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

DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

TRIGG COUNTY
PADUCAH-TENN. STATE LINE ROAD
KY. 124 OVER I-24

updated 11-7-73 JCB

Letting Date 11-21-77

REFERENCE AND ESTIMATE OF QUANTITIES

Item	Sheet Nº	Concrete Class "AA" (Cu. Yds.)	Concrete Class "A" (Cu. Yds.)	Steel Reinforcement (Non Coated) (Lbs.)	Structural Steel (Lump Sum)	Bronze Bearing Plates (Lbs.)	Neoprene Expansion Joint (Lin. Ft.)	Epoxy Coated Steel Reinf. (Lbs)	Test Piles (Lin Feet)	Structure Excavation Common (Cu. Yds.)	Structure Excavation Solid Rock (Cu. Yds.)	Piling HP 12×53 (Lin. Feet)	CELLULAR ABUTMENT BACKFILL (Lump Sum)	Crushed Aggregate Slope Protection (Tons)
Title & Quantities	1													
General Notes	2													
Layout	3													
Abutment Nº 1	4,5,6,7	66.9	98.1	19,357				4750	25		12	120	③	38
Pier Nº 1	8		64.9	15,188						34	47			
Abutment Nº 2	9,10,11,12	49.5	76.8	15,301				3545	20		12	95	④	38
Superstructure	13,14,15	226.3		22,299	①	466		32,469						
Expansion Joint	16						②							
Construction Elevations	17 & 18													
Soundings	19													
Sub-total Substructure		116.4	239.8	49,846				8295	45	34	71			76
Sub-total Superstructure		226.3		22,299	①	466		32,469						
Total		342.7	239.8	72,145	①	466	②	40,764	45	34	71	215	③ & ④	76

① Approximate weight of structural steel = 170,150 lbs.

② The Approximate length of Expansion Joint = 62 Lin. Ft. (Total). The Contractor shall use at his option, one of the following: Fel-Spa T-40, Transflex 400, Wabo Flex SR-4, Delastiflex CP-400

③ Includes Approx. 251 cu. yds. common excavation and 140 cu. yds. cellular abutment backfill.

④ Includes Approx. 206 cu. yds. common excavation and 119 cu. yds. cellular backfill.

STANDARD DRAWINGS

(Standard Drawings listed below are the current edition & are to be used with these plans.)

BPS-003-01
BJE-001-3
BGX-006-1
BGB-004-01 Thru BGB-007-01

BILL OF INCIDENTAL MATERIALS

Item	Nº of Pieces	Size	Location
Plastic Pipes	16	1"ϕ	Wing Tips

Note: The Bill of Incidental Materials is approximate only and the Contractor is responsible to furnish enough material to complete the work in accordance with the plans and specifications.

SPECIAL PROVISIONS

4(76) Welding Steel Bridges

19(76) Epoxy Coated Steel Reinforcement

PLANS PREPARED BY REID, QUEBE, THOMPSON AND ASSOCIATES, INC.

DESIGNED BY ____ CHECKED BY ____ DATE ____ REVISED ____ DATE ____
DETAILED BY JLG CHECKED BY MEC DATE 4-20-?? REVISED ____ DATE ____
TRACED BY ____ CHECKED BY ____ DATE ____ REVISED ____ DATE ____

KY. 124 over I-24 SHEET 1 of 19

COMMONWEALTH OF KENTUCKY
BUREAU OF HIGHWAYS
FRANKFORT
COUNTY OF
TRIGG
PADUCAH-TENN STATE LINE
ROAD SP 111-404-1L
STATION 4499+89.46 PROJECT NO. I-24-2(6)56
CONST. PROJ. NO. I24-2(33)5 MAINT. PROJ. NO.
DRWG. NO. 18730

BRIDGE

LETTING DATE

GENERAL NOTES

SPECIFICATIONS: The Kentucky Bureau of Highways Standard Specifications for Road and Bridge Construction, current edition, shall apply to this project.

DESIGN LOAD: This bridge is designed for H20-44 live load as specified in the 1969 AASHO Specifications. This bridge is designed for a wind load based on a wind velocity of 84 m.p.h.

DESIGN STRESSES: For reinforced concrete:

Class 'A'	Class 'AA'
f_s = 20,000 psi	f_s = 20,000 psi
f_c = 1,200 psi	f_c = 1,600 psi for other than slabs
f'_c = 3,000 psi	f_c = 1,200 psi for deck slabs
u (for embed.) = 200 psi	f'_c = 4,000 psi
u (for Σo) = 300 psi	u (for embed.) = 200 psi
n = 10	u (for Σo) = 300 psi
	n = 8

For structural steel:
f_s = 20,000 psi for A36 steel

FOUNDATION PRESSURE: Footings are designed for a maximum pressure of 4000 psf. Piles are designed for a maximum axial load of 37 tons per pile and a maximum horizontal shear of 0 tons per pile.

CONCRETE: Class 'AA' concrete is to be used throughout the superstructure. It is to be used in the portions of the substructure from the top of pile. Class 'A' concrete is to be used in the substructure below the top of cap.

REINFORCEMENT: Dimensions shown from the face of concrete to bars are clear distances unless otherwise shown. Spacing of bars is from center to center of bars.

BEVELED EDGES: All exposed edges shall be beveled ¾" unless otherwise shown.

BILL OF INCIDENTAL MATERIAL: The quantities shown in the Bill of Incidental Material are approximate only and the contractor is responsible for furnishing enough material to complete the work in accordance with the Plans and Specifications. The cost of these items is to be included in the unit price bid for Class 'AA' Concrete.

PAYMENT FOR STRUCTURAL STEEL: The Lump Sum Bid for structural steel shall be full payment for all structural steel, bolts, washers, lead plates, molten lead, anchor bolts, welding and welding materials, paint and all labor and materials necessary to erect the steel in accordance with the Plans and Specifications. The approximate weight of structural steel shown in the Estimate of Quantities does not include overrun or weld material.

PILING: Piling shall be driven to refusal or to solid rock. Test piles shall be driven where designated on the plans to determine the length required and shall be accurately located so that they may be used in the finished structure.

TYPE OF PILES: The Contractor shall use the following type throughout: HP12:53 Steel Piles, Std. Dwg. STR-003, current edition.

CONSTRUCTION IDENTIFICATION: The names of the prime contractor and the sub-contractor shall be imprinted in the concrete with one inch letters at a location designated by the Engineer. The Contractor shall furnish all plans, equipment and labor necessary to do the work for which no direct payment will be made.

CLEANING AND PAINTING: Section 604.25 Specifications applied to this project and contractors are hereby reminded that in accordance with the Specifications, ALL steel surfaces to be painted including exposed surfaces of splice plates, shall be first cleaned to a near white condition in accordance with SSPC 10 immediately prior to being painted with the first coat of paint regardless of whether the first coat is applied in the shop or in the field.

TREPANNED SELF-LUBRICATING BEARING PLATES, BRONZE: Self-lubricating bronze plates shall be an article of standard production by an established manufacturer of such equipment. They shall be in accordance with Sub-Section 813.06 of the Specifications except as herein modified. Trepanned recesses shall be in accordance with Section 813.06 of the Specifications.

Chemical requirements are as follows:

Copper	per cent	79.0 min. - 85.0 max.
Tin	per cent	15.0 min. - 20.0 max.
Lead	per cent	0.25 max.
Zinc	per cent	0.25 max.
Iron	per cent	0.25 max.
Phosphorus	per cent	1.00 max.

Analysis shall regularly be made for Copper, Tin, Lead, and Phosphorus. However, the presence of Zinc and Iron greater than that specified shall constitute cause for rejection of the castings.

Physical requirements are as follows:
Deformation limit, min. - 18000 psi.
Permanent set in one (1) inch under 100,000 psi - 0.04 inches to 0.20 inches.

ANCHOR BOLT HOLES: Holes of depth and dimensions shown shall be drilled for anchor bolts or dowels after the base plates are properly set by the superstructure contractor who shall be responsible for keeping holes dry in freezing weather. After base plates are properly set, anchor bolt holes drilled & anchor bolts are placed in drilled holes molten lead shall be poured in holes & packed until holes are completely filled flush to top of base plates. The cost of drilling anchor bolt holes, furnishing lead, & filling holes with molten lead, shall be incidental to & included in the lump sum bid for structural steel.

TEXTURING: The bridge deck shall be textured in accordance with Section 609.18 of the Standard Specifications.

MEMBRANE CURING COMPOUND: White pigmented curing compound shall be applied to the bridge deck in accordance with the Specifications.

EPOXY COATED REINFORCING STEEL: All reinforcing bars designated by suffix (E) in the plans shall be epoxy coated in accordance with the Special Provision for Epoxy Coated Reinforcing Steel.

TEMPORARY SUPPORTS: Temporary supports or shoring will not be permitted under the girders when pouring the concrete floor slab or when taking "top of steel" elevations.

CAMBER: Web plates shall be cut to provide for the camber of the girders. Girders which do not conform to plan camber and grade in the erected position shall be considered as requiring, at no additional cost to the state, either an adjustment in depth of the concrete slab haunch over the steel supporting members or a reworking of the girder camber to meet the plan grade and slab thickness.

CONNECTIONS: Unless otherwise provided on the plans, all field connections shall be 7/8" diameter high strength bolts. Open holes shall be 15/16" diameter. All joints are designed as friction type connections. Tightening shall be done with properly calibrated wrenches.

PROHIBITED FIELD WELDING: Except as shown on the plans, no welding of any nature shall be performed on the load carrying members of the bridge without the written consent of the Director, Division of Bridges, or his authorized representative, and then only in the manner and at the locations designated in the authorization.

WELDING: All welding shall conform to AWS D.1.1-72 "Structural Welding Code" of the American Welding Society, with modifications & additions as stated on the plans, 1974 AASHTO, and Spec. Provision 4(76) and all revisions of AWS D.1.1-72.

CONCRETE SURFACE FINISH: In addition to those surface areas listed in the following surface areas shall also receive the surface preparation:

1. The bottom of the pier cap & exposed surfaces of the pier below the bottom of the pier cap.
2. All exposed surfaces of the abutments below the top of cap.

DIMENSIONS: All dimensions are for a normal temperature of 60° Farenheit. Layout dimensions are horizontal dimensions.

SHOP ASSEMBLY: General reaming of holes for each bolted splice connection of each longitudinal girder line shall be progressively shop assembled with at least three contiguous shop sections adjusted to line, elevations camber & fit for drilling or reaming. At least one shop section shall be added at the advancing end of the assembly before any shop section is removed from the rearward end so that the assembled portion of the structure is never less than three contiguous shop sections. Other major bolted connections to the longitudinal girders shall be drilled or reamed in the shop with connecting parts assembled or shall be reamed to metal template without assembly. Girder sections shall remain assembled for inspection by the Bureau of Highways Inspector & are to be matchmarked while assembled. Connections for the cross frames, expansion dams & other minor members may be punched or drilled full size without assembly, subject to the requirements in the specifications for general reaming.

WELDING PROCEDURE: Qualification tests of all welding procedures shall be completed by the contractor and approved by the Engineer prior to the final approval of the shop drawings and Welding Procedure and the start of the fabrication.

MATERIALS: AWS & ASTM Specifications, current edition, as designated below, shall govern the materials furnished.
* A36-75 Structural Steel, 36,000 psi Minimum Yield.

A325-74 High Strength Carbon Steel Bolts for Structural Joints, including Suitable Nuts and Plain Hardened Washers.
A615-75 Deformed Billet-Steel Bars for Concrete Reinforcement Grade 60.
B29-55(1971) Sheet Lead and Pig Lead.

E94-68(14) Radiographic Inspection of Welds.
E109-63(1970) Magnetic Particle Inspection of Welds.

NEOPRENE EXP. JT.: The Contractor shall provide a factory prefabricated expansion joint system as manufactured by Watson Bowman Assoc. Inc. Buffalo, New York; The General Tire & Rubber Company, Wabash, Indiana; Fel-Pro Inc., Skokie, Illinois; or the D.S. Brown Company, North Baltimore, Ohio. The particular model number for each manufacturer is listed on sheet 10 of these plans. The manufacturer of the prefabricated joint shall prepare three sets of shop drawings to be submitted to the Engineer for review. The shop drawings shall provide information regarding material specifications, geometry, a table of variable temperatures & dimensions & a bill of material. Approval of the shop drawings shall be required prior to the make-up of the components of the joint.

The expansion joint seal shall be in accordance with the type designated on the plans and as designed & detailed by the Company. The expansion device shall be paid for at the unit price bid per linear foot & shall include all materials, tools, equipment, labor & other incidentals necessary to the satisfactory completion of manufacture & installation. The expansion device shall be installed as recommended by the manufacturer & under the manufacturer's supervision.

* The A36 structural steel material shall meet the longitudinal charpy V-notch tough ness requirement of 15 ft-lbs. at 40° F. Sampling & testing procedures shall be in accordance with A.S.T.M. A673, current edition, utilizing frequency testing. The following bridge member material shall be required to meet the longitudinal charpy V-notch toughness tests: All flange & web material in longitudinal girder shapes, including web & flange splice plates.

Ky 124 over I-24 SHEET 2

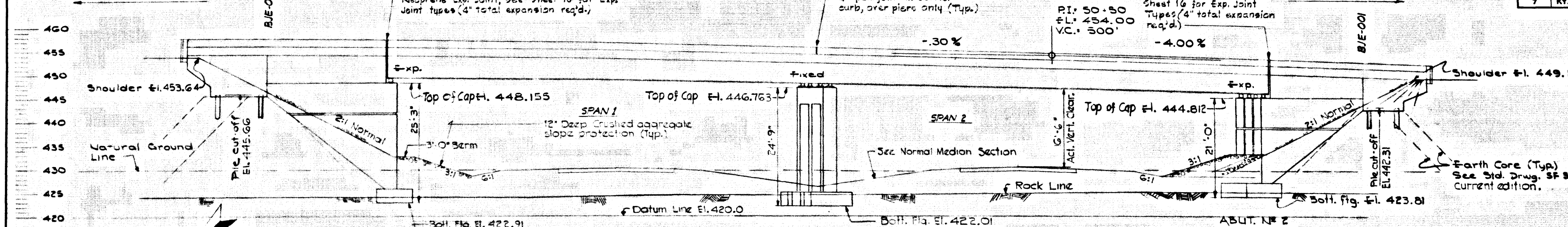
COMMONWEALTH OF KENTUCKY
BUREAU OF HIGHWAYS
FRANKFORT
COUNTY OF
TRIGG
PADUCAH - TENN. STATE LINE
ROAD
STATION 4499+89.46 P.E. PROJECT NO.

