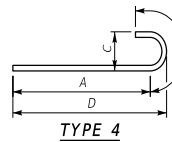


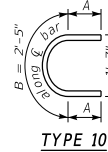
15° SKEW 16'-0" - 17'-6" BRIDGE WIDTH (No Seismic Load)

[illegible]

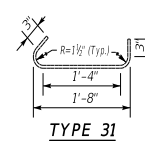
Reinforcement Details



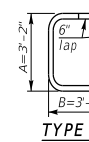
TYPE 4



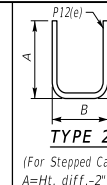
TYPE 10



TYPE 31



TYPE 14



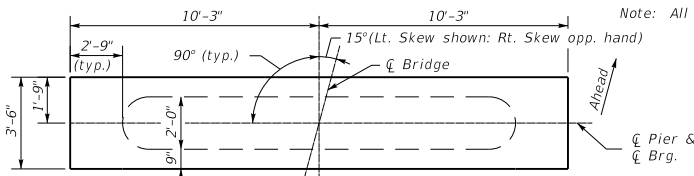
TYPE 2

(For Stepped Cap)
A=Ht. diff.-2" CI
+2'-0"emb.
B=1'-2½"

H	A		B		C	
	ft.	in.	ft.	in.	ft.	in.
10-11	2	6	2	3	9	9
12-13	2	6	2	3	9	9
14-15	2	6	2	3	9	9
16-17	2	6	2	3	9	9
18-19	2	6	2	3	9	9
20-21	2	6	2	3	9	9
22-23	2	6	2	3	9	9
24-25	2	6	2	3	9	9

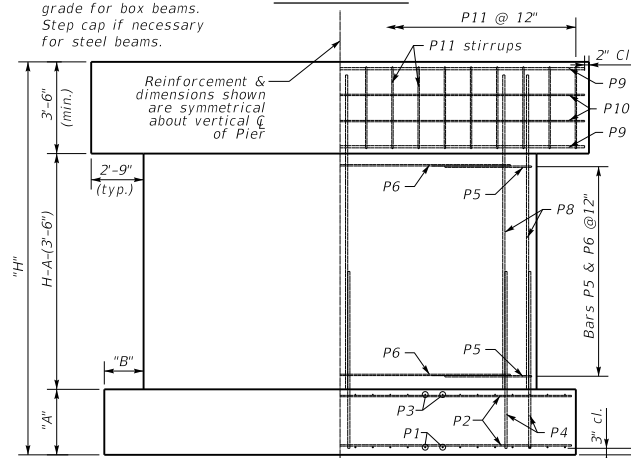
QUANTITIES

		CONCRETE CLASS "A"	STEEL REINFORCEMENT EPOXY COATED	STEEL REINFORCEMENT
D (in)	H	CU. YDS. (1)	LBS.	LBS.
3	10-11	37.5	792	3998
3	12-13	39.7	792	4331
3	14-15	41.8	792	4665
3	16-17	44	792	4998
3	18-19	46.2	792	5331
3	20-21	48.3	792	5664
3	22-23	50.5	792	5997
3	24-25	52.6	792	6330

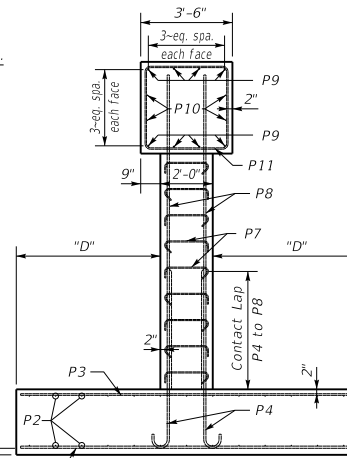


Note: Grade cap to roadway grade for box beams.
Step cap if necessary for steel beams.

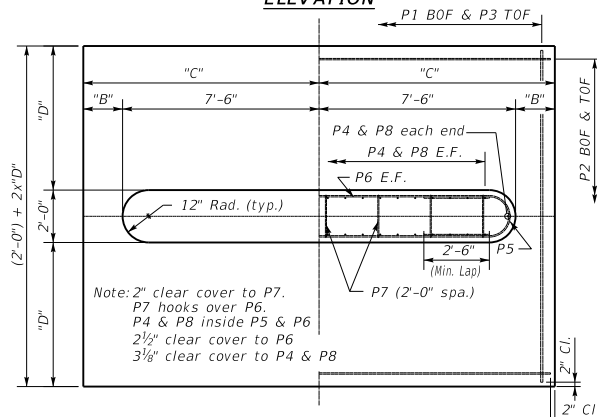
PLAN OF CAP



ELEVATION

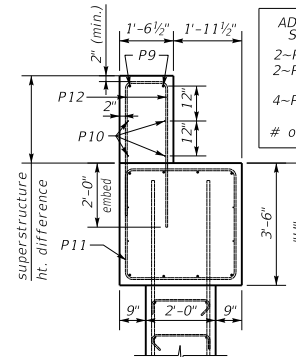


END ELEVATION



Note: 2" clear cover to P7.
P7 hooks over P6.
P4 & P8 inside P5 & P6
2½" clear cover to P6
3⅛" clear cover to P4 & P8

PLAN OF FOOTING



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)

STEPPED CAP
(if necessary)

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 17'-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

KENTUCKY DEPARTMENT OF HIGHWAYS

Standard Pier

15° Skew

16'-0"-17'-6" Bridge Width

STANDARD DRAWING NO. *BSP-004*

SUBMITTED Bart Johnson 02-26-20
DIRECTOR DIVISION OF STRUCTURAL DESIGN DATE

APPROVED [Signature] 02-26-20
STATE HIGHWAY ENGINEER DATE