

KENTUCKY DEPARTMENT OF HIGHWAYS

GRAVES COUNTY

JACKSON PURCHASE PARKWAY

J.P.P. OVER MAYFIELD CREEK

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

REFERENCE AND ESTIMATE OF QUANTITIES - WESTBOUND LANE

REFERENCE AND ESTIMATE OF QUANTITIES - WESTBOUND LANE																				
LOCATION	ITEM	SHEET NO.	CONCRETE CU. YD.		REINFT. S. LB.	STR. EXC. CU. YD. COM.	END BENT BACKFILL CU. YD.	HIGH STRENGTH HANDRAIL LIN. FT.	STRUCTURAL STEEL LUMP SUM BID ①	LINSEED OIL PROT. COATING SQ. YD.	PRESTRESSED BEAMS TYPE II (Each) 48 FT. 32 FT.	CONCRETE PILING LF. (SEE GENERAL NOTE FOR DESCRIPTION OF ALT. PILES)								CYCLOPEAN STONE SLOPE PROTECTION SQ. YD.
			CL. A	CL. A A								ALTERNATE 'A'		ALTERNATE 'B'		ALTERNATE 'C'		TYPE 'D'		
												FURNISH	DRIVE	FURNISH	DRIVE	FURNISH	DRIVE	FURNISH	DRIVE	
QUANTITIES		1																		
NOTES		2																		
LAYOUT		3																		
SOUNDINGS		3																		
PILE RECORD		4 & 5																		
END BENT 1		6 & 10	39.8	14.7	8,568	115	65													
END BENT 2		6 & 10	39.8	14.7	8,568	115	65					198	198	198	198	198	198			475
INT. BENT 1		7	16.9		1,823							270	270	270	270	270	270			245
INT. BENT 2		7	16.9		1,823													243	243	
INT. BENT 3		7	16.9		1,823													279	279	
SUPERSTRUCTURE ELEVATIONS		8, 9 & 10		277.4	8, 9 & 10			450	①	1,075	10	10						279	279	
		11 & 12																		
SUPERSTRUCTURE TOTALS				277.4	8, 9 & 10			450	①	1,075	10	10								
SUBSTRUCTURE TOTALS			130.3	29.4	22,605	230	130						468	468	468	468	468	468	801	801
TOTALS			130.3	306.8	104,522	230	130	450	①	1,075	10	10	468	468	468	468	468	468	801	801
① Estimated weight of steel based on standard weight of steel																				

① Estimated weight of Structural Steel is 11,174 lb.

REFERENCE AND ESTIMATE OF QUANTITIES - EASTBOUND LANE

REFERENCE AND ESTIMATE OF QUANTITIES - EASTBOUND LANE																				
ITEM	SHEET NO.	CONCRETE CU YD		REINF. STEEL LB	STR. EXC. CU. YD. COM.	END BENT BACKFILL CU. YD.	HIGH STRENGTH HANDRAIL LIN. FT.	STRUCTURAL STEEL LUMP SUM BID ①	LINSEED OIL PROT. COATING SQ. YD.	PRESTRESSED BEAMS TYPE II (Rock 48 FT. 32 FT)	CONCRETE PILING LF. (SEE GENERAL NOTE FOR DESCRIPTION OF ALT. PILES)								CYCLOPEAN STONE SLOPE PROTECTION SQ. YD.	
		CL. A	CL. A A								ALTERNATE 'A'		ALTERNATE 'B'		ALTERNATE 'C'		TYPE 'D'			
LOCATION											FURNISH	DRIVE	FURNISH	DRIVE	FURNISH	DRIVE	FURNISH	DRIVE		
QUANTITIES	1																			
NOTES	2																			
LAYOUT	3																			
SOUNDINGS	3																			
PILE RECORD	4 & 5																			
END BENT 1	6 & 10	39.8	14.7	8,568	115	65														
END BENT 2	6 & 10	39.8	14.7	8,568	115	65					198	198	198	198	198	198			475	
INT. BENT 1	7	16.9		1,823							270	270	270	270	270	270			245	
INT. BENT 2	7	16.9		1,823													243	243		
INT. BENT 3	7	16.9		1,823													279	279		
SUPERSTRUCTURE ELEVATIONS	8, 9 & 10	277.4	819.7				450	①	1,075	10	10						279	279		
	11 & 12																			
SUPERSTRUCTURE TOTALS			277.4	819.7				①	1,075	10	10									
SUBSTRUCTURE TOTALS		130.3	29.4	22,605	230	130	450													
TOTALS		130.3	306.8	104,522	230	130	450	①	1,075	10	10	468	468	468	468	468	468	801	801	720

① Estimated weight of Structural Steel is 11,174 lb.

STANDARD DRAWINGS

H 116A, ED3, SF2A, P30, P3, F21, F2, H150B, AE1
Special Provisions for Research Surveillance of Bridge Construction Procedures
" " " Dimensional Tolerances for Prestressed Concrete Members dated 1-11-66
" " " Class "A" Concrete dated 7-15-66
" " " Linseed Oil Protective Coating dated 4-14-64
" " " Joint Sealing Compound dated 6-24-65
" " " High Strength Cast Aluminum Bridge Railing Post dated 10-2-64

BILL OF INCIDENTAL MATERIAL

ITEM	NO.	SIZE & LOCATION
Joint Sealing Compound	4	1"x3"x1'-8" at Exp. Dams
From Cont. Exp. H. Mat'l.	48	1/2"x3"x7'4" at Int. Bents
" " " "	24	1"x2"x2'-6" at Int. Bent Risers
" " " "	60	1"x3"x3'-6" at Int. Bents around Beams
Fabric Bearing Pads	60	6"x6"x1'-6" at Int. Bents
" " " "	20	9"x6"x2'-6" at End Bents

NOTE

Quantities shown in the Bill of Incidental Material are approximate only and the Contractor is responsible for furnishing enough material to complete the job in accordance with the plans and specifications.
Quantities shown are for both bridges.

J.P.P. OVER MAYFIELD CREEK SHEET 1 OF 12

COMMONWEALTH OF KENTUCKY	
DEPARTMENT OF HIGHWAYS	
FRANKFORT	
COUNTY OF	
GRAVES	
JACKSON PURCHASE PARKWAY	
ROAD	
STATION 1236+25.75	PROJECT NO. SP-42-773
BRIDGE NUMBER 3-1	DRAWING NO. 16527

DESIGNED BY	DATE	REVISED	CHECKED BY	DATE
VEN	12/16/64		PCW	12/16/64
DRAWN BY	DATE	REVISED	CHECKED BY	DATE
TRACED BY	DATE	REVISED	CHECKED BY	DATE

GENERAL NOTES

SPECIFICATIONS: Kentucky Department of Highways Standard Specifications, current edition with revisions.

DESIGN LOAD: Bridge designed for HS 20-44 or alternate loading.

DESIGN STRESSES: For Class "AA" Reinforced Concrete.
 $f_s = 20,000$ psi
 $f_c = 1,600$ psi
 $U = 200$ psi for embedment
 $U = 300$ psi for summation of perimeters
 $f_t = 4,000$ psi
 $n = 8$

For Prestressed Girder Concrete.
 $f_s = 20,000$ psi
 $f_c = 250,000$ psi
 $U = 2,000$ psi for embedment
 $U = 300$ psi for summation of perimeters
 $f_t = 5,000$ psi
 $n = 6$

REINFORCEMENT: Intermediate or hard grade reinforcement shall be used in accordance with ASTM A15-65 for billet steel or A16-65 for rail steel conforming to the bending requirements of ASTM Spec. A42. Dimensions shown from face of concrete to bars are clear distances. Spacing of bars is from center to center of bars.

BEVELED EDGES: All exposed edges shall be beveled $\frac{3}{8}$ " unless otherwise shown.

JOINT SEALING COMPOUND: FABRIC RADS, JOINT SEALING COMPOUND: the unit price bid for Class "A" Concrete.

STRUCTURAL STEEL: Lump Sum Bid for structural steel shall be full payment for all structural steel, rivets, bolts, washers, welding and welding materials, paint and all labor and materials necessary to erect the steel in accordance with the plans and specifications. Use ASTM A36, current specifications.

PLACING FILLS: See Standard Drawing S1-2e.

PIILING: Piling shall be driven to refusal or to sustain a minimum load of 50 tons per pile in accordance with the specifications. Test piles shall be driven where designated on the plans to determine the length required. All test piles shall be accurately located so that they may be used in the finished structure.

DRIVING PILES: Cored pilot holes through the End Bent embankment will be required for starting piles. The cost of this work is to be included in the unit price bid per linear foot for driving piles.

ALTERNATE TYPE OF PILES: The contractor shall use one of the following types of piles (Alternate A, B, or C) throughout the End Bents. Type D's to be used in the intermediate bents only.
Alternate A: 12" x 14" Reinforced Concrete precast pile. Standard Drawing No. P2.
Alternate B: 12" x 14" Cast in place concrete pile, fluted steel shell. Standard Drawing No. P2a.
Alternate C: 12" x 14" Reinforced Concrete precast pile. Standard Drawing No. P3.
Type D: 12" x 14" Reinforced Concrete precast pile. Standard Drawing No. P3.

PROTECTIVE COATING: The protective coating shall be furnished and placed in accordance with the special provision for Linseed Oil Protective Coating approved 4/14/64.

SLOPE PROTECTION: Slope protection shall be Dry Cyclopean Stone Riprap in accordance with the current specifications.

OPTIONAL TYPES OF HIGH STRENGTH HANDRAIL: The contractor shall provide throughout the project, at his option, either High Strength Aluminum Handrail in accordance with Standard Drawing H116, or High Strength Concrete Handrail in accordance with Standard Drawing H150.

PAINT: All structural steel shall be given one shop coat of type 1 red lead paint and two field coats of aluminum paint. Exposed surfaces of expansion domes, not accessible after erection, shall be given two field coats of aluminum paint before erection. Shop paint shall not be applied within 5" of open holes where high strength bolts are to be used for field connections and shall not be applied to steel surfaces in contact with concrete.

PRECAST CONCRETE GIRDERS: This work shall consist of furnishing and placing precast, prestressed concrete girders in accordance with the details shown on the plans.

PRESTRESSING REINFORCEMENT: Prestressing reinforcement shall be $\frac{1}{8}$ " nominal diameter high-tensile strength seven-wire strands in accordance with ASTM Designation A416-64.

TENSIONING METHOD: Beams shall be pretensioned. No bond stress shall be transferred to the concrete. nor shall end anchors be released, until the concrete has attained a compressive strength as shown by standard cylinders made and cured identically with the girders, of at least minimum strength of 4,000 pounds per square inch. Initial prestress shall be 175,000 psi or 25,200 pounds per cable.

WIND LOADS: This structure is designed using wind loads based on a wind velocity of 84 m.p.h.

FOR ADDITIONAL NOTES, SEE PRESTRESSED GIRDER DETAIL SHEET.

CONSTRUCTION IDENTIFICATION: The names of the prime contractor and the subcontractor 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.

MATERIAL TEST REPORTS: Material test reports in triplicate shall be furnished the Kentucky Department of Highways showing that all materials furnished conform to the specifications.

SHOP PLANS: The contractor shall furnish the Department of Highways with three (3) sets of complete Shop Detail Plans for approval at a time of thirty (30) days prior to the scheduled pouring date of the prestressed concrete I-beams.