CONSTRUCTION PROJECT NO.	MAINTENANCE PROJECT NO.	DRAWING NO.
		18790

GENERAL NOTES

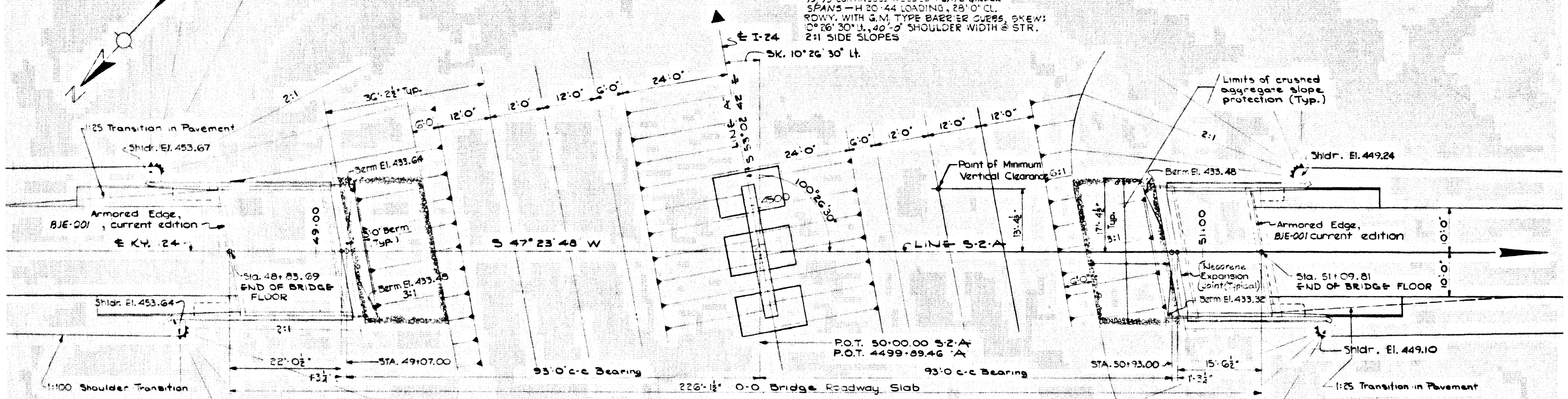
BRIDGE

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

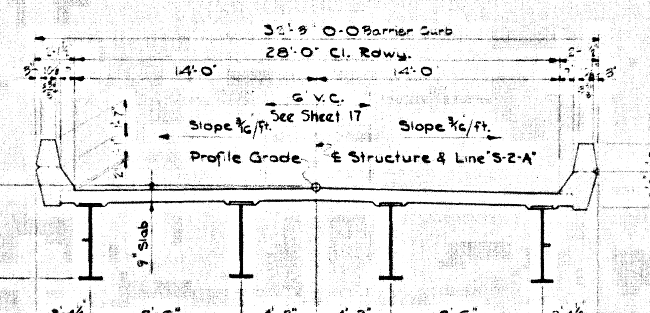


ELEVATION

93', 93' CONTINUOUS WELDED PLATE GIRDER SPANS — H 20-44 LOADING, 28'-0" CL. RDWY. WITH G.M. TYPE BARRIER CURBS, SKEW: 10° 26' 30" Lt., 40'-0" SHOULDER WIDTH @ STR. 2:1 SIDE SLOPES



PLAN
(Deck Removed)



TYPICAL SECTION THRU DECK

LAYOUT

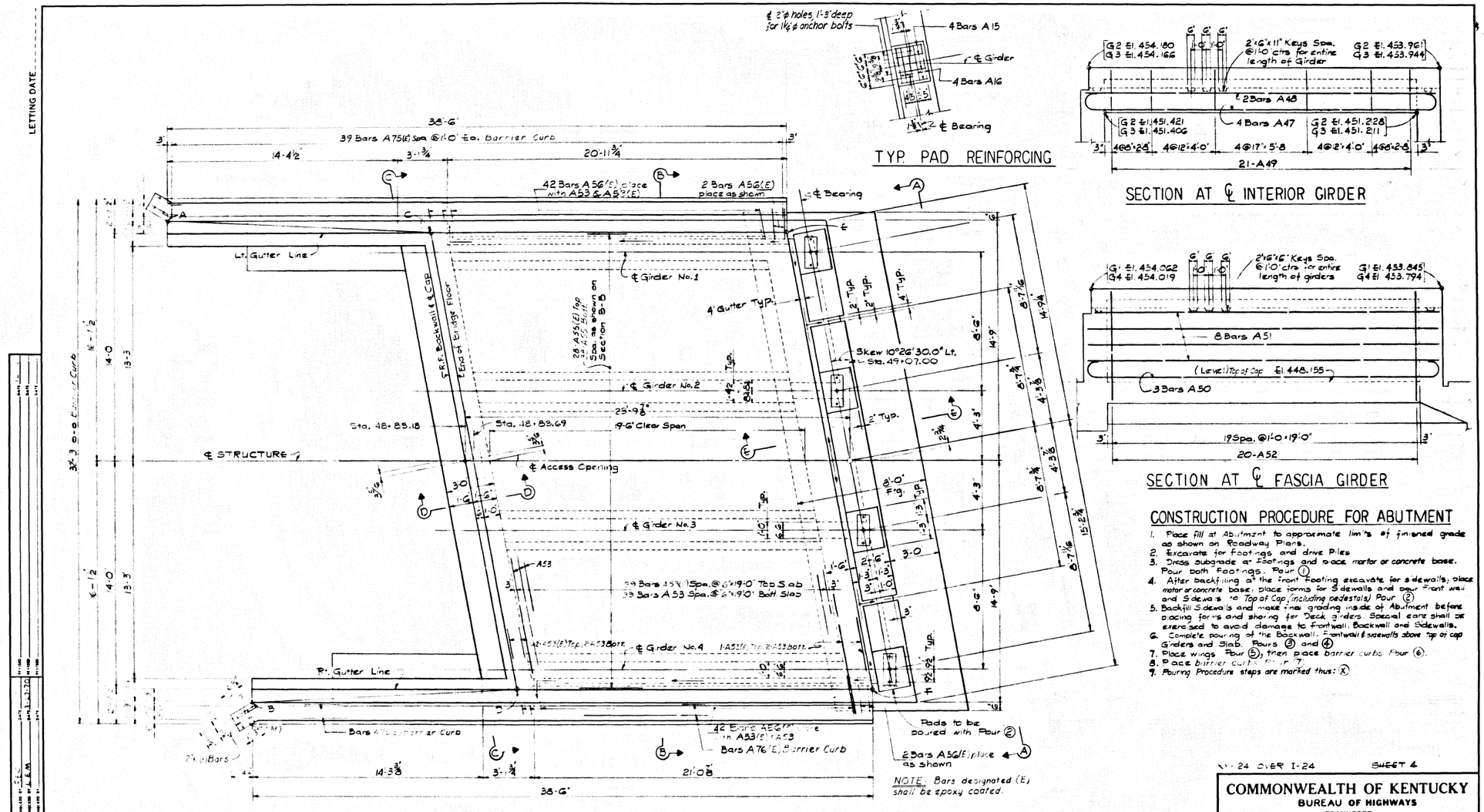
KY-124 OVER I-24 SHEET 3

COMMONWEALTH OF KENTUCKY
BUREAU OF HIGHWAYS
FRANKFORT
COUNTY OF
TRIGG
PADUCAH - TENN. STATE LINE
ROAD
STATION 4499+89.46 PROJECT NO.
BRIDGE NUMBER
DRAWING NO. 18730

DESIGNED BY ___ CHECKED BY ___ DATE ___
DETAILED BY RKS 3-9-67 CHECKED BY KEC DATE ___
TRACED BY ___ CHECKED BY ___ DATE ___
REVISED ___ DATE ___

BRIDGE

LETTING DATE



PLAN

TYP. PAD REINFORCING

SECTION AT ℄ INTERIOR GIRDER

SECTION AT ℄ FASCIA GIRDER

CONSTRUCTION PROCEDURE FOR ABUTMENT

1. Place fill at Abutment to approximate limits of finished grade as shown on Roadway Plans.
2. Excavate for Footings and drive Piles
3. Dress subgrade at Footings and place mortar or concrete base. Pour both Footings. Pour (1)
4. After backfilling at the front footing excavate for sidewalls; place mortar or concrete base; place forms for Sidewalls and pour Front wall and Sidewalls to Top of Cap (including pedestals) Pour (2)
5. Backfill Sidewalls and make final grading inside of Abutment before placing forms and shoring for Deck girders. Special care shall be exercised to avoid damage to Frontwall, Backwall and Sidewalls.
6. Complete pouring of the Backwall, Frontwall & sidewalls above Top of cap Girders and Slab. Pours (3) and (4)
7. Place wings Pour (5), then place barrier curbs. Pour (6).
8. Place barrier curbs. Pour 7
9. Pouring Procedure steps are marked thus: (X)

TABLE OF ELEVATIONS

Location	Elevation
A Face of Pinth Top Curb	455.[illegible]
B	457.[illegible]
C Gutter Line Top Slab	454.044
D	453.997
E	453.828
F	453.772

ABUTMENT NO. 1

24 OVER I-24 SHEET 4

COMMONWEALTH OF KENTUCKY
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FRANKFORT
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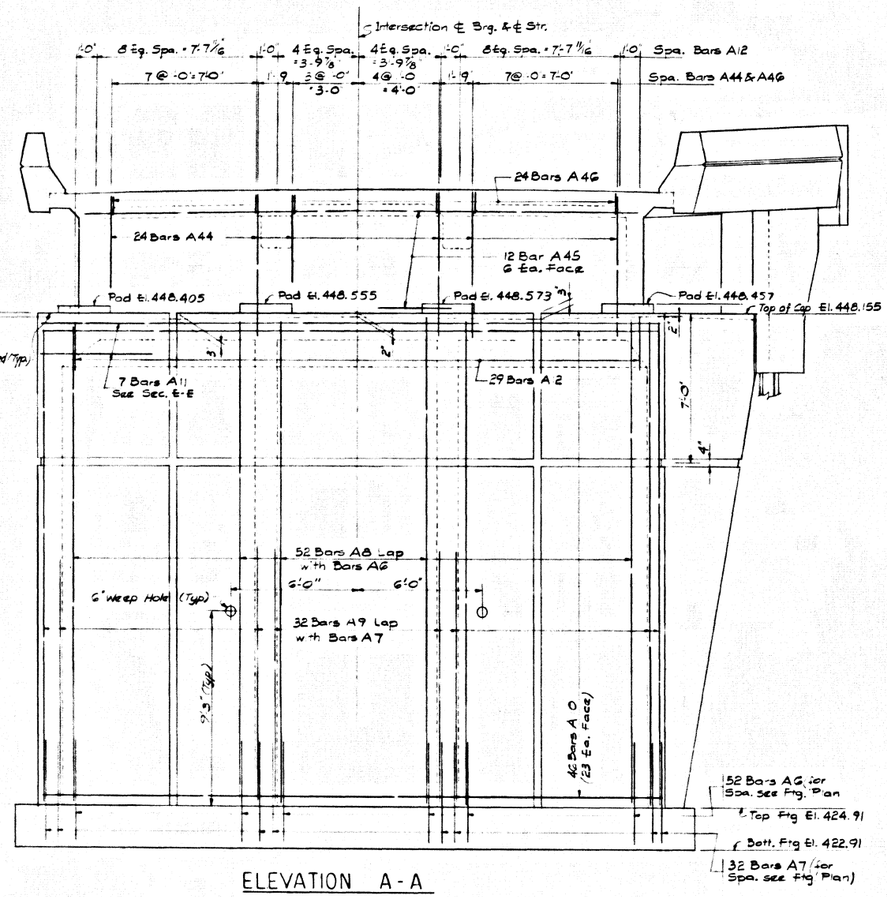
PADUCAH-TENN. STATE LINE
ROAD
STATION 4499+89.46 P.E. PROJECT NO.

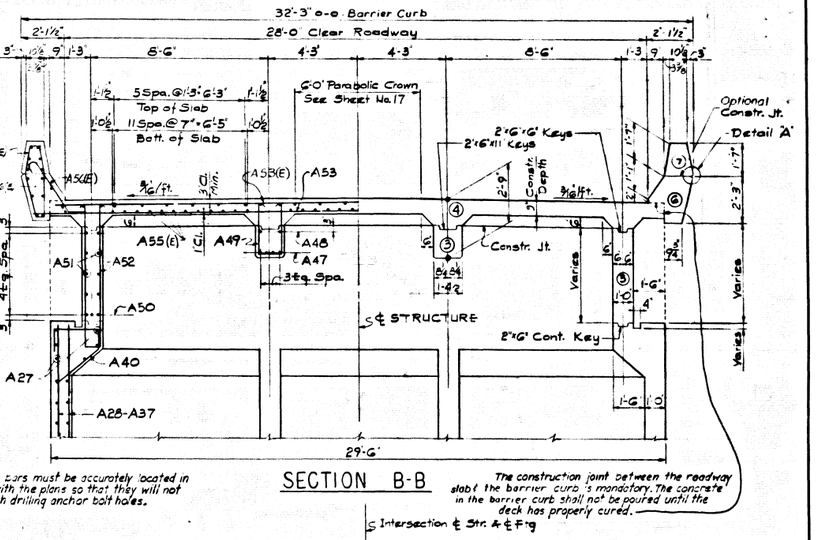
CONSTRUCTION PROJECT NO	MAINTENANCE PROJECT NO.	DRAWING NO
		18750

BRIDGE

LETTING DATE



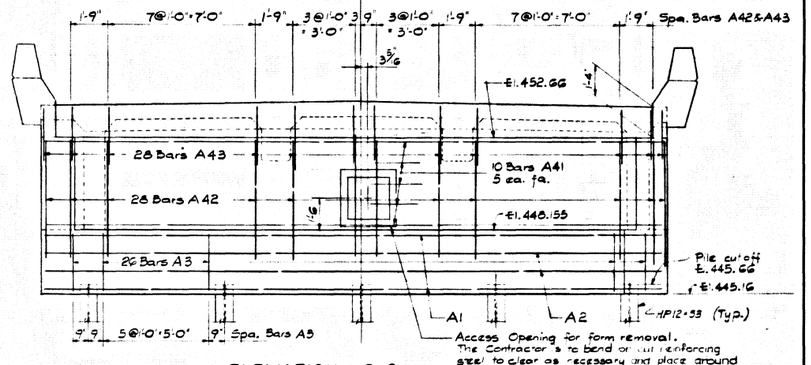
ELEVATION A-A



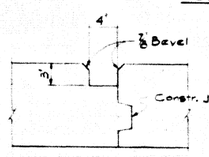
SECTION B-B

The top of cap bars must be accurately located in accordance with the plans so that they will not interfere with drilling anchor bolt holes.

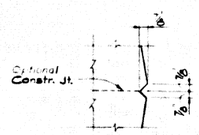
The construction joint between the roadway slab & the barrier curb is mandatory. The concrete in the barrier curb shall not be poured until the deck has properly cured.



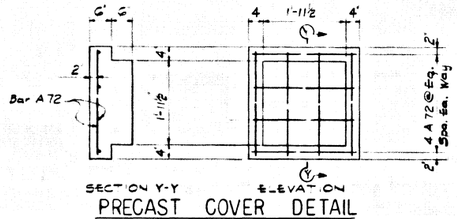
ELEVATION C-C



RUSTICATION DETAIL



DETAIL A



PRECAST COVER DETAIL

ABUTMENT NO. 1

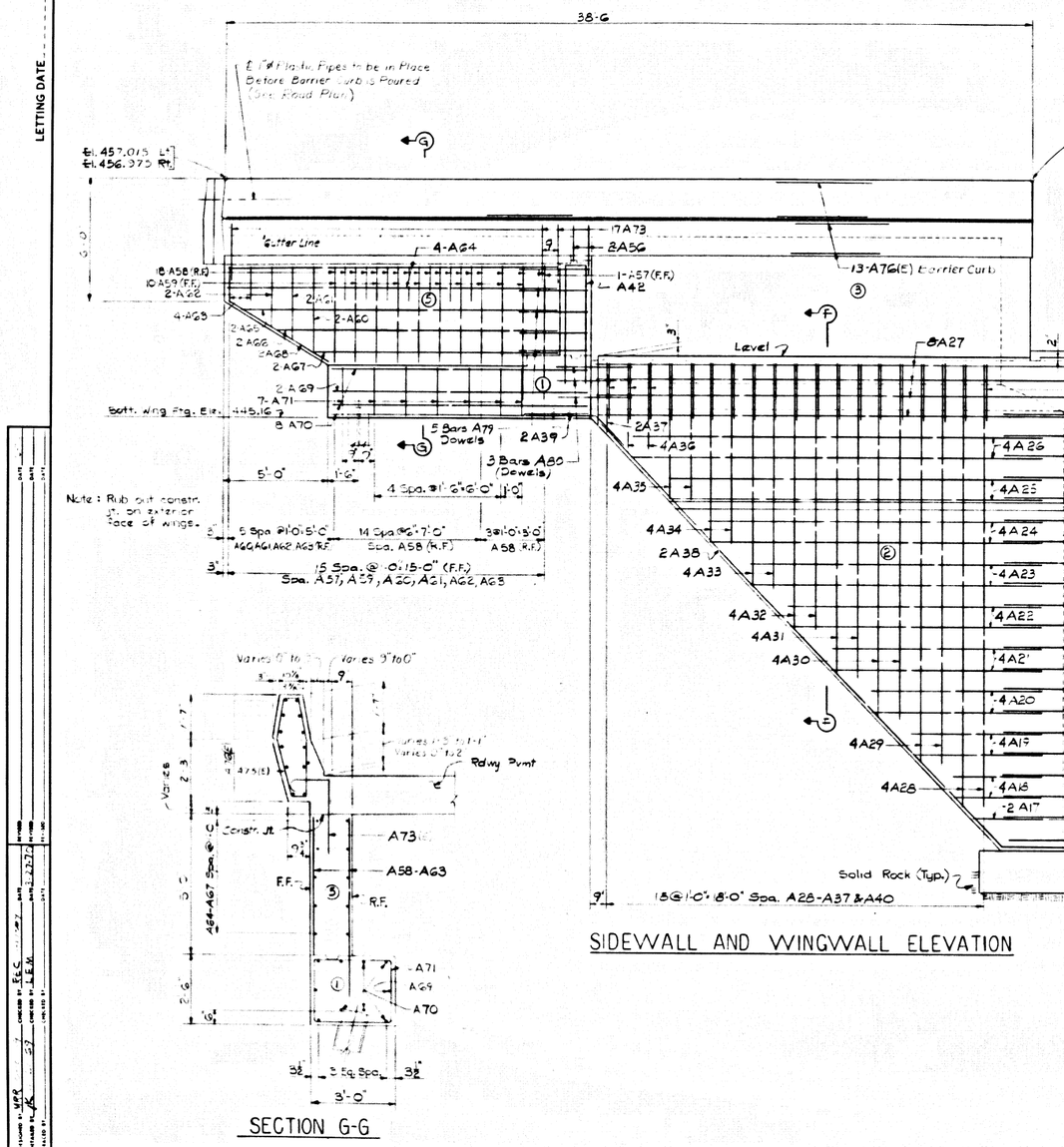
KY-124 OVER I-24 SHEET 5

COMMONWEALTH OF KENTUCKY
BUREAU OF HIGHWAYS
FRANKFORT
COUNTY OF
TRIGG
PADUCAH - TENN. STATE LINE
ROAD
STATION 4499+89.46 P.E. PROJECT NO.

