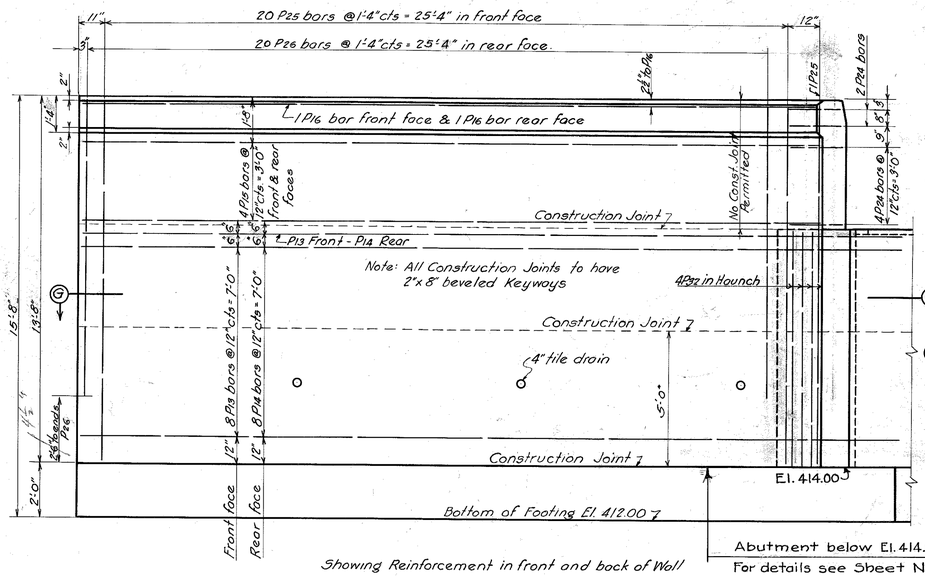
SPOTTSVILLE TOLL BRIDGE - SHEET 3A OF 20

COMMONWEALTH OF KENTUCKY
STATE HIGHWAY DEPARTMENT
FRANKFORT
COUNTY OF
HENDERSON
HENDERSON-OWENSBORO
STATION — ROAD PROJECT NO.

SUBMITTED BY ..... BRIDGE ENGR. | DRAWING NO. | INDEX
APPROVED BY ..... CHIEF ENGR.

DESIGNED BY J.R.M. DATE 4/51 | REVISED | DATE
TRACED BY L. Cornwell DATE 4/19/51 | REVISED | DATE
CHECKED BY W.W. Evans DATE 4/19/51 | REVISED | DATE

FED. ROAD DIST. NO.	STATE	FED. AID PRO. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	KY.				

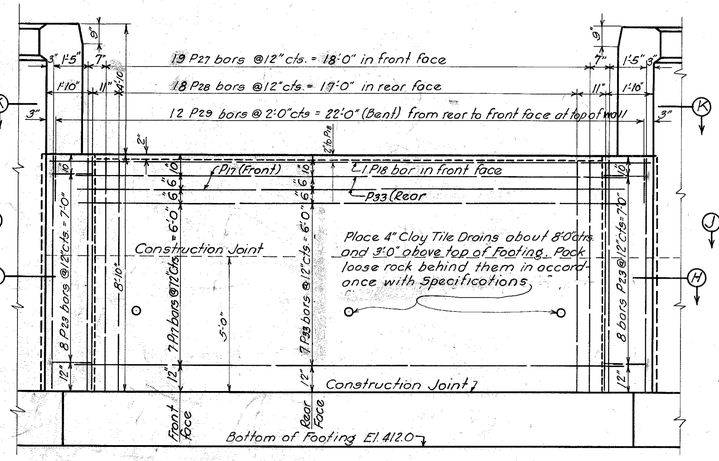


Showing Reinforcement in front and back of Wall

Abutment below El. 414.00 revised
For details see Sheet No. 3A

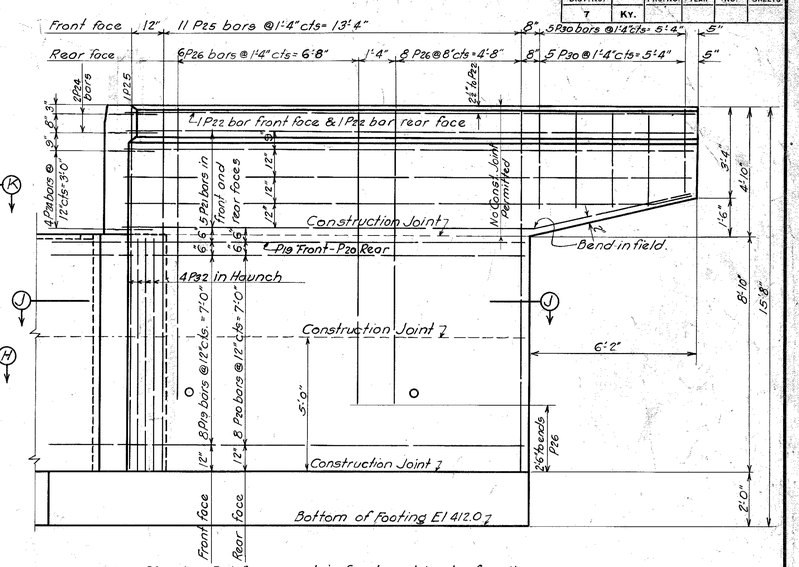
ELEVATION D-D

Note: Dowels for Handrail Posts on wing walls to be placed before pouring above bridge seat. See sheet No. 17 for spacing of some.



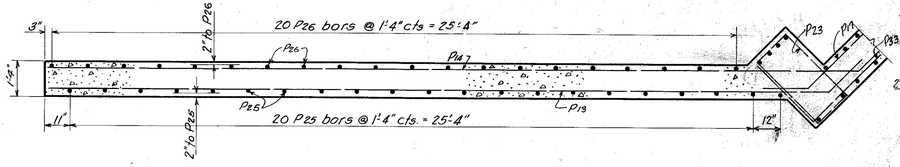
Showing Reinforcement in front and back of wall

ELEVATION E-E

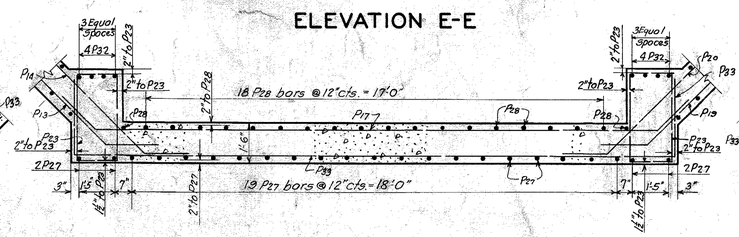


Showing Reinforcement in front and back of wall

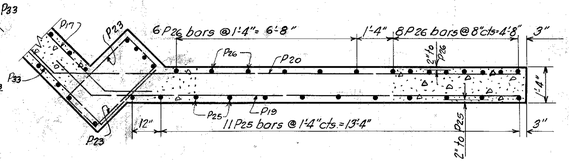
ELEVATION F-F



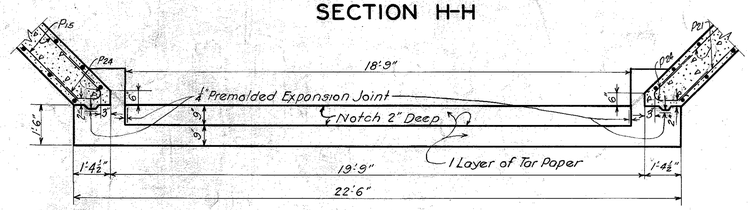
SECTION G-G



SECTION H-H



SECTION J-J

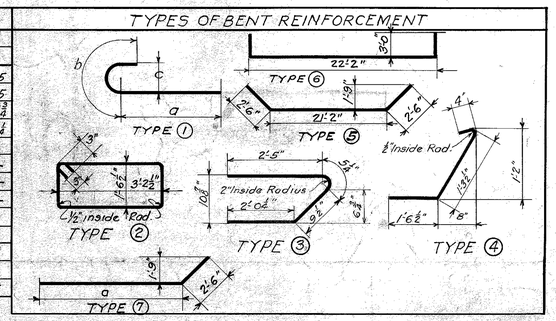


SECTIONAL PLAN K-K

BILL OF STRAIGHT REINFORCEMENT					
MARK	NO.	SIZE	LENGTH FT	LENGTH IN	LOCATION
P1	4	1/2" Ø	30	3	Footing
P2	3	"	20	6	"
P3	4	"	17	6	"
P6	4	"	28	2	"
P7	2	"	18	2	"
P8	4	"	15	6	"
P9	93	1/2" □	6	2	"
P10	17	"	5	2	"
P15	8	1/2" Ø	27	4	Long Wingwall
P16	2	3/4" Ø	27	4	" "
~~P17~~	~~16~~	~~1/2" Ø~~	~~28~~	~~6~~	~~Main Wall~~
P18	1	3/4" Ø	22	2	" "
P21	10	1/2" Ø	20	10	Short Wingwall
P22	2	3/4" Ø	20	10	" "
P25	33	1/2" Ø	13	6	Wingwalls
P26	34	5/8" Ø	11	0	"
P27	23	1/2" Ø	8	8	Wall
P28	20	1/2" □	8	6	" "
P30	10	1/2" Ø	3	6	Short Wingwall
P31	2	3/4" Ø	28	0	Footing
P32	8	3/4" Ø	8	8	Haunches

BILL OF BENT REINFORCEMENT													
MARK	TYPE	NO	SIZE	LENGTH FT.	LENGTH IN.	LOCATION	a FT	a IN.	b FT	b IN	c FT	c IN
P4	1	71	1/2" □	6	10	Footing	6	0	0	10	0	5
P5	1	62	"	5	10	"	5	0	0	10	0	5
P11	1	67	7/8" Ø	7	9	Footing & Wingwall	6	5	1	4	0	8 3/4
P12	1	49	5/8" Ø	5	6	" Main Wall	4	6	1	0	0	6 1/4
P13	7	9	1/2" □	31	6	Long Wingwall	29	0	—	—	—	—
P14	7	9	"	32	10	" "	30	4	—	—	—	—
P19	7	9	"	18	10	Short " "	16	4	—	—	—	—
P20	7	9	"	20	2	" " "	17	8	—	—	—	—
P23	2	16	1/2" □	10	0	Main Wall & Wingwalls	—	—	—	—	—	—
P24	3	12	1/2" Ø	5	8	Wingwalls	—	—	—	—	—	—
P29	4	12	"	3	1	Main Wall	—	—	—	—	—	—
P17	5	9	1/2" Ø	26	1	" "	—	—	—	—	—	—
P33	6	9	"	28	0	" "	—	—	—	—	—	—

Note: For additional reinforcing and location of bars {P1 - P10 incl. see Sheet No. 3A & P31



DETAILS OF ABUTMENT NO. 2 (2 Sheets)

ESTIMATE OF QUANTITIES - FOR REVISED ABUT.

Concrete, Class "A"	73.1 cu yds.	+ 114.8	= 187.9 cu yds.
Reinforcement	5910 lbs.	+ 3200	= 9110 lbs.

SPOTTSVILLE TOLL BRIDGE SHEET 4 OF 20

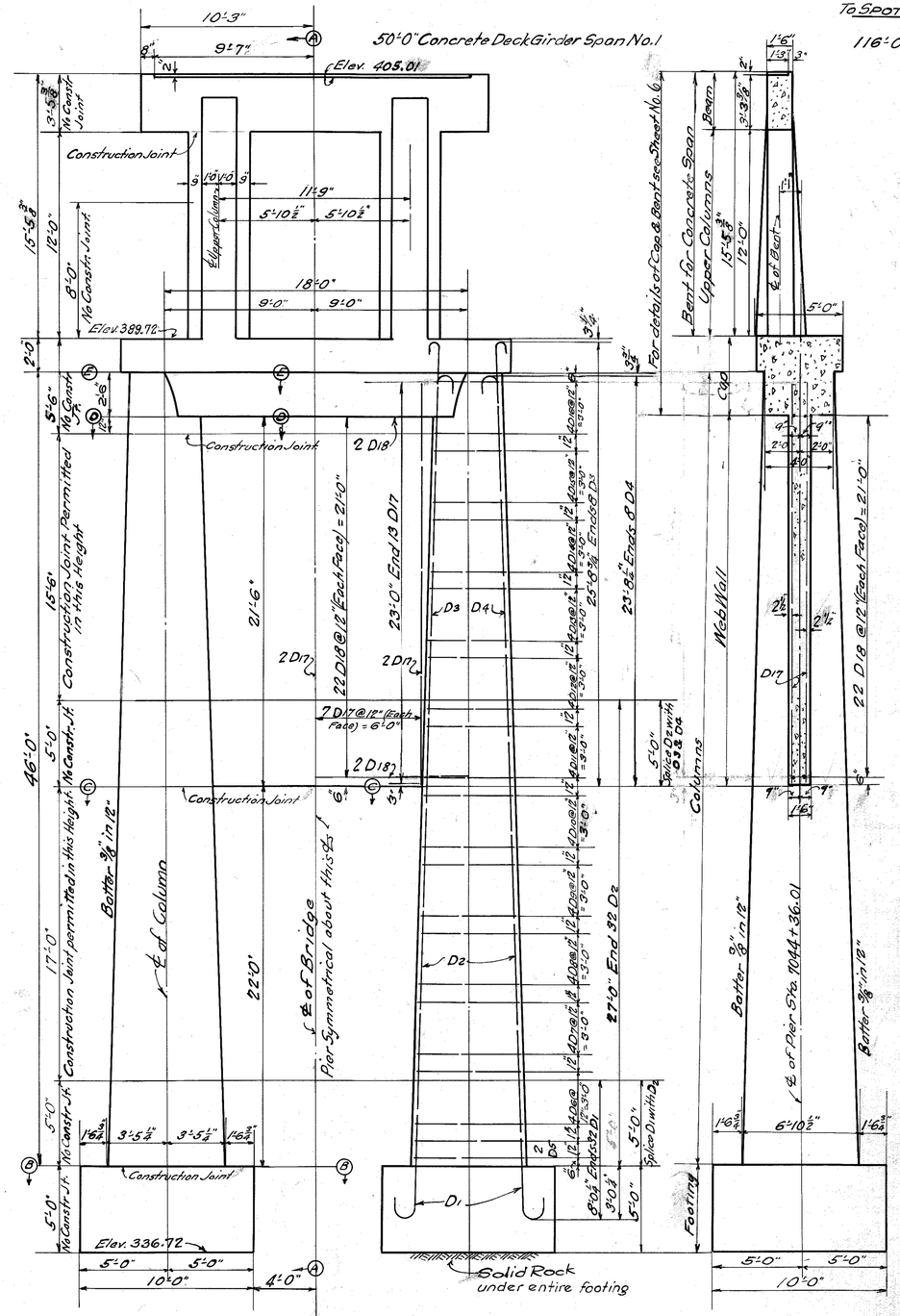
COMMONWEALTH OF KENTUCKY
STATE HIGHWAY DEPARTMENT
FRANKFORT
COUNTY OF
HENDERSON
HENDERSON-OWENSBORO ROAD

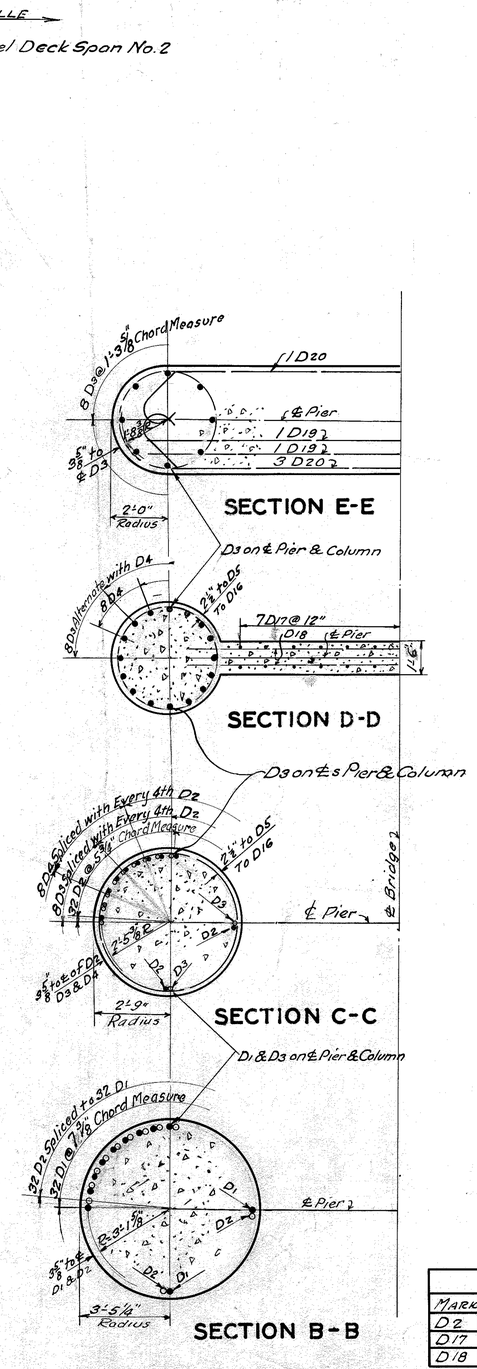
STATION PROJECT NO.

SUBMITTED BY H. W. Bush BRIDGE ENGR.
APPROVED BY STATE HIGHWAY ENGR.
DRAWING No. 4053
INDEX

DESIGNED BY H. W. Bush DATE 7/15/31
TRACED BY L.A. Seaborn DATE 5-29
CHECKED BY W. N. Pierney DATE 5/29/31
REVISED Footing & Estimate DATE 7/15/31
REVISED DATE
REVISED DATE
REVISED DATE

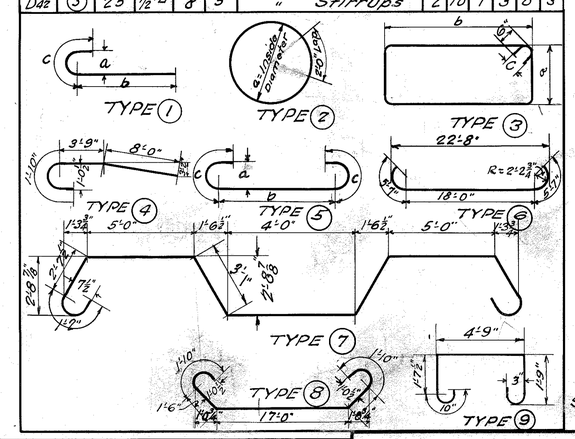
FED. ROAD DIST. NO.	STATE	FED. AID PRO. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	KY.				





BILL & TYPES OF BENT REINFORCEMENT

Mark	Type	No	Size	Length Ft.	Length In.	Location	a Ft.	a In.	b Ft.	b In.	c Ft.	c In.
D1	1	64	1 1/8" □	9	4	Footings-Dowels to Columns	1	0½	7	6	1	10
D3	"	16	"	27	3	Columns into Cap	0	7½	25	5	1	10
D4	"	16	"	25	0	" " "	1	0½	23	2	1	10
D5	2	4	1/2" Ø	21	11	" Hoops	6	4½	-	-	-	-
D6	"	8	"	21	4	" "	6	2	-	-	-	-
D7	"	8	"	20	7	" "	5	11	-	-	-	-
D8	"	8	"	19	9	" "	5	8	-	-	-	-
D9	"	8	"	19	0	" "	5	5	-	-	-	-
D10	"	8	"	18	3	" "	5	2	-	-	-	-
D11	"	8	"	17	5	" "	4	11	-	-	-	-
D12	"	8	"	16	8	" "	4	8	-	-	-	-
D13	"	8	"	15	10	" "	4	5	-	-	-	-
D14	"	8	"	15	1	" "	4	2	-	-	-	-
D15	"	8	"	14	4	" "	3	11	-	-	-	-
D16	"	8	"	13	6	" "	3	8	-	-	-	-
D19	5	5	1 1/4" □	22	8	Cap	0	7½	19	0	1	10
D20	8	4	"	23	6	"	-	-	-	-	-	-
D21	6	5	"	29	2	"	-	-	-	-	-	-
D22	3	24	3/8" Ø	16	9	" Stirrups	4	3	3	9	0	4½
D23	9	13	1/2" Ø	9	6	" "	-	-	-	-	-	-
D24	"	2	"	13	3	" "	1	9	4	6	0	3
D25	1	16	1 1/8" □	13	3	" into upper Column	1	0½	11	5	1	10
D26	4	8	"	13	7	" " " "	-	-	-	-	-	-
D27	1	8	"	15	3	Upper Column (Vertical)	1	0½	13	5	1	10
D28	"	8	"	15	9	" " "	1	0½	13	11	1	10
D29	3	2	1/2" Ø	9	1½	" " Hoops	2	5¾	1	8	0	5
D30	"	2	"	8	11½	" " "	2	4¾	1	8	0	5
D31	"	2	"	8	9½	" " "	2	3¾	1	8	0	5
D32	"	2	"	8	7½	" " "	2	2¾	1	8	0	5
D33	"	2	"	8	5½	" " "	2	1¾	1	8	0	5
D34	"	2	"	8	3½	" " "	2	0¾	1	8	0	5
D35	"	2	"	8	1½	" " "	1	11¾	1	8	0	5
D36	"	2	"	7	11½	" " "	1	10¾	1	8	0	5
D37	"	2	"	7	9½	" " "	1	9¾	1	8	0	5
D38	"	2	"	7	7½	" " "	1	8¾	1	8	0	5
D39	"	24	"	9	4	" " "	1	1	3	2	0	5
D40	5	4	3/4" Ø	21	8	" " "	0	7½	19	4	1	2
D41	7	2	"	27	3	Beam	-	-	-	-	-	-
D42	3	25	1/2" □	8	5	" Stirrups	2	10	1	3	0	3



BILL OF STRAIGHT REINFORCEMENT

Mark	No	Size	Length Ft.	Length In.	Location
D2	64	1 1/4" □	27	0	Columns
D17	26	1/2" Ø	23	0	Web Wall (Vertical)
D18	44	"	17	0	" " (Horizontal)

ESTIMATE OF QUANTITIES

Concrete, Class "A" 1566 cu. yds.
Reinforcement 25040 lbs.