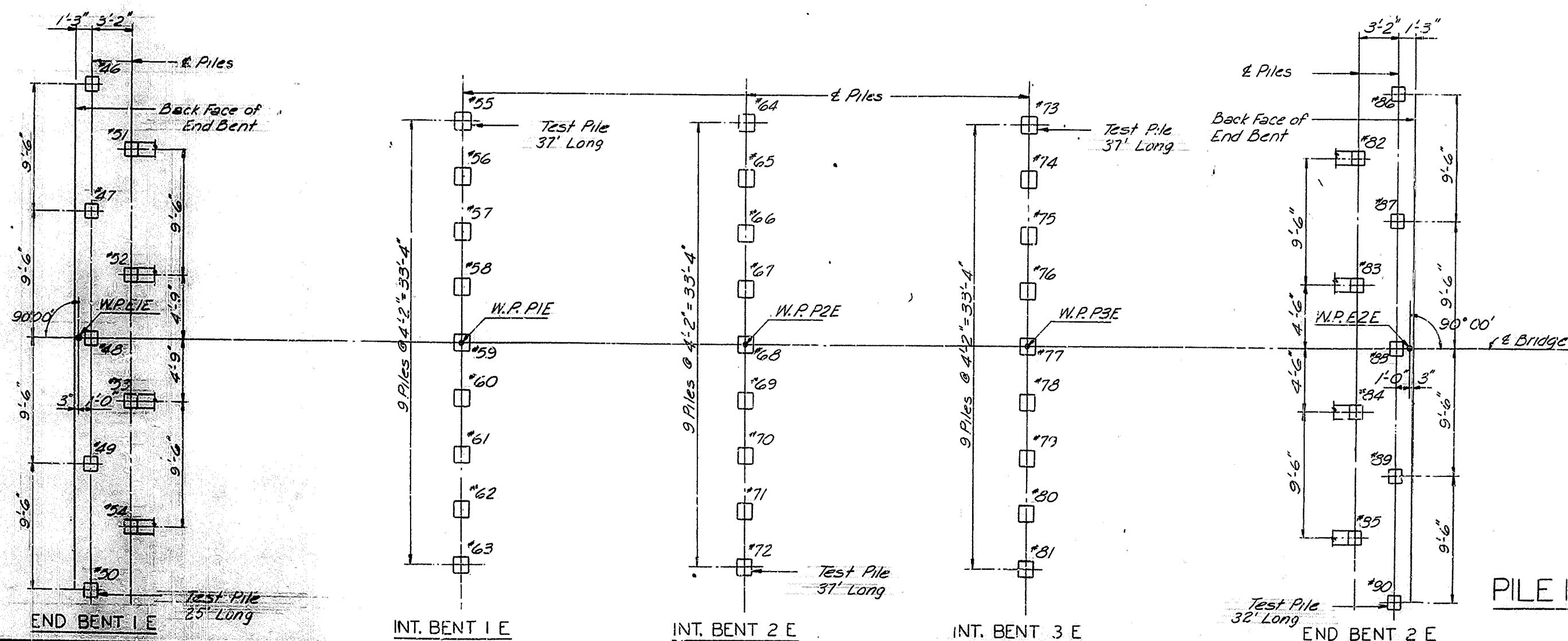
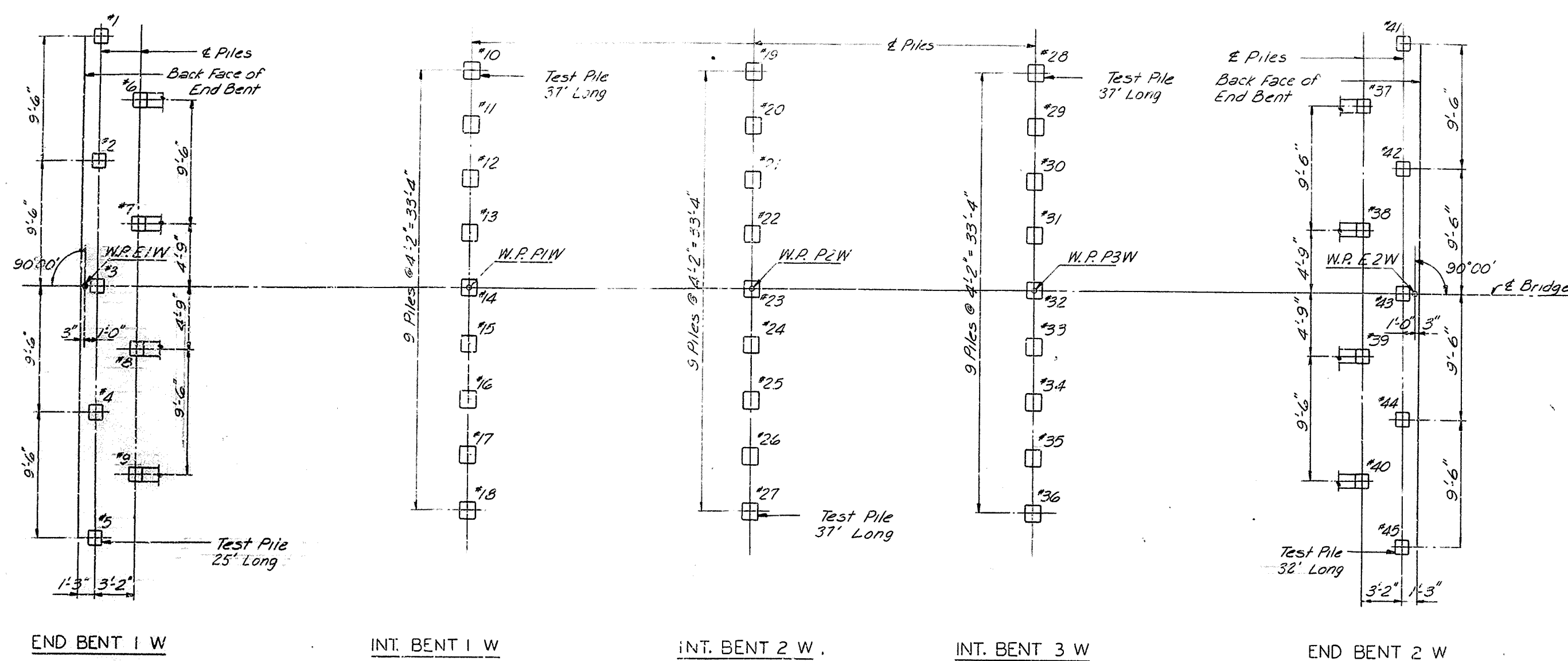
FOUNDATION PRESSURE: Axial computed load per pile is 778 kips (End Bents) and is 716 (Int. Bents). Horizontal computed shear per pile is 1.2 kips (End Bents). This is Group I Loading.

CONCRETE: Class "A" Concrete is to be used throughout except in superstructure, prestressed girders, portion of end bents above the construction joint at bridge seat elevation, piles and handrails. Class "D" Concrete is to be used in high strength concrete handrail. Class "AA" Concrete is to be used in roadway slab, curb, plinth and in the end bents above the construction joint at the bridge seat elevation. Prestressed Girder Concrete shall be in accordance with the plans and Section 405 of the Specifications.

J P P OVER MAYFIELD CREEK		SHEET 2	
COMMONWEALTH OF KENTUCKY			
DEPARTMENT OF HIGHWAYS			
FRANKFORT			
COUNTY OF			
GRAVES			
JACKSON PURCHASE PARKWAY			
ROAD			
STATION 12 36+25.75		PROJECT NO.	
BRIDGE NUMBER		DRAWING NO.	16527

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

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



J.P.P. OVER MAYFIELD CREEK SHEET 4

COMMONWEALTH OF KENTUCKY
 DEPARTMENT OF HIGHWAYS
 FRANKFORT
 COUNTY OF
GRAVES
 JACKSON PURCHASE PARKWAY
 ROAD

STATION 1236 + 25.75 PROJECT NO. 16527

BRIDGE NUMBER DRAWING NO. INDEX

PILE RECORD-END BENTS								PILE RECORD-INT. BENTS					
Location	Pile No.	Cutoff El. Shown Alt. "A"	Cutoff El. Shown Alt. "B"	Cutoff El. Shown Alt. "C"	Tip of Pile Elevation as driven	Pile Length in place (Lin. Ft.)	Calculated Bearing Capacity (Tons)	Location	Pile No.	Cutoff El. Shown	Tip of Pile Elevation as driven	Pile Length in place (Lin. Ft.)	Calculated Bearing Capacity (Tons)
E.B.1W	*1	435.13	430.13	430.13	403.84	28.78	112	I.B.1W	*10	431.04	395.51	35.83	Refusal
"	*2	"	"	"	403.81	29.12	112	"	*11	"	395.17	35.87	Refusal
"	*3	"	"	"	403.23	28.30	84	"	*12	"	395.22	35.82	81
"	*4	"	"	"	403.38	28.75	149	"	*13	"	395.10	35.94	67
"	*5	"	"	"	403.87	29.26	149	"	*14	"	395.12	35.92	96
"	*6	"	"	"	403.98	29.10	93	"	*15	"	395.11	35.93	96
"	*7	"	"	"	404.07	29.38	123	"	*16	"	395.11	35.93	96
"	*8	"	"	"	403.79	27.76	64	"	*17	"	395.10	35.94	79
"	*9	432.10	430.10	430.10	403.97	29.68	128	"	*18	"	395.25	35.79	108
E.B.2W	*37	430.10	430.10	430.10	403.85	29.67	122	I.B.2W	*19	431.06	393.91	37.15	112
"	*38	"	"	"	402.88	30.80	112	"	*20	"	393.26	37.80	122
"	*39	"	"	"	403.64	30.00	149	"	*21	"	393.95	37.11	149
"	*40	"	"	"	403.09	30.58	149	"	*22	"	393.22	37.84	117
"	*41	"	"	"	402.01	30.05	96	"	*23	"	393.11	37.95	96
"	*42	"	"	"	403.95	28.15	122	"	*24	"	393.21	37.85	84
"	*43	"	"	"	401.30	30.80	134	"	*25	"	393.11	37.95	122
"	*44	"	"	"	401.52	30.58	100	"	*26	"	393.29	37.77	122
"	*45	432.13	430.13	430.13	402.15	29.95	149	"	*27	"	393.39	40.67	134
E.B.1E	*46	430.13	430.13	430.13	401.16	30.97	122	I.B.3W	*28	431.03	395.91	35.12	149
"	*47	"	"	"	403.02	29.11	122	"	*29	"	395.75	35.28	141
"	*48	"	"	"	401.53	30.67	112	"	*30	"	395.49	35.54	Refusal
"	*49	"	"	"	403.09	29.04	112	"	*31	"	395.75	35.28	141
"	*50	"	"	"	403.04	29.09	96	"	*32	"	395.30	35.73	122
"	*51	"	"	"	404.71	28.90	134	"	*33	"	395.96	35.07	Refusal
"	*52	"	"	"	403.57	30.10	75	"	*34	"	394.86	36.17	103
"	*53	"	"	"	403.25	30.44	112	"	*35	"	394.60	36.43	96
"	*54	432.10	430.10	430.10	401.62	31.95	96	"	*36	"	395.10	35.93	Refusal
E.B.2E	*82	430.10	430.10	430.10	406.53	27.48	141	I.B.1E	*55	431.04	388.01	43.03	93
"	*83	"	"	"	405.36	28.25	112	"	*56	"	396.82	34.22	149
"	*84	"	"	"	404.39	29.21	123	"	*57	"	396.39	34.65	134
"	*85	"	"	"	404.86	28.71	134	"	*58	"	395.25	35.79	128
"	*86	"	"	"	404.43	27.67	134	"	*59	"	396.05	34.99	149
"	*87	"	"	"	403.90	28.20	122	"	*60	"	395.15	35.89	112
"	*88	"	"	"	403.70	28.40	134	"	*61	"	397.72	34.32	103
"	*89	"	"	"	403.45	28.65	112	"	*62	"	394.93	36.11	103
"	*90	"	"	"	403.55	28.55	134	"	*63	"	395.43	35.61	134
								I.B.2E	*64	431.06	392.76	38.30	112
								"	*65	"	393.23	37.83	103
								"	*66	"	393.27	37.79	112
								"	*67	"	393.27	37.79	122
								"	*68	"	393.16	37.90	79
								"	*69	"	393.20	37.66	112
								"	*70	"	393.24	37.82	96
								"	*71	"	393.02	38.04	103
								"	*72	"	392.31	38.75	Refusal
								I.B.3E	*73	431.03	395.08	35.95	Refusal
								"	*74	"	395.18	35.85	122
								"	*75	"	395.16	35.87	112
								"	*76	"	395.16	35.87	134
								"	*77	"	395.11	35.92	134
								"	*78	"	395.19	35.84	134
								"	*79	"	395.21	35.82	103
								"	*80	"	395.07	35.96	134
								"	*81	"	396.04	35.99	122

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

NOTE -

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

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

Alternate "A"-14" Reinforced Concrete Piles-For notes and details see Std. Dwg. P2.

