UPDATE DATE 4/1/80
LETTING DATE 4/15/80

PLANS PREPARED BY
L M MAHONEY
DESIGN SECTION

DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

PIKE COUNTY
COAL RUN ROAD
C R 1526 OVER LEVISA FORK

REFERENCES AND ESTIMATE OF QUANTITIES

ITEM	SHEET NO.	CONCRETE CU. YDS CLASS "A"	CONCRETE CU. YDS CLASS "AA"	STEEL REINFORCEMENT LBS. UNCOATED	STEEL REINFORCEMENT LBS. EPOXY COATED	STRUCT. STEEL LUMP SUM	END BENT BACKFILL LUMP SUM	DRY CYCLOP. IN STRM SLOPE PROTECT. TONS	STRUCT. EXCAV. COMMON CU. YDS.		PILES-HP12X53 LIN. FT. STEEL PILES	PILES-HP12X53 LIN. FT. TEST PILES	4" NEOPRENE EXP. DAM LIN. FT.	6" DIA DRAIN PIPE LIN FT	REMOVE EXISTING STRUCTURE LUMP SUM	
TITLE SHEET	1															
GENERAL NOTE	2,3															
BYOUT	4															
NAVIGATION PERMIT	5															
SUBSTRUCTURE																
FOOTINGS	6,7															
END BENT 1	8,9	39.8	39.2	6236							1395	157				
END BENT 2	8,9	39.8	38.1	6209							1640	185				
PIER 1	10	120.7		27,759				167	143		909	99				
PIER 2	11	116.5		26,754				156	175		905	99				
PILE RECORD & LAYOUT	12															
SUBSTRUCTURE TOTALS		316.8	77.3	66,958			②	323	318		4849	540				
SUPERSTRUCTURE																
SUPERSTRUCTURE	13,14,15		376.1	26,082	45,616											
DRAIN DETAILS	16													70		
STRUCTURAL STEEL	17,18,19,20															
PADS	21,22															
NEOPRENE EXP. JOINT	23															
CONST. ELEVATIONS	24,25												30			
SUPERSTRUCTURE TOTALS			376.1	26,082	45,616	①							30	70		
BRIDGE TOTALS		316.8	453.4	93,040	45,616	①	②	323	318		4849	540	30	70	1	

① The approximate weight of Structural Steel is 448,327 Lbs.

② The Lump Sum Bid for End Bent Backfill includes approximately 282 Cubic Yards of End Bent Backfill & 231 Cubic Yards of Structure Excavation End Bent.

BILL OF INCIDENTAL MATERIAL

ITEM	NO.	SIZE & LOCATION
PLASTIC PIPE	16	1" I.D. x 1'-5" PWL BENT WINGS
PREFORMED CORK EXP. JT.	1	1/2"x2'-0"x30'-1" @ END BENT 1
PREFORMED JOINT SEAL	1	4"x2"x34'-1" @ END BENT 1

REFERENCES

SPECIAL PROVISIONS: 4 C (79)

SPECIAL NOTES for Neoprene Expansion Joints

STANDARD DRAWINGS

BGX-006-02	BJE-002-03
BGB-001-05	BJJ-003-03
BGB-002-05	BJJ-004-03
BGB-003-05	BPS-003-01
BJE-001-03	RBC-001-03

Bridge over Levisa Fork — Sheet 1 of 25

COMMONWEALTH OF KENTUCKY
BUREAU OF HIGHWAYS
FRANKFORT
COUNTY OF
PIKE
COAL RUN (CR 1526)
ROAD
SRS-098-5526-
STATION 13+83.00 P. E. PROJECT NO. A-0010

CONSTRUCTION PROJECT NO	MAINTENANCE PROJECT NO	DRAWING NO
		20131

BRIDGE

PLANS PREPARED BY L.M. MAHONEY DESIGN SECTION

UPDATE DATE — LETTING DATE 5/16/80

End Bent 1 to End Bent 2

S.A. Compact — 8/77

DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

PIKE COUNTY
COAL RUN ROAD
C R 1526 OVER LEVISA FORK

REFERENCES AND ESTIMATE OF QUANTITIES

ITEM	SHEET NO.	CONCRETE CU. YDS CLASS "A"	CONCRETE CU. YDS CLASS "AA"	STEEL REINFORCEMENT LBS. UNCOATED	STEEL REINFORCEMENT LBS. EPOXY COATED	STRUCT. STEEL LUMP SUM	END BENT BACKFILL LUMP SUM	DRY CYCLOP. AND STONE SLOPE PROTECT. TONS	STRUCTURE EXCAV. COMMON CU. YDS.		PILES-HP12X53 LIN. FT. STEEL PILES	PILES-HP12X53 LIN. FT. TEST PILES	4" NEOPRENE EXP. DAM LIN. FT.	6" DIA. DRAIN PIPE LIN FT	REMOVE EXISTING STRUCTURE LUMP SUM	
TITLE SHEET	1															
GENERAL NOTE	2,3															
LAYOUT	4															
NAVIGATION PERMIT	5															
SUBSTRUCTURE																
FOUNDINGS	6,7															
END BENT 1	8,9	398	392	(6216)	6455						1395	157				
END BENT 2	8,9	398	381	(6209)	6421						1640	185				
PIER 1	10	1207		27,759				187	143		909	99				
PIER 2	11	1165		26,754				156	175		905	99				
PILE RECORD & LAYOUT	12															
SUBSTRUCTURE TOTALS		3168	773	(66,958)	67,389		②	323	318		4849	540				
SUPERSTRUCTURE																
SUPERSTRUCTURE	13,14,15		3761	26,082	45,616											
DRAIN DETAILS	16													70		
STRUCTURAL STEEL	17,18,19,20															
SHOES	21,22															
NEOPRENE EXP. JOINT	23												30			
CONST. ELEVATIONS	24,25															
SUPERSTRUCTURE TOTALS			3761	26,082	45,616	①							30	70		
BRIDGE TOTALS		3168	4534	(93,040) 93,477	45,616	①	②	323	318		4849	540	30	70	1	

① The approximate weight of Structural Steel is 448,327 Lbs.

② The Lump Sum Bid for End Bent Backfill includes approximately 282 Cubic Yards of End Bent Backfill & 231 Cubic Yards of Structure Excavation End Bent.

BILL OF INCIDENTAL MATERIAL

ITEM	NO.	SIZE & LOCATION
PLASTIC PIPE	16	1" I.D. x 1'-5" FOR BENT WINGS
PREFORMED CORK EXP. JT.	1	1"x2'-0"x30'-1" @ END BENT 1
PREFORMED JOINT SEAL	1	2"x2"x34'-1" @ END BENT 1

REFERENCES

SPECIAL PROVISIONS: 4 C (79)

SPECIAL NOTES for Neoprene Expansion Joints

STANDARD DRAWINGS

BGX-006-02	BJE-002-03
BGB-001-05	BJJ-003-03
BGB-002-05	BJJ-004-03
BGB-003-05	BPS-003-01
BJE-001-03	RBC-001-03

Bridge over Levisa Fork — Sheet 1 of 25

COMMONWEALTH OF KENTUCKY
BUREAU OF HIGHWAYS
FRANKFORT
COUNTY OF
PIKE
COAL RUN (CR 1526)
ROAD SRS-098-3528-
STATION 13+83.00 P. E. PROJECT NO. A-0010

CONSTRUCTION PROJECT NO.	MAINTENANCE PROJECT NO.	DRAWING NO.
		20131

S.R. 73-437-19

UPDATE DATE
LETTING DATE

GENERAL NOTE

SPECIFICATIONS

THE KENTUCKY BUREAU OF HIGHWAYS STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, CURRENT EDITION SHALL APPLY TO THIS PROJECT.

DESIGN LOAD

THIS BRIDGE IS DESIGNED FOR HS20-44 LIVE LOAD, AS SPECIFIED IN 1979 AASHTO 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 MPH.

DESIGN METHOD

ALL REINFORCED CONCRETE MEMBERS ARE DESIGNED BY THE LOAD FACTOR METHOD AS SPECIFIED IN THE CURRENT AASHTO SPECIFICATIONS

MATERIALS DESIGN SPECIFICATIONS

FOR CLASS "A" REINFORCED CONCRETE
F'C = 3500 PSI

FOR CLASS "AA" REINFORCED CONCRETE
F'C = 4000 PSI

FOR STEEL REINFORCEMENT
FY = 60000 PSI

FOR STRUCTURAL STEEL
FS = 20000 PSI FOR A36 STEEL

FOUNDATION PRESSURE

PILES ARE DESIGNED FOR A MAXIMUM AXIAL LOAD OF 87 TONS PER PILE AND A MAXIMUM HORIZONTAL SHEAR OF 2.16 KIPS PER PILE.

CONCRETE

CLASS "AA" CONCRETE IS TO BE USED THROUGHOUT THE SUPERSTRUCTURE AND IN THE PORTIONS OF THE SUBSTRUCTURE ABOVE THE TOP OF THE CAPS EXCEPT IN THE PEDESTALS. CLASS "A" CONCRETE IS TO BE USED IN THE PEDESTALS AND IN THE SUBSTRUCTURE BELOW THE TOP OF THE CAPS, EXCEPT IN THE CONCRETE PILES.

TEXTURING

THE BRIDGE DECK SHALL BE TEXTURED IN ACCORDANCE WITH SECTION 609.13 OF THE STANDARD SPECIFICATIONS.

REINFORCEMENT

DIMENSIONS SHOWN FROM THE FACE OF CONCRETE TO BARS ARE CLEAR DISTANCES UNLESS OTHERWISE SHOWN. SPACING OF BARS IS FROM CENTER TO CENTER OF BARS.

EPOXY COATED REINFORCING STEEL

ALL REINFORCING BARS DESIGNATED BY SUFFIX (E) IN THE PLANS SHALL BE EPOXY COATED IN ACCORDANCE WITH SECTION 811.10 OF THE STANDARD SPECIFICATIONS.

BEVELED EDGES

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

MEMBRANE CURING COMPOUND

WHITE PIGMENTED CURING COMPOUND SHALL BE APPLIED TO THE BRIDGE DECK IN ACCORDANCE WITH SECTION 609.15 OF THE KBH SPECIFICATIONS.

SPIRAL COLUMN TIES

SPLICES FOR SPIRALS WHERE DESIRED BY THE CONTRACTOR SHALL BE MADE WITH A MINIMUM OF ONE AND ONE-HALF TURNS OF SPIRAL. NO ADDITIONAL PAYMENT WILL BE MADE FOR THESE SPLICES, AND THE COST WILL BE CONSIDERED INCIDENTAL TO THE COST OF THE DEVELOPED-LENGTH OF SPIRAL SHOWN ON THE PLANS. SPIRAL REINFORCEMENT SHALL MEET THE REQUIREMENTS OF SUB-SECTION 811.02.01 OF THE SPECIFICATIONS.

BILL OF INCIDENTAL MATERIAL

THE QUANTITIES SHOWN IN THE BILL OF INCIDENTAL MATERIALS ARE APPROXIMATE ONLY AND THE CONTRACTOR IS RESPONSIBLE FOR FURNISHING ENOUGH MATERIAL TO COMPLETE THE WORK IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS. THE COST OF THESE ITEMS IS TO BE INCLUDED IN THE UNIT PRICE BID FOR CLASS "AA" CONCRETE.

PAYMENT FOR STRUCTURAL STEEL

THE LUMP SUM BID FOR STRUCTURAL STEEL SHALL BE FULL PAYMENT FOR ALL STRUCTURAL STEEL, BOLTS, WASHERS, 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.

PAINT

ALL STRUCTURAL STEEL SHALL BE CLEANED AND PAINTED IN ACCORDANCE WITH SECTION 607.25 OF THE KBH SPECIFICATIONS.

CLEANING AND PAINTING

SECTION 607.25 OF THE KBH SPECIFICATIONS APPLIES TO THIS PROJECT AND CONTRACTORS ARE HEREBY REMINDED THAT IN ACCORDANCE WITH THAT SECTION ALL STEEL SURFACES TO BE PAINTED, INCLUDING EXPOSED SURFACES OF SPLICE PLATES, SHALL BE BLAST CLEANED TO A NEAR-WHITE CONDITION IN ACCORDANCE WITH SSPC-SP10 IMMEDIATELY PRIOR TO BEING PAINTED WITH THE FIRST COAT OF PAINT, REGARDLESS OF WHETHER THE FIRST COAT IS APPLIED IN THE SHOP OR IN THE FIELD.

CAMBER

WEB PLATES SHALL BE CUT TO PROVIDE FOR THE 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.

ANCHOR BOLT HOLES

HOLES OF DEPTH AND DIMENSIONS SHOWN SHALL BE DRILLED FOR ANCHOR BOLTS OR DOWELS, AFTER BASE PLATES ARE PROPERLY SET, BY THE SUPERSTRUCTURE CONTRACTOR WHO SHALL BE RESPONSIBLE FOR KEEPING HOLES DRY IN FREEZING WEATHER. AFTER BASE PLATES ARE PROPERLY SET, ANCHOR BOLT HOLES DRILLED, AND ANCHOR BOLTS HEATED TO A BLUE HEAT 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, HEATING ANCHOR BOLTS, FURNISHING LEAD, AND FILLING HOLES WITH MOLTEN LEAD SHALL BE INCIDENTAL TO AND INCLUDED IN THE LUMP SUM BID FOR STRUCTURAL STEEL.

CONNECTIONS

UNLESS OTHERWISE PROVIDED ON THE PLANS, ALL FIELD CONNECTIONS SHALL BE 7/8" DIAMETER HIGH STRENGTH BOLTS. OPEN HOLES SHALL BE 15/16" DIAMETER. ALL JOINTS ARE DESIGNED AS FRICTION TYPE CONNECTIONS. TIGHTENING SHALL BE DONE WITH PROPERLY CALIBRATED WRENCHES.

MATERIALS

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

MATERIALS	A.S.T.M. DESIGNATION
STRUCTURAL STEEL	A36-77a
CARBON STEEL BARS AND SHAFTING PINS AND ROLLERS	A108-79
HIGH STRENGTH BOLTS NUTS AND WASHERS	A325-79
SHEET LEAD AND PIG LEAD	B29-55(1971)

MILD STEEL COVERED ARC-WELDING ELECTRODES AWS SPECIFICATIONS A5.1-69
ALL FLANGE AND WEB MATERIAL, INCLUDING SPLICE PLATES, IN LONGITUDINAL PLATE GIRDERS SHALL MEET THE LONGITUDINAL CHARPY V-NOTCH TOUGHNESS TEST APPLICABLE TO GROUP 2 MINIMUM SERVICE TEMP FROM -10Q F TO -300Q F, IN ACCORDANCE FOR A36 STEEL (UP TO 4"INCLUSIVE) OF 15 FT. LB. @ 40QQ F. SAMPLING AND TESTING PROCEDURES SHALL BE IN ACCORDANCE WITH ASTM A673 CURRENT EDITION, UTILIZING (H) FREQUENCY TESTING.

SLOPE PROTECTION

SLOPE PROTECTION SHALL BE DRY CYCLOPEAN STONE SLOPE PROTECTION IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS.

WELDING

ALL WELDING AND WELDING MATERIALS EXCEPT FOR REINFORCEMENT, SHALL CONFORM TO AWS D.1.1-75 "STRUCTURAL WELDING CODE" WITH REV. 1-76 AND REV. 2-77. FOR MODIFICATIONS AND ADDITIONS AS STATED ON THE PLANS, AASHTO 1977 STANDARD SPECIFICATIONS FOR WELDING OF STRUCTURAL STEEL HIGHWAY BRIDGES AND SPECIAL PROVISION 4(c)79) (CURRENT EDITION) SHALL SUPERSEDE THE AWS SPECIFICATIONS.

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.

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.

REMOVE EXISTING STRUCTURE

THE EXISTING 490' SUSPENSION BRIDGE LOCATED APPROXIMATELY 50' UPSTREAM FROM THE NEW BRIDGE IS TO BE REMOVED IN ACCORDANCE WITH SECTION 203 OF THE SPECIFICATIONS. PAYMENT FOR REMOVING THE EXISTING STRUCTURE SHALL BE MADE AS A LUMP SUM.

BRIDGE OVER LEVISA FORK SHEET 2

COMMONWEALTH OF KENTUCKY
BUREAU OF HIGHWAYS
FRANKFORT
COUNTY OF
PIKE
COAL RUN (CR 1526)
ROAD
STATION 13+69.00 P.E. PROJECT NO.

CONSTRUCTION PROJECT NO.	MAINTENANCE PROJECT NO.	DRAWING NO.
		20131

GENERAL NOTE

BRIDGE

UPDATE DATE

LETTING DATE

DIMENSIONS

DIMENSIONS ARE FOR A NORMAL TEMPERATURE OF 60° FAHRENHEIT. LAYOUT DIMENSIONS ARE HORIZONTAL MEASUREMENTS.

NEOPRENE EXPANSION DAM

4" NEOPRENE EXPANSION JOINT SHALL BE FURNISHED IN ACCORDANCE WITH SPECIAL NOTES FOR NEOPRENE EXPANSION JOINTS AND SHEET 23.

PILING

PILING SHALL BE DRIVEN TO REFUSAL OR TO SOLID ROCK
TEST PILES SHALL BE DRIVEN WHERE DESIGNATED ON THE PLANS TO DETERMINE THE LENGTH OF PILE REQUIRED
ALL TEST PILES SHALL BE ACCURATELY LOCATED SO THAT THEY MAY BE USED IN THE FINISHED STRUCTURE

NAVIGATION CLEARANCES

ALL WORK SHALL BE CONDUCTED WITHOUT UNREASONABLE INTERFERENCE TO THE FREE NAVIGATION OF THE WATERWAY AND WITHOUT IMPAIRMENT TO THE PRESENT NAVIGATIONAL DEPTHS
THE CHANNEL OR CHANNELS CROSSED BY THE STRUCTURE SHALL PROMPTLY BE CLEARED OF ALL FALSEWORK, PILING OR OTHER OBSTRUCTIONS PLACED THEREIN OR CAUSED BY THE CONSTRUCTION OF THE BRIDGE. THIS CLEARING OF THE CHANNEL SHALL BE DONE TO THE SATISFACTION OF THE U. S. COAST GUARD COMMANDANT AND THE BUREAU OF HIGHWAYS AT SUCH TIME, WHEN THE ENGINEERS' JUDGEMENT, THE WORK HAS REACHED A POINT WHERE SUCH ACTION CAN BE TAKEN, BUT IN ANY CASE NOT LATER THAN DAYS AFTER THE BRIDGE HAS BEEN OPENED TO TRAFFIC. THE EXISTING BRIDGE SHALL BE REMOVED AND THE CHANNEL CLEARED TO THE SATISFACTION OF THE U. S. COAST GUARD COMMANDANT AND THE BUREAU OF HIGHWAYS NOT LATER THAN 90 DAYS AFTER THE NEW BRIDGE IS OPENED TO TRAFFIC.

FALSEWORK PLANS

THE CONTRACTOR SHALL SUBMIT TO THE DIVISION OF CONSTRUCTION, FOR SUBMISSION TO THE U. S. COAST GUARD FOR APPROVAL AND TEMPORARY NAVIGATION LIGHTING REQUIREMENTS, SEVEN (7) SETS OF PRELIMINARY FALSEWORK PLANS SHOWING THE PLAN, ELEVATION, AND LOCATION OF ANY AND ALL COFFERDAMS, TEMPORARY FALSEWORK AND OTHER OBSTRUCTIONS TO BE USED IN CONNECTION WITH THE CONSTRUCTION OF THESE BRIDGES. ONE COPY SHOWING REQUESTED ALTERATIONS, IF ANY, WILL BE RETURNED TO THE CONTRACTOR BY THE DIVISION OF CONSTRUCTION. THE CONTRACTOR SHALL SUBMIT TO THE DIVISION OF CONSTRUCTION FIVE (5) SETS OF FINAL FALSEWORK PLANS FOR DISTRIBUTION

COFFERDAMS

THE COST OF ANY COFFERDAM THAT MAY BE NECESSARY, SHALL BE INCLUDED IN THE UNIT PRICE BID FOR STRUCTURE EXCAVATION, COMMON.

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.

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.
THE DRAIN PIPE SHALL BE 6" Ø STANDARD WEIGHT IN ACCORDANCE WITH SUB-SECTION 810.02.13 OF THE SPECIFICATIONS, OR OPTIONALLY IN ACCORDANCE WITH ASTM SPEC. A 714, GRADE V (CLASS 4). 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 SHALL BE PAINTED IN ACCORDANCE WITH SECTION 807.25 OF THE KDH SPECIFICATIONS.

TEMPORARY SUPPORTS

TEMPORARY SUPPORTS OR SHORING WILL NOT BE PERMITTED UNDER THE GIRDERS WHEN POURING THE CONCRETE FLOOR SLAB OR WHEN TAKING "TOP OF BEAM" ELEVATIONS.

POURING SEQUENCE

THE POURING SEQUENCE OF THE SLAB MAY BE CHANGED WITH THE WRITTEN APPROVAL OF THE ENGINEER.

DETAILED 11-78 Z.W.M. 14.11 6-79

BRIDGE OVER LEVISA FORK SHEET 3

COMMONWEALTH OF KENTUCKY
BUREAU OF HIGHWAYS
FRANKFORT
COUNTY OF
PIKE
COAL RUN (CR 1526)
ROAD
STATION 13+83.00 P.E. PROJECT NO.

