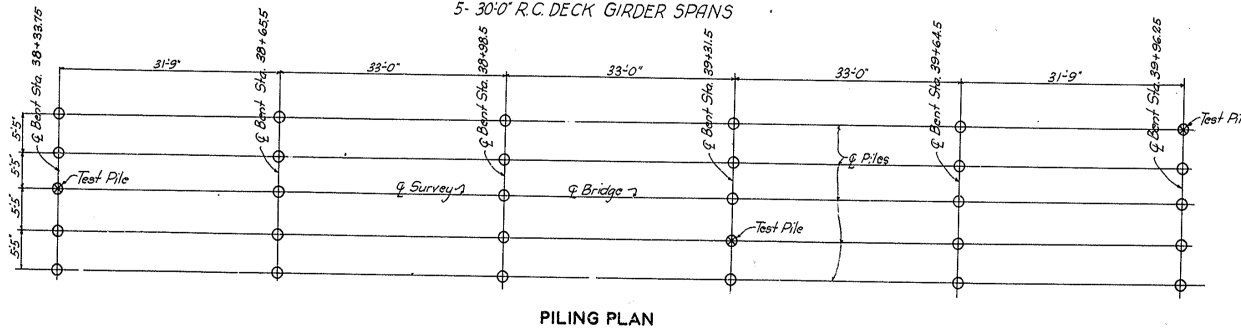
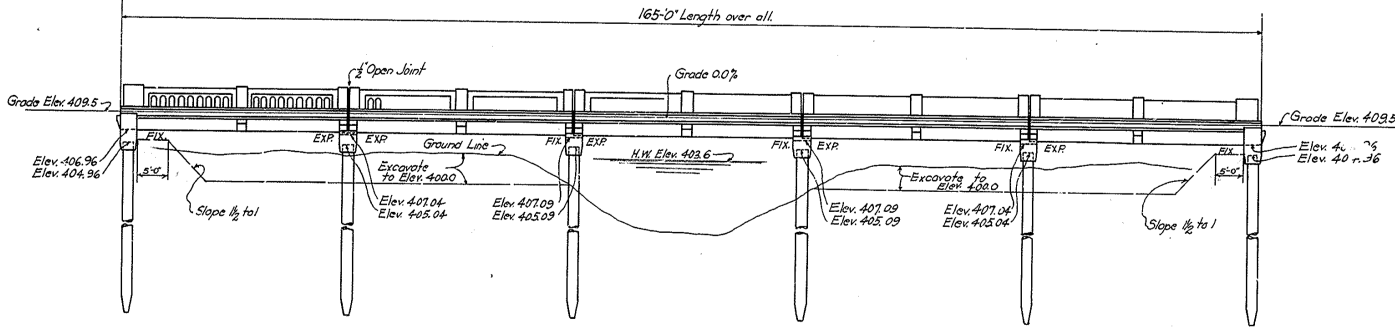
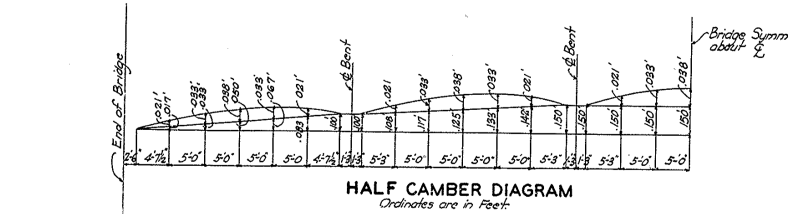


**REFERENCES:** For details of 18" R.C. Piles, see Standard Drawing P-1  
 For details of Caps for Piles, see Standard Drawing A-116  
 For details of 30'-0" R.C. Deck Girder Spans, see Standard Drawing G-228  
 For details of Drains, see Standard Drawing G-200  
 For details of Handrail, see Standard Drawing H-12

**GENERAL NOTE**

**SPECIFICATIONS:** State Highway Department, Kentucky, 1932 Standard with subsequent adopted amendments.  
**CONCRETE:** Class A concrete to be used thruout except in Handrail, Handrail Posts, and Piles. Class D concrete to be used in Handrail, Handrail Posts, and Piles.  
**STEEL REINFORCEMENT:** To be deformed bars. Dimensions shown from face of concrete are clear distances. Dimensions shown for bar spacing are the distances center to center of bars. All reinforcement shall be sparcely held in correct position by means of precast mortar or concrete blocks and wired at all intersections. Precast mortar or concrete blocks supporting reinforcement shall be spaced not farther apart than 50 diameters of the supported bar.  
**PILING:** To be driven to refusal or to sustain a load of 50 tons per pile. One concrete test pile to determine length of piling required shall be driven at points shown. Test piles shall be accurately located so as to be used as bearing piles in the finished structure.  
**PLACING FILL:** Fill around and bents shall be placed in horizontal layers to approximately the same elevation at the same time. The part of the fill at the front and the sides of the end bents shall be placed to full slope lines, and this shall be done by hand work if conditions require such methods. Dumping of entire fill behind end bents without working to front and sides to required slopes will not be allowed.

Plan Sheet	Sheet	Plan Sheet	Plan Sheet	Sheet	Sheet
7	KV.				



**ESTIMATE OF QUANTITIES**

Reinforcement 10120 Lbs.  
 Concrete Class A 267.9 Cu.Yds.  
 Concrete Class D 19.0 Cu.Yds.  
 30'-18" Precast Piles 1050'-Lin.Ft.  
 Excavation- Channel Change See Road Plans

P-1  
 A-116  
 G-228  
 G-200  
 H-12

**COMMONWEALTH OF KENTUCKY**  
 STATE HIGHWAY DEPARTMENT  
 FRANKFORT  
 COUNTY OF  
**MUHLENBERG**  
 CENTRAL CITY - MADISONVILLE

