KENTUCKY DEPARTMENT OF HIGHWAYS
LEXINGTON - TENNESSEE LINE
INTERSTATE OVER CUMBERLAND RIVER
WHITLEY COUNTY

GENERAL NOTES

SPECIFICATIONS — KENTUCKY DEPARTMENT OF HIGHWAYS, 1956 STANDARD WITH ADDENDMENTS.

DESIGN LOAD — BRIDGE DESIGNED FOR H20-S16-44 LOADING AS SPECIFIED IN 1961 A.A.S.H.O. SPECIFICATIONS OR ALTERNATE LOADING OF TWO 24 KIP AXLES SPACED 4 FEET APART WHICHEVER PRODUCES THE GREATER STRESS. SLABS ARE DESIGNED FOR 16 KIP WHEEL LOAD.

DESIGN STRESSES — FOR REINFORCED CONCRETE, fs= 20,000psi , fc= 1200 psi , f'c= 3000psi , u= 200 psi , n= 10. FOR STRUCTURAL STEEL, fs= 18,000psi A373, fs= 20,000psi A36.

CONCRETE — CLASS "A" CONCRETE IS TO BE USED THROUGHOUT

REINFORCEMENT — INTERMEDIATE OR HARD GRADE REINFORCEMENT SHALL BE USED IN ACCORDANCE WITH ASTM A15-58T FOR BILLET STEEL OR A16-59T FOR RAIL STEEL, CONFORMING TO BENDING REQUIREMENTS OF AASHO SPEC. M42. DIMENSIONS SHOWN FROM FACE OF CONCRETE TO BARS ARE CLEAR DISTANCE. SPACING OF BARS IS FROM CENTER TO CENTER OF BARS.

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

EXPANSION JOINT MATERIAL — THE COST OF CORK PREMOLDED EXPANSION JOINT MATERIAL, POLYVINYL WATER STOP AND JOINT SEALING COMPOUND SHALL BE INCLUDE IN THE UNIT PRICE BID FOR CLASS "A" CONCRETE.

CONSTRUCTION JOINTS — ALL SLAB CONSTRUCTION JOINTS SHALL BE CAREFULLY FORMED.

ANCHOR BOLT HOLES — THE SUPERSTRUCTURE CONTRACTOR SHALL DRILL ALL ANCHOR BOLT HOLES AND PLACE ANCHOR BOLTS. THE SUBSTRUCTURE CONTRACTOR SHALL EXERCISE CARE IN PLACING REINFORCING STEEL IN THE TOP OF ALL SUBSTRUCTURE UNITS TO THE DIMENSIONS SHOWN.

CONSTRUCTION NOTE — IF MATERIAL FOR EMBANKMENT IS TO BE HAULED OVER FINISHED BRIDGE. THE ROADWAY APPROACHES FOR A MINIMUM DISTANCE OF 50 FT. FROM THE BACKFACE OF EACH ABUTMENT SHALL BE BROUGHT TO GRADE WITH COMPACTED MATERIAL AND SURFACED WITH TRAFFIC BOUND MACADAM.

C.I. DRAINS - PIPE — SEE SHEET 11 FOR NOTES.

CHANGES IN STRUCTURAL STEEL QUANTITIES — IN THE EVENT THAT CHANGES IN STEEL QUANTITIES ARE REQUIRED DUE TO CHANGES BY THE ENGINEER IN THE PLANS OR IN THE 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 ESTIMATED TOTAL WEIGHT.

ELECTRICAL CONDUIT — "LUMP SUM BID" FOR ELECTRICAL CONDUIT SHALL BE FULL PAYMENT FOR ALL RIGID GALVANIZED CONDUIT, JUNCTION BOXES, EXPANSION FITTINGS, GROUNDING STRAPS, AND ALL LABOR AND MATERIALS NECESSARY TO COMPLETE THE INSTALLATION IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS.

STRUCTURAL STEEL — "LUMP SUM BID" FOR STRUCTURAL STEEL SHALL BE FULL PAYMENT FOR ALL STRUCTURAL STEEL, BOLTS, WASHERS, STEEL PINS, CAST IRON, LEAD PLATES, MOLTEN LEAD, WELDING AND WELDING MATERIALS, FLOOR DRAINS, PAINT, LINEN TRACINGS OF SHOP DETAIL AND ERECTION DRAWINGS, AND ALL LABOR AND MATERIALS NECESSARY TO ERECT THE STEEL IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS.

PROTECTIVE COATING — THE ITEM FOR PROTECTIVE COATING SHALL BE IN ACCORDANCE WITH "THE SPECIAL PROVISION FOR LINSEED OIL PROTECTIVE COATING".

HANDRAIL — ALTERNATE TYPES OF METAL HANDRAIL; THE CONTRACTOR SHALL USE ONE OF THE FOLLOWING THROUGHOUT.
ALT. "A" ALUMINUM HANDRAIL, STD. DWG. H112
ALT. "B" GALVANIZED STEEL HANDRAIL, STD. DWG. H113

FINISH — EXTERIOR FACES OF PLINTH AND SOFFIT OVERHANGS ADJACENT TO MEDIAN TO RECEIVE A RUBBED FINISH IN ACCORDANCE WITH THE SPECIFICATIONS.

REFERENCES & ESTIMATE OF QUANTITIES [TOTAL SUPERSTRUCTURE - TWIN BRIDGES]

ITEM	SHEET NO.	CONCRETE CLASS "A" CU. YRDS.	REINFORCEMENT LBS.	STRUCTURAL STEEL *LUMP SUM	ELECTRICAL CONDUIT LUMP SUM	CAT WALK GALV. LIN. FT.	6" Φ PIPE DRAINS LIN. FT.	METAL HANDRAIL ALT. "A" ALUM. LIN. FT.	METAL HANDRAIL ALT. "B" STEEL LIN. FT.	PROTECTIVE COATING SQ. YDS.
TITLE SHEET AND QUANTITIES	1									
NOTES (STRUCTURAL STEEL)	2									
LAYOUT	3,4									
2-90' PLATE GIRDER EAST BR.	5,12,13	186.52	38,556			180.00				
2-90' PLATE GIRDER WEST BR.	5,12,13	186.52	38,556			180.00				
140'-200'-140' CONT. R. GR. EAST BR.	6,7,8	486.83	101,000			480.00				
140'-200'-140' CONT. R. GR. WEST BR.	6,7,8	486.83	101,000			480.00				
GIRDER SHOES	9									
GIRDER EXPANSION DEVICES	10									
DRAINS AND CAMBER DIAGRAMS	11						391.33			
ROADWAY SLAB (CONCRETE) E. BR.	12,13									3008
ROADWAY SLAB (CONCRETE) W. BR.	12,13									3,008
HANDRAIL SPACING	14									
ANCHOR BOLT PLAN	14									
CONSTRUCTION ELEVATIONS	15									
METAL HANDRAIL-	H112 H113							2,665.7	2,665.7	
EXPANSION JOINT MAT'L.	G-352									
ELECTRICAL CONDUIT DETAILS	16									
WELDING NOTE	AWS-1	1345.0								
TOTALS		1346.70	279,112	LUMP SUM	LUMP SUM	1,320.00	391.33	2,665.7	2,665.7	6,016

*ITEM STRUCTURAL STEEL INCLUDES STRUCTURAL STEEL, PINS, BOLTS, CAST IRON, CABLE, CLAMPS AND LEAD PLATES OR PREFORMED FABRIC PADS IF USED.

TOTAL APPROXIMATE WEIGHT OF STRUCTURAL STEEL = 2,149,564 lb.

REFERENCES

G-352
H-112
H-113
AWS-1

THE SPECIAL PROVISIONS "FOR LINSEED OIL PROTECTIVE COATING".

THE SPECIAL PROVISIONS "FOR JOINT SEALING COMPOUND".

BILL OF INCIDENTAL MATERIAL

ITEM	NO. REQD.	SIZE	LOCATION
Cork Prem. Exp. Jt.	10	3X1X30-0"	Ends and Stringer Expansion
Cork Prem. Exp. Jt.	20	[illegible]	Ends and Stringer Expansion
Cork Prem. Exp. Jt.	56	8X1X30-0"	Over Floor Beams
Cork Prem. Exp. Jt.	112	[illegible] 2-10	Over Floor Beams
Polyvinyl Waterstop	6	31-6	Stringer Expan. Joint [illegible]
Polyvinyl Waterstop	12	2-6	[illegible]
Polyvinyl Waterstop	26	31-6	Over Floor Beam [illegible]
Polyvinyl Waterstop	112	[illegible]	[illegible]

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 plans and specifications.

I 75 OVER CUMBERLAND RIVER SHEET 1 OF 16

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
WHITLEY
LEXINGTON-TENNESSEE LINE

ROAD SP 119-359-2L
STATION 793+30.0 PROJECT NO. I 75-1

BRIDGE NUMBER

DRAWING NO. 14610

DESIGNED BY	CHECKED BY	DATE	REVISED ASTM Designations	DATE 6/28/64
DETAILED BY RBA	CHECKED BY LMM	DATE 11-63	REVISED	DATE
TRACED BY	CHECKED BY	DATE	REVISED	DATE

STRUCTURAL STEEL NOTE

SPECIFICATIONS

Kentucky Department of Highways Standard, 1956 edition with amendments.

MATERIAL SPECIFICATIONS

The following ASTM designations shall govern the materials furnished:

ASTM-DESIGNATION	MATERIAL
A36-62T	All Structural Steel
A325-61T	High-Strength Bolts, Nuts and Washers
A108-31T (Grade 1016 to 1030 inclusive)	Steel Pins and Plates
A72-63T	Wrought Iron Pipe and Couplings
A48-60T	Gray Iron Castings
B29-51	Molten Lead and sheet lead
A307-61T	Steel Machine Bolts and Nuts
A122-56	Galvanh Cable

PAYMENT FOR STRUCTURAL STEEL

For purposes of payment "lump sum bid" for structural steel includes structural, rivets, high-strength bolts, washers, welding and welding materials, molten lead, lead plates and anchor bolts, paint and all labor and materials necessary to erect the steel in accordance with the Plans and Specifications. Payment credits for changes in the steel quantities due to changes in the Plans ordered by the Engineer shall be at the unit price derived from the Contract lump sum bid divided by the estimated structural steel weight.

STEEL FINISH

Steel bearing surfaces in contact shall be finished in accordance with Section 5.2.3 of the Specifications.

CAMBER

Web plates shall be cut to provide for parabolic camber of the girder.

MILL TEST REPORTS

Notarized mill tests reports in triplicate shall be furnished the Kentucky Department of Highways showing that all materials furnished conform to the Specifications.

SHOP DETAIL DRAWINGS

The Contractor shall submit shop detail drawings of all structural steel to the Bridge Engineer for approval in accordance with the Specifications. A set of linen tracings of approved shop details shall become the property of the Department of Highways when the Contract is completed and before final payment is made. No direct payment shall be made for record drawings but the cost shall be included in "lump sum bid" for structural steel. Any material ordered or work done by the Contractor before the shop drawings, including the welding procedures, are approved shall be at his risk. Qualification tests of all welding procedures shall be completed by the Contractor and approved by the Engineer prior to the final approval of shop drawings and start of the fabrication.

DIMENSIONS

Dimensions shown on the design drawings are for a normal temperature of 60° Fahrenheit with dead load on the structure.

SHOP ASSEMBLY

All holes in girder field splices shall be drilled or reamed with all parts of each splice completely shop assembled with parts adjusted to line and camber. Girders shall remained assembled for inspection by the Department of Highways Inspector and are to be match-marked while assembled. All other field connections shall be drilled or reamed in the shop with connecting parts assembled, or shall be drilled or reamed to a metal templete without assembly.

FIELD CONNECTIONS

High strength steel bolts shall be used in all field connections in accordance with Section 5.2.3-A-5 (1) of the Specifications, except Assembly and Dimensions of high strength bolts, nuts and washers shall conform to "Specifications for Structural Joints using ASTM A325 Bolts", March 1960, approved by the Research Council on Riveted and Bolted Structural Joints of the Engineering Foundation. All joints are designed as friction-type connections. Installation shall be performed by using the turn-of-nut method. When the width of high-strength bolt heads corresponds to that of the heavy semifinished hexagon bolt only one washer per bolt is required.

Open holes shall be 15/16" diameter for 7/8" diameter bolts; 1 1/16" diameter for 1" diameter bolts; and 1 3/16" diameter for 1 1/8" diameter bolts, except as noted for turned bolts at shoes.

Where field welding is indicated, welding shall be performed in accordance with the Specifications for welding materials and welding. Welding procedures shall be submitted by the erector to the Department of Highways for approval.

PAINT

All structural steel shall be given one shop coat and one field coat of type I red lead paint and two field coats of aluminum paint. Exposed surfaces of expansion dams, not accessible after erection shall be given two field coats of aluminum paint before erection. Shop paint shall not be applied within 3" of open holes where high strength bolts are to be used for field connections and shall not be applied to steel surfaces in contact with concrete. Cleaning of weld spatter from welded assemblies in accordance with AWS 4.3 (A) shall be required before assemblies are shop painted. Shop paint shall not be applied where field welding is to be done. Areas not painted in the shop shall be given one coat of type I red lead as touch up prior to application of the field coat of red lead paint. Individual field coats shall be tinted to faithfully indicate the progress of field painting.

ADDITIONAL FIELD SPLICES

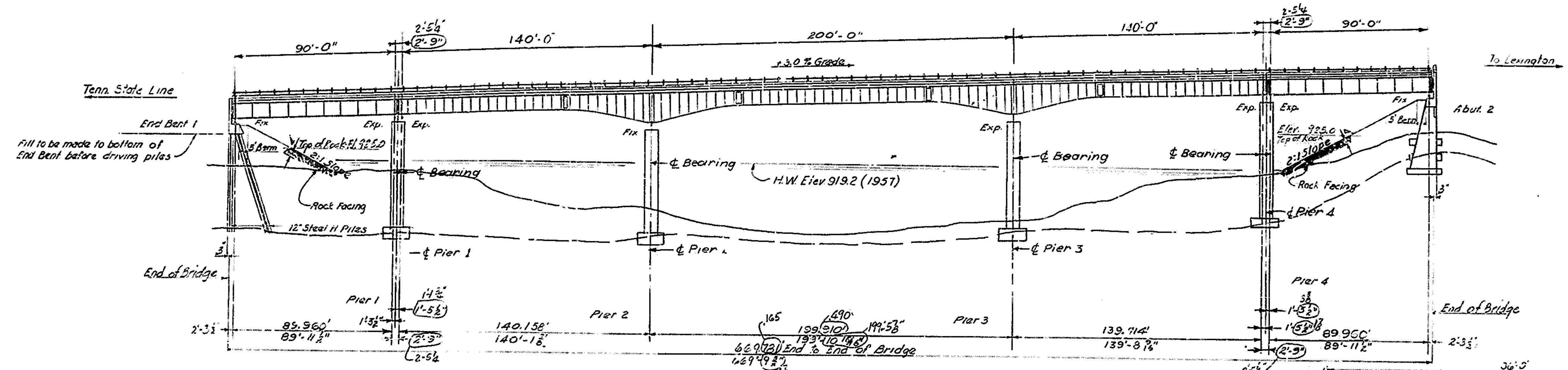
If additional field splices are permitted they shall be at the Contractor's expense and shall be included in the "lump sum bid" for structural steel

175' over Cumberland River Sheet 2

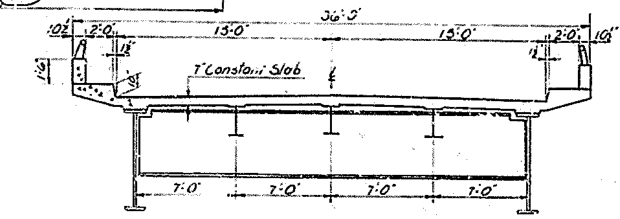
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
WHITLEY
LEXINGTON-TENNESSEE LINE
ROAD

STATION 795+36.0
BRIDGE NUMBER
PROJECT NO. 146(6)
SHEET NO. 7

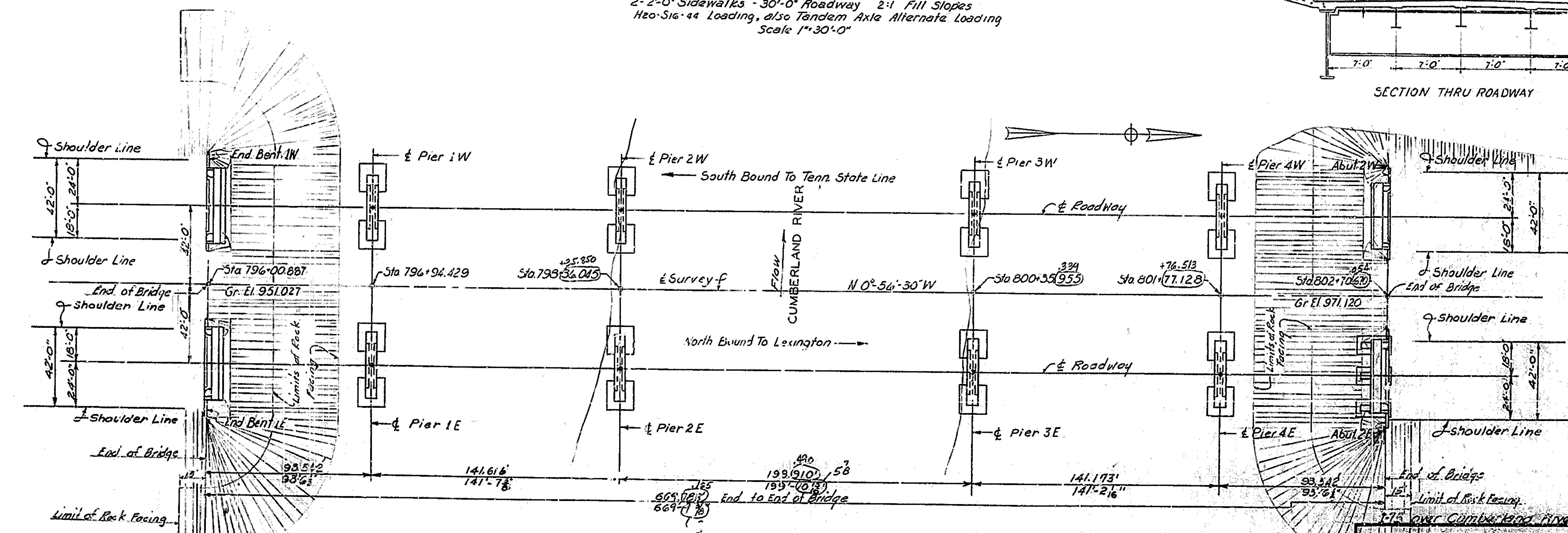
Fed. Road Dist.	State	Fed. Aid Proj. No.	Fiscal Year	Sheet No.	Total Sheets
7	KY.				



