KENTUCKY DEPARTMENT OF HIGHWAYS
RUSSELL COUNTY
BOWLING GREEN-SOMERSET PARKWAY
RELOC. MILLER CEMETERY RD. OVER B.S.P.

FOR: H.A. SPALDING, INC. CONSULTING ENGRS.

PLANS PREPARED BY: KROBOTH ENGRS. INC.

DESIGNED BY RAS DATE 7/62 CHECKED BY DATE
DETAILED BY DGM DATE CHECKED BY DATE
TRACED BY DATE REVISED DATE REVISED DATE REVISED

REFERENCES & ESTIMATE OF QUANTITIES

Location \ Item	Sheet No.	Concrete Class "A" (Cu. Yds.)	Concrete Class "AA" (Cu. Yds.)	Steel Reinforcement (Lbs.)	Structural Steel (LumpSum)	High Strength Handrail (Lin. Ft.)	Protective Coating: Styrene-Butadiene (Gal.)	Protective Coating: Linseed Oil (Sq. Yds.)	End Bent Backfill (Cu. Yds.)	Structure Excavation: Common (Cu. Yds.)	Structure Excavation: Solid Rock (Cu. Yds.)	Piling 12 BP 53: Furnish (Lin. Ft.)	Piling 12 BP 53: Drive (Lin. Ft.)	Slope Prot. 12" Deep Crush. Agg. (Sq. Yds.)
Title & Quantities	1													
Notes	2													
Layout	3													
Pile Record	5													
End Bent 1	4,5	31.3	12.8	3,879			1	5	30	95	—	404	404	220
Pier 1	6	32.2		7,034			2			65	10			
Pier 2	6	32.2		7,034			2			75	10			
Pier 3	6	30.9		6,822			2			70	10			
End Bent 2	4.5	31.3	12.8	3,879			1	5	30	95	—	309	309	165
Spans 1,2,3 & 4	7,8,9,10		388.9	130,124			11	670						
High Strength Handrail	3					502								
Construction Elevations	11													
Soundings	12													
Sub-total Substructure		157.9	25.6	28,648	—	—	8	10	60	400	30	713	713	385
Sub-total Superstructure		—	388.9	130,124	①	502	11	670	—	—	—	—	—	—
Total		157.9	414.5	156,772	①	502	19	680	60	400	30	713	713	385

① Approximate Weight of Structural Steel = 14,675 Lbs.

BILL OF INCIDENTAL MATERIAL

Item	No.	Description	Location
Four Bolt Insert Assembly	4	See Note Sh. 3 & 5	End Bent Wings
Joint Sealing Compound	2	1" x 3½" x 29'-0"	Expansion Dams @ End Bents
Prem. Cork Expan. Jt. Material	4	½ x 6" x 1'-6"	Sides of Keys @ End Bents
" " " " "	2	½ x 1'-6" x 4'-0"	Top of Keys @ End Bents

SPECIAL PROVISIONS

No. 8A for Linseed Oil Protective Coating
No. 12 for Joint Sealing Compound
No. 30 B for Membrane Curing of Concrete Structures
No. 35 B for Class "AA" Concrete
No. 77 B for Styrene-Butadiene Protective Coating
No. 79 for Concrete Bridge Deck Finishing Machine
No. 80A for Blast Cleaning and Painting Structural Steel

REFERENCES

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

AE 1-D	G354C	P212A-A	SS 2B
ED3C	H11GC	SF 2B	17.40 A

Reloc Miller Cemetery Rd. over B.S.P. Sheet 1 of 12

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
RUSSELL
BOWLING GREEN-SOMERSET PARKWAY
ROAD BSP 4-1
STATION 4547+06.00 **P.E. PROJECT NO.** SP104-043-1L

CONSTRUCTION PROJECT NO.	MAINTENANCE PROJECT NO.	DRAWING NO.
		18166

GENERAL NOTES

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

DESIGN LOAD THIS BRIDGE IS DESIGNED FOR H20-44 LIVE LOAD AS SPECIFIED IN 1969 AASHO SPECIFICATIONS, INCLUDING INTERIM SPECIFICATIONS. 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:

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

FOUNDATION PRESSURE PIER FOOTINGS ARE DESIGNED FOR A MAXIMUM PRESSURE OF 12,500 PSF. END BENT PILES ARE DESIGNED FOR A MAXIMUM AXIAL LOAD OF 24.0 TONS PER PILE AND A MAXIMUM HORIZONTAL SHEAR OF 0.8 TON PER PILE. THESE MAXIMUMS ARE FOR GROUP 1 LOADS WITH INCREASES ALLOWED FOR OTHER LOADING GROUPS.

CONCRETE. CLASS "AA" CONCRETE IS TO BE USED THROUGHOUT THE SUPERSTRUCTURE, AND IS TO BE USED IN PORTIONS OF THE SUBSTRUCTURE ABOVE BEARING SEATS. CLASS "A" CONCRETE IS TO BE USED IN THE SUBSTRUCTURE BELOW THE BEARING SEATS.

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

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

BILL OF INCIDENTAL MATERIAL: THE QUANTITIES SHOWN IN THE BILL OF INCIDENTAL 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, STEEL PINS, LEAD PLATES, MOLTEN LEAD, WELDING AND WELDING MATERIALS, PAINT AND ALL LABOR AND MATERIALS NECESSARY TO ERECT THE STEEL IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS. THE APPROXIMATE WEIGHT OF STRUCTURAL STEEL SHOWN IN THE ESTIMATE OF QUANTITIES DOES NOT INCLUDE OVERRUN OR WELD MATERIAL.

PILING: THE CONTRACTOR SHALL USE A STANDARD 12" STRUCTURAL STEEL BEARING PILE @ 53 LBS. SEE STANDARD DRAWING P212A, 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. THE 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.

HIGH STRENGTH HANDRAIL: THE CONTRACTOR SHALL USE A HIGH STRENGTH ALUMINUM HANDRAIL ACCORDING TO STANDARD DRAWING H116, 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: AWS & ASTM SPECIFICATIONS, CURRENT EDITION, AS DESIGNATED BELOW, SHALL GOVERN THE MATERIALS FURNISHED:

ASTM A 36-69	STRUCTURAL STEEL FOR ARMORED EDGES, EXPANSION DAMS, SHOES AND ROCKERS.
ASTM A108-69	PINTLES (GRADES 1016 TO 1030 INCLUSIVE)
AWS A5.1-69	MILD STEEL ELECTRODES FOR MANUAL SHIELDED METAL ARC WELDING
ASTM B 29-55 (1966)	LEAD PLATES AND MOLTEN LEAD

POURING SEQUENCE: POUR THE GIRDER STEM IN ONE CONTINUOUS OPERATION IN HORIZONTAL LAYERS FOR EACH GIRDER. POUR ENDWALLS AND DIAPHRAMS WITH GIRDER STEM BY PROVIDING VERTICAL CONSTRUCTION JOINTS MIDWAY BETWEEN GIRDERS. POUR SLAB IN ONE CONTINUOUS POUR. THE POURING SEQUENCE OF THE SLAB MAY BE CHANGED WITH THE WRITTEN APPROVAL OF THE ENGINEER.

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.

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.

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.

STYRENE-BUTADIENE PROTECTIVE COATING. STYRENE-BUTADIENE PROTECTIVE COATING SHALL BE APPLIED TO THE TOP SURFACES AND INSIDE FACES OF CURBS, THE TOP AND INSIDE VERTICAL SURFACES OF PLINTHS, THE TOP AND INSIDE EXPOSED SURFACES OF END BENT WING WALLS, THE TOP SIDES AND ENDS OF PIER CAPS AND THE SEAT (INCLUDING KEYS) OF END BENTS.

NOTES

Reloc Miller Cemetery Rd over B.S.P. Sheet 2

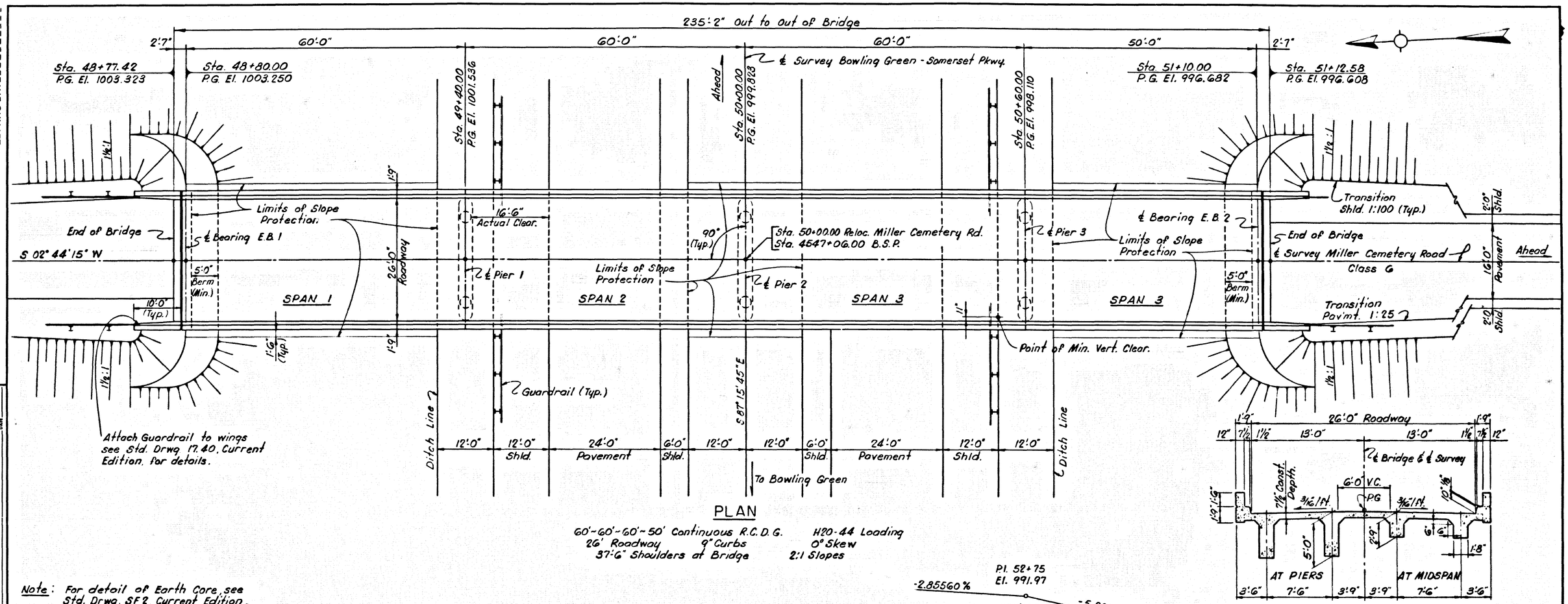
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
RUSSEL
BOWLING GREEN-SOMERSET PKWY.
ROAD
STATION 1547+06.00 **P.E. PROJECT NO.**