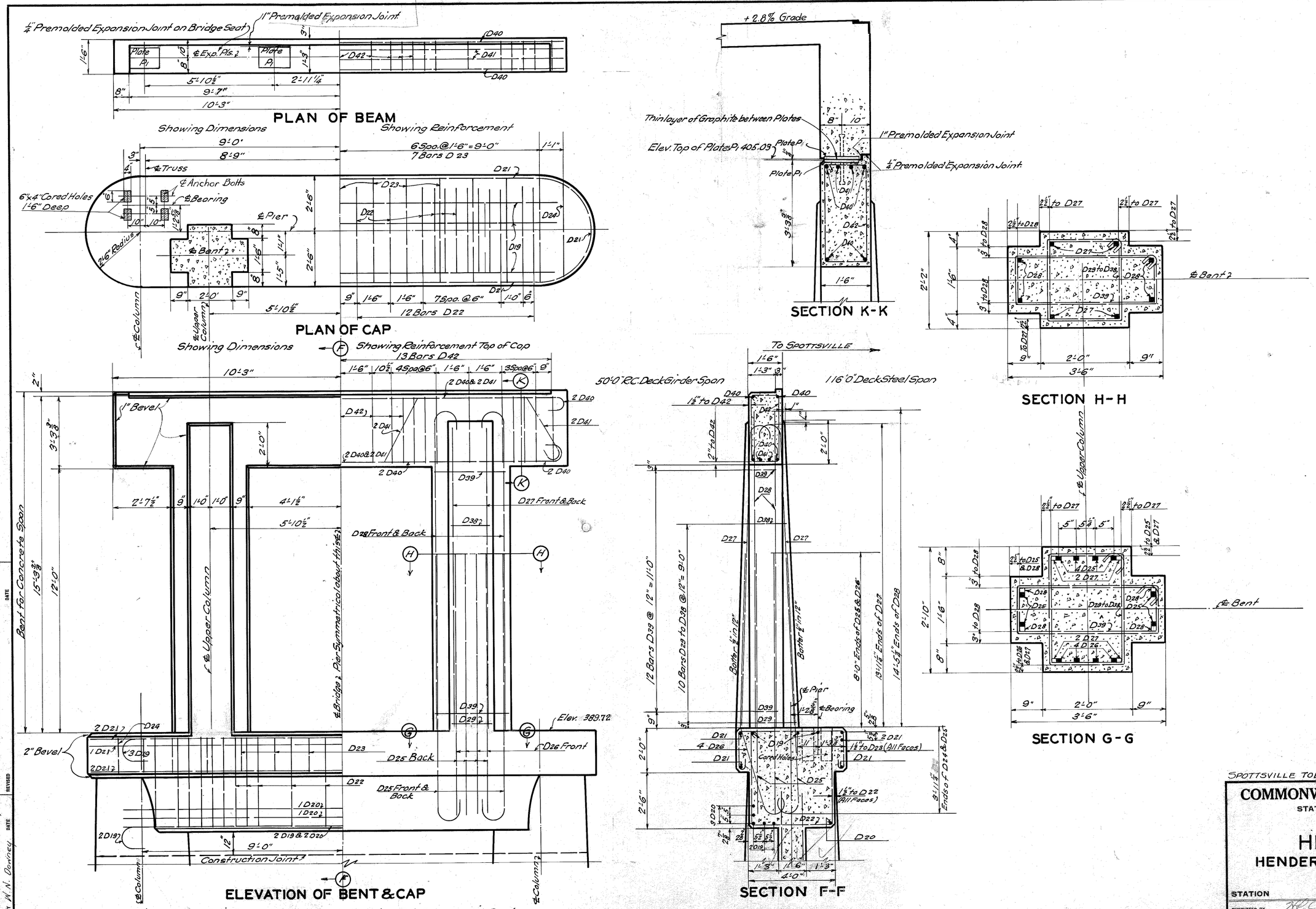
DETAILS OF PIER NO. 1 (2 SHEETS)

SPOTTSVILLE TOLL BRIDGE
SHEET 5 OF 20

DESIGNED BY K. Stanley DATE 3-29
TRACED BY Gibbs DATE 3-29
CHECKED BY H. A. Downey DATE 4-6-29
REVISED DATE
REVISED DATE
REVISED DATE

COMMONWEALTH OF KENTUCKY
STATE HIGHWAY DEPARTMENT
FRANKFORT
COUNTY OF
HENDERSON
HENDERSON - OWENSBORO
ROAD
STATION PROJECT NO.
SUBMITTED BY H. B. Gaul BRIDGE ENGR.
APPROVED BY STATE HIGHWAY ENGR.
DRAWING No. 4053
INDEX

FED. ROAD DIST. NO.	STATE	FED. AID PRO. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	KY.				



DETAILS OF PIER NO. 1 (2 SHEETS)

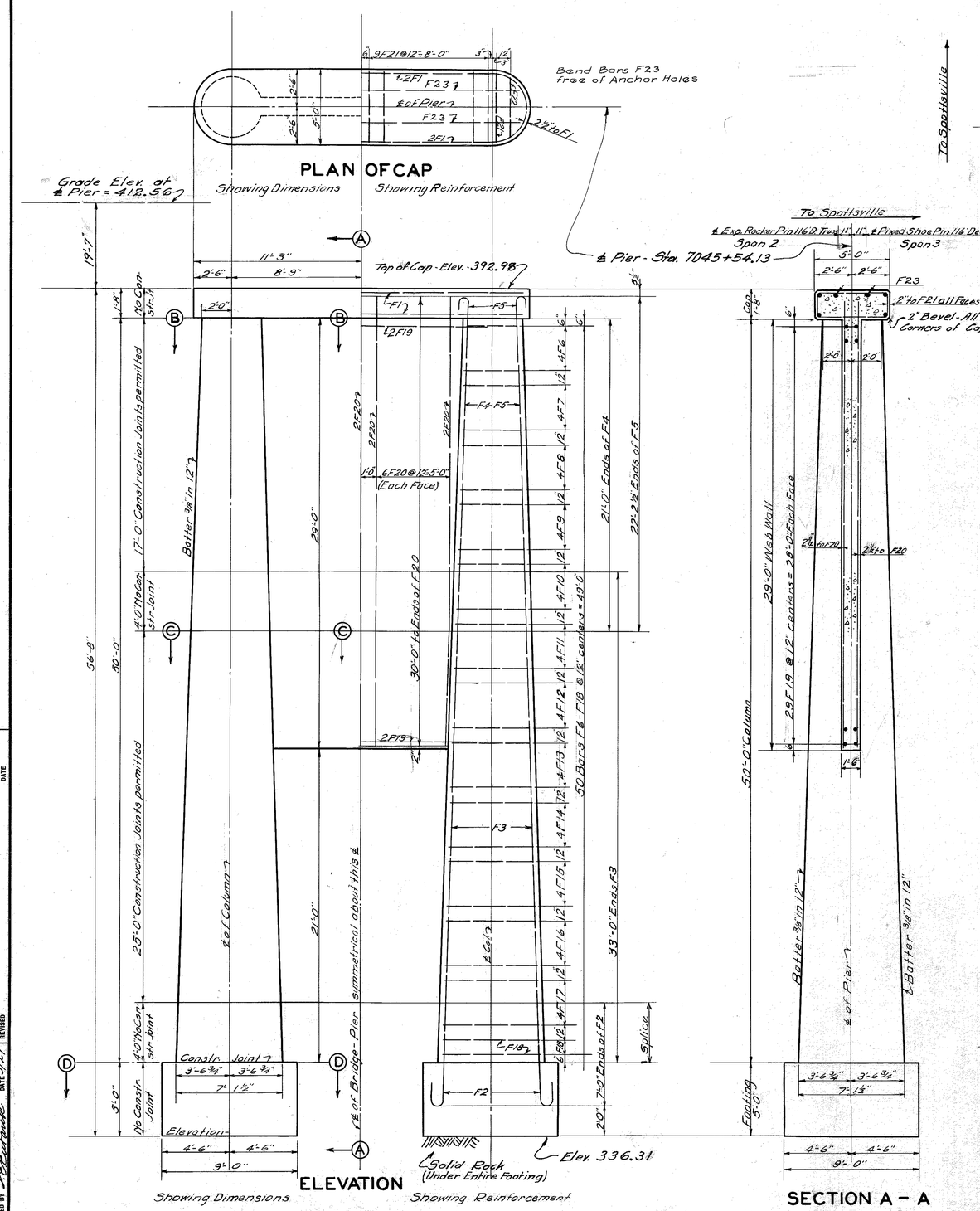
SPOTTSVILLE TOLL BRIDGE SHEET 6 OF 20

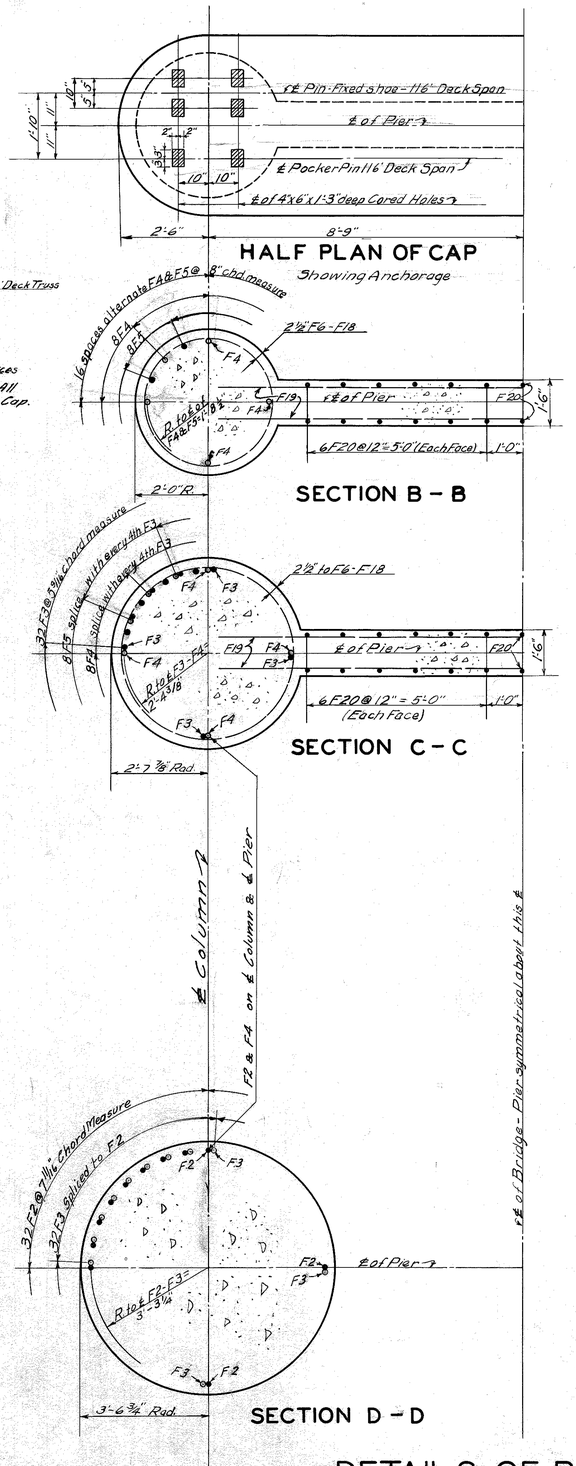
COMMONWEALTH OF KENTUCKY
STATE HIGHWAY DEPARTMENT
FRANKFORT
COUNTY OF
HENDERSON
HENDERSON - OWENSBORO
ROAD
STATION PROJECT NO.

SUBMITTED BY H. R. Crist BRIDGE ENGR.
APPROVED BY STATE HIGHWAY ENGR.
DRAWING No. 4053
INDEX

DESIGNED BY H. Stanley DATE 5/29 REVISED DATE
TRACED BY Gibbs DATE 5/29 REVISED DATE
CHECKED BY W. N. Downey DATE REVISED DATE

FED. ROAD DIST. NO.	STATE	FED. AID PRO. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	KY.				

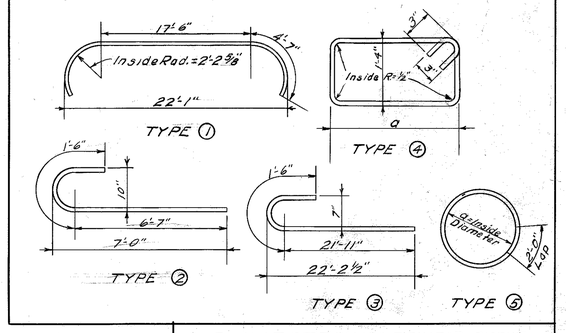




DETAILS OF PIER NO. 2

BILL AND TYPES OF BENT REINFORCEMENT

MARK	TYPE	NO	SIZE	LENGTH FT.	LENGTH IN.	LOCATION	a FT.	a IN.
F1	1	4	1" ϕ	26	8	Pier Cap	—	—
F2	2	64	1" ϕ	8	1	Columns into Footings	—	—
F5	3	16	1" ϕ	23	5	Columns into Cap	—	—
F6	5	8	½" ϕ	13	6	Columns	3	7½
F7	"	8	"	14	4	"	3	10½
F8	"	8	"	15	1	"	4	1½
F9	"	8	"	15	11	"	4	4½
F10	"	8	"	16	8	"	4	7½
F11	"	8	"	17	5	"	4	10½
F12	"	8	"	18	3	"	5	1½
F13	"	8	"	19	0	"	5	4½
F14	"	8	"	19	10	"	5	7½
F15	"	8	"	20	7	"	5	10½
F16	"	8	"	21	4	"	6	1½
F17	"	8	"	22	2	"	6	4½
F18	"	4	"	22	9	"	6	6½
F21	4	20	"	12	6	Pier Cap	4	8
F22	4	2	"	11	1	" "	3	11½



BILL OF STRAIGHT REINFORCEMENT

MARK	Nº	SIZE	LENGTH FT.	LENGTH IN.	LOCATION
F3	64	1" ϕ	33	0	Columns
F4	16	1" ϕ	21	0	"
F19	58	½" ϕ	17	0	Web Wall into Columns
F20	26	½" ϕ	30	0	Web Wall into Cap
F23	2	3/4" ϕ	21	2	Cap

ESTIMATED QUANTITIES

Concrete Class "A"	149.3 Cu. yds
Reinforcement	11830 Lbs.

SPOTTSVILLE TOLL BRIDGE — SHEET 7 OF 20

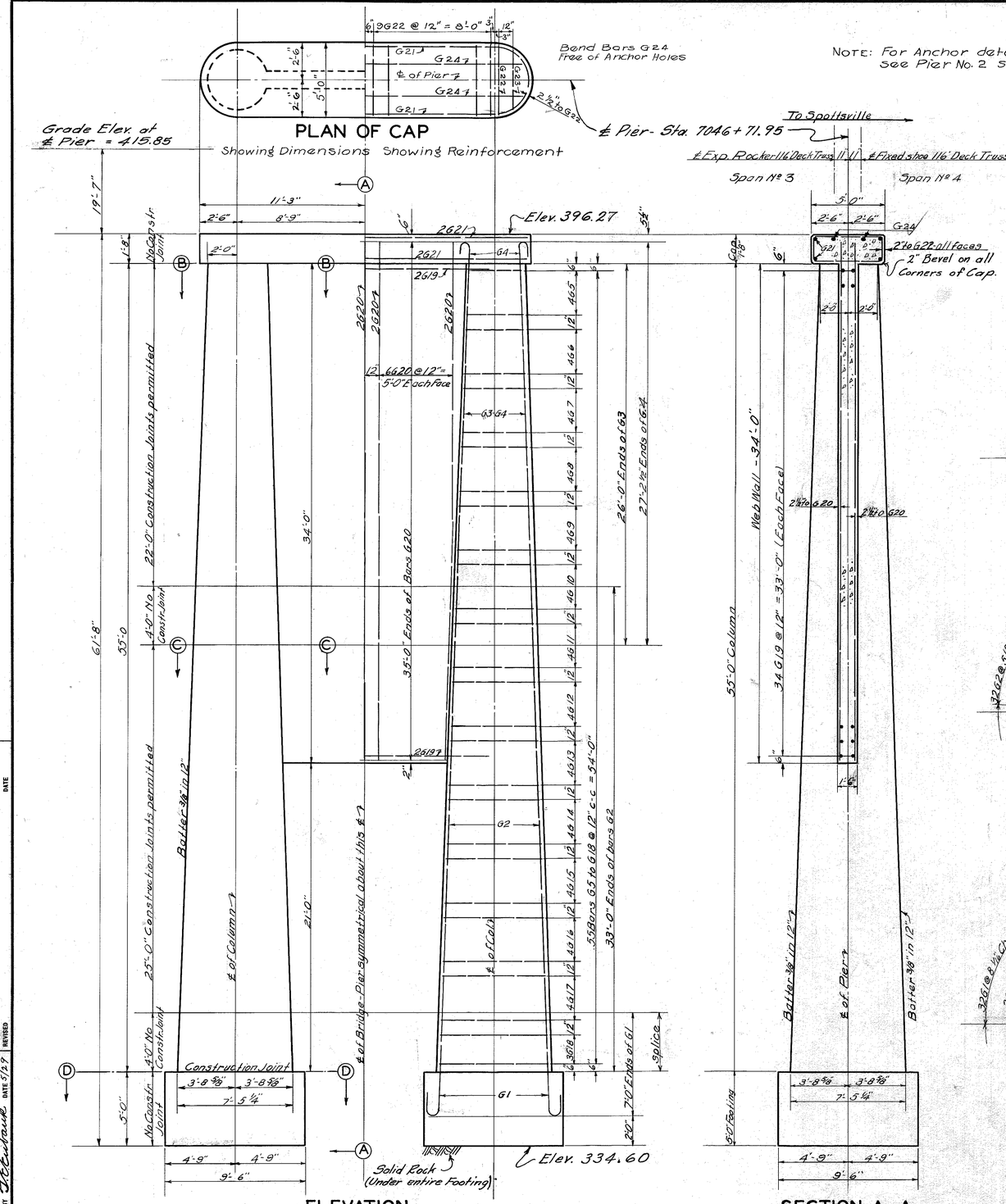
COMMONWEALTH OF KENTUCKY
STATE HIGHWAY DEPARTMENT
FRANKFORT
COUNTY OF
HENDERSON
HENDERSON - OWENSBORO
ROAD

STATION — PROJECT NO.

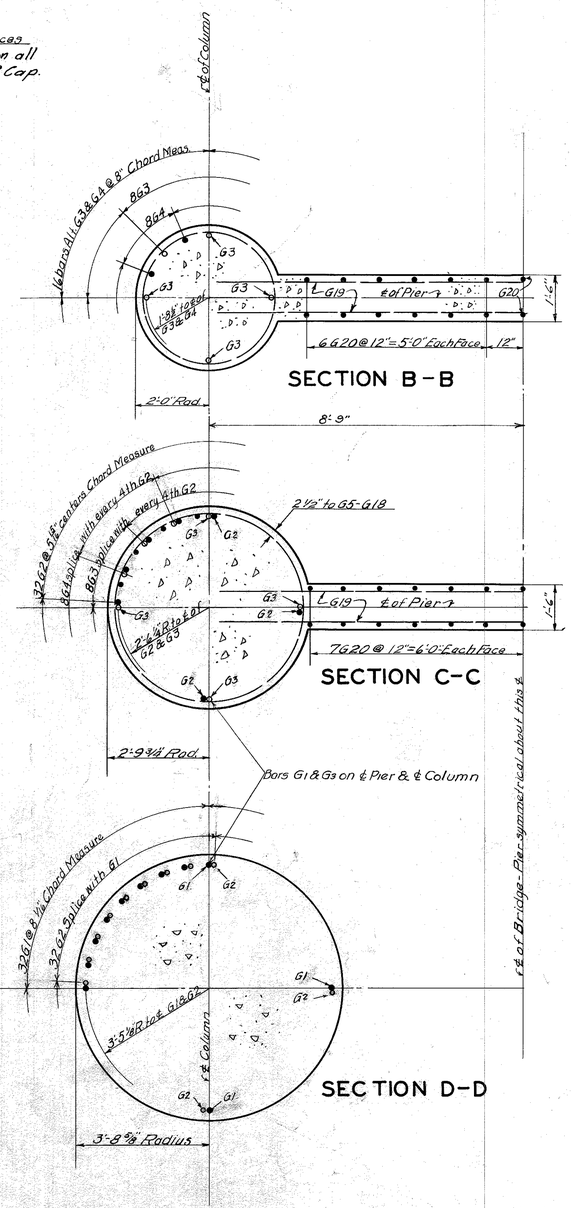
SUBMITTED BY ..... BRIDGE ENGR.
APPROVED BY ..... STATE HIGHWAY ENGR.
DRAWING No. 4053
INDEX

DESIGNED BY H. Stanley DATE 4/1/29 — REVISED Quantities DATE 10/12/50
TRACED BY J.R. Odell DATE 4-24-29 — REVISED DATE
CHECKED BY H.E. Schaub DATE 5/2/29 — REVISED DATE

FED. ROAD DIST. NO.	STATE	FED. AID PRO. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	KY.				



