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

KENTUCKY DEPARTMENT OF HIGHWAYS
GREENUP COUNTY
ASHLAND-GREENUP ROAD
ASHLAND-GREENUP RD. OVER LITTLE SANDY RIVER

Detail changes for this Construction Revision include introducing a joint on the center line survey at End Bents and in the Superstructure, and removing Dowels between Existing Piers and New Piers.

By Change Order, the Contractor will completely remove the existing Expansion Dams and adjust the Expansion Rockers to vertical as detailed. Also included in the Change Order is the patching and sealing of open cracks in the existing Piers as directed by the Engineer.

Void Sheets 13, 14 & 17. Add new Detail Sheets 13, 16 & 17 and renumber sheets. Revise all sheets except 19 & 20.

REFERENCE & ESTIMATE OF QUANTITIES

Location \ Item	Sheet No.	Concrete Class "A" (Cu Yds)	Concrete Class "AA" (Cu Yds)	Steel Reinforcement Lbs	Structural Steel (Lump Sum)	High Str. Handrail (Lin. Ft.)	Cofferdam Piers 2 & 3 (Lump Sum)	6" Drain Pipe (Lin. Ft.)	Structure Excavation Common (Cu. Yds.)	Structure Excavation Solid Rock (Cu Yds)	Piling 14 BP73 Furnish (Lin. Ft.)	Piling 14 BP73 Drive (Lin. Ft.)	14BP73 with encasement Furnish (Lin. Ft.)	14BP73 with encasement Drive (Lin. Ft.)	Bonded Concrete Overlay (S.Y.)	Welded Steel Wire Fabric 36" Wide (L.F.)	Remove Concrete Masonry (C.Y.)	Protective Coating Shy Blast (Sq. Ft.)	Protective Coating Linseed Oil (Sq. Yds.)	End Bent Backfill (Cu. Yds.)	Steel Bm. Guardrail Type 3 (Lin. Ft.)
Title & Quantities	1																				
Notes	2																				
Layout	3																				
Pile Record	4																				
End Bent 1	5,6	90.3	62.8	13,370	13,330				315				2006 (1943)	2006 (1943)			32	5	15	145	
Pier 1	7	233.3		20,421	20,139				310		559	559						6			
Pier 2	8,9	500.5		79,706	79,401				140	150								6			
Pier 3	8,9	500.5		79,706	79,401				725	100								6			
Pier 4	7	238.6	62.7	41,343	41,051				245		496	496	1323 (1771)	1323 (1771)				6			
End Bent 2	5,6	90.3	62.8	13,370	13,330				315								32	5	15	145	
Span 1	10-17	520.6	100.0	24,674	25,126			6.5							149	515	25 26	3	495		48
Span 2, 3 & 4	10-17	1091.1	530.1	130,477	136,579			26							751	2600	125 129	12	2,485		240
Span 5	10-17	520.6	100.0	24,674	25,126			6.5							149	515	25 26	3	495		48
High Strength Handrail	3		109.1			801															
Construction Elevations	18,19																				
Soundings	20																				
Sub-Total, Substructure		1633.3 (1633.3)	125.4 (53.2)	266,662 (255,293)	136,533	—	Lump Sum	—	2050	250	1055	1055	3334 (3334)	3334 (3334)	—	—	64 (65)	34	30	290	—
Sub-Total, Superstructure		7553	792.1	179,825	1	801	—	39	—	—	—	—	—	—	1049	3630	175 181	18	3475	—	356
Total		6533.0	867.7	447,761	1	801	Lump Sum	39	2050	250	1055	1055	3714	3714	1049	3630	239	52	3505	290	356

① Approximate Weight of Structural Steel = 641,500 Lbs (678,700) (3834) (3834) (235)
(Approximate Weight does not include weld material or overrun)

BILL OF INCIDENTAL MATERIAL

Item	No.	Size	Location
Joint Sealing Compound	1	4"x1"x65'-0"	Exp Dam at Pier 1
" " "	1	4"x1"x68'-0"	Exp Dam at Pier 4
(a) Preformed Joint Seal	2	3/4"x1"x92'-0"	At End Bents 1 & 2
(b) Premolded Cork Exp. Jt. Mat'l	4	1"x12"x18"	" " " "
" " " "	2	6"x1"x22'-0"x3'-0"	" " " "
" " " "	2	7'-8"x1"x26'-0"	" " " "
(c) Four-Bolt Insert Assembly	4	See Detail Rmvy Plan	At End Bent Wings
Anchor Rods	18	See Sheet 5	End of Existing Bridge
Premolded Cork Exp. Jt. Mat'l	1	1"x12"x36'-0"	Joint on 2 Bridges
" " " "	58	1"x3 1/2"x1'-1"	Under Guardrail Posts

(a) See Std. Drwg. G-383 F
(b) See Std. Drwg. G-354 C
(c) See Std. Drwg. RBC-001

STANDARD DRAWINGS:

Standard Drawings listed below are the Current Edition and are to be used with these plans.

AS1-D AW593A H117E G383F P214A P214B-A CD-2A
AE2-D SF2B H150B G354C RBR-001 RBC-001
SUE-002, SUD-001

SPECIAL PROVISIONS:

No. 8B - Linseed Oil Protective Coating
No. 12 — Joint Sealing Compound
No. 30B - Membrane Curing of Concrete Structures
No. 77C - Styrene-Butadiene Protective Coating
No. 36A - Set Retarding Admixtures for Concrete
No. 35B — Class "AA" Concrete
No. 37) — Preformed Compression Joint Seal.
No. 77 - Concrete Bridge Deck Finishing Machine
No. 80C Blast Cleaning and Painting Structural Steel (Alkyd System)

Ashland-Greenup Rd over Little Sandy River Sheet 1 of 20

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
GREENUP
ASHLAND-GREENUP
ROAD
AP 45-591-3L
STATION 915+26.97 PROJECT NO. APD-537(23)
BRIDGE NUMBER Const. APD 537(63) DRAWING NO. 17622 SHEET

PLANS PREPARED BY: KROBOTH ENGRS. INC. CONSULTING ENGRS.
FOR: PRESTON & ASSOCIATES CONSULTING ENGRS.

DESIGNED BY: R.P.P. DATE: 2-18-72
CHECKED BY: J.S.B. DATE:
DRAWN BY: D.G.M. DATE: 1-62
CHECKED BY: D.G.M. DATE: 1-62
TRACED BY: DATE:

MICROFILMED-71 5-18-72

BRIDGE

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

KENTUCKY DEPARTMENT OF HIGHWAYS
GREENUP COUNTY
ASHLAND-GREENUP ROAD
ASHLAND-GREENUP RD. OVER LITTLE SANDY RIVER

Detail changes for this Construction Revision include introducing a joint on the center line survey at End Bents and in the Superstructure, and removing Dowels between Existing Piers and New Piers.

By Change Order. The Contractor will completely remove the existing Expansion Dams and adjust the Expansion Rockers to vertical as detailed. Also included in the Change Order is the patching and sealing of open cracks in the existing Piers as directed by the Engineer.

Void Sheets 13, 14 & 17. Add new Detail sheets 13, 16 & 17 and renumber sheets. Revise all sheets except 19 & 20.

REFERENCE & ESTIMATE OF QUANTITIES

Location \ Item	Sheet No.	Concrete Class "A" (Cu.Yds.)	Concrete Class "AA" (Cu.Yds.)	Steel Reinforcement Lbs.	Structural Steel (Lump Sum)	High Str. Handrail (Lin. Ft.)	Cofferdam Piers 2 & 3 (Lump Sum)	6" Drain Pipe (Lin. Ft.)	Structure Excavation Common (Cu. Yds.)	Structure Excavation Solid Rock (Cu. Yds.)	Piling 14 BP 73 Furnish (Lin. Ft.)	Piling 14 BP 73 Drive (Lin. Ft.)	14BP73 with encasement Furnish (Lin. Ft.)	14BP73 with encasement Drive (Lin. Ft.)	Bonded Concrete Overlay (S.Y.)	Welded Steel Wire Fabric 96 in Wide (L.F.)	Remove Concrete Masonry (C.Y.)	Protective Coating Sty-Butad (Gals.)	Protective Coating Linseed Oil (Sq. Yds.)	End Bent Backfill (Cu Yds)	Steel Bm. Guardrail Type 3 (Lin. Ft.)
Title & Quantities	1																				
Notes	2																				
Layout	3																				
Pile Record	4	90.2	62.7																		
End Bent 1	5,6	(90.3)	(62.8)	(13,370)	13,330								2006	2006							
Pier 1	7	293.9		(20,441)	20,149				315				(1943)	(1943)			32	5	15	145	
Pier 2	8,9	500.5		(79,706)	79,401				310		559	550						6			
Pier 3	8,9	500.5		(79,706)	79,401				140	150								6			
Pier 4	7	238.6	62.7	(41,343)	41,051				725	100								6			
End Bent 2	5,6	(90.3)	(62.8)	(13,370)	13,330				245		496	496	1808	1808				6			
Span 1	10-17	100.0	100.0	(24,614)	25,126				315				(171)	(171)			32	5	15	145	
Span 2, 3 & 4	10-17	109.1	(330.1)	(130,677)	136,579			6.5							149	516	(25) 26	3	495		48
Span 5	10-17	539.6	100.0	(24,614)	25,126			26.							751	2600	(125) 129	12	2,485		260
High Strength Handrail	3		109.1			801		6.5							149	515	(25) 26	3	495		48
Construction Elevations	18,19																				
Soundings	20																				
		1653.3	125.4	266,660	186,831								3834	3834							
Sub-total, Substructure		(1653.3)	(125.0)	(267,980)	—	—	Lump Sum	—	2050	250	1055	1055	(3714)	(3714)	—	—	64	34	30	290	—
Sub-total, Superstructure		—	1518	(142,1)	(179,825)	1	801	—	39.	—	—	—	—	—	1049	3630	(175) 181	18	3475	—	356
Total		(1653.3)	(867.7)	(447,761)	1	801	Lump Sum	39	2050	250	1055	1055	(3714)	(3714)	1049	3630	(239)	52	3505	290	356
		1653.3	853.2	453,498									3834	3834			245				

1 Approximate Weight of Structural Steel = (641,500) Lbs. 628,900
(Approximate Weight does not include weld material or overrun.)

BILL OF INCIDENTAL MATERIAL

Item	No.	Size	Location
~~Joint Sealing Compound~~	~~1~~	~~4"x1"x65'-0"~~	~~Exp. Dam at Pier 1~~
~~" " "~~	~~1~~	~~4"x1"x65'-0"~~	~~Exp. Dam at Pier 4~~
(a) Preformed Joint Seal	2	$1\frac{3}{8}$"x1"x92'-0"	At End Bents 1 & 2
(b) Premolded Cork Exp. Jt. Mat'l	4	1'-8"x1"x1'-8"	" " " "
" " " " "	2	6"x1"x(62'-0)+(88'-0)	" " " "
" " " " "	2	7'-0"x1"x26'-0"	" " " "
(c) Four-Bolt Insert Assembly	4	See Detail, Rdwy Plan	At End Bent Wings
Anchor Rods	13	See Sheet 5	End of Existing Bridge
Premolded Cork Exp. Jt. Mat'l	1	1"x14"x363'-8"	Joint on ½ Bridge
" " " " "	58	1"x3½"x1'-1"	Under Guardrail Posts

(a) See Std. Drwg. G-353 F
(b) See Std. Drwg. G-354 C
(c) See Std. Drwg. RBC-001

STANDARD DRAWINGS:

Standard Drawings listed below are the Current Edition and are to be used with these Plans.

AE1-D AW93A H117E G353 F P214 A P214 B-A CD-2A
AR2-D SF2 D H150 B G354 C RBR-001 RBC-001
BJE-002, BJD-001

SPECIAL PROVISIONS:

No. 8B - Linseed Oil Protective Coating
No. 12 — Joint Sealing Compound
No. 30B - Membrane Curing of Concrete Structures
No. 77C - Styrene - Butadiene Protective Coating
No. 36A - Set Retarding Admixtures for Concrete
No. 35 B — Class AA Concrete
No. 37 B — Preformed Compression Joint Seal.
No. 79 - Concrete Bridge Deck Finishing Machine
No. 80B Blast Cleaning and Painting Structural Steel (Alkyd System)

Ashland-Greenup Rd. over Little Sandy River. Sheet 1 of 20

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
GREENUP
ASHLAND-GREENUP
ROAD
STATION 915+26.97 PROJECT NO. APD-537(29) HP 43-531-36

BRIDGE NUMBER Const. APD 537(53) DRAWING NO. 17622 SHEET

DESIGNED BY R.A.P. CHECKED BY D.G.M. DATE 1-68 SHEET 1-68
DETAILED BY J.S.B. CHECKED BY D.G.M. DATE 1-68 REVISED
TRACED BY CHECKED BY DATE REVISED

PLANS PREPARED BY: K. ROBOTH ENGRS., INC. CONSULTING ENGRS.
FOR: PRESTON & ASSOCIATES CONSULTING ENGRS.

Quantities & Bill of Incidental Material DGM 2-15-72

MICROFILMED-72

5-18-72

BRIDGE

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

KENTUCKY DEPARTMENT OF HIGHWAYS
GREENUP COUNTY
ASHLAND-GREENUP ROAD
ASHLAND-GREENUP RD. OVER LITTLE SANDY RIVER

FOR: PRESTON & ASSOCIATES CONSULTING ENGRS.

PLANS PREPARED BY: KROBOTH ENGRS. INC. CONSULTING ENGRS.

DATE ____ REVISED ____ DATE ____ REVISED ____ DATE ____ REVISED ____

DETAILED BY: D.G.M. CHECKED BY: D.G.M. DATE 1-62 REVISED ____
TRACED BY: J.L.B. CHECKED BY: D.G.M. DATE 1-62 REVISED ____
ESTIMATED BY: R.R.P. CHECKED BY: ____ DATE ____ REVISED ____

REFERENCE & ESTIMATE OF QUANTITIES

Location \ Item	Sheet No.	Concrete Class "A" (Cu. Yds.)	Concrete Class "AA" (Cu. Yds.)	Steel Reinforcement (Lbs.)	Structural Steel (Lump Sum)	High Str. Handrail (Lin. Ft.)	Cofferdam Piers 2 & 3 (Lump Sum)	6" Drain Pipe (Lin. Ft.)	Structure Excavation Common (Cu. Yds.)	Structure Excavation Solid Rock (Cu. Yds.)	Piling 14 BP 73 Furnish (Lin. Ft.)	Piling 14 BP 73 Drive (Lin. Ft.)	14 BP 73 with encasement Furnish (Lin. Ft.)	14 BP 73 with encasement Drive (Lin. Ft.)	Bonded Concrete Overlay (S.Y.)	Welded Steel Wire Fabric 36 in Wide (L.F.)	Remove Concrete Masonry (C.Y.)	Protective Coating Sty-Butadiene (Gals.)	Protective Coating Linseed Oil (Sq. Yds.)	End Bent Backfill (Cu. Yds.)	Steel Bm. Guardrail Type 3 (Lin. Ft.)
Title & Quantities	1																				
Notes	2																				
Layout	3																				
Pile Record	4																				
End Bent 1	5,6	90.3	62.8	13,370					315				1943	1943			32	5	15	145	
Pier 1	7	233.3		40,441					310		559	559						6			
Pier 2	8,9	500.5		79,706					140	150								6			
Pier 3	8,9	500.5		79,706					725	100								6			
Pier 4	7	238.6		41,343					245		496	496						6			
End Bent 2	5,6	90.3	62.8	13,370					315				1771	1771			32	5	15	145	
Span 1	10-17		106.0	24,674				6.5							149	515	25	3	495		48
Span 2, 3 & 4	10-17		530.1	130,477				26.							751	2600	125	12	2,485		240
Span 5	10-17		106.0	24,674				6.5							149	515	25	3	495		48
High Strength Handrail	3					801															
Construction Elevations	18,19																				
Soundings	20																				
Sub-total, Substructure		1653.5	125.6	267,956	—	—	Lump Sum	—	2050	250	1055	1055	3714	3714	—	—	64	34	30	290	—
Sub-total, Superstructure		—	742.1	179,825	①	801	—	39.	—	—	—	—	—	—	1049	3630	175	18	3475	—	356
Total		1653.5	867.7	447,781	①	801	Lump Sum	39	2050	250	1055	1055	3714	3714	1049	3630	239	52	3505	290	356

① Approximate Weight of Structural Steel = 641,500. Lbs.
(Approximate Weight does not include weld material or overrun.)

BILL OF INCIDENTAL MATERIAL

Item	No.	Size	Location
Joint Sealing Compound	1	4"x1"x65'-0"	Exp. Dam at Pier 1
" " "	1	4"x1"x65'-0"	Exp. Dam of Pier 4
(a) Preformed Joint Seal	2	1 3/4"x1"x92'-0"	At End Bents 1 & 2
(b) Premolded Cork Exp. Jt. Mat'l	4	1'-8"x1"x1'-8"	" " " " "
" " " " "	2	6"x1"x62'-0"	" " " " "
" " " " "	2	7'-0"x1"x26'-0"	" " " " "
(c) Four Bolt Insert Assembly	4	See Detail, Rdwy Plan.	At End Bent Wings

(a) See Std. Dwg. G-959 F (b) See Std. Dwg. G354C (c) See Std. Dwg. RBC 001

STANDARD DRAWINGS:

Standard Drawings listed below are the Current Edition and are to be used with these plans.

AE1-D AW93A H117E G363F P214A P214-8-A CD-2A
AE2-D SF2D H150B G354C RBR-001 RBC-001

SPECIAL PROVISIONS:

No. 8B - Linseed Oil Protective Coating
No. 12 — Joint Sealing Compound
No. 30B - Membrane Curing of Concrete Structures
No. 71C - Styrene - Butadiene Protective Coating
No. 36A - Set Retarding Admixtures for Concrete.
No. 35B — Class "AA" Concrete
No. 37B — Preformed Compression Joint Seal.
No. 79 - Concrete Bridge Deck Finishing Machine
No. 80B Blast Cleaning and Painting Structural Steel (Alkyd System)

Ashland-Greenup Rd over Little Sandy River Sheet 1 of 20

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
GREENUP
ASHLAND-GREENUP
ROAD AP 45-591-3L
STATION 915+26.97 PROJECT NO. APD-537(23)
BRIDGE NUMBER Const. APD 537 (23) DRAWING NO. 17622 DWGS.

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

GENERAL NOTES

SPECIFICATIONS — THE KENTUCKY DEPARTMENT OF HIGHWAY STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION CURRENT EDITION WITH REVISIONS SHALL APPLY TO THIS PROJECT

DESIGN LOAD — THIS BRIDGE IS DESIGNED FOR HS20 44 LIVE LOAD AS SPECIFIED IN 1965 AASHO SPECIFICATIONS OR ALTERNATE LOADING OF TWO 24 KIP AXLES SPACED FOUR FEET APART WHICHEVER PRODUCES THE GREATER STRESS THIS BRIDGE IS DESIGNED FOR A WIND LOAD BASED ON A WIND VELOCITY OF 84 M.P.H.

DESIGN STRESSES — FOR REINFORCED CONCRETE USE THE FOLLOWING

FOR CLASS "A":		FOR CLASS "AA":	
fs = 20 000 PSI	u (for #9 & #10) = 200 PSI	fs = 20 000 PSI	f'c = 4 000 PSI
fc = 1 200 PSI	u (for #11) = 300 PSI	fc = 1 600 PSI FOR OTHER THAN SLABS	u (for #9 & #10) = 200 PSI
f'c = 3 000 PSI	n = 10	fc = 1 200 PSI FOR DECK SLABS	u (for #11) = 300 PSI
			n = 8

FOR STRUCTURAL STEEL: fs = 20 000 PSI FOR A36 STEEL

BLASTING NEAR EXISTING PIERS — THE BEARING VALUE OF THE ROCK LOCATED UNDER THE PROPOSED BRIDGE PIERS MUST BE PRESERVED FROM DAMAGE BY BLASTING BY CONCUSSION FROM BLASTING OR BY EXCESSIVE BACKBREAKAGE ANY INCREASES IN STRUCTURE COSTS CAUSED BY BLASTING DAMAGE TO THE BRIDGE FOUNDATIONS SHALL BE AN EXPENSE OF THE CONTRACTOR

FOUNDATION PRESSURE — FOOTINGS FOR PIERS 2 & 3 ARE DESIGNED FOR A MAXIMUM PRESSURE OF 6 700 PSF PILES FOR PIERS 1 & 4 ARE DESIGNED FOR A MAXIMUM AXIAL LOAD OF 38 3 TON PER PILES END BENT PILES ARE DESIGNED FOR A MAXIMUM AXIAL LOAD OF 27 6 TONS PER PILE AND A MAXIMUM HORIZONTAL SHEAR OF 1 4 TONS PER PILE THESE MAXIMUMS ARE FOR GROUP I LOADS WITH INCREASES ALLOWED FOR OTHER LOADING GROUPS

CONCRETE — CLASS "AA" CONCRETE IS TO BE USED THROUGHOUT THE SUPERSTRUCTURE EXCEPT IN THE CONCRETE HANDRAIL AND THE PORTIONS OF THE SUBSTRUCTURE ABOVE THE BEARING SEATS CLASS "A" CONCRETE IS TO BE USED IN THE SUBSTRUCTURE BELOW THE BEARING SEATS CLASS "D" CONCRETE IS TO BE USED IN THE CONCRETE HANDRAIL AND IN THE ENCASEMENT OF END BENT PILES

BONDING COMPOUND — AN EPOXY POLYSULFIDE BONDING COMPOUND SHALL BE USED THROUGHOUT THE STRUCTURE FOR BONDING FRESH PLASTIC CONCRETE TO HARDENED CONCRETE THIS OPERATION SHALL BE CARRIED OUT IN STRICT ACCORDANCE WITH AASHO SPECIFICATION M200 63 TYPE B THE COST OF SURFACE PREPARATION SUPPLYING MIXING AND APPLICATION SHALL BE INCLUDED IN THE UNIT PRICE BID FOR BONDED CONCRETE OVERLAY

BONDED CONCRETE OVERLAY — THE CONCRETE OVERLAY SHALL BE A CLASS "AA" STRENGTH CONCRETE USING 1 4 AGGREGATE WITH THE APPROPRIATE CHEMICAL ADMIXTURE THE ADMIXTURES ARE AS FOLLOWS
(1) FOR CONSTRUCTION TEMPERATURES BELOW 50°F
 a. A NON AIR ENTRAINING ADMIXTURE SPECIFICATION TYPE ASTM C 494 63T TYPE A
 b. A LOW SHRINKAGE ACCELERATOR SPECIFICATION TYPE ASTM C 494 63T TYPE C
(2) FOR CONSTRUCTION TEMPERATURES ABOVE 50°F
 a. A RETARDING DENSIFIER SPECIFICATION TYPE ASTM C 494 63T TYPE D

REINFORCEMENT — DIMENSIONS SHOWN FROM 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 1 8 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 ARE 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 INCLUDING EXPANSION BOLTS WASHERS STEEL PINS CAST IRON LEAD PLATES MOLTEN LEAD WELDING AND WELDING MATERIALS FLOOR DRAINS 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 — THE CONTRACTOR SHALL USE STANDARD "H" STRUCTURAL STEEL BEARING PILE 33 LBS SEE STANDARD DRAWINGS P2144 AND P2148 CURRENT EDITION PILING SHALL BE DRIVEN TO REFUSAL OR TO SOLID ROCK TEST PILES SHALL BE DRIVEN WHERE DESIGNATED ON THE PLANS TO DETERMINE THE LENGTH OF PILE REQUIRED ALL TEST PILES SHALL BE ACCURATELY LOCATED SO THAT THEY MAY BE USED IN THE FINISHED STRUCTURE

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

OPTIONAL TYPES OF HANDRAIL — THE CONTRACTOR SHALL PROVIDE THROUGHOUT THE PROJECT AT HIS OPTION EITHER A HIGH STRENGTH ALUMINUM HANDRAIL ACCORDING TO STANDARD DRAWING H111 CURRENT EDITION OR HIGH STRENGTH CONCRETE HANDRAIL ACCORDING TO STANDARD DRAWING H106 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

MATERIALS — ASTM SPECIFICATIONS CURRENT EDITION AS DESIGNATED BELOW SHALL GOVERN THE MATERIALS FURNISHED

A36	STRUCTURAL STEEL AND ANCHOR BOLTS
A48 54	GRAY IRON CASTINGS CLASS 30A
A47 68	WROUGHT IRON PIPE
A108	PINS
A325	HIGH STRENGTH BOLTS NUTS AND WASHERS
B29 55 (1965)	SHEET LEAD AND MOLTEN LEAD
A185	WELDED STEEL WIRE FABRIC
C 494 63T TYPE A	NON AIR ENTRAINING ADMIXTURE FOR CONCRETE OVERLAY
C 494 63T TYPE C	LOW SHRINKAGE ACCELERATOR FOR CONCRETE OVERLAY
C 494 63T TYPE D	RETARDING DENSIFIER FOR CONCRETE OVERLAY
A53 TYPE S GRADE A	SEAMLESS STEEL PIPE

LINSEED OIL PROTECTIVE COATING — LINSEED OIL PROTECTIVE COATING SHALL BE APPLIED IN ACCORDANCE WITH THE SPECIAL PROVISION EXCEPT THAT IT SHALL ONLY BE APPLIED TO THE BRIDGE DECK BETWEEN THE GUTTER LINES AND SHALL NOT BE APPLIED UNTIL AFTER THE STYRENE BUTADIENE PROTECTIVE COATING HAS BEEN APPLIED TO THE CURBS AND PLINTHS

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

COFFERDAMS — COFFERDAMS SHALL BE CONSTRUCTED FOR PIERS 2 AND 3 IN ACCORDANCE WITH THE SPECIFICATIONS AND AS HEREIN DESCRIBED THE CONTRACTOR SHALL SUBMIT DRAWINGS FOR APPROVAL WHICH SHOW HIS PROPOSED METHOD OF COFFERDAM CONSTRUCTION COFFERDAM CONSTRUCTION SHALL NOT START BEFORE THESE SUBMITTED DRAWINGS ARE APPROVED COFFERDAMS SHALL BE WELL BRACED AS NEAR WATER TIGHT AS PRACTICABLE AND SHALL BE CONSTRUCTED TO ALLOW REINFORCED CONCRETE FOOTINGS OF THE DIMENSIONS SHOWN ON THE PLANS COFFERDAMS WHICH ARE TILTED OR MOVED LATERALLY DURING CONSTRUCTION DUE TO ANY CAUSE SHALL BE RIGHTED RESET OR ENLARGED SO AS TO PROVIDE THE CLEARANCE NECESSARY FOR THE CONSTRUCTION OF THE SUBSTRUCTURE AS SHOWN ON THE PLANS AND THIS SHALL BE AT THE SOLE EXPENSE OF THE CONTRACTOR ALL SHEETING SHALL BE REMOVED OR CUT OFF AT THE TOP OF THE REINFORCED CONCRETE FOOTINGS COFFERDAMS FOR PIERS 2 AND 3 WILL BE PAID FOR AT THE LUMP SUM BID FOR "COFFERDAMS" WHICH PAYMENT SHALL INCLUDE AND BE FULL COMPENSATION FOR PLANS FOR FURNISHING HAULING AND PLACING ALL NECESSARY MATERIALS CONSTRUCTION MAINTENANCE UNWATERING REMOVAL OF BRACING REMOVAL OF OR CUTTING OFF OF SHEETING AND FOR ALL LABOR EQUIPMENT TOOLS AND INCIDENTALS NECESSARY TO COMPLETE THIS PART OF THE WORK

ANCHOR BOLT HOLES — HOLES OF DEPTH AND DIMENSIONS SHOWN SHALL BE DRILLED FOR ANCHOR BOLTS OR DOWELS BY THE 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 INCIDENTAL TO AND INCLUDED IN THE LUMP SUM BID FOR STRUCTURAL STEEL

DRAIN DETAILS — FOUNDRY NOTE ALL DRAINS SHALL BE GRAY IRON CASTINGS ASTM A48 CURRENT EDITION CLASS 30A REPORT OF FIELD INSPECTION OF CASTINGS CURRENT FORM SHALL BE SUBMITTED TO THE DIVISION OF MATERIALS WROUGHT IRON PIPE IS TO BE 6" STANDARD WEIGHT 19 POUNDS PER LINEAR FOOT IN ACCORDANCE WITH ASTM A72 CURRENT EDITION SEAMLESS STEEL PIPE IS TO BE 6" STANDARD WEIGHT IN ACCORDANCE WITH ASTM A53 CURRENT EDITION TYPE S GRADE A PIPE FITTINGS AND CONNECTIONS SHALL BE INCLUDED IN THE UNIT PRICE PER LINEAR FOOT OF 6" DRAIN PIPE COMPLETE IN PLACE PIPE AND ALL FITTINGS ARE TO BE GIVEN TWO COATS OF TYPE I RED LEAD PAINT AND TWO COATS OF ALUMINUM PAINT

CONNECTIONS — UNLESS OTHERWISE PROVIDED ON THE PLANS ALL CONNECTIONS SHALL BE 7 8" DIAMETER HIGH STRENGTH BOLTS OPEN HOLES SHALL BE 15 16" DIAMETER ALL JOINTS ARE DESIGNED AS FRICTION TYPE CONNECTIONS INSTALLATION SHALL BE WITH PROPERLY CALLEBRATED WRENCHES WHEN THE WIDTH OF HIGH STRENGTH BOLT HEAD CORRESPONDS TO THAT OF THE HEAVY SEMIFINISHED HEXAGON BOLT ONLY ONE WASHER PER BOLT IS REQUIRED

DIMENSIONS — DIMENSIONS ARE FOR A NORMAL TEMPERATURE OF 60 DEGREES FAHRENHEIT LAYOUT DIMENSIONS ARE HORIZONTAL MEASUREMENTS EXCEPT AS NOTED THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE EXISTING BRIDGE DIMENSIONS AS SHOWN ON THESE PLANS PRIOR TO FABRICATION OF STRUCTURAL STEEL VERIFICATION OF EXISTING BRIDGE DIMENSIONS SHALL BE ACCOMPLISHED BY THE CONTRACTOR WITH FIELD MEASUREMENTS AT HIS EXPENSE

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

CAMBER — WEB PLATES SHALL BE CUT TO PROVIDE FOR PARABOLIC CAMBER OF THE GIRDER 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

SHOP ASSEMBLY — GENERAL REAMING OF HOLES FOR EACH BOLTED SPLICE AND CONNECTION OF THE CONTINUOUS GIRDERS SHALL BE REQUIRED EACH CONTINUOUS GIRDER UNIT SHALL BE COMPLETELY SHOP ASSEMBLED WITH PARTS ADJUSTED TO LINE ELEVATIONS AND CAMBER FIT FOR DRILLING OR REAMING OTHER BOLTED CONNECTIONS TO THE GIRDERS SHALL BE DRILLED OR REAMED IN THE SHOP WITH CONNECTING PARTS ASSEMBLED OR SHALL BE DRILLED OR REAMED TO A METAL TEMPLATE WITHOUT ASSEMBLY GIRDERS SHALL REMAIN ASSEMBLED FOR INSPECTION BY THE DEPARTMENT OF HIGHWAYS INSPECTOR AND ARE TO BE MATCHMARKED WHILE ASSEMBLED CONNECTIONS FOR THE CROSS FRAMES EXPANSION JOINTS AND OTHER MINOR MEMBERS MAY BE PUNCHED OR DRILLED FULL SIZE WITHOUT ASSEMBLY SUBJECT TO THE REQUIREMENTS IN THE SPECIFICATIONS FOR GENERAL REAMING

WELDING MATERIAL — WELDING AND WELDING MATERIAL SHALL CONFORM TO THE AMERICAN WELDING SOCIETY STANDARD SPECIFICATIONS FOR WELDED HIGHWAY AND RAILWAY BRIDGES CURRENT SPECIFICATIONS AND SUBSEQUENT ADOPTED AMENDMENTS, AND KENTUCKY HIGHWAY DEPARTMENT STANDARD DRAWING AWS2 CURRENT EDITION

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

STEEL BEAM GUARDRAIL — GUARDRAIL SHALL BE AS DETAILED ON STD DWG [illegible] CURRENT EDITION EXCEPT AS SHOWN ON SH 17 POST MATERIAL INCLUDING BASE PLATES AND ANCHOR BOLTS ARE TO BE ASTM A36 AND ARE TO BE GALVANIZED AFTER FABRICATION IN CONFORMANCE WITH ASTM A123 63 UNIT PRICE BID PER LINEAL FOOT OF STEEL BEAM GUARDRAIL SHALL INCLUDE FURNISHING AND PLACING OF GUARDRAIL WITH ALL NECESSARY FITTINGS AND ALL LABOR EQUIPMENT TOOLS AND INCIDENTALS NECESSARY TO COMPLETE THE WORK THE PAY LENGTH SHALL BE CENTER TO CENTER OF END POSTS AS SHOWN ON THE PLANS

HOLES FOR EXPANSION BOLTS AND DOWELS — COST OF DRILLING HOLES IN EXISTING CONCRETE FOR EXPANSION BOLTS AND DOWELS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR CONCRETE CLASS "AA" AND THE COST OF PLACING EXPANSION BOLTS AND DOWELS

EXISTING REINFORCING STEEL — COST OF CLEANING CUTTING AND BENDING EXISTING REINFORCING STEEL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR REMOVING CONCRETE MASONRY

PLACING BONDED CONCRETE OVERLAY — THE SURFACE OF THE EXISTING CONCRETE SHALL BE CLEANED OF ALL DISINTEGRATED MATERIAL DUST GREASE OR OTHER FOREIGN PARTICLES A PROPERLY MIXED BONDING COMPOUND SHALL BE APPLIED WITH A BROOM OR OTHER APPROVED MEANS TO FORM A FILM THICKNESS OF APPROXIMATELY 10 MILS THE CONCRETE OVERLAY SHALL BE PLACED IN ACCORDANCE WITH THE SPECIFICATIONS AND WHEN THE BONDING COMPOUND IS PROPERLY CURED AND WHILE IT IS STILL TACKY COST OF FURNISHING ALL MATERIALS EQUIPMENT AND LABOR NECESSARY TO CONSTRUCT THE CONCRETE OVERLAY IS TO BE INCLUDED IN THE UNIT PRICE BID PER SQUARE YARD FOR BONDED CONCRETE OVERLAY

PLACING APPROACH FILLS — FILLS ARE TO BE BUILT BEFORE ANY WORK ON THE STRUCTURE IS STARTED.

CONSTRUCTION PROCEDURE FOR SUBSTRUCTURE
(1) BUILD PIERS 2 & 3 (3) DRIVE PILING FOR END BENTS 1 & 2
(2) DRIVE PILING FOR PIERS 1 & 4 (4) CONSTRUCT PIERS 1 & 4 AND END BENTS 1 & 2

CONSTRUCTION PROCEDURE FOR SUPERSTRUCTURE
(1) CONSTRUCT ENTIRE SUPERSTRUCTURE DESIGNATED AS SOUTHBOUND ON *[illegible] Sheet 2* SHEET 2 INCLUDING METAL GUARDRAIL
(2) AFTER DECK SLAB HAS PROPERLY CURED ROUTE ALL TRAFFIC TO SOUTHBOUND DECK
(3) CONSTRUCT END BENT ADDITIONS ON NORTHBOUND BRIDGE ERECT GIRDERS AND POUR DECK SLAB AS INDICATED ON SHEET

SHOP DETAIL DRAWINGS — THE CONTRACTOR SHALL SUBMIT SHOP DETAIL DRAWINGS TO THE BRIDGE ENGINEER FOR APPROVAL IN ACCORDANCE WITH THE SPECIFICATIONS A SET OF TRACINGS OF THE APPROVED SHOP DETAILS SHALL BECOME THE PROPERTY OF THE DEPARTMENT OF HIGHWAYS BEFORE FINAL PAYMENT IS MADE THE COST OF THESE RECORD DRAWINGS SHALL BE INCLUDED IN THE "LUMP SUM BID" FOR STRUCTURAL STEEL

NOTES

DESIGNED BY [illegible] DETAILED BY [illegible] CHECKED BY [illegible] TRACED BY

REVISED *Construction Procedure for Superstructure* DGM DATE [illegible]

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
GREENUP
ASHLAND - GREENUP
ROAD
STATION *915+26.97* **PROJECT NO.**
BRIDGE NUMBER | DRAWING NO. *17622* | INDEX

BRIDGE

GENERAL NOTES

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

SPECIFICATIONS: THE KENTUCKY DEPARTMENT OF HIGHWAY STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, CURRENT EDITION WITH REVISIONS, SHALL APPLY TO THIS PROJECT.

DESIGN LOAD: THIS BRIDGE IS DESIGNED FOR HS20-44 LIVE LOAD AS SPECIFIED IN 1965 AASHO SPECIFICATIONS OR ALTERNATE LOADING OF TWO 24-KIP AXLES SPACED FOUR FEET APART, WHICHEVER PRODUCES THE GREATER STRESS. THIS BRIDGE IS DESIGNED FOR A WIND LOAD BASED ON A WIND VELOCITY OF 84 m.p.h.

DESIGN STRESSES: FOR REINFORCED CONCRETE USE THE FOLLOWING:

FOR CLASS "A":		FOR CLASS "AA":	
fs = 20,000 PSI	u (for embed.) = 200 PSI	fs = 20,000 PSI	f'c = 4,000 PSI
fc = 1,200 PSI	u (for Σ_o) = 300 PSI	fc = 1,600 PSI FOR OTHER THAN SLABS	u (for embed.) = 200 PSI
f'c = 3,000 PSI	n = 10	fc = 1,200 PSI FOR DECK SLABS	u (for Σ_o) = 300 PSI
			n = 8

FOR STRUCTURAL STEEL: fs = 20,000 PSI FOR A36 STEEL

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

FOUNDATION PRESSURE: FOOTINGS FOR PIERS 2 & 3 ARE DESIGNED FOR A MAXIMUM PRESSURE OF 6,700 PSF. PILES FOR PIERS 1 & 4 ARE DESIGNED FOR A MAXIMUM AXIAL LOAD OF 58.3 TON PER PILES. END BENT PILES ARE DESIGNED FOR A MAXIMUM AXIAL LOAD OF 17.6 TONS PER PILE AND A MAXIMUM HORIZONTAL SHEAR OF 1.4 TONS PER PILE. THESE MAXIMUMS ARE FOR GROUP I LOADS WITH INCREASES ALLOWED FOR OTHER LOADING GROUPS.

CONCRETE: CLASS "AA" CONCRETE IS TO BE USED THROUGHOUT THE SUPERSTRUCTURE EXCEPT IN THE CONCRETE HANDRAIL, AND THE PORTIONS OF THE SUBSTRUCTURE ABOVE THE BEARING SEATS. CLASS "A" CONCRETE IS TO BE USED IN THE SUBSTRUCTURE BELOW THE BEARING SEATS. CLASS "D" CONCRETE IS TO BE USED IN THE CONCRETE HANDRAIL AND IN THE ENCASEMENT OF END BENT PILES.

BONDING COMPOUND: AN EPOXY-POLYSULFIDE BONDING COMPOUND SHALL BE USED THROUGHOUT THE STRUCTURE FOR BONDING FRESH PLASTIC CONCRETE TO HARDENED CONCRETE. THIS OPERATION SHALL BE CARRIED OUT IN STRICT ACCORDANCE WITH AASHO SPECIFICATION M200-63 TYPE B. THE COST OF SURFACE PREPARATION, SUPPLYING, MIXING AND APPLICATION SHALL BE INCLUDED IN THE UNIT PRICE BID FOR BONDED CONCRETE OVERLAY.

BONDED CONCRETE OVERLAY: THE CONCRETE OVERLAY SHALL BE A CLASS "AA" STRENGTH CONCRETE USING 1/4" AGGREGATE WITH THE APPROPRIATE CHEMICAL ADMIXTURE. THE ADMIXTURES ARE AS FOLLOWS:
(1) FOR CONSTRUCTION TEMPERATURES BELOW 50°F.
  a. A NON-AIR-ENTRAINING ADMIXTURE, SPECIFICATION TYPE: ASTM C-494-65T, TYPE A
  b. A LOW SHRINKAGE ACCELERATOR, SPECIFICATION TYPE ASTM C-494-65T, TYPE C.
(2) FOR CONSTRUCTION TEMPERATURES ABOVE 50°F.
  a. A RETARDING DENSIFIER, SPECIFICATION TYPE ASTM C-494-65T TYPE D.

REINFORCEMENT: DIMENSIONS SHOWN FROM 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 7/8" 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 ARE 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, INCLUDING EXPANSION BOLTS, WASHERS, STEEL PINS, CAST IRON, LEAD PLATES, MOLTEN LEAD, WELDING AND WELDING MATERIALS, FLOOR DRAINS, 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: THE CONTRACTOR SHALL USE STANDARD 14" STRUCTURAL STEEL BEARING PILE @ 73 LBS. SEE STANDARD DRAWINGS P214A AND P214B, CURRENT EDITION. PILING SHALL BE DRIVEN TO REFUSAL OR TO SOLID ROCK. TEST PILES SHALL BE DRIVEN WHERE DESIGNATED ON THE PLANS TO DETERMINE THE LENGTH OF PILE REQUIRED. ALL TEST PILES SHALL BE ACCURATELY LOCATED SO THAT THEY MAY BE USED IN THE FINISHED STRUCTURE.

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

OPTIONAL TYPES OF HANDRAIL: THE CONTRACTOR SHALL PROVIDE THROUGHOUT THE PROJECT, AT HIS OPTION, EITHER A HIGH STRENGTH ALUMINUM HANDRAIL ACCORDING TO STANDARD DRAWING H117, CURRENT EDITION OR HIGH STRENGTH CONCRETE HANDRAIL ACCORDING TO STANDARD DRAWING H150, 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.

MATERIALS: ASTM SPECIFICATIONS, CURRENT EDITION, AS DESIGNATED BELOW, SHALL GOVERN THE MATERIALS FURNISHED.

A36-70a	STRUCTURAL STEEL AND ANCHOR BOLTS
A48-64	GRAY IRON CASTINGS (CLASS 30A)
A72-68	WROUGHT IRON PIPE
A108-69	PINS
A325-70a	HIGH STRENGTH BOLTS, NUTS AND WASHERS
B29-55 (1966)	SHEET LEAD AND MOLTEN LEAD
A185-70	WELDED STEEL WIRE FABRIC
C-494-65T TYPE A	NON-AIR-ENTRAINING ADMIXTURE FOR CONCRETE OVERLAY
C-494-65T TYPE C	LOW SHRINKAGE ACCELERATOR FOR CONCRETE OVERLAY
C-494-65T TYPE D	RETARDING DENSIFIER FOR CONCRETE OVERLAY
A53-70 TYPE S GRADE A	SEAMLESS STEEL PIPE

LINSEED OIL PROTECTIVE COATING: LINSEED OIL PROTECTIVE COATING SHALL BE APPLIED IN ACCORDANCE WITH THE SPECIAL PROVISION, EXCEPT THAT IT SHALL ONLY BE APPLIED TO THE BRIDGE DECK BETWEEN THE GUTTER LINES AND SHALL NOT BE APPLIED UNTIL AFTER THE STYRENE-BUTADIENE PROTECTIVE COATING HAS BEEN APPLIED TO THE CURBS AND PLINTHS.

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

COFFERDAMS: COFFERDAMS SHALL BE CONSTRUCTED FOR PIERS 2 AND 3 IN ACCORDANCE WITH THE SPECIFICATIONS AND AS HEREIN DESCRIBED. THE CONTRACTOR SHALL SUBMIT DRAWINGS FOR APPROVAL WHICH SHOW HIS PROPOSED METHOD OF COFFERDAM CONSTRUCTION. COFFERDAM CONSTRUCTION SHALL NOT START BEFORE THESE SUBMITTED DRAWINGS ARE APPROVED. COFFERDAMS SHALL BE WELL BRACED AS NEAR WATER TIGHT AS PRACTICABLE AND SHALL BE CONSTRUCTED TO ALLOW REINFORCED CONCRETE FOOTINGS OF THE DIMENSIONS SHOWN ON THE PLANS. COFFERDAMS WHICH ARE TILTED OR MOVED LATERALLY DURING CONSTRUCTION DUE TO ANY CAUSE SHALL BE RIGHTED, RESET, OR ENLARGED SO AS TO PROVIDE THE CLEARANCE NECESSARY FOR THE CONSTRUCTION OF THE SUBSTRUCTURE AS SHOWN ON THE PLANS, AND THIS SHALL BE AT THE SOLE EXPENSE OF THE CONTRACTOR. ALL SHEETING SHALL BE REMOVED OR CUT OFF AT THE TOP OF THE REINFORCED CONCRETE FOOTINGS. COFFERDAMS FOR PIERS 2 AND 3 WILL BE PAID FOR AT THE LUMP SUM BID FOR "COFFERDAMS", WHICH PAYMENT SHALL INCLUDE AND BE FULL COMPENSATION FOR PLANS, FOR FURNISHING, HAULING AND PLACING ALL NECESSARY MATERIALS, CONSTRUCTION, MAINTENANCE, UNWATERING, REMOVAL OF BRACING, REMOVAL OF OR CUTTING OFF OF SHEETING, AND FOR ALL LABOR, EQUIPMENT, TOOLS AND INCIDENTALS NECESSARY TO COMPLETE THIS PART OF THE WORK.

ANCHOR BOLT HOLES: HOLES OF DEPTH AND DIMENSIONS SHOWN SHALL BE DRILLED FOR ANCHOR BOLTS OR DOWELS BY THE 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 INCIDENTAL TO AND INCLUDED IN THE LUMP SUM BID FOR STRUCTURAL STEEL.

DRAIN DETAILS: FOUNDRY NOTE: ALL DRAINS SHALL BE GRAY IRON CASTINGS, ASTM A48, CURRENT EDITION, CLASS 30A. REPORT OF FIELD INSPECTION OF CASTINGS, CURRENT FORM, SHALL BE SUBMITTED TO THE DIVISION OF MATERIALS. WROUGHT IRON PIPE IS TO BE 6" STANDARD WEIGHT 19 POUNDS PER LINEAR FOOT IN ACCORDANCE WITH ASTM A72, CURRENT EDITION. SEAMLESS STEEL PIPE IS TO BE 6" STANDARD WEIGHT IN ACCORDANCE WITH ASTM A53, CURRENT EDITION, TYPE S, GRADE A. PIPE, FITTINGS, AND CONNECTIONS SHALL BE INCLUDED IN THE UNIT PRICE PER LINEAR FOOT OF 6" DRAIN PIPE COMPLETE IN PLACE. PIPE AND ALL FITTINGS ARE TO BE GIVEN TWO COATS OF TYPE I RED LEAD PAINT AND TWO COATS OF ALUMINUM PAINT.

CONNECTIONS: UNLESS OTHERWISE PROVIDED ON THE PLANS, ALL CONNECTIONS SHALL BE 7/8" DIAMETER HIGH STRENGTH BOLTS. OPEN HOLES SHALL BE 15/16" DIAMETER. ALL JOINTS ARE DESIGNED AS FRICTION TYPE CONNECTIONS. INSTALLATION SHALL BE WITH PROPERLY CALEBRATED WRENCHES. WHEN THE WIDTH OF HIGH STRENGTH BOLT HEAD CORRESPONDS TO THAT OF THE HEAVY SEMIFINISHED HEXAGON BOLT, ONLY ONE WASHER PER BOLT IS REQUIRED.

DIMENSIONS: DIMENSIONS ARE FOR A NORMAL TEMPERATURE OF 60 DEGREES FAHRENHEIT. LAYOUT DIMENSIONS ARE HORIZONTAL MEASUREMENTS EXCEPT AS NOTED. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE EXISTING BRIDGE DIMENSIONS AS SHOWN ON THESE PLANS PRIOR TO FABRICATION OF STRUCTURAL STEEL. VERIFICATION OF EXISTING BRIDGE DIMENSIONS SHALL BE ACCOMPLISHED BY THE CONTRACTOR WITH FIELD MEASUREMENTS AT HIS EXPENSE.

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.

CAMBER: WEB PLATES SHALL BE CUT TO PROVIDE FOR PARABOLIC CAMBER OF THE GIRDER. 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.

SHOP ASSEMBLY: GENERAL REAMING OF HOLES FOR EACH BOLTED SPLICE AND CONNECTION OF THE CONTINUOUS GIRDERS SHALL BE REQUIRED. EACH CONTINUOUS GIRDER UNIT SHALL BE COMPLETELY SHOP ASSEMBLED WITH PARTS ADJUSTED TO LINE, ELEVATIONS, AND CAMBER, FIT FOR DRILLING OR REAMING. OTHER BOLTED CONNECTIONS TO THE GIRDERS SHALL BE DRILLED OR REAMED IN THE SHOP WITH CONNECTING PARTS ASSEMBLED OR SHALL BE DRILLED OR REAMED TO A METAL TEMPLATE WITHOUT ASSEMBLY. GIRDERS SHALL REMAIN ASSEMBLED FOR INSPECTION BY THE DEPARTMENT OF HIGHWAYS INSPECTOR AND ARE TO BE MATCHMARKED WHILE ASSEMBLED. CONNECTIONS FOR THE CROSS FRAMES. EXPANSION JOINTS AND OTHER MINOR MEMBERS MAY BE PUNCHED OR DRILLED FULL SIZE WITHOUT ASSEMBLY, SUBJECT TO THE REQUIREMENTS IN THE SPECIFICATIONS FOR GENERAL REAMING.