CONSTRUCTION PROJECT NO.	MAINTENANCE PROJECT NO.	DRAWING NO.
		18166

LETTING DATE

DESIGNED BY WG DATE
DETAILED BY DATE
TRACED BY DATE
CHECKED BY DGM DATE 12-69
CHECKED BY DATE
CHECKED BY DATE
REVISED
REVISED
REVISED

LETTING DATE



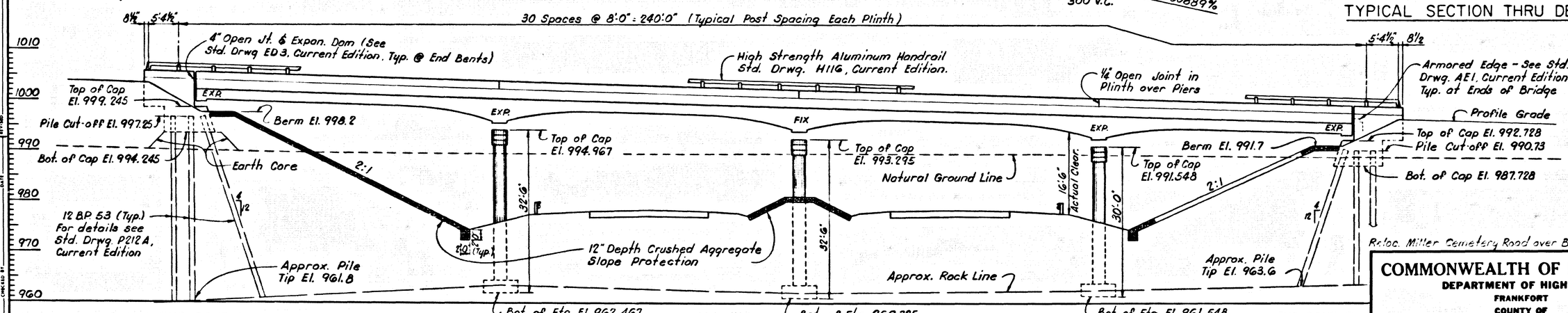
PLAN

60'-60'-60'-50' Continuous R.C.D.G. — H20-44 Loading
26' Roadway — 9" Curbs — 0° Skew
37'-6" Shoulders at Bridge — 2:1 Slopes

TYPICAL SECTION THRU DECK

Note: For detail of Earth Core, see Std. Drwg. SF2, Current Edition.

P.I. 52+75
El. 991.97
-2.85560%
300' V.C.
-5.80889%



ELEVATION

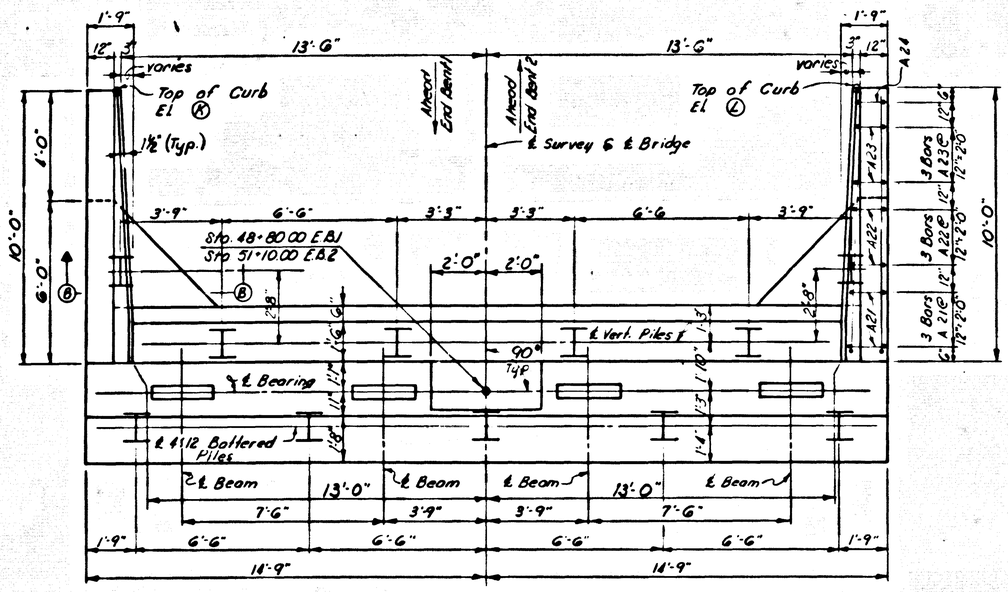
LAYOUT

Reloc. Miller Cemetery Road over B.S.P. Sheet 3

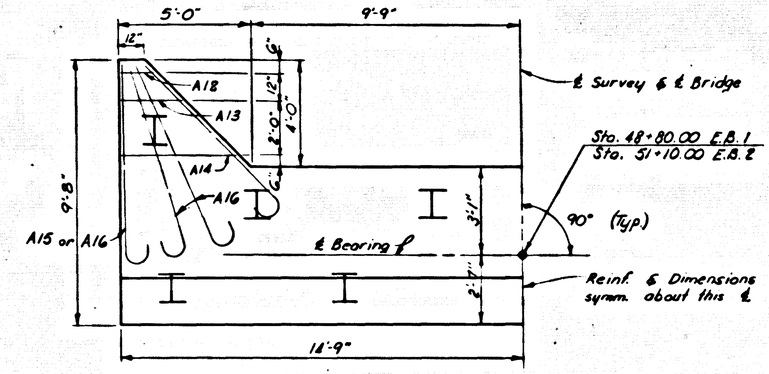
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
RUSSELL
BOWLING GREEN - SOMERSET PKWY.
ROAD

STATION 4547+06.00	P.E. PROJECT NO.	
CONSTRUCTION PROJECT NO.	MAINTENANCE PROJECT NO.	DRAWING NO 18166

DESIGNED BY W.T.G. — DATE 12/69
DETAILED BY N.E.T. — DATE 12/69
TRACED BY — DATE
CHECKED BY D.G.M. — DATE 12/69
CHECKED BY — DATE

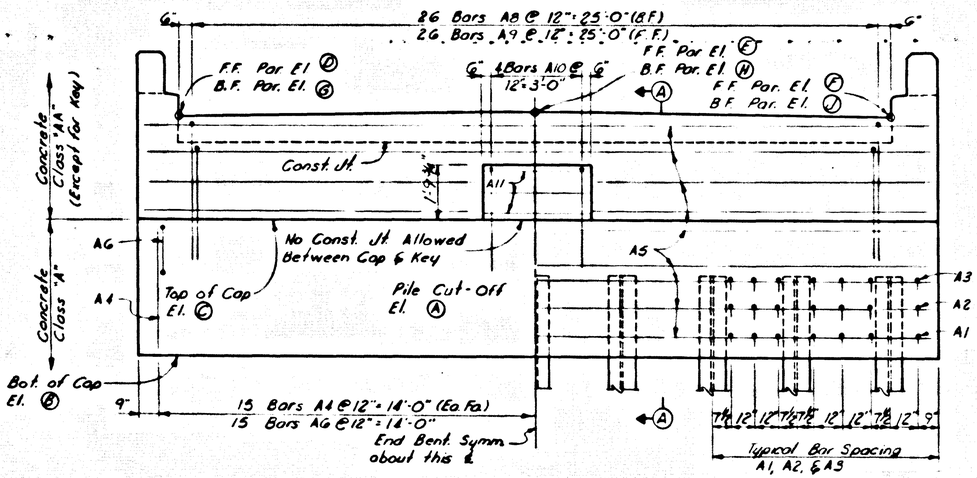


PLAN OF CAP

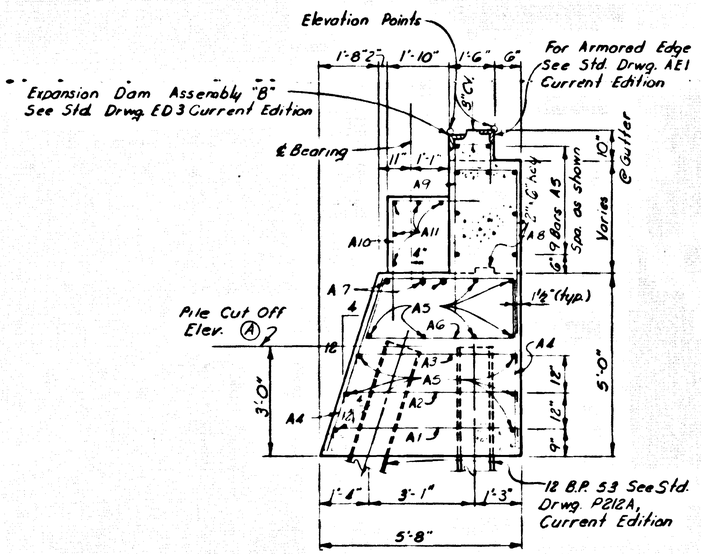


WING CAP PLAN

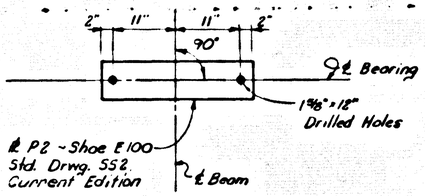
Note:
Top of cap bars are to be accurately located in accordance with the plan so they will not interfere with the drilling of Anchor Bolt Holes.



