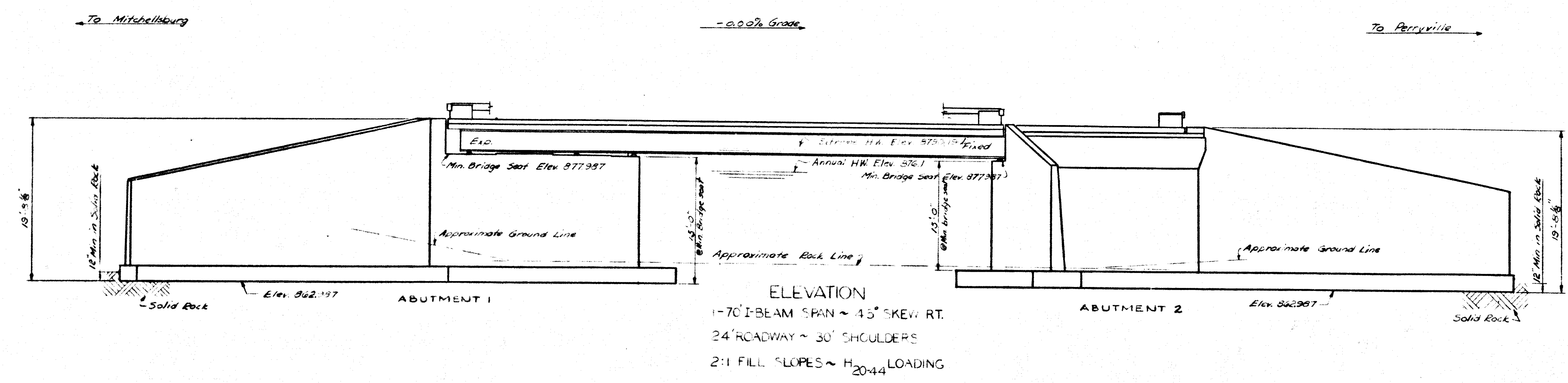
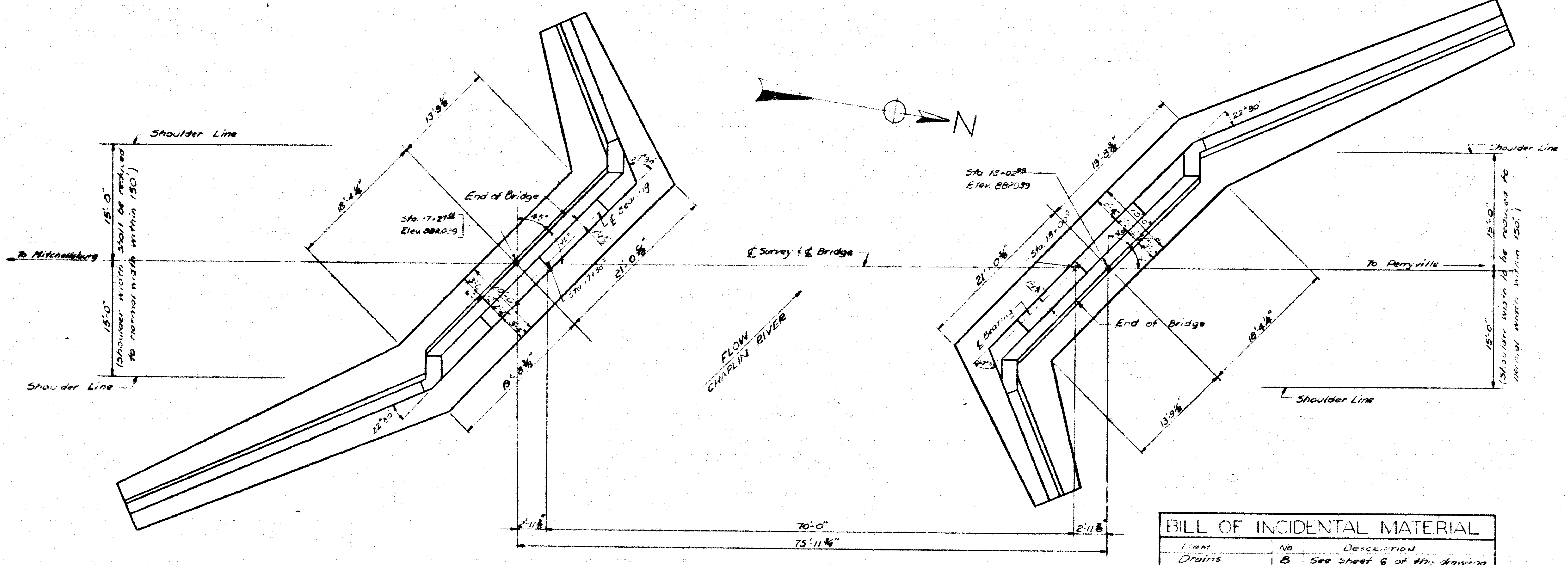


NO.	DATE	BY	REVISION
7	KY		



ELEVATION
 1-70' I-BEAM SPAN ~ 45° SKEW RT.
 24' ROADWAY ~ 30' SHOULDERS
 2:1 FILL SLOPES ~ H₂₀44 LOADING

GENERAL NOTE
 SPECIFICATIONS Kentucky Department of Highways, 1956 Standard with Amendments.
 DESIGN LOAD Bridge designed for H20-44 loading as specified in A.A.S.P.O. 1961 Specifications.
 CONCRETE Class "A" concrete to be used throughout except in handrail. Class "D" concrete to be used in handrail.
 REINFORCEMENT Intermediate or Hard Grade reinforcement shall be used in accordance with A.S.T.M. A15-58T for rail steel and A.S.T.M. A16-58T for rail steel. Dimensions from face of concrete to bars shall be as shown, except as otherwise shown. Dimensions for bar spacing are center to center of bar.
 BEVELED EDGES All exposed edges to be beveled 7/8" unless otherwise noted.
 FLOOR DRAINS EXPANSION JOINT MATERIAL COPPER STRIP The cost of these items is to be included in the unit price bid for Class "A" concrete.
 FOUNDRY NOTE Cast iron drains to be gray iron castings A.S.T.M. A-48, current specifications, except that tensile and transverse tests are not required. From 7-521, Report of Field Inspection of Castings, is to be submitted to the laboratory.
 CONSTRUCTION NOTE Four Abutment footings against solid rock without the use of forms. Any additional concrete placed outside the neat lines will be at the contractor's expense.
 REMOVE EXISTING STRUCTURE Existing 50' Steel Truss to be used for detour, and no part shall be removed, obstructed, or closed until the new road is open to traffic. Existing structure to be removed in accordance with plans and specifications. Match marking is not required. The steel stringers, if any, shall be carefully removed without damage. The Contractor may remove trusses and floor beams in any manner he so desires. However, all truss steel shall be taken apart or cut into lengths which may be readily transported and shall be piled in a location convenient for loading. The cost of all work required for fulfillment of this contract shall be included in the "Lump Sum Bid" for removing the existing structure.



PLAN
(Superstructure Removed)

STRUCTURAL STEEL
 The lump sum bid for Structural Steel includes all steel plates, nuts, lead plates and Fig 1223 for anchor bolt packing. In the event that changes in steel quantities are required due to changes by the engineer in the

TOTAL ESTIMATE OF QUANTITIES						
ITEM	QUANTITY	UNIT	PRICE	TOTAL	REMARKS	UNIT PRICE
LAYOUT	1					
ABUTMENT 1	234	1712	13687	90	50	
DRAIN & SHOULDER DETAILS	5					
SLAB DETAILS	6	542	13580			
ABUTMENT 2	234	1712	13687	100	50	
ELEVATIONS	7					
FOUNDATIONS	8					
HANDRAIL	9	40	1249			50' steel pipe
COPPER STRIP & EXP. JOINT MAT'L G-351						
TOTALS	396	40	42203	190	100	ONE

plans or specifications, credits or additional payments therefore shall be made at a unit price which will be equal to the contract lump sum price divided by the estimate weight.
 Approximate weight of structural steel 76,500

ITEM	NO.	DESCRIPTION
Drains	8	See sheet 6 of this drawing
Copper Strips	2	See sketch below, SHEET G-351
Exp. Jt. Material	2	1 1/2" x 3/4" G Abutments 1 & 2
" "	4	1 1/2" x 2 1/2" G Abutments 1 & 2

NOTE: Quantities shown in Bill of Incidental Material are approximate only, and the contractor is responsible for furnishing enough material to complete the work in accordance with the specifications.

DESIGNED BY: [Signature]
 CHECKED BY: [Signature]
 DATE: [Date]
 REVISIONS: [Table]
 DRAWING NO. G-351

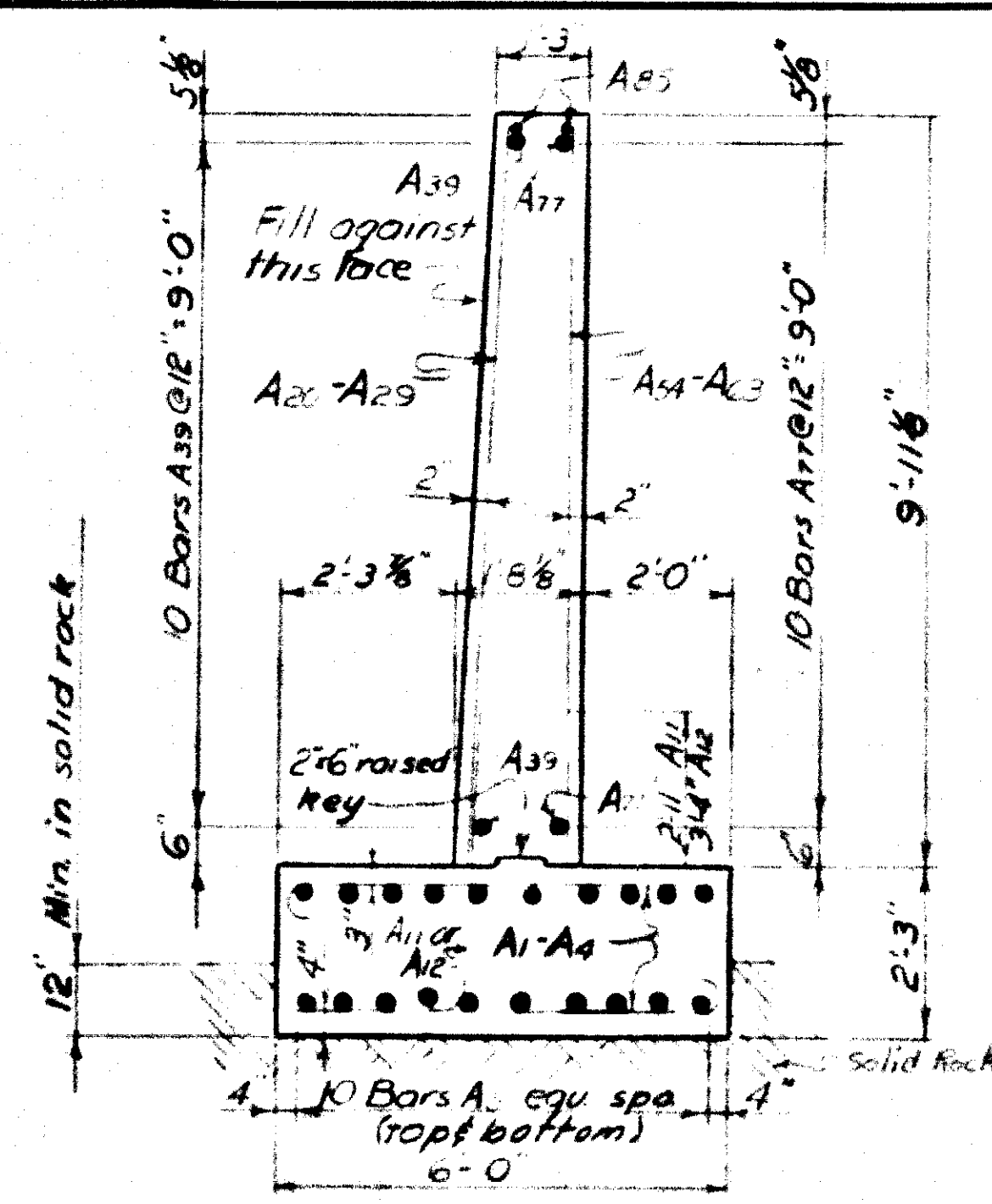
BRIDGE OVER CHARLIN RIVER SHEET 1079

COMMONWEALTH OF KENTUCKY
 DEPARTMENT OF HIGHWAYS
 FRANKFORT
 COUNTY OF
BOYLE
 PERRYVILLE - MITCHELLSBURG
 ROAD

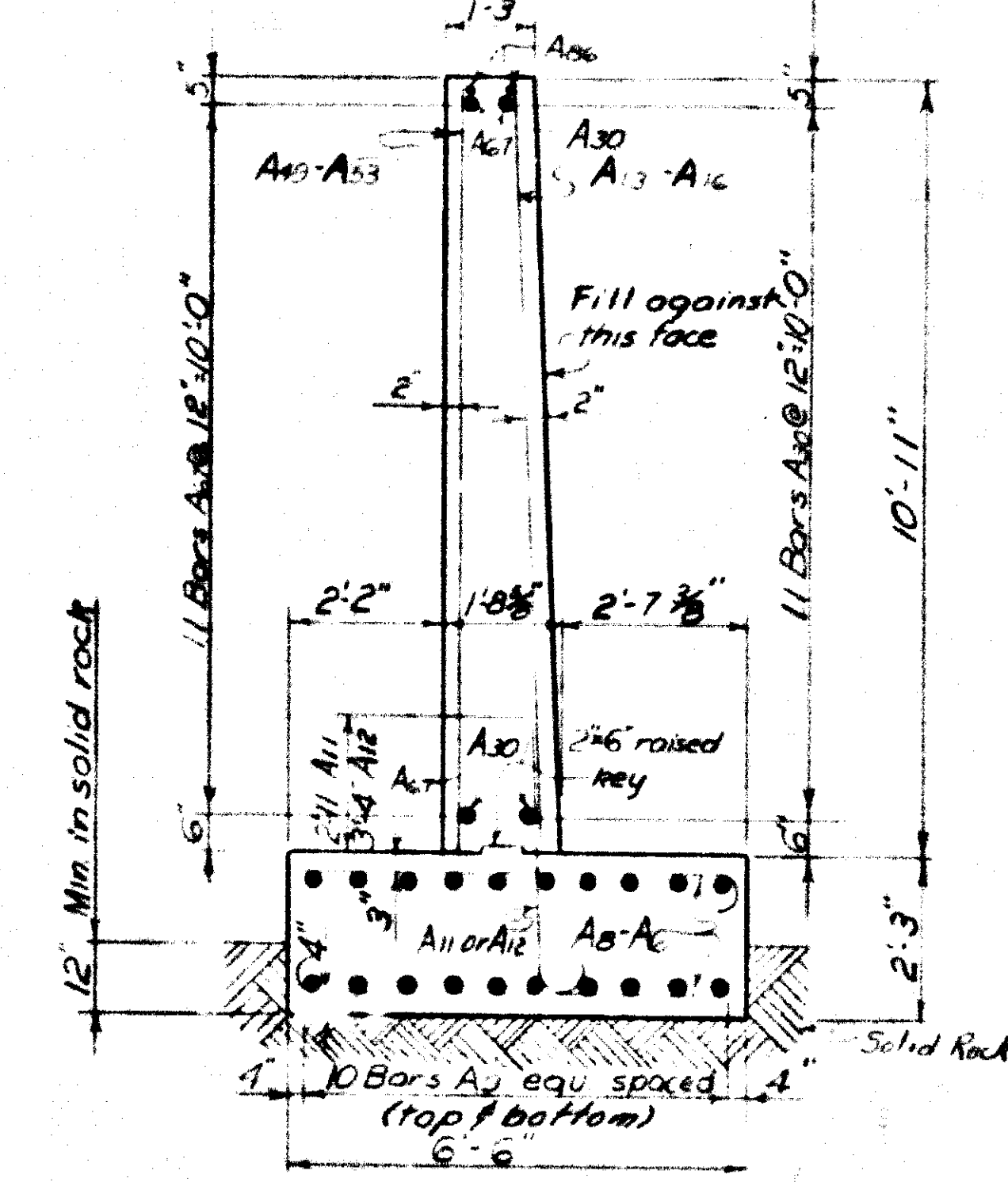
STATION 17+65
 BRIDGE NUMBER [Blank] PROJECT NO. [Blank]

G 351 DRAWING NO. M 671 INDEX

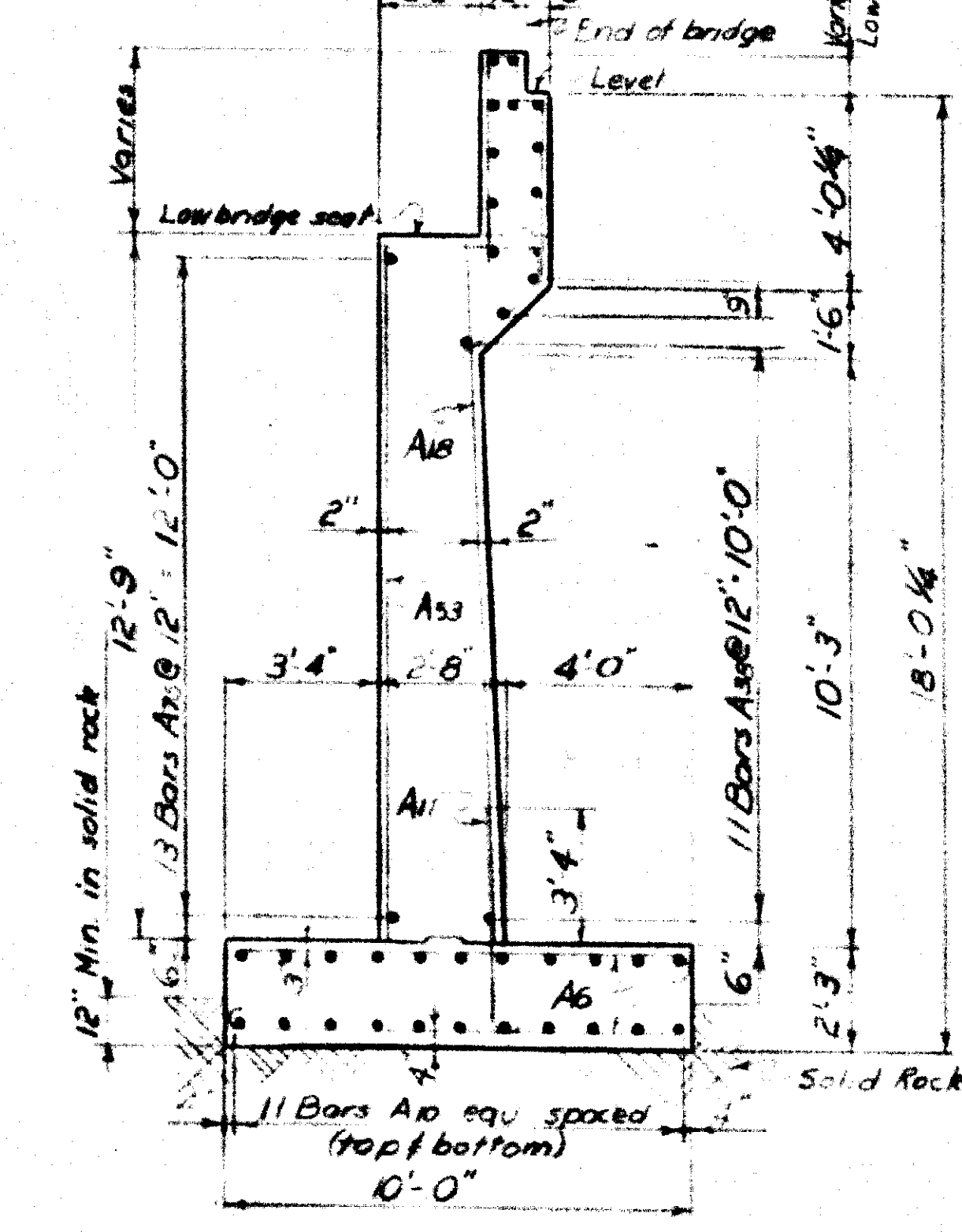
BRIDGE



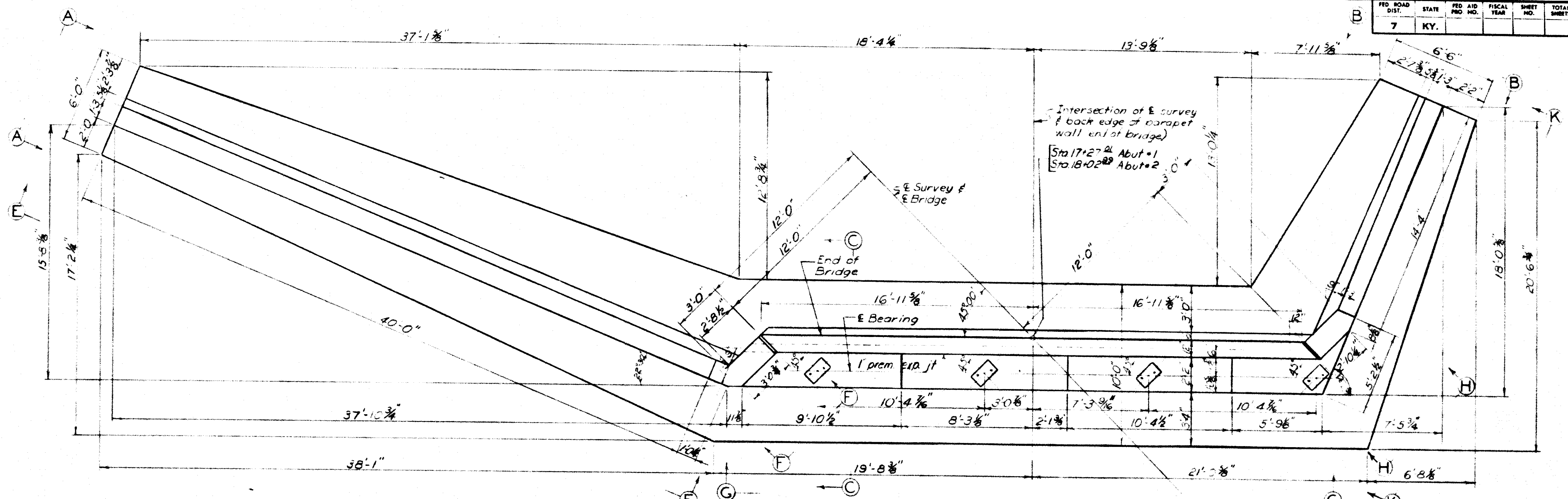
ELEVATION A-A
(Long Wing)



