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

DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

GARRARD COUNTY
SUGAR CREEK ROAD
OVER WEST FORK SUGAR CREEK

REFERENCE AND ESTIMATE OF QUANTITIES

ITEM / LOCATION	SHEET NO.	CONCRETE CU. YD. CL. 'A'	CONCRETE CU. YD. CL. 'AA'	REINF. STEEL LB.	STR. EXC. CU. YD. COM.	STR. EXC. CU. YD. S.R.	BRONZE PLATES LB.		LINSEED OIL PROT. COATING SQ YD.	STRUCTURAL STEEL LUMP SUM BID (1)	HIGH STR ALUMINUM HANDRAIL LIN. FT.	
QUANTITIES	1											
NOTES	2											
LAYOUT & SOUNDINGS	3,4											
ABUTMENT 1	5-8	97.7		13080	110	55						
ABUTMENT 2	8-11	118.5		15414	120	55						
PIER 1	12	35.9		4680	20	10						
SUPERSTRUCTURE	13-15		185.4	47539			608		375	(1)	184.7	
ELEVATIONS	16											
SUPERSTRUCTURE TOTALS			185.4	47539			608		375	(1)	184.7	
SUBSTRUCTURE TOTALS		252.1		33174	250	120						
TOTALS		252.1	185.4	80713	250	120	608		375	(1)	184.7	

(1) Approximate weight of Structural Steel is 2081 Lbs.

BILL OF INCIDENTAL MATERIAL

ITEM	NO.	SIZE & LOCATION
Prem. Cork Exp. Jt. Matl.	1	½" x 1'-6" x 22'-0" Total @ Abut. Wings
" " " " "	2	¾" x 1'-5" x 27'-8" Between Curbs
" " " " "	1	¾" x 6'-10" x 37'-0" " Spans
" " " " "	1	½" x 3'-0" x 38'-0" Over Pier Cap
Preformed Jt. Seal	1	46'-4" long x 1¼" x 1¾ Seal @ Pier 1
4 Bolt Insert Assembly	4	For Details See Std. Drwg. RBC-001-01

NOTE:

Quantities shown in 'Bill of Incidental Material' are approximate only and the contractor is responsible for furnishing enough material to complete the work according to plans and specifications. The cost of these items is to be included in the unit price bid for Class "AA" Concrete.

REFERENCES

All references listed below are the current edition and are to be used with these Plans.

Special Provision No 8B for Linseed Oil Protective Coating
Special Provision No 30B for Membrane Curing of Concrete Structures
Special Provision No 35B for Class AA Concrete
Special Provision No 36A for Set Retarding Admixtures for Concrete
Special Provision No 37D for Preformed Compression Joint Seals

Special Provision No 80B for Blast Cleaning and Painting Structural Steel
Special Provision No 99A for Concrete Surface Finish
Special Provision No 102 for Coarse Aggregates

BJE-001-01 BJE-002-01 RBC-001-01 BHA-005-01
BHA-006-01 BJJ-003 BJJ-004 BGX-006

SUGAR CREEK RD. OVER W. FORK SUGAR CREEK SHEET 1 OF 16

COMMONWEALTH OF KENTUCKY
BUREAU OF HIGHWAYS
FRANKFORT
COUNTY OF
GARRARD
SUGAR CREEK
ROAD

STATION 11+94.00 **PROJECT NO.** R.L. 40-886-1L

BRIDGE NUMBER RS 40-886 | DRAWING NO. 17048 | INDEX

PLANS BY: ODELL, WRIGHT, MORGAN AND BROWN INC.

DESIGNED BY CEB DATE
DETAILED BY DATE
TRACED BY DATE
CHECKED BY DATE
CHECKED BY DATE
REVISED DATE 5-27
REVISED DATE
REVISED DATE

PLANS UPDATED 8-13-73 G. GRISHAM
2-15-74
5-20-74

Letting Date - 6-6-74

DESIGNED BY	CHECKED BY	DATE	REVISED DATE
DETAILED BY UB	CHECKED BY RW	DATE 5-67	REVISED DATE
TRACED BY	CHECKED BY	DATE	REVISED DATE

GENERAL NOTES

NOTE: ALL REFERENCES TO THE FORMER DEPARTMENT OF HIGHWAYS AND ANY OF ITS DIVISIONS OR AGENTS WHICH ARE MENTIONED IN THE PLANS, SPECIFICATIONS, SPECIAL PROVISIONS, SPECIAL NOTES, ETC., SHALL APPLY TO THE CURRENT KENTUCKY DEPARTMENT OF TRANSPORTATION, BUREAU OF HIGHWAYS, AND ANY OF ITS DIVISIONS OR AGENTS.

SPECIFICATIONS: KENTUCKY DEPARTMENT OF HIGHWAYS STANDARD SPECIFICATIONS, CURRENT EDITION WITH REVISIONS.

DESIGN LOAD: BRIDGE DESIGNED FOR H20-44 LOADING & SLAB DESIGNED FOR 16 KIP WHEEL LOAD, AS SPECIFIED IN THE 1973 AASHO SPECIFICATIONS.

REINFORCEMENT: DIMENSIONS SHOWN FROM FACE OF CONCRETE TO BARS ARE CLEAR DISTANCES. SPACING OF BARS IS FROM CENTER TO CENTER OF BARS.

BEVELED EDGES: ALL EXPOSED EDGES SHALL BE BEVELED 7/8" UNLESS OTHERWISE SHOWN.

CORK EXPANSION JOINT MATERIAL, TAR PAPER, PREFORMED JOINT SEAL: THE COST OF THESE ITEMS IS TO BE INCLUDED IN THE UNIT PRICE BID FOR CLASS "AA" CONCRETE.

FOUNDATION PRESSURE: THE MAXIMUM FOOTING PRESSURE IS 7.5 TSF FOR GROUP I LOADS @ PIER AND 6.1 TSF @ ABUTMENTS.

CONCRETE: CLASS "A" CONCRETE IS TO BE USED IN ABUTMENTS AND PIERS.
CLASS "AA" CONCRETE IS TO BE USED IN THE SUPERSTRUCTURE.

WIND LOADS: THIS STRUCTURE IS DESIGNED USING WIND LOADS BASED ON A WIND VELOCITY OF 84 M.P.H.

CONSTRUCTION IDENTIFICATION: THE NAMES OF THE PRIME CONTRACTOR AND THE SUBCONTRACTOR SHALL BE IMPRINTED IN THE CONCRETE WITH ONE INCH LETTERS AT A LOCATION DESIGNATED BY THE ENGINEER. THE CONTRACTOR SHALL FURNISH ALL PLANS, EQUIPMENT, AND LABOR NECESSARY TO DO THE WORK, FOR WHICH NO DIRECT PAYMENT WILL BE MADE.

MILL TEST REPORTS: NOTARIZED MILL TEST REPORTS IN TRIPLICATE SHALL BE FURNISHED THE KENTUCKY DEPARTMENT OF HIGHWAYS SHOWING THAT ALL MATERIALS FURNISHED CONFORM TO THE SPECIFICATIONS.

DESIGN STRESSES:

FOR CLASS "AA" REINFORCED CONCRETE	FOR CLASS "A" REINFORCED CONCRETE
f_s = 20,000 PSI	f_s = 20,000 PSI
f_c = 1,600 PSI FOR OTHER THAN SLABS f_c = 1,200 PSI FOR DECK SLABS	f_c = 1,200 PSI
f_e = 200 PSI FOR EMBEDMENT	f_e = 200 PSI FOR EMBEDMENT
f_p = 300 PSI FOR SUM OF PERIMETERS	f_p = 300 PSI FOR SUM OF PERIMETERS
f_d = 4,000 PSI	f_d = 3,000 PSI
N = 8	N = 10

STRUCTURAL STEEL: "LUMP SUM BID" FOR STRUCTURAL STEEL SHALL BE FULL PAYMENT FOR ALL STRUCTURAL STEEL, CAST IRON DRAINS, WELDING AND WELDING MATERIALS, PAINT AND ALL LABOR AND MATERIALS NECESSARY TO ERECT THE STEEL IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS. USE ASTM A36 CURRENT SPECIFICATIONS.

PAINT: ALL STRUCTURAL STEEL SHALL BE CLEANED AND PAINTED IN ACCORDANCE WITH THE SPECIAL PROVISION FOR BLAST CLEANING AND PAINTING STRUCTURAL STEEL, CURRENT EDITION.

TAR PAPER: TAR PAPER IS TO BE COMMERCIAL GRADE TAR PAPER OR ROOFING FELT APPROXIMATELY 1/16" THICK.

BRONZE BEARING PLATES: ALL BRONZE PLATES TO BE ASTM B22, ALLOY C WITH SLIDING SURFACES FINELY POLISHED. MACHINE BOLTS ARE TO BE FURNISHED BUT ARE NOT INCLUDED IN THE WEIGHTS OF PLATES GIVEN. THE COST IS TO BE INCLUDED IN THE UNIT PRICE BID FOR PLATES.

HIGH STRENGTH ALUMINUM HANDRAIL: THE CONTRACTOR SHALL PROVIDE THROUGHOUT THE PROJECT HIGH STRENGTH ALUMINUM HANDRAIL IN ACCORDANCE WITH STANDARD DRAWING BHA-005 & BHA-006, CURRENT EDITION

POURING SEQUENCE: POUR THE GIRDER STEM IN ONE CONTINUOUS OPERATION, IN HORIZONTAL LAYERS FOR EACH GIRDER. POUR ENDWALLS AND DIAPHRAMS WITH GIRDER STEM, BY PROVIDING VERTICAL CONSTRUCTION JOINTS MIDWAY BETWEEN GIRDERS. THE POURING SEQUENCE OF THE SLAB MAY BE CHANGED WITH THE WRITTEN APPROVAL OF THE ENGINEER

BLASTING NEAR ABUTMENT SITES: THE BEARING VALUE OF THE ROCK LOCATED UNDER THE PROPOSED BRIDGE ABUTMENTS MUST BE PRESERVED FROM DAMAGE BY BLASTING, BY CONCUSSION FROM BLASTING, OR BY EXCESSIVE BACKBREAKAGE. ANY INCREASES IN STRUCTURE COSTS CAUSED BY BLASTING DAMAGE TO THE BRIDGE FOUNDATIONS SHALL BE AN EXPENSE OF THE CONTRACTOR.

FOUNDRY NOTE: ALL DRAINS SHALL BE GRAY IRON CASTINGS, ASTM A48, CURRENT EDITION, CLASS 30A. REPORT OF FIELD INSPECTION OF CASTINGS, SURRENT FORM, SHALL SHALL BE SUBMITTED TO THE DIVISION OF MATERIALS.

MEMBRANE CURING COMPOUND: WHITE PIGMENTED CURING COMPOUND SHALL BE APPLIED TO THE BRIDGE DECK IN ACCORDANCE WITH THE SPECIAL PROVISION, EXCEPT THAT THE MEMBRANE USED SHALL HAVE A RESINOUS BASE.

LINSEED OIL PROTECTIVE COATING: LINSEED OIL PROTECTIVE COATING SHALL BE APPLIED TO THE BRIDGE DECK IN ACCORDANCE WITH THE SPECIAL PROVISION.

NOTES

COMMONWEALTH OF KENTUCKY
BUREAU OF HIGHWAYS
FRANKFORT
COUNTY OF
GARRARD
SUGAR CREEK ROAD

SUGAR CREEK RD. OVER W. FORK SUGAR CREEK SHEET 2

STATION 11+94.00

BRIDGE NUMBER

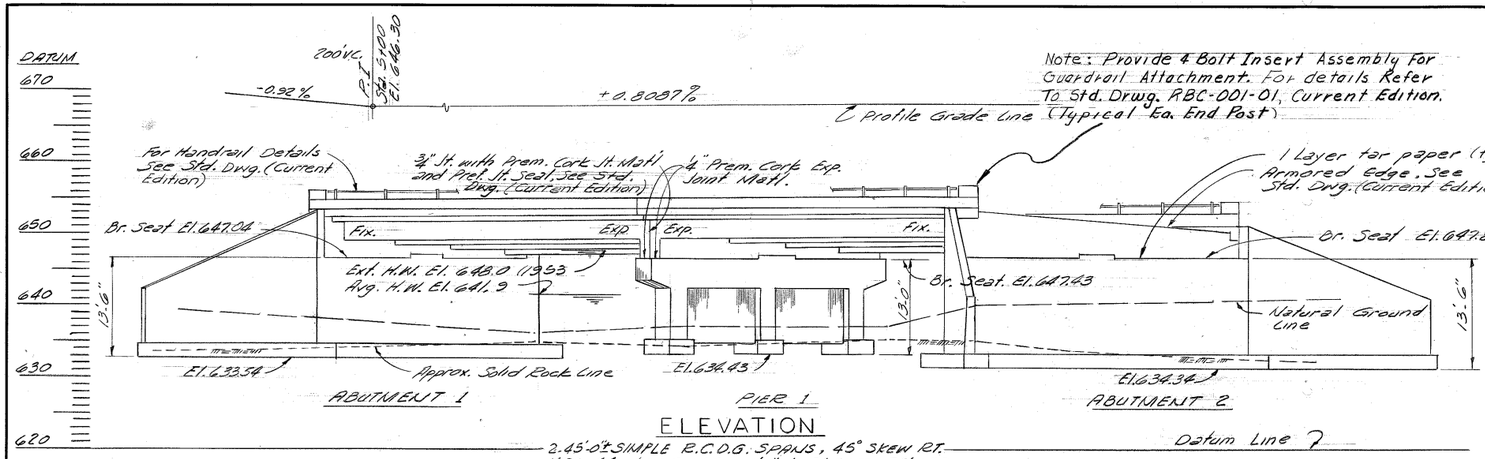
PROJECT NO.

DRAWING NO. 17048

INDEX

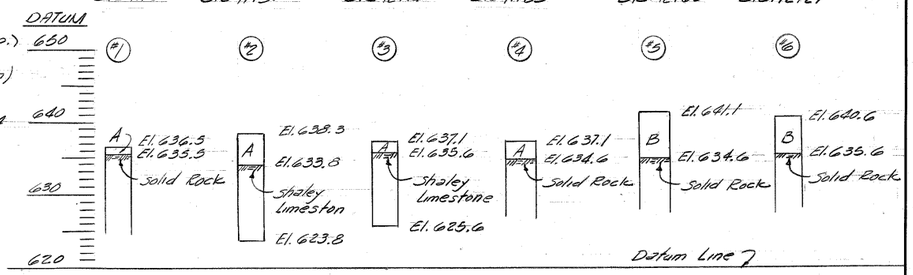
FED. ROAD DIV. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	KY.				

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



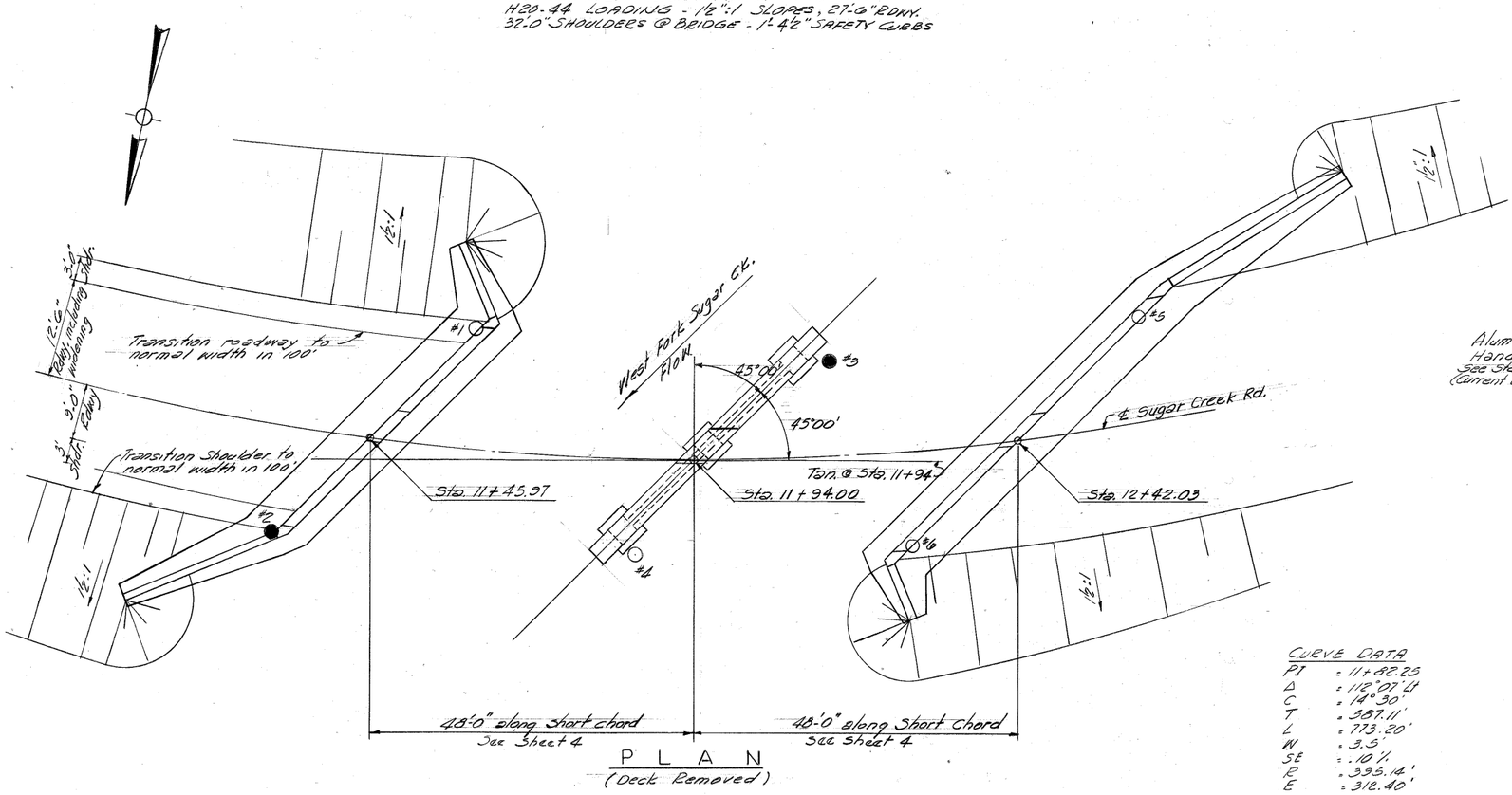
ELEVATION

2-45'-0" SIMPLE R.C.D.G. SPANS, 45° SKEW RT.
H20-44 LOADING - 1½":1 SLOPES, 27'-6" RDWY.
32'-0" SHOULDERS @ BRIDGE - 1'-4½" SAFETY CURBS



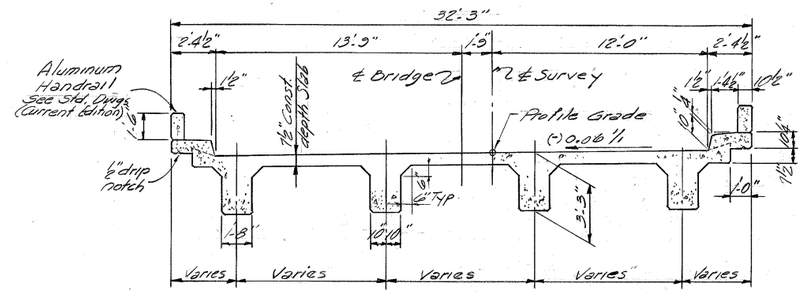
SOUNDINGS

Legend –
A Scattered rocks
B Clay with boulders



PLAN
(Deck Removed)

CURVE DATA	
PI	= 11+82.25
Δ	= 112°07' Lt
C	= 14°30'
T	= 387.11'
L	= 773.20'
N	= 3.5
SE	= .10'/.
R	= 395.14'
E	= 312.40'



TYPICAL SECTION

FOR STAKEOUT DIAGRAM, SEE SHEET 4.

○ Indicates Soundings to solid rock
● Indicates core 10' in to solid rock.