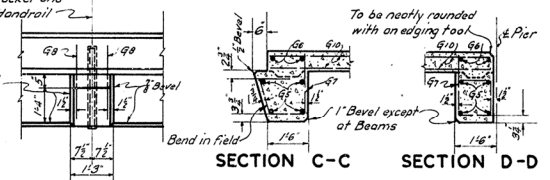
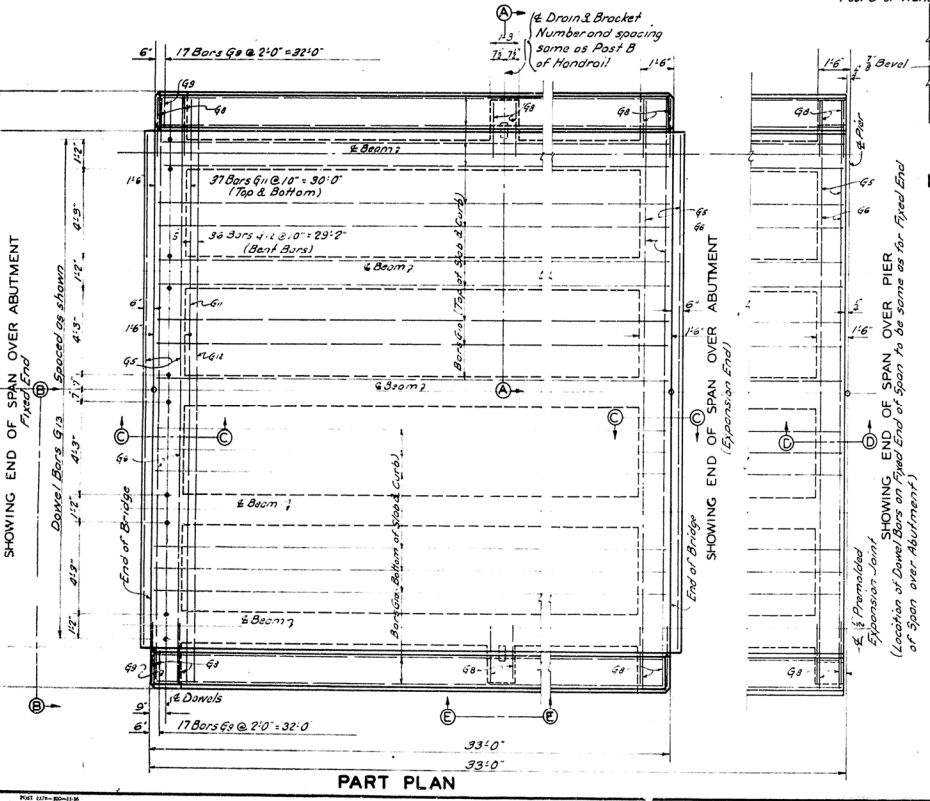
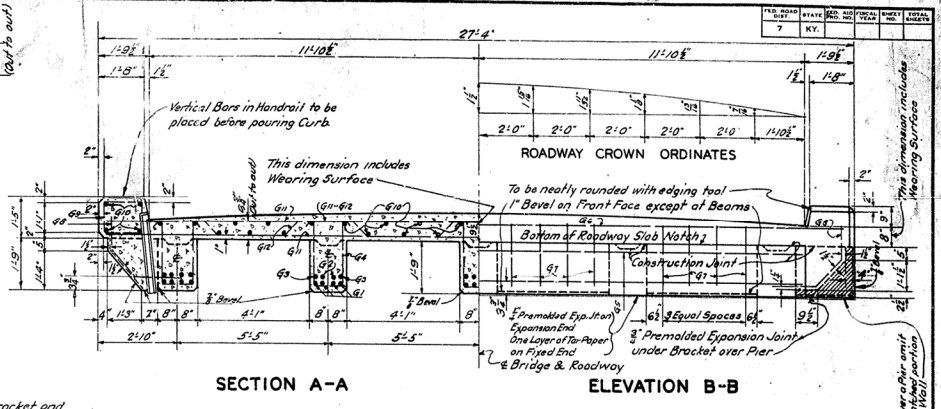
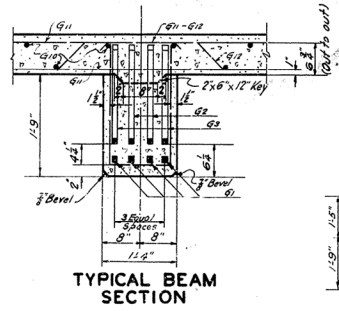
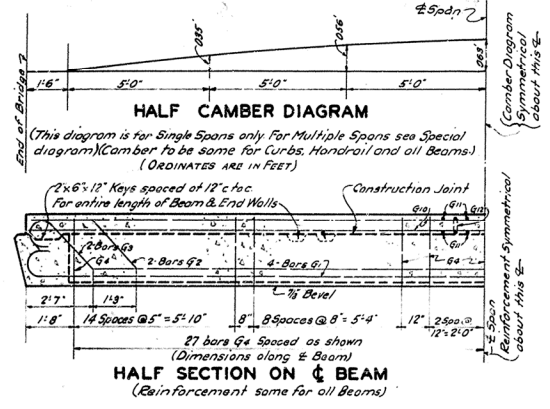
ROAD PROJECT NO.  
 STATION 39+15  
 89-223-1

DATE  
 5/23/52

**BRIDGE**

DATE: 5/23/52  
 DRAWN BY: [Signature]  
 CHECKED BY: [Signature]  
 APPROVED BY: [Signature]  
 DIVISION: F.C.M.

FIG. NO.	DATE	BY	CHKD.	APP'D.	SHEET NO.	TOTAL SHEETS
7	KY					



NOTE: Quantities are estimated for One Intermediate Bracket on each side of Span.

ESTIMATE OF QUANTITIES			
SPAN	SINGLE	INTERMEDIATE	END
Concrete, Loss A	470 Cu. Yds.	45.9 Cu. Yds.	46.3 Cu. Yds.
Reinforcement	12,600 Lbs.	12,600 Lbs.	12,600 Lbs.

**GENERAL NOTE**

**SPECIFICATIONS:** State Highway Department, Kentucky (1532 Standard with subsequent adopted amendments).

**CONCRETE:** Class A concrete to be used thruout.

**STEEL REINFORCEMENT:** To be deformed bars. Dimension shown from the face of concrete is the clear distance. Dimension shown for bar spacing is the distance center to center of bars. All reinforcement shall be securely held in correct position by means of precast mortar or concrete blocks and wired at intersections. Precast mortar or concrete blocks supporting reinforcement shall be spaced not farther apart than 30 diameters of the supported bar.

**WEARING SURFACE:** To be 3" Monolithic concrete, placed and finished in accordance with the requirements of same.

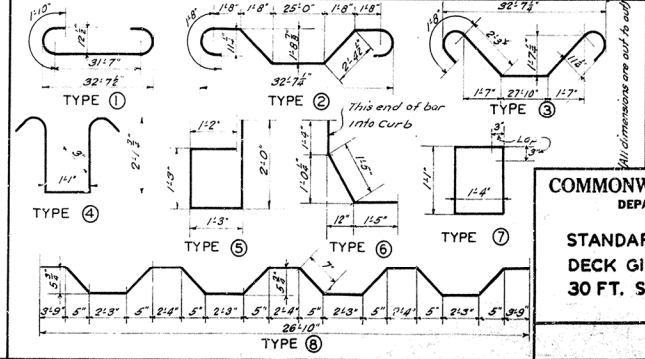
**BEVELED CORNERS:** All exposed corners to be beveled with 3/8" triangular molding unless otherwise shown.