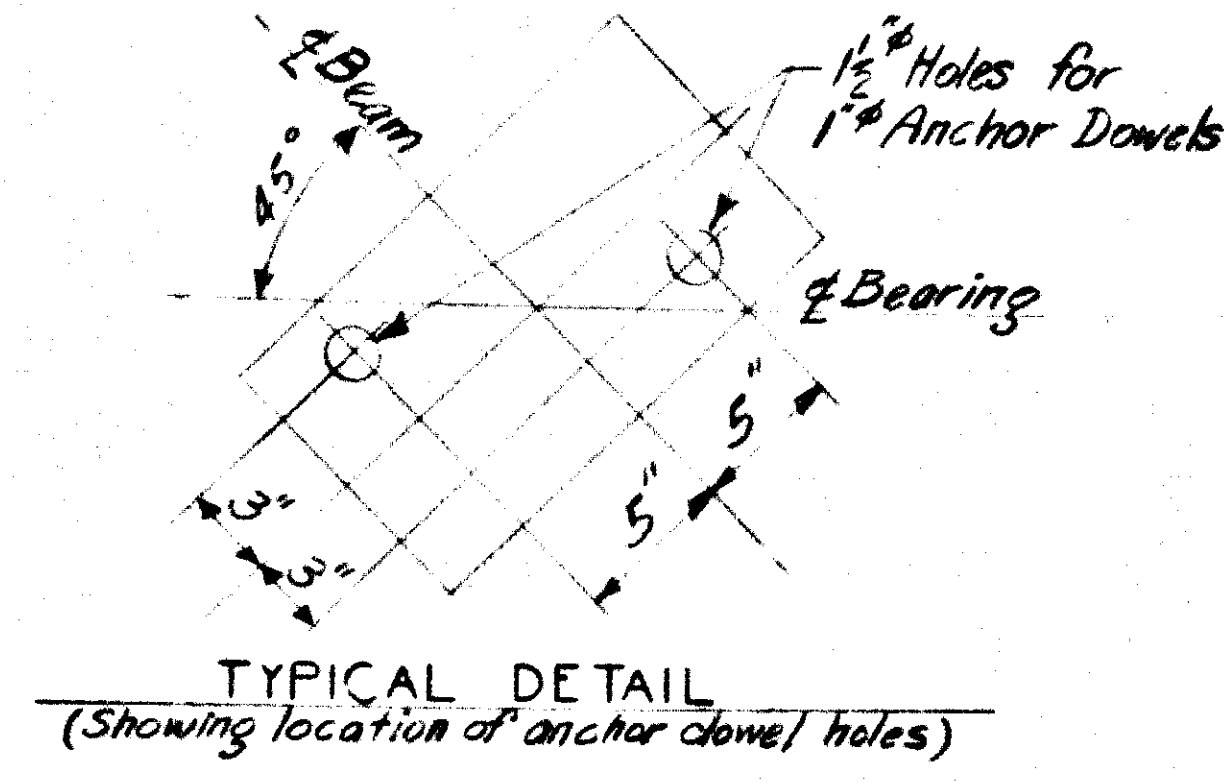
ELEVATION B-B
(Sharp Wing)



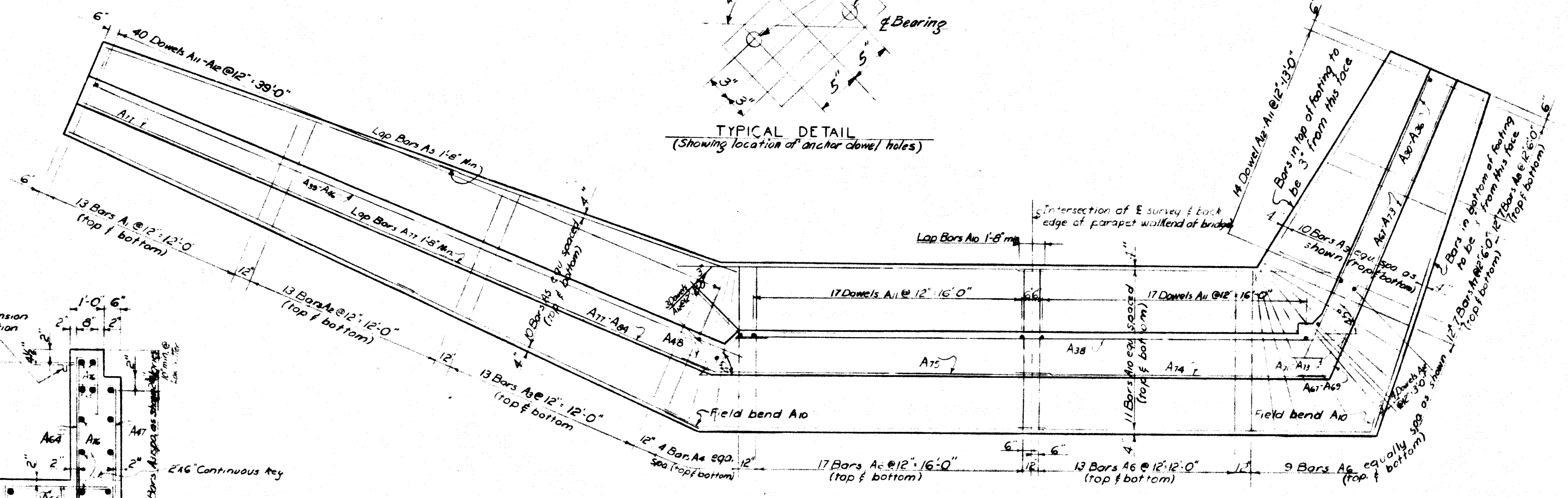
SECTION C-C



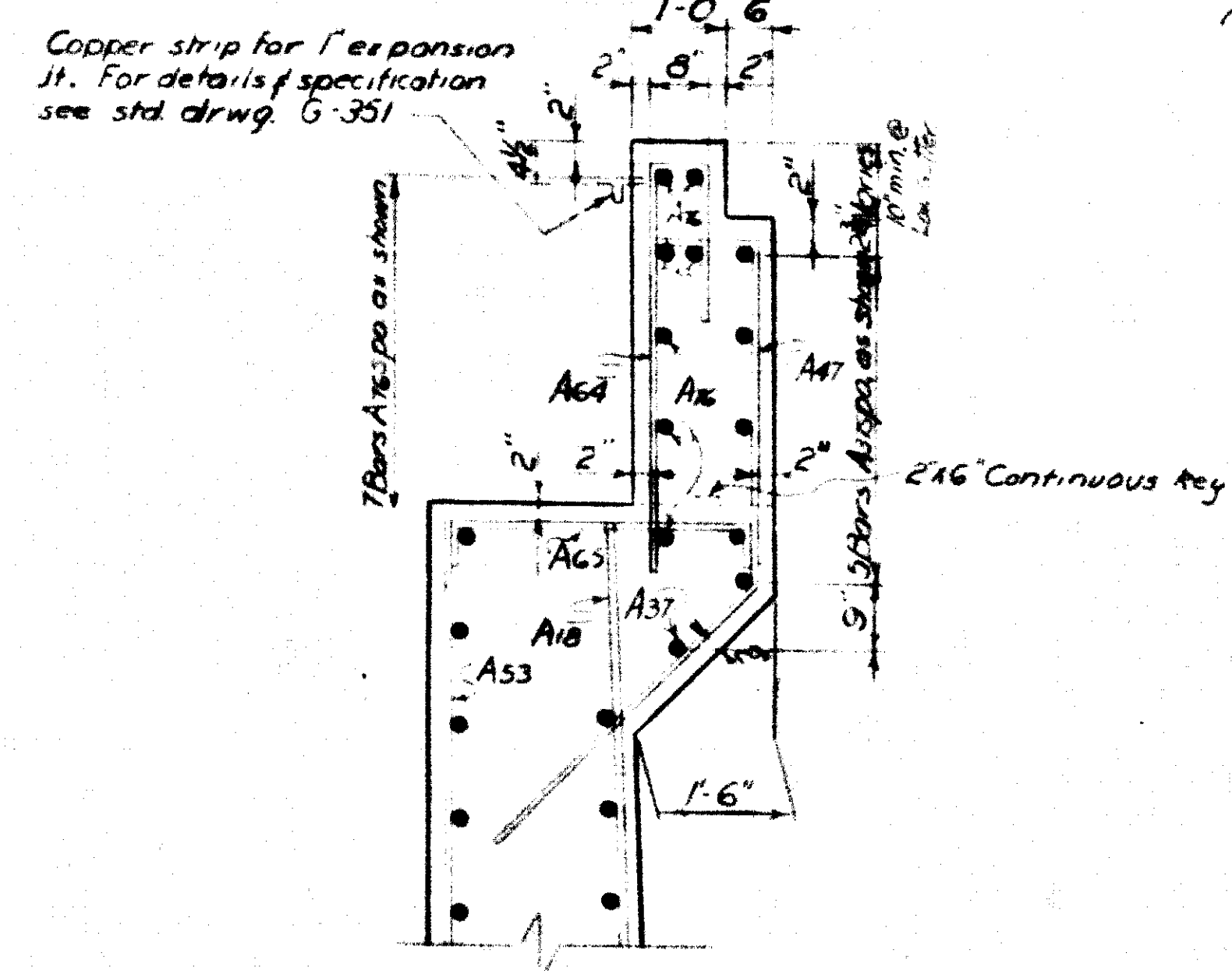
PLAN OF ABUTMENT



TYPICAL DETAIL
(Showing location of anchor dowel holes)



SECTIONAL PLAN J-J



PART SECTION C-C

ESTIMATE OF QUANTITIES
 CONCRETE CLASS "A" 171.2 CU YDS.
 REINFORCEMENT 13687 LBS.
 Quantities shown for one abutment only

BRIDGE OVER CHAPIN RIVER SHEET 2

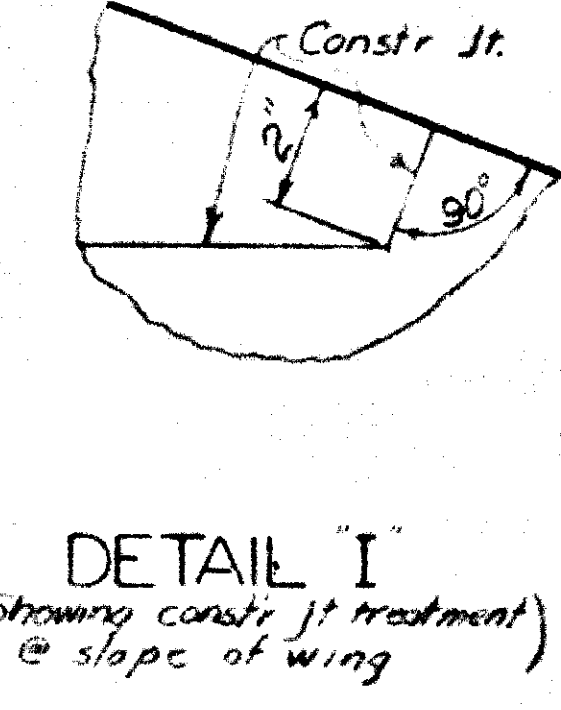
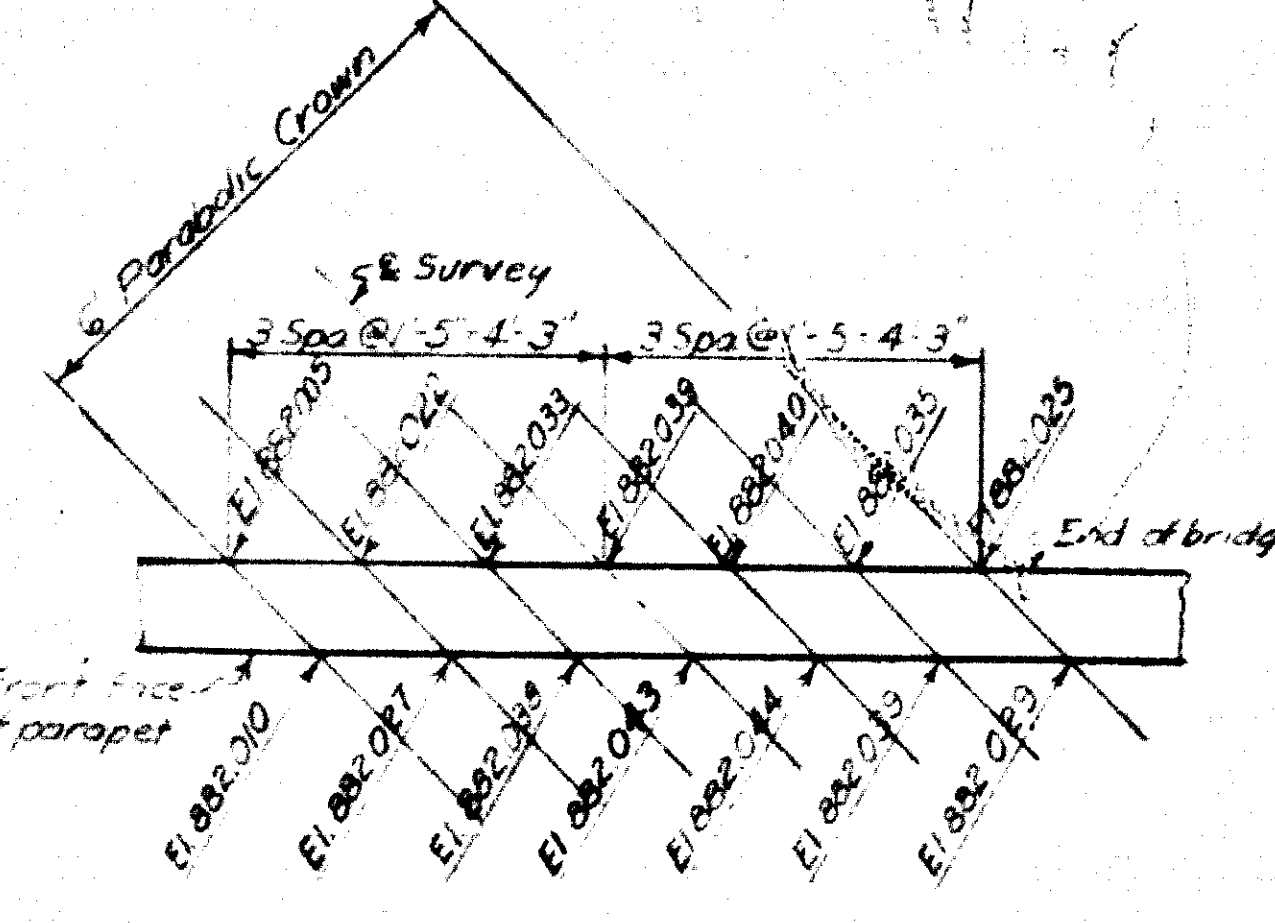
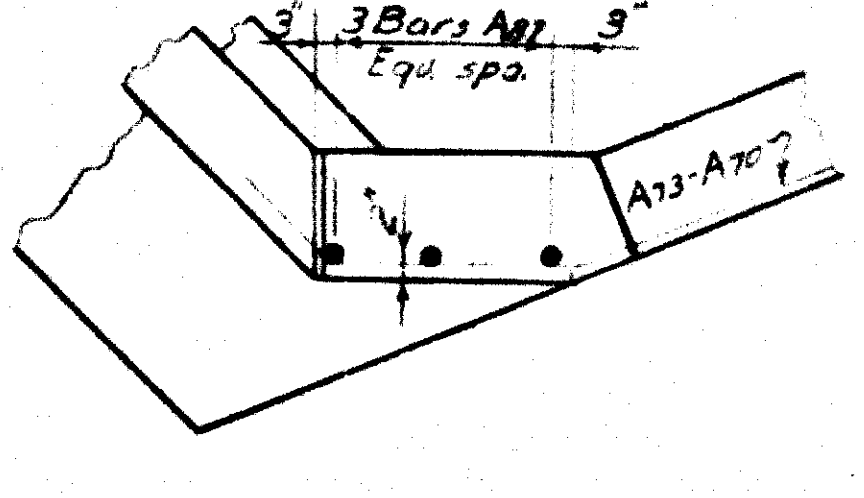
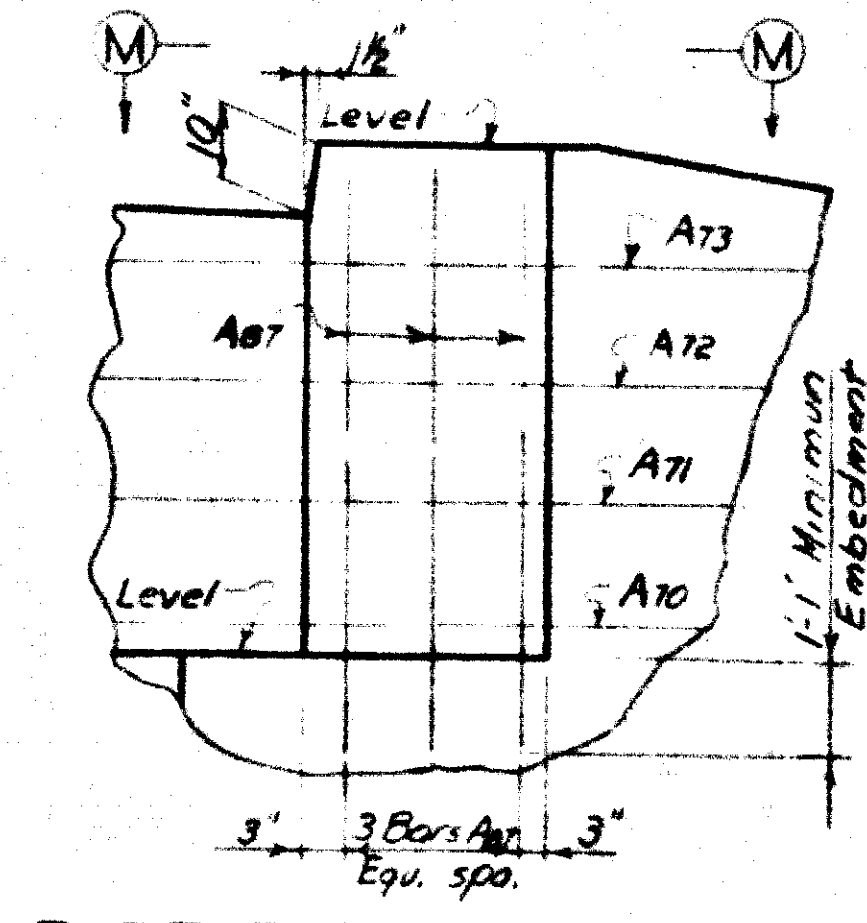
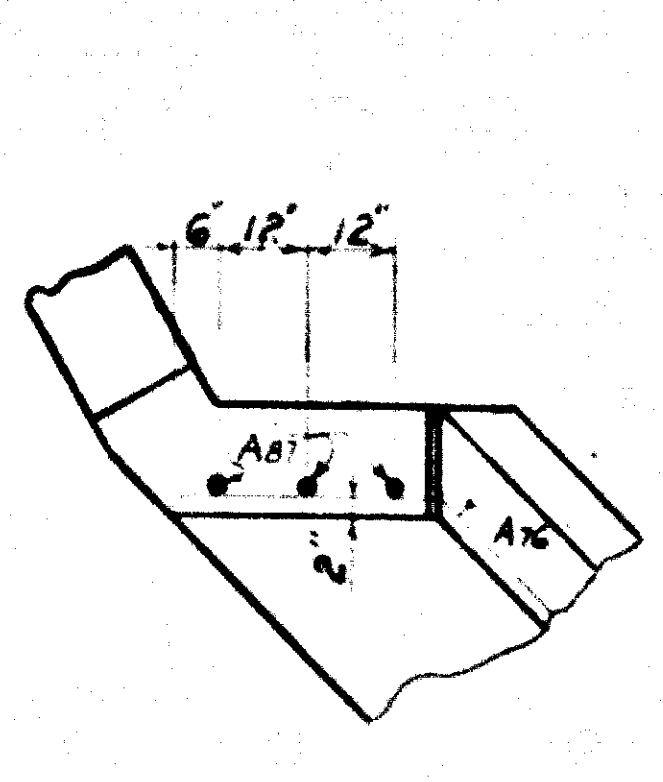
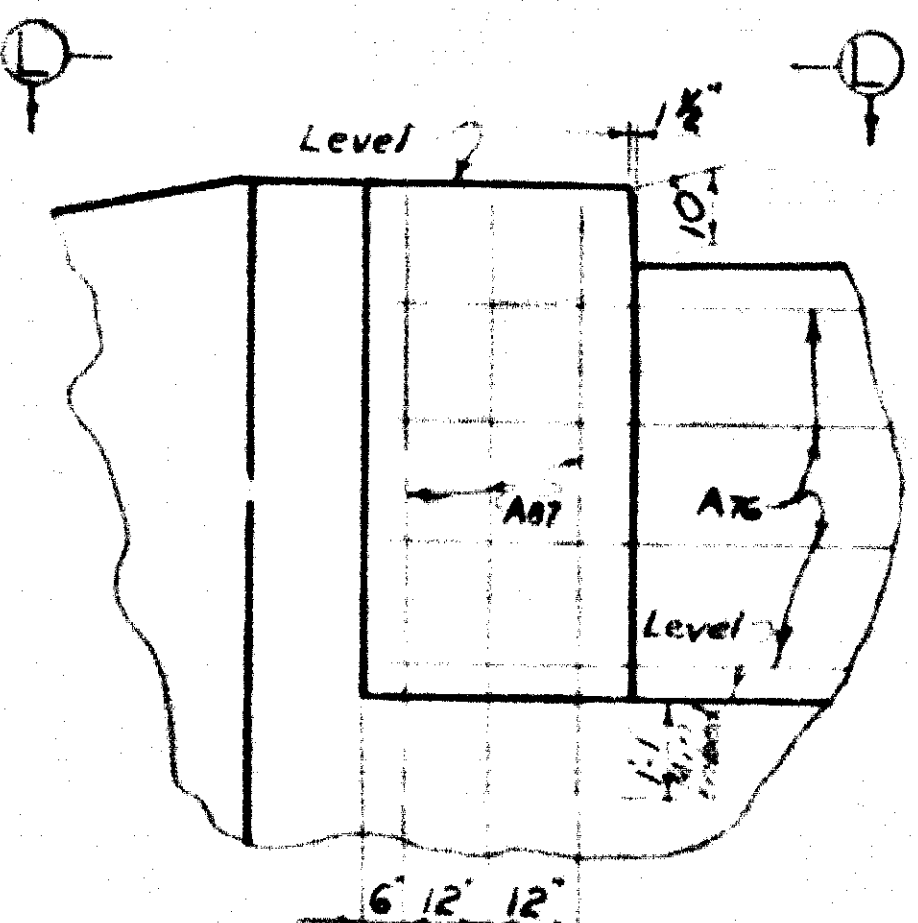
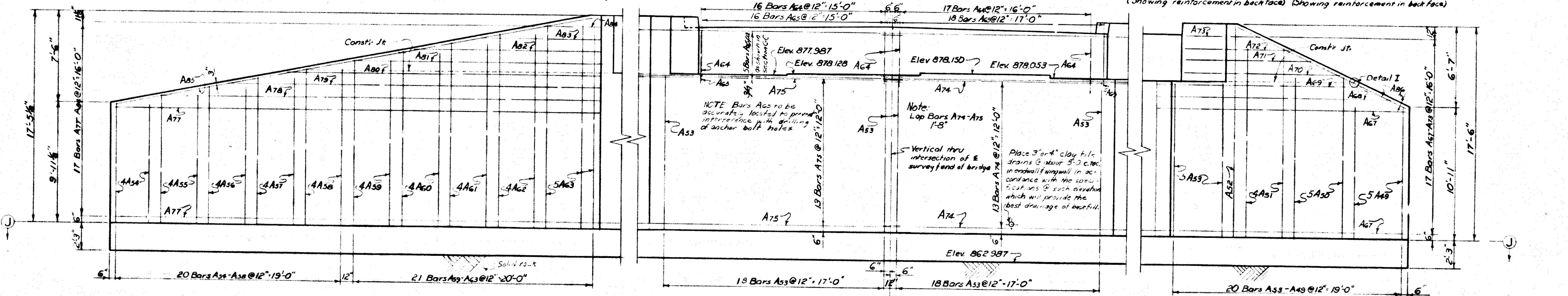
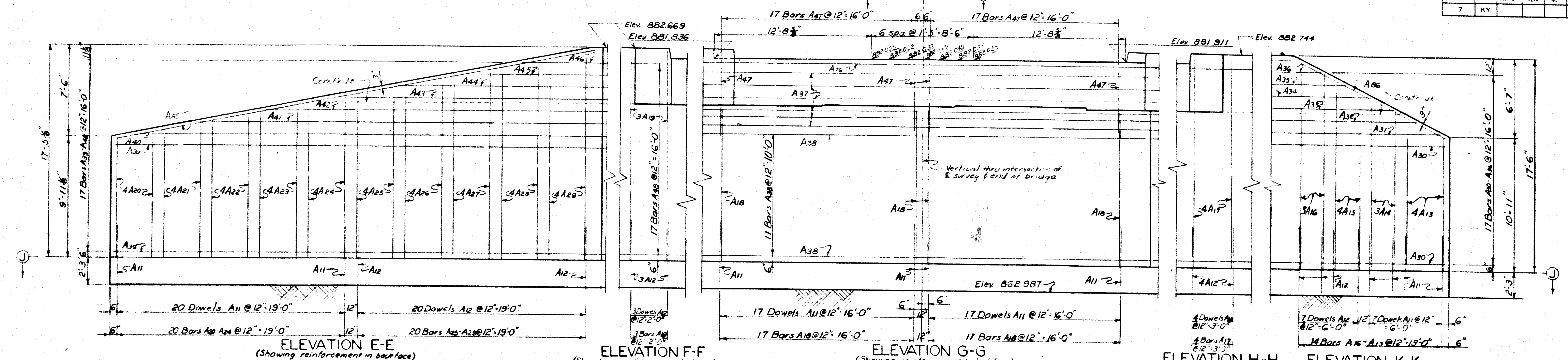
COMMONWEALTH OF KENTUCKY
 DEPARTMENT OF HIGHWAYS
 FRANKFORT
 COUNTY OF
BOYLE
 PERRYVILLE - MITCHELLSBURG
 ROAD