ELEVATION NORTH BOUND ALONG ℄ BRIDGE
90'-0" Plate Girder Span-140'-200'-140' Continuous Unit-90'-0" Plate Girder Span
2-2'-0" Sidewalks - 30'-0" Roadway 2:1 Fill Slopes
H20-S16-44 Loading, also Tandem Axle Alternate Loading
Scale 1"=30'-0"



SECTION THRU ROADWAY

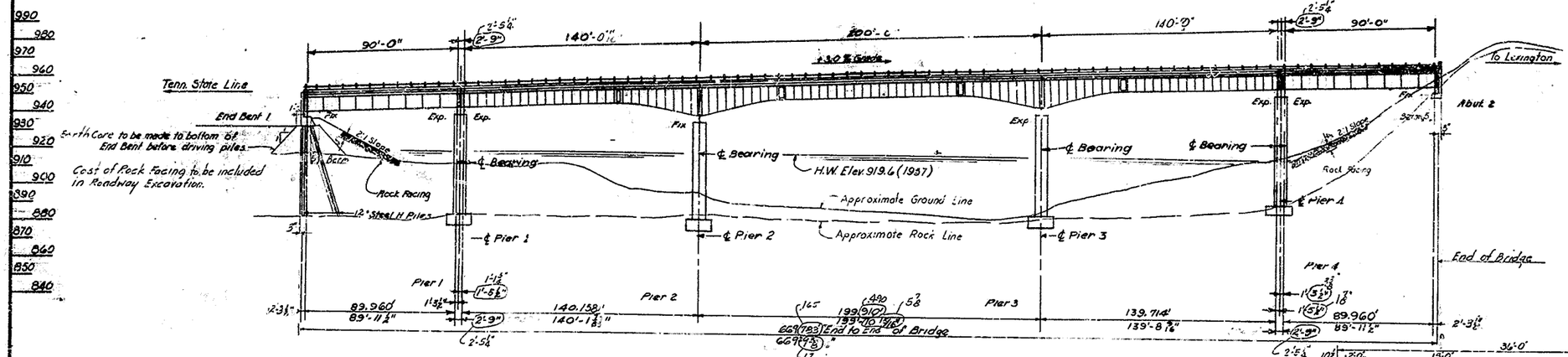


PLAN
(SUPERSTRUCTURE REMOVED)

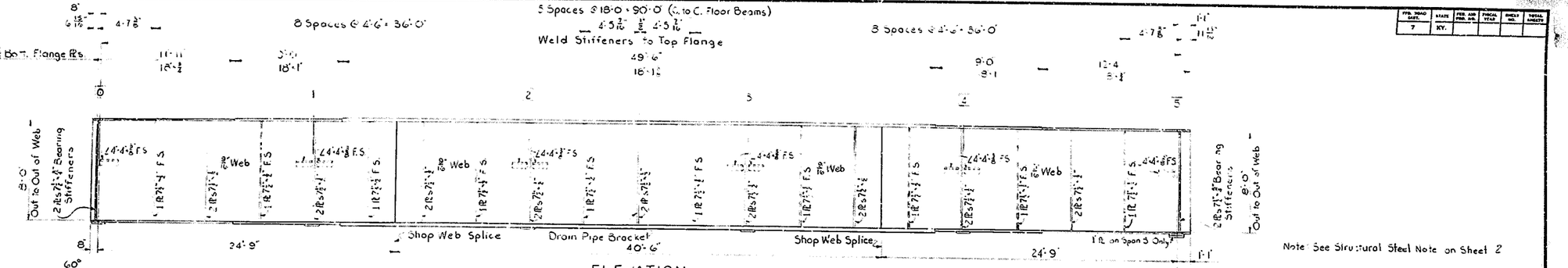
I-75 over Cumberland River Sheet 3 of 15

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
WHITLEY
LEXINGTON-TENNESSEE LINE
ROAD:
STATION 792+36.0
PROJECT NO.
BRIDGE NUMBER
14610

NORTH BOUND LANE

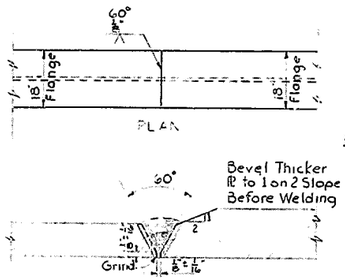

990
980
970
960
950
940
930
920
910
900
890
880
870
860
850
840
Tenn. State Line
End Bent 1
Earth Core to be made to bottom of End Bent before driving piles.
Cost of Rock Facing to be included in Roadway Excavation.
90'-0"
140'-0"
200'-0"
140'-0"
90'-0"
+3.0% Grade
To Lexington
Fix
Exp.
Fix
Exp.
Exp.
Exp.
Fix
Abut 2
1:1 Slope
Batter
Rock Facing
12" Steel H Piles
℄ Bearing
℄ Bearing
H.W. Elev. 919.6 (1937)
℄ Bearing
Approximate Ground Line
Approximate Rock Line
℄ Pier 1
℄ Pier 2
℄ Pier 3
℄ Pier 4
Pier 1
Pier 2
Pier 3
Pier 4
End of Bridge
89.960'
89'-11 1/2"
140.158'
140'-1 5/8"
139.714'
139'-8 7/8"
89.960'
89'-11 1/2"
End to End of Bridge
ELEVATION SOUTH BOUND ALONG ℄ BRIDGE
90'-0" Plate Girder Span-140'-200'-140' Continuous Unit-90'-0" Plate Girder Span
2-2'-0" Sidewalks - 30'-0" Roadway 2:1 Fill Slopes
Heo-Sig-44 Loading, also Tandem Axle Alternate Loading
Scale 1"=30'-0"
7" Constant Slab
7'-0"
7'-0"
7'-0"
7'-0"
SECTION THRU ROADWAY
Shoulder Line
End Bent 1W
℄ Pier 1W
℄ Pier 2W
South Bound To Tenn. State Line
℄ Pier 3W
℄ Roadway
℄ Pier 4W
Abut 2W
Shoulder Line
42'-0"
18'-0"
24'-0"
Shoulder Line
Sta 796+00.883
Gr. El. 951.027
Sta 796+94.429
Sta 798+35.850 (36.045)
℄ Survey ℄
FLOW CUMBERLAND RIVER
N 0°-56'-30" W
Sta 800+55 (55.339)
Sta 801+76.513 (77.128)
Sta 802+70.654 (70.610)
Gr. El. 971.120
End of Bridge
Shoulder Line
End of Bridge
Limits of Rock Facing
End Bent 1E
℄ Pier 1E
℄ Pier 2E
℄ Pier 3E
℄ Pi 4E
Abut 2E
Shoulder Line
End of Bridge
Shoulder Line
End of Bridge
93.540'
93'-6 1/2"
141.616'
141'-7 3/8"
141.173'
141'-2 1/8"
32.512'
93'-6 1/2"
End to End of Bridge
Limit of Rock Facing
North Bound To Lexington
PLAN
(SUPERSTRUCTURE REMOVED)
SOUTH BOUND LANE
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
STATE PROJECT
COUNTY OF
WHITLEY
LEXINGTON-TENNESSEE
ROAD
STATION 99+350
PROJECT
SHEET NUMBER
14-10

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

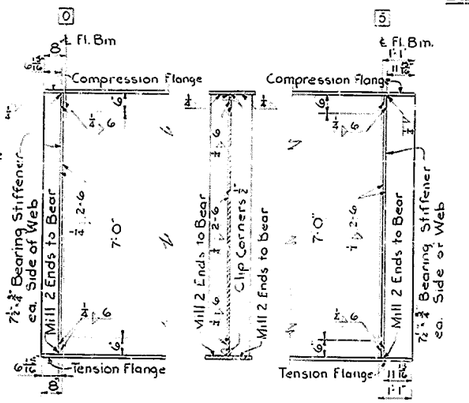


ELEVATION

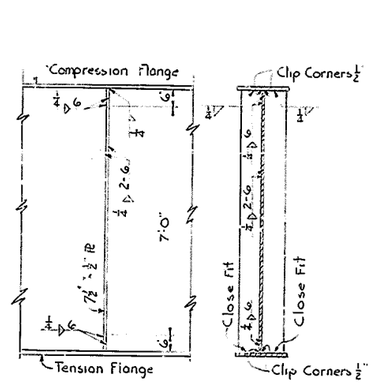
Note: See Structural Steel Note on Sheet 2



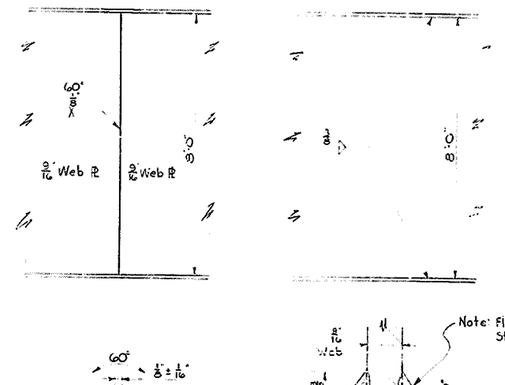
SHOP FLANGE SPLICE



BEARING STIFFENERS

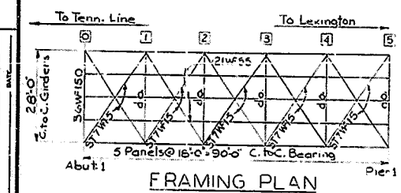


INTERMEDIATE STIFFENERS

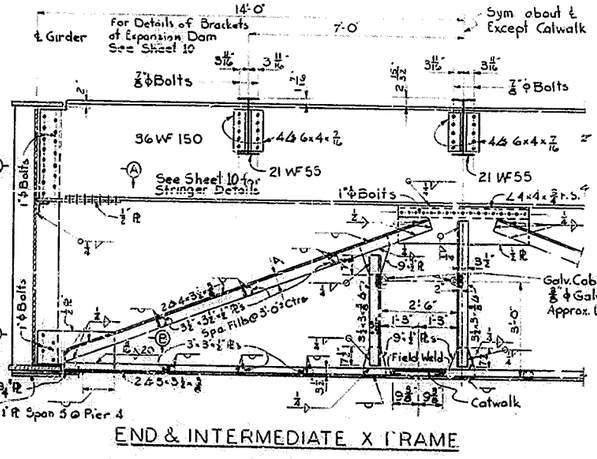


SHOP WEB SPLICE

FLANGE TO WEB WELD

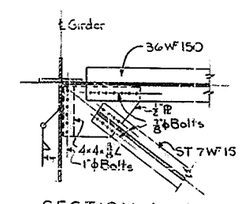


FRAMING PLAN

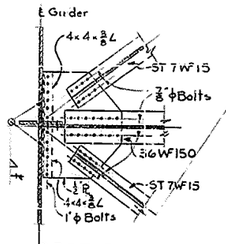


END & INTERMEDIATE X FRAME

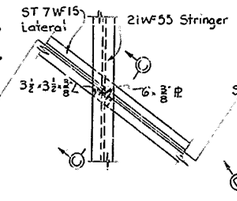
Note: Catwalk details are similar to catwalk details for the Continuous Girder Span. See Sheet 8.

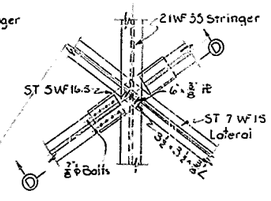


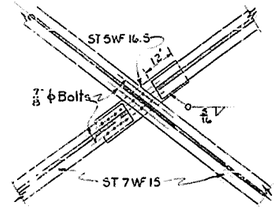
SECTION A-A
END X FRAME



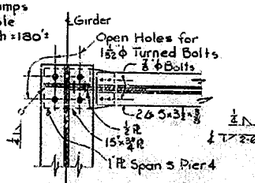
SECTION A-A
INTERMEDIATE X FRAME



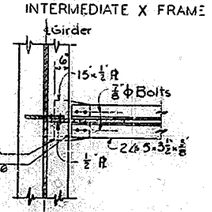




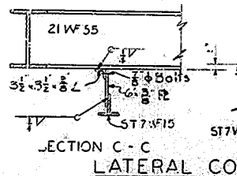
LATERAL SPLICE



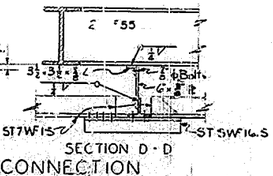
SECTION B-B
END X FRAME



SECTION B-B
INTERMEDIATE X FRAME



SECTION C-C



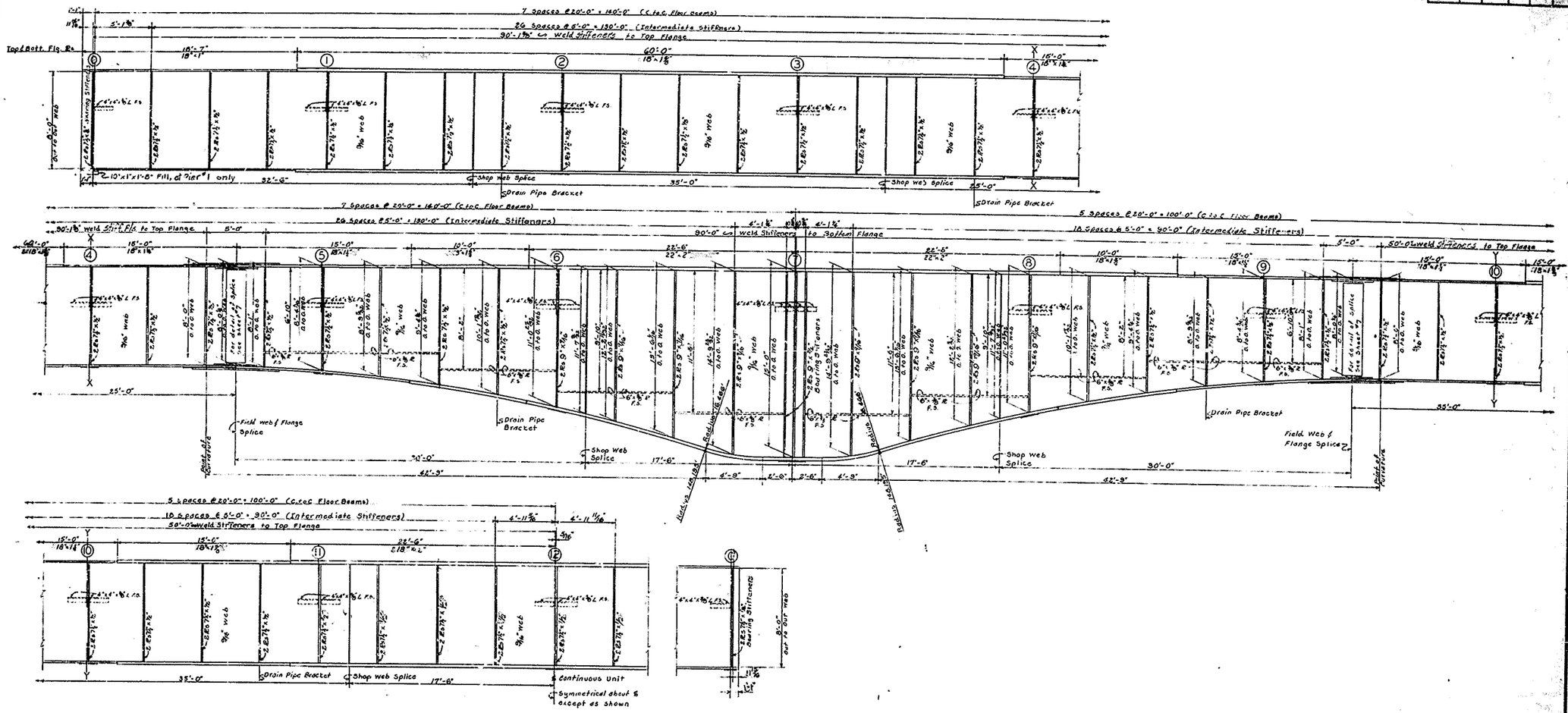
SECTION D-D

LATERAL CONNECTION TO STRINGERS

I-75 Over Cumberland River — Sheet 5

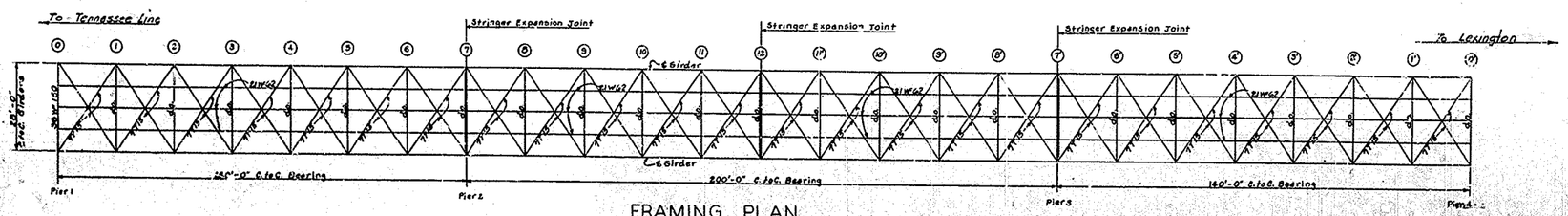
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
WHITLEY
LEXINGTON - TENNESSEE LINE
ROAD — PROJECT NO. SP 118-350-2 L
STATION 799+36.0
BRIDGE NUMBER — DRAWING — SHEET — No. 14010

90' WELDED PLATE GIRDER SPAN 1 & 5



PART ELEVATION

NOTE: All longitudinal dimensions on this sheet are dimensions parallel to grade.