LAYOUT

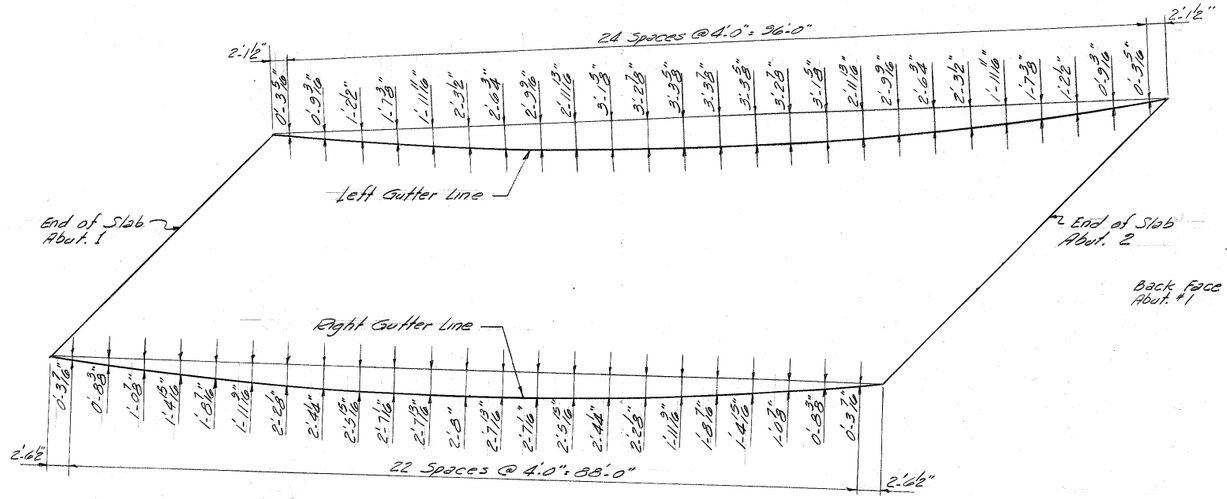
DESIGNED BY
DETAILED BY
TRACED BY
CHECKED BY: PLW DATE 4-67
CHECKED BY
CHECKED BY
REVISED DATE
REVISED DATE
REVISED DATE

SUGAR CK. RD. OVER W. FORK SUGAR CK. SHEET 3

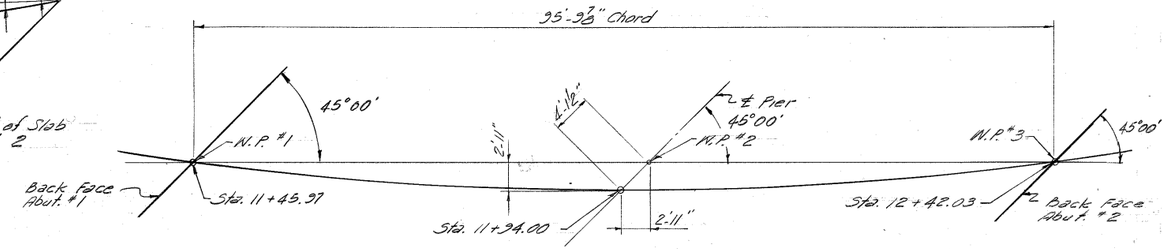
COMMONWEALTH OF KENTUCKY
BUREAU OF HIGHWAYS
FRANKFORT
COUNTY OF
GARRARD
SUGAR CREEK
ROAD
STATION 11+94.00 **PROJECT NO.**

BRIDGE NUMBER	DRAWING NO.	INDEX
	17048	

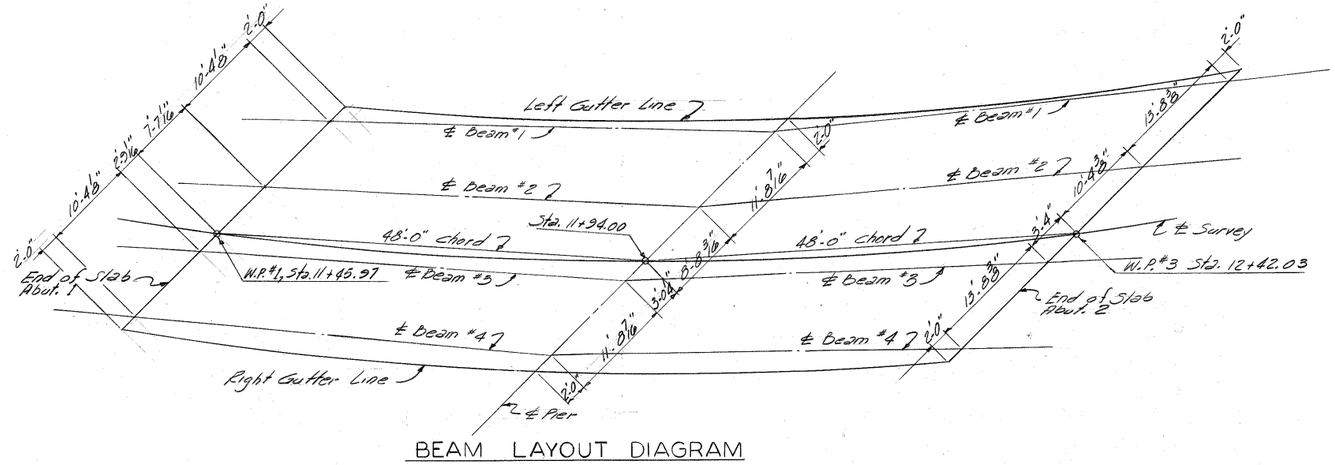
FED. ROAD DIST.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	KY.				



GUTTER LINE OFFSETS



LAYOUT DIAGRAM



BEAM LAYOUT DIAGRAM

LAYOUT DIAGRAMS

SUGAR CK. RD. OVER W. FORK SUGAR CK. SHEET 4

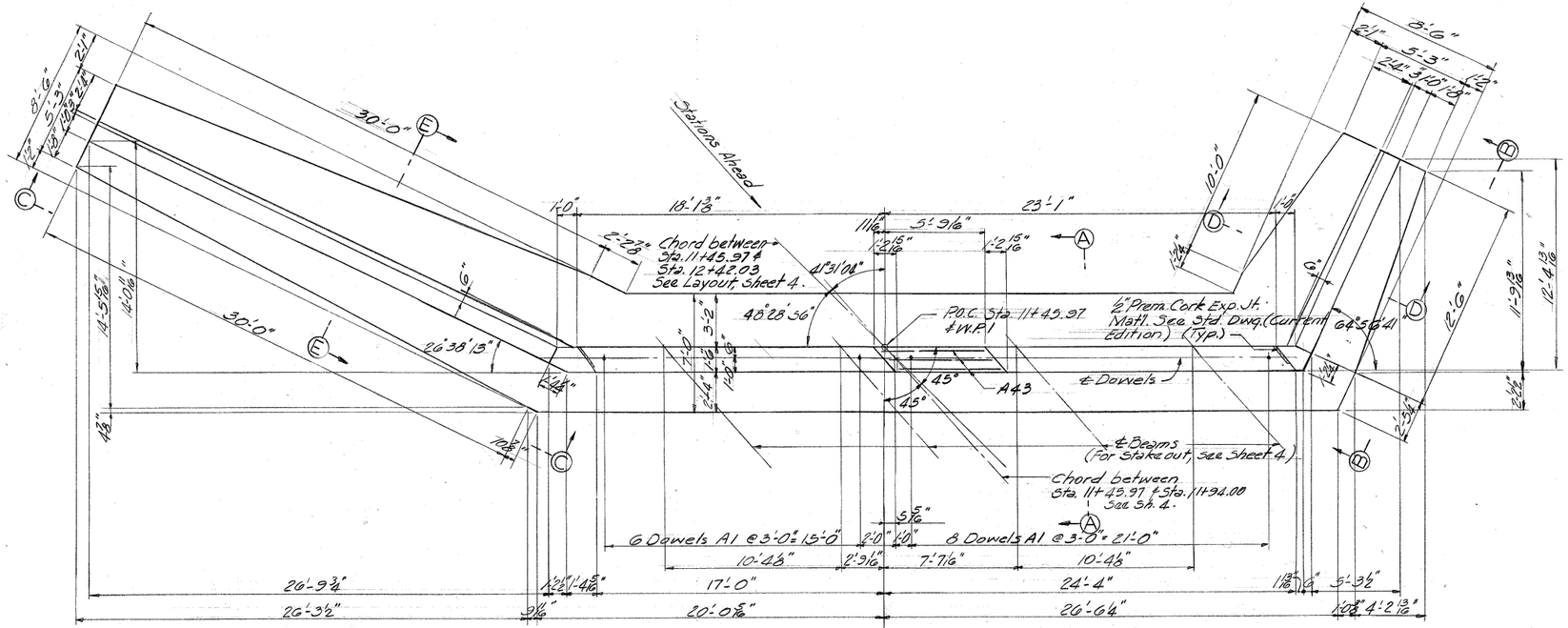
COMMONWEALTH OF KENTUCKY
BUREAU OF HIGHWAYS
FRANKFORT
COUNTY OF
GARRARD
SUGAR CREEK
ROAD

STATION 11 + 94.00 **PROJECT NO.**

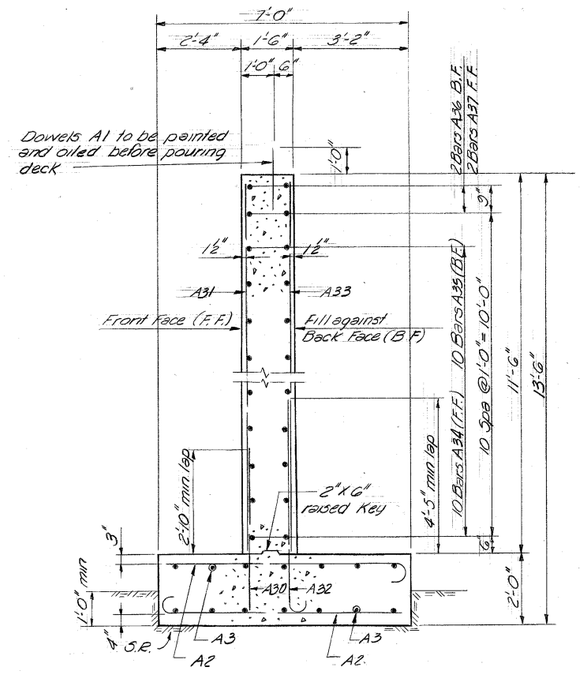
BRIDGE NUMBER	DRAWING NO.	INDEX
	17048	

DESIGNED BY ____ DATE ____ REVISED ____ DATE ____
DETAILED BY ____ DATE 5-61 REVISED ____ DATE ____
TRACED BY ____ CHECKED BY ____ DATE ____ REVISED ____ DATE ____
CHECKED BY ____ CHECKED BY ____

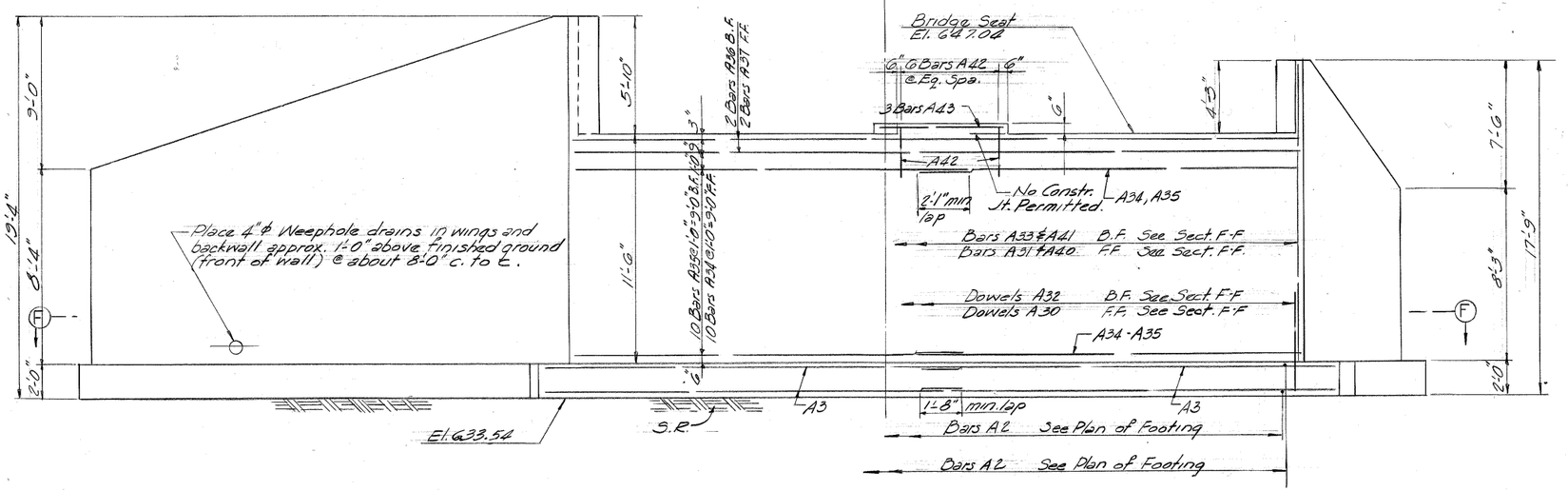
FED. ROAD DIST.	STATE	FED. AID PRO. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	KY.				



PLAN
(Showing Dimensions)



SECTION A-A



ELEVATION

ESTIMATE OF QUANTITIES

Concrete Class 'A'	37.7	Cu Yd.
Reinforcement	13,080	Lb.

DESIGNED BY PW CHECKED BY JRO DATE 5-62 REVISED DATE
DETAILED BY CEB CHECKED BY PW DATE 5-62 REVISED DATE
TRACED BY CHECKED BY DATE REVISED DATE

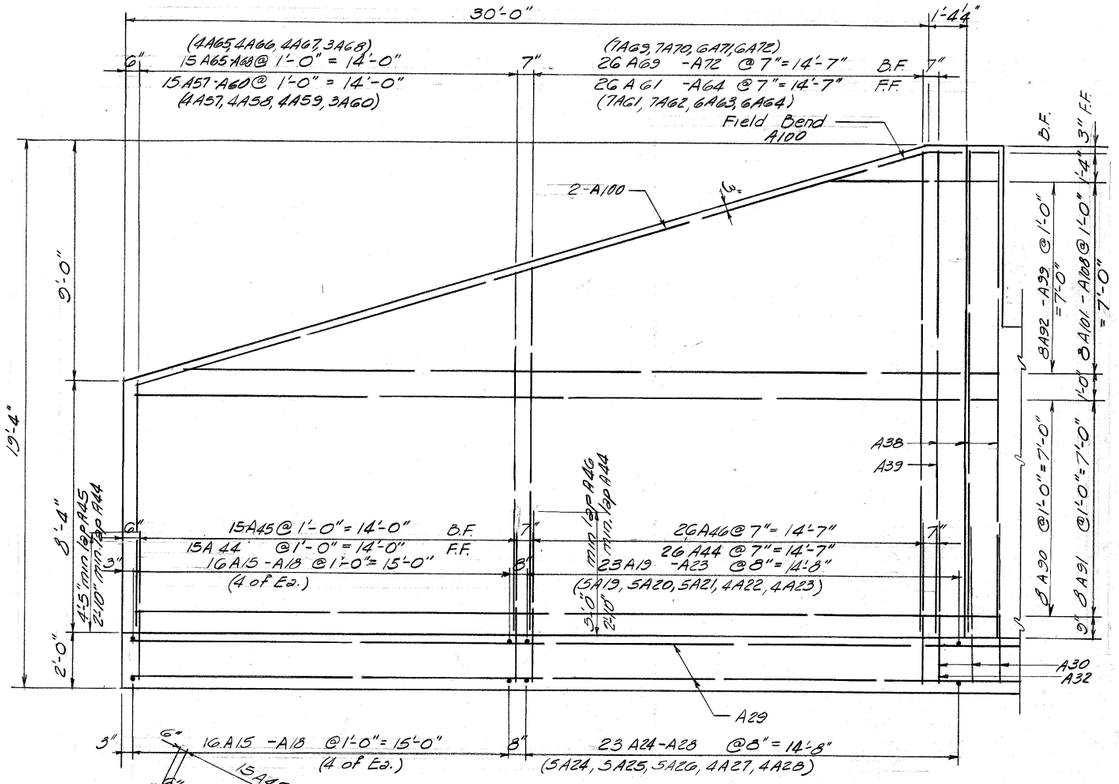
SUGAR CREEK RD OVER W FORK SUGAR CREEK SHEET 5

COMMONWEALTH OF KENTUCKY
BUREAU OF HIGHWAYS
FRANKFORT
COUNTY OF
GARRARD
SUGAR CREEK
ROAD
STATION 11+94.00 PROJECT NO.

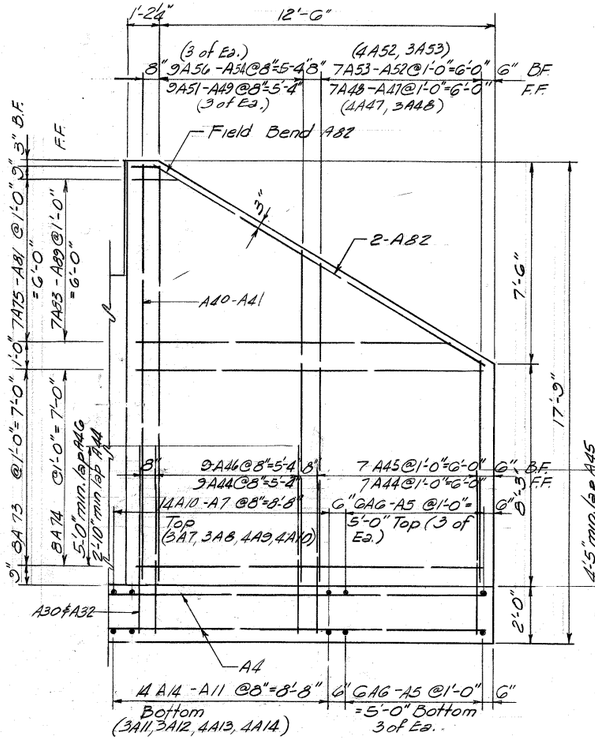
BRIDGE NUMBER | DRAWING NO. 17048 | INDEX

ABUTMENT NO. 1

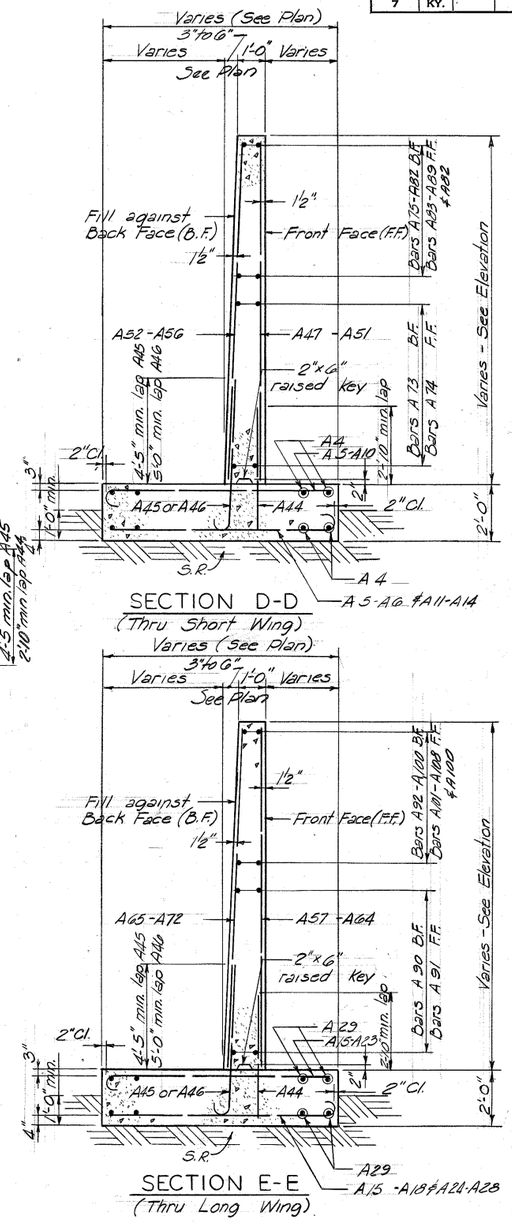
FED. ROAD DIST.	STATE	FED. AID PRO. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	KY.				