STATION 17 + 65.2 PROJECT NO. _____
 BRIDGE NUMBER _____ DRAWING NO. 4671

ABUTMENTS 1 & 2

BRIDGE

NO.	DATE	BY	CHKD.	APP'D.	TOTAL
7	KY				



DESIGNED BY: G.A. [Name]
 CHECKED BY: [Name]
 DATE: [Date]
 REVISIONS: [Table]
 DATE: [Date]
 BY: [Name]
 CHECKED BY: [Name]
 DATE: [Date]

ABUTMENTS 1 & 2

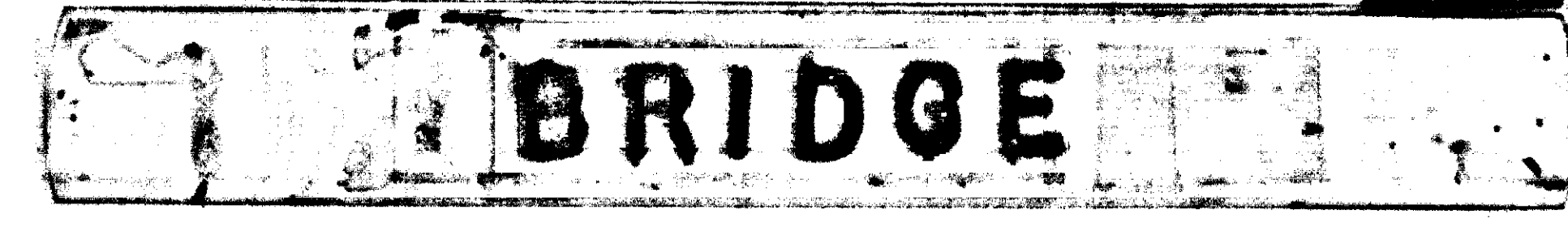
BRIDGE OVER CHAPLIN RIVER SHEET 3

COMMONWEALTH OF KENTUCKY
 DEPARTMENT OF HIGHWAYS
 FRANKFORT
 COUNTY OF
BOYLE
 PERRYVILLE ↔ MITCHELLSBURG

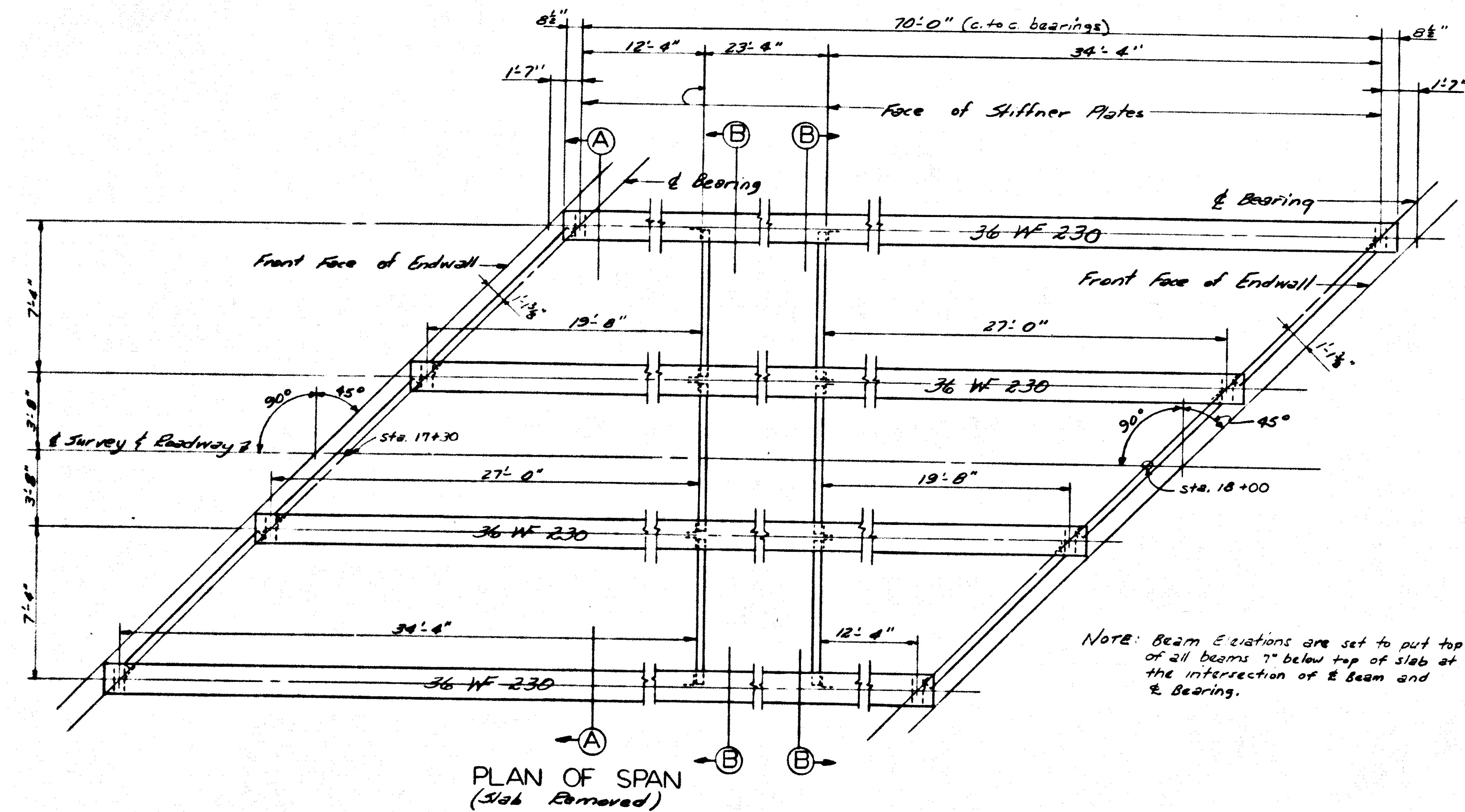
ROAD

STATION 17+65.0 PROJECT NO. [Blank]

BRIDGE NUMBER [Blank] DRAWING NUMBER 4671 INDEX [Blank]



REVISED	DATE	BY	CHKD	DATE
7				

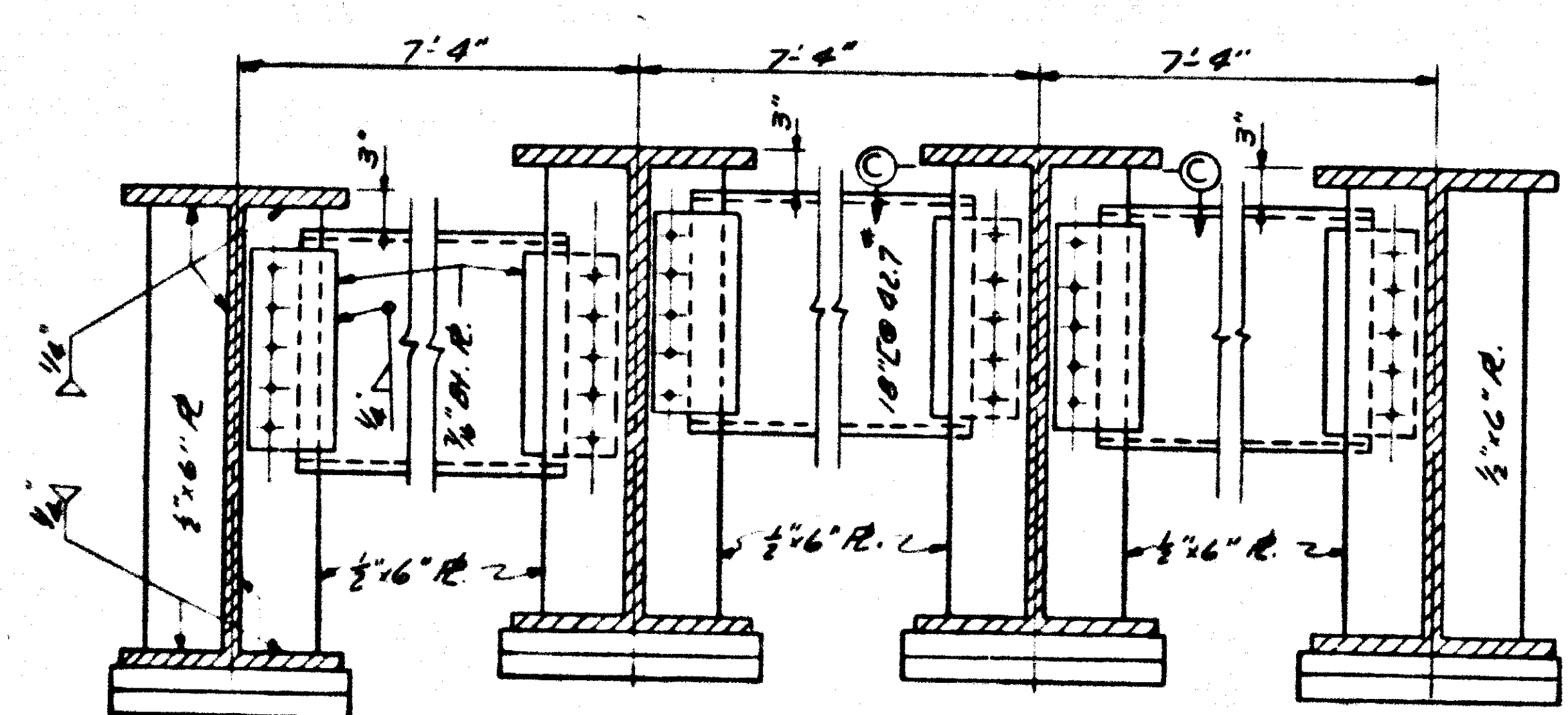


PLAN OF SPAN
(Slab Removed)

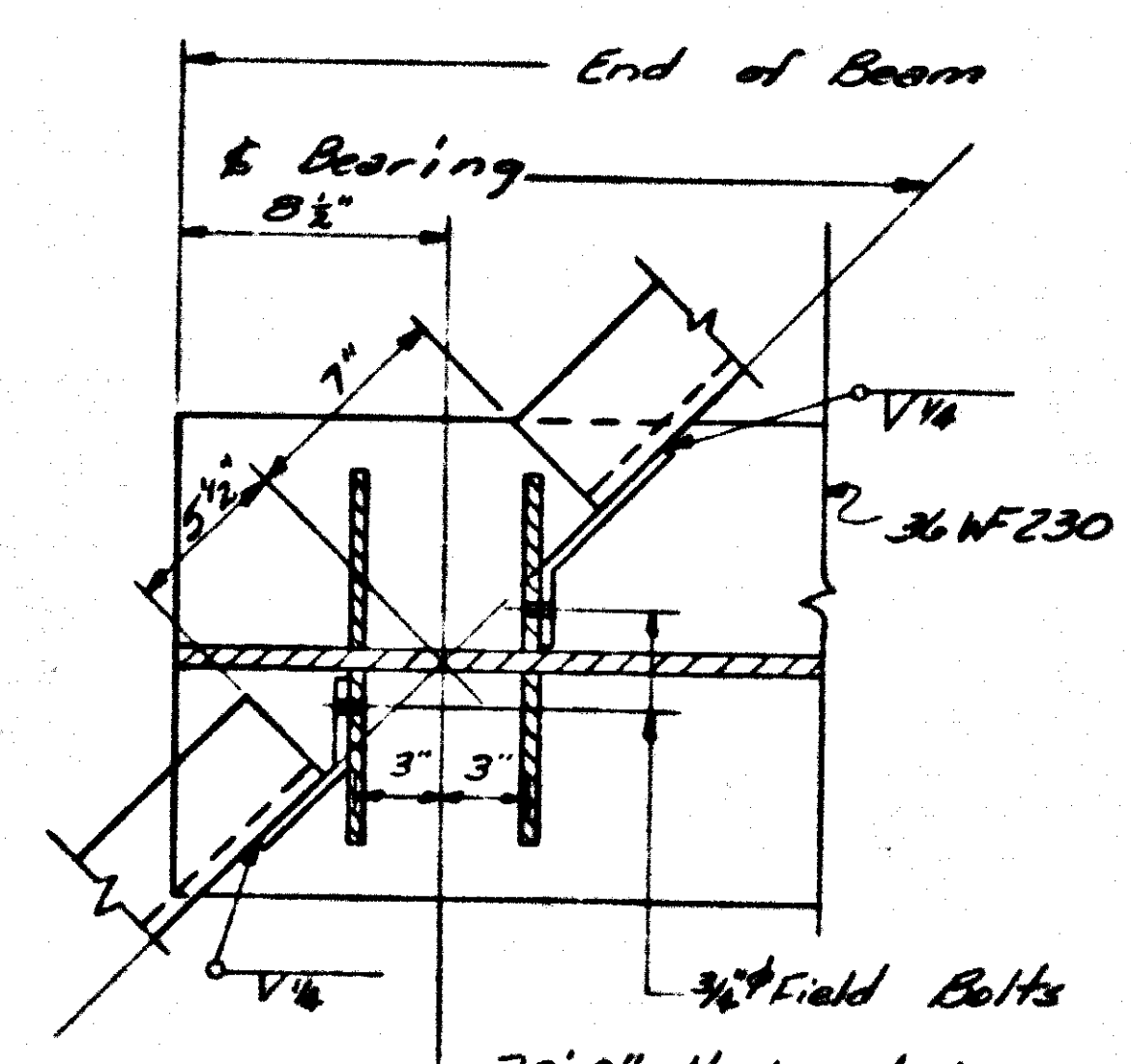
NOTE: Beam Elevations are set to put top of all beams 7" below top of slab at the intersection of \bar{x} beam and \bar{x} bearing.