**PREMOLDED EXPANSION JOINT MATERIAL:** To be of Asphaltic or Tar composition of approved quality. Cost of furnishing and placing to be included in price bid for concrete.

**CAST IRON DRAINS:** For details of drains see Standard Drawing G-200

**BILL AND TYPES OF REINFORCEMENT**

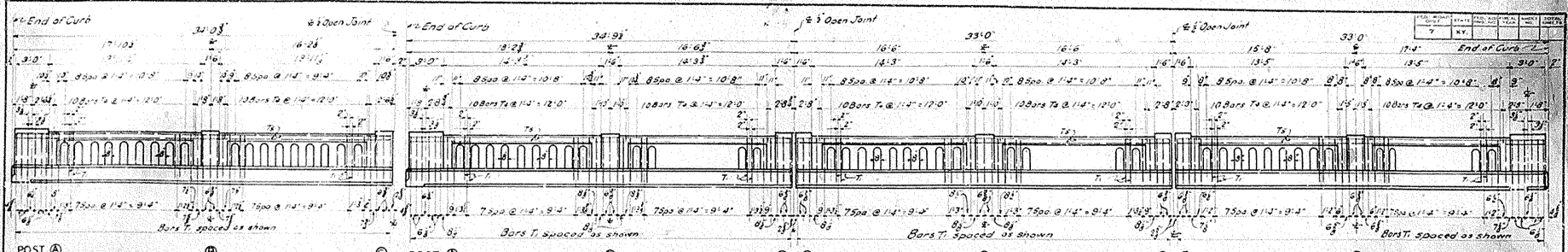
MARK	TYPE	NO.	SIZE	LOCATION	LOCATION
				FR	IN
G1	⊙	20	1 1/2"	G3	3
G2	⊙	10	1 1/2"	G8	7
G3	⊙	10	"	G5	6
G4	⊙	265	1/2"	G4	9
G5	⊙	8	1/2"	G23	5
G6	⊙	4	1/2"	G27	0
G7	⊙	32	1/2"	G5	5
G8	⊙	12	1/2"	G4	1
G9	⊙	34	"	G5	0
G10	⊙	38	"	G8	8
G11	⊙	74	1/2"	G26	10
G12	⊙	36	"	G27	6
G13	⊙	10	1/2"	G2	0



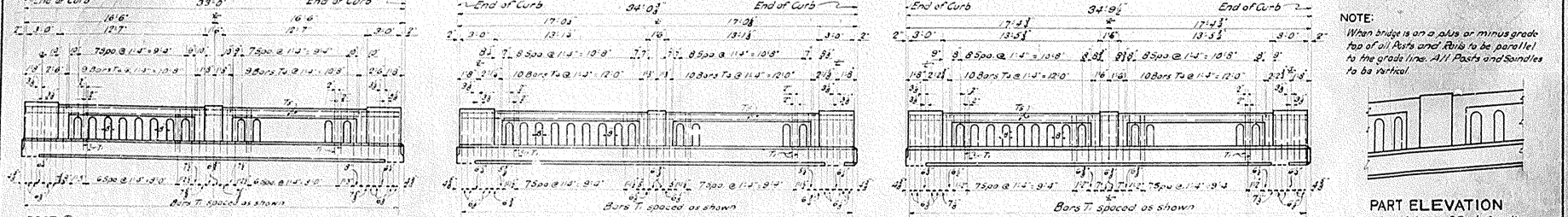
**COMMONWEALTH OF KENTUCKY**  
DEPARTMENT OF HIGHWAYS

**STANDARD CONCRETE BRIDGE**  
DECK GIRDER STRAIGHT  
30 FT. SPAN 24 FT. ROADWAY

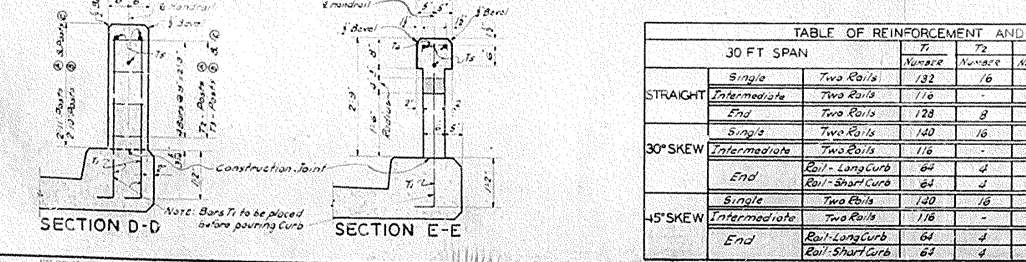
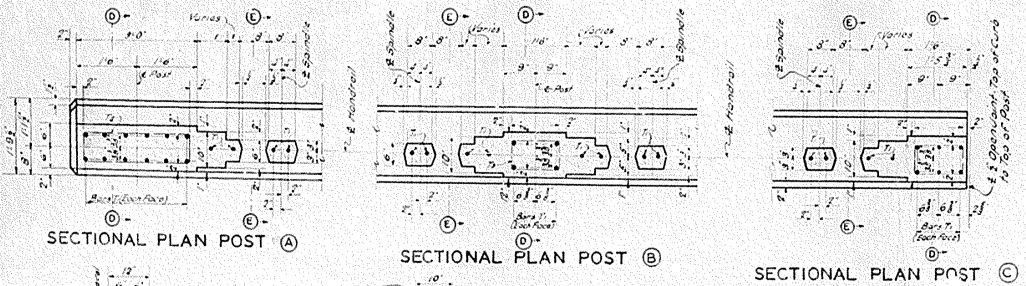
DELIVERED BY  
N. G-228



RAIL-END SPAN - LONG CURB - 30° SKEW      RAIL-END SPAN - LONG CURB - 45° SKEW      RAIL-INTERMEDIATE SPAN STRAIGHT - 30° OR 45° SKEW      RAIL-END SPAN - STRAIGHT OR SHORT CURB - 30° OR 45° SKEW



RAIL-SINGLE SPAN - STRAIGHT      RAIL-SINGLE SPAN - 30° SKEW      RAIL-SINGLE SPAN - 45° SKEW



BILL AND TYPES OF REINFORCEMENT							
Item	Type	No.	Size	Location	FF. IN.	a	
T1	(1)	50	4	2	Curb into Posts & Boundaries	-	-
T2	(2)	10	6	10	Posts (A)	2	0
T3	(3)	3	10		(B) (C)	1	2
T4	(4)	50	0	11	Top of Rail	-	-
T5	(5)	50	0	11	Rail	-	-

ALL DIMENSIONS ARE OUT TO OUT

**GENERAL NOTE**

Specifications - State Highway Department, Kentucky Standard with subsequent adopted amendments

Concrete - Class D concrete to be used in Handrail & Posts

Steel Reinforcement - To be deformed bars. Dimensions shown from the face of concrete are the clear distances. Dimensions shown for bar spacing are the distances center to center of bars.