Alternate "B"-14" Seamless Steel or Welded Pipe Shell Concrete Filled Piles-For notes and details see Std. Dwg. P20.

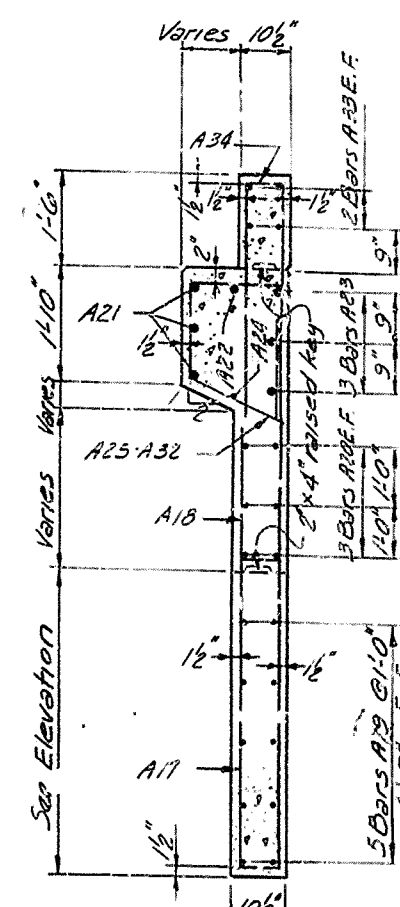
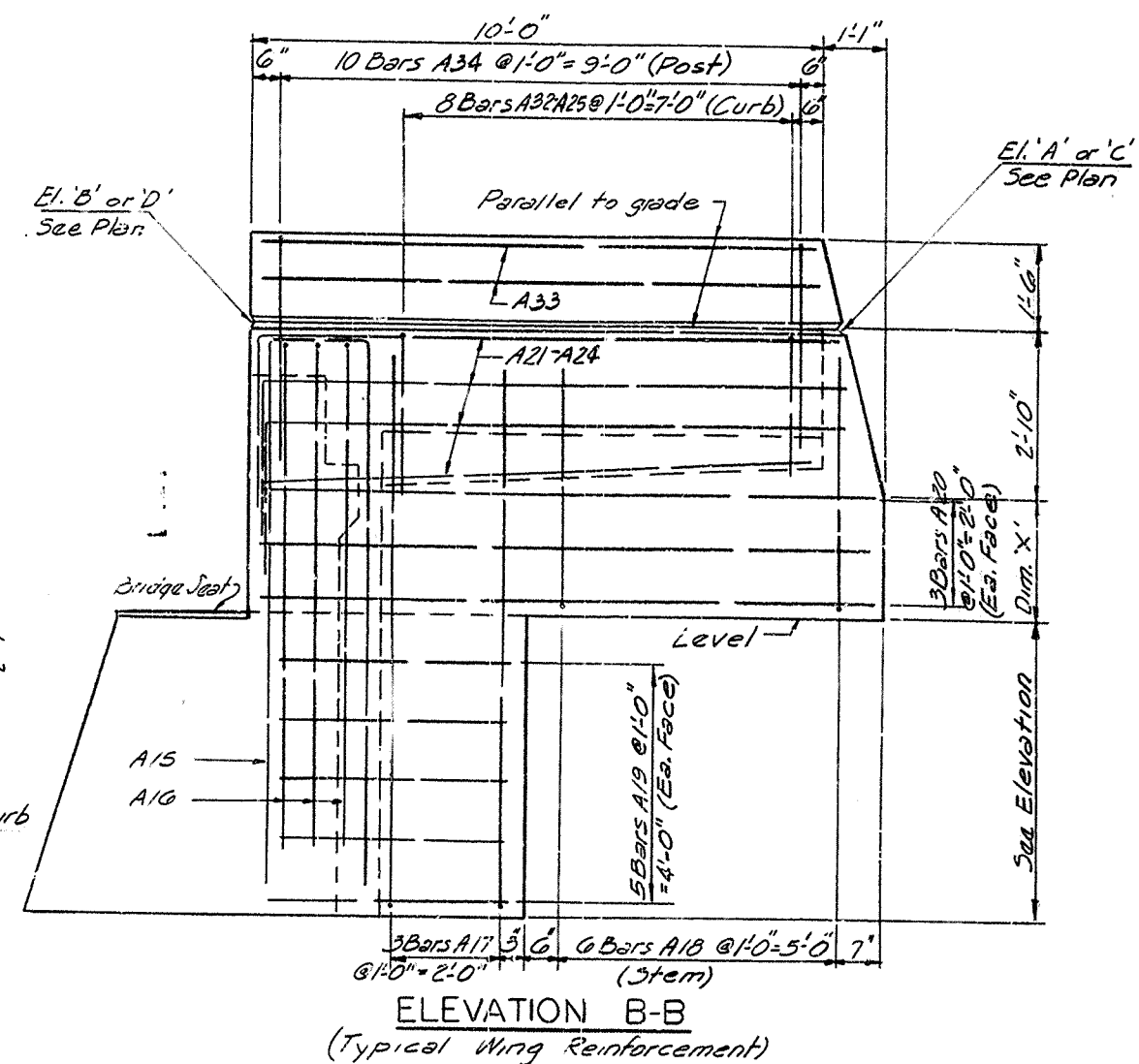
Alternate "C"-14" Metal Shells Concrete Filled Piles-For notes and details see Std. Dwg. P21.

Intermediate Bent Piles are 16" Reinforced Concrete Piles-For notes and details see Std. Dwg. P3.

See Sheet 6 for batter on Piles.

PILE RECORD

3-1 J. RE OVER MAYFIELD CREEK		SHEET 5	
COMMONWEALTH OF KENTUCKY			
DEPARTMENT OF HIGHWAYS			
FRANKFORT			
COUNTY OF			
GRAVES			
JACKSON PURCHASE PARKWAY			
ROAD			
STATION 1236 + 25.75		PROJECT NO.	
BRIDGE NUMBER		DRAWING NO. 16527	