GENERAL NOTE

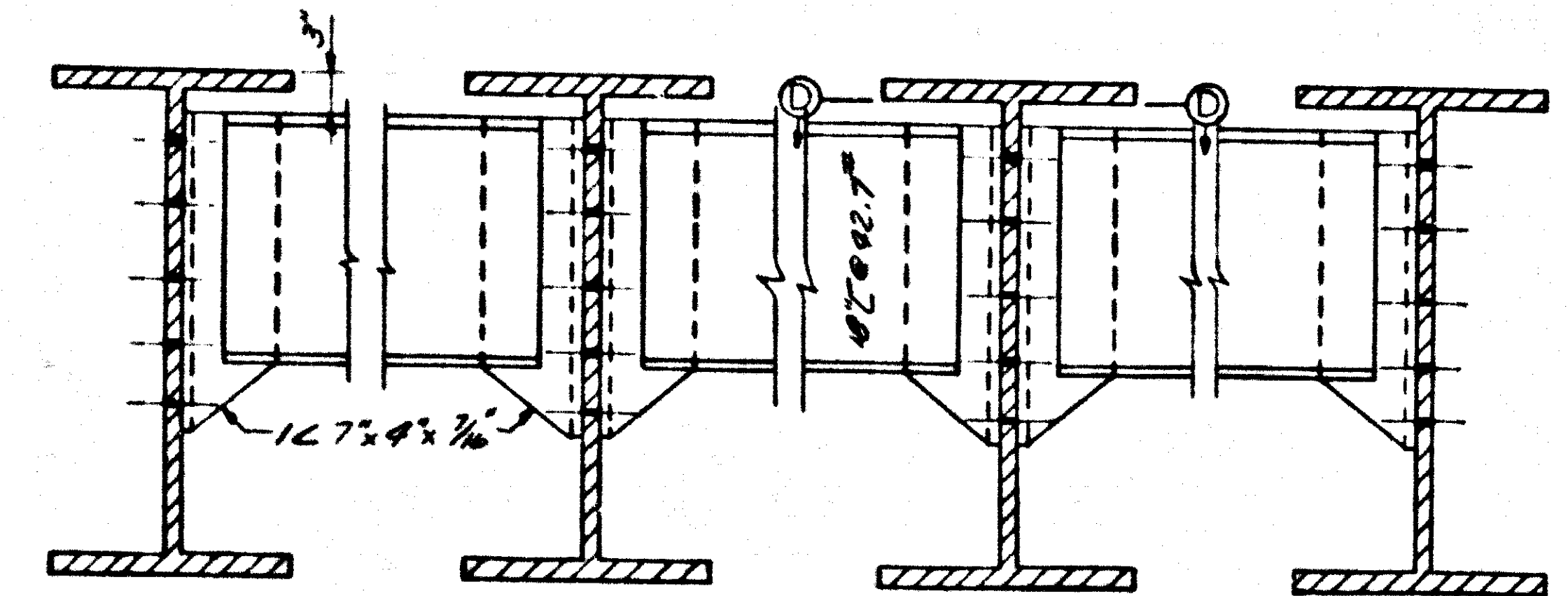
SPECIFICATION: Kentucky Department of Highways 1956 Standard with Amendments.
 ANCHOR DOWELS: Anchor bolts to be 1" in diameter. The contractor is responsible for keeping anchor dowel holes dry in event of freezing weather. The anchor dowel holes shall be 1 1/2" diameter, and shall be drilled in concrete masonry. After the base assembly is in place, and anchor dowel holes are drilled, the anchor dowels are to be heated to a blue heat and set in the holes by filling the holes with molten lead to the top of the base plate. The cost of lead required to set the anchor dowels and the cost of drilling anchor dowel holes shall be included in the Lump Sum Price Bid for structural steel.
 PAINT: All structural steel shall be given one shop coat of red lead paint according to the specifications. All exposed surfaces not in contact with concrete shall be given two field coats of Aluminum paint in accordance with the specifications. End lead paint shall be Type 1.
 WELDING: The cost of welding material and labor shall be included in the Lump Sum Bid for structural steel.
 WELDING MATERIAL: Welding material shall conform to the American Society for Welding Highway and Railroad Bridges current specifications with Amendments.
 MILL TEST REPORTS: Notarized Mill Test Reports in triplicate shall be furnished the Department of Highways showing that all structural steel furnished meets the specifications.
 SHOP PLANS: The contractor shall furnish the Department of Highways with complete shop detail plans for approval.
 PLATES: Plates must be true and free of warp.
 FIELD CONNECTIONS: Field connections shall be made using 3/4" diameter Eng. Hex. Head Semi-finished High Strength Bolts, with heavy plain carburized washer under the head, and Heavy Hex. Head Semi-finished Nut. The radius of the fillet under the bolt head shall be not less than 1/2". Where clearance makes it necessary, washers may be clipped on one side of a distance not less than 3/4" from the center of the washer. The bearing surface under each washer shall be free of paint and all other foreign materials, burrs, pits and any other defects which would interfere with the contact of the tightened parts. A torque wrench or inspect wrench may be used to tighten the bolts to the required tension of 35,000 pounds (Torque value of 420 foot-pounds).
 DRAINS: All drains to be Gray Iron Castings ASTM A48-56, except that tensile and transverse tests are not required. Form T-521, Report of Field Inspection of Casting, is to be submitted to the laboratory.
 A.S.T.M. SPECIFICATIONS: Structural steel A7-61T, C.I. Drains A48-56
 STEEL FINISH SPECIFICATIONS: Shoes in contact with beams A.S.A. 1000, Bridge Shoes A.S.A. 259. Stiffeners in compression A.S.A. 500.



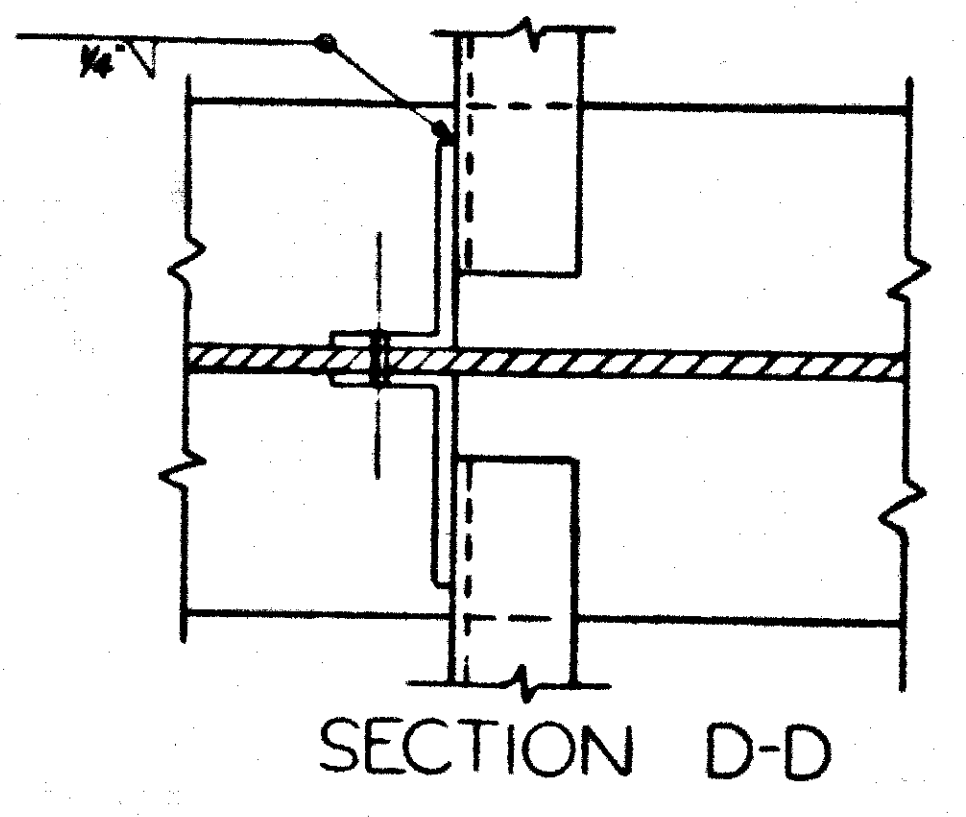
SECTION A-A
(Typical End Diaphragm)