WELDING MATERIAL: WELDING AND WELDING MATERIAL SHALL CONFORM TO THE AMERICAN WELDING SOCIETY STANDARD SPECIFICATIONS FOR WELDED HIGHWAY AND RAILWAY BRIDGES, CURRENT SPECIFICATIONS AND SUBSEQUENT ADOPTED AMENDMENTS, AND KENTUCKY HIGHWAY DEPARTMENT STANDARD DRAWING AWS2, CURRENT EDITION.

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.

STEEL BEAM GUARDRAIL: GUARDRAIL SHALL BE AS DETAILED ON STD. DWG. RGR-6, CURRENT EDITION EXCEPT AS SHOWN ON SH. 12. POST MATERIAL INCLUDING BASE PLATES AND ANCHOR BOLTS ARE TO BE ASTM A36-70a AND ARE TO BE GALVANIZED AFTER FABRICATION IN CONFORMANCE WITH ASTM A123-65. UNIT PRICE BID PER LINEAL FOOT OF STEEL BEAM GUARDRAIL SHALL INCLUDE FURNISHING AND PLACING OF GUARDRAIL WITH ALL NECESSARY FITTINGS AND ALL LABOR, EQUIPMENT, TOOLS AND INCIDENTALS NECESSARY TO COMPLETE THE WORK. THE PAY LENGTH SHALL BE CENTER TO CENTER OF END POSTS AS SHOWN ON THE PLANS.

HOLES FOR EXPANSION BOLTS AND DOWELS: COST OF DRILLING HOLES IN EXISTING CONCRETE FOR EXPANSION BOLTS AND DOWELS AND THE COST OF PLACING EXPANSION BOLTS AND DOWELS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR CONCRETE CLASS "AA".

EXISTING REINFORCING STEEL: COST OF CLEANING, CUTTING AND BENDING EXISTING REINFORCING STEEL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR REMOVING CONCRETE MASONRY.

PLACING BONDED CONCRETE OVERLAY: THE SURFACE OF THE EXISTING CONCRETE SHALL BE CLEANED OF ALL DISINTEGRATED MATERIAL, DUST, GREASE OR OTHER FOREIGN PARTICLES. A PROPERLY MIXED BONDING COMPOUND SHALL BE APPLIED WITH A BROOM OR OTHER APPROVED MEANS TO FORM A FILM THICKNESS OF APPROXIMATELY 15 MILS. THE CONCRETE OVERLAY SHALL BE PLACED IN ACCORDANCE WITH THE SPECIFICATIONS AND WHEN THE BONDING COMPOUND IS PROPERLY CURED AND WHILE IT IS STILL TACKY. COST OF FURNISHING ALL MATERIALS, EQUIPMENT AND LABOR NECESSARY TO CONSTRUCT THE CONCRETE OVERLAY IS TO BE INCLUDED IN THE UNIT PRICE BID PER SQUARE YARD FOR BONDED CONCRETE OVERLAY.

PLACING APPROACH FILLS: FILLS ARE TO BE BUILT BEFORE ANY WORK ON THE STRUCTURE IS STARTED.

CONSTRUCTION PROCEDURE FOR SUBSTRUCTURE:
(1) BUILD PIERS 2 & 3 (3) DRIVE PILING FOR END BENTS 1 & 2
(2) DRIVE PILING FOR PIERS 1 & 4 (4) CONSTRUCT PIERS 1 & 4 AND END BENTS 1 & 2

CONSTRUCTION PROCEDURE FOR SUPERSTRUCTURE:
(1) CONSTRUCT ENTIRE SUPERSTRUCTURE DESIGNATED AS SOUTHBOUND ON SHEET 3 INCLUDING MEDIAN GUARDRAIL.
(2) AFTER DECK SLAB HAS PROPERLY CURED ROUTE ALL TRAFFIC TO SOUTHBOUND DECK.
(3) CONSTRUCT END BENT ADDITIONS ON NORTHBOUND BRIDGE. ERECT GIRDERS AN POUR DECK SLAB AS INDICATED ON SHEET

SHOP DETAIL DRAWINGS: THE CONTRACTOR SHALL SUBMIT SHOP DETAIL DRAWINGS TO THE BRIDGE ENGINEER FOR APPROVAL IN ACCORDANCE WITH THE SPECIFICATIONS. A SET OF TRACINGS OF THE APPROVED SHOP DETAILS SHALL BECOME THE PROPERTY OF THE DEPARTMENT OF HIGHWAYS BEFORE FINAL PAYMENT IS MADE. THE COST OF THESE RECORD DRAWINGS SHALL BE INCLUDED IN THE "LUMP SUM BID" FOR STRUCTURAL STEEL.

NOTES

Ashland-Greenup Rd. over Little Sandy River Sheet 2

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
GREENUP
ASHLAND-GREENUP
ROAD
STATION 915+26.97 PROJECT NO.
BRIDGE NUMBER | DRAWING NO. 17622 | INDEX

DESIGNED BY DAP CHECKED BY DGM DATE 12-68 REVISED Construction Procedure for Superstructure DGM 9-8-72
DETAILED BY JSB CHECKED BY DGM DATE 12-68 REVISED
TRACED BY CHECKED BY DATE REVISED

BRIDGE

GENERAL NOTES

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

SPECIFICATIONS: THE KENTUCKY DEPARTMENT OF HIGHWAY STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, CURRENT EDITION WITH REVISIONS, SHALL APPLY TO THIS PROJECT.

DESIGN LOAD: THIS BRIDGE IS DESIGNED FOR HS20-44 LIVE LOAD AS SPECIFIED IN 1965 AASHO SPECIFICATIONS OR ALTERNATE LOADING OF TWO 24-KIP AXLES SPACED FOUR FEET APART, WHICHEVER PRODUCES THE GREATER STRESS. THIS BRIDGE IS DESIGNED FOR A WIND LOAD BASED ON A WIND VELOCITY OF 84 m.p.h.

DESIGN STRESSES: FOR REINFORCED CONCRETE USE THE FOLLOWING:

FOR CLASS "A":		FOR CLASS "AA":	
f_s = 20,000 PSI	u (for embed) = 200 PSI	f_s = 20,000 PSI	f'_c = 4,000 PSI
f_c = 1,200 PSI	u (for Σ_o) = 300 PSI	f_c = 1,600 PSI FOR OTHER THAN SLABS	u (for embed) = 200 PSI
f'_c = 3,000 PSI	n = 10	f_c = 1,200 PSI FOR DECK SLABS	u (for Σ_o) = 300 PSI
			n = 8

FOR STRUCTURAL STEEL: f_s = 20,000 PSI FOR A36 STEEL

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

FOUNDATION PRESSURE: FOOTINGS FOR PIERS 2 & 3 ARE DESIGNED FOR A MAXIMUM PRESSURE OF 6,700 PSF. PILES FOR PIERS 1 & 4 ARE DESIGNED FOR A MAXIMUM AXIAL LOAD OF 58.3 TON PER PILES. END BENT PILES ARE DESIGNED FOR A MAXIMUM AXIAL LOAD OF 17.6 TONS PER PILE AND A MAXIMUM HORIZONTAL SHEAR OF 1.4 TONS PER PILE. THESE MAXIMUMS ARE FOR GROUP I LOADS WITH INCREASES ALLOWED FOR OTHER LOADING GROUPS.

CONCRETE: CLASS "AA" CONCRETE IS TO BE USED THROUGHOUT THE SUPERSTRUCTURE EXCEPT IN THE CONCRETE HANDRAIL, AND THE PORTIONS OF THE SUBSTRUCTURE ABOVE THE BEARING SEATS. CLASS "A" CONCRETE IS TO BE USED IN THE SUBSTRUCTURE BELOW THE BEARING SEATS. CLASS "D" CONCRETE IS TO BE USED IN THE CONCRETE HANDRAIL AND IN THE ENCASEMENT OF END BENT PILES.

BONDING COMPOUND: AN EPOXY-POLYSULFIDE BONDING COMPOUND SHALL BE USED THROUGHOUT THE STRUCTURE FOR BONDING FRESH PLASTIC CONCRETE TO HARDENED CONCRETE. THIS OPERATION SHALL BE CARRIED OUT IN STRICT ACCORDANCE WITH AASHO SPECIFICATION M200-63 TYPE B. THE COST OF SURFACE PREPARATION, SUPPLYING, MIXING AND APPLICATION SHALL BE INCLUDED IN THE UNIT PRICE BID FOR BONDED CONCRETE OVERLAY.

BONDED CONCRETE OVERLAY: THE CONCRETE OVERLAY SHALL BE A CLASS "AA" STRENGTH CONCRETE USING 1/4" AGGREGATE WITH THE APPROPRIATE CHEMICAL ADMIXTURE. THE ADMIXTURES ARE AS FOLLOWS:

(1) FOR CONSTRUCTION TEMPERATURES BELOW 50°F.
- a. A NON-AIR-ENTRAINING ADMIXTURE, SPECIFICATION TYPE: ASTM C-494-65T, TYPE A
- b. A LOW SHRINKAGE ACCELERATOR, SPECIFICATION TYPE ASTM C-494-65T, TYPE C.

(2) FOR CONSTRUCTION TEMPERATURES ABOVE 50°F.
- a. A RETARDING DENSIFIER, SPECIFICATION TYPE ASTM C-494-65T TYPE D.

REINFORCEMENT: DIMENSIONS SHOWN FROM 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 7/8" 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 ARE 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, INCLUDING EXPANSION BOLTS, WASHERS, STEEL PINS, CAST IRON, LEAD PLATES, MOLTEN LEAD, WELDING AND WELDING MATERIALS, FLOOR DRAINS, 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: THE CONTRACTOR SHALL USE STANDARD 14" STRUCTURAL STEEL BEARING PILE @ 73 LBS. SEE STANDARD DRAWINGS P214A AND P214B, CURRENT EDITION. PILING SHALL BE DRIVEN TO REFUSAL OR TO SOLID ROCK. TEST PILES SHALL BE DRIVEN WHERE DESIGNATED ON THE PLANS TO DETERMINE THE LENGTH OF PILE REQUIRED. ALL TEST PILES SHALL BE ACCURATELY LOCATED SO THAT THEY MAY BE USED IN THE FINISHED STRUCTURE.

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

OPTIONAL TYPES OF HANDRAIL: THE CONTRACTOR SHALL PROVIDE THROUGHOUT THE PROJECT, AT HIS OPTION, EITHER A HIGH STRENGTH ALUMINUM HANDRAIL ACCORDING TO STANDARD DRAWING H117, CURRENT EDITION OR HIGH STRENGTH CONCRETE HANDRAIL ACCORDING TO STANDARD DRAWING H150, 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.

MATERIALS: ASTM SPECIFICATIONS, CURRENT EDITION, AS DESIGNATED BELOW, SHALL GOVERN THE MATERIALS FURNISHED.

A36-70a	STRUCTURAL STEEL AND ANCHOR BOLTS
A48-64	GRAY IRON CASTINGS (CLASS 30A)
A72-68	WROUGHT IRON PIPE
A108-69	PINS
A325-70a	HIGH STRENGTH BOLTS, NUTS AND WASHERS
B29-55 (1966)	SHEET LEAD AND MOLTEN LEAD
A185-70	WELDED STEEL WIRE FABRIC
C-494-65T TYPE A	NON-AIR-ENTRAINING ADMIXTURE FOR CONCRETE OVERLAY
C-494-65T TYPE C	LOW SHRINKAGE ACCELERATOR FOR CONCRETE OVERLAY
C-494-65T TYPE D	RETARDING DENSIFIER FOR CONCRETE OVERLAY
A53-70 TYPE S GRADE A	SEAMLESS STEEL PIPE

LINSEED OIL PROTECTIVE COATING: LINSEED OIL PROTECTIVE COATING SHALL BE APPLIED IN ACCORDANCE WITH THE SPECIAL PROVISION, EXCEPT THAT IT SHALL ONLY BE APPLIED TO THE BRIDGE DECK BETWEEN THE GUTTER LINES AND SHALL NOT BE APPLIED UNTIL AFTER THE STYRENE BUTADIENE PROTECTIVE COATING HAS BEEN APPLIED TO THE CURBS AND PLINTHS.

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

COFFERDAMS: COFFERDAMS SHALL BE CONSTRUCTED FOR PIERS 2 AND 3 IN ACCORDANCE WITH THE SPECIFICATIONS AND AS HEREIN DESCRIBED. THE CONTRACTOR SHALL SUBMIT DRAWINGS FOR APPROVAL WHICH SHOW HIS PROPOSED METHOD OF COFFERDAM CONSTRUCTION. COFFERDAM CONSTRUCTION SHALL NOT START BEFORE THESE SUBMITTED DRAWINGS ARE APPROVED. COFFERDAMS SHALL BE WELL BRACED, AS NEAR WATER TIGHT AS PRACTICABLE AND SHALL BE CONSTRUCTED TO ALLOW REINFORCED CONCRETE FOOTINGS OF THE DIMENSIONS SHOWN ON THE PLANS. COFFERDAMS WHICH ARE TILTED OR MOVED LATERALLY DURING CONSTRUCTION DUE TO ANY CAUSE SHALL BE RIGHTED, RESET, OR ENLARGED SO AS TO PROVIDE THE CLEARANCE NECESSARY FOR THE CONSTRUCTION OF THE SUBSTRUCTURE AS SHOWN ON THE PLANS, AND THIS SHALL BE AT THE SOLE EXPENSE OF THE CONTRACTOR. ALL SHEETING SHALL BE REMOVED OR CUT OFF AT THE TOP OF THE REINFORCED CONCRETE FOOTINGS. COFFERDAMS FOR PIERS 2 AND 3 WILL BE PAID FOR AT THE LUMP SUM BID FOR "COFFERDAMS", WHICH PAYMENT SHALL INCLUDE AND BE FULL COMPENSATION FOR PLANS, FOR FURNISHING, HAULING AND PLACING ALL NECESSARY MATERIALS, CONSTRUCTION, MAINTENANCE, UNWATERING, REMOVAL OF BRACING, REMOVAL OF OR CUTTING OFF OF SHEETING, AND FOR ALL LABOR, EQUIPMENT, TOOLS AND INCIDENTALS NECESSARY TO COMPLETE THIS PART OF THE WORK.

ANCHOR BOLT HOLES: HOLES OF DEPTH AND DIMENSIONS SHOWN SHALL BE DRILLED FOR ANCHOR BOLTS OR DOWELS BY THE 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 INCIDENTAL TO AND INCLUDED IN THE LUMP SUM BID FOR STRUCTURAL STEEL.

DRAIN DETAILS: FOUNDRY NOTE — ALL DRAINS SHALL BE GRAY IRON CASTINGS, ASTM A48, CURRENT EDITION, CLASS 30A. REPORT OF FIELD INSPECTION OF CASTINGS, CURRENT FORM, SHALL BE SUBMITTED TO THE DIVISION OF MATERIALS. WROUGHT IRON PIPE IS TO BE 6" STANDARD WEIGHT 19 POUNDS PER LINEAR FOOT IN ACCORDANCE WITH ASTM A72, CURRENT EDITION. SEAMLESS STEEL PIPE IS TO BE 6" STANDARD WEIGHT IN ACCORDANCE WITH ASTM A53, CURRENT EDITION, TYPE S, GRADE A. PIPE, FITTINGS, AND CONNECTIONS SHALL BE INCLUDED IN THE UNIT PRICE PER LINEAR FOOT OF 6" DRAIN PIPE COMPLETE IN PLACE. PIPE AND ALL FITTINGS ARE TO BE GIVEN TWO COATS OF TYPE I RED LEAD PAINT AND TWO COATS OF ALUMINUM PAINT.

CONNECTIONS: UNLESS OTHERWISE PROVIDED ON THE PLANS, ALL CONNECTIONS SHALL BE 7/8" DIAMETER HIGH STRENGTH BOLTS. OPEN HOLES SHALL BE 15/16" DIAMETER. ALL JOINTS ARE DESIGNED AS FRICTION TYPE CONNECTIONS. INSTALLATION SHALL BE WITH PROPERLY CALEBRATED WRENCHES. WHEN THE WIDTH OF HIGH STRENGTH BOLT HEAD CORRESPONDS TO THAT OF THE HEAVY SEMIFINISHED HEXAGON BOLT, ONLY ONE WASHER PER BOLT IS REQUIRED.

DIMENSIONS: DIMENSIONS ARE FOR A NORMAL TEMPERATURE OF 60 DEGREES FAHRENHEIT. LAYOUT DIMENSIONS ARE HORIZONTAL MEASUREMENTS EXCEPT AS NOTED. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE EXISTING BRIDGE DIMENSIONS AS SHOWN ON THESE PLANS PRIOR TO FABRICATION OF STRUCTURAL STEEL. VERIFICATION OF EXISTING BRIDGE DIMENSIONS SHALL BE ACCOMPLISHED BY THE CONTRACTOR WITH FIELD MEASUREMENTS AT HIS EXPENSE.

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.

CAMBER: WEB PLATES SHALL BE CUT TO PROVIDE FOR PARABOLIC CAMBER OF THE GIRDER. 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.

SHOP ASSEMBLY: GENERAL REAMING OF HOLES FOR EACH BOLTED SPLICE AND CONNECTION OF THE CONTINUOUS GIRDERS SHALL BE REQUIRED. EACH CONTINUOUS GIRDER UNIT SHALL BE COMPLETELY SHOP ASSEMBLED WITH PARTS ADJUSTED TO LINE, ELEVATIONS, AND CAMBER, FIT FOR DRILLING OR REAMING. OTHER BOLTED CONNECTIONS TO THE GIRDERS SHALL BE DRILLED OR REAMED IN THE SHOP WITH CONNECTING PARTS ASSEMBLED OR SHALL BE DRILLED OR REAMED TO A METAL TEMPLATE WITHOUT ASSEMBLY. GIRDERS SHALL REMAIN ASSEMBLED FOR INSPECTION BY THE DEPARTMENT OF HIGHWAYS INSPECTOR AND ARE TO BE MATCHMARKED WHILE ASSEMBLED. CONNECTIONS FOR THE CROSS FRAMES. EXPANSION JOINTS AND OTHER MINOR MEMBERS MAY BE PUNCHED OR DRILLED FULL SIZE WITHOUT ASSEMBLY, SUBJECT TO THE REQUIREMENTS IN THE SPECIFICATIONS FOR GENERAL REAMING.

WELDING MATERIAL: WELDING AND WELDING MATERIAL SHALL CONFORM TO THE AMERICAN WELDING SOCIETY STANDARD SPECIFICATIONS FOR WELDED HIGHWAY AND RAILWAY BRIDGES, CURRENT SPECIFICATIONS AND SUBSEQUENT ADOPTED AMENDMENTS, AND KENTUCKY HIGHWAY DEPARTMENT STANDARD DRAWING AWS2, CURRENT EDITION.

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.

STEEL BEAM GUARDRAIL: GUARDRAIL SHALL BE AS DETAILED ON STD. DWG. RBR-001 CURRENT EDITION EXCEPT AS SHOWN ON SH. 12. POST MATERIAL INCLUDING BASE PLATES AND ANCHOR BOLTS ARE TO BE ASTM A36-70a AND ARE TO BE GALVANIZED AFTER FABRICATION IN CONFORMANCE WITH ASTM A123-65. UNIT PRICE BID PER LINEAL FOOT OF STEEL BEAM GUARDRAIL SHALL INCLUDE FURNISHING AND PLACING OF GUARDRAIL WITH ALL NECESSARY FITTINGS AND ALL LABOR, EQUIPMENT, TOOLS AND INCIDENTALS NECESSARY TO COMPLETE THE WORK. THE PAY LENGTH SHALL BE CENTER TO CENTER OF END POSTS AS SHOWN ON THE PLANS.

HOLES FOR EXPANSION BOLTS AND DOWELS: COST OF DRILLING HOLES IN EXISTING CONCRETE FOR EXPANSION BOLTS AND DOWELS AND THE COST OF PLACING EXPANSION BOLTS AND DOWELS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR CONCRETE CLASS "AA".

EXISTING REINFORCING STEEL: COST OF CLEANING, CUTTING AND BENDING EXISTING REINFORCING STEEL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR REMOVING CONCRETE MASONRY.

PLACING BONDED CONCRETE OVERLAY: THE SURFACE OF THE EXISTING CONCRETE SHALL BE CLEANED OF ALL DISINTEGRATED MATERIAL, DUST, GREASE OR OTHER FOREIGN PARTICLES. A PROPERLY MIXED BONDING COMPOUND SHALL BE APPLIED WITH A BROOM OR OTHER APPROVED MEANS TO FORM A FILM THICKNESS OF APPROXIMATELY 15 MILS. THE CONCRETE OVERLAY SHALL BE PLACED IN ACCORDANCE WITH THE SPECIFICATIONS AND WHEN THE BONDING COMPOUND IS PROPERLY CURED AND WHILE IT IS STILL TACKY. COST OF FURNISHING ALL MATERIALS, EQUIPMENT AND LABOR NECESSARY TO CONSTRUCT THE CONCRETE OVERLAY IS TO BE INCLUDED IN THE UNIT PRICE BID PER SQUARE YARD FOR BONDED CONCRETE OVERLAY.

PLACING APPROACH FILLS: FILLS ARE TO BE BUILT BEFORE ANY WORK ON THE STRUCTURE IS STARTED.

CONSTRUCTION PROCEDURE FOR SUBSTRUCTURE:
(1) BUILD PIERS 2 & 3
(2) DRIVE PILING FOR PIERS 1 & 4
(3) DRIVE PILING FOR END BENTS 1 & 2
(4) CONSTRUCT PIERS 1 & 4 AND END BENTS 1 & 2

CONSTRUCTION PROCEDURE FOR SUPERSTRUCTURE:
(1) POUR CONCRETE SLAB ON RIGHT HALF OF BRIDGE FIRST.
(2) CONFINE TRAFFIC TO 28' NEXT TO RIGHT CURB ON RIGHT HALF OF BRIDGE AFTER CONCRETE IS PROPERLY CURED.
(3) POUR CONCRETE LEFT OF ℄ AFTER TRAFFIC IS ON RIGHT SIDE (26' NEXT TO RIGHT CURB) OF NEW DECK.

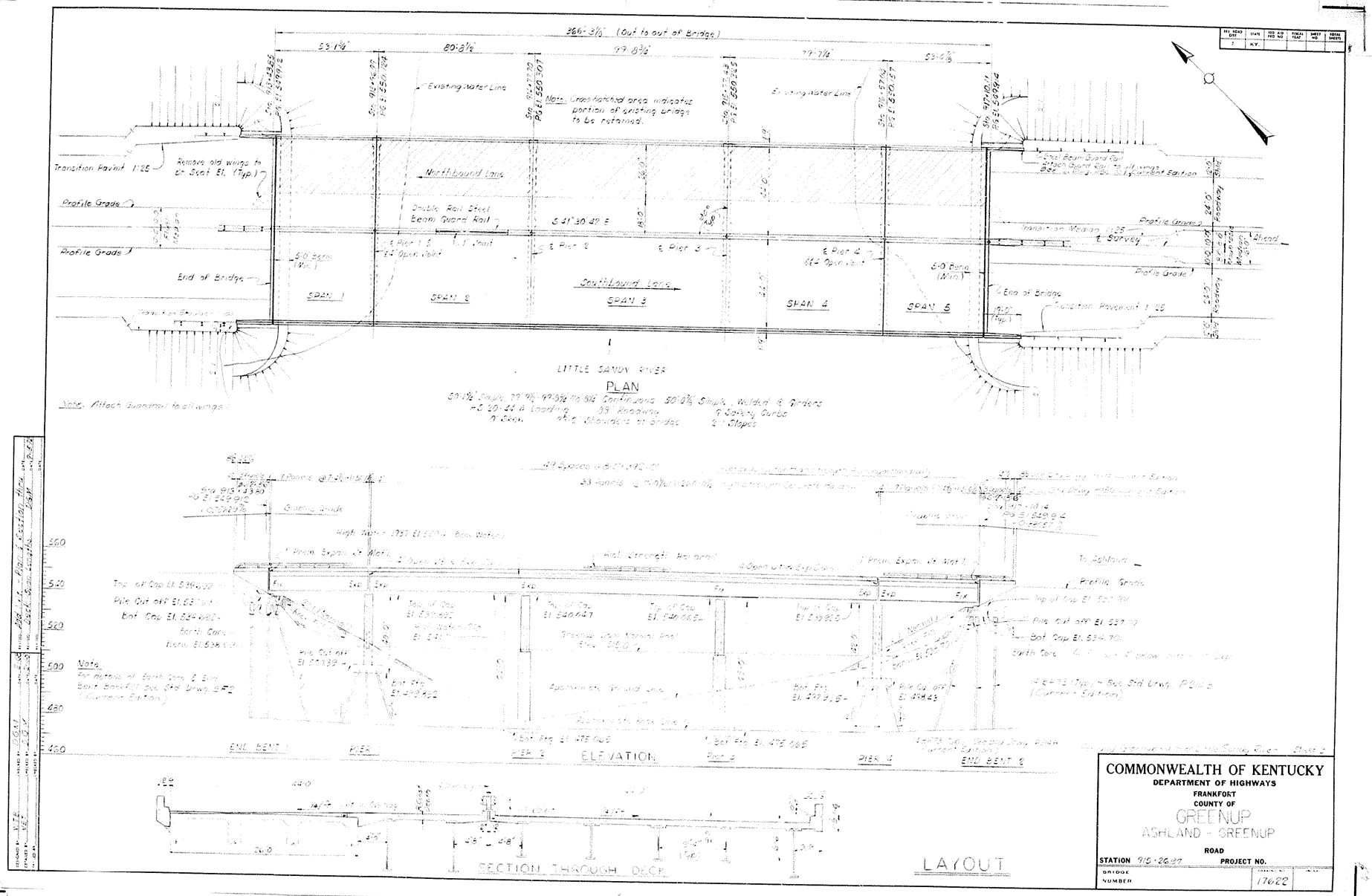
SHOP DETAIL DRAWINGS: THE CONTRACTOR SHALL SUBMIT SHOP DETAIL DRAWINGS TO THE BRIDGE ENGINEER FOR APPROVAL IN ACCORDANCE WITH THE SPECIFICATIONS. A SET OF TRACINGS OF THE APPROVED SHOP DETAILS SHALL BECOME THE PROPERTY OF THE DEPARTMENT OF HIGHWAYS BEFORE FINAL PAYMENT IS MADE. THE COST OF THESE RECORD DRAWINGS SHALL BE INCLUDED IN THE "LUMP SUM BID" FOR STRUCTURAL STEEL.

Ashland-Greenup Rd over Little Sandy River Sheet 2

NOTES

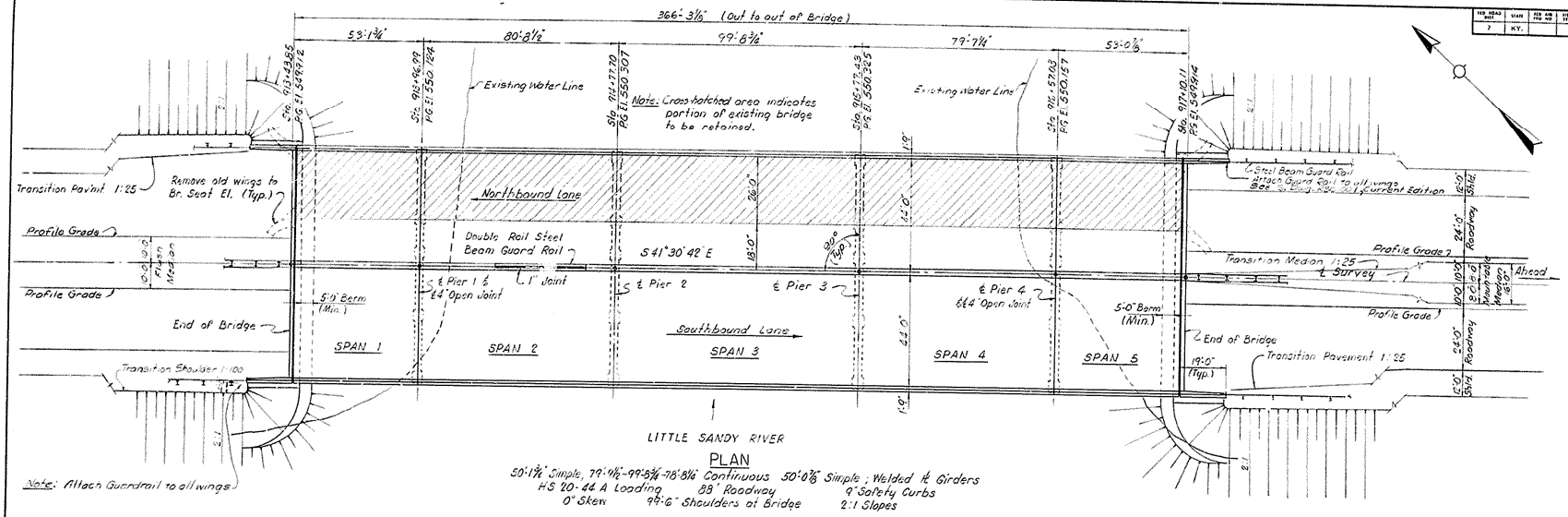
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
GREENUP
ASHLAND - GREENUP
ROAD
STATION 915+26.97 PROJECT NO.
BRIDGE NUMBER — DRAWING NO. 17622 — INDEX

DESIGNED BY PAP — CHECKED BY DGM — DATE 12-69 — REVISED — DATE
DETAILED BY JSB — CHECKED BY DGM — DATE 12-68 — REVISED — DATE
TRACED BY — CHECKED BY — DATE — REVISED — DATE


366'-3½" (Out to out of Bridge)
Existing Water Line
Note: Crosshatched area indicates portion of existing bridge to be retained.
Transition Pavmt 1:25
Remove old wings to at Grade El. (Typ.)
Profile Grade
Northbound Lane
Double Rail Steel Beam Guard Rail
End of Bridge
Southbound Lane
SPAN 1
SPAN 2
SPAN 3
SPAN 4
SPAN 5
LITTLE SANDY RIVER
PLAN
Note: Attach Guardrail to all wings.
ENG. BENT 1
PIER 1
PIER 2
PIER 3
PIER 4
ENG. BENT 2
ELEVATION
SECTION THROUGH DECK
LAYOUT
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
GREENUP
ASHLAND - GREENUP
ROAD
STATION 915+26.07
PROJECT NO.
BRIDGE NUMBER
17622

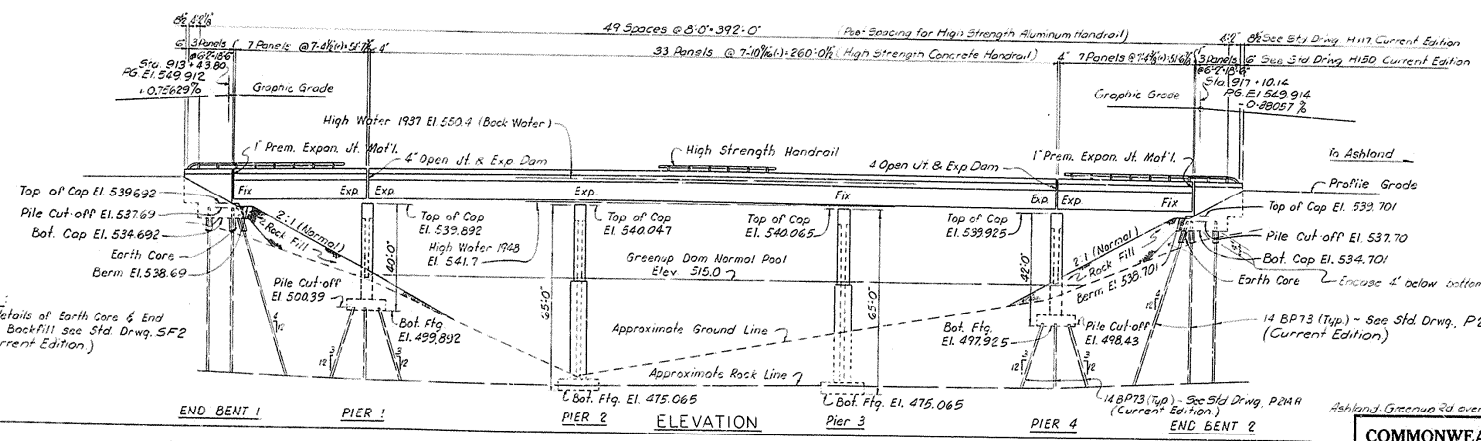
BRIDGE

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

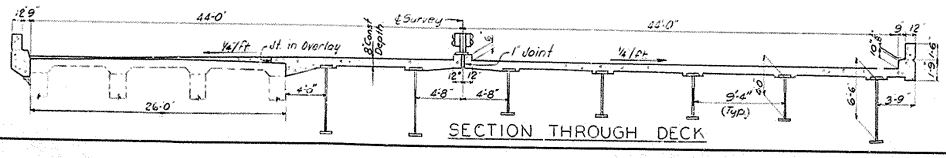


PLAN

50'-1 3/8" Simple, 79'-1 1/8"-99'-5 3/8"-78'-8 1/8" Continuous 50'-0 7/8" Simple ; Welded H Girders
HS 20-44 A Loading 88' Roadway 9" Safety Curbs
0° Skew 9'-6" Shoulders at Bridge 2:1 Slopes



ELEVATION



SECTION THROUGH DECK

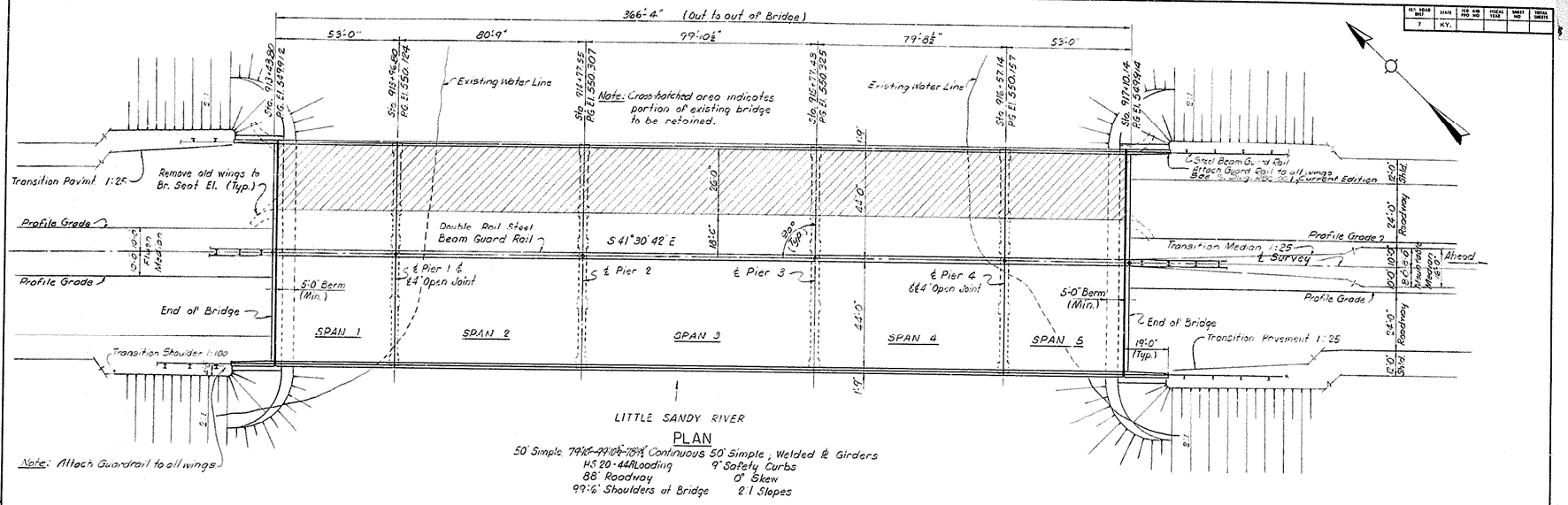
LAYOUT

Ashland-Greenup Rd over Little Sandy River Sheet 3

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
GREENUP
ASHLAND - GREENUP
ROAD
STATION 915+26.97 **PROJECT NO.**
BRIDGE NUMBER
DRAWING NO. 17622
INDEX

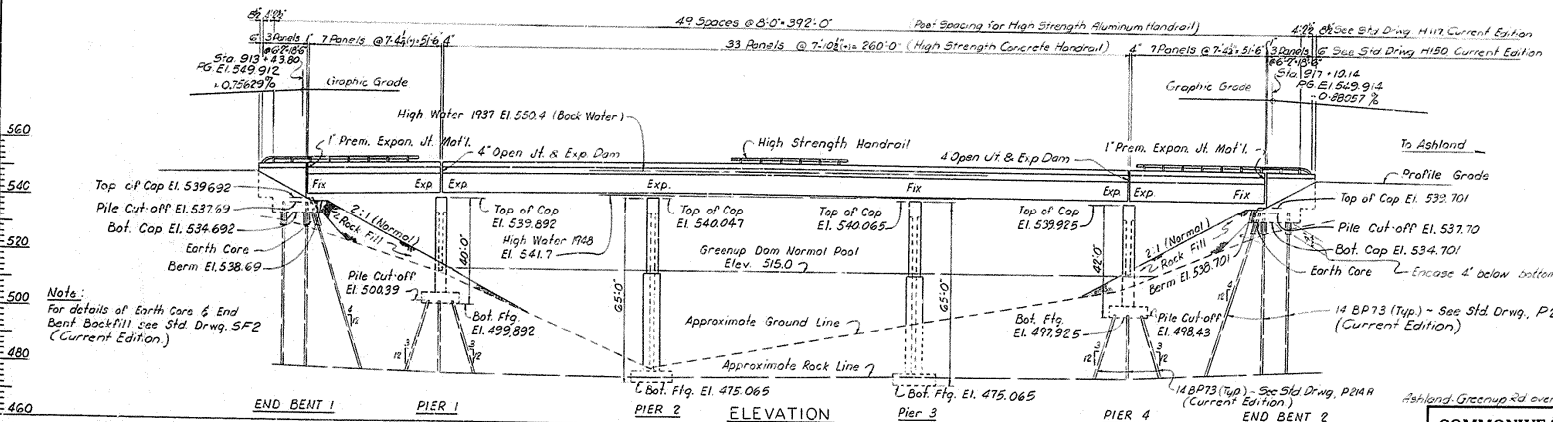
DRAWN BY D.G.M.	DATE 2-58	REVISED Add Lt. - Plan & Section Thru	DATE 2-58
CHECKED BY D.G.M.	DATE 2-58	REVISED Deck-Span Lengths	DATE 2-58
DESIGNED BY W.T.R.	CHECKED BY	REVISED Add	DATE
DETAILED BY W.E.F.	CHECKED BY	REVISED	DATE
TRACED BY	CHECKED BY	REVISED	DATE

BRIDGE



PLAN

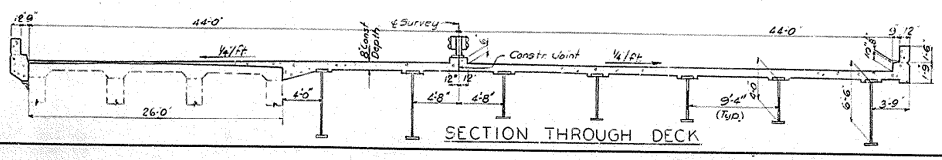
50' Simple, 79'-10'-99'-10'-79'-8½" Continuous 50' Simple ; Welded ℄ Girders
HS 20-44 Loading 9" Safety Curbs
88' Roadway 0° Skew
99'-6" Shoulders at Bridge 2:1 Slopes



Note: For details of Earth Core & End Bent Backfill see Std. Drwg. SF2 (Current Edition.)

ELEVATION

Ashland-Greenup Rd over Little Sandy River Sheet 3



SECTION THROUGH DECK

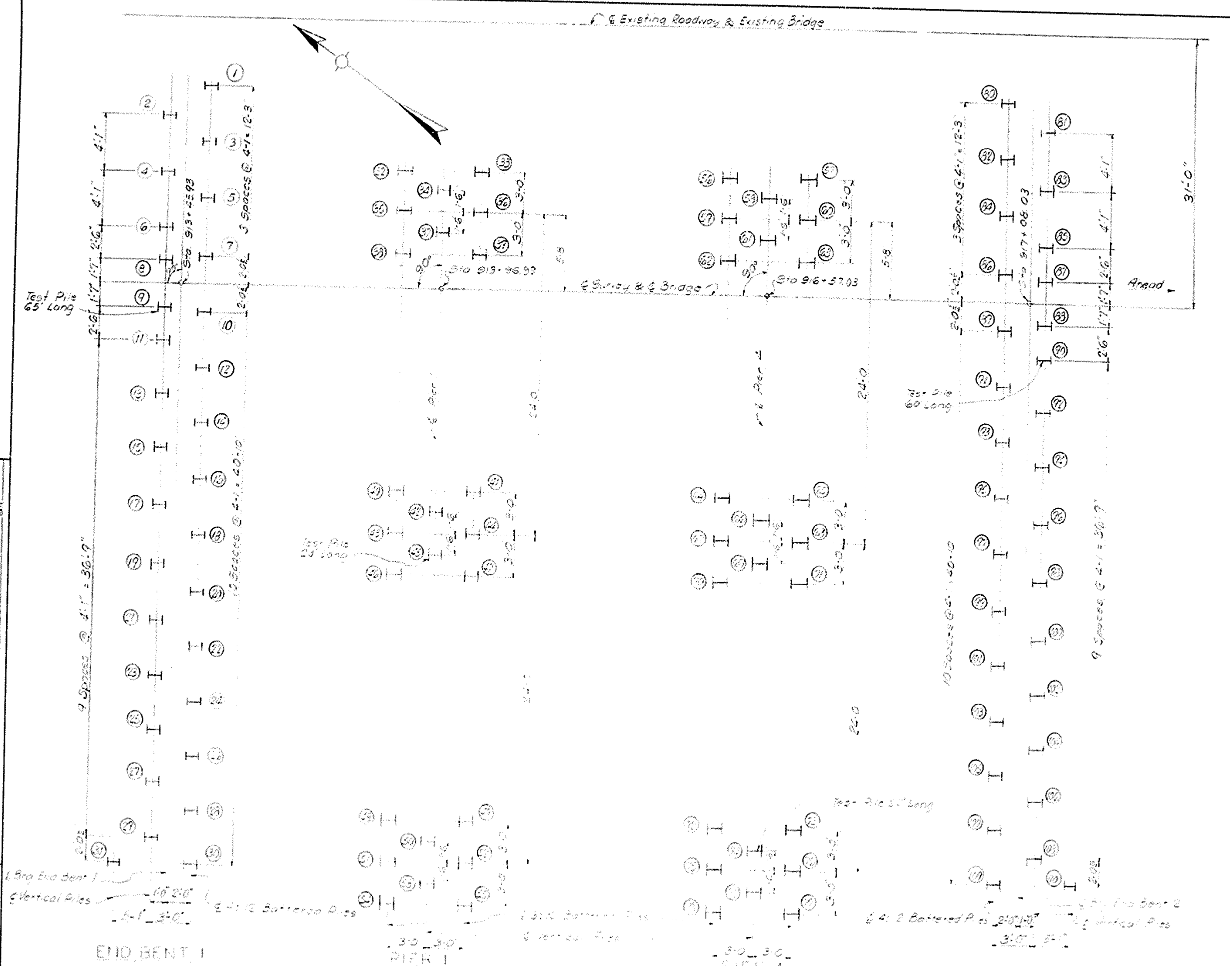
LAYOUT

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
GREENUP
ASHLAND - GREENUP
ROAD

STATION 915+26.37 PROJECT NO.

BRIDGE NUMBER — DRAWING NO. 17622

DESIGNED BY: WTR CHECKED BY: D.G.M.
DETAILED BY: WET CHECKED BY: D.G.M.
TRACED BY: DATE: 2-66 REVISED: DATE: REVISED: DATE: REVISED: DATE:



PILE LAYOUT

(See Std. Dwgs. P214 & P214 E (Current Editions))

NOTE:

THIS PILE RECORD DOES NOT REPLACE OTHER RECORDS OF PILES REQUIRED 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 THE FINISHED STRUCTURE BELOW CUT-OFF ELEVATION AND ARE NOT NECESSARILY PAY ITEMS.

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

Pile No.	Cut off Elevation	Tip of Pile Elevation	Pile Length (Lin. Ft.)	Calc. Brg. Capacity (Tons)
END BENT 1				
1	537.69			
2	"			
3	"			
4	"			
5	"			
6	"			
7	"			
8	"			
9	"			
10	"			
11	"			
12	"			
13	"			
14	"			
15	"			
16	"			
17	"			
18	"			
19	"			
20	"			
21	"			
22	"			
23	"			
24	"			
25	"			
26	"			
27	"			
28	"			
29	"			
30	"			
31	"			
PIER 1				
32	500.39			
33	"			
34	"			
35	"			
36	"			
37	"			
38	"			
39	"			
40	"			
41	"			
42	"			
43	"			
44	"			
45	"			
46	"			
47	"			
48	"			
49	"			
50	"			
51	"			
52	"			
53	"			
54	"			
55	"			

Pile No.	Cut off Elevation	Tip of Pile Elevation	Pile Length (Lin. Ft.)	Calc. Brg. Capacity (Tons)
PIER 4				
56	498.43			
57	"			
58	"			
59	"			
60	"			
61	"			
62	"			
63	"			
64	"			
65	"			
66	"			
67	"			
68	"			
69	"			
70	"			
71	"			
72	"			
73	"			
74	"			
75	"			
76	"			
77	"			
78	"			
79	"			
END BENT 2				
80	537.70			
81	"			
82	"			
83	"			
84	"			
85	"			
86	"			
87	"			
88	"			
89	"			
90	"			
91	"			
92	"			
93	"			
94	"			
95	"			
96	"			
97	"			
98	"			
99	"			
100	"			
101	"			
102	"			
103	"			
104	"			
105	"			
106	"			
107	"			
108	"			
109	"			
110				

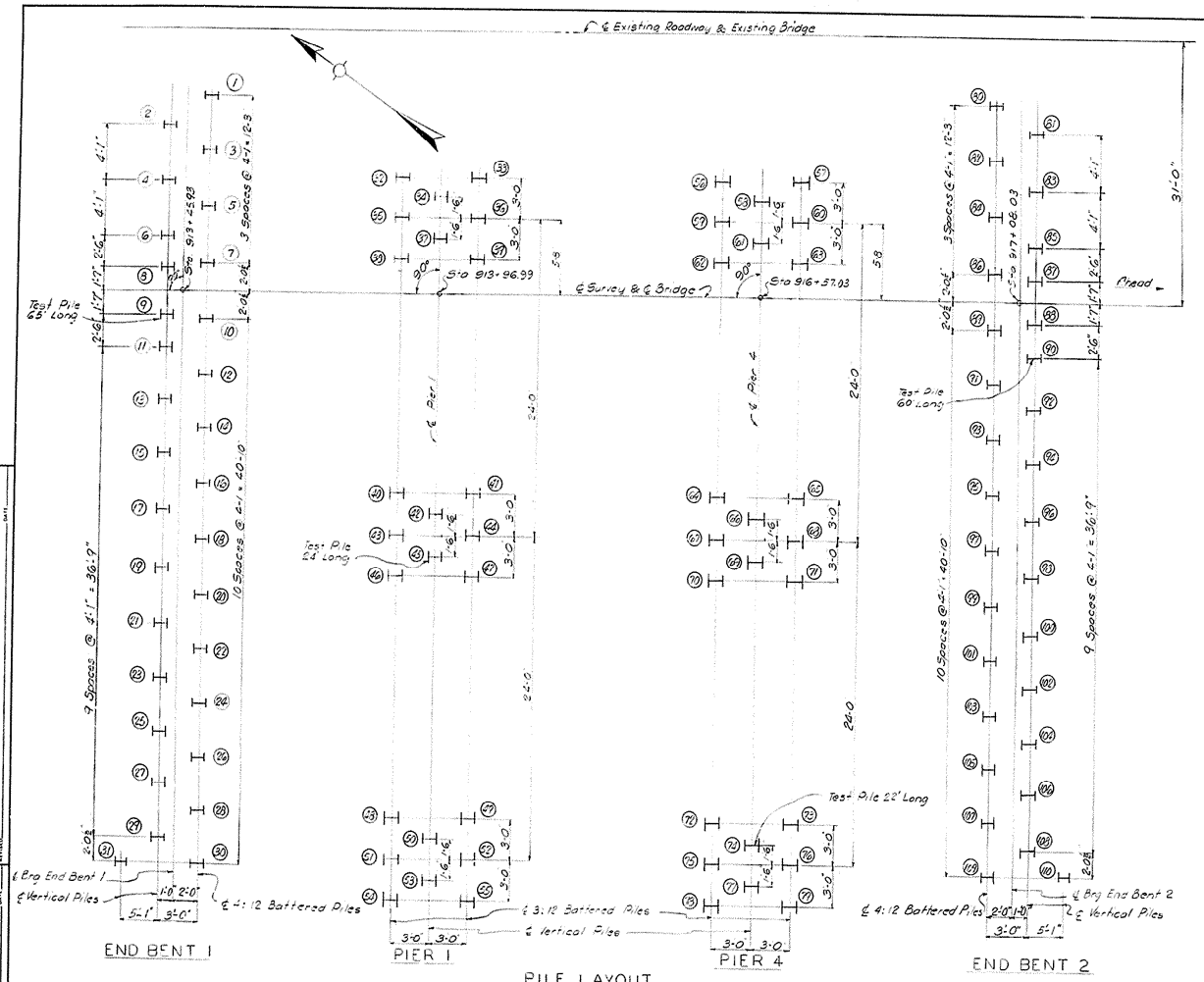
Add Pile at End Bents — DGM

Ashland-Greenup Rd. over Little Sandy River Sheet 4

PILE RECORD

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
GREENUP
ASHLAND-GREENUP
ROAD
STATION 915+26.97 PROJECT NO.
BRIDGE NUMBER
DRAWING NO. 17622
INDEX

BRIDGE



PILE LAYOUT
(All Piles 14 BP 73)
See Std Dwgs P214 A8 P214 B (Current Editions)

NOTE:
THIS PILE RECORD DOES NOT REPLACE OTHER RECORDS OF PILES REQUIRED 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 THE FINISHED STRUCTURE BELOW CUT-OFF ELEVATION AND ARE NOT NECESSARILY PAY ITEMS.