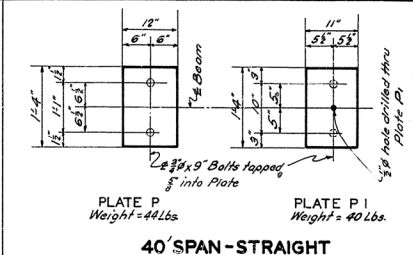
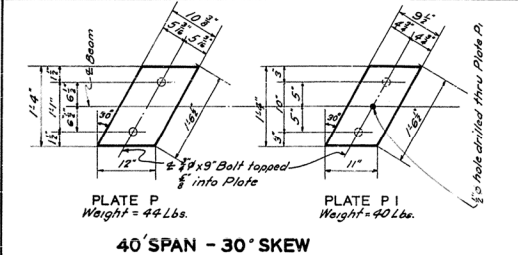
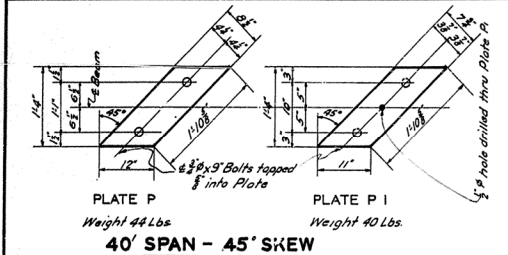
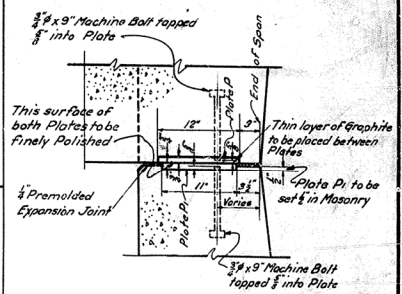
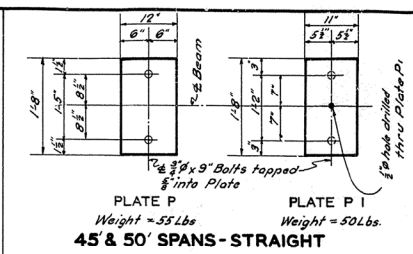
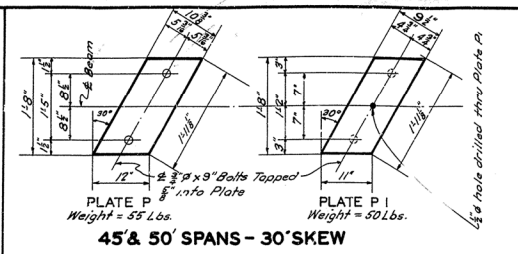
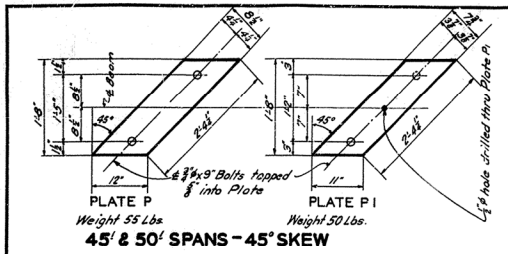
All reinforcement shall be securely held in correct position by means of precast mortar or concrete blocks and wired at intersections. Precast mortar or concrete blocks supporting reinforcement shall be spaced not farther apart than 50 diameters of the supported bar.

Bevels - All corners of Handrail to be beveled 5' unless otherwise noted herein.

TABLE OF REINFORCEMENT AND ESTIMATED QUANTITIES								
30 FT SPAN		T1	T2	T3	T4	T5	Concrete Class D	Reinforcement-Lbs
		Number	Number	Number	Number	Number	cu Yds	
STRAIGHT	Single Two Rails	132	16	8	36	6	32.4	41
	End	64	4	8	20	3	32.6	39
30° SKEW	Intermediate Two Rails	116	-	24	40	6	32.7	38
	End Rail-LongCurb Rail-ShortCurb	64	4	8	20	3	32.6	39
45° SKEW	Single Two Rails	120	16	8	40	6	34.1	42
	End Rail-LongCurb Rail-ShortCurb	64	4	8	20	3	34.3	40

COMMONWEALTH OF KENTUCKY  
DEPARTMENT OF HIGHWAYS  
**STANDARD HANDRAIL FOR DECK-GIRDERS 30 FT. SPANS**

FIG. NO.	DATE	REV.	BY	APP'D.	SCALE	PROJECT	POSTED
7	KY.						

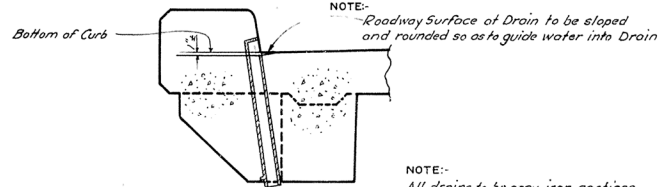
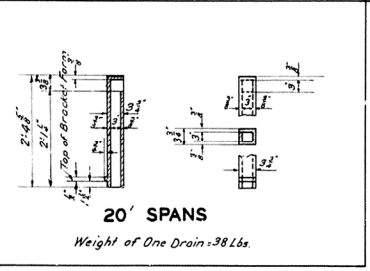
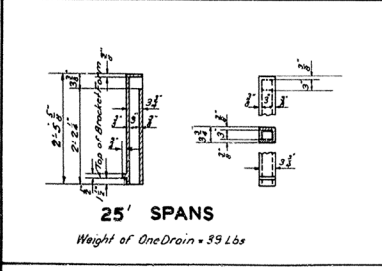
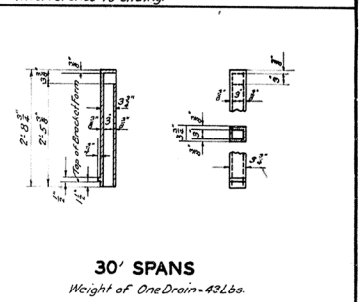
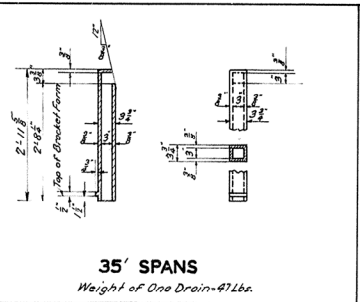
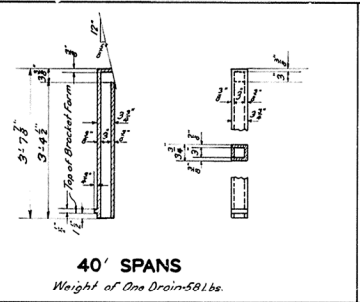
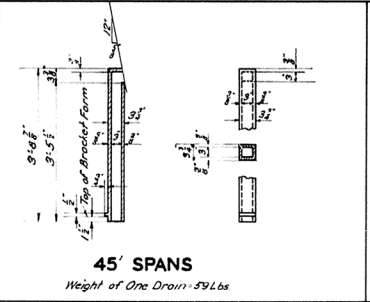
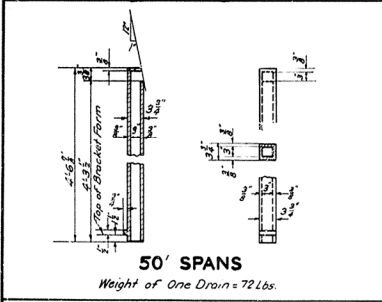