ELEVATION



SECTION A-A



ANCHOR BOLT LAYOUT

TABLE OF ELEVATIONS

LOCATION	A	B	C	D	E	F	G	H	J	K	L
END BENT 1	997.25	994.245	999.245	1003.077	1003.257	1003.077	1003.120	1003.300	1003.120	1004.207	1004.207
END BENT 2	990.73	987.728	992.728	996.448	996.628	996.448	996.405	996.585	996.405	997.006	997.006

END BENTS 1 & 2

F.A.P. Miller Cemetery Rd. over B.S.P. Sheet 4

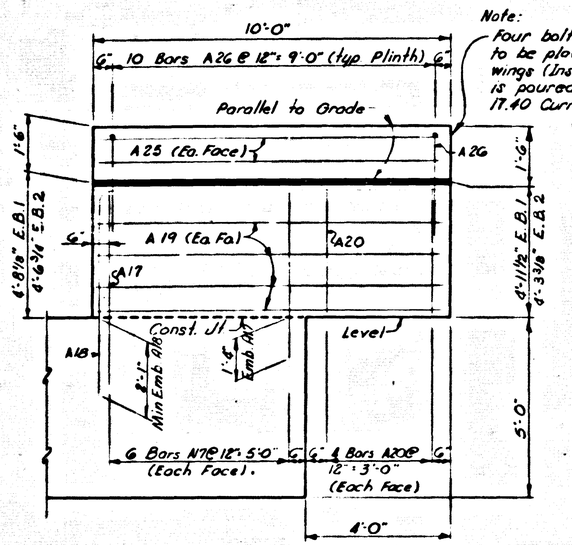
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
RUSSELL
BOWLING GREEN-SOMERSET PKWY.
ROAD
STATION 4547+06.00 P.E. PROJECT NO.

CONSTRUCTION PROJECT NO	MAINTENANCE PROJECT NO.	DRAWING NO
		18166

LETTING DATE

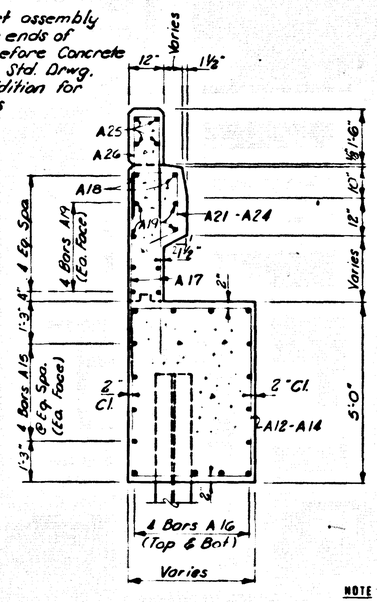
DESIGNED BY AF CHECKED BY DGM DATE 1/1/62 REVISED
DETAILED BY MMP CHECKED BY DGM DATE 12/1/62 REVISED
TRACED BY CHECKED BY DATE REVISED

LETTING DATE



Note:
Four bolt insert assembly to be placed in ends of wings (Inside) before Concrete is poured. See Std. Drwg. IT.40 Current Edition for details

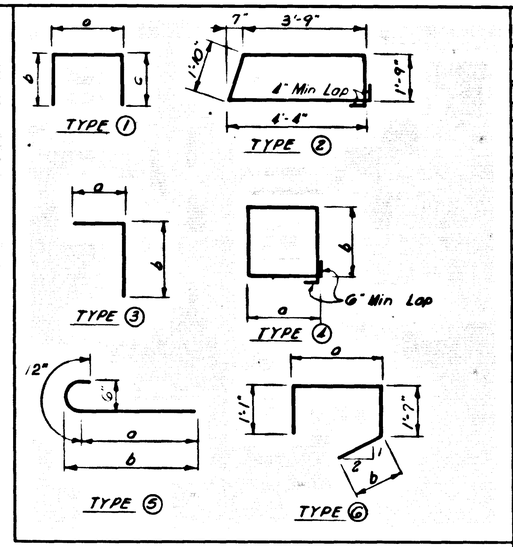
ELEVATION C-C



SECTION B-B

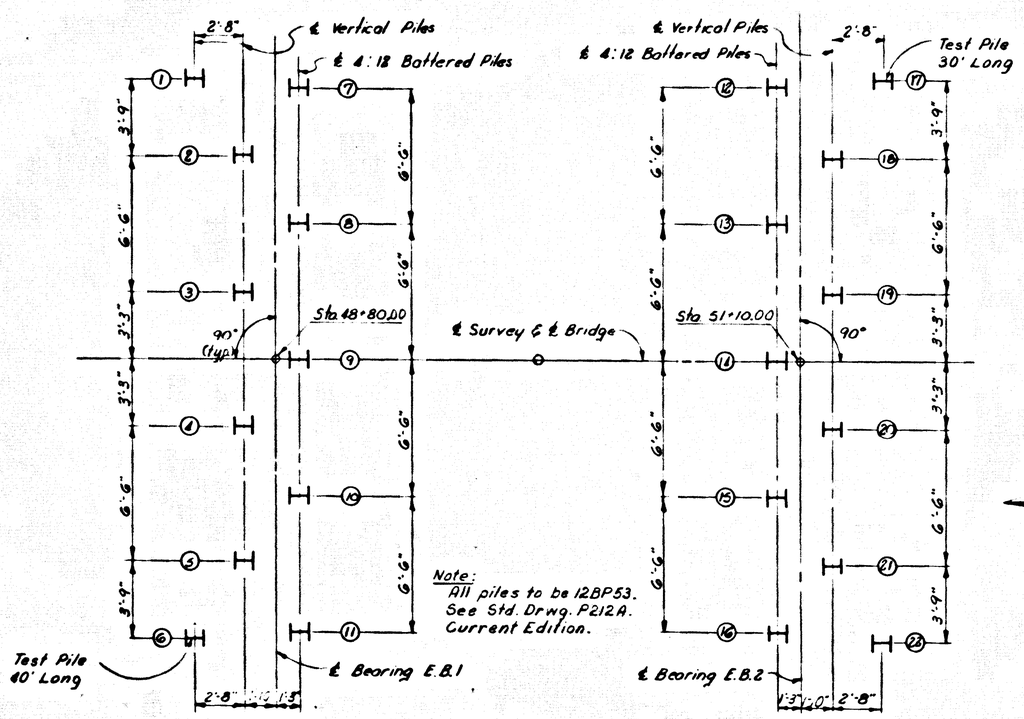
NOTE

AFTER ALL PILES HAVE BEEN DRIVEN THE RESIDENT ENGINEER SHALL RECORD FOR EACH PILE THE TIP OF PILE ELEVATION AS DRIVEN THE LENGTH OF PILE IN PLACE AND THE CALCULATED BEARING CAPACITY AND SHALL RETURN ONE BLUE PRINT 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. LENGTHS OF PILES IN PLACE SHOWN HEREON ARE THE ACTUAL LENGTHS OF PILES IN THE FINISHED STRUCTURE BELOW CUTOFF 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.



BILL OF REINFORCEMENT

MARK	TYPE	NUMBER EB1	NUMBER EB2	SIZE	LENGTH Ft.	LENGTH In.	LOCATION	a Ft	a In	b Ft	b In	c Ft	c In
A1	1	26	26	#5	5	9	Cap	5	2	0	4	0	4
A2	1	26	26	#5	5	5	"	4	10	0	4	0	4
A3	1	26	26	#5	5	1	"	4	6	0	4	0	4
A4	Str.	58	58	#5	4	7	"						
A5	Str.	21	21	#5	29	2	"						
A6	2	27	29	#5	12	1	"						
A7	Str.	3	3	#8	29	2	"						
A8	3	26	26	#6	6	1	Parapet	1	9	4	5		
A9	1	26	26	#6	8	6	"	1	3	5	4	2	0
A10	3	4	4	#5	5	9	Key	2	9	3	0		
A11	Str.	5	5	#4	3	8	"						
A12	4	2	2	#5	12	7	Wing Cap	1	3	4	8		
A13	4	2	2	#5	14	7	" "	2	3	4	8		
A14	4	2	2	#5	18	7	" "	4	3	4	8		
A15	5	16	16	#6	8	5	" "	7	5	7	8		
A16	5	16	16	#6	8	7	" "	7	1	7	6		
A17	Str.	24	24	#5	5	10	Wing						
A18	3	4	4	#8	16	2	"	6	7	9	8		
A19	Str.	16	16	#5	9	8	"						
A20	Str.	16	16	#4	4	2	"						
A21	6	6	6	#5	5	4	"	1	4 1/2	1	4 1/2		
A22	6	6	6	#5	5	2	"	1	3	1	4		
A23	6	6	6	#5	4	10	"	1	1	1	2		
A24	6	2	2	#5	4	6	"	0	11	1	0		
A25	Str.	8	8	#4	9	8	Plinth						
A26	1	20	20	#5	5	10	"	0	9	2	7	2	7



END BENT 1 PILE LAYOUT END BENT 2

Pile No.	Cut-off Elevation	Tip of Pile Elevation	Pile Length (Lin Ft.)	Calc. Brg. Capacity (Tons)
End Bent 1				
1	[illegible]	[illegible]	[illegible]	[illegible]
2	"	[illegible]	[illegible]	"
3	"	[illegible]	[illegible]	"
4	"	[illegible]	[illegible]	"
5	"	[illegible]	[illegible]	"
6	"	[illegible]	[illegible]	"
7	"	405.94	[illegible]	"
8	"	406.18	[illegible]	"
9	"	406.10	[illegible]	"
10	"	406.42	[illegible]	"
11	"	405.34	[illegible]	"
End Bent 2				
12	990.13	403.76	[illegible]	[illegible]
13	"	404.26	[illegible]	"
14	"	404.28	[illegible]	"
15	"	404.9	[illegible]	"
16	"	404.73	[illegible]	
17	"	[illegible]	[illegible]	
18	"	[illegible]	[illegible]	
19	"	[illegible]	[illegible]	
20	"	[illegible]	[illegible]	
21	"	[illegible]	[illegible]	
22	"	[illegible]	[illegible]	