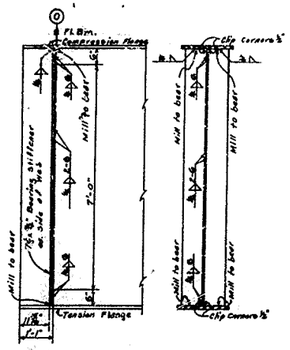
FRAMING PLAN

140'-200'-140' CONTINUOUS UNIT

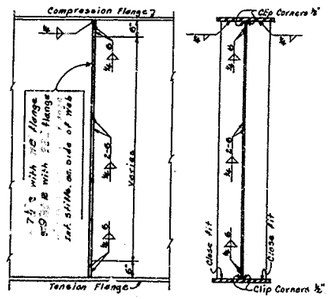
WORK SHEETS 6 THRU 8 TOGETHER

I-75 over Cumberland River Sheet 6

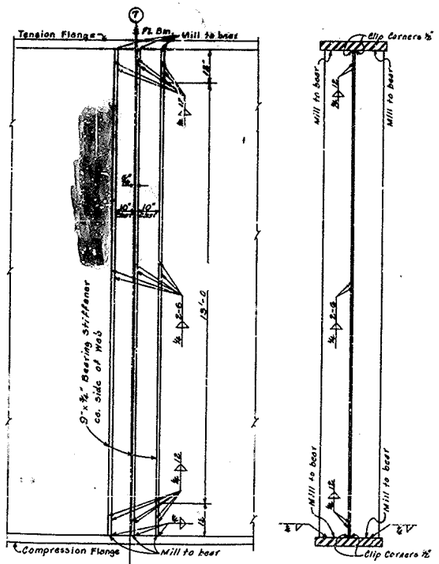
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
WHITLEY
LEXINGTON - TENNESSEE LINE
ROAD
STATION 799+36.0 PROJECT NO.
BRIDGE NUMBER
No. 14610



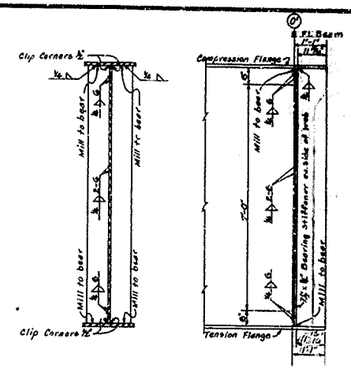
BEARING STIFFENERS
PANEL POINT 0



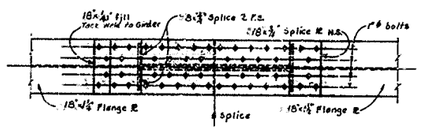
INTERMEDIATE STIFFENERS



BEARING STIFFENERS
PANEL POINTS 7 & 7'

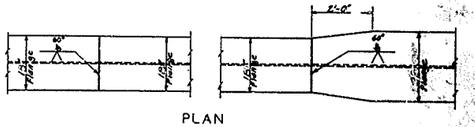


BEARING STIFFENERS
PANEL POINT 0'

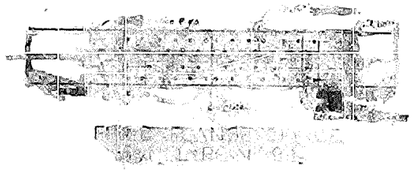


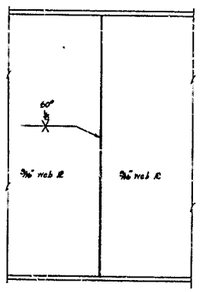
FIELD FLANGE SPLICE
PANEL POINT 4⅝
PANEL POINT 9⅜ OPP HAND

FIELD SPLICE NOTE -
Use 1⅛" holes with 1" High Strength Steel Bolts

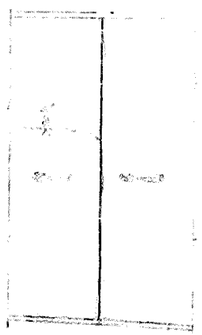


PLAN

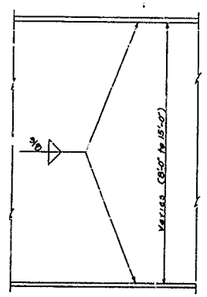




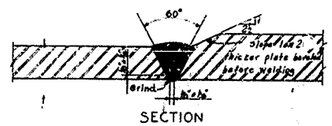
ELEVATION



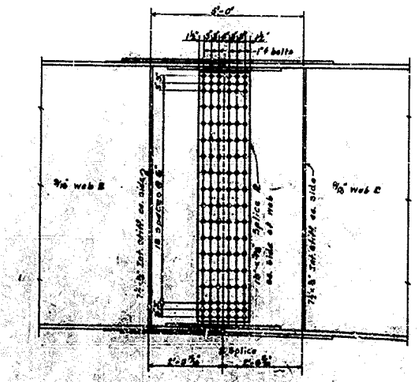
ELEVATIONS



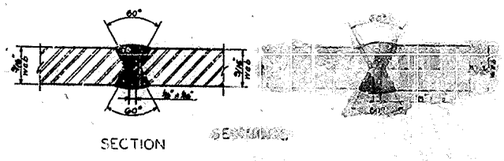
ELEVATION

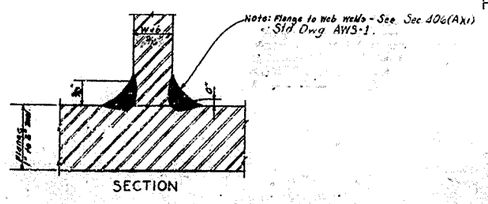


SHOP FLANGE SPLICE

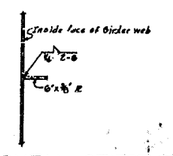


FIELD WEB SPLICE PANEL POINT 4⅝
PANEL POINT 9⅜ OPP. HAND





FLANGE TO WEB WELD



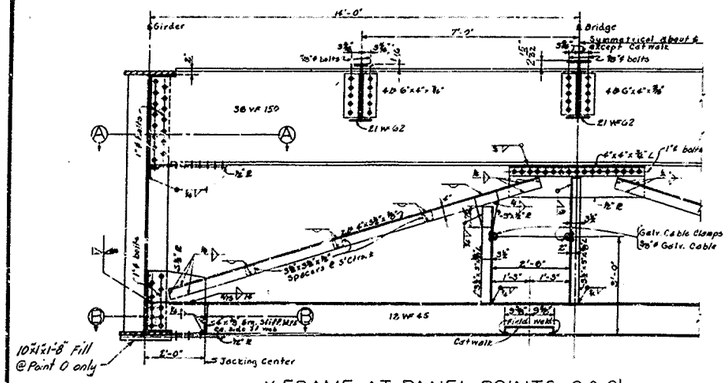
HORIZONTAL STIFFENER
DETAIL

WORK SHEETS 6 THRU 8 TOGETHER
See "Welding Procedure" Note on Standard Dwg AWS1

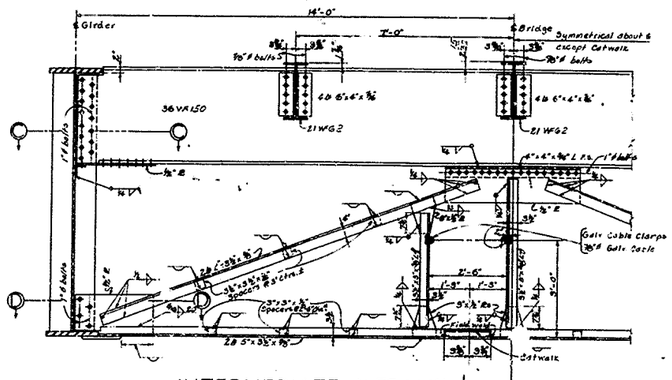
140'-200'-140' CONTINUOUS UNIT

I-75 over Cumberland River — Section 10

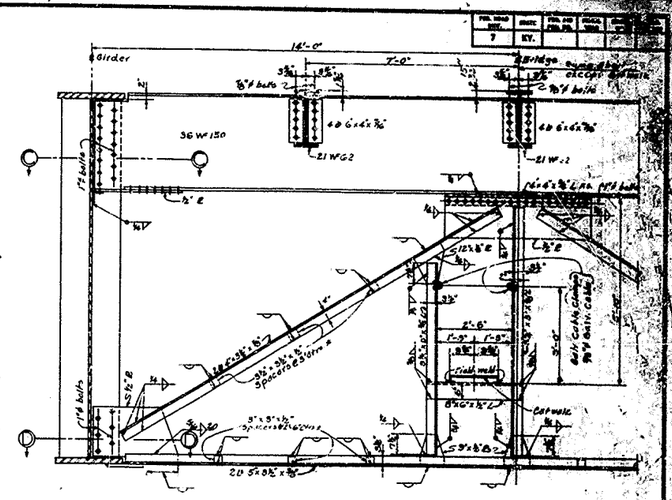
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
WHITLEY
LEXINGTON - TENNESSEE LINE
ROAD
STATION 799+36.0
BRIDGE NUMBER 46(2)



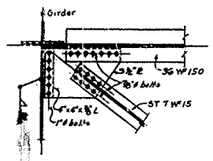
X FRAME AT PANEL POINTS 0 & 0'
(View shown is at P.P. 0')



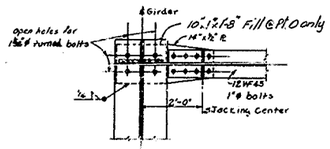
INTERMEDIATE X FRAME
PANEL POINTS 1,2,3,4,5,9,10,11,12
AND 1',2',3',4',5',9',10' & 11'



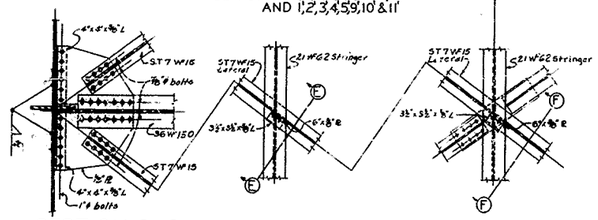
INTERMEDIATE X FRAME
PANEL POINTS 6, 8, 6' & 8'



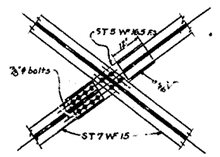
SECTION A-A



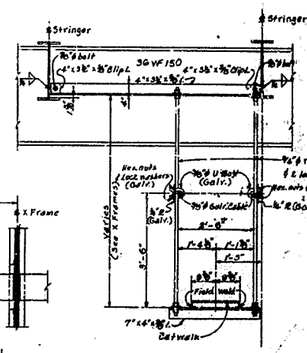
SECTION B-B



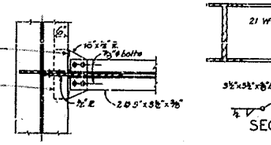
SECTION C-C



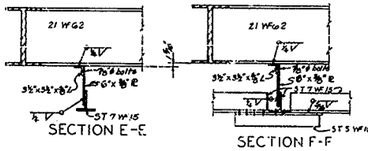
LATERAL SPLICE



CATWALK HANGER DETAIL



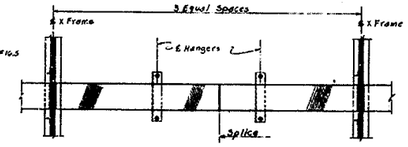
SECTION D-D



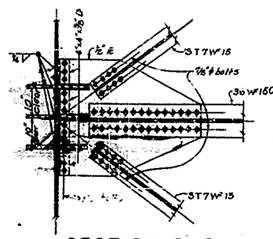
SECTION E-E
SECTION F-F

LATERAL CONNECTION TO STRINGERS

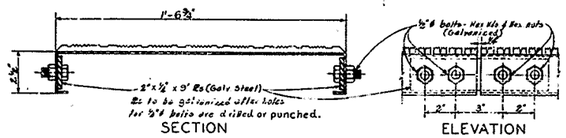
Note: For details of Stringer Expansion See Sheet 10.



PLAN OF CATWALK PANEL

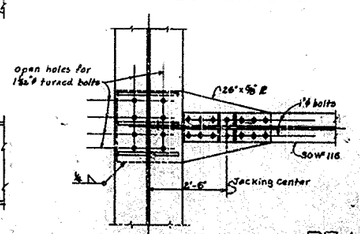


SECTION G-G

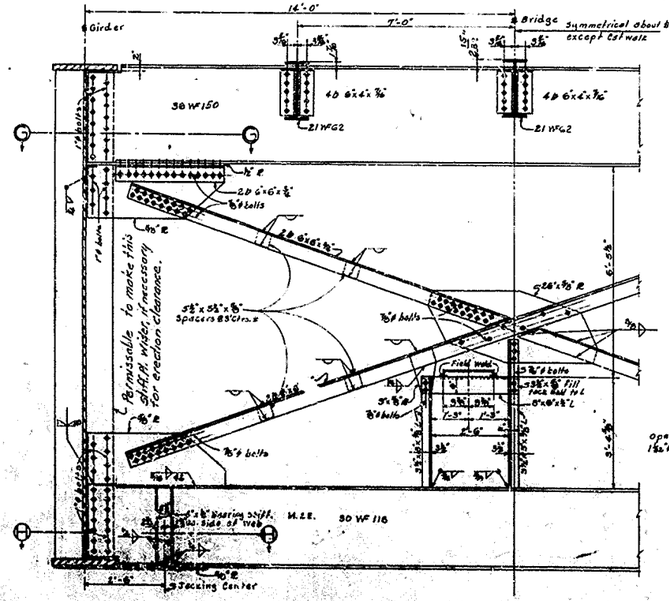


SECTION
ELEVATION

CATWALK SPLICE DETAIL



SECTION H-H



XFRAME AT PANEL POINTS 7 & 7'

Note: All views shown on this sheet are taken looking ahead on ℄ Survey.

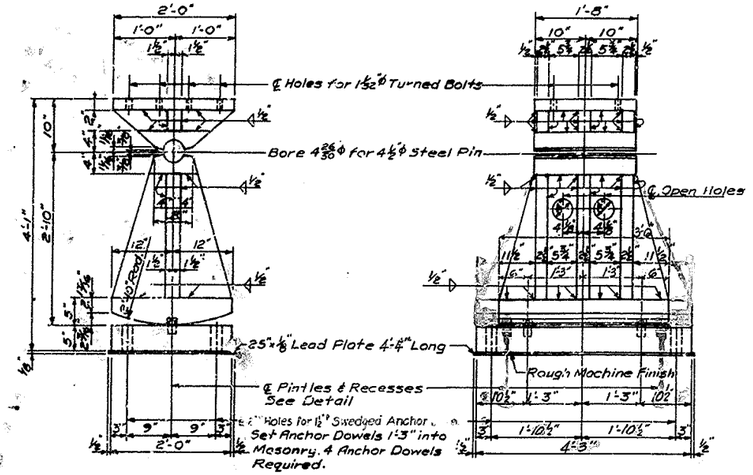
NOTE:
Catwalk to be 13⅜" wide on 2⅞" Channels, 12 gauge galvanized steel and shall be made up from standard lengths as manufactured by the Globe Co. Chicago, Ill. under the trade name of "Safety Grip Stair Tread" or equal. The grated surface shall be serrated (saw tooth) Steel, the steel is to be hot rolled pickled and oiled drawing quality 10-20 Carbon. The unit price bid per lin. ft. of Catwalk shall include furnishing Catwalk, 2"x½"x8" splice Plates, ⅝" ø galvanized bolts and nuts, welding material, tools, labor and all incidentals necessary to complete the installation on the identical twin bridges.
Approximately 2670 lineal feet of ⅜" ø - 7 wire class "A" extra galvanized Common steel wire strand and galvanized cable clamps shall be included in the lump sum bid price for total Structural Steel. Steel wire shall conform to A.S.T.M. Specification A 122-58 T.

TYPICAL CATWALK DETAILS-ALL SPANS
BRACING-140'-200'-140' CONTINUOUS UNIT

WORK SHEETS 6 THRU 8 TOGETHER

I-75 over Cumberland River

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TRANSPORT
COUNTY OF
WHITLEY
LEXINGTON - TENNESSEE LINE
STATION 794+36.9
BRIDGE NUMBER



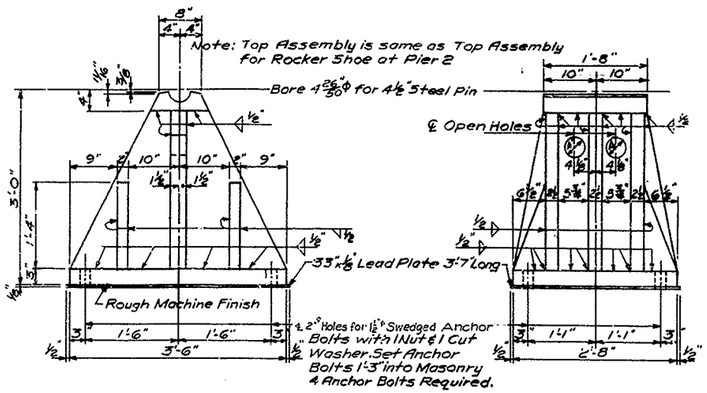
EXPANSION ROCKER - PIER 3

2 Required

Weight of 1 Rocker including Anchor Dowels

* Structural Steel = 5171 Lb.
Lead Plate = 66 Lb.

* Steel Pin and Weld Material not included

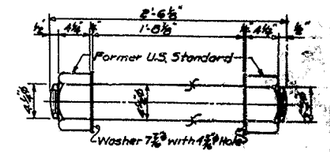


FIXED SHOE - PIER 2

2 Required

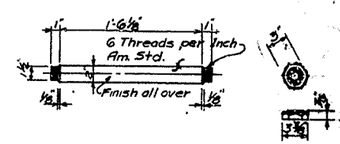
* Structural Steel = 4204 Lb.
Lead Plate = 72 Lb.

* Steel Pin and Weld Material not included



STEEL PIN

4 Required with 2 Nuts & 2 Washers Each
Weight of 1 Pin, 2 Nuts & 2 Washers = 17.9 Lb.



STEEL PIN

12 Required with 2 Recessed Pressed Steel Nuts Each
Weight of 1 Pin & 2 Nuts = 19 Lb.

NOTES

Specifications — Kentucky Department of Highways 1956 Standard with Amendments.

Paint — All material shown on this sheet except finished surfaces of steel pins and pin bearing surfaces shall be given one shop coat of Type I red lead paint and one field coat of Type I red lead paint, then be given two field coats of Aluminum paint, all in accordance with the Specifications.

Welding Material — Welding material shall conform to the American Welding Society Specifications for Welded Highway and Railway Bridges, 1963 Edition and subsequent adopted Amendments.