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

Pile No.	Cut off Elevation	Tip of Pile Elevation	Pile Length (Lin. Ft.)	Calc. Brg Capacity (Tons)
END BENT 1				
1	537.69			
2	"			
3	"			
4	"			
5	"			
6	"			
7	"			
8	"			
9	"			
10	"			
11	"			
12	"			
13	"			
14	"			
15	"			
16	"			
17	"			
18	"			
19	"			
20	"			
21	"			
22	"			
23	"			
24	"			
25	"			
26	"			
27	"			
28	"			
29	"			
30	"			
31	"			
PIER 1				
32	500.39			
33	"			
34	"			
35	"			
36	"			
37	"			
38	"			
39	"			
40	"			
41	"			
42	"			
43	"			
44	"			
45	"			
46	"			
47	"			
48	"			
49	"			
50	"			
51	"			
52	"			
53	"			
54	"			
55	"			

Pile No.	Cut off Elevation	Tip of Pile Elevation	Pile Length (Lin. Ft.)	Calc. Brg Capacity (Tons)
PIER 4				
56	498.43			
57	"			
58	"			
59	"			
60	"			
61	"			
62	"			
63	"			
64	"			
65	"			
66	"			
67	"			
68	"			
69	"			
70	"			
71	"			
72	"			
73	"			
74	"			
75	"			
76	"			
77	"			
78	"			
79	"			
END BENT 2				
80	537.70			
81	"			
82	"			
83	"			
84	"			
85	"			
86	"			
87	"			
88	"			
89	"			
90	"			
91	"			
92	"			
93	"			
94	"			
95	"			
96	"			
97	"			
98	"			
99	"			
100	"			
101	"			
102	"			
103	"			
104	"			
105	"			
106	"			
107	"			
108	"			
109	"			
110				

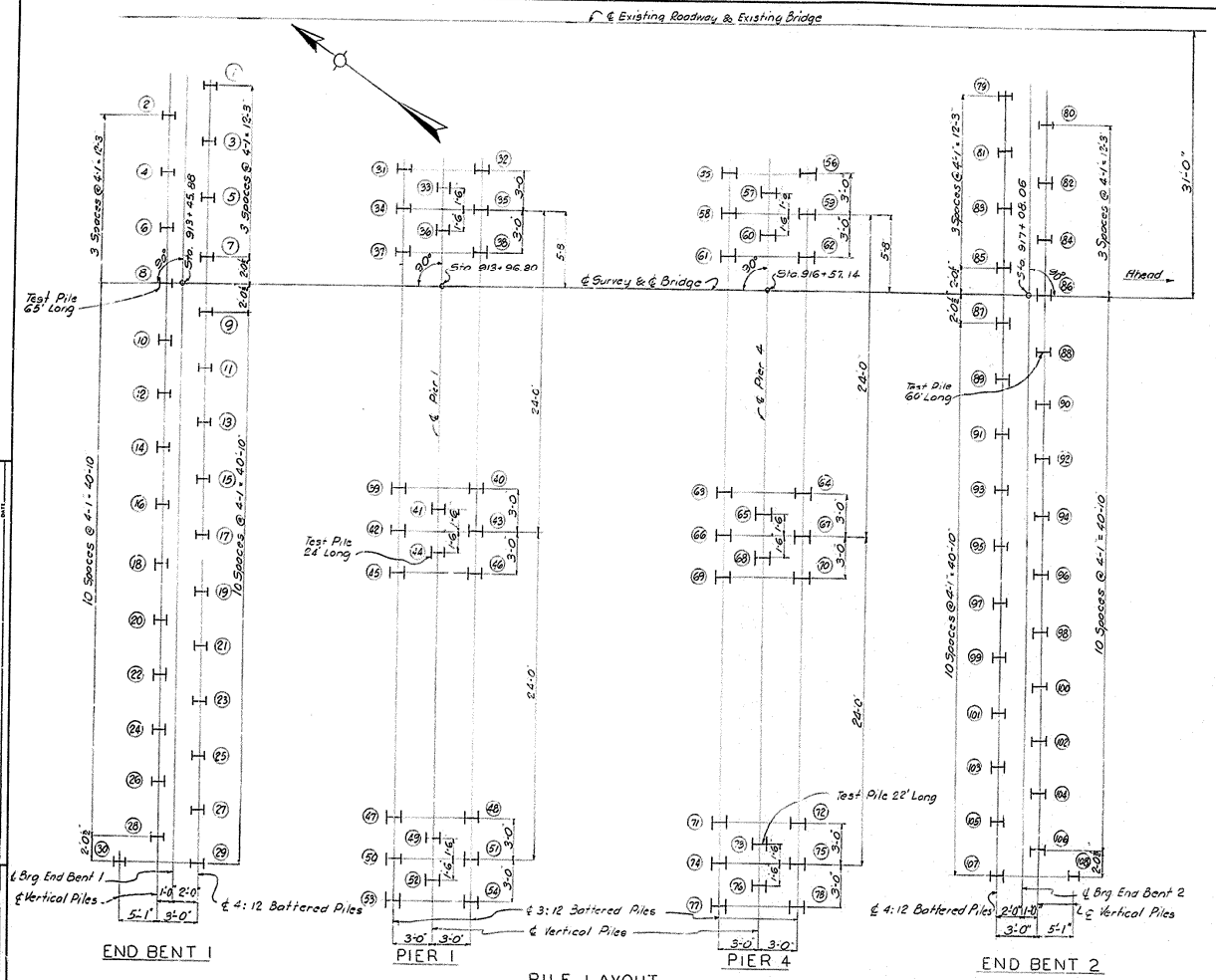
Ashland Greenup Rd over Little Sandy River Sheet 4

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
GREENUP
ASHLAND-GREENUP
ROAD
STATION 915+26.97 PROJECT NO.
BRIDGE NUMBER
DRAWING NO. 17622
INDEX

PILE RECORD

DESIGNED BY DCP	CHECKED BY DCM	DATE 8-26-72	REVISED Add Pile at End Bents
DRAWN BY J.S.R.	CHECKED BY DCM	DATE 8-26-72	REVISED Central Structure
TRACED BY		DATE	REVISED

BRIDGE



PILE LAYOUT
(All Piles 14 BP 73*)
See Std Drwgs P214 A & P214 B (Current Editions)

NOTE:
THIS PILE RECORD DOES NOT REPLACE OTHER RECORDS OF PILES REQUIRED 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 THE FINISHED STRUCTURE BELOW CUT-OFF ELEVATION AND ARE NOT NECESSARILY PAY ITEMS.

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

Pile No.	Cut off Elevation	Tip of Pile Elevation	Pile Length (Lin. Ft.)	Calc. Brg Capacity (Tons)
END BENT 1				
1	537.69			
2	"			
3	"			
4	"			
5	"			
6	"			
7	"			
8	"			
9	"			
10	"			
11	"			
12	"			
13	"			
14	"			
15	"			
16	"			
17	"			
18	"			
19	"			
20	"			
21	"			
22	"			
23	"			
24	"			
25	"			
26	"			
27	"			
28	"			
29	"			
30	"			
PIER 1				
31	500.39			
32	"			
33	"			
34	"			
35	"			
36	"			
37	"			
38	"			
39	"			
40	"			
41	"			
42	"			
43	"			
44	"			
45	"			
46	"			
47	"			
48	"			
49	"			
50	"			
51	"			
52	"			
53	"			
54	"			

Pile No.	Cut off Elevation	Tip of Pile Elevation	Pile Length (Lin. Ft.)	Calc. Brg Capacity (Tons)
PIER 4				
55	498.43			
56	"			
57	"			
58	"			
59	"			
60	"			
61	"			
62	"			
63	"			
64	"			
65	"			
66	"			
67	"			
68	"			
69	"			
70	"			
71	"			
72	"			
73	"			
74	"			
75	"			
76	"			
77	"			
78	"			
END BENT 2				
79	537.70			
80	"			
81	"			
82	"			
83	"			
84	"			
85	"			
86	"			
87	"			
88	"			
89	"			
90	"			
91	"			
92	"			
93	"			
94	"			
95	"			
96	"			
97	"			
98	"			
99	"			
100	"			
101	"			
102	"			
103	"			
104	"			
105	"			
106	"			
107	"			
108	"			

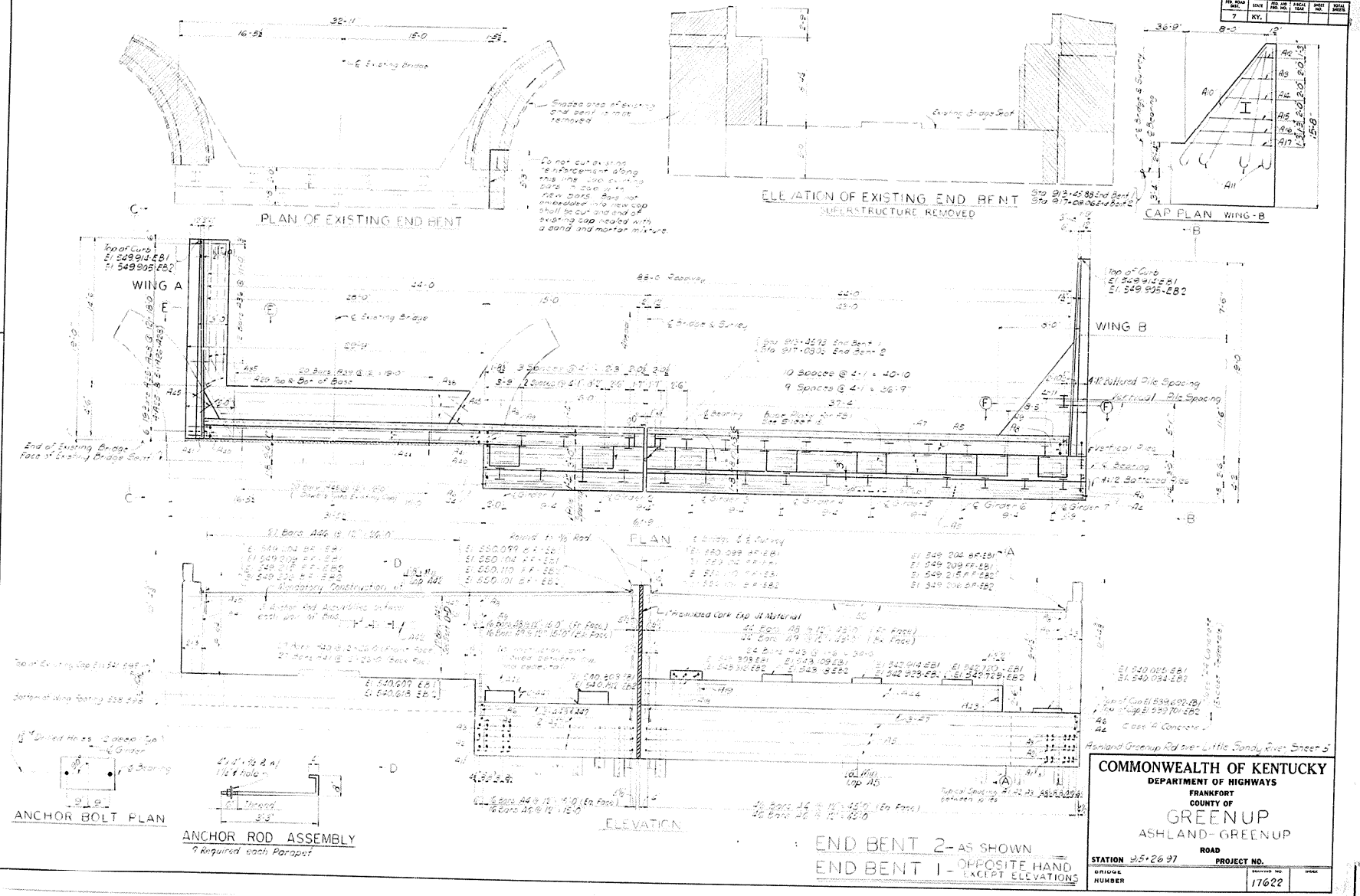
Ashland-Greenup Rd. over Little Sandy River Sheet 4

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
GREENUP
ASHLAND-GREENUP
ROAD
STATION 915+66.97 PROJECT NO.
BRIDGE NUMBER
DRAWING NO. 17622
DOCK

PILE RECORD

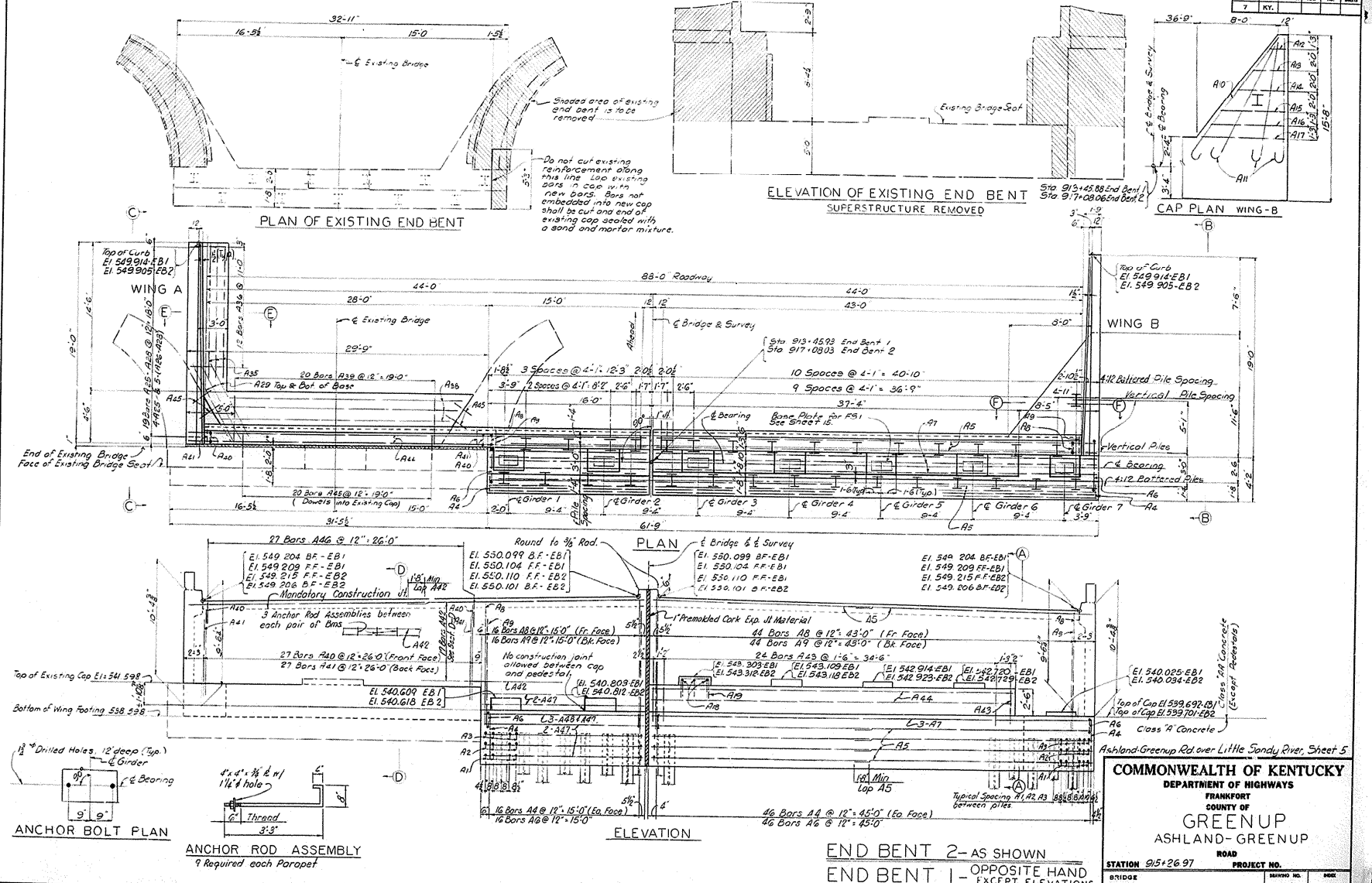
DESIGNED BY RAP
DETAILED BY J.S.B.
TRACED BY
CHECKED BY D.G.M.
CHECKED BY D.G.M.
CHECKED BY
DATE 12-66 REVISED
DATE 8-68 REVISED
DATE REVISED
DATE REVISED

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



BRIDGE

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



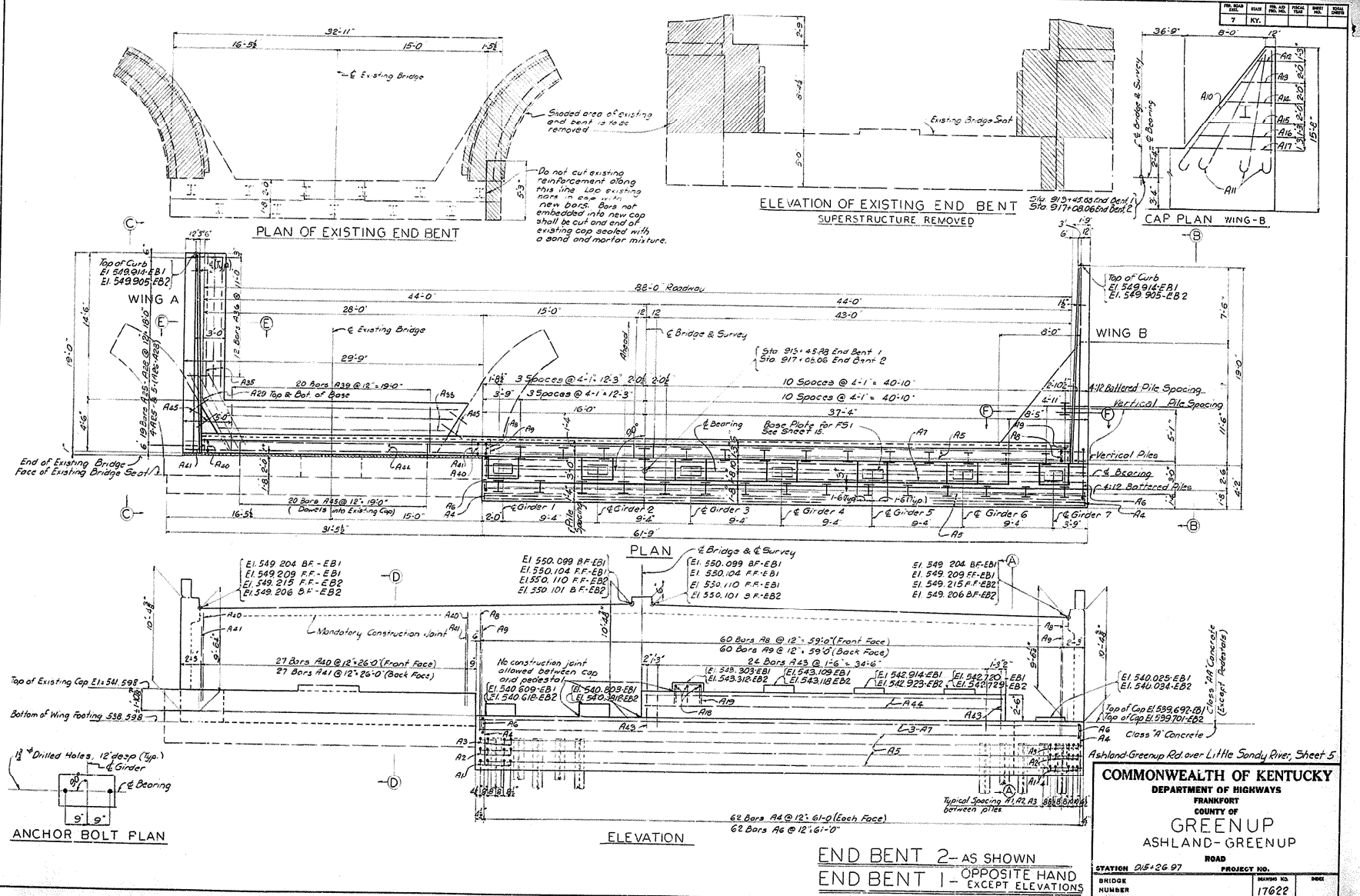
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
GREENUP
ASHLAND-GREENUP
ROAD
STATION 915+26.97 **PROJECT NO.**
BRIDGE NUMBER — **DRAWING NO.** 17622 — **INDEX**

Rehabilitate Vehicular Bridge Deck & Replace Approach Rail to existing Bridge, Control Section Road

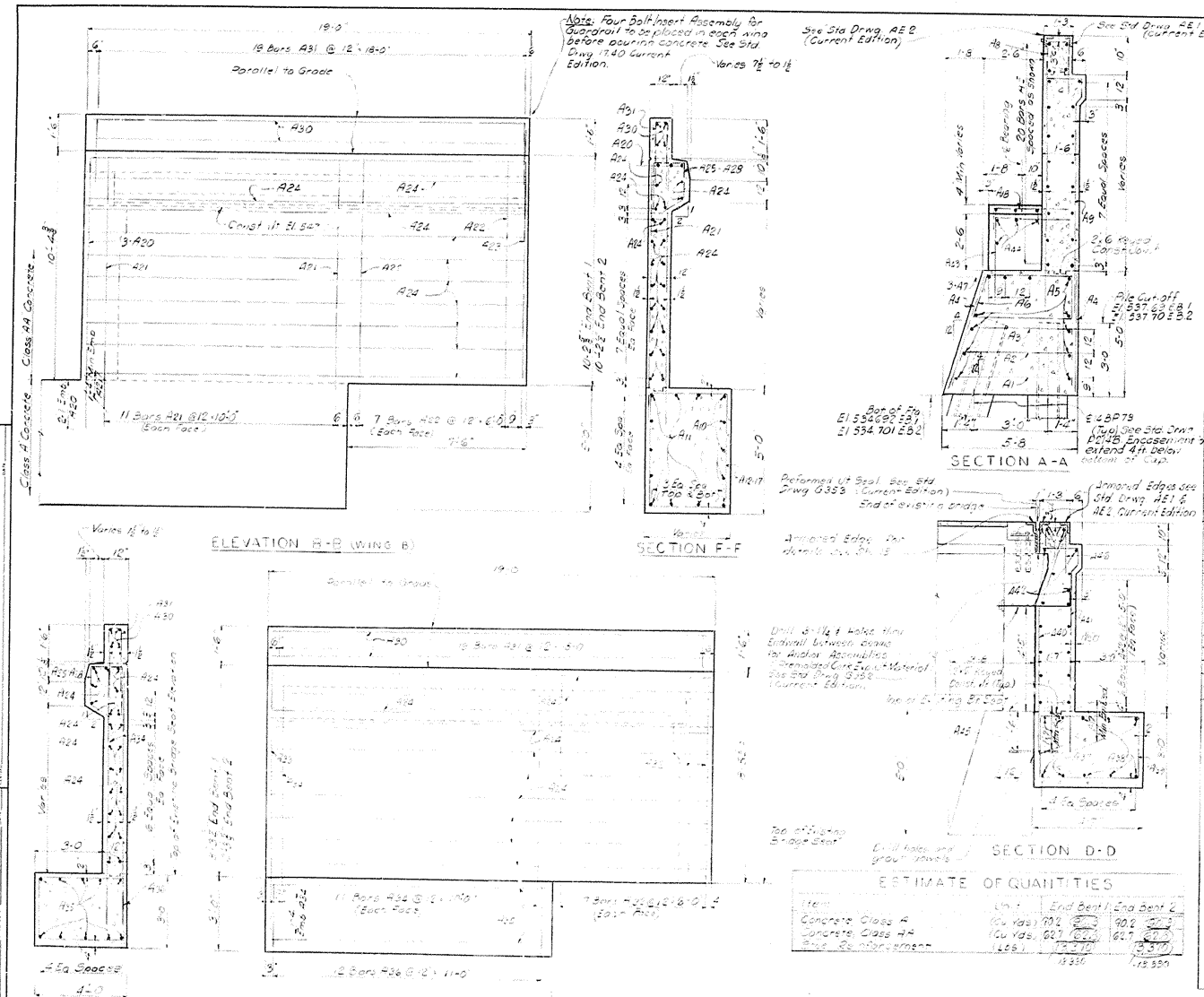
DESIGNED BY: P.A.D. DATE: 7-86 — CHECKED BY: D.G.M. DATE: 7-86
DETAILED BY: J.S.B. — CHECKED BY: D.G.M. DATE: 9/15/86
TRACED BY: — CHECKED BY: DATE:
REVISED: — DATE: — REVISED: — DATE:

BRIDGE

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



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

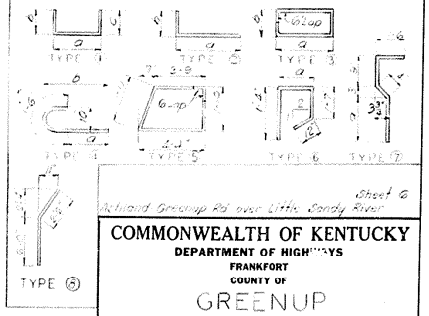


BILL OF REINFORCEMENT (EACH END BENT)

Mark	Type	No	Size	Length Ft	Length In	Location	a Ft	a In	b Ft	b In	c Ft	c In
A1	1	57	#5	5	7	Cap	5	1	0	4	0	4
A2		5	"	5	3	"	4	8	0	4	0	4
A3		6	"	5	4	"	4	5	0	4	0	4
A4	Str	124	"	4	8	"						
A5	"	38	"	23	9	Cap & Parapet						
A6	5	62	"	10	7	Cap						
A7	Str	3	#8	25	5	"						
A8	11	60	#6	14	2	Parapet	1	0	1	9	11	9
A9	17	60	"	11	11	"	9	5				
A10	14	5	#8	15	4	Wing B	13	10	14	3		
A11	"	2	"	13	1	"	11	7	12	0		
A12	13	1	#5	12	9	"	1	6	4	6		
A13	"	1	"	16	1	"	3	2	4	6		
A14	"	1	"	19	3	"	4	9	4	6		
A15	"	1	"	22	3	"	6	3	4	6		
A16	"	1	"	24	5	"	7	4	4	6		
A17	"	1	"	26	3	"	8	3	4	6		
A18	12	21	"	5	2	Pedestal	3	2	2	1		
A19	1	21	"	6	11	"	2	9	2	2	2	2
A20	12	5	#6	30	5	Wing B	12	4	18	6		
A21	Str	22	#5	11	7	"						
A22		16	"	10	0	"						
A23		2	"	11	7	"						
A24		43	"	18	9	Wing A & B						
A25	6	8	"	5	1	Curbs	1	4				
A26	6	10	"	4	11	"	1	2				
A27	6	10	"	5	9	"	1	0				
A28	6	10	"	4	8	"	0	11				
A29	Str	6	"	8	0	Wing footing Dowel						
A30	"	5	#4	18	9	"						
A31	7	38	#5	5	11	"	0	9	2	8	2	8
A32	Str	4	"	8	2	Wing A						
A33	"	2	"	9	8	"						
A34		22	"	9	7	"						
A35		10	"	14	6	"						
A36	3	12	"	13	1	"	3	8	2	6		
A37	Str	4	"	19	6	Parapet Base						
A38		6	"	23	0	"						
A39	2	20	"	14	3	"	4	3	2	6		
A40	15	27	#6	5	2	Parapet						
A41	2	27	#6	10	2	"	7	8				
A42	Str	34	#5	23	7	"						
A43	9	26	#5	6	11	Pedestal	3	5	3	2		
A44	Str	4	#4	37		"						
A45		20	#11	2	0	Parapet Dowels						
A46	16	27	#6	3	5	Parapet	1	0	0	10	1	11
A47	Str	13	#5	15	3	Cap						
A48	Str	3	#3	15	3	"						

ESTIMATE OF QUANTITIES

Item	Unit	End Bent 1	End Bent 2
Concrete Class A	(Cu Yds)	90.2	90.2
Concrete Class HA	(Cu Yds)	62.7	62.7
Bridge Reinforcement	(Lbs)	13,210	13,370

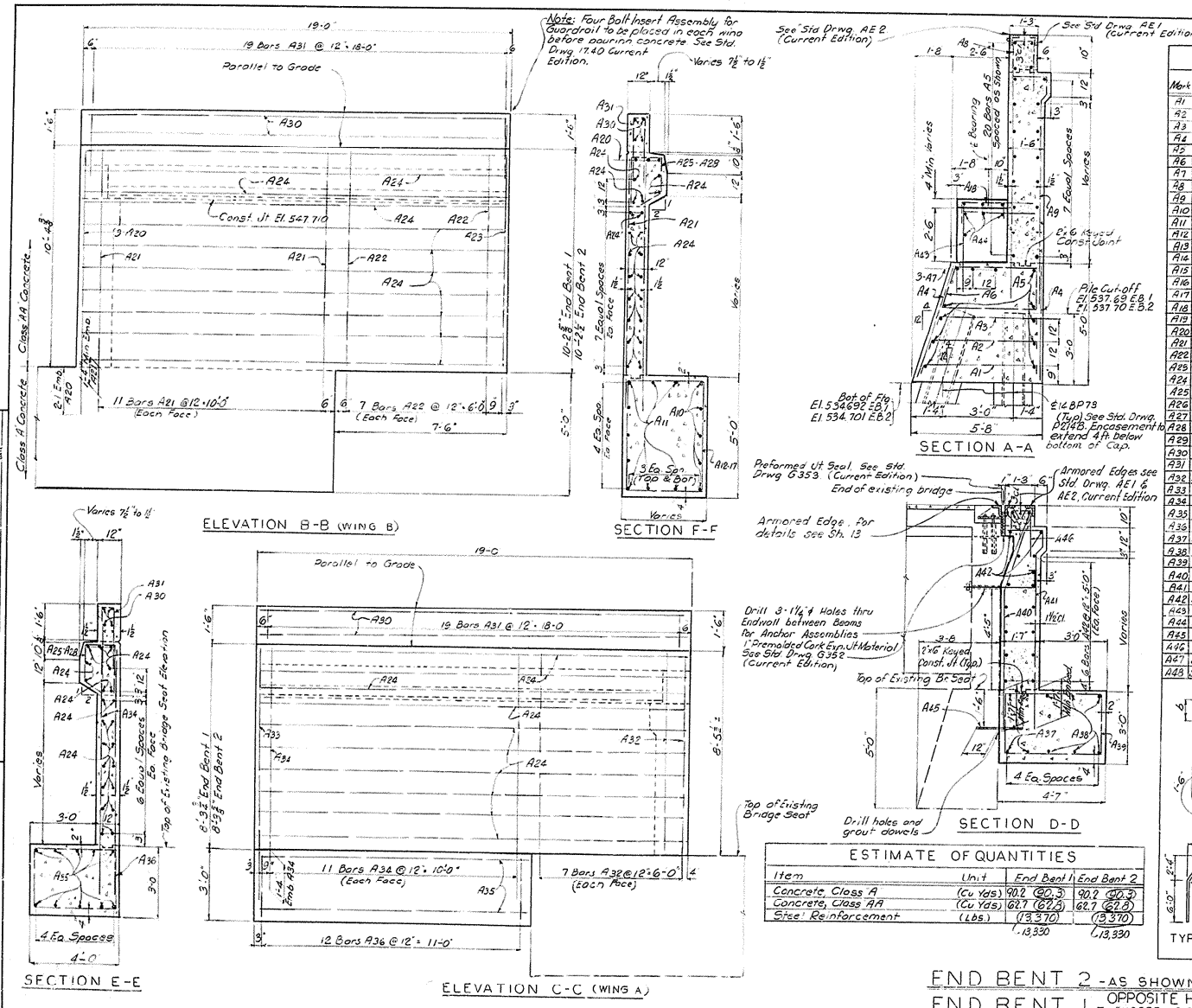


END BENT 2 - AS SHOWN
END BENT 1 - OPPOSITE HAND EXCEPT AS SHOWN

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
GREENUP
ASHLAND-GREENUP
ROAD
STATION 915+26.97
PROJECT NO.
BRIDGE NUMBER
DRAWING NO. 17622
INDEX

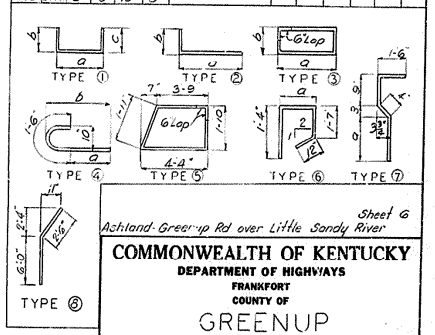
BRIDGE

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



BILL OF REINFORCEMENT (EACH END BENT)

Mark	Type	No	Size	Length Ft	Length In	Location	a Ft	a In	b Ft	b In	c Ft	c In
A1	1	59	#5	5	7	Cap	5	1	0	4	0	4
A2	"	59	#5	5	3	"	4	9	0	4	0	4
A3	"	59	#5	4	11	"	4	5	0	4	0	4
A4	Str	124	#5	4	9	"						
A5	"	38	#5	23	9	Cap & Parapet						
A6	5	62	#5	12	7	Cap						
A7	Str	3	#8	45	5							
A8	1	60	#8	14	2	Parapet	1	0	1	9	11	9
A9	1	60	#8	11	11		9	5				
A10	4	5	#8	15	4	Wing B	13	10	14	3		
A11	"	9	#8	13	1	" "	11	7	12	0		
A12	3	1	#5	13	9	" "	1	6	4	6		
A13	"	1	#5	16	1	" "	3	2	4	6		
A14	"	1	#5	19	3	" "	4	9	4	6		
A15	"	1	#5	22	3	" "	6	3	4	6		
A16	"	1	#5	24	5	" "	7	4	4	6		
A17	"	1	#5	26	3	" "	8	3	4	6		
A18	2	21	#4	5	2	Pedestal	3	2	2	1		
A19	1	21	#5	6	11	"	2	9	2	2	2	2
A20	2	3	#8	30	8	Wing B	12	4	18	6		
A21	Str	22	#5	11	7	"						
A22	"	16	#5	10	0	"						
A23	"	2	#5	11	7	"						
A24	"	43	#5	18	9	Wing A & B						
A25	6	8	#5	5	1	Curbs	1	4				
A26	6	10	#5	4	11	"	1	2				
A27	6	10	#5	5	9	"	1	0				
A28	6	10	#5	4	8	"	0	11				
A29	Str	6	#5	8	0	Wing Footing						
A30	"	8	#4	18	9	Dowels						
A31	7	38	#5	5	11	"	0	9	2	8	2	8
A32	Str	14	#5	8	2	Wing A						
A33	"	2	#5	8	8	"						
A34	"	22	#5	9	7	"						
A35	"	10	#5	14	6	"						
A36	3	12	#5	13	1	"	3	8	2	6		
A37	Str	4	#5	19	6	Parapet Base						
A38	"	6	#5	23	0	"						
A39	3	20	#5	14	3	"	4	3	2	6		
A40	6	27	#6	8	6	Parapet						
A41	7	27	#6	10	2	"	7	8				
A42	Str	34	#5	23	9	"						
A43	8	26	#5	6	11	Pedestal	3	8	3	4		
A44	Str	4	#2	37	1	"						
A45	"	20	#1	2	0	Parapet Base Dowels						
A46	1	27	#6	3	8	Parapet	1	0	0	10	1	11
A47	Str	13	#5	15	8	Cap						
A48	Str	3	#8	15	8	"						



ESTIMATE OF QUANTITIES

Item	Unit	End Bent 1	End Bent 2
Concrete, Class A	(Cu Yds)	90.2 (90.3)	90.2 (90.3)
Concrete, Class AA	(Cu Yds)	62.7 (62.8)	62.7 (62.8)
Steel Reinforcement	(Lbs.)	(13,370) 13,330	(13,370) 13,330

END BENT 2 - AS SHOWN

END BENT 1 - OPPOSITE HAND EXCEPT AS SHOWN

Sheet 6

Ashland-Greenup Rd over Little Sandy River

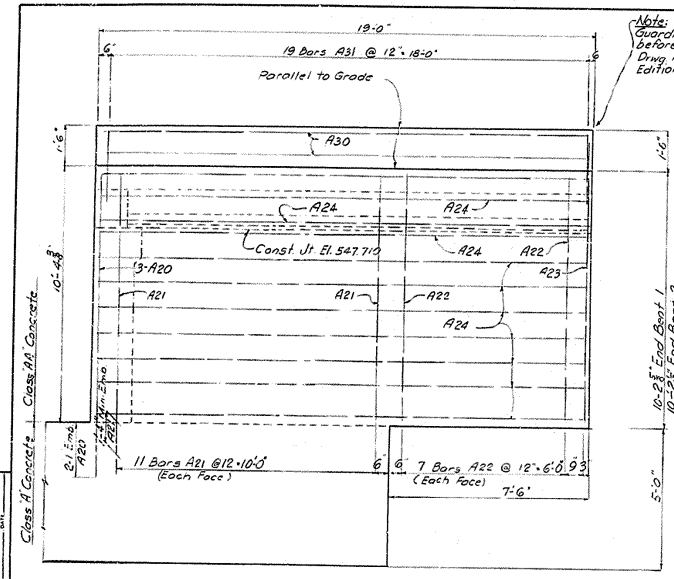
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
GREENUP
ASHLAND-GREENUP
ROAD
STATION 915+26.91
PROJECT NO.
BRIDGE NUMBER
DRAWING NO. 17622
INDEX

REVISIONS	DATE	REVISIONS	DATE
Section D-D & Quantities	9-25-72		

DRAWN DAP CHECKED BY D.G.M. DATE 8-68
DETAILED BY G.S.B. CHECKED BY D.G.M. DATE 8-68
TRACED BY CHECKED BY DATE

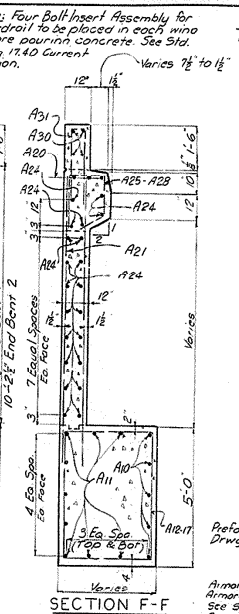
BRIDGE

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

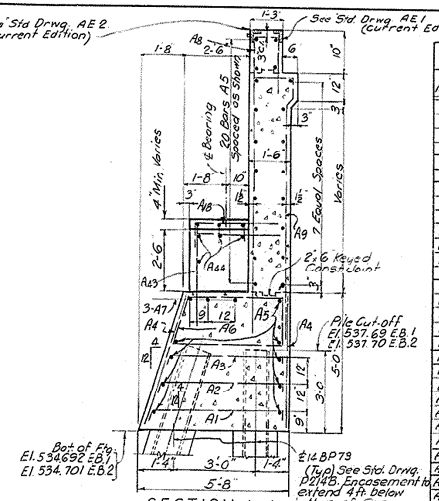


ELEVATION B-B (WING B)

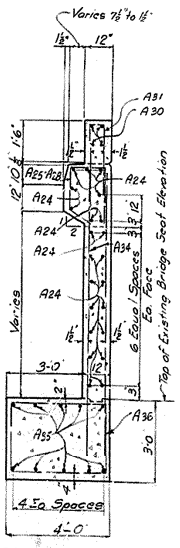
Note: Four Bolt Insert Assembly for Guardrail to be placed in each wing before pouring Concrete. See Std. Drwg. 17.40 Current Edition.



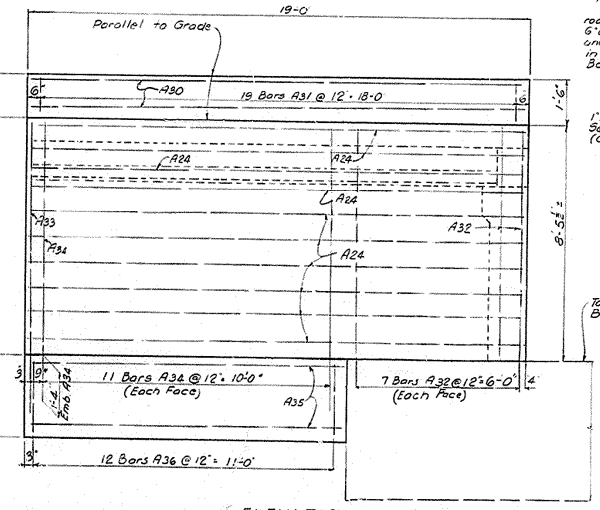
SECTION F-F



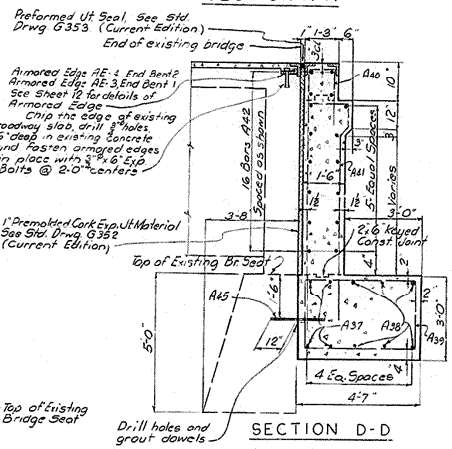
SECTION A-A



SECTION E-E



ELEVATION C-C (WING A)



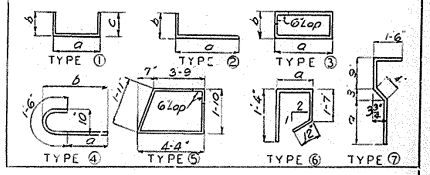
SECTION D-D

ESTIMATE OF QUANTITIES

Item	Unit	End Bent 1	End Bent 2
Concrete, Class A	(Cu. Yds.)	90.3	90.3
Concrete, Class AA	(Cu. Yds.)	62.8	62.8
Steel Reinforcement	(LBS.)	13,370	13,370

BILL OF REINFORCEMENT

Mark	Type	No.	Size	Length Ft.	Length In.	Location	a Ft.	a In.	b Ft.	b In.	c Ft.	c In.
A1	(1)	61	#5	5	7	Cap	5	1	0	4	0	4
A2	"	61	#5	5	3	"	4	9	0	4	0	4
A3	"	61	#5	4	1	"	4	5	0	4	0	4
A4	Str.	124	#5	4	8							
A5	"	38	#5	31	9	Cap & Parapet						
A6	(5)	62	#5	12	7	Cap						
A7	Str.	6	#8	32	5							
A8	(7)	60	#6	14	2	Parapet	1	0	1	9	11	9
A9	(7)	60	#6	11	11		9	3				
A10	(4)	5	#8	15	4	Wing B	13	10	14	3		
A11	"	9	#8	13	1	" "	11	7	12	0		
A12	(3)	1	#5	12	9	" "	1	6	4	6		
A13	"	1	#5	16	1	" "	3	2	4	6		
A14	"	1	#5	19	3	" "	4	9	4	6		
A15	"	1	#5	22	3	" "	6	3	4	6		
A16	"	1	#5	24	5	" "	7	4	4	6		
A17	"	1	#5	26	3	" "	8	3	4	6		
A18	(2)	21	#4	5	2	Pedestal	3	2	2	1		
A19	(1)	21	#5	6	11	"	2	9	2	2	2	2
A20	(2)	3	#8	30	8	Wing B	12	4	18	6		
A21	Str.	22	#5	11	7	"						
A22	"	16	#5	10	0	"						
A23	"	2	#5	11	7	"						
A24	"	43	#5	18	9	Wing A & B						
A25	(6)	8	#5	5	1	Curbs	1	4				
A26	(6)	10	#5	4	11	"	1	2				
A27	(6)	10	#5	5	9	"	1	0				
A28	(6)	10	#5	4	8	"	0	11				
A29	Str.	6	#5	8	0	Wing Footing						
A30	"	8	#4	18	9	Pintn						
A31	(7)	38	#5	5	11	"	0	9	2	8	2	8
A32	Str.	14	#5	8	2	Wing A						
A33	"	2	#5	9	8	" "						
A34	"	22	#5	9	7	" "						
A35	"	10	#5	14	6	" "						
A36	(5)	12	#5	13	1	"	3	8	2	6		
A37	Str.	4	#5	19	6	Parapet Base						
A38	"	6	#5	23	0	"						
A39	(3)	20	#5	14	3	"	4	3	2	6		
A40	(1)	27	#6	12	1	Parapet	1	0	1	9	9	7
A41	(7)	27	#6	9	9	"	7	3				
A42	Str.	16	#5	31	8	"						
A43	(2)	26	#5	6	11	Pedestal	3	6	3	4		
A44	Str.	4	#4	37	1	"						
A45	"	20	#11	2	0	Parapet Base Dowels						



END BENT 2 - AS SHOWN

END BENT 1 - OPPOSITE HAND EXCEPT AS SHOWN

Ashland-Greenup Rd over Little Sandy River Sheet 6

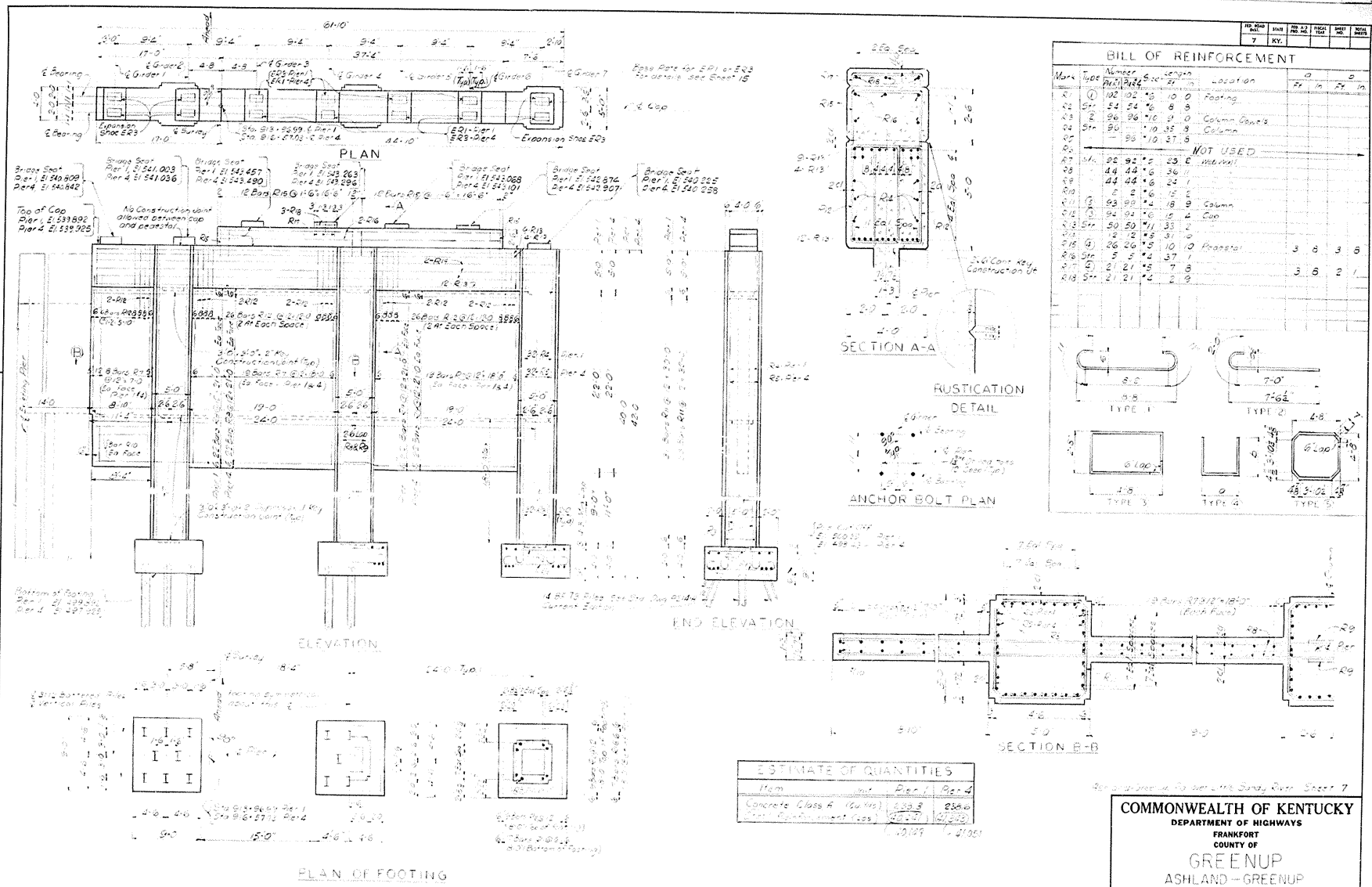
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
GREENUP
ASHLAND-GREENUP
ROAD

STATION 915+26.97 PROJECT NO.