ESTIMATE OF QUANTITIES

Item / Location	EB1	EB2
Concrete, Class "A" (Cu. Yds.)	31.3	31.3
Concrete, Class "AA" (Cu. Yds.)	12.8	12.8
Steel Reinforcement (Lbs)	3,879	3,879

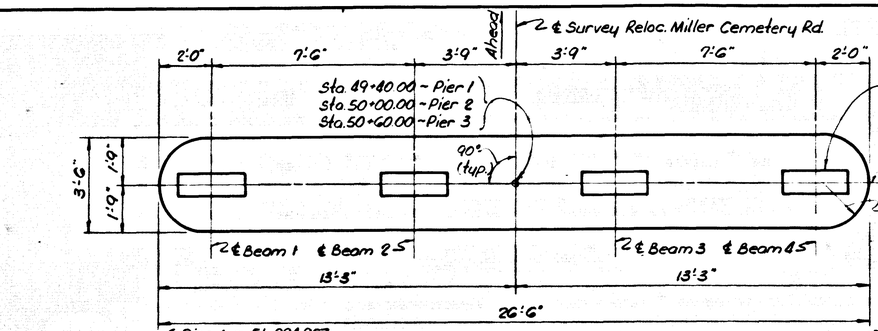
Relocate Miller Cemetery Rd over B.S.P. Sheet 5

PILE RECORD & END BENTS 1 & 2

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
RUSSELL
BOWLING GREEN-SOMERSET PKWY.
ROAD
STATION 4547+06.00 P.E. PROJECT NO.

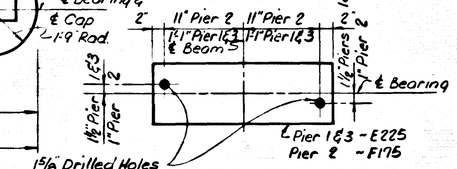
CONSTRUCTION PROJECT NO	MAINTENANCE PROJECT NO.	DRAWING NO
		18166

DESIGNED BY A.F. CHECKED BY J.G.M. DATE 12-6-94
DETAILED BY J.M.P. CHECKED BY D.G.M. DATE 12-6-94
TRACED BY CHECKED BY DATE

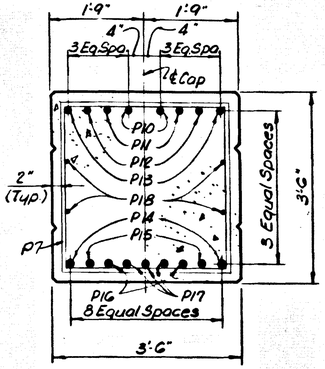


PLAN OF CAP

Note:
Top of Cap bars are to be accurately spaced as not to interfere with drilling of Anchor Bolt Holes.

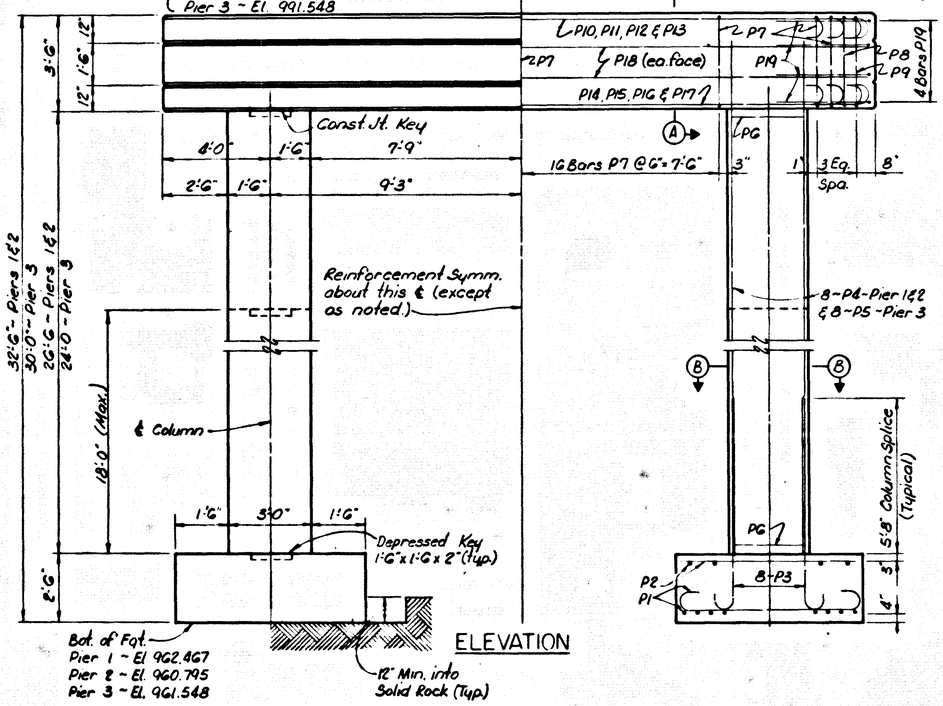


ANCHOR BOLT LAYOUT

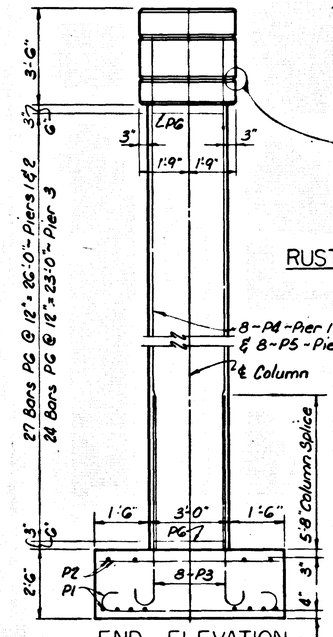


SECTION A-A

Top of Cap
Pier 1 ~ El. 994.967
Pier 2 ~ El. 993.295
Pier 3 ~ El. 991.548



ELEVATION

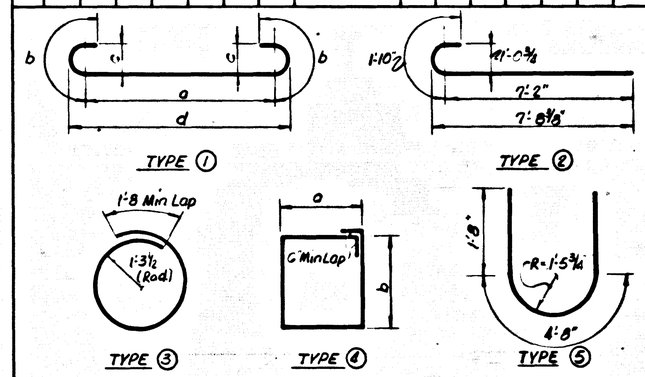


END ELEVATION

RUSTICATION DETAIL

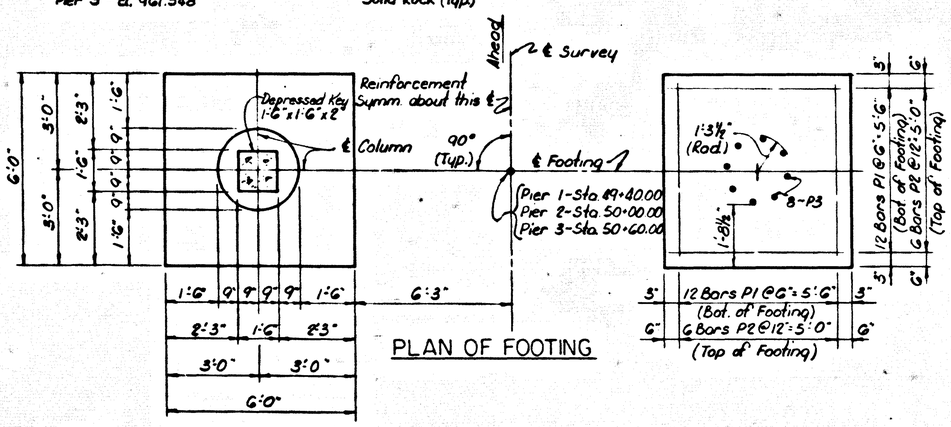
BILL OF REINFORCEMENT

MARK	TYPE	NUMBER Pier 1	NUMBER Pier 2	NUMBER Pier 3	BAR SIZE	LENGTH Ft.	LENGTH In.	LOCATION	a Ft.	a In.	b Ft.	b In.	c Ft.	c In.	d Ft.	d In.
P1	1	48	48	48	#6	7	2	Footing	5	2	1	0	0	2	5	8
P2	Str.	24	24	24	#5	5	8	"								
P3	2	16	16	16	#10	9	0	"								
P4	Str	16	16	—	#10	29	0	Column								
P5	Str.	—	—	16	#10	26	6	"								
P6	3	54	54	48	#4	9	11	"								
P7	4	35	35	35	#6	13	4	Cap	3	2	3	2				
P8	4	2	2	2	#6	11	11	"	2	5	3	2				
P9	4	2	2	2	#6	10	3	"	1	7	3	2				
P10	1	2	2	2	#11	28	10	"	24	10	2	0	1	2 1/4	26	0 1/4
P11	1	2	2	2	#11	28	6	"	24	6	2	0	1	2 1/4	25	8 1/4
P12	1	2	2	2	#11	28	0	"	24	0	2	0	1	2 1/4	25	2 1/4
P13	1	2	2	2	#11	26	6	"	22	6	2	0	1	2 1/4	23	8 1/4
P14	1	2	2	2	#11	26	6	"	22	6	2	0	1	2 1/4	23	8 1/4
P15	1	2	2	2	#11	28	0	"	24	0	2	0	1	2 1/4	25	2 1/4
P16	1	2	2	2	#11	28	6	"	24	6	2	0	1	2 1/4	25	8 1/4
P17	1	3	3	3	#11	28	10	"	24	10	2	0	1	2 1/4	26	0 1/4
P18	Str.	4	4	4	#4	23	8	"								
P19	5	8	8	8	#4	8	0	"								

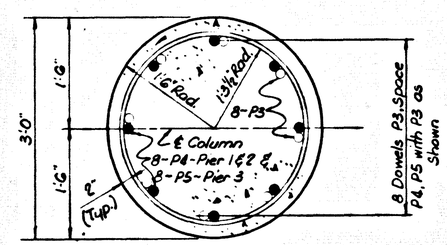


ESTIMATE OF QUANTITIES

Item / Location	Pier 1	Pier 2	Pier 3
Concrete, Class "A" (Cu. Yds.)	32.2	32.2	30.9
Steel Reinforcement (Lbs.)	7,034	7,034	6,822



PLAN OF FOOTING



SECTION B-B

PIERS 1, 2 & 3

Reloc. Miller Cemetery Rd over B.S.P.

