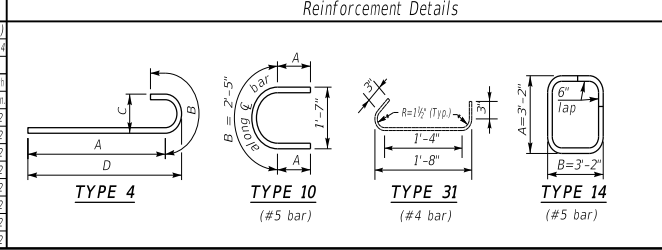


0° SKEW 24'-0" - 25'-6" BRIDGE WIDTH (No Seismic Load)

MARK		P1		P2		P3		P4				P5		P6		P7		P8		P9(e)		P10(e)		P11(e)																																
TYPE		Str.		Str.		Str.		Type 4				Type 10		Str.		Type 31		Str.		Str.		Type 14		Type 14																																
SIZE		#		#		#		#				#		#		#		#		#		#		#																																
10-11	40	8	12	8	8	26	6	26	2	12	40	5	12	8	8	8	8	10	8	7	5	1	5	0	8	7	9	10	5	7	5	12	2	6	10	5	19	0	12	30	2	5	60	8	10	0	8	8	26	8	4	26	8	27	13	2
12-13	40	8	12	8	8	26	6	26	2	12	40	5	12	8	8	8	8	10	8	7	5	1	5	0	8	7	9	14	5	7	5	12	2	6	14	5	19	0	12	70	2	5	60	8	10	0	8	8	26	8	4	26	8	27	13	2
14-15	40	8	12	8	8	26	6	26	2	12	40	5	12	8	8	8	8	10	8	7	5	1	5	0	8	7	9	18	5	7	5	12	2	6	18	5	19	0	12	90	2	5	60	8	10	0	8	8	26	8	4	26	8	27	13	2
16-17	40	8	12	8	8	26	6	26	2	12	40	5	12	8	8	8	8	10	8	7	5	1	5	0	8	7	9	22	5	7	5	12	2	6	22	5	19	0	12	110	2	5	60	8	10	0	8	8	26	8	4	26	8	27	13	2
18-19	40	8	12	8	8	26	6	26	2	12	40	5	12	8	8	8	8	10	8	7	5	1	5	0	8	7	9	26	5	7	5	12	2	6	26	5	19	0	12	130	2	5	60	8	10	0	8	8	26	8	4	26	8	27	13	2
20-21	40	8	12	8	8	26	6	26	2	12	40	5	12	8	8	8	8	10	8	7	5	1	5	0	8	7	9	30	5	7	5	12	2	6	30	5	19	0	12	150	2	5	60	8	10	0	8	8	26	8	4	26	8	27	13	2
22-23	40	8	12	8	8	26	6	26	2	12	40	5	12	8	8	8	8	10	8	7	5	1	5	0	8	7	9	34	5	7	5	12	2	6	34	5	19	0	12	170	2	5	60	8	10	0	8	8	26	8	4	26	8	27	13	2
24-25	40	8	12	8	8	26	6	26	2	12	40	5	12	8	8	8	8	10	8	7	5	1	5	0	8	7	9	38	5	7	5	12	2	6	38	5	19	0	12	190	2	5	60	8	10	0	8	8	26	8	4	26	8	27	13	2

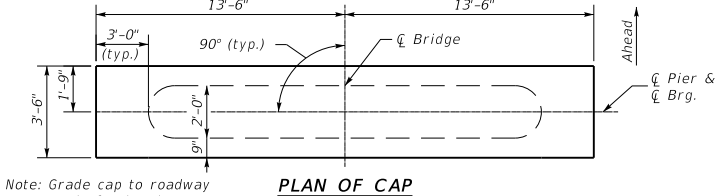


QUANTITIES		DIMENSIONS TABLE												CONCRETE CLASS "A"			STEEL REINFORCEMENT EPOXY COATED			STEEL REINFORCEMENT		
		H												CU. YDS. (1)			LBS.			LBS.		
		H												CU. YDS. (1)			LBS.			LBS.		
10-11	2	6	2	9	13	3	3	5	6	10-11	32.2		1055	597.3								
12-13	2	6	2	9	13	3	3	5	6	12-13	55.3		1055	6438								
14-15	2	6	2	9	13	3	3	5	6	14-15	58.3		1055	6902								
16-17	2	6	2	9	13	3	3	5	6	16-17	61.4		1055	7366								
18-19	2	6	2	9	13	3	3	5	6	18-19	64.4		1055	7830								
20-21	2	6	2	9	13	3	3	5	6	20-21	67.5		1055	8295								
22-23	2	6	2	9	13	3	3	5	6	22-23	70.5		1055	8759								
24-25	2	6	2	9	13	3	3	5	6	24-25	73.6		1055	9223								