ELEVATION C-C

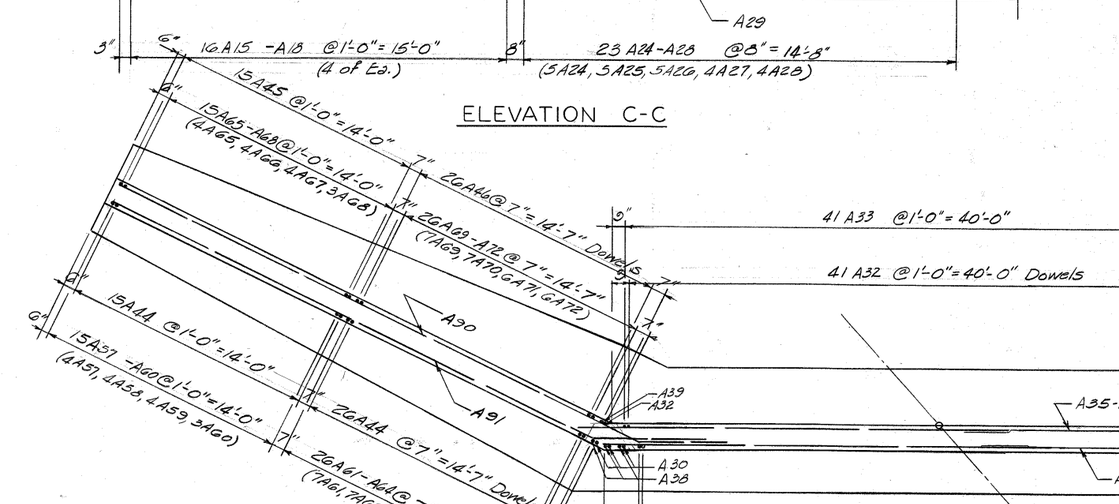


ELEVATION B-B



SECTION D-D
(Thru Short Wing)

SECTION E-E
(Thru Long Wing)



SECTION F-F

ABUTMENT NO. 1

SUGAR CREEK RD. OVER W. FORK SUGAR CREEK - SHEET 6.

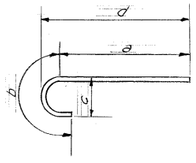
COMMONWEALTH OF KENTUCKY
BUREAU OF HIGHWAYS
FRANKFORT
COUNTY OF
GARRARD
SUGAR CREEK
ROAD
STATION 11+94.00 **PROJECT NO.**
BRIDGE NUMBER
DRAWING NO. 17048
INDEX

DESIGNED BY	RCW	CHECKED BY	JEO	DATE 5-67
DETAILED BY	JSW	CHECKED BY	PW	DATE 5-67
TRACED BY		CHECKED BY		DATE

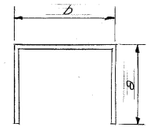
REVISED. DATE
REVISED. DATE
REVISED. DATE

BILL OF REINFORCEMENT – ABUT. NO. 1

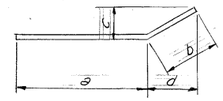
Mark	Type	No.	Bar Size	Length Ft	Length In.	Location	a Ft	a In	b Ft	b In	c Ft	c In	d Ft	d In
A1	Str.	14	#4	2	0	Dowels into Superstr.								
A2	①	140	6	7	5	Footing	6	5	1	0	0	6	6	8
A3	Str.	28	4	23	11	"								
A4	"	13	4	16	5	"								
A5	①	6	6	3	11	"	4	11	1	0	0	6	3	2
A6	"	6	6	6	10	"	5	10	1	0	0	6	6	1
A7	"	3	7	7	9	"	6	7	1	2	0	7	6	10½
A8	"	3	7	8	4	"	7	2	1	2	0	7	7	5½
A9	"	4	7	8	11	"	7	9	1	2	0	7	8	0½
A10	"	4	7	9	2	"	8	0	1	2	0	7	8	3½
A11	"	3	6	7	7	"	6	7	1	0	0	6	6	10
A12	"	3	6	8	2	"	7	2	1	0	0	6	7	5
A13	"	4	6	8	9	"	7	9	1	0	0	6	8	0
A14	"	4	6	9	0	"	8	0	1	0	0	6	8	3
A15	"	8	6	5	9	"	4	9	1	0	0	6	5	0
A16	"	8	6	6	2	"	5	2	1	0	0	6	5	5
A17	"	8	6	6	7	"	5	7	1	0	0	6	5	10
A18	"	8	6	7	0	"	6	0	1	0	0	6	6	3
A19	"	5	8	7	9	"	6	3	1	6	0	10	6	8
A20	"	5	8	8	1	"	6	7	1	6	0	10	7	0
A21	"	5	8	8	6	"	7	0	1	6	0	10	7	5
A22	"	4	8	8	10	"	7	4	1	6	0	10	7	9
A23	"	4	8	9	1	"	7	7	1	6	0	10	8	0
A24	"	5	6	7	5	"	6	5	1	0	0	6	6	8
A25	"	5	6	7	9	"	6	9	1	0	0	6	7	0
A26	"	5	6	8	2	"	7	2	1	0	0	6	7	5
A27	"	4	6	8	6	"	7	6	1	0	0	6	7	9
A28	"	4	6	8	9	"	7	9	1	0	0	6	8	0
A29	Str.	18	4	32	3	"								
A30	"	45	5	4	6	Wall Dowels								
A31	"	41	5	11	4	Wall								
A32	①	43	8	7	2	Wall Dowels	5	8	1	6	0	10	6	1
A33	Str.	41	6	11	4	Wall								
A34	"	20	5	22	4	"								
A35	"	20	5	24	2	"								
A36	"	2	8	46	2	"								
A37	"	2	8	42	7	"								
A38	"	3	5	17	2	"								
A39	"	1	7	17	2	"								
A40	"	1	5	15	7	"								
A41	"	1	7	15	7	"								
A42	②	6	5	5	7	Key	2	0	1	9				
A43	Str	3	5	6	5	"								
A44	"	57	5	4	6	Wing Dowels								
A45	①	22	8	7	2	" "	5	8	1	6	0	10	6	1
A46	"	35	9	7	11	" "	6	3	1	8	0	11½	6	8⅝
A47	Str	4	5	8	4	Wings								
A48	"	3	5	10	9	"								
A49	"	3	5	12	4	"								
A50	"	3	5	13	7	"								
A51	"	3	5	14	9	"								
A52	"	4	7	8	4	"								
A53	"	3	7	10	9	"								
A54	"	3	7	12	4	"								
A55	"	3	7	13	7	"								
A56	"	3	7	14	9	"								
A57	"	4	5	8	3	"								
A58	"	4	5	9	6	"								
A59	"	4	5	10	8	"								
A60	"	3	5	11	11	"								
A61	"	7	5	12	8	"								
A62	"	7	5	13	11	"								
A63	"	6	5	15	1	"								
A64	"	6	5	16	2	"								
A65	"	4	7	8	3	"								
A66	"	4	7	9	6	"								
A67	"	4	7	10	8	"								
A68	"	3	7	11	11	"								
A69	"	7	7	12	8	"								
A70	"	7	7	13	11	"								
A71	"	6	7	15	1	"								
A72	"	6	7	16	2	"								
A73	③	8	5	15	11	"	13	10	2	1	1	10½	0	10½
A74	"	8	4	15	0	"	13	4	1	8	1	6	0	8½
A75	"	1	5	14	5	"	12	4	2	1	1	10½	0	10½
A76	"	1	5	12	9	"	10	8	2	1	1	10½	0	10½
A77	"	1	5	11	1	"	9	0	2	1	1	10½	0	10½
A78	Str.	1	5	7	4	"								
A79	Str.	1	#5	5	8	Wings								
A80	"	1	5	4	0	"								
A81	"	1	5	2	4	"								
A82	"	2	6	15	4	"								
A83	③	1	4	13	8	"	12	0	1	8	1	6	0	8½
A84	"	1	4	12	0	"	10	4	1	8	1	6	0	8½
A85	"	1	4	10	4	"	8	8	1	8	1	6	0	8½
A86	Str	1	4	7	0	"								
A87	"	1	4	5	4	"								
A88	"	1	4	3	8	"								
A89	"	1	4	2	0	"								
A90	③	8	5	33	8	"	31	7	2	1	0	11	1	10
A91	"	8	4	32	3	"	30	7	1	8	0	9	1	5½
A92	"	1	5	31	3	"	29	2	2	1	0	11	1	10
A93	"	1	5	27	11	"	25	10	2	1	0	11	1	10
A94	Str	1	5	22	6	"								
A95	"	1	5	19	4	"								
A96	"	1	5	15	10	"								
A97	"	1	5	12	10	"								
A98	"	1	5	9	6	"								
A99	"	1	5	6	2	"								
A100	"	2	6	32	6	"								
A101	③	1	4	30	8	"	29	0	1	8	0	9	1	5½
A102	"	1	4	27	4	"	25	8	1	8	0	9	1	5½
A103	Str	1	4	22	4	"								
A104	"	1	4	19	0	"								
A105	"	1	4	15	8	"								
A106	"	1	4	12	4	"								
A107	"	1	4	9	0	"								
A108	"	1	4	5	8	"								



Type ①



Type ②



Type ③

DESIGNED BY	DATE	CHECKED BY	DATE	REVISED	DATE
PW		JRO	5-67		
DETAILED BY	DATE	CHECKED BY	DATE	REVISED	DATE
PW		PW	5-67		
TRACED BY	DATE	CHECKED BY	DATE	REVISED	DATE
CEB					

ABUT. NO. 1

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

SUGAR CREEK RD. OVER W. FORK SUGAR CREEK SHEET 7

COMMONWEALTH OF KENTUCKY
BUREAU OF HIGHWAYS
FRANKFORT
COUNTY OF
GARRARD
SUGAR CREEK
ROAD

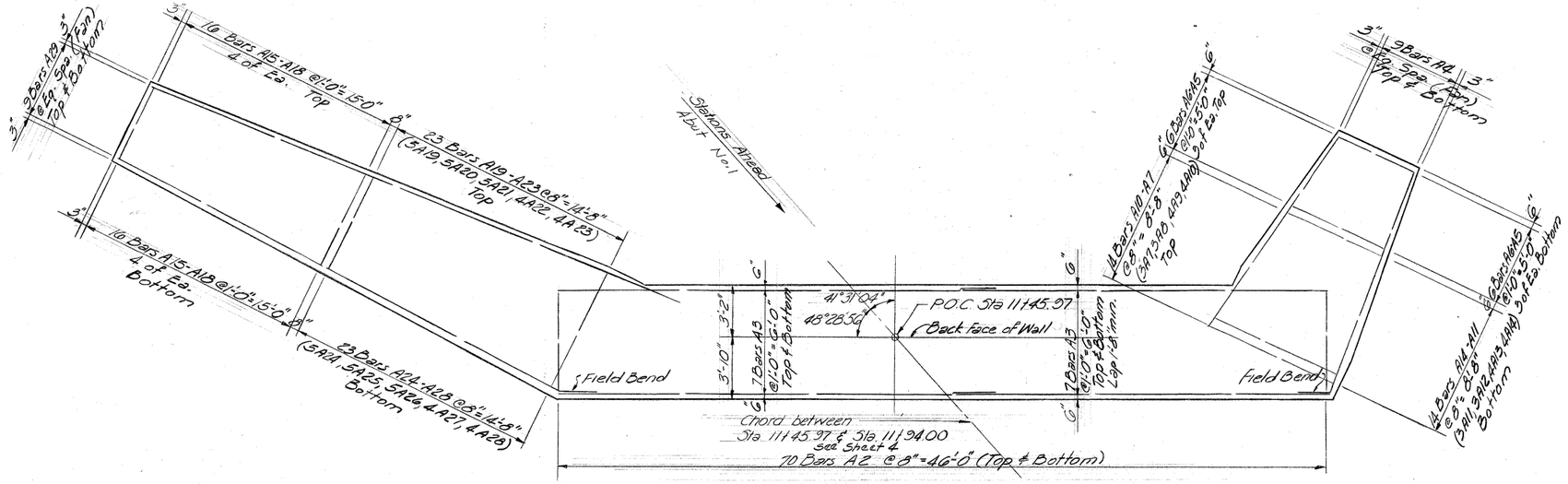
STATION 11+94.00 **PROJECT NO.**

BRIDGE NUMBER

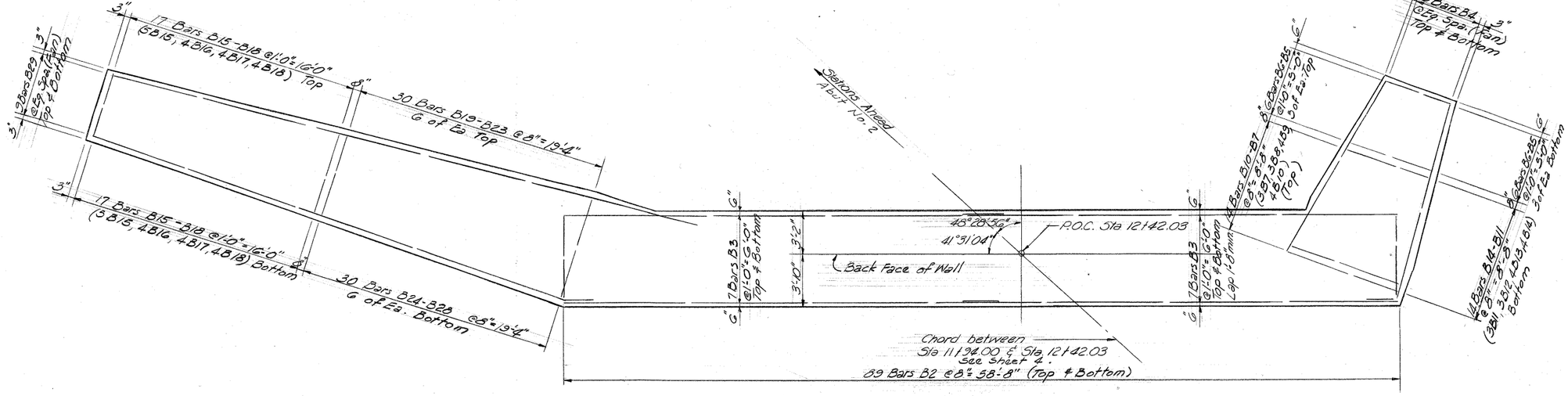
DRAWING NO. 17048

INDEX

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



PLAN OF FOOTING
ABUTMENT NO. 1
(Showing Footing Reinforcement)



PLAN OF FOOTING
ABUTMENT NO. 2

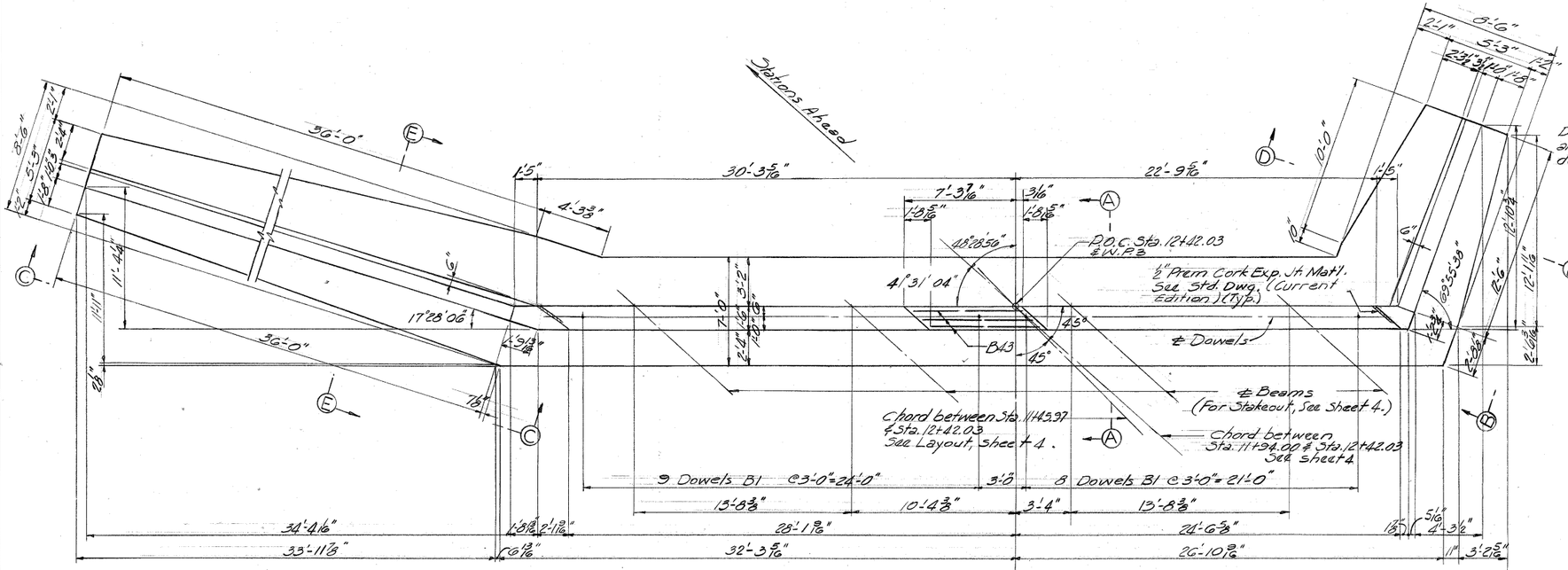
DESIGNED BY PW CHECKED BY JEO DATE 5-14-7
DETAILED BY CEB CHECKED BY PW DATE 5-14-7
TRACED BY CHECKED BY DATE
REVISED DATE
REVISED DATE
REVISED DATE

SUGAR CREEK RD OVER W FORK SUGAR CREEK SHEET 8

ABUTMENTS NO. 1 & NO. 2

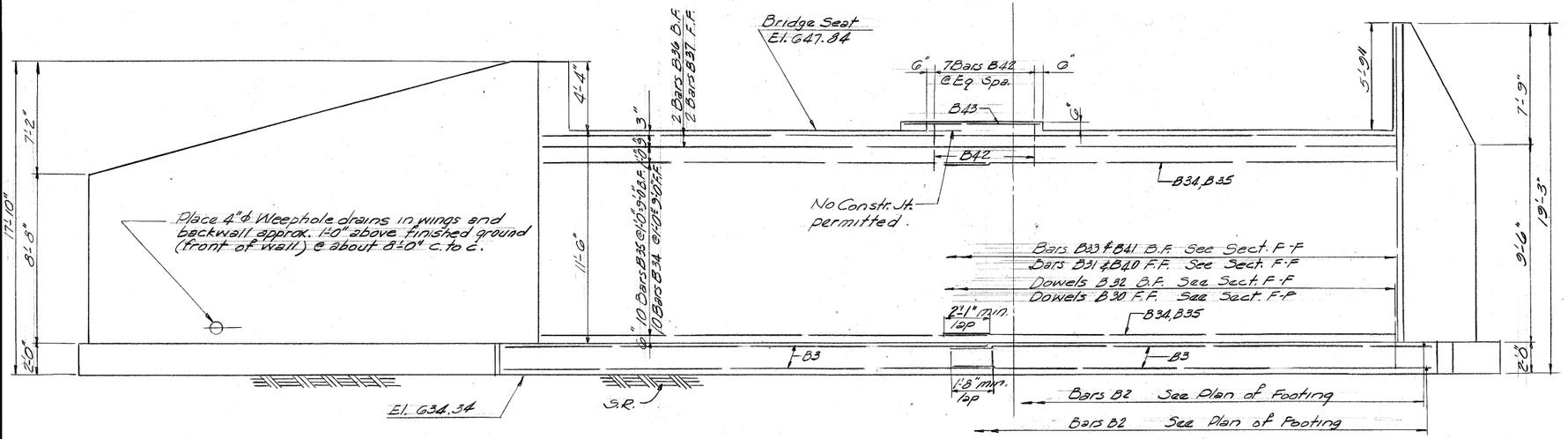
COMMONWEALTH OF KENTUCKY
BUREAU OF HIGHWAYS
FRANKFORT
COUNTY OF
GARRARD
SUGAR CREEK
ROAD
STATION 11+94.00 **PROJECT NO.**
BRIDGE NUMBER
DRAWING NO. 17048
INDEX

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



PLAN
(Showing Dimensions)

SECTION A-A



ELEVATION

ESTIMATE OF QUANTITIES

Concrete Class 'A'	118.5 Cu Yd.
Reinforcement	15414 Lb.