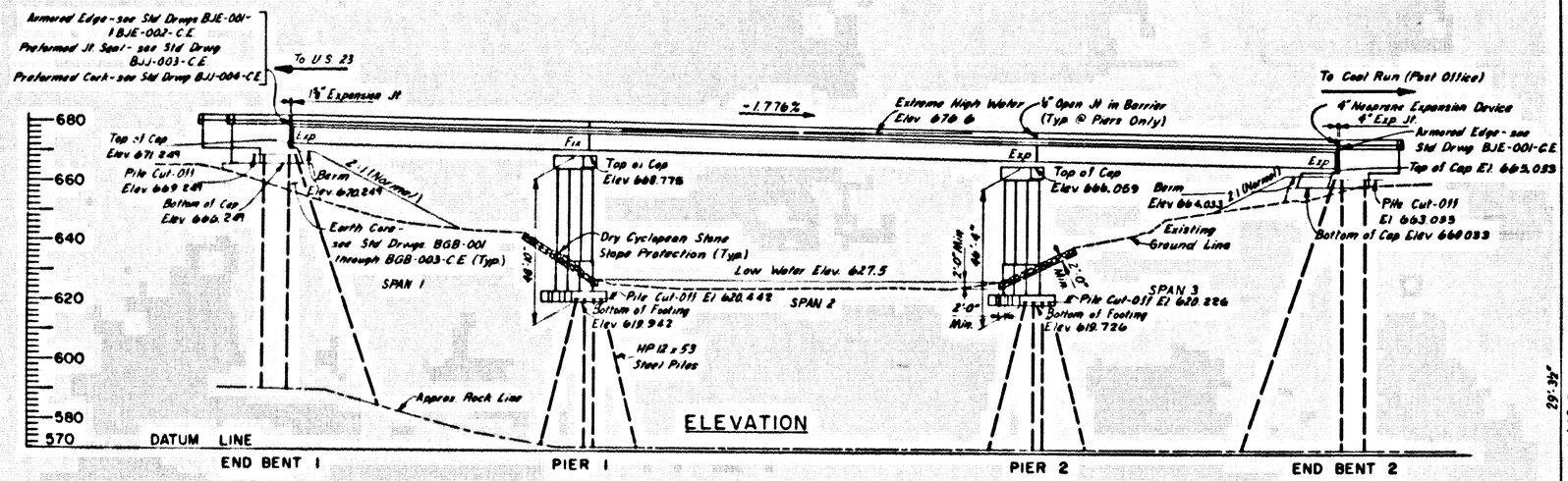
CONSTRUCTION PROJECT NO	MAINTENANCE PROJECT NO	DRAWING NO
		20131

GENERAL NOTE

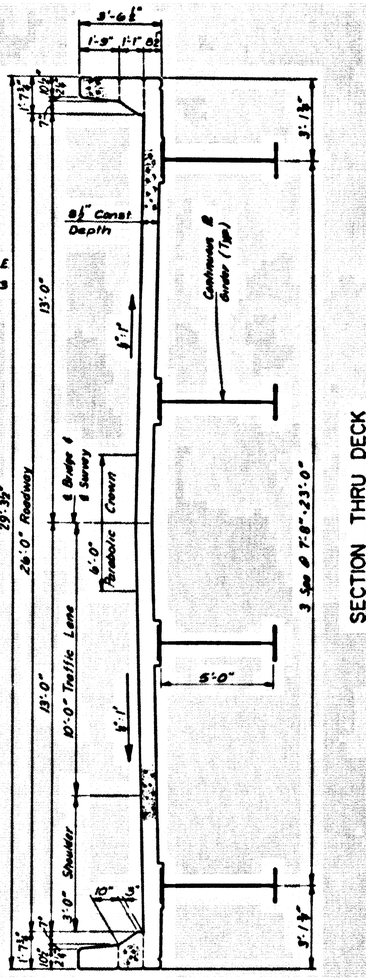
BRIDGE

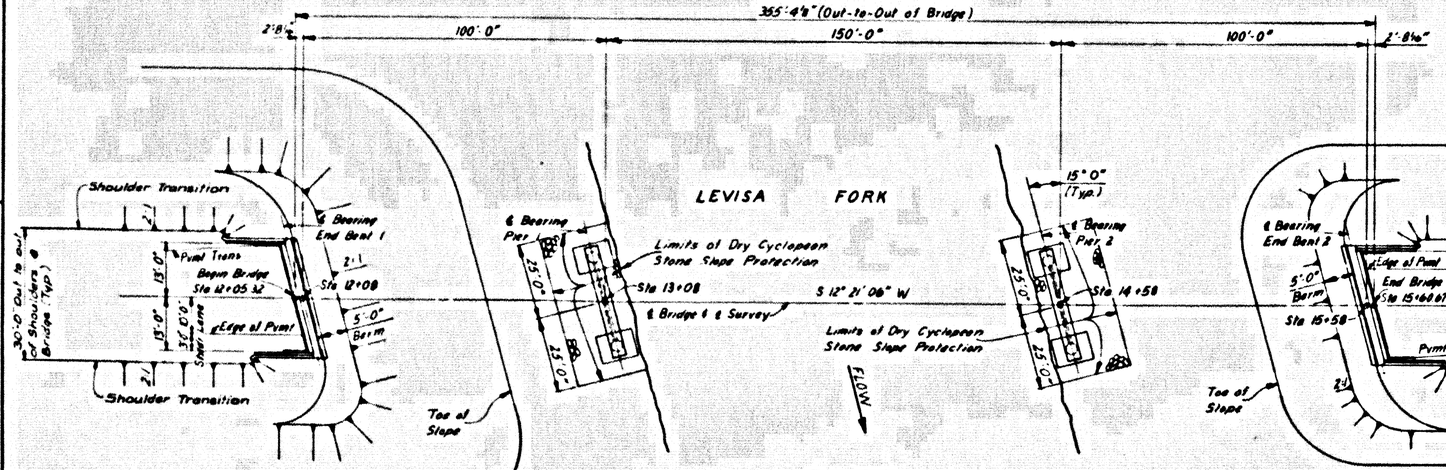
UPDATE DATE

LETTING DATE



100', 150', 100' CONTINUOUS W.S.P. SPANS
30'-0" SHOULDERS 6'-0" ROADWAY
2:1 FILL SLOPES HS 20-44 LOADING
15° SKEW LEFT





Bridge over Levisa Fork Sheet 4 of 25

COMMONWEALTH OF KENTUCKY
BUREAU OF HIGHWAYS
FRANKFORT
COUNTY OF
PIKE
COAL RUN (CR 1526)
ROAD
STATION 13+83.00 P.E. PROJECT NO.
CONSTRUCTION PROJECT NO. MAINTENANCE PROJECT NO. DRAWING NO. 20131

BETWEEN 11-76

BRIDGE

UPDATE DATE

LETTING DATE

DEPARTMENT OF TRANSPORTATION
UNITED STATES COAST GUARD

MAILING ADDRESS: U.S. COAST GUARD, (obr) SECOND COAST GUARD DISTRICT, 1430 OLIVE STREET, ST. LOUIS, MO. 63103

BRIDGE PERMIT
(116-79)

AUG 2 0 1979

WHEREAS by Title V of an act of Congress approved August 2, 1946, entitled "General Bridge Act of 1946," as amended (33 U.S.C. 525-533), the consent of Congress was granted for the construction, maintenance and operation of bridges and approaches thereto over the navigable waters of the United States;

AND WHEREAS under Section 502(b) of that act, the authority of which was transferred to and vested in the Secretary of Transportation by Section 6(g)(6)(C) of the Department of Transportation Act (80 Stat. 938) and delegated by the Secretary to the Commandant, U.S. Coast Guard by Section 1.46(c) of Title 49 Code of Federal Regulations, it is required that the location and plans for such bridges be approved by the Commandant before construction is commenced and in approving the location and plans of any such bridge, the Commandant may impose any specific conditions relating to the construction, maintenance and operation of the structure which he deems necessary in the interest of public navigation, such conditions to have the force of law;

AND WHEREAS the - COMMONWEALTH OF KENTUCKY - has submitted the location and plans of a bridge to be constructed across the Levisa Fork of the Big Sandy River near Pikeville, Kentucky;

NOW THEREFORE, This is to certify that the location and plans received April 1979 are hereby approved by the Commandant, subject to the following conditions:

1. No deviation from the approved plans may be made either before or after completion of the structure unless the modification of said plans has previously been submitted to and received the approval of the Commandant.

2. The construction of falsework, pilings, cofferdams or other obstructions, if required, shall be in accordance with plans submitted to and approved by the Commander, Second Coast Guard District prior to construction of the bridge. All work shall be so conducted that the free navigation of the waterway is not unreasonably interfered with and the present navigable depths are not impaired. Timely notice of any and all events that may affect navigation shall be given to the District Commander during construction of the bridge. The channel or channels through the structure shall be promptly cleared of all obstructions placed therein or caused by the construction of the bridge to the satisfaction of the District Commander, when in his judgment the construction work has reached a point where such action should be taken, but in no case later than ninety days after the bridge has been opened to traffic.

55

AUG 2 0 1979

BRIDGE PERMIT: (116-79) Bridge across the Levisa Fork of the Big Sandy River near Pikeville, Kentucky

3. Issuance of this permit does not relieve the permittee of the obligation or responsibility for compliance with the provisions of any other law or regulation as may be under the jurisdiction of the U. S. Army Corps of Engineers, Huntington District; Commonwealth of Kentucky; Department of Fish and Wildlife Resources; Department for Natural Resources and Environmental Protection; Division of Water Resources; Division of Hazardous Materials and Waste Management, or any other federal, state or local authority having cognizance of any aspect of the location, construction or maintenance of said bridge.

4. All parts of the existing to be replaced Coal Run (County Road 1526) Bridge across the Levisa Fork of the Big Sandy River, mile 83.1, shall be removed down to or below the natural bottom of the waterway or ground line and the waterway cleared to the satisfaction of the District Commander. A period of 90 days subsequent to the opening to traffic of the new bridge, mile 83.1, will be allowed for such removal and clearance. The proposed method and schedule for removal of the existing bridge shall be submitted to the Commander, Second Coast Guard District, for approval prior to commencement of such removal.

5. When the proposed bridge is no longer used for transportation purposes, it shall be removed in its entirety and the waterway cleared to the satisfaction of the District Commander. Such removal and clearance shall be completed by and at the expense of the owner of the bridge upon due notice from the District Commander.

6. The approval hereby granted shall cease and be null and void unless construction of the bridge is commenced within 3 years and completed within 5 years after the date of this permit.

R. D. HODGES
Captain, U.S. Coast Guard
Chief, Bridge Division
By direction of the Commandant

DEPARTMENT OF TRANSPORTATION
UNITED STATES COAST GUARD

RECEIVED
SEP 7 1979
DIVISION OF BRIDGES
FRANKFORT, KENTUCKY

MAILING ADDRESS: COMMANDER (obr) SECOND COAST GUARD DISTRICT 1430 OLIVE STREET ST. LOUIS, MO. 63103

Tel. 314-425-4607
FTS 279-4607
16591.1/83.1 Levisa Fk
SEP 0 5 1979

Mr. Charles C. Cook, Director
Division of Bridges
Kentucky Department of Transportation
Frankfort, KY 40601

Re: Proposed bridge across Levisa Fork, Mile 83.1 near Pikeville, Kentucky

Dear Mr. Cook:

Your application of 20 March 1979 requesting approval of the location and plans for a proposed bridge across Levisa Fork, Mile 83.1, near Pikeville, Kentucky has been approved. Bridge Permit No. 116-79 dated 20 August 1979 is enclosed.

It is essential that we be kept informed of any events that could affect navigation during construction of the bridge. Your representative should be specifically instructed to keep this office informed of the progress of construction with particular reference to any and all events that may have an effect on navigation. The information received regarding the work will be disseminated to mariners by radio and by written notices.

Plans for cofferdams, temporary causeways, work bridges, falsework piers, or any other temporary structures that will be placed in the water to facilitate construction of this bridge must be approved by this office. Construction of this bridge must be accomplished with minimal interference with navigation. To this end, construction schedules, plans, and erection schemes should be submitted to us at the earliest possible time so that approval can be assured prior to commencing work.

The U. S. Army Corps of Engineers, Huntington District has asked us to inform you that attention should be given to natural drainage patterns, erosion and spillage of pollutants into Levisa Fork and minimum alteration of riparian vegetation. Also, the Kentucky Department of Fish and Wildlife Resources, Division of Water Resources, and Hazardous Materials and Waste Management has requested certain precautions be taken during construction; a copy of their letter listing recommended conditions is enclosed.

Re: Proposed bridge across Levisa Fork, Mile 83.1 near Pikeville, Kentucky

It has been determined that you will not be required to install navigation lights or vertical clearance gauges on the bridge at this time. Should conditions change so as to require a review of navigation needs, we will advise you.

Please acknowledge receipt of the Permit. If you have any questions concerning our jurisdiction or requirements, you can contact us at telephone number 314-425-4607.

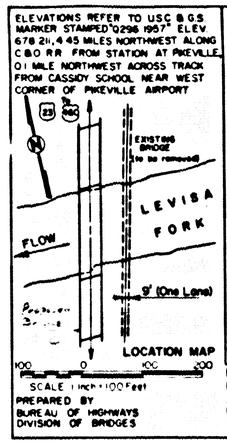
Sincerely,

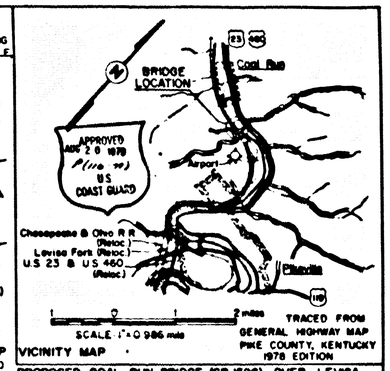
R. W. THORNBURGH
Chief, Bridge Branch
Second Coast Guard District
By direction of the District Commander

Encl: (1) U.S. Coast Guard Bridge Permit No. 116-79 dtd 20 Aug 79
(2) Kentucky Dept. of F&W Resources's ltr dtd 16 May 79
(3) Div. Water Resources's ltr dtd 8 Jun 79
(6) Div. Hazard Materials & Waste Management's ltr 16 May 79

Copy to:
CofE, Huntington Dist.
Div. Engr. Ohio River Div.
EPA, Region IV
FHWA

2

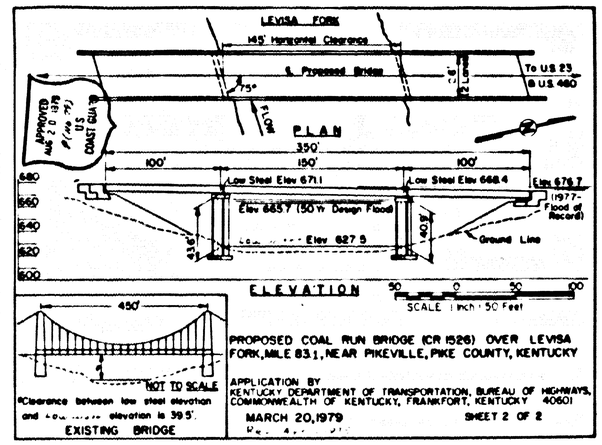




PROPOSED COAL RUN BRIDGE (CR 1526) OVER LEVISA FORK, MILE 83.1, NEAR PIKEVILLE, PIKE COUNTY, KENTUCKY

APPLICATION BY KENTUCKY DEPARTMENT OF TRANSPORTATION, BUREAU OF HIGHWAYS, COMMONWEALTH OF KENTUCKY, FRANKFORT, KENTUCKY 40601

MARCH 20, 1979 SHEET 1 OF 2



PROPOSED COAL RUN BRIDGE (CR 1526) OVER LEVISA FORK, MILE 83.1, NEAR PIKEVILLE, PIKE COUNTY, KENTUCKY

APPLICATION BY KENTUCKY DEPARTMENT OF TRANSPORTATION, BUREAU OF HIGHWAYS, COMMONWEALTH OF KENTUCKY, FRANKFORT, KENTUCKY 40601

MARCH 20, 1979 SHEET 2 OF 2

Bridge over Levisa Fork Sheet 5 of 25

COMMONWEALTH OF KENTUCKY
BUREAU OF HIGHWAYS
FRANKFORT
COUNTY OF
PIKE
COAL RUN (CR 1526)
ROAD
STATION 13+83.00 P.E. PROJECT NO.
CONSTRUCTION PROJECT NO. MAINTENANCE PROJECT NO. DRAWING NO. 20131

BETWEEN 11 TO

BRIDGE

UPDATE DATE

LETTING DATE

14 MAY 1980

AMENDMENT TO BRIDGE PERMIT
(116-79a)

WHEREAS by a permit issued on 30 August 1979, the Commandant of the U. S. Coast Guard approved the location and plans of a bridge to be constructed by the Commonwealth of Kentucky across Levisa Fork of the Big Sandy River near Pikeville, Kentucky under authority of the General Bridge Act of 1946;

AND WHEREAS condition 1 of that permit provides that no deviation from the approved plans shall be made either before or after completion of the structure unless the modification of said plans has previously been submitted to and received the approval of the Commandant;

AND WHEREAS the - COMMONWEALTH OF KENTUCKY - submitted for approval revised plans for construction of the bridge;

AND WHEREFORE, this is to certify that plan Sheet 2 (of 2) last revised 3 March 1980 is hereby approved and supersedes plan Sheet 2 (of 2) last revised April 1979 previously approved. In granting this approval, all conditions to which the permit was subject remain in force.

T. W. Harrison
Captain, U. S. Coast Guard
Chief, Operations Division
By direction of the District Commander

DEPARTMENT OF TRANSPORTATION
UNITED STATES COAST GUARD

RECEIVED
MAY 19 1980
DIVISION OF BRIDGES
FRANKFORT, KENTUCKY

Commander (obr)
Second Coast Guard District
1430 Olive Street
St. Louis, Mo. 63103

Tel. 314-425-4607
FTS 279-4607
16591.1/03.1 Levisa Fk
14 May 1980

Mr. O. J. Sheets, Acting Director
Division of Bridges
Department of Transportation
Commonwealth of Kentucky
Frankfort, KY 40620

Re: Proposed bridge across Levisa Fork (of the Big Sandy River), Mile 93.1, near Pikeville, Pike County, Kentucky
(Item No. 13-276.0)

Dear Mr. Sheets:

Your agency's application of 3 March 1980 requesting approval of the revised plans, which call for a decrease in the roadway width of the referenced bridge, has been approved.

Amendment to Bridge Permit No. 116-79a dated 14 May 1980 is enclosed. Permit drawing sheet 2 of 2 last revised 3 March 1980 has been approved and supersedes permit drawing Sheet 2 of 2 last revised April 1979 and approved on 30 August 1979. All other conditions of the original permit remain in force.

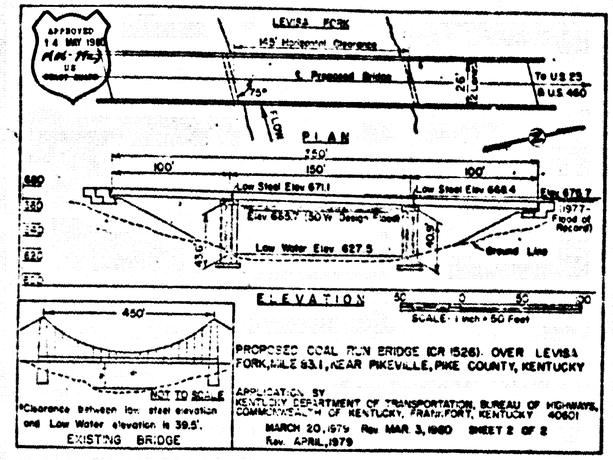
Please acknowledge receipt of the Amendment to Bridge Permit.

Sincerely,

O. B. VanDeMark
Chief, Bridge Branch
Second Coast Guard District
By direction of the District Commander

Encl: (1) USCG Amendment to Bridge Permit No. 116-79a

APPROVED
14 MAY 1980
U.S. COAST GUARD



PROPOSED COAL RUN BRIDGE (CR 1526) OVER LEVISA FORK, MILE 93.1, NEAR PIKEVILLE, PIKE COUNTY, KENTUCKY

APPLICATION BY KENTUCKY DEPARTMENT OF TRANSPORTATION, BUREAU OF HIGHWAYS, COMMONWEALTH OF KENTUCKY, FRANKFORT, KENTUCKY 40601

MARCH 20, 1979 Rev MAR 3, 1980 SHEET 2 OF 2
Rev. APRIL, 1979

Bridge over Levisa Fork Sheet 5A of 25

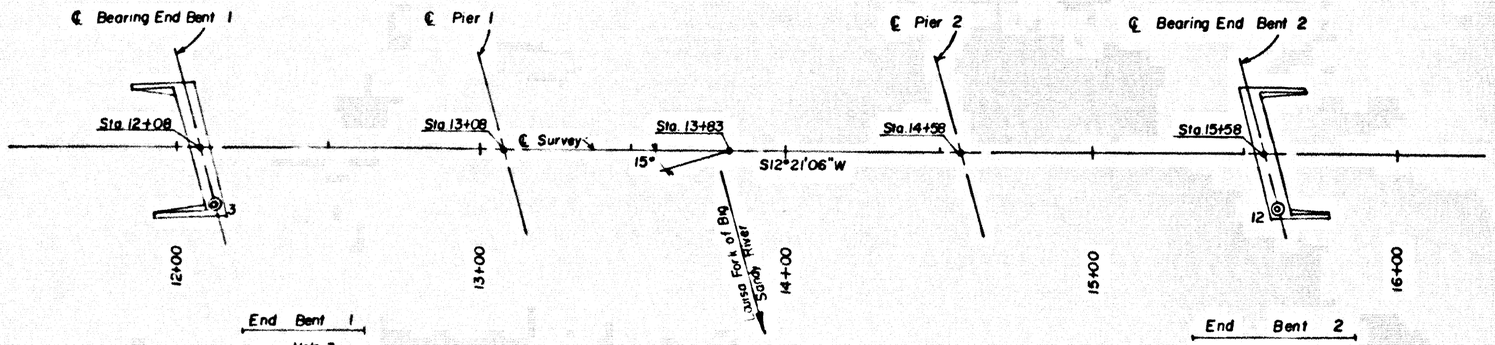
COMMONWEALTH OF KENTUCKY
BUREAU OF HIGHWAYS
FRANKFORT
COUNTY OF
PIKE
COAL RUN (CR 1526)
ROAD
STATION 13+83.00 P. E. PROJECT NO.