CONSTRUCTION PROJECT NO.	MAINTENANCE PROJECT NO.	DRAWING NO.
		18730

BRIDGE

LETTING DATE



SIDEWALL AND WINGWALL ELEVATION

N.I.E. Reinforcing bars designated (E) shall be epoxy coated

ABUTMENT NO. 1

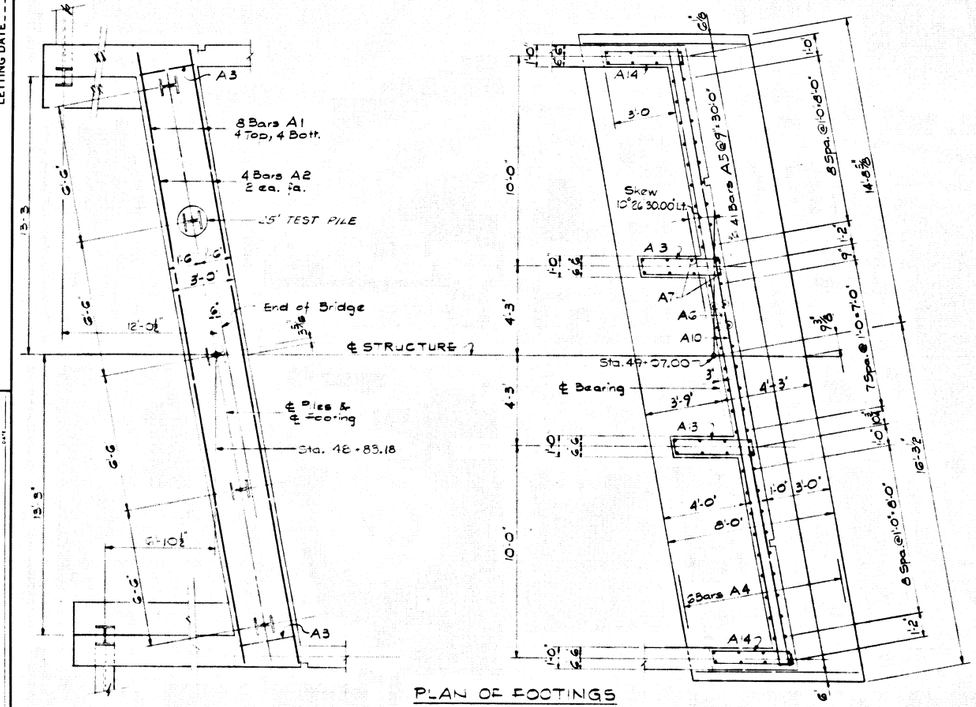
KY-124 OVER T-24 SHEET 6

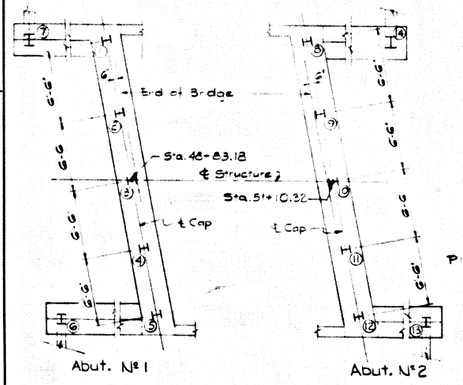
COMMONWEALTH OF KENTUCKY
BUREAU OF HIGHWAYS
FRANKFORT
COUNTY OF
TRIGG
PADUCAH-TENN. STATE LINE
ROAD
STATION 2499+89.46 P.E. PROJECT NO.

CONSTRUCTION PROJECT NO.	MAINTENANCE PROJECT NO.	DRAWING NO.
		18730

BRIDGE

LETTING DATE





PILE RECORD

Pile No.	Cut-off El. as shown on Plans as driven	Tip of Pile El.	Length Calculated as Pile Bearing in Place (Lin. Ft.)	Capacity (Tons)	Pile No.	Cut-off Elev. as shown on Plans as driven	Tip of Pile El.	Length of Pile in Place (Lin. Ft.)	Calculated Bearing Capacity (Tons)
	445.26				8	442.31			
2	"				9	"			
3	"				10	"			
4	"				11	"			
5	"				12	"			
6	"				13	"			
7	"				14	"			

PILE NOTE: This pile record does not replace other records of piles to be kept and submitted by the Resident Engineer. After all piles have been driven, the Resident Engineer shall record the tip of pile elevation as driven, the length of pile in place, the calculated bearing capacity of each pile, and shall return one blue print copy of this sheet with this data to the Director of Bridges so that the data may be recorded on the original Plans. Lengths of piles in place shown hereon are the actual lengths of piles in place in the finished Structure below cut-off elevation and are not necessarily pay items.

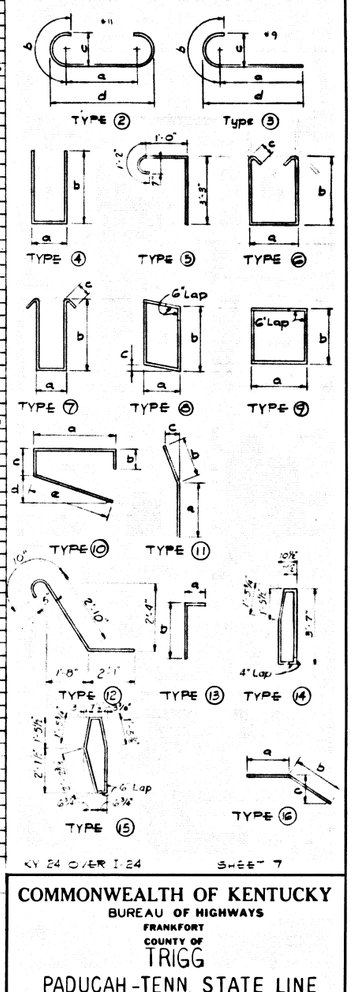
BILL OF REINFORCEMENT

Mark	Type	No.	Size	Length Ft.	Length In.	Location	a Ft.	a In.	b Ft.	b In.	c Ft.	c In.	d Ft.	d In.	e Ft.	e In.
A1	Str.	8	7	29	6	Footing										
A2	Str.	4	6	29	6											
A3	(9)	26	4	11	5	"	2	8	2	8						
A4	Str.	6	5	30	6	"										
A5	Str.	41	6	7	6	"										
A6	(9)	52	5	4	5	Dowels	3	7	0	10	0	5	3	9½		
A7	(9)	32	8	6	2	Counterfort Dowels	4	8	1	6	0	8	5	0		
A8	Str.	52	5	23	0	Front wall										
A9	Str.	32	8	23	0	Counterforts										
A10	Str.	46	5	29	8	Frontwall										
A11	Str.	7	6	29	8	Frontwall Cap										
A12	(10)	29	5	8	7	"	3	6	0	6	0	11	1	5½	3	9½
A13	(3)	26	4	8	9	Counterforts	0	9	3	9	0	0	1	8½		
A14	(5)	42	4	8	4	Sidewalls	0	6½	3	9	0	1	1	4		
A15	(4)	16	5	5	7	Pads	1	8	2	6						
A16	(9)	16	5	6	1	"	2	2	2	0						
A17	Str.	4	5	3	6	Sidewalls										
A18	Str.	8	5	4	6	"										
A19	Str.	8	5	6	3	"										
A20	Str.	8	5	8	3	"										
A21	Str.	8	5	10	3	"										
A22	Str.	8	5	12	0	"										
A23	Str.	8	5	14	0	"										
A24	Str.	8	5	16	0	"										
A25	Str.	8	5	17	9	"										
A26	Str.	8	5	19	9	"										
A27	Str.	6	5	20	3	"										
A28	Str.	8	5	20	9	"										
A29	Str.	8	5	18	9	"										
A30	Str.	8	5	16	6	"										
A31	Str.	8	5	14	6	"										
A32	Str.	8	5	12	6	"										
A33	Str.	8	5	10	3	"										
A34	Str.	8	5	8	3	"										
A35	Str.	8	5	6	3	"										
A36	Str.	8	5	4	3	"										
A37	Str.	4	5	3	0	"										
A38	(1)	4	6	31	3	"	27	6	3	9	2	6				
A39	(2)	4	6	6	2	Footing	3	2	3	0	2	6				
A40	(3)	58	5	6	8	Sidewalls	2	2	1	0	0	9		10½	2	10
A41	Str.	10	5	29	8	Endwall										
A42	(2)	28	5	13	1	"	1	2	6	0						
A43	(2)	28	5	6	7	"	0	8	3	0						
A44	(4)	24	5	13	7	Frontwall	1	2	6	3						
A45	Str.	2	5	26	7	"										
A46	(3)	24	5	3	0	"	0	11	2	1						
A47	(2)	8	11	24	0	Int. Girder	20	0	2	0	1	2½	22	0¼		
A48	Str.	4	5	22	0	"										
A49	(2)	38	5	6	11	"	1	1½	2	5	0	6¾				
A50	(3)	6	9	24	5	Fascia Girder	21	1	1	8	0	11¼	22	0¾		
A51	Str.	16	5	22	0	Fascia Girder										
A52	(9)	40	5	5	3	"	0	9	6	9	0	7				
A53	Str.	43	5	29	8	Slab										
A54	Str.	42	5	29	8	"										
A55	Str.	2	5	21	8	"										
A56	(3)	58	5	5	9	Slab & Barrier Curb										
A57	Str.	2	5	4	0	Wingwalls										
A58	Str.	36	6	6	4	"										
A59	Str.	20	5	4	8	"										
A60	Str.	4	5	4	3	"										
A61	Str.	4	5	3	9	"										
A62	Str.	4	5	3	10	"										
A63	Str.	8	5	1	6	"										
A64	Str.	8	5	5	7	"										
A65	Str.	1	5	15	10	"										
A66	Str.	1	5	18	6	"										
A67	Str.	4	5	11	7	"										
A68	Str.	4	6	5	6	"										
A69	Str.	4	5	12	10	Wing Ftg.										
A70	Str.	6	9	2	10	"										
A71	(9)	4	4	10	15	"	2	8	2	2						
A72	Str.	8	4	2	4	Precast Cover										
A73	(5)	34	7	5	4	Wingwall (Barrier Curb										
A74																
A75	(3)	78	5	5	2	"										
A76	Str.	62	5	20	3	Barrier Curb										
A77				2	6											
A78																
A79	(2)	10	5	8	0	Endwall (Wingwall Dowels)	1	1	3	6						
A80	(2)	6	5	7	11	Footing & Sidewall Dowels	0	6	3	9						
A81	"	"	5	21	8	Slab										
W(1)	(4)	4	5	3	0	Wing Tip										
W(2)	(4)	12	5	2	11	"	1	3	1	8	0	10				
P2(6)	(4)	12	5	3	11	"	1	3	1	8	0	10				

ESTIMATE OF QUANTITIES

Class A Concrete = 98.1 cu. yds.
Class AA Concrete = 603.9 cu. yds.
Epoxy coated steel reinforcement = 4750 Lbs.
Non-coated steel reinforcement = 19357 Lbs.

ABUTMENT NO. 1 & PILE RECORD



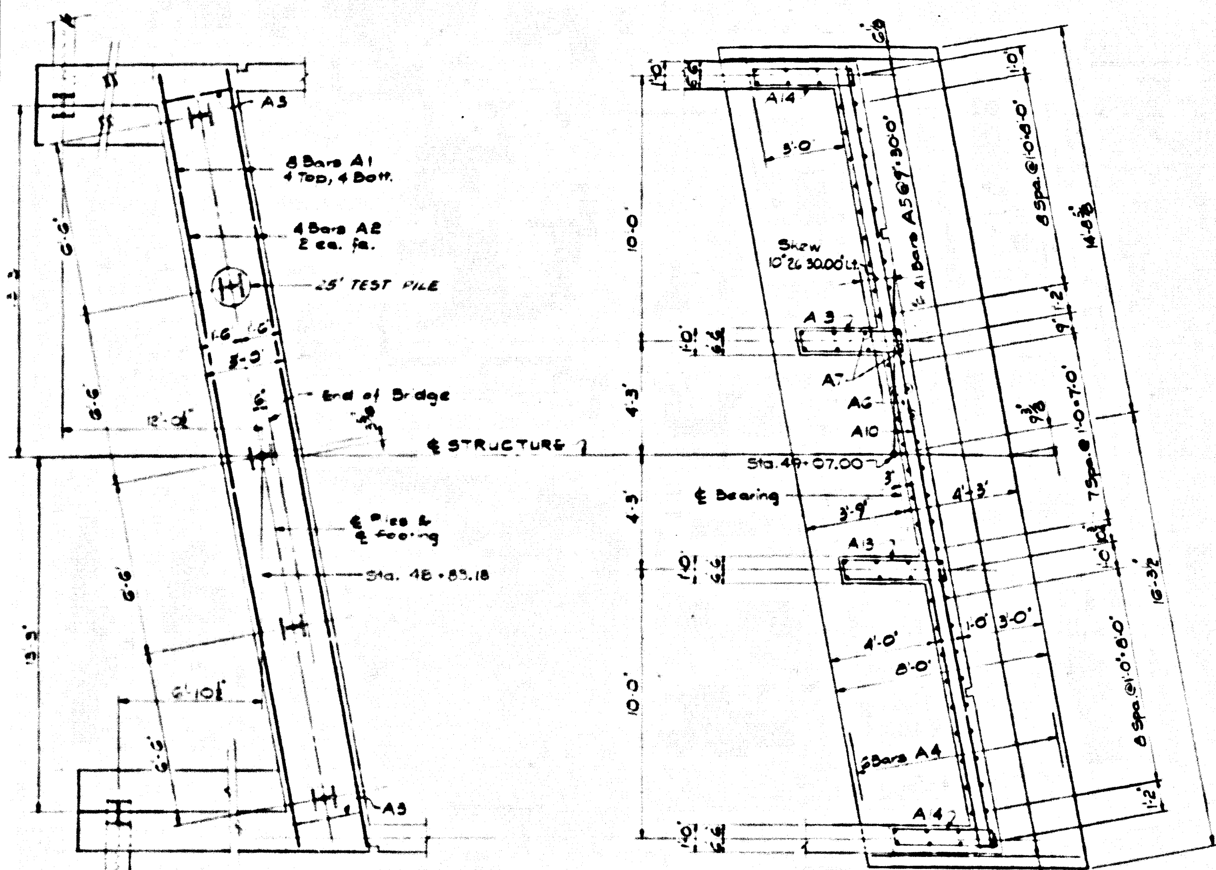
KY 24 OVER I-24 SHEET 7

COMMONWEALTH OF KENTUCKY
BUREAU OF HIGHWAYS
FRANKFORT
COUNTY OF
TRIGG
PADUCAH-TENN STATE LINE
ROAD
STATION 4499+89.46 P.E. PROJECT NO.