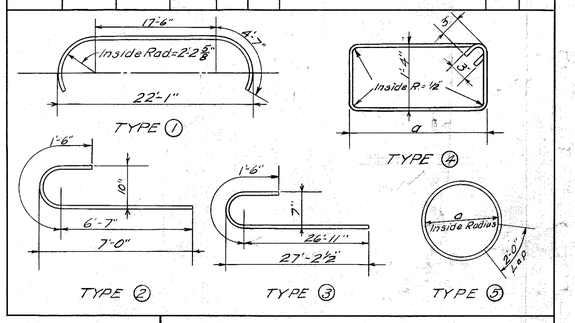
NOTE: For Anchor details of Pier No. 3 see Pier No. 2 Sheet 7 of 20



DETAILS OF PIER NO. 3

BILL AND TYPES OF BENT REINFORCEMENT

MARK	TYPE	№	SIZE	LENGTH FT.	LENGTH IN.	LOCATION	a FT.	a IN.
G1	2	64	1" ϕ	8	1	Columns into Footings	—	—
G4	3	16	1" ϕ	28	5	Columns into Pier Cap	—	—
G5	5	8	1/2" ϕ	13	6	Columns	3	7 1/2
G6	"	8	"	14	4	"	3	10 1/2
G7	"	8	"	15	1	"	4	1 1/2
G8	"	8	"	15	11	"	4	4 1/2
G9	"	8	"	16	8	"	4	7 1/2
G10	"	8	"	17	5	"	4	10 1/2
G11	"	8	"	18	3	"	5	1 1/2
G12	"	8	"	19	0	"	5	4 1/2
G13	"	8	"	19	10	"	5	7 1/2
G14	"	8	"	20	7	"	5	10 1/2
G15	"	8	"	21	4	"	6	1 1/2
G16	"	8	"	22	2	"	6	4 1/2
G17	"	8	"	22	11	"	6	7 1/2
G18	"	6	"	23	8	"	6	10 1/2
G21	1	4	1" ϕ	26	8	Pier Cap	—	—
G22	4	20	1/2" ϕ	12	6	" "	4	8
G23	4	2	1/2" ϕ	11	1	" "	3	11 1/2



BILL OF STRAIGHT REINFORCEMENT

MARK	№	SIZE	LENGTH FT.	LENGTH IN.	LOCATION
G2	64	1" ϕ	33	0	Columns
G3	16	1" ϕ	26	0	"
G19	68	1/2" ϕ	17	0	Web Wall
G20	26	1/2" ϕ	35	0	" "
G24	2	3/4" ϕ	21	2	Cap

ESTIMATED QUANTITIES

Concrete Class A	171.4 Cu. Yds.
Reinforcement	12,610 Lbs.

SPOTTSVILLE TOLL BRIDGE SHEET 8 OF 20

COMMONWEALTH OF KENTUCKY
STATE HIGHWAY DEPARTMENT
FRANKFORT
COUNTY OF
HENDERSON
HENDERSON - OWENSBORO
ROAD

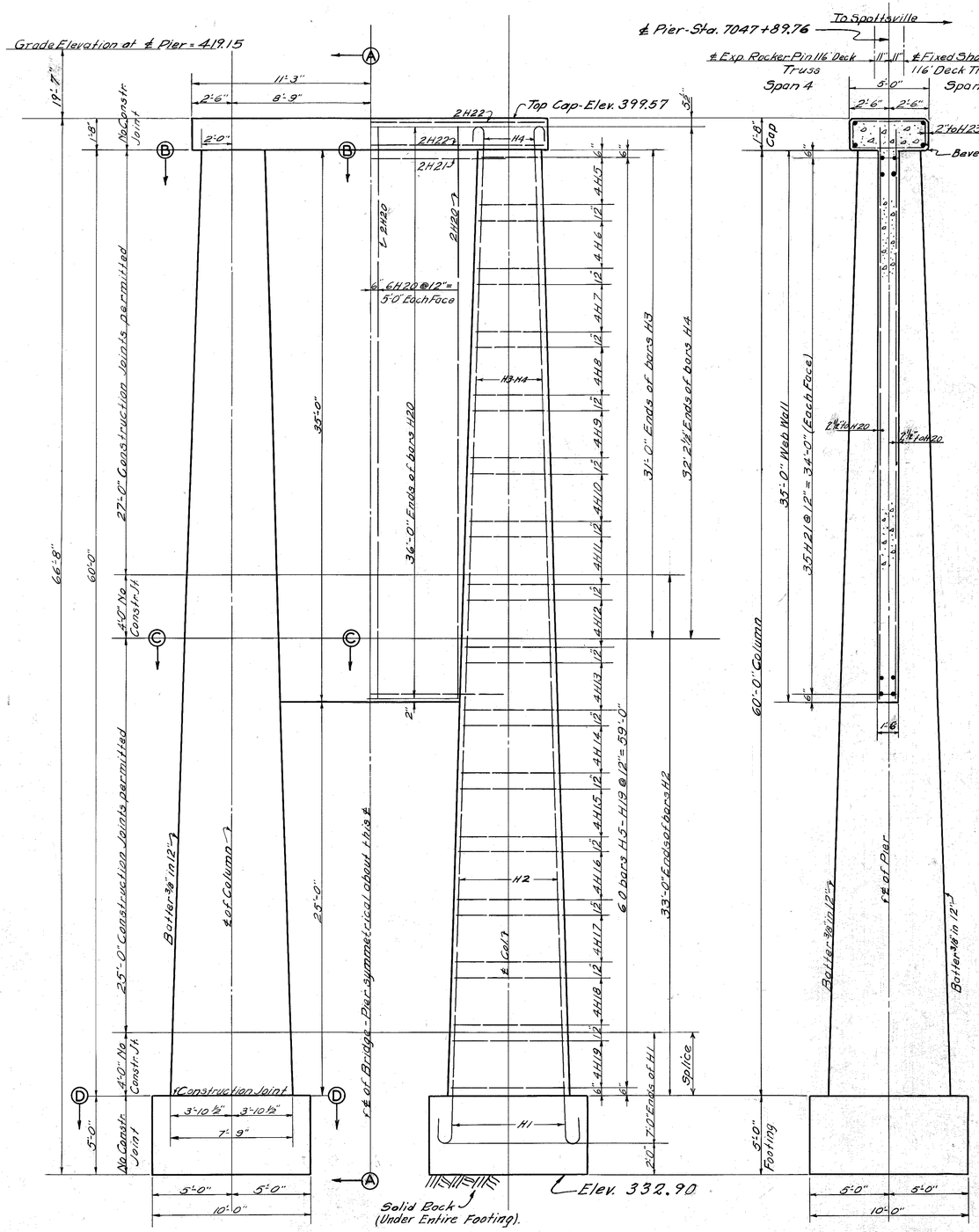
STATION PROJECT NO.

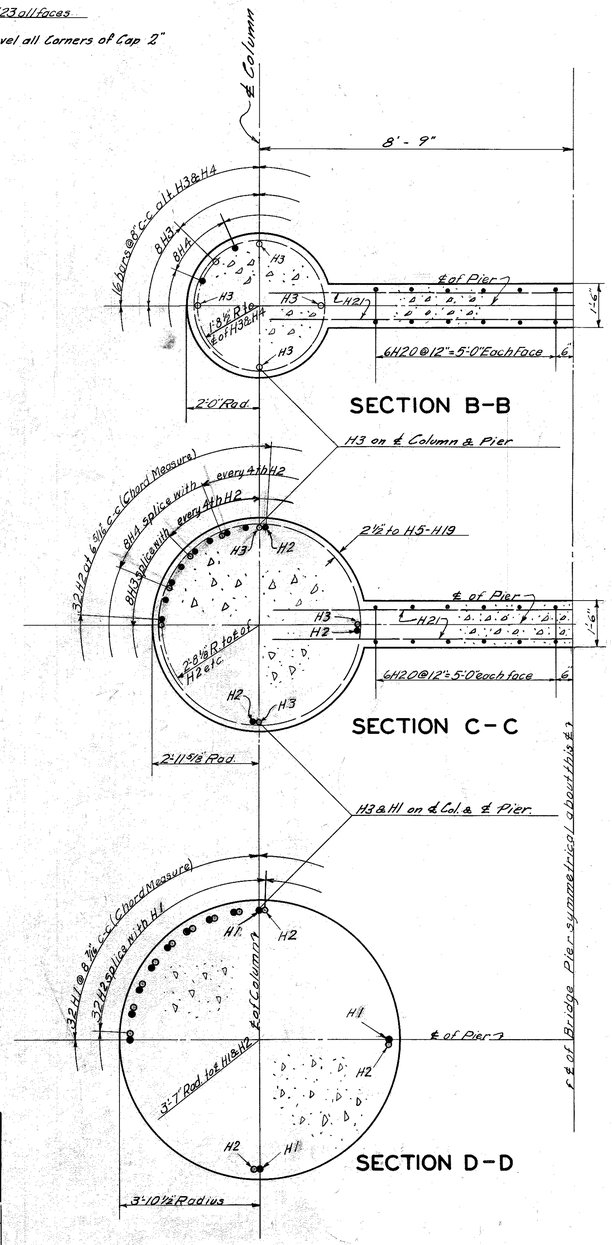
SUBMITTED BY _____ BRIDGE ENGR.
APPROVED BY _____ STATE HIGHWAY ENGR.
DRAWING No. 4053
INDEX

DESIGNED BY
TRACED BY
CHECKED BY
REVISED
DATE

FED. ROAD DIST. NO.	STATE	FED. AID PRO. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	KY.				

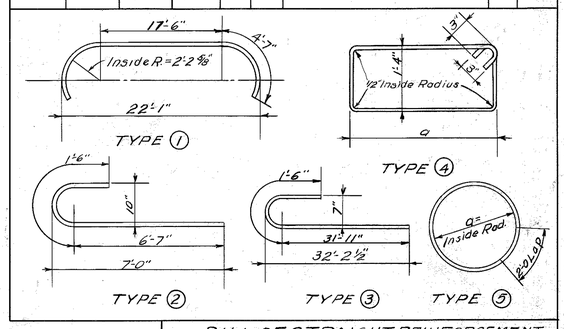
Note: For Details of Pier Cap see Pier No 2 Sheet No. 7





BILL AND TYPES OF BENT REINFORCEMENT

MARK	TYPE	No	SIZE	LENGTH FT.	LENGTH IN.	LOCATION	LENGTH FT.	LENGTH IN.
H1	2	64	1" ϕ	8	1	Columns into Footings	—	—
H4	3	16	1" ϕ	33	5	Columns into Pier Cap	—	—
H5	5	8	½" ϕ	13	6	Columns	3	7½"
H6	"	8	"	14	4	"	3	10½
H7	"	8	"	15	1	"	4	1½
H8	"	8	"	15	11	"	4	4½
H9	"	8	"	16	8	"	4	7½
H10	"	8	"	17	5	"	4	10½
H11	"	8	"	18	3	"	5	1½
H12	"	8	"	19	0	"	5	4½
H13	"	8	"	19	10	"	5	7½
H14	"	8	"	20	7	"	5	10½
H15	"	8	"	21	4	"	6	1½
H16	"	8	"	22	2	"	6	4½
H17	"	8	"	22	11	"	6	7½
H18	"	8	"	23	8	"	6	10½
H19	"	8	"	24	6	"	7	1½
H22	1	4	1" ϕ	26	8	Pier Cap	—	—
H23	4	20	½" ϕ	12	6	" "	4	8
H24	4	2	½" ϕ	11	1	" "	3	11½



BILL OF STRAIGHT REINFORCEMENT

MARK	No	SIZE	LENGTH FT.	LENGTH IN.	LOCATION
H2	64	1" ϕ	33	0	Columns
H3	16	1" ϕ	31	0	"
H20	24	½" ϕ	36	0	Web Wall
H21	70	½" ϕ	17	0	" "

ESTIMATED QUANTITIES

Concrete Class "A" 192.3 Cu. Yds.
Reinforcement 13,140 Lbs.

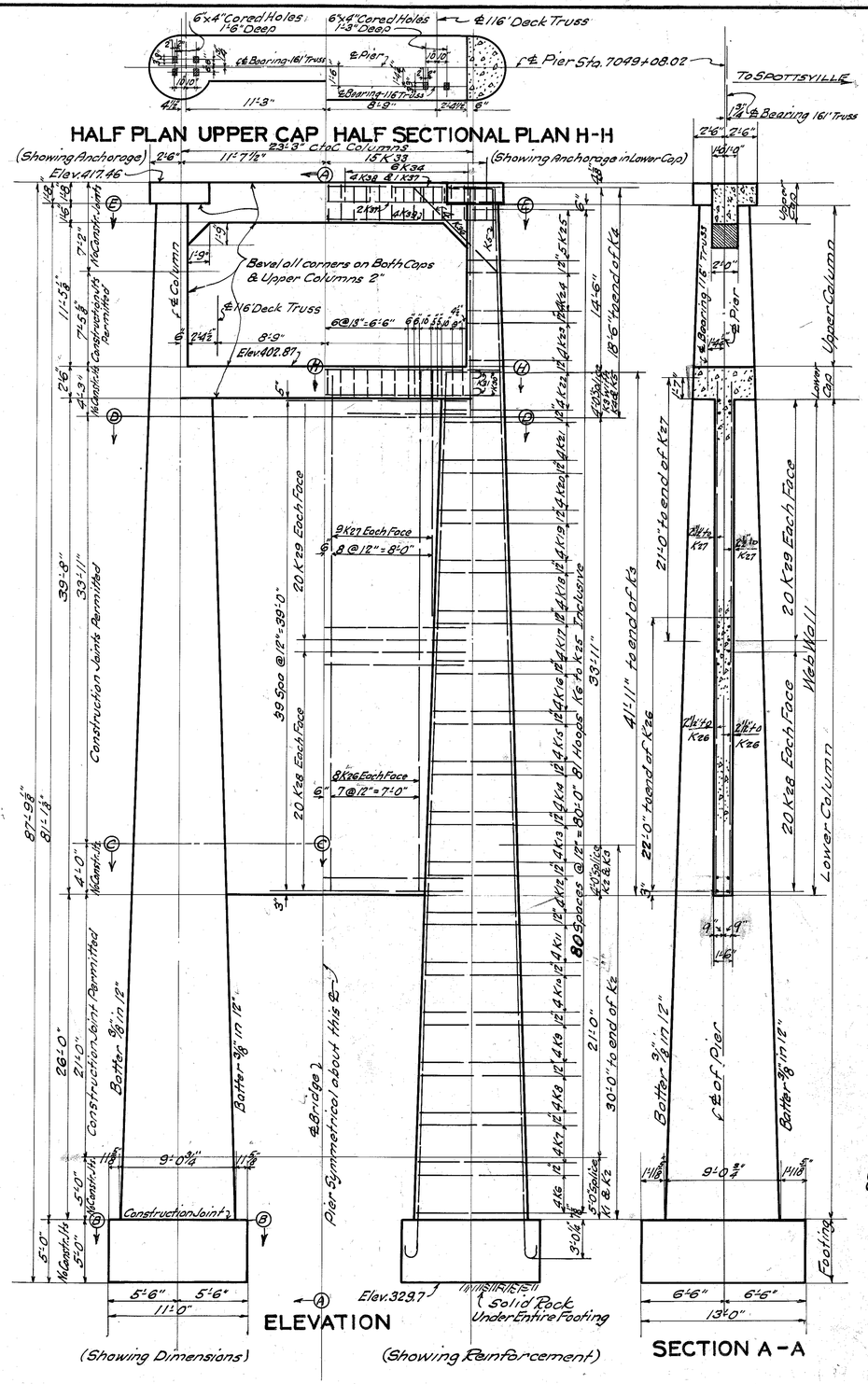
DETAILS OF PIER NO. 4

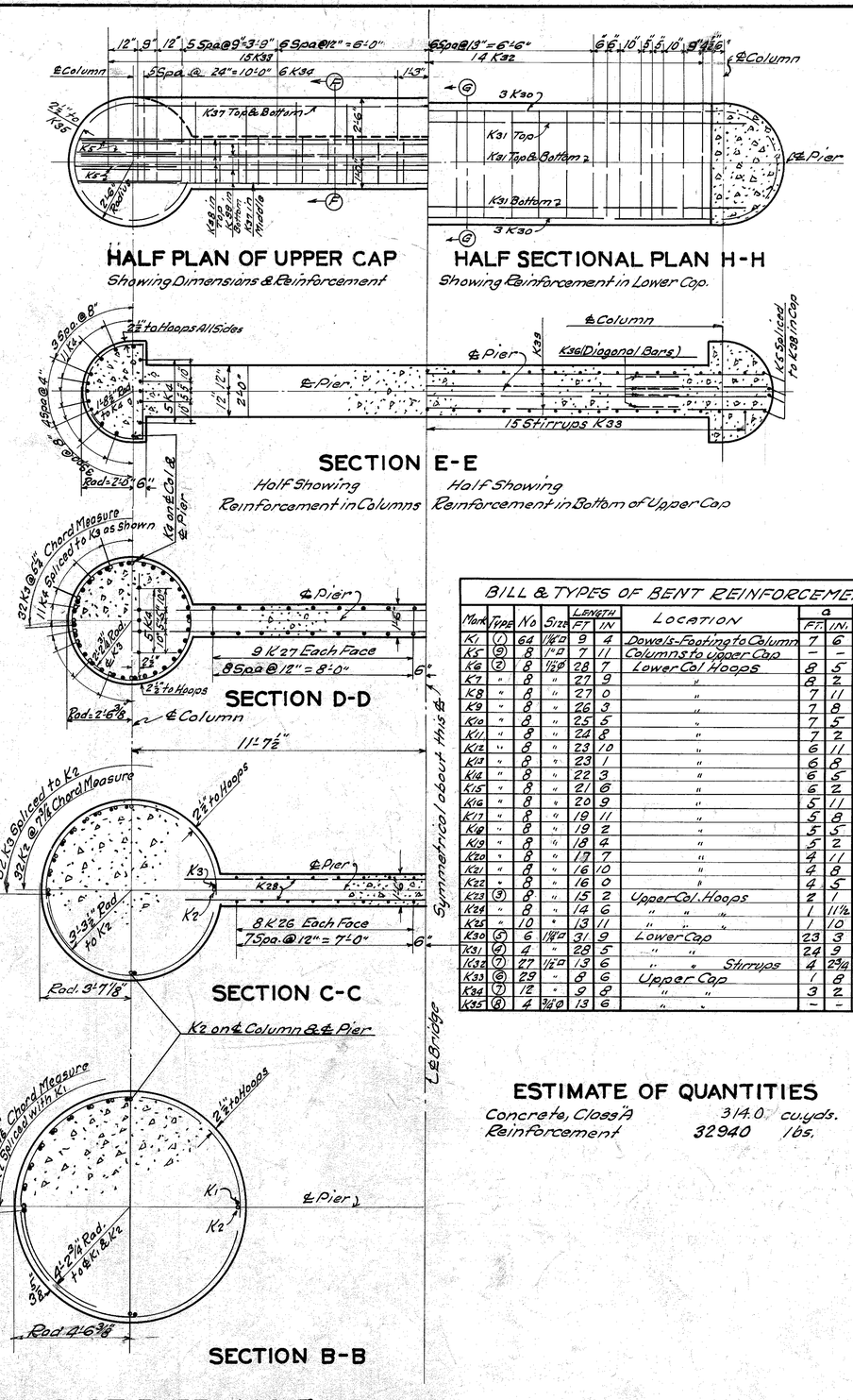
SPOTTSVILLE TOLL BRIDGE SHEET 9 OF 20

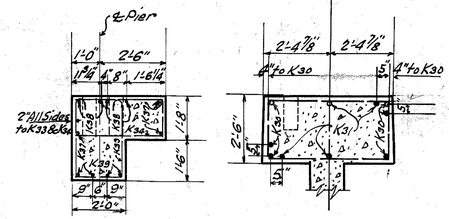
COMMONWEALTH OF KENTUCKY
STATE HIGHWAY DEPARTMENT
FRANKFORT
COUNTY OF
HENDERSON
HENDERSON-OWENSBORO
ROAD
STATION PROJECT NO.
SUBMITTED BY H. R. Creel BRIDGE ENGR.
APPROVED BY STATE HIGHWAY ENGR.
DRAWING No. 4053
INDEX

DESIGNED BY H. Stanley DATE 4/1/29 REVISED DATE
TRACED BY J. R. Odell DATE 4-25-29 REVISED DATE
CHECKED BY F. E. Eckhart DATE 5/29 REVISED DATE

FED. ROAD DIST. NO.	STATE	FED. AID PRO. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	KY.				

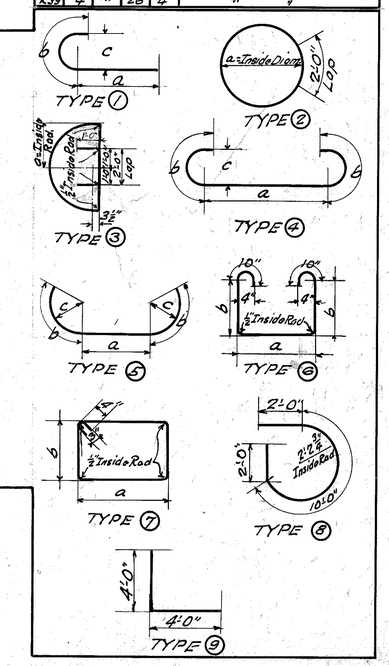






BILL OF STRAIGHT REINFORCEMENT.					
Mark	No	Size	LENGTH FT.	LENGTH IN	LOCATION
K2	64	1 1/4" ▱	30	0	Lower Columns
K3	64	1" ▱	41	11	" "
K4	32	"	18	6	Upper Columns
K26	32	1 1/2" ⌀	22	0	Web Verticals
K27	36	"	21	0	" "
K28	40	"	21	0	" Horizontals
K29	40	"	22	0	" "
K36	8	1" ▱	9	6	Column to upper Cap
K37	3	3 1/4" ⌀	23	3	Upper Cap
K38	4	1" ▱	27	4	" "
K39	4	"	26	4	" "

BILL & TYPES OF BENT REINFORCEMENT													
Mark	Type	No	Size	LENGTH FT.	LENGTH IN.	LOCATION	a FT.	a IN.	b FT.	b IN.	c FT.	c IN.
K1	①	64	1 1/4" ⌀	9	4	Dowels-Footing to Column	7	6	1	10	0	0 1/2
K5	⑨	8	1" ▱	7	11	Columns to upper Cap	–	–	–	–	–	–
K6	②	8	1 1/2" ⌀	28	7	Lower Col Hoops	8	5	–	–	–	–
K7	"	8	"	27	9	"	8	2	–	–	–	–
K8	"	8	"	27	0	"	7	11	–	–	–	–
K9	"	8	"	26	3	"	7	8	–	–	–	–
K10	"	8	"	25	5	"	7	5	–	–	–	–
K11	"	8	"	24	8	"	7	2	–	–	–	–
K12	"	8	"	23	10	"	6	11	–	–	–	–
K13	"	8	"	23	1	"	6	8	–	–	–	–
K14	"	8	"	22	3	"	6	5	–	–	–	–
K15	"	8	"	21	6	"	6	2	–	–	–	–
K16	"	8	"	20	9	"	5	11	–	–	–	–
K17	"	8	"	19	11	"	5	8	–	–	–	–
K18	"	8	"	19	2	"	5	5	–	–	–	–
K19	"	8	"	18	4	"	5	2	–	–	–	–
K20	"	8	"	17	7	"	4	11	–	–	–	–
K21	"	8	"	16	10	"	4	8	–	–	–	–
K22	"	8	"	16	0	"	4	5	–	–	–	–
K23	③	8	"	15	2	Upper Col. Hoops	2	1	–	–	–	–
K24	"	8	"	14	6	" " "	1	11 1/2	–	–	–	–
K25	"	10	"	13	11	" " "	1	10	–	–	–	–
K30	⑤	6	1 1/4" ▱	31	9	Lower Cap	23	3	4	3	1	11 1/2
K31	④	4	"	28	5	" "	24	9	1	10	1	0 1/2
K32	⑦	27	1 1/2" ▱	13	6	" " Stirrups	4	2 3/4	2	2	–	–
K33	⑥	29	"	8	6	Upper Cap	1	8	2	8	–	–
K34	⑦	12	"	9	8	" "	3	2	1	4	–	–
K35	⑧	4	3 3/4" ⌀	13	6	" "	–	–	–	–	–	–



ESTIMATE OF QUANTITIES

Concrete, Class A	314.0	cu. yds.
Reinforcement	32940	lbs.