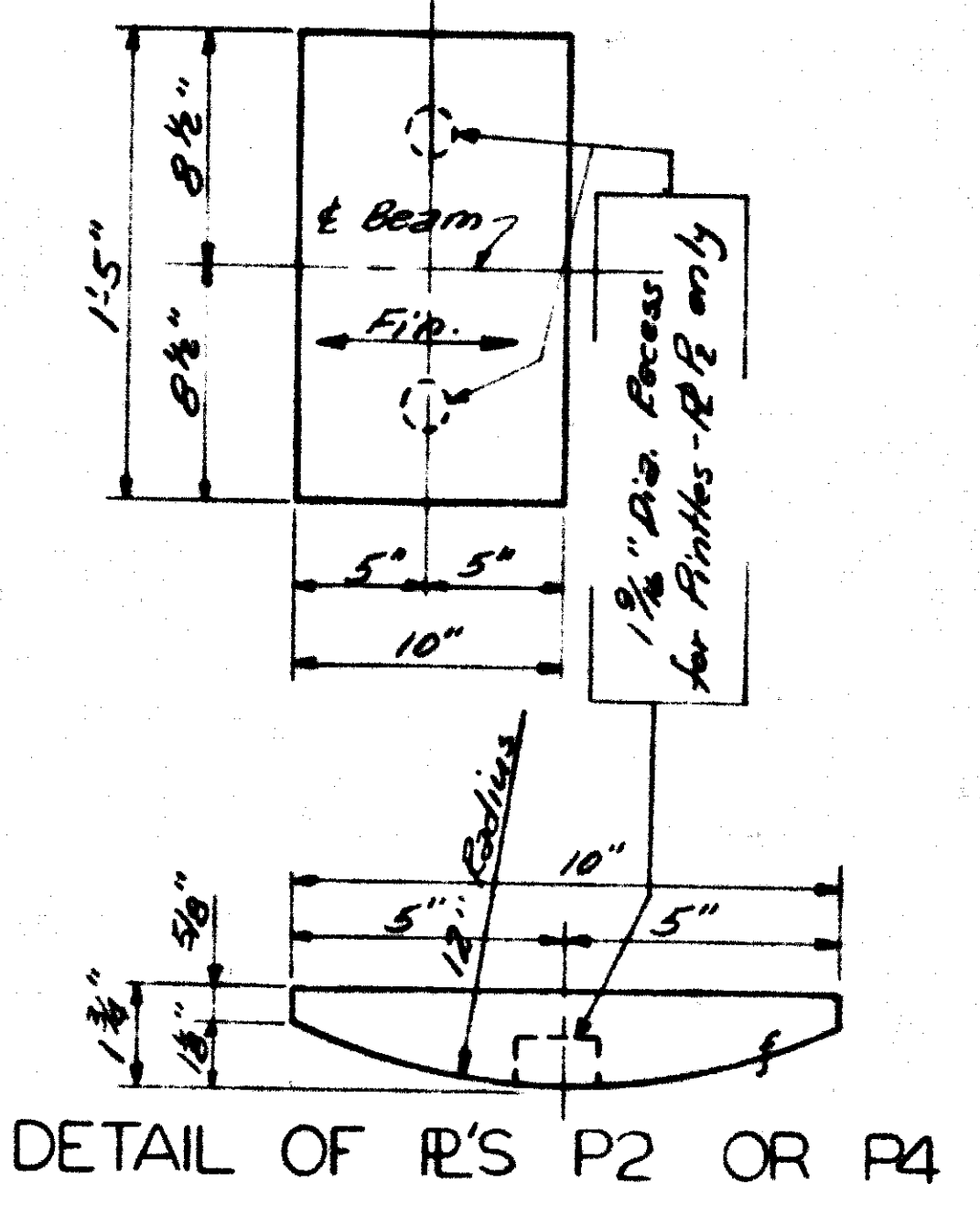
SECTION C-C



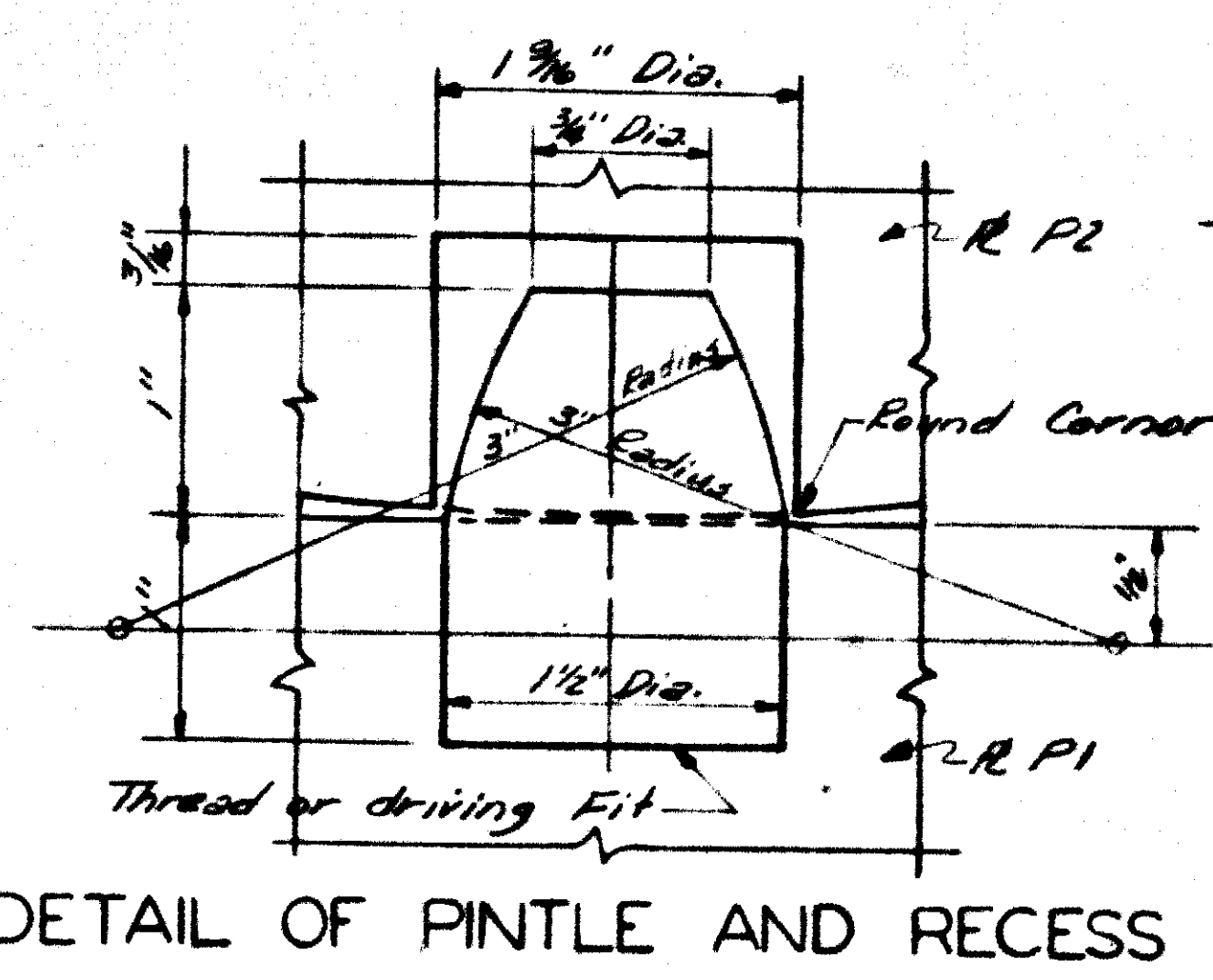
SECTION B-B



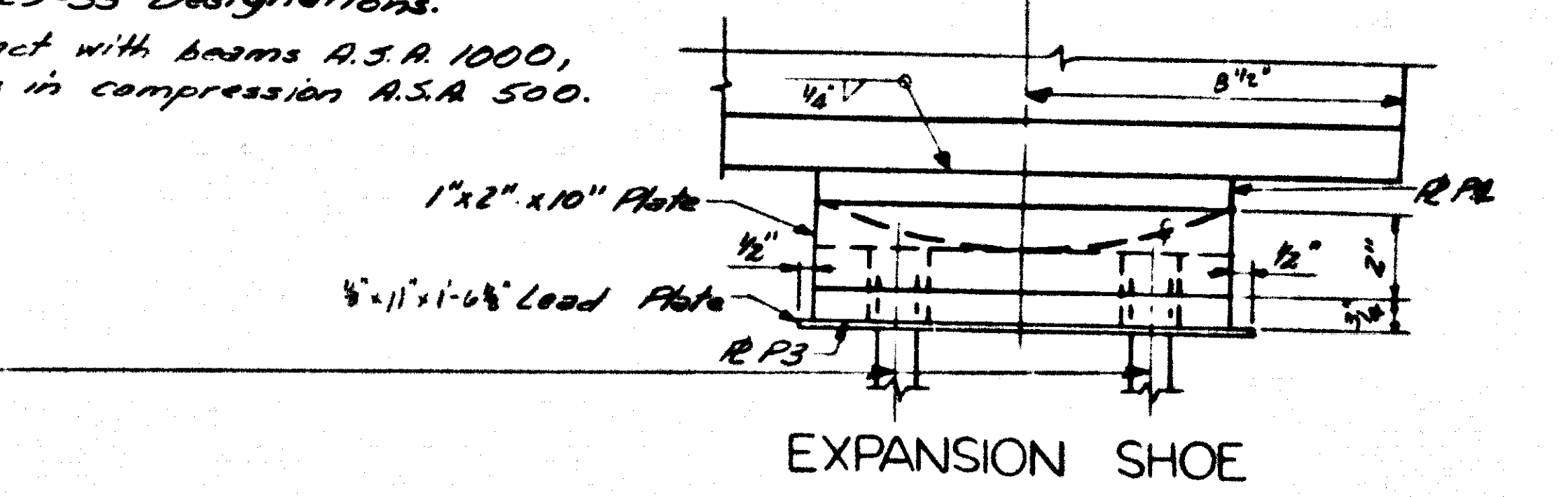
SECTION D-D



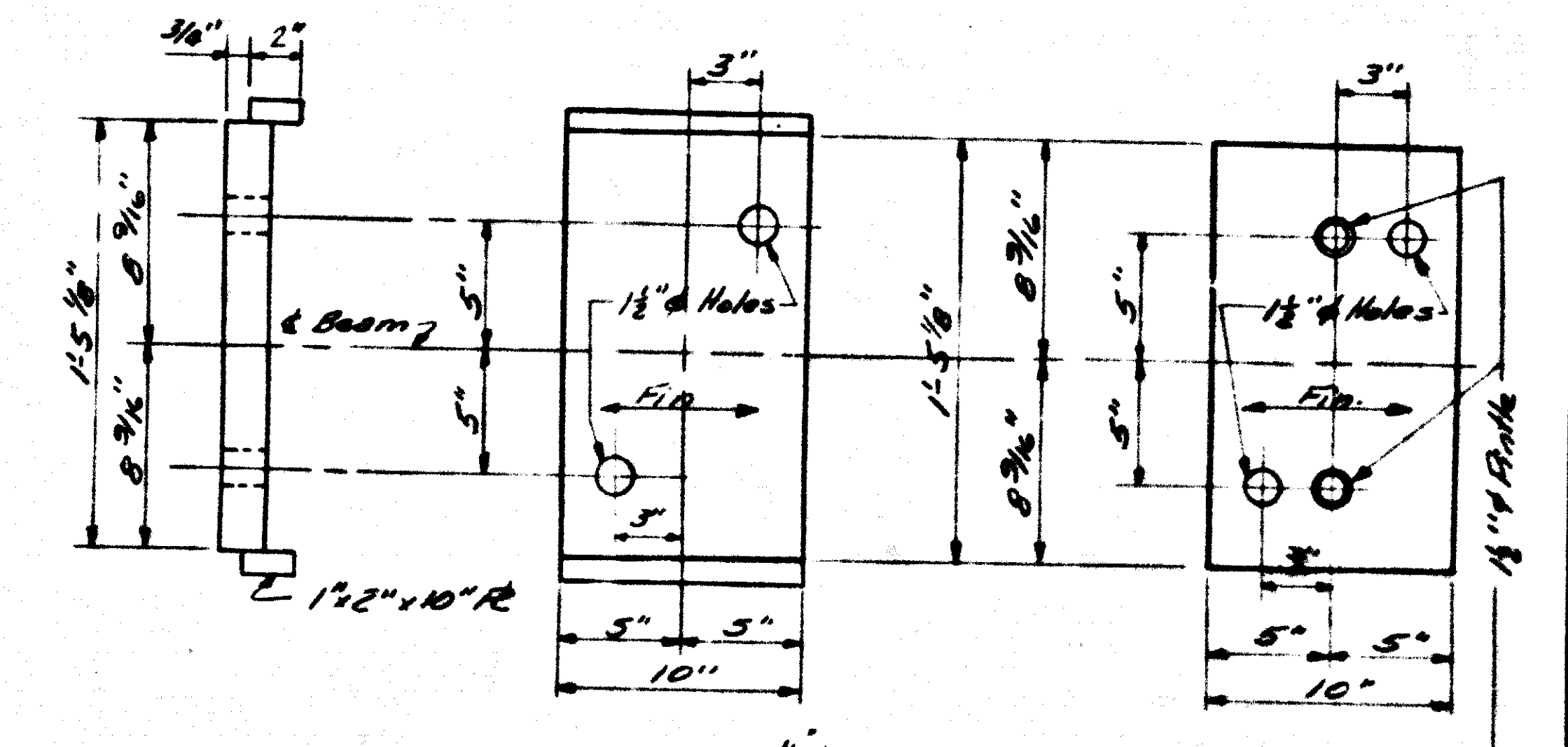
DETAIL OF R'S P2 OR P4



DETAIL OF PINTLE AND RECESS

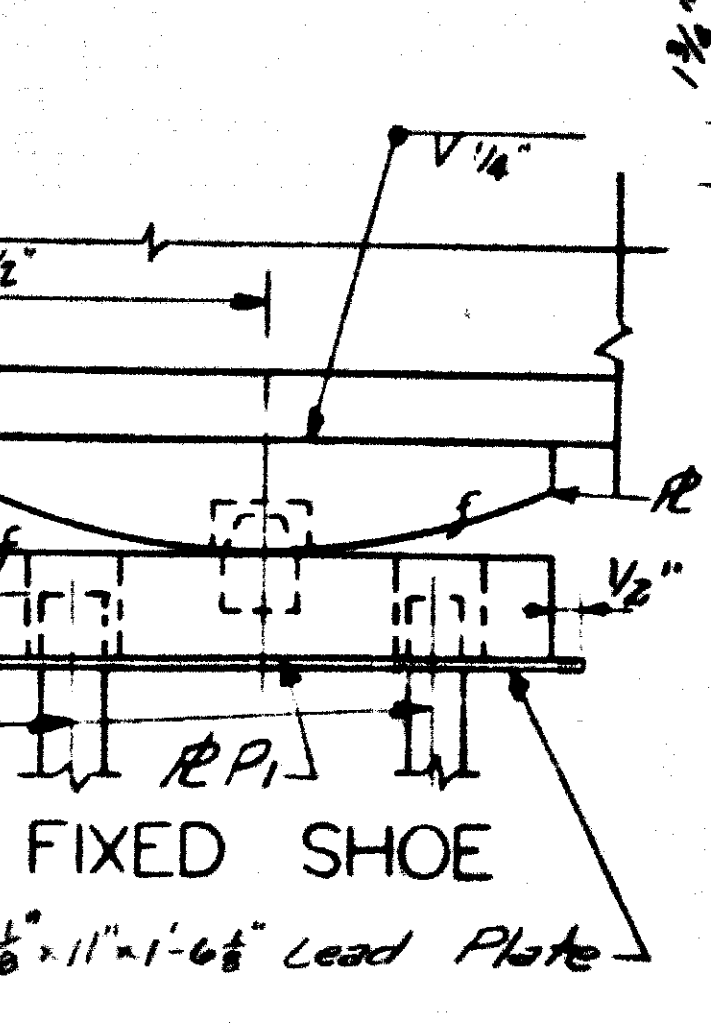


EXPANSION SHOE



DETAIL OF R P3

DETAIL OF R P1



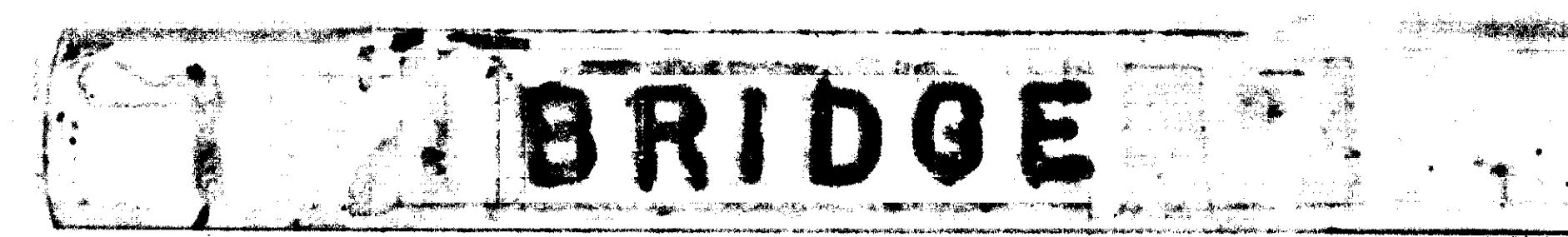
FIXED SHOE

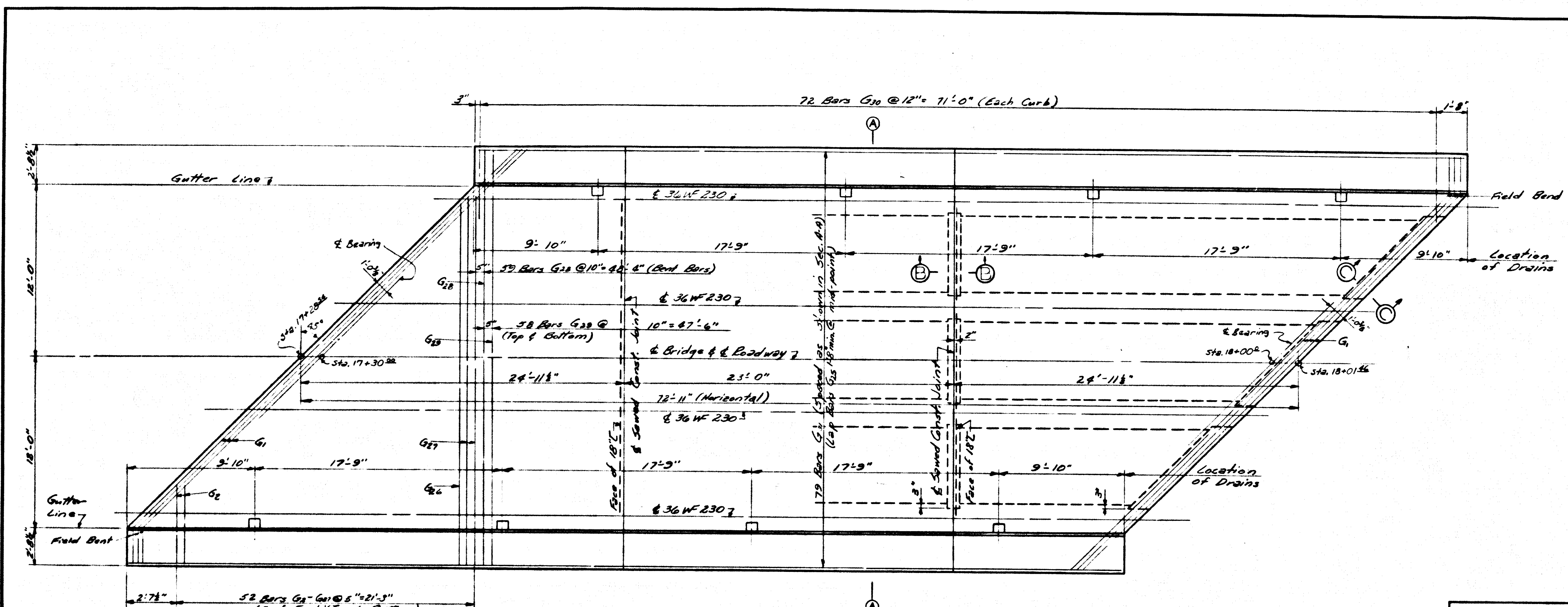
SPAN AND SHOE DETAILS

Bridge over Chaplin River Sheet

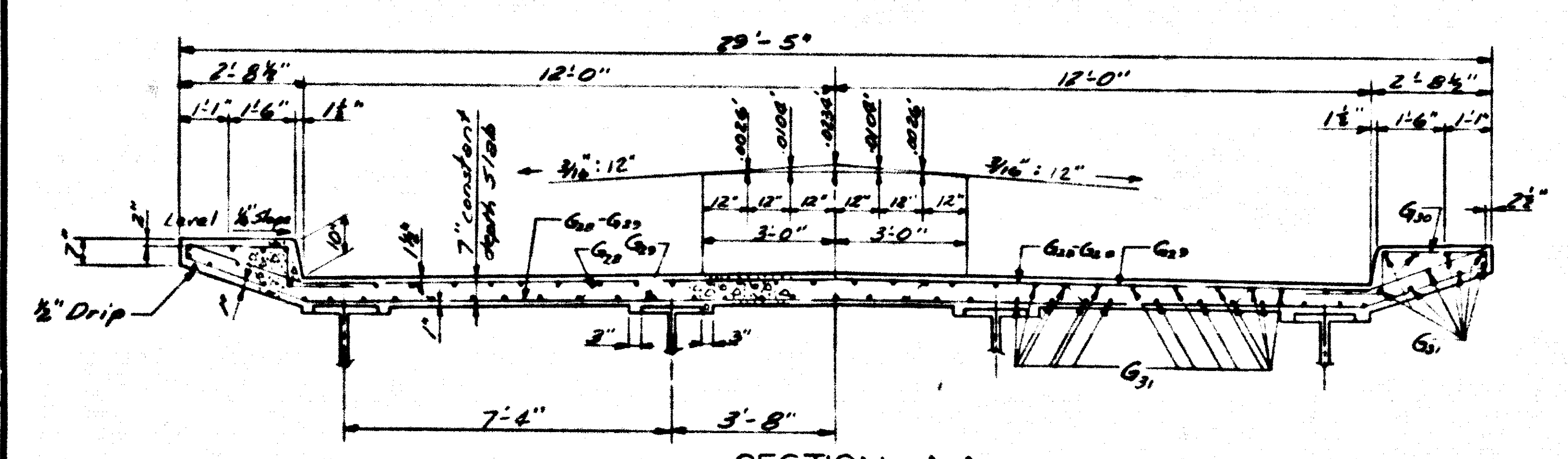
COMMONWEALTH OF KENTUCKY
 DEPARTMENT OF HIGHWAYS
 FRANKFORT
 COUNTY OF
BOYLE
 PERRYVILLE-MITCHELLSBURG