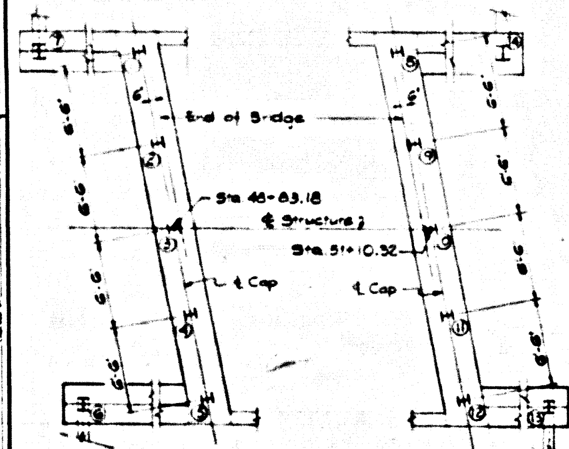
CONSTRUCTION PROJECT NO.	MAINTENANCE PROJECT NO.	DRAWING NO.
		18730

BRIDGE

LETTING DATE



PLAN OF FOOTINGS

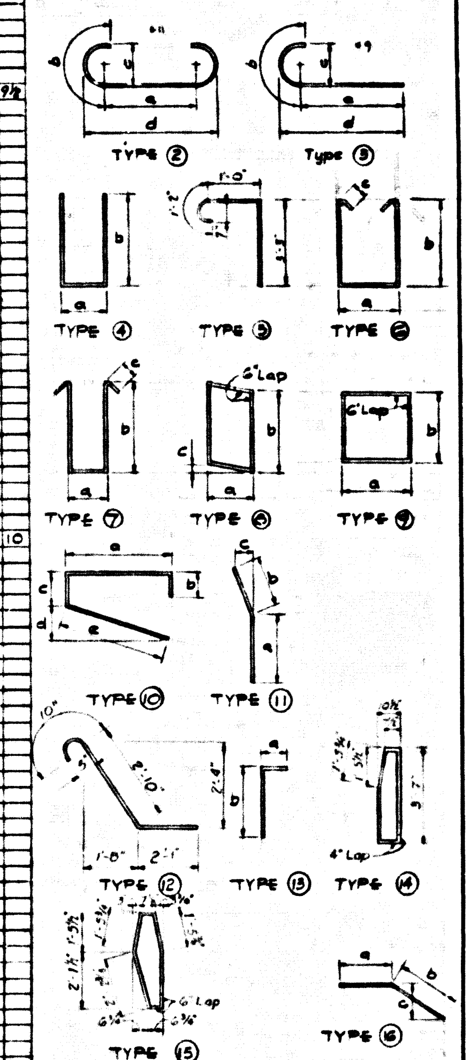


PILE RECORD									
Pile No.	Cut-off El. as shown on Plans	Tip of Pile El. as driven	Length of Pile in Place (Lin. Ft.)	Calculated Bearing Capacity (Tons)	Pile No.	Cut-off Elev. as shown on Plans	Tip of Pile El. as driven	Length of Pile in Place (Lin. Ft.)	Calculated Bearing Capacity (Tons)
1	445.66	416.16	29.50	Refusal	8	442.31	418.74	23.57	Refusal
2	"	421.45	24.21	"	9	"	418.79	23.52	"
3	"	425.53	20.13	"	10	"	418.77	23.54	"
4	"	421.58	24.08	"	11	"	417.86	24.45	"
5	"	420.93	24.73	"	12	"	417.17	25.14	"
6	"	419.40	26.26	"	13	"	415.14	27.17	"
7	"	425.41	20.25	"	14	"	418.05	24.26	"

PILE NOTE: This pile record does not replace other records of piles to be kept and submitted by the Resident Engineer. After all piles have been driven, the Resident Engineer shall record the tip of pile elevation as driven, the length of pile in place, the calculated bearing capacity of each pile, and shall return one blue print copy of this sheet with this data to the Director of Bridges so that the data may be recorded on the original Plans. Lengths of piles in place shown hereon are the actual lengths of piles in place in the finished Structure below cut-off elevation and are not necessarily pay items.

BILL OF REINFORCEMENT

Mark	Type	No.	Size	Length Ft.	Length In.	Location	a Ft.	a in.	b Ft.	b in.	c Ft.	c in.	d Ft.	d in.	e Ft.	e in.
A1	Str.	8	7	29	6	Footing										
A2	Str	4	6	29	6											
A3	9	26	4	11	5	"	2	8	2	8						
A4	Str.	6	5	30	6	"										
A5	Str	41	6	7	8	"										
A6	3	52	5	4	5	Dowels	3	7	0	10	0	5	3	9½		
A7	3	32	8	6	2	Counterfort Dowels	4	8	1	6	0	8	5	0		
A8	Str.	52	5	23	0	Front wall										
A9	Str.	32	8	23	0	Counterforts										
A10	Str	46	5	29	8	Frontwall										
A11	Str	7	6	29	8	Frontwall Cap										
A12	10	29	5	8	7	"	3	6	0	6	0	11	1	5½	3	9½
A13	5	26	4	8	9	Counterforts	0	9	3	9	0	[illegible]				
A14	8	42	4	8	4	Sidewalls	0	6½	3	9	0	1¼				
A15	4	16	5	5	7	Pads	1	8	2	0						
A16	4	16	5	6	1	"	2	2	2	0						
A17	Str.	4	5	3	6	Sidewalls										
A18	Str.	8	5	4	6	"										
A19	Str	8	5	6	3	"										
A20	Str.	8	5	8	3	"										
A21	Str.	8	5	0	3	"										
A22	Str.	8	5	2	0	"										
A23	Str.	8	5	14	0	"										
A24	Str	8	5	16	0	"										
A25	Str.	8	5	17	9	"										
A26	Str	8	5	9	9	"										
A27	Str	6	5	23	2	"										
A28	Str.	8	5	20	9	"										
A29	Str	8	5	18	9	"										
A30	Str	8	5	6	6	"										
A31	Str.	8	5	14	6	"										
A32	Str.	8	5	2	6	"										
A33	Str	8	5	10	3	"										
A34	Str.	8	5	8	3	"										
A35	Str.	8	5	6	3	"										
A36	Str.	8	5	4	3	"										
A37	Str	4	5	3	0	"										
A38	11	4	6	31	3	"	27	6	3	9	2	8				
A39	6	4	6	6	2	Footing	3	2	3	0	2	6				
A40	13	38	5	6	8	Sidewalls	2	2	1	0	0	9	1	10½	2	10
A41	Str.	10	5	29	8	Endwall										
A42	4	28	5	13	1	"	1	2	6	0						
A43	4	28	5	6	7	"	0	8	3	0						
A44	4	24	5	13	7	Frontwall	1	2	6	3						
A45	Str.	2	5	26	7											
A46	13	24	5	3	0		0	11	2	1						
A47	2	8	11	24	10	Int. Girder	20	0	2	0	1	2¼	22	0¼		
A48	Str	4	5	22	0	"										
A49	2	38	5	6	11	"	1	1½	2	5	0	6¾				
A50	2	6	9	24	5	Fascia Girder	21	1	1	8	0	11¼	22	0¼		
A51	Str.	16	5	22	0	Fascia Girder										
A52	7	40	5	5	3		0	9	6	9	0	7				
A53	Str.	43	5	29	8	Slab										
A54	Str	42	5	29	8	"										
A55	Str	[illegible]	5	21	8	"										
A56	3	68	5	5	9	Slab & Barrier Curb										
A57	Str.	2	5	4	0	Wingwalls										
A58	Str.	36	6	6	6	"										
A59	Str	20	5	4	8	"										
A60	Str.	4	5	4	3	"										
A61	Str	4	5	9	9	"										
A62	Str	4	5	3	0	"										
A63	Str.	8	5	1	6	"										
A64	Str	8	5	[illegible]	7	"										
A65	Str.	4	5	15	0	"										
A66	Str.	4	5	13	6	"										
A67	Str.	4	5	11	9	"										
A68	Str	4	6	5	6											
A69	Str	4	5	12	0	Wing Ftg.										
A70	Str	16	9	12	0											
A71	9	4	4	10	5		2	8	2	2						
A72	Str.	8	4	2	4	Precast Cover										
A73	3	34	7	5	4	Wingwall & Barrier Curb										
A74	Not Used															
A75	15	78	5	[illegible]	2	Barrier Curb										
A76	Str.	52	5	20	3	Barrier Curb										
A77	Not Used															
A78	Not Used															
A79	4	10	5	8	0	Endwalls & Wingwalls (Dowels)	1	1	3	6						
A80	3	6	5	7	11	Footing & Sidewall Dowels	0	6	3	9						
[illegible]	[illegible]	[illegible]	[illegible]	21	8	Slab										
K(E)	4	4	5	9	0	Wing Tip										
P1(E)	[illegible]	12	5	2	11	" "	1	3	1	8	0	10				
P2(E)	[illegible]	12	5	3	1	" "	1	5	1	8	0	10				



ESTIMATE OF QUANTITIES

Class A Concrete = 98.1 cu. yds.
Class AA Concrete = 66.9 cu. yds.
Epoxy coated steel reinforcement = 4750 Lbs.
Non-coated steel reinforcement = 19357 Lbs.

ABUTMENT NO. 1 & PILE RECORD

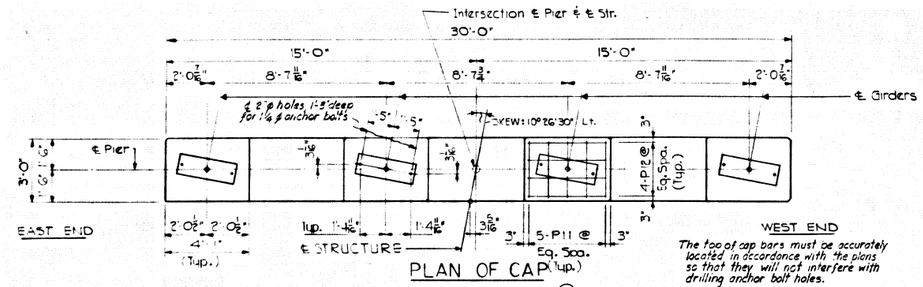
KY 24 OVER I-24 SHEET 7

COMMONWEALTH OF KENTUCKY
BUREAU OF HIGHWAYS
FRANKFORT
COUNTY OF
TRIGG
PADUCAH-TENN. STATE LINE
ROAD
STATION 4499+89.46 P. E. PROJECT NO.

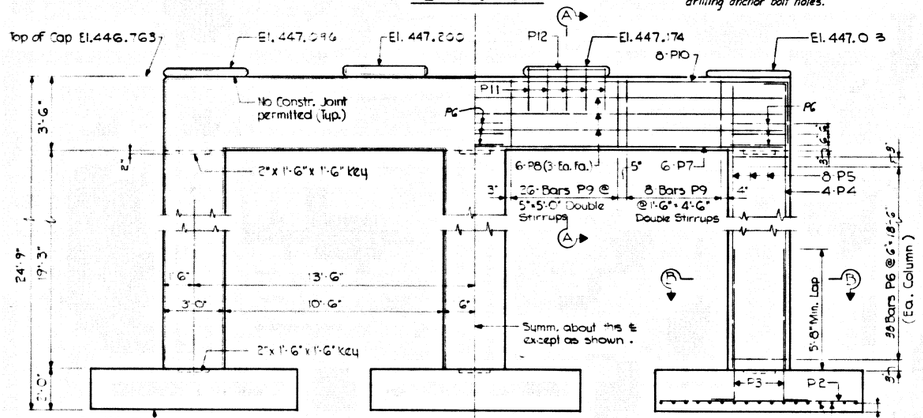
CONSTRUCTION PROJECT NO	MAINTENANCE PROJECT NO.	DRAWING NO
		16730

BRIDGE

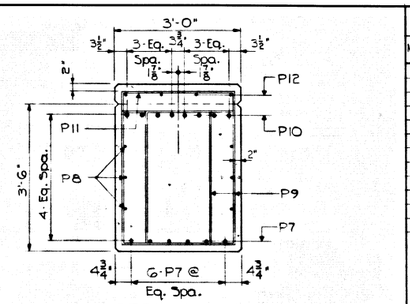
LETTING DATE



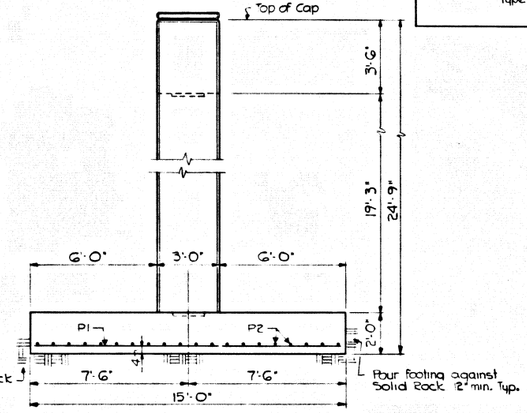
PLAN OF CAP



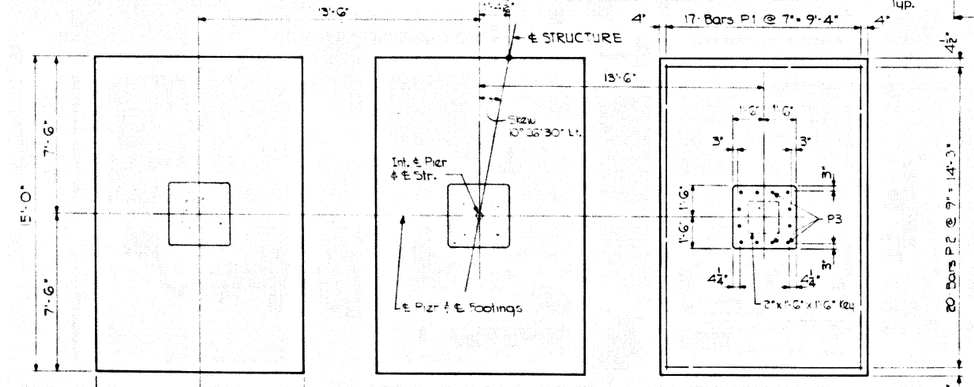
NORTH ELEVATION



SECTION A-A

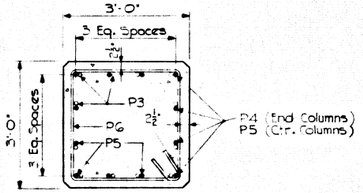


END ELEVATION



PLAN OF FOOTINGS

Details Typical for each Footing.



SECTION B-B

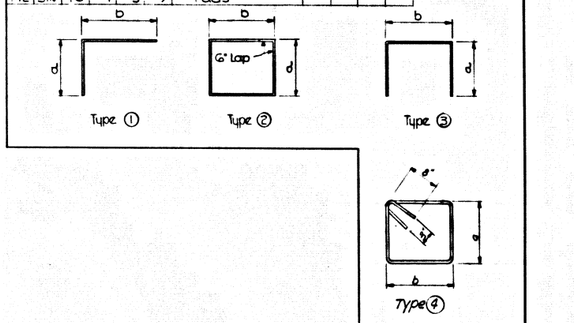
ESTIMATE OF QUANTITIES

Concrete . Class "A"	64.9 Cu. Yds.
Steel Reinforcement	15,188 Lbs.