Sheet 6

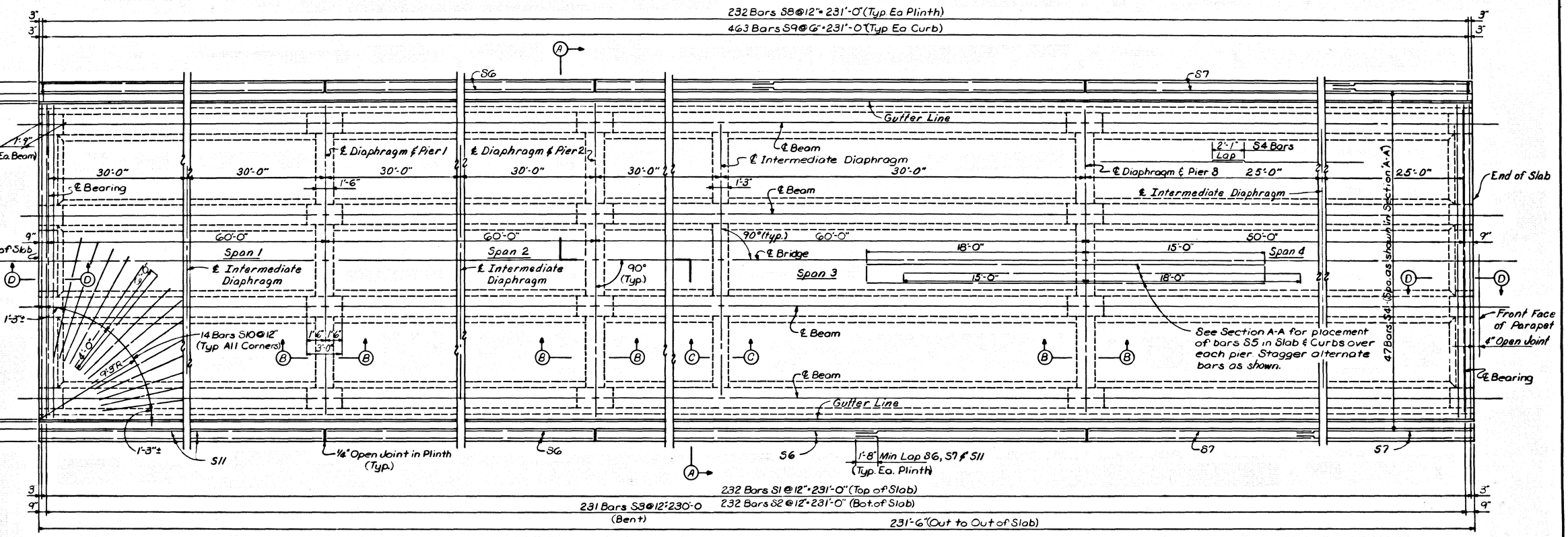
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
RUSSELL
BOWLING GREEN - SOMERSET PKWY.
ROAD
STATION 6547+06.00 **P. E. PROJECT NO.**

CONSTRUCTION PROJECT NO	MAINTENANCE PROJECT NO.	DRAWING NO.
		18166

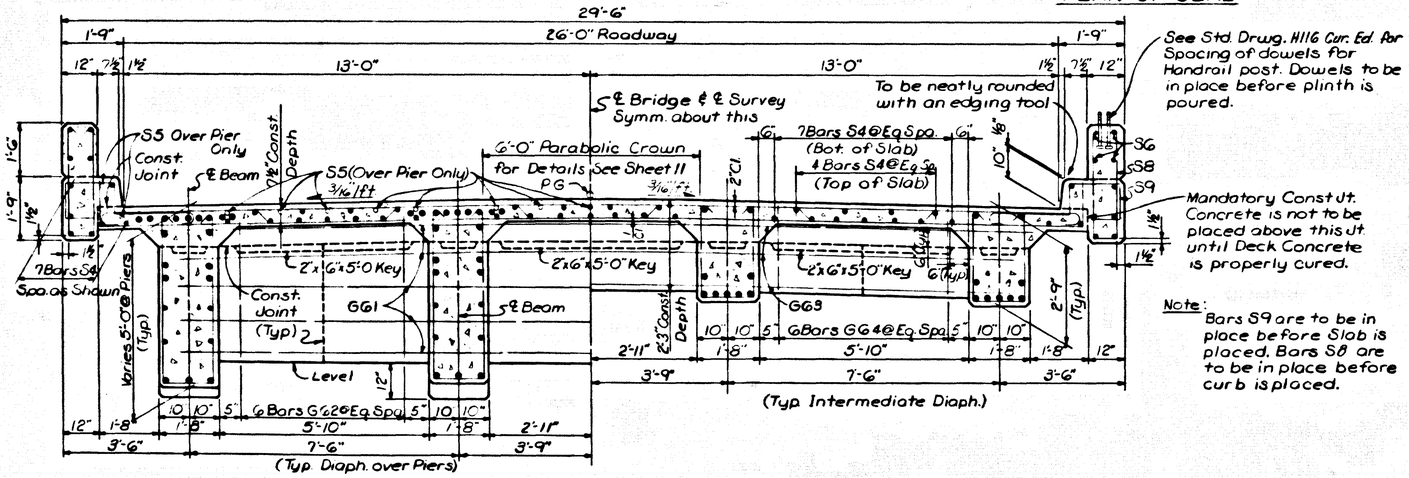
LETTING DATE

DESIGNED BY AF	CHECKED BY DGM	DATE 11/69	REVISED
DETAILED BY RAS	CHECKED BY DGM	DATE 10/69	REVISED
TRACED BY	CHECKED BY	DATE	REVISED

LETTING DATE



PLAN OF SLAB

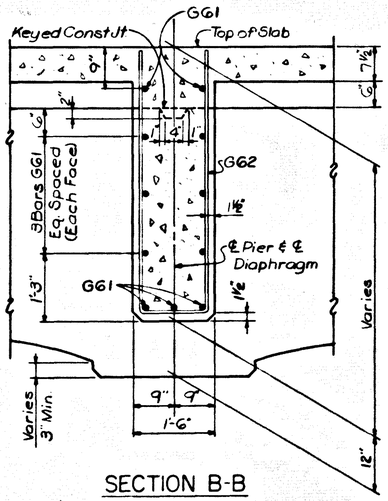


SECTION A-A

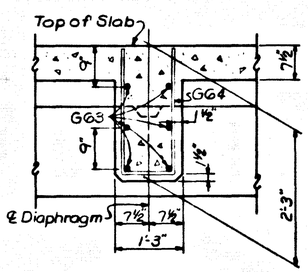
See Std. Drwg. H116 Cur. Ed. for Spacing of dowels for Handrail post. Dowels to be in place before plinth is poured.

Mandatory Const Jt. Concrete is not to be placed above this Jt. until Deck Concrete is properly cured.

Note: Bars S9 are to be in place before Slab is placed. Bars S8 are to be in place before curb is placed.