ROAD PROJECT NO.
 STATION 17+65.0
 BRIDGE NUMBER
 DRAWING NO. 14671

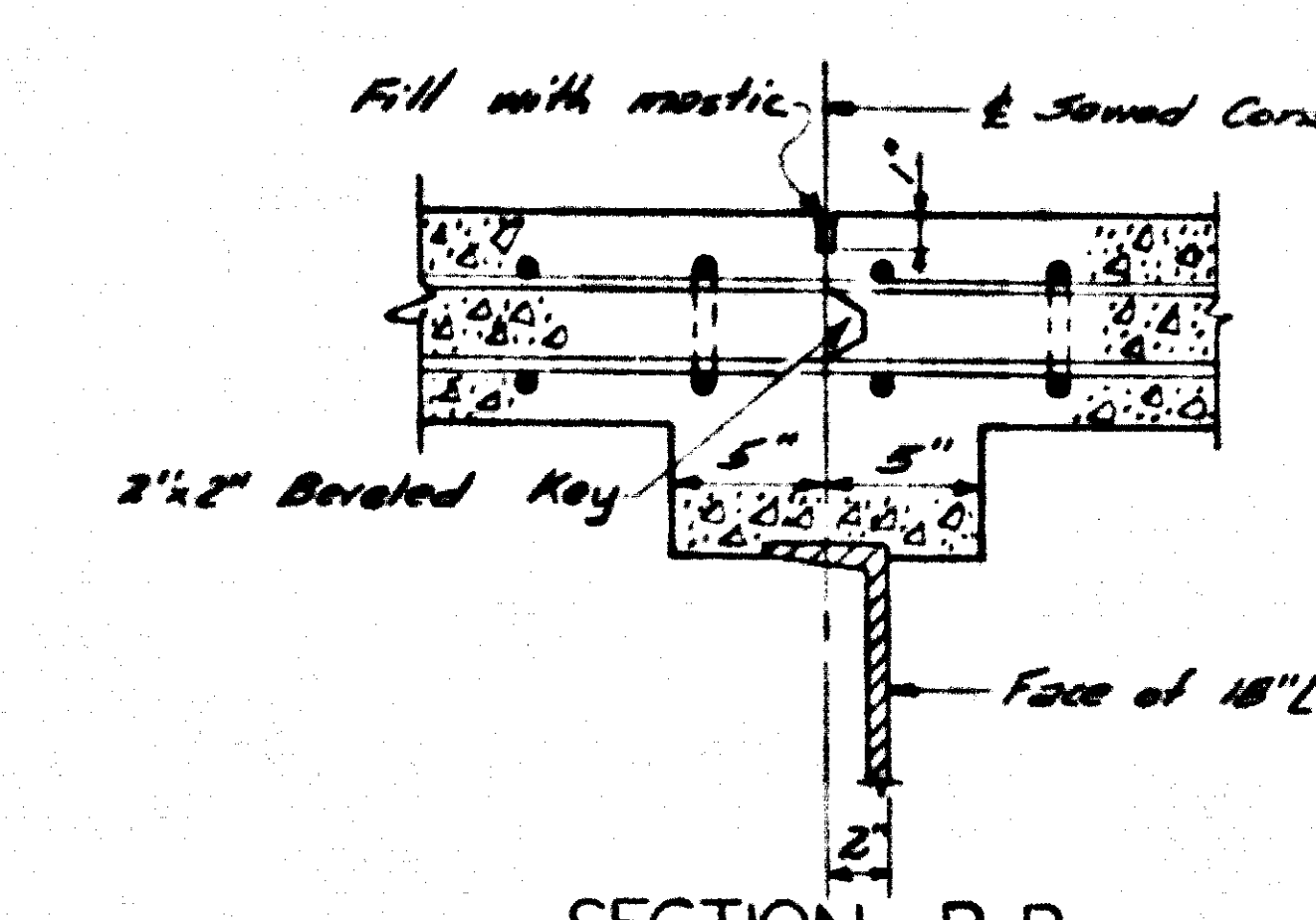




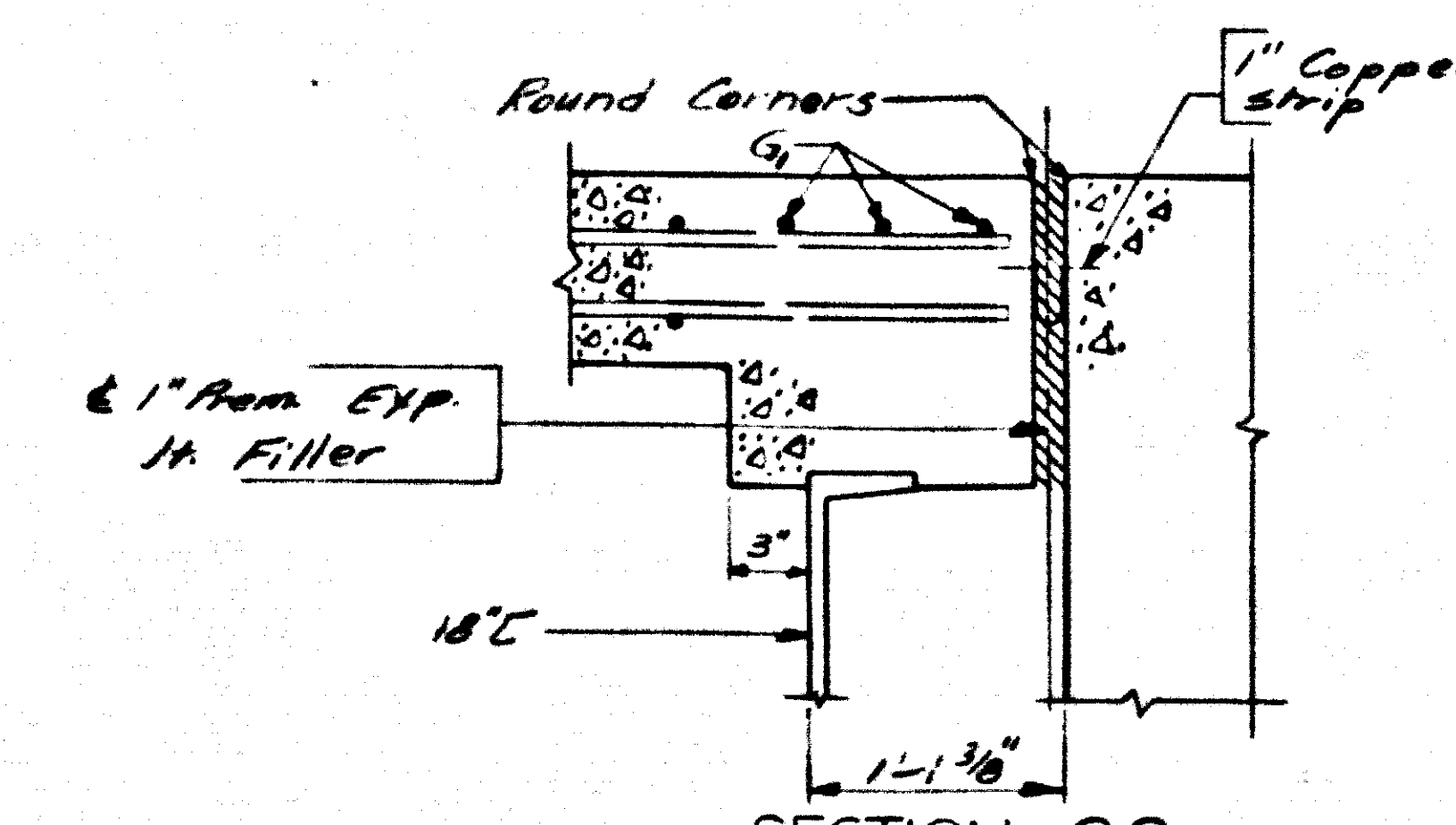
PLAN OF SLAB



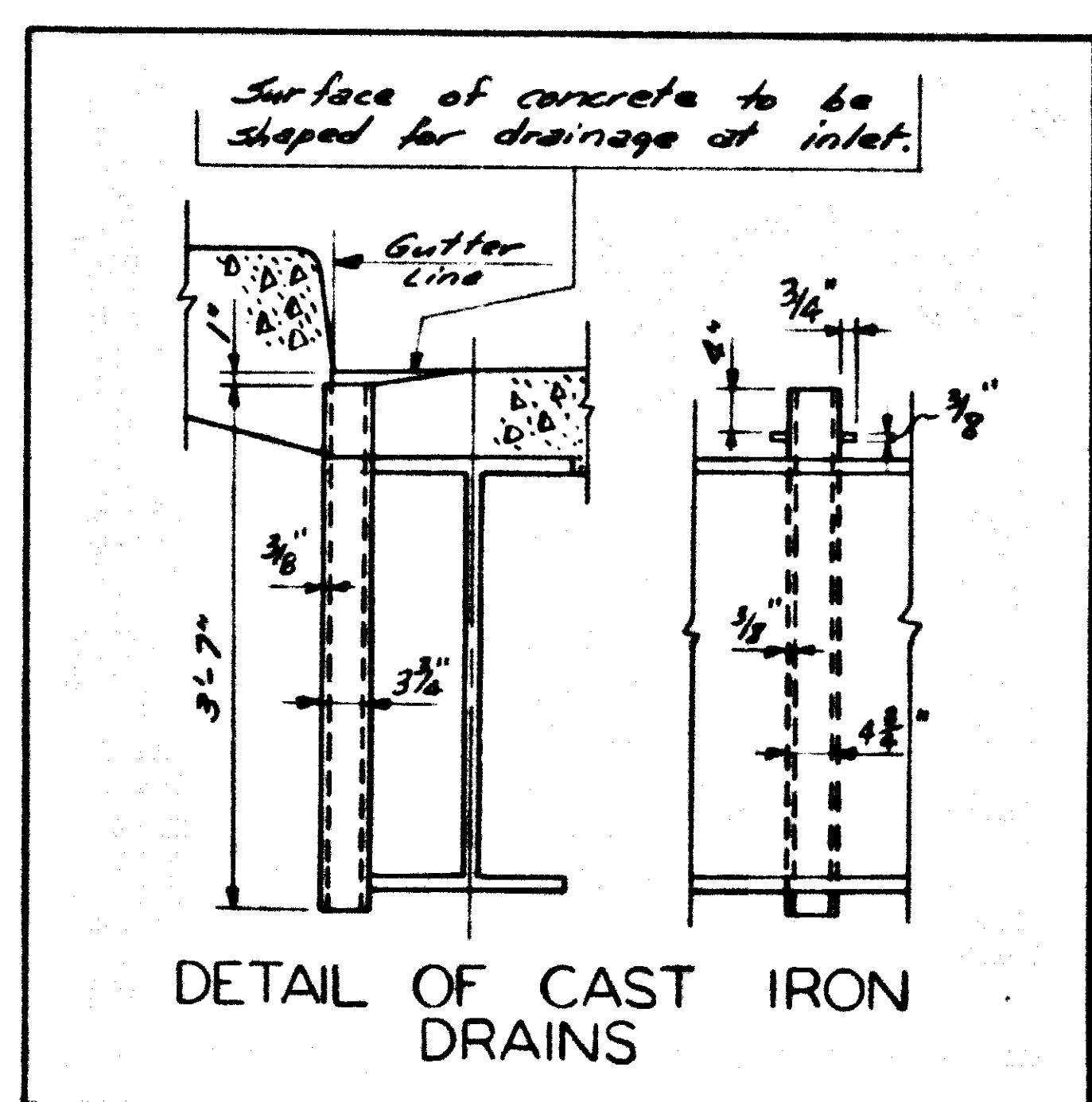
SECTION A-A



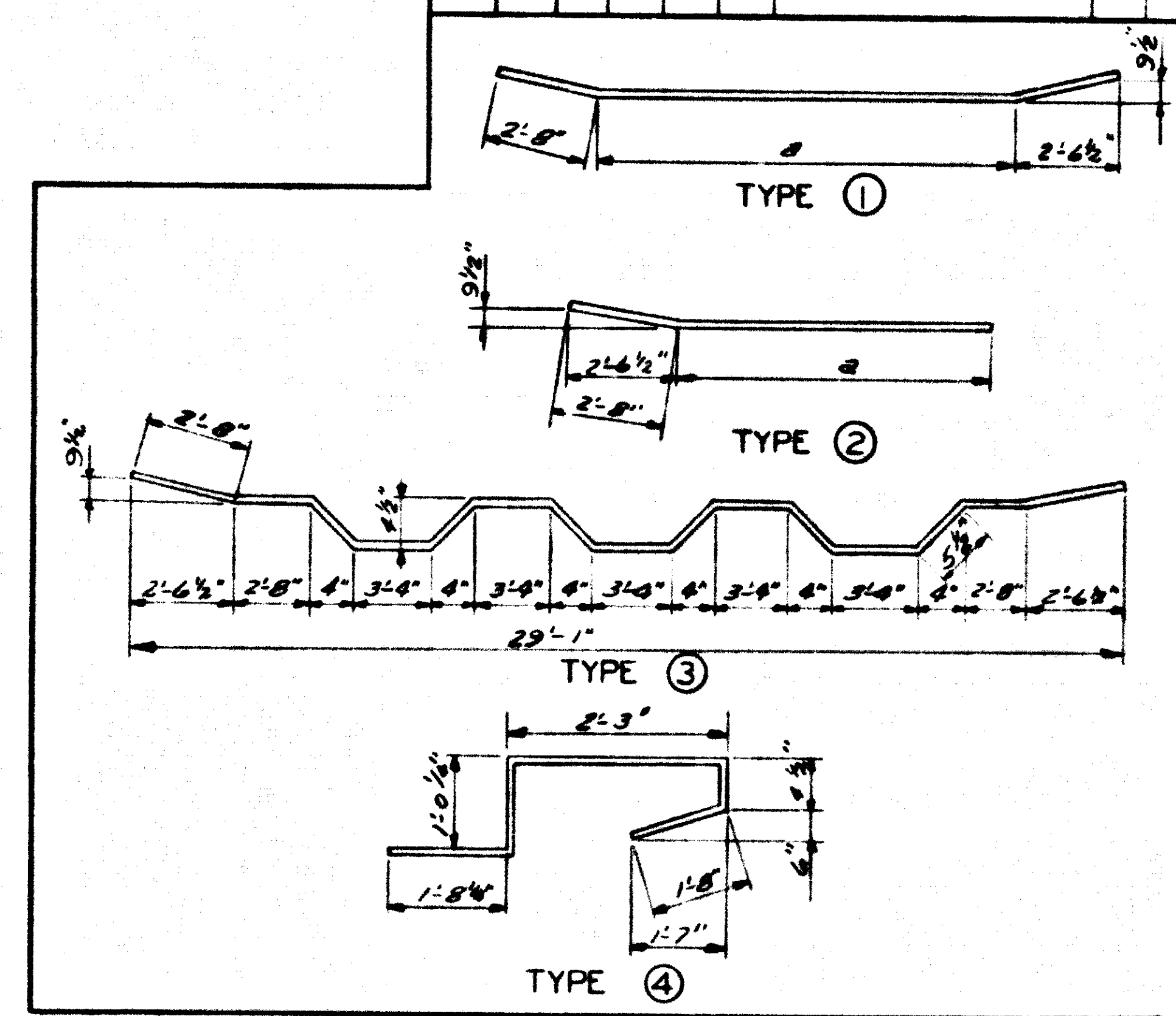
SECTION B-B



SECTION C-C



DETAIL OF CAST IRON DRAINS



ESTIMATE OF QUANTITIES
 CONCRETE, CLASS "A" 54.2 CU. YDS.
 REINFORCEMENT 13580 LBS.

SLAB DETAILS

BILL OF REINFORCEMENT									
MARK	TYPE	NO.	SIZE	LENGTH	WEIGHT	LOCATION	FT.	LBS.	TOTAL
G1	⊖	6	5/8"	33.3	33	Top of Slab	33	11	
G2	⊖	6	5/8"	5.1	5	Top of Bottom of Slab	5	5	
G3	⊖	6	5/8"	5.1	5	"	5	5	
G4	⊖	6	5/8"	6.3	6	"	6	7	
G5	⊖	6	5/8"	7.5	7	"	7	11	
G6	⊖	6	5/8"	8.7	8	"	8	17	
G7	⊖	6	5/8"	9.9	9	"	9	27	
G8	⊖	6	5/8"	11.1	10	"	10	37	
G9	⊖	6	5/8"	12.3	11	"	11	47	
G10	⊖	6	5/8"	13.5	12	"	12	57	
G11	⊖	6	5/8"	14.7	13	"	13	67	
G12	⊖	6	5/8"	15.9	14	"	14	77	
G13	⊖	6	5/8"	17.1	15	"	15	87	
G14	⊖	6	5/8"	18.3	16	"	16	97	
G15	⊖	6	5/8"	19.5	17	"	17	107	
G16	⊖	6	5/8"	20.7	18	"	18	117	
G17	⊖	6	5/8"	21.9	19	"	19	127	
G18	⊖	6	5/8"	23.1	20	"	20	137	
G19	⊖	6	5/8"	24.3	21	"	21	147	
G20	⊖	6	5/8"	25.5	22	"	22	157	
G21	⊖	6	5/8"	26.7	23	"	23	167	
G22	⊖	6	5/8"	27.9	24	"	24	177	
G23	⊖	6	5/8"	29.1	25	"	25	187	
G24	⊖	6	5/8"	30.3	26	"	26	197	
G25	⊖	6	5/8"	31.5	27	"	27	207	
G26	⊖	6	5/8"	32.7	28	"	28	217	
G27	⊖	6	5/8"	33.9	29	"	29	227	
G28	⊖	6	5/8"	35.1	30	"	30	237	
G29	⊖	6	5/8"	36.3	31	"	31	247	
G30	⊖	6	5/8"	37.5	32	"	32	257	
G31	⊖	6	5/8"	38.7	33	"	33	267	

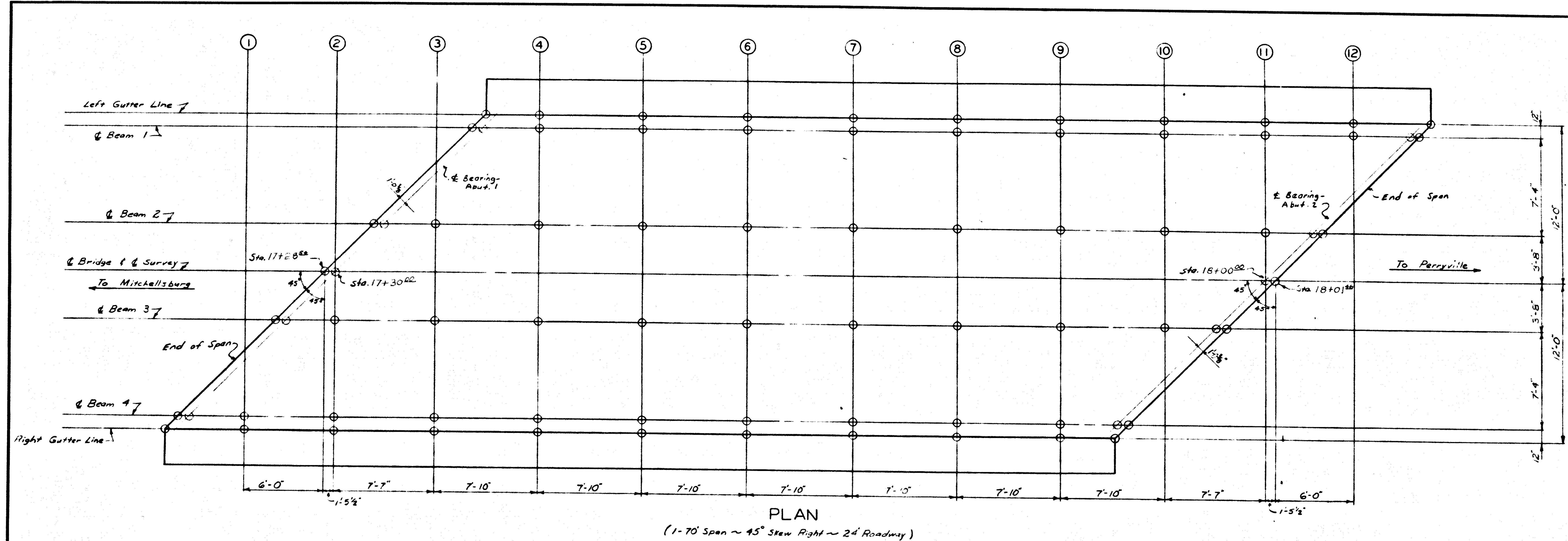
Bridge over Chaplin River Sheet 6

COMMONWEALTH OF KENTUCKY
 DEPARTMENT OF HIGHWAYS
 FRANKFORT
 COUNTY OF
 BOYLE
 PERRYVILLE - MITCHELLSBURG

ROAD PROJECT NO.
 STATION 17+65.0 DRAWING INDEX
 BRIDGE NUMBER NO. 14671

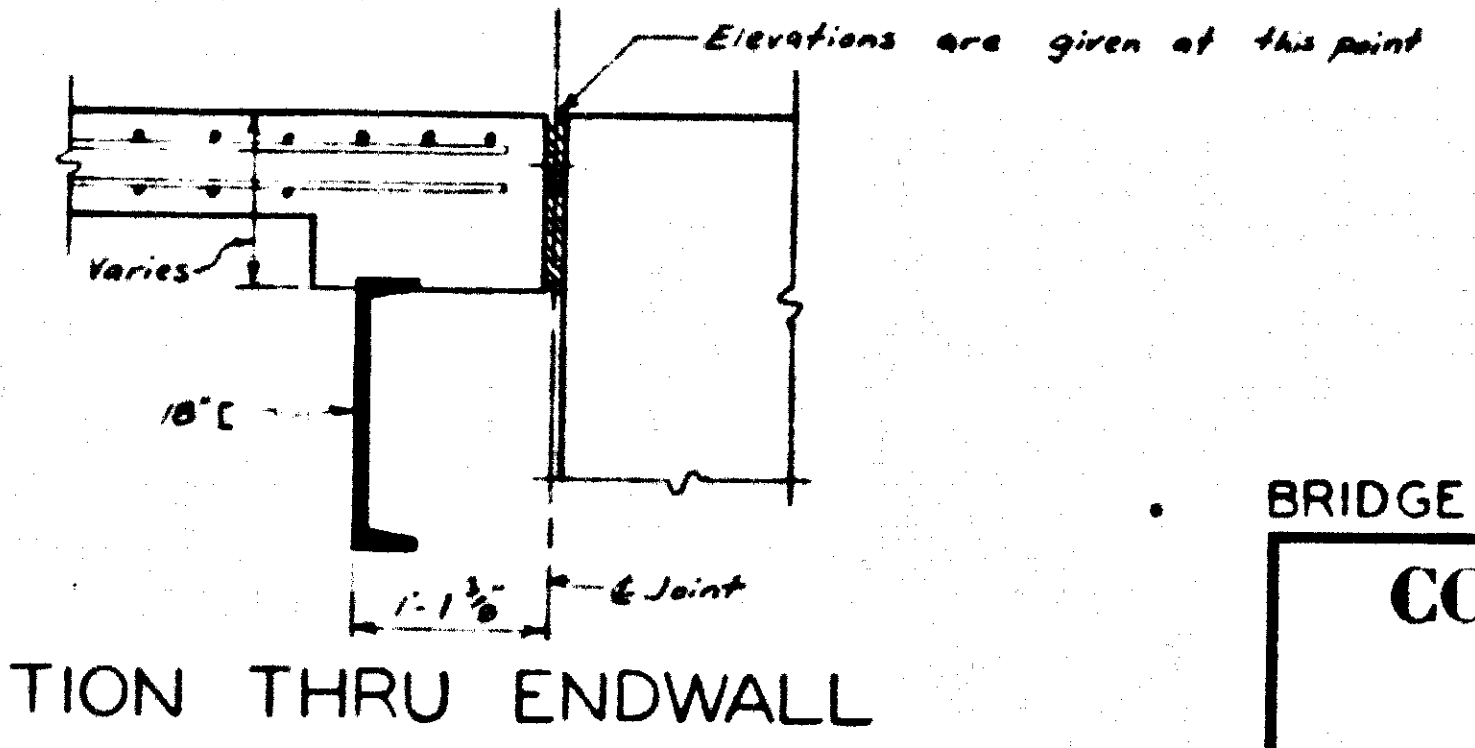
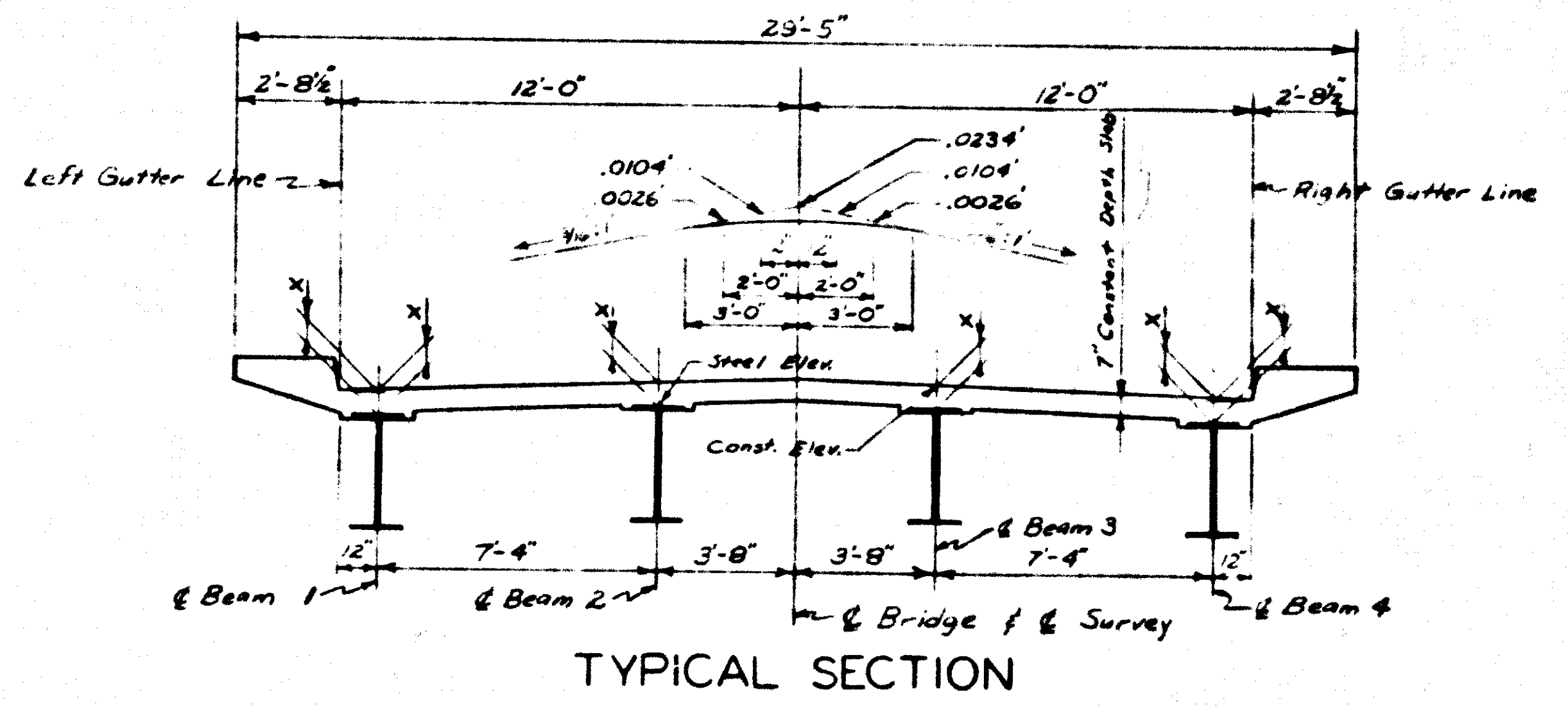
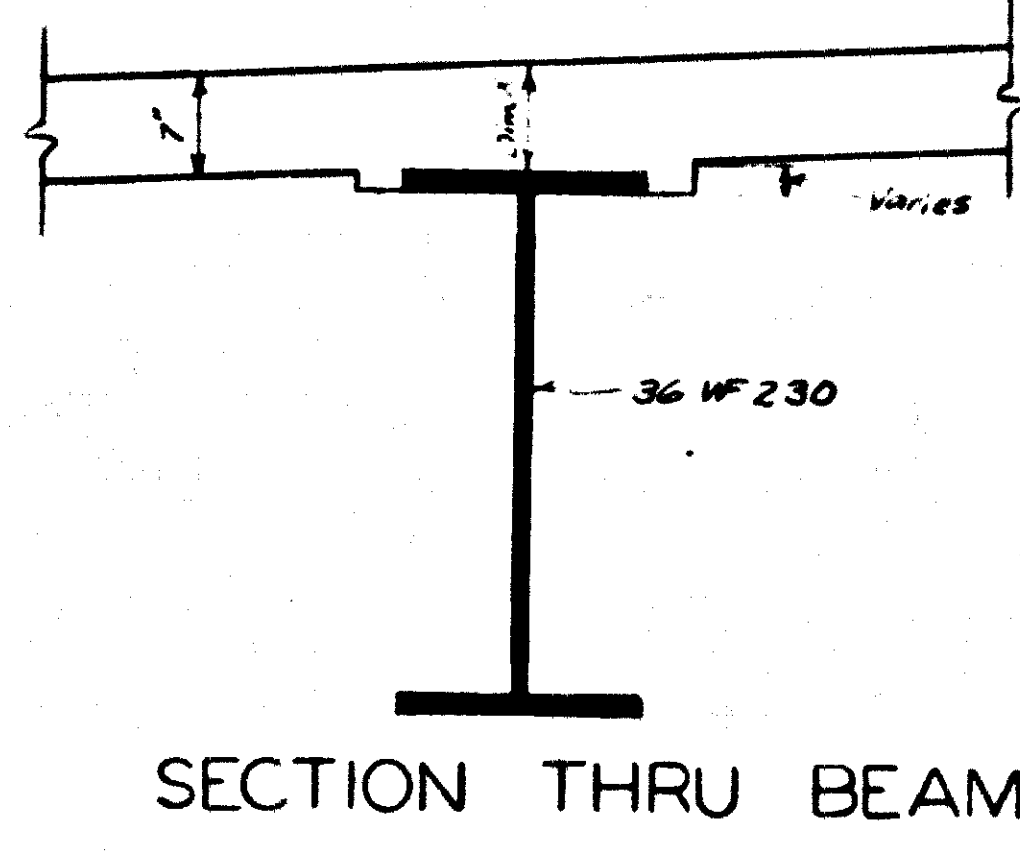
BRIDGE

FED. ROAD DIST.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
7	KY			



CONSTRUCTION NOTE

- Take elevations on top of steel at points indicated after lateral bracing is in place and after all falsework has been removed, but before forms for concrete slab have been put in place. Read elevations to three decimals using target and enter readings in table under steel elevations.
- Compute Dimension X as follows—Construction Elevation minus Steel Elevation equals "Dim. X". Construction Elevations include camber due to weight of concrete slab.
- For setting templates, measure Dim. X above top of steel for top of template. Do not set templates by elevations.