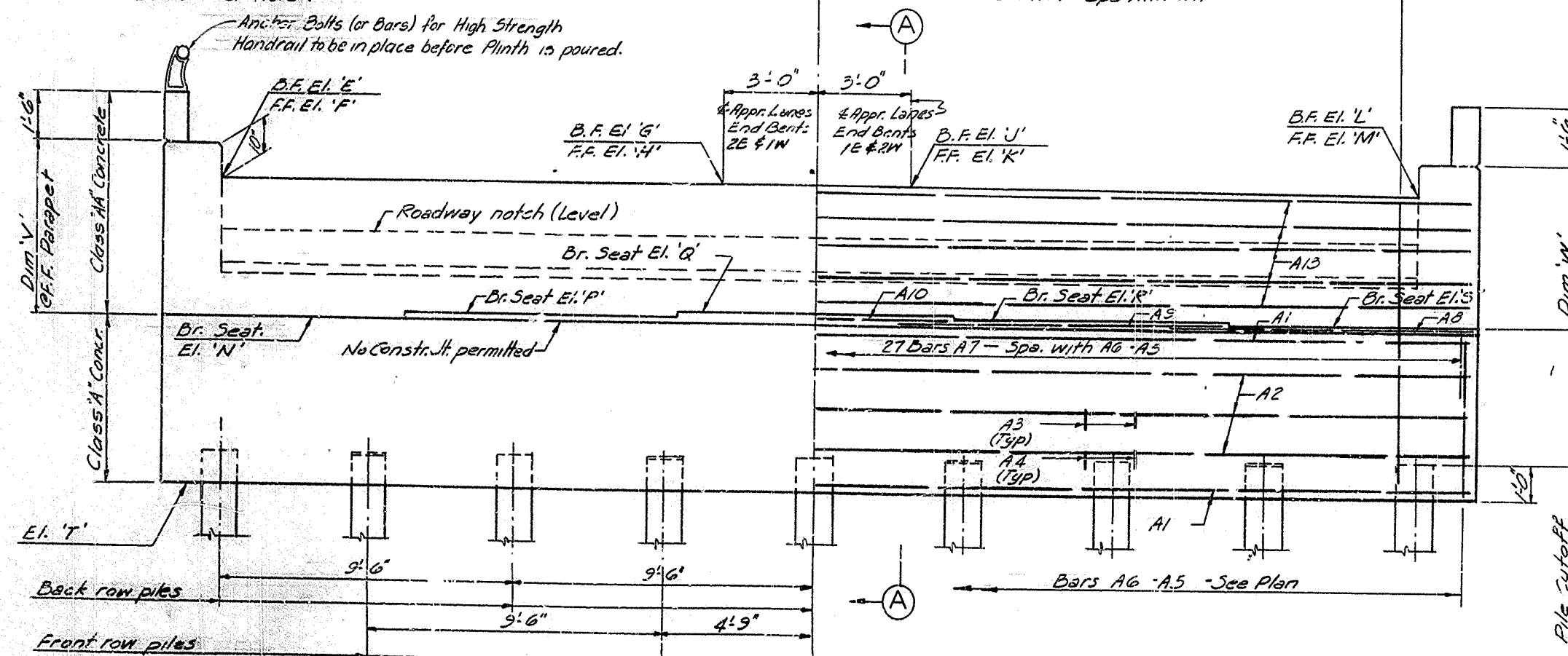
SECTION C-C

PLAN	OF CAP
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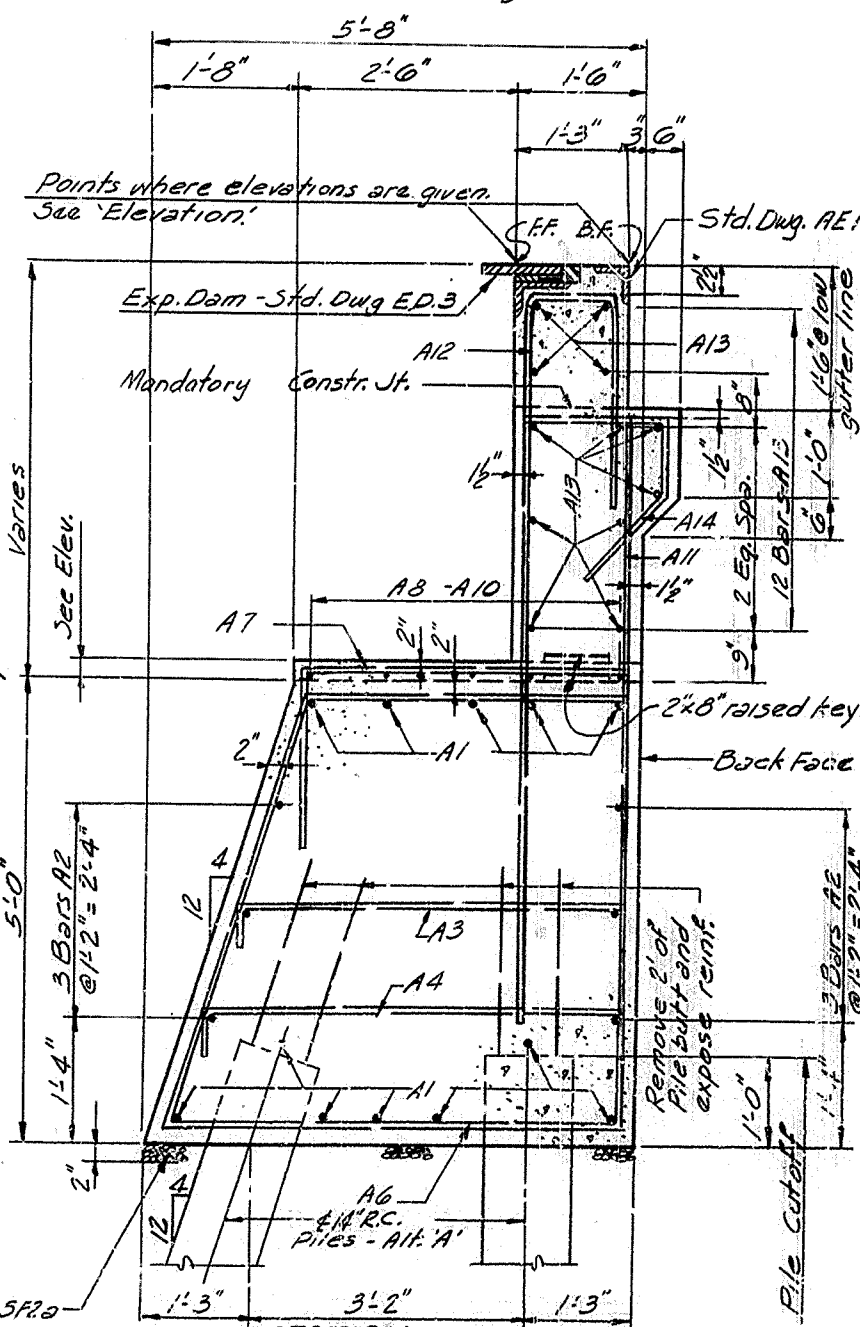
(Showing Reinforcement)

ANCHOR BOLT NOTE -

The cost of lead required to set anchor bolts and the cost of drilling anchor bolt holes shall be included in the "Lump Sum Bid" for structural steel. The contractor shall be responsible for keeping holes dry in wet and freezing weather. At the time of setting, anchor bolts are to be heated to a blue heat to assure free flow of lead to bottom of hole.



ELEVATION



SECTION A-A

END BENTS

TABLE OF DIMENSIONS AND ELEV.				
Dim.	End Bent			
Elev.	1E	2E	1W	2W
A	438.850	438.909	438.943	438.916
B	864	927	957	835
C	438.943	438.816	438.850	438.909
D	857	835	864	927
E	438.029	438.022	438.124	437.779
F	031	022	124	001
G		438.319	438.349	
H		321	351	
I	438.349			438.319
J	351			321
K	438.222	437.779	438.029	438.022
L	124	438.001	027	029
M	438.127	438.191	438.121	438.077
N	264	328	358	234
O	901	371	401	371
P	358	334	264	328
Q	271	087	177	191
R	438.13	438.10	438.13	438.10
S	430.13	430.10	430.13	430.10
T	4-8 1/2	4-8 1/2	4-8 1/2	4-8 1/2
U	4-8 1/2	4-8 1/2	4-8 1/2	4-8 1/2
Wing				
	A	B	A	B
X	1-10 1/2	1-10 1/2	1-10 1/2	1-10 1/2

ESTIMATE OF QUANTITIES

ESTIMATE OF QUANTITIES	
Concrete, Class 'AA'	14.7 Cu. Yd.
Concrete, Class 'A'	39.8 Cu. Yd.
Reinforcement	8,568 Lb.

J.P.P. OVER MAYFIELD CREEK

SKLET 6

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
GRAVES
JACKSON PURCHASE PARKWAY
ROAD

STATION 1236 + 25,75

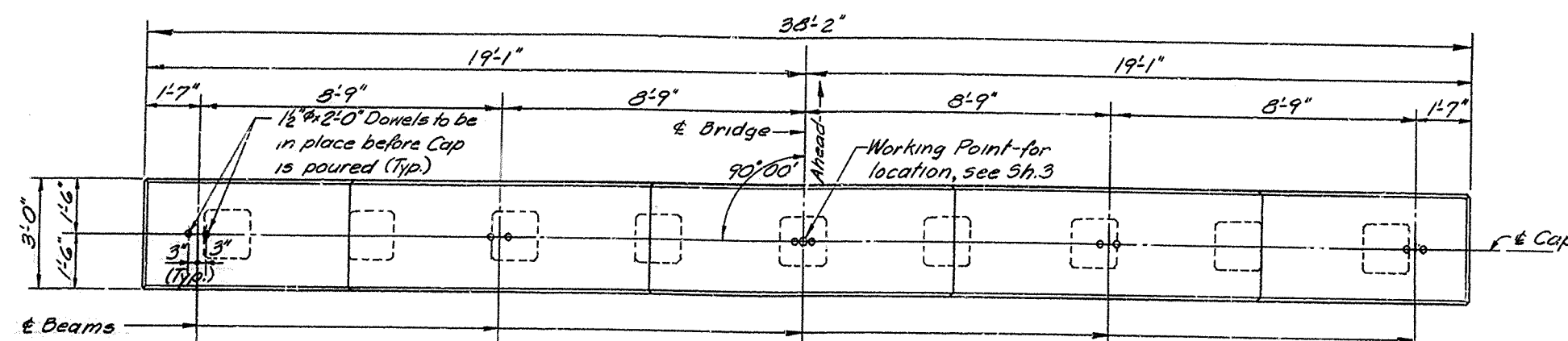
PROJECT NO.

BRIDGE
NUMBER

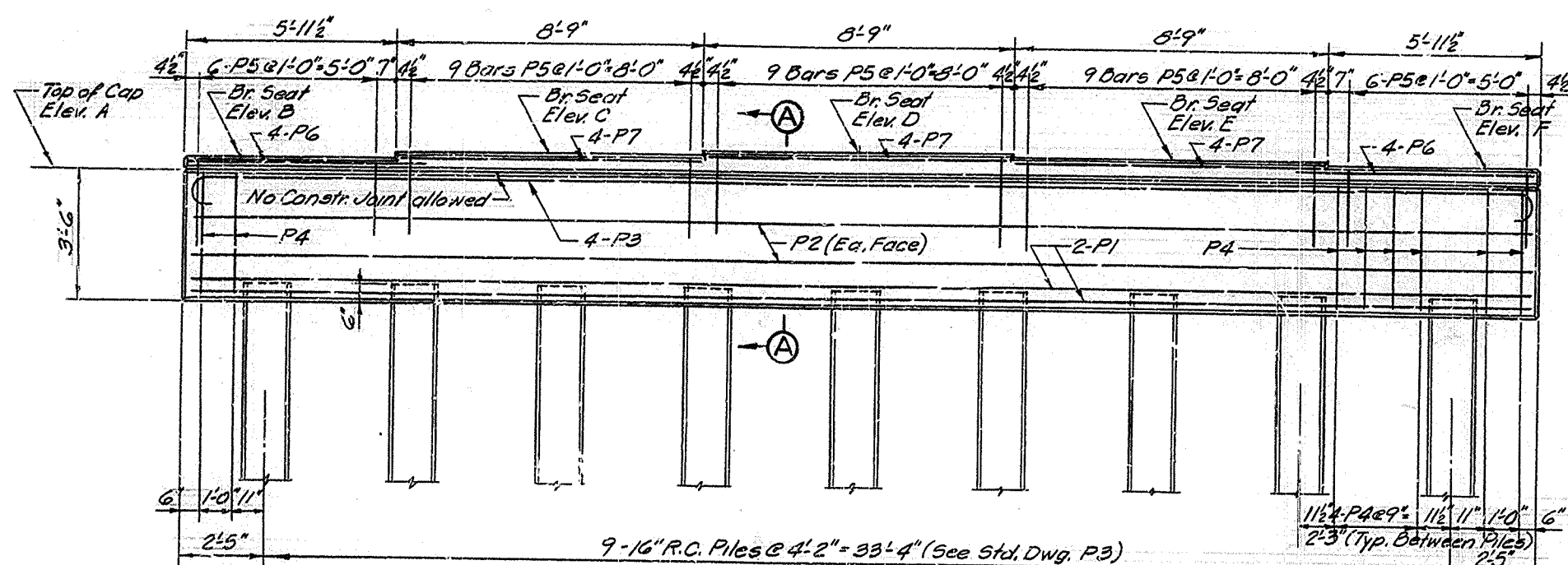
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DRAWING NO.