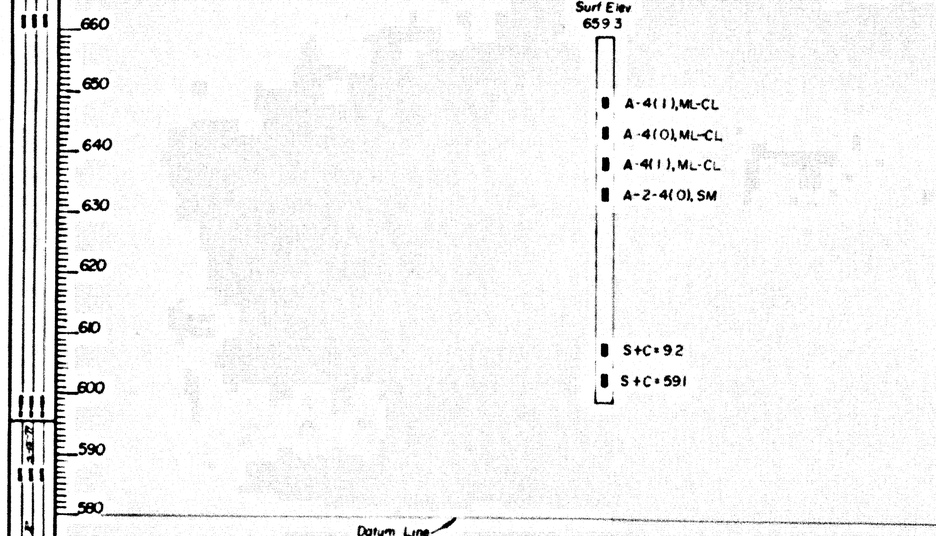
CONSTRUCTION PROJECT NO	MAINTENANCE PROJECT NO	DRAWING NO
		20131

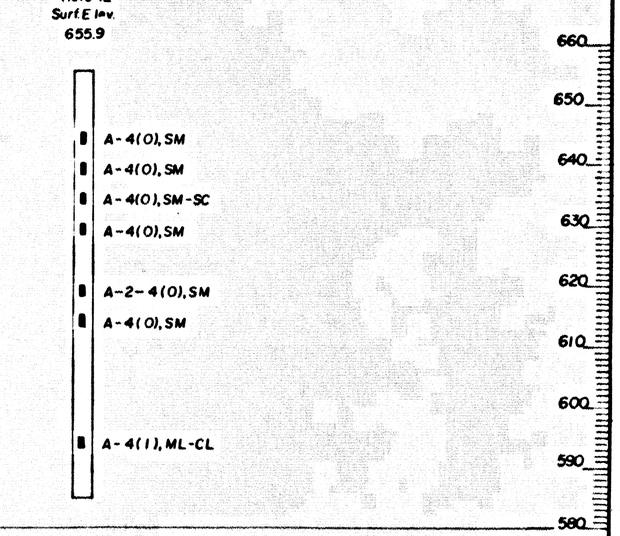
AMENDMENT TO BRIDGE PERMIT

BRIDGE

SUBSURFACE DATA







Sheet 6 of 25

COMMONWEALTH OF KENTUCKY
BUREAU OF HIGHWAYS
FRANKFORT
COUNTY OF
PIKE
Coal Run Bridge (CR 1526)
ROAD
STATION 13+83 P.E. PROJECT NO.
CONSTRUCTION PROJECT NO. MAINTENANCE PROJECT NO. Drawing No. 20131

BRIDGE

Description of Soil Compactness or Consistency

SOIL TYPE	COMPACTNESS OR CONSISTENCY	RANGE OF PENETRATION RESISTANCE	RANGE OF UNCONFINED COMPRESSIVE STRENGTH
Coarse grained soils (More than half of material is larger than No 200 sieve size)	Very loose Loose Medium compact Compact Very compact	Less than 4 blows per foot 4 to 10 10 to 30 30 to 50 Greater than 50	Not applicable
Fine grained soils (More than half of material is smaller than No 200 sieve size)	Very soft Soft Medium stiff Stiff Very stiff Hard	Not applicable	Less than 0.25 tsf 0.25 to 0.5 0.5 to 1.0 1.0 to 2.0 2.0 to 4.0 Greater than 4.0

Unified Soil Classifications

MAJOR DIVISIONS		SYMBOL		NAME
COARSE GRAINED SOILS	GRAVEL AND GRAVELLY SOILS	GW		Well graded gravels or gravel sand mixtures, little or no fines
		GP		Poorly graded gravels or gravel sand mixtures, little or no fines
		GM		Silty gravels, gravel-sand-silt mixtures
		GC		Clayey gravels, gravel-sand-clay mixtures
	SAND AND SANDY SOILS	SW		Well graded sands or gravelly sands, little or no fines
		SP		Poorly graded sands or gravelly sands, little or no fines
		SM		Silty sands, sand-silt mixture
		SC		Clayey sands, sand-clay mixtures
FINE GRAINED SOILS	SILTS AND CLAYS LL IS LESS THAN 50	ML		Inorganic silts and very fine sands, rock flour, silty or clayey fine sands or clayey silts with slight plasticity
		CL		Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays
	SILTS AND CLAYS LL IS GREATER THAN 50	MH		Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts
		CH		Inorganic clays of high plasticity, fat clays
UNCLASSIFIED MATERIAL		NONE		Non-classified material (ie overburden, pavement, coal mine waste, slag, rubble, talus, etc) Include visual description

AI	Activity Index
LI	Liquidity Index
N	Penetration Resistance
S+C(%)	Material finer than No. 200 seive
○	Rockline Sounding
◒	Disturbed Sample Boring
◎	Undisturbed Sample Boring
⊙	Undisturbed Sample Boring and Rock Core
●	Rock Core
⊹	Slope Inclinometer Installation
	typical applications: ○ ◒ ◎ ⊙ ●
▬▶	Approximate Footing Elevation
▽	Water Elevation
▮	Thin-walled Tube Sample
<	Standard Penetration Test Sample
Q_u	Unconfined Compressive Strength
w(%)	Moisture Content
RQD(%)	Rock Quality Designation
SDI(%)	Slake Durability Index
Rec (%)	Core Recovery
Φ	Angle of Internal Friction
$\bar{\Phi}$	Effective Angle of Internal Friction
c	Cohesion
$\bar{c}$	Effective Cohesion
γ	Total Unit Weight
RDZ	Rock Disintegration Zone
OB	Overburden Bench
IB	Intermediate Bench
R	Refusal
NR	Refusal Not Encountered

LIMESTONE

SANDSTONE

COAL

SHALE, SOIL-LIKE (SDI ≤ 50)

SHALE, INTERMEDIATE (50 < SDI < 95)

SHALE, ROCK-LIKE (SDI ≥ 95)

Relation of RQD and in situ Rock Quality

RQD (%)	Rock Quality
90-100	Excellent
75-90	Good
50-75	Fair
25-50	Poor
0-25	Very Poor

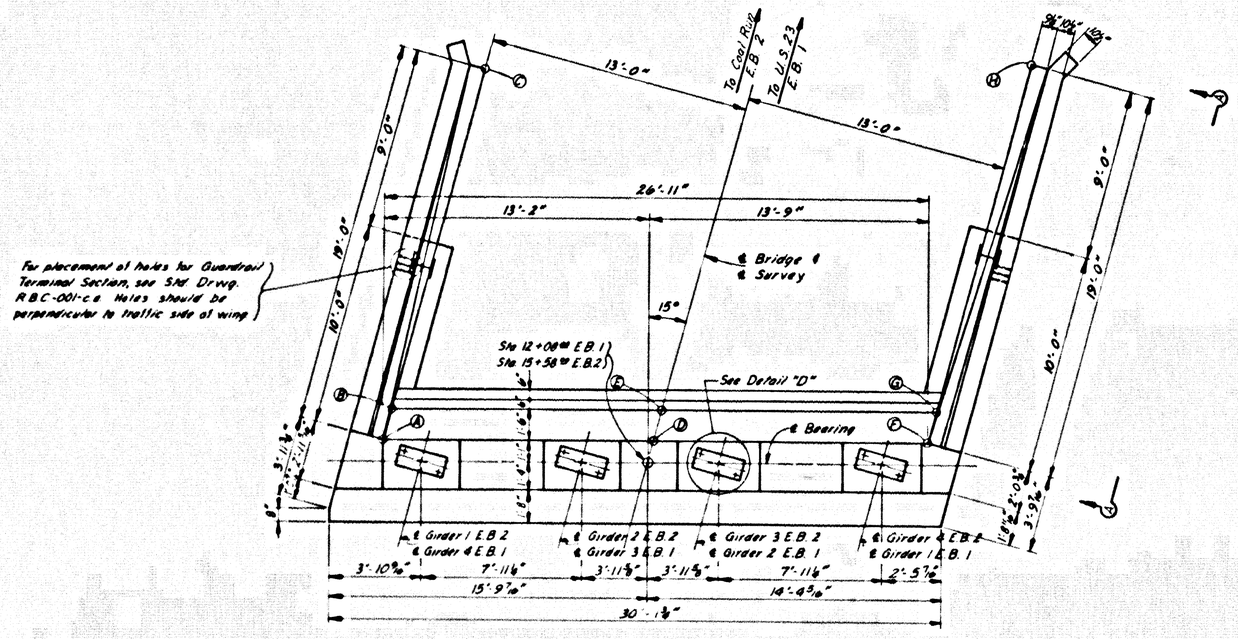
COMMONWEALTH OF KENTUCKY
BUREAU OF HIGHWAYS
FRANKFORT
COUNTY OF
PIKE
Coal Run Bridge (CR 1526)
ROAD
STATION 13+83 P.E. PROJECT NO.

CONSTRUCTION PROJECT NO	MAINTENANCE PROJECT NO	DRAWING NO
		20131

BRIDGE

UPDATE DATE

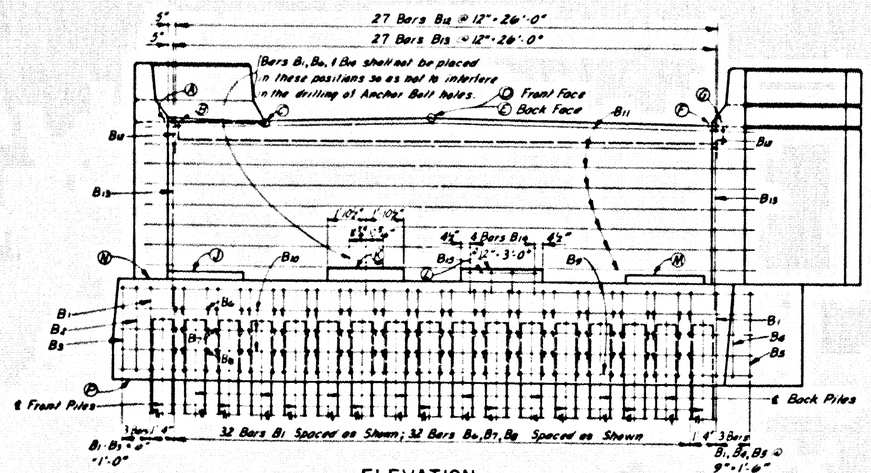
LETTING DATE



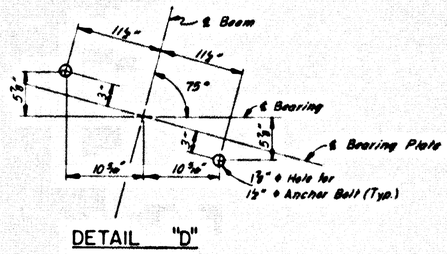
PLAN

TABLE OF ELEVATIONS		
POINT	END BENT 1	END BENT 2
A	∅79.148	∅73.016
B	∅79.175	∅72.988
C	∅79.963	∅72.7.8
D	∅79.648	∅73.193
E	∅79.476	∅73.165
F	∅79.271	∅72.892
G	∅74.299	∅72.864
H	∅79.538	∅72.554
J	∅71.583	∅65.476
K	∅71.774	∅65.599
L	∅71.815	∅65.563
M	∅71.693	∅65.367
N	∅71.249	∅65.033
P	∅66.249	∅60.033

ESTIMATE OF QUANTITIES			
ITEM	QUANTITY-EB 1	QUANTITY-EB 2	UNIT
Concrete, Class "AA"	39.2	38.1	Cu. Yds.
Concrete, Class "A"	39.8	39.8	Cu. Yds.
Reinforcement	6236	∅209	Lbs.



ELEVATION



DETAIL "D"

END BENTS 1 & 2

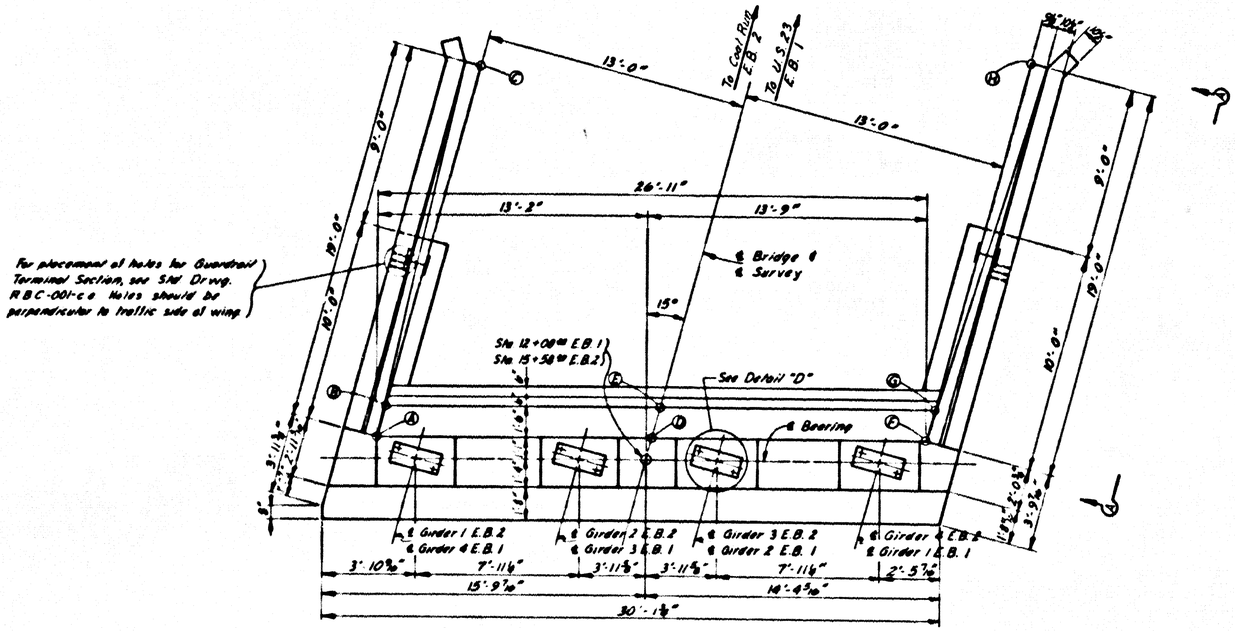
Bridge over Levisa Fork Sheet 8 of 25

COMMONWEALTH OF KENTUCKY
BUREAU OF HIGHWAYS
FRANKFORT
COUNTY OF
PIKE
COAL RUN (CR 1526)
ROAD
STATION 13+83.00 P. E. PROJECT NO.
CONSTRUCTION PROJECT NO | MAINTENANCE PROJECT NO | DRAWING NO 20131

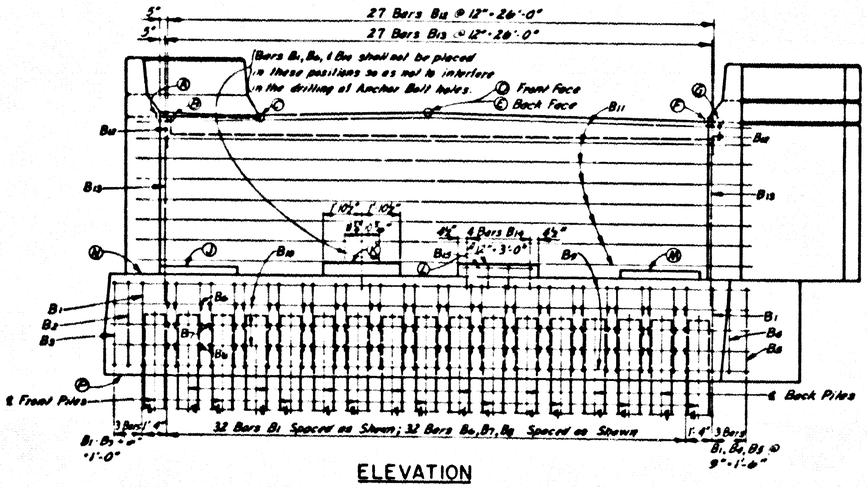
BRIDGE

UPDATE DATE

LETTING DATE



PLAN

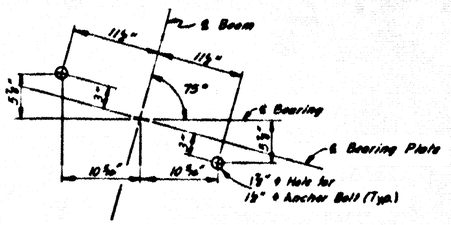


ELEVATION

TABLE OF ELEVATIONS		
POINT	END BENT 1	END BENT 2
A	℄79.148	℄73.016
B	℄79.175	℄72.988
C	℄79.403	℄72.760
D	℄79.448	℄73.193
E	℄79.476	℄73.165
F	℄79.271	℄72.892
G	℄79.299	℄72.864
H	℄79.338	℄72.554
J	℄71.583	℄65.476
K	℄71.779	℄65.599
L	℄71.815	℄65.563
M	℄71.693	℄65.367
N	671.249	665.033
P	666.249	660.033

ESTIMATE OF QUANTITIES			
ITEM	QUANTITY-E.B.1	QUANTITY-E.B.2	UNIT
Concrete, Class "AA"	39.2	38.1	Cu. Yds.
Concrete, Class "A"	39.8	39.8	Cu. Yds.
Reinforcement	(6230)	(6209)	Lbs.

6455 6421



DETAIL "D"

END BENTS 1 & 2

Bridge over Levisa Fork Sheet 8 of 25

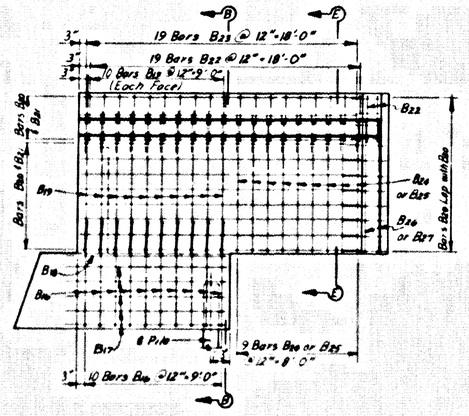
COMMONWEALTH OF KENTUCKY
BUREAU OF HIGHWAYS
FRANKFORT
COUNTY OF
PIKE
COAL RUN (CR 1526)
ROAD
STATION 13+83.00 P. E. PROJECT NO.

CONSTRUCTION PROJECT NO.	MAINTENANCE PROJECT NO.	DRAWING NO.
		20131

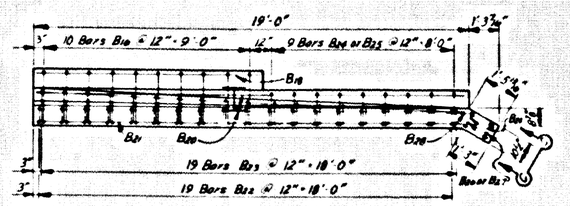
S.P. 73-437-19

UPDATE DATE

LETTING DATE



ELEVATION A-A

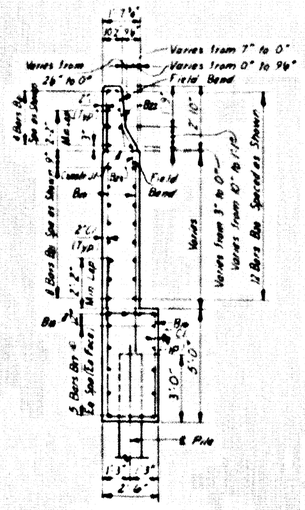


PLAN OF WING

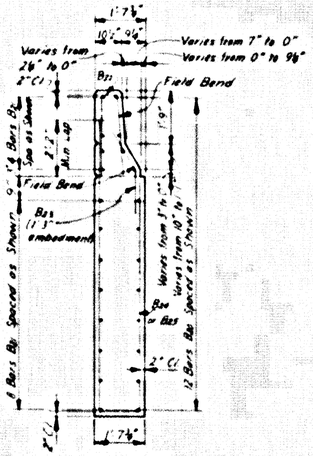


DETAIL "F"
Backwall at End Bent 2

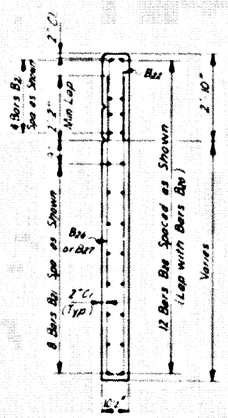
NOTE: The Pedestal and Top of Cap bars shall be accurately located in accordance with the plans so as not to interfere with the drilling of Anchor Bolt holes.