DETAILS OF PIER NO. 5

SPOTTSVILLE TOLL BRIDGE — SHEET 10 of 20

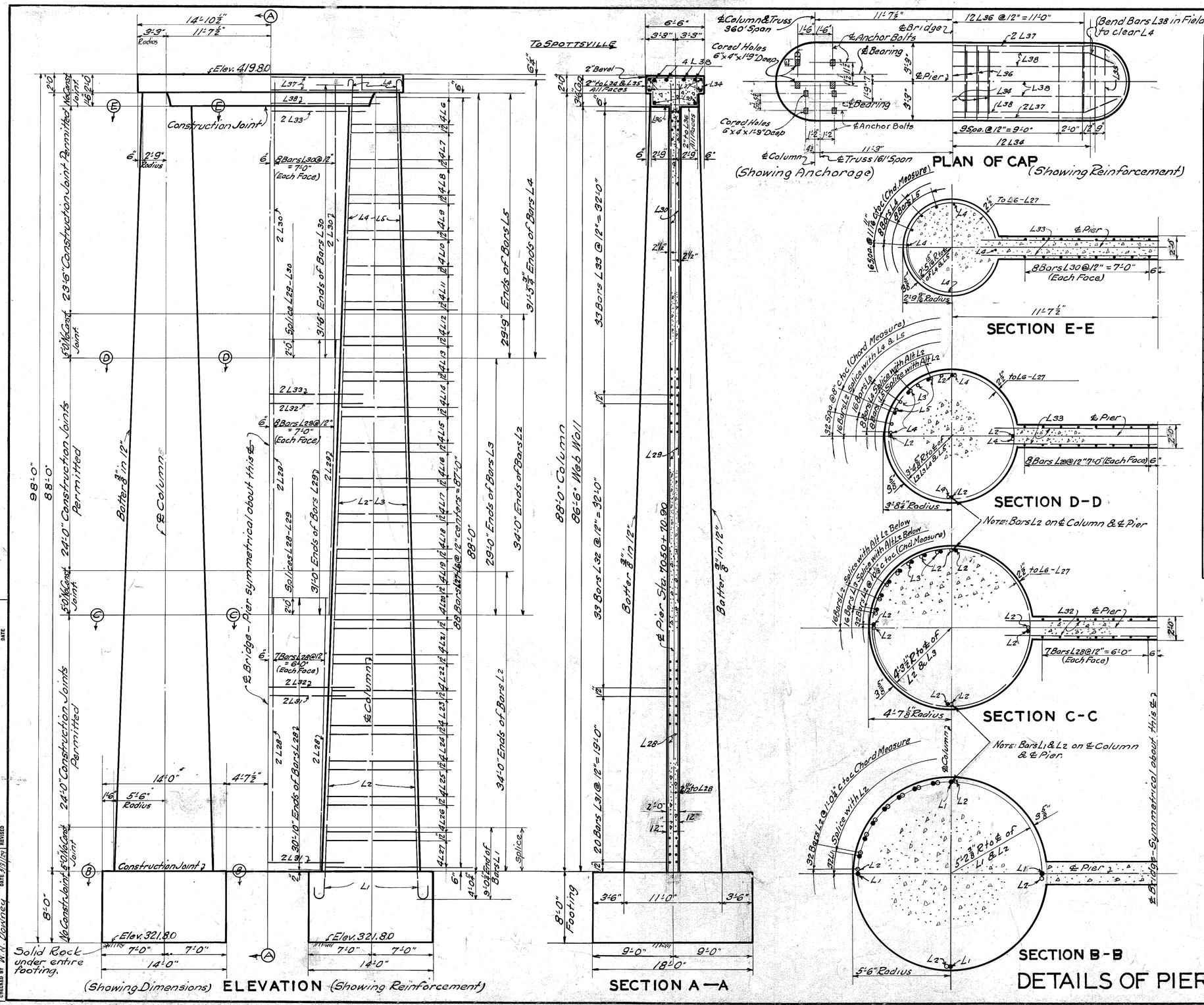
COMMONWEALTH OF KENTUCKY
STATE HIGHWAY DEPARTMENT
FRANKFORT
COUNTY OF
HENDERSON
HENDERSON - OWENSBORO
ROAD

STATION — PROJECT NO.

SUBMITTED BY ..... BRIDGE ENGR. — DRAWING No. 4053 — INDEX
APPROVED BY ..... STATE HIGHWAY ENGR.

DESIGNED BY H. E. Lenhart — DATE 4/1/29 — REVISED — DATE
TRACED BY G. Hess — DATE 5/28/29 — REVISED — DATE
CHECKED BY H. Poole — DATE 5/1/29 — REVISED — DATE

FED. ROAD DIST. NO.	STATE	FED. AID PRO. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	KY.				



(Showing Dimensions) ELEVATION (Showing Reinforcement)

SECTION A—A

(Showing Anchorage) PLAN OF CAP (Showing Reinforcement)

SECTION E-E

SECTION D-D

Note: Bars L2 on ℄ Column & ℄ Pier

SECTION C-C

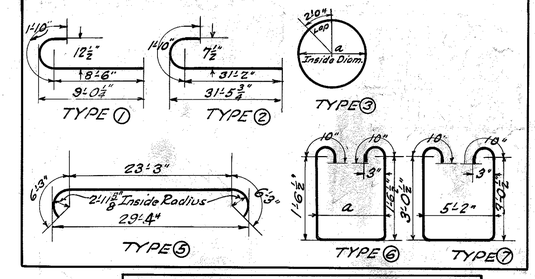
Note: Bars L1 & L2 on ℄ Column & ℄ Pier.

SECTION B-B

DETAILS OF PIER NO. 6

BILL & TYPES OF BENT REINFORCEMENT

MARK	TYPE	NO	SIZE	LENGTH FT.	LENGTH IN.	LOCATION	a FT.	a IN.
L1	1	64	1 1/4" □	10	4	Columns & Footing	–	–
L4	2	16	"	33	0	" & Cap	–	–
L6	3	8	1/2" Ø	18	3	Columns	5	1 1/2
L7	"	8	"	19	0	"	5	4 1/2
L8	"	8	"	19	10	"	5	7 1/2
L9	"	8	"	20	7	"	5	10 1/2
L10	"	8	"	21	5	"	6	1 1/2
L11	"	8	"	22	2	"	6	4 1/2
L12	"	8	"	22	11	"	6	7 1/2
L13	"	8	"	23	9	"	6	10 1/2
L14	"	8	"	24	6	"	7	1 1/2
L15	"	8	"	25	4	"	7	4 1/2
L16	"	8	"	26	1	"	7	7 1/2
L17	"	8	"	26	11	"	7	10 1/2
L18	"	8	"	27	8	"	8	1 1/2
L19	"	8	"	28	5	"	8	4 1/2
L20	"	8	"	29	3	"	8	7 1/2
L21	"	8	"	30	0	"	8	10 1/2
L22	"	8	"	30	10	"	9	1 1/2
L23	"	8	"	31	7	"	9	4 1/2
L24	"	8	"	32	5	"	9	7 1/2
L25	"	8	"	33	2	"	9	10 1/2
L26	"	8	"	33	11	"	10	1 1/2
L27	"	8	"	34	9	"	10	4 1/2
L34	6	23	"	10	9	Cap	6	2
L35	"	2	"	10	4	"	5	9
L36	7	23	"	12	10	"	–	–
L37	5	4	7/8" Ø	35	9	"	–	–



BILL OF STRAIGHT REINFORCEMENT

MARK	NO	SIZE	LENGTH FT.	LENGTH IN.	LOCATION
L2	96	1 1/4" □	34	0	Columns
L3	32	"	29	0	"
L5	16	"	29	9	"
L28	14	1/2" Ø	30	10	Web Wall
L29	16	"	31	0	" "
L30	16	"	31	6	" "
L31	40	"	18	0	" "
L32	66	"	20	0	" "
L33	66	"	22	0	" "
L38	6	7/8" Ø	27	0	Cap

ESTIMATED OF QUANTITIES

Concrete, Class "A" 625.9 cu.yds.
Reinforcement 38520 lbs.

SPOTTSVILLE TOLL BRIDGE SHEET 11 OF 20

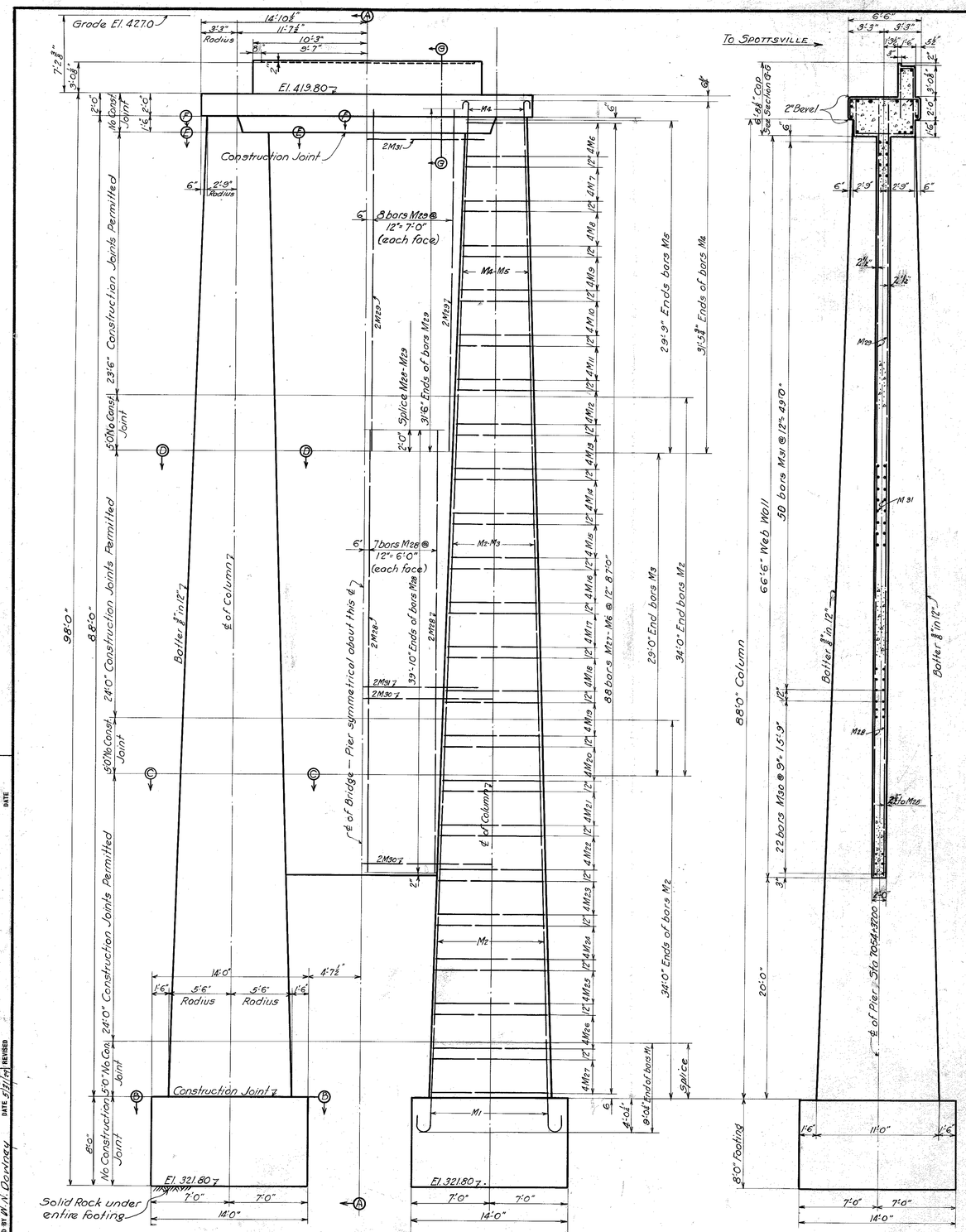
COMMONWEALTH OF KENTUCKY
STATE HIGHWAY DEPARTMENT
FRANKFORT
COUNTY OF
HENDERSON
HENDERSON - OWENSBORO

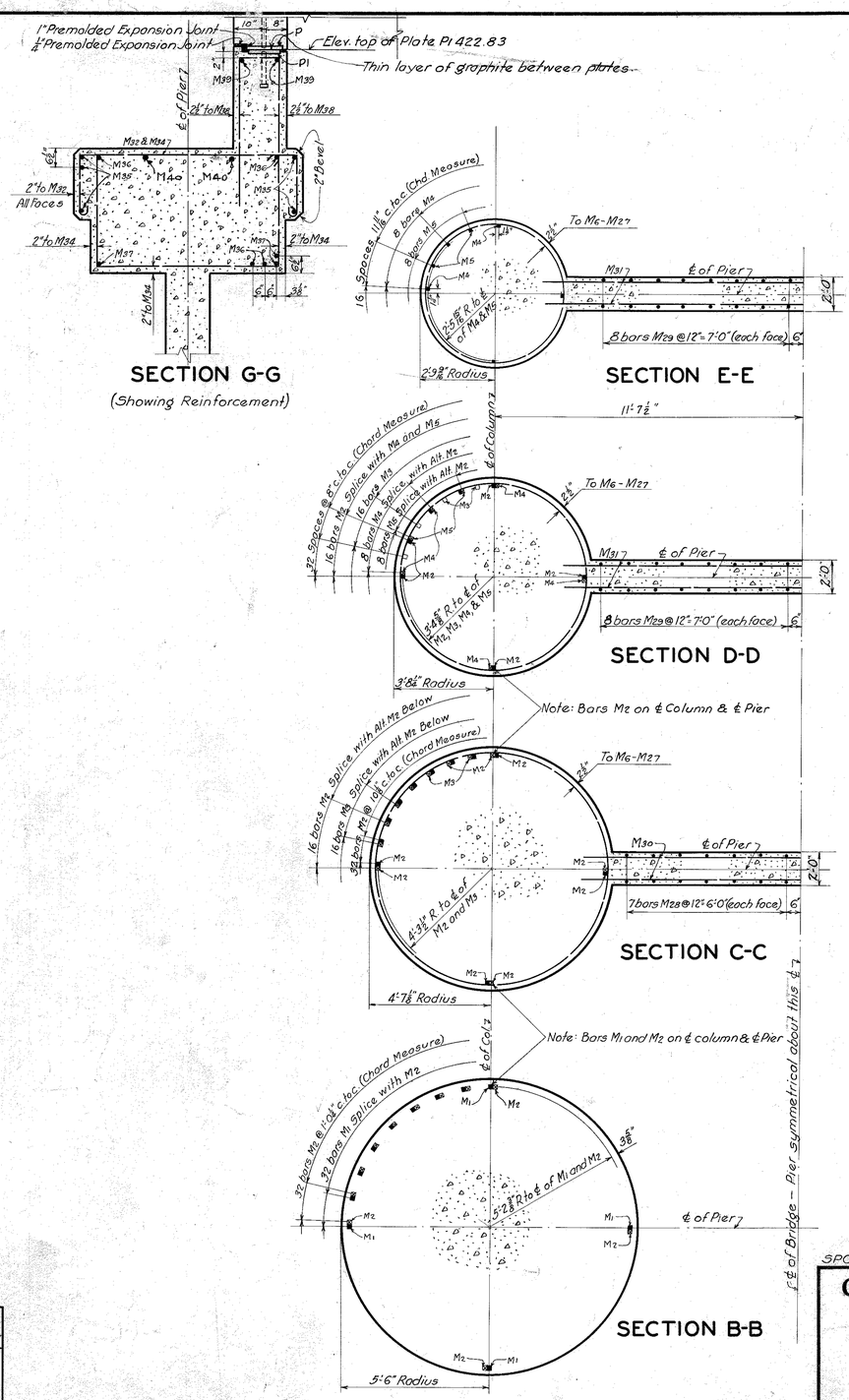
ROAD
STATION PROJECT NO.

SUBMITTED BY ..... BRIDGE ENGR. DRAWING No. 4053 INDEX
APPROVED BY ..... STATE HIGHWAY ENGR.

DESIGNED BY C. C. Bailey DATE
TRACED BY Gibbs DATE
CHECKED BY W. N. Downey DATE 5/31/29
REVISED DATE
REVISED DATE
REVISED DATE

FED. ROAD DIST. NO.	STATE	FED. AID PRO. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	KY.				





ESTIMATED QUANTITIES

Concrete, Class "A"	577.7 cu. yds.
Reinforcement	41690 lbs.

SPOTTSVILLE TOLL BRIDGE — SHEET 12 OF 20

COMMONWEALTH OF KENTUCKY

STATE HIGHWAY DEPARTMENT
FRANKFORT
COUNTY OF

HENDERSON

HENDERSON-OWENSBORO ROAD

STATION — PROJECT NO.

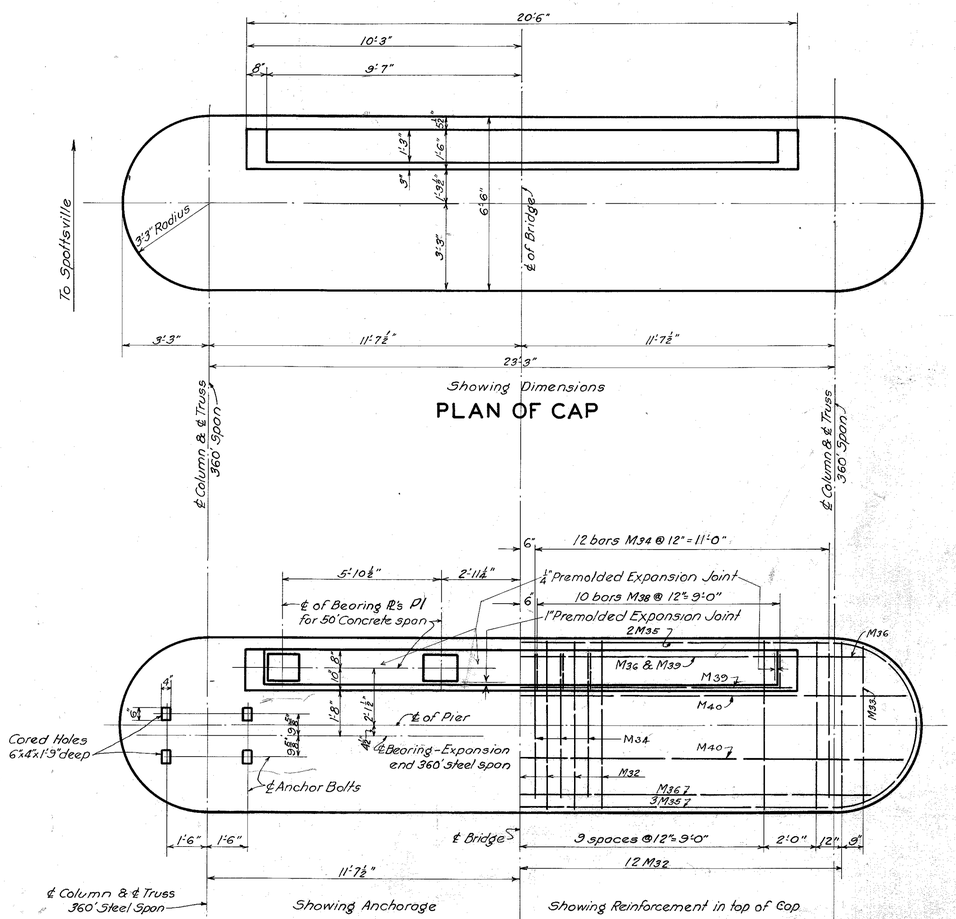
SUBMITTED BY — BRIDGE ENGR. — DRAWING No. 4053 — INDEX

APPROVED BY — STATE HIGHWAY ENGR.

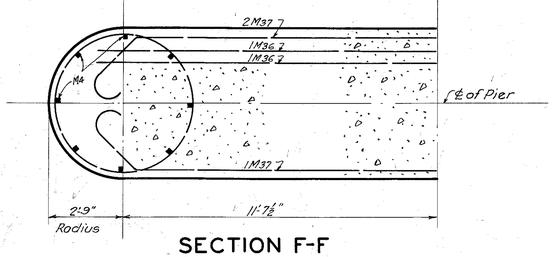
DETAILS OF PIER NO. 7 (2 SHEETS)

DESIGNED BY C.C. Bailey — DATE — REVISED — DATE 10/2/30
TRACED BY L.A. Seaborn — DATE 5-27-29 — REVISED — DATE
CHECKED BY W.N. Downey — DATE 5/31/29 — REVISED — DATE

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	KY.				