Welding — The cost of welding material and labor to be included in the lump sum bid for structural steel. No direct payment will be made for welding and welding material.

Anchor Dowels — The cost of lead required to set anchor dowels and the cost of drilling anchor dowel holes shall be included in the lump sum bid for structural steel. The contractor shall be responsible for keeping holes dry in wet and freezing weather. At the time of setting, anchor dowels shall be heated to a blue heat to assure free flow of lead to bottom of hole.

White Lead and Tallow — Finished surfaces of steel pins and pin bearing surfaces in steel shoes shall be coated with white lead and tallow in accordance with current specifications with amendments.

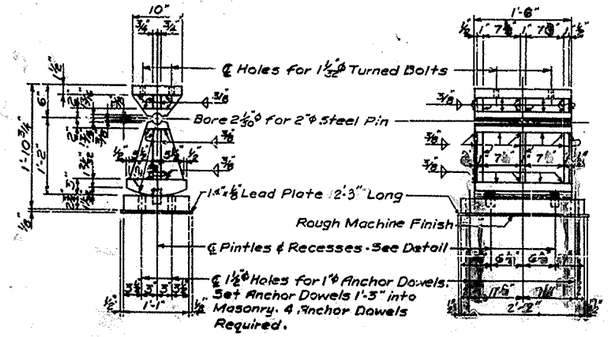
Plates — Plates must be true and free of warp.

Mill Test Reports — Notarized Mill test reports in triplicate shall be furnished the Department of Highways showing that all structural steel furnished meets specifications.

Shop Plans — The contractor shall furnish the Department of Highways with complete shop detail plans in accordance with Article 5.2.3.A.1. of the Specifications.

Masonry Bearing Plates — One-eighth (⅛) inch lead plates or preformed fabric pads may be used.

For additional Notes See Sheet No. 2



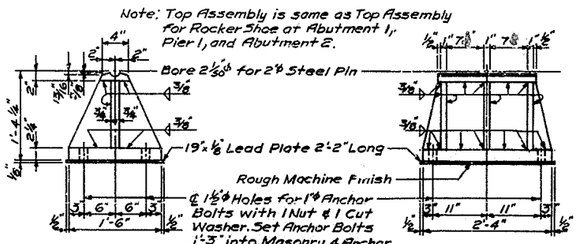
EXPANSION ROCKER - PIER 1 & PIER 4

8 Required

Weight of 1 Rocker including Dowels.

* Structural Steel = 706 Lb.
Lead Plate = 15 Lb.

* Steel Pin and Weld Material not included



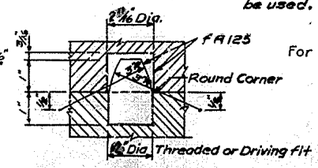
FIXED SHOE - ABUTS. 1 & 2

4 Required

Weight of 1 Shoe

* Structural Steel = 712 Lb.
Lead Plate = 28 Lb.

* Steel Pin and Weld Material not included



DETAIL OF PINTLE AND RECESS

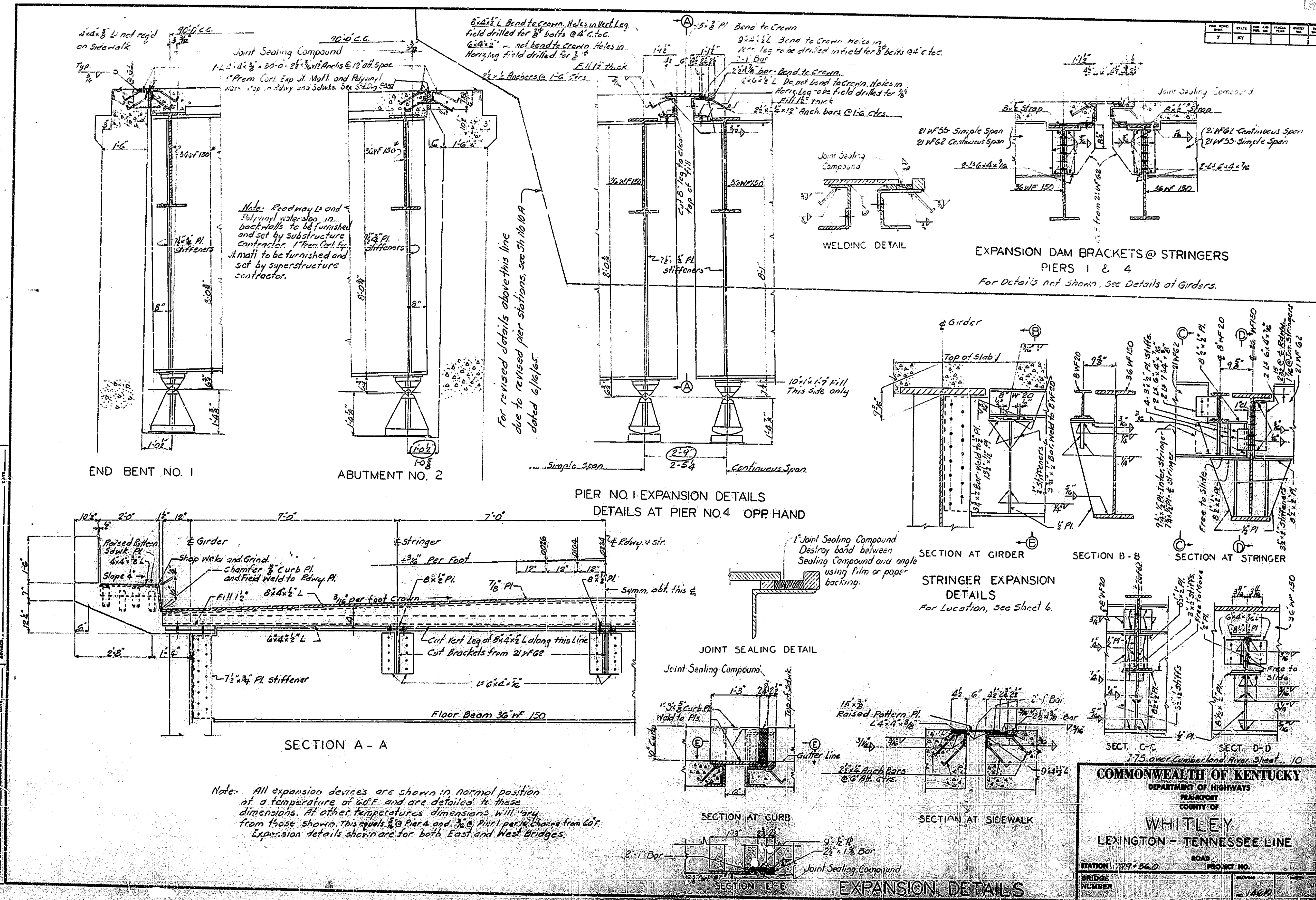
SURFACE FINISH OF STEEL - SPECIFICATIONS	
Steel Slabs	A.S.A. 2000
Heavy Plates in Contact in Shoes to be Welded	A.S.A. 1000
Milled Ends of Compression Members, Stiffners & Fillers	A.S.A. 500
Bridge Rollers and Rockers	A.S.A. 250
Pins and Pin Holes	A.S.A. 125

A.S.T.M. SPECIFICATIONS		
Structural Steel	A36-64T	
Steel Pins	A108-64T	Grade 1016 to 1030 Incl.
Sheet Lead & Lead for Anchor Dowel Holes	B29-55	

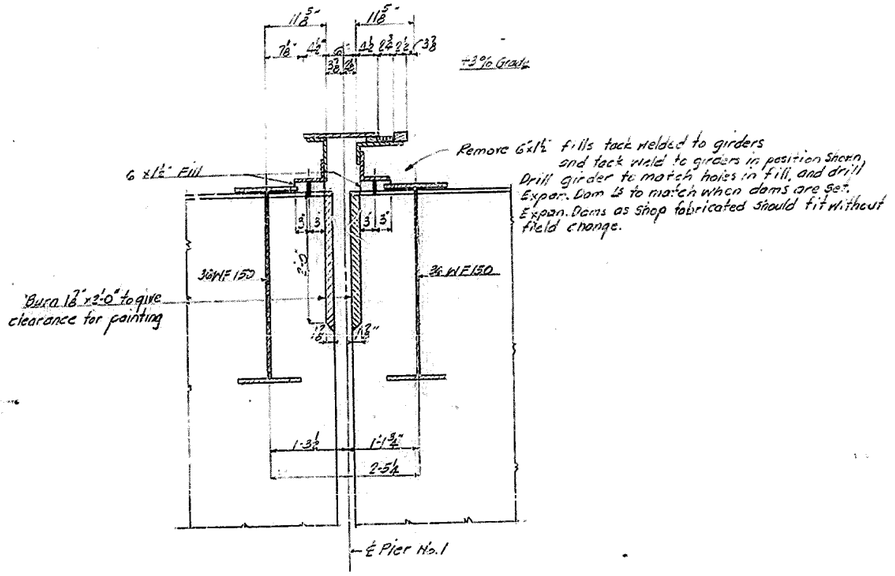
ROCKERS AND SHOES PIERS 1,2,3,4 AND ABUTMENTS 1 AND 2 SHOES FOR ONE BRIDGE, 2 REQ'D.

I-75 over Cumberland River Sheet 9

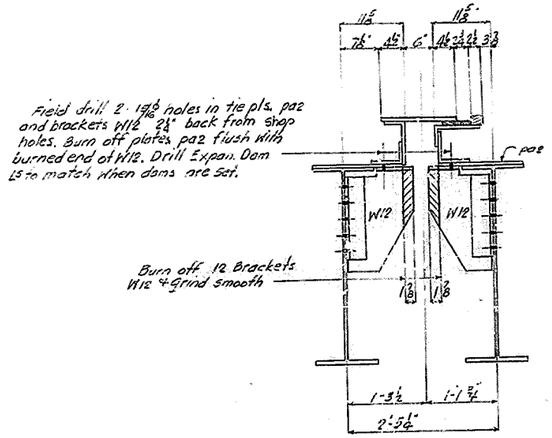
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF WHITLEY
LEXINGTON - TENN. STATE LINE ROAD
STATION 799+36.0 PROJECT NO.
BRIDGE NUMBER


END BENT NO. 1
ABUTMENT NO. 2
PIER NO. 1 EXPANSION DETAILS
DETAILS AT PIER NO. 4 OPP. HAND
Joint Sealing Compound
Note: Roadway Ls and Polyvinyl waterstop in backwalls to be furnished and set by substructure contractor. 1" Prem. Cork Exp. Jt. mat'l to be furnished and set by superstructure contractor.
For revised details above this line due to revised pier stations, see Sh. 10A dated 6/16/65.
Simple Span
Continuous Span
10"x1/4"x1'-7" Fill This side only
WELDING DETAIL
EXPANSION DAM BRACKETS @ STRINGERS
PIERS 1 & 4
For Details not shown, see Details at Girders.
21 WF 55 Simple Span
21 WF 62 Continuous Span
36 WF 150
SECTION A - A
Floor Beam 36" WF 150
Cut Brackets from 21 WF 62
JOINT SEALING DETAIL
1" Joint Sealing Compound Destroy bond between Sealing Compound and angle using film or paper backing.
SECTION AT GIRDER
SECTION B-B
SECTION AT STRINGER
STRINGER EXPANSION DETAILS
For Location, See Sheet 6.
SECT. C-C
SECT. D-D
SECTION AT CURB
SECTION AT SIDEWALK
SECTION E-E
Joint Sealing Compound
Note: All expansion devices are shown in normal position at a temperature of 60°F and are detailed to these dimensions. At other temperatures dimensions will vary from those shown. This equals 3/8" @ Pier 4 and 3/16" @ Pier 1 per 1° change from 60°F. Expansion details shown are for both East and West Bridges.
I-75 over Cumberland River Sheet 10
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
WHITLEY
LEXINGTON - TENNESSEE LINE
ROAD
STATION 779+36.0
PROJECT NO.
BRIDGE NUMBER
EXPANSION DETAILS

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



REVISED PIER NO. 1 EXPANSION DETAILS AT GIRDERS
DETAILS AT PIER NO. 4 OPPOSITE HAND.
DETAILS ABOVE SHOW CHANGES FROM DETAILS SHOWN ON SHEET 10, DWG 14610
TO FIT PIERS AS BUILT. WORK THIS SHEET WITH SHEET 14, REVISED 6/15/65



REVISED PIER NO. 1 EXPANSION DETAILS AT FLOOR BEAM BRACKETS
DETAILS AT PIER NO. 4 OPPOSITE HAND
DETAILS ABOVE SHOW REQUIRED CHANGES FROM DETAILS SHOWN ON SHEET 10, DWG 14610

DESIGNED BY	DATE	APPROVED BY	DATE
DRAWN BY	DATE	APPROVED BY	DATE
CHECKED BY	DATE	APPROVED BY	DATE

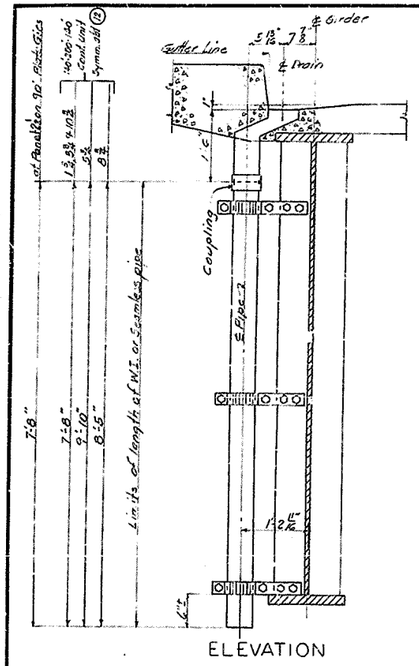
REVISIONS	DATE
REVISIONS	DATE
REVISIONS	DATE

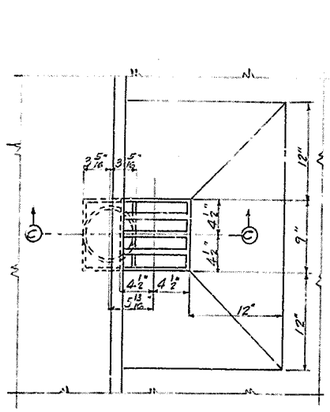
I-75 over Cumberland River Sheet 10 A

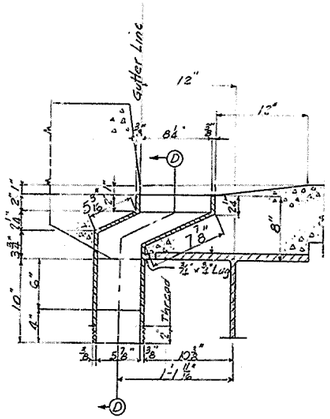
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
WHITLEY
LEXINGTON - TENNESSEE LINE
ROAD
STATION 799+86.0 PROJECT NO.
BRIDGE NUMBER
REVISED 10/14610 DATE

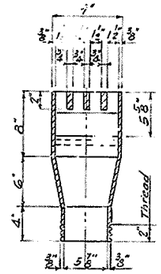
REVISED EXPANSION DETAILS

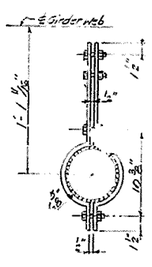
FED. ROAD DIST.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	KY.				

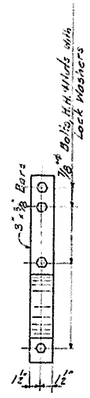



PLAN




SECTION D-D


DRAIN PIPE BRACKET



NOTES

Foundry Note:
All Drains to be gray iron castings A.S.T.M. A48-60T except that tensile and transverse tests are not required. Form T-52 Report of Field Inspection of Castings, is to be submitted to the Laboratory. Drains are to be furnished by the Superstructure Contractor and the cost of furnishing and placing same is to be included in the lump sum bid price for Structural Steel.

Pipe Note:
All pipe to be 6" I.P.S. Grade A Seamless. Pipe, fittings and connections are to be paid for at the unit price bid per lin. ft. of pipe. Wrought Iron pipe is to be 6" ℄ standard weight 19 pounds per linear ft. in accordance with ASTM A72. Seamless pipe is to be 6" ℄ standard weight, containing a minimum of 0.75% copper and 1.5% nickel and having a minimum tensile strength of 60,000 p.s.i.

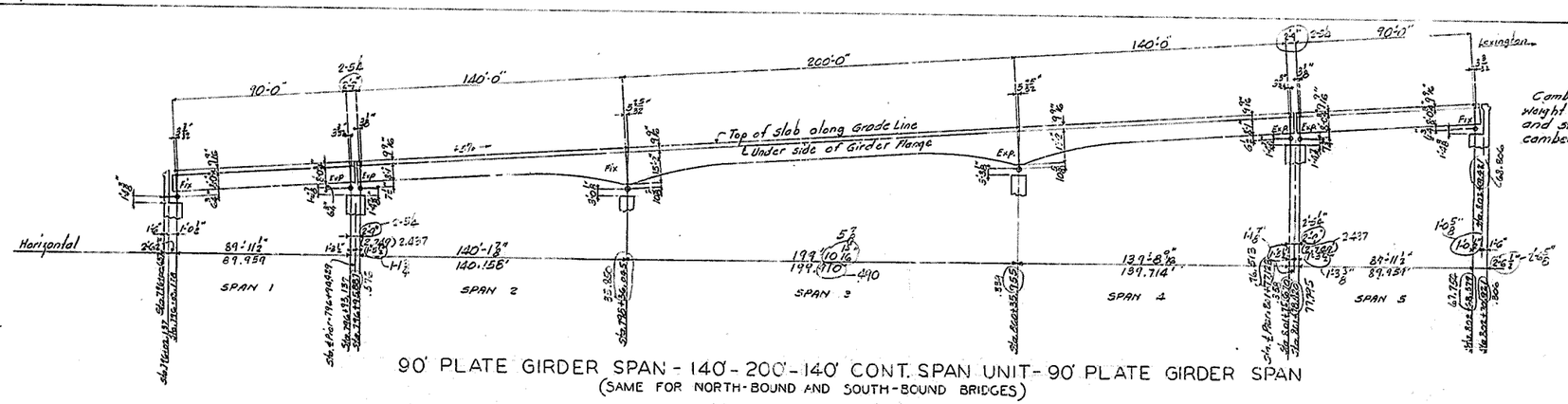
Paint:
Exposed part of C.I. drain, all pipe and fittings are to be given one coat of Type I red lead and two coats of aluminum paint.