PIER Nº 1

BILL OF REINFORCEMENT

Mark	Type	Nº Bars	Bar Size	Length Ft.	Length In.	Location	a Ft.	a In.	b Ft.	b In.
P1	Str.	51	11	14	6	Footing				
P2	Str.	60	8	9	6	Footing				
P3	①	36	10	9	2	Footing & Col.	1	10	7	4
P4	①	8	10	23	9	Columns	1	3	22	6
P5	Str.	28	10	22	6	Columns				
P6	④	126	4	11	5	Column Hoops	2	7	2	7
P7	Str.	6	10	29	8	Cap (Bott.)				
P8	Str.	6	6	29	8	Cap (Side)				
P9	②	68	6	11	4	Cap (Stirrups)	3	2	2	1½
P10	③	8	11	35	6	Cap (Top)	3	0	29	6
P11	③	20	4	6	7	Pads	2	0	2	7
P12	Str.	16	4	3	9	Pads				

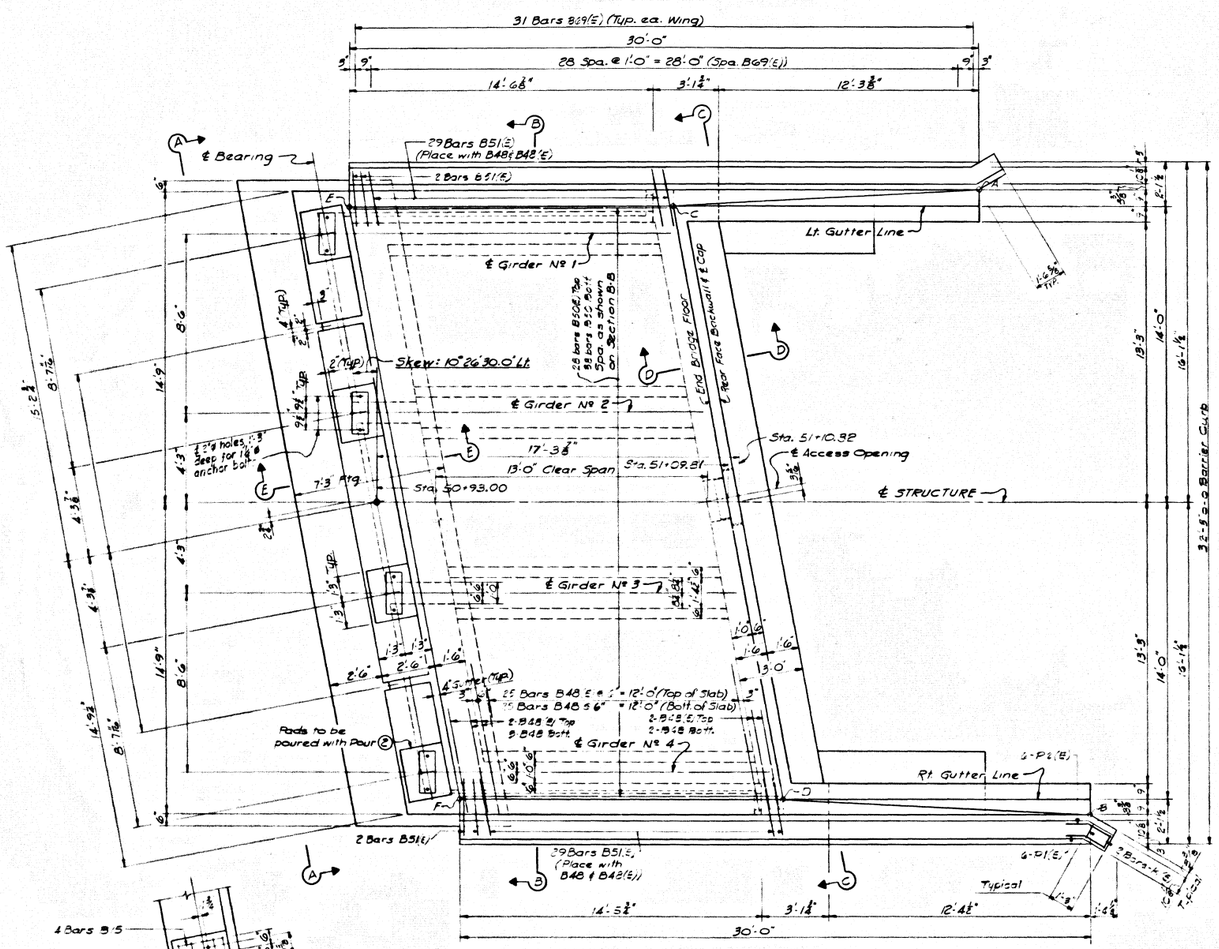


KY 124 over I 24 SHEET 8

COMMONWEALTH OF KENTUCKY
BUREAU OF HIGHWAYS
FRANKFORT
COUNTY OF
TRIGG
PADUCAH-TENN. STATE LINE
ROAD
STATION 4499+89.46 P.E. PROJECT NO.
CONSTRUCTION PROJECT NO | MAINTENANCE PROJECT NO. | DRAWING NO 18730

BRIDGE

LETTING DATE

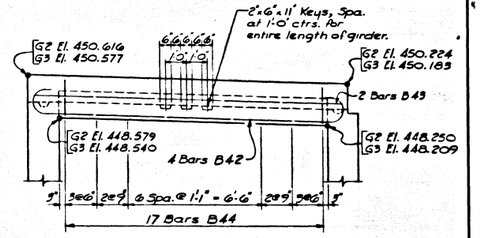


PLAN

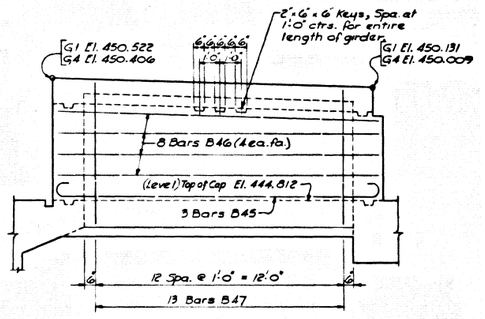
TYP. PAD REINFORCING

ELEVATIONS

	Location	Elevation
A	Face of Curb - Top Slab	449.797
B	" "	449.398
C	Gutter Line - Top Slab	450.118
D	" "	449.764
E	" "	450.508
F	" "	450.380



SECTION AT ℄ INTERIOR GIRDER



SECTION AT ℄ FASCIA GIRDER

Note: Reinforcing bars designated (E) shall be epoxy coated.

Note: For Construction Procedure, see Sheet 4.

1"=1'-0" over 1'-0" SHEET 9

COMMONWEALTH OF KENTUCKY
BUREAU OF HIGHWAYS
FRANKFORT
COUNTY OF
TRIGG
PADUCAH-TENN. STATE LINE
ROAD
STATION 4499 + 89.46 P.E. PROJECT NO.

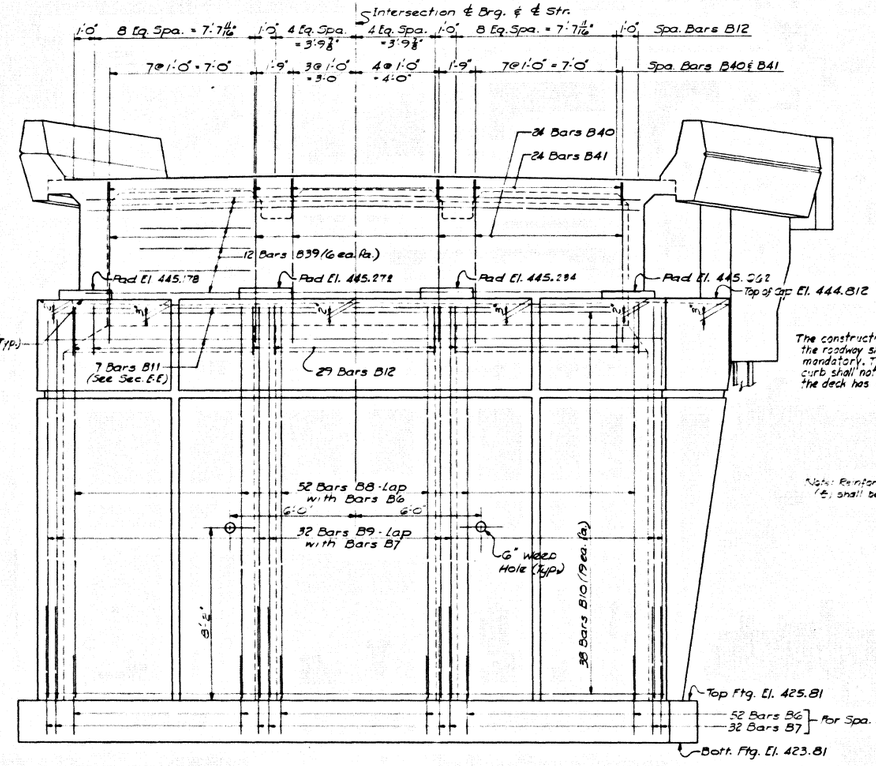
CONSTRUCTION PROJECT NO.	MAINTENANCE PROJECT NO.	DRAWING NO.
		18790

ABUTMENT NO. 2

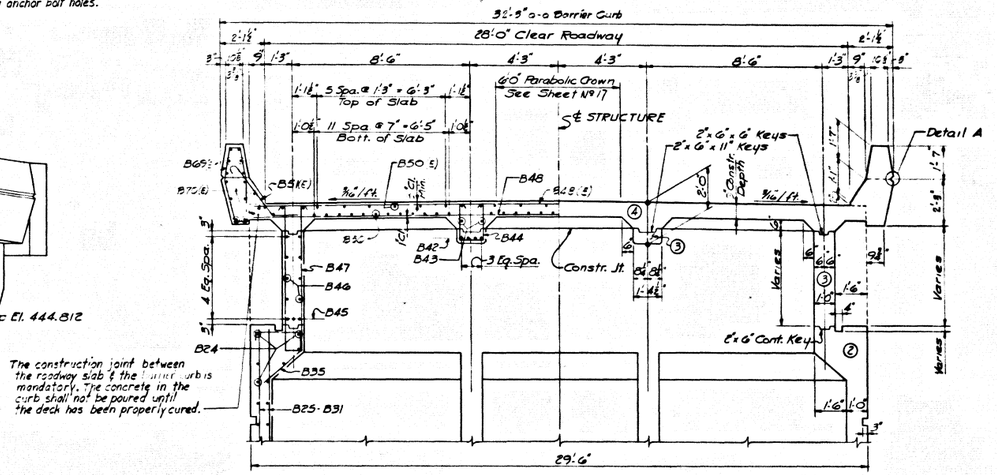
BRIDGE

LETTING DATE

The top of cap bars must be accurately located in accordance with the plans so that they will not interfere with drilling anchor bolt holes.



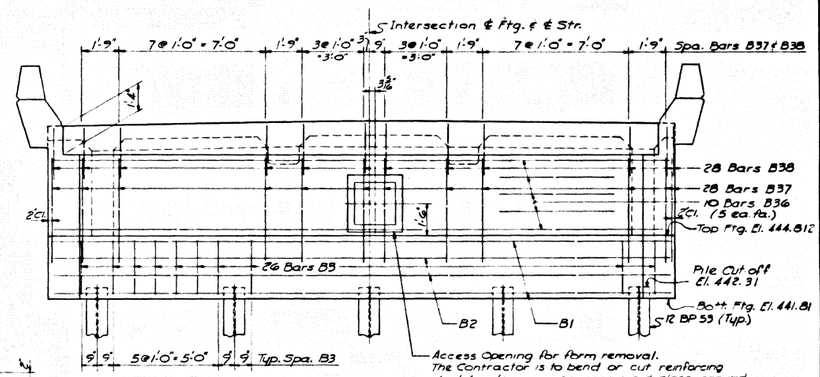
ELEVATION A-A



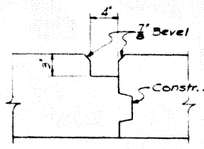
The construction joint between the roadway slab & the barrier curb is mandatory. The concrete in the curb shall not be poured until the deck has been properly cured.

SECTION B-B

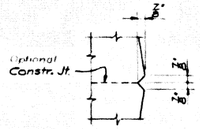
Note: Reinforcing bars designated (E) shall be epoxy coated.



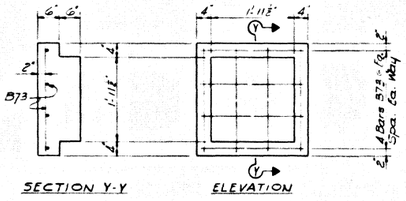
ELEVATION C-C



RUSTICATION DETAIL



DETAIL A



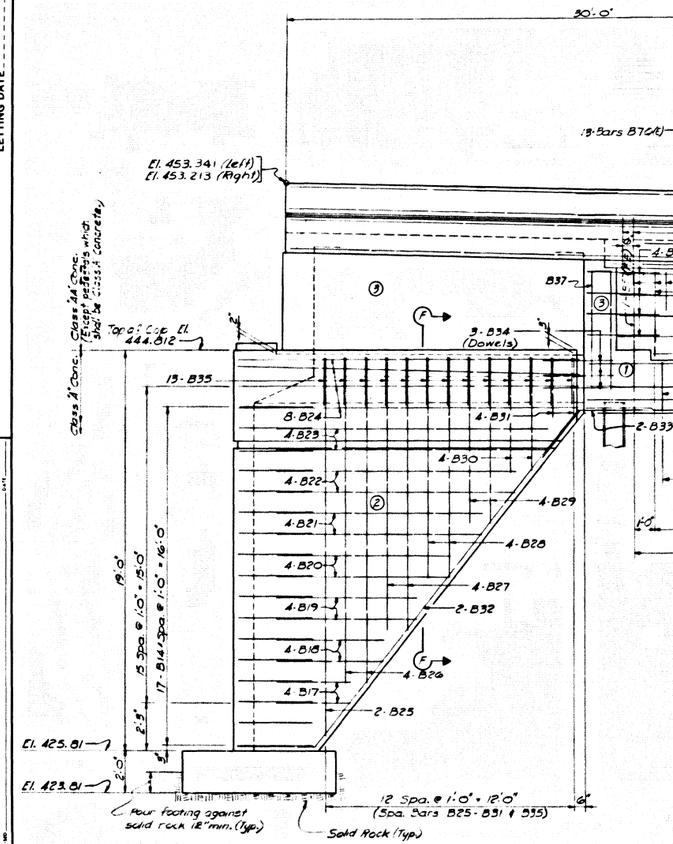
PRECAST COVER DETAIL

COMMONWEALTH OF KENTUCKY
BUREAU OF HIGHWAYS
FRANKFORT
COUNTY OF
TRIGG
PADUCAH-TENN. STATE LINE
ROAD
STATION 4499 + 89.46 P.E. PROJECT NO.
CONSTRUCTION PROJECT NO | MAINTENANCE PROJECT NO. | DRAWING NO 18736

ABUTMENT NO. 2

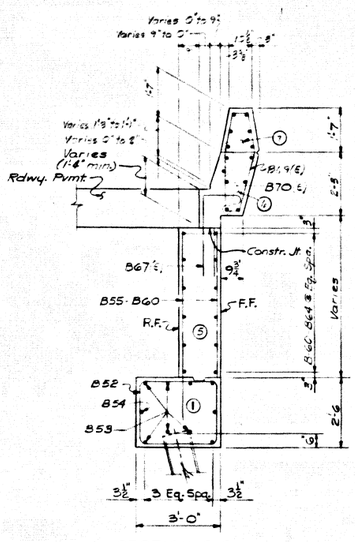
BRIDGE

LETTING DATE

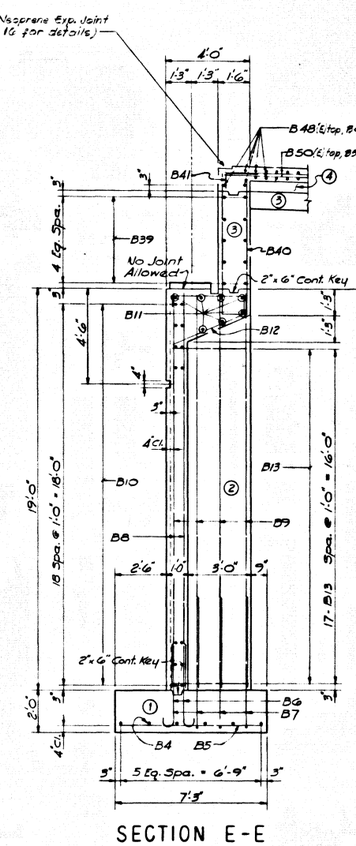


SIDEWALL AND WINGWALL ELEVATION

NOTE: Rub out Constr. Jt. on exterior face of wings.