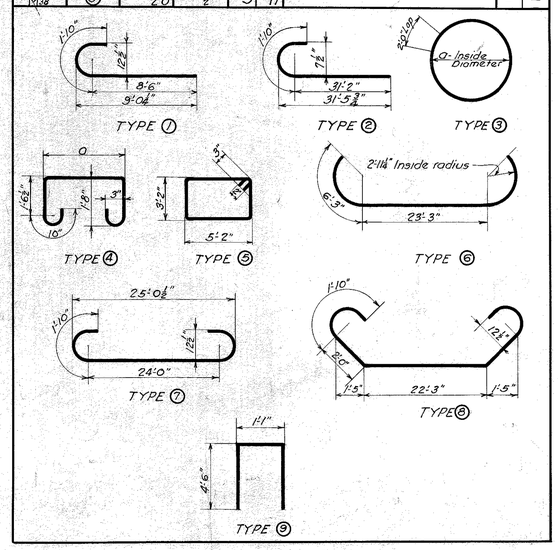
PLAN OF CAP



SECTION F-F

BILL AND TYPES OF BENT REINFORCEMENT

Mark	Type	No.	Size	Length Ft.	Length In.	Location	O Ft.	O In.
M1	1	64	1¼"□	10	4	Footing into Columns	–	–
M4	2	16	"	33	0	Columns into Cap	–	–
M6	3	8	½"Ø	18	3	Columns	5	1½
M7	"	8	"	19	0	"	5	4½
M8	"	8	"	19	10	"	5	7½
M9	"	8	"	20	7	"	5	10½
M10	"	8	"	21	5	"	6	1½
M11	"	8	"	22	2	"	6	4½
M12	"	8	"	22	11	"	6	7½
M13	"	8	"	23	9	"	6	10½
M14	"	8	"	24	6	"	7	1½
M15	"	8	"	25	4	"	7	4½
M16	"	8	"	26	1	"	7	7½
M17	"	8	"	26	11	"	7	10½
M18	"	8	"	27	8	"	8	1½
M19	"	8	"	28	5	"	8	4½
M20	"	8	"	29	3	"	8	7½
M21	"	8	"	30	0	"	8	10½
M22	"	8	"	30	10	"	9	1½
M23	"	8	"	31	7	"	9	4½
M24	"	8	"	32	5	"	9	7½
M25	"	8	"	33	2	"	9	10½
M26	"	8	"	33	11	"	10	1½
M27	"	8	"	34	9	"	10	4½
M32	4	23	½"□	10	9	Cap	6	2
M33	"	2	"	10	4	"	5	9
M34	5	24	¾"Ø	17	1	"	–	–
M35	6	5	1¼"□	35	9	"	–	–
M36	7	4	"	27	8	"	–	–
M37	8	3	"	29	9	"	–	–
M38	9	20	½"□	9	11	"	–	–



BILL OF STRAIGHT REINFORCEMENT

Mark	No.	Size	Length Ft.	Length In.	Location
M2	96	1¼"□	34	0	Columns
M3	32	"	29	0	"
M5	16	"	29	9	"
M28	14	½"Ø	39	10	Web Wall
M29	16	"	31	6	"
M30	44	⅜"Ø	23	3	"
M31	100	½"Ø	22	0	"
M39	2	¾"Ø	20	2	Cap
M40	2	"	28	6	"

DETAILS OF PIER NO. 7 (2 SHEETS)

SPOTTSVILLE TOLL BRIDGE — SHEET 13 OF 20

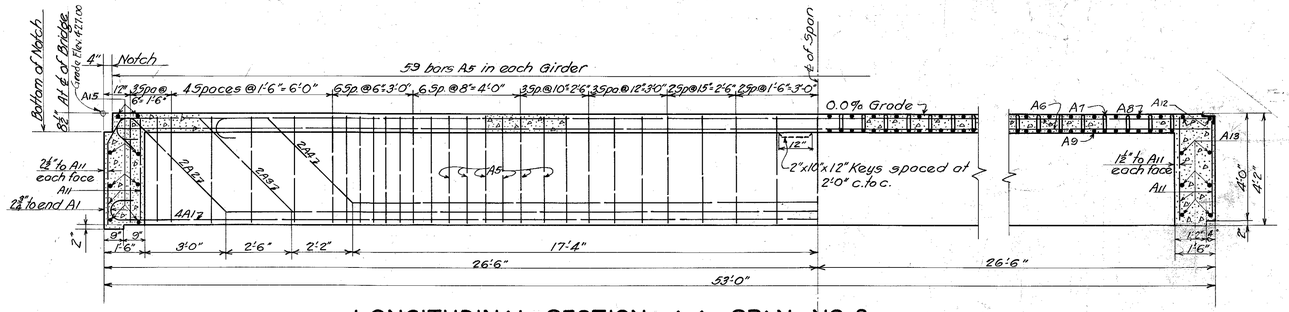
COMMONWEALTH OF KENTUCKY
STATE HIGHWAY DEPARTMENT
FRANKFORT
COUNTY OF
HENDERSON
HENDERSON-OWENSBORO ROAD

STATION — PROJECT NO.

SUBMITTED BY ..... BRIDGE ENGR.
APPROVED BY ..... STATE HIGHWAY ENGR.
DRAWING No. 4053
INDEX

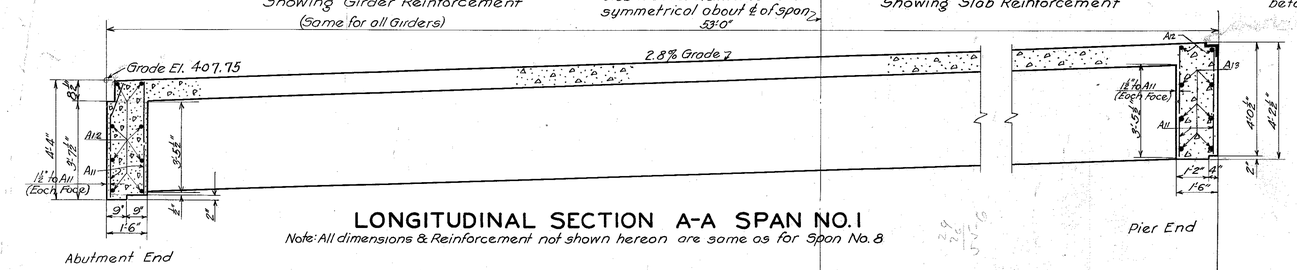
DESIGNED BY C.C. Bailey DATE ..... REVISED ..... DATE
TRACED BY L.A. Seaborn DATE 5-21-22 REVISED ..... DATE
CHECKED BY W.N. Downey DATE 5-31-22 REVISED ..... DATE
G.S.M. DATE 6/5/22

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	KY.				



LONGITUDINAL SECTION A-A SPAN NO. 8

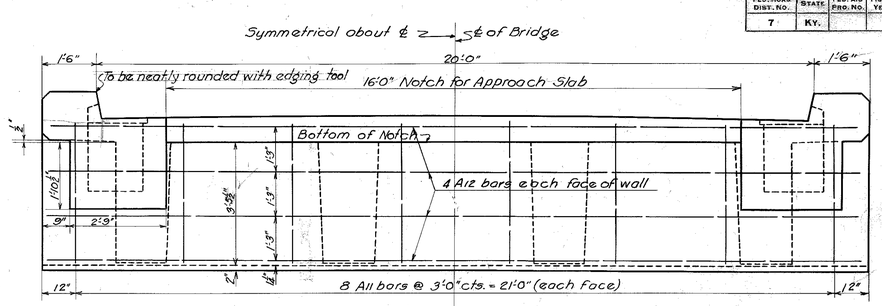
Abutment End — Showing Girder Reinforcement (Same for all Girders) — Slab & Girder Reinforcement symmetrical about ℄ of span — Showing Slab Reinforcement — Pier End



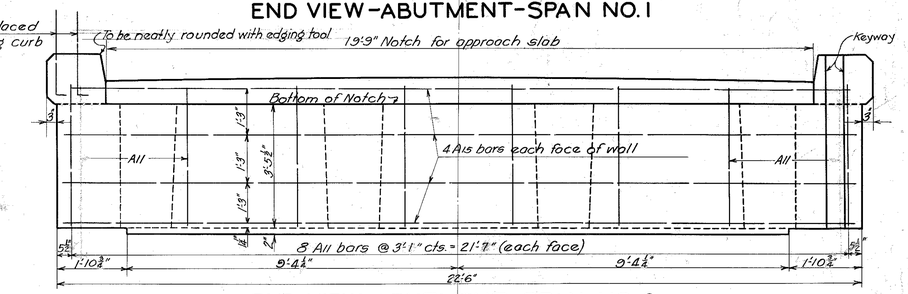
LONGITUDINAL SECTION A-A SPAN NO. 1

Note: All dimensions & Reinforcement not shown hereon are same as for Span No. 8

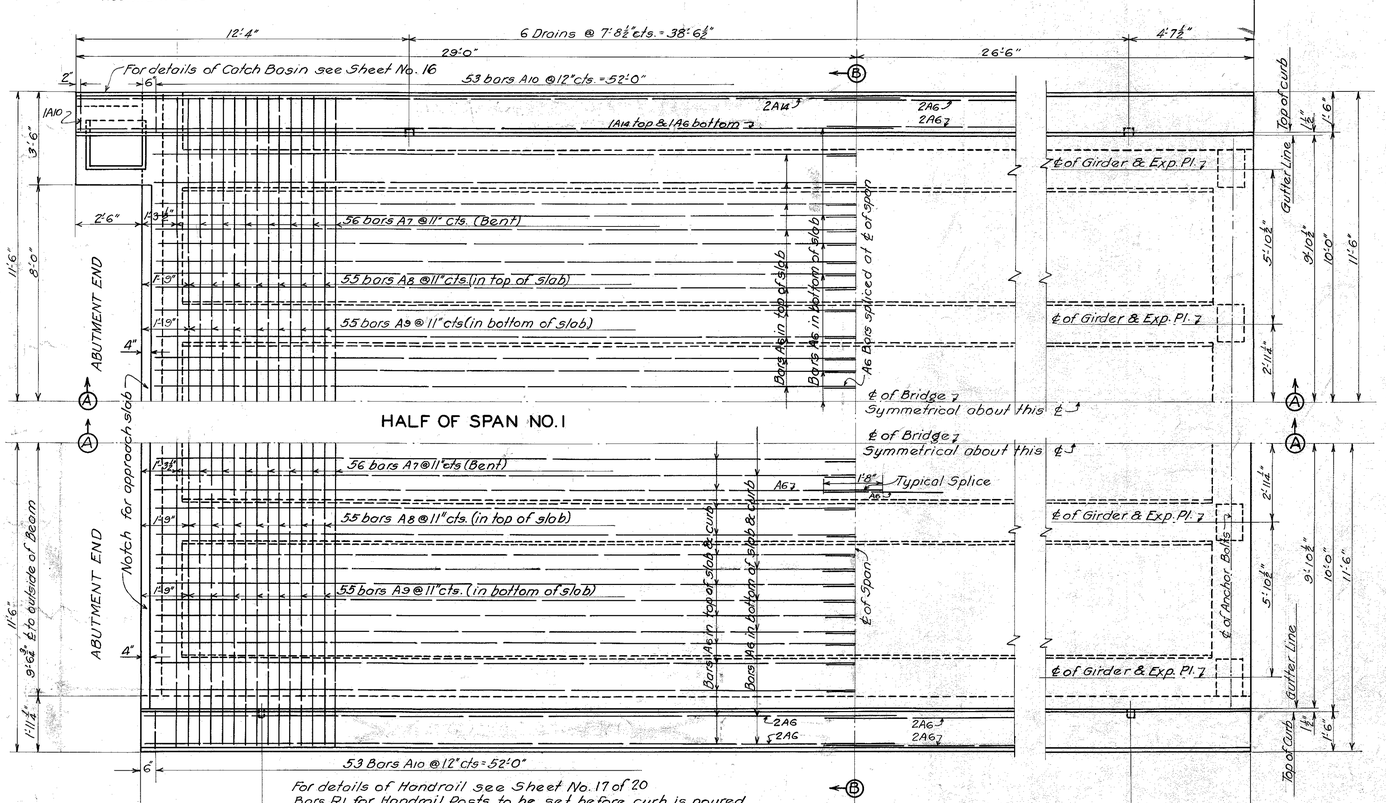
Abutment End — Pier End



END VIEW-ABUTMENT-SPAN NO. 1



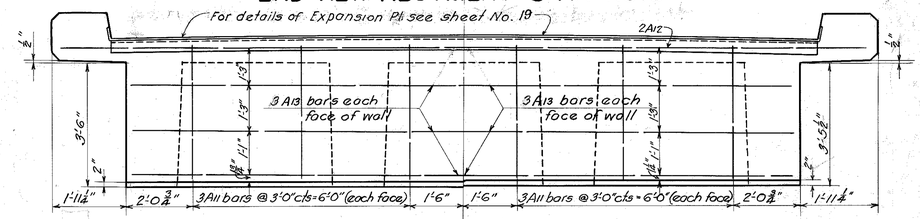
END VIEW-ABUTMENT-SPAN NO. 8



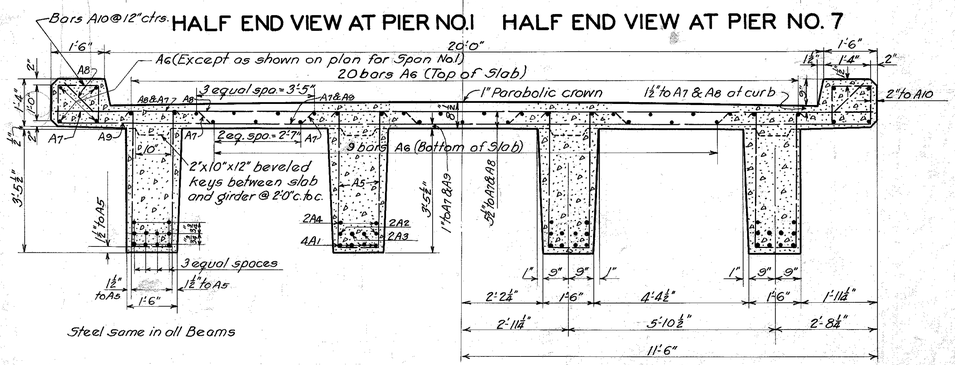
HALF OF SPAN NO. 1

HALF OF SPAN NO. 8

PLAN



HALF END VIEW AT PIER NO. 1 — HALF END VIEW AT PIER NO. 7



SECTION B-B

Showing Reinforcement and Dimensions (same for both spans)

SPOTTSVILLE TOLL BRIDGE — SHEET 14 OF 20

DETAILS OF SPANS NO. 1 & NO. 8

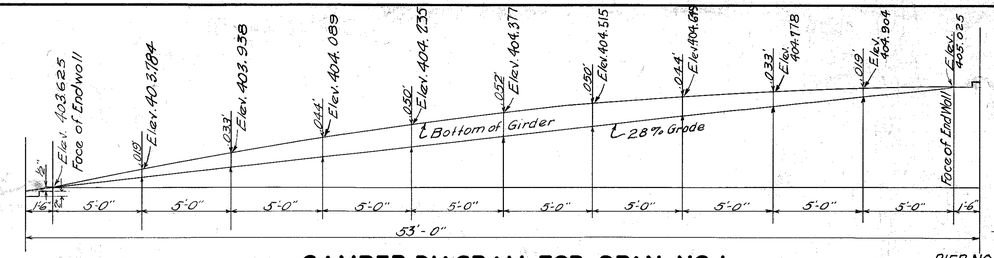
COMMONWEALTH OF KENTUCKY
STATE HIGHWAY DEPARTMENT
FRANKFORT
COUNTY OF
HENDERSON
HENDERSON-OWENSBORO ROAD

STATION — PROJECT NO.

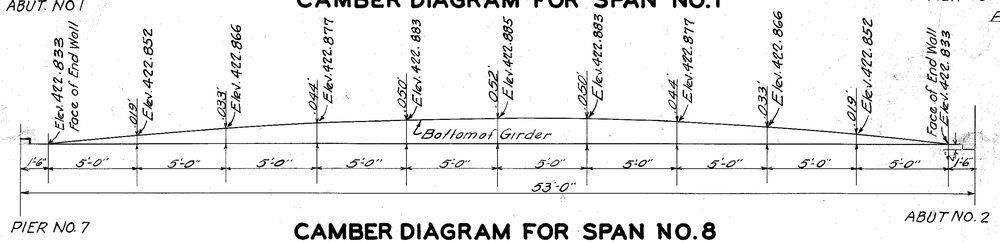
SUBMITTED BY ..... BRIDGE ENGR. — DRAWING No. 4053 — INDEX

APPROVED BY ..... STATE HIGHWAY ENGR.

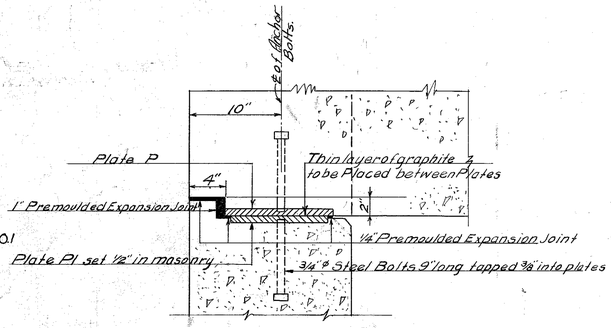
DESIGNED BY H.W. Bush	DATE 2-16-27	REVISED	DATE
TRACED BY L.A. Seaborn	DATE 5-10-29	REVISED	DATE
CHECKED BY M.V. Easley	DATE 5-17-29	REVISED	DATE



CAMBER DIAGRAM FOR SPAN NO. 1



CAMBER DIAGRAM FOR SPAN NO. 8



SECTION ON ℄ OF PLATES

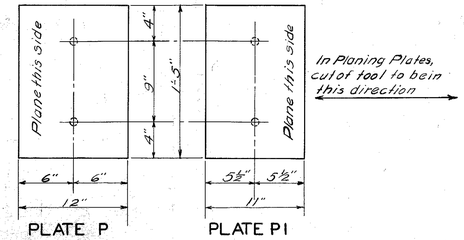


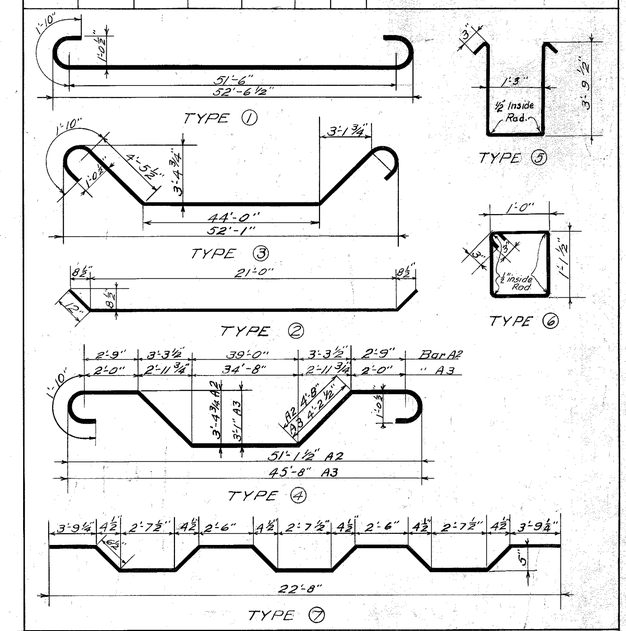
PLATE P — PLATE P1

DETAILS OF EXPANSION PLATES

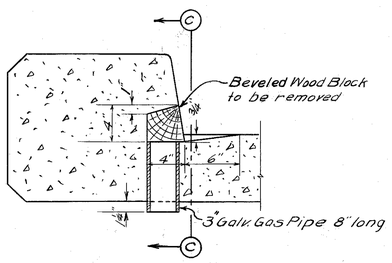
1'-5" x 12" x 3/4" Bronze Plates planed on one side 8 Required

1'-5" x 11" x 3/4" Bronze Plates planed on one side 8 Required

BILL AND TYPES OF BENT REINFORCEMENT							
Mark	Type	No. Span 1	No. Span 8	Size	Length Ft.	Length In.	Location
A1	1	16	16	1 1/4" □	55	2	Girders
A2	3	8	8	1 1/4" □	56	5	"
A3	4	8	8	1 1/4" □	57	2	"
A4	4	8	8	1 1/4" □	50	5	"
A5	5	236	236	1/2" □	9	2	"
A7	7	56	56	1/2" □	23	2	Slab
A8	2	55	55	1/2" □	22	11	Top of Slab
A10	6	108	106	1/2" ø	4	9	Curb

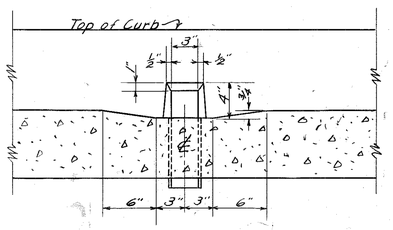


BILL OF STRAIGHT REINFORCEMENT						
Mark	No. Span 1	No. Span 8	Size	Length Ft.	Length In.	Location
A6	62	74	1/2" ø	27	0	Slab & Curb
A9	55	55	1/2" □	22	8	"
A11	28	28	1/2" ø	3	9	End Wall
A12	10	2	3/4" ø	22	8	" "
A13	6	6	3/4" ø	18	4	" "
A14	12	—	1/2" ø	28	9	Curb
A15	—	8	1/2" ø	22	2	End Wall



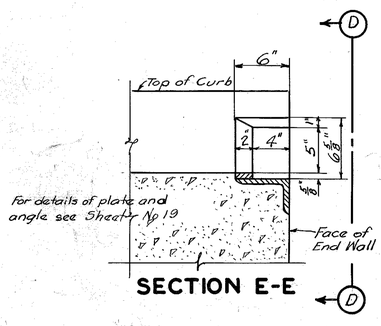
SECTION OF CURB THRU DRAIN

Showing details of drains with wood block form in place

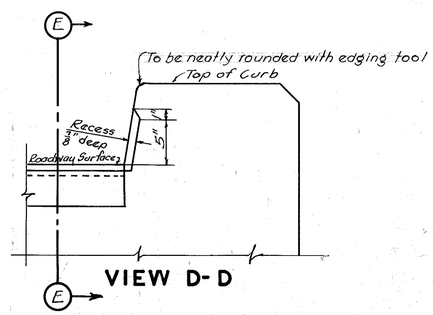


SECTION C - C

Showing details of drains with wood block form removed



SECTION E-E



VIEW D-D

DETAILS OF EXPANSION PLATE RECESS.