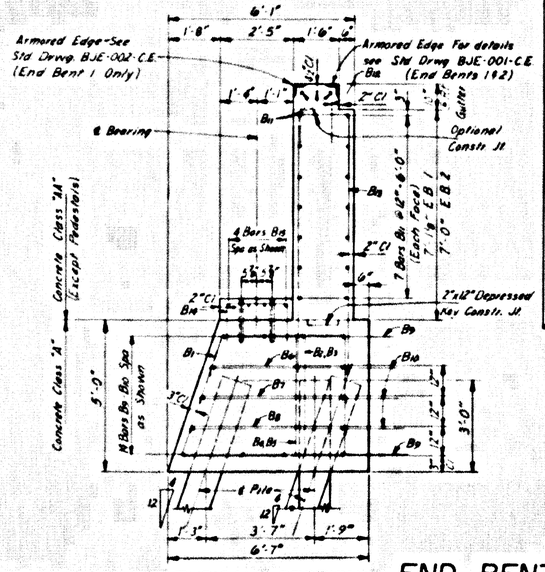
SECTION B-B



SECTION E-E



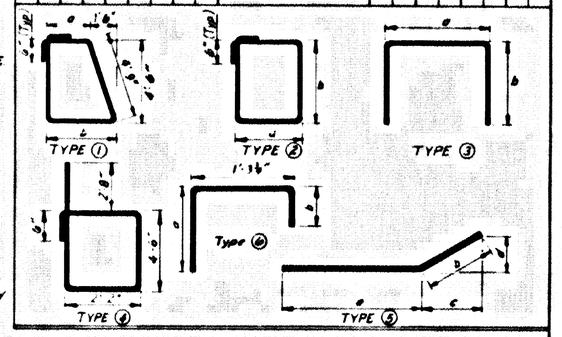
ELEVATION C-C



TYPICAL SECTION THRU END BENT

BILL OF REINFORCEMENT

MARK	TYPE	SIZE	NO EB1	NO EB2	LENGTH EB 1 Ft	LENGTH EB 1 In	LENGTH EB 2 Ft	LENGTH EB 2 In	LOCATION	a Ft	a In	b Ft	b In	c Ft	c In	d Ft	d In
B1	①	5	34	34	20	6	20	6	Cap	4	5½	5	11½				
B2	②		1	1	16	9	16	9	↓	2	7	4	1				
B3	③		1	1	13	0	13	0	↓	0	8½	2	2½				
B4	④		1	1	17	3	17	3	↓	3	9	4	6				
B5	⑤		1	1	11	8	11	8	↓	0	11½	4	6				
B6	⑥		32	32	5	4	5	4	↓	4	11	0	3				
B7	⑦		32	32	5	8	5	8	↓	5	3	0	3				
B8	⑧	5	32	32	6	0	6	0	↓	5	7	0	3				
B9	Str	8	8	8	29	9	29	9	Cap								
B10	Str	5	6	6	29	9	29	9	Backwall								
B11	Str	5	16	16	28	7	28	7	Backwall								
B12	⑨	5	27	27	5	9	5	9	Backwall	1	2	2	4				
B13	⑩	5	27	27	18	5	18	5	Pedestal	1	8	8	5				
B14	⑪	4	16	16	6	0	6	0	Pedestal	2	1	2	0				
B15	Str	4	16	16	3	5	3	5	Wing Footing								
B16	⑫	5	20	20	16	7	16	7	Wing Footing								
B17	Str	5	20	20	10	6	10	6	Wing Footing								
B18	↓	6	8	8	10	6	10	6	Wing Wall								
B19	↓	5	20	20	10	6	10	2	Wing Wall & Barrier								
B20	Str		24	24	18	8	18	8	Wing Wall & Barrier	18	8	1	1	0	11½	0	6½
B21	⑬		24	24	19	9	19	9	Barrier	0	6½	2	7½				
B22	⑭		42	42	5	9	5	9	Barrier Curb								
B23	Str		38	38	3	6	3	6	Wing Wall	10	4½	7	6½				
B24	⑮		18	0	19	2	0	0	↓	10	0½	7	2				
B25	⑯		0	18	0	0	18	5	↓	0	6½	10	6½				
B26	⑰		4	0	21	2	0	0	↓	0	6½	9	8½				
B27	⑱		0	4	0	0	19	11	Wing Wall	0	6½	9	8½				
B28	⑲	5	24	24	3	7	3	7	Wing Wall & Barrier	2	4	1	3	1	1	0	7½



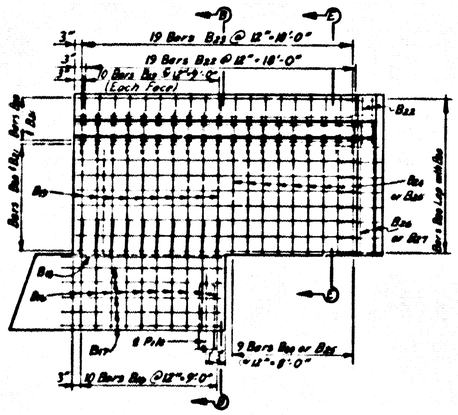
Bridge over Levisa Fork — Sheet 9 of 25

COMMONWEALTH OF KENTUCKY
BUREAU OF HIGHWAYS
FRANKFORT
COUNTY OF
PIKE
COAL RUN (CR 1526)
ROAD
STATION 13+83.00
P.E. PROJECT NO
CONSTRUCTION PROJECT NO
MAINTENANCE PROJECT NO
DRAWING NO 20131

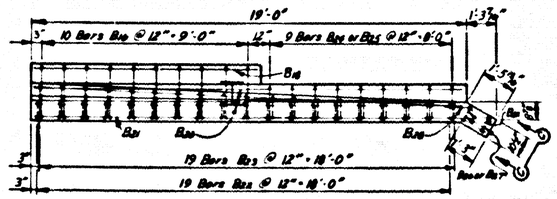
END BENTS 1&2

DETZER 11-76

BRIDGE



ELEVATION A-A

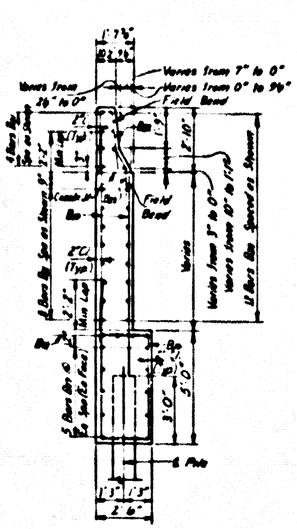


PLAN OF WING

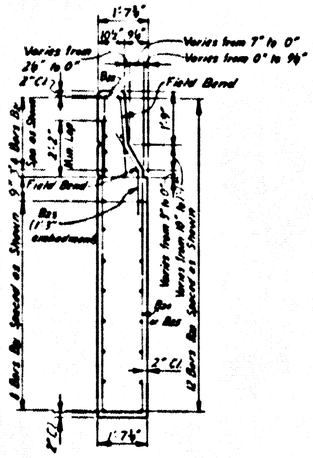


DETAIL "F"
Backwall at End Bent 2

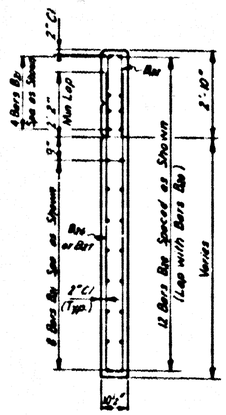
NOTE: The Pedestal and Top of Cap bars shall be accurately located in accordance with the plans so as not to interfere with the drilling of Anchor Bolt holes.



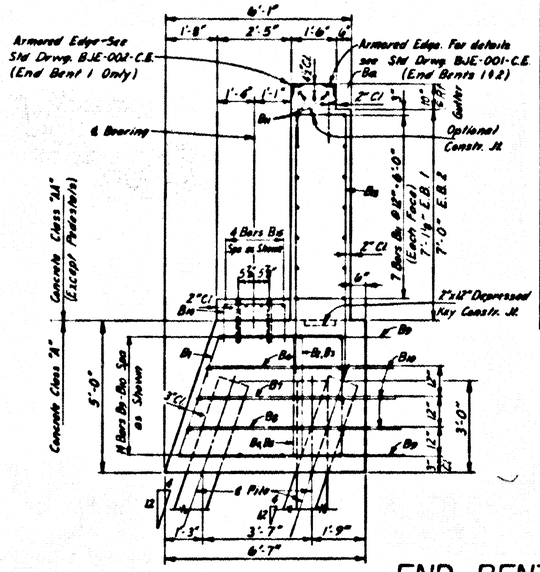
SECTION B-B



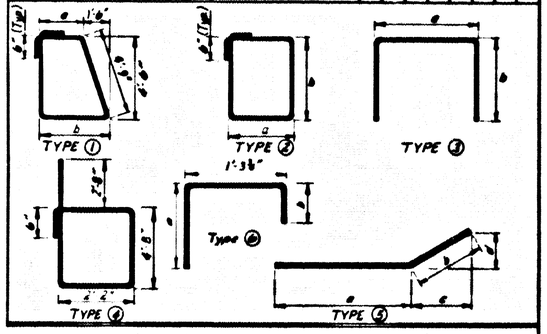
SECTION E-E



ELEVATION C-C



TYPICAL SECTION THRU END BENT



BILL OF REINFORCEMENT

MARK	TYPE	SIZE	NO EB1	NO EB2	LENGTH EB 1 Ft	LENGTH EB 1 In	LENGTH EB 2 Ft	LENGTH EB 2 In	LOCATION	a Ft	a In	b Ft	b In	c Ft	c In	d Ft	d In
B1	1	5	34	34	20	6	20	6	Cap	4	9½	5	11½				
B2	2		1	1	16	9	16	9		2	7	4	1				
B3	2		1	1	13	0	13	0		0	8½	2	2½				
B4	2		1	1	17	3	17	3		3	9	4	6				
B5	2		1	1	11	8	11	8		0	11½	4	6				
B6	3		32	32	5	4	5	4		4	11	0	3				
B7	3	4	32	32	5	8	5	8		5	3	0	3				
B8	3	5	32	32	6	0	6	0		5	7	0	3				
B9	Str	8	8	8	29	9	29	9									
B10	Str	5	6	6	29	9	29	9	Cap								
B11	Str	5	16	16	28	7	28	7	Backwall								
B12	3	5	27	27	5	9	5	9	Backwall	1	2	2	4				
B13	3	5	27	27	18	5	18	5	Backwall	1	8	8	5				
B14	3	4	16	16	6	0	6	0	Pedestal	2	1	2	0				
B15	Str	4	16	16	3	5	3	5	Pedestal								
B16	4	5	20	20	16	7	16	7	Wing Footing								
B17	Str	5	20	20	10	6	10	6	Wing Footing								
B18	1	6	8	8	10	6	10	6	Wing Footing								
B19	1	5	20	20	10	6	10	2	Wing Wall								
B20	Str		24	24	18	8	18	8	Wing Wall & Barrier								
B21	4		24	24	19	9	19	9	Wing Wall & Barrier	18	8	1	1	0	11½	0	6½
B22	4		42	42	5	9	5	9	Barrier	0	6½	2	7½				
B23	Str		38	38	3	6	3	6	Barrier Curb								
B24	4		18	0	19	2	0	0	Wing Wall	10	4½	7	6½				
B25	4		0	18	0	0	18	5		10	0½	7	2				
B26	3		4	0	21	2	0	0		0	6½	10	4½				
B27	3		0	4	0	0	19	11	Wing Wall	0	6½	9	8½				
B28	3	5	24	24	3	7	3	7	Wing Wall & Barrier	2	4	1	3	1	1	0	7½

40

Bridge over Levisa Fork — Sheet 9 of 25

COMMONWEALTH OF KENTUCKY
BUREAU OF HIGHWAYS
FRANKFORT
COUNTY OF
PIKE
COAL RUN (CR 1526)
ROAD
STATION 13+83.00 — P.E. PROJECT NO.
CONSTRUCTION PROJECT NO. — MAINTENANCE PROJECT NO. — 20131

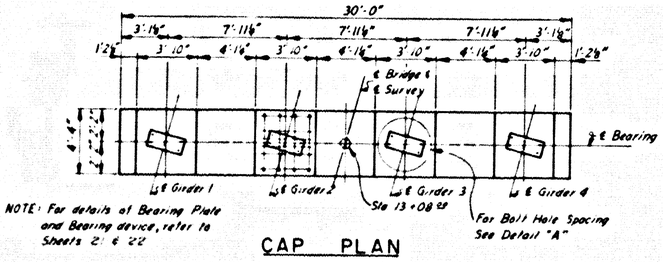
END BENTS 1&2

S.P. 73-437-19

UPDATE DATE
LETTING DATE

UPDATE DATE

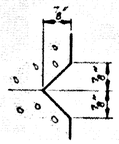
LETTING DATE



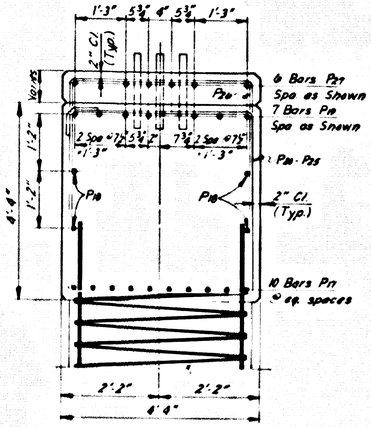
NOTE: For details of Bearing Plate and Bearing device, refer to Sheets 21 & 22

CAP PLAN

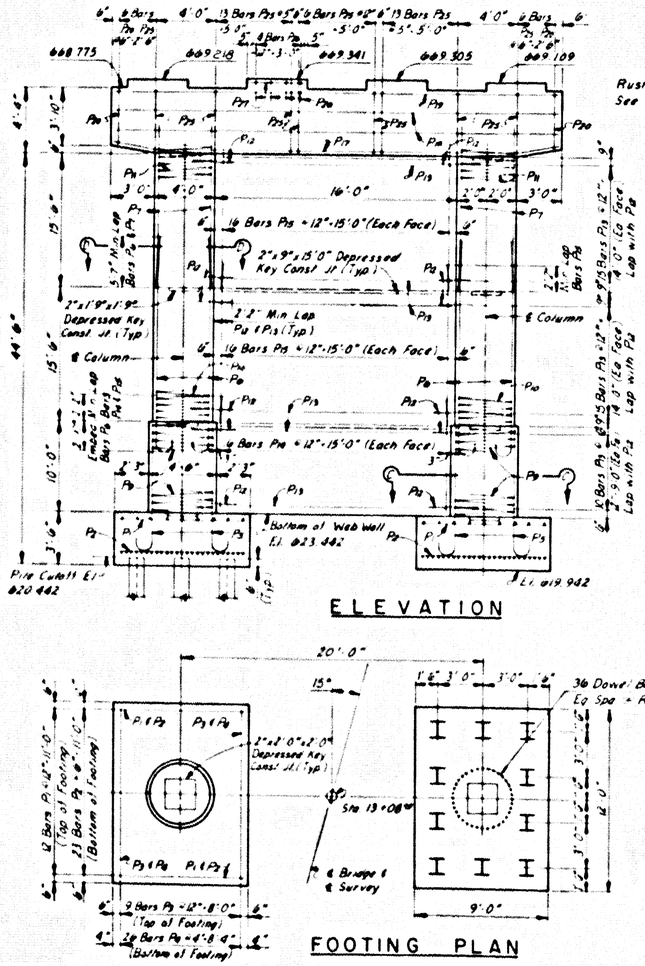
NOTE: Bars in bridge pedestals and top of cap are to be accurately located so as not to interfere with drilling of anchor bolt holes.

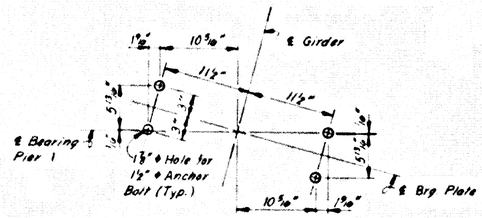


DETAIL "B"



SECTION THRU CAP



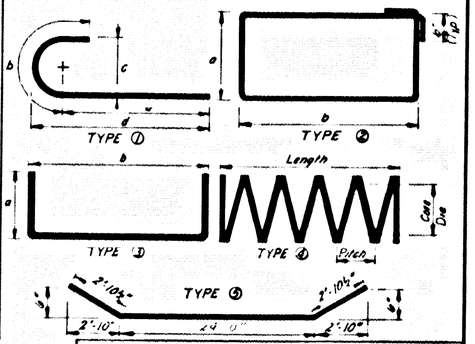


DETAIL "A"

BILL OF REINFORCEMENT

MARK	TYPE	SIZE	NO.	LENGTH Ft.	LENGTH In	LOCATION	a Ft.	a In	b Ft.	b In	c Ft.	c In	d Ft.	d In
P1	Str	5	24	8	8	Footing - Top								
P2		6	46	8	8	Footing - Bottom								
P3		5	18	11	8	Footing - Top								
P4	Str	8	52	11	8	Footing - Bottom								
P5	①	10	72	13	8	Footing - Column	11	10	1	10	1	0½	12	6½
P6	①	10	60	25	3	Column	23	5	1	10	1	0½	23	11½
P7	②	10	62	17	7	Column - Cap								
P8						Not Used in Pier 1								
P9	Str	5	168	3	11	Column - Web Wall								
P10			80	15	6	Web Wall								
P11			32	12	0	Web Wall								
P12	Str	5	64	17	8	Web Wall								
P13						Not Used in Pier 1								
P14	③	10	10	29	9	Cap								
P15	Str	5	4	29	8									
P16	Str	10	7	29	8									
P20	②	5	2	15	10	↓	3	6½	4	0				
P21				16	0		3	7½	4	0				
P22				16	2		3	8½	4	0				
P23				16	4		3	9½	4	0				
P24			2	16	6		3	10½	4	0				
P25	②	5	34	16	9	Cap	4	0	4	0				
P26	③	4	16	7	5	Pedestal	1	9	4	0				
P27	Str	4	24	3	6	Pedestal								

MARK	TYPE	SIZE	LENGTH	CORE DIA	NO BARS	PITCH	TURNS
P9	④	4	9'-9"	4'-1"	2	3"	42
P10	④	4	15'-6"	3'-7"	2	3"	65
P11	④	4	15'-9"	3'-7"	2	3"	66



ESTIMATE OF QUANTITIES

ITEM	QUANTITY	UNIT
Concrete, Class "A"	120.7	Cu. Yds
Steel Reinforcement	27,759	Lbs.

PIER 1

Bridge over Levisa Fork Sheet 10 of 35

COMMONWEALTH OF KENTUCKY
BUREAU OF HIGHWAYS
FRANKFORT
COUNTY OF
PIKE
COAL RUN (CR 1526)
ROAD
STATION 13+83.00 P. E. PROJECT NO.

CONSTRUCTION PROJECT NO	MAINTENANCE PROJECT NO	DRAWING NO
		20131

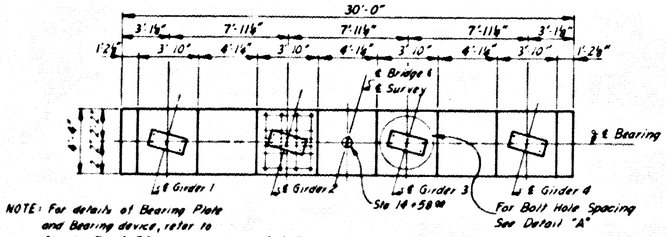
DESIGNED: W. H. Edwards, S. T. Hu
DRAWN: W. H. Edwards
TRACED: E. A. Campbell
CHECKED: W. H. Edwards

OCTOBER 11 78

BRIDGE

UPDATE DATE

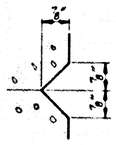
LETTING DATE



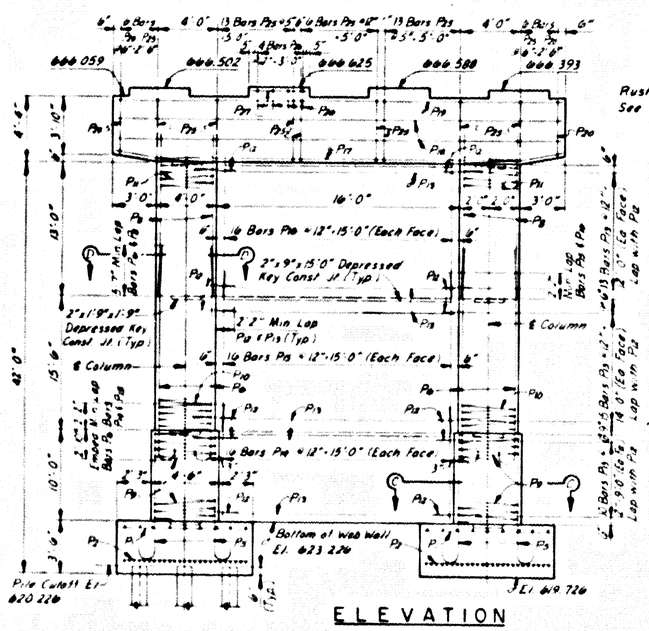
NOTE: For details of Bearing Plate and Bearing device, refer to Sheets 21 & 22

CAP PLAN

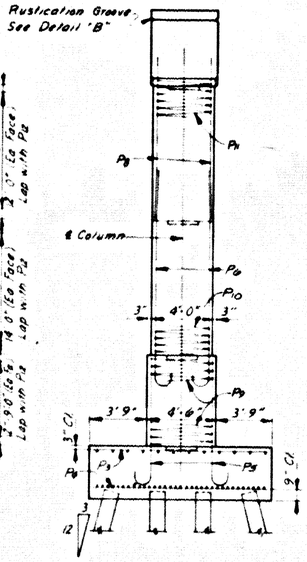
NOTE: Bars in bridge pedestals and top of cap are to be accurately located so as not to interfere with drilling of anchor bolt holes.