BRIDGE NUMBER | DRAWING NO. 17622 | SHEET

DESIGNED BY: PAD	CHECKED BY: D.G.M.	DATE: 1-8-68	REVISED:
DETAILED BY: U.S.B.	CHECKED BY: D.G.M.	DATE: 2-8-68	REVISED:
TRACED BY:	CHECKED BY:	DATE:	REVISED:

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



BILL OF REINFORCEMENT

Mark	Type	Number Pier 1	Number Pier 4	Size	Length Ft.	Length In.	Location	Q Ft.	Q In.	Q Ft.	Q In.
R1	①	102	102	#8	10	0	Footing				
R2	Str	54	54	#6	8	8					
R3	2	96	96	#10	9	0	Column Dowels				
R4	Str	90		#10	35	8	Column				
R5			98	#10	37	8					
R6	NOT USED										
R7											
R8		92	92	#5	23	6	Wall Wall				
R9		44	44	#6	36	11					
R10		44	44	#6	24	1					
R11		6	2	#6	15	2					
R12	③	93	99	#4	18	9	Column				
R13	①	94	94	#6	15	4	Cap				
R14	Str	50	50	#11	33	2					
R15		12	12	#5	31	0					
R16	④	26	26	#5	10	10	Pronestal	3	6	3	6
R17	Str	5	5	#4	37	1					
R18	④	21	21	#5	7	8		3	6	2	1
R19	Str	21	21	#4	2	9					

ESTIMATE OF QUANTITIES

Item	Unit	Pier 1	Pier 4
Concrete Class A (Cu. Yds.)		238.3	238.0
Steel Reinforcement (Lbs.)		[illegible]	[illegible]

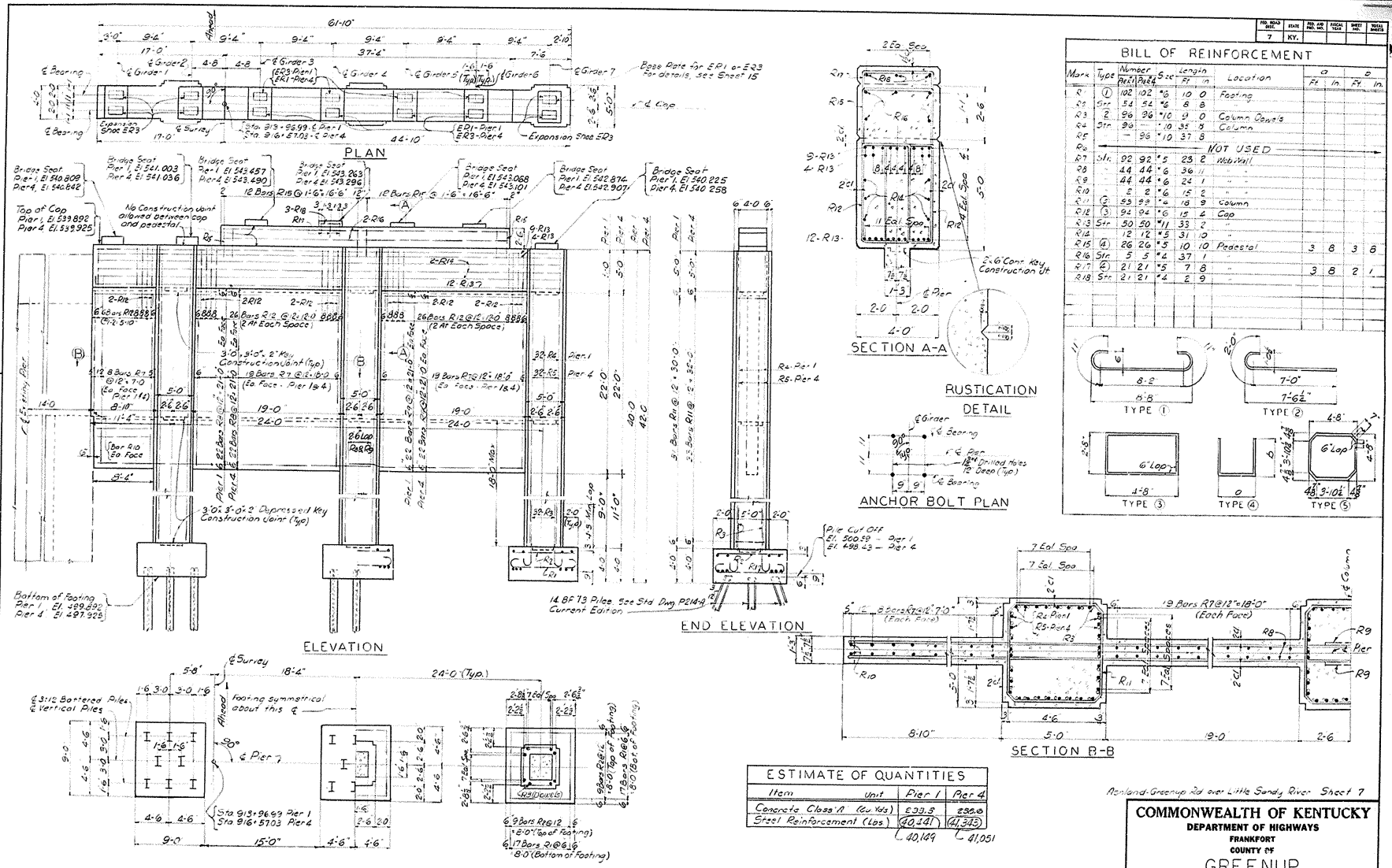
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
GREENUP
ASHLAND – GREENUP
ROAD
STATION 915+26.17 PROJECT NO.

BRIDGE NUMBER | DRAWING NO. 17622 | INDEX

PIER 1 & 4

BRIDGE

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



BILL OF REINFORCEMENT

Mark	Type	Number Pier 1	Number Pier 4	Size	Length Ft	Length In	Location	a Ft	a In	b Ft	b In
R1	1	102	102	#6	10	0	Footing				
R2	Str	54	54	#6	8	8	"				
R3	2	96	96	#10	9	0	Column Dowels				
R4	Str	96		#10	35	3	Column				
R5		—	96	#10	37	8	"				
R6	NOT USED										
R7	Str	92	92	#5	23	2	Wetwall				
R8	"	44	44	#6	36	11	"				
R9	"	44	44	#6	24	1	"				
R10	"	5	2	#6	15	2	"				
R11	2	55	55	#4	18	9	Column				
R12	3	94	94	#6	15	4	Cap				
R13	Str	50	50	#11	33	2	"				
R14		12	12	#5	31	10	"				
R15	4	26	26	#5	10	10	Pedestal	3	8	3	6
R16	Str	5	5	#4	37	1	"				
R17	4	21	21	#5	7	8	"	3	8	2	1
R18	Str	21	21	#4	2	9	"				

ESTIMATE OF QUANTITIES

Item	Unit	Pier 1	Pier 4
Concrete Class "A"	(cu. yds)	533.3	535.0
Steel Reinforcement	(lbs)	(40,141)	(41,343)
		40,149	41,051

Ashland-Greenup Rd over Little Sandy River Sheet 7

PIER 1 & 4

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF

GREENUP

ASHLAND – GREENUP

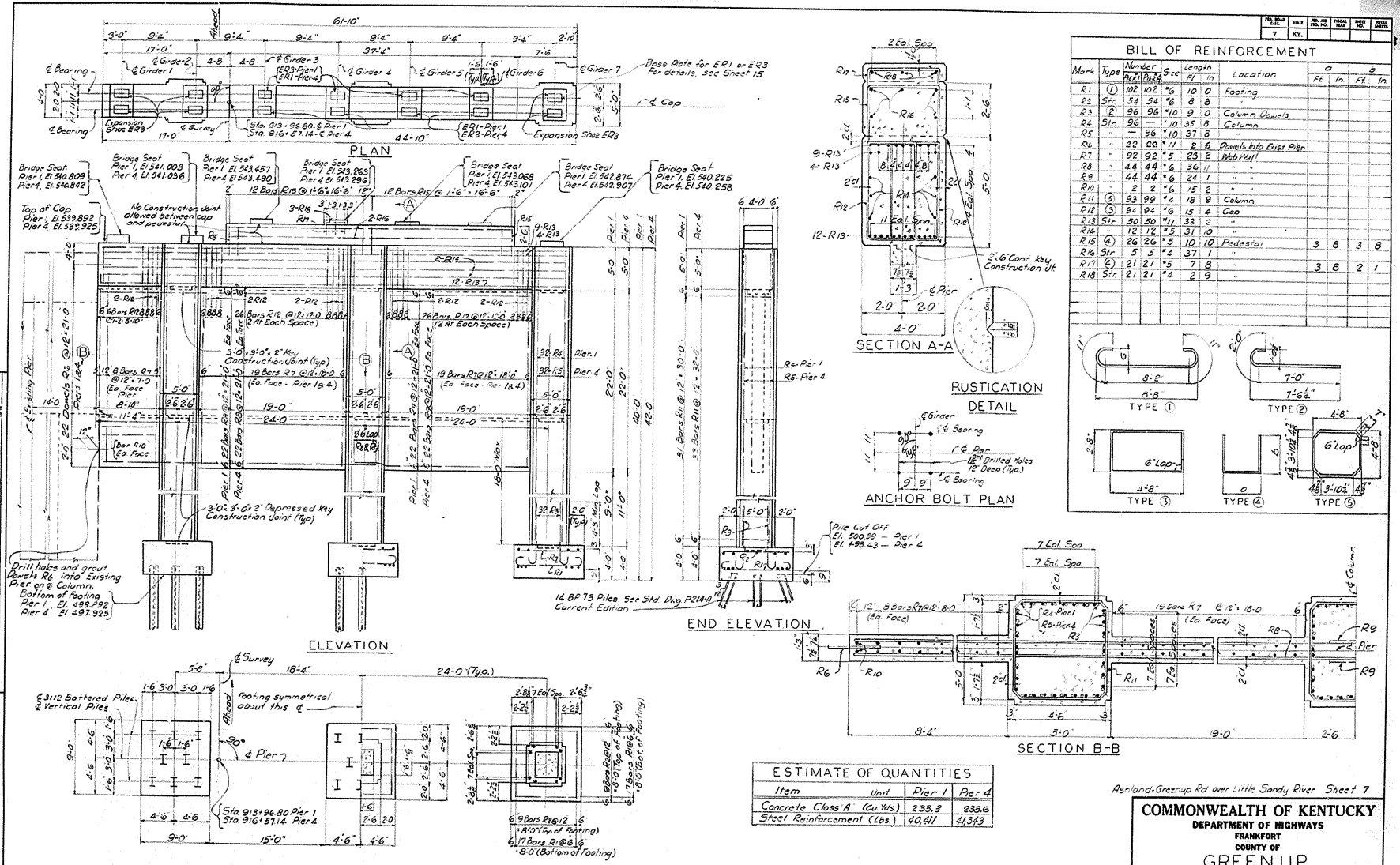
ROAD

STATION 915+26.97 **PROJECT NO.**

BRIDGE NUMBER	DRAWING NO.	INDEX
	17622	

BRIDGE

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



BILL OF REINFORCEMENT

Mark	Type	Number Per El	Number Per Pier	Size	Length Ft	Length In	Location	a Ft	a In	b Ft	b In
R1	1	102	102	#6	10	0	Footing				
R2	Str	54	54	#6	8	8	"				
R3	2	96	96	#10	9	0	Column Dowels				
R4	Str	96	—	#10	35	8	Column				
R5	"	—	96	#10	37	8	"				
R6	"	22	22	#11	2	6	Dowels into Exist Pier				
R7	"	92	92	#5	23	2	Web Wall				
R8	"	44	44	#6	36	11	" "				
R9	"	44	44	#6	24	1	" "				
R10	"	2	2	#6	15	2	" "				
R11	3	93	99	#4	18	9	Column				
R12	3	94	94	#6	15	4	Cap				
R13	Str	50	50	#11	33	2	"				
R14		12	12	#5	31	10	"				
R15	4	26	26	#5	10	10	Pedestal	3	8	3	8
R16	Str	5	5	#4	37	1	"				
R17	4	21	21	#5	7	8	"	3	8	2	1
R18	Str	21	21	#4	2	9	"				

ESTIMATE OF QUANTITIES

Item	Unit	Pier 1	Pier 4
Concrete Class A	(Cu. Yds)	233.3	238.6
Steel Reinforcement	(Lbs.)	40,411	41,343

PIER 1 & 4

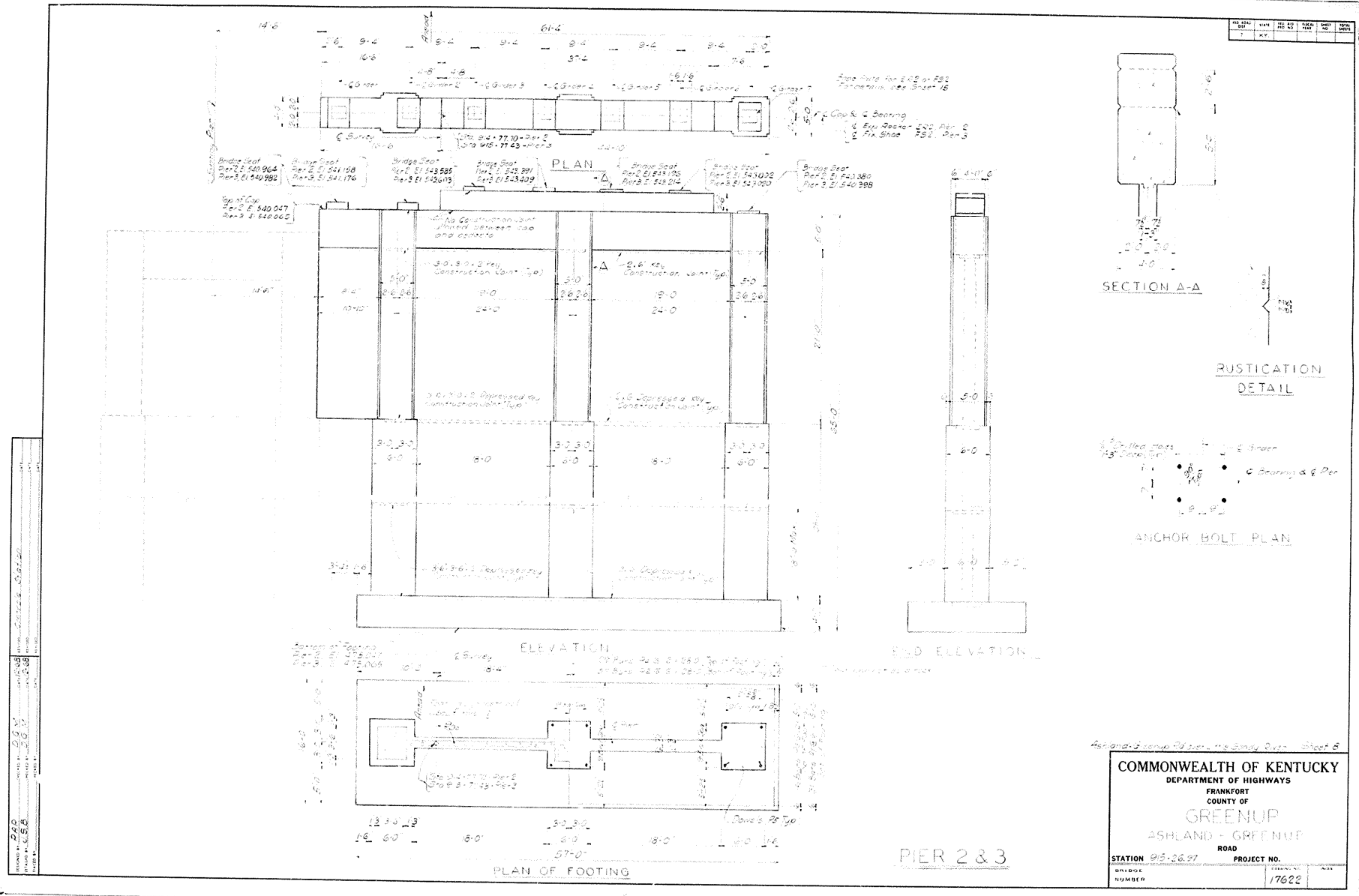
Ashland-Greenup Rd over Little Sandy River Sheet 7

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
GREENUP
ASHLAND-GREENUP
ROAD

STATION 915+26.97 **PROJECT NO.**

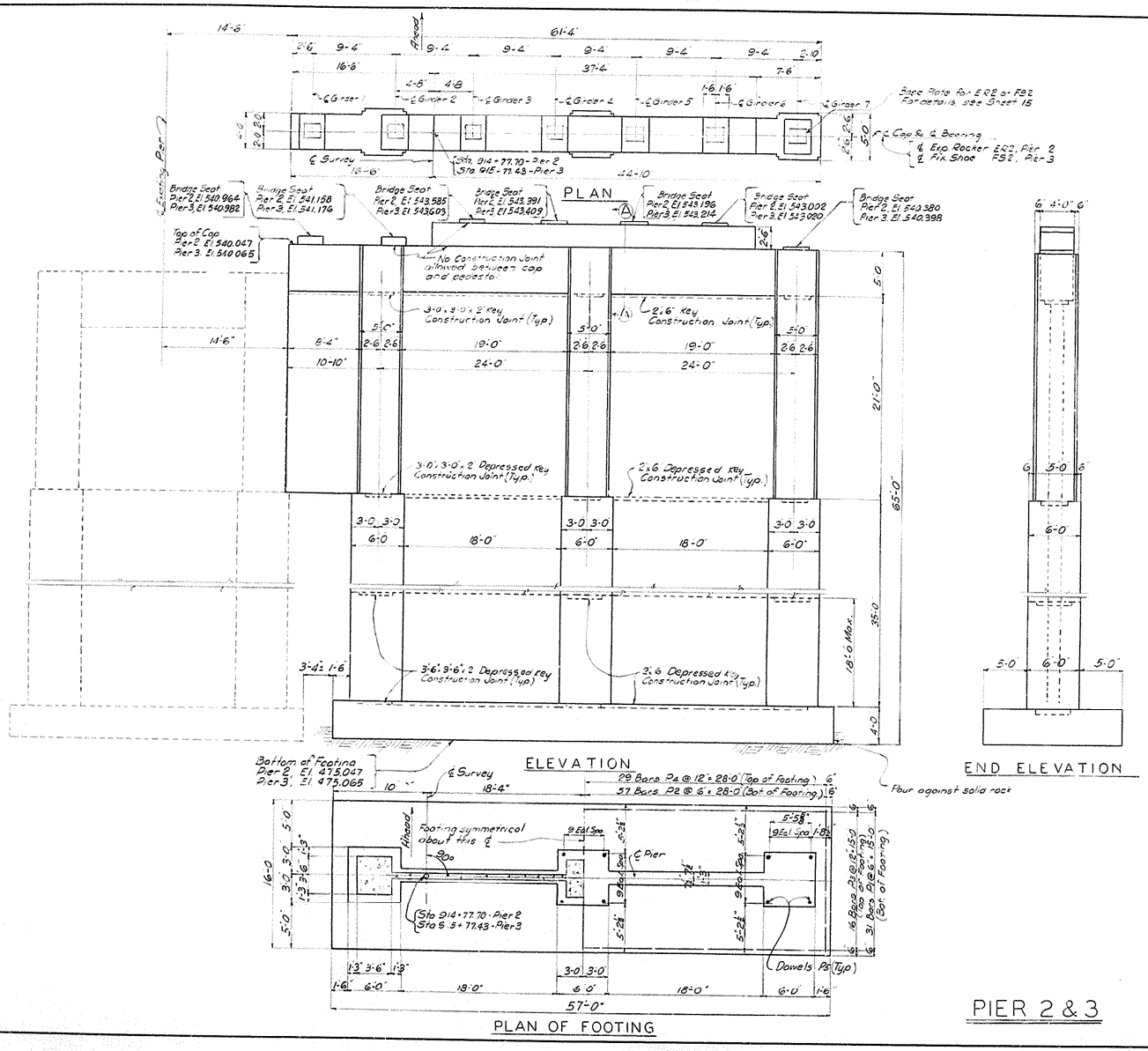
BRIDGE NUMBER | DRAWING NO. 17622 | INDEX

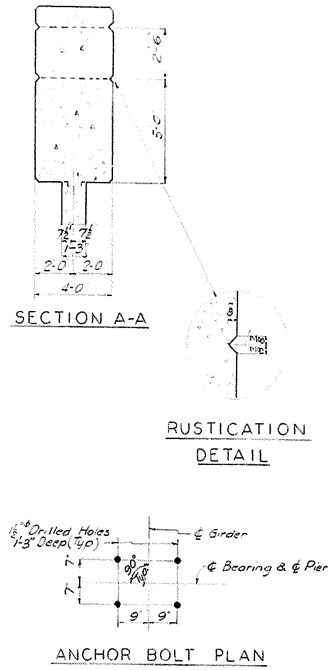
DESIGNED BY: D.R.P. CHECKED BY: D.G.M. DATE: 12-63
DETAILED BY: J.S.B. CHECKED BY: D.G.M. DATE: 2-63
TRACED BY: CHECKED BY: DATE:
REVISED: DATE: REVISED: DATE:


PLAN
ELEVATION
END ELEVATION
SECTION A-A
RUSTICATION DETAIL
ANCHOR BOLT PLAN
PLAN OF FOOTING
PIER 2 & 3
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
GREENUP
ASHLAND - GREENUP
ROAD
STATION 915+26.97
PROJECT NO.
BRIDGE NUMBER
17622

BRIDGE

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





END ELEVATION

PIER 2 & 3

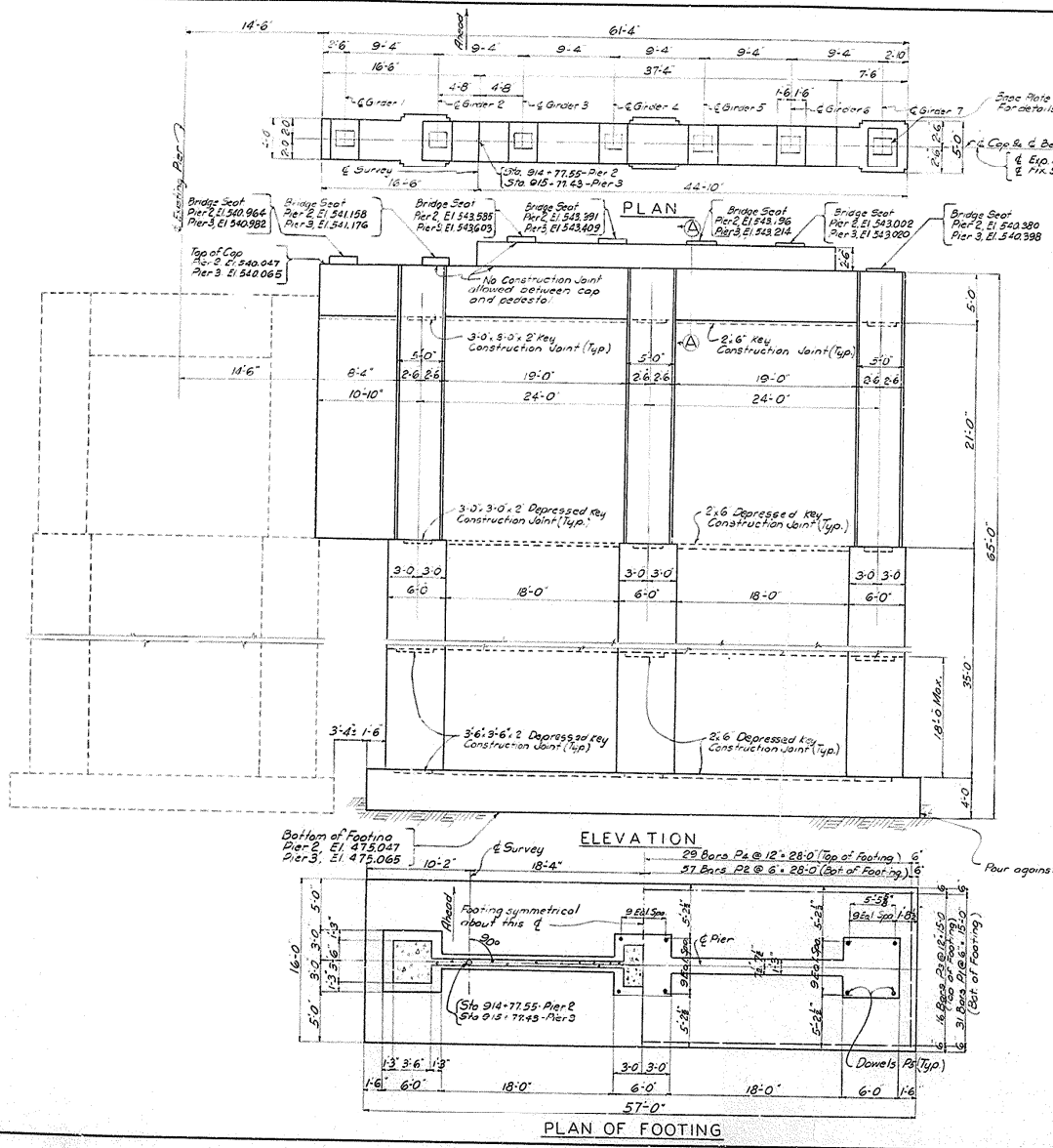
Ashland-Greenup Rd. over Little Sandy River Sheet 8

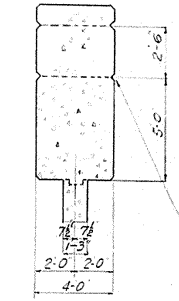
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
GREENUP
ASHLAND - GREENUP
ROAD
STATION 915+26.97 **PROJECT NO.**

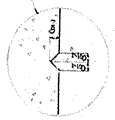
BRIDGE NUMBER	DRAWING NO.	INDEX
	17622	

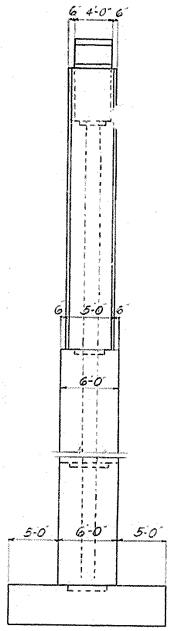
DETAILED BY PAP	CHECKED BY D.G.M.	DATE 2-68	REVISED
DRAWN BY W.S.B.	CHECKED BY D.G.M.	DATE 2-68	REVISED
TRACED BY	CHECKED BY	DATE	REVISED

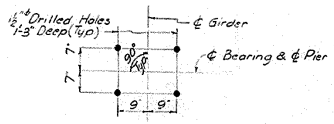
Contrib. Station











PIER 2 & 3

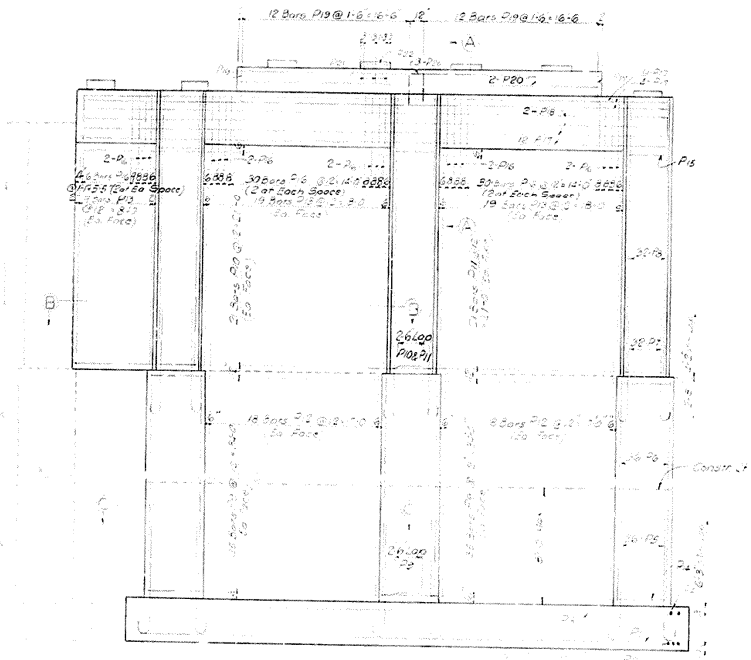
Ashland-Greenup Rd. over Little Sandy River Sheet 8

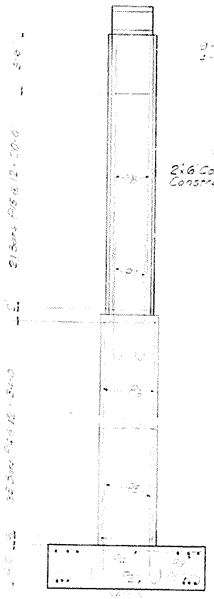
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
GREENUP
ASHLAND - GREENUP
ROAD
STATION 915+26.97 **PROJECT NO.**

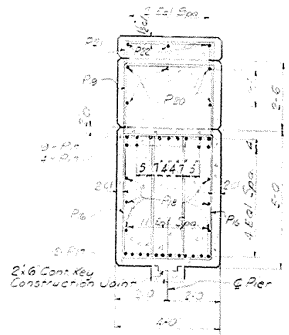
BRIDGE NUMBER	DRAWING NO.	INDEX
	17622	

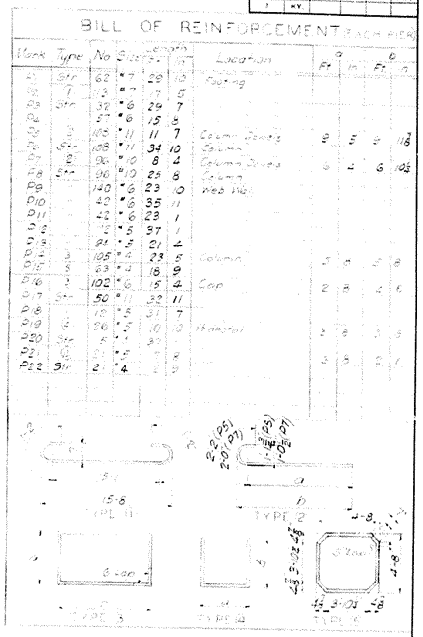
FED. ROAD DIST.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	KY.				

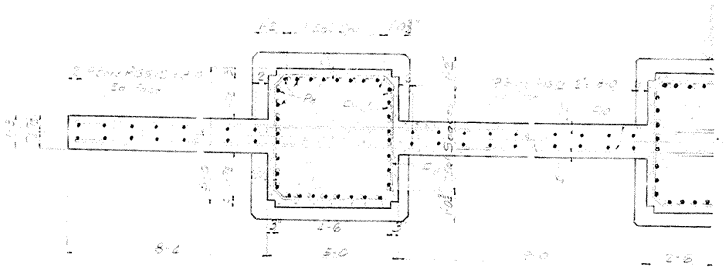
DESIGNED BY PAP CHECKED BY D.G.M. DATE 12-68 REVISED
DETAILED BY J.S.B. CHECKED BY D.G.M. DATE 12-68 REVISED
TRACED BY CHECKED BY DATE REVISED

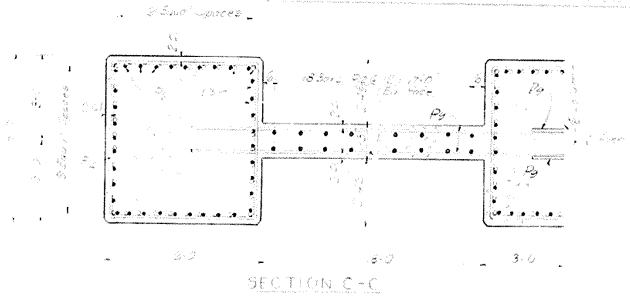












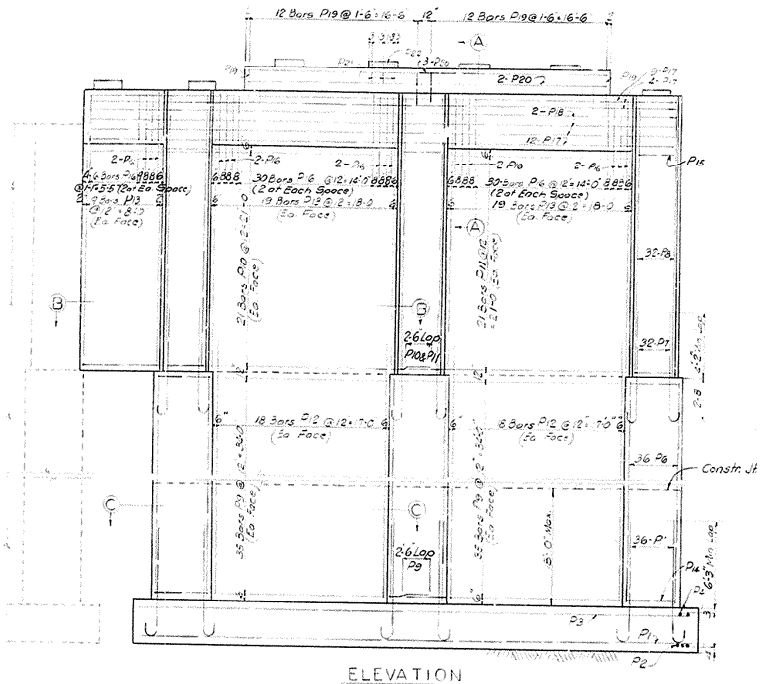
	Pier 2	Pier 3
Concrete Class A (Cu. Yds.)	500.5	500.5

PIER 2 & 3

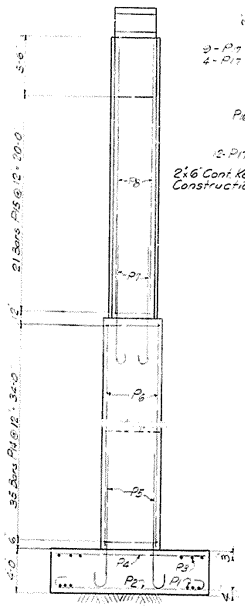
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
GREENUP
ASHLAND-GREENUP
ROAD
STATION 915+26.97 PROJECT NO.
BRIDGE NUMBER 7622

BRIDGE

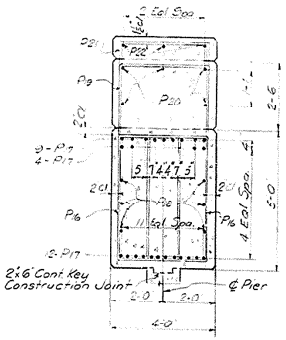
FED. ROAD DIST.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	KY.				



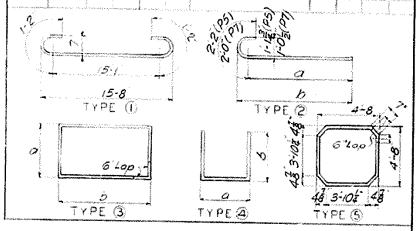
ELEVATION



END ELEVATION

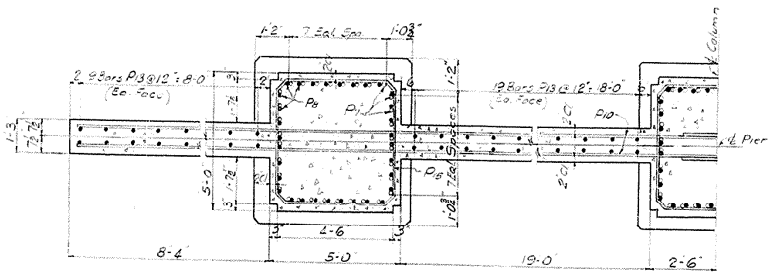


SECTION A-A

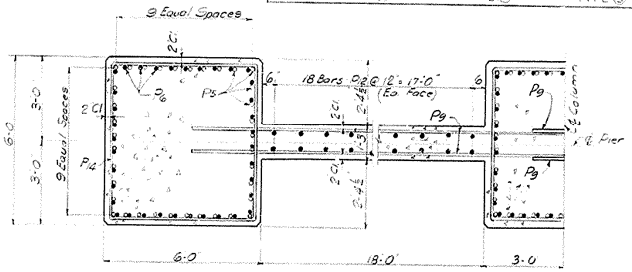


BILL OF REINFORCEMENT EACH PIER

Mark	Type	No	Size	Length Ft	Length In	Location	a Ft	a In	b Ft	b In
P1	Str	62	#7	29	10	Footing				
P2	T	13	#7	17	5					
P3	Str	32	#6	29	7					
P4		27	#6	15	8					
P5		105	#11	11	7	Column Dowels	5	5	3	11½
P6	Str	108	#11	34	10	Column				
P7		96	#10	8	4	Column Dowels	5	4	6	10½
P8	Str	96	#10	23	8	Column				
P9		140	#6	23	10	Web Wall				
P10		42	#6	35	11					
P11		42	#6	29	1					
P12		74	#5	37	1					
P13		84	#5	21	4					
P14	3	105	#4	23	5	Column	5	8	5	8
P15	3	63	#4	18	9					
P16	3	102	#6	15	4	Cap	2	8	4	8
P17	Str	50	#11	32	11					
P18		18	#5	31	7					
P19	3	26	#5	10	10	Additional	3	8	3	8
P20	Str	5	#4	31	1					
P21	4	21	#5	7	8					
P22	Str	21	#4	2	9					



SECTION B-B



SECTION C-C

ESTIMATE OF QUANTITIES			
Item	Unit	Pier 2	Pier 3
Concrete Class "A"	(Cu. Yds.)	500.5	500.5
Steel Reinforcement	(Lbs.)	79,706	79,706
		79,401	79,401

PIER 2 & 3

Ashland-Greenup Rd over Little Sandy River Sheet 9

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
GREENUP
ASHLAND-GREENUP
ROAD

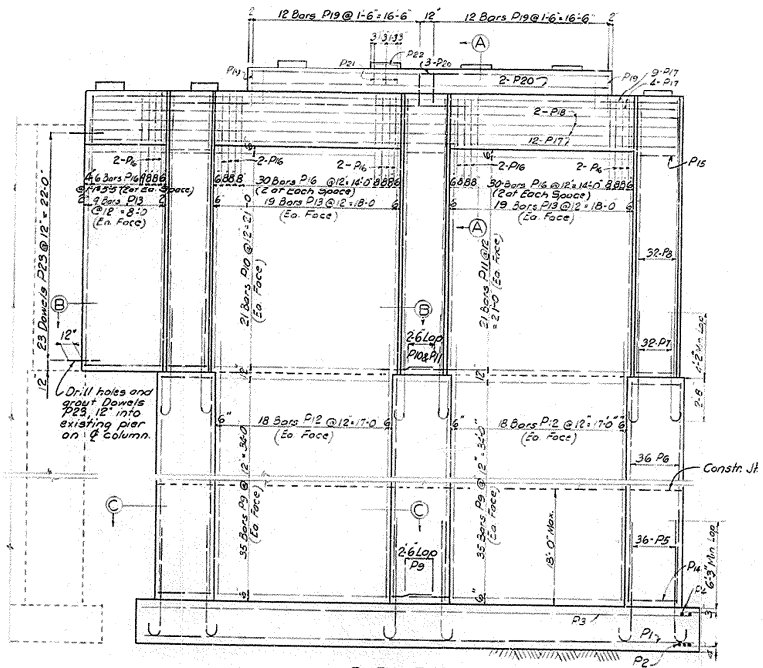
STATION 915-26.97 **PROJECT NO.**

BRIDGE NUMBER	DRAWING NO.	INDEX
	17622	

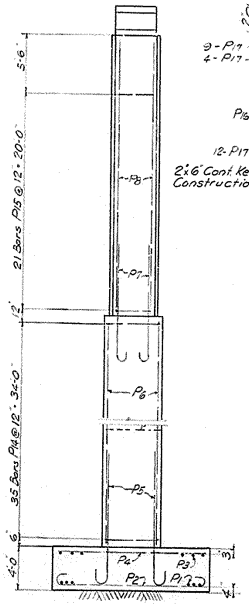
Remove Piers into existing Pier
Quantities
Dgill
12-5-72
12-28
12-28
2-2-71
2-23-71
2-5-72
PAP
RLS

BRIDGE

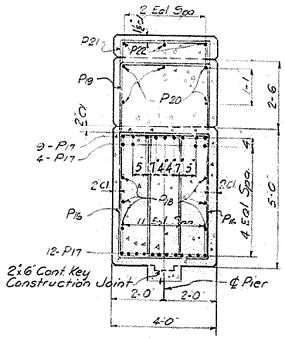
FED ROAD DIST.	STATE	FED AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	KY.				



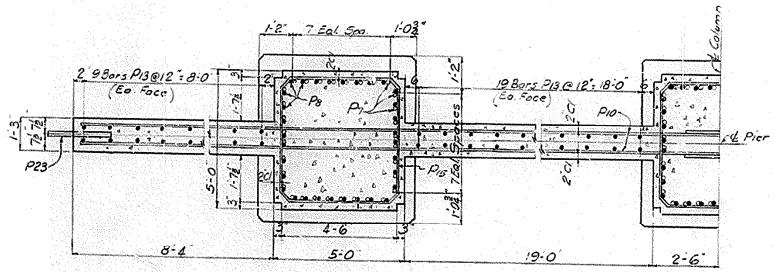
ELEVATION



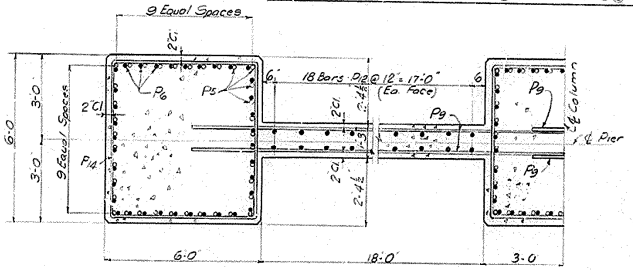
END ELEVATION



SECTION A-A



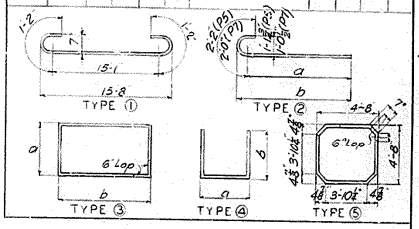
SECTION B-B



SECTION C-C

BILL OF REINFORCEMENT (EACH PIER)

Mark	Type	No	Size	Length Ft	Length In	Location	a Ft	a In	b Ft	b In
P1	Str.	62	#7	29	10	Footing				
P2	1	113	#7	17	5					
P3	Str.	32	#6	29	7					
P4		57	#6	13	6					
P5	2	108	#11	11	7	Column Dowels	9	5	9	11 3/8
P6	Str.	108	#11	34	10	Column				
P7	2	96	#10	8	4	Column Dowels	6	4	6	10 3/8
P8	Str.	96	#10	25	8	Column				
P9	-	140	#6	23	10	Web Wall				
P10	-	42	#6	35	11					
P11	-	42	#6	23	1					
P12	-	72	#5	37	1					
P13	-	84	#5	21	4					
P14	3	105	#4	23	5	Column	5	8	5	8
P15	3	63	#4	18	9					
P16	3	102	#6	15	4	Cap	2	8	4	8
P17	Str.	50	#11	32	11					
P18	-	12	#5	31	7					
P19	4	26	#5	10	10	Pedestal	3	8	3	8
P20	Str.	5	#4	37	1					
P21	4	21	#5	7	8		5	0	2	1
P22	Str.	21	#4	2	9					
P23	Str.	23	#11	2	6	Dowel to Exist. Pier				



ESTIMATE OF QUANTITIES

Item	Unit	Pier 2	Pier 3
Concrete Class "A"	(Cu. Yds.)	500.5	500.5
Steel Reinforcement	(Lbs.)	79706.	79706.

PIER 2 & 3

Ashland-Greenup Rd. over Little Sandy River Sheet 9

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF

GREENUP

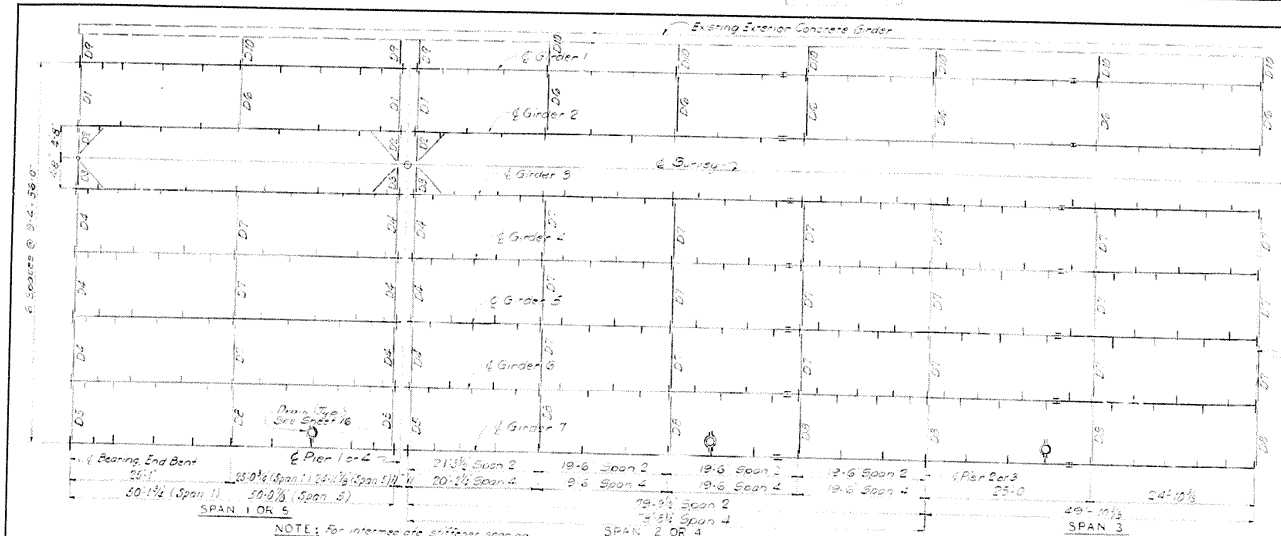
ASHLAND-GREENUP

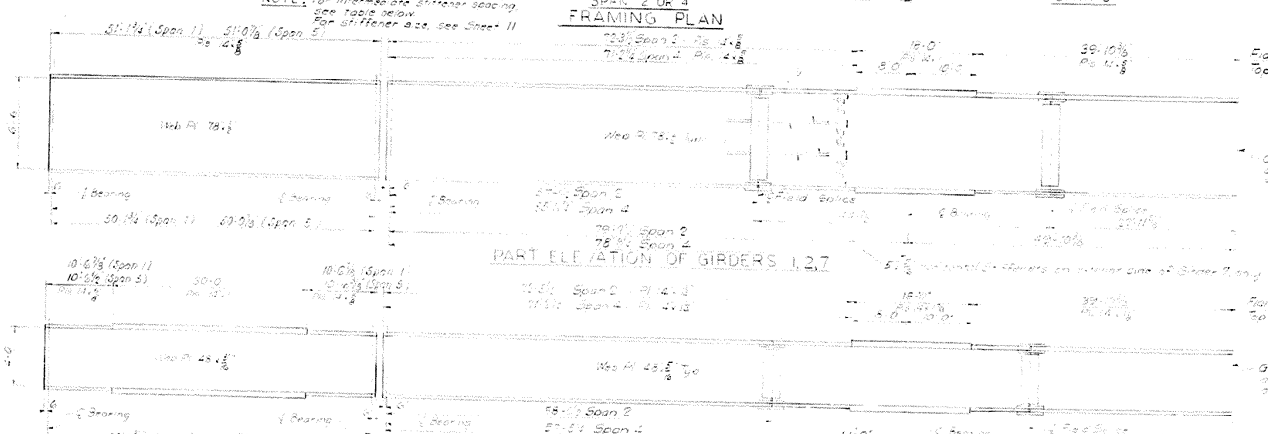
ROAD

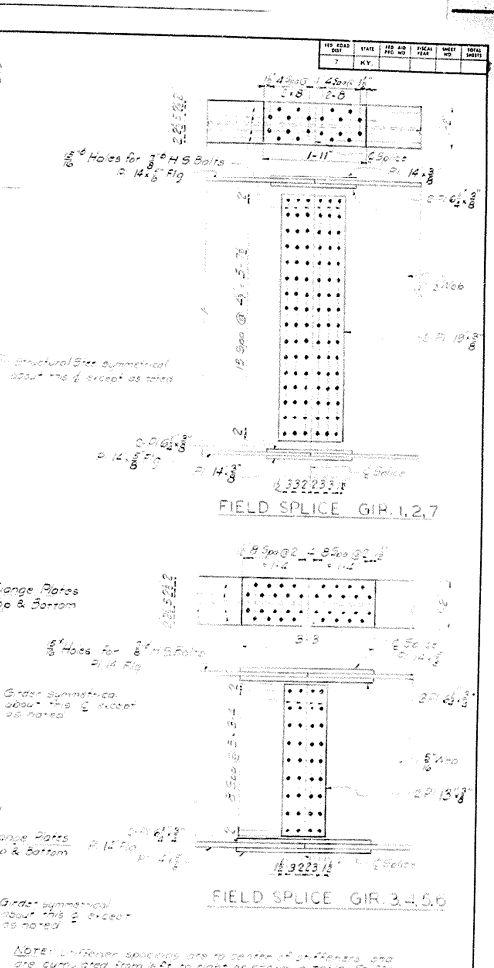
STATION 915+26.97 PROJECT NO.

