

0° SKEW 24'-0" - 25'-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.	4	Str.	Str.	Str.	8	8	8	8	7	7	Str.	Str.	Str.		
SIZE	#5					#5					#5					#5				
H	Length	Length	Length	Length	Length	Length	Length	Length	Length	Length	Length	Length	Length	Length	Length	Length	Length	Length		
ft.	in.	ft.	in.	ft.	in.	ft.	in.	ft.	in.	ft.	in.	ft.	in.	ft.	in.	ft.	in.	ft.		
15-16	76	10	71	8	12	76	7	10	8	12	24	0	24	24	0	24	37	10	74	
13-14	72	9	10	8	12	72	7	10	8	12	20	9	22	37	5	68	8	8	3	
11-12	69	8	9	8	12	69	6	9	8	12	18	7	20	37	0	64	7	17	1	
9-10	65	7	8	8	12	65	5	8	8	12	16	4	18	6	7	60	6	16	1	
7-8	58	6	7	2	12	58	5	7	2	12	16	1	19	6	5	52	5	15	5	
5-6	56	5	6	2	12	56	5	6	2	12	14	9	7	14	9	48	5	15	5	

Reinforcement Details

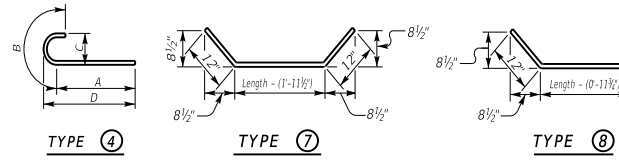
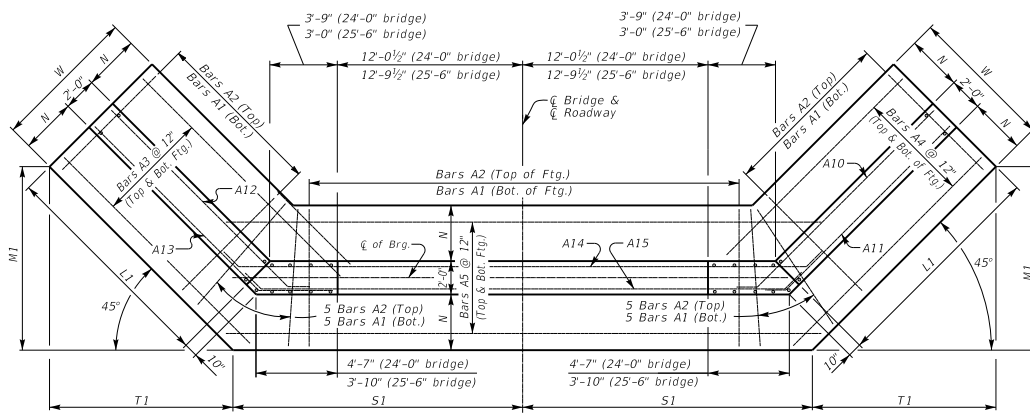


Table of Dimensions

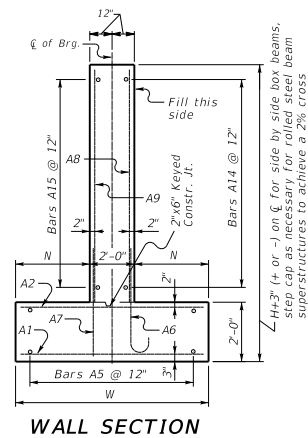
H	W	N	M1	S1	T1	L1
Length	Length	Length	Length	Length	Length	Length
ft.	ft.	ft.	ft.	ft.	ft.	ft.
15-16	12	0	5	0	18	10
13-14	11	0	4	6	14	7
11-12	10	0	4	0	13	6
9-10	9	0	3	6	11	6
7-8	7	6	2	8	8	5
5-6	6	6	2	3	6	4

4 foot min. shoulder

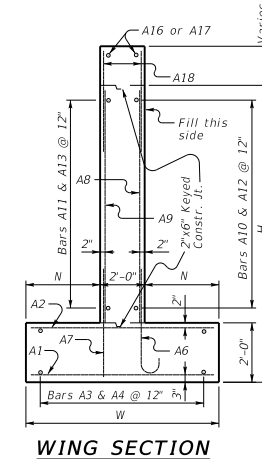


PLAN

NOTE: Trim A16 & A17 bars if necessary



WALL SECTION



WING SECTION

Quantities

H	Concrete*	Reinforcement
ft.	C.Y.	LBS.
15	38	3223
13	41.7	3223
11	53.1	4392
9	57	4392
7	77.2	6520
5	81.7	6520
3	96.8	8974
1	101.7	8974
0	118.2	12385
14	123.4	12385
15	145.4	16223
16	150.9	16223

*Concrete quantities computed using 21" beam depth on 1/2" pad & 24'-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 25'-6" rolled steel beam bridge width.

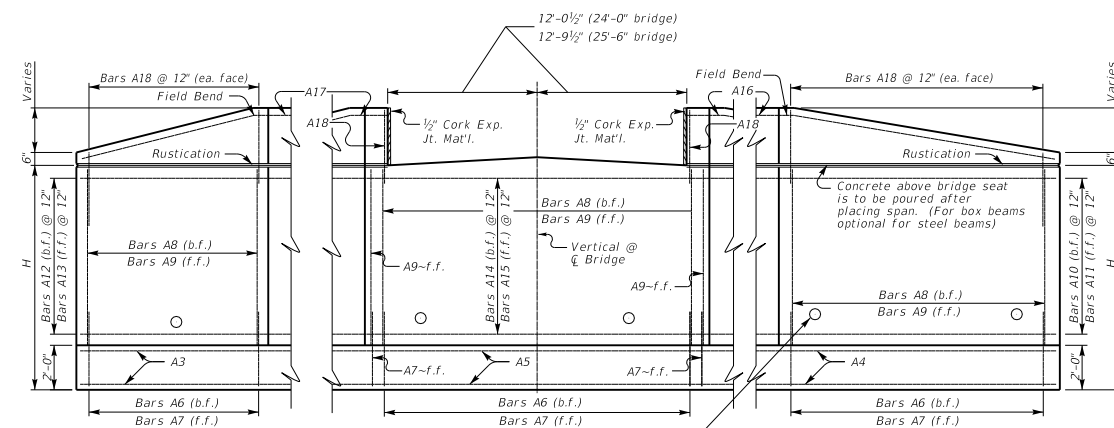
FOUNDATION PRESSURE: Construct abutment footings on solid rock bearing material that can support a pressure of 8000 psf service or 10,800 psf strength factored as recommended by a geotechnical engineer.

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.)

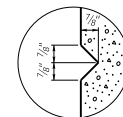
NOTE: Distances to bars shown are clear dimensions unless otherwise noted.

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



ELEVATION

Place 4" weep hole drains at 8'-0" centers at such elevation as to afford best drainage of backfill, in accordance with the Standard Specifications.



RUSTICATION GROOVE

KENTUCKY
DEPARTMENT OF HIGHWAYS

0° SKEW
24'-0"-25'-6" BRIDGE WIDTH
2:1 FILL SLP, 4' MIN. SHLDR.

STANDARD DRAWING NO. BSA-102

SUBMITTED *Boj* DIRECTOR DIVISION OF STRUCTURAL DESIGN DATE 02-26-20

APPROVED *Boj* STATE ENGINEER DATE 02-26-20