ABUTMENT NO. 2

DESIGNED BY PW — CHECKED BY JRD — DATE
DETAILED BY C.E.B. — CHECKED BY PW — DATE 5-67 — REVISED
TRACED BY — CHECKED BY — DATE — REVISED

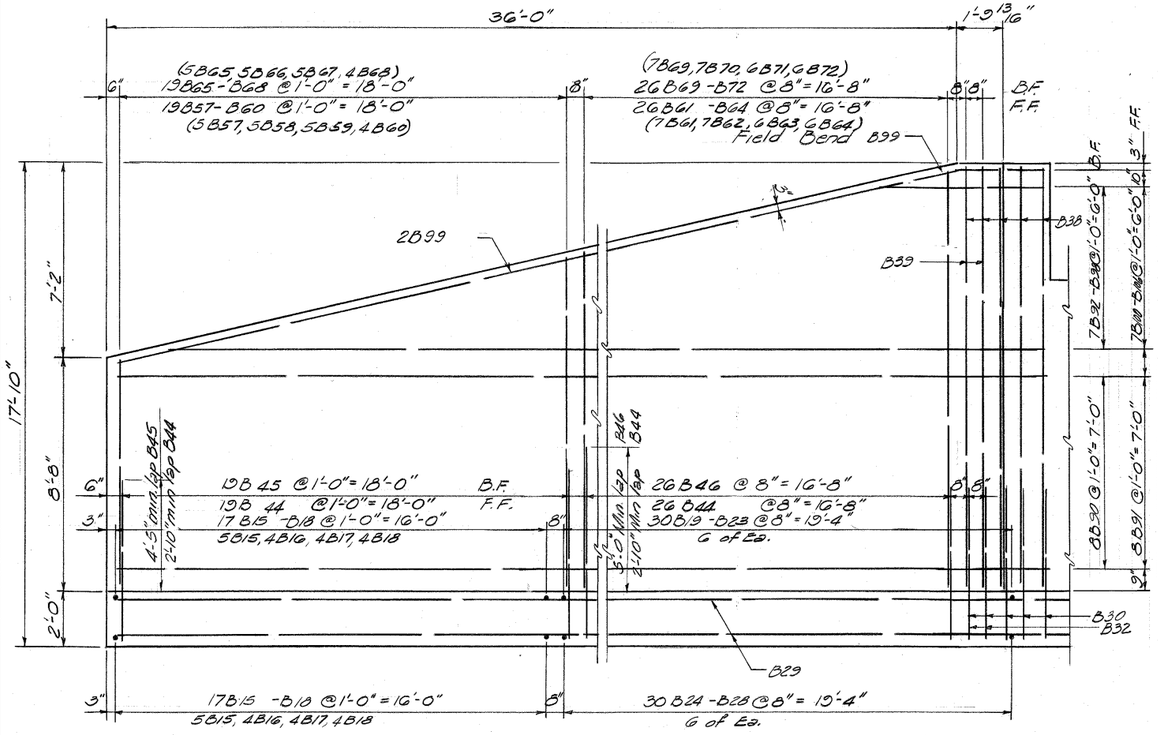
SUGAR CREEK RD OVER W FORK SUGAR CREEK SHEET 9

COMMONWEALTH OF KENTUCKY
BUREAU OF HIGHWAYS
FRANKFORT
COUNTY OF
GARRARD
SUGAR CREEK
ROAD

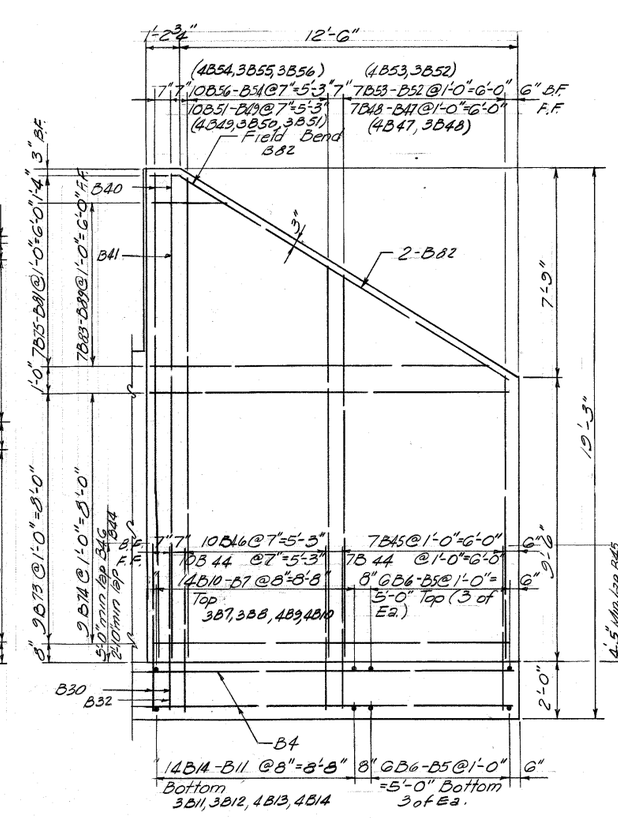
STATION 11+94.00 **PROJECT NO.**

BRIDGE NUMBER — DRAWING NO. 17048 — INDEX

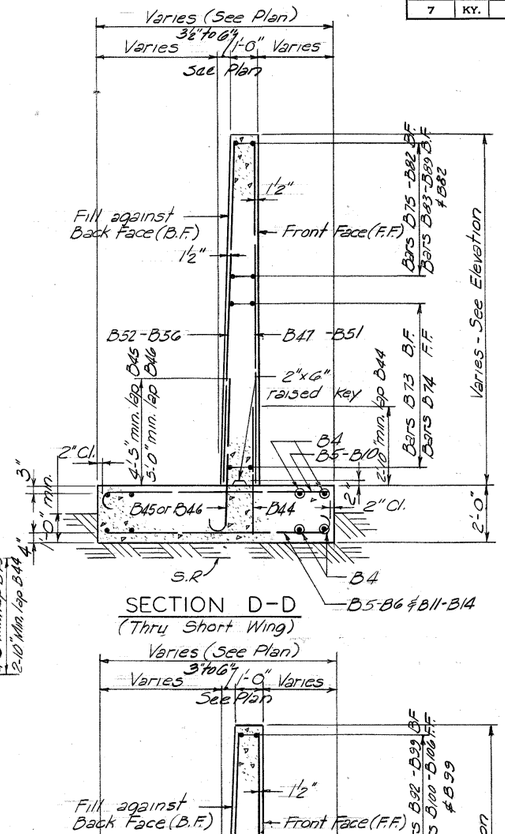
FED. ROAD DIST.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	KY.				



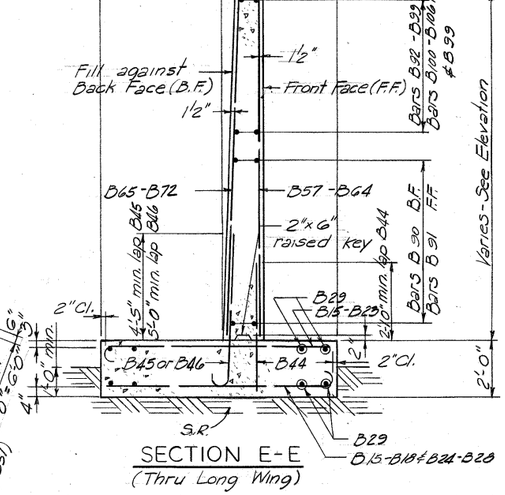
ELEVATION C-C



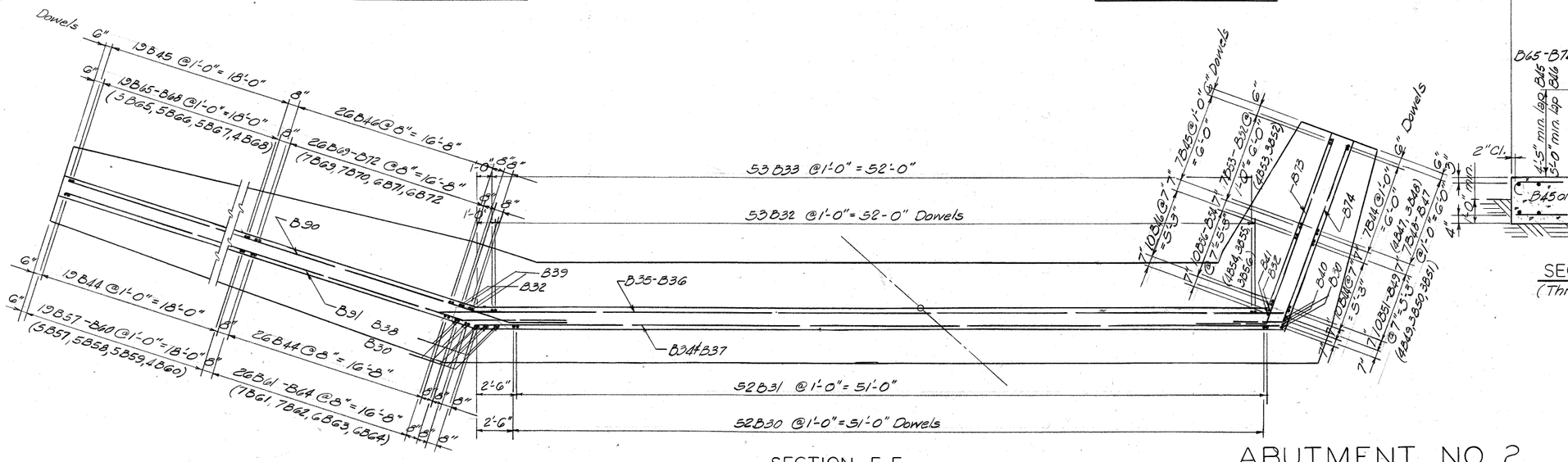
ELEVATION B-B



SECTION D-D
(Thru Short Wing)



SECTION E-E
(Thru Long Wing)



SECTION F-F

ABUTMENT NO. 2

SUGAR CREEK RD. OVER W. FORK SUGAR CREEK SHEET 10

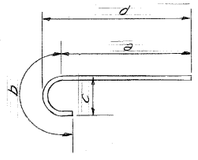
DESIGNED BY PW DATE
DETAILED BY CEB CHECKED BY PW DATE 5-67
TRACED BY CHECKED BY DATE
REVISED DATE 5-67
REVISED DATE
REVISED DATE

COMMONWEALTH OF KENTUCKY
BUREAU OF HIGHWAYS
FRANKFORT
COUNTY OF
GARRARD
SUGAR CREEK
ROAD
STATION 11+94.00 **PROJECT NO.**

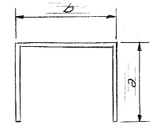
BRIDGE NUMBER | DRAWING NO. 17048 | INDEX

BILL OF REINFORCEMENT – ABUT NO. 2

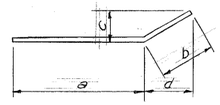
Mark	Type	No	Bar Size	Length Ft	Length In	Location	a Ft	a In	b Ft	b In	c Ft	c In	d Ft	d In
B1	Str.	17	#4	2	0	Dowels into Superstr.								
B2	①	178	6	7	5	Footing	6	5	1	0	0	6	6	8
B3	Str	28	4	30	3	"								
B4	"	18	4	15	1	"								
B5	①	6	6	5	11	"	4	11	1	0	0	6	5	2
B6	"	6	6	6	9	"	5	9	1	0	0	6	6	0
B7	"	3	8	7	10	"	6	4	1	6	0	10	6	9
B8	"	3	8	8	6	"	7	0	1	6	0	10	7	5
B9	"	4	8	9	0	"	7	6	1	6	0	10	7	11
B10	"	4	8	9	3	"	7	9	1	6	0	10	8	2
B11	"	3	6	7	3	"	6	3	1	0	0	6	6	9
B12	"	3	6	8	2	"	7	2	1	0	0	6	7	5
B13	"	4	6	8	8	"	7	8	1	0	0	6	7	11
B14	"	4	6	8	11	"	7	11	1	0	0	6	8	2
B15	"	10	6	5	9	"	4	3	1	0	0	6	5	0
B16	"	8	6	6	2	"	5	2	1	0	0	6	5	5
B17	"	8	6	6	6	"	5	6	1	0	0	6	5	9
B18	"	8	6	6	11	"	5	11	1	0	0	6	6	2
B19	"	6	7	7	5	"	6	3	1	2	0	7	6	6½
B20	"	6	7	7	9	"	6	7	1	2	0	7	6	10½
B21	"	6	7	8	1	"	6	11	1	2	0	7	7	2½
B22	"	6	7	8	6	"	7	4	1	2	0	7	7	7½
B23	"	6	7	8	11	"	7	9	1	2	0	7	8	0½
B24	"	6	6	7	3	"	6	3	1	0	0	6	6	6
B25	"	6	6	7	7	"	6	7	1	0	0	6	6	10
B26	"	6	6	7	11	"	6	11	1	0	0	6	7	2
B27	"	6	6	8	4	"	7	4	1	0	0	6	7	7
B28	"	6	6	8	9	"	7	9	1	0	0	6	8	0
B29	Str.	18	4	39	1	"								
B30	"	59	5	4	6	Wall Dowels								
B31	"	52	5	11	4	Wall								
B32	①	56	8	7	2	Wall Dowels	5	8	1	6	0	10	6	1
B33	Str	53	6	11	4	Wall								
B34	"	20	5	28	5	"								
B35	"	20	5	29	8	"								
B36	"	2	8	57	0	"								
B37	"	2	8	54	7	"								
B38	"	5	5	15	8	"								
B39	"	2	7	15	8	"								
B40	"	2	5	17	1	"								
B41	"	1	7	17	1	"								
B42	②	7	5	5	10	Key	2	0	2	0				
B43	Str.	3	5	7	3	"								
B44	"	62	5	4	6	Wing Dowels								
B45	①	26	8	7	2	" "	5	8	1	6	0	10	6	1
B46	"	36	9	7	11	" "	6	3	1	8	0	11¼	6	8¾
B47	Str.	4	5	9	7	Wings								
B48	"	3	5	12	1	"								
B49	"	4	5	13	8	"								
B50	"	3	5	15	2	"								
B51	"	3	5	16	2	"								
B52	"	4	7	9	7	"								
B53	"	3	7	12	1	"								
B54	"	4	7	13	8	"								
B55	"	3	7	15	2	"								
B56	"	3	7	16	2	"								
B57	"	5	5	8	6	"								
B58	"	5	5	9	6	"								
B59	"	5	5	10	6	"								
B60	"	4	5	11	6	"								
B61	"	7	5	12	2	"								
B62	"	7	5	13	2	"								
B63	"	6	5	14	1	"								
B64	"	6	5	14	10	"								
B65	"	5	7	8	6	"								
B66	"	5	7	9	6	"								
B67	"	5	7	10	6	"								
B68	"	4	7	11	6	"								
B69	"	7	7	12	2	"								
B70	"	7	7	13	2	"								
B71	"	6	7	14	1	"								
B72	"	6	7	14	10	"								
B73	③	9	5	15	10	"	13	9	2	1	2	0	0	7½
B74	"	9	4	15	2	"	13	6	1	8	1	7	0	6
B75	"	1	5	15	7	"	13	5	2	1	2	0	0	7½
B76	Str	1	5	11	9	"								
B77	"	1	5	10	2	"								
B78	"	1	5	8	6	"								
B79	Str.	1	5	6	11	Wings								
B80	"	1	5	5	4	"								
B81	"	1	5	3	9	"								
B82	Str.	2	6	15	6	"								
B83	③	1	4	14	10	"	13	2	1	8	1	7	0	6
B84	Str.	1	4	11	6	"								
B85	"	1	4	9	11	"								
B86	"	1	4	8	3	"								
B87	"	1	4	6	8	"								
B88	"	1	4	5	1	"								
B89	"	1	4	3	6	"								
B90	③	8	5	40	7	"	38	6	2	1	0	8½	1	11½
B91	"	8	4	39	2	"	37	6	1	8	0	7	1	7
B92	"	1	5	39	4	"	37	3	2	1	0	8½	1	11½
B93	"	1	5	34	4	"	32	3	2	1	0	8½	1	11½
B94	"	1	5	29	4	"	27	3	2	1	0	8½	1	11½
B95	Str	1	5	22	3	"								
B96	"	1	5	17	3	"								
B97	"	1	5	12	3	"								
B98	"	1	5	7	3	"								
B99	"	2	6	38	6	"								
B100	③	1	4	38	3	"	36	7	1	8	0	7	1	7
B101	"	1	4	33	3	"	31	7	1	8	0	7	1	7
B102	"	1	4	28	3	"	26	7	1	8	0	7	1	7
B103	Str	1	4	21	7	"								
B104	"	1	4	16	7	"								
B105	"	1	4	11	7	"								
B106	"	1	4	6	6	"								



Type ①



Type ②



Type ③

ABUT. NO. 2

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

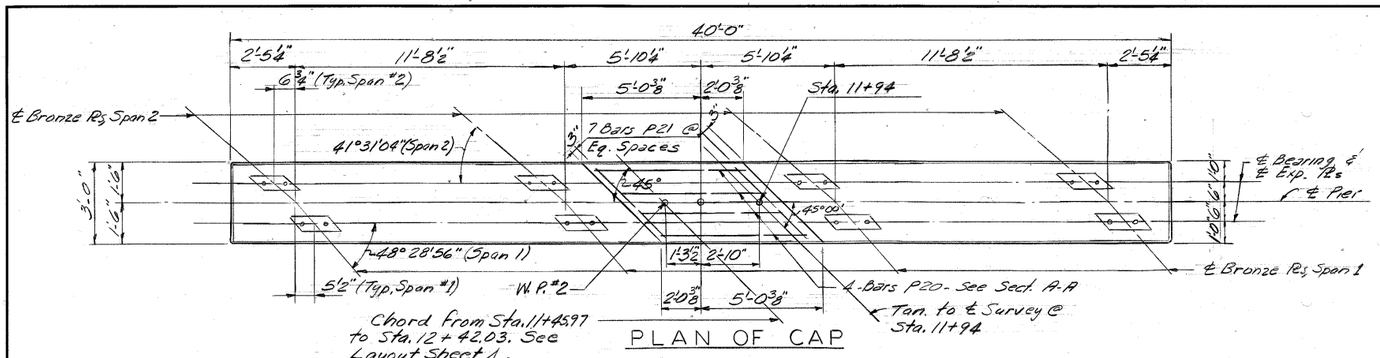
DESIGNED BY PW — DATE 5-67
DETAILED BY CEB — CHECKED BY PW — DATE 5-67
TRACED BY — CHECKED BY JRD — DATE
REVISED — DATE
REVISED — DATE
REVISED — DATE

SUGAR CREEK RD OVER W. FORK SUGAR CREEK SHEET 11

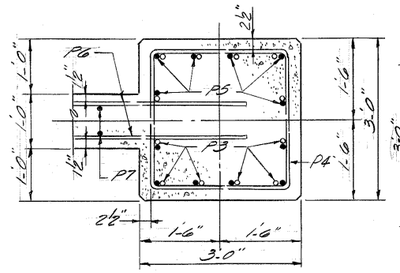
COMMONWEALTH OF KENTUCKY
BUREAU OF HIGHWAYS
FRANKFORT
COUNTY OF
GARRARD
SUGAR CREEK
ROAD
STATION 11+94.00 **PROJECT NO.**

BRIDGE NUMBER — DRAWING NO. 17048 — INDEX

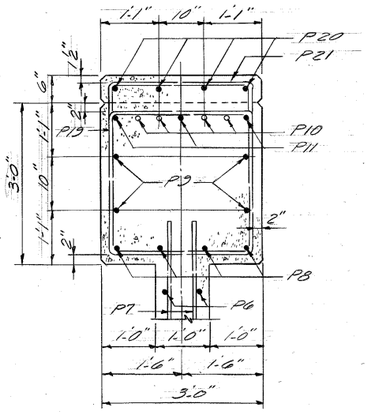
FED. ROAD DIST.	STATE	FED. AID PRO. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	KY.				