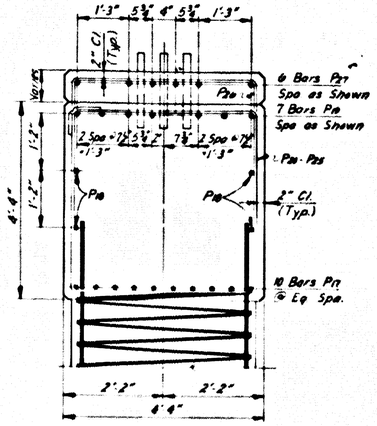


DETAIL "B"

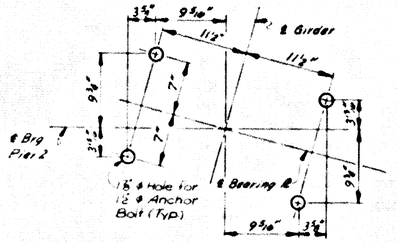


ELEVATION

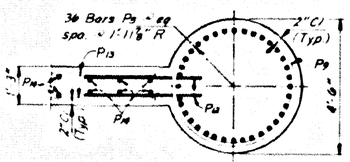




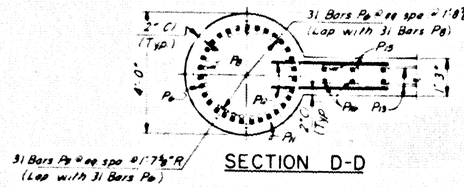
SECTION THRU CAP



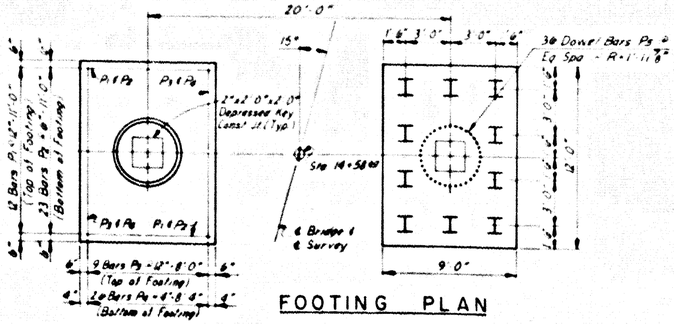
DETAIL "A"



SECTION C-C



SECTION D-D



FOOTING PLAN

ESTIMATE OF QUANTITIES

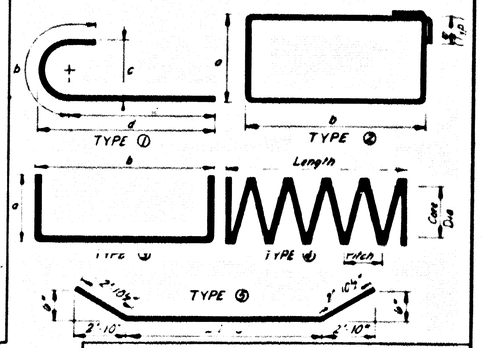
ITEM	QUANTITY	UNIT
Concrete, Class "A"	116.5	Cu Yds
Steel Reinforcement	26,754	Lbs

PIER 2

BILL OF REINFORCEMENT

MARK	TYPE	SIZE	NO.	LENGTH Ft	LENGTH In	LOCATION	a Ft	a In	b Ft	b In	c Ft	c In	d Ft	d In
P1	Str	5	24	8	8	Footing - Top								
P2		6	46	8	8	Footing - Bottom								
P3		5	18	11	8	Footing - Top								
P4	Str	8	52	11	8	Footing - Bottom								
P5	①	10	72	13	8	Footing - Columns	11	10	1	10	1	0½	12	6½
P6	①	10	62	25	3	Column	23	5	1	10	1	0½	23	11½
P7						Not Used in Pier 2								
P8	②	10	62	15	1	Column - Cap								
P12	Str	5	152	3	11	Column - Web Wall								
P13			76	15	6	Web Wall								
P14			32	12	0	Web Wall								
P15			32	17	8	Web Wall								
P16	Str	5	32	15	0	Web Wall								
P17	③	10	10	29	9	Cap								
P18	Str	5	4	29	8									
P19	Str	10	7	29	8									
P20	⑦	5	2	15	10		3	6½	4	0				
P21				16	0		3	7½	4	0				
P22				16	2		3	8½	4	0				
P23				16	4		3	9½	4	0				
P24			2	16	6		3	10½	4	0				
P25	④	5	34	16	9	Cap	4	0	4	0				
P26	⑤	4	16	7	5	Pedestal	1	9	4	0				
P27	Str	6	28	3	6	Pedestal								

MARK	TYPE	SIZE	LENGTH	CORE DIA	NO BARS	PITCH	TURNS
P9	⑥	4	9'-9"	4'-1"	2	3"	42
P10	⑧	4	15'-6"	3'-7"	2	3"	65
P11	⑥	4	13'-3"	3'-7"	2	3"	56



Bridge over Levisa Fork — Sheet 11 of 25

COMMONWEALTH OF KENTUCKY
BUREAU OF HIGHWAYS
FRANKFORT
COUNTY OF
PIKE
COAL RUN (CR 1526)
ROAD
STATION 13 + 83.00 — P. E. PROJECT NO.

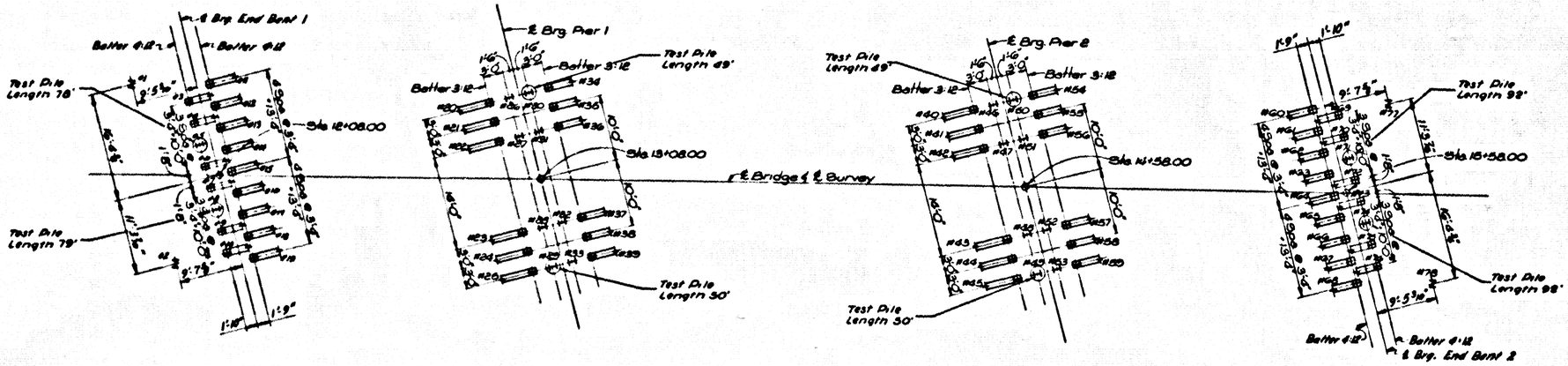
CONSTRUCTION PROJECT NO	MAINTENANCE PROJECT NO	DRAWING NO
		20131

DESIGNED 11-79 — W.F. Hawkins, S.T.H., W.E. Knuckols — W.E. Knuckols — W.E. Knuckols

BRIDGE

UPDATE DATE

LETTING DATE



END BENT 1 | PIER 1 | PIER 2 | END BENT 2

NOTE: Pile Numbers 5, 8, 29, 30, 49, 50, 71 and 74 are to be Test Piles.

NOTE: After all piles have been driven, the Resident Engineer shall record for each pile the *Tip of Pile Elevation as Driven*, the *Pile Length in Place*, and the *Calculated Bearing Capacity* and shall return one Blueprint copy of this sheet with this date to the Director of the Division of Bridges so that the data may be recorded on the original plans.

Pile Length in Place shown hereon are the actual lengths of piles in the finished structure below cut-off elevation and are not necessarily pay items.

This Pile Record does not replace other records of piles required to be kept and submitted by the Resident Engineer.

NOTE: All dimensions are at bottom of End Bent or Pier Footing.

NOTE: All piles are HP 12x 53.

PILE RECORD

END BENT 1

PILE NO.	CUT-OFF ELEVATION AS SHOWN ON PLANS	TIP OF PILE ELEVATION AS DRIVEN	PILE LENGTH IN PLACE LIN FT	CALCULATED BEARING CAPACITY TONS
1V	669.269	599.580	69.689	Refusal
2V		598.040	71.209	
3		594.829	74.449	
4		595.671	77.331	
5		597.332	71.917	
6		595.366	77.669	
7		596.353	74.626	
8		597.216	74.033	
9		597.345	75.582	
10		598.185	74.906	
11		595.698	77.329	
12		596.983	74.173	
13		595.685	77.343	
14		597.385	75.731	
15		597.105	76.046	
16		594.813	78.460	
17		596.318	76.876	
18		595.363	77.800	
19	669.269	598.143	74.950	Refusal

PIER 1

PILE NO.	CUT-OFF ELEVATION AS SHOWN ON PLANS	TIP OF PILE ELEVATION AS DRIVEN	PILE LENGTH IN PLACE LIN FT	CALCULATED BEARING CAPACITY TONS
20	680.442	594.753	26.480	Refusal
21		594.859	26.370	
22		594.859	26.370	
23		594.840	26.390	
24		595.108	26.120	
25		594.927	26.300	
26		594.592	25.850	
27		594.962	25.480	
28		594.522	25.920	
29		594.192	26.250	
30		595.842	24.600	
31		595.152	25.290	
32		594.892	26.150	
33		595.972	26.470	
34		596.373	24.810	
35		595.181	26.080	
36		594.811	26.420	
37		594.310	26.930	
38		594.330	26.910	
39	680.442	594.500	26.740	Refusal

PIER 2

PILE NO.	CUT-OFF ELEVATION AS SHOWN ON PLANS	TIP OF PILE ELEVATION AS DRIVEN	PILE LENGTH IN PLACE LIN. FT.	CALCULATED BEARING CAPACITY TONS
40	680.226	597.748	23.170	Refusal
41		597.428	23.500	
42		597.331	23.600	
43		595.584	25.400	
44		597.505	23.420	
45		595.002	26.000	
46V		597.306	22.920	
47V		595.286	24.940	
48V		595.026	25.200	
49T		595.056	25.170	
50T		595.226	25.000	
51V		595.306	24.920	
52V		595.226	25.000	
53V		595.096	25.130	
54		595.410	25.360	
55		595.361	25.630	
56		595.565	25.420	
57		595.487	25.500	
58		595.973	25.000	
59	680.226	595.307	25.480	Refusal

END BENT 2

PILE NO.	CUT-OFF ELEVATION AS SHOWN ON PLANS	TIP OF PILE ELEVATION AS DRIVEN	PILE LENGTH IN PLACE LIN. FT.	CALCULATED BEARING CAPACITY TONS
60	663.033	595.441	71.228	Refusal
61		595.237	71.463	
62		595.516	71.167	
63		595.676	71.000	
64		596.063	70.592	
65		595.363	71.330	
66		595.126	71.580	
67		596.233	70.413	
68		595.722	70.952	
69		596.131	70.500	
70		595.631	70.837	
71T		593.610	69.483	
72		596.619	70.217	
73		596.376	70.050	
74T		593.890	69.183	
75		595.000	71.715	
76		595.406	71.285	
77V		593.023	69.410	
78V	663.033	594.593	68.440	Refusal

PILE RECORD & LAYOUT

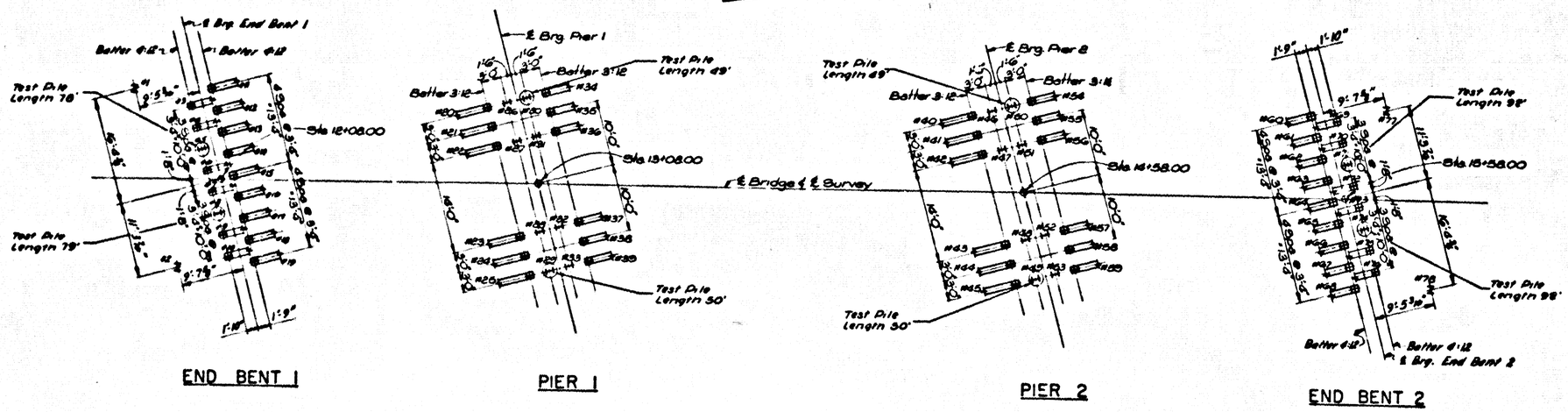
Bridge over Levisa Fork — Sheet 12 of 25

COMMONWEALTH OF KENTUCKY
BUREAU OF HIGHWAYS
FRANKFORT
COUNTY OF
PIKE
COAL RUN (CR 1526)
ROAD
STATION 13 + 83.00 — P. E. PROJECT NO.
CONSTRUCTION PROJECT NO. — MAINTENANCE PROJECT NO. — Drawing No. 20131

BRIDGE

UPDATE DATE

LETTING DATE



END BENT 1 | PIER 1 | PIER 2 | END BENT 2

NOTE: Pile Numbers 5, 8, 29, 30, 49, 50, 71 and 74 are to be Test Piles.

PILE RECORD

END BENT 1

PILE NO.	CUT-OFF ELEVATION AS SHOWN ON PLANS	TIP OF PILE ELEVATION AS DRIVEN	PILE LENGTH IN PLACE LIN. FT.	CALCULATED BEARING CAPACITY TONS
1V	669.245	599.580	69.669	Refusal
2V		598.040	71.209	
3		594.820	74.429	
4		595.077	77.351	
5		597.332	71.917	
6		593.366	77.669	
7		596.555	74.226	
8		597.216	74.033	
9		597.545	73.382	
10		598.185	74.908	
11		595.698	77.329	
12		596.985	76.173	
13		595.685	77.343	
14		597.385	75.791	
15		597.103	76.046	
16		594.813	78.460	
17		596.318	76.876	
18		595.305	77.600	
19	669.245	598.185	74.850	Refusal

PIER 1

PILE NO.	CUT-OFF ELEVATION AS SHOWN ON PLANS	TIP OF PILE ELEVATION AS DRIVEN	PILE LENGTH IN PLACE LIN. FT.	CALCULATED BEARING CAPACITY TONS
20	620.442	594.153	26.480	Refusal
21		594.859	26.370	
22		594.859	26.370	
23		594.840	26.390	
24		595.108	26.120	
25		594.987	26.300	
26		594.592	25.850	
27		594.968	25.680	
28		594.522	25.980	
29		594.192	26.250	
30		595.822	24.600	
31		595.152	25.290	
32		594.992	26.150	
33		593.972	26.670	
34		596.373	24.810	
35		595.141	26.080	
36		594.811	26.420	
37		594.316	26.930	
38		594.336	26.910	
39	620.442	594.500	26.740	Refusal

PIER 2

PILE NO.	CUT-OFF ELEVATION AS SHOWN ON PLANS	TIP OF PILE ELEVATION AS DRIVEN	PILE LENGTH IN PLACE LIN. FT.	CALCULATED BEARING CAPACITY TONS
40	620.226	597.748	23.170	Refusal
41		597.428	23.500	
42		597.331	23.600	
43		595.584	25.400	
44		597.505	23.420	
45		595.002	26.000	
46V		597.306	22.920	
47V		595.286	24.940	
48V		595.026	25.200	
49T		595.056	25.170	
50T		595.226	25.000	
51V		595.306	24.920	
52V		595.226	25.000	
53V		595.096	25.130	
54		595.610	25.580	
55		595.361	25.630	
56		595.595	25.420	
57		595.687	25.500	
58		595.973	25.000	
59	620.226	595.307	25.680	Refusal

END BENT 2

PILE NO.	CUT-OFF ELEVATION AS SHOWN ON PLANS	TIP OF PILE ELEVATION AS DRIVEN	PILE LENGTH IN PLACE LIN. FT.	CALCULATED BEARING CAPACITY TONS
60	663.033	595.441	71.228	Refusal
61		595.237	71.463	
62		595.518	71.167	
63		595.676	71.000	
64		596.063	70.592	
65		595.363	71.330	
66		595.126	71.580	
67		596.233	70.413	
68		595.722	70.952	
69		596.151	70.500	
70		595.837	70.837	
71T		593.610	69.423	
72		596.419	70.217	
73		596.578	70.050	
74T		593.890	69.143	
75		595.000	71.713	
76		595.406	71.285	
77V		593.623	69.810	
78V	663.033	594.593	68.440	Refusal

NOTE: After all piles have been driven, the Resident Engineer shall record for each pile the *Tip of Pile Elevation as Driven*, the *Pile Length in Place*, and the *Calculated Bearing Capacity* and shall return one Blueprint copy of this sheet with this date to the Director of the Division of Bridges so that the date may be recorded on the original plans.

Pile Length in Place shown hereon are the actual lengths of piles in the finished structure below cut-off elevation and are not necessarily pay items.

This Pile Record does not replace other records of piles required to be kept and submitted by the Resident Engineer.

NOTE: All dimensions are at bottom of End Bent or Pier Footing.

NOTE: All piles are HP 12 x 53.

Bridge over Levisa Fork — Sheet 12 of 25

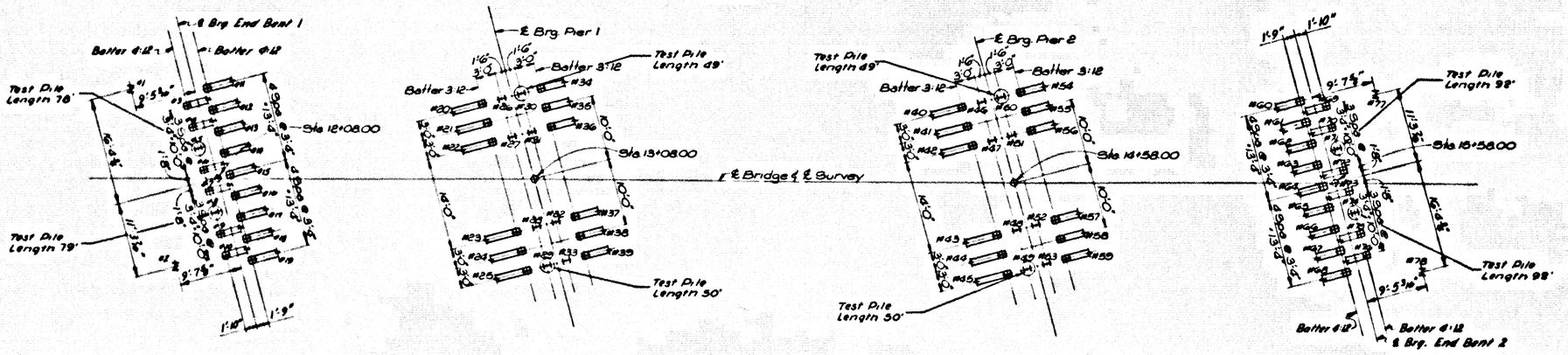
PILE RECORD & LAYOUT

COMMONWEALTH OF KENTUCKY
BUREAU OF HIGHWAYS
FRANKFORT
COUNTY OF
PIKE
COAL RUN (CR 1526)
ROAD
STATION 13 + 83.00 — P. E. PROJECT NO.
CONSTRUCTION PROJECT NO. | MAINTENANCE PROJECT NO. | DRAWING NO. 20191

BRIDGE

UPDATE DATE

LETTING DATE



END BENT 1 | PIER 1 | PIER 2 | END BENT 2

NOTE: Pile Numbers 5, 8, 29, 30, 49, 50, 71 and 74 are to be Test Piles.

NOTE: After all piles have been driven, the Resident Engineer shall record for each pile the *Tip of Pile Elevation as Driven*, the *Pile Length in Place*, and the *Calculated Bearing Capacity* and shall return one Blueprint copy of this sheet with this data to the Director of the Division of Bridges so that the data may be recorded on the original plans.

Pile Length in Place shown hereon are the actual lengths of piles in the finished structure below cut-off elevation and are not necessarily pay items.

This Pile Record does not replace other records of piles required to be kept and submitted by the Resident Engineer.

NOTE: All dimensions are at bottom of End Bent or Pier Footing.

NOTE: All piles are HP 12 x 53.