SECTION B-B



SECTION C-C

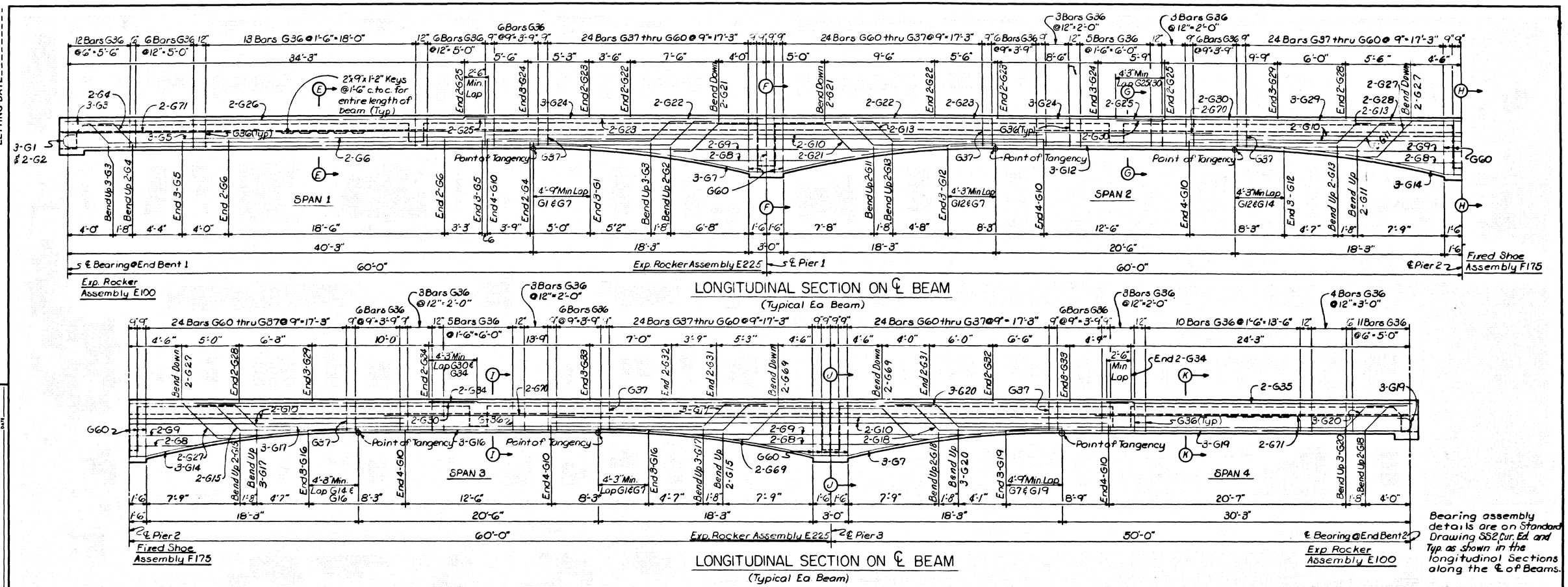
SUPERSTRUCTURE

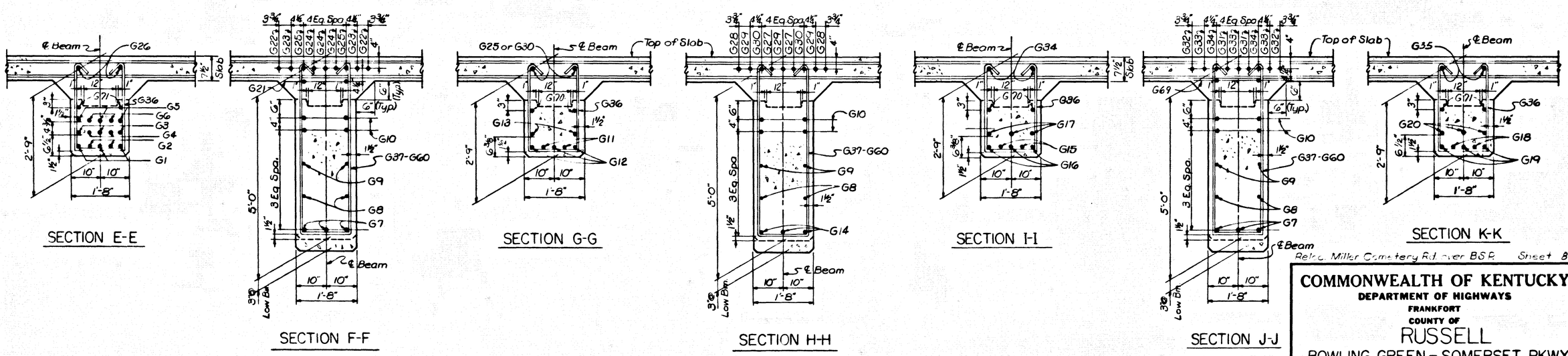
Reloc. Miller Cemetery Rd over B S P Sheet 7

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
RUSSELL
BOWLING GREEN - SOMERSET PKWY.
ROAD
STATION 4547+06.00 **P. E. PROJECT NO.**

CONSTRUCTION PROJECT NO.	MAINTENANCE PROJECT NO.	DRAWING NO
		18166

DESIGNED BY AF CHECKED BY DGM DATE 12-6-69 REVISED
DETAILED BY VCF CHECKED BY DGM DATE 12-6-69 REVISED
TRACED BY CHECKED BY DATE REVISED





Relocate Miller Cemetery Rd. over BSP. Sheet 8

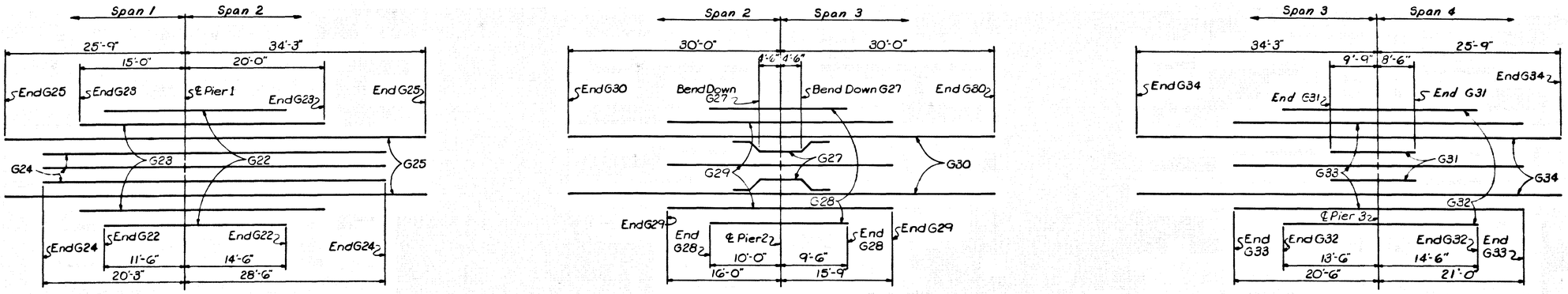
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
RUSSELL
BOWLING GREEN - SOMERSET PKWY.
ROAD
STATION 4547+06.00 **P. E. PROJECT NO.**

CONSTRUCTION PROJECT NO.	MAINTENANCE PROJECT NO.	DRAWING NO.
		18166

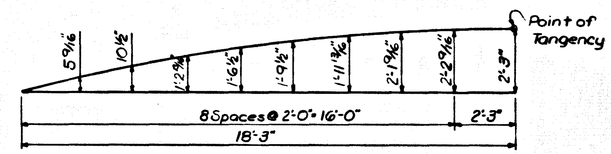
SUPERSTRUCTURE

LETTING DATE

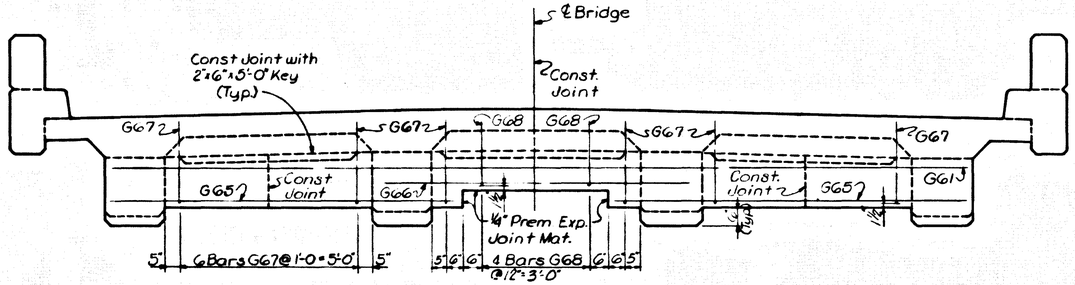
DESIGNED BY AF CHECKED BY DGM DATE 12-69 REVISED
DETAILED BY WGF & DMG CHECKED BY DGM DATE 12-69 REVISED
TRACED BY CHECKED BY DATE REVISED



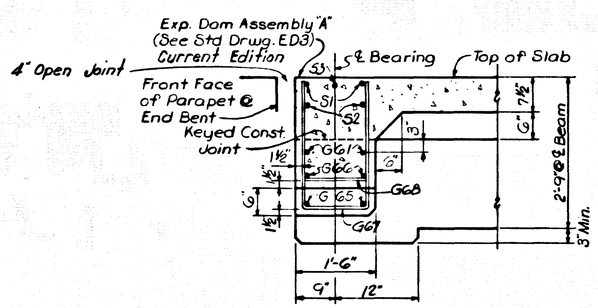
PLAN (Showing Reinforcement in Top Row @ Piers)



ORDINATES FOR PARABOLIC SOFFIT



END WALL ELEVATION



SECTION D-D

TABLE OF REACTIONS (Kips)

Item	End Bent 1		Pier 1		Pier 2		Pier 3		End Bent 2	
	Int Bm	Ext Bm	Int Bm	Ext Bm	Int Bm	Ext Bm	Int Bm	Ext Bm	Int Bm	Ext Bm
Dead Load	39.3	33.8	136.1	118.5	105.8	91.7	124.9	108.6	31.0	26.5
Live Load	32.1	29.1	53.6	48.6	51.0	46.3	51.6	46.8	29.8	27.0
Impact	8.7	7.9	14.5	13.2	13.8	12.5	14.3	13.0	8.5	7.7
Total	80.1	70.8	204.2	180.3	170.6	150.5	190.8	168.4	69.3	61.2

Note:

Dead Load includes weight of shoes. Reactions are at ℄ of bearing. Live Load and Impact are Maxima for one beam and are not substructure loads.

SUPERSTRUCTURE

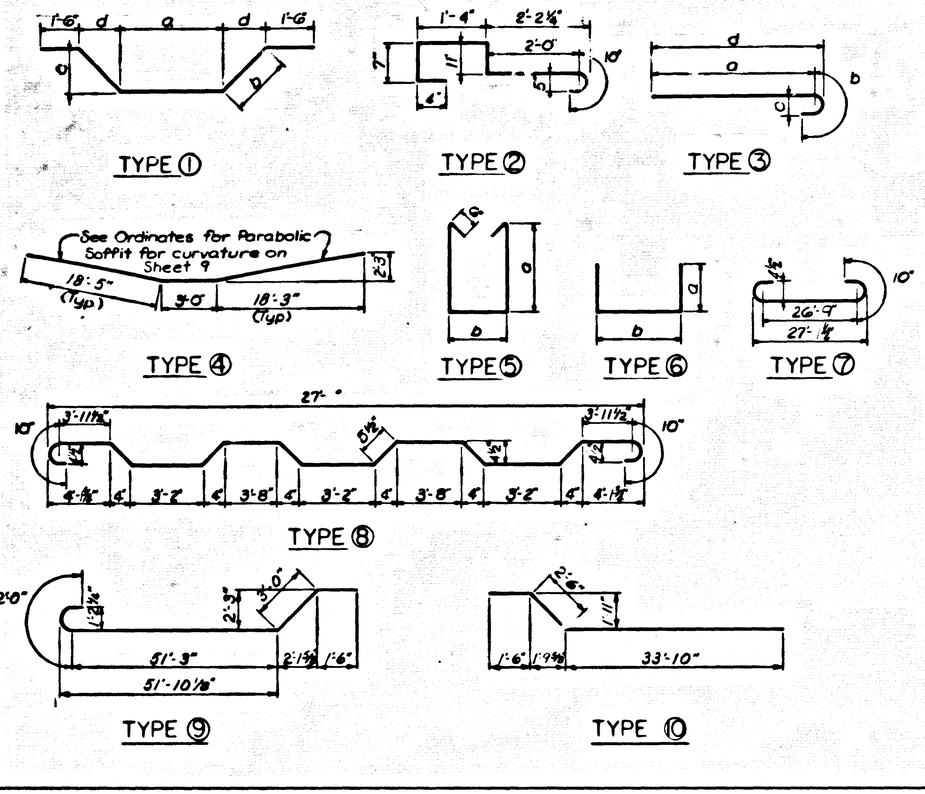
Relocate Miller Cemetery Rd over B.S.P. Sheet 9