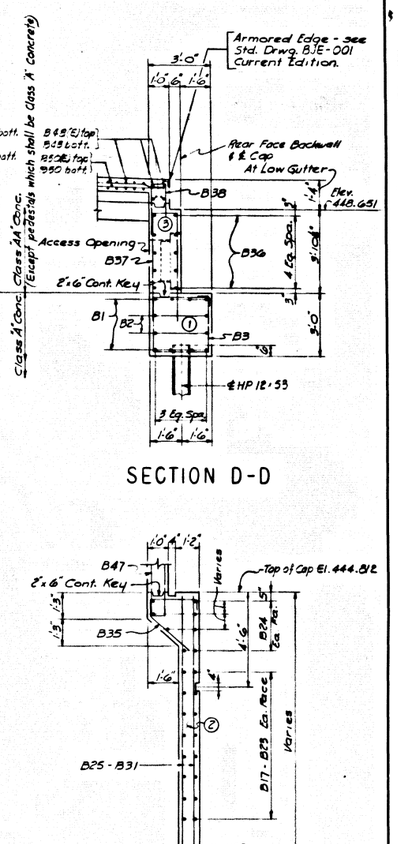


SECTION G-G



SECTION E-E

Note: Reinforcing bars designated (E) shall be epoxy coated.



SECTION D-D

SECTION F-F

KY. 124 over T-78 SHEET 11

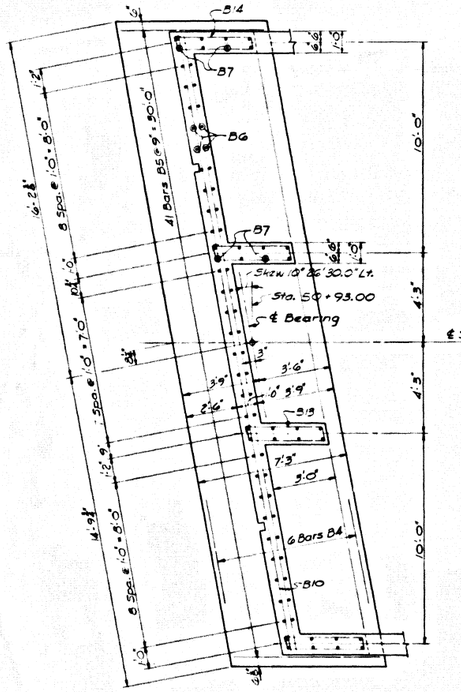
COMMONWEALTH OF KENTUCKY
BUREAU OF HIGHWAYS
FRANKFORT
COUNTY OF
TRIGG
PADUCAH-TENN. STATE LINE
ROAD
STATION 4499+89.46 P.E. PROJECT NO.

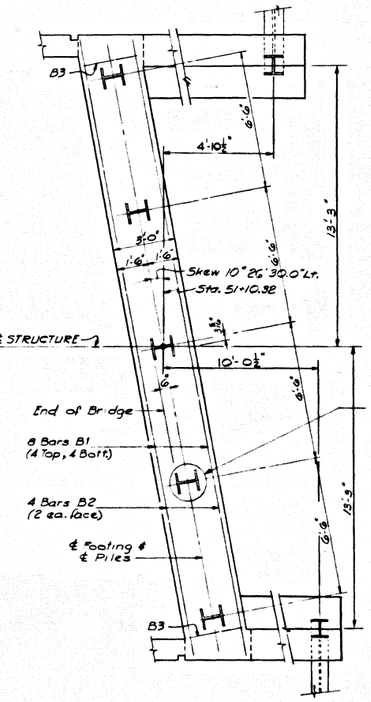
CONSTRUCTION PROJECT NO	MAINTENANCE PROJECT NO.	DRAWING NO
		18780

ABUTMENT NO. 2

BRIDGE

LETTING DATE





PLAN OF FOOTINGS

Note: For Pile Record, see Sheet 7.

BILL OF REINFORCEMENT

Mark	Type	No.	Size	Length Ft.	Length In.	Location	a Ft.	a In.	b Ft.	b In.	c Ft.	c In.	d Ft.	d In.	e Ft.	e In.
B1	Str.	8	7	29	6	Footing										
B2	Str.	4	6	29	6	"										
B3	9	26	4	11	5	"	2	8	2	8						
B4	Str.	6	5	30	6	"										
B5	Str.	41	6	6	10	"										
B6	3	52	5	4	5	Dowels	3	7	0	10	0	5	3	9½		
B7	3	32	6	6	2	Counterfort Dowels	4	8	1	6	0	8	5	0		
B8	Str.	52	5	18	10	Frontwall										
B9	Str.	32	6	18	10	Counterforts										
B10	Str.	38	5	29	8	Frontwall										
B11	Str.	7	6	29	8	Frontwall Cap										
B12	10	29	5	8	7	" "	3	6	0	6	0	11	1	5½	3	9½
B13	8	34	4	9	9	Counterforts	0	9	3	9	0	1⅜				
B14	8	34	4	9	4	Sidewalls	0	6½	3	9	0	1¼				
B15	4	16	5	5	7	Pads	1	8	2	0						
B16	4	16	5	6	1	"	2	2	2	0						
B17	Str.	8	5	3	9	Sidewalls										
B18	Str.	8	5	5	9	"										
B19	Str.	8	5	6	9	"										
B20	Str.	8	5	8	6	"										
B21	Str.	8	5	10	0	"										
B22	Str.	8	5	11	6	"										
B23	Str.	8	5	13	0	"										
B24	Str.	16	5	16	8	"										
B25	Str.	4	5	18	0	"										
B26	Str.	8	5	15	6	"										
B27	Str.	8	5	12	9	"										
B28	Str.	8	5	10	3	"										
B29	Str.	8	5	7	9	"										
B30	Str.	8	5	5	9	"										
B31	Str.	8	5	2	9	"										
B32	11	4	6	28	0	"	30	3	3	9	3	0				
B33	16	4	6	9	2	Footing	3	2	3	0	2	4	3	0	1	1
B34	4	6	5	7	11	Ftg. & Sidewalls(Dowels)	0	6	3	9						
B35	10	26	5	6	8	Sidewalls	2	2	1	0	0	9	1	10⅛	2	10
B36	Str.	10	5	29	8	Endwall										
B37	4	28	5	11	9	"	1	2	5	4						
B38	4	28	5	6	7	"	0	8	3	0						
B39	Str.	18	5	26	7	Frontwall										
B40	4	24	5	13	7	"	1	2	6	3						
B41	13	24	5	3	0	"	0	11	2	1						
B42	2	8	10	17	9	Int. Girder	14	1	1	10	1	0¾	15	1⅜		
B43	Str.	4	5	15	2	" "										
B44	6	34	6	5	5	" "	1	11½	1	8	0	6¾				
B45	3	6	7	17	3	Fascia Girder	14	11	1	2	0	7	15	6		
B46	Str.	16	5	15	6	" "										
B47	7	26	5	14	3	" "	0	9	6	5	0	7				
B48	Str.	30	5	29	8	Slab										
B48(1)	Str.	24	5	29	8	"										
B50	Str.	38	5	15	0	"										
B51(L)	12	62	5	5	9	Slab & Barrier Curb	2	1	1	3	1	6	0	10	0	2½
B52	10	4	10	5		Wing Ftg.	2	8	2	2						
B53	Str.	16	9	10	0	" "										
B54	Str.	4	5	10	0	" "										
B55	Str.	32	6	5	9	Wingwalls										
B56	Str.	16	5	4	0	"										
B57	Str.	2	5	3	6	"										
B58	Str.	4	5	3	6	"										
B59	Str.	8	5	2	6	"										
B60	Str.	8	5	1	9	"										
B61	Str.	8	5	13	9	"										
B62	Str.	4	5	12	9	"										
B63	Str.	4	5	10	6	"										
B64	Str.	4	5	7	6	"										
B65	Str.	4	6	5	5	"										
B66	4	8	5	8	0	Endwall & Wingwall (Dowels)	1	1	3	6						
B67(L)	5	30	7	0	4	Wingwall & Curb										
B68						Not Used										
B69(L)	15	62	5	9	2	Barrier Curb										
B70(L)	Str.	60	5	29	8	Barrier Curb										
B71						Not Used										
B72						Not Used										
B73	Str.	8	6	2	4	Precast Cover										
B74	Str.	28	5	5	0	Slab										
W1(L)	4	4	5	9	0	Wing Tip										
W2(L)	12	12	5	8	7	Wing Tip	1	3	1	8	0	10				
W3(L)	16	12	5	3	1	Wing Tip	1	5	1	8	0	10				

ESTIMATE OF QUANTITIES

Class 'A' Concrete = 76.3 Cys
Class AA Concrete = 47.5 Cys
Epoxy-Coated Steel Reinforcement = 3,545 Lbs.
Non-Coated Steel Reinforcement = 12,301 Lbs.

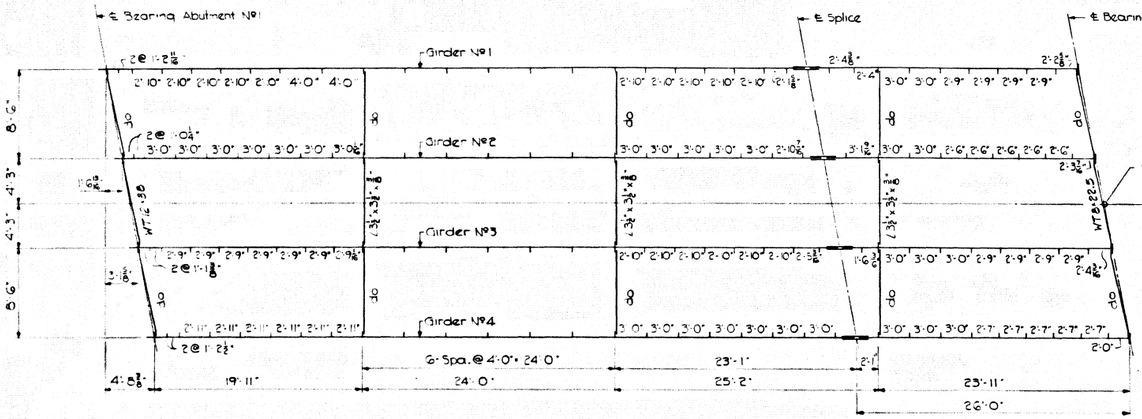
ABUTMENT NO. 2

SHEET 2

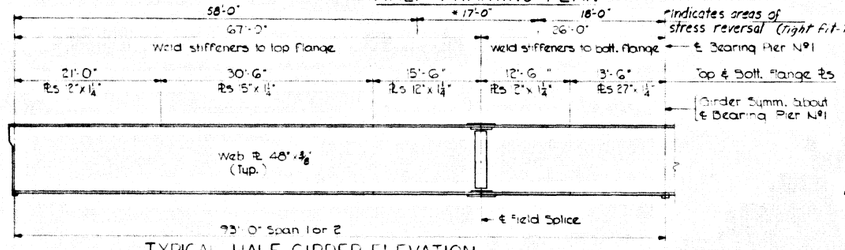
COMMONWEALTH OF KENTUCKY
BUREAU OF HIGHWAYS
FRANKFORT
COUNTY OF
TRIGG
PADUCAH-TENN. STATE LINE
ROAD
STATION 4499+89.46 P.E. PROJECT NO.
CONSTRUCTION PROJECT NO. | MAINTENANCE PROJECT NO. | DRAWING NO. 18730

BRIDGE

LETTING DATE

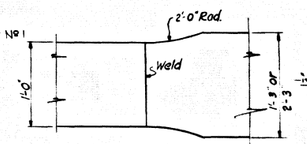


HALF FRAMING PLAN



TYPICAL HALF GIRDER ELEVATION

Note: All bearing stiffener plates & ends of girders to be vertical. All intermediate stiffener plates to be normal to grade.

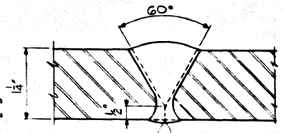


PLAN

Framing Plan summ. about this point by rotation

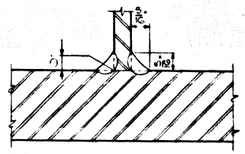
℄ Bridge

Flange to web welds to be single pass submerged arc fillet welds in the flat position. Parts are to be assembled with the edge of web ℄ light against flange ℄ before welding.

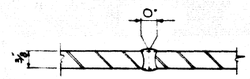


SHOP FLANGE SPLICE

AWS B-L2c-5

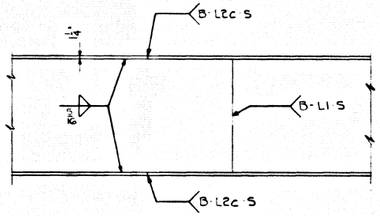


FLANGE TO WEB WELD



SHOP WEB SPLICE

AWS B-L1-S



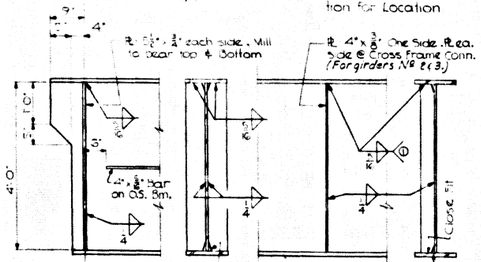
PART GIRDER ELEVATION

(Showing Welds)

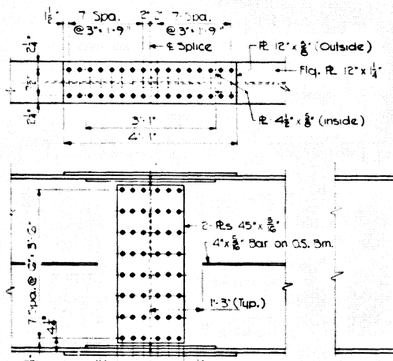
Note

See "WELDING" note on sh. 2

NOTE: Terminate all shiftener to flange welds 2" from flange plates.

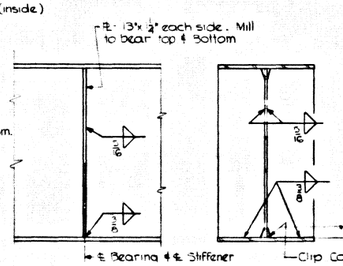


BEARING STIFFENERS @ ABUTS. 1 & 2

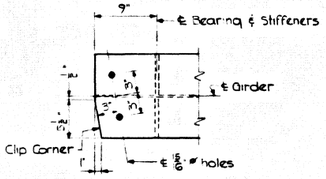


INTERMEDIATE STIFFENERS

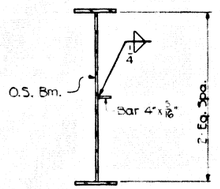
FIELD SPLICE (⅞" H.S. Bolts)



BEARING STIFFENERS @ PIER 1



END DETAIL TOP FLANGE



LONGITUDINAL STIFFENERS Q.S. BMS.

SUPERSTRUCTURE

KY 124 over I-24 SHEET 13

COMMONWEALTH OF KENTUCKY
BUREAU OF HIGHWAYS
FRANKFORT
COUNTY OF
TRIGG
PADUCAH-TENN. STATE LINE
ROAD
STATION 124+89.46 P.E. PROJECT NO.