ELEVATIONS													
LINE OF CENTER	Left Gutter Line		Beam 1		Beam 2		Beam 3		Beam 4		Right Gutter Line		DIM. X
	Const. Elev.	Steel Elev.	Const. Elev.	Steel Elev.	Const. Elev.	Steel Elev.	Const. Elev.	Steel Elev.	Const. Elev.	Steel Elev.	Const. Elev.	Steel Elev.	
1	851.111		851.925		852.051		852.044		851.978		851.856		
2													
3	851.926		851.957		852.052		852.048		851.947		851.856		
4	851.979		851.996		852.082		852.083		851.947		851.880		
5	852.006		852.024		852.121		852.122		851.952		851.925		
6	852.019		852.037		852.134		852.135		851.972		852.000		
7	852.019		852.035		852.144		852.145		851.999		852.007		
8	852.035		852.051		852.150		852.151		852.022		852.007		
9	852.072		852.088		852.182		852.183		852.071		852.077		
10	852.035		852.051		852.150		852.151		852.022		852.007		
11	851.935		851.947		852.083		852.084		851.957		851.926		
12	851.880		851.892		852.032		852.033		851.925		851.871		
Bearing	851.856		851.856		851.977		852.044		852.081		851.926		
End of Span					852.044		852.044		852.081		851.856		

BRIDGE OVER CHAPLIN RIVER SHEET 7

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
BOYLE
PERRYVILLE - MITCHELLSBURG
ROAD

STATION 17+65.5
BRIDGE NUMBER 14671
PROJECT NO. DRAWING NO. 14671

BRIDGE

DRAWN BY: J. M. SCOTT
 CHECKED BY: G. P. RESIDE
 DATE: 10/10/50
 REVISED: 12/1/50
 DATE: 12/1/50

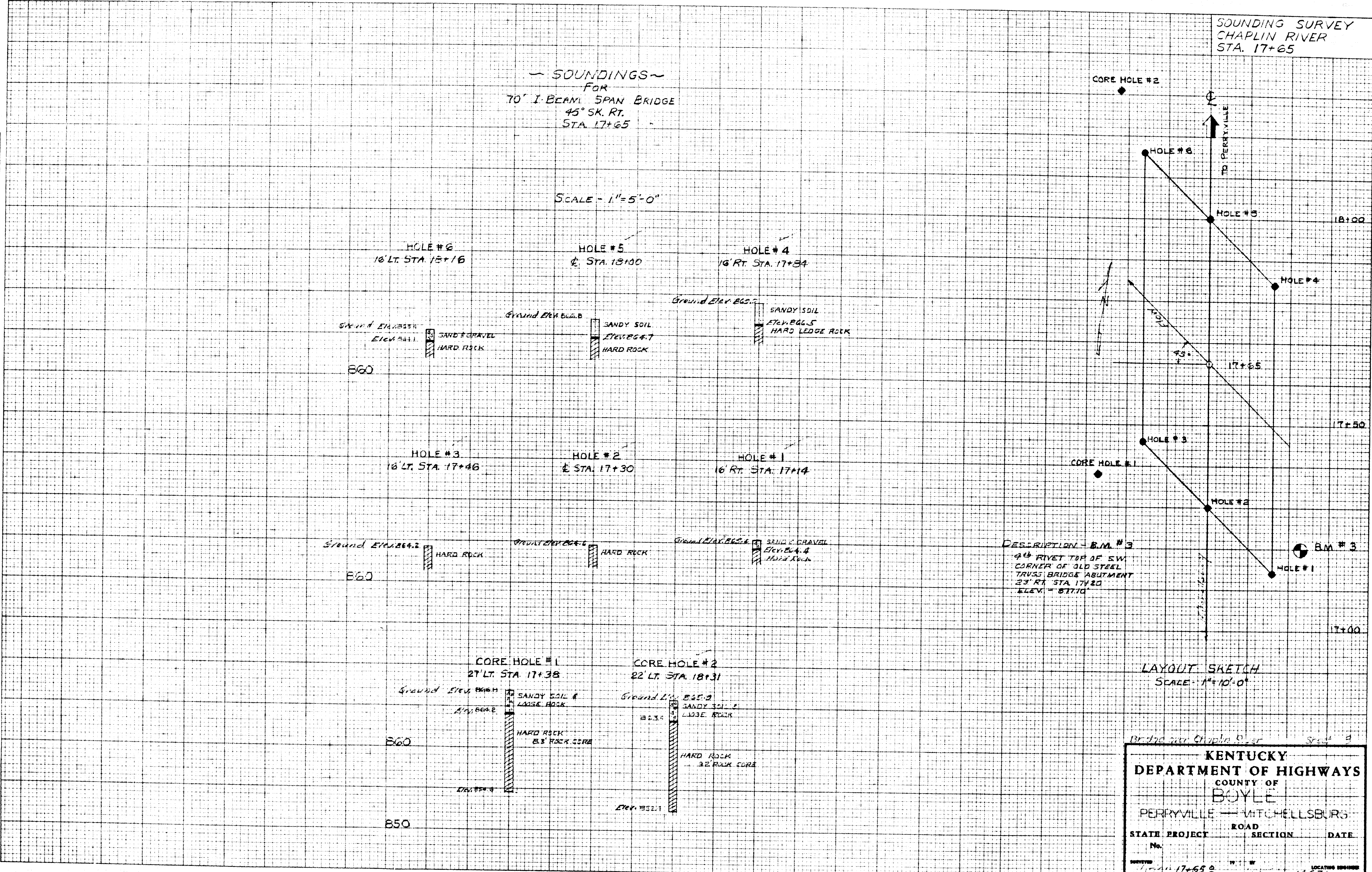
SOUNDING SURVEY
CHAPLIN RIVER
STA. 17+65

~ SOUNDINGS ~
FOR
70' I-BEAM SPAN BRIDGE
45° SK. RT.
STA. 17+65

SCALE - 1" = 5'-0"

DATE	
BY	
CHECKED	
APPROVED	
DESIGNED	
DRAWN	
FIELD CHECKED	

DATE	
BY	
CHECKED	
APPROVED	
DESIGNED	
DRAWN	
FIELD CHECKED	



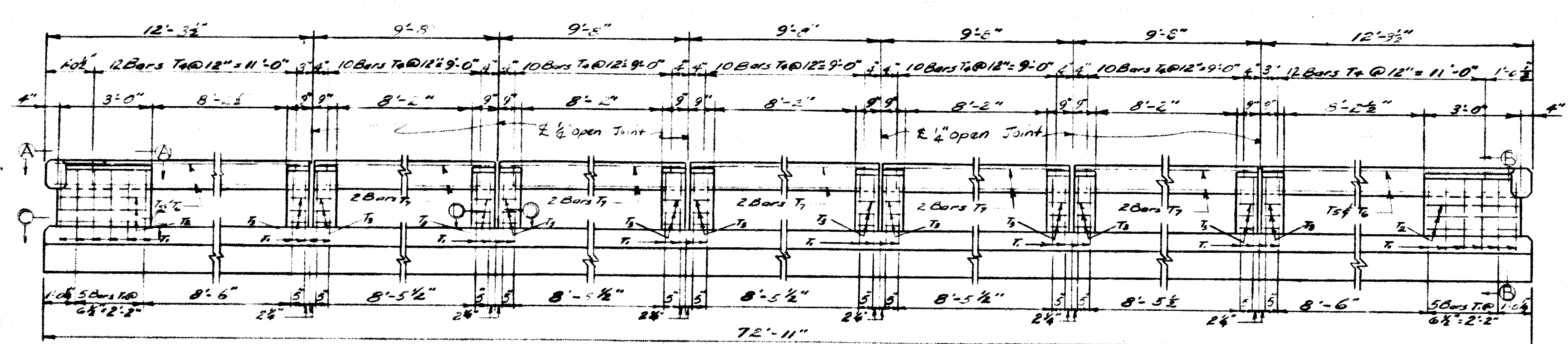
LAYOUT SKETCH
SCALE - 1" = 10'-0"

BRIDGE OVER CHAPLIN RIVER

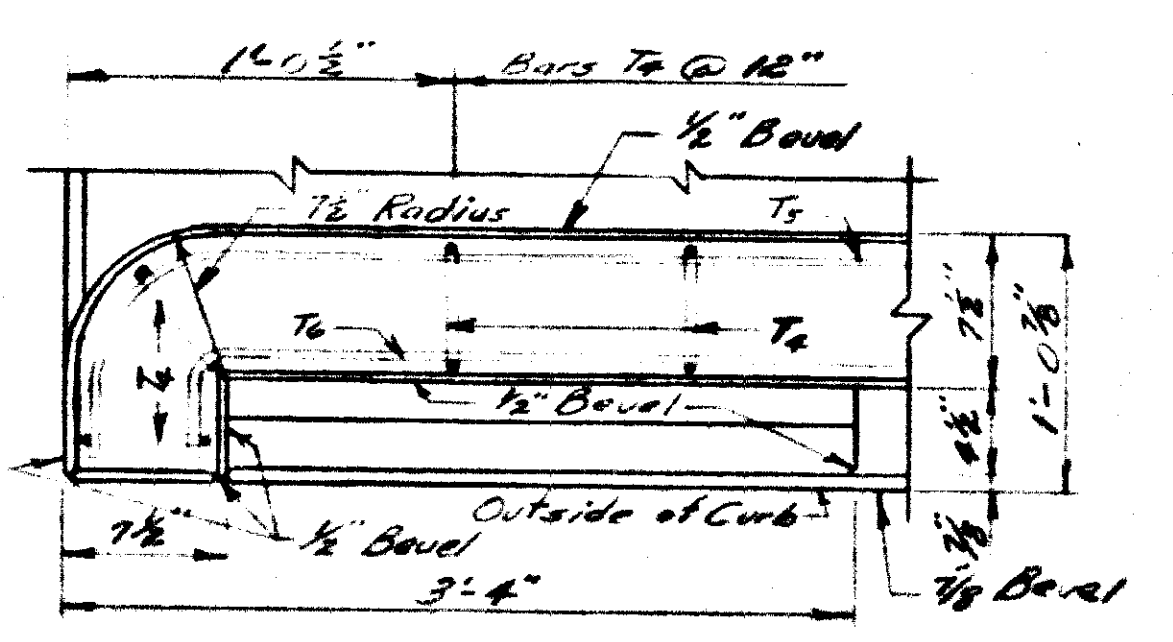
KENTUCKY
DEPARTMENT OF HIGHWAYS
COUNTY OF
BOYLE
PERRYVILLE - MITCHELLSBURG
ROAD SECTION DATE
STATE PROJECT No. 17+65
LOCATING NUMBER 14671

PLATE 3 CROSS SECTION D. P. S. & E. STANDARD
NOT A STANDARD TITLE - NOT TO BE USED IN U. S. A.
1788N CD

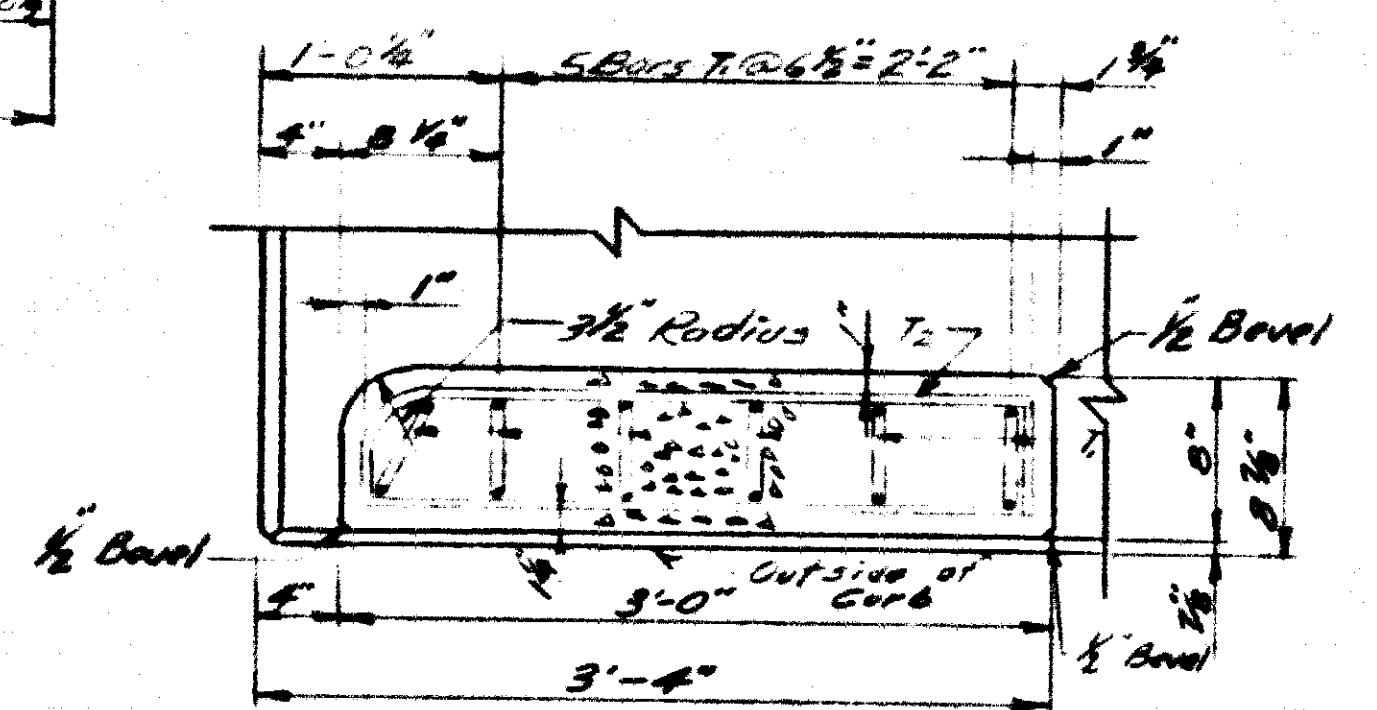
BRIDGE



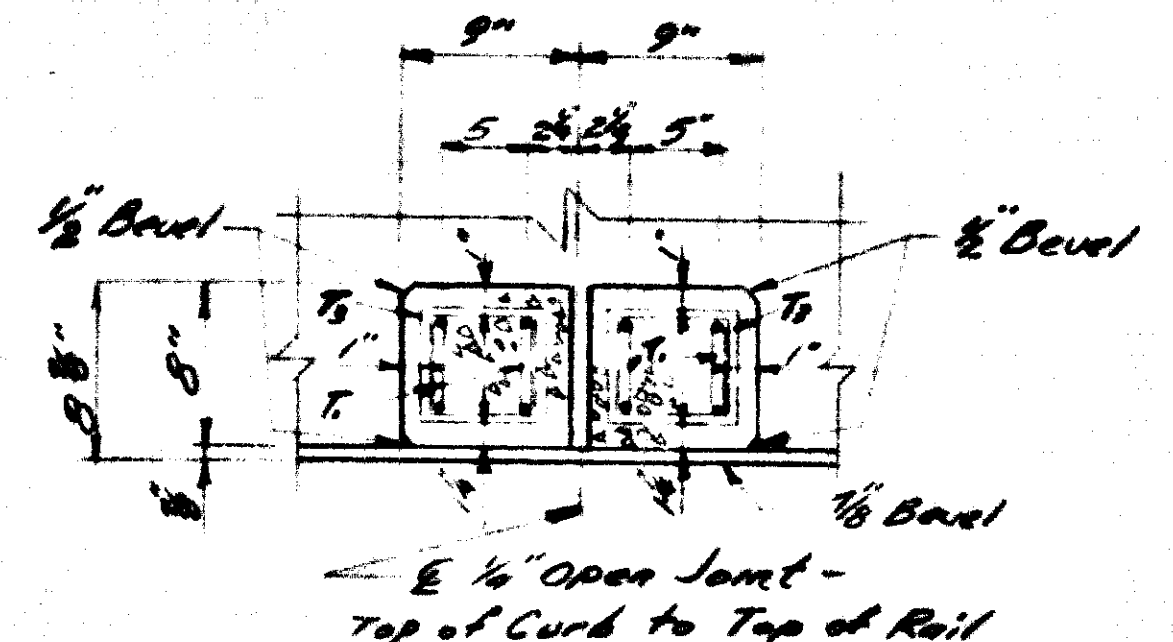
ELEVATION OF HANDRAIL



PLAN A-A

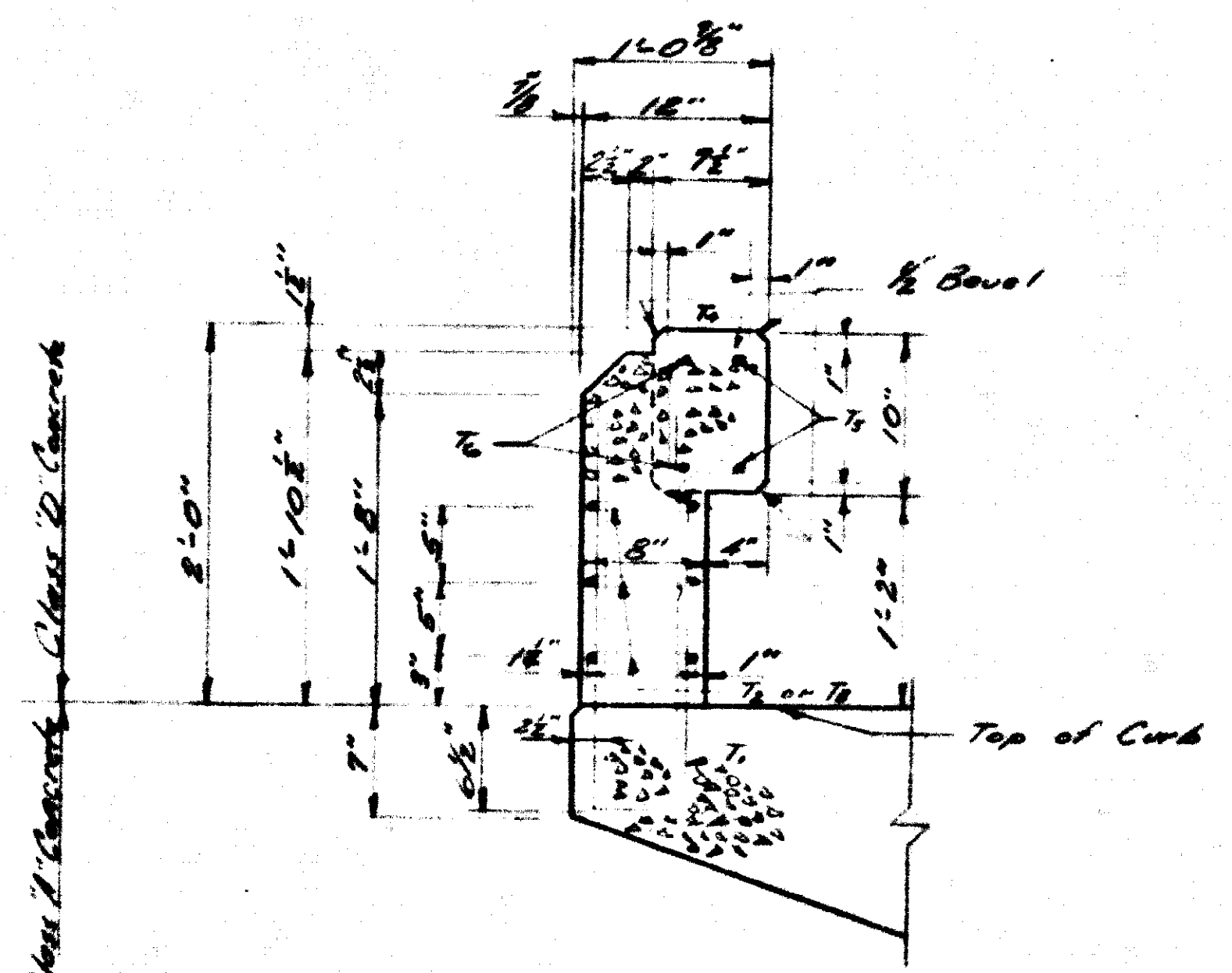


SECTION C-C



SECTION D-D

NOTE: The top of all posts and rail shall be parallel to grade line. Sides of all posts shall be vertical.