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
RUSSELL
BOWLING GREEN - SOMERSET PKWY.
ROAD
STATION 4547+06.00 **P.E. PROJECT NO.**

CONSTRUCTION PROJECT NO.	MAINTENANCE PROJECT NO.	DRAWING NO.
		18166

LETTING DATE

DESIGNED BY: A.F. DATE: 12-69 REVISED
DETAILED BY: J.C.F. CHECKED BY: D.G.M. DATE: 12-69 REVISED
TRACED BY: CHECKED BY: DATE REVISED



BILL OF REINFORCEMENT

MARK	TYPE	NO.	BAR SIZE	LENGTH Ft.	LENGTH In.	LOCATION	a Ft.	a In.	b Ft.	b In.	c Ft.	c In.	d Ft.	d In.
G1	3	12	#11	47	0	Beams	45	0	2	0	1	2¼	45	7⅛
G2	9	8	#11	57	9	"								
G3	1	12	#11	54	2	"	46	2	2	6	1	11	1	9⅝
G4	10	8	#11	37	10	"								
G5	Str.	12	#11	25	9	"								
G6	Str.	8	#11	18	6	"								
G7	4	24	#11	39	10	"								
G8	Str.	24	#6	12	3	"								
G9	Str.	24	#6	25	9	"								
G10	Str.	48	#8	47	6	"								
G11	1	8	#10	50	7	"	41	7	3	0	2	3	2	1¾
G12	Str	12	#10	29	0	"								
G13	1	8	#10	46	5	"	38	3	2	7	1	11	1	9¾
G14	4	12	#10	39	10	"								
G15	1	8	#10	50	6	"	41	6	3	0	2	3	2	1¾
G16	Str.	12	#10	29	0	"								
G17	1	12	#10	46	4	"	38	2	2	7	1	11	1	9¾
G18	1	8	#11	45	9	"	36	9	3	0	2	3	2	1⅛
G19	3	12	#11	37	0	"	35	0	2	0	1	2¼	35	7⅛
G20	1	12	#11	41	5	"	33	5	2	6	1	11	1	9⅝
G21	1	8	#11	19	4	"	9	0	3	8	2	8	2	6⅝
G22	Str.	8	#11	26	0	"								
G23	Str.	8	#11	35	0	"								
G24	Str.	12	#11	48	9	"								
G25	Str.	8	#11	60	0	"								
G26	Str.	8	#6	37	3	"								
G27	1	8	#10	19	8	"	9	0	3	10	2	10	2	8⅜
G28	Str.	8	#10	19	6	"								
G29	Str.	12	#10	31	9	"								
G30	Str.	8	#10	60	0	"								
G31	Str.	8	#11	18	3	"								
G32	Str.	8	#11	28	0	"								
G33	Str.	12	#11	41	6	"								
G34	Str.	8	#11	60	0	"								
G35	Str.	8	#6	27	3	"								
G36	5	492	#5	7	1	"	2	5	1	5				
G37		24		7	1	"	2	5						
G38				7	1	"	2	5						
G39				7	2	"	2	5½						
G40				7	3	"	2	6						
G41				7	4	"	2	6½						
G42				7	5	"	2	7						
G43				7	6	"	2	7½						
G44				7	7	"	2	8						
G45	SAME	SAME	SAME	7	9	"	2	9	SAME	SAME				
G46				7	11	"	2	10						
G47				8	1	"	2	11						
G48				8	3	"	3	0						
G49				8	5	"	3	1						
G50				8	8	"	3	2½						
G51				8	10	"	3	3½						
G52				9	1	"	3	5						
G53				9	4	"	3	6½						
G54				9	8	"	3	8½						
G55				9	11	"	3	10						
G56				10	3	"	4	0						
G57				10	7	"	4	2						
G58				10	11	"	4	4						
G59		24		11	3	"	4	6						
G60	5	80	#5	11	7	Beams	4	8	1	5				

Mark	Type	NO.	Bar Size	LENGTH Ft.	LENGTH In.	LOCATION	a Ft.	a In.	b Ft.	b In.	c Ft.	c In.	d Ft.	d In.
G61	Str.	37	#5	23	10	End Walls & Diaphragms								
G62	6	54	#5	9	1	Diaphragm @ Piers	8	11½	1	8				
G63	Str.	24	#5	23	10	Inter. Diaphragm								
G64	6	72	#5	4	9	Inter. Diaphragm	1	11	1	0				
G65	Str.	8	#5	9	10	End Wall								
G66	Str.	4	#5	8	7	End Wall								
G67	6	28	#5	5	7	End Wall	2	2½	1	3				
G68	6	8	#5	4	7	End Wall	1	8½	1	3				
G69	7	8	#11	19	4	Beam	9	0	3	8	2	8	2	6⅝
G70	Str.	16	#5	16	8	Beam								
G71	Str.	16	#5	38	4	Beam								
S1	7	232	#6	28	5	Slab								
S2	6	232	#5	29	5	"	1	2	27	2				
S3	8	231	#5	29	2	"								
S4	Str.	282	#5	40	3	"								
S5	Str.	57	#8	38	0	Slab								
S6	Str.	32	#4	30	8	Plinth.								
S7	Str.	16	#4	26	1	"								
S8	5	464	#5	7	7	Plinth	3	0	0	9				
S9	2	926	#5	5	11	Curb								
S10	Str.	56	#6	10	0	Slab								
S11	Str.	16	#4	31	1	Plinth								

ESTIMATE OF QUANTITIES		
Item / Unit		
Concrete, Class "AA"	388.9	Cu. Yds.
Steel Reinforcement	130,24	Lbs.

SUPERSTRUCTURE

Reloc. Miller Cemetery Rd. over B.S.P. Sheet 10

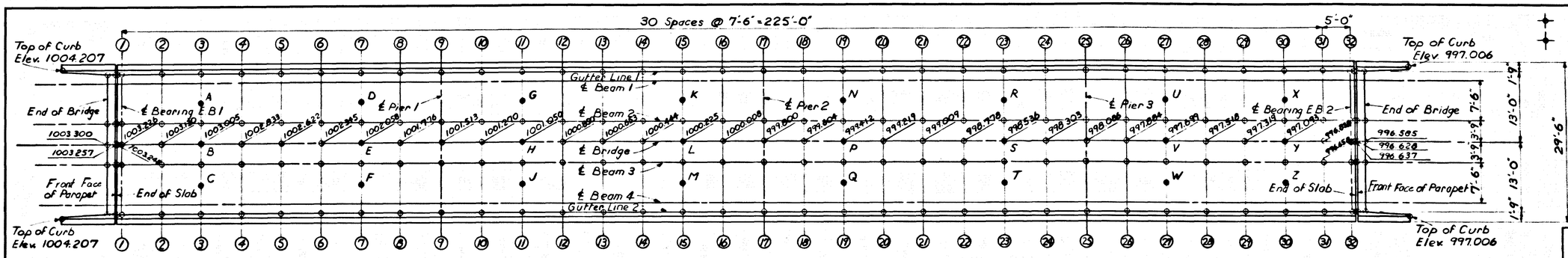
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
RUSSELL
BOWLING GREEN-SOMERSET PKWY.
ROAD

STATION 4547+06.00 P.E. PROJECT NO.

CONSTRUCTION PROJECT NO. | MAINTENANCE PROJECT NO. | DRAWING NO. 18166

LETTING DATE

DESIGNED BY AF CHECKED BY DGM DATE 12-69
DRAWN BY VCF CHECKED BY DGM DATE 12-69
TRACED BY CHECKED BY DATE



Points where elevations are given

Points where elevations are given for control of slab thickness

PLAN

(Showing Point where Elevations are Given)