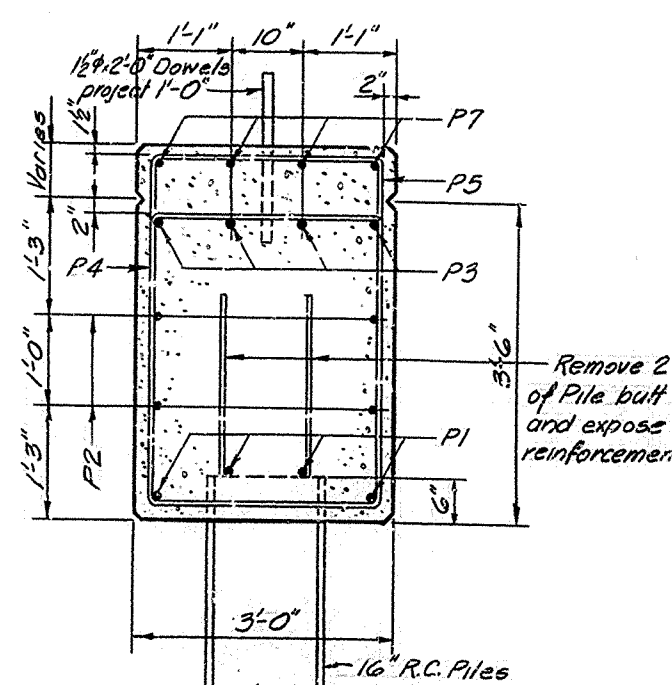
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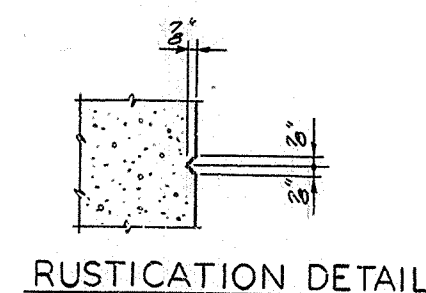
PLAN OF CAP



ELEVATION



SECTION A-A



RUSTICATION DETAIL

TABLE OF ELEVATIONS						
INT. BENT	Elev. A	Elev. B	Elev. C	Elev. D	Elev. E	Elev. F
1W	434.042	434.469	434.626	434.648	434.512	434.375
2W	434.055	434.482	434.639	434.662	434.525	434.388
3W	434.026	434.453	434.590	434.633	434.496	434.359
1E	434.042	434.375	434.512	434.648	434.606	434.469
2E	434.055	434.388	434.525	434.662	434.619	434.482
3E	434.026	434.359	434.496	434.633	434.590	434.453

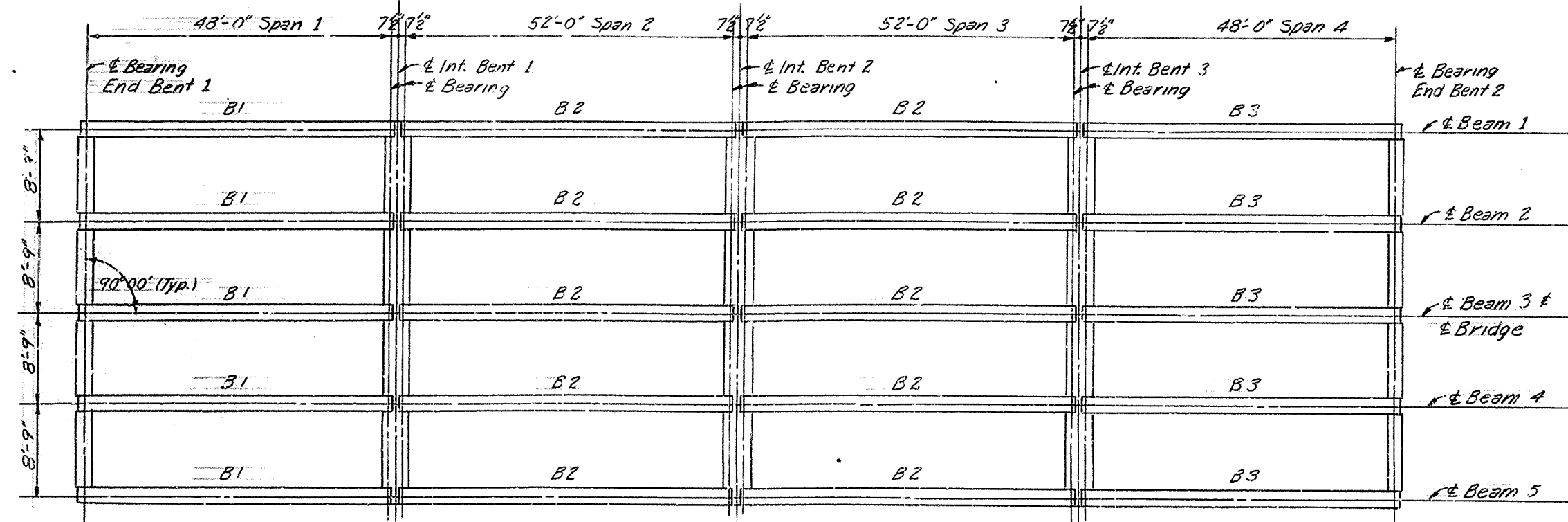
BILL OF REINFORCEMENT-ONE CAP						
Mark	Type	No.	Bar Size	Length Ft.	Length In.	Location
P1	Str.	4	#8	37	10	Bottom of Cap
P2	"	4	#6	37	10	Sides of Cap
P3	(1)	4	#8	40	1	Top of Cap
P4	(2)	36	#5	12	5	Cap Stirrups
P5	(3)	39	#4	7	5	Bridge Seats
P6	Str.	8	#4	6	9	"
P7	"	12	#4	8	6	"

ESTIMATE OF QUANTITIES
(For each Int. Bent)
Concrete, Class "A" 16.9 Cu. Yd.
Reinforcement 1823 Lb.

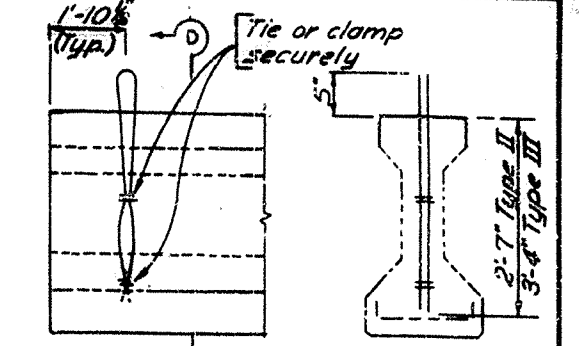
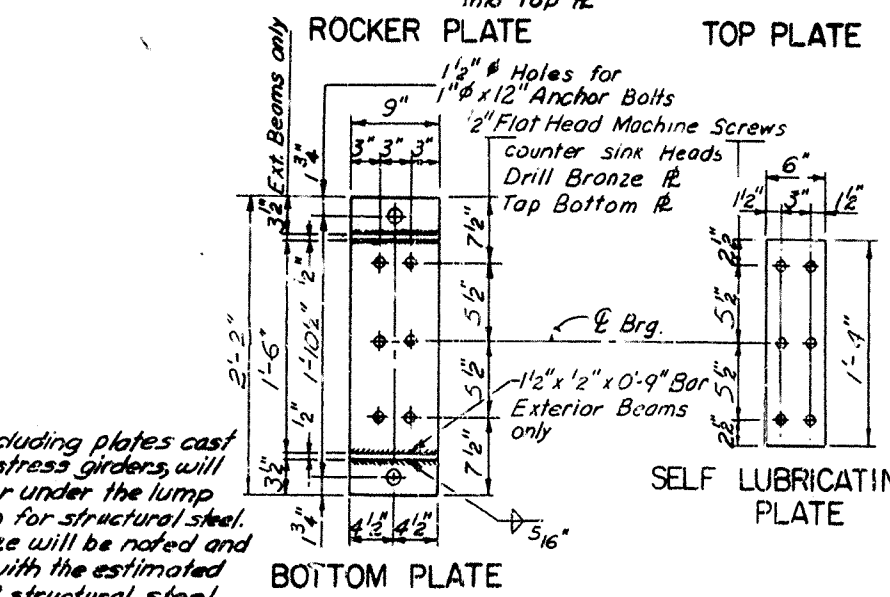
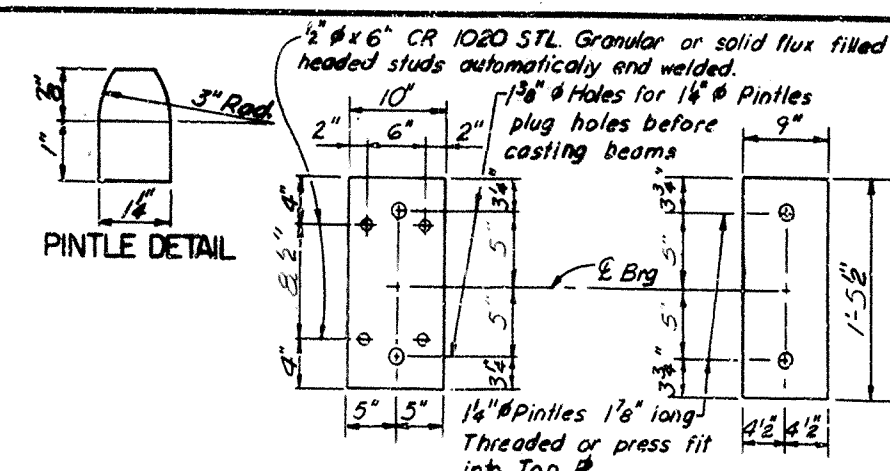
DESIGNED BY: JRO
CHECKED BY: JRO
DATE: 12/14/64
REVIEWED BY: JRO
DATE: 12/14/64
DRAWN BY: JMM
CHECKED BY: JMM
DATE: 12/14/64
TYPED BY: JMM
DATE: 12/14/64

J.P. ROVER MAYFIELD CREEK SHEET 7
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
GRAVES
JACKSON PURCHASE PARKWAY
ROAD
STATION 1236+25.75 PROJECT NO.
BRIDGE NUMBER 16527 INDEX

INTERMEDIATE BENTS



FRAMING PLAN
(Two Required)

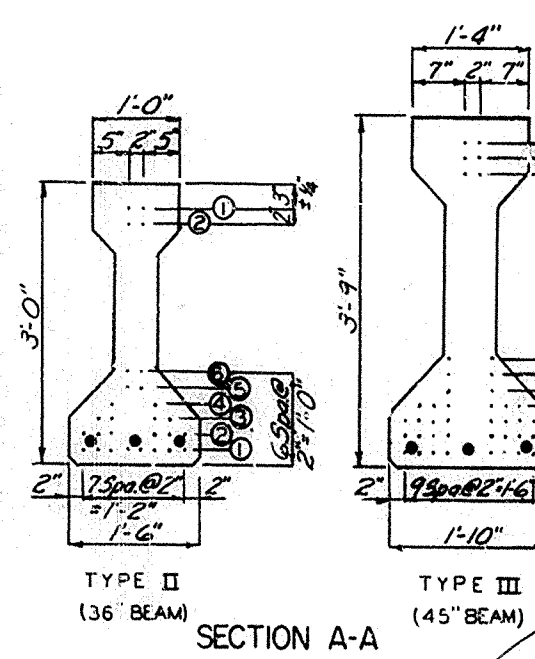


LIFTING DEVICE SECTION D-D
Note: Lifting shall be by equal loads to each pair of loops.
Other types of lifting devices may be used subject to approval by the Kentucky Department of Highways

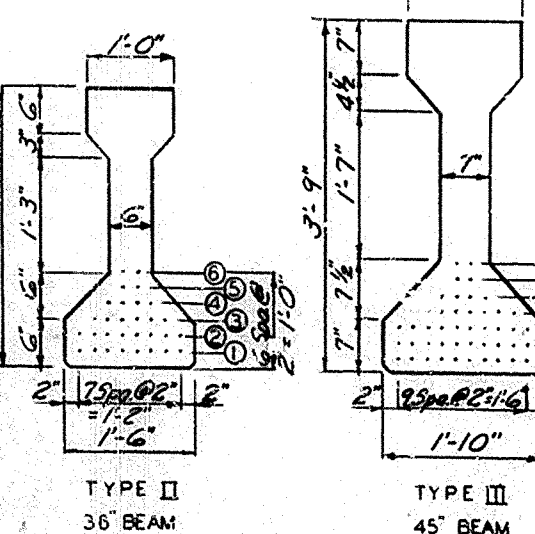
STRAND SIZE	NO. OF STRANDS	ALLOWABLE WT. OF BEAM
3/8"	2	20 Tons
1/2"	2	27 Tons
5/8"	2	36 Tons
3/4"	2	30 Tons
7/8"	2	40.5 Tons
1"	2	54 Tons

