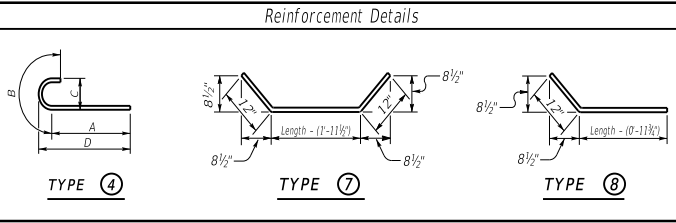


# 0° SKEW 16'-0" - 17'-6" BRIDGE WIDTH 2:1 FILL SLOPES

**Bill of Reinforcement**

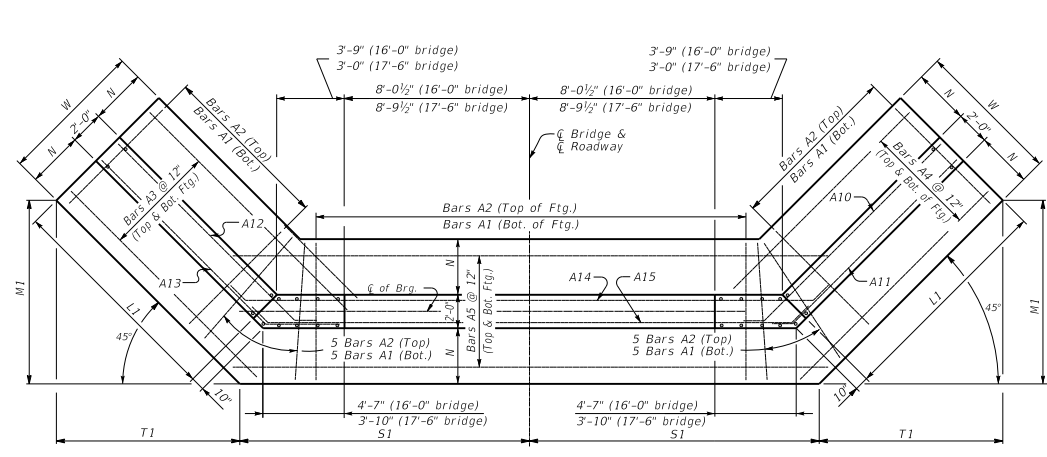
MARK	A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	A11	A12	A13	A14	A15	A16	A17	A18																																																								
TYPE	Str.	Str.	Str.	Str.	Str.	Str.	Str.	Str.	Str.	Str.	Str.	Str.	Str.	Str.	Str.	Str.	Str.	Str.																																																								
SIZE	#5					#5				#5		#5		#5		#5																																																										
H	15-16	68	10	11	8	12	68	7	11	8	12	24	24	0	24	24	0	24	29	10	66	9	9	11	12	8	1/2	1	10	0	11	8	6	9	5	4	11	12	66	6	12	10	12	69	12	10	12	24	0	14	22	7	14	24	0	14	22	7	14	29	11	14	27	0	2	26	4	2	26	4	10	8	5	9
L1	13-14	64	9	10	8	12	64	7	10	8	12	23	20	9	22	39	5	6	0	8	3	12	6	11	1	3	0	8	7	3	6	3	4	11	12	60	6	10	12	63	10	12	23	0	12	19	7	12	21	0	12	19	7	12	29	11	12	27	0	2	23	4	2	23	4	9	6	5	9					
M1	11-12	61	8	9	8	12	61	8	9	8	12	20	16	7	20	39	0	5	6	7	1	12	5	10	1/2	1	0	8	7	6	2	5	9	4	11	12	56	5	8	10	12	59	8	10	12	10	19	0	10	17	7	10	19	11	10	27	0	2	21	4	2	21	4	8	8	5	9							
N	9-10	57	7	8	8	12	57	5	8	8	12	18	16	4	18	28	7	5	2	6	1	12	5	1	0	6	5	4	5	5	4	11	12	52	5	6	10	12	55	6	10	12	8	17	0	8	15	7	8	17	0	8	15	7	8	17	0	2	19	4	2	19	4	8	0	5	9							
O	7-8	50	6	7	2	12	50	5	7	2	12	16	11	9	16	27	6	4	5	7	12	4	8	0	10	0	5	4	11	4	7	5	4	11	12	44	4	10	12	47	4	10	12	6	13	0	6	11	7	6	13	0	6	11	7	6	13	0	6	27	0	2	15	4	2	15	4	6	4	5	9			
P	5-6	48	5	6	2	12	48	5	6	2	12	14	9	7	14	17	1	4	0	5	4	11	4	8	0	10	0	5	4	11	4	3	5	4	11	12	40	2	10	12	43	2	10	12	4	9	7	4	11	0	4	9	7	4	11	0	4	9	7	4	11	0	4	27	0	2	13	4	2	13	4	5	9	