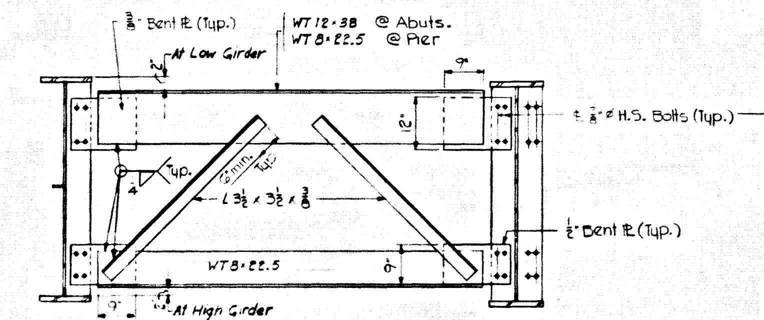
CONSTRUCTION PROJECT NO.	MAINTENANCE PROJECT NO.	DRAWING NO.
		18730

BRIDGE

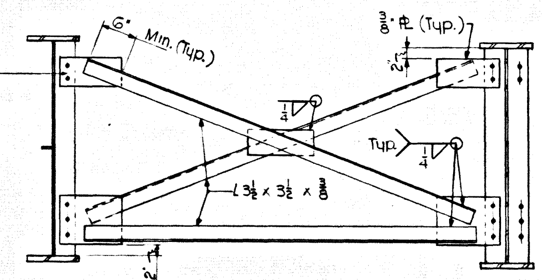
LETTING DATE

SURFACE FINISH OF STEEL - SPECIFICATIONS

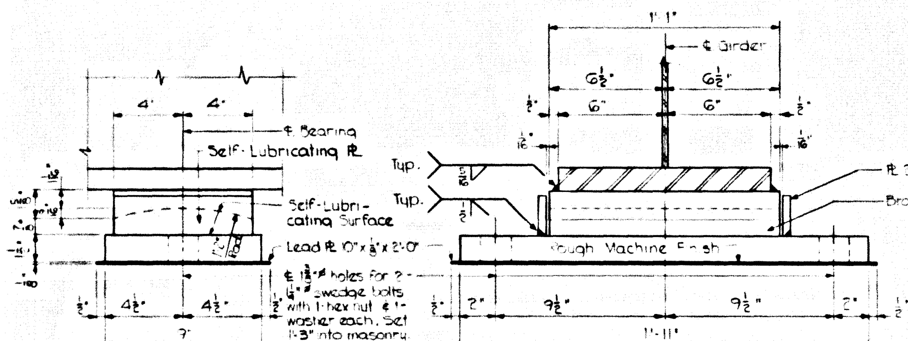
Steel Slabs.	ANSI 2000
Heavy plates in contact in shoes to be welded.	ANSI 1000
Milled ends of compression members, stiffeners, & fillers.	ANSI 500
Bridge rollers & rockers.	ANSI 250



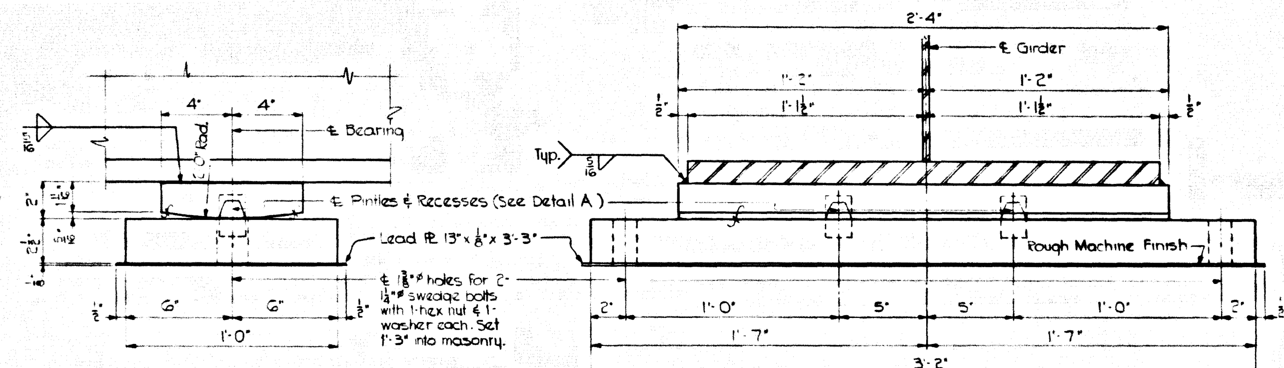
TYPICAL CROSS FRAME AT BEARINGS



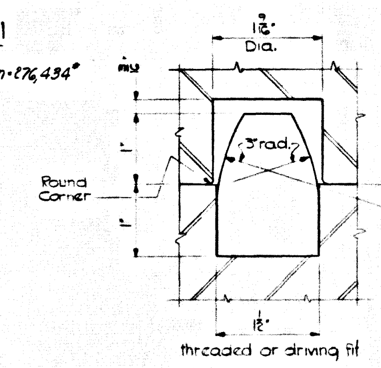
TYPICAL INTERMEDIATE CROSS FRAME



EXPANSION SHOE AT ABUTS. 1 & 2
4 Required
(Weight/Shoe Assy. = 206#), Max. Reaction = 100,370#

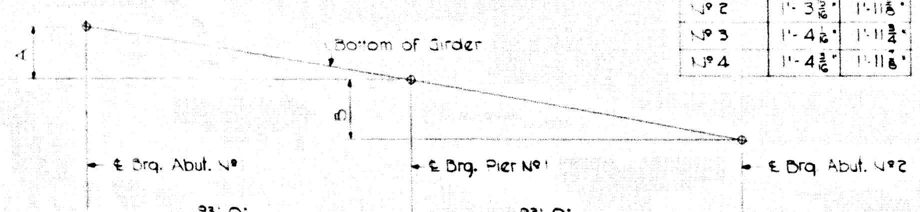


FIXED SHOE AT PIER 1
4 Required
(Weight/Shoe Assy. = 341#), Max. Reaction = 276,434#



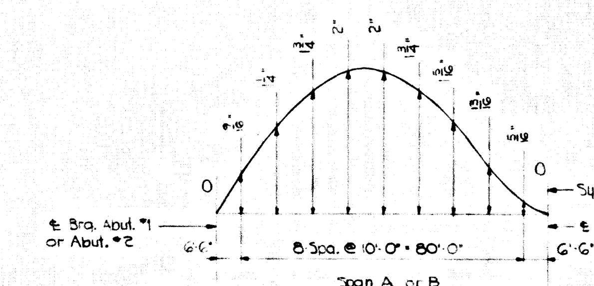
DETAIL A

Girder	Dim. A	Dim. B
Nº 1	1'-3 13/16"	1'-11 1/2"
Nº 2	1'-3 15/16"	1'-11 5/8"
Nº 3	1'-4 1/16"	1'-11 3/4"
Nº 4	1'-4 3/16"	1'-11 7/8"



Note:
Camber to be cut into Web ℞.

BLOCKING DIAGRAM



CAMBER DIAGRAM
TOTAL DEAD LOAD PLUS VERTICAL CURVE CORRECTION
Note: Camber to be cut into Web ℞.

NOTE: All Structural Steel on this sheet is A36 unless noted.

SUPERSTRUCTURE

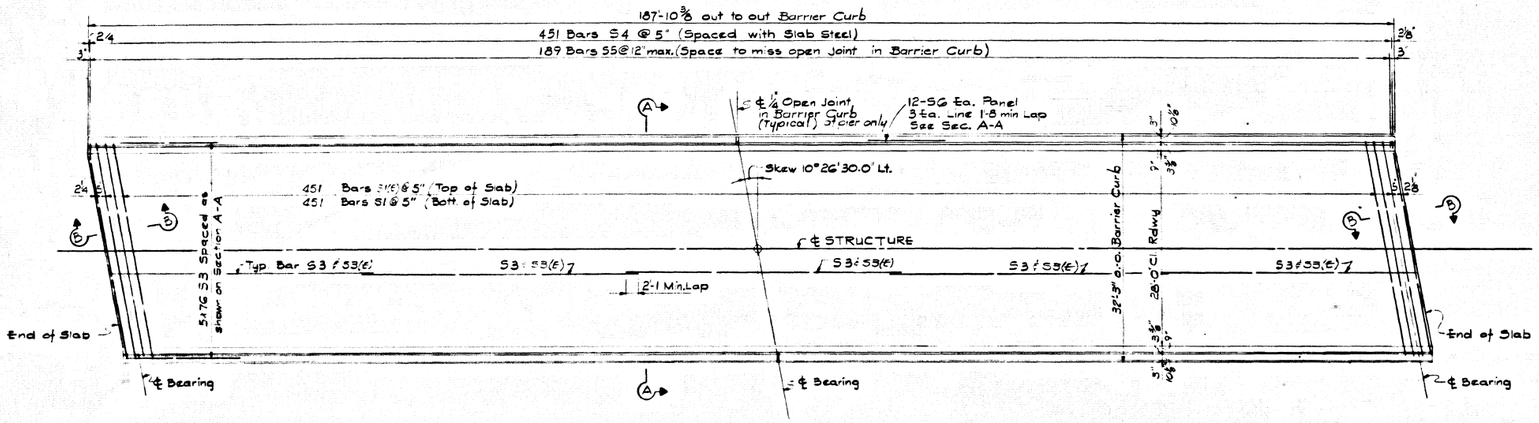
KY 124 over I 24 SHEET 14

COMMONWEALTH OF KENTUCKY
BUREAU OF HIGHWAYS
FRANKFORT
COUNTY OF
TRIGG
PADUCAH-TENN. STATE LINE
ROAD
STATION 4499 + 89.46 P.E. PROJECT NO.

CONSTRUCTION PROJECT NO.	MAINTENANCE PROJECT NO.	DRAWING NO.
		18730

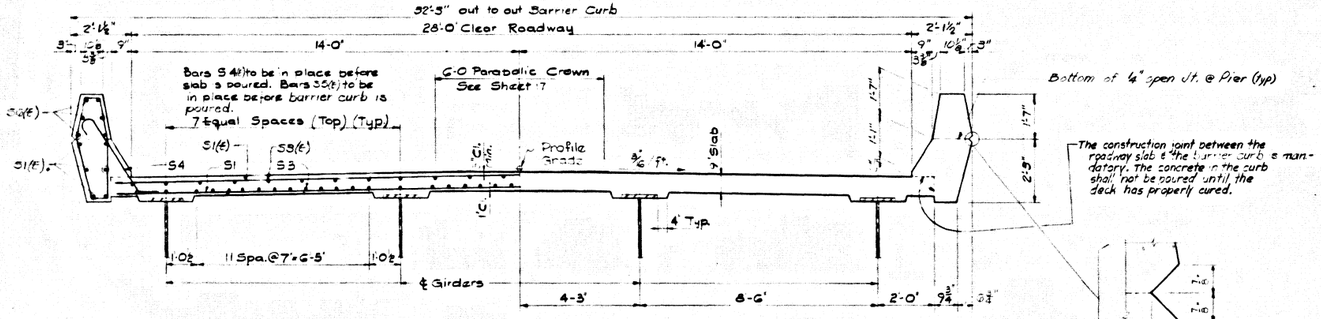
BRIDGE

LETTING DATE

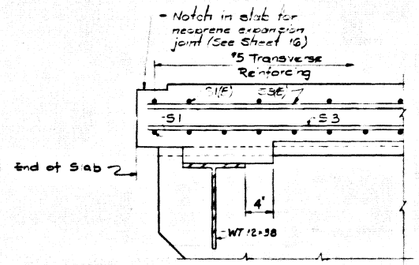


BILL OF REINFORCEMENT

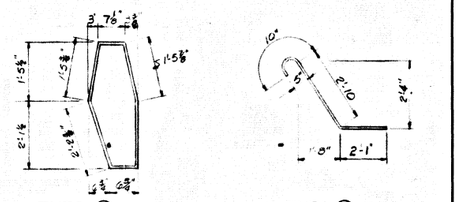
Mark	Type	No.	Bar Size	Length Ft.	Length In.	Location
S1	Str.	451	#5	29	2	Slab
S2						Not Used
S3	Str.	210	#5	39	2	Slab & Barrier Curb
S4(E)	③	902	#5	5	9	Slab & Barrier Curb
S5(E)	②	378	#5	9	2	Barrier Curb
S6(E)	Str.	72	#4	32	4	Barrier Curb
S1(E)	Str.	451	#5	29	2	Slab
S3(E)	Str.	200	#5	39	2	Slab



SECTION A-A



SECTION B-B



ESTIMATE OF QUANTITIES
Concrete Class 'AA' = 226.3 cys.
Epoxy Coated Steel Reinf. = 32,469 lbs.
Non-Coated Steel Reinf. = 28,293 lbs.

SUPERSTRUCTURE

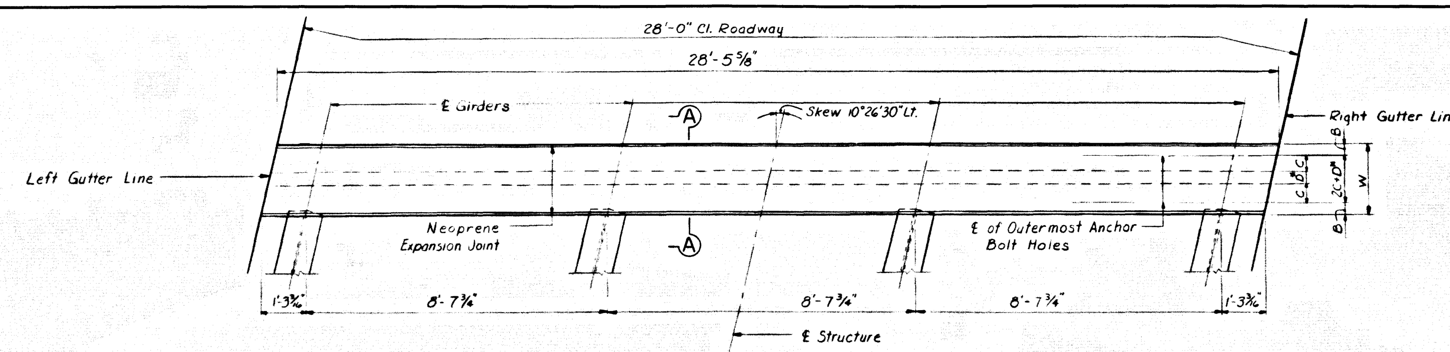
KY. 124 OVER T. 124 SHEET 15

COMMONWEALTH OF KENTUCKY
BUREAU OF HIGHWAYS
FRANKFORT
COUNTY OF
TRIGG
PADUCAH-TENN. STATE LINE
ROAD
STATION 4699-89.46 P. E. PROJECT NO.

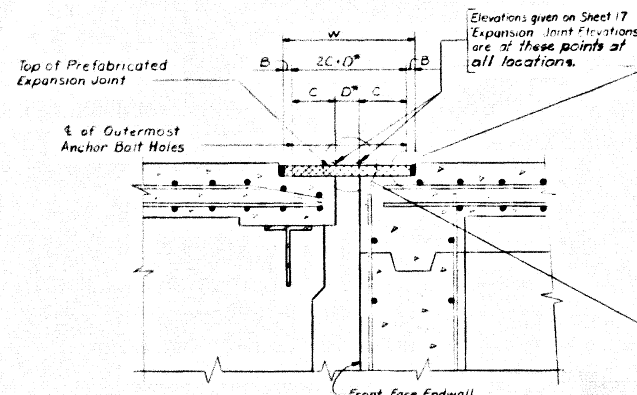
CONSTRUCTION PROJECT NO.	MAINTENANCE PROJECT NO.	DRAWING NO.
		18730

BRIDGE

LETTING DATE

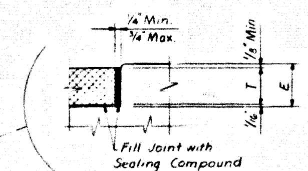


PLAN OF NEOPRENE EXP. JOINT

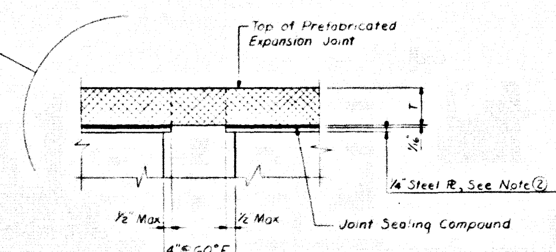


SECTION A-A

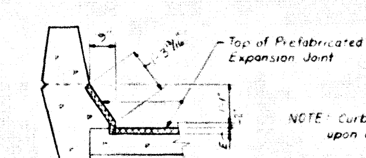
See Table "Dimension D" for
Temperature variance.



DIMENSION D*				
12°	36°	60°	84°	108°
3⅜"	3¹¹⁄₁₆"	4"	4⁵⁄₁₆"	4⅝"



This Detail Applicable to Fel-Span
and Delastiflex models only.



NOTE: Curb treatment dependent
upon option used.

SECTION THRU BARRIER CURB

GENERAL NOTES

The contractor shall provide a factory prefabricated expansion joint system as manufactured by: Watson-Bowman Assoc. Inc. of Buffalo, New York; General Tire & Rubber Co. of Wabash, Indiana; Fel-Pro Inc. of Skokie, Illinois; The D.S. Brown Co. of North Baltimore, Ohio, or an approved equal. The particular model number for each of the above manufacturers is listed in the table, this sheet.

The expansion joints shall be fabricated to follow the contour of the roadway and up the barrier to an elevation 1'-3" above finished roadway.