BAR	DIM.	BEAM TYPE
S1	a	3 1/2"
S1	b	3"
S1	c	9"
S1	d	2 1/2"
S1	e	7 1/2"
S2	a	3"
S2	b	1 3/4"
S2	c	5 1/2"
S2	d	3 1/2"
S2	e	3-11 1/2"
S3	a	3 1/2"
S3	b	3-2 1/2"
S3	c	8"
S3	d	3 1/2"
S3	e	3-4"

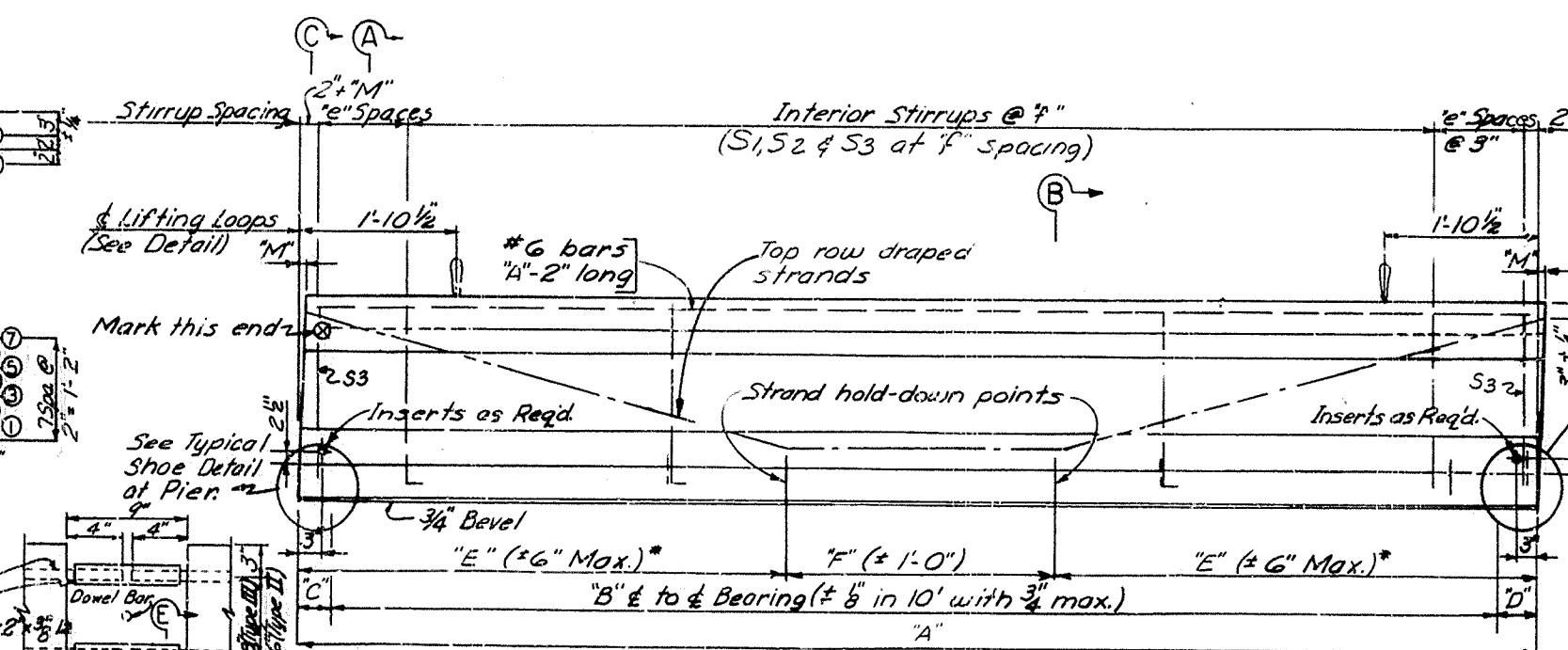
NOTE: Shoes, including plates cast in to prestress girders, will be paid for under the lump sum item for structural steel. The bronze will be noted and included with the estimated weight of structural steel.



SECTION A-A



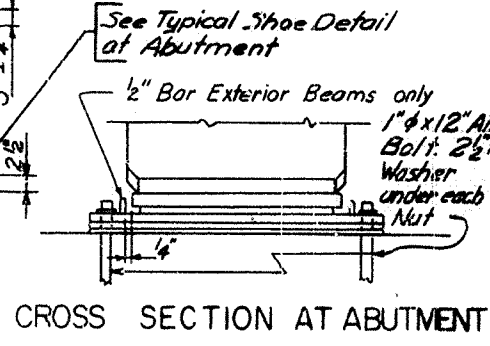
SECTION B-B
SHOWING STRAND ARRANGEMENT AT MIDSPAN



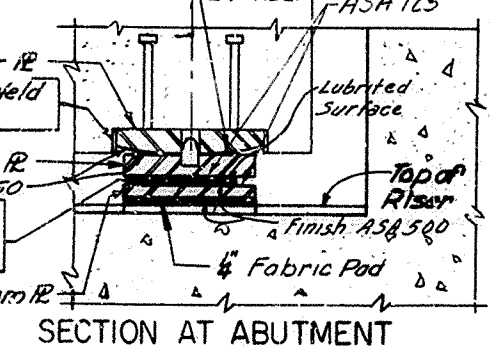
NOTE: The welding and weld material shall conform to the Recommended Practices for Welding Reinforcing Steel, American Welding Society Specifications AWS D12.1-61. No direct payment shall be made for welding or weld material, but the cost of these items shall be included in the unit price bid for the "Superstructure Concrete." ELEVATION

MARK	TYPE	NUMBER OF 1/2 0-7 WIRE STRANDS IN INDICATED ROW										TOTAL NO.	INITIAL PRESTRESS FORCE (LBS)
		MIDSPAN (SECTION B-B)					END (VIEW A-A)						
		1	2	3	4	5	6	7	8	9	10		
B1	II	8	8	2					8	6		18	25,200
B2	II	8	8	2					8	6		18	25,200
B3	II	8	8	2					8	6		18	25,200

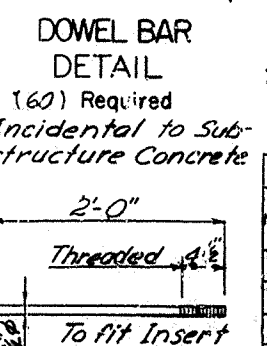
Note: Shop plans shall include a diagram of casting bed layout. Where the "pull down" method is used, the jacking force for draped strands, together with appropriate computations shall also be submitted by the fabricator. (The value of "E" used in calculating strand elongation shall be as recommended by the strand manufacturer.) Strands shall be placed symmetrically about the centerline of beam.



CROSS SECTION AT ABUTMENT



SECTION AT ABUTMENT



DOWEL BAR DETAIL

(60) Required
Incidental to Sub-structure Concrete

Threaded Anchor Bar Detail
(80) Required
Incidental to Prestressed Concrete I Beams

BEAM DIMENSIONS												
MARK	TYPE	NO. REQD	DIMENSIONS									Approx. Weight Each
			A	B	C	D	E	F	G	H	M	
B1	II	10	48'-11"	48'-0"	3"	8"	19'-5 1/2"	10'-0"	3	13"	0	18,784
B2	II	20	52'-6"	52'-0"	3"	8"	21'-0"	10'-6"	3	13"	0	20,160
B3	II	10	48'-11"	48'-0"	3"	8"	19'-5 1/2"	10'-0"	3	13"	0	18,784

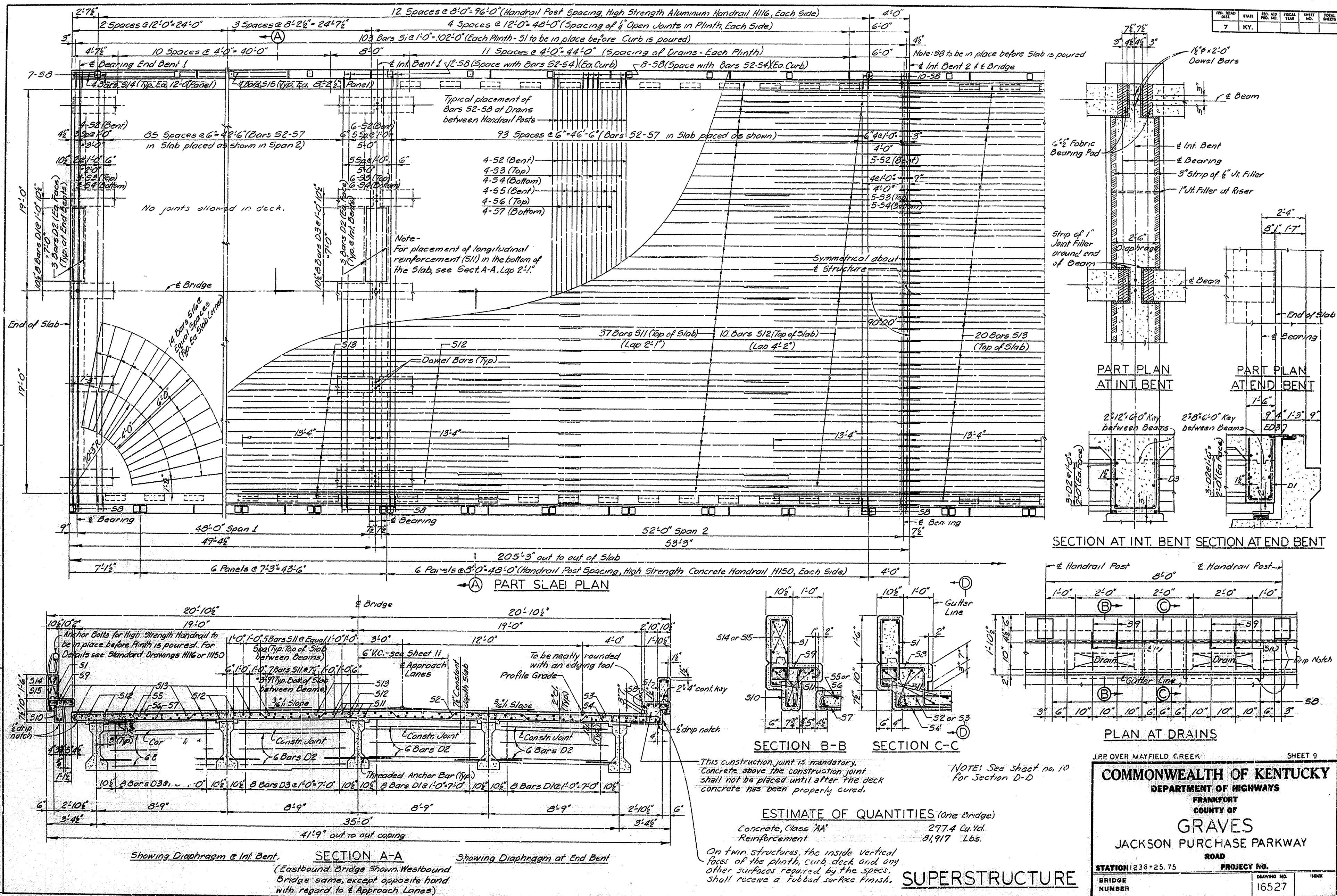
SUPERSTRUCTURE

JPP OVER MAYFIELD CREEK SHEET 8

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
GRAVES
JACKSON PURCHASE PARKWAY
ROAD