ESTIMATED QUANTITIES

Concrete Class "F" Span 1, 85.1 Cu. yds. Including two Catch Basins.
Concrete Class "F" Span 8, 83.9 Cu. yds.
Reinforcement Span 1, 19,010 Lbs.-Including two Catch Basins
Reinforcement Span 8, 18,960 Lbs.

Designed By H.W. Bush Date 3-16-29 Revised Date
Traced by J.R. Odell Date 4-11-29 Revised Date
Checked by W.M. Easley Date 5-31-29 Revised Date

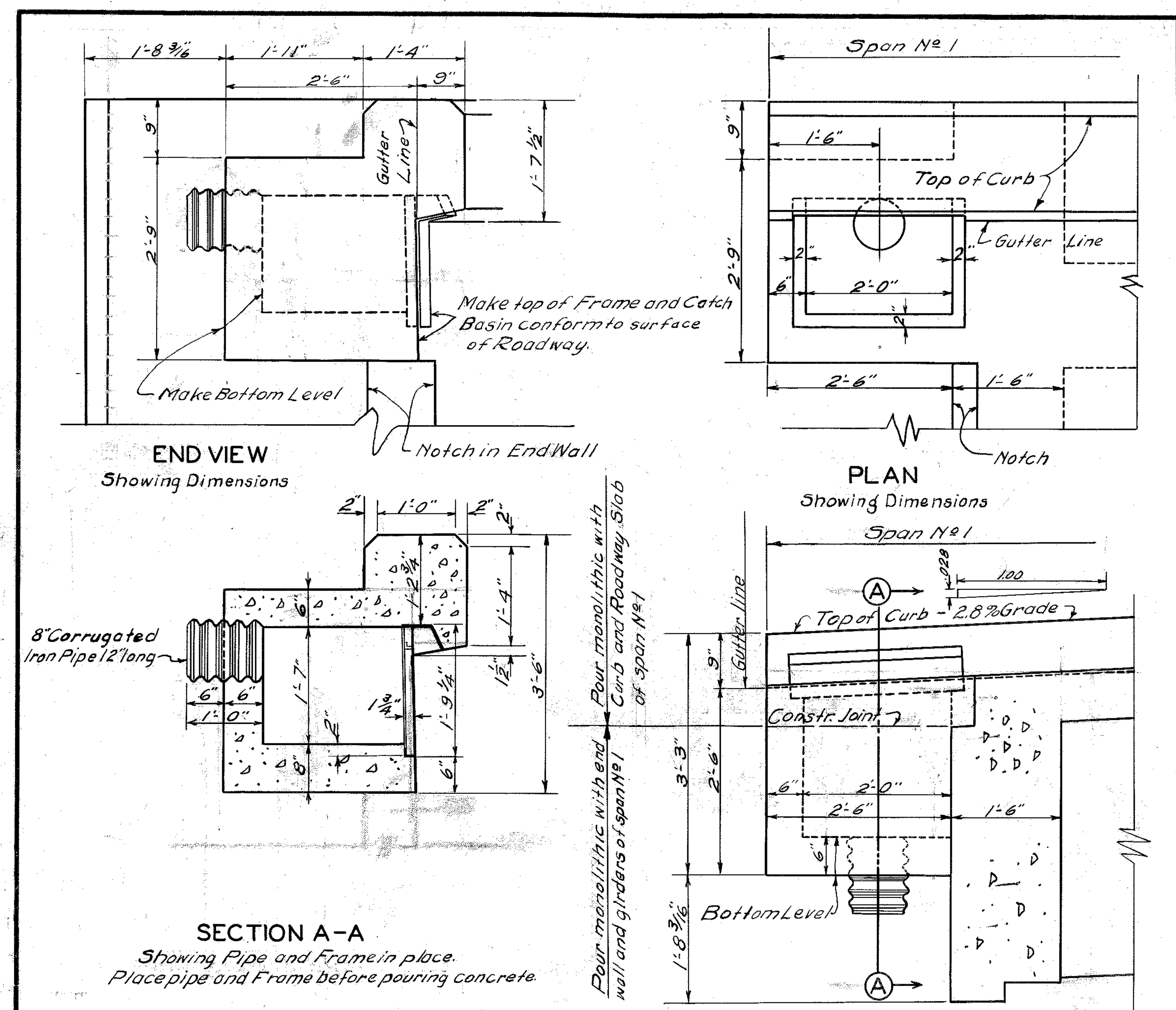
SPOTTSVILLE TOLL BRIDGE SHEET 15 OF 20

COMMONWEALTH OF KENTUCKY
STATE HIGHWAY DEPARTMENT
FRANKFORT
COUNTY OF
HENDERSON
HENDERSON-OWENSBORO
ROAD
STATION PROJECT NO.
SUBMITTED BY BRIDGE ENGR. STATE HIGHWAY ENGR. DRAWING No. 4053 INDEX

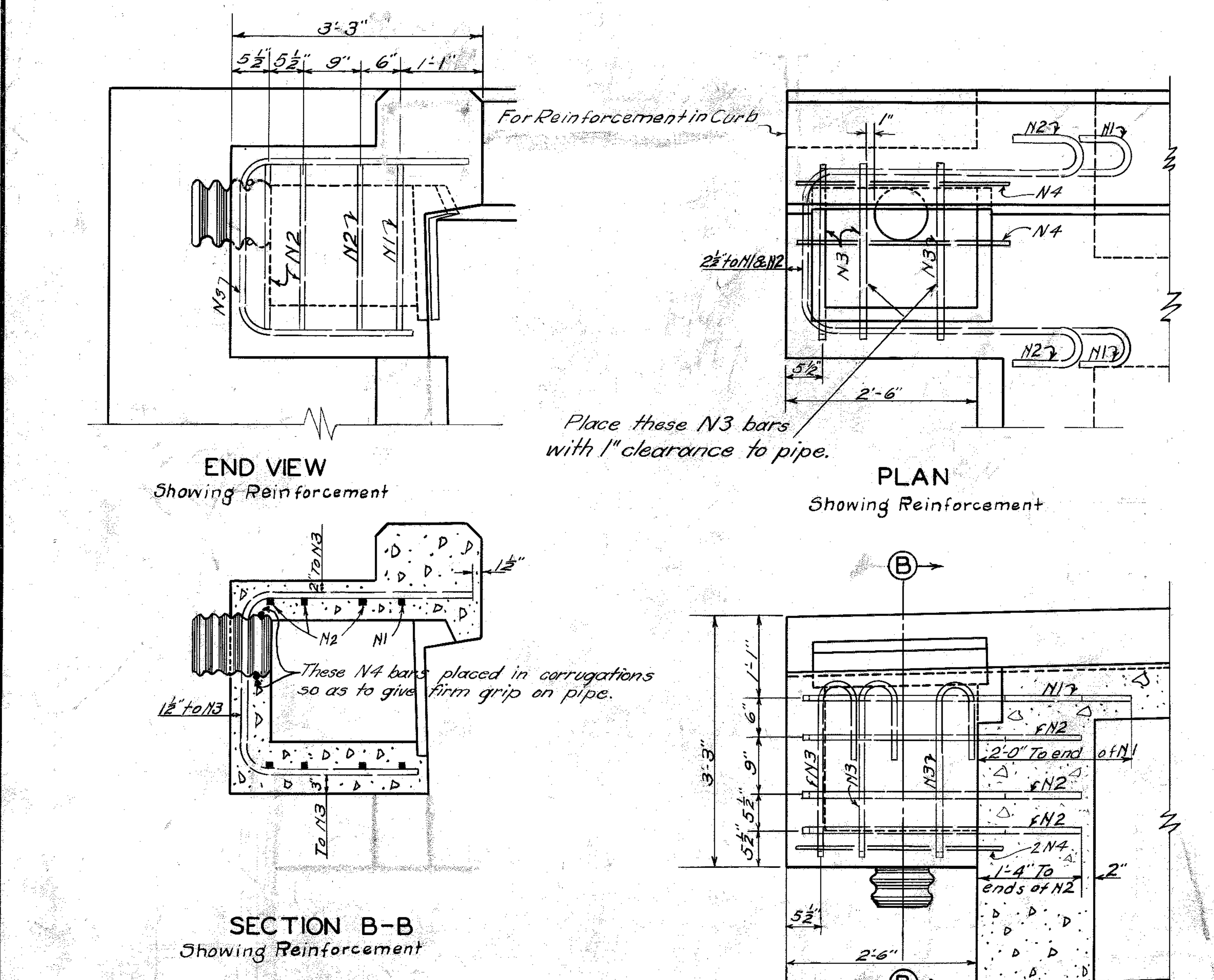
DETAILS OF SPANS NO. 1 & NO. 8

(2 Sheets)

FED. ROAD DIST. NO.	STATE	FED. AID PRO. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	KY.				

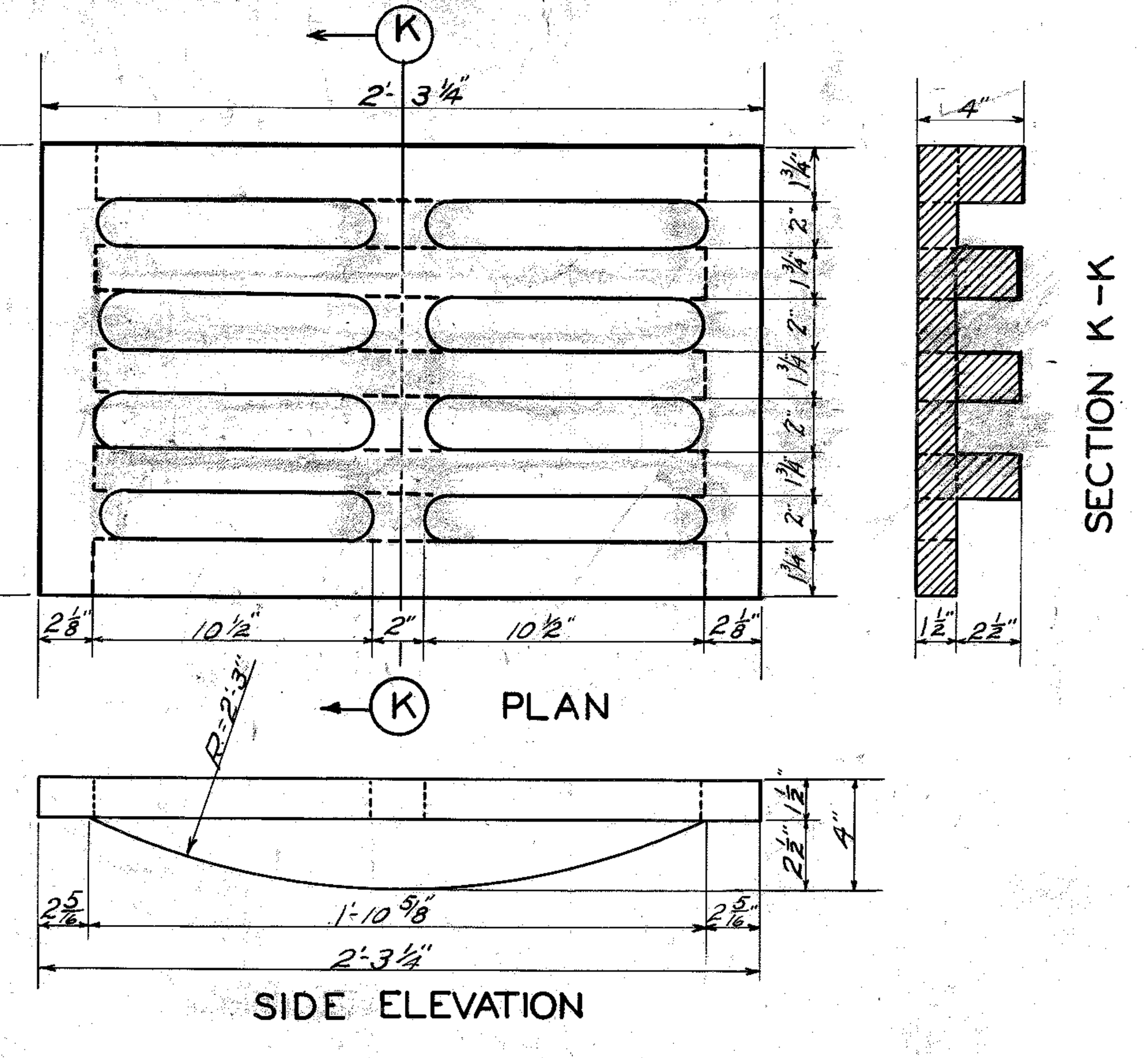


CONCRETE DETAILS

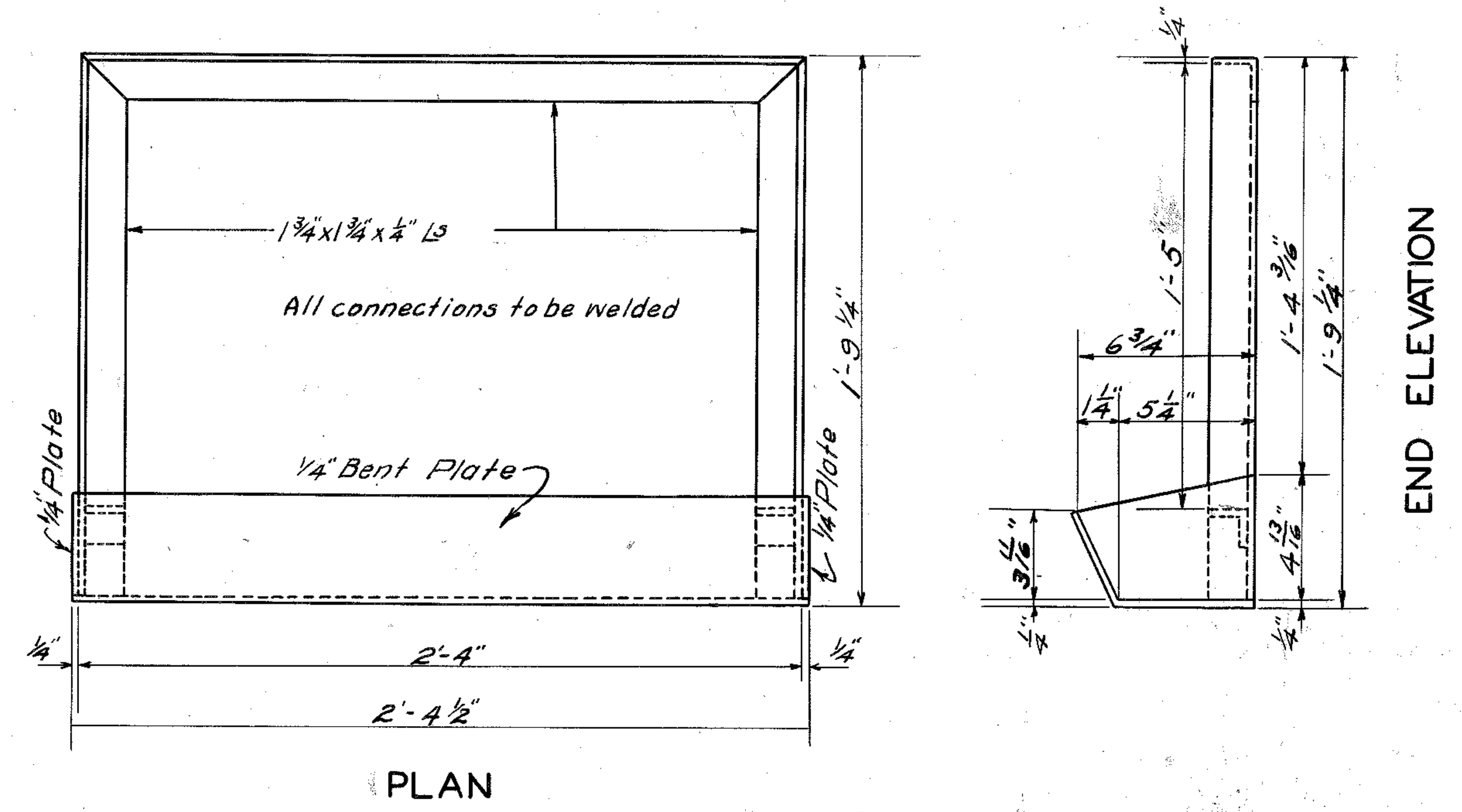


REINFORCEMENT DETAILS

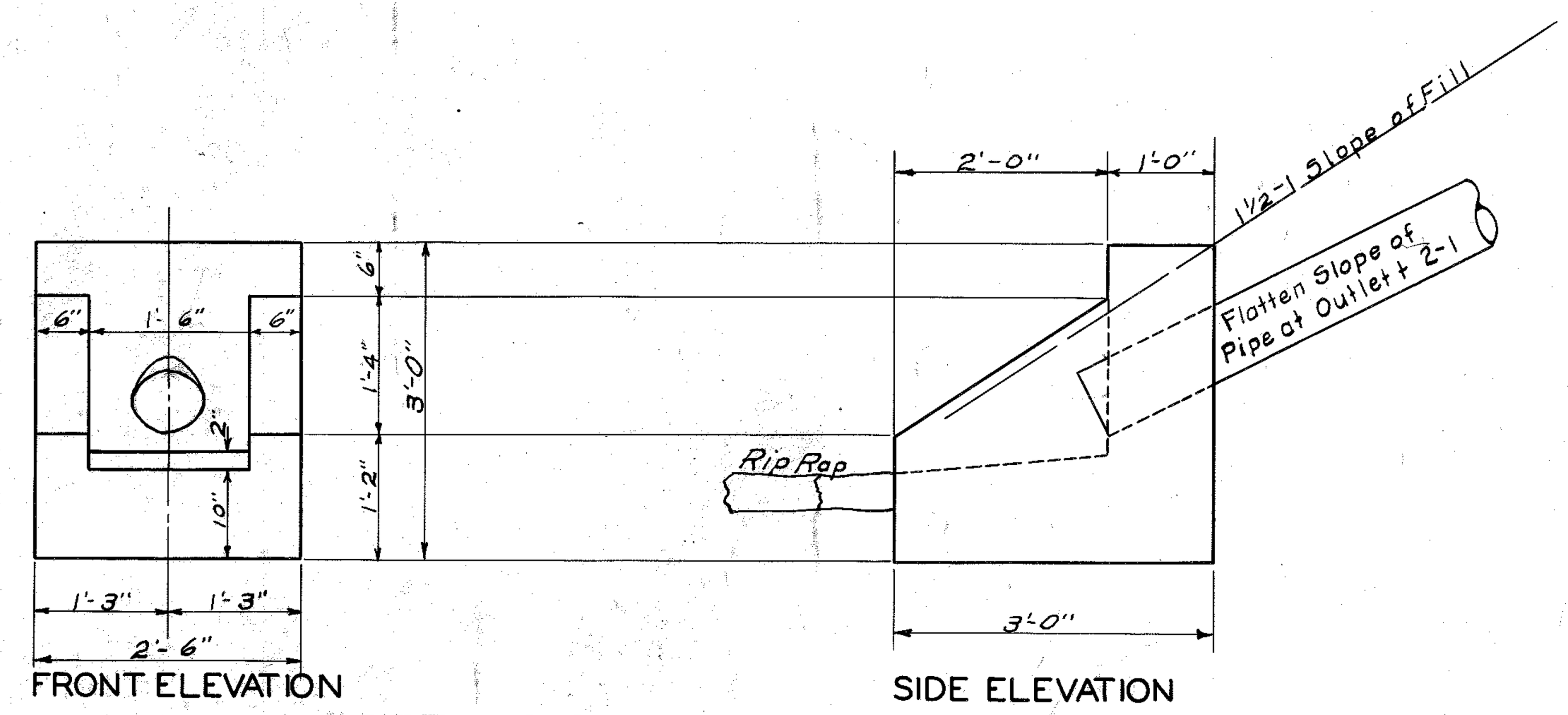
DETAILS OF CATCH BASIN
For Details of Span Nº 1 see sheets Nos. 14 & 15



DETAILS OF C. I. GRATING
Estimated Weight 171 Lbs



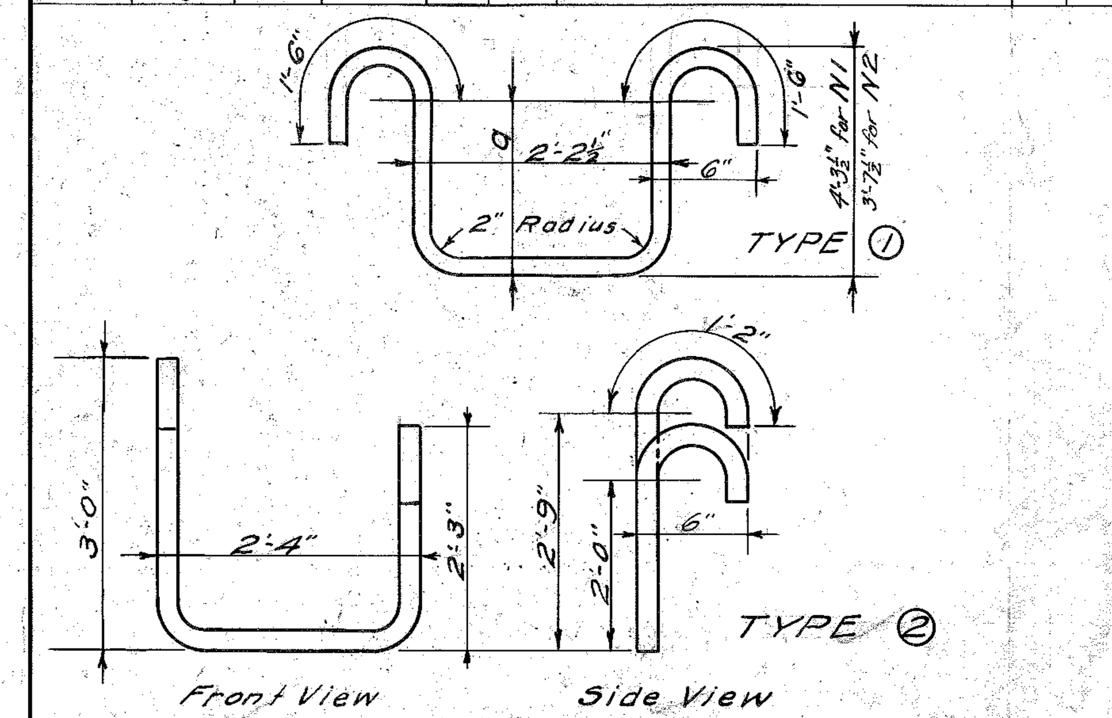
DETAILS OF STEEL FRAME
Estimated Weight 36 Lbs.