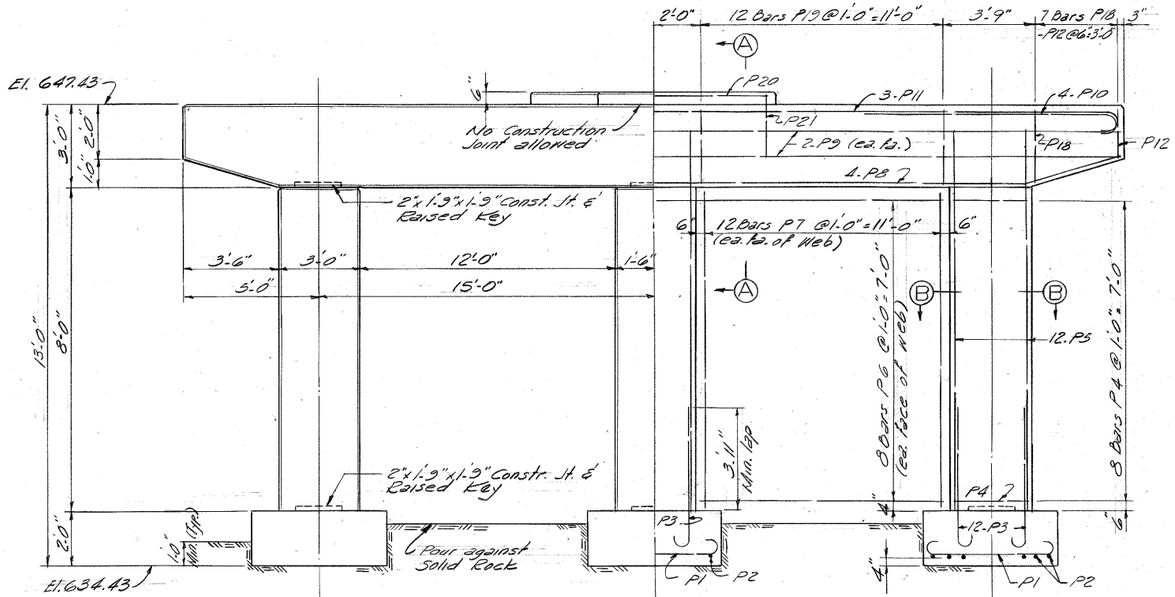
PLAN OF CAP



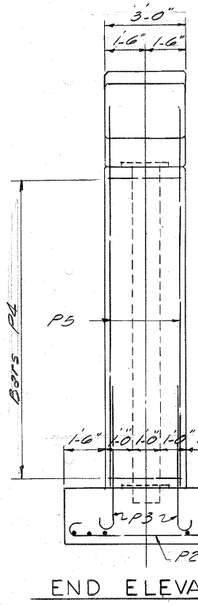
SECTION B-B



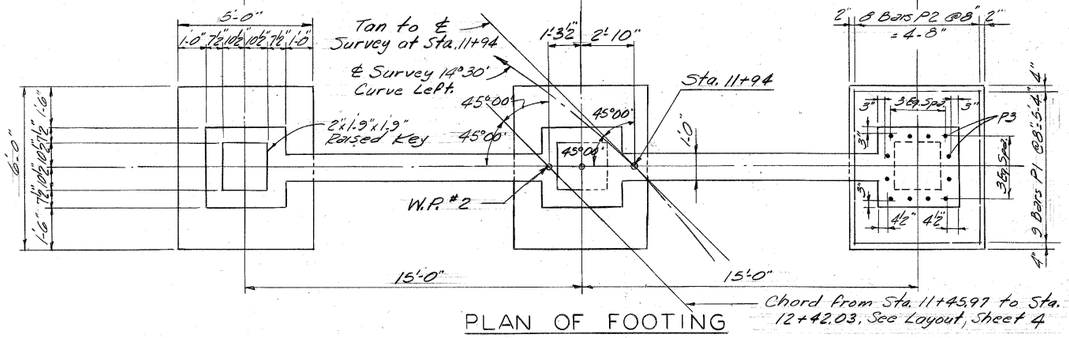
SECTION A-A



ELEVATION



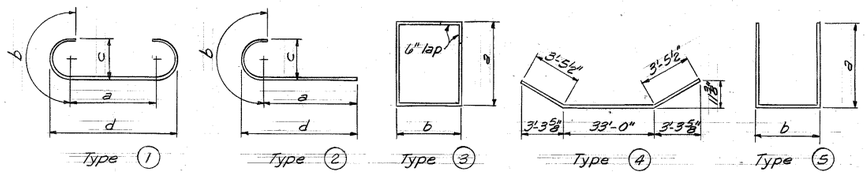
END ELEVATION



PLAN OF FOOTING

BILL OF REINFORCEMENT

Mark	Type	No.	Bar Size	Length Ft.	Length In.	Location	a Ft.	a In.	b Ft.	b In.	c Ft.	c In.	d Ft.	d In.
P1	①	27	#5	5	11	Footings	4	3	0	10	0	5	4	8
P2	"	24	"	5	6	"	5	3	0	10	0	5	5	8
P3	②	36	"	7	6	4	Column Dowels	5	2	1	2	0	7	5	5½
P4	③	24	"	4	11	7	" Hoops	2	7	2	7				
P5	Str.	36	"	7	10	6	Columns								
P6	"	32	"	4	14	6	Web Wall								
P7	"	48	"	4	10	0	" "								
P8	④	4	"	8	39	11	Cap (Bottom)								
P9	Str.	4	"	6	39	8	Cap (Sides)								
P10	②	8	"	11	9	11	Cap (Top)	7	11	2	0	1	2	8	6
P11	①	3	"	11	42	6	" "	38	6	2	0	1	2	39	8
P12	③	2	"	5	9	7	Cap Stirrups	1	9	2	8				
P13	"	2	"	5	9	10	" "	1	10½	2	8				
P14	"	2	"	5	10	1	" "	2	0	2	8				
P15	"	2	"	5	10	4	" "	2	1½	2	8				
P16	"	2	"	5	10	7	" "	2	3	2	8				
P17	"	2	"	5	10	10	" "	2	4½	2	8				
P18	"	2	"	5	11	1	" "	2	6	2	8				
P19	"	24	"	5	11	5	" "	2	8	2	8				
P20	Str.	4	"	5	6	8	Key								
P21	⑤	7	"	5	9	0	"	2	8	3	10				



ESTIMATE OF QUANTITIES

Concrete Class A	35.9 Cu. Yd.
Reinforcement	4680. Lbs.

DESIGNED BY JRD — CHECKED BY — DATE
DETAILED BY DW — CHECKED BY — DATE 5-67
TRACED BY — CHECKED BY — DATE
REVISED — DATE 5-67
REVISED — DATE
REVISED — DATE

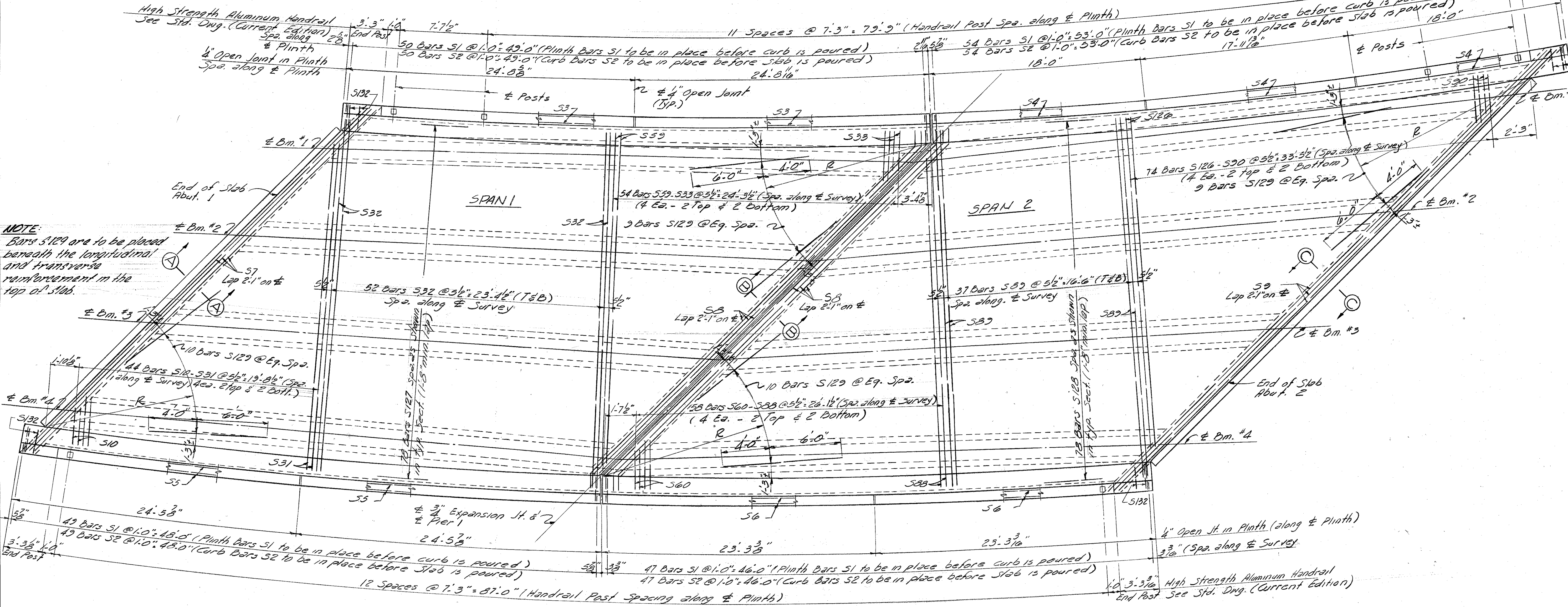
SUGAR CK. RD. OVER W. FORK SUGAR CREEK SHEET 12

COMMONWEALTH OF KENTUCKY
BUREAU OF HIGHWAYS
FRANKFORT
COUNTY OF
GARRARD
SUGAR CREEK
ROAD
STATION 11+94.00 **PROJECT NO.**

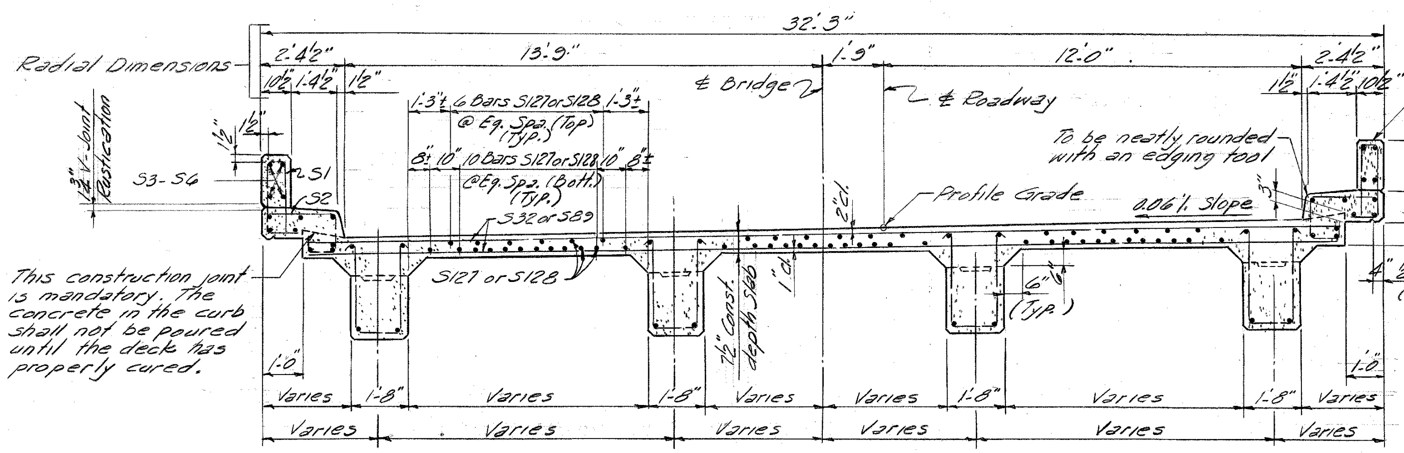
BRIDGE NUMBER — DRAWING NO. 17048 — INDEX

PIER 1

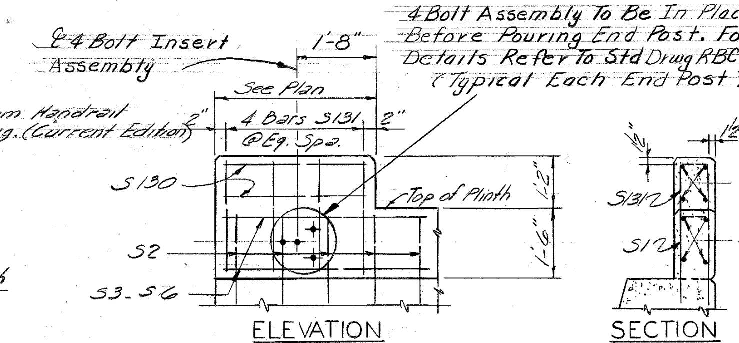
FED. ROAD DIST.	STATE	FED. AID PRO. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	KY.				



PLAN



TYPICAL SECTION THRU DECK
(Looking Ahead)



END POST DETAILS

Note: Bars S131 to be in place before pouring curbs

NOTE

For drain layout, See Sheet # 14.
For drain details, See Sheet # 16.
For location of dowels & Exp. plates, see substructure details and layout Sheet 3.
For Beam and Slab layout, see Sheet # 4.

ESTIMATE OF QUANTITIES

Concrete, Class "AA"	185.4 Cu. Yds.
Reinforcement	47539 Lbs.

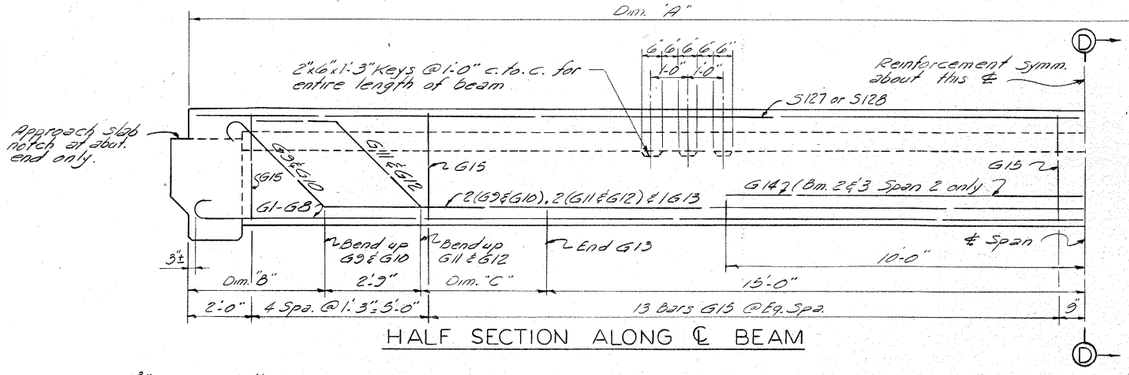
SUPERSTRUCTURE

SUGAR CK. RD. OVER W. FORK SUGAR CK. SHEET 13

COMMONWEALTH OF KENTUCKY
BUREAU OF HIGHWAYS
FRANKFORT
COUNTY OF
GARRARD
SUGAR CREEK
ROAD
STATION 11 + 94.00
PROJECT NO.
BRIDGE NUMBER
DRAWING NO. 17048
INDEX

DESIGNED BY — CHECKED BY — DATE 5-67
DETAILED BY — CHECKED BY — DATE 5-67
TRACED BY — CHECKED BY — DATE
REVISED — DATE
REVISED — DATE
REVISED — DATE

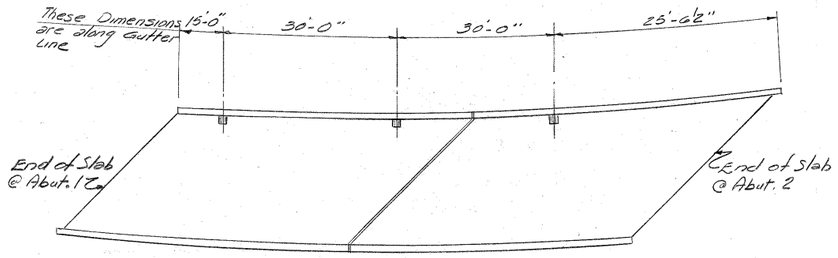
FED. ROAD DIST.	STATE	FED. AID PRO. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	KY.				



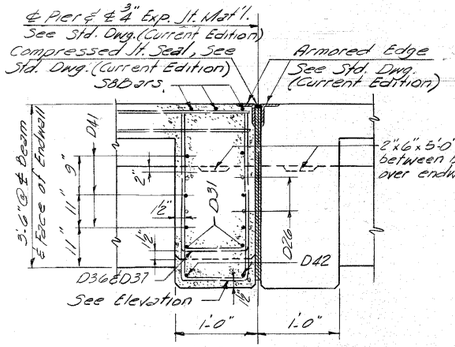
HALF SECTION ALONG ℄ BEAM

TABLE OF DIMENSIONS

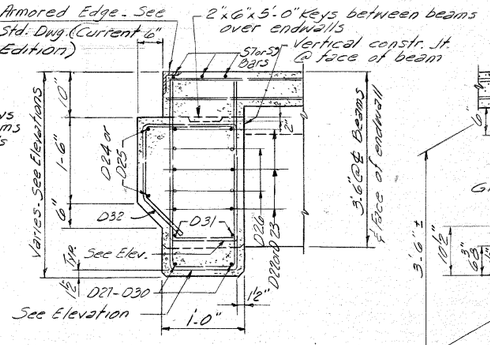
		Dim. "A"	Dim. "B"	Dim. "C"
SPAN 1	Beam #1	43'-7 15/16"	4'-0"	3'-1"
	Beam #2	48'-8 15/16"	3'-6 1/16"	3'-1"
	Beam #3	47'-3 3/16"	4'-3 1/16"	1'-10 1/2"
	Beam #4	46'-11 1/4"	3'-10 5/16"	1'-10 1/2"
SPAN 2	Beam #1	50'-3 1/16"	4'-6 5/8"	3'-1"
	Beam #2	49'-3 1/4"	3'-9 3/8"	3'-1"
	Beam #3	47'-3 3/16"	4'-3 1/16"	1'-10 1/2"
	Beam #4	46'-3 3/8"	3'-6 1/16"	1'-10 1/2"



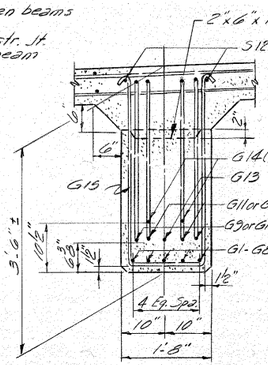
DRAINS LAYOUT
(For drain details see Sh. 10.)