STATION 1236+25.75 PROJECT NO. 16527
BRIDGE NUMBER INDEX

11-22-1965



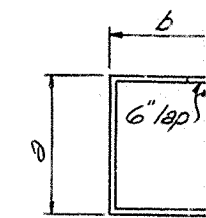
BILL OF REINFORCEMENT - ONE SUPERSTRUCTURE

Mark	Type	No.	Bar Size	Length Ft. In.	Location	a Ft. In.	b Ft. In.	c Ft. In.	d Ft. In.
S1	(1)	412	#5	5 10	Plinth	1 11	0 7 1/2		
S2	(2)	110	#5	43 0	Slab bent	4 6 1/2	0 10	0 4 1/2	40 4 1/2
S3	(3)	108	#6	42 0	" top	40 0	1 0	0 4 1/2	40 5 1/2
S4	(4)	108	#6	42 9	" bottom	1 3	40 6		
S5	(5)	96	#5	40 10	" bent @ drains	3 5 1/2	0 10	0 4 1/2	38 2 1/2
S6	(3)	96	#6	39 9	" top	37 9	1 0	0 4 1/2	38 2 1/2
S7	Str.	96	#6	38 3	" bottom @ "				
S8	(5)	436	#5	4 6	Curb				
S9	(6)	192	#5	3 0	" @ drains				
S10	(7)	192	#4	3 4	" "				
S11	Str.	582	#5	36 0	Slab longitudinal (lengths)				
S12	"	70	#10	32 10	" " (7 lengths)				
S13	"	60	#10	26 8	" " over Int. Bent				
S14	"	104	#4	11 9	Plinth				
S15	"	48	#4	7 11	"				
S16	"	56	#6	10 0	Slab Corners				

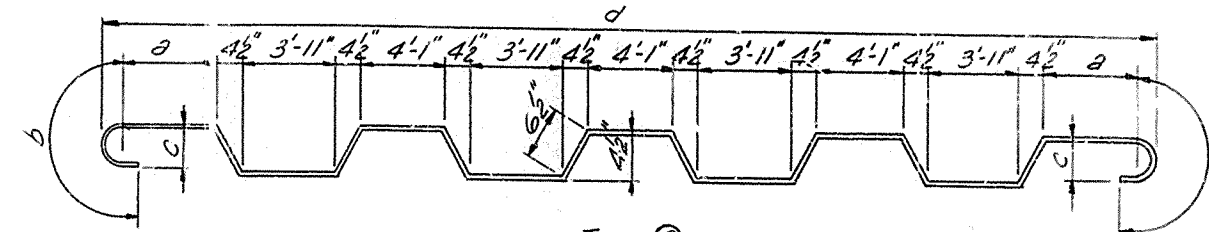
D1	(4)	64	#4	6 9	Diaphragms	2 10	1 3		
D2	Str.	120	#5	7 3	"				
D3	(4)	96	#4	8 5	"	3 2	2 3		

ONE END BENT

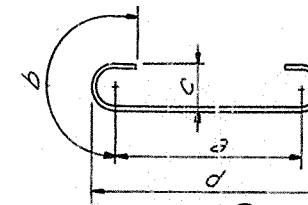
A1	Str.	12	#10	41 5	Cap				
A2	"	6	#6	41 5	"				
A3	(4)	18	#6	5 3	" @ Piles	0 6	4 6		
A4	"	18	#6	5 8	"	0 6	4 10 1/2		
A5	(5)	6	#6	20 1	Cap	4 1	5 7 1/2		
A6	"	32	#5	19 5	"	3 9	5 3 1/2		
A7	(4)	27	#5	7 6	Cap Steps	2 0	3 8		
A8	Str.	5	#5	9 9	"				
A9	"	10	#5	10 9	"				
A10	"	5	#5	8 5	"				
A11	(5)	38	#7	8 1	Parapet	7 0	1 3		
A12	(10)	38	#6	11 0	"	8 0	1 0 2 6		
A13	Str.	12	#5	41 5	"				
A14	(10)	38	#4	4 4	Appr. Slab Support				
A15	(4)	8	#9	18 3	Parapet	8 6	2 0		
A16	"	6	#8	16 4	"	7 6	1 6 1/2		
A17	"	6	#6	17 5	Wings	8 6	0 7 1/2		
A18	"	12	#6	7 5	"	3 6	0 7 1/2		
A19	Str.	20	#6	4 9	"				
A20	"	12	#6	10 9	"				
A21	(10)	6	#10	11 0	"				
A22	(9)	2	#10	12 6	"	3 0	9 8		
A23	"	6	#10	13 7	"	3 0	10 9		
A24	Str.	2	#8	9 8	"				
A25	(13)	2	#5	7 2	"	1 12	1 3		
A26	"	2	#5	7 4	"	1 24	1 5 1/2		
A27	"	2	#5	7 7	"	1 3	1 6		
A28	"	2	#5	7 9	"	1 3 1/2	1 7		
A29	"	2	#5	7 10	"	1 4 1/2	1 7 1/2		
A30	"	2	#5	8 0	"	1 5 1/2	1 8		
A31	"	2	#5	8 1	"	1 6	1 9		
A32	"	2	#5	8 3	"	1 7	1 10		
A33	Str.	8	#5	9 9	"				
A34	(2)	20	#6	8 0	"	3 9	0 7 1/2		



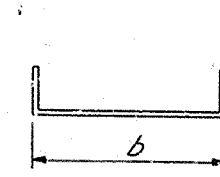
Type (1)



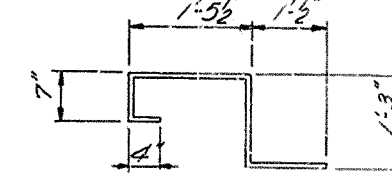
Type (2)



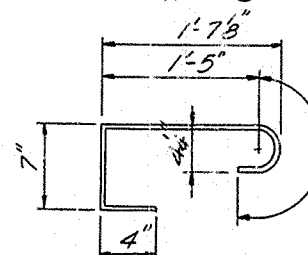
Type (3)



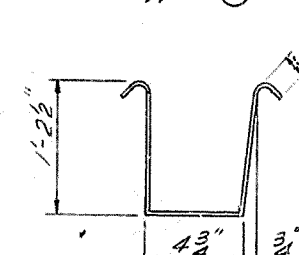
Type (4)



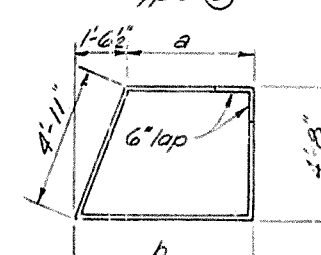
Type (5)



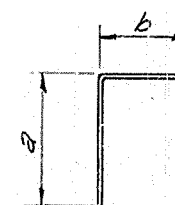
Type (6)



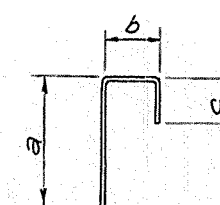
Type (7)



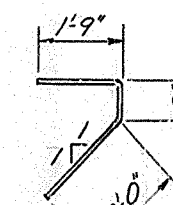
Type (8)



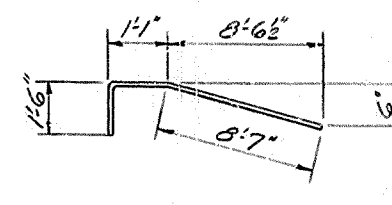
Type (9)



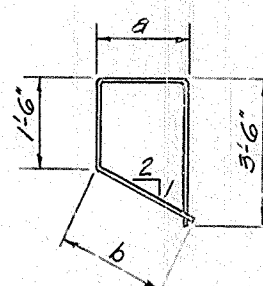
Type (10)



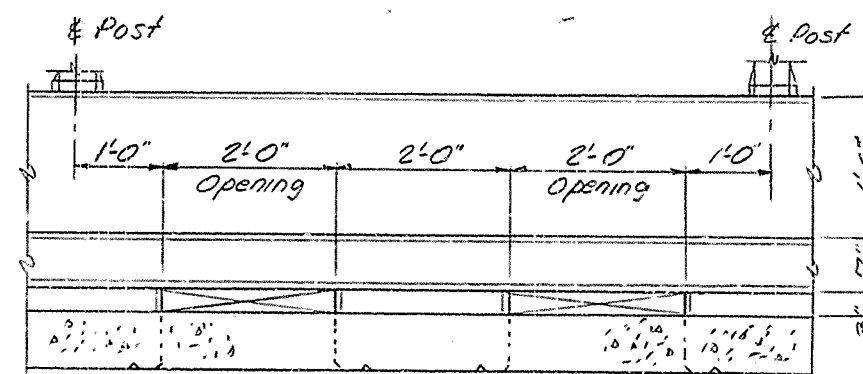
Type (11)



Type (12)



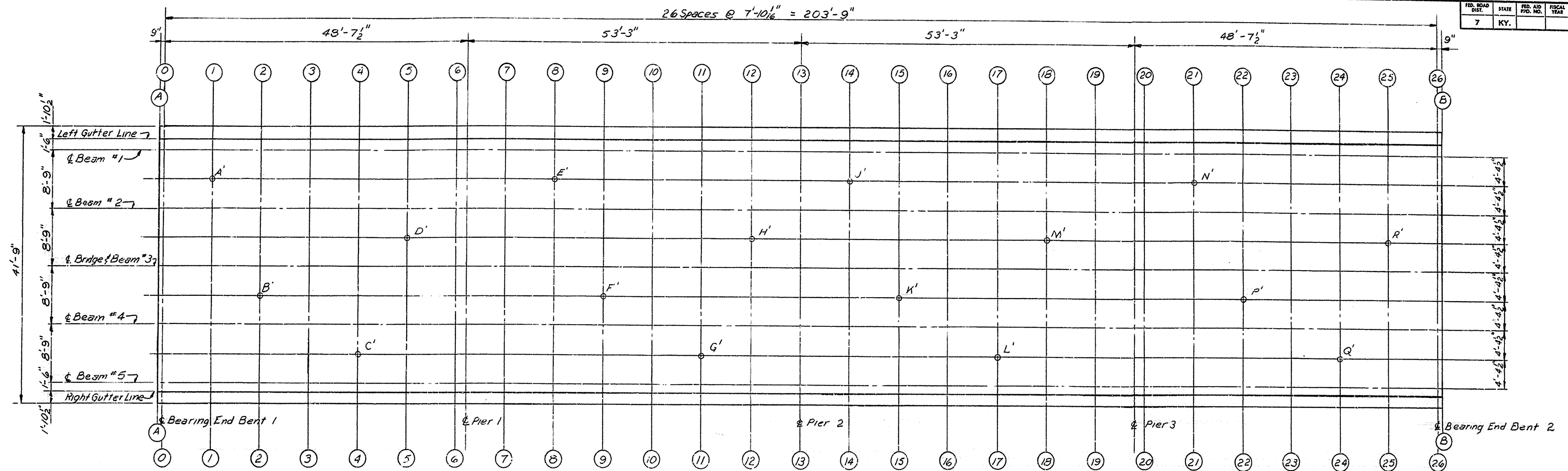
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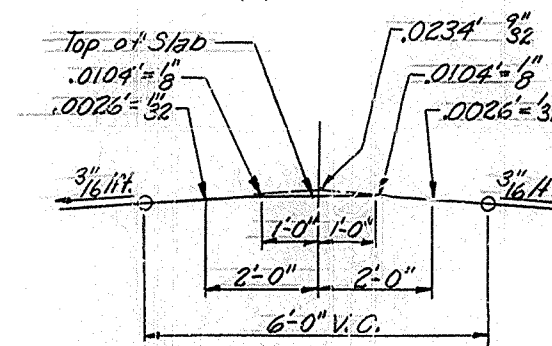
SECTION D-D