BRIDGE NUMBER — DRAWING NO. 17622 — INDEX

DESIGNED BY PAP — CHECKED BY D.G.M. — DATE 2-66 — REVISED
DETAILED BY L.G.B. — CHECKED BY D.S.M. — DATE 2-66 — REVISED
TRACED BY — CHECKED BY — DATE — REVISED







Note: Stiffener spacings are to center of stiffeners and are numbered from left to right as shown in table. Stiffeners shall be placed on sides of webs as shown in plan above.

Ashland-Greenup Rd. over Little Sandy Riv. Sheet 10

STIFFENER SPACING SPANS 1, 5

		Stiff. to Flange Weld	Top & Bot	Top	Top & Bot	Length
Span 1	Girders 1,2,7	℄ Brg.	2@6-3 1/2, 2@6-2, 2@3-3 1/2	℄ Brg.	50-1 1/2
	Girders 3,4,5,6	℄ Brg.	2@6-10, 2@10, 4@4-0, 2@2-10, 2@1-10	℄ Brg.	50-1 1/2
Span 5	Girders 1,2,7	℄ Brg.	2@3-3 1/2, 6@6-2, 2@3-3 1/2, 1@3-2 1/2	℄ Brg.	50-0 1/2
	Girders 3,4,5,6	℄ Brg.	2@1-8 1/2, 2@2-10, 8@4-0, 2@2-10, 2@1-8 1/2	℄ Brg.	50-0 1/2

STIFFENER SPACING SPANS 2,3,4

	Stiff. to Flange Weld	Top & Bot	Top	Top & Bottom	Bottom	Top & Bottom	Top	Length
Span 2	Gir. 1,2,7	℄ Brg.	Span 2: 1@3-0, 1@6-1, 4@6-6; Span 4: 1@3-0, 2@5-0, 4@6-6	3@6-6	3@6-6 (℄ Brg.) 2@6-3	2@6-3	2@6-3, 1@6-1 1/2 (℄ Span 3)	79-9 1/2, 78-3 1/2 Cont.
	Gir. 3,4,5,6	℄ Brg.	Span 2: 1@3-0, 3@3-3, 2@4-3, 1@3-6; Span 4: 1@3-0, 2@3-3, 2@3-9 1/2, 1@3-6	3@2-0, 1@3-6, 1@3-0, 3@3-0, 3@2-6	3@2-6 (℄ Brg.) 2@2-6, 1@2-9, 1@3-3, 1@3-6	3@3-6, 2@3-3	2@3-3, 2@4-0, 1@3-1 1/2 (℄ Span 3)	79-9 1/2, 78-3 1/2 Cont.

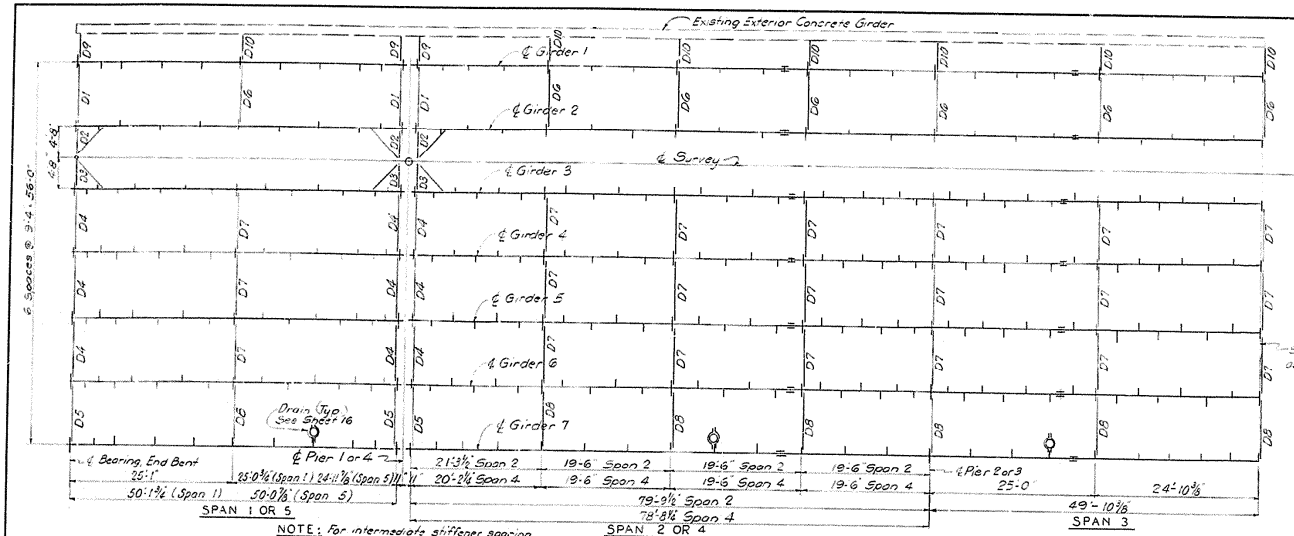
STRUCTURAL STEEL

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
GREENUP
ASHLAND - GREENUP
ROAD
STATION 915+26.97 PROJECT NO.
BRIDGE NUMBER
DRAWING NO. 17622
INDEX

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

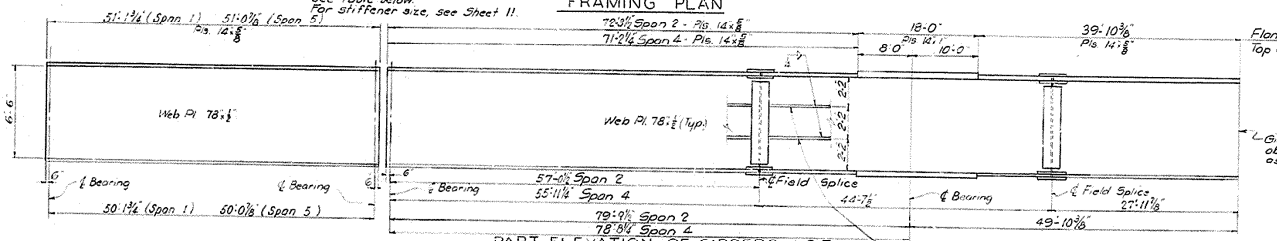
Revised Elevations on ℄ Survey Align. Revised Elevation Description. G.S.K.

DRAWN BY PAP
DETAILED BY G.S.B.
TRACED BY
CHECKED BY

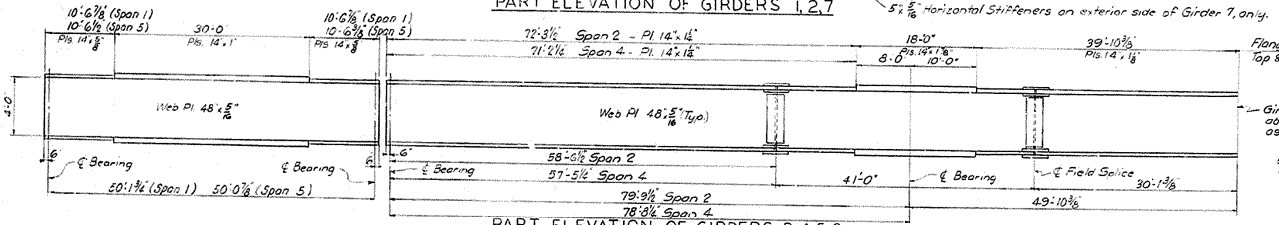


FRAMING PLAN

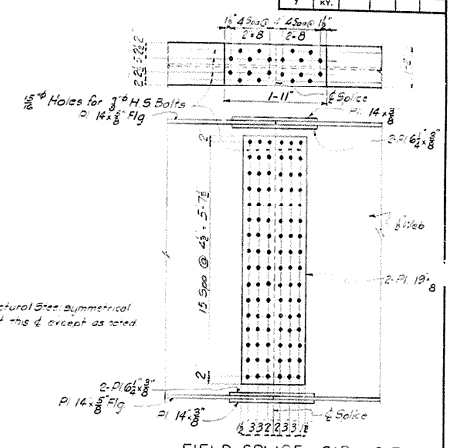
NOTE: For intermediate stiffener spacing, see table below. For stiffener size, see Sheet 11.



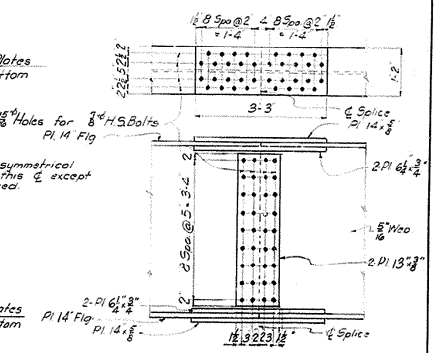
PART ELEVATION OF GIRDERS 1,2,7



PART ELEVATION OF GIRDERS 3,4,5,6



FIELD SPLICE GIR. 1,2,7



FIELD SPLICE GIR. 3,4,5,6

NOTE: Stiffener spacings are to center of stiffeners and are cumulated from left to right as shown in table. Stiffeners shall be placed on sides of webs as shown in plan above.

Ashland-Greenup Rd. over Little Sandy River Sheet 10

STIFFENER SPACING SPANS 1, 5

	Stiff. to Flange Weld	Top & Bot.	Top	Top & Bot	Length
Span 1	Girders 1,2,7	℄ Brg.	2@3'-3 1/2", 6@6'-2", 2@3'-3 1/2"	℄ Brg.	50'-1 3/4"
	Gir. 3,4,5,6	℄ Brg.	1@1'-8 1/2", 2@2'-10", 8@4'-0", 2@2'-10", 2@1'-8 1/2"	℄ Brg.	50'-1 3/4"
Span 5	Girders 1,2,7	℄ Brg.	2@3'-3 1/2", 6@6'-2", 1@3'-3", 1@3'-2 1/2"	℄ Brg.	50'-0 1/8"
	Girders 3,4,5,6	℄ Brg.	2@1'-8 1/2", 2@2'-10", 8@4'-0", 2@2'-10", 1@1'-8", 1@1'-7 1/2"	℄ Brg.	50'-0 1/8"

STIFFENER SPACING SPANS 2,3,4

Stiff. to Flange Weld	Top & Bot.	Top	Top & Bottom	Bottom	Top & Bottom	Top	Length
Gir. 1,2,7	℄ Brg.	SPAN 2-1@2'-7 1/2", 2@6'-1", 4@6'-6" SPAN 4-1@3'-7 1/2", 2@5'-0 1/2", 4@6'-6"	3@6'-6"	3@6'-6 (℄ Brg.) 2@6'-3"	3@6'-3	2@6'-3, 1@6'-1 1/2" (℄ Span 3)	79'-9 1/2", 79'-8 1/2", 78'-8 1/2" Cont.
Gir. 3,4,5,6	℄ Brg.	SPAN 2-1@2'-11 1/2", 3@3'-3", 2@4'-3 1/2", 1@3'-6, 5@4'-0" SPAN 4-1@2'-10 1/2", 3@3'-3", 2@3'-3 1/2", 1@3'-6, 5@4'-0"	3@4'-0, 1@3'-6, 1@3'-0	3@3'-0, 3@2'-6 (℄ Brg.) 2@2'-6, 1@2'-3, 1@3'-3, 1@3'-6	3@3'-6, 2@3'-3	2@3'-3, 2@4'-0", 1@3'-10 1/2" (℄ Span 3)	79'-9 1/2", 79'-8 1/2", 78'-8 1/2" Cont.

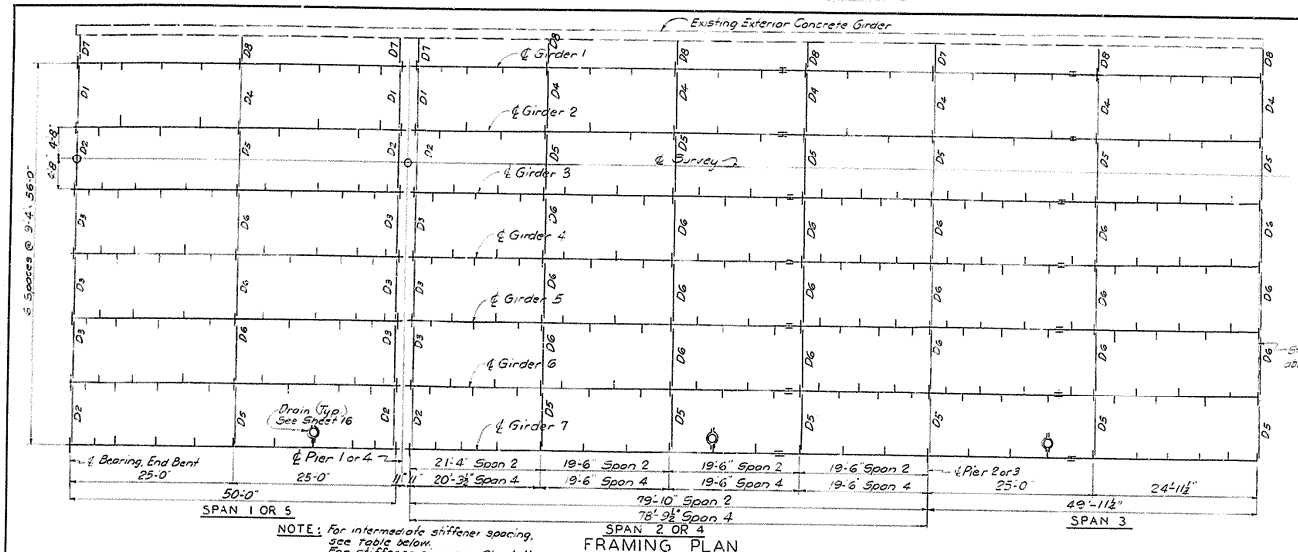
STRUCTURAL STEEL

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

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
GREENUP
ASHLAND - GREENUP
ROAD
STATION 915+26.97 PROJECT NO.
BRIDGE NUMBER
DRAWING NO. 17622
INDEX

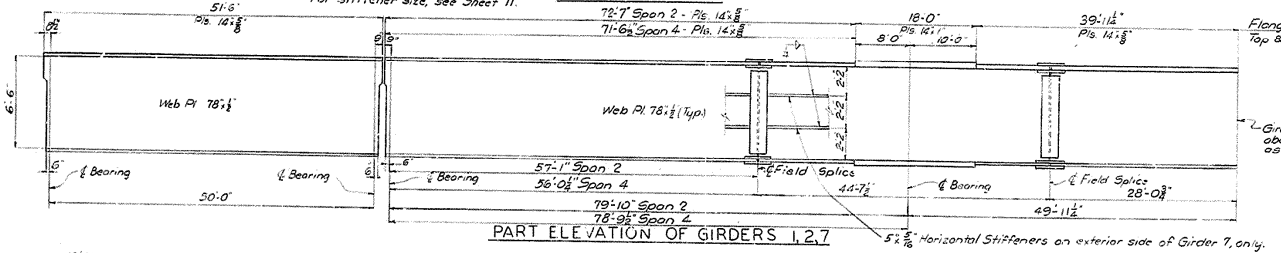
DESIGNED BY TAP CHECKED BY D.G.M.
DETAILED BY D.S.R. CHECKED BY D.G.M.
TRACED BY D.S.R. CHECKED BY D.G.M.
REVISED 8-6-96 REVISED 8-6-96 REVISED 8-6-96
Bridge Diagrams on L Survey Alig. Girder Elevation, Span Lengths

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

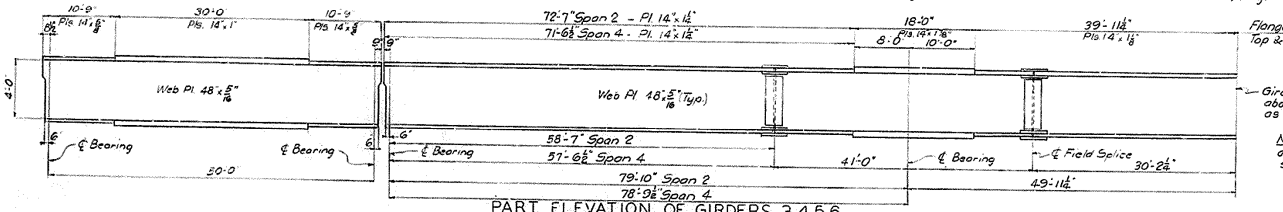


NOTE: For intermediate stiffener spacing, see table below. For stiffener size, see Sheet 11.

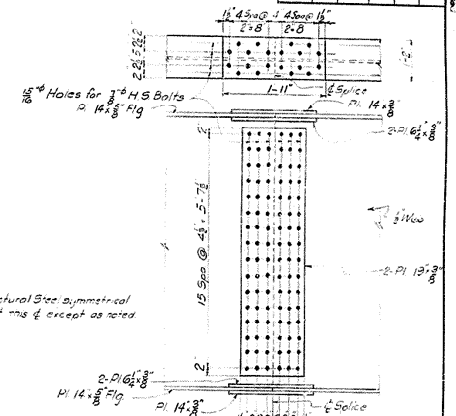
FRAMING PLAN



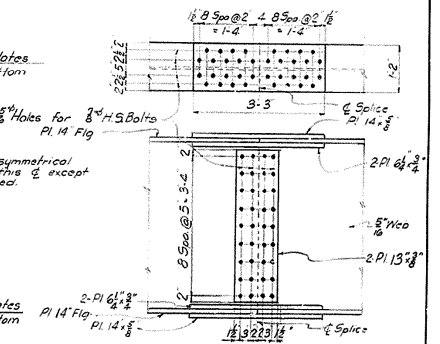
PART ELEVATION OF GIRDERS 1,2,7



PART ELEVATION OF GIRDERS 3,4,5,6



FIELD SPLICE GIR. 1,2,7



FIELD SPLICE GIR. 3,4,5,6

NOTE: Stiffener spacings are to center of stiffeners and are cumulated from left to right as shown in table. Stiffeners shall be placed on sides of webs as shown in plan above.

Ashland-Greenup Rd. over Little Sandy River Sheet 10

STIFFENER SPACING SPANS 1, 5

STIFF. TO FLANGE WELD	TOP & BOT.	TOP	TOP & BOT.	LENGTH
Girders 1,2,7	℄ Brg.	2@3'-3", 6@6'-2", 2@3'-9"	℄ Brg.	50'-0"
Girders 3,4,5,6	℄ Brg.	2@1'-8", 2@2'-10", 8@2'-0", 8@2'-0", 2@1'-8"	℄ Brg.	50'-0"

STIFFENER SPACING SPANS 2,3,4

STIFF. TO FLANGE WELD	TOP & BOT.	TOP	TOP & BOTTOM	BOTTOM	TOP & BOTTOM	TOP	LENGTH
Gir. 1,2,7	℄ Brg.	SPAN ② 2@4'-4½", 10@6'-1", 4@6'-6" SPAN ④ 2@4'-4½", 10@5'-0½", 4@6'-6"	3@6'-6"	3@6'-6 (℄ Brg.) 2@6'-3"	3@6'-3"	2@6'-3", 10@6'-2½" (℄ Span 3)	79'-10", 99'-10½", 78'-9½" Cont.
Gir. 3,4,5,6	℄ Brg.	SPAN ② 1@3'-0, 3@3'-3", 2@4'-3½", 10@3'-6, 5@4'-0" SPAN ④ 1@3'-0, 3@3'-5", 2@3'-7½", 10@3'-6, 5@4'-0"	3@4'-0, 10@3'-6, 1@3'-0	3@3'-0, 9@2'-6 (℄ Brg.) 2@2'-6, 10@2'-9, 10@3'-3", 10@3'-6	3@3'-6, 2@3'-5	2@3'-3, 2@4'-0" 10@3'-11½" (℄ Span 3)	79'-10, 99'-10½", 78'-9½" Cont.

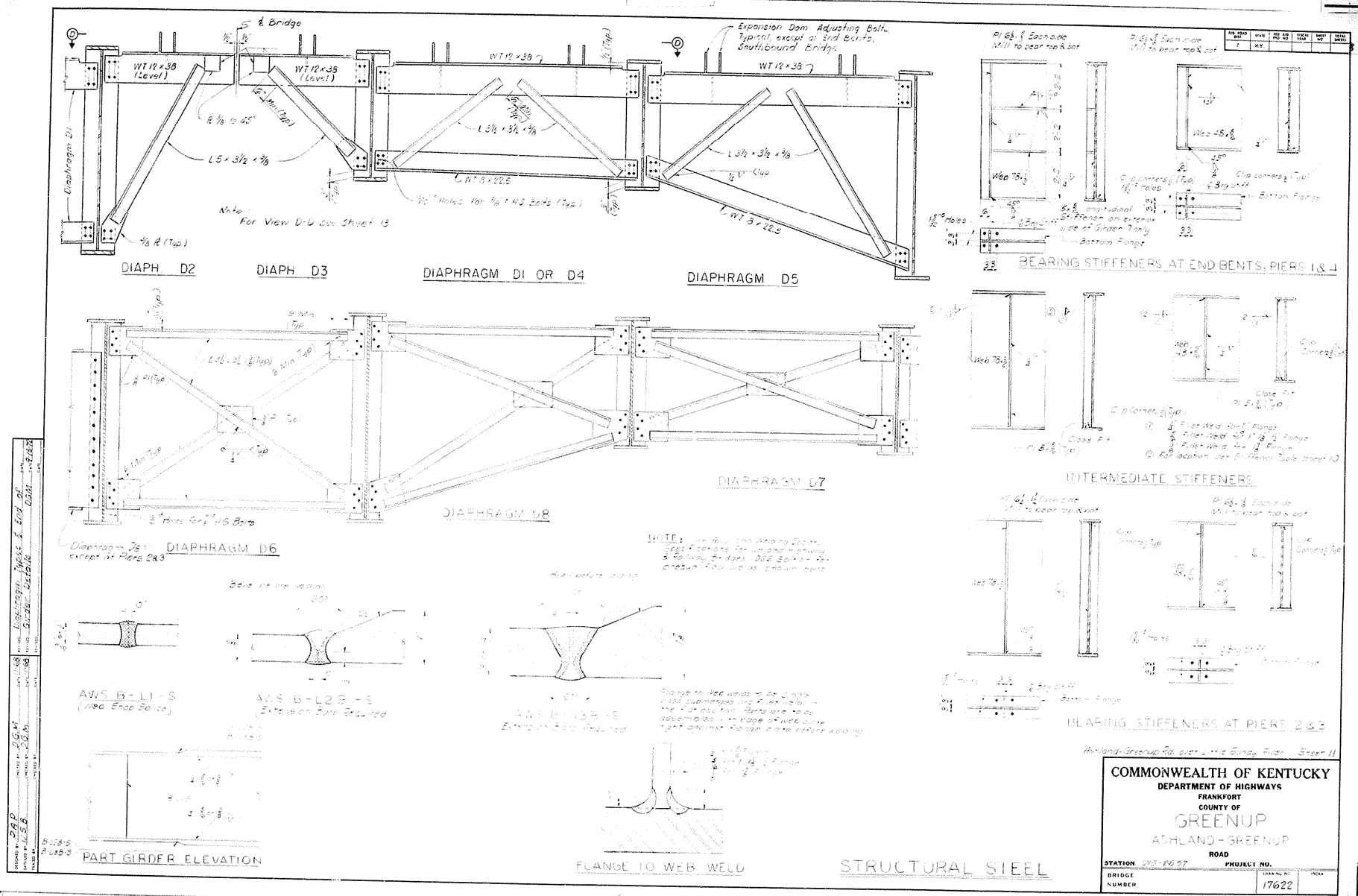
STRUCTURAL STEEL

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
GREENUP
ASHLAND - GREENUP
ROAD

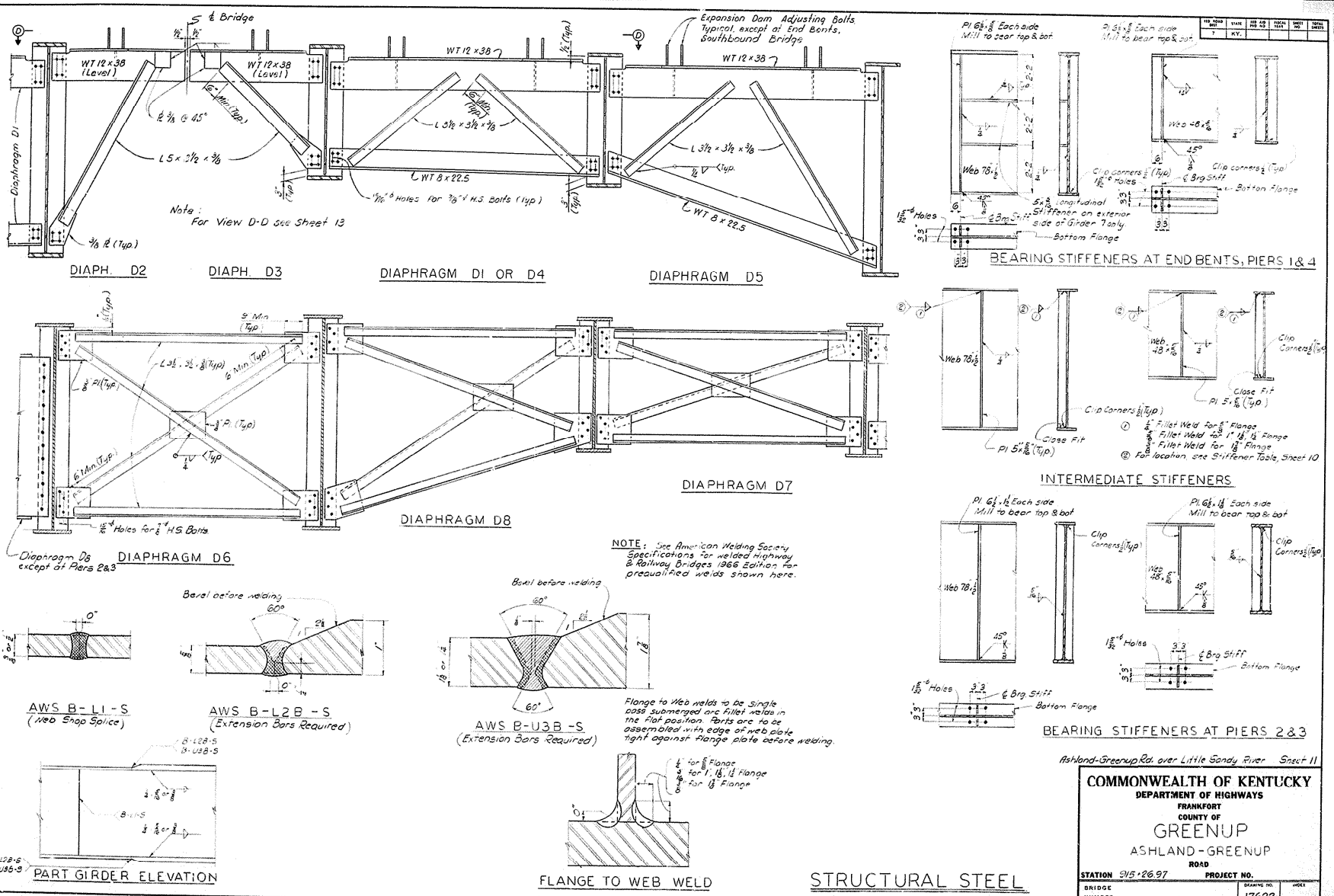
STATION 015+66.97 PROJECT NO.

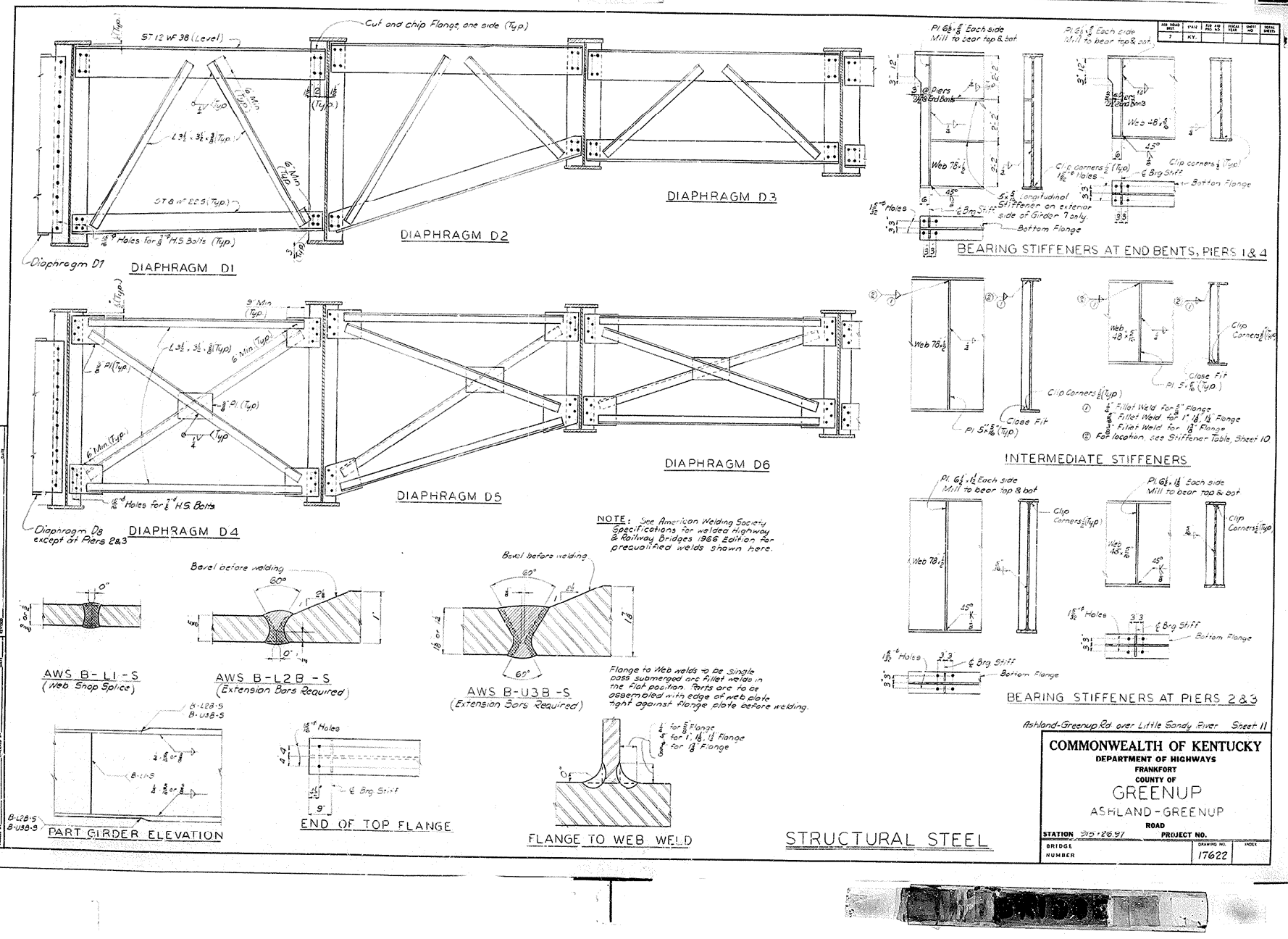
BRIDGE NUMBER — DRAWING NO. 17622 — INDEX

DESIGNED BY DAP — CHECKED BY DGM — REVISED BY — DATE
DETAILED BY DLS — CHECKED BY DGM — REVISED BY — DATE

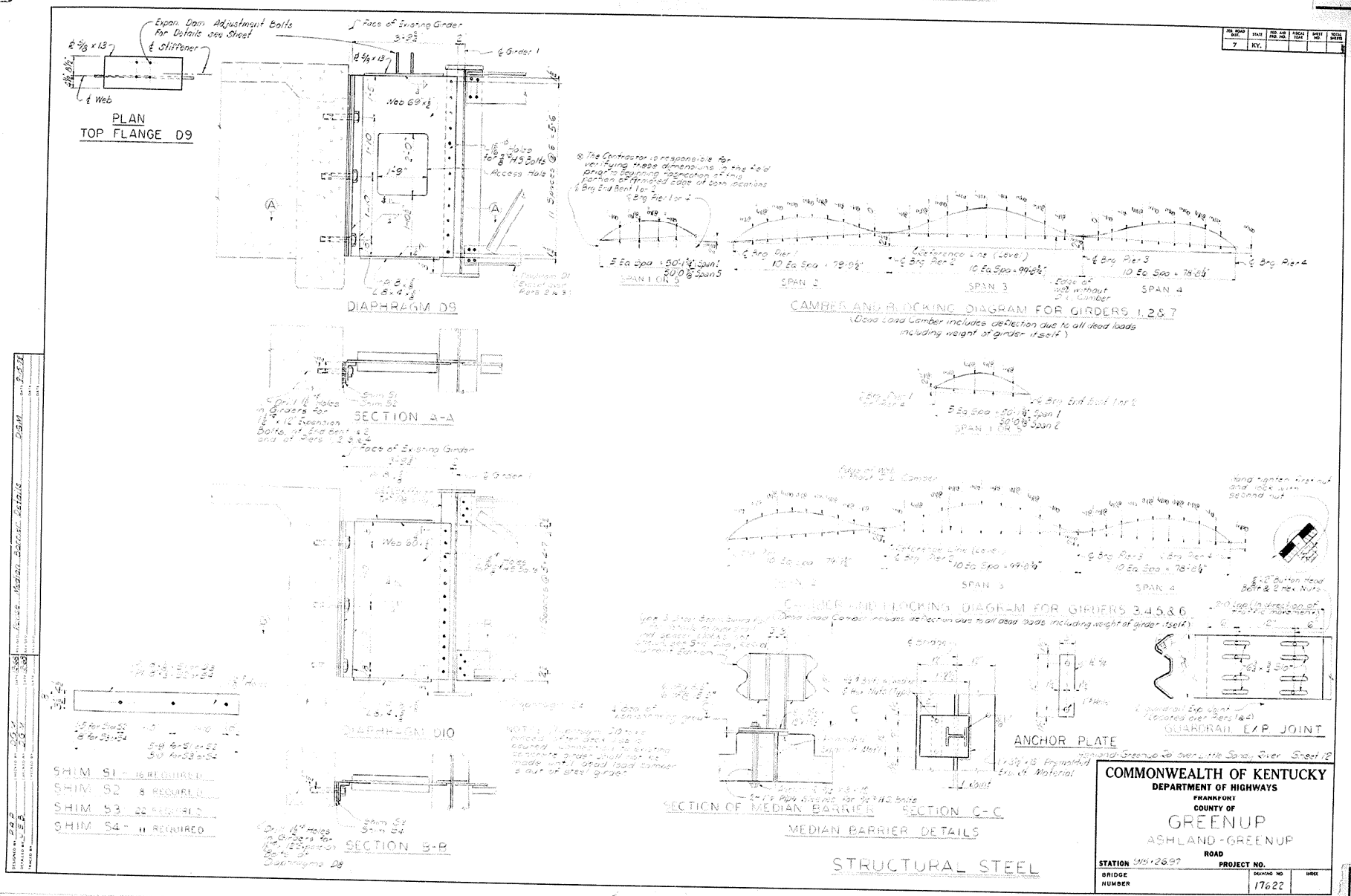

DIAPH D2
DIAPH D3
DIAPHRAGM D1 OR D4
DIAPHRAGM D5
BEARING STIFFENERS AT END BENTS, PIERS 1 & 4
DIAPHRAGM D7
DIAPHRAGM D8
DIAPHRAGM D6
INTERMEDIATE STIFFENERS
BEARING STIFFENERS AT PIERS 2 & 3
AWS B-L1-S
AWS B-L2B-S
PART GIRDER ELEVATION
FLANGE TO WEB WELD
STRUCTURAL STEEL
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
GREENUP
ASHLAND-GREENUP
ROAD
STATION
PROJECT NO.
BRIDGE NUMBER
17622

BRIDGE


℄ Bridge
Expansion Dam Adjusting Bolts Typical, except at End Bents, Southbound Bridge
WT 12 x 38 (Level)
WT 12 x 38 (Level)
WT 12 x 38
WT 12 x 38
L 5 x 3½ x ⅜
L 3½ x 3½ x ⅜
L 3½ x 3½ x ⅜
WT 8 x 22.5
WT 8 x 22.5
⅜" ℓ (Typ.)
Diaphragm D1
Note: For View D-D see Sheet 13
DIAPH. D2
DIAPH. D3
DIAPHRAGM D1 OR D4
DIAPHRAGM D5
Pl 6½ x ⅝ Each side Mill to bear top & bot
Pl 5½ x ⅝ Each side Mill to bear top & bot
Web 78 x ½
Web 48 x 5/16
Clip Corners ½ (Typ.)
1 5/16" ⌀ Holes
℄ Brg Stiff
Bottom Flange
5 x ⅜ Longitudinal Stiffener on exterior side of Girder Only
BEARING STIFFENERS AT END BENTS, PIERS 1 & 4
Web 78 x ½
Web 48 x 5/16
Clip Corners ½ (Typ.)
Close Fit
Pl 5 x 5/16 (Typ.)
Pl 5 x 5/16 (Typ.)
① ¼" Fillet Weld for ⅝" Flange
⅜" Fillet Weld for 1" & 1⅛" Flange
⅜" Fillet Weld for 1⅜" Flange
② For location, see Stiffener Table, Sheet 10
INTERMEDIATE STIFFENERS
Pl 6½ x 1½ Each side Mill to bear top & bot
Pl 6½ x 1⅛ Each side Mill to bear top & bot
Web 78 x ½
Web 48 x 5/16
1 5/16" ⌀ Holes
℄ Brg Stiff
Bottom Flange
BEARING STIFFENERS AT PIERS 2 & 3
Diaphragm D8 except at Piers 2 & 3
DIAPHRAGM D6
DIAPHRAGM D7
DIAPHRAGM D8
1 5/16" ⌀ Holes for ⅝" ⌀ H.S. Bolts
L 3½ x 3½ x ⅜ (Typ.)
Pl (Typ.)
6" Min (Typ.)
NOTE: See American Welding Society Specifications for welded Highway & Railway Bridges 1966 Edition for prequalified welds shown here.
Bevel before welding
60°
AWS B-L1-S (Web Shop Splice)
AWS B-L2B-S (Extension Bars Required)
AWS B-U3B-S (Extension Bars Required)
Flange to Web welds to be single pass submerged arc fillet welds in the flat position. Parts are to be assembled with edge of web plate tight against flange plate before welding.
B-L2B-S
B-U3B-S
PART GIRDER ELEVATION
FLANGE TO WEB WELD
STRUCTURAL STEEL
Ashland-Greenup Rd. over Little Sandy River Sheet 11
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
GREENUP
ASHLAND-GREENUP
ROAD
STATION 915+26.97
PROJECT NO.
BRIDGE NUMBER
DRAWING NO. 17622
INDEX
Diaphragm Types & End of Girder Details
DRAWN BY Z.A.P.
DETAILED BY W.S.B.
CHECKED BY D.G.M.
DATE 8/1/62
BRIDGE


ST 12 WF 38 (Level)
Cut and chip Flange, one side (Typ.)
L 3½ × 3½ × ⅜ (Typ.)
ST 8 WF 22.5 (Typ.)
Holes for ⅞" H.S. Bolts (Typ.)
Diaphragm D1
DIAPHRAGM D1
DIAPHRAGM D2
DIAPHRAGM D3
Pl. (Typ.)
Holes for ⅞" H.S. Bolts
Diaphragm D8 except at Piers 2&3
DIAPHRAGM D4
DIAPHRAGM D5
DIAPHRAGM D6
Pl. 6⅛ × ⅜ Each side Mill to bear top & bot
Web 78 × ½
Web 48 × ⅜
Holes
℄ Brg Stiff
Bottom Flange
5 × ⅜ Longitudinal Stiffener on exterior side of Girder 7 only
Clip corners ½ (Typ.)
Close Fit
Pl. 5 × 5/16 (Typ.)
BEARING STIFFENERS AT END BENTS, PIERS 1 & 4
INTERMEDIATE STIFFENERS
BEARING STIFFENERS AT PIERS 2 & 3
NOTE: See American Welding Society Specifications for welded Highway & Railway Bridges 1966 Edition for prequalified welds shown here.
Bevel before welding
AWS B-L1-S (Web Snap Splice)
AWS B-L2B-S (Extension Bars Required)
AWS B-U3B-S (Extension Bars Required)
Flange to Web welds to be single pass submerged arc fillet welds in the flat position. Parts are to be assembled with edge of web plate tight against flange plate before welding.
PART GIRDER ELEVATION
END OF TOP FLANGE
FLANGE TO WEB WELD
STRUCTURAL STEEL
Ashland-Greenup Rd over Little Sandy River Sheet 11
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
GREENUP
ASHLAND-GREENUP
ROAD
STATION 210+26.97
PROJECT NO.
BRIDGE NUMBER
DRAWING NO. 17622
INDEX

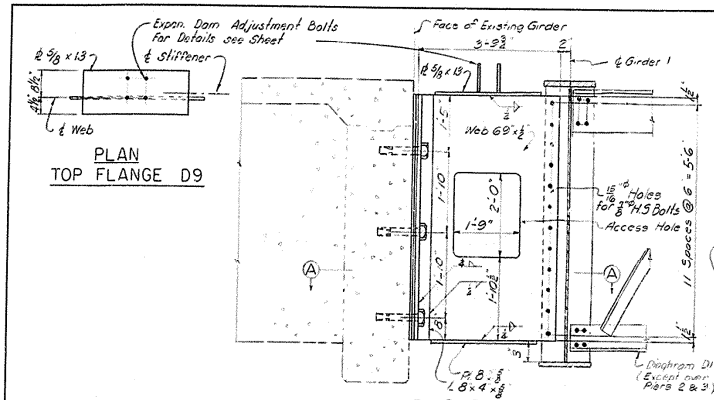
FED. ROAD DIST.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	KY.				



COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
GREENUP
ASHLAND-GREENUP
ROAD
STATION 915+28.97
PROJECT NO.
BRIDGE NUMBER
DRAWING NO. 17622
INDEX

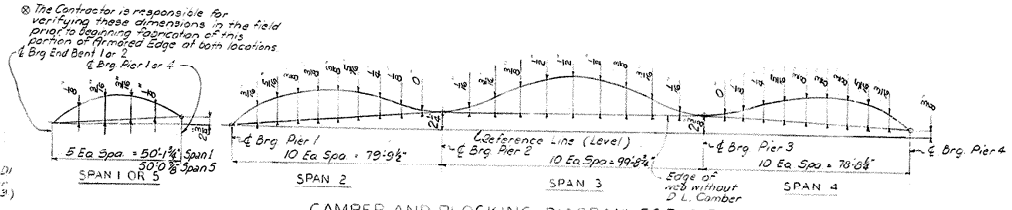
BRIDGE

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

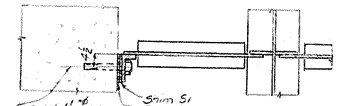


PLAN
TOP FLANGE D9

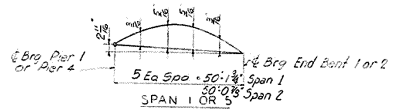
DIAPHRAGM D9

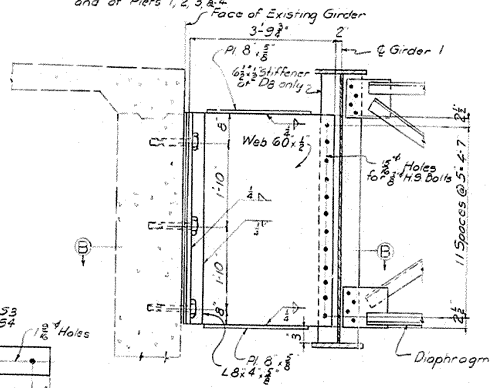


CAMBER AND BLOCKING DIAGRAM FOR GIRDERS 1, 2 & 7
(Dead Load Camber includes deflection due to all dead loads including weight of girder itself.)

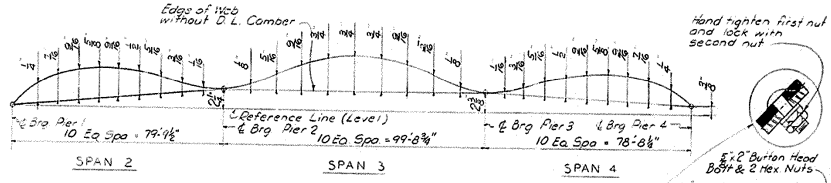


SECTION A-A

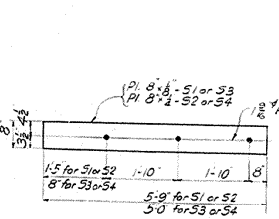




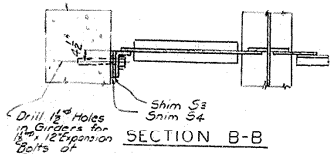
DIAPHRAGM D10



CAMBER AND BLOCKING DIAGRAM FOR GIRDERS 3, 4, 5 & 6
(Dead Load Camber includes deflection due to all dead loads including weight of girder itself.)

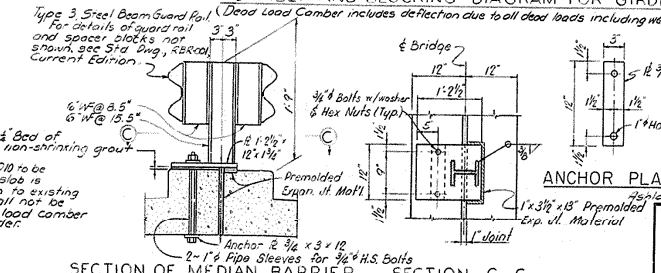


SHIM S1 - 16 REQUIRED
SHIM S2 - 8 REQUIRED
SHIM S3 - 22 REQUIRED
SHIM S4 - 11 REQUIRED



SECTION B-B

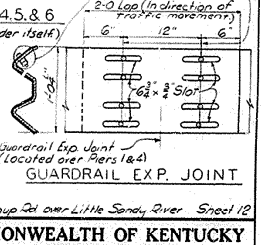
NOTE: Diaphragm D10 to be placed after deck slab is poured. Connection to existing concrete girder shall not be made until dead load camber is out of steel girder.