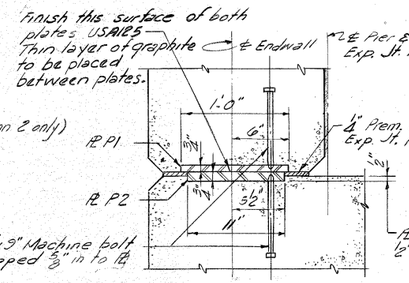
SECTION B-B



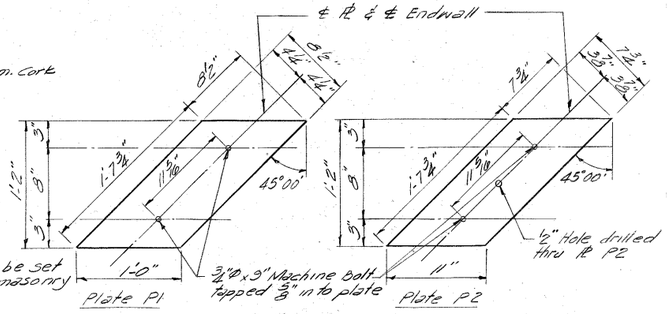
SECTION C-C & SECTION A-A



SECTION D-D

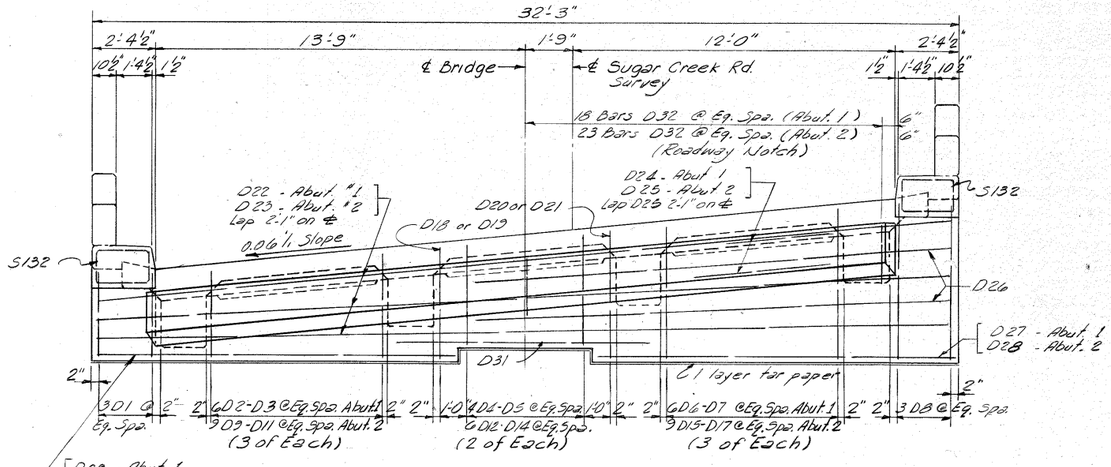


TYPICAL SECTION - THRU PLATES ON ℄ GIRDER AT PIER

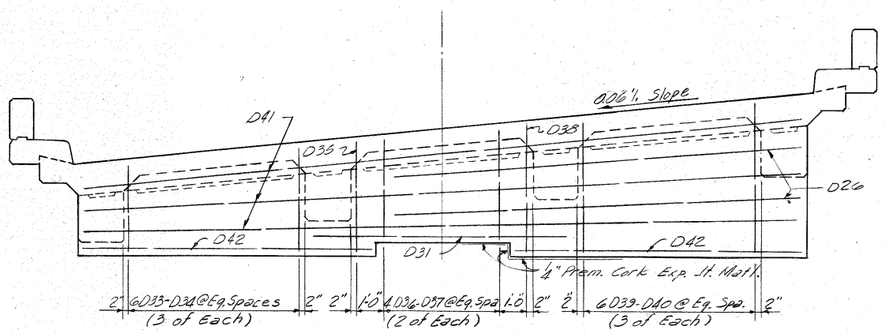


DETAILS OF EXPANSION PLATES AT PIER

Plate P1 - Weight = 40 Lbs., 8 Required;
Plate P2 - Weight = 36 Lbs., 8 Required.



ENDWALL ELEVATION - ABUTMENT 1
Abutment 2 Opposite hand
(Dimensions shown are on radial line looking ahead)



ENDWALL ELEVATION AT PIER

SUPERSTRUCTURE

SUGAR CK. RD. OVER W. FORK SUGAR CK. SHEET 14

COMMONWEALTH OF KENTUCKY
BUREAU OF HIGHWAYS
FRANKFORT
COUNTY OF
GARRARD
SUGAR CREEK
ROAD
STATION 11+94.00 PROJECT NO.

BRIDGE NUMBER	DRAWING NO.	INDEX
	17048	

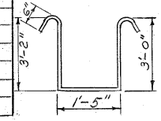
DESIGNED BY: RCJ DATE: 5-67
DETAILED BY: RCJ DATE: 5-67
TRACED BY: DATE
CHECKED BY: CEP DATE
CHECKED BY: CEP DATE
CHECKED BY: DATE
REVISED. DATE
REVISED. DATE
REVISED. DATE

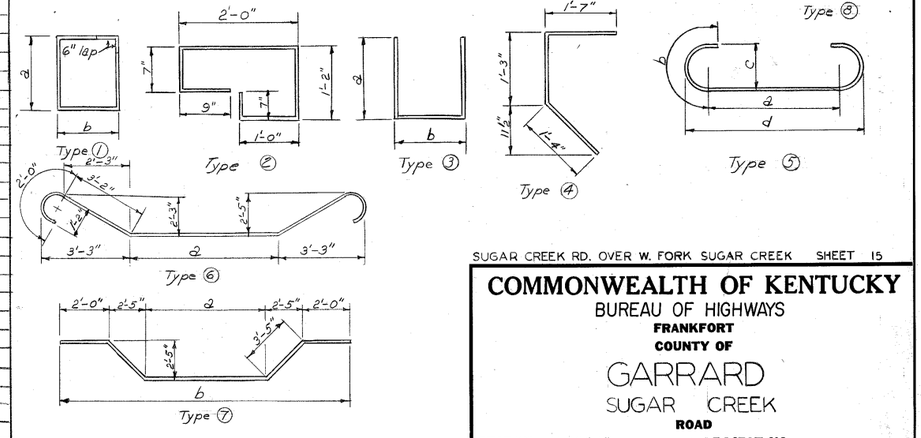
FED. ROAD DIST.	STATE	FED. AID PRO. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	KY.				

BILL OF REINFORCEMENT - SUPERSTRUCTURE

Mark	Type	No	Bar Size	Length Ft	Length In	Location	a Ft	a In	b Ft	b In	c Ft	c In	d Ft	d In
S1	①	200	5	6	2	Plinths	2	1	0	7½				
S2	②	200	5	5	10	Curbs								
S3	Str.	8	4	24	5	Plinth								
S4	Str.	12	4	17	8	"								
S5	"	8	4	24	1	"								
S6	"	8	4	23	0	"								
S7	"	6	5	21	3	End of Slab (Abut①)								
S8	"	12	5	22	4	End of Slab (Pier)								
S9	"	6	5	27	6	End of Slab (Abut②)								
S10	"	4	5	3	3	Slab								
S11	"	4	5	4	5	"								
S12	"	4	5	5	6	"								
S13	"	4	5	6	7	"								
S14	"	4	5	7	9	"								
S15	"	4	5	8	10	"								
S16	"	4	5	10	0	"								
S17	"	4	5	11	2	"								
S18	"	4	5	12	3	"								
S19	"	4	5	13	4	"								
S20	"	4	5	14	6	"								
S21	"	4	5	15	7	"								
S22	"	4	5	16	9	"								
S23	"	4	5	17	10	"								
S24	"	4	5	19	0	"								
S25	"	4	5	20	2	"								
S26	"	4	5	21	3	"								
S27	"	4	5	22	4	"								
S28	"	4	5	23	6	"								
S29	"	4	5	24	8	"								
S30	"	4	5	25	9	"								
S31	"	4	5	26	11	"								
S32	"	104	5	29	11	"								
S33	"	4	5	3	11	"								
S34	"	4	5	4	10	"								
S35	"	4	5	5	8	"								
S36	"	4	5	6	7	"								
S37	"	4	5	7	5	"								
S38	"	4	5	8	4	"								
S39	"	4	5	9	2	"								
S40	"	4	5	10	1	"								
S41	"	4	5	11	0	"								
S42	"	4	5	11	10	"								
S43	"	4	5	12	9	"								
S44	"	4	5	13	7	"								
S45	"	4	5	14	6	"								
S46	"	4	5	15	5	"								
S47	"	4	5	16	4	"								
S48	"	4	5	17	2	"								
S49	"	4	5	18	1	"								
S50	"	4	5	18	11	"								
S51	"	4	5	19	10	"								
S52	"	4	5	20	9	"								
S53	"	4	5	21	7	"								
S54	"	4	5	22	6	"								
S55	"	4	5	23	4	"								
S56	"	4	5	24	3	"								
S57	"	4	5	25	2	"								
S58	"	4	5	26	0	"								
S59	"	4	5	26	11	"								
S60	"	4	5	2	7	"								
S61	"	4	5	3	5	"								
S62	"	4	5	4	4	"								
S63	"	4	5	5	2	"								
S64	"	4	5	6	1	"								
S65	"	4	5	6	11	"								
S66	"	4	5	7	10	"								
S67	"	4	5	8	8	"								
S68	"	4	5	9	6	"								
S69	"	4	5	10	5	"								
S70	"	4	5	11	4	"								
S71	"	4	5	12	2	"								
S72	"	4	5	13	0	"								
S73	"	4	5	13	11	"								
S74	"	4	5	14	9	"								
S75	"	4	5	15	8	"								
S76	"	4	5	16	6	"								
S77	"	4	5	17	5	"								
S78	"	4	5	18	3	"								
S79	Str.	4	5	19	2	Slab								
S80	"	4	5	20	0	"								
S81	"	4	5	20	10	"								
S82	"	4	5	21	9	"								
S83	"	4	5	22	7	"								
S84	"	4	5	23	6	"								
S85	"	4	5	24	4	"								
S86	"	4	5	25	3	"								
S87	"	4	5	26	1	"								
S88	"	4	5	27	0	"								
S89	"	74	5	29	11	"								
S90	"	4	5	2	3	"								
S91	"	4	5	2	11	"								
S92	"	4	5	3	7	"								
S93	"	4	5	4	3	"								
S94	"	4	5	5	0	"								
S95	"	4	5	5	8	"								
S96	"	4	5	6	4	"								
S97	"	4	5	7	1	"								
S98	"	4	5	7	9	"								
S99	"	4	5	8	5	"								
S100	"	4	5	9	1	"								
S101	"	4	5	9	10	"								
S102	"	4	5	10	6	"								
S103	"	4	5	11	2	"								
S104	"	4	5	11	10	"								
S105	"	4	5	12	6	"								
S106	"	4	5	13	3	"								
S107	"	4	5	13	11	"								
S108	"	4	5	14	7	"								
S109	"	4	5	15	4	"								
S110	"	4	5	16	0	"								
S111	"	4	5	16	8	"								
S112	"	4	5	17	4	"								
S113	"	4	5	18	0	"								
S114	"	4	5	18	9	"								
S115	"	4	5	19	5	"								
S116	"	4	5	20	1	"								
S117	"	4	5	20	10	"								
S118	"	4	5	21	6	"								
S119	"	4	5	22	2	"								
S120	"	4	5	22	10	"								
S121	"	4	5	23	6	"								
S122	"	4	5	24	3	"								
S123	"	4	5	24	11	"								
S124	"	4	5	25	7	"								
S125	"	4	5	26	3	"								
S126	"	4	5	27	0	"								
S127	"	156	4	25	6	"								
S128	"	156	4	26	1	"								
S129	"	38	6	10	0	Slab acute Corners								
S130	Str.	16	4	2	11	Railing End Posts								
S131	①	16	4	8	6	Railing End Posts	3	3	0	7½				
S132	"	8	5	7	1	Curbs at ends of Bridge	1	2	2	0				
D1	③	6	4	7	5	Endwalls	3	3	1	1				
D2	"	3	4	7	7	" Abut. 1	3	4	1	1				
D3	"	3	4	8	3	" "	3	7	1	1				
D4	"	2	4	7	7	" "	3	4	1	1				
D5	"	2	4	7	11	" "	3	6	1	1				
D6	"	3	4	9	5	" "	4	3	1	1				
D7	"	3	4	9	9	" "	4	5	1	1				
D8	"	6	4	10	3	Endwalls	4	8	1	1				
D9	"	3	4	7	7	" Abut. 2	3	4	1	2				
D10	"	3	4	7	10	" "	3	5½	1	2				
D11	"	3	4	8	1	" "	3	7	1	2				
D12	"	2	4	7	6	" "	3	3½	1	2				
D13	"	2	4	7	9	" "	3	5	1	2				
D14	"	2	4	8	0	" "	3	6½	1	2				
D15	"	3	4	9	3	" "	4	2	1	2				
D16	"	3	4	9	6	" "	4	3½	1	2				
D17	"	3	4	9	9	" "	4	5	1	2				
D18	"	1	4	8	5	Endwall Abut. 1	3	9	1	1				
D19	"	1	4	8	4	" Abut. 2	3	8½	1	2				
D20	"	1	4	9	1	Endwall Abut. 1	4	1	1	1				
D21	"	1	4	9	2	" Abut. 2	4	1½	1	2				

Mark	Type	No.	Size	Length Ft.	Length In.	Location	a Ft.	a In.	b Ft.	b In.	c Ft.	c In.	d Ft.	d In.
D22	Str.	12	#5	21	6	Endwall Abut. 1								
D23	"	12	5	27	4	" Abut. 2								
D24	"	2	5	34	8	" Abut. 1								
D25	"	4	5	23	5	" Abut. 2								
D26	"	16	5	28	0	Endwalls								
D27	"	2	5	16	9	" Abut 1								
D28	"	2	5	22	2	" Abut 2								
D29	"	2	5	16	11	" Abut 1								
D30	"	2	5	22	7	" Abut 2								
D31	"	8	5	11	8	Endwalls								
D32	④	80	5	4	0	Appr. Slab Notch								
D33	③	6	4	7	5	Endwall at Pier	3	3	1	1				
D34	"	6	4	7	11	" " "	3	6	1	1				
D35	"	2	4	8	5	" " "	3	3	1	1				
D36	"	4	4	7	3	" " "	3	2	1	1				
D37	"	4	4	7	7	" " "	3	4	1	1				
D38	"	2	4	9	1	" " "	4	1	1	1				
D39	"	6	4	9	3	" " "	4	2	1	1				
D40	"	6	4	9	9	" " "	4	5	1	1				
D41	"	12	5	37	2	" " "								
D42	"	8	5	14	11	" " "								
G1	⑤	5	#11	52	0	Beams	48	0	2	0	1	2	49	2
G2	"	5	11	51	1	"	47	1	2	0	1	2	48	3
G3	"	5	11	50	2	"	46	2	2	0	1	2	47	4
G4	"	5	11	49	3	"	45	3	2	0	1	2	46	5
G5	"	5	11	53	1	"	49	1	2	0	1	2	50	3
G6	"	5	11	51	7	"	47	7	2	0	1	2	48	9
G7	"	5	11	50	1	"	46	1	2	0	1	2	47	3
G8	"	5	11	48	8	"	44	8	2	0	1	2	45	10
G9	⑥	8	11	52	0	Beams 1 & 2	41	8						
G10	⑥	8	11	49	7	Beams 3 & 4	39	3						
G11	⑦	8	11	45	3	Beams	34	5	43	3				
G12	⑦	8	11	44	7	"	33	9	42	7				
G13	Str.	8	11	30	0	"								
G14	Str.	4	11	20	0	"								
G15	⑤	272	4	8	4	"								





SUPERSTRUCTURE

SUGAR CREEK RD. OVER W. FORK SUGAR CREEK SHEET 15

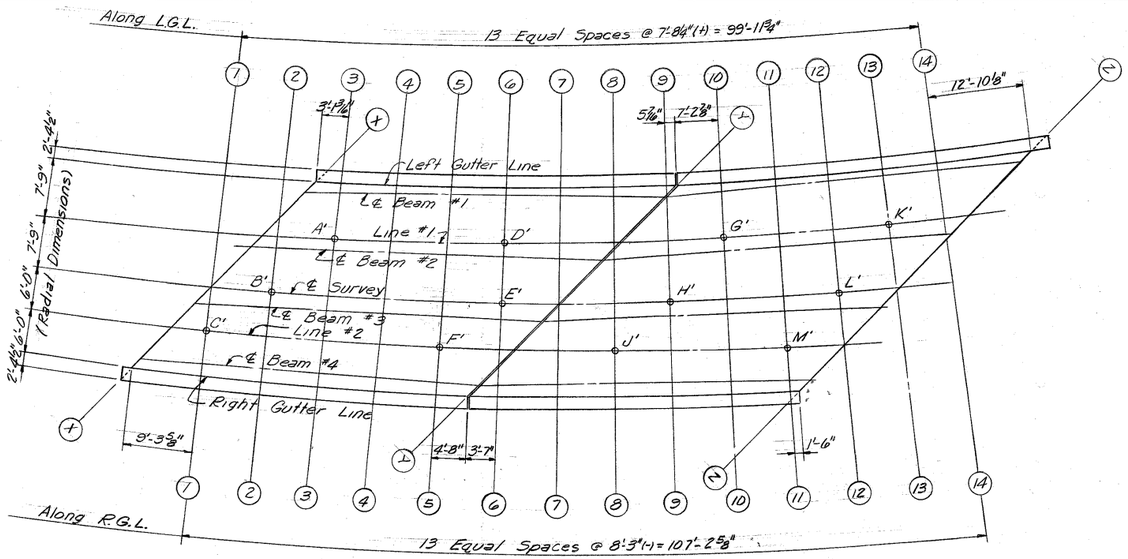
COMMONWEALTH OF KENTUCKY
BUREAU OF HIGHWAYS
FRANKFORT
COUNTY OF
GARRARD
SUGAR CREEK
ROAD

STATION 11+94.00 **PROJECT NO.**

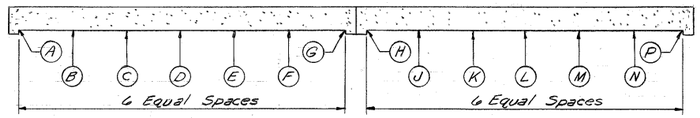
BRIDGE NUMBER | DRAWING NO. 17048 | INDEX

DESIGNED BY DW DATE 5-61
DETAILED BY HL DATE 5-61
TRACED BY DATE
CHECKED BY DEB DATE
CHECKED BY DEB DATE
REVISED DATE
REVISED DATE

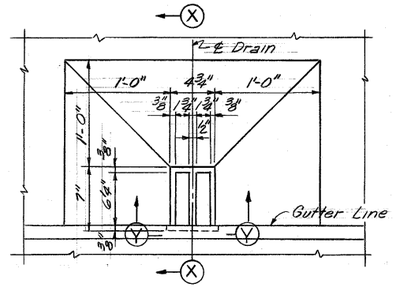
FED. ROAD DIST.	STATE	FED. AID PRO. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	KY.				



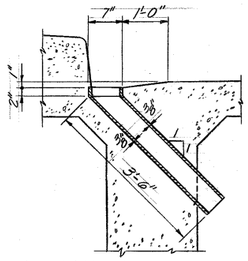
PLAN
(Showing Top of Slab Elevations)



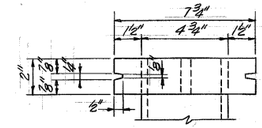
SECTION ON ℄ BEAM
(Showing Bottom of Beam Elevations)



PART PLAN



PART SECTION X-X



PART SECTION Y-Y

Showing details of lug on floor drains

DETAILS OF FLOOR DRAINS

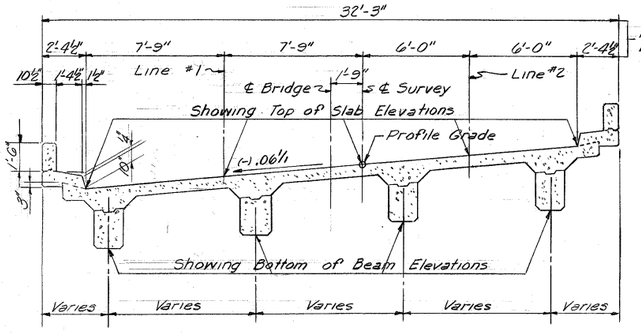
3 Cast Iron drains required. For spacing see sketch on Sh.14.
Foundry Note: All drains shall be gray iron castings, ASTM A48, Class 30A Report of field inspection of castings, current form, shall be submitted to the Division of Materials.