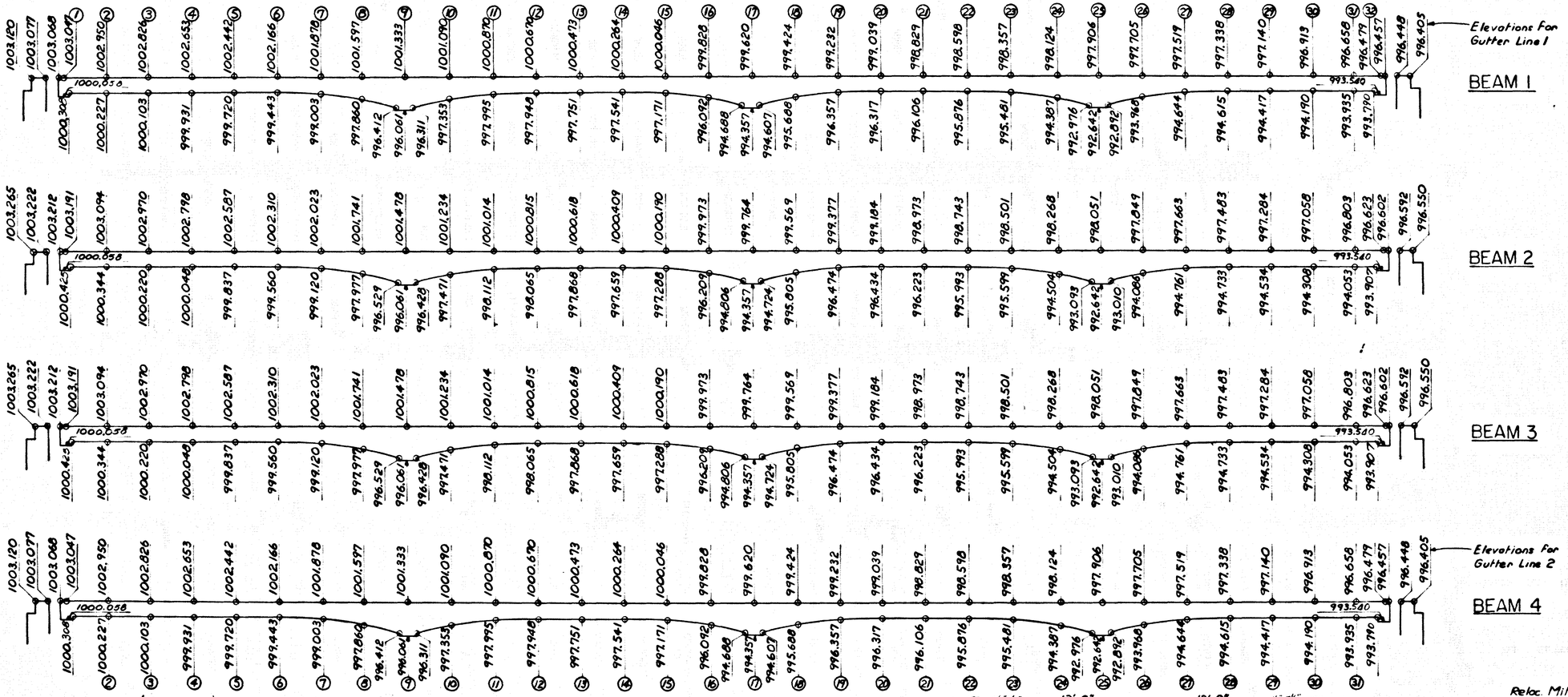
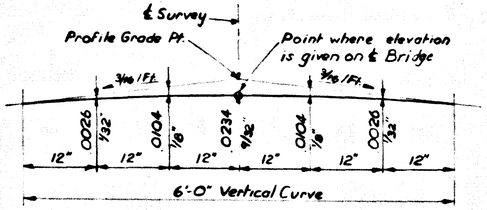


TABLE OF ELEVATIONS FOR CONTROL OF SLAB THICKNESS			
Pt.	Plan Elev. Top of Slab	Field Elev. Bot of Slab	Computed Slab Thickness
A	1002.912		
B	1003.005		
C	1002.912		
D	1001.964		
E	1002.058		
F	1001.964		
G	1000.956		
H	1001.050		
J	1000.956		
K	1000.132		
L	1000.225		
M	1000.132		
N	999.318		
P	999.412		
Q	999.318		
R	998.442		
S	998.536		
T	998.442		
U	997.605		
V	997.699		
W	997.605		
X	996.999		
Y	997.093		
Z	996.999		

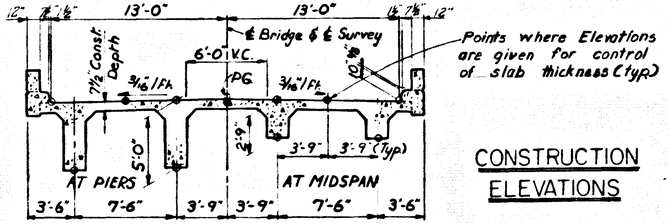
NOTE AFTER THE SLAB FORMS ARE ERECTED AND BEFORE THE SLAB REINFORCEMENT IS PLACED, THE RESIDENT ENGINEER SHALL TAKE FIELD ELEVATIONS AT THE SLAB THICKNESS CHECK POINTS AND ENTER THEM IN THE TABLE IN THE SPACE PROVIDED. THE SLAB THICKNESS SHALL THEN BE COMPUTED. IF THE COMPUTED SLAB THICKNESS VARIES MORE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



PARABOLIC CROWN DETAIL

SECTIONS ON ℄ BEAMS

Note: Elevations shown on this sheet include Dead Load Camber and are to be maintained with falsework in place.



TYPICAL SECTION THRU DECK

CONSTRUCTION ELEVATIONS

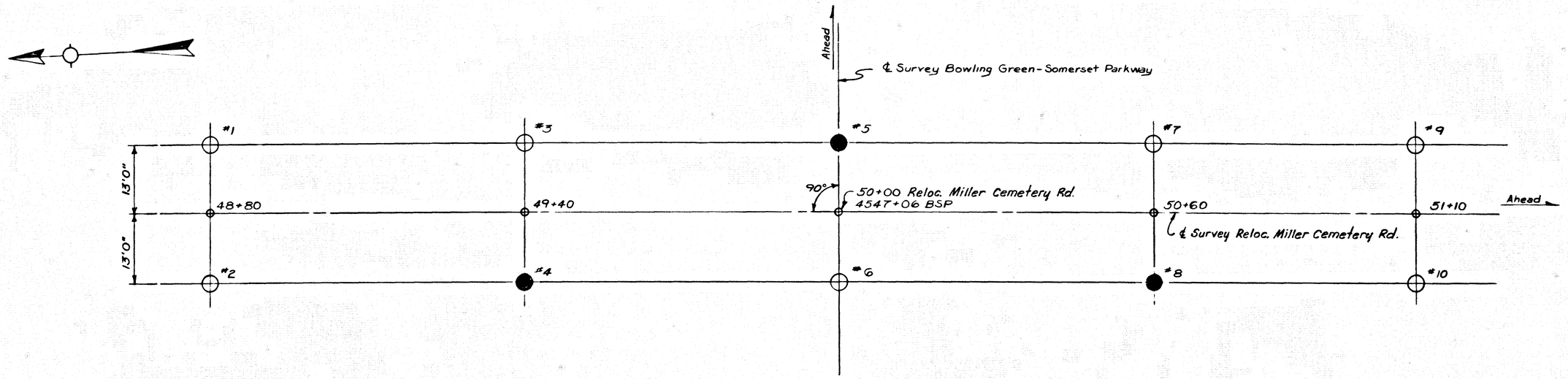
Reloc. Miller Cemetery Road over B.S.P. Sheet 11

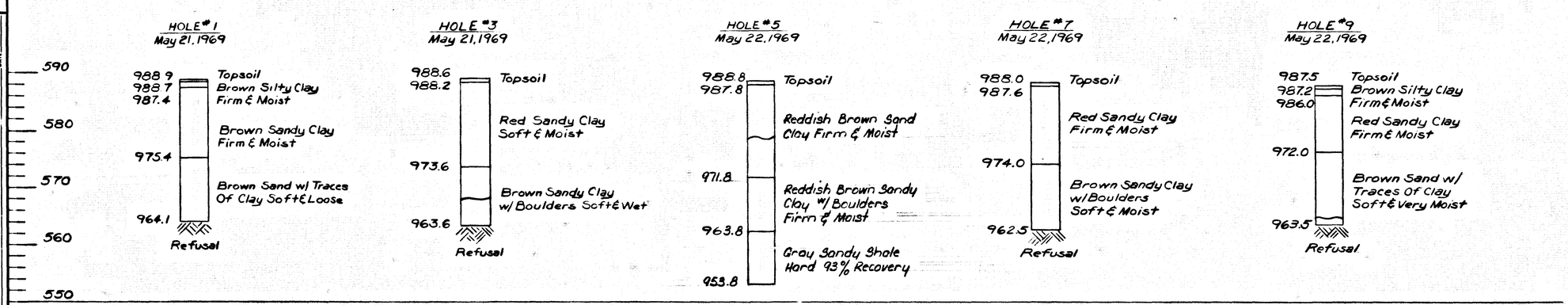
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
RUSSELL
BOWLING GREEN - SOMERSET PKWY.
ROAD
STATION 4547+06.00 P.E. PROJECT NO.
CONSTRUCTION PROJECT NO. | MAINTENANCE PROJECT NO. | DRAWING NO. 181GG

LETTING DATE

DESIGNED BY PAP CHECKED BY D.S.M. DATE 12/62 REVISED
DETAILED BY ATB CHECKED BY D.G.M. DATE 12/62 REVISED
TRACED BY CHECKED BY DATE REVISED

LETTING DATE

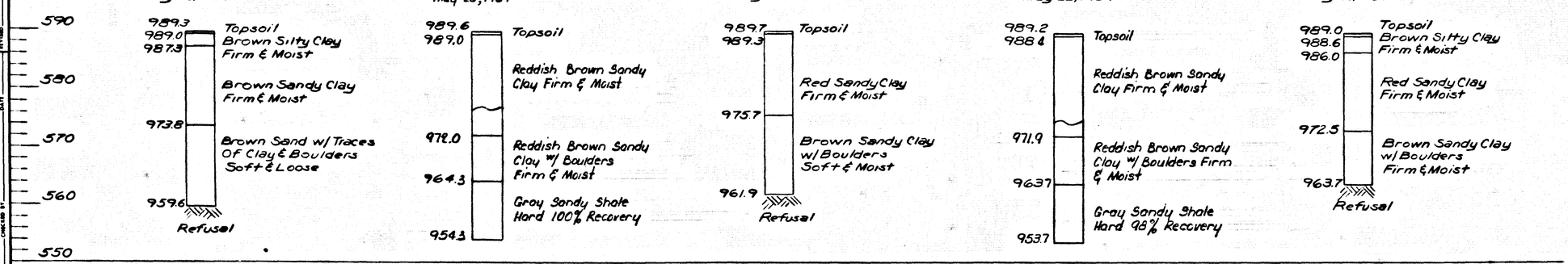




● Core Into Solid Rock

○ Auger To Solid Rock

〰 Indicates Ground Water Elev.



SOUNDINGS

Sheet 12

Reloc. Miller Cemetery Road over B.S.P.

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
RUSSELL

BOWLING GREEN - SOMERSET PKWY.
ROAD

STATION 4547+06.00 **P. E. PROJECT NO.**

CONSTRUCTION PROJECT NO.	MAINTENANCE PROJECT NO.	DRAWING NO.
		18166

DESIGNED BY JCF
DETAILED BY
TRACED BY
CHECKED BY PAP
CHECKED BY
CHECKED BY
DATE 7/69