DETAILS OF OUTLET
(Pour Monolithic)

BILL AND TYPES OF REINFORCEMENT

Mark	Type	Nº	Size	Length Ft.	Length In.	Location	a Ft.	a In.
N1	1	1	1"□	13	1	Sides and End	4	0½
N2	1	3	¾"φ	11	9	Sides and End	3	4½
N3	2	3	¾"φ	9	3	Sides and Bottom	—	—
N4	Straight	2	½"φ	2	9	Bottom	—	—



BILL OF MATERIAL FOR ONE CATCH BASIN & ONE OUTLET

DESCRIPTION	QUANTITIES	REMARKS
Concrete for Catch Basin Class "A"	.49 Cu. Yds.	Included in estimated quantities for Span Nº 1
Reinforcement for Catch Basin	144 Lbs.	
Structural Steel Frame 2'-4¼" x 1'-9¼"	1 Piece	To be furnished and placed by Contractor for Span Nº 1
Cast Iron Grating 2'-3¼ x 1'-4¾"	1 Piece	
Corrug. Armco Ingot Iron Pipe 8"D. x 1'-0 Long	1 Piece	
Corrug. Armco Ingot Iron Pipe 8" diam.	Lin. Ft.	Not included in Contract
120° Elbow Armco Ingot Iron Pipe	1 Piece	
Concrete Class "B" for Outlet	.51 Cu. Yds.	

DRAINAGE DETAILS AT END OF SPAN NO. 1

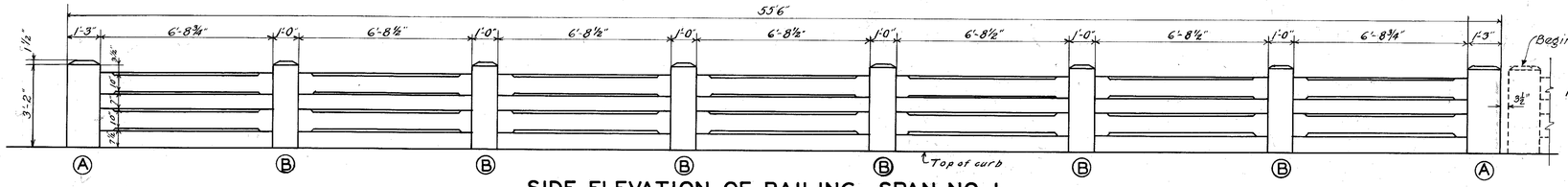
SPOTTSVILLE TOLL BRIDGE SHEET 16 OF 20

COMMONWEALTH OF KENTUCKY
STATE HIGHWAY DEPARTMENT
FRANKFORT
COUNTY OF
HENDERSON
HENDERSON - OWENSBORO
ROAD
STATION PROJECT NO.

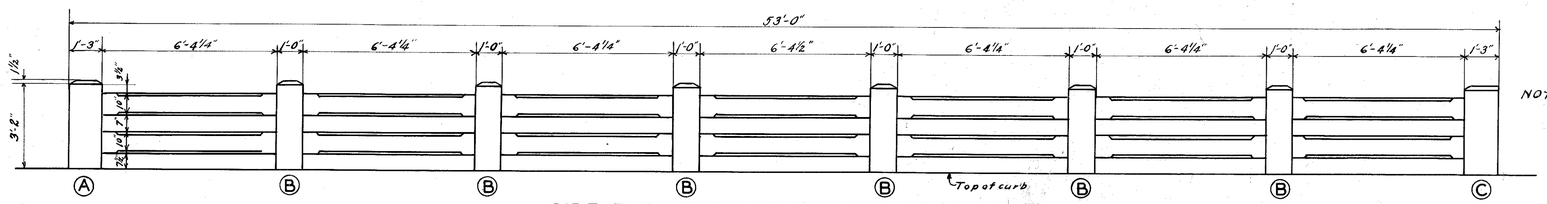
SUBMITTED BY [signature] BRIDGE ENGR. DRAWING No. 4053 INDEX
APPROVED BY STATE HIGHWAY ENGR.

DESIGNED BY M. W. Easley DATE 3-25-29 REVISED DATE
TRACED BY J. R. Odell DATE 4-7-29 REVISED DATE
CHECKED BY M. W. Easley DATE 5-17-29 REVISED DATE

FED. ROAD DIST. NO.	STATE	FED. AID PRO. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	KY.				



SIDE ELEVATION OF RAILING, SPAN NO. 1

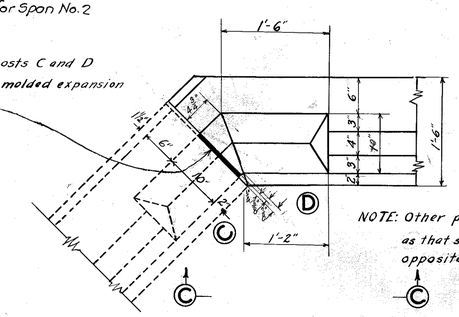


SIDE ELEVATION OF RAILING, SPAN NO. 8

For details of Spans No. 1 & No. 8 see Sheets Nos. 14 & 15

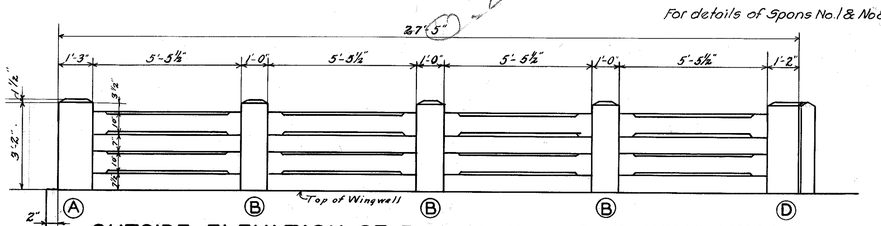
NOTE: Separate posts C and D with ¼" premolded expansion joint.

NOTE: Details of Post C same as Post A except bevel omitted adjacent to Post D.

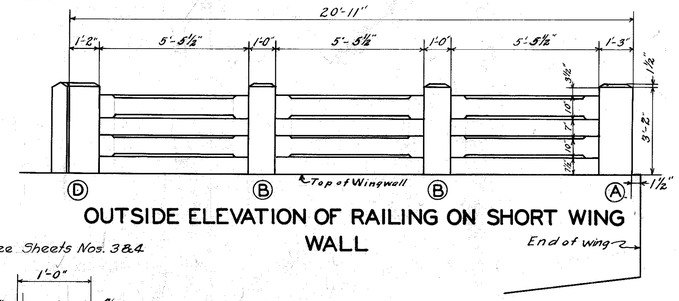


NOTE: Other post D is same as that shown, except opposite hand.

PLAN OF POST D

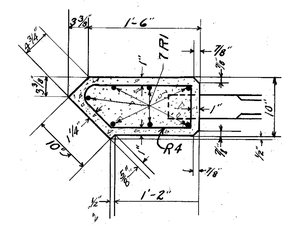


OUTSIDE ELEVATION OF RAILING ON LONG WING WALL

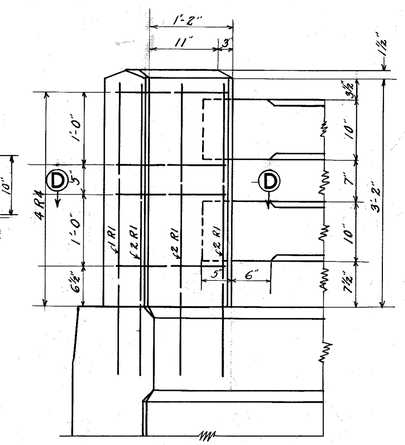


OUTSIDE ELEVATION OF RAILING ON SHORT WING WALL

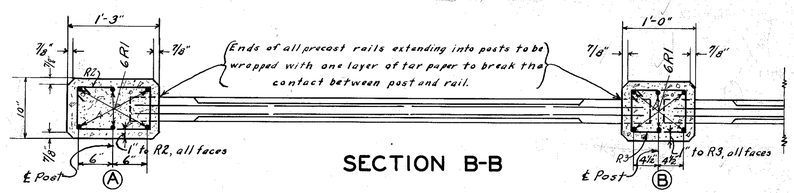
For details of Abutment No. 2 see Sheets Nos. 3 & 4



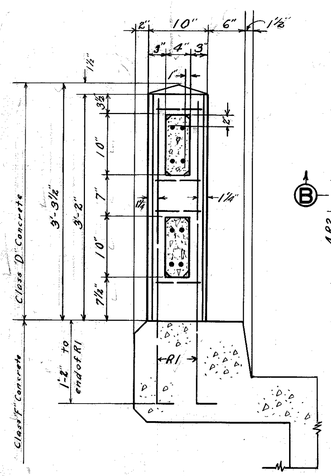
SECTION D-D



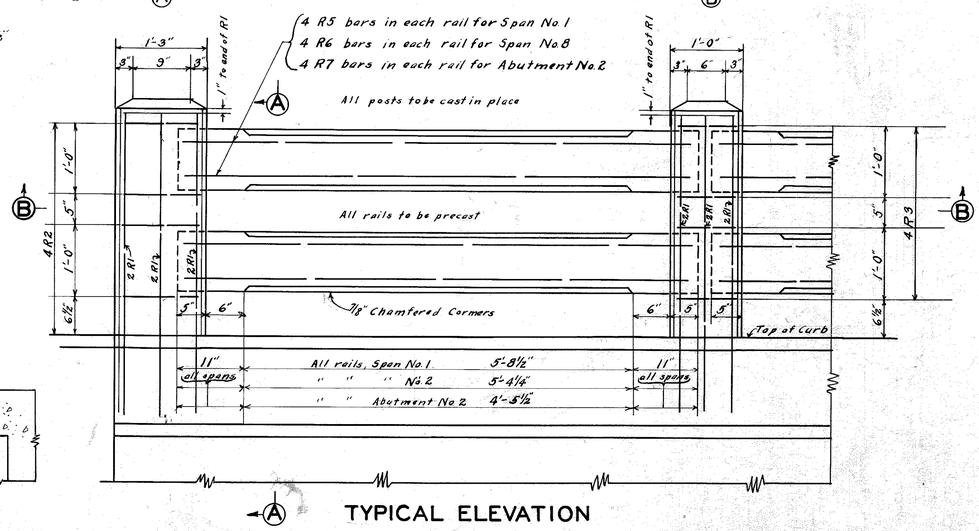
ELEVATION C-C



SECTION B-B



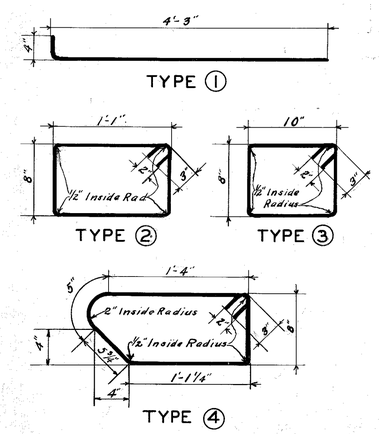
SECTION A-A



TYPICAL ELEVATION

BILL & TYPES OF BENT REINFORCEMENT

Bars	Type	No.	Size	Length Ft.	Length In.	Location
R1	1	248	½" φ	4	6	Posts
R2	2	40	¼" φ	4	0	Posts A & C
R3	3	116	"	3	6	Post B
R4	4	8	"	4	6	Post D



BILL OF STRAIGHT REINFORCEMENT

Bars	No.	Size	Length Ft.	Length In.	Location
R5	112	½" φ	7	4	Precast Rails, Span 1
R6	112	"	7	0	" " " 8
R7	56	"	6	2	" " Abut. No. 2

ESTIMATE OF QUANTITIES

Concrete, Class "D" 10.0 cu. yds.

Reinforcement 2,350 lbs.

Class "D" concrete to be used thruout.

SPOTTSVILLE TOLLBRIDGE SHEET 17 OF 20

RAILING DETAILS, SPANS 1 & 8 AND ABUTMENT NO. 2

COMMONWEALTH OF KENTUCKY
STATE HIGHWAY DEPARTMENT
FRANKFORT
COUNTY OF
HENDERSON
HENDERSON-OWENSBORO ROAD

STATION PROJECT NO.

SUBMITTED BY ..... BRIDGE ENGR.

APPROVED BY ..... STATE HIGHWAY ENGR.

DRAWING No. 4053

INDEX

DESIGNED BY H.W. Bosh DATE 3-29

TRACED BY D.Q. Moore DATE

CHECKED BY L.A. Seaborn DATE 5/18/29

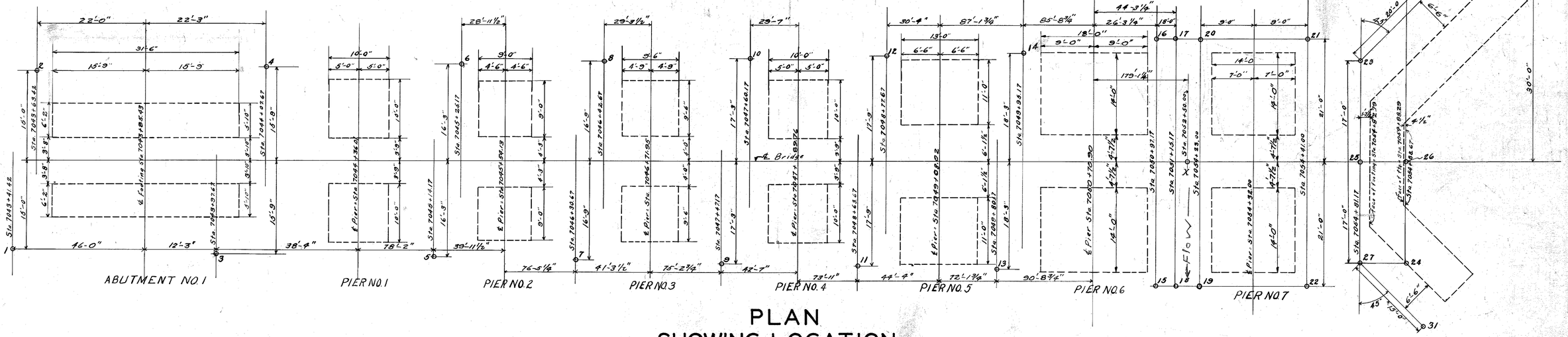
REVISED DATE

REVISED DATE

REVISED DATE

20'
1'-10"
2-5

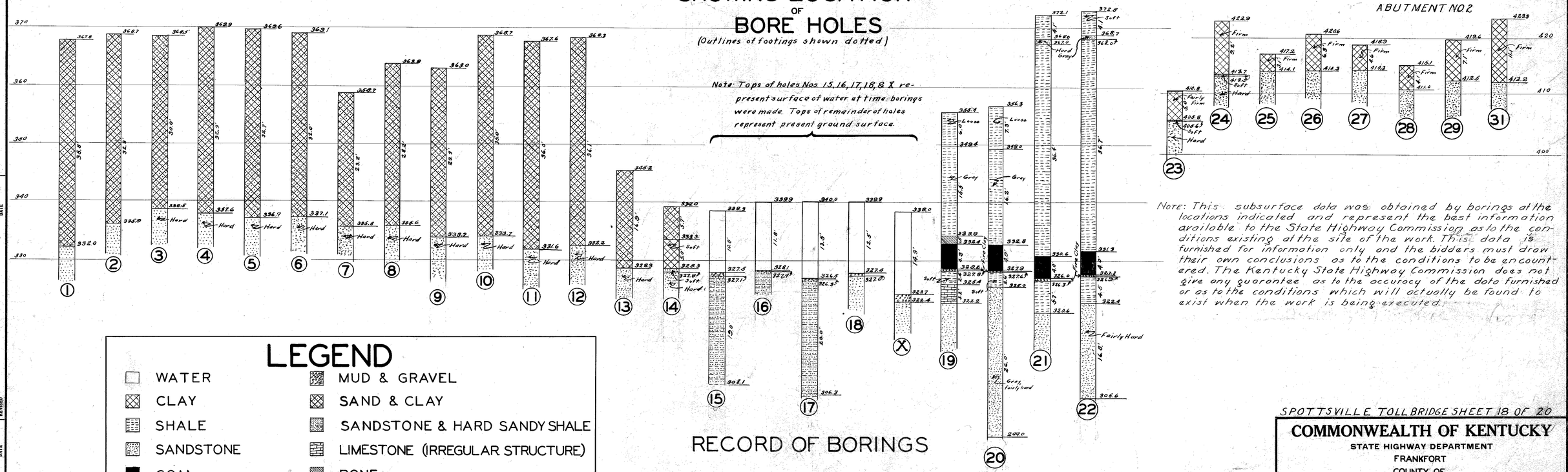
FED. ROAD DIST. NO.	STATE	FED. AID PRO. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	KY.				



PLAN SHOWING LOCATION OF BORE HOLES

(Outlines of footings shown dotted)

Note: Tops of holes Nos. 15, 16, 17, 18, & X represent surface of water at time borings were made. Tops of remainder of holes represent present ground surface.



RECORD OF BORINGS

Note: This subsurface data was obtained by borings at the locations indicated and represent the best information available to the State Highway Commission as to the conditions existing at the site of the work. This data is furnished for information only and the bidders must draw their own conclusions as to the conditions to be encountered. The Kentucky State Highway Commission does not give any guarantee as to the accuracy of the data furnished or as to the conditions which will actually be found to exist when the work is being executed.

LEGEND

WATER	MUD & GRAVEL
CLAY	SAND & CLAY
SHALE	SANDSTONE & HARD SANDY SHALE
SANDSTONE	LIMESTONE (IRREGULAR STRUCTURE)
COAL	BONE

SPOTTSVILLE TOLL BRIDGE SHEET 18 OF 20

COMMONWEALTH OF KENTUCKY
STATE HIGHWAY DEPARTMENT
FRANKFORT
COUNTY OF

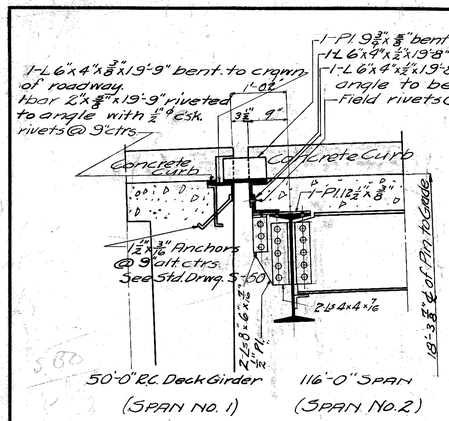
HENDERSON

HENDERSON-OWENSBORO ROAD

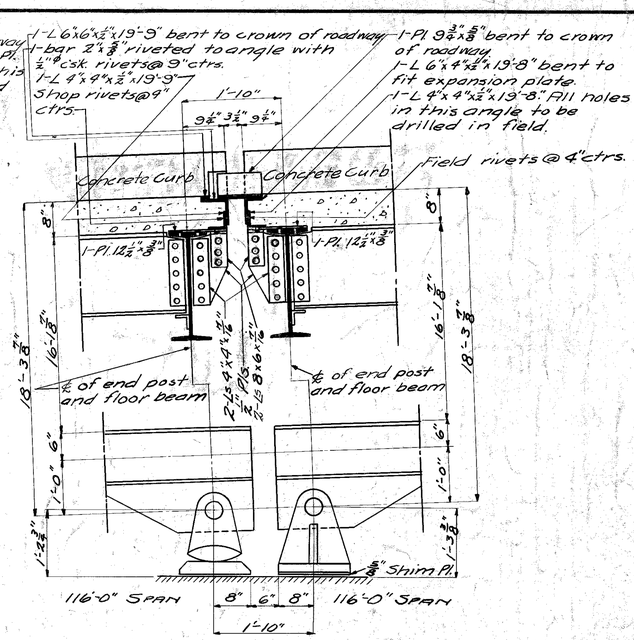
SUBMITTED BY _____ BRIDGE ENGR.
APPROVED BY _____ STATE HIGHWAY ENGR.
DRAWING No. 4053
INDEX

DESIGNED BY H.W. Bush DATE 4/29 REVISED DATE
TRACED BY D.O. Moore DATE 5/6/29 REVISED DATE
CHECKED BY DATE REVISED DATE

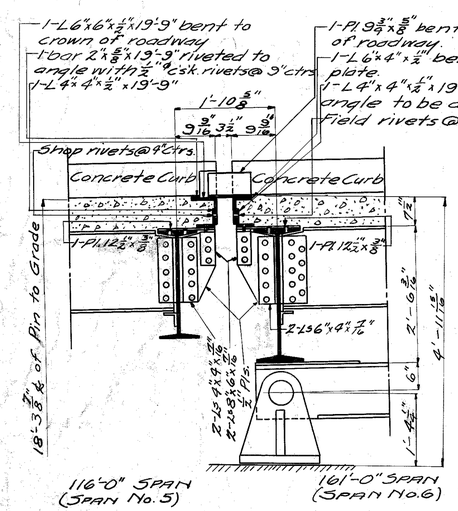
FED. ROAD DIST. NO.	STATE	FED. AID PRO. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	KY.				