**NOTE**

All Plates to be Class B Bronze A.S.T.M Specifications B22-21 with sliding surface finely polished. 2 3/8 Machine Bolts to be furnished for each Plate. Weight of Bolts not included in weight of Plates. Cost of Bolts to be included in price bid for Plates. Plates shall be true to dimensions and sliding surfaces shall be even and flat to give full bearing with no interference to sliding.

**DETAILS OF EXPANSION PLATES**

(DETAILS SHOWN ARE FOR RIGHT SKEW REVERSE-FOR LEFT SKEW - FOR NUMBER OF PLATES REQUIRED SEE DECK GIRDER DETAILS)



**NOTE:-**  
Roadway Surface of Drain to be sloped and rounded so as to guide water into Drain

**NOTE:-**  
All drains to be gray iron castings. A.S.T.M. Specifications A-48-35 T except that tensile and transverse tests are not required. Form T521. Report of Field Inspection of Castings is to be submitted to the Laboratory.

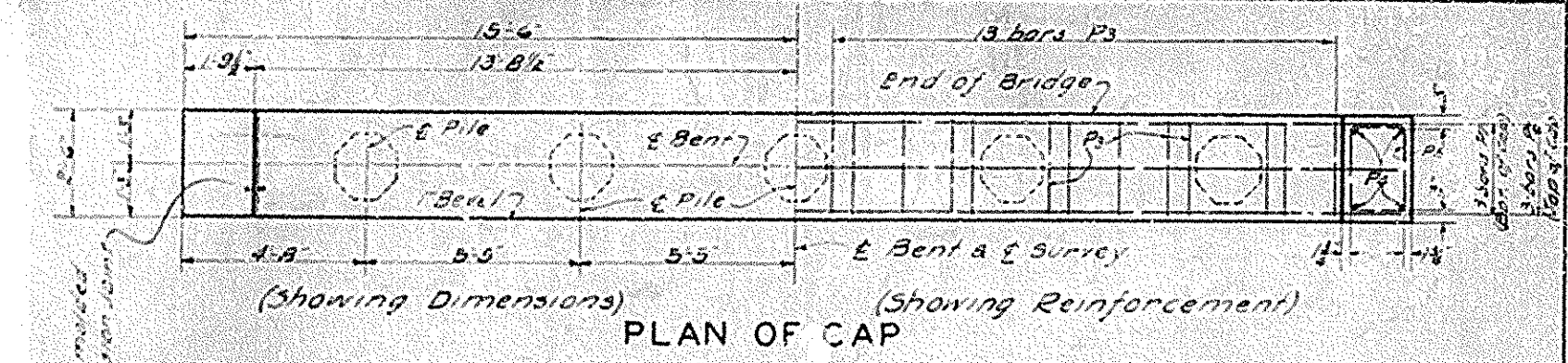
**GENERAL NOTE**  
SPECIFICATIONS: STATE HIGHWAY DEPARTMENT KENTUCKY, (932 STANDARD WITH SUBSEQUENT AMENDMENTS)

**COMMONWEALTH OF KENTUCKY**  
DEPARTMENT OF HIGHWAYS  
**STANDARD EXPANSION PLATES AND CAST IRON DRAINS FOR DECK GIRDES — 24' ROADWAY**