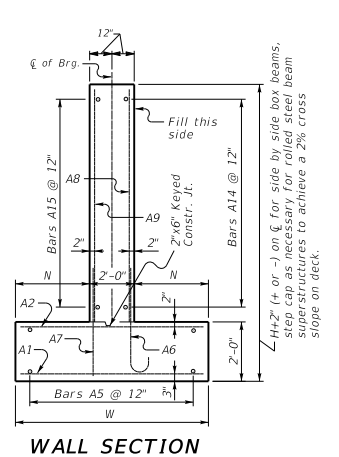
**Table of Dimensions**

H	W	N	M1	S1	T1	L1
ft.	in.	ft.	in.	ft.	in.	ft.
15-16	12	0	5	0	16	10
13-14	11	0	4	6	14	9
11-12	10	0	4	0	13	8
9-10	9	0	3	6	11	8
7-8	7	6	2	9	8	5
5-6	6	6	2	3	6	10

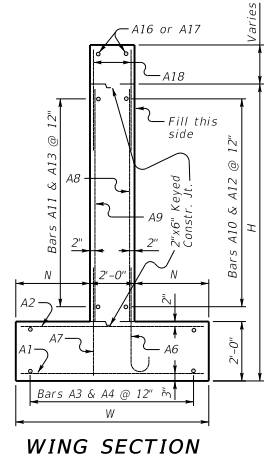
## 4 foot min. shoulder



**PLAN** NOTE: Trim A16 & A17 bars if necessary



**WALL SECTION**



**WING SECTION**

**Quantities**

H	Concrete*	Reinforcement
ft.	CY	LBS.
5	32.3	2801
6	35.3	2801
7	45.5	3843
8	48.9	3843
9	67.6	5792
10	71.5	5792
11	85.4	8010
12	89.7	8010
13	105.1	11099
14	108.6	11099
15	130.4	14634
16	135.4	14634

\*Concrete quantities computed using 21" beam depth on 1/2" pad & 16'-0" Bridge Width

## GENERAL NOTES

**SPECIFICATIONS:** Construct abutments according to the current edition of the Kentucky Department of Highways Standard Specifications for Road and Bridge Construction. Abutments are designed for side by side box beams as detailed in Standard Drawings BDP-001 through BDP-012, current edition. Dimensions may be adjusted to allow for 16'-6" rolled steel beam bridge width.

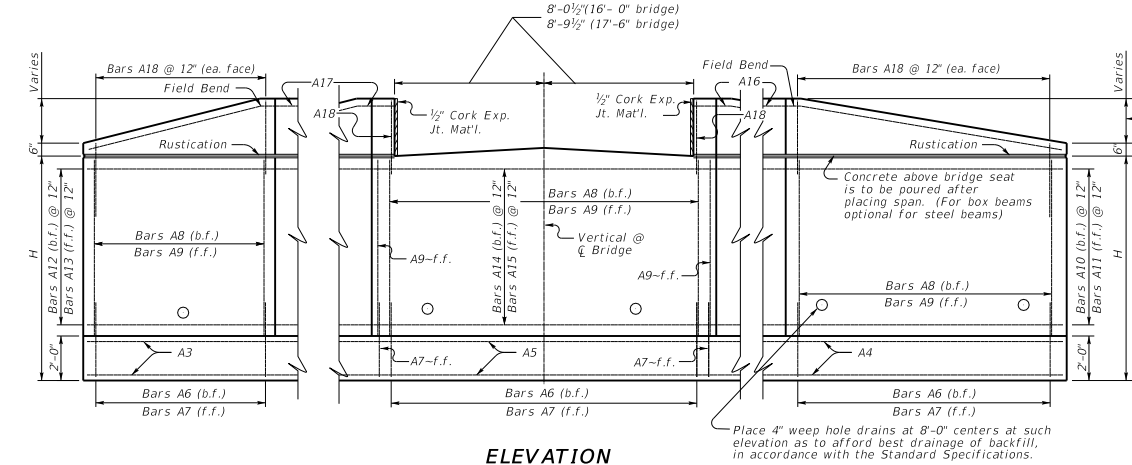
**FOUNDATION PRESSURE:** Construct abutment footings on solid rock bearing material that can support a pressure of 8000 psf service or 10,800 psf strength factored as recommended by a geotechnical engineer.

**WING LENGTHS:** Calculated assuming 21" superstructure depth and stream bank elevation at top of footing.

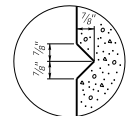
**FOOTING ELEVATION:** Construct bottom of footing below the anticipated scour elevation. (This typically entails embedding the footings 1'-0" to 2'-0" into rock and pouring concrete directly against cut rock faces as recommended by geotechnical engineer.)

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

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



**ELEVATION**



**RUSTICATION GROOVE**

**KENTUCKY  
DEPARTMENT OF HIGHWAYS**

0° SKEW  
16'-0"-17'-6" BRIDGE WIDTH  
2:1 FILL SLP, 4' MIN. SHLDR.

STANDARD DRAWING NO. BSA-101

SUBMITTED: *Bert Adams* 02-26-20  
DIRECTOR DIVISION OF STRUCTURAL DESIGN DATE

APPROVED: *[Signature]* 02-26-20  
STATE ENGINEER DATE