PILE RECORD

END BENT 1

PILE NO.	CUT-OFF ELEVATION AS SHOWN ON PLANS	TIP OF PILE ELEVATION AS DRIVEN	PILE LENGTH IN PLACE LIN. FT.	CALCULATED BEARING CAPACITY TONS
1	669.245			
2	↓			
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18	↓			
19	669.245			

PIER 1

PILE NO.	CUT-OFF ELEVATION AS SHOWN ON PLANS	TIP OF PILE ELEVATION AS DRIVEN	PILE LENGTH IN PLACE LIN. FT.	CALCULATED BEARING CAPACITY TONS
20	620.442			
21	↓			
22				
23				
24				
25				
26				
27				
28				
29				
30				
31				
32				
33				
34				
35				
36				
37				
38	↓			
39	620.442			

PIER 2

PILE NO.	CUT-OFF ELEVATION AS SHOWN ON PLANS	TIP OF PILE ELEVATION AS DRIVEN	PILE LENGTH IN PLACE LIN. FT.	CALCULATED BEARING CAPACITY TONS
40	620.226			
41	↓			
42				
43				
44				
45				
46				
47				
48				
49				
50				
51				
52				
53				
54				
55				
56				
57				
58	↓			
59	620.226			

END BENT 2

PILE NO.	CUT-OFF ELEVATION AS SHOWN ON PLANS	TIP OF PILE ELEVATION AS DRIVEN	PILE LENGTH IN PLACE LIN. FT.	CALCULATED BEARING CAPACITY TONS
60	663.033			
61	↓			
62				
63				
64				
65				
66				
67				
68				
69				
70				
71				
72				
73				
74				
75				
76				
77	↓			
78	663.033			

PLANS PREPARED BY: W.H. Hornbeck ... H. Peterson ... W.H. Hornbeck ... A. Campbell

Bridge over Levisa Fork — Sheet 12 of 25

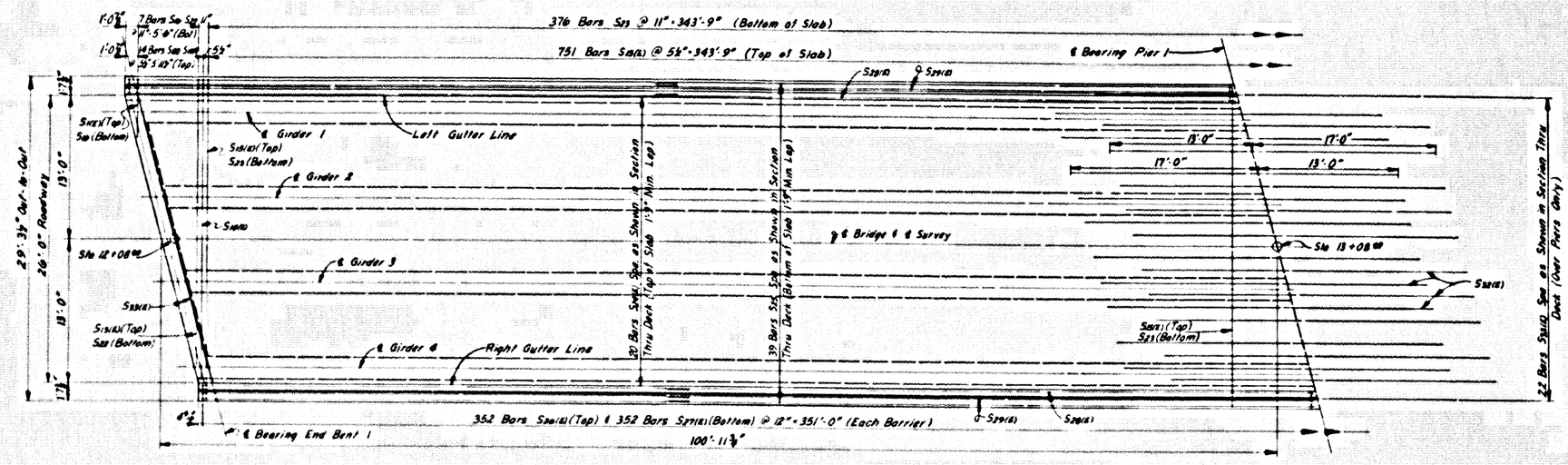
COMMONWEALTH OF KENTUCKY
BUREAU OF HIGHWAYS
FRANKFORT
COUNTY OF
PIKE
COAL RUN (CR 1526)
ROAD
STATION 13 + 83.00 — P. E. PROJECT NO.
CONSTRUCTION PROJECT NO | SUBMITTED PROJECT NO | DRAWING NO 20191

PILE RECORD & LAYOUT

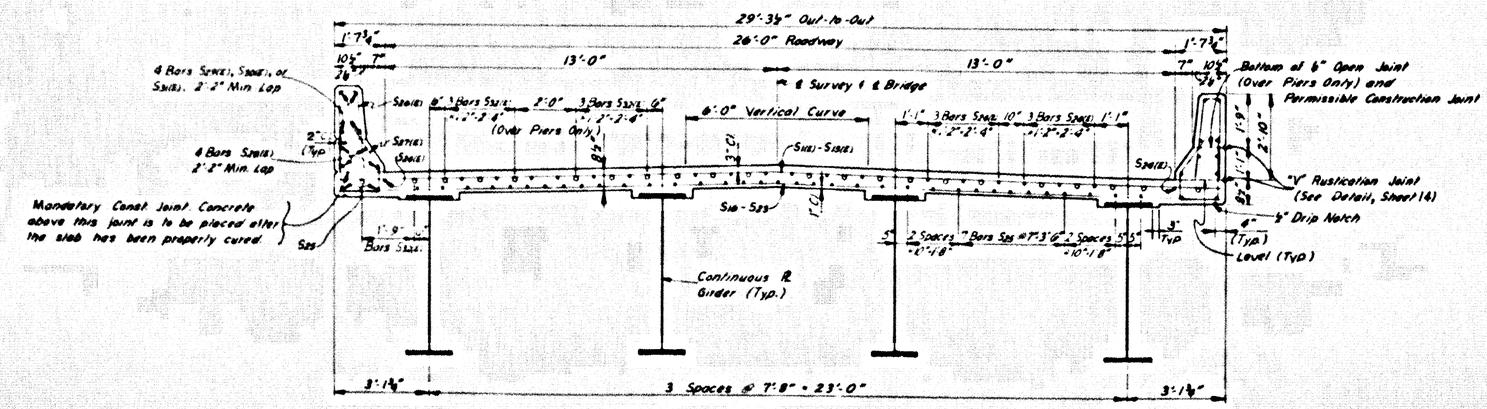
BRIDGE

UPDATE DATE

LETTING DATE



SLAB PLAN ~ SPAN 1



TYPICAL SECTION THRU DECK

SUPERSTRUCTURE

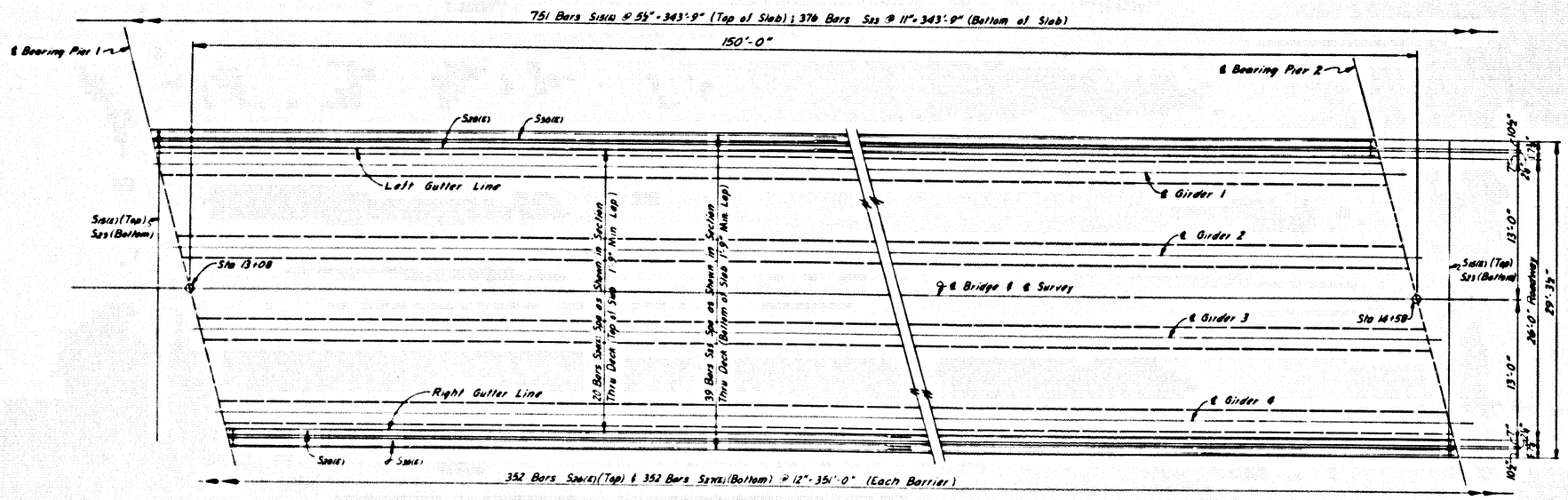
Bridge over Levisa Fork — Sheet 13 of 25

COMMONWEALTH OF KENTUCKY
BUREAU OF HIGHWAYS
FRANKFORT
COUNTY OF
PIKE
COAL RUN (CR 1526)
ROAD
STATION 13+83.00 — P. E. PROJECT NO.
CONSTRUCTION PROJECT NO. — MAINTENANCE PROJECT NO. — DRAWING NO. 20131

BRIDGE

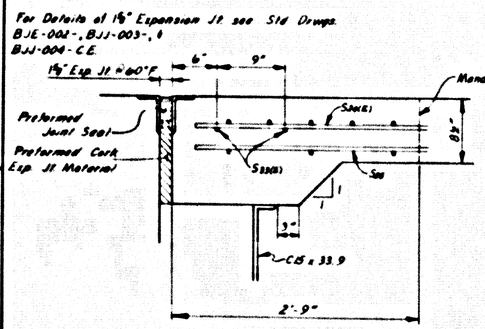
UPDATE DATE

LETTING DATE

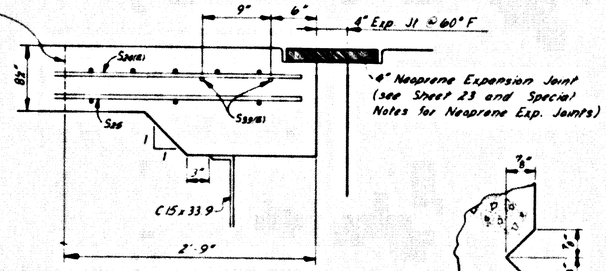


SLAB PLAN ~ SPAN 2

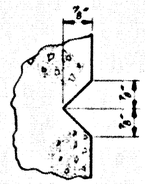
For Details of 1½" Expansion Jt see Std Drwgs. BJE-002-, BJJ-003-, & BJJ-004-C.E.



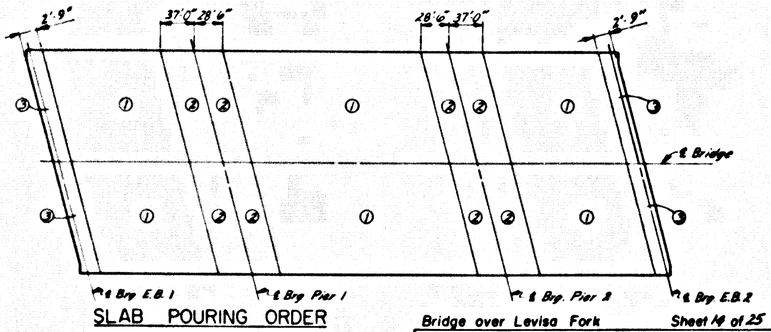
SECTION A-A



SECTION B-B



RUSTICATION GROOVE DETAIL



SLAB POURING ORDER

SUPERSTRUCTURE

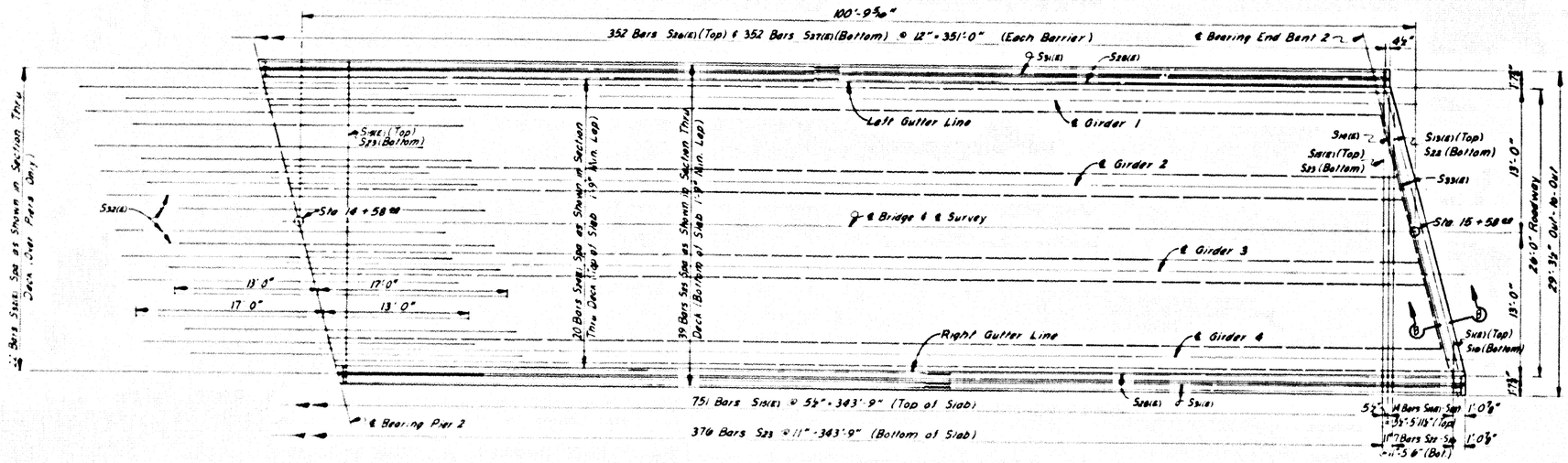
Bridge over Levisa Fork Sheet 14 of 25

COMMONWEALTH OF KENTUCKY
BUREAU OF HIGHWAYS
FRANKFORT
COUNTY OF
PIKE
COAL RUN (CR 1526)
ROAD
STATION 13+83.00 P.E. PROJECT NO.
CONSTRUCTION PROJECT NO. MAINTENANCE PROJECT NO. DRAWING NO. 20131

BRIDGE

UPDATE DATE

LETTING DATE



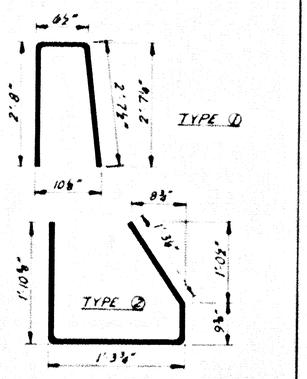
SLAB PLAN ~ SPAN 3

ESTIMATE OF QUANTITIES		
ITEM	QUANTITY	UNIT
Concrete, Class "AA"	316.1	Cu Yds
Steel Reinforcement, Plain	26,082	Lbs.
Steel Reinforcement, Epoxy	45,616	Lbs.

BILL OF REINFORCEMENT

MARK	TYPE	SIZE	NO	LENGTH Ft	LENGTH in	LOCATION	a Ft	a in	b Ft	b in	c Ft	c in	d Ft	d in
Ss1	Str	5	2	4	8	Slab Top								
Ss2				6	5									
Ss3				8	1									
Ss4				9	10									
Ss5				11	7									
Ss6				13	3									
Ss7				15	0									
Ss8				16	8									
Ss9				18	5									
Ss10				20	1									
Ss11				21	10									
Ss12				23	6									
Ss13				25	3									
Ss14			1	26	11									
Ss15		5	751	28	11	Slab Top								
Ss16		6	2	4	8	Slab Bottom								
Ss17				8	1									
Ss18				11	6									
Ss19				14	11									
Ss20				18	4									
Ss21			1	21	9									
Ss22	Str	6	2	25	2	Slab Bottom								

MARK	TYPE	SIZE	NO	LENGTH Ft	LENGTH in	LOCATION	a Ft	a in	b Ft	b in	c Ft	c in	d Ft	d in
Ss23	Str	6	376	28	11	Slab Bottom								
Ss24	Str	4	40	5	9	Slab Top								
Ss25	Str	4	273	5	9	Slab Bottom								
Ss26		5	704	5	9	Barrier Top								
Ss27			704	5	2	Barrier Bottom								
Ss28	Str	4	56	52	2	Barrier Bottom								
Ss29			16	5	5	Span 1 Barrier Top								
Ss30			24	5	4	Span 2 Barrier Top								
Ss31		5	16	5	5	Span 3 Barrier Top								
Ss32	Str	11	48	30	0	Top of Slab over Piers								
Ss33	Str	4	4	28	3	Slab Top								



SUPERSTRUCTURE

Bridge over Levisa Fork — Sheet 15 of 25

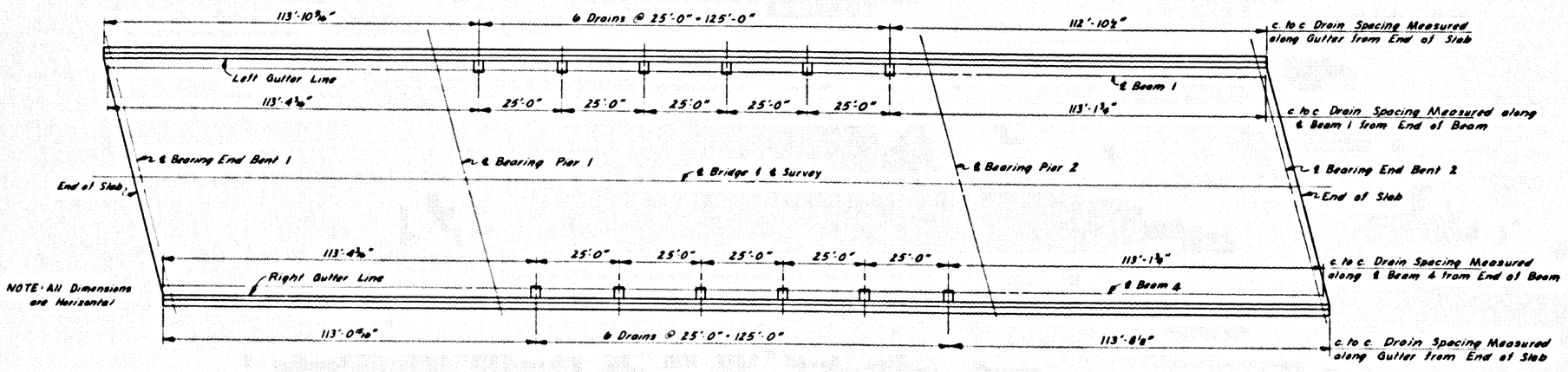
COMMONWEALTH OF KENTUCKY
BUREAU OF HIGHWAYS
FRANKFORT
COUNTY OF
PIKE
COAL RUN (CR 1526)
ROAD
STATION 13+83.00 — P. E. PROJECT NO.

CONSTRUCTION PROJECT NO	MAINTENANCE PROJECT NO	DRAWING NO
		20131

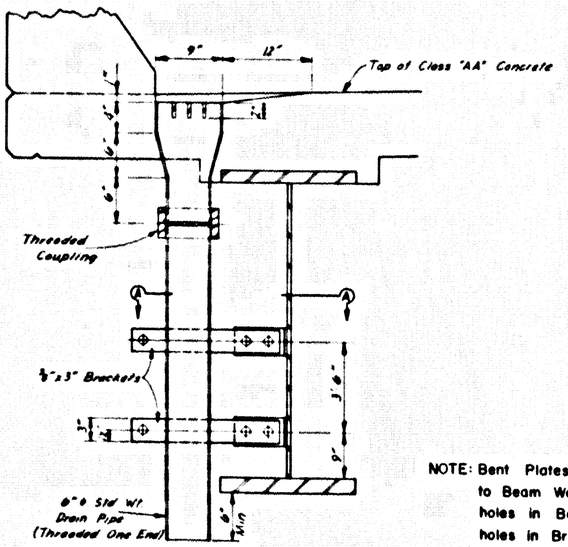
BRIDGE

UPDATE DATE

LETTING DATE

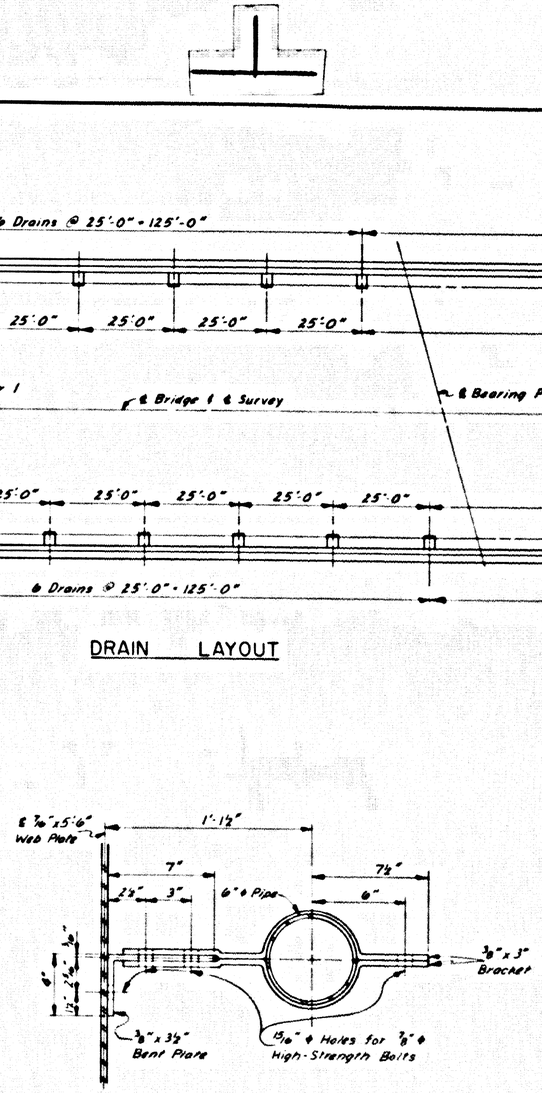


DRAIN LAYOUT



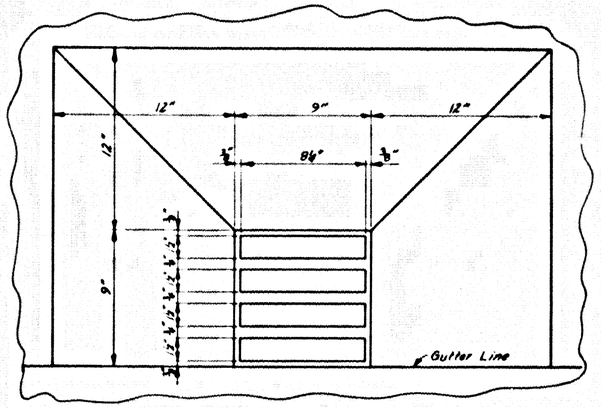
ELEVATION - DRAIN DETAIL

(12 Drains Required - Weight 140 Lbs. Each)



SECTION A-A

NOTE: Bent Plates are to be attached to Beam Web in shop. Field drill holes in Bent Plates to match holes in Bracket.



PLAN OF DRAIN

DRAIN DETAILS

Bridge over Levisa Fork — Sheet 16 of 25

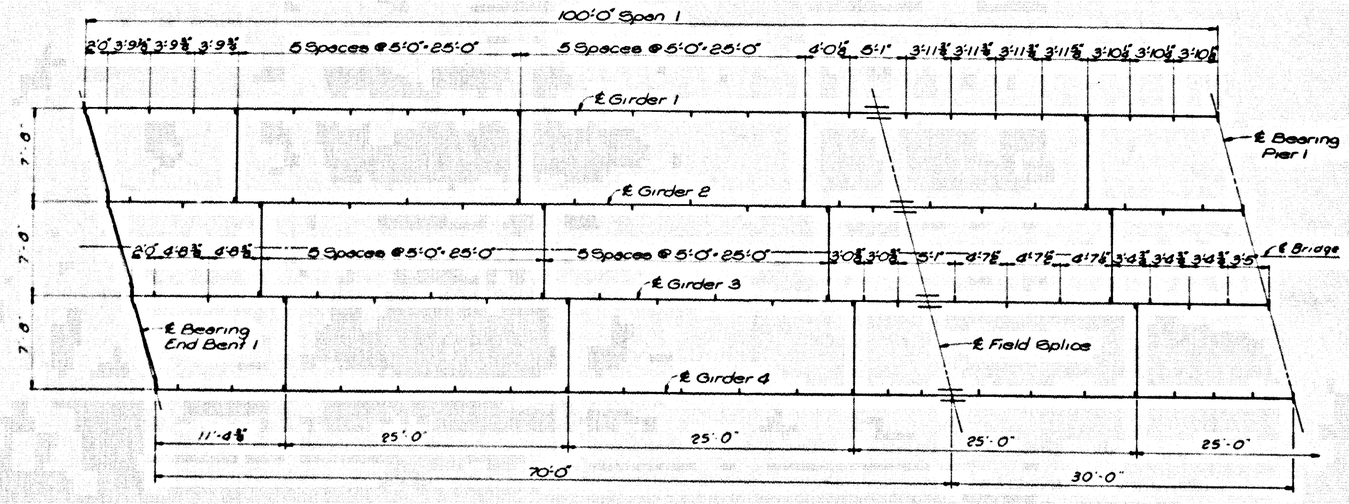
COMMONWEALTH OF KENTUCKY
BUREAU OF HIGHWAYS
FRANKFORT
COUNTY OF
PIKE
COAL RUN (CR 1526)
ROAD
STATION 13 + 83.00 — P.E. PROJECT NO.