The manufacturer of the prefabricated joint shall prepare shop drawings showing details of the assembly. Three sets of shop drawings shall be submitted to the Engineer for review. Approval of the shop drawings shall be required prior to the make-up of components of the joint.

Anchor bolt holes to be drilled with rotary type drill.

Dimensions shown in the table this sheet shall be verified as acceptable by the manufacturer.

TABLE OF DIMENSIONS ①					
TYPE	W	T	B	C	E
Fel-Span T-40	1'-1"	2⅛"	2"	2½"	2⁵⁄₁₆"
Transflex 400	1'-10¾"	2⅛"	1⁹⁄₁₆"	7¹³⁄₁₆"	2⁵⁄₁₆"
Naboflex SR-4	1'-10"	2⅛"	1⁹⁄₁₆"	7¹³⁄₁₆"	2⁵⁄₁₆"
Delastiflex CP-400 ②	1'-2⅛"	2"	—	—	—

① These dimensions are given @ mid-point temperature of 60°F.

② For this option only. A ⅛" × 5⁹⁄₁₆" steel plate is to be provided in addition to device hardware to enable the device to overhang the gap ½" on both sides.

EXPANSION SYSTEM DETAILS

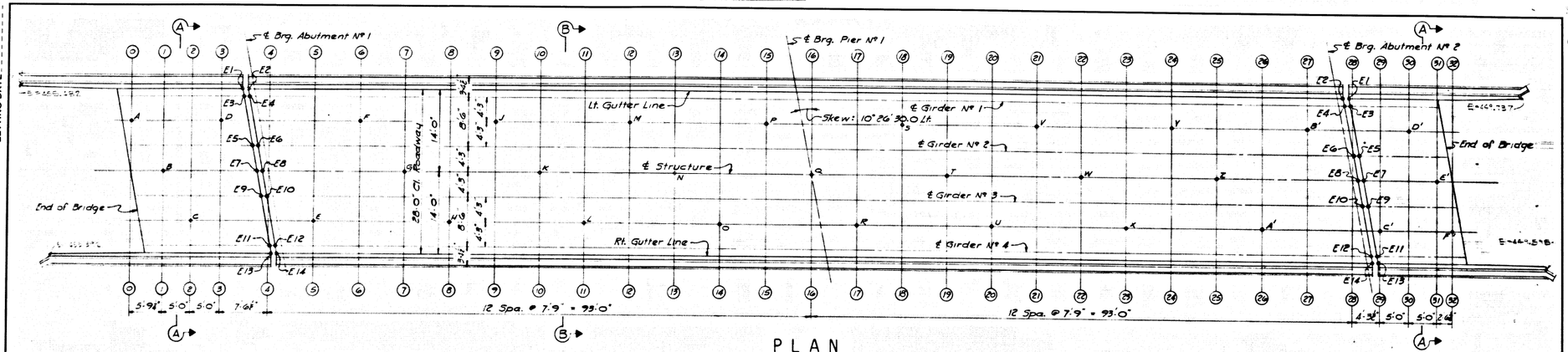
I-124 ... I-24 SHEET 16

COMMONWEALTH OF KENTUCKY
BUREAU OF HIGHWAYS
FRANKFORT
COUNTY OF
TRIGG
PADUCAH-TENN STATE LINE
ROAD
STATION 1499+99.46 **P.E. PROJECT NO.**

CONSTRUCTION PROJECT NO.	MAINTENANCE PROJECT NO.	DRAWING NO.
		18730

BRIDGE

LETTING DATE



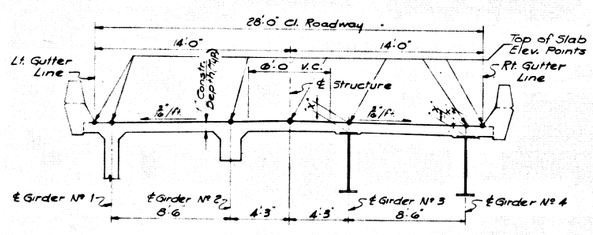
PLAN

TABLE OF ELEVATIONS

Location	Lt. Gutter Line Constr. El.	Top Steel Girder N°1	Dim. 'X'	℄ Girder N° 2 Constr. El.	Top Steel	Dim. 'X'	℄ Struct. Top Conc.	℄ Girder N° 3 Constr. El.	Top Steel	Dim. 'X'	Rt. Gutter Line Constr. El.	Top Steel Girder N°4	Dim. 'X'
0	454.021			454.74			454.217						
1	453.967			454.20			454.163	454.120			453.967		
2	453.918			454.072			454.115	454.072			453.918		
3	453.867			454.020			454.063	454.020			453.867		
4	453.795			453.942			453.982	453.939			453.787		
5	453.734			453.881			453.921	453.875			453.717		
6	453.668			453.810			453.851	453.806			453.650		
7	453.580			453.729			453.771	453.727			453.572		
8	453.487			453.638			453.681	453.637			453.483		
9	453.382			453.535			453.578	453.535			453.383		
10	453.267			453.421			453.465	453.422			453.271		
11	453.141			453.297			453.342	453.300			453.150		
12	453.007			453.164			453.209	453.167			453.018		
13	452.869			453.025			453.069	453.028			452.880		
14	452.728			452.884			452.928	452.887			452.737		
15	452.589			452.742			452.786	452.744			452.594		
16	452.451			452.604			452.647	452.604			452.451		
17	452.318			452.468			452.510	452.466			452.313		
18	452.185			452.335			452.376	452.332			452.176		
19	452.058			452.201			452.242	452.198			452.041		
20	451.915			452.063			452.105	452.060			451.904		
21	451.771			451.920			451.962	451.917			451.762		
22	451.616			451.767			451.810	451.766			451.612		
23	451.452			451.604			451.647	451.604			451.451		
24	451.275			451.430			451.474	451.431			451.279		
25	451.089			451.244			451.288	451.246			451.097		
26	450.891			451.047			451.092	451.051			450.903		
27	450.682			450.840			450.986	450.846			450.699		
28	450.476			450.628			450.671	450.631			450.484		
29	450.369			450.522			450.565	450.522			450.369		
30	450.243			450.397			450.440	450.397			450.243		
31	450.116			450.268			450.311	450.268			450.116		
32							450.240	450.203			450.051		

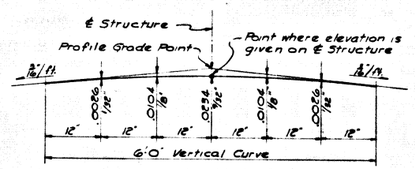
CONSTRUCTION NOTES

Lay out Section 0-0 to 32.32 as shown in plan on this sheet.
Take elevations on top of steel at points indicated after cross frames 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 a target rod and enter readings in table under top of steel.
Compute dimension 'X' as follows: Construction elevation minus top of steel elevation equals dimension 'X'. Construction elevations include camber due to weight of concrete slab, barrier curb and future surfacing.
For setting templates measure dimension 'X' above top of steel for top of template. Do not set templates by elevations.
Do not add camber to barrier curb.
Measuring of Dimension 'X' gives the final check on beam tolerances for camber, beam damage & errors in erection that produce reverse cambers, sags & unsightly fascia beams.



HALF SECTION A-A

HALF SECTION B-B



PARABOLIC CROWN

TABLE OF ELEVATIONS FOR CONTROL OF SLAB THICKNESS

Slab Check Point	Top Slab Elevation	Bott. Slab Elevation	Computed Slab Thickness	Slab Check Point	Top Slab Elevation	Bott. Slab Elevation	Computed Slab Thickness
A	454.108			R	452.400		
B	454.163			S	452.269		
C	454.006			T	452.242		
D	453.954			U	451.992		
E	453.876			V	451.856		
F	453.748			W	451.810		
G	453.771			X	451.538		
H	453.571			Y	451.364		
J	453.479			Z	451.288		
K	453.465			A'	450.987		
L	453.734			B'	450.771		
M	453.096			C'	450.456		
N	453.069			D'	450.331		
O	452.871			E'	450.311		
P	452.676			F'	450.137		
Q	452.647						

SLAB THICKNESS CONTROL

After the slab forms are erected and before the slab reinforcement is placed the Resident Engineer shall take field elevations at the slab thickness check points and enter them in the table in the space provided.
The slab thickness shall then be computed. If the computed thickness varies more than ¼" from the plan thickness, allowing ½ of the slab span for deflection of the formwork, the form shall be adjusted until the computed slab thickness [illegible]

CONSTRUCTION ELEVATIONS

EXPANSION JT. ELEVATIONS

Location	Abut. N°1	Abut. N°2
E1	453.828	450.508
E2	453.825	450.516
E3	453.845	450.522
E4	453.842	450.530
E5	453.901	450.616
E6	453.958	450.624
E7	453.996	450.640
E8	453.992	450.648
E9	453.944	450.577
E10	453.941	450.586
E11	453.794	450.406
E12	453.791	450.414
E13	453.772	450.380
E14	453.769	450.388

COMMONWEALTH OF KENTUCKY
BUREAU OF HIGHWAYS
FRANKFORT
COUNTY OF
TRIGG
PADUCAH-TENN. STATE LINE
ROAD
STATION 1499 - 89.46 P.E. PROJECT NO.

CONSTRUCTION PROJECT NO.	MAINTENANCE PROJECT NO.	DRAWING NO.
		18730

BRIDGE

LETTING DATE

TABLES of ELEVATIONS

	END OF BR @ABUT #1	℄ BRG ABUT #1	℄ BRG PIER #1	℄ BRG ABUT #2	END OF BR @ABUT #2
LT GUTTER	454.044	453.815	452.497	450.539	450.118
GIRDER #1	454.062	453.832	452.512	450.553	450.131
GIRDER #2	454. 80	453.948	452.618	450.647	450.224
GIRDER #3	454. 66	435.930	452.590	450.609	450. 83
GIRDER #4	454.0 9	453.780	452.429	450.437	450.009
RT GUTTER	453.997	453.758	452.405	450.412	449.984

Location	Girder No. 1			Girder No. 4		
	Const. El.	Top Steel	Dim "X"	Const. El.	Top Steel	Dim "X"
0	454.041					
1	453.987			453.987		
2	453.938			453.938		
3	453.887			453.887		
4	453.815			453.807		
5	453.754			453.737		
6	453.682			453.670		
7	453.600			453.592		
8	453.507			453.503		
9	453.402			453.403		
10	453.287			453.291		
11	453.161			453.170		
12	453.027			453.038		
13	452.889			452.900		
14	452.748			452.757		
15	452.609			452.614		
16	452.471			452.471		
17	452.338			452.333		
18	452.205			452.196		
19	452.072			452.061		
20	451.935			451.924		
21	451.791			451.782		
22	451.636			451.632		
23	451.472			451.471		
24	451.295			451.299		
25	451.109			451.117		
26	450.911			450.923		
27	450.702			450.719		
28	450.496			450.504		
29	450.389			450.389		
30	450.263			450.263		
31	450.136			450.136		
32				450.071		

KY 24 OVER I-24 SHEET 18

CONSTRUCTION ELEVATIONS

COMMONWEALTH OF KENTUCKY
BUREAU OF HIGHWAYS
FRANKFORT
COUNTY OF
TRIGG
PADUCAH-TENN. STATE LINE
ROAD

STATION P. E. PROJECT NO.

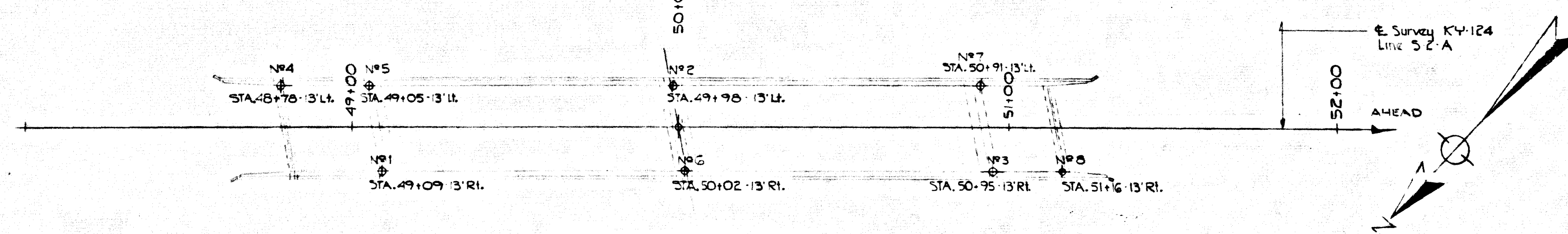
CONSTRUCTION PROJECT NO.	MAINTENANCE PROJECT NO.	DRAWING NO.
		18730

BRIDGE

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

BORINGS BY AMERICAN TESTING & ENGINEERING CORP.

PLANS PREPARED BY REID, QUEBE, THOMPSON



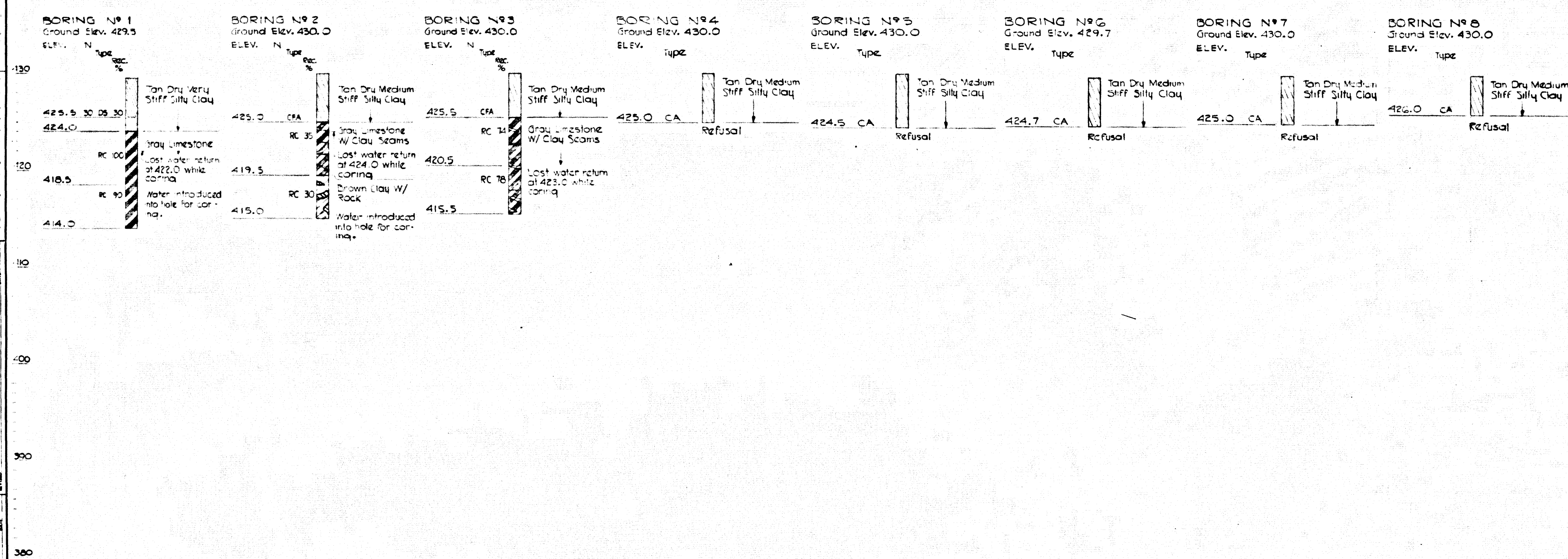
SOUNDING PLAN

LEGEND

N = Number of blows required to drive a 2" O.D. Sampler 1 foot with a 140 lb hammer falling 30 inches.

REC. = Percentage of mass recovered.

Type = Type of sampler used:
- DS - Driven Split Spoon
- RC - Rock Core
- CFA - (CA) Continuous Flight Auger



SOUNDINGS

KY 124 OVER I-24 SHEET 9

COMMONWEALTH OF KENTUCKY
BUREAU OF HIGHWAYS
FRANKFORT
COUNTY OF
TRIGG
PADUCAH-TENN. STATE LINE
ROAD
STATION 4499+89.46 **PROJECT NO.**

BRIDGE NUMBER | DRAWING NO. | INDEX 18730

BRIDGE