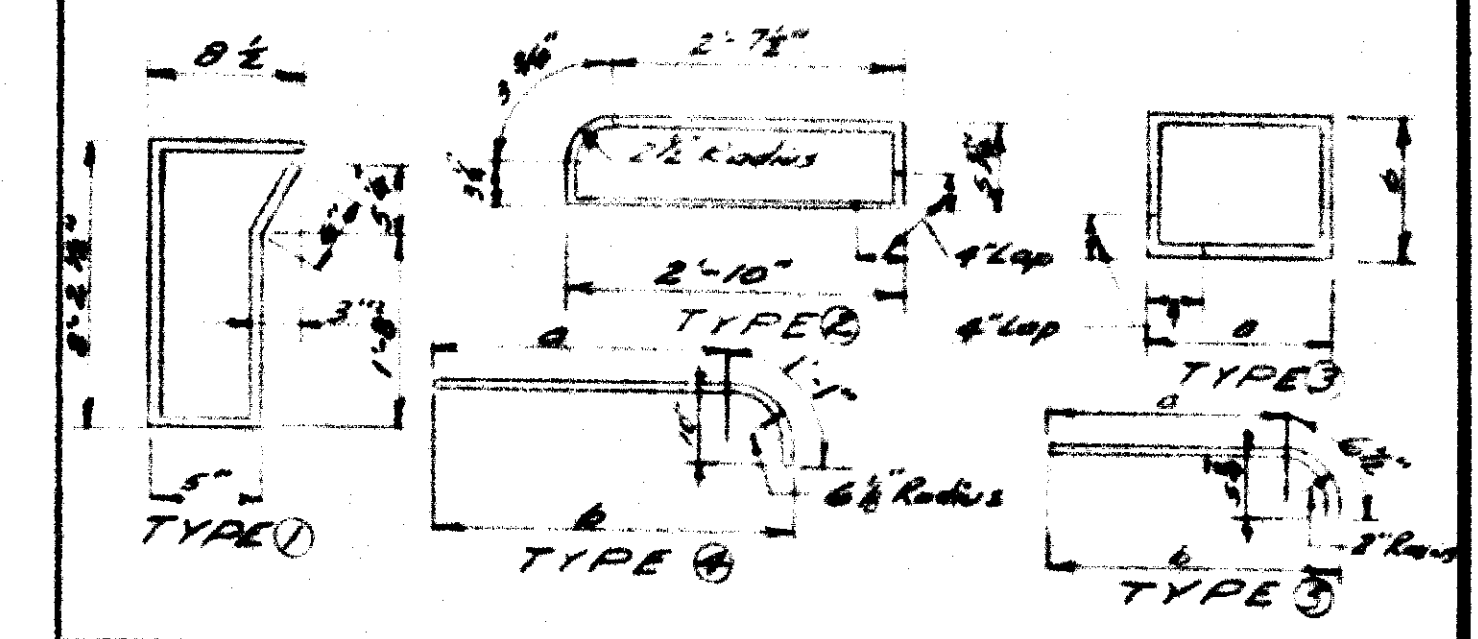


SECTION B-B

ESTIMATE OF QUANTITIES

CONCRETE, CLASS "D"	40 CU. YDS.
REINFORCEMENT	1249 LBS.

NO.	SIZE	LENGTH	LOCATION	FT. IN. FT. IN.
1	1/2"	5	Curb into Post	0 0 0 5 0
2	1/2"	7	Post	0 0 0 7 0
3	1/2"	2	Post	0 0 0 2 0
4	1/2"	2	Post	0 0 0 2 0
5	1/2"	2	Post	0 0 0 2 0
6	1/2"	2	Post	0 0 0 2 0
7	1/2"	2	Post	0 0 0 2 0
8	1/2"	2	Post	0 0 0 2 0
9	1/2"	2	Post	0 0 0 2 0
10	1/2"	2	Post	0 0 0 2 0
11	1/2"	2	Post	0 0 0 2 0
12	1/2"	2	Post	0 0 0 2 0
13	1/2"	2	Post	0 0 0 2 0
14	1/2"	2	Post	0 0 0 2 0
15	1/2"	2	Post	0 0 0 2 0
16	1/2"	2	Post	0 0 0 2 0
17	1/2"	2	Post	0 0 0 2 0
18	1/2"	2	Post	0 0 0 2 0
19	1/2"	2	Post	0 0 0 2 0
20	1/2"	2	Post	0 0 0 2 0



GENERAL NOTE

SPECIFICATIONS: Kentucky Department of Highways, 1902 Standard with Amendments.

CONCRETE: Class "D" Concrete to be used in Handrails.

REINFORCEMENT: Intermediate or Hard grade reinforcement shall be used in accordance with A.S.T.M. A15-58 for Billet Steel or A.S.T.M. A16-59 for Rail Steel. Dimensions from face of concrete to bars are clear distances except as otherwise shown. Dimensions for bar spacing are distances center to center of bars.

BEVELED EDGES: All exposed edges to be beveled 1/2" unless otherwise noted.

DESIGNED BY: W. J. JUDY
 CHECKED BY: L. J. JUDY
 DATE: _____

HANDRAIL

BRIDGE OVER CHARLIN RIVER SHEET 5

COMMONWEALTH OF KENTUCKY
 DEPARTMENT OF HIGHWAYS
 FRANKFORT
 COUNTY OF
 BOYLE
 PERRYVILLE - MITCHELLSBURG
 ROAD

STATION 17 + 35.0 PROJECT NO. _____

BRIDGE NUMBER _____ DRAWING NO. 4671

BRIDGE

STA.	DATE	NO.	BY	CHECKED	REVISION
7					

GENERAL NOTE

CONSTRUCTION NOTE: This drawing to be used in conjunction with Standard Plans 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 copper strip and premolded joint filler so placed as to prevent contact of concrete between spans and to provide the full width of joint shown on plans. The copper strip and premolded joint filler shall be accurately placed and rigidly held in correct position. The premolded filler on the roadway between curbs shall be trimmed or placed $\frac{1}{8}$ " below the concrete surface and sealed with asphaltic joint filler, as indicated on this drawing.

No direct payment will be made for material or installation of copper expansion strip and premolded expansion joint filler, the cost of these shall be included in the unit price bid for class A concrete.

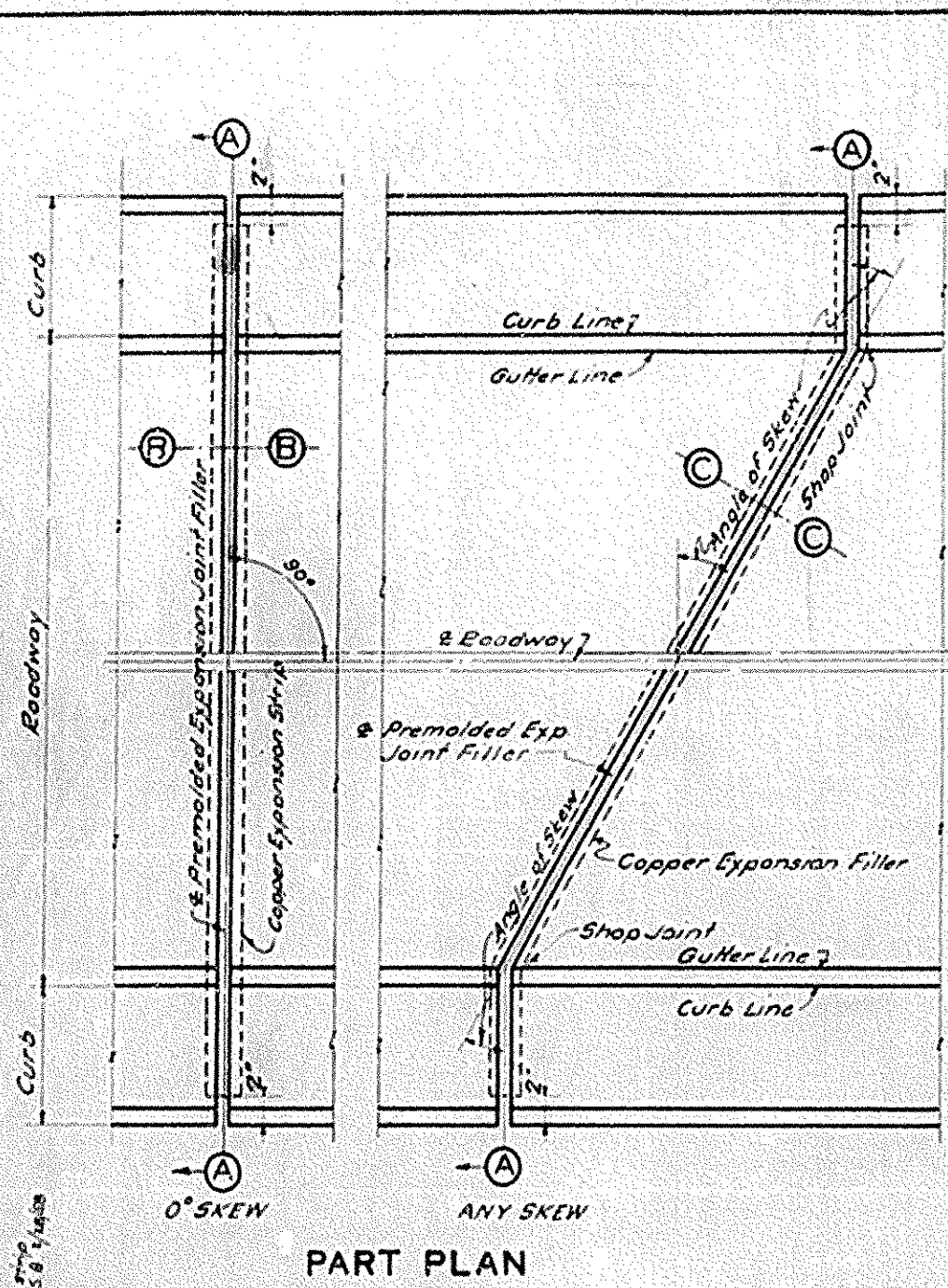
SPECIFICATIONS FOR PREMOLDED FILLER:

Premolded expansion joint filler shall conform to Section 7.25 of the 1956 Std Specifications.

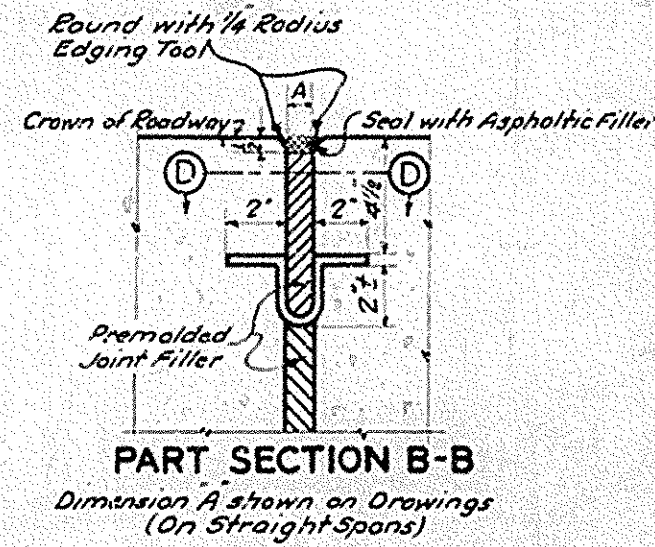
SPECIFICATIONS FOR ASPHALTIC FILLER: The Asphaltic Filler shall conform to the requirements of Section 7.26.2 of the Kentucky Department of Highways 1956 Standard Specifications, with Amendments.

SPECIFICATION FOR COPPER EXPANSION STRIP: The copper strips are to be 24 ounces soft sheet commercial grade A. Tolerance of 5% variation in weight above or below that specified will be allowed. The strips are to be shop fabricated to the section and dimensions shown. Field bending and fabrication will not be permitted except as provided herein. Unless otherwise provided by plans, the strips may be furnished in one or two pieces. If furnished in two pieces the field joint shall be at the center line of roadway. Shop joints shall not be spaced closer than 6 feet unless otherwise shown on plans and shall be lock seam and soldered. The field joint at the center line of roadway may be a 2 inch width lap joint soldered. All joints shall be water tight.

On Skewed Spans the two copper strips are separate units and are not to be connected in any way that will prevent movement of the strips relative to each other. All points are to be located to allow free movement of the individual strips.

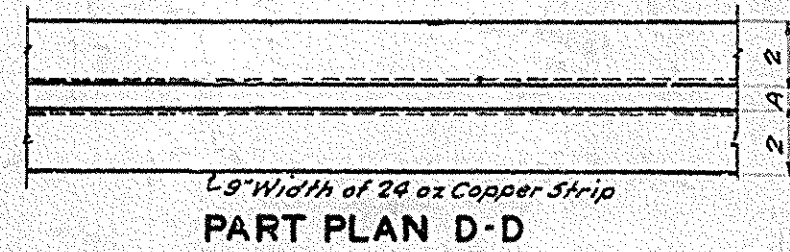


PART PLAN

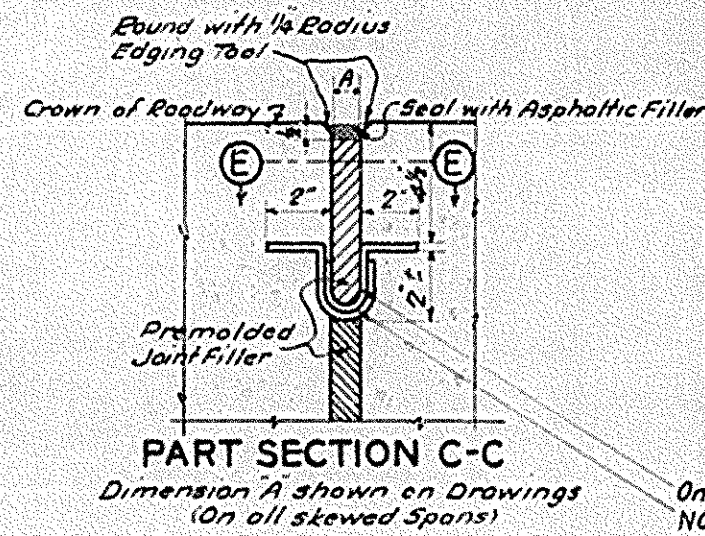


PART SECTION B-B
Dimension A shown on Drawings
(On Straight Spans)

NOTE: Dimension A is inside dimension and is to be same as thickness shown on Drawings for Premolded Expansion Joint Filler.

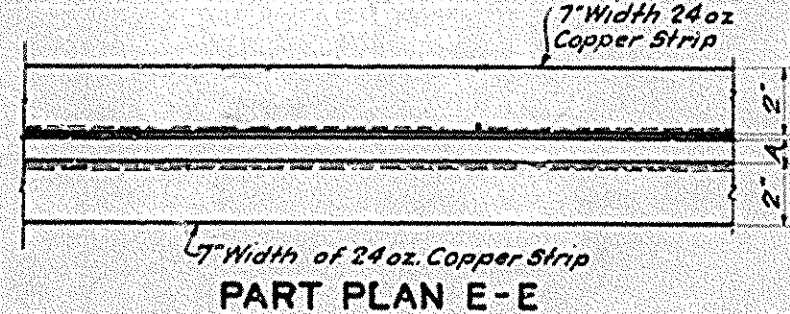


PART PLAN D-D
9" Width of 24 oz Copper Strip

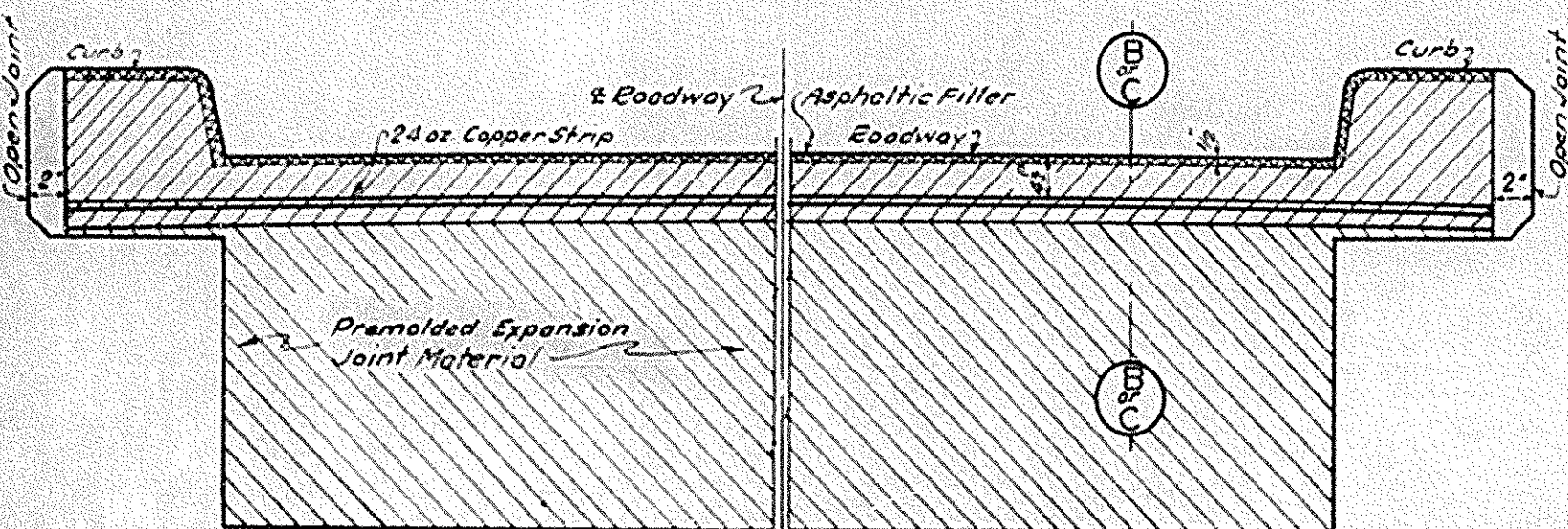


PART SECTION C-C
Dimension A shown on Drawings
(On all skewed Spans)

NOTE: Lower section of copper strip is placed first, just prior to placing upper section of copper strip paint lower section with PAC-7 along all areas of contact, to provide additional seal. Cost of this work shall be included in the unit price bid for Class A concrete.

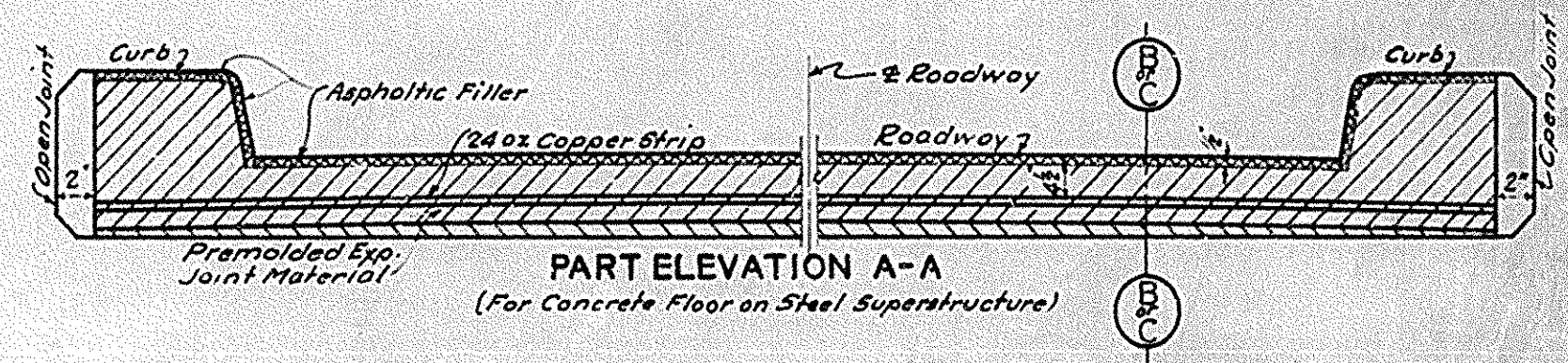


PART PLAN E-E
7" Width of 24 oz. Copper Strip



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

NOTE: Premolded 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 over unshaded areas.



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

TYPICAL EXPANSION JOINT DETAILS

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
**EXPANSION JOINT DETAILS
FOR
CONCRETE BRIDGE FLOORS**

REVISION
-G-351

BRIDGE