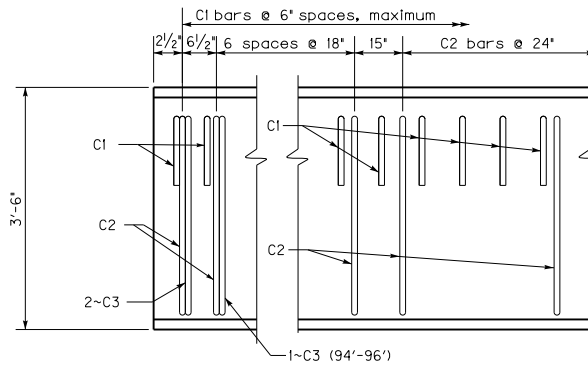


B42 BEAM



B42 ELEVATION OF 0° SKEW

(Refer to BDP-003, for skewed details)

TABLE OF STRAND DATA

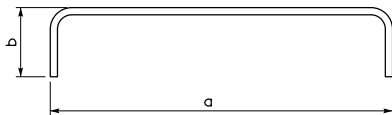
Beam Type	Beam Length (feet)	Number of Strands Required		
		Row ①	Row ②	Row ③
B42	80	17	6	
	82	17	7	
	84	17	8	
	86	17	10	
	88	17	11	
	90	17	12	
	92	17	13	
	94	17	14	2
96	17	15	2	

BAR QUANTITIES TABLE

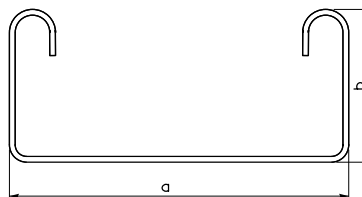
Beam Type	Beam Length (feet)	C1	C2	C3			
B42	80	161	46	4			
	82	165	47	4			
	84	169	48	4			
	86	173	49	4			
	88	177	50	4			
	90	181	51	4			
	92	185	52	4			
	94	189	53	6			
96	193	54	6				

DESIGN DATA

Beam Type	Beam Length (feet)	DC kips	DW kips	LL kips	LL+I kips
B42	80	38.5	2.3	55.5	68.6
	82	39.5	2.3	56.1	69.2
	84	40.4	2.4	56.6	69.8
	86	41.4	2.4	57.1	70.3
	88	42.4	2.5	57.6	70.9
	90	43.3	2.6	58.1	71.4
	92	44.3	2.6	58.6	72.0
	94	45.3	2.7	59.1	72.5
96	46.2	2.7	59.6	73.0	



C1(e) Bar



C2(e)-C3(e) Bars

Bent Reinforcement

Mark	Size	a	b
C1(e)	#5	3'-9"	6"
C2(e)	#4	3'-9"	3'-2 1/4"
C3(e)	#5	11 3/8"	3'-2 3/8"

Straight Reinforcement

Mark	Size	Length
A1(E)	#5	Beam Length Minus 3'
D(E)	#8	2'-0"

NOTE: A1 bars are to be lapped 2'-2" when necessary.

**KENTUCKY
DEPARTMENT OF HIGHWAYS
BOX BEAM
B42
DETAILS**

STANDARD DRAWING NO. BDP-011-04

SUBMITTED *Mad* 12-01-11
DIRECTOR OF STRUCTURAL DESIGN DATE
APPROVED *Mad* 12-01-11
STATE HIGHWAY ENGINEER DATE