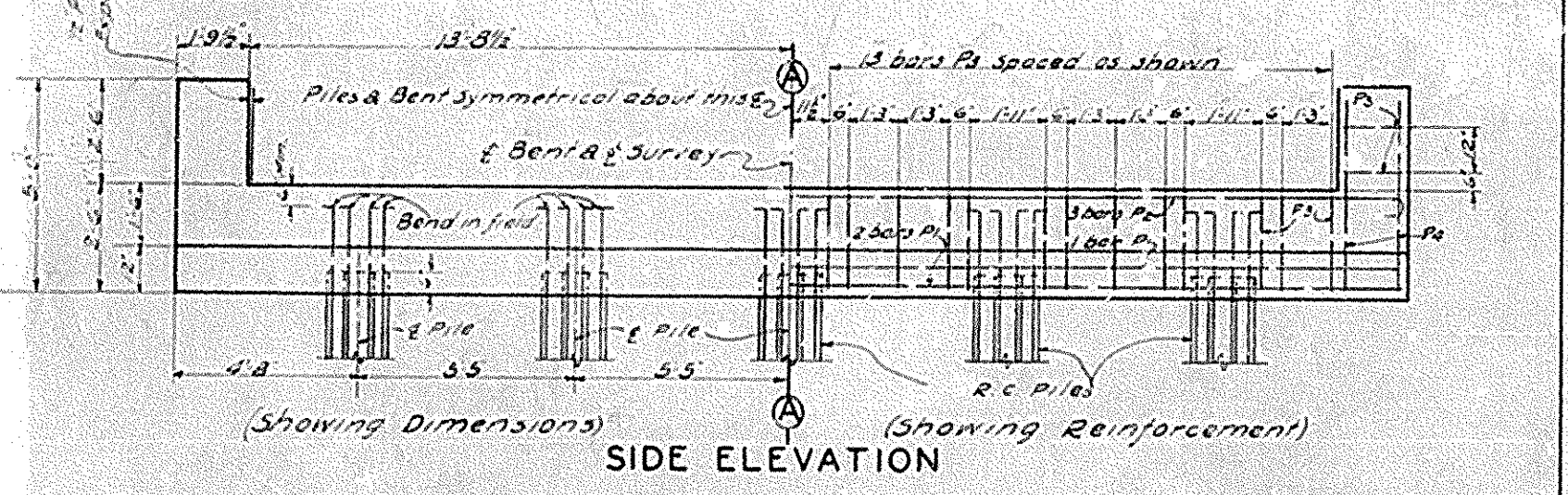
DRAWING	DATE
G-200	9/27

DESIGNED BY: DATE: 6/27/37  
 CHECKED BY: DATE: 6/27/37  
 APPROVED BY: DATE: 6/27/37  
 DATE: 6/27/37

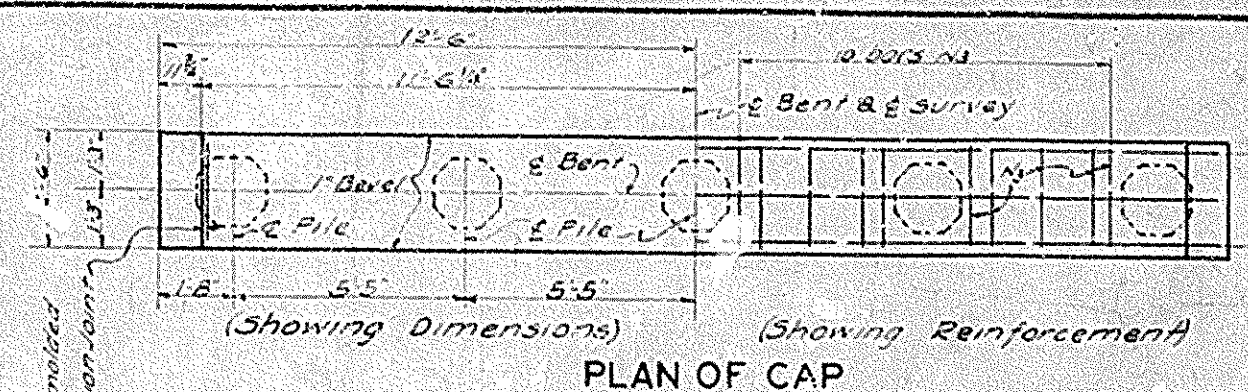
Proj. No.	Sheet No.	Scale	Date	Drawn by	Checked by	Approved by
7	KV					