DRAINS

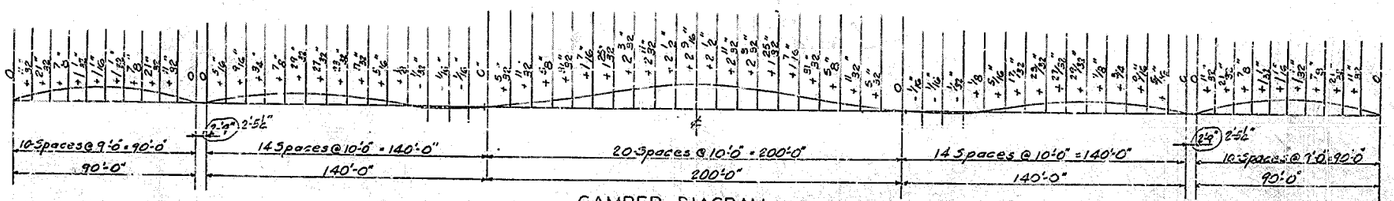
48 Required (Total - Twin Bridges)
Weight - Each Drain = 65 lb.
For Location of Drains See Sheets 5, 6 & 12

ESTIMATE OF QUANTITIES (2 bridges)

6" ℄ Pipe 391.33 Lin. Ft.



90' PLATE GIRDER SPAN - 140' - 200' - 140' CONT. SPAN UNIT - 90' PLATE GIRDER SPAN
(SAME FOR NORTH-BOUND AND SOUTH-BOUND BRIDGES)



CAMBER DIAGRAM
TOTAL DEAD LOAD

NOTE

Camber Diagram shown on this sheet includes the weight of concrete deck, handrail, future surfacing, and structural steel, and is to be used for setting shop camber in girders.

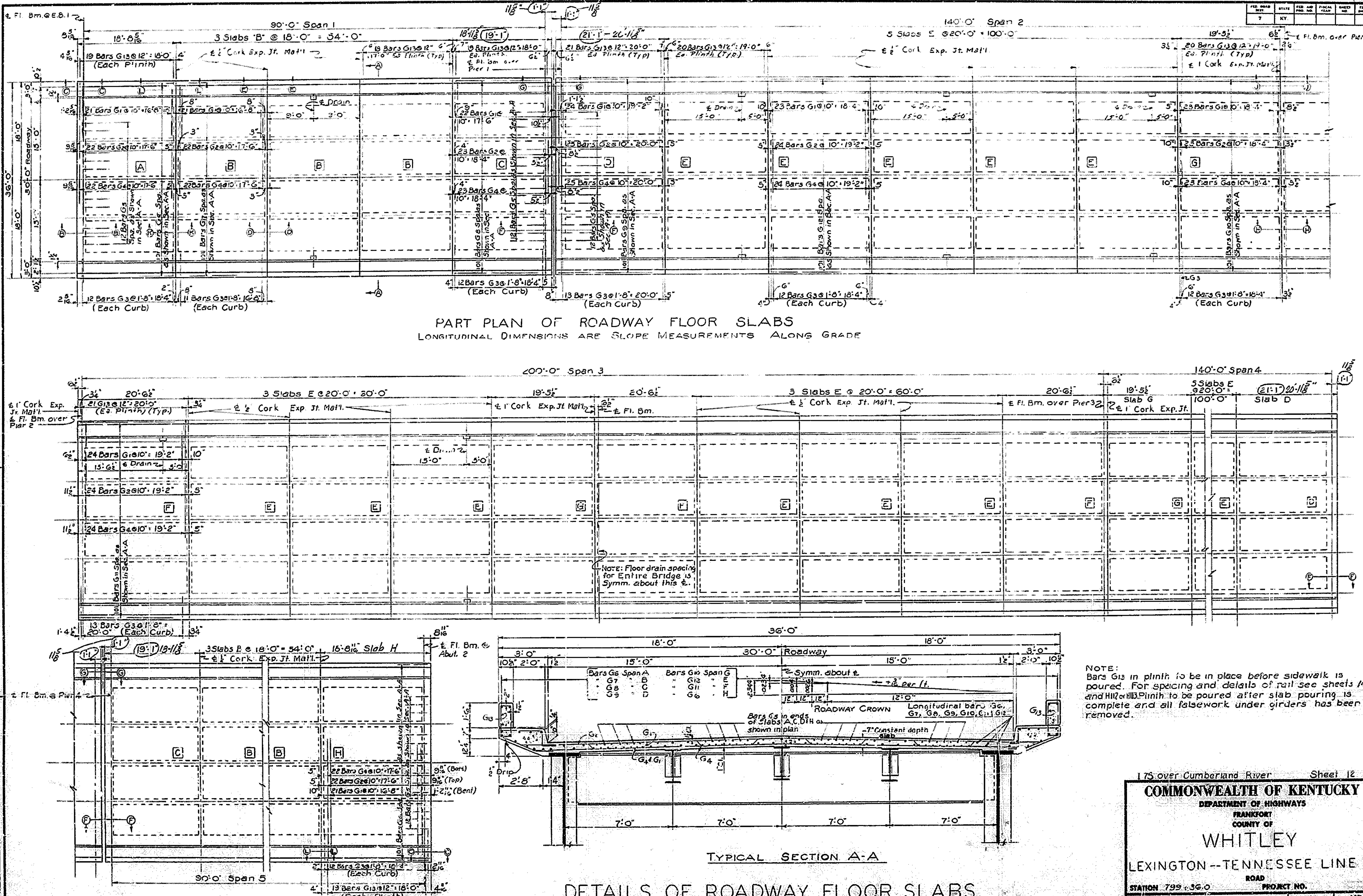
DESIGNED BY	CHECKED BY	DATE
DETAILED BY	CHECKED BY	DATE
TRACED BY	CHECKED BY	DATE

REVISIONS	DATE
Stations & dimensions Rev.	11-21
	11-22

I-75 over Cumberland River Sheet 11

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
WHITLEY
LEXINGTON - TENNESSEE LINE
ROAD
STATION 799+36.0 PROJECT NO.
BRIDGE NUMBER DRAWING NO. 14910 SHEET

DRAINS, DRAIN PIPE, & CAMBER DIAGRAM



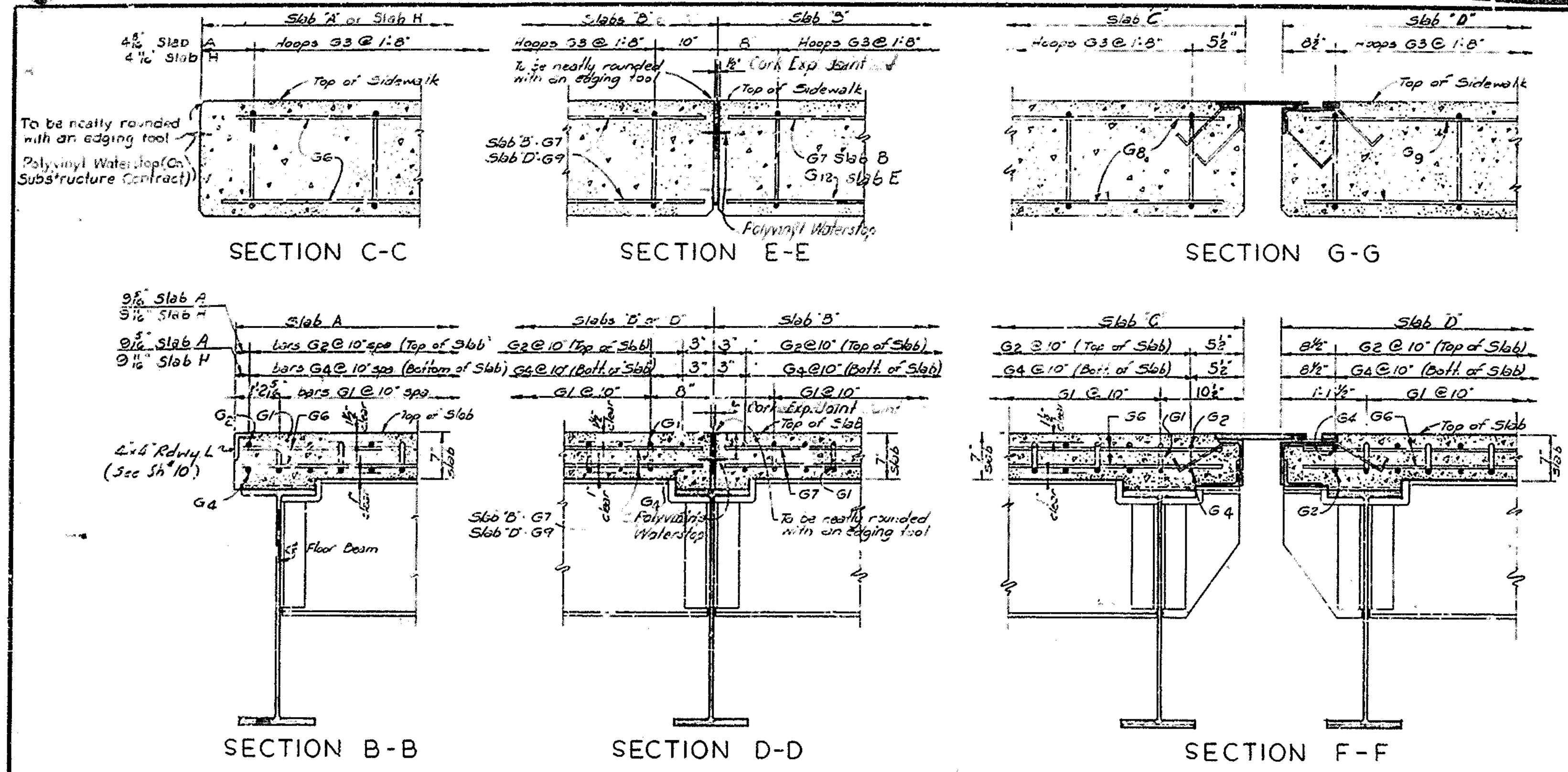
NOTE:
Bars G13 in plinth to be in place before sidewalk is poured. For spacing and details of rail see sheets 14 and H112 or H113. Plinth to be poured after slab pouring is complete and all falsework under girders has been removed.

DETAILS OF ROADWAY FLOOR SLABS

WORK SHEETS 12 AND 13 TOGETHER

I 75 over Cumberland River — Sheet 12

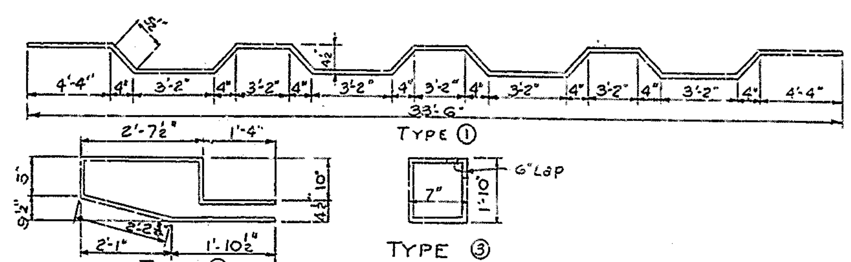
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
WHITLEY
LEXINGTON -- TENNESSEE LINE
ROAD
STATION 799 + 36.0 — PROJECT NO.
BRIDGE NUMBER — DRAWING NO. 14610

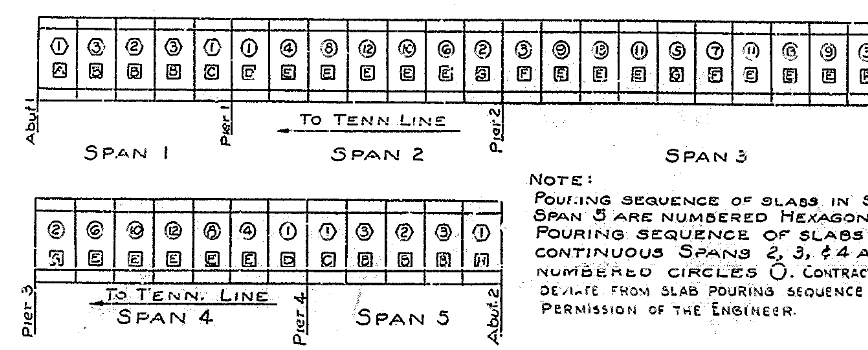


BILL OF REINFORCEMENT (FOR ONE BRIDGE (2 BRIDGES REQ'D)

FED. ROAD DIST.	STATE
7	KY.

Mark	Type	Number: Slab A & H	Slab B	Slab C	Slab D	Slab E	Slab F	Slab G	Total	Bar Size	Length Ft.	Length In.	Location
G1	(1)	42	126	44	48	368	72	69	769	#5	33	10	All slabs, Transverse
G2	Str.	44	132	46	50	384	72	69	797	"	33	6	" " , Top "
G3	(2)	48	132	48	52	448	78	78	884	"	9	7	" " , Sidewalk Hoops
G4	Str.	44	132	46	50	384	72	69	797	"	31	6	" " , Bottom, Transverse
G5	"	24		24	24				72	#4	5	0	End of " A, C, D & H
G6	"	202							202	"	18	5	Longitudinal Slab A, H & Plinths
G7	"		606						606	"	17	9	" " B
G8	"			202					202	"	18	10	" " C
G9	"				202				202	"	20	10	" " D
G10	"							303	303	"	19	2	" " G
G11	"						303		303	"	20	3	" " F
G12	"					1616			1616	"	19	9	" " E
G13	(3)	76	216	76	84	640	126	150	1368	"	5	7	Hoops in Plinth



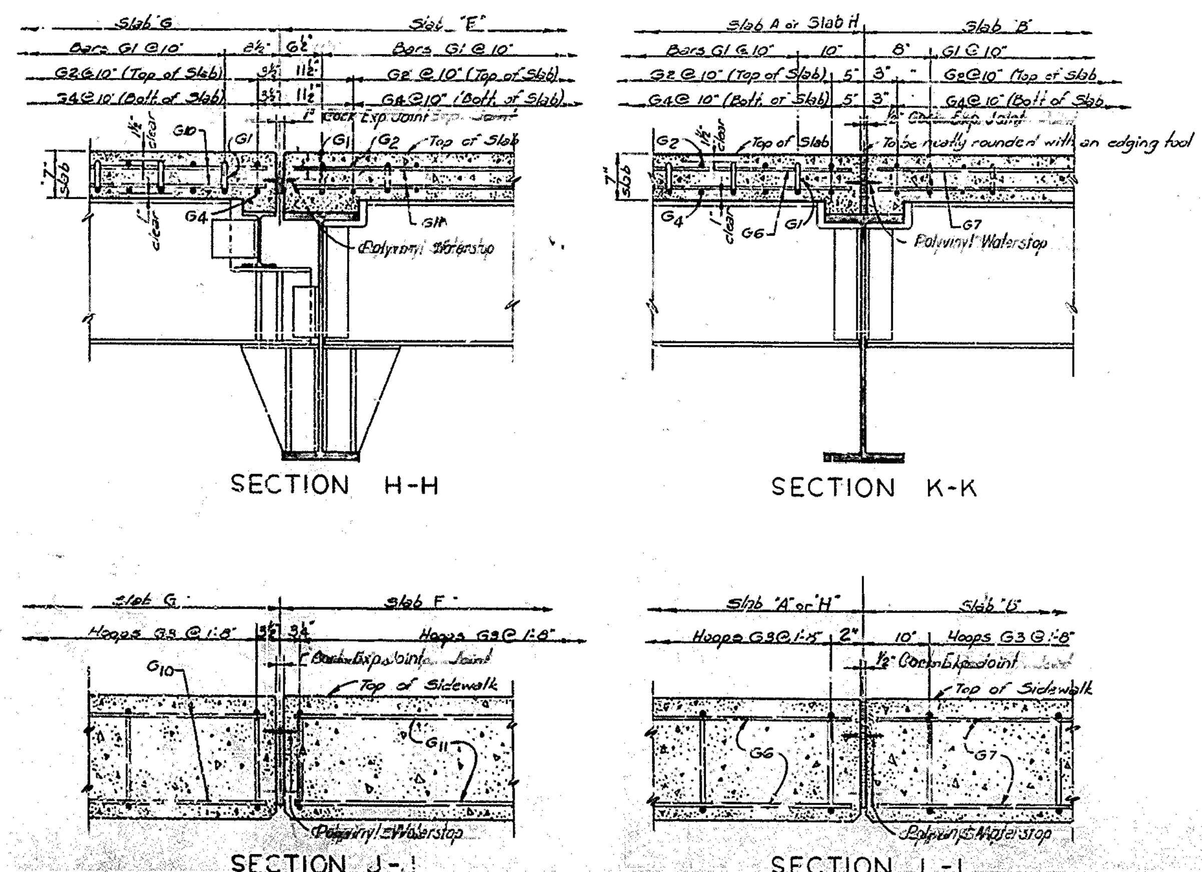


NOTE:
POURING SEQUENCE OF SLABS IN SPAN 1 & SPAN 5 ARE NUMBERED HEXAGONS. POURING SEQUENCE OF SLABS IN CONTINUOUS SPANS 2, 3, & 4 ARE NUMBERED CIRCLES. CONTRACTOR MAY DEVIATE FROM SLAB POURING SEQUENCE WITH PERMISSION OF THE ENGINEER.

SLAB POURING SEQUENCE

ESTIMATE OF QUANTITIES (Total 1-Bridge. 2-Reqd)

	SPAN 1	CONT. SPANS 2, 3 & 4	SPAN 5
CONCRETE, CLASS "A"	93.1 (93.2) CU. YDS.	486.3 (486.8) CU. YDS.	93.1 (93.3) CU. YDS.
REINFORCEMENT	19278. LBS.	101,000. LBS.	19278. LBS.