SECTION OF MEDIAN BARRIER

SECTION C-C

ANCHOR PLATE



GUARDRAIL EXP. JOINT

MEDIAN BARRIER DETAILS

STRUCTURAL STEEL

Ashland-Greenup Rd over Little Sandy River Sheet 12

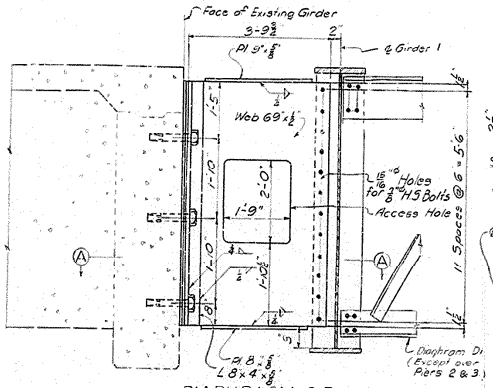
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
GREENUP
ASHLAND-GREENUP
ROAD

STATION 915+26.97 **PROJECT NO.**

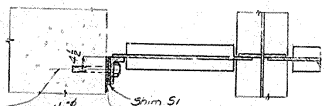
BRIDGE NUMBER	DRAWING NO.	INDEX
	17622	

DESIGNED BY RAD	CHECKED BY DGM	DATE 2-5-74	REVISED Revise Median Barrier Details
DETAILED BY J.S.B.	CHECKED BY DGM	DATE 2-5-74	REVISED
TRACED BY	CHECKED BY	DATE	REVISED

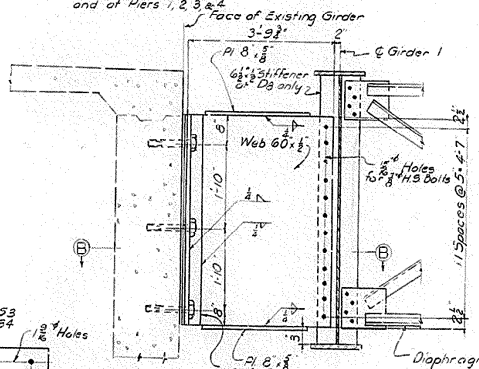
BRIDGE



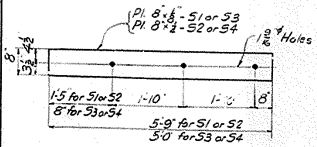
DIAPHRAGM D7



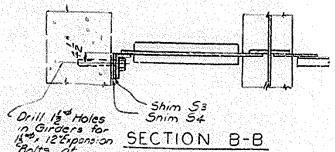
SECTION A-A



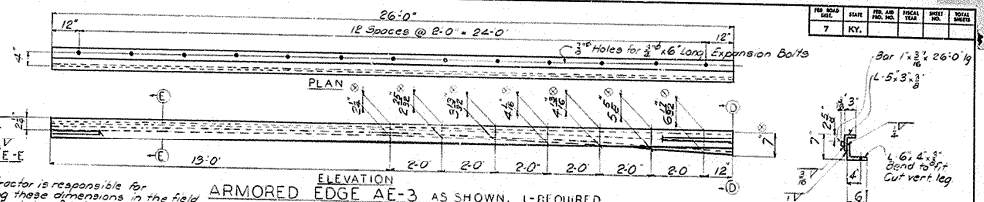
DIAPHRAGM D8



SHIM S1 - 16 REQUIRED
SHIM S2 - 8 REQUIRED
SHIM S3 - 22 REQUIRED
SHIM S4 - 11 REQUIRED

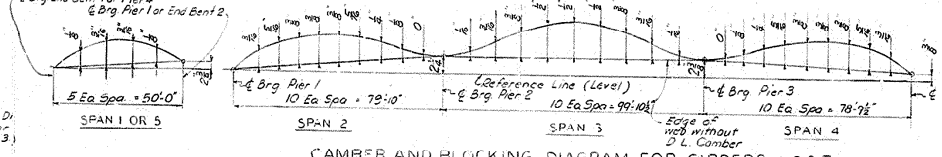


SECTION B-B

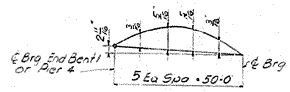


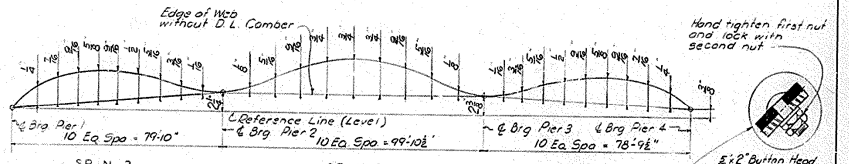
ARMORED EDGE AE-3 AS SHOWN, 1-REQUIRED
ARMORED EDGE AE-4 OPPOSITE HAND, 1-REQUIRED

⊗ The Contractor is responsible for verifying these dimensions in the field prior to beginning fabrication of this portion of Armored Edge at both locations



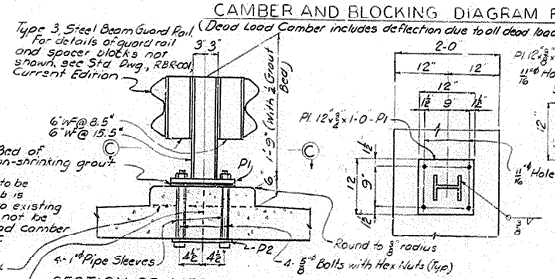
CAMBER AND BLOCKING DIAGRAM FOR GIRDERS 1, 2 & 7
(Dead Load Camber includes deflection due to all dead loads including weight of girder itself.)





CAMBER AND BLOCKING DIAGRAM FOR GIRDERS 3, 4, 5, & 6
(Dead Load Camber includes deflection due to all dead loads including weight of girder itself.)

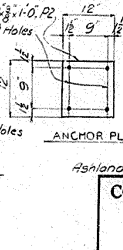
Hand tighten first nut and lock with second nut



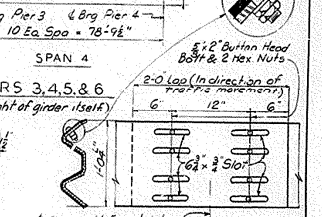
NOTE: Diaphragm D8 to be placed after deck slab is poured. Connection to existing concrete girder shall not be made until dead load camber is out of steel girder.

SECTION OF MEDIAN BARRIER SECTION C-C

MEDIAN BARRIER DETAILS



ANCHOR PLATE P2



GUARDRAIL EXP. JOINT

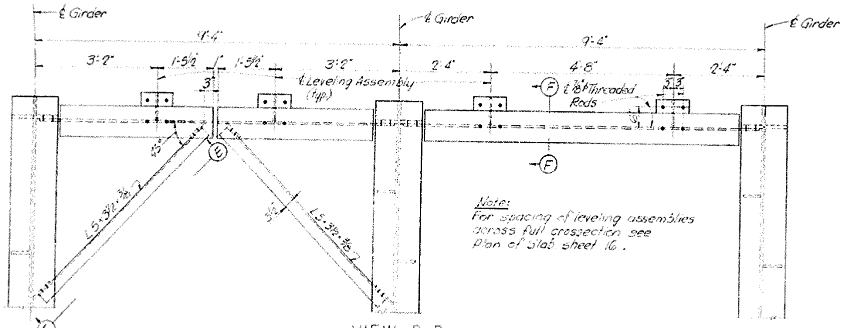
STRUCTURAL STEEL

Ashland-Greenup Rd. over Little Sandy River Sheet 12

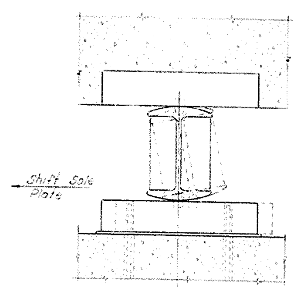
FED. ROAD DIST.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	KY.				

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
GREENUP
ASHLAND-GREENUP
ROAD
STATION 915+26.97
PROJECT NO.
BRIDGE NUMBER
DRAWING NO. 17622
INDEX

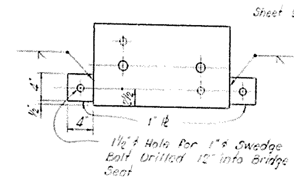
DESIGNED BY: DAP
DETAILED BY: J.G.B.
TRACED BY:
CHECKED BY: DGM
CHECKED BY: DGM
CHECKED BY:
DATE: 6-66 REVISED:
DATE: 6-66 REVISED:
DATE: REVISED:
DATE: REVISED:



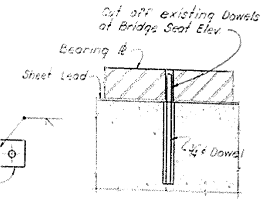
VIEW D-D



END ELEVATION



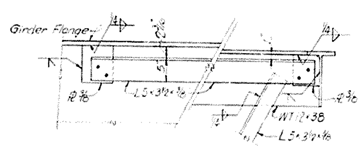
PLAN BOTTOM PLATE



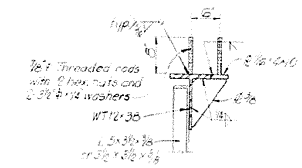
ANCHOR DOWEL DETAIL

CONSTRUCTION PROCEDURE FOR STRAIGHTENING ROCKERS:

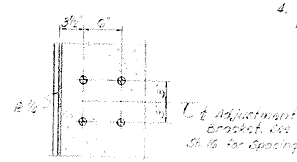
1. Cutoff existing Anchor Dowels at Bridge Seat.
2. Jack beam enough to slide Sole Plate causing rocker to be vertical at 60°F. Allow 1/16" increment for each 10° temperature change at Piers 2 & 4 and ⅛" at Pier 1.
3. Drill 2"ϕ Holes 12" deep as indicated above. Grout 1"ϕ Anchor Bolts with washer and Hex Nut using a non-shrinking grout.
4. Place 4"ϕ Connection Plates around bolts and weld as indicated.



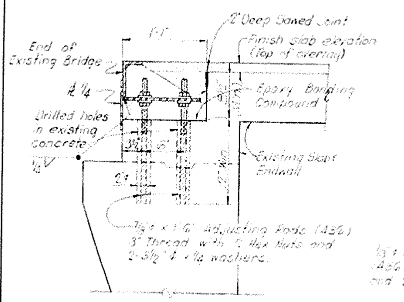
ELEVATION E-E



SECTION F-F

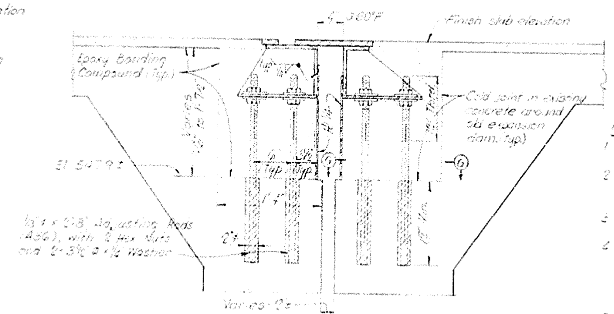


SECTION G-G



SECTION ~ MODIFIED ARMORED EDGE

(See Standard Drawing BJE-002)



SECTION ~ MODIFIED EXPANSION DAM

(See Standard Drawing BJD-001)

CONSTRUCTION PROCEDURE FOR MODIFIED ARMORED EDGE

1. Establish a reference profile for Elev Line Ⓒ or Ⓓ as shown on sheets 18 & 19 for Northbound Bridge.
2. Saw a two inch (2") deep joint thirteen (13") from end of existing bridge as shown.
3. Remove concrete to a depth of eight and one half inches (8½") below the reference profile. Care is to be used so as not to damage existing reinforcing bars.
4. Drill 2"ϕ holes twelve inches (12") at spacing shown on Plan of Slab Sheet 16. Set adjusting rods as shown using a non-shrinking grout.
5. Modify the Armored Edge Standard Drawing BJE-002 as shown using an adjustment bracket similar to one detailed on Standard Drawing BJD-001 for Expansion Dams.
6. Adjust Armored Edge to reference profile. Spot weld exposed reinforcement to anchors and brackets of Armored Edge. Use adjustment rods and brackets for Armored Edge on new portion of Northbound Bridge.
7. Apply Bonding Compound and cast with the concrete overlay of Deck Slab.

CONSTRUCTION PROCEDURES FOR MODIFIED EXPANSION DAM

1. Establish a reference profile for Elev. Line @ ℄ Pier & ℄ Expansion Joint as shown on sheet 18 for Northbound Bridge.
2. Remove old Expansion Dam and concrete around it back to cold joints as detailed. Care is to be used so as not to damage existing reinforcing bars.
3. Drill 2"ϕ holes twelve inches (12") deep at spacing shown. Set Adjusting Rods as shown using a non-shrinking grout.
4. Use Expansion Dam according to Standard Drawing BJD-001 aligning the 4" open joint with joint on new Southbound Bridge. Due to endwalls of old structure being partially closed the closure plate will not fit as detailed on Standard. Change ℄ to ½ and field weld.
5. Adjust Expansion Dam to reference profile. Spot weld exposed reinforcement to anchors and brackets of Expansion Dam. Use adjustment rods as detailed in Section F-F above with new superstructure.
6. Apply bonding compound and cast with the concrete overlay of Deck Slab.

The work involved in removing Expansion Dams and straightening the Expansion Rockers will be done by Change Order by the Contractor.

EXPANSION DAM & ARMORED EDGE DETAILS

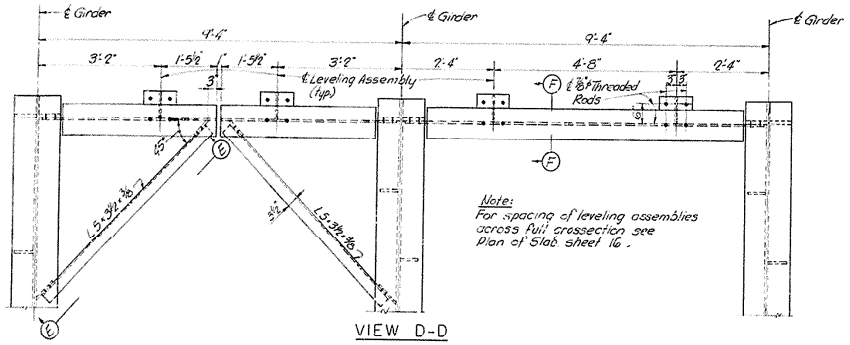
Ashland-Greenup Rd over Little Sandy River   Sheet 15

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
GREENUP
ASHLAND - GREENUP
ROAD
STATION 715+26.97   P. E. PROJECT NO.
CONSTRUCTION PROJECT NO.   MAINTENANCE PROJECT NO.   DRAWING NO. 17622

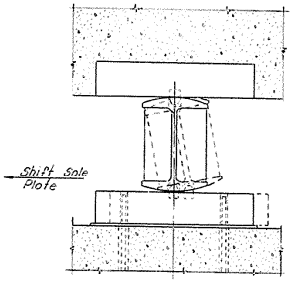
DESIGNED BY DGM   DRAFTED BY NET   TRACED BY
CHECKED BY DGM   CHECKED BY DGM
New Detail Sheet

LETTING DATE

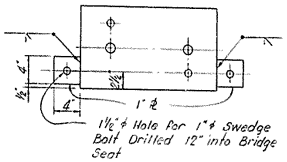
BRIDGE



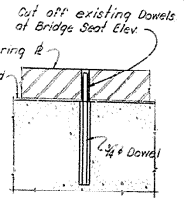
VIEW D-D



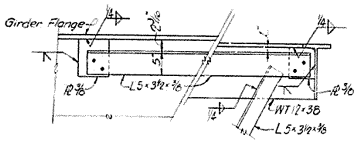
END ELEVATION



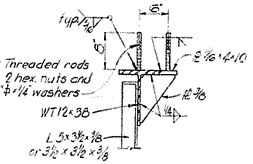
PLAN BOTTOM PLATE



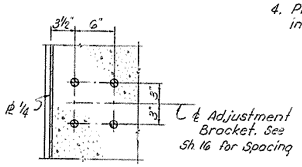
ANCHOR DOWEL DETAIL



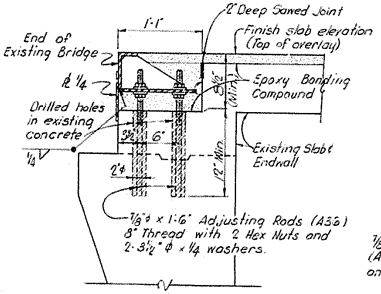
ELEVATION E-E



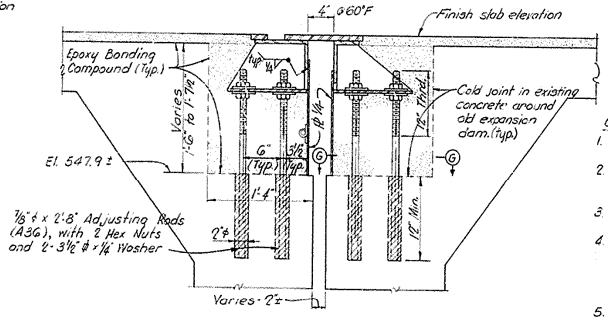
SECTION F-F



SECTION G-G



SECTION ~ MODIFIED ARMORED EDGE
(See Standard Drawing BJE-002)



SECTION ~ MODIFIED EXPANSION DAM
(See Standard Drawing BJD-001)

CONSTRUCTION PROCEDURE FOR MODIFIED ARMORED EDGE

1. Establish a reference profile for Elev. Line Ⓒ or Ⓓ as shown on sheets 18 & 19 for Northbound Bridge.
2. Saw a two inch (2") deep joint thirteen (13") from end of existing bridge as shown.
3. Remove concrete to a depth of eight and one half inches (8½") below the reference profile. Care is to be used so as not to damage existing reinforcing bars.
4. Drill 2"ϕ holes twelve inches (12") at spacing shown on Plan of Slab sheet 16. Set adjusting rods as shown using a non-shrinking grout.
5. Modify the Armored Edge Standard Drawing BJE-002 as shown using an adjustment bracket similar to one detailed on Standard Drawing BJD-001 for Expansion Dams.
6. Adjust Armored Edge to reference profile. Spot weld exposed reinforcement to anchors and brackets of Armored Edge. Use adjustment rods and brackets for Armored Edge on new portion of Northbound Bridge.
7. Apply Bonding Compound and cast with the concrete overlay of Deck Slab.

CONSTRUCTION PROCEDURE FOR STRAIGHTENING ROCKERS:

1. Cutoff existing Anchor Dowels of Bridge Seat.
2. Jack beam enough to slide Sole Plate causing rocker to be vertical at 60°F. Allow 1/16" Increment for each 10° temperature change of Piers 2 & 4 and ⅞" of Pier 1.
3. Drill 2"ϕ Holes 12" deep as indicated above. Grout 1"ϕ Anchor Bolts with washer and Hex Nut using a non-shrinking grout.
4. Place 4"ϕ Connection Plates around bolts and weld as indicated.

CONSTRUCTION PROCEDURES FOR MODIFIED EXPANSION DAM

1. Establish a reference profile for Elev. Line Ⓖ ℄ Pier 6 ℄ Expansion Joint as shown on sheet 18 for Northbound Bridge.
2. Remove old Expansion Dam and concrete around it back to Cold Joints as detailed. Care is to be used so as not to damage existing reinforcing bars.
3. Drill 2"ϕ holes twelve inches (12") deep at spacing shown. Set Adjusting Rods as shown using a non-shrinking grout.
4. Use Expansion Dam according to Standard Drawing BJD-001 aligning the 4" open joint with joint on new Southbound Bridge. Due to endwalls of old structure being partially closed the closure plate will not fit as detailed on standard. Change ⅜ to ¼" and field weld.
5. Adjust Expansion Dam to reference profile. Spot weld exposed reinforcement to anchors and brackets of Expansion Dam. Use adjustment rods as detailed in Section F-F above with new superstructure.
6. Apply bonding compound and cast with the concrete overlay of Deck Slab.

The work involved in removing Expansion Dams and straightening the Expansion Rockers will be done, by Change Order, by the Contractor.

EXPANSION DAM & ARMORED EDGE DETAILS

Ashland-Greenup 'A' over Little Sandy River Sheet 15

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
GREENUP
ASHLAND - GREENUP
ROAD

STATION 915+26.97 P.S. PROJECT NO.

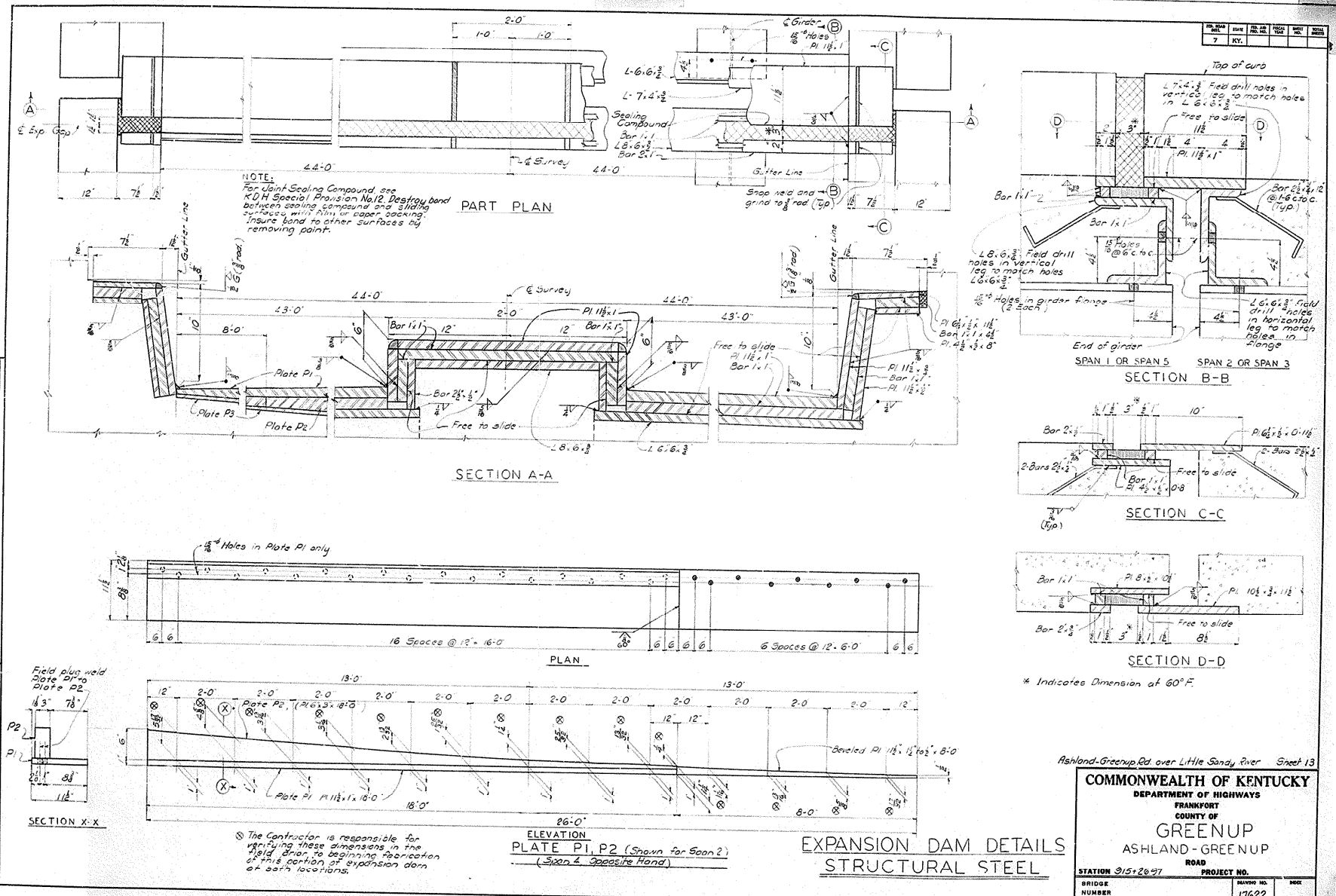
CONSTRUCTION PROJECT NO	MAINTENANCE PROJECT NO	DRAWING NO.
		17622

LETTING DATE

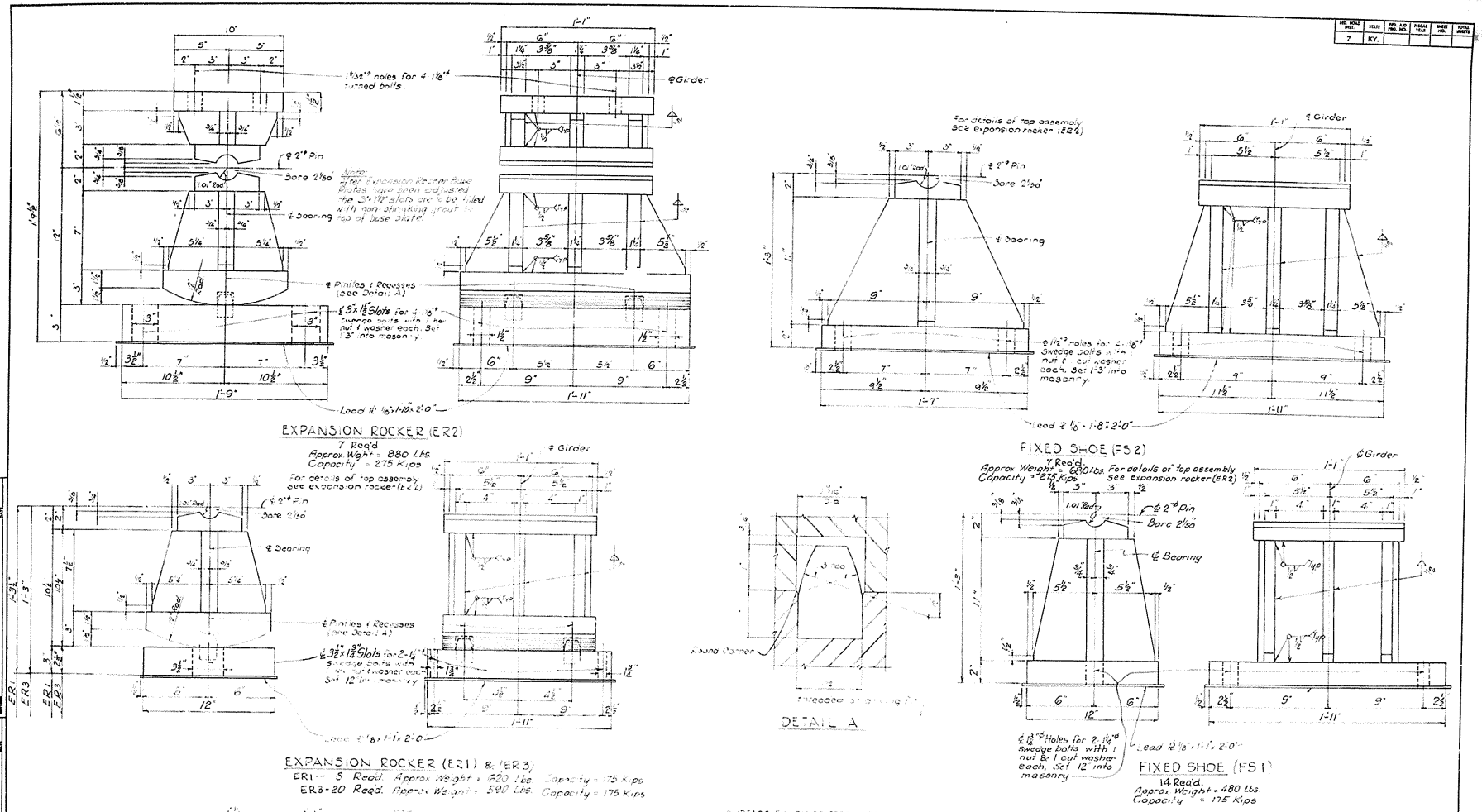
REVISED BY DGM	CHECKED BY	DATE 9-15-78	
REVISED BY	CHECKED BY	DATE	
TRACED BY DGM	CHECKED BY	DATE 2-78	
REVISED BY DGM	CHECKED BY	DATE 2-78	
REVISED BY	CHECKED BY	DATE	
REVISED BY	CHECKED BY	DATE	

New Detail Sheet

BRIDGE


PART PLAN
NOTE:
For Joint Sealing Compound, see KDH Special Provision No.12. Destroy bond between sealing compound and sliding surfaces, with film or paper backing. Insure bond to other surfaces by removing paint.
SECTION A-A
SECTION B-B
SPAN 1 OR SPAN 5
SPAN 2 OR SPAN 3
SECTION C-C
SECTION D-D
* Indicates Dimension at 60°F.
PLAN
ELEVATION
PLATE P1, P2 (Shown for Span 2)
(Span 4 Opposite Hand)
SECTION X-X
The Contractor is responsible for verifying these dimensions in the field prior to beginning fabrication of this portion of expansion dam at each locations.
EXPANSION DAM DETAILS
STRUCTURAL STEEL
Ashland-Greenup Rd. over Little Sandy River
Sheet 13
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
GREENUP
ASHLAND-GREENUP
ROAD
STATION 915+26.97
PROJECT NO.
BRIDGE NUMBER
DRAWING NO.
17622
INDEX

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



SURFACE FINISH OF STEEL - SPECIFICATIONS

Steel shoes	ASA 2000
Rocker plates in contact with shoes to be welded	ASA 1000
Milled ends of compression members, stiffeners and fillers	ASA 500
Bridge rollers & rockers	ASA 250
Pins & pin holes	ASA 125

BEARING ASSEMBLIES
STRUCTURAL STEEL

Ashland-Greenup Rd. over Little Sandy River Sheet: 14

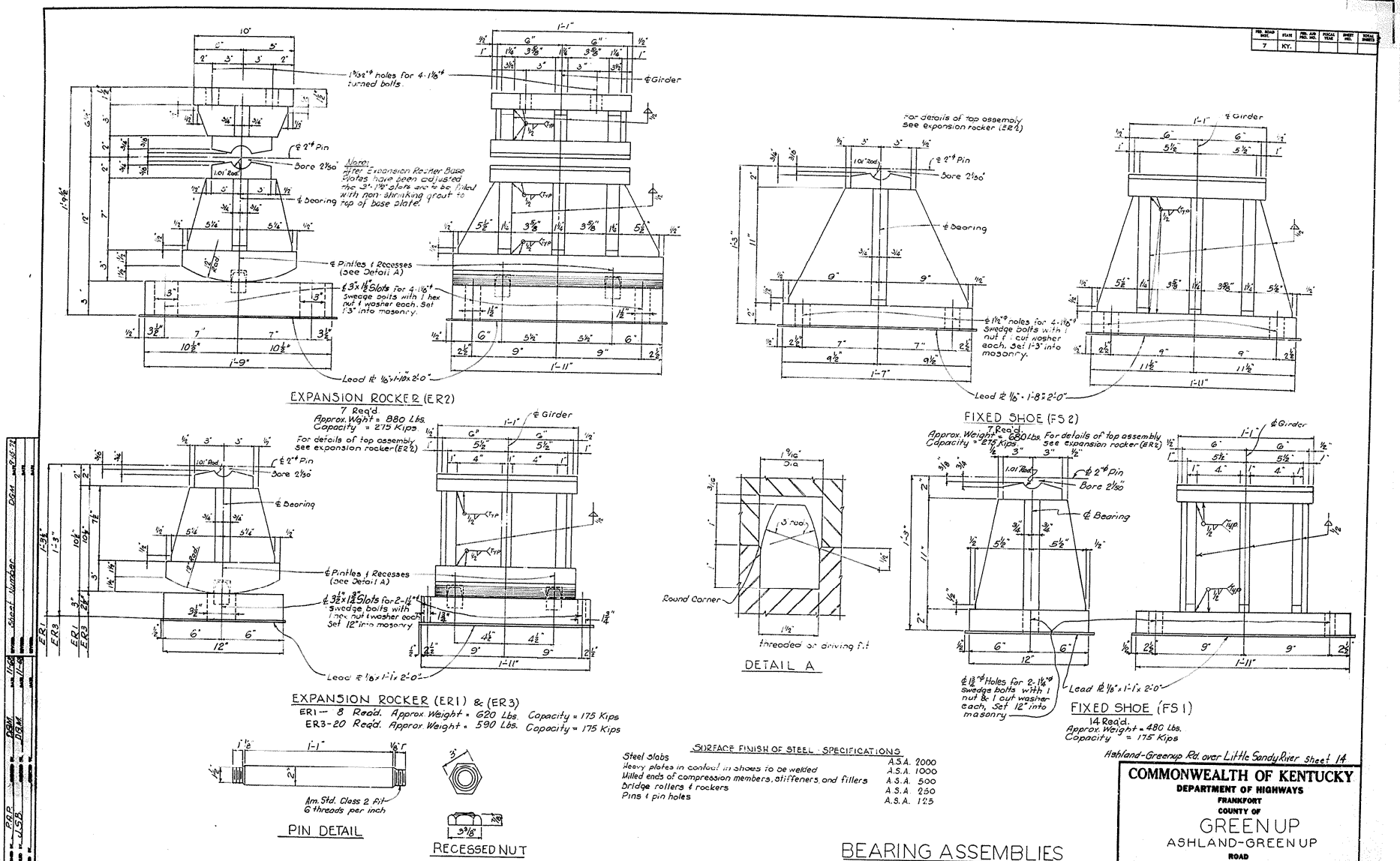
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
GREENUP
ASHLAND-GREENUP
ROAD

STATION 915 + 26.07 PROJECT NO.

BRIDGE NUMBER | DRAWING NO. 17622 | INDEX

BRIDGE

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



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, stiffeners and fillers	A.S.A. 500
Bridge rollers & rockers	A.S.A. 250
Pins & pin holes	A.S.A. 125

BEARING ASSEMBLIES STRUCTURAL STEEL

Ashland-Greenup Rd. over Little Sandy River Sheet 14

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
GREENUP
ASHLAND-GREENUP
ROAD

STATION 915+26.97 PROJECT NO.

BRIDGE NUMBER | DRAWING NO. 17622 | SHEET

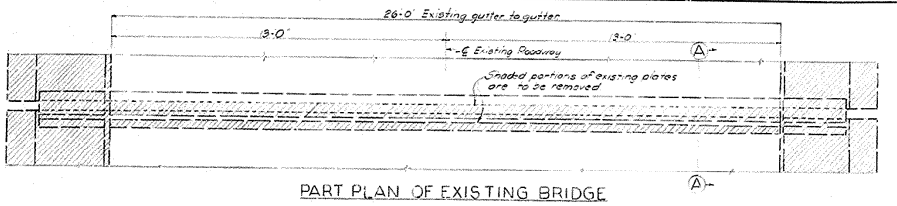
DESIGNED BY	P.R.P.	DATE	7-12-72
DETAILED BY	J.S.B.	DATE	
CHECKED BY		DATE	
REVISED BY		DATE	
REVISED BY		DATE	
REVISED BY		DATE	

DGM DATE 7-12-72
DGM DATE 11-6-72
JBW DATE 11-6-72

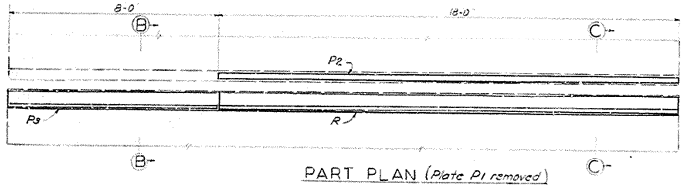
Sheet Number

BRIDGE

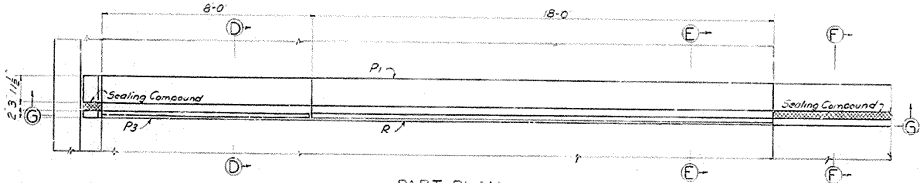
FED. ROAD DIST.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	KY.				



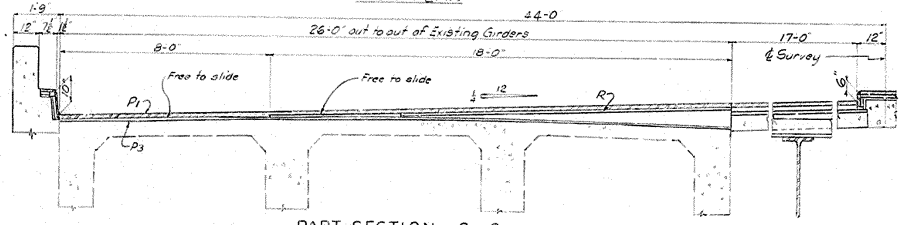
PART PLAN OF EXISTING BRIDGE



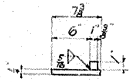
PART PLAN (Plate P1 removed)



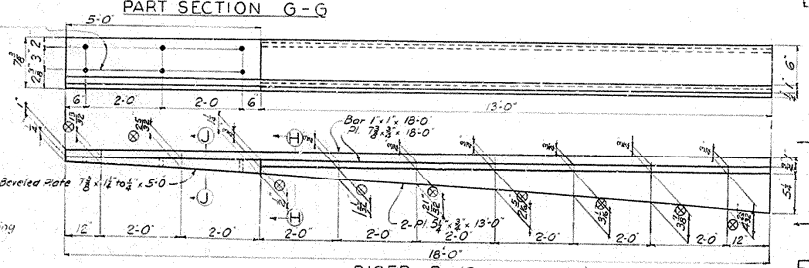
PART PLAN



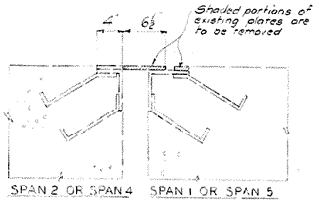
PART SECTION G-G



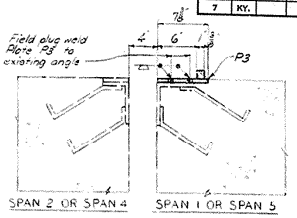
END ELEVATION



RISER R - (Shown for Span 1)
(Span 5, opposite hand)

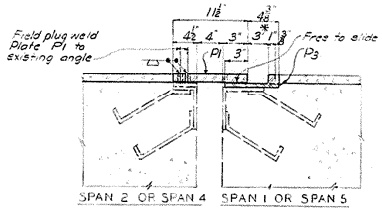


SECTION A-A

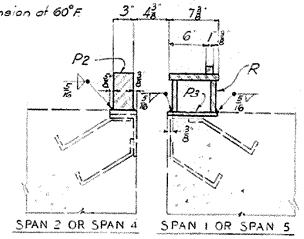


SECTION B-B

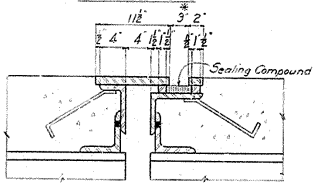
* Indicates dimension at 60°F



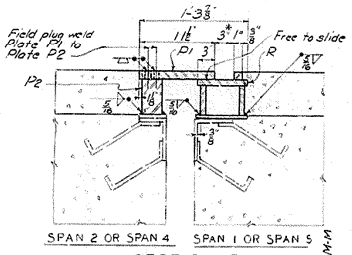
SECTION D-D



SECTION C-C



SECTION F-F



SECTION E-E

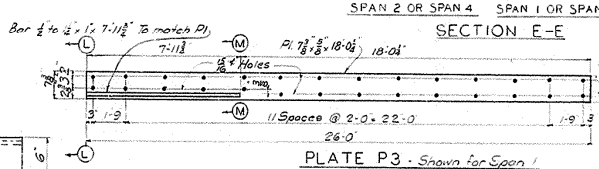
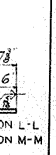
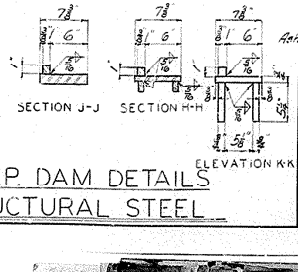


PLATE P3 - Shown for Span 1
Span 5, opposite hand



SECTION L-L
SECTION M-M



SECTION J-J
SECTION H-H
ELEVATION K-K

Ashland-Greenup Rd over Little Sandy River Sheet 14

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
GREENUP
ASHLAND - GREENUP
ROAD
STATION 915+26.97 **PROJECT NO.**

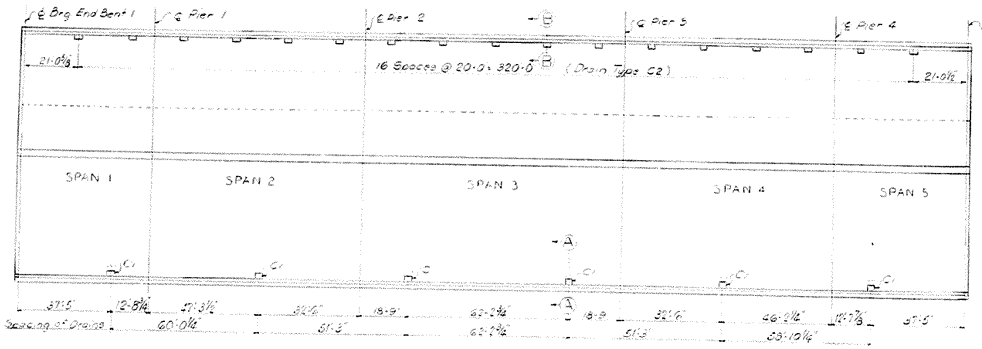
BRIDGE NUMBER	DRAWING NO.	INDEX
	17622	

⊗ The Contractor is responsible for verifying these dimensions in the field prior beginning fabrication of riser at both locations.

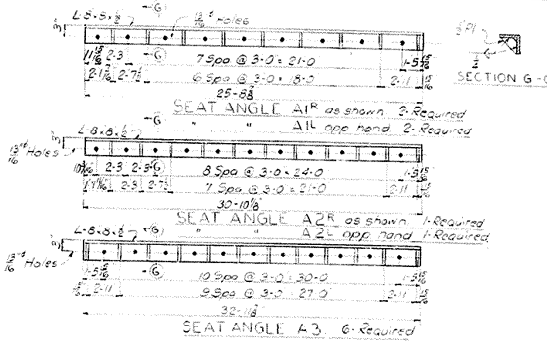
DESIGNED BY DGM CHECKED BY DGM DATE 1-68 REVISED DATE
DETAILED BY DGM CHECKED BY DATE REVISED DATE
TRACED BY CHECKED BY DATE REVISED DATE

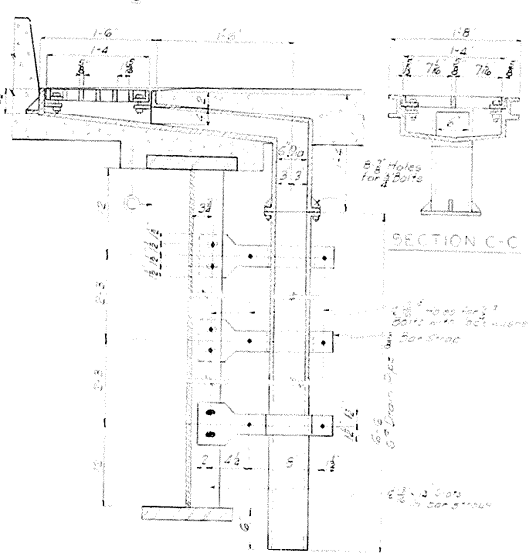
EXP DAM DETAILS
STRUCTURAL STEEL

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

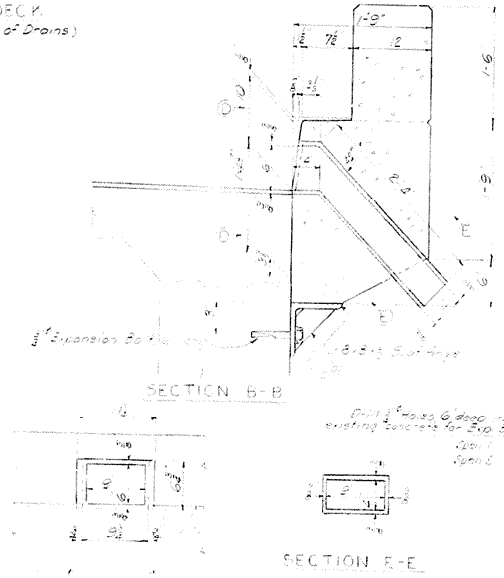


PLAN OF DECK
(Showing Location of Drains)

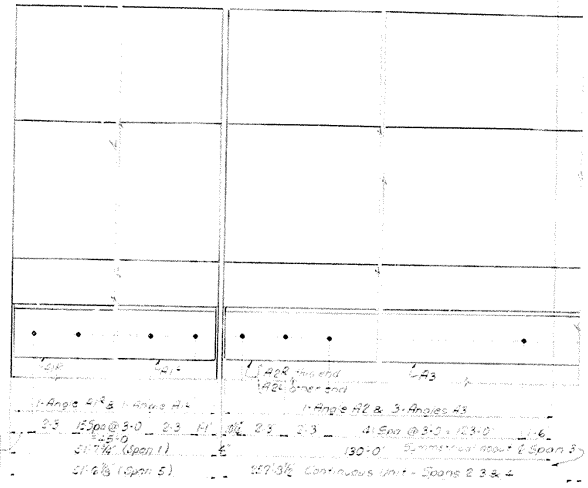




ROADWAY DRAINS C1
6-Required Approx. Wgt. = 310 Lbs Each
Estimated Drain Pipe = 39 Lin. Ft
See General Note Sheet 2



ROADWAY DRAINS C2
17-Required
Approximate Wgt. 70 Lbs Each



STRUCTURAL STEEL

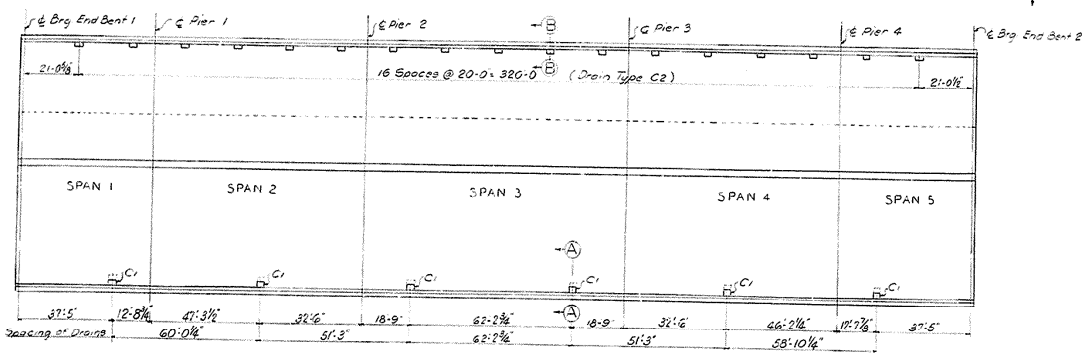
Ashland-Greenup Bridge over Little Sandy River Sheet 15

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
GREENUP
ASHLAND-GREENUP
ROAD
STATION 915+26.97 PROJECT NO.