CONSTRUCTION PROJECT NO.	MAINTENANCE PROJECT NO.	DRAWING NO.
		20131

BRIDGE

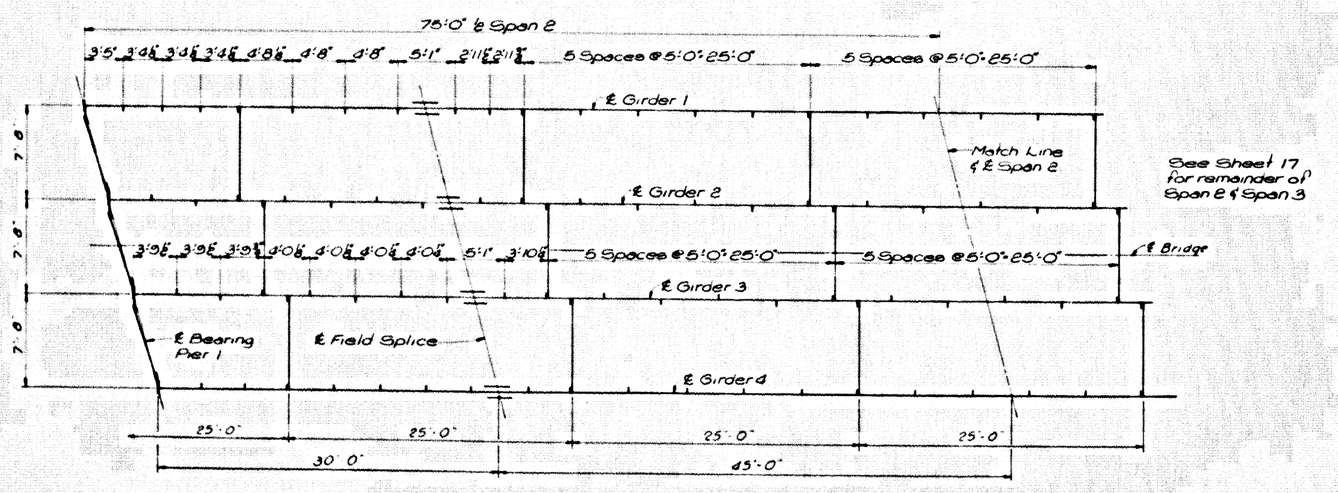
UPDATE DATE

LETTING DATE

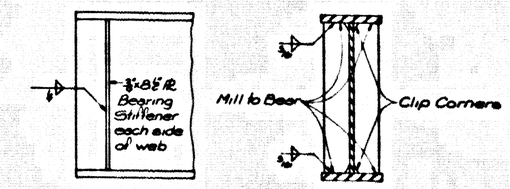


NOTE: All dimensions are horizontal

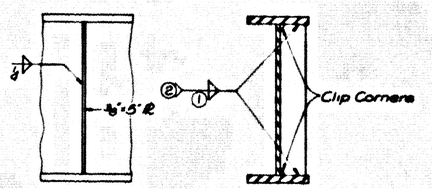
PLAN SPAN 1



PLAN SPAN 2



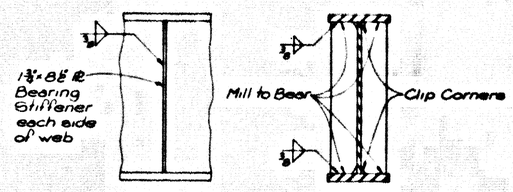
BEARING STIFFENERS AT END BENTS



INTERMEDIATE STIFFENERS

① ⅜ for 1" ℄ 1⅛" Flange PL
⅜ for 2" Flange PL

② See Girder Elevation for location of intermediate stiffener to flange fillet weld



BEARING STIFFENERS AT PIERS

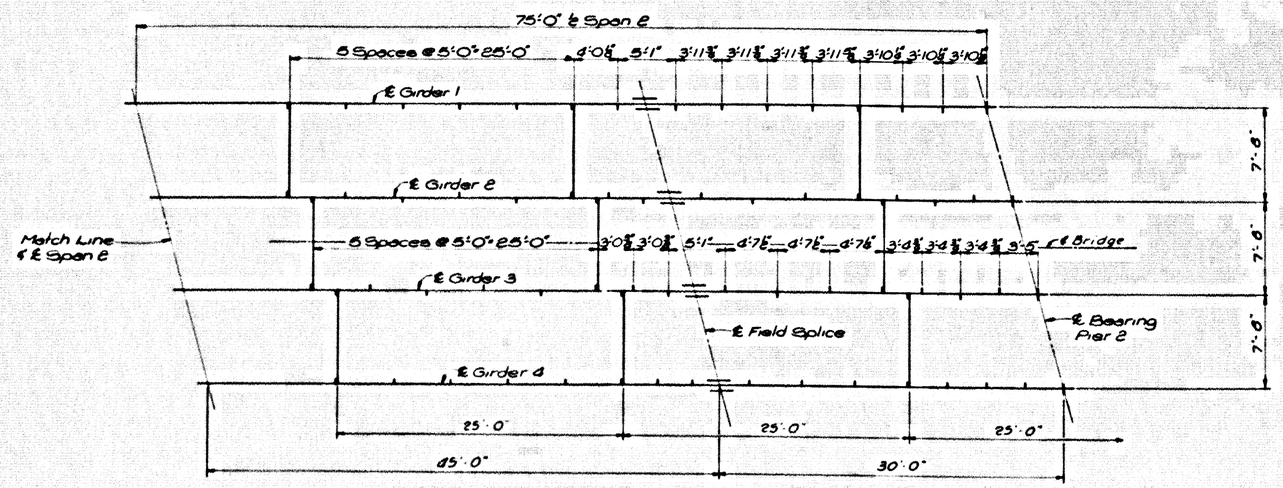
DETAILED 11-79 H. Hargadon W. Hancock
CHECKED 2-79 D. Smith W. Hancock

Bridge over Lavisa Fork — Sheet 17 of 25

COMMONWEALTH OF KENTUCKY
BUREAU OF HIGHWAYS
FRANKFORT
COUNTY OF
PIKE
COAL RUN (C.R. 1526)
ROAD
STATION 13+83.00 — P.E. PROJECT NO.
CONSTRUCTION PROJECT NO. — MAINTENANCE PROJECT NO. — DRAWING NO. 20131

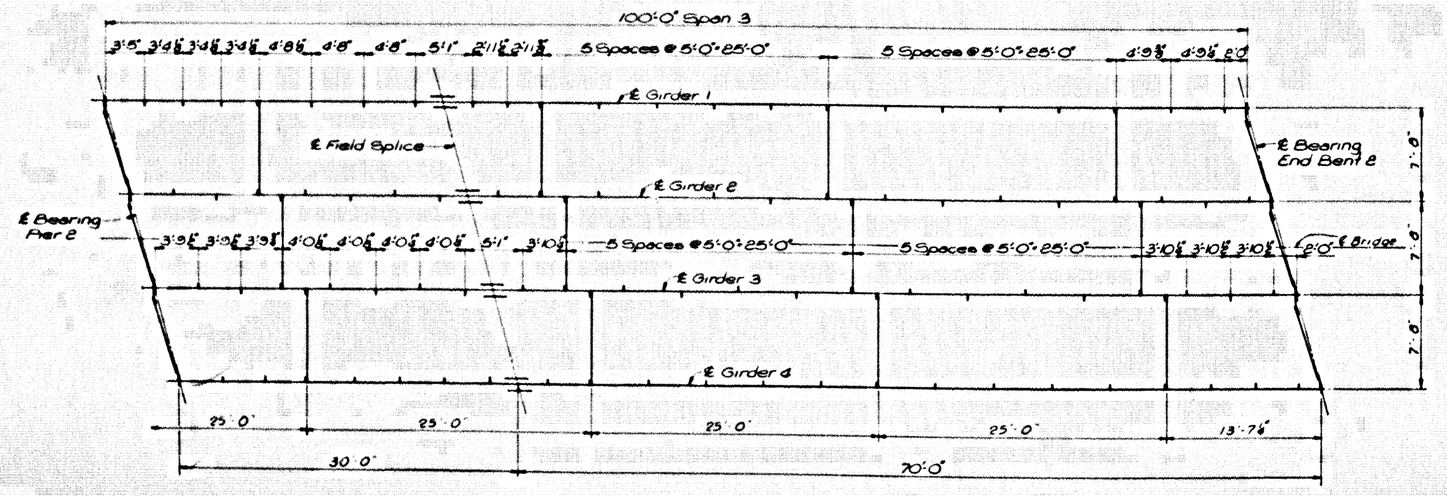
STRUCTURAL STEEL DETAILS

BRIDGE



PLAN SPAN 2

NOTE: All dimensions are horizontal



PLAN SPAN 3

Bridge over Levisa Fork Sheet 18 of 23

COMMONWEALTH OF KENTUCKY
BUREAU OF HIGHWAYS
FRANKFORT
COUNTY OF
PIKE
COAL RUN (C R 1526)
ROAD
STATION 13+83.00 P.E. PROJECT NO.
CONSTRUCTION PROJECT NO. MAINTENANCE PROJECT NO. DRAWING NO. 20131

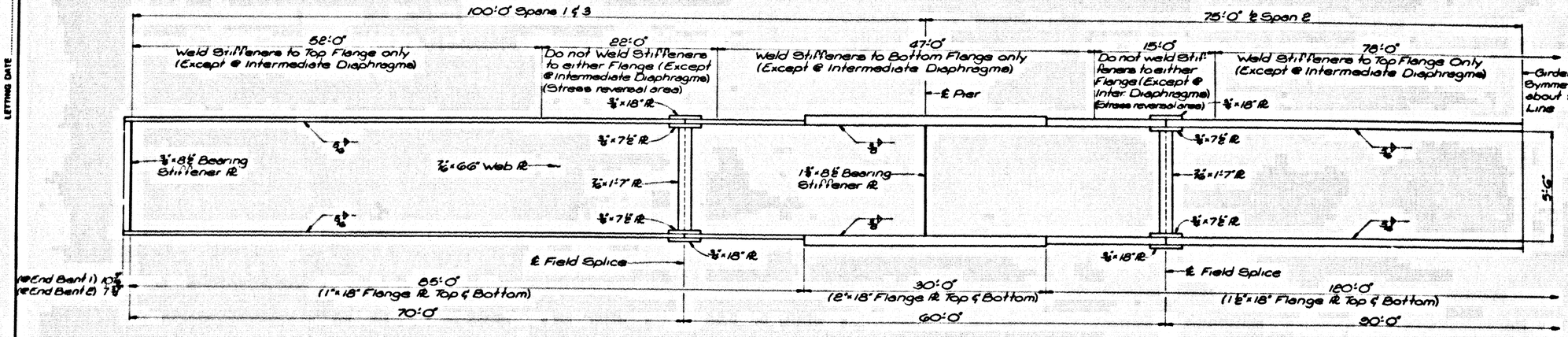
STRUCTURAL STEEL DETAILS

UPDATE DATE
LETTING DATE

BRIDGE

UPDATE DATE

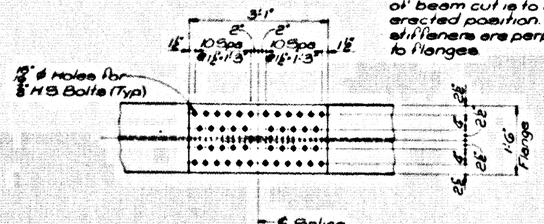
LETTING DATE

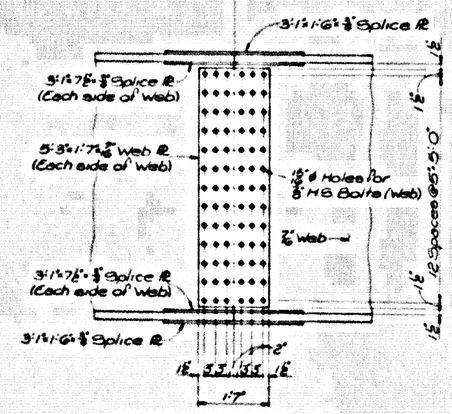


NOTE: All bearing stiffeners are to be vertical in erected position. End of beam cut is to be vertical in erected position. All intermediate stiffeners are perpendicular to flanges.

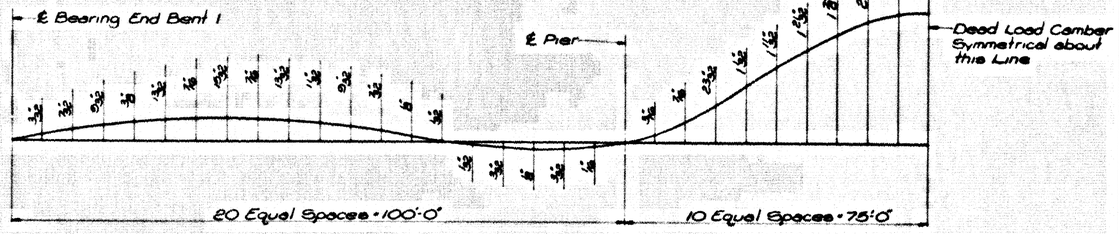
HALF ELEVATION OF GIRDER

NOTE: Stiffeners to be on side of Beam as shown in Framing Plan. Stiffeners are to be welded to both top & bottom flanges @ intermediate diaphragm locations.

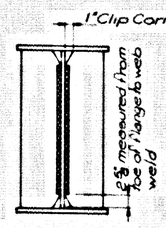




TYPICAL FIELD SPLICE

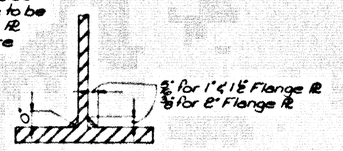


DEAD LOAD CAMBER DIAGRAM



TERMINATION OF STIFFENER TO WEB WELD

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 PL tight against flange PL before welding.



FLANGE TO WEB WELD

Bridg over Levisa Fork Sheet 19 of 23

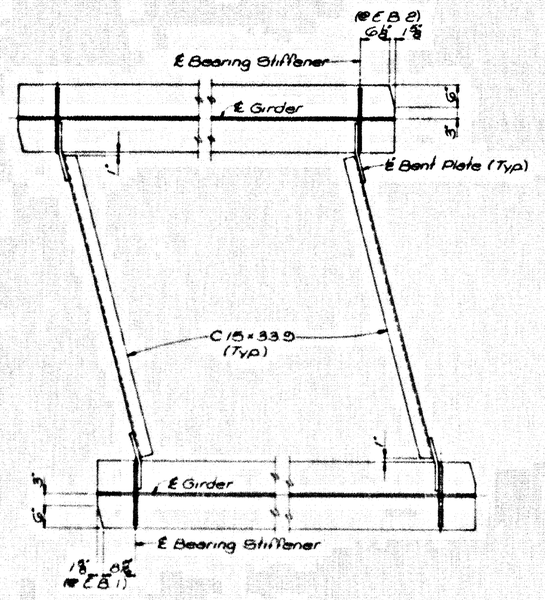
COMMONWEALTH OF KENTUCKY
BUREAU OF HIGHWAYS
FRANKFORT
COUNTY OF
PIKE
COAL RUN (C.R 1526)
ROAD
STATION 13+83.00 P.E. PROJECT NO.
CONSTRUCTION PROJECT NO. MAINTENANCE PROJECT NO. Drawing NO. 20131

STRUCTURAL STEEL DETAILS

BRIDGE

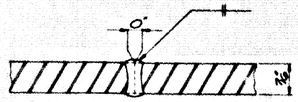
UPDATE DATE

LETTING DATE

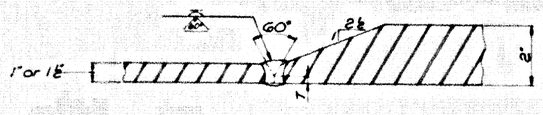


DETAIL "A"

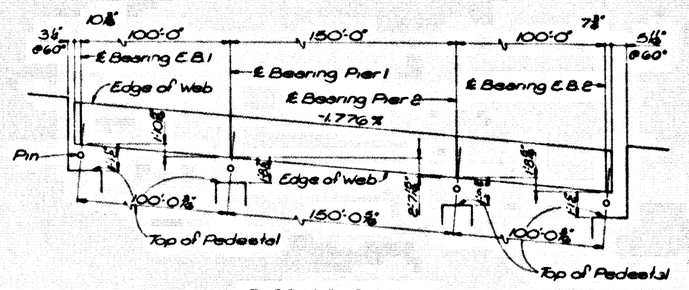
NOTE: See American Welding Society Specifications for welded Highway and Railroad Bridges, 1975 Edition for prequalified welds shown here.



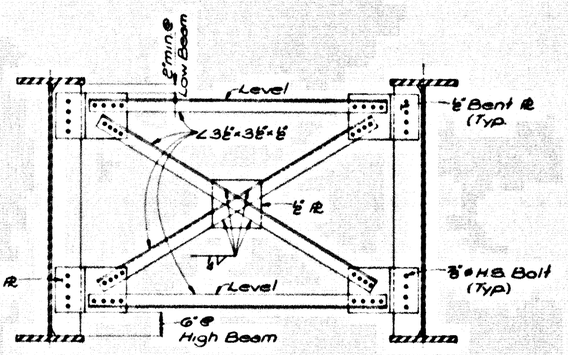
AWS B-LI-S
Shop Web Splice



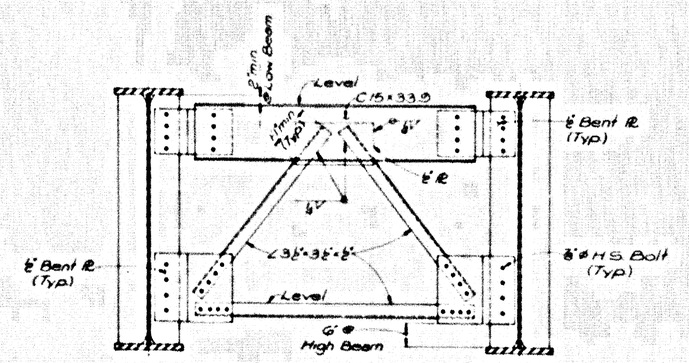
AWS B-L 2C-S
Shop Flange Splice



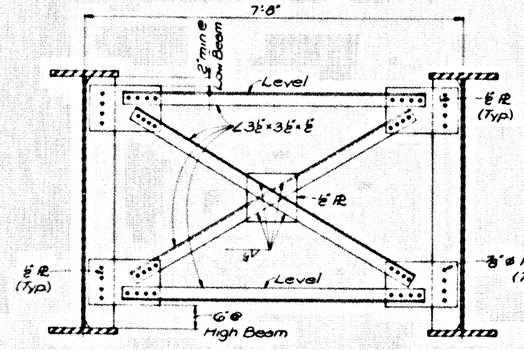
BLOCKING DIAGRAM



PIER DIAPHRAGM



END BENT DIAPHRAGM



INTERMEDIATE DIAPHRAGM

Bridge over Levisa Fork Sheet 20 of 23

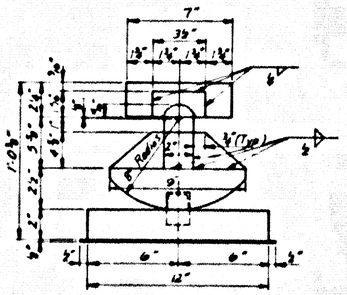
COMMONWEALTH OF KENTUCKY
BUREAU OF HIGHWAYS
FRANKFORT
COUNTY OF
PIKE
COAL RUN (C R 1526)
ROAD
STATION 13+83.00 P.E. PROJECT NO.
CONSTRUCTION PROJECT NO. | MAINTENANCE PROJECT NO. | Drawing NO. 20131

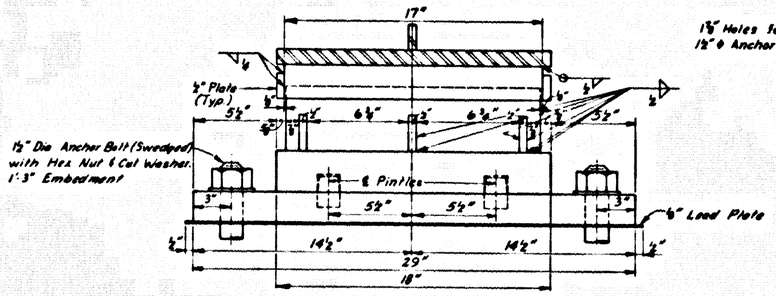
STRUCTURAL STEEL DETAILS

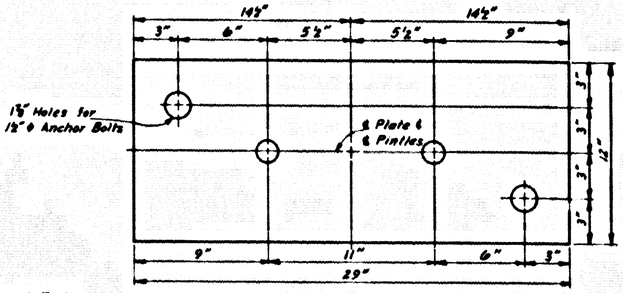
BRIDGE

UPDATE DATE

LETTING DATE



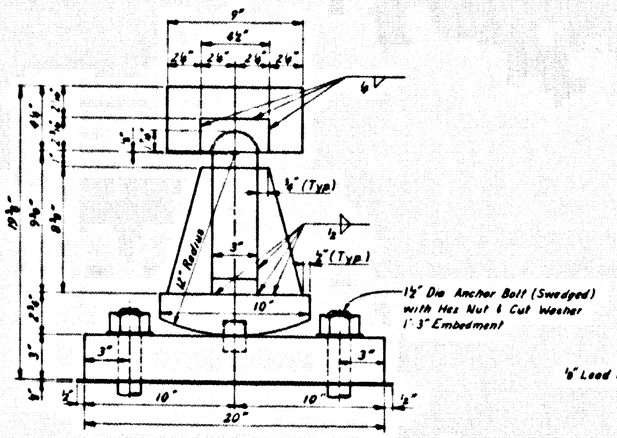


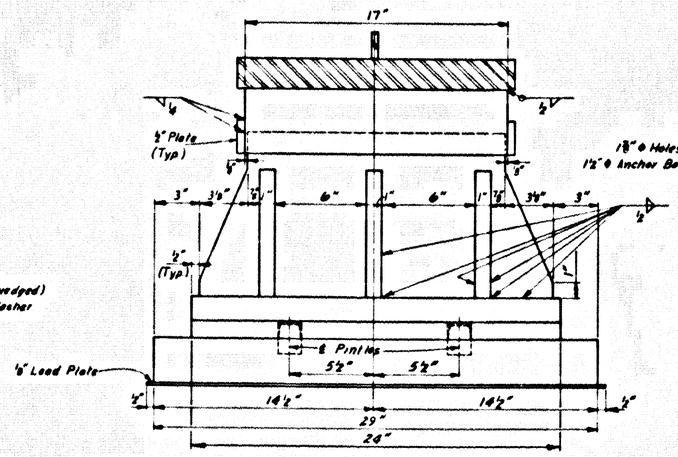


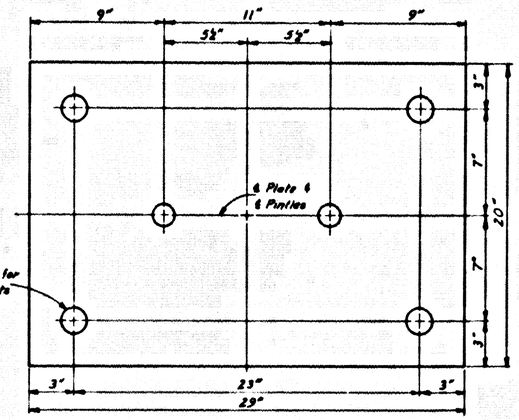
MASONRY BEARING PLATE AT END BENTS

EXPANSION SHOE AT END BENTS

6 Required Weight 453 # / Shoe







MASONRY BEARING PLATE AT PIER 2

EXPANSION SHOE AT PIER 2

4 Required Weight 1058 # / Shoe

SHOES

Bridge over Levisa Fork Sheet 21 of 25

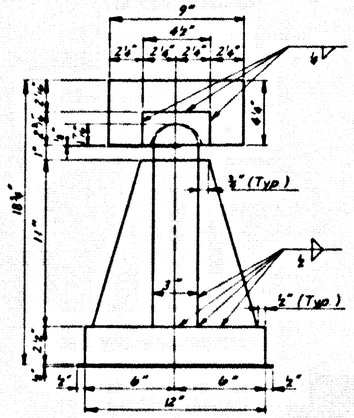
COMMONWEALTH OF KENTUCKY
BUREAU OF HIGHWAYS
FRANKFORT
COUNTY OF
PIKE
COAL RUN (CR 1526)
ROAD
STATION 13+83.00 P.E. PROJECT NO.