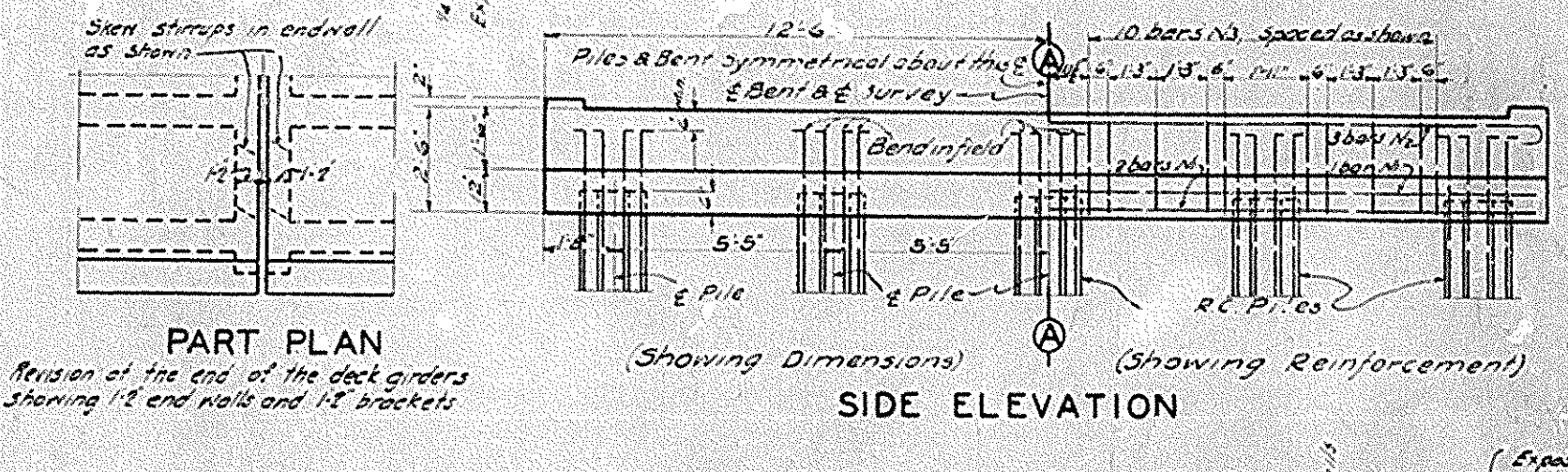
PLAN OF CAP



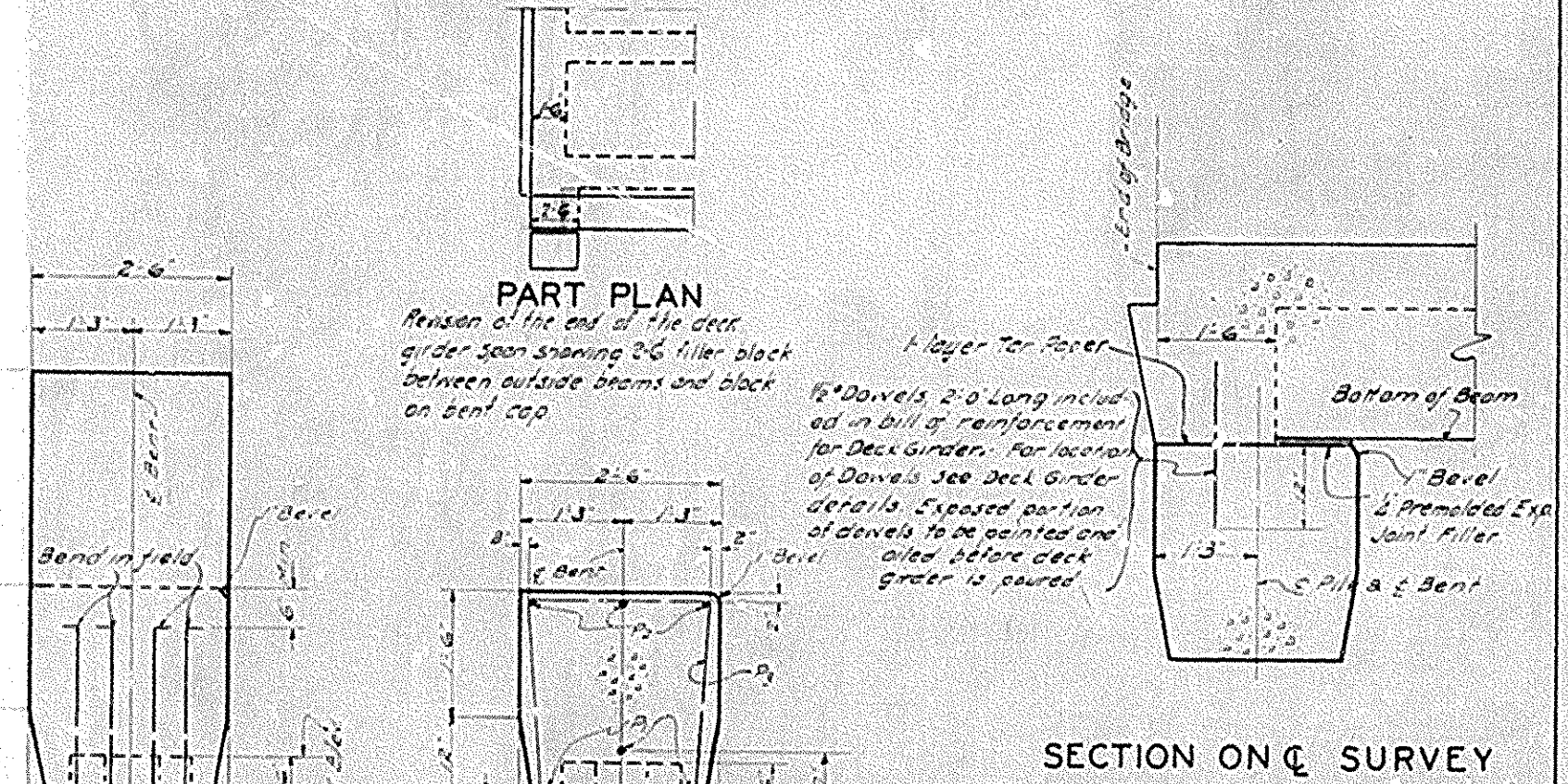
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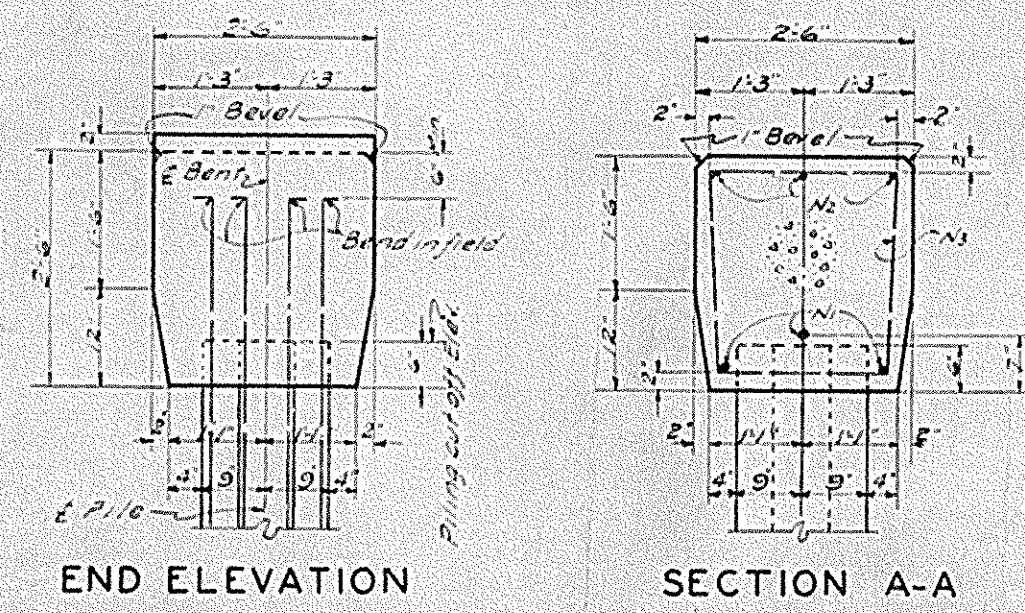
PLAN OF CAP



SIDE ELEVATION

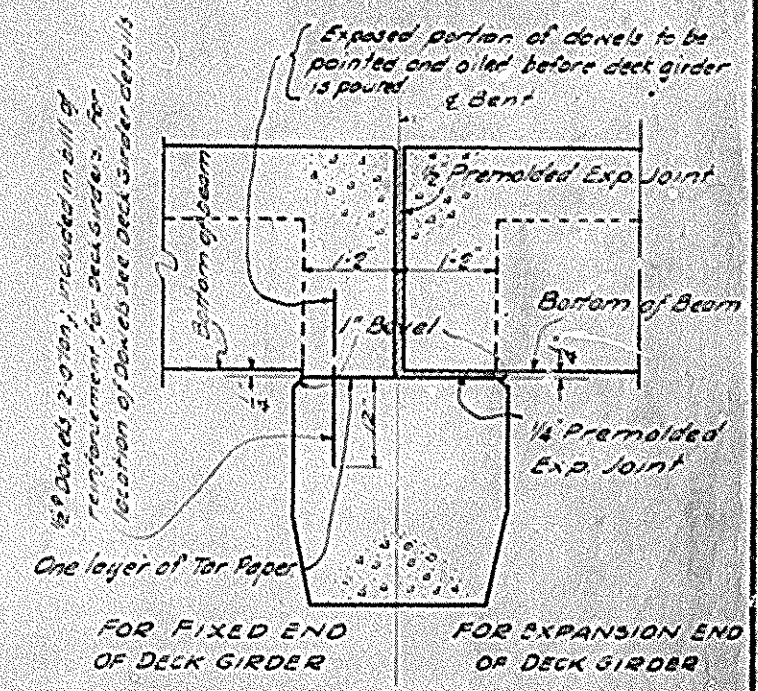


SECTION ON C OF SURVEY



END ELEVATION

SECTION A-A



SECTION ON C OF SURVEY

BILL & TYPES OF REINFORCEMENT (FOR ONE BENT CAP)

MARK	TYPE	NO.	SIZE	LENGTH FT. IN.	LOCATION
P1	Straps	3	1/2"	30 8	Cap
P2	⊙	3	1"	32 10	
P3	⊙	26	1/2"	9 2	
P4	Straps	8	1/2"	4 8	Walls
P5	⊙	4	1"	7 0	

BILL & TYPES OF REINFORCEMENT (FOR ONE BENT CAP)