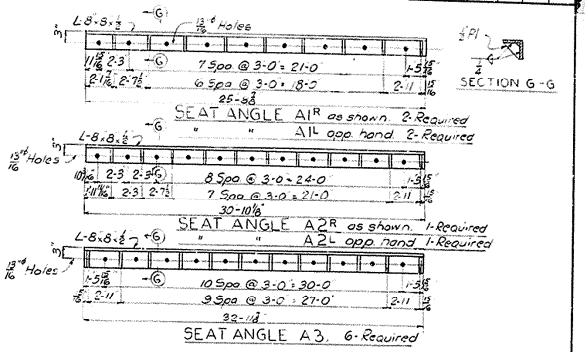
BRIDGE NUMBER	DRAWING NO.	INDEX
	17622	

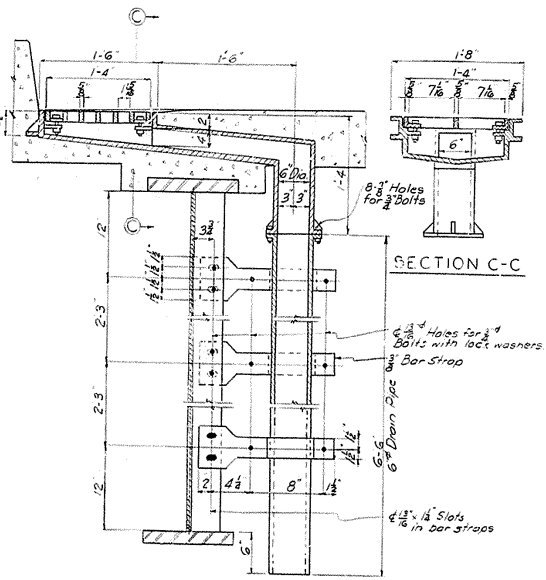
BRIDGE

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



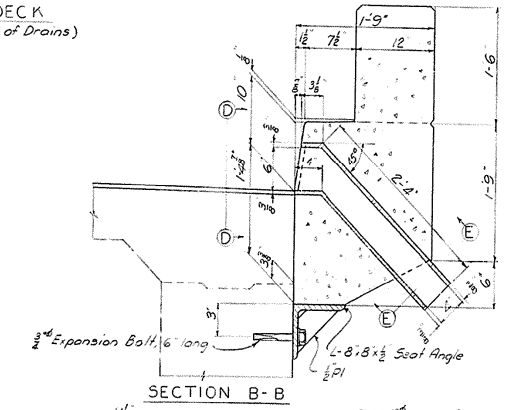
PLAN OF DECK
(Showing Location of Drains)

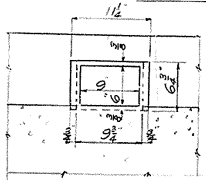




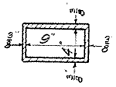
SECTION A-A

ROADWAY DRAINS C1
6-Required. Approx. Wght. = 310 Lbs Each
Estimated Drain Pipe = 39 Lin. Ft
See General Note, Sheet 2



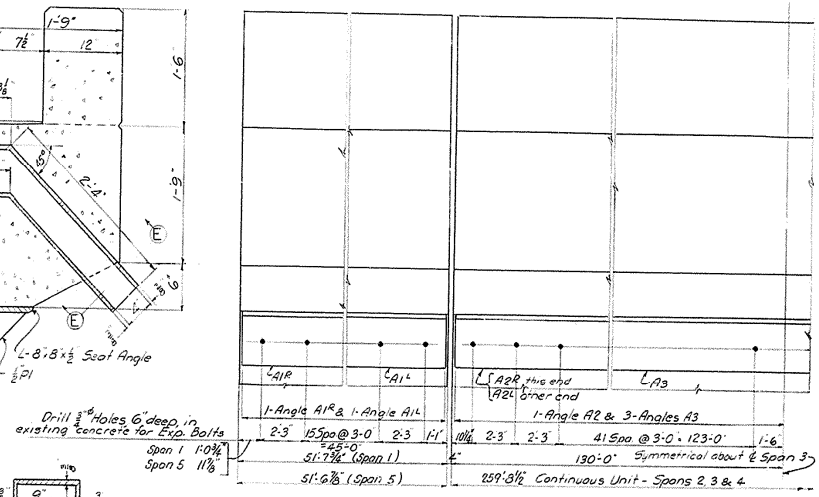


ELEVATION D-D



SECTION E-E

ROADWAY DRAINS C2
17-Required
Approximate Wght. 70 Lbs Each



PART ELEVATION F-F
Showing Seat Angles

STRUCTURAL STEEL

Ashland-Greenup Rd over Little Sandy River Sheet 15

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
GREENUP
ASHLAND-GREENUP
ROAD
STATION 915+26.97 **PROJECT NO.**

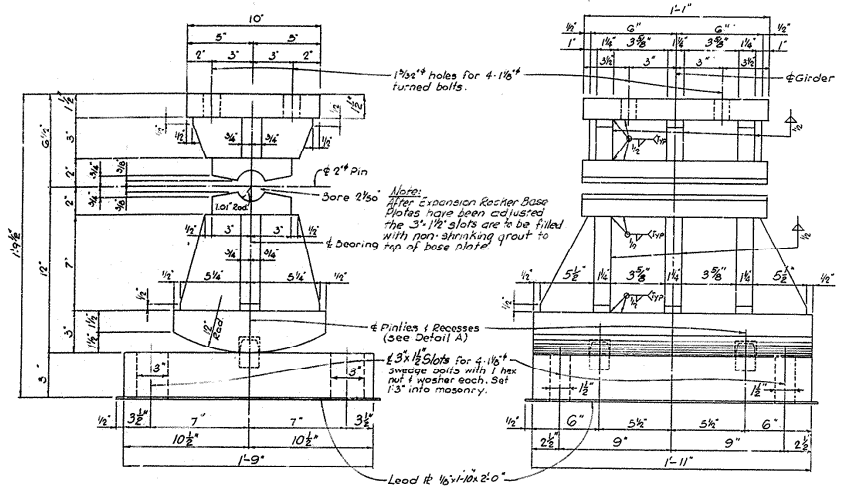
BRIDGE NUMBER	DRAWING NO.	BRIDGE
	17622	

DESIGNED BY RAD	CHECKED BY DGM	REVISED DATE 12-88	REVISED DATE 12-88
DETAILED BY RAD	CHECKED BY DGM	REVISED DATE 12-88	REVISED DATE
TRACED BY LSB	CHECKED BY	REVISED DATE	REVISED DATE

Sheet Number - Drain Spacing
Seat Angles
DGM DATE 2-16-94

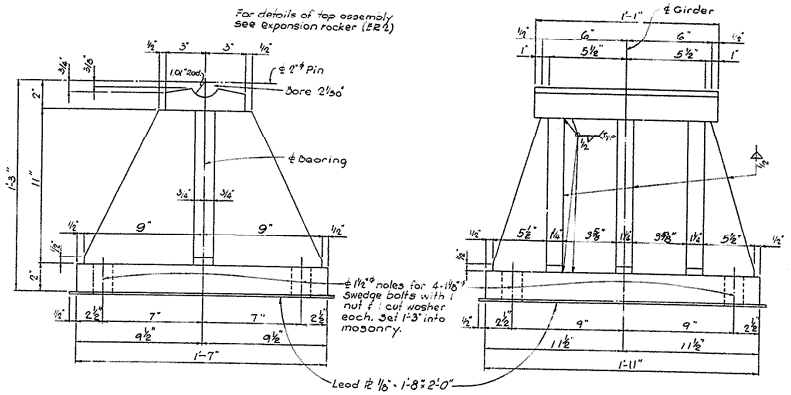
BRIDGE

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



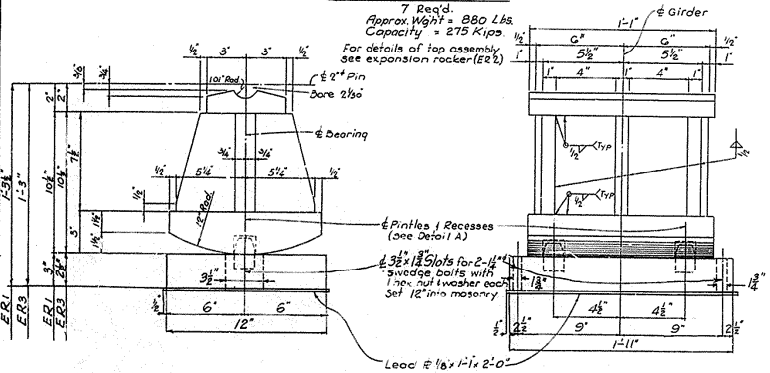
EXPANSION ROCKER (ER2)

7 Req'd.
Approx. Weight = 880 Lbs.
Capacity = 275 Kips



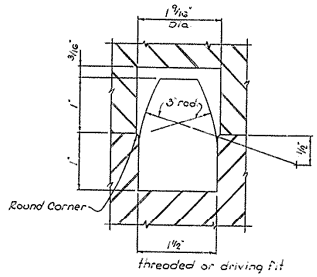
FIXED SHOE (FS2)

7 Req'd.
Approx. Weight = 880 Lbs.
Capacity = 275 Kips

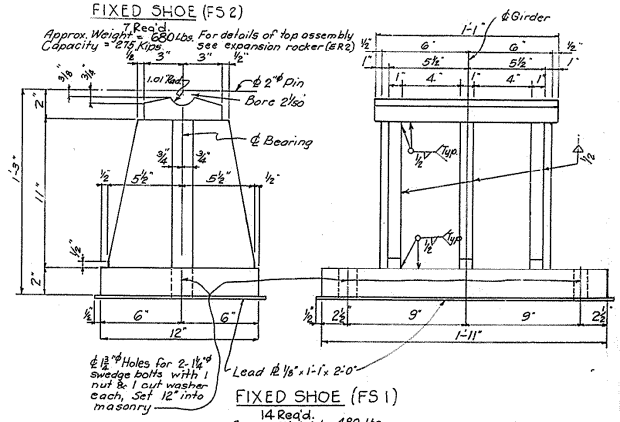


EXPANSION ROCKER (ER1) & (ER3)

ER1 — 8 Req'd. Approx. Weight = 620 Lbs. Capacity = 175 Kips
ER3 - 20 Req'd. Approx. Weight = 590 Lbs. Capacity = 175 Kips

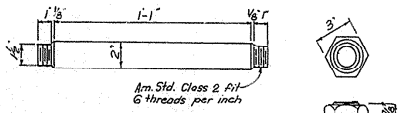


DETAIL A

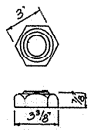


FIXED SHOE (FS1)

14 Req'd.
Approx. Weight = 480 Lbs.
Capacity = 175 Kips



PIN DETAIL



RECESSED NUT

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, stiffeners, and fillers	A.S.A. 500
Bridge rollers & rockers	A.S.A. 250
Pins & pin holes	A.S.A. 125

BEARING ASSEMBLIES STRUCTURAL STEEL

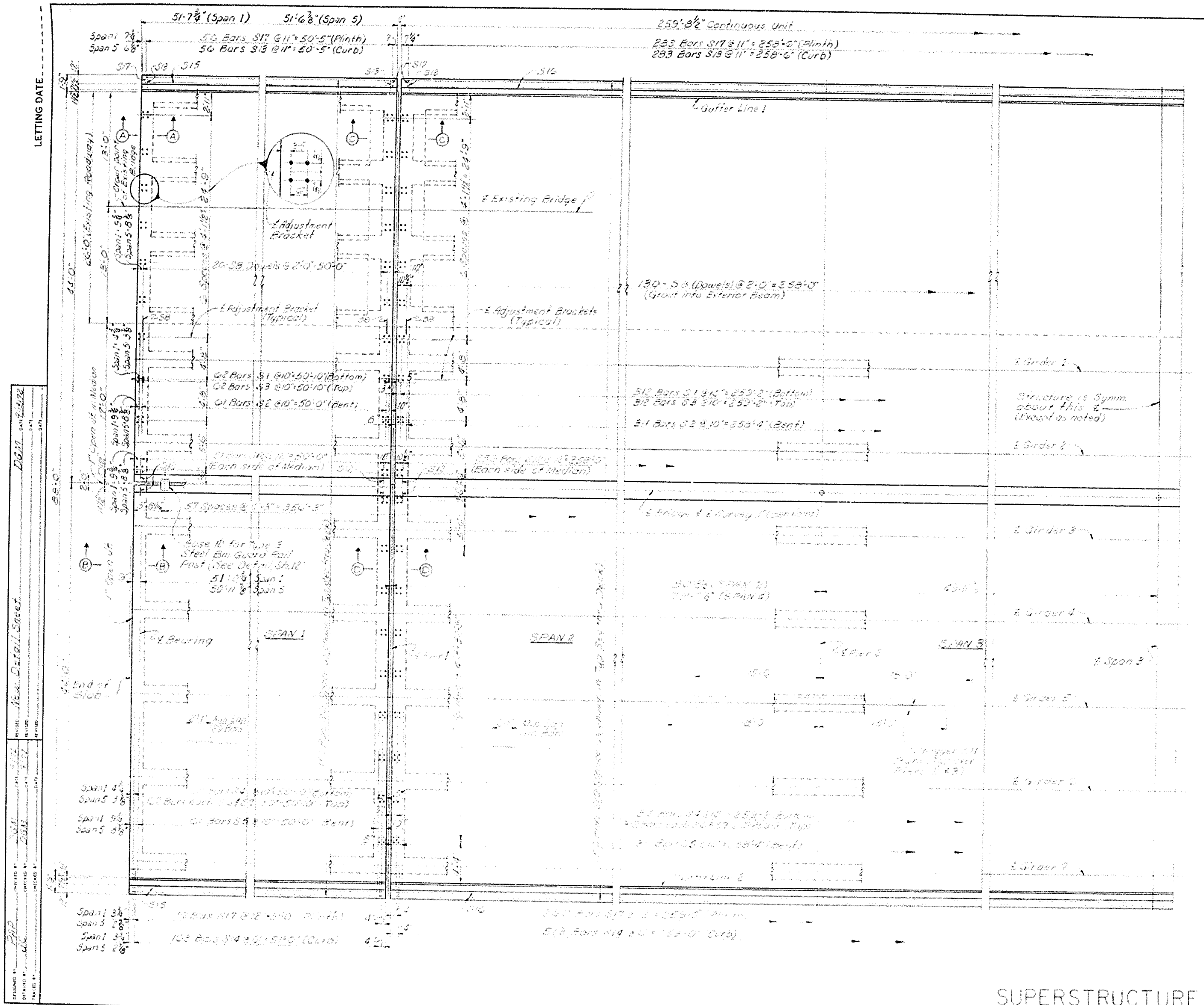
Ashland-Greenup Rd. over Little Sandy River Sheet 15

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
GREENUP
ASHLAND-GREENUP
ROAD

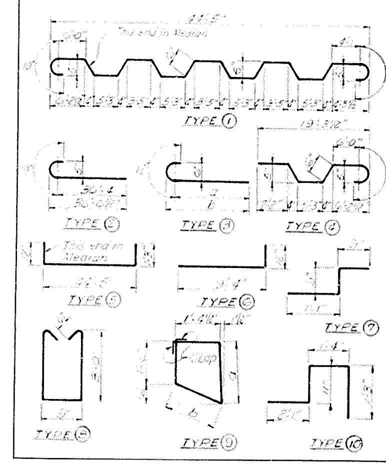
STATION 915 + 26.97 PROJECT NO.

BRIDGE NUMBER — DRAWING NO. 17622 — SHEET

PREP. BY J.S.B. 11-56
DESIGN BY J.S.B. 11-56
DRAWN BY D.G.W. 11-56
CHECKED BY



BILL OF REINFORCEMENT												
MARK	TYPE	NUMBER SPAN 1	NUMBER SPANS 2-3-4	NUMBER SPAN 5	BAR SIZE	LENGTH Ft.	LENGTH In.	LOCATION	C Ft.	C In.	D Ft.	D In.
S1	⑥	62	312	62	#5	20	4	Slab				
S2	④	61	311	61	#5	20	3	"				
S3	④	62	312	62	#6	20	1	"	13	1	13	4
S4	⑤	62	312	62	#5	16	7	"				
S5	①	61	311	61	#5	47	0	"				
S6	②	62	312	62	#5	37	2	"				
S7	③	62	312	62	#6	11	2	"	10	2	10	5
S8	Str.	26	130	26	#10	2	0	Ext. Bm. Dowels				
S9	"	312	—	312	#5	26	8	Slab				
S10	"	—	1249	—	#5	38	4	"				
S11	"	—	100	—	#8	33	0	"				
S12	⑦	102	518	102	#4	2	6	Median				
S13	⑨	56	283	56	#5	7	3	Curb	2	0	1	7
S14	⑩	103	519	103	#5	5	4	"				
S15	Str.	16	—	16	#4	26	7	Plinth				
S16	"	—	36	—	#4	39	7	"				
S17	⑧	108	543	108	#5	7	7	Curb & Plinth				



ESTIMATE OF QUANTITIES			
Item / Location	Span 1	Spans 2-3-4	Span 5
Concrete, Class "AA" (Cu. Yds)	106.0	530.1	106.0
Steel Reinforcement (Lbs)	24,672	130,477	24,672
	109.1	539.6	109.1
	25,126	136,579	25,126

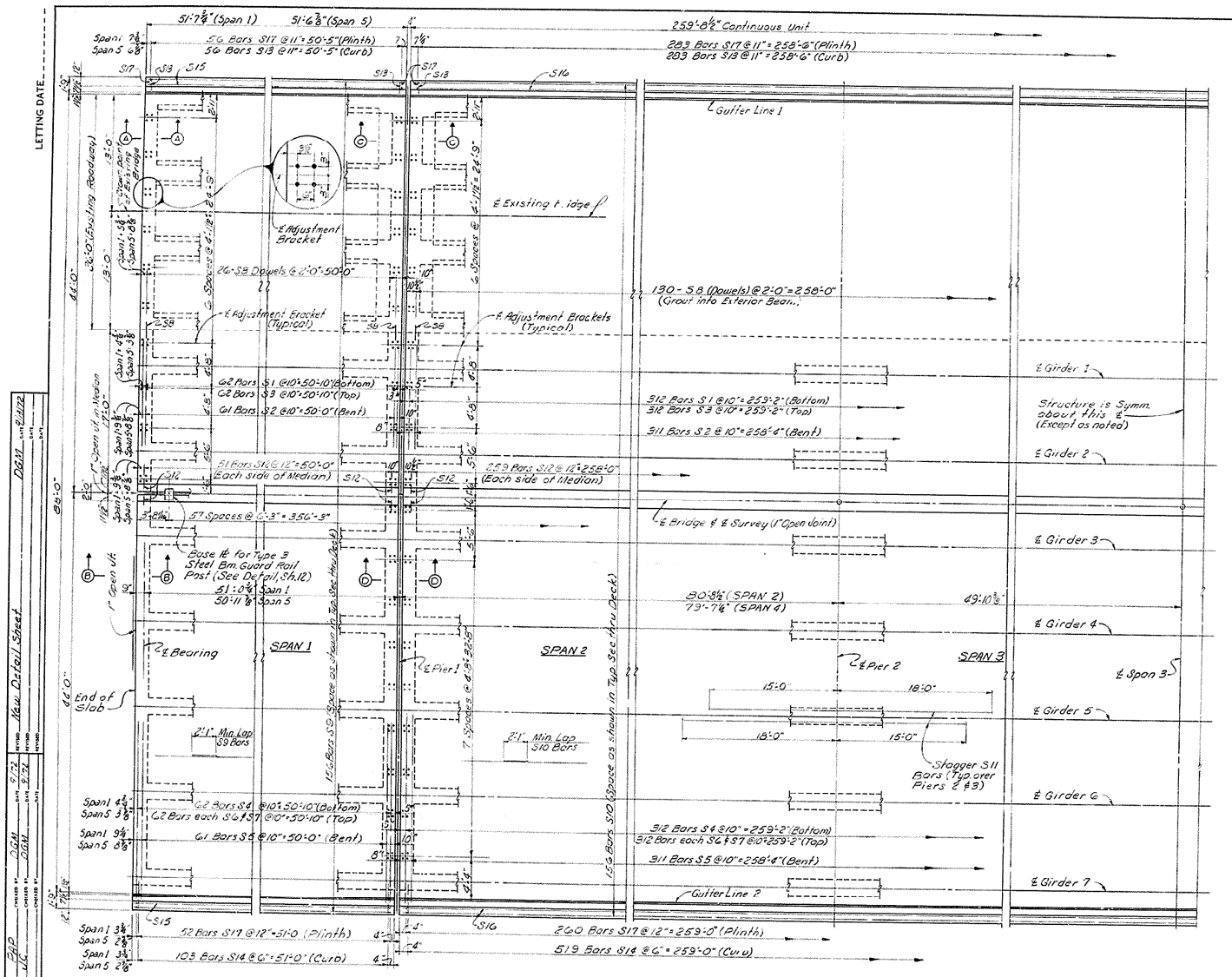
Ashland-Greenup Rd. over Little Sandy River Sheet 16

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
GREENUP
ASHLAND – GREENUP
ROAD
STATION 915 + 26.97
P. E. PROJECT NO.

CONSTRUCTION PROJECT NO	MAINTENANCE PROJECT NO	DRAWING NO.
		17622

SUPERSTRUCTURE

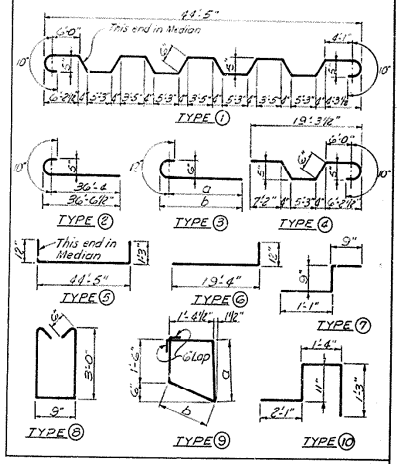
BRIDGE



SUPERSTRUCTURE

BILL OF REINFORCEMENT

MARK	TYPE	NUMBER SPAN 1	NUMBER SPANS 2-3-4	NUMBER SPAN 5	BAR SIZE	LENGTH Ft.	LENGTH In.	LOCATION	a Ft.	a In.	b Ft.	b In.
S1	①	62	312	62	#5	20	1	Slab				
S2	④	61	311	61	#5	20	3	"				
S3	⑤	62	312	62	#6	20	1	"	18	1	15	8
S4	⑥	62	312	62	#5	46	7	"				
S5	⑦	61	311	61	#5	47	0	"				
S6	⑧	62	312	62	#5	37	2	"				
S7	⑨	62	312	62	#6	11	2	"				
S8	Str.	26	130	26	#10	2	0	Ext. Bm. (Dowels)	10	2	10	5
S9	"	312	—	312	#5	26	8	Slab				
S10	"	—	1248	—	#5	34	4	"				
S11	"	—	100	—	#8	33	0	"				
S12	⑫	102	518	102	#4	2	6	Median				
S13	⑬	56	283	56	#5	"	5	Curb	2	0	1	7
S14	⑭	103	519	103	#5	5	4	"				
S15	Str.	16	—	16	#4	26	7	Plinth				
S16	"	—	56	—	#4	38	7	"				
S17	⑮	108	543	108	#5	7	7	Curb & Plinth				



ESTIMATE OF QUANTITIES

Item / Location	Span 1	Spans 2-3-4	Span 5
Concrete, Class "AA" (Cu. Yds.)	106.0	530.0	106.0
Steel Reinforcement (Lbs.)	24,676	130,477	24,676
	109.1	539.6	109.1
	25,126	136,570	25,126

Ashland-Greenup Rd. over Little Sandy River Sheet 16

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
GREENUP
ASHLAND-GREENUP
ROAD

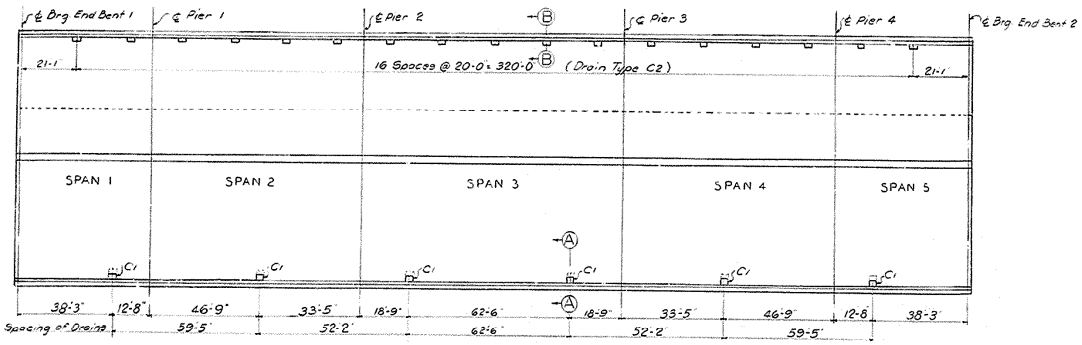
STATION 915+26.97 | P.E. PROJECT NO.
CONSTRUCTION PROJECT NO. | MAINTENANCE PROJECT NO. | DRAWING NO. 17622.

LETTING DATE

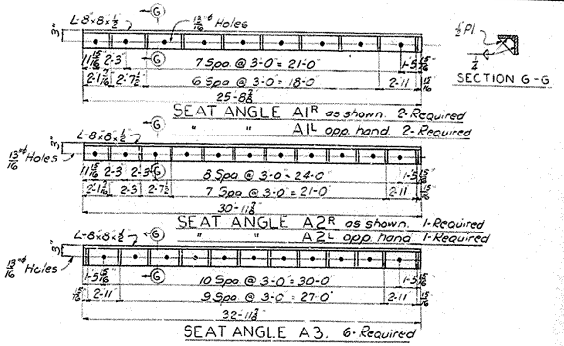
DGM DATE 8/2/72 | New Detail Sheet
DGM DATE 8/72
JLC DATE 8/72
FAP DATE

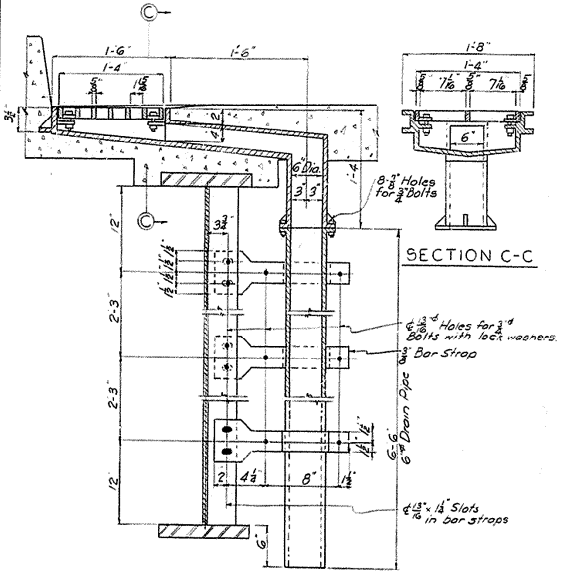
BRIDGE

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



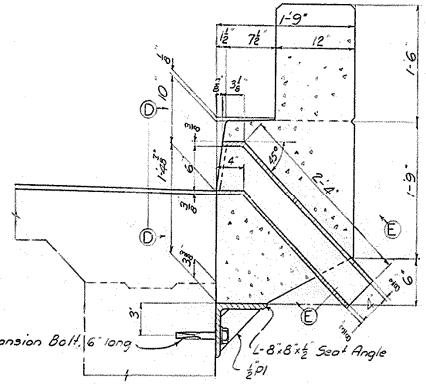
PLAN OF DECK
(Showing Location of Drains)

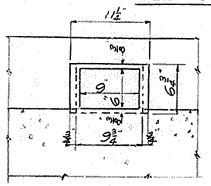




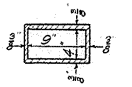
SECTION A-A

ROADWAY DRAINS C1
6-Required - Approx. Wght = 310 Lbs Each
Estimated Drain Pipe = 39 Lin. Ft
See General Note, Sheet 2



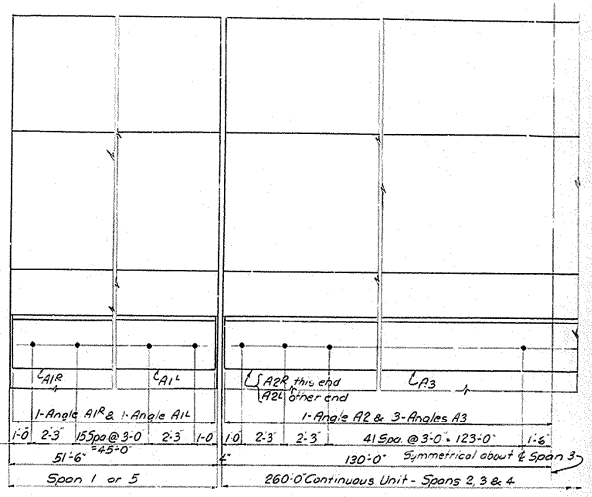


ELEVATION D-D



SECTION E-E

ROADWAY DRAINS C2
17-Required
Approximate Wght. 70 Lbs Each



PART ELEVATION F-F
Showing Seat Angles

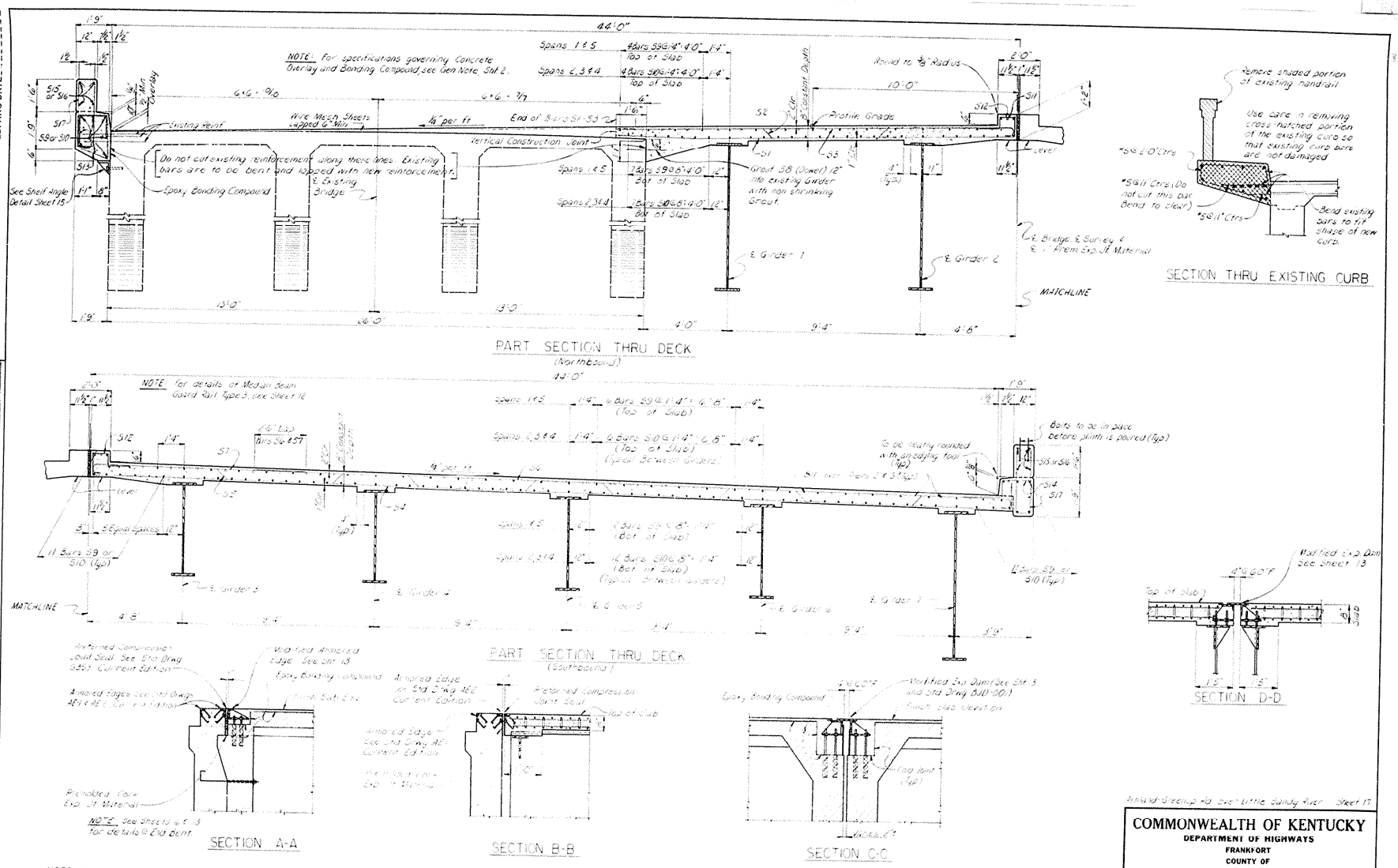
STRUCTURAL STEEL

Ashland-Greenup Rd over Little Sandy River Sheet 16

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
GREENUP
ASHLAND-GREENUP
ROAD
STATION 915+26.97 PROJECT NO.
BRIDGE NUMBER
DRAWING NO. 17622
SHEET

DESIGNED BY DGP	CHECKED BY DGM	DATE 12-68	REVISED
DETAILED BY USA	CHECKED BY DGM	DATE 12-68	REVISED
TRACED BY	CHECKED BY	DATE	REVISED

LETTING DATE



SUPERSTRUCTURE

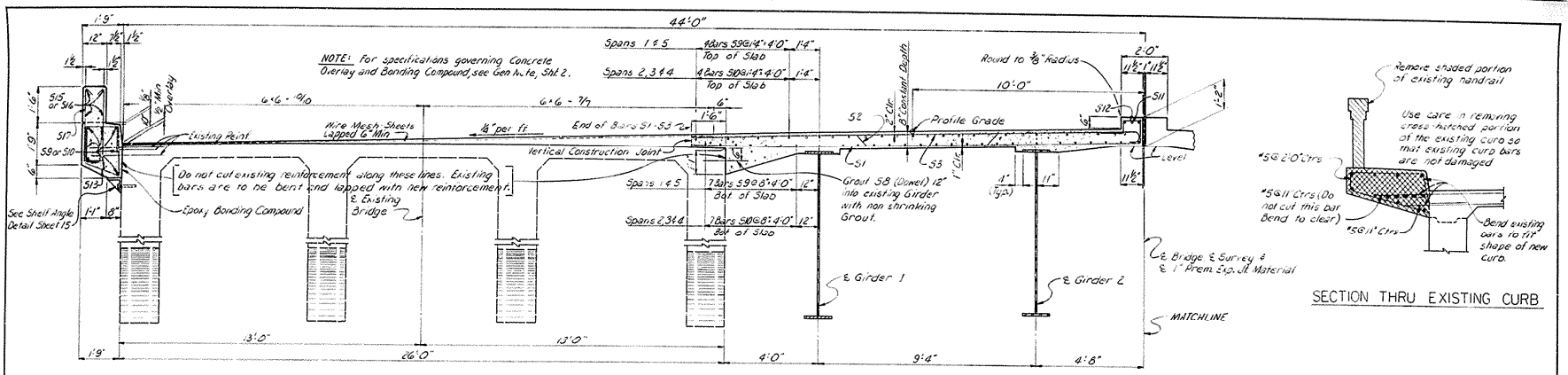
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
GREENUP
ASHLAND - GREENUP
ROAD
STATION 515+26.97
P. E. PROJECT NO.

CONSTRUCTION PROJECT NO	MAINTENANCE PROJECT NO	DRAWING NO.
		17622

PROJECT E. P.A.D.	DATE	DGM	9/12
DETAILED D.M.G.	DATE	DGM	9/12
TRACED	DATE		
CHECKED	DATE		
REVISED	DATE		
REVISED	DATE		
REVISED	DATE		
REVISED	DATE		
REVISED	DATE		
REVISED	DATE		

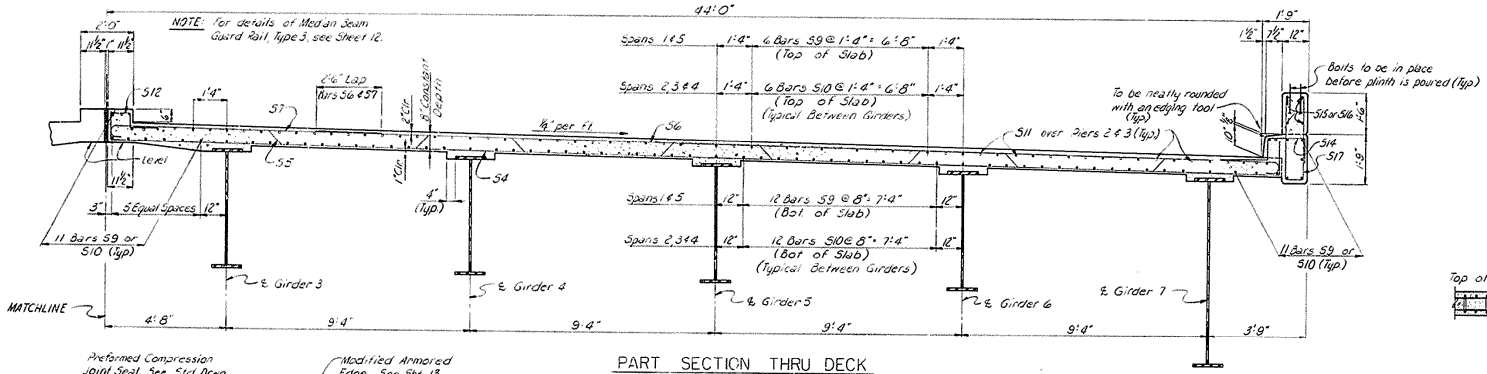
New Detail Sheet DGM 9/12

BRIDGE

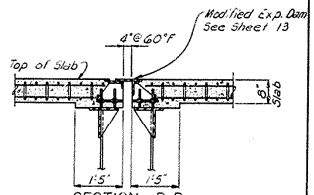


PART SECTION THRU DECK
(Northbound)

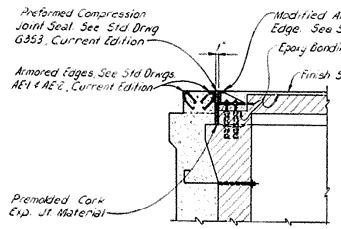
SECTION THRU EXISTING CURB



PART SECTION THRU DECK
(Southbound)

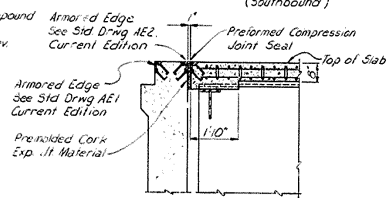


SECTION D-D

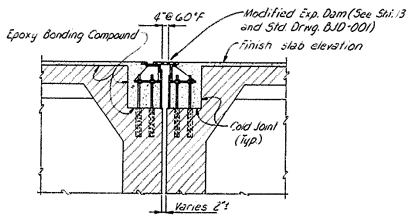


NOTE: See Sheets 6 & 13 for details @ End Bent.

SECTION A-A



SECTION B-B



SECTION C-C

NOTE: For Bar Marks, dimensions and other details not shown on Sections A-A, B-B, C-C & D-D, see Part Section above and Sheet 13.

SUPERSTRUCTURE

Ashland-Greenup Rd. over Little Sandy River Sheet 17

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
GREENUP
ASHLAND – GREENUP
ROAD
STATION 915+26.97 **P.E. PROJECT NO.**
CONSTRUCTION PROJECT NO. | MAINTENANCE PROJECT NO. | DRAWING NO. 17622

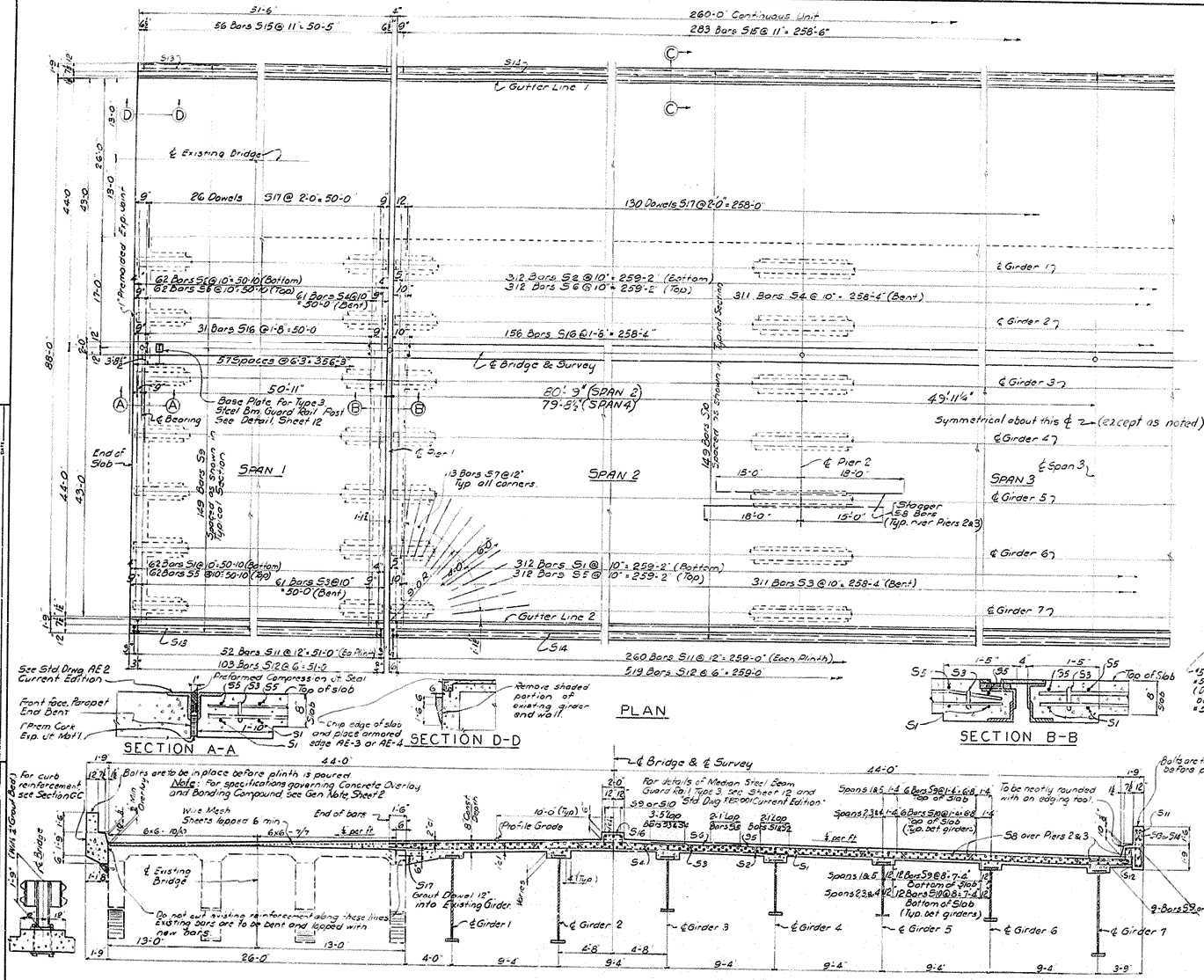
LETTING DATE

DESIGNED BY P.A.P.	CHECKED BY	DATE 9/72	REVISED DATE 11/92
DETAILED BY D.M.G.	CHECKED BY	DATE 9/72	REVISED DATE
TRACED BY	CHECKED BY	DATE	REVISED DATE

New Detail Sheet DGM 11/92

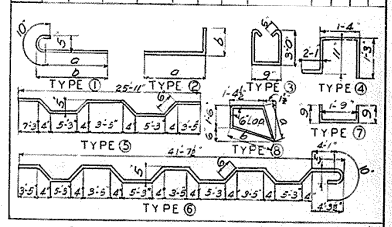
BRIDGE

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



BILL OF REINFORCEMENT

Mark	Type	Number Span 1	Number Spans 2-3-4	Number Span 5	Bar Size	Length Ft.	Length In.	Location	a Ft.	a In.	b Ft.	b In.
S1	(2)	62	312	62	#5	32	11	Slab	31	9	1	3
S2	Str	62	312	62	#5	34	7	"				
S3	(6)	61	311	61	#5	43	7	"				
S4	5	61	311	61	#5	26	7	"				
S5	(1)	62	312	62	#5	32	1	"	36	5	36	5
S6	Str	62	312	62	#5	29	11	"				
S7	"	52	52	52	#6	10	0	"				
S8		—	96	—	#8	33	0	"				
S9	"	298	—	298	#5	26	10	"				
S10	"	—	1192	—	#5	34	4	"				
S11	(3)	104	520	104	#5	7	7	Curb & Plinth				
S12	(4)	103	519	103	#5	5	4	Slab & Curb				
S13	Str	16	—	16	#4	26	7	Plinth				
S14	"	—	56	—	#4	38	7	"				
S15	(5)	56	283	56	#5	7	3	"	2	0	1	7
S16	(7)	31	156	31	#4	3	1	Median				
S17	Str	26	130	26	#10	2	0	Ext. Beam				



ESTIMATE OF QUANTITIES

Item	Unit	SPAN 1	SPANS 2-3-4	SPAN 5
Concrete, Class "A-A"	(Cu. Yds.)	106.0	530.1	106.0
Steel Reinforcement	(Lbs.)	24674	130477	24674

Ashland-Greenup Rd. over Little Sandy River Sheet 17

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
GREENUP
ASHLAND-GREENUP
ROAD

STATION 915+26.97 PROJECT NO.

BRIDGE NUMBER | DRAWING NO. 17622 | INDEX

DESIGNED BY: PAO | CHECKED BY: DGM | DATE: 1-8-60 | REVISED:
DETAILED BY: U.S.B. | CHECKED BY: DGM | DATE: 1-8-60 | REVISED:
TRACED BY: | CHECKED BY: | DATE: | REVISED:

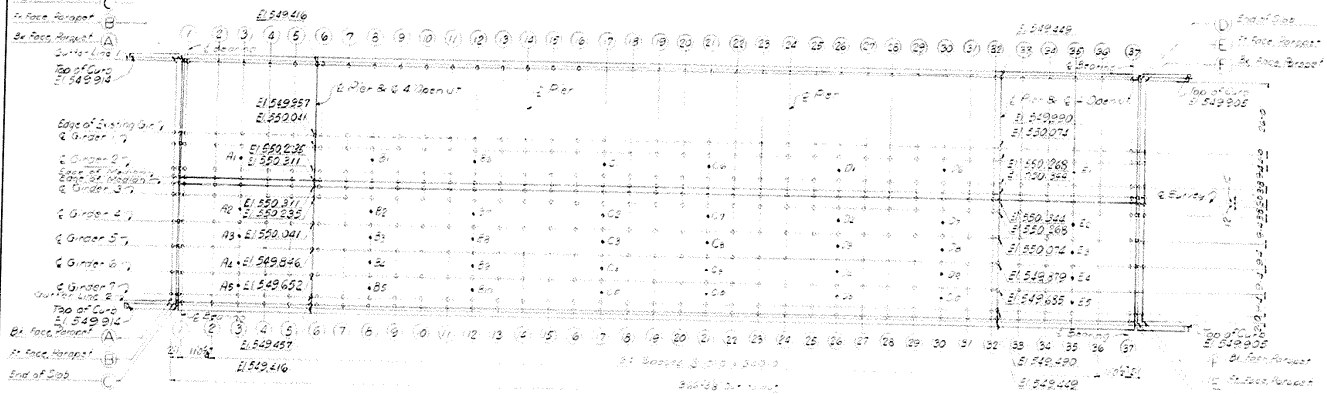
FED. ROAD DIST.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	KY.				

TABLE OF ELEVATIONS FOR CONTROL OF SLAB THICKNESS

Slab Check Pt	Plan Elev Top of Slab	Field Elev Bot of Slab	Computed Slab Thickness	Slab Check Pt	Plan Elev Top of Slab	Field Elev Bot of Slab	Computed Slab Thickness
A1	550.040			C6	550.468		
A2	550.052			C7	550.454		
A3	549.859			C8	550.280		
A4	549.603			C9	550.067		
A5	549.464			C10	549.871		
B1	550.288			D1	550.383		
B2	550.246			D2	550.440		
B3	550.052			D3	550.46		
B4	549.857			D4	549.957		
B5	549.663			D5	549.757		
B6	550.310			D6	550.060		
B7	550.317			D7	550.077		
B8	550.103			D8	550.283		
B9	549.908			D9	549.885		
B10	549.734			D10	549.690		
C1	550.359			E1	550.047		
C2	550.445			E2	550.076		
C3	550.251			E3	549.882		
C4	550.256			E4	549.657		
C5	549.962			E5	549.488		

NOTE 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 SLAB THICKNESS VARIES MORE THAN ¼" FROM THE PLAN THICKNESS ALLOWING 1/360 OF THE SLAB SPAN FOR DEFLECTION OF THE FORM WORK THE FORM SHALL BE ADJUSTED UNTIL THE COMPUTED SLAB THICKNESS IS WITHIN THE TOLERANCE ALLOWED

A COPY OF THIS SHEET SHOWING THE FINAL DATUM SHALL BE SENT TO THE DIRECTOR DIVISION OF BRIDGES



PLAN

NOTE:

SECTION THROUGH DECK

NOTE

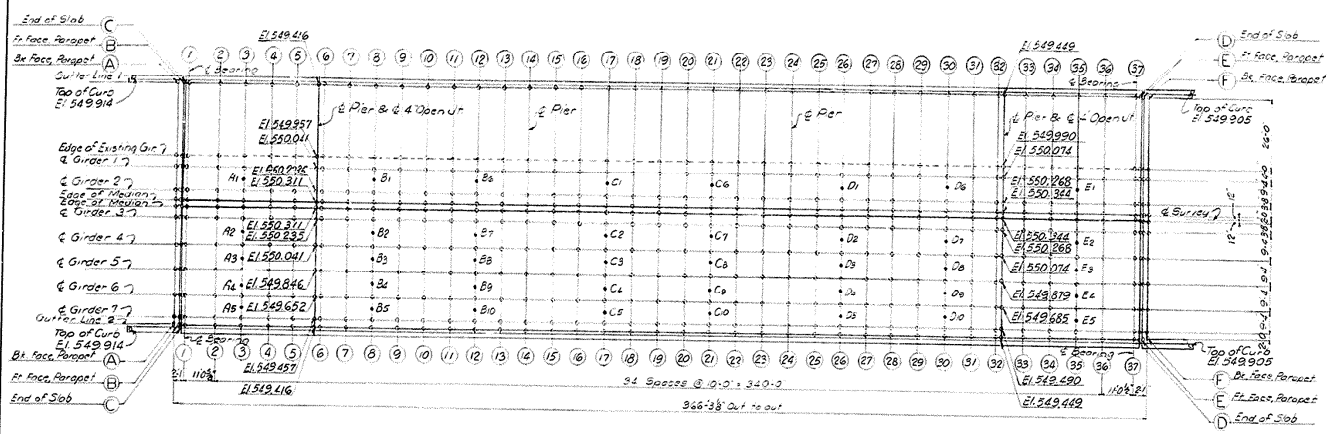
CONSTRUCTION ELEVATIONS

Revised Greenup Sheet 1 of 18 Sheets Sheet 18

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
GREENUP
ASHLAND-GREENUP
ROAD
STATION 95+26.97 PROJECT NO.
BRIDGE NUMBER
DRAWING NO. 17622
INDEX

BRIDGE

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



PLAN

NOTE:

℄ Indicates points where elevations are given.