TOTAL NUMBER OF SLABS REQUIRED

DESCRIPTION	NO. REQUIRED
SLAB A	1
" B	6
" C	2
" D	2
" E	16
" F	3
" G	3
" H	1
TOTAL	34

DETAILS OF ROADWAY FLOOR SLABS

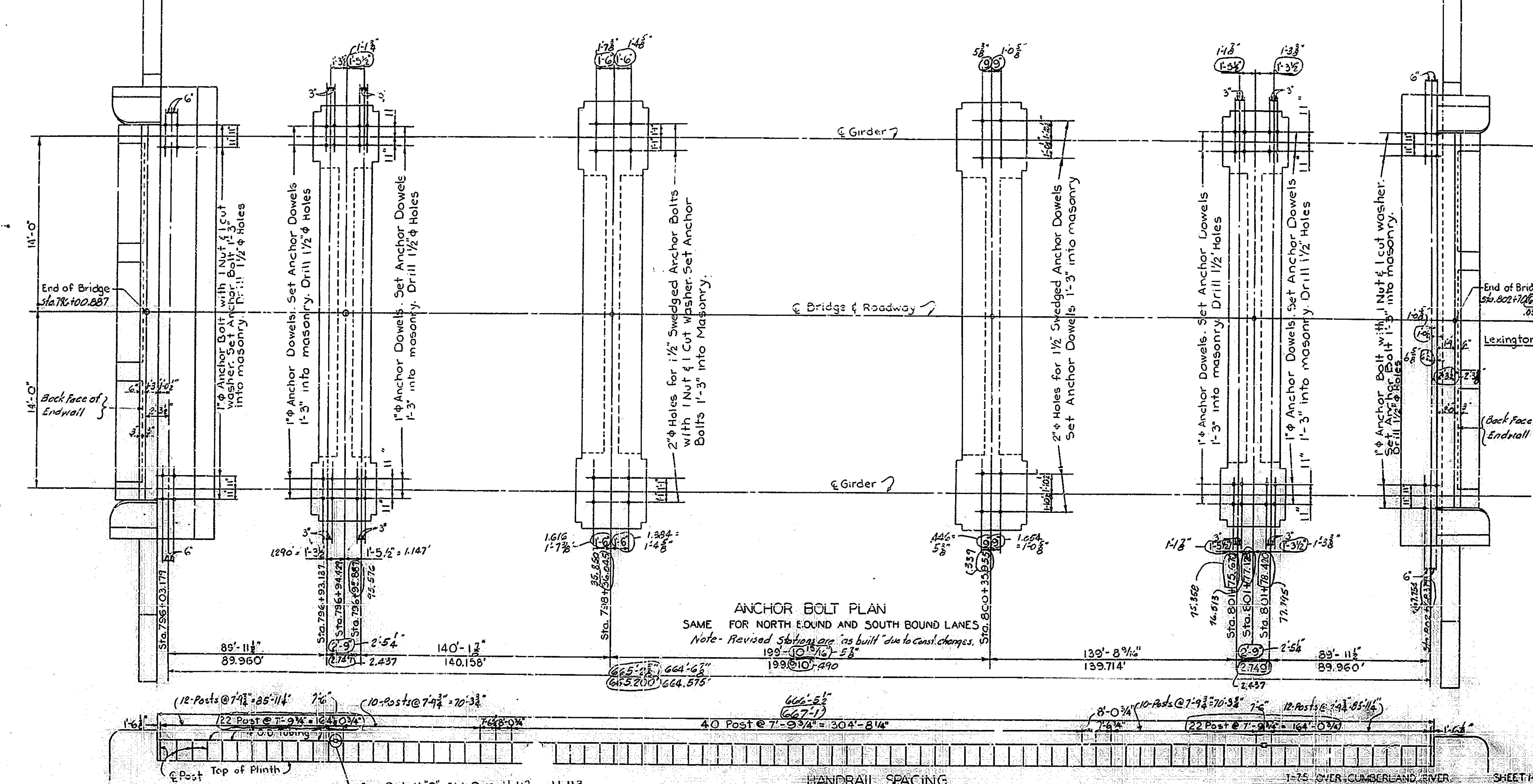
WORK SHEETS 12 AND 13 TOGETHER

SHEET 13

I-75 OVER CUMBERLAND RIVER

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
WHITLEY
LEXINGTON-TENNESSEE LINE
ROAD
STATION 799+36.0 **PROJECT NO.**
BRIDGE NUMBER
DRAWING NO. 14610

NOTE: HOLES OF DEPTH AND DIMENSIONS SHOWN SHALL BE DRILLED FOR ANCHOR BOLTS BY SUPERSTRUCTURE CONTRACTOR, WHO SHALL BE RESPONSIBLE FOR KEEPING HOLES DRY IN FREEZING WEATHER. AFTER BASE PLATES ARE PROPERLY SET AND ANCHOR BOLTS ARE PLACED IN DRILLED HOLES, MOLTEN LEAD SHALL BE POURED IN HOLES AND PACKED UNTIL HOLES ARE COMPLETELY FILLED FLUSH TO TOP OF BASE PLATES. THE COST OF DRILLING ANCHOR BOLT HOLES, FURNISHING LEAD AND FILLING HOLES WITH MOLTEN LEAD SHALL BE INCLUDED IN THE "LUMP SUM BID" FOR STRUCTURAL STEEL.



HANDRAIL SPACING

Handrail spacing same for each sidewalk. For Details see Std. Dwg. H-112 or H-113

Indicates tubing continuous over 2 post spacing

Indicates tubing continuous over 3 post spacing

Indicates tubing continuous over 2 1/2 post spacing in each direction connected with sleeve.

Indicates continuous over 2 post spacing with 12 1/4" overhang from ℄ of end post.

Note: Dimensions on Anchor Bolt Plan are perpendicular to horizontal whereas dimensions for Handrail are perpendicular to grade.

HANDRAIL SPACING ANCHOR BOLT PLAN

I-75 OVER CUMBERLAND RIVER — SHEET 14

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
WHITLEY
LEXINGTON - TENNESSEE LINE

ROAD

STATION 799+36.0 — PROJECT NO. SP 118-156-17 B2 Const. No.

BRIDGE NUMBER — NO. 1461[illegible]

TABLE OF ELEVATI[illegible]

SECTION	STATION*	Line A Const El.	Steel El.	Dim.X	Line B [illegible]	[illegible]	[illegible]	Line C [illegible]	[illegible]	[illegible]	[illegible]	Line D [illegible]	[illegible]	[illegible]	Line E [illegible]	[illegible]	[illegible]
1	796+00	[illegible]	—	—	[illegible]	—	—	[illegible]	[illegible]	—	—	[illegible]	—	—	[illegible]	—	—
2	+02	951.035	—	—	[illegible]	—	—	[illegible]	[illegible]	—	—	[illegible]	—	—	[illegible]	—	—
3	+02	951.235	—	—	[illegible]	—	—	[illegible]	[illegible]	—	—	[illegible]	—	—	[illegible]	—	—
4	+02	[illegible]	950.354	0.692	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	950.477	[illegible]	[illegible]	[illegible]	0.686	[illegible]	[illegible]	[illegible]
5	+11	.348	950.652	0.696	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	950.872	0.671	[illegible]	950.887	[illegible]	[illegible]	[illegible]	[illegible]
6	+20	[illegible]	950.956	[illegible]	[illegible]	951.067	[illegible]	[illegible]	[illegible]	951.067	[illegible]	[illegible]	951.067	[illegible]	[illegible]	[illegible]	.665
7	+29	951.920	951.297	0.623	[illegible]	951.469	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	951.474	0.556	[illegible]	[illegible]	[illegible]
8	+38	952.199	951.588	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	951.634	[illegible]	[illegible]	951.623	.686	[illegible]	[illegible]	[illegible]
9	+47	[illegible]	951.862	0.610	[illegible]	952.034	[illegible]	[illegible]	[illegible]	952.112	[illegible]	[illegible]	952.017	.665	[illegible]	951.842	.610
10	+56	.739	952.122	0.617	[illegible]	952.184	[illegible]	[illegible]	[illegible]	952.187	0.748	[illegible]	952.177	0.672	[illegible]	952.[illegible]	[illegible]
11	+65	953.000	952.377	[illegible]	[illegible]	952.554	0.555	[illegible]	[illegible]	952.634	0.561	[illegible]	[illegible]	0.568	[illegible]	952.367	[illegible]
12	+74	953.256	952.587	0.669	[illegible]	[illegible]	0.698	[illegible]	[illegible]	952.870	0.781	[illegible]	[illegible]	0.698	[illegible]	952.586	[illegible]
13	+83	.507	952.813	0.694	[illegible]	953.042	0.574	[illegible]	[illegible]	953.142	0.560	[illegible]	953.046	[illegible]	[illegible]	952.[illegible]	.634
14	+92	.754	953.062	0.692	.864	953.212	0.652	[illegible]	.950	953.214	0.736	.864	953.222	0.642	.754	953.082	0.672
15	796+53	953.788	953.243	[illegible]	953.898	[illegible]	[illegible]	[illegible]	953.984	953.[illegible]	[illegible]	953.898	[illegible]	[illegible]	953.788	[illegible]	[illegible]

TABLE OF ELEVATIONS FOR [illegible]

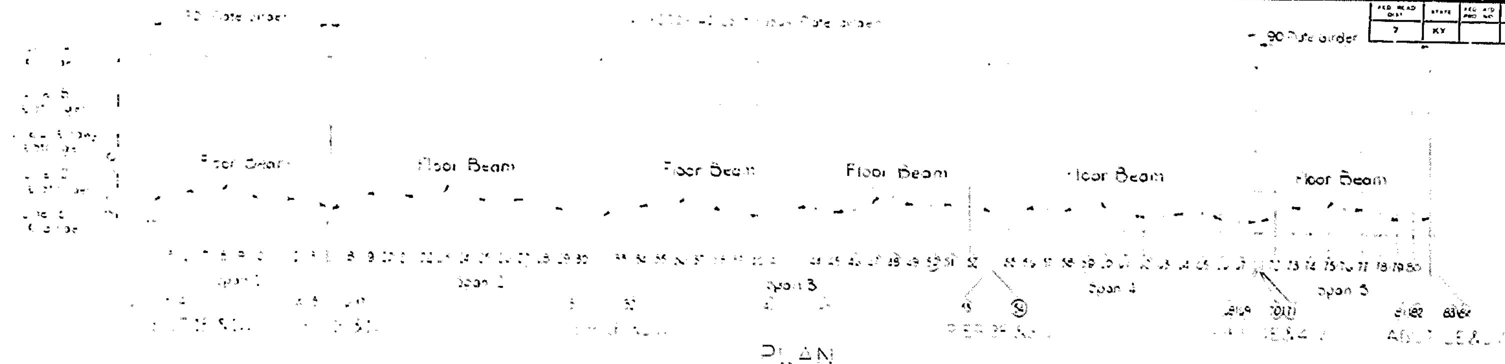
SECTION	STATION*	Line A Const El.	Steel El.	Dim.X	Line B Const El.	Steel El.	Dim.X	Line C Grade El.	Const El.	Steel El.	Dim.X	Line D Const El.	Steel El.	Dim.X	Line E Const El.	Steel El.	Dim.X
16	796+94	953.803	953.247	0.556	953.913	[illegible]	0.660	953.999	953.999	[illegible]	[illegible]	953.913	[illegible]	[illegible]	953.803	[illegible]	[illegible]
17	796+95	953.837	953.154	0.683	953.946	[illegible]	0.656	954.032	954.032	[illegible]	[illegible]	953.946	[illegible]	[illegible]	953.837	[illegible]	[illegible]
18	797+05	954.160	953.475	0.685	954.269	.492	[illegible]	.332	.335	[illegible]	[illegible]	954.269	[illegible]	[illegible]	954.160	[illegible]	[illegible]
19	+15	.480	953.857	0.623	.589	.889	[illegible]	.632	[illegible]	[illegible]	[illegible]	.589	[illegible]	[illegible]	.480	[illegible]	[illegible]
20	+25	954.793	954.169	0.625	954.903	[illegible]	[illegible]	954.932	954.989	[illegible]	[illegible]	954.903	[illegible]	[illegible]	954.793	[illegible]	[illegible]
21	+35	955.100	.475	0.625	955.210	[illegible]	[illegible]	955.232	[illegible]	[illegible]	[illegible]	955.210	[illegible]	[illegible]	955.100	[illegible]	[illegible]
22	+45	.401	.775	0.626	.511	[illegible]	[illegible]	.552	.597	[illegible]	[illegible]	.511	[illegible]	[illegible]	.401	[illegible]	[illegible]
23	+55	.699	955.079	0.621	955.809	[illegible]	[illegible]	955.852	955.895	[illegible]	[illegible]	955.809	[illegible]	[illegible]	.699	[illegible]	[illegible]
24	+65	955.989	.367	0.622	956.098	[illegible]	[illegible]	956.131	956.184	[illegible]	[illegible]	956.098	[illegible]	[illegible]	955.989	[illegible]	[illegible]
25	+75	956.275	.630	0.645	.384	[illegible]	[illegible]	.431	[illegible]	[illegible]	[illegible]	.384	[illegible]	[illegible]	956.275	[illegible]	[illegible]
26	+85	.558	.339	[illegible]	.667	[illegible]	[illegible]	956.731	[illegible]	[illegible]	[illegible]	.667	[illegible]	[illegible]	.558	[illegible]	[illegible]
27	797+95	956.843	956.220	0.623	956.953	[illegible]	[illegible]	957.031	957.039	[illegible]	[illegible]	956.953	[illegible]	[illegible]	956.843	[illegible]	[illegible]
28	798+05	957.134	956.530	0.604	957.244	[illegible]	[illegible]	.351	[illegible]	[illegible]	[illegible]	957.244	[illegible]	[illegible]	957.134	[illegible]	[illegible]
29	+15	.430	.842	[illegible]	.540	[illegible]	[illegible]	.631	[illegible]	[illegible]	[illegible]	.541	[illegible]	[illegible]	.430	[illegible]	[illegible]
30	+25	957.730	957.139	0.591	957.840	[illegible]	[illegible]	957.931	[illegible]	[illegible]	[illegible]	957.840	[illegible]	[illegible]	957.730	[illegible]	[illegible]
31	+34	958.017	.423	0.594	958.127	[illegible]	[illegible]	958.213	[illegible]	[illegible]	[illegible]	958.127	[illegible]	[illegible]	958.017	[illegible]	[illegible]
32	+35	.035	.448	0.567	.144	[illegible]	[illegible]	.230	.230	[illegible]	[illegible]	.144	[illegible]	[illegible]	.035	[illegible]	[illegible]
33	+45	.345	.744	0.601	.454	[illegible]	[illegible]	.530	.540	.365	[illegible]	.454	[illegible]	[illegible]	.345	[illegible]	[illegible]
34	+55	.658	958.062	0.597	958.769	[illegible]	[illegible]	958.830	958.853	[illegible]	[illegible]	958.769	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
35	+65	958.981	.356	0.625	959.090	[illegible]	[illegible]	959.130	959.174	[illegible]	[illegible]	959.090	[illegible]	[illegible]	958.981	[illegible]	[illegible]
36	+75	959.305	[illegible]	[illegible]	.415	.886	[illegible]	.450	[illegible]	[illegible]	[illegible]	.415	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
37	+85	.637	959.085	[illegible]	959.747	[illegible]	[illegible]	959.730	959.855	[illegible]	[illegible]	959.747	[illegible]	[illegible]	.637	[illegible]	[illegible]
38	798+95	959.962	[illegible]	[illegible]	960.072	.325	[illegible]	960.030	[illegible]	[illegible]	[illegible]	960.072	[illegible]	[illegible]	959.962	[illegible]	[illegible]
39	799+05	960.285	.618	0.667	.395	[illegible]	[illegible]	.330	.461	[illegible]	[illegible]	.395	[illegible]	[illegible]	960.285	[illegible]	[illegible]
40	+15	.604	.955	0.649	960.713	.942	0.771	.530	[illegible]	.937	[illegible]	[illegible]	[illegible]	[illegible]	.604	[illegible]	[illegible]
41	+25	960.916	960.260	[illegible]	961.025	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	960.916	[illegible]	[illegible]
42	+34	961.199	.540	[illegible]	961.309	[illegible]	[illegible]	[illegible]	[illegible]	.564	[illegible]	961.309	[illegible]	[illegible]	961.199	[illegible]	[illegible]
43	+35	.219	[illegible]	[illegible]	.328	.544	[illegible]	.329	[illegible]	[illegible]	[illegible]	.328	[illegible]	[illegible]	.219	[illegible]	[illegible]
44	+45	.515	.845	[illegible]	.625	.957	[illegible]	.529	[illegible]	[illegible]	[illegible]	.625	[illegible]	[illegible]	.515	[illegible]	[illegible]
45	+55	961.803	961.129	0.674	961.913	[illegible]	0.793	961.929	961.999	.725	0.874	961.913	[illegible]	[illegible]	961.803	[illegible]	[illegible]
46	+65	962.084	.377	0.713	962.194	.512	0.682	962.129	962.290	.592	0.688	962.194	[illegible]	[illegible]	962.084	.340	[illegible]
47	+75	.361	.616	0.745	.471	.669	0.802	.429	.557	.670	0.887	.471	.667	0.810	.361	[illegible]	[illegible]
48	+85	.686	.979	[illegible]	962.745	[illegible]	0.679	962.728	[illegible]	[illegible]	0.697	962.745	[illegible]	0.700	.686	[illegible]	[illegible]
49	799+95	962.904	962.203	0.701	963.013	.236	0.777	963.028	963.099	.238	0.871	963.013	[illegible]	[illegible]	962.904	[illegible]	[illegible]
50	800+05	963.179	.513	0.666	963.288	.650	0.638	.328	.374	.773	0.631	963.288	.652	0.636	963.170	[illegible]	[illegible]
51	+15	.458	.831	0.627	.567	.841	0.726	.628	[illegible]	[illegible]	[illegible]	[illegible]	.832	[illegible]	.458	[illegible]	[illegible]
52	+25	963.742	963.122	0.620	963.852	963.263	[illegible]	963.928	963.938	[illegible]	0.597	963.852	[illegible]	[illegible]	963.742	[illegible]	[illegible]
53	+35	964.032	.432	0.600	964.142	.421	[illegible]	964.228	964.228	[illegible]	[illegible]	964.142	[illegible]	[illegible]	964.032	[illegible]	[illegible]
54	+36	.050	.451	0.599	.159	[illegible]	[illegible]	.245	.245	[illegible]	[illegible]	.159	.492	[illegible]	.050	[illegible]	[illegible]
55	+45	.327	.740	0.587	.437	.902	[illegible]	.520	[illegible]	[illegible]	[illegible]	.437	[illegible]	[illegible]	.327	[illegible]	[illegible]
56	+55	.627	964.051	0.576	964.736	964.072	[illegible]	964.827	[illegible]	[illegible]	[illegible]	964.736	[illegible]	[illegible]	.627	[illegible]	[illegible]
57	+65	964.931	.341	0.590	965.040	.511	[illegible]	965.127	[illegible]	[illegible]	[illegible]	965.040	.519	[illegible]	964.931	[illegible]	[illegible]
58	+75	965.240	.641	0.599	.349	.699	[illegible]	.427	[illegible]	[illegible]	0.724	.349	[illegible]	[illegible]	965.240	[illegible]	[illegible]
59	+85	.554	965.021	0.533	.663	[illegible]	[illegible]	965.727	965.749	[illegible]	[illegible]	.663	[illegible]	[illegible]	.554	[illegible]	[illegible]
60	800+95	965.870	.241	[illegible]	[illegible]	.279	[illegible]	966.027	[illegible]	.330	0.736	965.980	[illegible]	[illegible]	965.870	[illegible]	[illegible]
61	801+05	966.184	.581	0.603	966.294	.744	[illegible]	.327	.360	.816	[illegible]	966.294	[illegible]	[illegible]	966.184	[illegible]	[illegible]
62	+15	.404	.803	[illegible]	[illegible]	.929	[illegible]	[illegible]	[illegible]	[illegible]	0.754	[illegible]	[illegible]	[illegible]	.494	[illegible]	[illegible]
63	+25	[illegible]	966.193	0.603	[illegible]	966.361	[illegible]	966.927	966.952	[illegible]	[illegible]	966.906	[illegible]	[illegible]	966.796	[illegible]	[illegible]
64	+35	967.095	.484	0.611	967.204	.532	[illegible]	967.226	967.290	.539	0.751	967.204	[illegible]	[illegible]	967.095	[illegible]	[illegible]
65	+45	.388	.776	0.612	.497	.940	0.557	.526	.583	[illegible]	0.565	.497	[illegible]	[illegible]	.388	[illegible]	[illegible]
66	+55	.674	967.061	0.613	967.783	[illegible]	[illegible]	967.826	967.869	[illegible]	0.775	967.783	[illegible]	[illegible]	.674	[illegible]	[illegible]
67	+65	967.954	.289	0.665	[illegible]	[illegible]	[illegible]	968.126	[illegible]	[illegible]	0.577	968.063	.521	[illegible]	967.954	[illegible]	[illegible]
68	+75	968.230	.570	0.660	968.340	[illegible]	[illegible]	968.426	[illegible]	[illegible]	0.736	.340	.690	[illegible]	968.230	[illegible]	[illegible]
69	801+76	968.264	.729	0.535	968.374	.709	[illegible]	968.460	968.460	.719	[illegible]	968.374	[illegible]	[illegible]	968.264	[illegible]	[illegible]