END BENTS AND
SUPERSTRUCTURE

J.P.P. OVER MAYFIELD CREEK		SHEET 10	
COMMONWEALTH OF KENTUCKY			
DEPARTMENT OF HIGHWAYS			
FRANKFORT			
COUNTY OF			
GRAVES			
JACKSON PURCHASE PARKWAY			
ROAD			
STATION 1236+25.75		PROJECT NO.	
BRIDGE NUMBER		DRAWING NO. 16527	
		INDEX	



PLAN



PARABOLIC CROWN

ELEVATIONS

J.P.P. OVER MAYFIELD CREEK		SHEET 11	
COMMONWEALTH OF KENTUCKY			
DEPARTMENT OF HIGHWAYS			
FRANKFORT			
COUNTY OF			
GRAVES			
JACKSON PURCHASE PARKWAY			
ROAD			
STATION 1236+25.75		PROJECT NO.	
BRIDGE NUMBER		DRAWING NO.	INDEX
		16527	

TABLE OF ELEVATIONS - W.B.L.*

	A-A	0-0	1-1	2-2	3-3	4-4	5-5	6-6	7-7	8-8	9-9	10-10	11-11	12-12	13-13	14-14	15-15	16-16	17-17	18-18	19-19	20-20	21-21	22-22	23-23	24-24	25-25	26-26	B-B
Left Gutter Line	438.031	438.032	438.073	438.101	438.117	438.119	438.111	438.086	438.111	438.148	438.167	438.171	438.161	438.136	438.095	438.134	438.156	438.164	438.157	438.136	438.097	438.070	438.093	438.099	438.094	438.076	438.045	438.003	438.002
E Beam #1		.052	.096	.124	.140	.142	.134	.109	.134	.171	.190	.194	.184	.159	.118	.157	.179	.167	.180	.159	.120	.093	.116	.122	.117	.099	.068	.026	
E Beam #2		.192	.233	.261	.277	.279	.271	.246	.271	.308	.327	.331	.321	.296	.255	.294	.316	.324	.317	.296	.257	.230	.253	.259	.254	.236	.205	.163	
E Bridge & Beam #3		.328	.369	.397	.413	.415	.407	.382	.407	.444	.463	.467	.457	.432	.391	.430	.452	.460	.453	.432	.393	.366	.389	.395	.390	.372	.341	.299	
E Beam #4		.286	.327	.355	.371	.373	.365	.340	.365	.402	.421	.425	.415	.390	.349	.388	.410	.418	.411	.390	.350	.324	.347	.353	.348	.330	.299	.257	
E Beam #5		.149	.190	.218	.234	.236	.228	.203	.228	.265	.284	.288	.278	.253	.212	.251	.273	.281	.274	.253	.213	.187	.210	.216	.211	.193	.162	.120	
Right Gutter Line	.124	.125	.166	.194	.210	.212	.204	.179	.204	.241	.260	.264	.254	.229	.188	.227	.249	.257	.250	.229	.190	.163	.187	.210	.216	.211	.193	.162	.120
E Approach Lane	.351	.352	.393	.421	.437	.439	.431	.406	.431	.468	.487	.491	.481	.456	.415	.454	.476	.484	.477	.456	.417	.390	.413	.419	.414	.396	.365	.323	.322

TABLE OF ELEVATIONS - E.B.L.*

	A-A	0-0	1-1	2-2	3-3	4-4	5-5	6-6	7-7	8-8	9-9	10-10	11-11	12-12	13-13	14-14	15-15	16-16	17-17	18-18	19-19	20-20	21-21	22-22	23-23	24-24	25-25	26-26	B-B
Left Gutter Line	438.124	438.125	438.166	438.194	438.210	438.212	438.204	438.179	438.204	438.241	438.260	438.264	438.254	438.229	438.188	438.227	438.249	438.257	438.250	438.229	438.190	438.163	438.186	438.192	438.187	438.169	438.138	438.096	438.094
E Beam #1		.149	.190	.218	.234	.236	.228	.203	.228	.265	.284	.288	.278	.253	.212	.251	.273	.281	.274	.253	.213	.187	.210	.216	.211	.193	.162	.120	
E Beam #2		.286	.327	.355	.371	.373	.365	.340	.365	.402	.421	.425	.415	.390	.349	.388	.410	.418	.411	.390	.350	.324	.347	.353	.348	.330	.299	.257	
E Bridge & Beam #3		.328	.369	.397	.413	.415	.407	.382	.407	.444	.463	.467	.457	.432	.391	.430	.452	.460	.453	.432	.393	.366	.389	.395	.390	.372	.341	.299	
E Beam #4		.192	.233	.261	.277	.279	.271	.246	.271	.308	.327	.331	.321	.296	.255	.294	.316	.324	.317	.296	.257	.230	.253	.259	.254	.236	.205	.163	
E Beam #5		.055	.096	.124	.140	.142	.134	.109	.134	.171	.190	.194	.184	.159	.118	.157	.179	.167	.180	.159	.120	.093	.116	.122	.117	.099	.068	.026	
Right Gutter Line	.031	.032	.073	.101	.117	.119	.111	.086	.111	.148	.167	.171	.161	.136	.095	.134	.156	.164	.157	.136	.097	.070	.093	.099	.094	.076	.045	.003	.002
E Approach Lane	.351	.352	.393	.421	.437	.439	.431	.406	.431	.468	.487	.491	.481	.456	.415	.454	.476	.484	.477	.456	.417	.390	.413	.419	.414	.396	.365	.323	.322

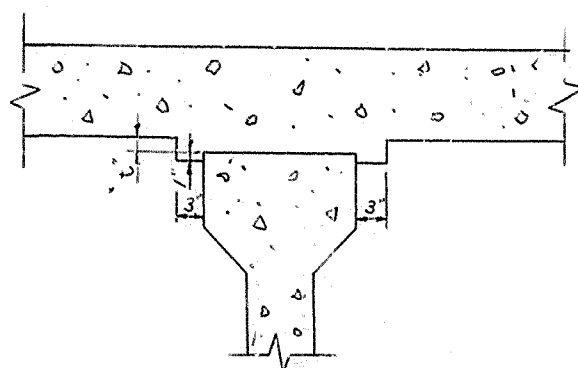
* All elevations are "Top of slab Elevation Adjusted for Dead Load Deflection."

	WESTBOUND LANE								EASTBOUND LANE							
	SPAN 1		SPAN 2		SPAN 3		SPAN 4		SPAN 1		SPAN 2		SPAN 3		SPAN 4	
	Top of Beam Elev.	Top of Beam Elev.	Top of Beam Elev.	Top of Beam Elev.	Top of Beam Elev.	Top of Beam Elev.	Top of Beam Elev.	Top of Beam Elev.	Top of Beam Elev.	Top of Beam Elev.	Top of Beam Elev.	Top of Beam Elev.	Top of Beam Elev.	Top of Beam Elev.	Top of Beam Elev.	Top of Beam Elev.
E Beam #1	374.45	375.61	374.95	374.95	375.37	374.35	374.33	375.47	374.93	374.93	375.13	373.77	375.41	376.53	376.11	376.11
E Beam #2	375.69	376.81	376.01	376.01	376.97	375.59	375.59	377.11	376.01	376.01	376.61	375.49	377.41	378.31	377.65	377.65
E Beam #3	376.59	377.87	377.63	377.63	378.19	376.93	376.93	378.15	377.43	377.43	377.71	376.43	377.29	378.39	377.87	377.87
E Beam #4	376.43	377.87	376.93	376.93	377.69	376.69	376.69	378.13	377.13	377.13	377.51	375.92	376.21	377.11	376.51	376.51
E Beam #5	374.71	376.09	375.83	375.83	376.87	375.51	375.51	376.87	375.63	375.63	375.91	374.22	374.53	375.69	375.23	375.23

NOTE: Eastbound lane only; All slab elevations were raised .045 (forty-five thousandths) due to excess camber in beams.

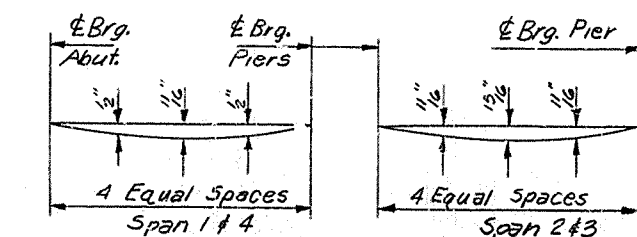
TABLE OF ELEV FOR CONTROL OF SLAB THICKNESS-W.B.L.				TABLE OF ELEV FOR CONTROL OF SLAB THICKNESS-E.B.L.			
Point	Plan Elev. Top of Slab	Field Elev. Top of Form	Computed Slab Thick.	Point	Plan Elev. Top of Slab	Field Elev. Top of Form	Computed Slab Thick.
A	438.165	37.535	.630	A'	438.259	37.657	.647
B	.416	37.774	.642	B'	.329	37.744	.635
C	.305	37.684	.621	C'	.211	37.617	.639
D	.339	37.707	.632	D'	.426	37.837	.634
E	.240	37.629	.621	E'	.297	37.727	.615
F	.402	37.838	.644	F'	.395	37.797	.643
G	.266	37.629	.637	G'	.253	37.659	.639
H	.364	37.719	.645	H'	.451	37.869	.627
J	.226	37.589	.637	J'	.320	37.725	.640
K	.471	37.827	.644	K'	.384	37.779	.632
L	.342	37.706	.636	L'	.249	37.657	.637
M	.364	37.732	.632	M'	.451	37.852	.644
N	.185	37.544	.641	N'	.279	37.678	.645
P	.414	37.786	.628	P'	.327	37.728	.644
Q	.262	37.644	.618	Q'	.168	37.572	.641
R	.273	37.653	.620	R'	.360	37.767	.638

NOTE: The Engineer shall obtain the Field Elevation at the check points indicated on the plan and enter the data in the proper column in this table. If the computed slab thickness varies from the design slab thickness by more than 4 inch, the slab form shall be adjusted to provide a slab within the 4 inch tolerance specified. A copy of this sheet showing the final datum elevation shall be sent to the Director, Division of Bridges.



STANDARD FILLET DETAIL

NOTE: To determine "c": After all precast pre-stressed beams have been erected, elevations of the top flanges of the beams shall be taken at ends and middle. These elevations subtracted algebraically from "Top of Slab Elevation Adjusted for Dead Load Deflections," minus slab thickness, equals to Fillet Height "c". A positive value of "c" equals to Fillet Height above the top of the beam. A negative value of "c," not to exceed 2, equals to embedment of the beam above the theoretical bottom of slab elevation.

DEAD LOAD DEFLECTION DIAGRAM
(Includes weight of concrete slab only)

NOTE: The above deflections are not to be used in the field if the engineer is working from the grade elevation adjusted for dead load deflection as shown above.

ELEVATIONS

J. P. R. OVER MAYFIELD CREEK		SHEET 12	
COMMONWEALTH OF KENTUCKY			
DEPARTMENT OF HIGHWAYS			
FRANKFORT			
COUNTY OF			
GRAVES			
JACKSON PURCHASE PARKWAY			
ROAD			
STATION 1236+25.75		PROJECT NO.	
BRIDGE NUMBER	16527	DRAWING NO.	INDEX