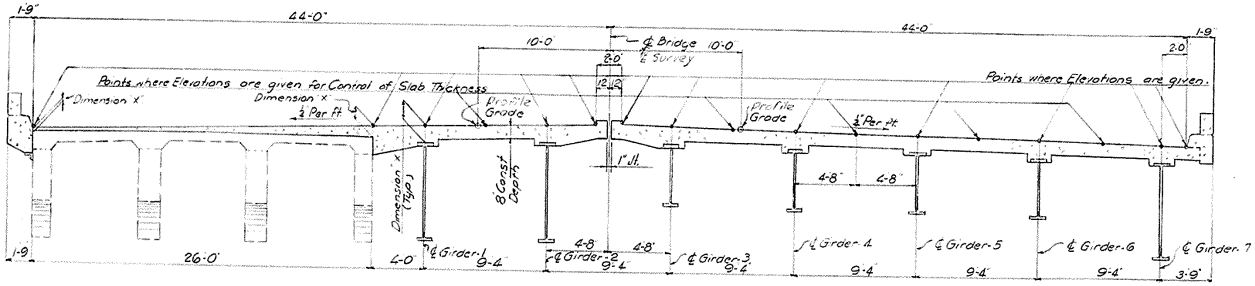
• Indicates points where elevations are given for control of slab thickness.

TABLE OF ELEVATIONS FOR CONTROL OF SLAB THICKNESS

Slab Check Pt.	Plan Elev Top of Slab	Field Elev Bot of Slab	Computed Slab Thickness	Slab Check Pt.	Plan Elev Top of Slab	Field Elev Bot of Slab	Computed Slab Thickness
A1	550.040			C6	550.368		
A2	550.052			C7	550.454		
A3	549.838			C8	550.260		
A4	549.663			C9	550.065		
A5	549.464			C10	549.871		
B1	550.289			D1	550.333		
B2	550.246			D2	550.340		
B3	550.052			D3	550.146		
B4	549.857			D4	549.957		
B5	549.663			D5	549.757		
B6	550.310			D6	550.260		
B7	550.317			D7	550.277		
B8	550.123			D8	550.083		
B9	549.928			D9	549.888		
B10	549.734			D10	549.694		
C1	550.359			E1	550.064		
C2	550.445			E2	550.076		
C3	550.251			E3	549.882		
C4	550.056			E4	549.687		
C5	549.862			E5	549.458		

NOTE: 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 SLAB THICKNESS VARIES MORE THAN ± ¼" FROM THE PLAN THICKNESS ALLOWING 1/360 OF THE SLAB SPAN FOR DEFLECTION OF THE FORM WORK, THE FORM SHALL BE ADJUSTED UNTIL THE COMPUTED SLAB THICKNESS IS WITHIN THE TOLERANCE ALLOWED.

A COPY OF THIS SHEET, SHOWING THE FINAL DATUM, SHALL BE SENT TO THE DIRECTOR, DIVISION OF BRIDGES.



SECTION THROUGH DECK
(LOOKING AHEAD)

NOTES: 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 STEEL ELEVATIONS.

COMPUTE DIMENSION "X" AS FOLLOWS: CONSTRUCTION ELEVATION MINUS STEEL ELEVATION EQUALS DIMENSION "X". CONSTRUCTION ELEVATIONS INCLUDE CAMBER DUE TO WEIGHT OF CONCRETE SLAB, PLINTH, AND HANDRAIL. FOR SETTING TEMPLATES, MEASURE DIMENSION "X" ABOVE TOP OF STEEL FOR TOP OF TEMPLATE. DO NOT SET TEMPLATES BY ELEVATIONS.

CONSTRUCT HANDRAIL PLINTH TO SIDEWALK GRADE. DO NOT ADD CAMBER TO HANDRAIL PLINTH.

Ashland-Greenup Rd over Little Sandy River Sheet 18

CONSTRUCTION ELEVATIONS

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
GREENUP
ASHLAND-GREENUP
ROAD

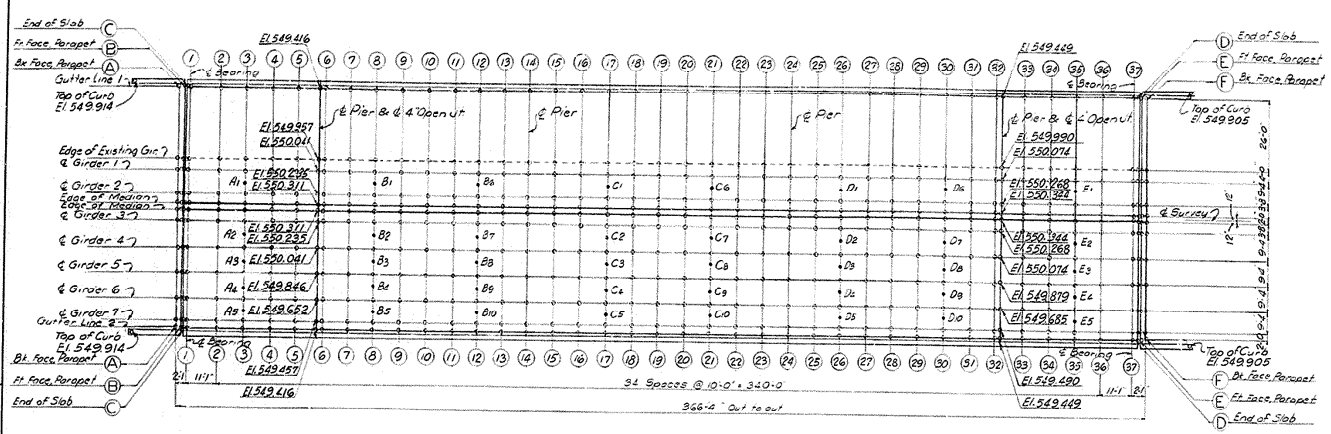
STATION 9+15+26.97 **PROJECT NO.**

BRIDGE NUMBER	DRAWING NO.	INDEX
	17622	

DESIGNED BY: ZAP CHECKED BY: DGM DATE: 8-8-72
DETAILED BY: LEB CHECKED BY: DGM DATE: 8-8-72
TRACED BY: CHECKED BY: DATE:
REVISED: Add 1" Jt. in Deck Pan dimensions DGM DATE: 8-8-72
REVISED: DATE:
REVISED: DATE:

BRIDGE

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

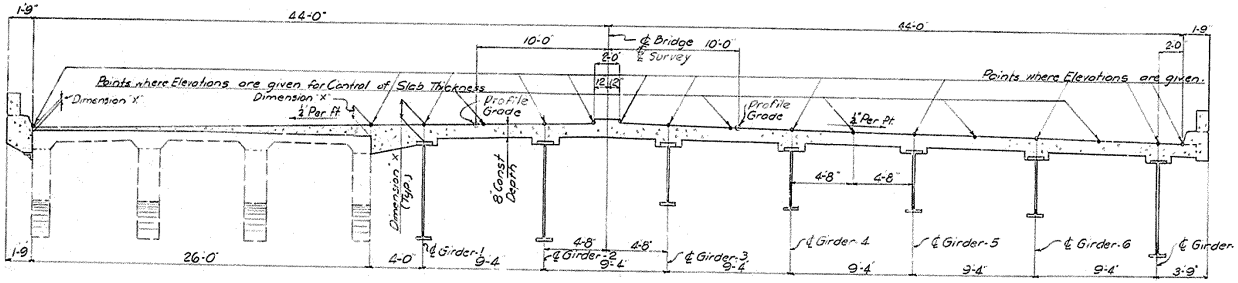


PLAN

NOTE:

℄ Indicates points where elevations are given.

• Indicates points where elevations are given for control of slab thickness.



SECTION THROUGH DECK

(LOOKING AHEAD)

NOTES:

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 STEEL ELEVATIONS.

COMPUTE DIMENSION "X" AS FOLLOWS: CONSTRUCTION ELEVATION MINUS STEEL ELEVATION EQUALS DIMENSION "X". CONSTRUCTION ELEVATIONS INCLUDE CAMBER DUE TO WEIGHT OF CONCRETE SLAB, PLINTH, AND HANDRAIL. FOR SETTING TEMPLATES, MEASURE DIMENSION "X" ABOVE TOP OF STEEL FOR TOP OF TEMPLATE. DO NOT SET TEMPLATES BY ELEVATIONS.

CONSTRUCT HANDRAIL PLINTH TO SIDEWALK GRADE. DO NOT ADD CAMBER TO HANDRAIL PLINTH.

TABLE OF ELEVATIONS FOR CONTROL OF SLAB THICKNESS

Slab Check Pt.	Plan Elev Top of Slab	Field Elev Bot. of Slab	Computed Slab Thickness	Slab Check Pt.	Plan Elev Top of Slab	Field Elev Bot. of Slab	Computed Slab Thickness
A1	550.040			C6	550.368		
A2	550.052			C7	550.454		
A3	549.838			C8	550.260		
A4	549.663			C9	550.065		
A5	549.464			C10	549.871		
B1	550.223			D1	550.333		
B2	550.246			D2	550.340		
B3	550.052			D3	550.146		
B4	549.857			D4	549.951		
B5	549.663			D5	549.757		
B6	550.310			D6	550.260		
B7	550.317			D7	550.277		
B8	550.123			D8	550.083		
B9	549.928			D9	549.888		
B10	549.734			D10	549.694		
C1	550.350			E1	550.064		
C2	550.445			E2	550.076		
C3	550.251			E3	549.882		
C4	550.056			E4	549.687		
C5	549.862			E5	549.488		

NOTE: 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 SLAB THICKNESS VARIES MORE THAN 1/4" FROM THE PLAN THICKNESS ALLOWING 1/360 OF THE SLAB SPAN FOR DEFLECTION OF THE FORM WORK, THE FORM SHALL BE ADJUSTED UNTIL THE COMPUTED SLAB THICKNESS IS WITHIN THE TOLERANCE ALLOWED.

A COPY OF THIS SHEET, SHOWING THE FINAL DATUM, SHALL BE SENT TO THE DIRECTOR, DIVISION OF BRIDGES.

Ashland-Greenup Rd. over Little Sandy River Sheet 18

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
GREENUP
ASHLAND-GREENUP
ROAD
STATION 915+26.97 **PROJECT NO.**

BRIDGE NUMBER	DRAWING NO.	INDEX
	17622	

CONSTRUCTION ELEVATIONS

DESIGNED BY PAP	CHECKED BY DGM	DATE 2-66	REVISED
DETAILED BY L.G.B.	CHECKED BY DGM	DATE 2-66	REVISED
TRACED BY	CHECKED BY	DATE	REVISED

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

TABLE OF ELEVATIONS

LOCATION	GUTTER LINE 1			EDGE OF EXIST. GIR.			GIRDER 1			GIRDER 2		
	Top of Conc	Top of Exist Gir	Dimen x	Top of Conc	Top of Exist Gir	Dimen x	Top of Conc	Top of Steel	Dimen x	Top of Conc	Top of Steel	Dimen x
A-A	549.704			549.725			549.809			550.023		
B-B	549.698			549.750			549.834			550.028		
C-C	549.710			549.751			549.835			550.029		
D-D	549.716			549.757			549.847			550.035		
E-E	549.729			549.756			549.840			550.034		
F-F	549.746			549.747			549.831			550.025		
1-1	549.813			549.754			549.838			550.032		
2-2	549.869			549.810			549.900			550.094		
3-3	549.901			549.859			549.943			550.137		
4-4	549.945			549.890			549.983			550.177		
5-5	549.987			549.928			550.018			550.212		
6-6	549.946			549.957			550.041			550.235		
7-7	549.951			549.992			550.086			550.282		
8-8	549.986			550.027			550.132			550.326		
9-9	549.993			550.052			550.164			550.358		
10-10	549.998			550.080			550.189			550.383		
11-11	549.999			550.100			550.208			550.397		
12-12	549.977			550.118			550.213			550.407		
13-13	549.989			550.130			550.217			550.411		
14-14	549.999			550.140			550.224			550.418		
15-15	549.004			550.135			550.216			550.217		
16-16	549.009			550.150			550.240			550.220		
17-17	549.015			550.156			550.262			550.258		
18-18	549.019			550.160			550.272			550.266		
19-19	549.020			550.161			550.276			550.270		
20-20	549.023			550.164			550.442			550.470		
21-21	549.024			550.165			550.271			550.465		
22-22	549.023			550.164			550.260			550.454		
23-23	549.020			550.161			550.249			550.425		
24-24	549.017			550.158			550.242			550.420		
25-25	549.009			550.150			550.237			550.231		
26-26	549.000			550.141			550.236			550.230		
27-27	549.588			550.129			550.230			550.226		
28-28	549.587			550.105			550.217			550.211		
29-29	549.585			550.084			550.194			550.188		
30-30	549.587			550.059			550.155			550.151		
31-31	549.484			550.035			550.121			550.115		
32-32	549.449			549.999			550.074			550.068		
33-33	549.415			549.952			550.044			550.038		
34-34	549.372			549.921			550.016			550.010		
35-35	549.338			549.874			549.987			550.161		
36-36	549.287			549.826			549.916			550.112		
37-37	549.222			549.765			549.847			550.021		

LOCATION	EDGE OF MEDIAN			EDGE OF MEDIAN			GIRDER 3			GIRDER 4		
	Top of Conc	Top Steel Girder 2	Dimen x	Top of Conc	Top Steel Girder 3	Dimen x	Top of Conc	Top of Steel	Dimen x	Top of Conc	Top of Steel	Dimen x
A-A	550.033			550.099			550.023			549.809		
B-B	550.040			550.104			550.028			549.834		
C-C	550.105			550.105			550.029			549.835		
D-D	550.111			550.111			550.035			549.841		
E-E	550.110			550.110			550.034			549.840		
F-F	550.101			550.101			550.025			549.831		
1-1	550.108			550.108			550.032			549.838		
2-2	550.179			550.179			550.094			549.900		
3-3	550.225			550.225			550.137			549.943		
4-4	550.264			550.264			550.177			549.983		
5-5	550.295			550.295			550.212			550.018		
6-6	550.311			550.311			550.235			550.041		
7-7	550.361			550.361			550.282			550.086		
8-8	550.409			550.409			550.326			550.132		
9-9	550.446			550.446			550.358			550.164		
10-10	550.466			550.466			550.383			550.189		
11-11	550.475			550.475			550.397			550.208		
12-12	550.485			550.485			550.407			550.213		
13-13	550.486			550.486			550.411			550.217		
14-14	550.494			550.494			550.418			550.224		
15-15	550.509			550.509			550.216			550.216		
16-16	550.529			550.529			550.240			550.240		
17-17	550.573			550.573			550.258			550.262		
18-18	550.595			550.595			550.266			550.272		
19-19	550.616			550.616			550.270			550.276		
20-20	550.602			550.602			550.470			550.442		
21-21	550.580			550.580			550.465			550.465		
22-22	550.553			550.553			550.454			550.454		
23-23	550.525			550.525			550.425			550.425		
24-24	550.512			550.512			550.420			550.420		
25-25	550.506			550.506			550.231			550.231		
26-26	550.509			550.509			550.230			550.230		
27-27	550.507			550.507			550.226			550.226		
28-28	550.492			550.492			550.211			550.211		
29-29	550.471			550.471			550.188			550.188		
30-30	550.440			550.440			550.151			550.151		
31-31	550.394			550.394			550.115			550.115		
32-32	550.344			550.344			550.068			550.068		
33-33	550.321			550.321			550.038			550.038		
34-34	550.269			550.269			550.010			550.010		
35-35	550.249			550.249			550.161			550.161		
36-36	550.197			550.197			550.112			550.112		
37-37	550.177			550.177			550.021			550.021		

LOCATION	GIRDER 5			GIRDER 6			GIRDER 7			GUTTER LINE 2		
	Top of Conc	Top of Steel	Dimen x	Top of Conc	Top of Steel	Dimen x	Top of Conc	Top of Steel	Dimen x	Top of Conc	Top Steel Girder 7	Dimen x
A-A	549.443			549.445			549.704			549.704		
B-B	549.639			549.445			549.703			549.703		
C-C	549.640			549.446			549.715			549.710		
D-D	549.646			549.452			549.727			549.716		
E-E	549.645			549.451			549.730			549.729		
F-F	549.836			549.442			549.747			549.746		
1-1	549.843			549.449			549.852			549.813		
2-2	549.712			549.520			549.318			549.877		
3-3	549.760			549.566			549.360			549.901		
4-4	549.799			549.605			549.402			549.901		
5-5	549.830			549.635			549.435			549.934		
6-6	549.846			549.672			549.457			549.916		
7-7	549.903			549.704			549.514			549.963		
8-8	549.954			549.760			549.565			549.507		
9-9	549.986			549.792			549.599			549.538		
10-10	550.012			549.816			549.621			549.562		
11-11	550.022			549.828			549.633			549.578		
12-12	550.025			549.831			549.636			549.586		
13-13	550.022			549.830			549.635			549.592		
14-14	550.029			549.835			549.640			549.592		
15-15	550.053			549.859			549.662			549.685		
16-16	550.01			549.907			549.712			549.721		
17-17	550.153			549.959			549.764			549.837		
18-18	550.162			549.965			549.773			549.847		
19-19	550.205			550.011			549.816			549.891		
20-20	550.196			550.002			549.807			549.951		
21-21	550.162			549.968			549.773			549.946		
22-22	550.115			549.921			549.726			549.935		
23-23	550.069			549.875			549.680			549.924		
24-24	550.047			549.853			549.658			549.917		
25-25	550.044			549.850			549.655			549.912		
26-26	550.046			549.854			549.659			549.911		
27-27	550.051			549.857			549.662			549.907		
28-28	550.040			549.846			549.651			549.892		
29-29	550.016			549.824			549.629			549.869		
30-30	549.965			549.791			549.586			549.838		
31-31	549.936			549.762			549.547			549.796		
32-32	549.879			549.685			549.490			549.749		
33-33	549.856			549.662			549.461			549.720		
34-34	549.824			549.629			549.427			549.684		
35-35	549.794			549.590			549.384			549.645		
36-36	549.732			549.538			549.334			549.595		
37-37	549.695			549.499			549.293			549.553		

Proposed Structure Ka. over Little Sandy River Sheet 12

CONSTRUCTION ELEVATIONS

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
GREENUP
ASHLAND - GREENUP
ROAD
STATION 915+26.97 **PROJECT NO.**

BRIDGE NUMBER	DRAWING NO.	INDEX
	17622	

BRIDGE

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

TABLE OF ELEVATIONS

LOCATION	GUTTER LINE 1			EDGE OF EXIST. GIR.			GIRDER 1			GIRDER 2			EDGE OF MEDIAN			EDGE OF MEDIAN			GIRDER 3			GIRDER 4			GIRDER 5			GIRDER 6			GIRDER 7			GUTTER LINE 2		
	Top of Conc	Top of Exist Conc	Dimen X	Top of Conc	Top of Exist Conc	Dimen X	Top of Conc	Top of Steel	Dimen X	Top of Conc	Top of Steel	Dimen X	Top of Conc	Top Steel Girder 2	Dimen. X	Top of Conc	Top Steel Girder 3	Dimen. X	Top of Conc	Top of Steel	Dimen X	Top of Conc	Top of Steel	Dimen X	Top of Conc	Top of Steel	Dimen X	Top of Conc	Top of Steel	Dimen X	Top of Conc	Top of Steel	Dimen X	Top of Conc	Top Steel Girder 7	Dimen X
A-A	549.202			549.725			549.829			550.023			550.099			550.099			550.023			549.829			549.634			549.440			549.245			549.202		
B-B	549.208			549.750			549.834			550.028			550.104			550.104			550.028			549.834			549.639			549.445			549.250			549.209		
C-C	549.210			549.751			549.835			550.029			550.105			550.105			550.029			549.835			549.640			549.446			549.251			549.210		
D-D	549.216			549.757			549.841			550.035			550.111			550.111			550.035			549.841			549.646			549.452			549.257			549.216		
E-E	549.215			549.756			549.840			550.034			550.110			550.110			550.034			549.840			549.645			549.451			549.256			549.215		
F-F	549.206			549.747			549.831			550.025			550.101			550.101			550.025			549.831			549.636			549.442			549.247			549.206		
1-1	549.213			549.754			549.838			550.032			550.108			550.108			550.032			549.838			549.643			549.449			549.254			549.213		
2-2	549.269			549.810			549.900			550.094			550.179			550.179			550.103			549.909			549.714			549.520			549.318			549.277		
3-3	549.304			549.850			549.943			550.137			550.225			550.225			550.149			549.955			549.760			549.564			549.362			549.321		
4-4	549.349			549.890			549.983			550.177			550.264			550.264			550.188			549.994			549.799			549.605			549.402			549.361		
5-5	549.387			549.928			550.018			550.212			550.295			550.295			550.219			550.025			549.830			549.636			549.435			549.394		
6-6	549.416			549.957			550.041			550.235			550.311			550.311			550.235			550.041			549.846			549.652			549.457			549.416		
7-7	549.451			549.992			550.086			550.282			550.361			550.365			550.292			550.098			549.903			549.709			549.514			549.463		
8-8	549.484			550.027			550.132			550.326			550.409			550.413			550.339			550.149			549.954			549.760			549.565			549.507		
9-9	549.515			550.054			550.164			550.358			550.442			550.446			550.377			550.183			549.988			549.794			549.599			549.532		
10-10	549.539			550.080			550.189			550.383			550.466			550.470			550.401			550.207			550.012			549.818			549.623			549.562		
11-11	549.559			550.100			550.209			550.397			550.478			550.482			550.411			550.217			550.022			549.828			549.633			549.578		
12-12	549.577			550.118			550.213			550.407			550.485			550.489			550.418			550.280			550.025			549.831			549.636			549.588		
13-13	549.589			550.130			550.217			550.411			550.486			550.490			550.413			550.219			550.024			549.830			549.635			549.592		
14-14	549.599			550.140			550.224			550.418			550.494			550.494			550.418			550.224			550.029			549.835			549.640			549.599		
15-15	549.604			550.145			550.316			550.427			550.509			550.513			550.442			550.248			550.053			549.859			549.664			549.605		
16-16	549.609			550.150			550.246			550.440			550.539			550.543			550.460			550.266			550.101			549.907			549.712			549.621		
17-17	549.615			550.156			550.262			550.456			550.573			550.577			550.548			550.348			550.153			549.959			549.764			549.637		
18-18	549.619			550.160			550.272			550.466			550.598			550.602			550.581			550.357			550.162			549.968			549.773			549.647		
19-19	549.620			550.161			550.276			550.470			550.606			550.610			550.594			550.400			550.205			550.011			549.816			549.651		
20-20	549.623			550.164			550.442			550.470			550.602			550.606			550.385			550.391			550.196			550.002			549.807			549.651		
21-21	549.624			550.165			550.271			550.465			550.582			550.586			550.351			550.357			550.162			549.968			549.773			549.646		
22-22	549.623			550.164			550.260			550.454			550.553			550.557			550.504			550.310			550.115			549.921			549.726			549.635		
23-23	549.620			550.161			550.249			550.443			550.525			550.529			550.458			550.264			550.069			549.875			549.680			549.624		
24-24	549.617			550.158			550.242			550.436			550.512			550.512			550.436			550.242			550.047			549.853			549.658			549.617		
25-25	549.609			550.150			550.237			550.431			550.506			550.510			550.433			550.239			550.044			549.850			549.655			549.612		
26-26	549.600			550.141			550.236			550.430			550.506			550.512			550.437			550.243			550.048			549.854			549.659			549.611		
27-27	549.588			550.129			550.232			550.426			550.507			550.511			550.440			550.246			550.052			549.857			549.662			549.607		
28-28	549.567			550.108			550.217			550.411			550.494			550.498			550.429			550.235			550.040			549.846			549.651			549.592		
29-29	549.543			550.084			550.194			550.388			550.472			550.476			550.407			550.379			550.018			549.824			549.629			549.569		
30-30	549.517			550.058			550.163			550.357			550.440			550.444			550.374			550.180			549.985			549.791			549.596			549.538		
31-31	549.484			550.025			550.121			550.315			550.394			550.398			550.325			550.131			549.936			549.742			549.547			549.496		
32-32	549.449			549.990			550.074			550.268			550.344			550.344			550.268			550.074			549.879			549.685			549.490			549.449		
33-33	549.413			549.954			550.044			550.238			550.321			550.321			550.245			550.051			549.856			549.662			549.467			549.420		
34-34	549.376			549.915			550.008			550.202			550.289			550.289			550.213			550.019			549.824			549.630			549.427			549.386		
35-35	549.333			549.874			549.967			550.161			550.249			550.249			550.173			549.979			549.784			549.590			549.386			549.345		
36-36	549.287			549.826			549.918			550.112			550.197			550.197			550.121			549.927			549.732			549.538			549.336			549.295		
37-37	549.222			549.763			549.847			550.041			550.117			550.117			550.041			549.847			549.652			549.458			549.263			549.222		

Ashland-Greenup Rd over Little Sandy River Sheet 19

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
GREENUP
ASHLAND - GREENUP
ROAD
STATION 915+26.97 **PROJECT NO.**
BRIDGE NUMBER | **DRAWING NO.** 17622 | **INDEX**

CONSTRUCTION ELEVATIONS

DESIGNED BY RAP CHECKED BY D.G.M. DATE 1968 REVISED DATE
DETAILED BY J.S.B. CHECKED BY D.G.M. DATE 1968 REVISED DATE
TRACED BY CHECKED BY DATE REVISED DATE

BRIDGE

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

TABLE OF ELEVATIONS

LOCATION	GUTTER LINE 1			EDGE OF EXIST. GIR.			GIRDER 1			GIRDER 2			EDGE OF MEDIAN			EDGE OF MEDIAN		
	Top of Conc	Top of Exist Conc	Dimen X	Top of Conc	Top of Exist Conc	Dimen X	Top of Conc	Top of Steel	Dimen X	Top of Conc	Top of Steel	Dimen X	Top of Conc	Top Steel Girder 2	Dimen. X	Top of Conc	Top Steel Girder 3	Dimen. X
A-A	549.204			549.745			549.829			550.023			550.099			550.099		
B-B	549.209			549.750			549.834			550.028			550.104			550.104		
C-C	549.210			549.751			549.835			550.029			550.106			550.105		
D-D	549.216			549.757			549.841			550.035			550.111			550.111		
E-E	549.215			549.756			549.840			550.034			550.110			550.110		
F-F	549.206			549.747			549.831			550.025			550.101			550.101		
1-1	549.213			549.754			549.838			550.032			550.108			550.108		
2-2	549.269			549.810			549.900			550.094			550.179			550.179		
3-3	549.303			549.850			549.943			550.137			550.225			550.225		
4-4	549.349			549.890			549.983			550.177			550.264			550.264		
5-5	549.387			549.928			550.018			550.210			550.295			550.295		
6-6	549.416			549.957			550.041			550.235			550.311			550.311		
7-7	549.451			549.992			550.088			550.282			550.361			550.365		
8-8	549.486			550.027			550.132			550.326			550.409			550.413		
9-9	549.519			550.054			550.164			550.358			550.439			550.446		
10-10	549.539			550.080			550.189			550.383			550.466			550.470		
11-11	549.559			550.100			550.209			550.397			550.478			550.482		
12-12	549.577			550.118			550.213			550.407			550.485			550.489		
13-13	549.589			550.130			550.217			550.411			550.486			550.490		
14-14	549.599			550.140			550.224			550.418			550.491			550.494		
15-15	549.604			550.145			550.316			550.427			550.509			550.513		
16-16	549.609			550.150			550.246			550.440			550.539			550.543		
17-17	549.615			550.156			550.262			550.456			550.553			550.557		
18-18	549.619			550.160			550.272			550.466			550.596			550.602		
19-19	549.620			550.161			550.276			550.470			550.606			550.610		
20-20	549.623			550.164			550.442			550.470			550.602			550.606		
21-21	549.624			550.165			550.271			550.465			550.582			550.586		
22-22	549.623			550.164			550.260			550.454			550.558			550.557		
23-23	549.620			550.161			550.249			550.443			550.525			550.529		
24-24	549.617			550.158			550.242			550.436			550.512			550.512		
25-25	549.609			550.150			550.237			550.431			550.506			550.510		
26-26	549.600			550.141			550.236			550.430			550.508			550.512		
27-27	549.588			550.129			550.232			550.426			550.507			550.511		
28-28	549.567			550.108			550.217			550.411			550.494			550.498		
29-29	549.543			550.084			550.194			550.388			550.472			550.476		
30-30	549.517			550.058			550.163			550.357			550.440			550.444		
31-31	549.484			550.025			550.121			550.315			550.394			550.398		
32-32	549.449			549.990			550.074			550.268			550.344			550.344		
33-33	549.413			549.954			550.044			550.238			550.321			550.321		
34-34	549.374			549.915			550.008			550.202			550.289			550.289		
35-35	549.333			549.874			549.967			550.161			550.249			550.249		
36-36	549.287			549.828			549.913			550.112			550.197			550.197		
37-37	549.222			549.763			549.847			550.061			550.117			550.117		

LOCATION	GIRDER 3			GIRDER 4			GIRDER 5			GIRDER 6			GIRDER 7			GUTTER LINE 2		
	Top of Conc	Top of Steel	Dimen X	Top of Conc	Top of Steel	Dimen X	Top of Conc	Top of Steel	Dimen X	Top of Conc	Top of Steel	Dimen X	Top of Conc	Top of Steel	Dimen X	Top of Conc	Top Steel Girder 7	Dimen X
A-A	550.023			549.829			549.634			549.440			549.245			549.204		
B-B	550.028			549.834			549.639			549.444			549.250			549.209		
C-C	550.029			549.835			549.640			549.446			549.251			549.210		
D-D	550.035			549.841			549.646			549.452			549.257			549.216		
E-E	550.034			549.840			549.645			549.451			549.256			549.215		
F-F	550.025			549.831			549.636			549.442			549.247			549.206		
1-1	550.032			549.838			549.643			549.449			549.254			549.213		
2-2	550.103			549.909			549.714			549.520			549.318			549.277		
3-3	550.149			549.955			549.760			549.566			549.362			549.321		
4-4	550.188			549.994			549.799			549.605			549.402			549.361		
5-5	550.219			550.025			549.830			549.638			549.435			549.394		
6-6	550.235			550.041			549.846			549.652			549.457			549.416		
7-7	550.292			550.098			549.903			549.709			549.514			549.463		
8-8	550.343			550.149			549.954			549.760			549.565			549.507		
9-9	550.377			550.183			549.988			549.794			549.599			549.539		
10-10	550.401			550.207			550.012			549.816			549.623			549.564		
11-11	550.411			550.217			550.022			549.828			549.633			549.578		
12-12	550.414			550.220			550.025			549.831			549.636			549.588		
13-13	550.413			550.219			550.024			549.830			549.635			549.592		
14-14	550.418			550.224			550.029			549.835			549.640			549.599		
15-15	550.442			550.248			550.053			549.859			549.664			549.608		
16-16	550.490			550.296			550.101			549.907			549.712			549.621		
17-17	550.548			550.348			550.153			549.959			549.764			549.637		
18-18	550.581			550.357			550.162			549.968			549.773			549.647		
19-19	550.594			550.400			550.205			550.011			549.816			549.651		
20-20	550.585			550.391			550.196			550.002			549.807			549.651		
21-21	550.551			550.357			550.162			549.968			549.773			549.646		
22-22	550.504			550.310			550.115			549.921			549.726			549.635		
23-23	550.458			550.264			550.069			549.875			549.680			549.624		
24-24	550.436			550.242			550.047			549.853			549.658			549.617		
25-25	550.433			550.239			550.044			549.850			549.655			549.612		
26-26	550.431			550.243			550.048			549.854			549.655			549.611		
27-27	550.440			550.246			550.052			549.857			549.622			549.607		
28-28	550.429			550.235			550.040			549.846			549.651			549.592		
29-29	550.407			550.379			550.018			549.824			549.629			549.569		
30-30	550.374			550.180			549.985			549.791			549.596			549.538		
31-31	550.325			550.131			549.936			549.742			549.547			549.496		
32-32	550.268			550.074			549.879			549.685			549.490			549.449		
33-33	550.245			550.051			549.856			549.662			549.461			549.420		
34-34	550.213			550.019			549.824			549.630			549.427			549.386		
35-35	550.173			549.979			549.784			549.594			549.386			549.345		
36-36	550.121			549.927			549.732			549.538			549.336			549.295		
37-37	550.041			549.847			549.658			549.458			549.263			549.222		

Ashland-Greenup Rd over Little Sandy River Sheet 19

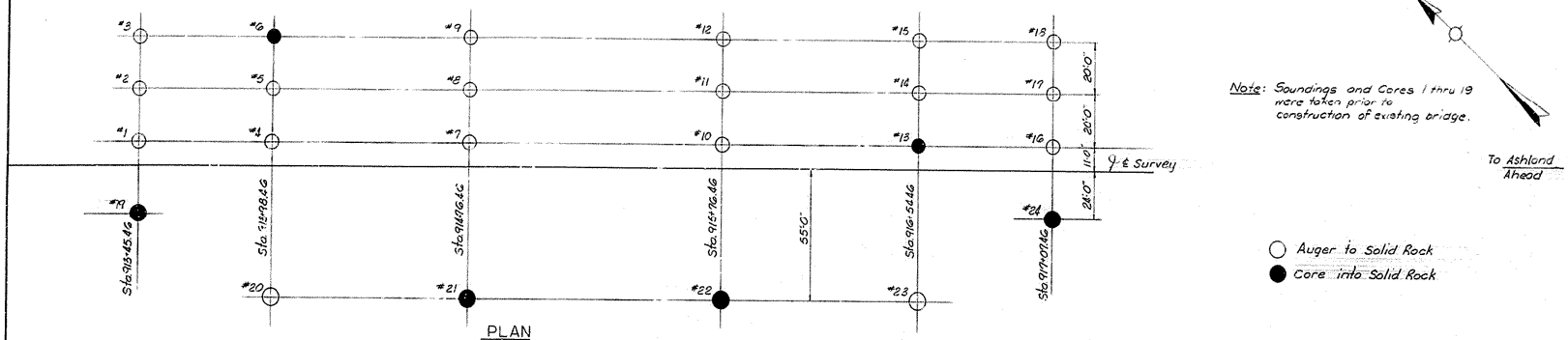
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
GREENUP
ASHLAND - GREENUP
ROAD
STATION 915+26.97 **PROJECT NO.**

BRIDGE NUMBER	DRAWING NO.	INDEX
	17622	

CONSTRUCTION ELEVATIONS

DESIGNED BY D.A.D. DATE 1-68
DETAILED BY J.E.B. DATE 2-68
TRACED BY DATE
CHECKED BY DATE
CHECKED BY DATE
REVISED DATE
REVISED DATE

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

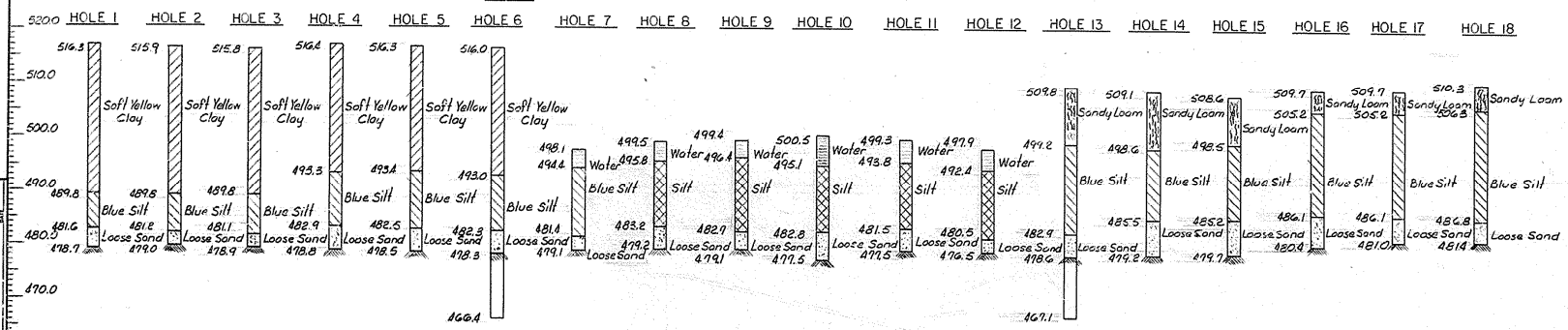


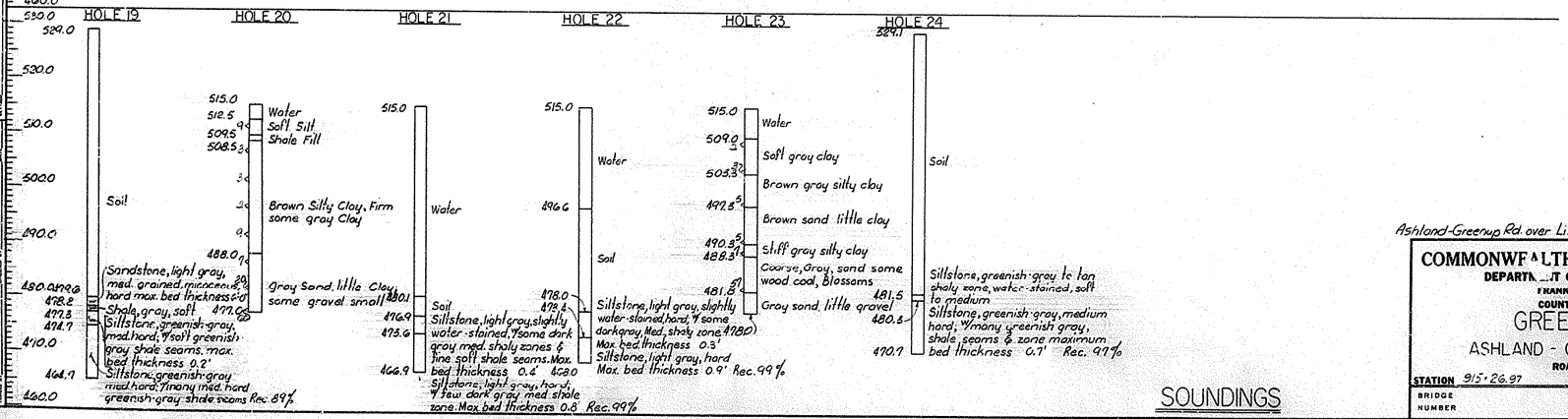
Note: Soundings and Cores 1 thru 19 were taken prior to construction of existing bridge.

○ Auger to Solid Rock

● Core into Solid Rock

PLAN





SOUNDINGS

Ashland-Greenup Rd. over Little Sandy River Sheet 20

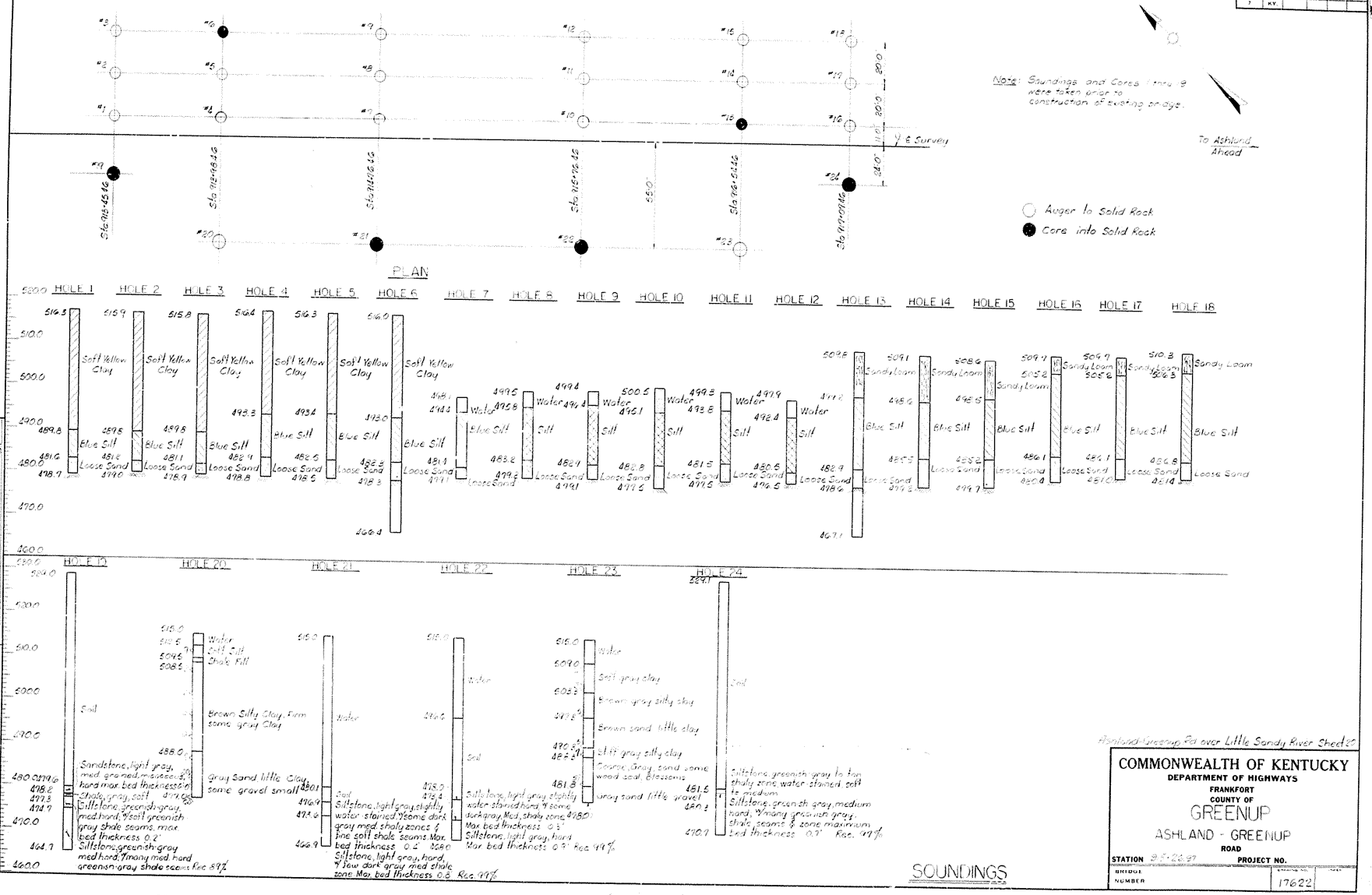
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
GREENUP
ASHLAND - GREENUP
ROAD

STATION 915+26.97 PROJECT NO.

BRIDGE NUMBER — DRAWING NO. 17622 — INDEX

DESIGNED BY RAS
DETAILED BY
TRACED BY
CHECKED BY PAP
CHECKED BY
CHECKED BY
DATE 5-66
REVISED
REVISED

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



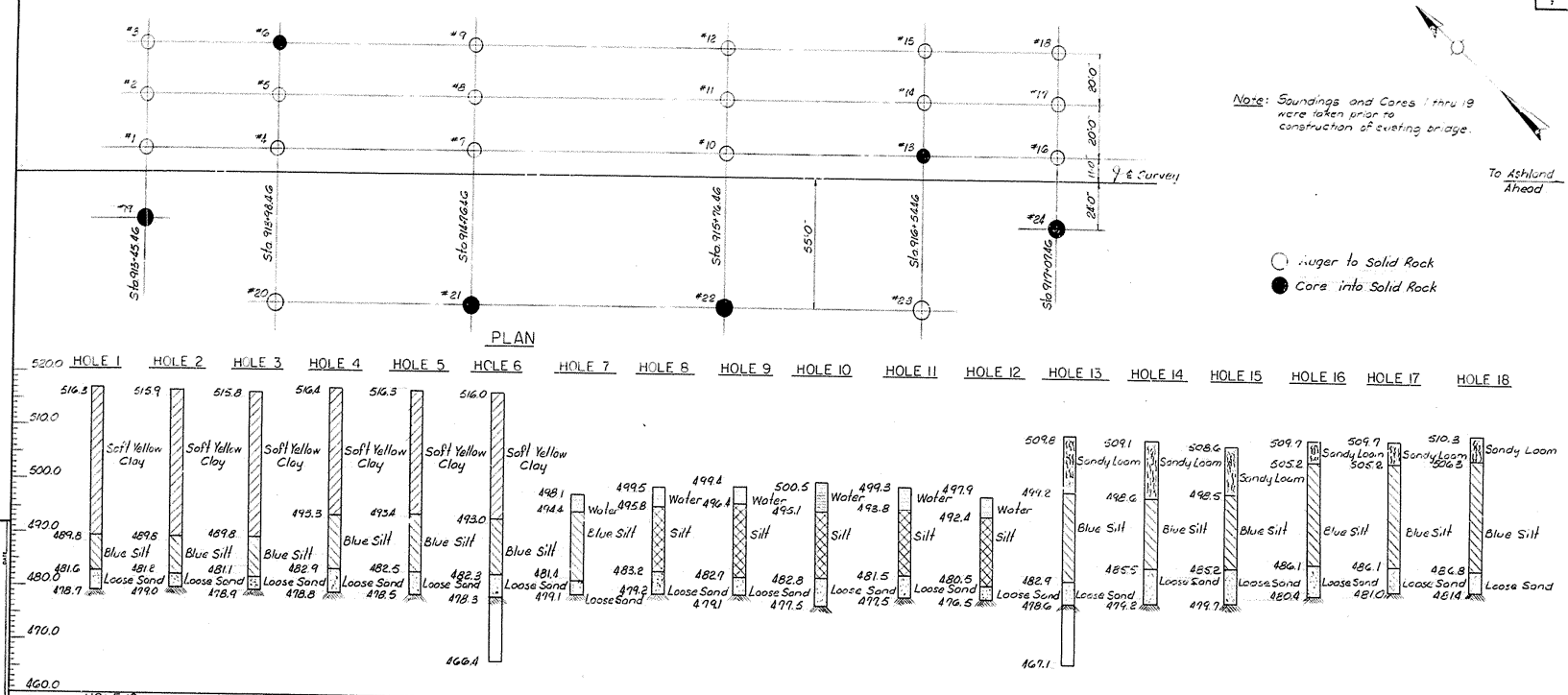
Ashland-Greenup Rd over Little Sandy River Sheet 20

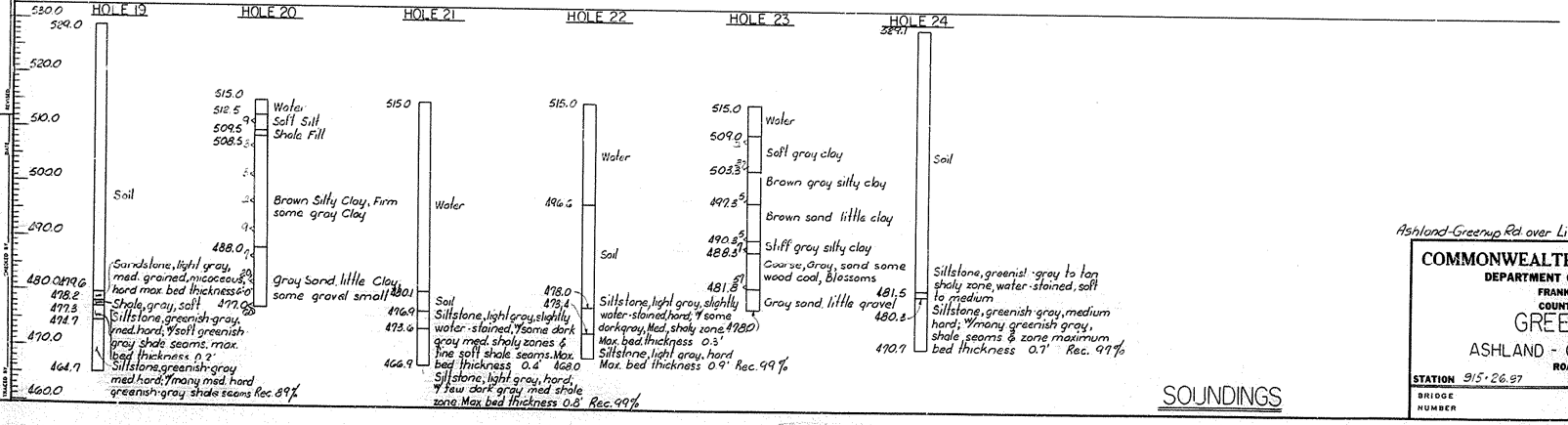
SOUNDINGS

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
GREENUP
ASHLAND - GREENUP
ROAD
STATION 9.5+26.97 PROJECT NO.
BRIDGE NUMBER
STRUCTURE NO. 17622

BRIDGE

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





SOUNDINGS

Ashland-Greenup Rd. over Little Sandy River Sheet 20

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
GREENUP
ASHLAND - GREENUP
ROAD

STATION 915+26.97 PROJECT NO.

BRIDGE NUMBER | DRAWING NO. 17622 | INDEX

BRIDGE