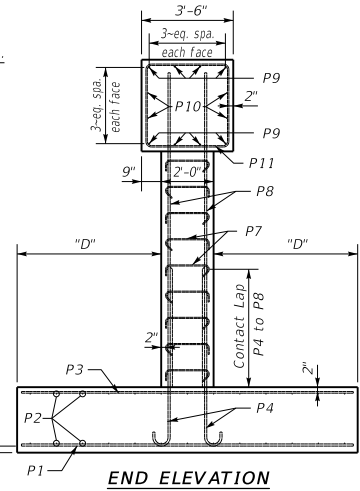
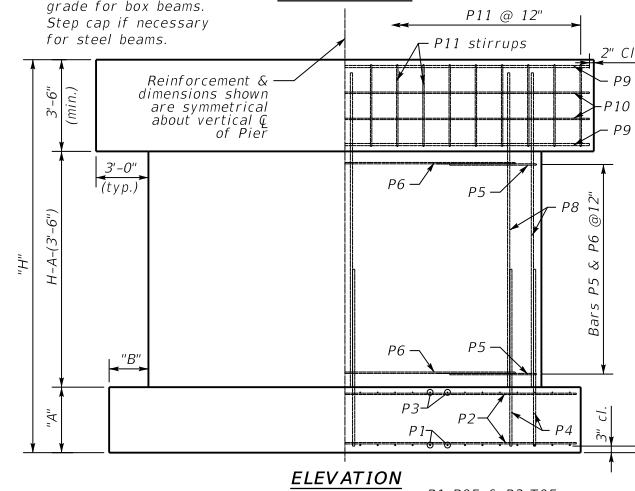
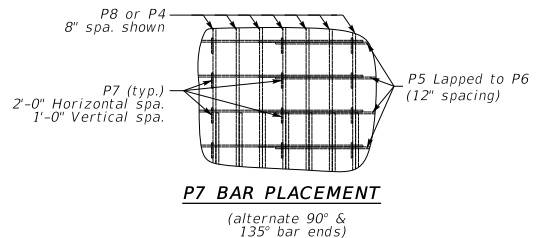
Note: All bars in cap shall be epoxy coated.

Note: All concrete shall be Class "A"

(1) Quantity is based on taller height. Reduce by 1.5 cubic yard for shorter height.



Note: Grade cap to roadway grade for box beams. Step cap if necessary for steel beams.



GENERAL NOTES

SPECIFICATIONS: Construct piers according to the current edition of the Kentucky Department of Highways Standard Specifications for Road and Bridge Construction. Piers are designed for side by side box beams as detailed in Standard Drawings BDP-001 through BDP-012, current edition. They may be slightly modified to allow for 25'-6" rolled steel beam bridge width.

FOUNDATION PRESSURE: Construct pier footings on solid rock bearing material that can support a pressure of 8000 psf service or 10,800 psf strength factored as recommended by a geotechnical engineer.

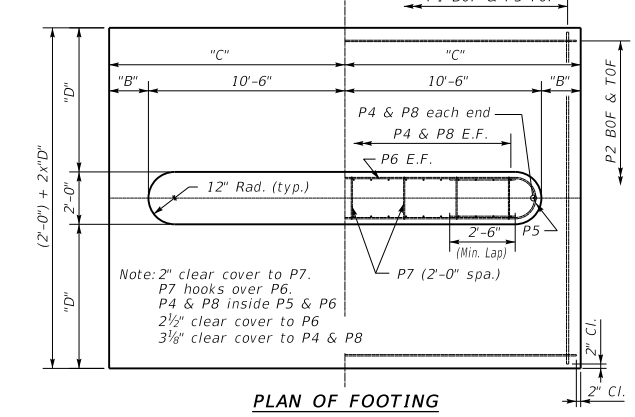
DESIGN LOADS: Pier is designed for the CB42 beam superstructure with 3-97 foot spans. Pier is designed to handle a half a 97 foot span for thermal load with expansion bearings under the beams. Pier is designed for 100 mph wind. Wind on superstructure is for 1-97' span longitudinal and transverse. Pier is designed for stream flow of 10 ft./sec. up to the top of the pier. It is not designed for flow acting on the superstructure. Pier is not designed for earthquake loading.

DESIGN APPLICABILITY: Consult with a structural engineer to determine if these details are applicable for any particular project.

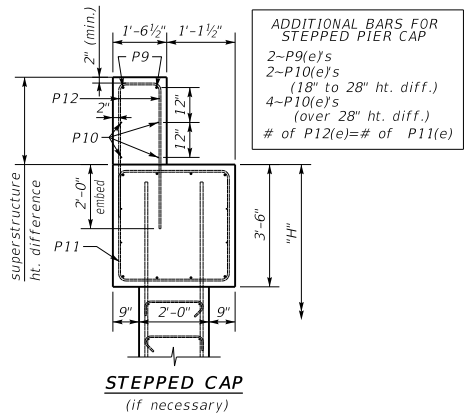
FOOTING ELEVATION: Construct bottom of footing below the anticipated scour elevation. (This typically entails embedding the footings 1'-0" to 2'-0" into rock and pouring concrete directly against cut rock faces as recommended by geotechnical engineer.)

NOTE: Distances to bars shown are clear dimensions unless otherwise noted.

MATERIAL SPECIFICATIONS:
Concrete, Class "A" = 3500 psi
Steel Reinforcement = Grade 60



Note: 2" clear cover to P7. P7 hooks over P6. P4 & P8 inside P5 & P6. 2 1/2" clear cover to P6. 3/8" clear cover to P4 & P8.



ADDITIONAL BARS FOR STEPPED PIER CAP
2-P9(e)s
2-P10(e)s
(18" to 28" ht. diff.)
4-P10(e)s
(over 28" ht. diff.)
of P12(e)=# of P11(e)

KENTUCKY DEPARTMENT OF HIGHWAYS	
Standard Pier 0° Skew 24'-0"-25'-6" Bridge Width	
STANDARD DRAWING NO. BSP-002	
SUBMITTED	02-26-20
DIRECTOR DIVISION OF STRUCTURAL DESIGN	
APPROVED	02-26-20
STATE ENGINEER	