TABLE OF ELEVATIONS FOR CONTROL OF SLAB THICKNESS

Check Points	Top of Slab Elev.	Bott. of Slab Elev	Computed Slab Thick
A'	651.203		
B'	.603		
C'	.834		
D'	.404		
E'	.861		
F'	652.184		
G'	651.661		
H'	652.065		
J'	.372		
K'	651.855		
L'	652.250		
M'	.571		

TABLE OF ELEVATION

	TOP OF SLAB					BOTTOM OF BEAM				
Section	Left Gutter	Line #1	℄ Survey	Line #2	Right Gutter Line	Section	Beam #1	Beam #2	Beam #3	Beam #4
1 - 1	——	——	651.524	651.894	652.259	A	647.291	647.720	648.153	648.596
2 - 2	——	651.125	.603	.982	.354	B	.369	.796	.227	.670
3 - 3	650.732	.203	.676	652.062	.399	C	.442	.867	.296	.738
4 - 4	.807	.275	.744	.128	.458	D	.509	.932	.359	.801
5 - 5	.877	.344	.806	.184	.514	E	.570	.991	.416	.860
6 - 6	.943	.404	.861	.227	.575	F	.626	648.044	.468	.908
7 - 7	651.003	.462	.912	.287	.633	G	.676	.092	.514	.954
8 - 8	.060	.512	.991	.372	.723	H	.699	.115	.537	.977
9 - 9	.115	.589	652.065	.451	.787	J	.778	.191	.611	649.050
10-10	.187	.661	.132	.516	.845	K	.852	.262	.679	.117
11 - 11	.261	.732	.194	.571	.896	L	.920	.327	.742	.179
12 -12	.331	.795	.250	——	——	M	.982	.386	.798	.234
13 - 13	.396	.855	.301	——	——	N	648.038	.440	.849	.284
14 - 14	.455	.907	——	——	——	P	.089	.488	.894	.328
X - X	650.697	——	651.524	——	652.171					
Y - Y	651.116	——	.912	——	.540					
Z - Z	.543	——	652.301	——	.903					



TYPICAL SECTION

NOTE

Elevations on this sheet include construction camber and are to be maintained with falsework in place. After the slab forms are erected and before the slab reinforcement is placed, the Resident Engineer shall take field elevations at the slab thickness check points and enter them in the table in the space provided. The slab thickness shall then be computed. If the computed thickness varies more than ¼" from the plan thickness allowing 1/360 of the slab span for deflection of the form work, the form shall be adjusted until the computed slab thickness is within the tolerance allowed.

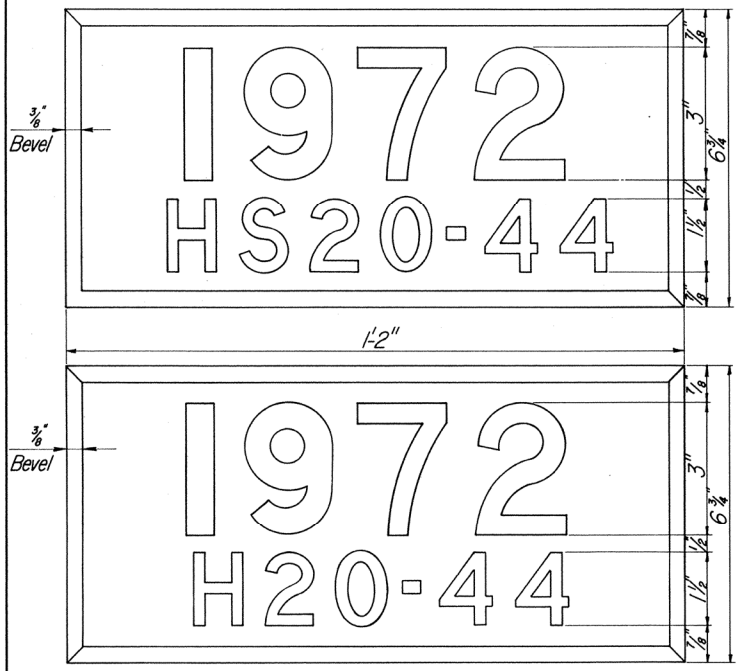
ELEVATIONS

DESIGNED BY DW DATE
DETAILED BY TB DATE 5-61 REVISED
TRACED BY DATE 5-61 REVISED
CHECKED BY DATE
CHECKED BY DATE

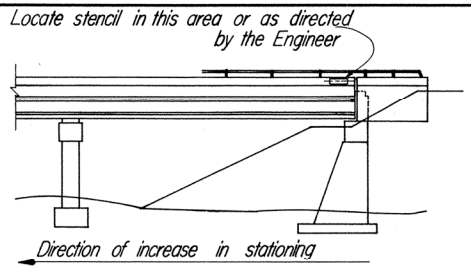
SUGAR CK. RD. OVER WEST FORK SUGAR CK. SHEET 16

COMMONWEALTH OF KENTUCKY
BUREAU OF HIGHWAYS
FRANKFORT
COUNTY OF
GARRARD
SUGAR CREEK
ROAD
STATION 11 + 94.00 PROJECT NO.

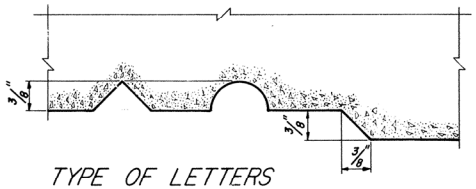
BRIDGE NUMBER	DRAWING NO.	INDEX
	17048	



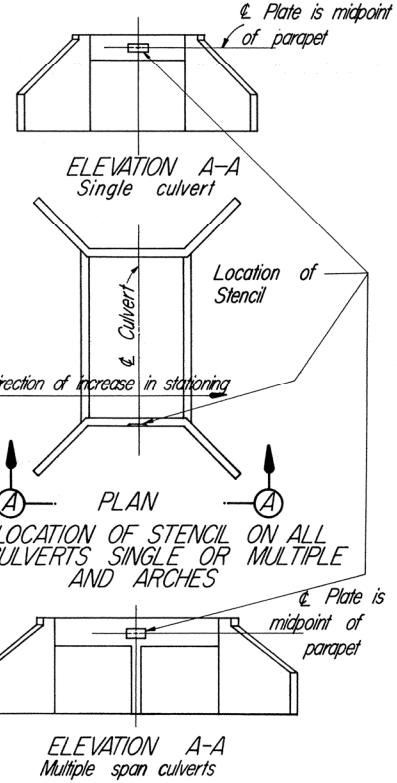
INSCRIPTION FOR STANDARD STENCIL
WHEN DATE ONLY IS USED. PLACE DATE IN CENTER OF PLATE



LOCATION OF STENCIL ON BRIDGES



TYPE OF LETTERS



LOCATION OF STENCIL ON ALL CULVERTS SINGLE OR MULTIPLE AND ARCHES

GENERAL NOTES

SPECIFICATIONS: Kentucky Department of Highways Standard Specifications for Road and Bridge Construction, current edition with revisions.

CONSTRUCTION DATE: Year shown on stencil shall be that in which Contract for Structure is executed. The stencils shall be used for all bridges and culverts in accordance with paragraph 404.3.1J of the Specifications. Stencil shall be made in a depressed panel approximately 6 3/4" x 3/16" x 1'-2" and having beveled edges. Stencil shall be made by the use of a plate with beveled edges and raised letters and figures. If structure is designed for loading other than shown above change to agree with design loading shown on plans. The stencil showing date and loading shall be used for all structures classified as bridges, except multi span culverts. The stencil showing date only shall be used for culverts with individual spans of less than 20 feet. The contractors' name plate, when required, shall be located in the near vicinity to the date plate, as directed by the Engineer.

DRAWN L. L. Sisco 12-71
CHECKED J. Yankum 1-72
RECOMMENDED S. J. Adams 1-72

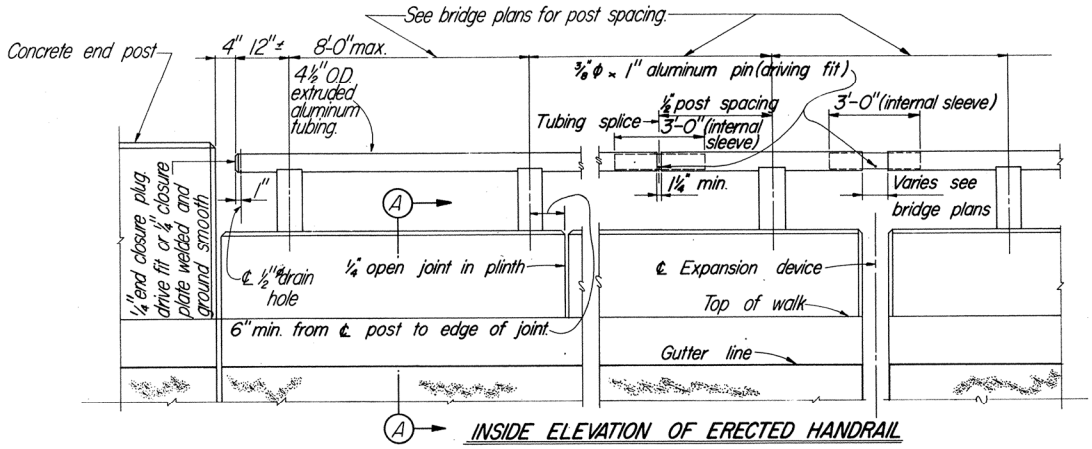
KENTUCKY DEPARTMENT OF HIGHWAYS

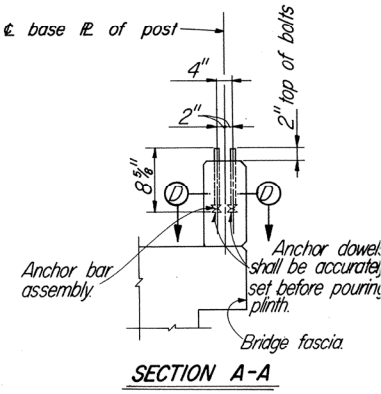
STENCIL CONSTRUCTION DATE FOR BRIDGES

STANDARD DRAWING No. **BGX-006**

SUBMITTED C. Carlos M. Cook, DIRECTOR DIVISION OF BRIDGES — 1/31/72 DATE

APPROVED T. C. Madison, STATE HIGHWAY ENGINEER — 2/1/72 DATE





GENERAL NOTE:

SPECIFICATIONS: Kentucky Department of Highways Standard Specifications for Road and Bridge Construction, Current Edition with Revisions. AASHO, ASTM and Aluminum Association Material Specifications, Current Editions, are also applicable as designated hereon.

DESIGN LOAD: As specified in the AASHO Specifications, Current Edition.

SCOPE: In general, this drawing in conjunction with the specifications, covers the furnishing and erection of High Strength Aluminum Handrails on highway bridge structures. The additional plans required for each bridge are the bridge plans and the fabricator's shop detail plans.

FABRICATION:

GENERAL: Post spacing is governed by the details shown on the bridge plans. The end result shall be a continuous rail; with each rail section being attached to a minimum of three posts and with each joint being spliced as detailed hereon. Fabricator's shop detail plans, as required for each bridge, must be approved by the Department, and the Contractor is responsible for furnishing these plans to the Department for approval prior to fabrication.

APPEARANCE: Pieces having surfaces so scored or marked as to cause an objectionable appearance will be rejected.

CUTTING: All cuts are to be sawed and milled.

HOLES: All holes in castings shall be cored.

WELDING: Welding shall be done by an arc welding process in which no welding flux is used. Filler material for welding shall conform to AWS Specification A5.10-69.

ERECTION, MEASUREMENT AND PAYMENT:

ERECTION: Posts shall be set at right angles to the bridge fascia line and perpendicular to grade. The alignment of the railing shall be parallel to the fascia line. Special fabrication of curvature will be required when fascia lines are curved. U-shaped washer shims having a maximum thickness of ½" may be used under the posts to obtain desired alignment of post or rail. The void space under the posts shall be filled with alumilastic compound or an approved equal, so as to completely insulate the aluminum from the concrete.

MEASUREMENT: The work actually completed and accepted in place shall be measured along the rail in linear feet between ends.

PAYMENT: Payment will be made for the quantity measured as described above, at the contract unit price per linear foot and such payment shall be full compensation for all materials and work necessary for completion.

MATERIAL:

TUBING, SLEEVE AND CLAMPS: Shall meet the requirements of ASTM B221 alloy 6061-T6511 or alloy 6063-T6, using normal mill finish.

END CAST CLOSURE PLUG: Shall conform to ASTM B26 alloy S5B-F, ASTM B108 alloy S5B-F or Aluminum Association alloy A344-untreated.

POSTS: Cast aluminum posts shall be in accordance with AASHO Designation M193-64 for Cast Aluminum Railing Post, using normal mill finish.

WASHERS: Cast aluminum washers shall be Aluminum Association alloy A344-T4 or ASTM B108 alloy S5B-F. Washer shims shall be in accordance with ASTM B209 alloy 1100 or alloy alclad 2024-T3. All other washers shall be ASTM B209 alloy alclad 2024-T3.

NUTS: All nuts shall be hexagon and shall comply with ANSI B18.2.2 for dimensions.
Aluminum Nuts shall be ASTM B211 alloy 6061-T6 or 6262-T9, American Standard finished hexagon, thick nuts, Class 2B thread.
Steel Nuts in the anchor bar assembly shall be ASTM A307, Grade A.

CAP SCREWS: Stainless steel screws shall conform to ASTM A276 type 302 or 304.

DOWELS: Stainless steel anchor dowels shall conform to ASTM A276 type 430 except that their ultimate strength shall be 100,000 p.s.i. minimum. Threads shall be rolled.

ANCHOR CHANNEL BARS: Shall conform to ASTM A36.

MILL TEST REPORTS: Notarized mill test reports showing or statements certifying that the materials comply with the Specifications, shall be furnished in triplicate to the Department.

CLOSURE PLATE: Shall meet the requirements of ASTM B209 alloy 6061-T6.

DATE
DRAWN 1-72
CHECKED 6-72
RECOMMENDED 6-72

Work this drawing with Drawing No. BHA-006

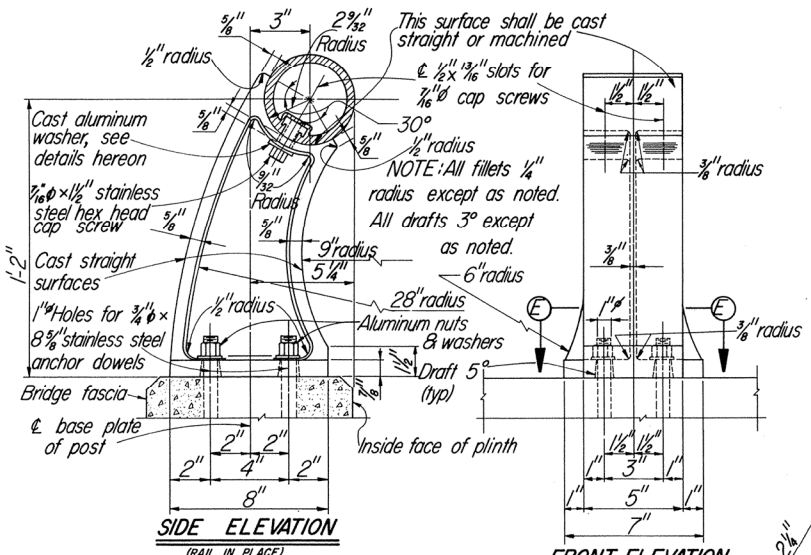
KENTUCKY
DEPARTMENT OF HIGHWAYS

HIGH STRENGTH ALUMINUM HANDRAIL

STANDARD DRAWING No. BHA-005

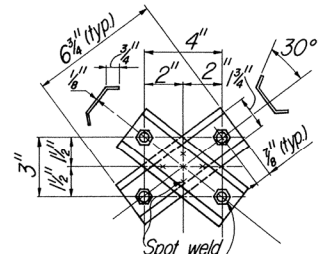
SUBMITTED C. Carlos H. Cook, DIRECTOR DIVISION OF BRIDGES — 6/30/72 DATE

APPROVED J. K. Hutchinson, STATE HIGHWAY ENGINEER — 7/5/72 DATE

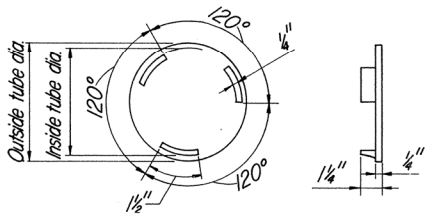


SIDE ELEVATION
(RAIL IN PLACE)

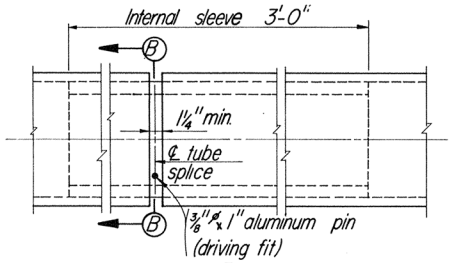
FRONT ELEVATION
(RAIL REMOVED)



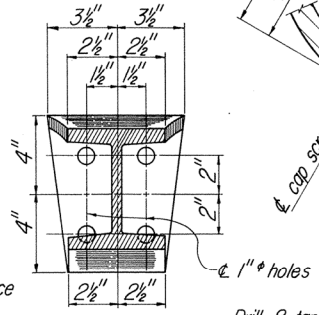
SECTION D-D



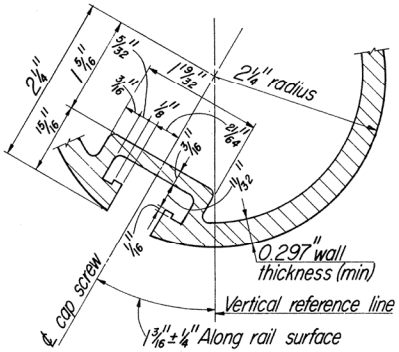
END CAST CLOSURE PLUG



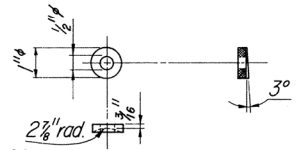
TUBE SPLICE DETAIL



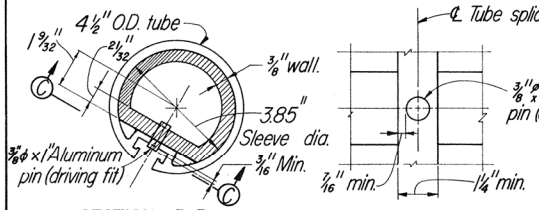
SECTION E-E



PART SECTION OF RAILING

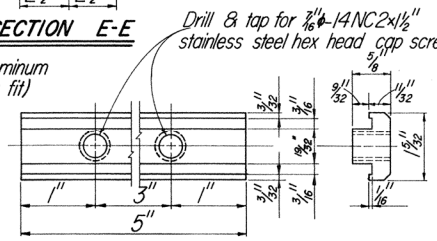


CAST ALUMINUM WASHER DETAIL

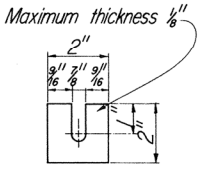


SECTION B-B
(Internal sleeve detail)

SECTION C-C



RAIL POST CLAMP BAR



DETAIL OF WASHER SHIM

Work this drawing with Drawing No. BHA-005

KENTUCKY DEPARTMENT OF HIGHWAYS

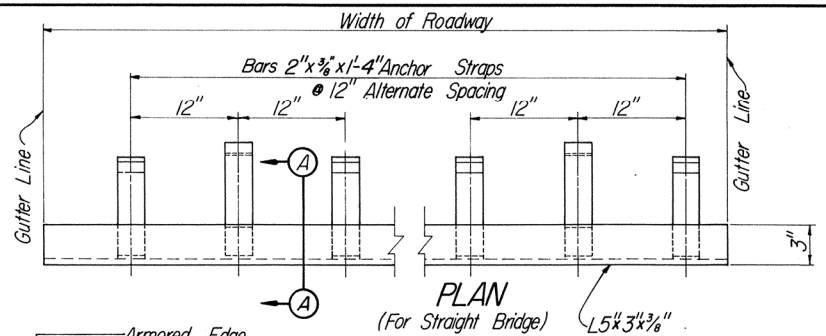
HIGH STRENGTH ALUMINUM HANDRAIL

STANDARD DRAWING No. BHA-006

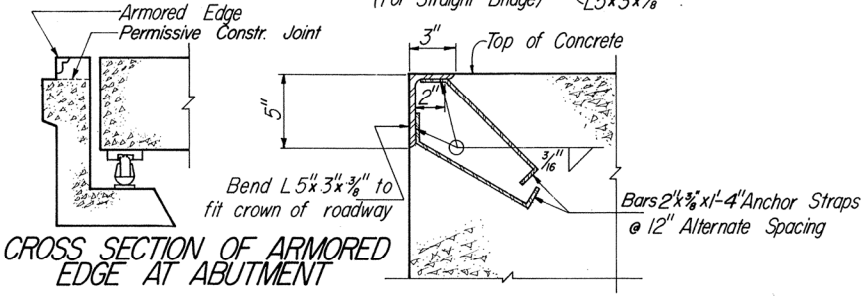
SUBMITTED C. Burlow B. Cook, DIRECTOR, DIVISION OF BRIDGES — 6/30/72 DATE

APPROVED J. D. Vanhoose, STATE HIGHWAY ENGINEER — 7/5/72 DATE

STANDARD DRAWING 10-1V
RECOMMENDED S. J. BRATO 6-72

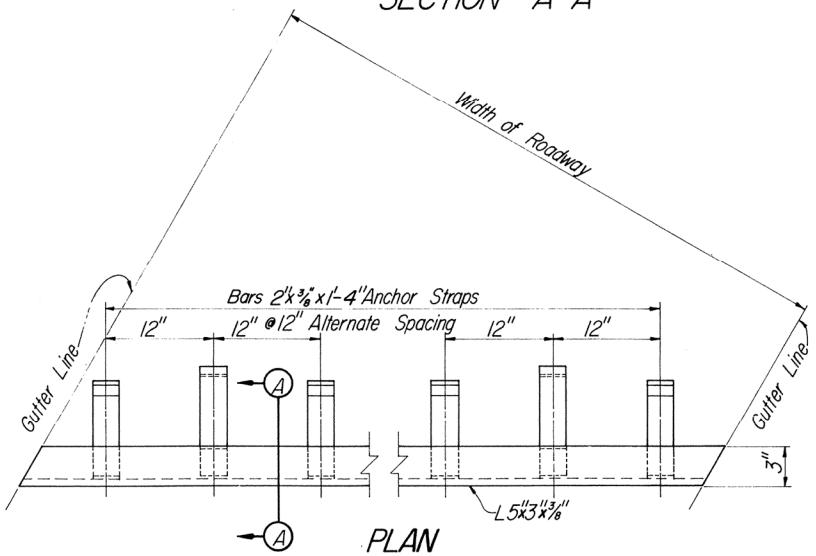


PLAN
(For Straight Bridge)



CROSS SECTION OF ARMORED EDGE AT ABUTMENT

SECTION A-A



PLAN
(For Skewed Bridge)

GENERAL NOTES

SPECIFICATIONS: The Kentucky Department of Highways Standard Specifications for Road and Bridge Construction, current edition with revisions.