TABLE OF ELEVATIONS FOR SETTING SLAB FORMS FOR 90' PLATE GIRDER

SECTION	STATION*	Line A Const. El	Steel El	Dim.X	Line B Const. El	Steel El	Dim.X	Line C Grade El	Const El	Steel El	Dim.X	Line D Const El	Steel El	Dim.X	Line E Const El	Steel El	Dim.X
70	801+77	968.270	967.736	[illegible]	968.389	967.766	0.623	968.475	968.475	967.766	0.709	968.389	967.756	0.633	968.270	967.736	0.543
71	+78	.315	967.617	0.698	.422	967.796	0.626	.508	.508	967.794	0.714	.422	967.777	0.645	.313	[illegible]	0.692
72	+87	.605	967.918	0.687	968.714	968.164	0.550	968.778	968.800	968.231	0.569	968.714	968.156	0.558	.605	967.914	0.691
73	801+96	[illegible]	968.227	0.667	969.003	968.315	0.689	969.048	969.089	968.314	0.775	969.003	[illegible]	[illegible]	968.894	968.214	[illegible]
74	802+05	969.178	968.547	0.631	969.287	968.716	0.571	.316	.373	969.776	0.597	969.287	968.706	0.581	969.178	968.526	[illegible]
75	+14	.456	968.828	0.628	.566	968.867	0.699	.588	.652	968.865	0.787	.566	968.862	0.704	.456	968.806	0.650
76	+23	.729	969.107	0.622	969.839	969.266	0.573	969.858	969.925	969.327	0.598	969.839	969.244	0.595	.729	969.076	0.653
77	+32	969.996	969.376	0.620	970.106	969.411	0.695	970.128	970.192	969.406	0.786	970.106	969.396	0.710	969.996	969.337	0.657
78	+41	970.257	969.636	0.621	.367	969.786	0.581	.397	.458	969.868	0.587	.367	969.783	0.584	970.257	969.598	0.659
79	+50	.513	969.858	0.655	.623	969.925	0.653	.667	.709	969.919	0.790	.623	969.913	0.710	.513	969.826	[illegible]
80	+59	970.764	970.085	0.679	970.873	970.303	0.570	970.937	970.956	970.372	0.587	970.873	970.282	0.591	970.764	970.054	[illegible]
81	+68	971.012	970.326	0.686	971.121	970.425	0.696	971.207	971.207	970.431	0.776	971.121	970.421	0.700	971.012	970.305	0.707
82	+68	.034			.143			.229	.229			.143			.034		
83	+68	.036			.146			.232	.232			.146			.036		
84	802+90	971.089			971.198			971.284	971.284			971.198			971.080		

*Stations shown are on Grade Line.

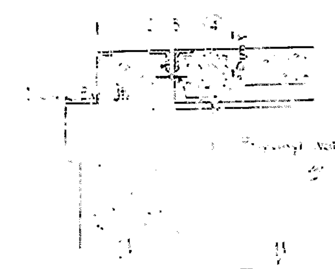
Grade El. on ℄ for information Only. (See Construction Note)



PLAN

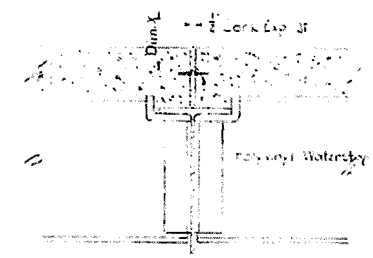
CONSTRUCTION NOTE

1. Take elevations on top of steel at points indicated after cross frames and lateral bracing are in place and after all falsework has been removed, but before forms for concrete slabs have been put in place. Read elevations to three decimals using target rod and enter readings in Table under Steel Elevations.
2. Compute Dimension X as follows: Construction Elevation minus Steel Elevation equals Dim. "X". Construction Elevation includes camber due to weight of concrete slab, plinth, handrail and future surfacing. Grade El. along ℄ Roadway is final Elevation with slab in place and all false work removed.
3. For setting templates measure Dim. X above top of steel for top of Template. Do not set templates by Elevations.
4. Construct Handrail Plinth & Sidewalk Grade. Do not add Camber to Handrail Plinth.



END BENT 1

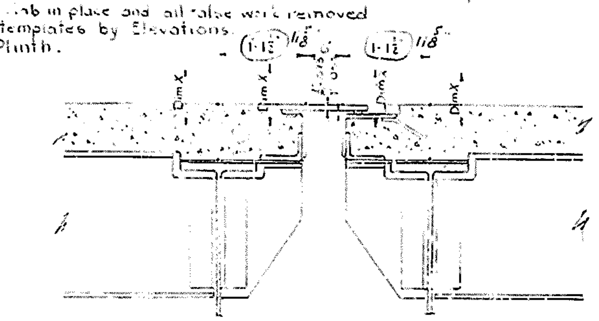
32 43 55



FLOOR BEAMS

19—29 34—40 45—51

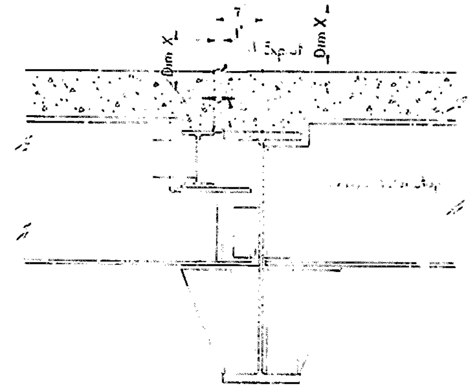
75—79



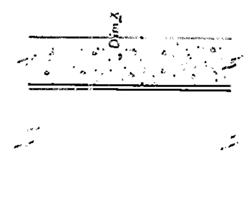
PIER 1 & 4 EXP. DAM

(14) (15) (16) (17)

(71) (70) (69) (68)



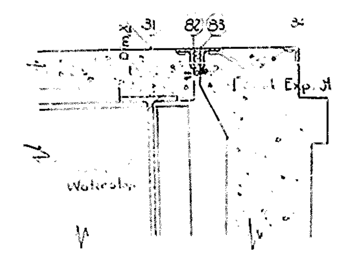
STRINGER EXPANSION



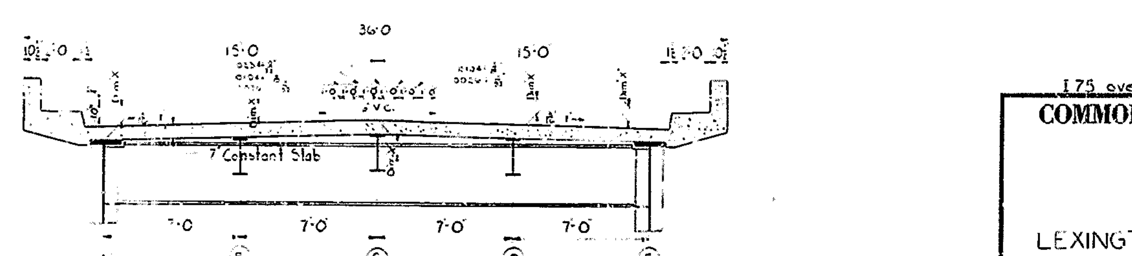
STRINGERS

5—15 18—30 33—41

44—52 55—67 —80



ABUT. 2



TYPICAL CROSS SECTION

ELEVATIONS ~ ~~NORTH &~~ SOUTH BOUND LANE

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

I 75 over Cumberland River Sheet 15

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
WHITLEY
LEXINGTON-TENNESSEE LINE
ROAD
STATION 799+36.0 PROJECT NO. SP 118-350-2L
BRIDGE NUMBER DRAWING NO. 14610 INDEX

SB W Brdg.

DESIGNED BY L.M.M. CHECKED BY RBR DATE 11/63
DETAILED BY L.M.M. CHECKED BY " DATE "
TRACED BY CHECKED BY DATE
REVISED Dimensions @ Expan. Dams RBR LRE DATE [illegible]
REVISED Steel Elev. & Dimension X for Span 1 DATE 1-14-65 GWH
REVISED DATE S.D.H.

TABLE OF ELEVATIONS FOR SETTING SLAB FORMS FOR 90' PLATE GIRDER

SECTION	STATION*	Line 'A' Const. El.	Line 'A' Steel El.	Line 'A' Dim. X	Line 'B' Const. El.	Line 'B' Steel El.	Line 'B' Dim. X	Line 'C' Grade El.	Line 'C' Const. El.	Line 'C' Steel El.	Line 'C' Dim. X	Line 'D' Const. El.	Line 'D' Steel El.	Line 'D' Dim. X	Line 'E' Const. El.	Line 'E' Steel El.	Line 'E' Dim. X
1	796+00	951.095	—	—	951.135	—	—	951.191	951.191	—	—	951.135	—	—	950.995	—	—
2	+02.122	951.035	—	—	.147	—	—	.228	.228	—	—	.142	—	—	951.035	—	—
3	+02.250	951.035	—	—	.145	—	—	.231	.231	—	—	.145	—	—	.035	—	—
4	+02.694	.056	950.362	0.694	.165	950.464	0.701	.251	.251	950.472	0.779	.165	950.474	0.691	.056	950.378	0.678
5	+11.681	.348	950.658	0.690	.457	950.889	0.568	.521	.543	950.971	0.572	.457	950.895	0.562	.348	950.673	0.675
6	+20.688	.637	950.970	0.667	951.746	951.061	0.685	951.791	951.832	951.071	0.761	951.746	951.077	0.669	.637	950.991	0.646
7	+29.694	951.920	951.288	0.632	952.030	951.451	0.579	952.041	952.116	951.551	0.565	952.030	951.487	0.543	951.920	951.311	0.609
8	+38.690	952.199	951.568	0.631	.309	951.622	0.687	.331	.395	951.637	0.758	.309	951.639	0.670	952.199	951.588	0.611
9	+47.696	.472	951.847	0.625	.582	952.028	0.554	.601	.668	952.119	0.549	.582	952.029	0.553	.472	951.860	0.612
10	+56.692	.739	952.109	0.630	952.849	952.169	0.680	952.870	952.935	952.180	0.755	952.849	952.170	0.679	952.739	952.124	0.615
11	+65.698	953.000	952.369	0.631	953.109	952.544	0.565	953.140	953.195	952.639	0.556	953.109	952.549	0.560	953.000	952.379	0.621
12	+74.694	953.256	952.581	0.675	.365	952.669	0.696	.410	.451	952.679	0.772	.365	952.679	0.686	953.256	952.596	0.660
13	+83.690	.507	952.811	0.696	.616	953.036	0.580	.680	.702	953.131	0.571	.616	953.049	0.567	.507	952.828	0.679
14	+92.696	.754	953.050	0.704	.864	953.199	0.665	.950	.950	953.204	0.746	.864	953.199	0.665	.754	953.069	0.685
15	796+93.691	953.788	953.229	0.559	953.898	953.226	0.672	953.984	953.984	953.230	0.754	953.898	953.228	0.670	953.788	953.248	[illegible]