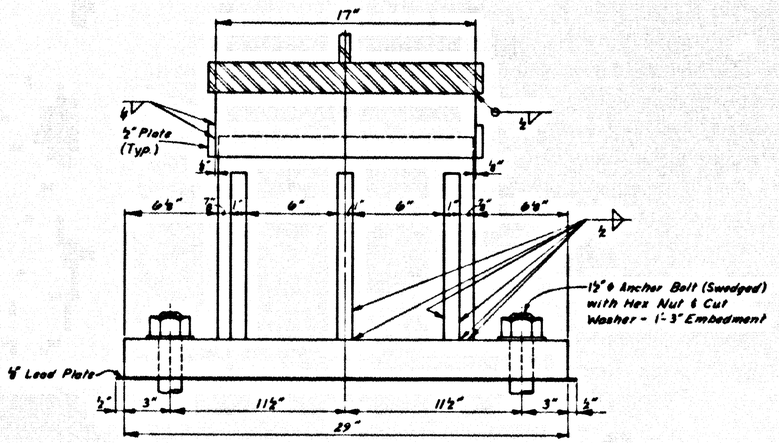
CONSTRUCTION PROJECT NO	MAINTENANCE PROJECT NO	DRAWING NO
		20131

BRIDGE

UPDATE DATE

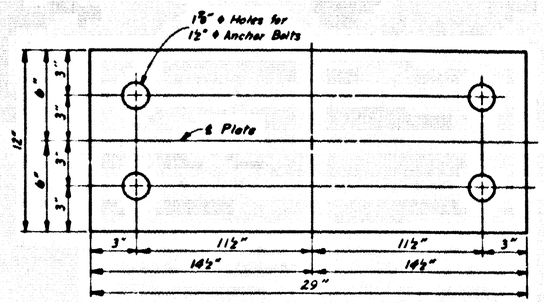
LETTING DATE



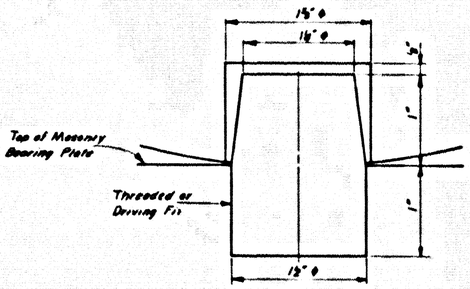


FIXED SHOE AT PIER 1

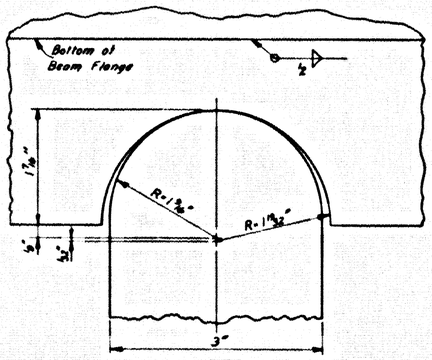
4 Required Weight 680 # /Shoe



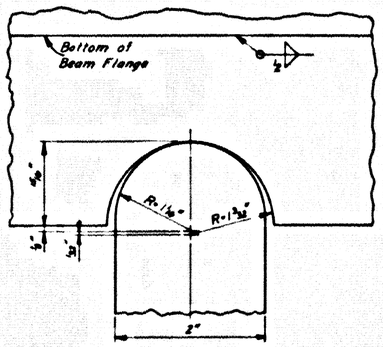
MASONRY BEARING PLATE AT PIER 1



PINTLE DETAIL



TOP OF BEARING PLATE
(at Piers)



TOP OF BEARING PLATE
(at End Bents)

SHOES

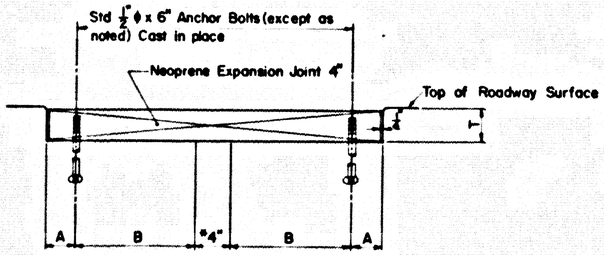
Bridge over Levisa Fork Sheet 22 of 25

COMMONWEALTH OF KENTUCKY
BUREAU OF HIGHWAYS
FRANKFORT
COUNTY OF
PIKE
COAL RUN (CR 1526)
ROAD
STATION 13+83.00 P.E. PROJECT NO.
CONSTRUCTION PROJECT NO. MAINTENANCE PROJECT NO. Drawing No. 20131

BRIDGE

UPDATE DATE

LETTING DATE



CROSS SECTION

*At 60° F

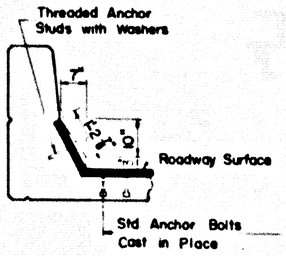
Dimensions are at right angles.

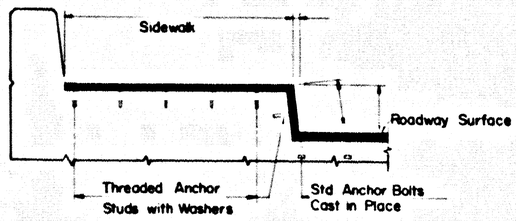
NOTE: Joint openings shall be adjusted for each 10° above or below 60°F, decrease or increase respectively by increment shown in table below.

SPAN 200' to 320'

*SPAN	200'	201'-220'	221'-240'	241'-260'	261'-280'	281'-300'	301'-320'
INCREMENT	1560"	1716"	1872"	2028"	2185"	234"	250"
	5/32"	11/64"	3/16"	13/64"	7/32"	15/64"	1/4"

*Span is defined in Sketch

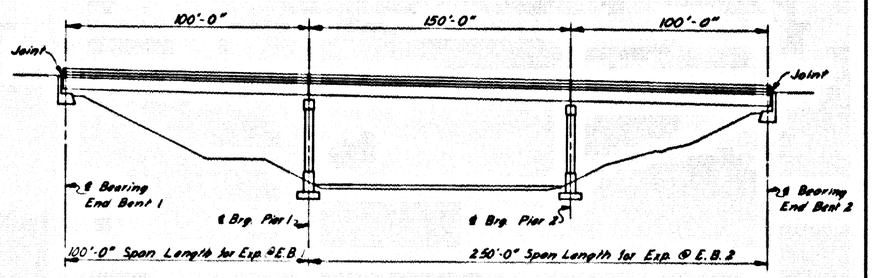




TYPICAL END TREATMENT

ALTERNATE NEOPRENE EXPANSION JOINTS

MODEL	SUPPLIER	BLOCKOUT DIMENSIONS
TRANSFLEX, MODEL 400A	General Tire Company	T=2 3/8" A=2 3/16" B=7 13/16"
WABOFLEX, MODEL SR4	Watson Bowman Associates, Inc.	T=2 3/8" A=1 13/16" B=8 1/16"



SECTION ALONG ℄

NEOPRENE EXPANSION JOINTS (4")

Bridge over Levisa Fork Sheet 23 of 25

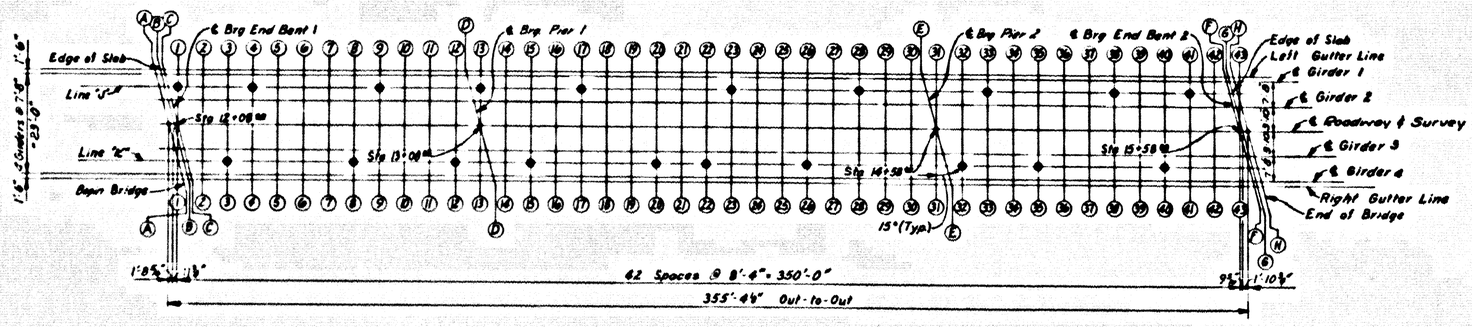
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
PIKE
COAL RUN (CR 1526)
ROAD
STATION 13+83.00 P.E. PROJECT NO.

CONSTRUCTION PROJECT NO.	MAINTENANCE PROJECT NO.	DRAWING NO.
		20131

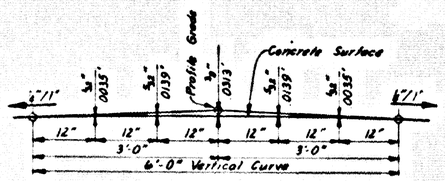
BRIDGE

UPDATE DATE

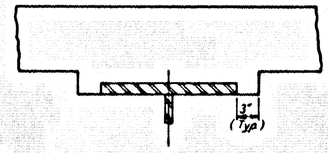
LETTING DATE



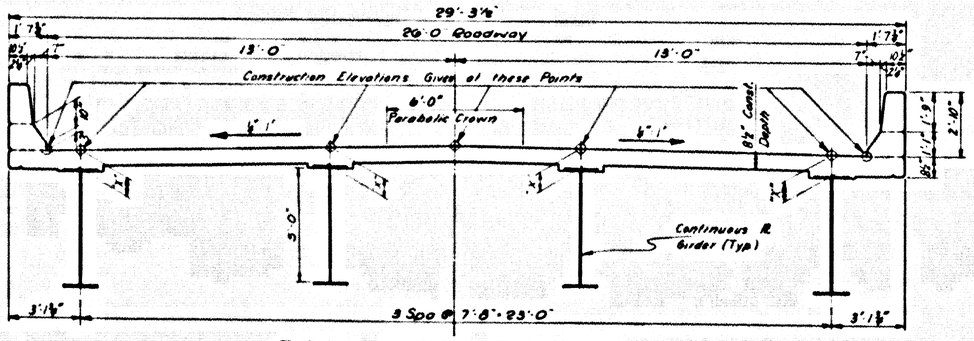
GRID SPACING PLAN



PARABOLIC CROWN



FILLET DETAIL



TYPICAL SECTION THRU DECK

CONSTRUCTION ELEVATIONS

Bridge over Levisa Fork Sheet 24 of 25

COMMONWEALTH OF KENTUCKY
BUREAU OF HIGHWAYS
FRANKFORT
COUNTY OF
PIKE
COAL RUN (CR 1526)
ROAD
STATION 13+83.00
P.E. PROJECT NO.

CONSTRUCTION PROJECT NO	MAINTENANCE PROJECT NO	DRAWING NO
		20131

BRIDGE

UPDATE DATE

LETTING DATE

DATE

DATE

DATE

DESIGNED BY
DETAILED BY
CHECKED BY
TRACED BY

Dist

DATE

DATE

CONSTRUCTION ELEVATIONS

LOCATION	LEFT GUTTER	BEAM 1 CONSTR. ELEV.	BEAM 1 TOP OF BEAM	BEAM 1 DIM "X"	BEAM 2 CONSTR. ELEV.	BEAM 2 TOP OF BEAM	BEAM 2 DIM "X"	CL RDY CONSTR. ELEV.	BEAM 3 CONSTR. ELEV.	BEAM 3 TOP OF BEAM	BEAM 3 DIM "X"	BEAM 4 CONSTR. ELEV.	BEAM 4 TOP OF BEAM	BEAM 4 DIM "X"	RIGHT GUTTER
SKEW LN A TOP	679.299	679.323			679.448			679.476	679.409			679.213			679.175
SKEW LN B TOP	679.268	679.293			679.418			679.446	679.379			679.183			679.148
SKEW LN C TOP	679.251	679.275			679.398			679.429	679.362			679.166			679.128
SKEW LN D TOP	677.478	677.489			677.622			677.653	677.586			677.390			677.352
SKEW LN E TOP	674.811	674.835			674.958			674.989	674.922			674.726			674.686
SKEW LN F TOP	673.035	673.059			673.182			673.213	673.146			672.950			672.912
SKEW LN G TOP	673.022	673.046			673.169			673.199	673.132			672.936			672.898
SKEW LN H TOP	672.988	673.012			673.135			673.165	673.098			672.902			672.864
GRID LN 1 TOP	679.198	679.226			679.382			679.429							
GRID LN 2 TOP	679.080	679.090			679.246			679.294	679.243			679.081			679.050
GRID LN 3 TOP	678.921	678.952			679.109			679.157	679.107			678.945			678.914
GRID LN 4 TOP	678.779	678.810			678.968			679.016	678.967			678.806			678.775
GRID LN 5 TOP	678.633	678.664			678.823			678.872	678.823			678.663			678.632
GRID LN 6 TOP	678.482	678.513			678.673			678.723	678.674			678.516			678.485
GRID LN 7 TOP	678.327	678.358			678.519			678.569	678.521			678.364			678.333
GRID LN 8 TOP	678.170	678.201			678.363			678.413	678.365			678.208			678.178
GRID LN 9 TOP	678.012	678.043			678.205			678.255	678.207			678.051			678.020
GRID LN 10 TOP	677.856	677.887			678.048			678.098	678.050			677.893			677.862
GRID LN 11 TOP	677.704	677.735			677.894			677.944	677.896			677.737			677.707
GRID LN 12 TOP	677.556	677.589			677.746			677.795	677.746			677.587			677.556
GRID LN 13 TOP	677.417	677.448			677.604			677.653	677.604			677.443			677.411
GRID LN 14 TOP	677.287	677.317			677.471			677.518	677.467			677.303			677.272
GRID LN 15 TOP	677.158	677.188			677.342			677.389	677.337			677.173			677.141
GRID LN 16 TOP	677.033	677.063			677.216			677.263	677.211			677.046			677.014
GRID LN 17 TOP	676.908	676.938			677.092			677.138	677.086			676.921			676.889
GRID LN 18 TOP	676.782	676.812			676.966			677.012	676.960			676.796			676.764
GRID LN 19 TOP	676.651	676.681			676.836			676.883	676.832			676.669			676.637
GRID LN 20 TOP	676.516	676.546			676.702			676.750	676.700			676.537			676.506
GRID LN 21 TOP	676.374	676.406			676.563			676.611	676.561			676.401			676.369
GRID LN 22 TOP	676.227	676.258			676.417			676.466	676.417			676.258			676.227
GRID LN 23 TOP	676.073	676.104			676.265			676.315	676.267			676.109			676.078
GRID LN 24 TOP	675.913	675.945			676.107			676.158	676.110			675.954			675.923
GRID LN 25 TOP	675.748	675.780			675.944			675.995	675.948			675.793			675.763
GRID LN 26 TOP	675.580	675.612			675.776			675.828	675.781			675.627			675.597
GRID LN 27 TOP	675.409	675.441			675.605			675.657	675.611			675.458			675.428
GRID LN 28 TOP	675.237	675.270			675.434			675.486	675.440			675.287			675.257
GRID LN 29 TOP	675.069	675.101			675.264			675.316	675.269			675.116			675.086
GRID LN 30 TOP	674.904	674.935			675.099			675.150	675.103			674.948			674.918
GRID LN 31 TOP	674.748	674.779			674.940			674.989	674.940			674.784			674.753
GRID LN 32 TOP	674.597	674.628			674.787			674.836	674.787			674.629			674.598
GRID LN 33 TOP	674.451	674.482			674.640			674.688	674.639			674.480			674.449
GRID LN 34 TOP	674.311	674.341			674.498			674.546	674.496			674.338			674.304
GRID LN 35 TOP	674.172	674.203			674.359			674.407	674.357			674.198			674.164
GRID LN 36 TOP	674.034	674.064			674.221			674.269	674.219			674.057			674.026
GRID LN 37 TOP	673.893	673.924			674.081			674.129	674.079			673.919			673.887
GRID LN 38 TOP	673.749	673.780			673.938			673.987	673.937			673.777			673.746
GRID LN 39 TOP	673.600	673.631			673.791			673.840	673.791			673.632			673.601
GRID LN 40 TOP	673.447	673.478			673.638			673.688	673.640			673.482			673.451
GRID LN 41 TOP	673.290	673.321			673.483			673.533	673.485			673.328			673.297
GRID LN 42 TOP	673.130	673.161			673.323			673.374	673.326			673.170			673.140
GRID LN 43 TOP								673.213	673.166			673.010			672.979

Table of Elevations for Control of Slab Thickness

POINT	TOP OF SLAB ELEVATION	BOTTOM OF SLAB ELEVATION	COMPUTED SLAB THICKNESS	POINT	TOP OF SLAB ELEVATION	BOTTOM OF SLAB ELEVATION	COMPUTED SLAB THICKNESS
J-1	679.303			K-40	679.561		
K-3	679.026			J-41	673.402		
J-4	678.889						
K-8	678.286						
J-9	678.124						
K-12	677.666						
J-13	677.526						
K-15	677.255						
J-17	677.015						
K-20	676.618						
K-22	676.338						
J-23	676.184						
K-26	675.704						
J-28	675.352						
K-32	674.708						
J-33	674.561						
K-35	674.276						
J-38	673.859						

NOTE:

1. TAKE ELEVATIONS ON TOP OF BEAM AT POINTS INDICATED AFTER DIAPHRAGMS 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 BEAM ELEVATIONS.

2. FOR SETTING TEMPLATES MEASURE DIMENSION "X" ABOVE TOP OF BEAM FOR TOP OF TEMPLATE. DO NOT SET TEMPLATE BY ELEVATIONS.

3. CONSTRUCT NEW JERSEY BARRIER TO GUTTER LINE GRADE. DO NOT ADD CAMBER TO NEW JERSEY BARRIER.

4. SLAB THICKNESS CONTROL: AFTER THE SLAB FORMS ARE ERECTED AND BEFORE THE SLAB REINFORCEMENT IS PLACED, THE RESIDENT ENGINEER SHALL TAKE FIELD ELEVATIONS AT THE SLAB THICKNESS CHECK POINTS AND ENTER THEM IN THE TABLE IN THE SPACE PROVIDED. THE SLAB THICKNESS SHALL THEN BE COMPUTED. IF THE COMPUTED 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.

5. COMPUTE DIMENSION X AS FOLLOWS: CONSTRUCTION ELEVATION MINUS TOP OF BEAM ELEVATION EQUALS DIMENSION X. CONSTRUCTION ELEVATION INCLUDES CAMBER DUE TO WEIGHT OF CONCRETE SLAB, BARRIERS, AND FUTURE SURFACING. MEASURING OF DIMENSION X GIVES THE FINAL CHECK ON TOLERANCES FOR CAMBER, BEAM DAMAGE, AND ERRORS IN ERECTION THAT PRODUCE REVERSE CAMBERS, SAGS, AND UNSIGHTLY FASCIA BEAMS.

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STATION 13+69 P.E. PROJECT NO.

CONSTRUCTION PROJECT NO.	MAINTENANCE PROJECT NO.	DRAWING NO.
		20131

CONSTRUCTION ELEVATIONS

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