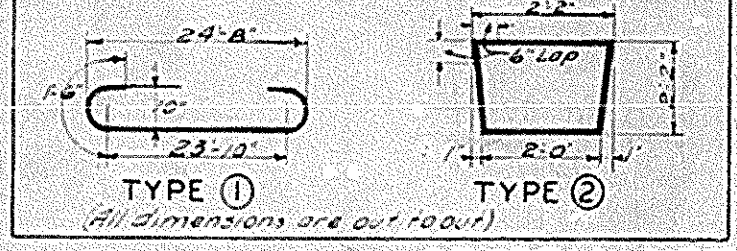
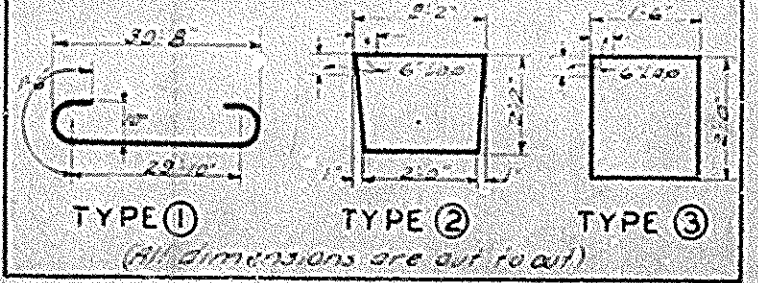
MARK	TYPE	NO.	SIZE	LENGTH FT. IN.	LOCATION
N1	Straps	3	1/2"	24 8	Cap
N2	⊙	3	1"	26 10	
N3	⊙	20	1/2"	9 2	

ESTIMATE OF QUANTITIES  
(FOR ONE BENT CAP)  
Concrete, Class A 5.5 Cu Yds  
Reinforcement 570 Lbs

END ELEVATION SECTION A-A

ESTIMATE OF QUANTITIES  
FOR ONE BENT CAP  
Concrete, class A 7.4 Cu Yds  
Reinforcement 770 Lbs

DETAILS OF CAP FOR END BENTS



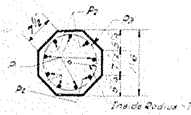
DETAILS OF CAP FOR INTERMEDIATE BENTS

GENERAL NOTE  
SPECIFICATION State Highway Department, Kentucky (1932 Standard with Subsequent adopted amendments)  
CONCRETE Class A concrete to be used throughout.  
STEEL REINFORCEMENT To be deformed bars. Dimensions from the face of concrete are the clear distances. Dimensions shown for bar spacing are the distances center to center of bars. All reinforcement shall be securely held in correct position by means of precast mortar or concrete blocks and wired at all intersections. Precast mortar or concrete blocks supporting reinforcement shall be spaced not farther apart than 50 diameters of the supported bar.  
CORNERS All exposed corners to be chamfered 3/8" unless otherwise shown.

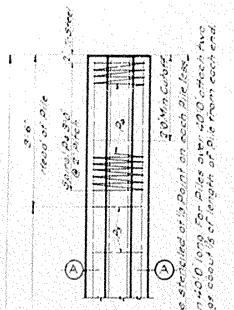
COMMONWEALTH OF KENTUCKY  
STATE HIGHWAY DEPARTMENT  
STANDARD REINF CONC BENT CAPS  
FOR 30" DECK GIRDERS  
30 FT SHOULDERS 1/2 TO 1 FILL SLOPES  
24" ROADWAY STRAIGHT

BRIDGE

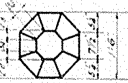
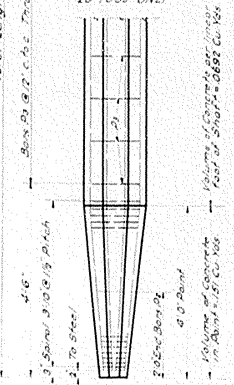
REV.	DATE	BY	CHKD.	APP'D.
1				



**SECTION A-A**  
USE FOR PILE LENGTHS OVER 55 IN ORDER TO COMPLY WITH SPEC. ARTICLE 622.H.3



**SECTION A-A**  
USE FOR PILE LENGTHS 20 TO 55 ONLY



**VIEW B-B**

TABLE OF DIMENSIONS AND QUANTITIES									
BILL AND TYPES OF REINFORCEMENT FOR ONE PILE ONLY									
H	ESTIMATED QUANTITIES FOR ONE PILE		REINFORCEMENT		LENGTH a		LENGTH a		NUMBER
	CONCRETE CLASS D	REINFORCEMENT	FT	IN	FT	IN	FT	IN	
20	126	220	15	0	15	10	17	10	13
22	120	216	17	0	17	10	19	10	13
24	153	273	19	0	19	10	21	10	17
26	167	320	21	0	21	10	23	10	19
28	181	366	23	0	23	10	25	10	21
30	195	412	25	0	25	10	27	10	23
32	208	459	27	0	27	10	29	10	25
34	222	506	29	0	29	10	31	10	27
36	236	552	31	0	31	10	33	10	29
38	250	599	33	0	33	10	35	10	31
40	264	646	35	0	35	10	37	10	33
42	277	692	37	0	37	10	39	10	35
44	291	738	39	0	39	10	41	10	37
46	305	785	41	0	41	10	43	10	39
48	318	831	43	0	43	10	45	10	41
50	333	878	45	0	45	10	47	10	43
52	347	924	47	0	47	10	49	10	45
54	361	971	49	0	49	10	51	10	47
56	375	1017	51	0	51	10	53	10	49
58	389	1064	53	0	53	10	55	10	51
60	403	1110	55	0	55	10	57	10	53
62	417	1157	57	0	57	10	59	10	55
64	431	1203	59	0	59	10	61	10	57
66	445	1250	61	0	61	10	63	10	59
68	459	1296	63	0	63	10	65	10	61

**GENERAL NOTE**

**SPECIFICATIONS:** Kentucky Department of Highways

**CONCRETE:**— Class D concrete shall be used in Piles

**REINFORCEMENT:**— The cost of reinforcement shall be included in the price bid per linear foot of Piles. Concrete Piles must not be damaged below cutoff elevation. Concrete and Spiral above cutoff elevation to remain and project into structure above. These Bars shall be bent in field if necessary to maintain clearance shown on Bridge details.

**PILING:**— All Piles shall have a minimum penetration of 20' unless solid rock is encountered. Piles shall be driven to refusal or to support a minimum load of 50 Tons per pile.

**TEST PILES:**— Test Piles shall be driven where designated on Bridge Plans to determine the length of Piles required. All Test Piles shall be located so they will act as a part of the piling system.

**PILE CUTOFF:**— No payment will be made for pile cutoff except as provided for in Specifications. Deformation of reinforcing bars shall conform to A.S.T.M. A-305 Current Specification.

COMMONWEALTH OF KENTUCKY  
DEPARTMENT OF HIGHWAYS  
**STANDARD**  
**18" REINFORCED**  
**CONCRETE PILE**

**BRIDGE**