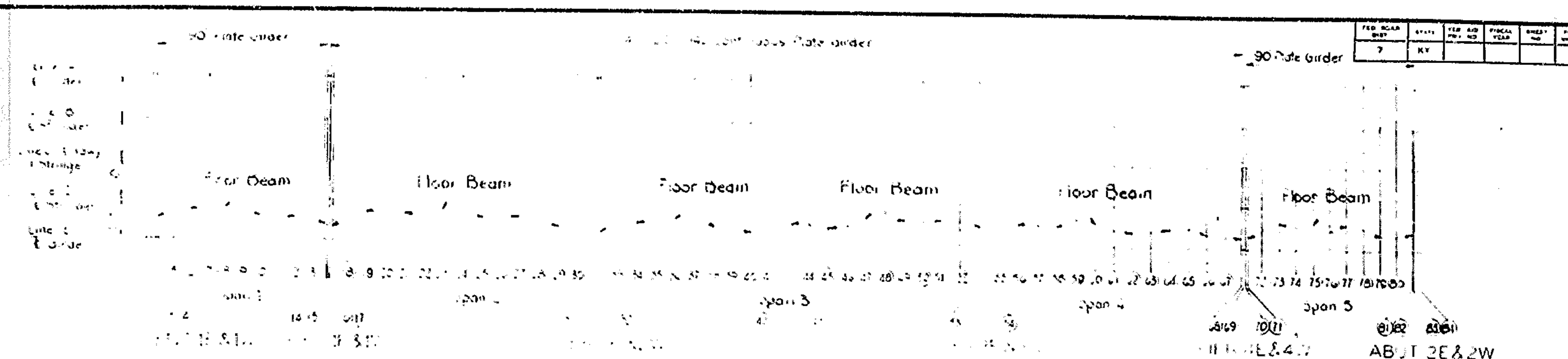
TABLE OF ELEVATIONS FOR SETTING SLAB FORMS FOR 140-200-140' PLATE GIRDER

SECTION	STATION*	Line 'A' Const. El.	Line 'A' Steel El.	Line 'A' Dim. X	Line 'B' Const. El.	Line 'B' Steel El.	Line 'B' Dim. X	Line 'C' Grade El.	Line 'C' Const. El.	Line 'C' Steel El.	Line 'C' Dim. X	Line 'D' Const. El.	Line 'D' Steel El.	Line 'D' Dim. X	Line 'E' Const. El.	Line 'E' Steel El.	Line 'E' Dim. X
16	796+94.777	953.803	953.249	.554	953.913	953.250	.663	953.999	953.999	953.266	.733	953.913	953.255	.658	953.803	953.246	.557
17	796+95	953.837	.156	.681	953.946	.293	.653	954.032	954.032	.296	.736	953.946	.288	.658	953.837	.155	.682
18	797+05	954.160	.487	.673	954.269	.688	.581	.332	.355	.776	.579	954.269	.693	.576	954.160	.473	.687
19	+15	.480	.863	.617	.589	.900	.689	.652	.675	.905	.770	.589	.899	.690	.480	.849	.631
20	+25	954.793	954.159	.634	954.903	954.327	.576	954.932	954.980	954.413	.576	954.903	954.328	.575	954.793	954.164	.629
21	+35	955.100	.460	.640	955.210	.499	.711	955.252	955.296	.516	.780	955.210	.517	.693	955.100	.476	.624
22	+45	.401	.768	.633	.511	.934	.577	.532	.597	955.009	.588	.511	.931	.580	.401	.784	.617
23	+55	.699	955.062	.637	955.809	955.103	.706	955.832	955.895	.109	.786	955.809	955.117	.692	.699	955.076	.623
24	+65	955.989	.358	.631	956.098	.517	.581	956.131	956.184	.604	.580	956.098	.579	.579	955.989	.357	.632
25	+75	956.275	.621	.654	.384	.892	.692	.431	.470	.893	.777	.384	.688	.696	956.275	.610	.665
26	+85	.558	956.007	.551	.667	956.106	.551	956.731	956.753	956.186	.567	.667	956.105	.562	.558	.988	.570
27	797+95	956.843	.219	.624	956.953	.276	.677	957.031	957.059	.284	.755	956.953	.277	.676	956.843	956.213	.630
28	798+05	957.134	.533	.601	957.244	.694	.550	.381	.330	.773	.557	957.244	.694	.550	957.134	.535	.599
29	+15	.430	.855	.575	.540	.858	.682	.631	.626	.858	.768	.540	.856	.684	.430	.840	.590
30	+25	957.730	957.139	.591	957.840	957.308	.532	957.931	957.926	957.400	.526	957.840	957.297	.543	957.750	957.131	.599
31	+34	958.017	.435	.582	958.127	.494	.633	958.213	958.213	.500	.713	958.127	.467	.660	958.017	.425	.592
32	+35	.035	.453	.582	.144	[illegible]	.700	.230	.250	.449	.781	.144	.441	.703	.035	.439	.596
33	+45	.345	.752	.593	.454	.893	.561	.530	.540	.962	.578	.454	.892	.562	.345	.737	.608
34	+55	.659	958.070	.589	958.769	958.073	.696	958.850	958.855	958.065	.790	958.769	958.060	.709	.659	.993	.666
35	+65	958.981	.356	.615	959.090	.512	.578	959.130	959.176	.590	.586	959.090	.497	.593	958.981	958.325	.656
36	+75	959.305	.668	.637	.415	.697	.718	.430	.501	.692	.809	.415	.676	.739	959.305	.617	.688
37	+85	.637	959.048	.589	959.747	959.131	.616	959.730	959.833	959.196	.637	959.747	959.113	.634	.657	959.003	.634
38	798+95	959.962	.283	.679	960.072	.325	.747	960.030	960.158	.312	.846	960.072	.298	.774	959.962	.230	.732
39	799+05	960.285	.630	.655	.395	.759	.636	.330	.481	.833	.648	.395	.727	.668	960.285	.577	.708
40	+15	.604	.972	.632	960.713	.954	.759	.650	960.799	.953	.846	960.713	.933	.780	.604	.877	.727
41	+25	960.916	960.278	.638	961.025	960.392	.633	960.929	961.111	960.477	.634	961.025	960.374	.651	960.916	960.227	.689
42	+34	961.199	.561	.638	961.309	.586	.723	961.212	.395	.577	.818	961.309	.547	.762	961.199	.516	.683
43	+35	.219	.570	.649	.328	.562	.766	.229	.414	.534	.880	.328	.540	.788	.219	.545	.674
44	+45	.515	.859	.656	.625	.983	.642	.329	.711	961.064	.647	.625	.964	.661	.515	.841	.674
45	+55	961.803	961.151	.652	961.913	961.136	.777	961.829	961.999	.136	.863	961.913	961.124	.789	961.803	961.112	.691
46	+65	962.084	.402	.682	962.194	.538	.656	962.129	962.280	.614	.666	962.194	.517	.677	962.084	.356	.728
47	+75	.361	.653	.708	.471	[illegible]	.757	.413	.557	.715	.842	.471	.695	.775	.361	.626	.735
48	+85	.636	962.032	.604	962.745	962.134	.611	962.728	962.831	962.261	.828	962.745	962.114	.631	.636	.994	.642
49	799+95	962.904	.274	.630	963.013	.274	.739	963.028	[illegible]	.274	.829	963.013	.264	.749	962.904	962.208	.696
50	800+05	963.179	.544	.635	963.288	.701	.587	.328	.374	.792	.582	963.288	.684	.604	963.179	.513	.666
51	+15	.458	.845	.613	.567	.856	.711	.628	.653	.856	.797	.567	.845	.722	.458	.834	.624
52	+25	963.742	963.124	.618	963.851	963.274	.578	963.928	963.938	963.355	.583	963.852	963.279	.573	963.742	963.135	.607
53	+35	964.032	.436	.596	964.142	.444	.698	964.228	964.228	.449	.779	964.142	.447	.695	964.032	.446	.586
54	+36	.050	.455	.595	.159	.482	.677	.245	.245	.525	.720	.159	.504	.655	.050	.464	.586
55	+45	.327	.735	.592	.437	.894	.543	.528	.523	964.003	.520	.437	.912	.525	.327	.752	.575
56	+55	.627	964.054	.573	964.736	964.064	.672	964.827	964.822	.074	.748	964.736	964.072	.664	.627	964.064	.563
57	+65	964.931	.354	.577	965.040	.493	.547	965.127	965.126	.594	.532	965.040	.513	.527	964.931	.355	.576
58	+75	965.240	.634	.606	.349	.680	.669	.427	.435	.694	.741	.349	.701	.648	965.240	.654	.586
59	+85	.554	965.014	.540	.663	965.119	.544	965.727	965.749	965.214	.535	.663	965.134	.529	.554	964.034	.520
60	800+95	965.870	.244	.626	965.980	.319	.661	966.027	966.066	.326	.740	965.980	.314	.666	965.870	.250	.620
61	801+05	966.184	.582	.602	966.294	.746	.548	.327	.380	.834	.546	966.294	.748	.546	966.184	.582	.602
62	+15	.494	.889	.605	.604	.923	.681	.627	.690	.928	.762	.604	.924	.680	.494	.903	.591
63	+25	966.796	966.186	.610	966.906	966.344	.562	966.927	966.997	966.448	.549	966.906	[illegible]	.551	966.796	[illegible]	[illegible]
64	+35	967.095	.482	.613	967.204	.526	.678	967.226	967.290	.529	.761	967.204	.526	.678	967.095	.497	.598
65	+45	.388	.775	.613	.497	.924	.573	.526	.583	967.005	.578	.497	.934	.563	.388	.785	.603
66	+55	.674	967.073	.601	967.783	967.103	.680	967.826	967.869	.099	.770	967.783	967.097	.686	.674	967.082	.592
67	+65	967.954	.284	.670	968.064	.499	.564	968.126	968.149	.585	.564	968.068	.493	.570	967.954	.286	.668
68	+75	968.230	.537	.693	968.340	.691	.649	968.426	.426	.694	.732	.340	.689	.651	968.230	.548	.682
69	801+76	968.264	.688	.576	968.374	.719	.655	968.460	968.460	.719	.741	968.374	.711	.663	968.264	.699	.565

TABLE OF ELEVATIONS FOR SETTING SLAB FORMS FOR 90' PLATE GIRDER

SECTION	STATION*	Line 'A' Const. El.	Line 'A' Steel El.	Line 'A' Dim. X	Line 'B' Const. El.	Line 'B' Steel El.	Line 'B' Dim. X	Line 'C' Grade El.	Line 'C' Const. El.	Line 'C' Steel El.	Line 'C' Dim. X	Line 'D' Const. El.	Line 'D' Steel El.	Line 'D' Dim. X	Line 'E' Const. El.	Line 'E' Steel El.	Line 'E' Dim. X
70	801+77	968.279	967.732	.547	968.389	967.738	.651	968.475	968.475	967.733	.742	968.389	967.733	.656	968.279	967.724	.555
71	+78	.313	.612	.701	.422	.765	.657	.508	.508	.768	.740	.422	.764	.658	.313	.611	.702
72	+87	.605	.912	.693	968.714	968.144	.570	968.778	968.800	968.205	.595	968.714	968.130	.584	.605	.901	.704
73	801+96	968.896	968.215	.679	969.005	.295	.708	969.048	969.089	.294	.795	969.005	.293	.710	968.896	968.203	.591
74	802+05	969.178	.536	.612	969.287	.703	.584	.318	.373	.783	.590	969.287	.702	.585	969.178	.523	.655
75	+14	.456	.820	.636	.566	.872	.694	.588	.652	.874	.778	.566	.873	.693	.456	.805	.651
76	+23	.729	969.102	.627	969.839	969.263	.576	969.858	969.925	969.345	.580	969.839	969.255	.584	.729	969.078	.651
77	+32	969.996	.372	.624	970.106	.416	.690	970.128	970.192	.416	.776	970.106	.408	.698	969.996	.343	.653
78	+41	970.257	.633	.624	.367	.797	.570	.397	.455	.868	.587	.367	.788	.579	970.257	.600	.657
79	+50	.513	.853	.660	.623	.932	.691	.647	.709	.932	.777	.623	.923	.700	.513	.823	.690
80	+59	970.764	970.074	.690	970.873	970.288	.585	970.937	970.958	970.371	.588	970.873	970.284	.589	970.764	970.051	.713
81	+68	971.012	.311	.701	971.121	.413	.708	971.207	971.207	.415	.792	971.121	.412	.709	971.012	.296	.716
82	+68	.034			.143			.229	.229			.143			.034		
83	+68	.036			.146			.252	.252			.146			.036		
84	802+70	971.089			971.198			971.284	971.284			971.198			971.089		

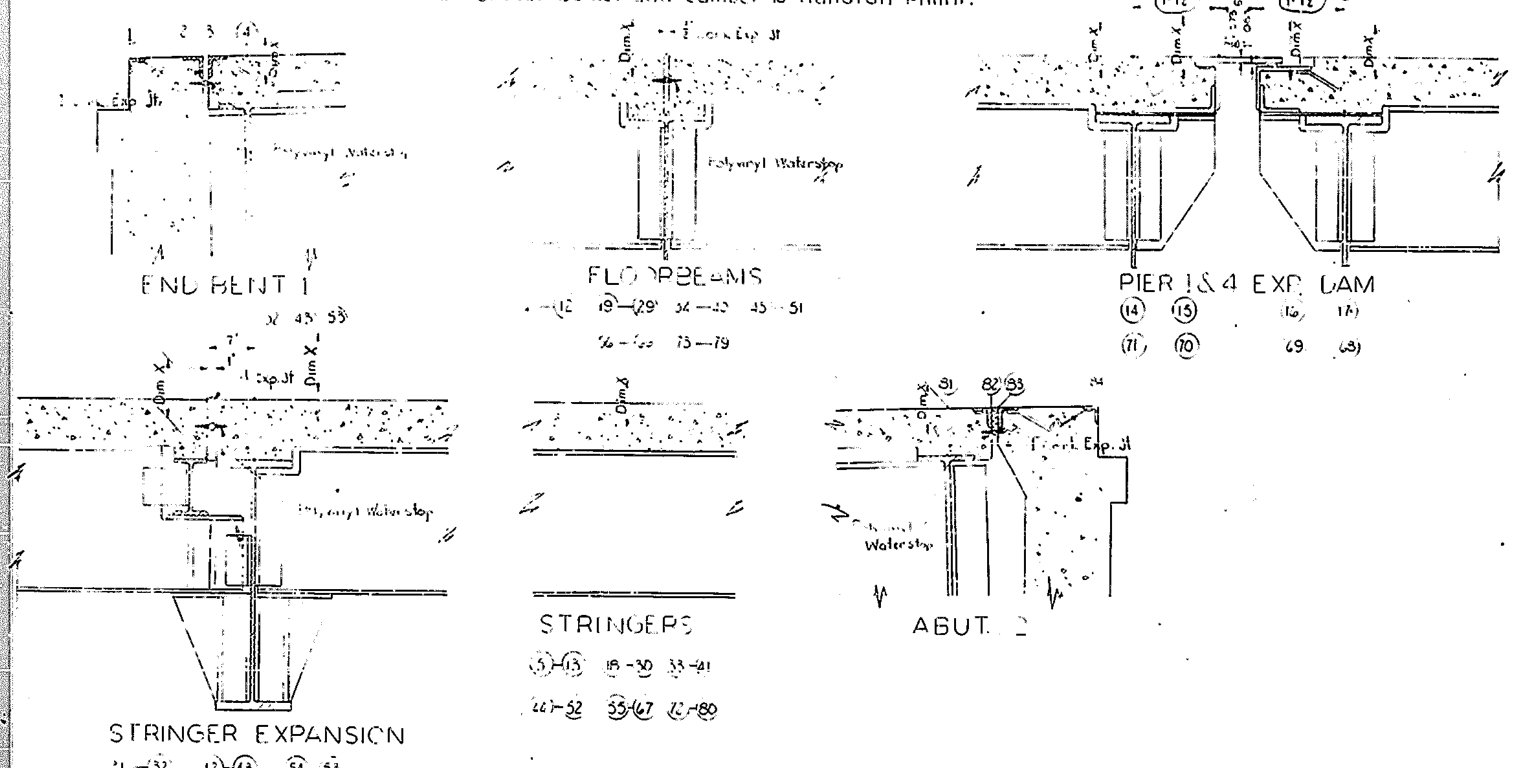
*Stations shown are on Grade Line. "Grade El." on ℄ for information Only (See Construction Note)



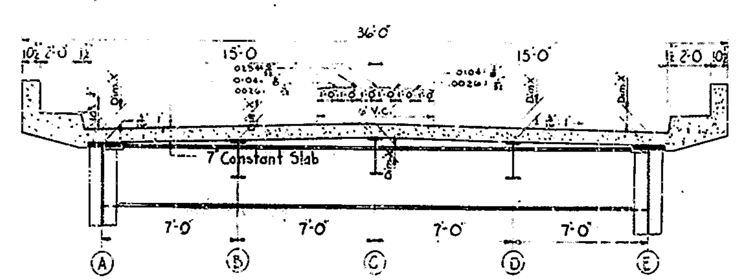
PLAN

CONSTRUCTION NOTE

1. Take elevations on top of steel at points indicated after cross frames and lateral bracing are in place and after all falsework has been removed, but before forms for concrete slabs have been put in place. Read elevations to three decimals using target rod and enter readings in Table under Steel Elevations.
2. Compute Dimension X as follows – Construction Elevation minus Steel Elevation equals Dim. X. Construction Elevation includes camber due to weight of Concrete Slab, Plinth, Handrail and Future Surfacing. Grade El. along ℄ Roadway is final elevation with slab in place and all false work removed.
3. In setting templates measure Dim. X above top of steel for top of Template. Do not set templates by Elevations.
4. Construct Handrail Plinth to Sidewalk Grade. Do not add Camber to Handrail Plinth.



I 75 - 1(12) 14



TYPICAL CROSS SECTION

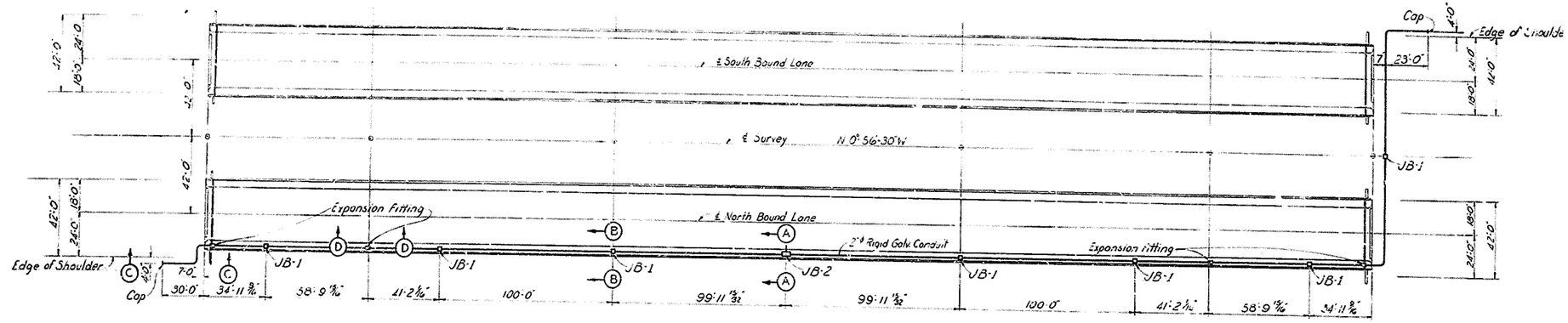
ELEVATIONS ~ NORTH ~~& SOUTH~~ BOUND LANE

I 75 over Cumberland River — Sheet 15 A

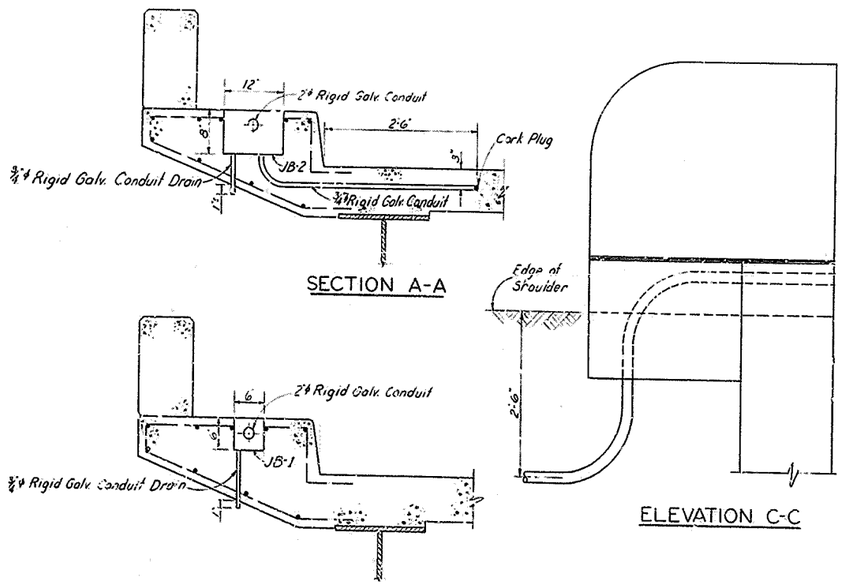
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
WHITLEY
LEXINGTON-TENNESSEE LINE
ROAD
STATION 799+36.0 — PROJECT NO. SP 118-350-2 L
BRIDGE NUMBER — DRAWER NO. 14610

Revised: Dimensions @ Expan. Dam. Pier 1 & 2 — Date 6-16-65
Revised: Steel Elev. & Dimension 'X' for Span 1 — Date 8-10-65
Revised: This Sh. Added for NB Lane — Date 9-65
Steel Elev. & Dim. 'X' added 9-2-65 : G.W.H.
S.DH.
Designed by L.M.M. — Detailed by L.M.M.

NC
[redacted]



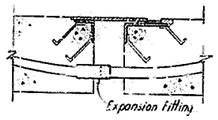
PLAN



SECTION A-A

ELEVATION C-C

SECTION B-B



SECTION D-D

Note: Junction boxes and conduit are to be placed so as to interfere with a minimum amount of reinforcement. Bend reinforcement where necessary.

BILL OF MATERIAL

2"ϕ Galv. Rigid Conduit	840 Lin.-Ft.
2"ϕ Galv. Rigid Conduit	8 Lin.-Ft.
Junction Box-JB1 - OZ Type YR-(16"x6"x6") or approved equal	7 Each
Junction Box-JB2 - OZ Type YR-(18"x12"x8") or approved equal	1 Each
Expansion Fitting-(Crouse-Hinds XJ66i with GC-100 grounding straps)	4 Each
2"ϕ Galv. Conduit Caps	2 Each

ELECTRICAL CONDUIT DETAILS

I-75 OVER CUMBERLAND RIVER

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
WHITLEY
LEXINGTON – TENNESSEE
ROAD
STATION 799+36.0
PROJECT
BRIDGE NUMBER