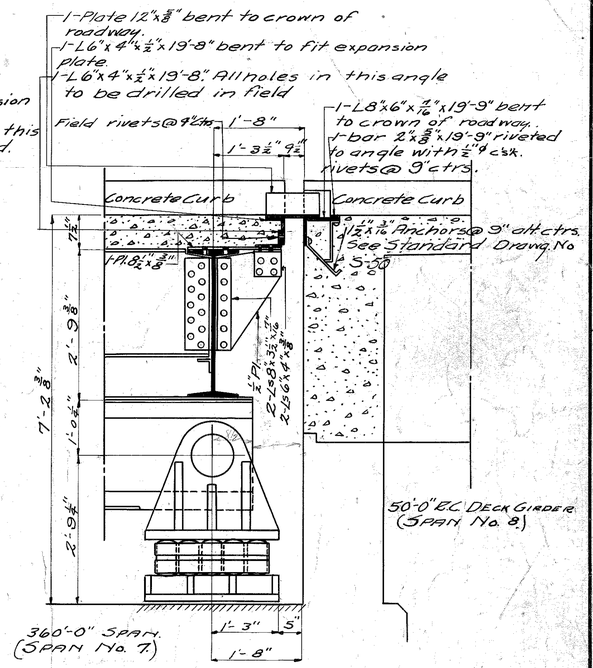
PIER NO. 1



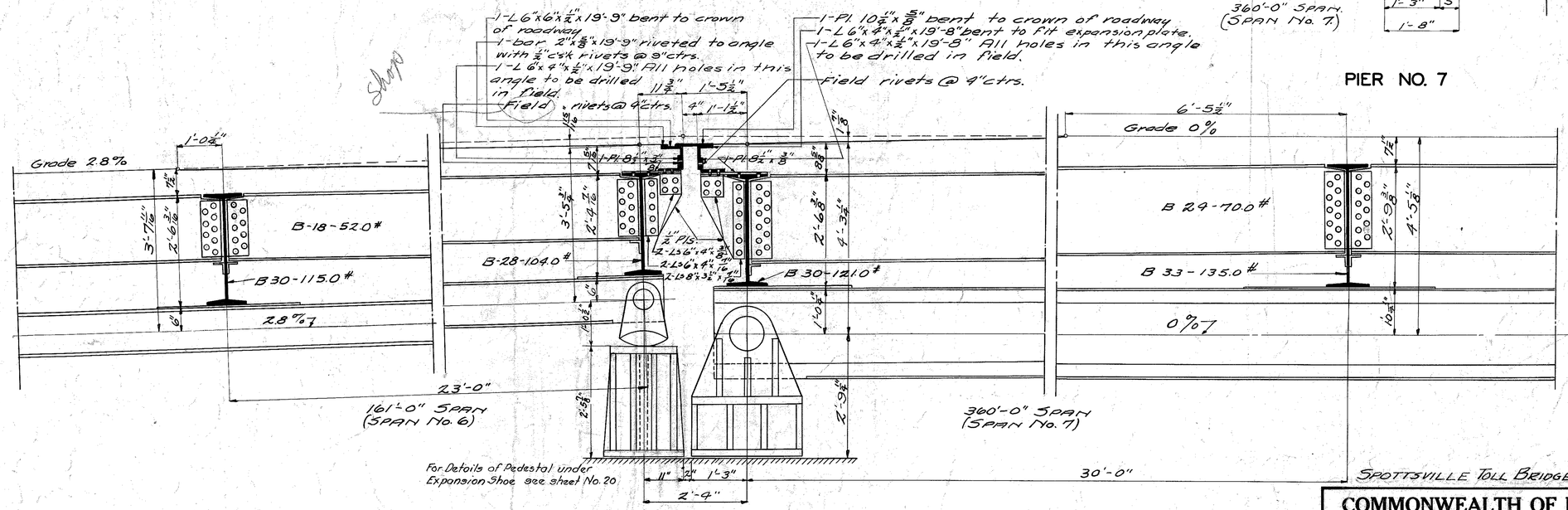
PIER NO. 2, NO. 3 & NO. 4

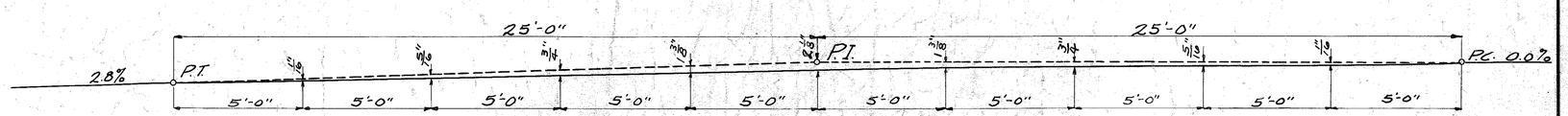


PIER NO. 5



PIER NO. 7





DETAILS OF PIER NO. 6 AND VERTICAL CURVE

SPOTTSVILLE TOLL BRIDGE SHEET No. 19 OF 20

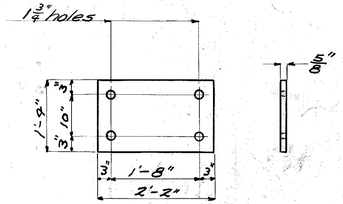
DESIGNED BY J.D.W. DATE 7-29 REVISED DATE
TRACED BY [illegible] DATE 7-29 REVISED DATE
CHECKED BY P.D.G. DATE 7-29 REVISED DATE

COMMONWEALTH OF KENTUCKY
STATE HIGHWAY DEPARTMENT
FRANKFORT
COUNTY OF
HENDERSON
HENDERSON-OWENSBORO
ROAD

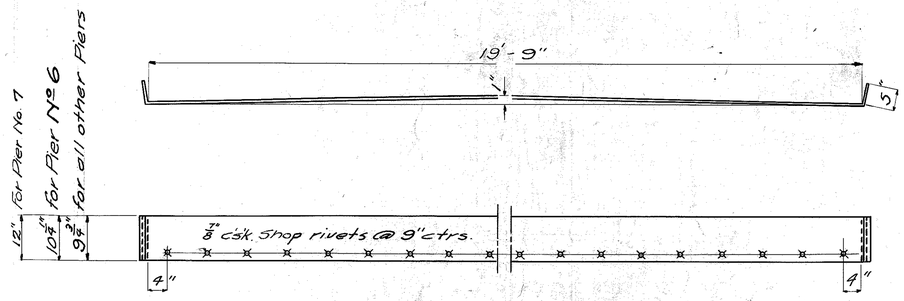
STATION PROJECT NO.

SUBMITTED BY [illegible] BRIDGE ENGR.
APPROVED BY STATE HIGHWAY ENGR.
DRAWING No. 4053
INDEX

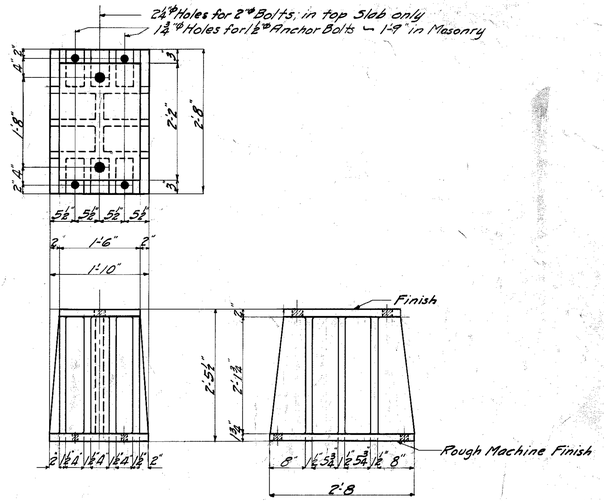
FED. ROAD DIST. NO.	STATE	FED. AID PRO. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	KY.				



DETAILS OF SHIM PLATE AT PIER No. 2, No. 3 & No. 4

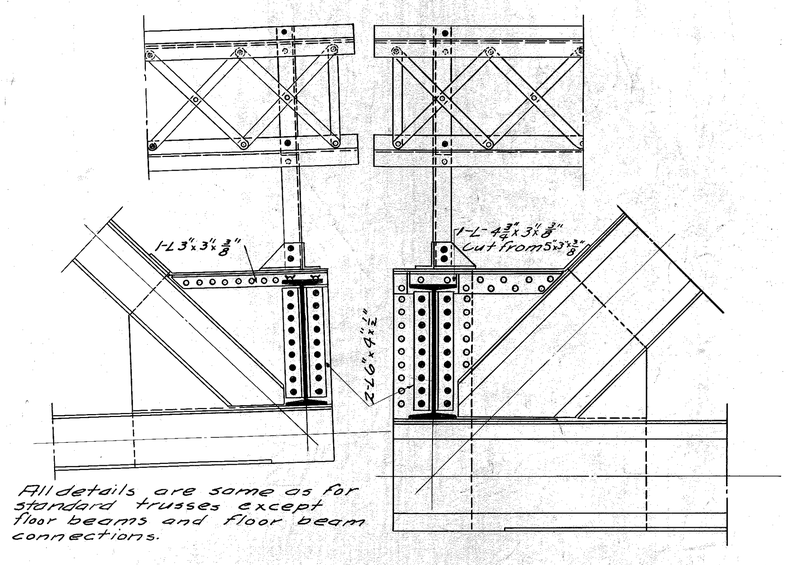


DETAILS OF EXPANSION PLATE



PEDESTAL UNDER EXPANSION SHOE
FOR 161'-0 SPAN ~ ON PIER # 6
CAST STEEL WT = 2220# EACH; 2-REQ'D

Note - This pedestal takes the place of Masonry plate shown for Expansion Shoe on Standard plans for 161'-0 Span



All details are same as for standard trusses except floor beams and floor beam connections.

SPECIAL DETAIL SHOWING CHANGE IN STANDARD TRUSSES TO PROVIDE FOR VERTICAL CURVE OVER PIER No. 6
(SEE SHEET No 19 FOR VERTICAL CURVE)

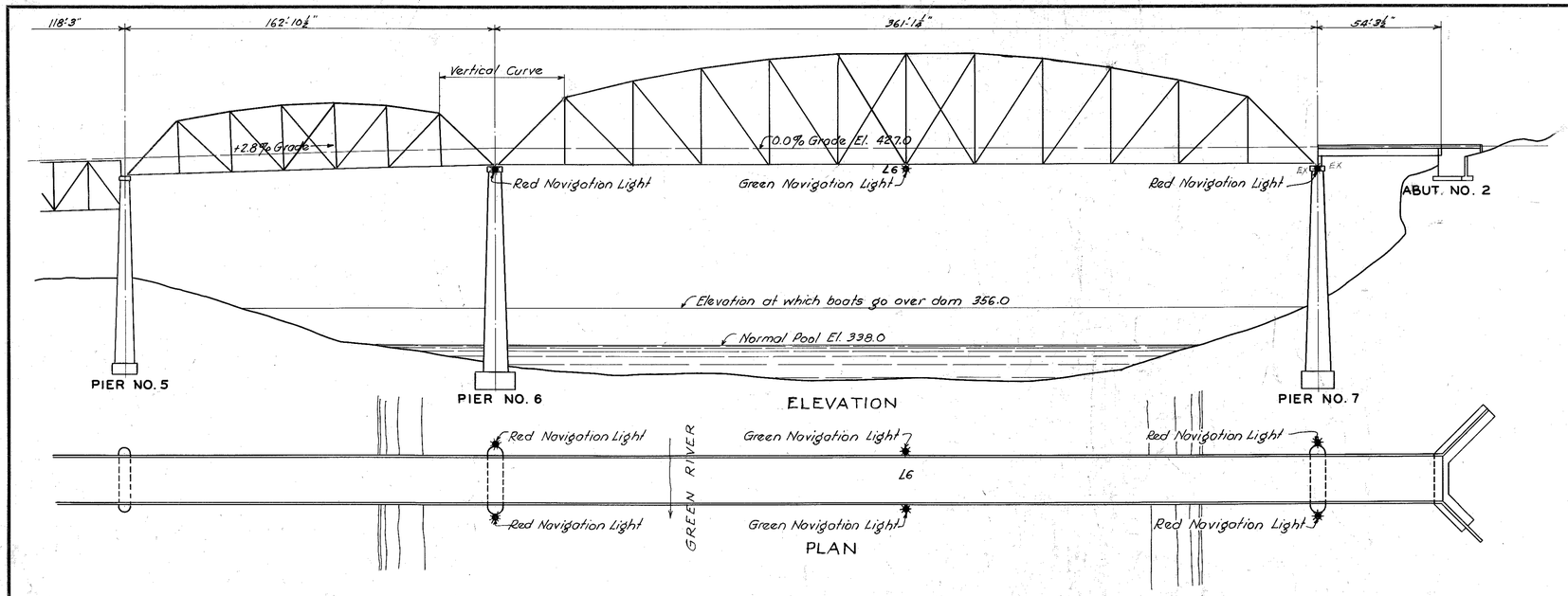
SPOTTSVILLE TOLL BRIDGE SHEET 20 OF 20

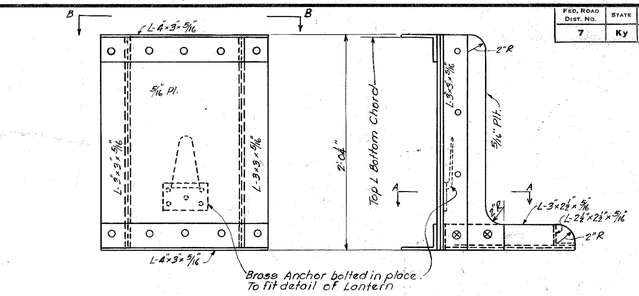
COMMONWEALTH OF KENTUCKY
STATE HIGHWAY DEPARTMENT
FRANKFORT
COUNTY OF
HENDERSON
HENDERSON - OWENSBORO
ROAD
STATION PROJECT NO.

SUBMITTED BY H.R. Crell BRIDGE ENGR.
APPROVED BY STATE HIGHWAY ENGR.
DRAWING No. 4053
INDEX

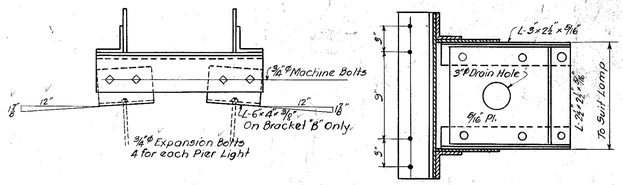
DESIGNED BY Anderson DATE 7-29 REVISED DATE
TRACED BY [illegible] DATE 7/30/29 REVISED DATE
CHECKED BY P.D.G. DATE 7-29 REVISED DATE

Fed. Road Dist. No.	State	Fed Aid Proj. No.	Fiscal Year	Sheet No.	Total Sheets
7	Ky				



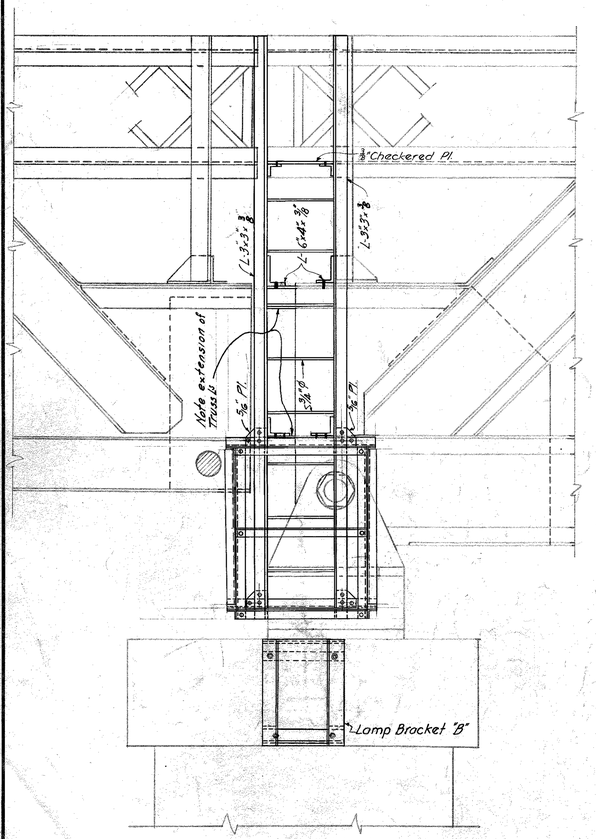


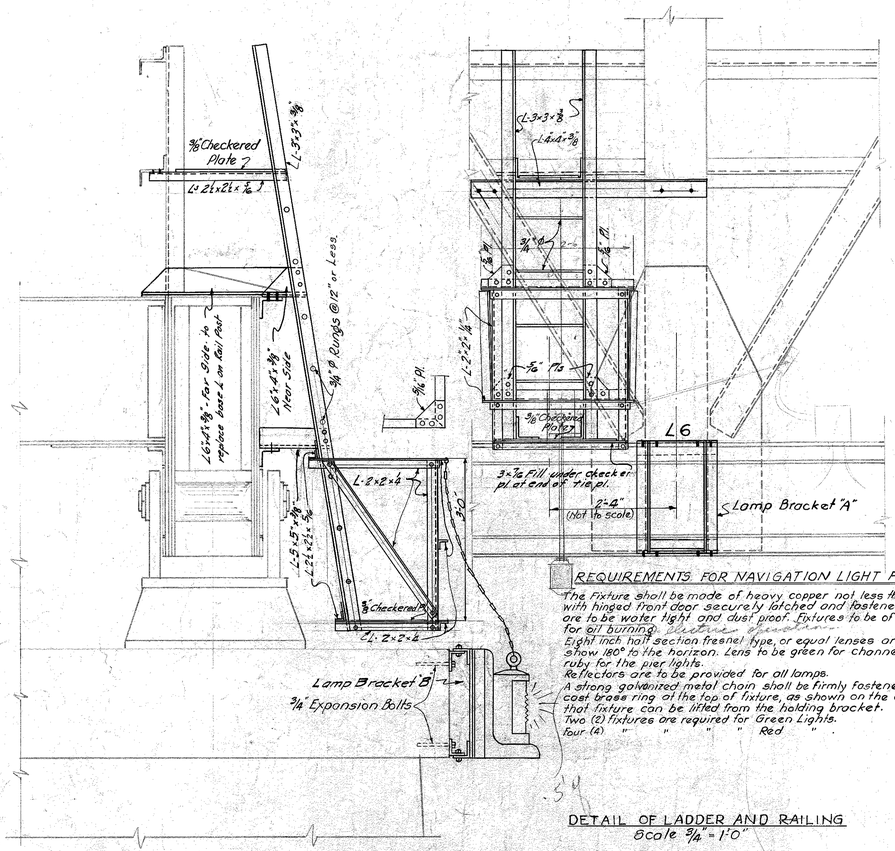
All Rivets 9/16" ϕ - All open holes 13/16" ϕ

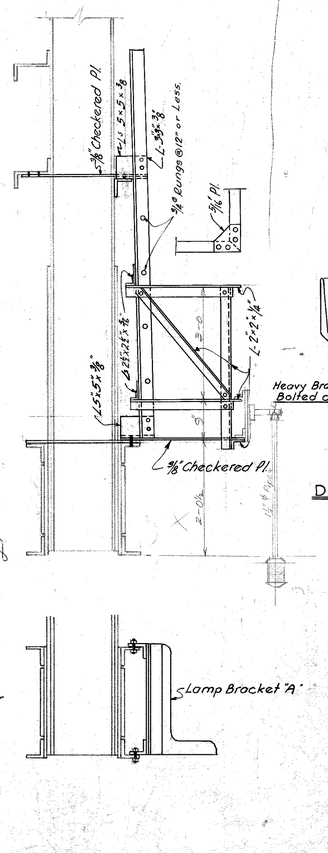


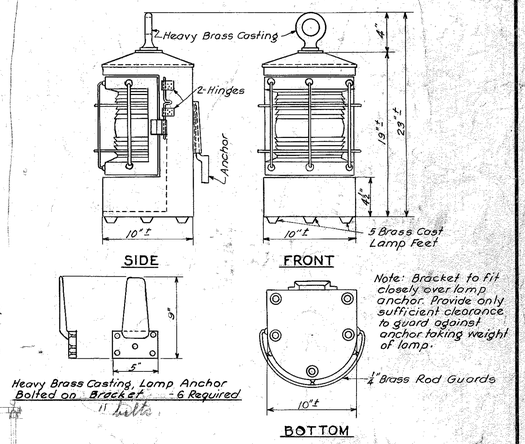
DETAIL OF BRACKETS "A" & "B"

2 Brackets "A" Required
4 Brackets "B" Required
Scale 1½" = 1'-0"









DETAIL OF NAVIGATION LIGHT

Scale 1½" = 1'-0"

ESTIMATED QUANTITIES
Light Fixtures - 6 Required.
Structural Steel - 4000 lbs.

REQUIREMENTS FOR NAVIGATION LIGHT FIXTURE

The Fixture shall be made of heavy copper not less than No. 16 B.W.G. with hinged front door securely latched and fastened. The fixtures are to be water tight and dust proof. Fixtures to be of a type suitable for oil burning. Lenses to be Fresnel type.
Eight inch half section fresnel type, or equal lenses are required to show 180° to the horizon. Lens to be green for channel lights and ruby for the pier lights.
Reflectors are to be provided for all lamps.
A strong galvanized metal chain shall be firmly fastened to a heavy cast brass ring at the top of fixture, as shown on the drawing, in order that fixture can be lifted from the holding bracket.
Two (2) fixtures are required for Green Lights.
Four (4) " " " " Red " .

DETAIL OF LADDER AND RAILING

Scale 3/4" = 1'-0"

SPOTTSVILLE TOLL BRIDGE — Sheet No. 20-A of 20

COMMONWEALTH OF KENTUCKY

STATE HIGHWAY DEPARTMENT
FRANKFORT
COUNTY OF

HENDERSON

HENDERSON-OWENSBORO

STATION — ROAD PROJECT NO.

SUBMITTED BY ..... BRIDGE ENGR.
APPROVED BY ..... CHIEF ENGR.

DRAWING No. 4053 — INDEX

DESIGNED BY — DATE
TRACED BY — DATE
CHECKED BY — DATE
REVISED — DATE
REVISED — DATE
REVISED — DATE