PAINT: All structural steel shown on this sheet shall be cleaned and painted in accordance with the Special Provision for Blast Cleaning and Painting Structural Steel.

WELDING SPECIFICATIONS: All welding materials, welding techniques and welding procedure shall comply with American Welding Society Standard Specifications for Welded Highway and Railway Bridges, current edition.

WELDING AND WELDING MATERIAL: The cost of welding, welding material and labor to be included in the lump sum bid for structural steel.

MILL TEST REPORTS: Notarized statements in triplicate shall be furnished the Department of Highways showing that all structural steel furnished meets the specifications.

SHOP DETAIL PLANS: The contractor shall submit shop detail plans for approval prior to fabrication in accordance with plans and specifications.

ANCHOR STRAPS: When armored edge is used in conjunction with expansion dam, the location of 2" x 3/8" x 1'-4" anchor straps should be spaced not to interfere with anchor straps located on expansion dam.

MATERIAL SPECIFICATION: Steel material shall conform to A.S.T.M. designation A 36.

PAYMENT: The cost of furnishing and placing armored edge shall be included in the lump sum bid for Structural Steel.

LOCATION: The location of armored edge shall be shown on the detail plans.

WEIGHT: Weight per foot of assembly = 11.39 lbs.

DESIGNED [illegible] 4-71
CHECKED Woodward 6-72
RECOMMENDED S.J. Bratcher 6-72

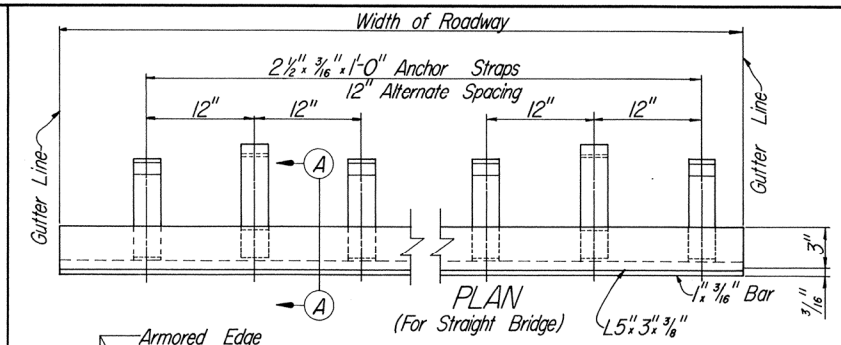
KENTUCKY
DEPARTMENT OF HIGHWAYS

ARMORED EDGE
FOR CONCRETE

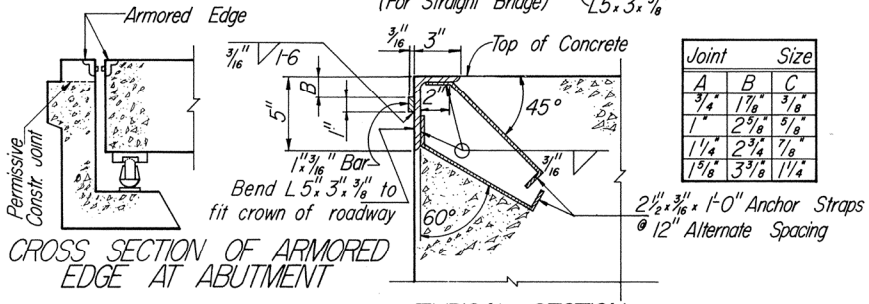
STANDARD DRAWING No. BJE-001

SUBMITTED C. Gordon B. Cook, DIRECTOR DIVISION OF BRIDGES — 6/30/72 DATE

APPROVED J. K. Harlan, STATE HIGHWAY ENGINEER — 7/5/72 DATE



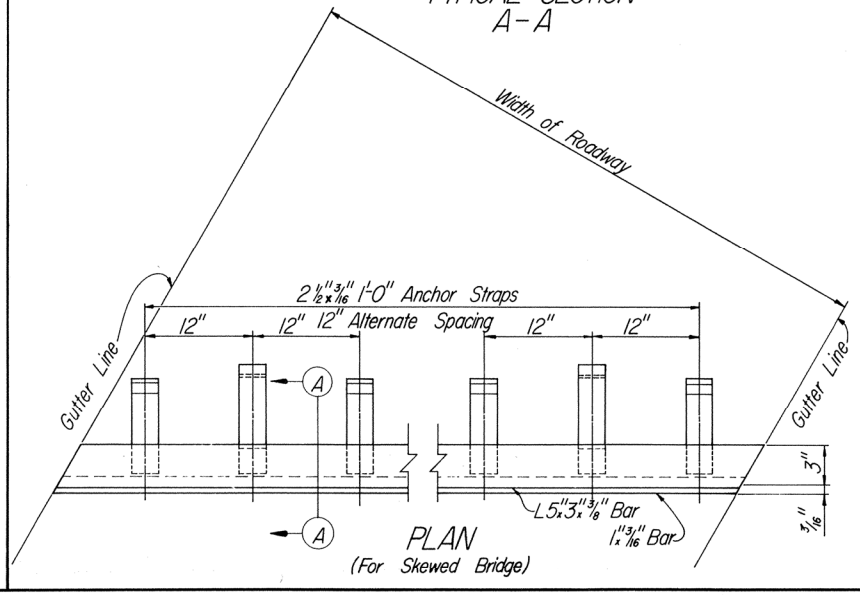
PLAN
(For Straight Bridge)



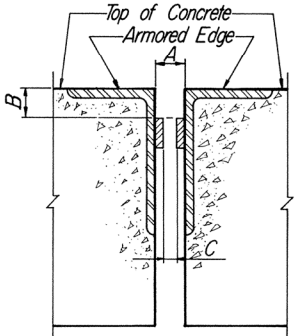
CROSS SECTION OF ARMORED EDGE AT ABUTMENT

TYPICAL SECTION A-A

Joint Size		
A	B	C
¾"	1⅞"	⅜"
1"	2⅝"	⅝"
1¼"	2¾"	⅞"
1⅝"	3⅜"	1¼"



PLAN
(For Skewed Bridge)



SECTION THRU JOINT

GENERAL NOTES

SPECIFICATIONS: The Kentucky Department of Highways Standard Specifications for Road and Bridge Construction, current edition with revisions.

PAINT: All structural steel shown on this sheet shall be cleaned and painted in accordance with the Special Provision for Blast Cleaning and Painting Structural Steel.

WELDING SPECIFICATIONS: All welding materials, welding techniques and welding procedure shall comply with American Welding Society Standard Specifications for Welded Highway and Railway Bridges, current edition.

WELDING AND WELDING MATERIAL: The cost of welding, welding material and labor to be included in the lump sum bid for structural steel.

MILL TEST REPORTS: Notarized statements in triplicate shall be furnished the Department of Highways showing that all structural steel furnished conform to the specifications.

SHOP DETAIL PLANS: The contractor shall submit shop detail plans for approval prior to fabrication in accordance with specifications.

GENERAL NOTES (CONT'D.)

ANCHOR STRAPS: When armored edge is used in conjunction with expansion dam, the location of 2½" x 3/16" x 1'-0" anchor straps should be spaced not to interfere with anchor straps located on expansion dam.

MATERIAL SPECIFICATION: Steel material shall conform to A.S.T.M. designation A 36.

PAYMENT: The cost of furnishing and placing armored edge shall be included in the lump sum bid for Structural Steel.

LOCATION: The location of armored edge shall be shown on the detail plans.

WEIGHT: Weight per foot of assembly 24.06 lbs for two of them

JOINT SIZE: This drawing to be used only with Joints ¾" or larger.

CHECKED. [signature] 6-72
RECOMMENDED. S. J. Adams 6-72

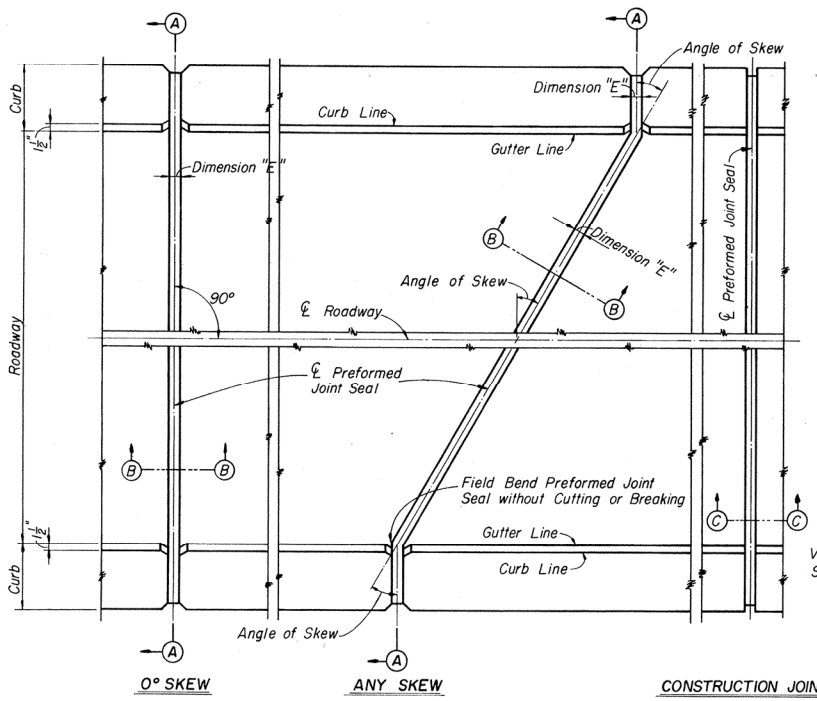
KENTUCKY
DEPARTMENT OF HIGHWAYS

ARMORED EDGE FOR JOINTS IN CONCRETE

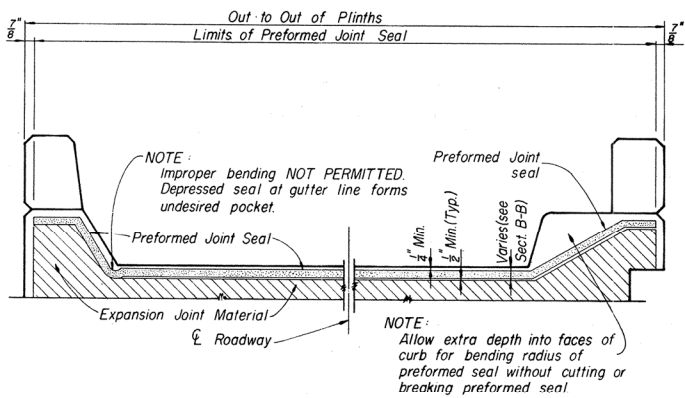
STANDARD DRAWING No. BJE-002

SUBMITTED C. Rankin B. Cook, DIRECTOR DIVISION OF BRIDGES — 6/20/72 DATE

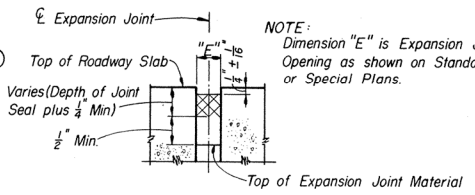
APPROVED [signature], STATE HIGHWAY ENGINEER — 7/5/72 DATE



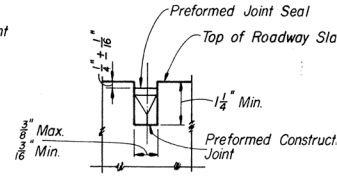
PART PLAN - EXPANSION JOINTS



PART ELEVATION A-A



PART SECTION B-B



PART SECTION C-C

GENERAL NOTES

SPECIFICATIONS: Kentucky Department of Highways Standard Specifications for Road and Bridge Construction, Current Edition with revisions.

JOINT TREATMENT: All joints shall be sealed with Preformed Compression Joint Seal as set forth in Special Provision No. 37, current edition. The Special Provision governs material requirements, sampling and testing, joint preparation, application, measurement and payment.

CONSTRUCTION JOINTS: Transverse construction joints shall not be placed in the slab unless shown on the plans or directed by the Engineer and then only in the location and size specified. When a transverse construction joint is needed, the joint shall be sawed or formed and shall be true to alignment and have vertical faces.

EXPANSION JOINTS: The size of joints specified either on Standard Drawings or on plans shall be of the size shown in Special Provision No. 37, current edition, for Preformed Compression Joint Seals.

RECOMMENDED S. J. Amato 7-72

KENTUCKY DEPARTMENT OF HIGHWAYS

PREFORMED JOINT SEAL DETAILS FOR CONCRETE BRIDGE FLOORS

STANDARD DRAWING No. BJJ-003

SUBMITTED	C. Burke H. Cook, DIRECTOR DIVISION OF BRIDGES	7/13/72 DATE
APPROVED	J. L. Hankins, STATE HIGHWAY ENGINEER	7/18/72 DATE

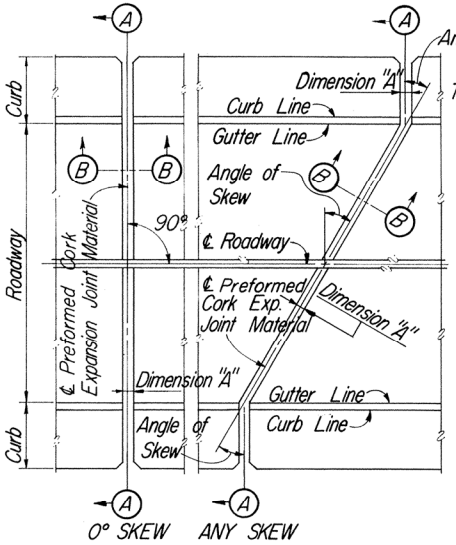
GENERAL NOTES

SPECIFICATIONS: The Kentucky Department of Highways Standard Specifications for Road and Bridge Construction, current edition with revisions.

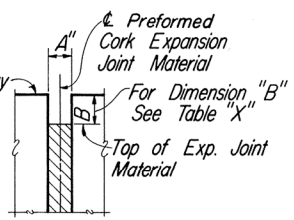
CONSTRUCTION NOTE: This drawing is to be used in conjunction with standard or special plans for concrete floors on bridges when so noted on the standard or special plans. The joint between the spans shall have the preformed cork filler so placed as to prevent contact of concrete between spans and to provide the full width of joint shown on plans. The preformed cork filler shall be accurately placed and rigidly held in correct position. The cork filler on the roadway and curbs shall be trimmed or placed below the concrete surface a distance equal to dimension "B" as shown in Table "X". Joint shall be sealed as required on plans. No direct payment will be made for material or installation of cork filler. The cost of material and installation shall be included in the unit price bid for Class "A" Concrete.

PREFORMED CORK EXPANSION JOINT MATERIAL: Preformed cork filler shall conform to AASHO Specification M153, Type II, current edition.

FORMING SEALER SPACE AT TOP OF JOINT: Top edges of concrete shall not be rounded. To obtain sharply defined joint edges employ, at top of joint, a dummy form smoothly finished on all sides and oiled for ease of removal.



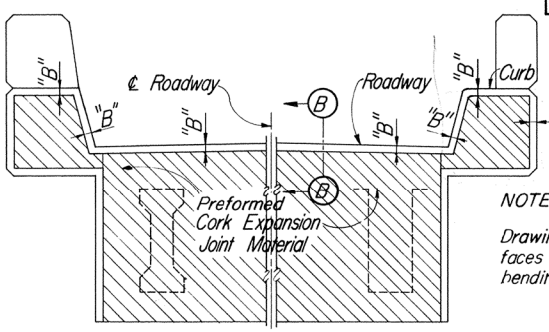
PART PLAN - EXPANSION JOINTS



PART SECTION B-B

Dimension "A" is Expansion Joint opening as shown on standard or special plans. This dimension is to be used as thickness of Preformed Cork Expansion Joint Material.

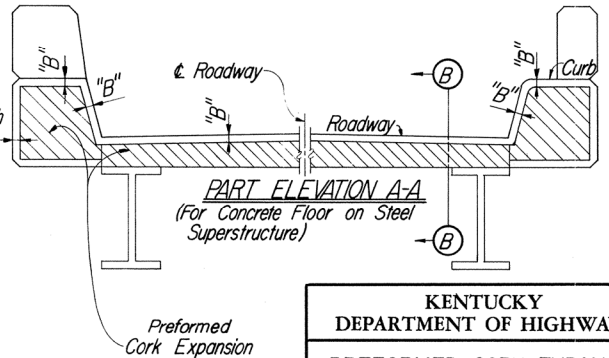
TABLE "X"	
Joint Size	"B"
1/2"	2"
3/4"	1 1/2"
1"	2 1/4"
1 1/4"	2 5/16"
1 5/8"	3"
1 7/8"	3 3/4"
2 1/4"	3 3/4"



PART ELEVATION A-A
(For Concrete Deck Girder Span)

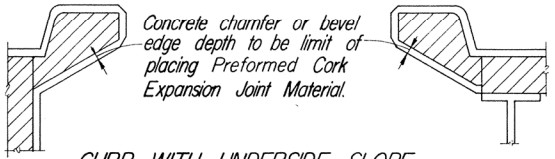
Concrete chamfer or bevel edge depth to be limit of placing preformed Cork Expansion Joint Material. Allow extra depth when preformed seal is being used.

NOTE:
When working this drawing with Standard Drawing BJJ-002, dimension "B" at vertical faces of curbs is to be increased to allow for bending radius of preformed seal.



PART ELEVATION A-A
(For Concrete Floor on Steel Superstructure)

Preformed Cork Expansion Joint Material of the thickness shown on plans to be used in joint over area shown as shaded above. Joint to be left open in unshaded areas not required to be sealed.



CURB WITH UNDERSIDE SLOPE

RECOMMENDED S.J. AMATO 7-72

KENTUCKY DEPARTMENT OF HIGHWAYS

PREFORMED CORK EXPANSION JOINT MATERIAL DETAILS FOR CONCRETE BRIDGE FLOOR

STANDARD DRAWING No. BJJ-004

SUBMITTED C. Rankin H. Cook, DIRECTOR DIVISION OF BRIDGES — 7/12/72 DATE

APPROVED J. K. Hudson, STATE HIGHWAY ENGINEER — 7/13/72 DATE