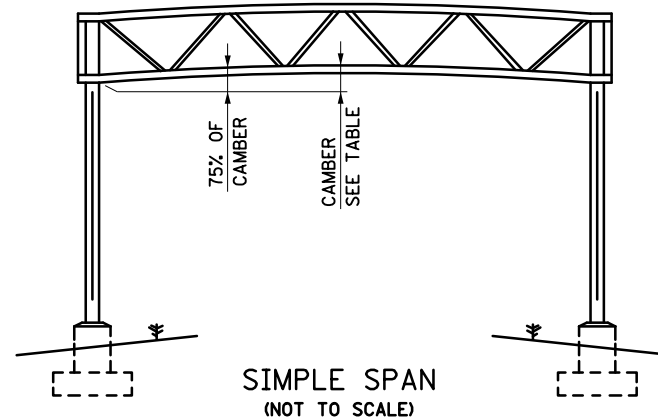


**SIMPLE SPAN**

SIMPLE SPAN TRUSS CAMBER (INCHES)												
SPAN (FEET)	40'	50'	60'	70'	80'	90'	100'	110'	120'	130'	140'	150'
CAMBER	1/4	5/16	3/8	13/16	1 1/16	1 3/8	1 11/16	2	2 3/8	2 13/16	3 1/4	3 3/4
DL DEFLECTION	0	1/16	1/8	1/4	3/8	1/2	5/8	3/4	7/8	1 1/8	1 1/2	1 5/8
RESIDUAL CAMBER	1/4	3/8	1/2	5/8	1 1/16	1 1/8	1 3/8	1 1/2	1 5/8	1 3/4	1 7/8	2 1/16

**NOTE:**

CAMBER AND DEFLECTIONS SHOWN AT  $\bar{C}$  SPAN. THE DEFLECTIONS AND CAMBER AT THE QUARTER POINTS TO BE APPROXIMATELY 75% OF THESE VALUES.



TRUSS QUANTITIES*		
USE LENGTH FROM $\bar{C}$ POST WHEN CALCULATING TOTAL WEIGHTS.		
TRUSS TYPE A	TRUSS TYPE B	TRUSS TYPE C
123 LB./FT.	168 LB./FT.	196 LB./FT.

\* FOR STRUCTURES WITH DMS, THE TOTAL QUANTITY OF TRUSS STEEL REQUIRED IS EQUAL TO THE WEIGHT OF THE TRUSS COMBINED WITH THE WEIGHT OF THE DMS MOUNTING ANGLES. CALCULATE THE WEIGHT OF THE DMS MOUNTING ANGLES AS 40 LBS./FT. x LENGTH OF DMS. SEE STANDARD PLAN 5-297.772 FOR DMS MOUNTING ANGLE DETAILS.

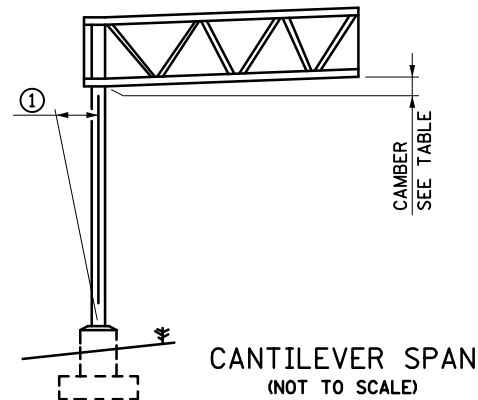
**CANTILEVER**

CANTILEVER TRUSS CAMBER (INCHES)					
SPAN (FEET)	15'	20'	30'	40'	45'
CAMBER	1/8	1/4	5/8	1 1/16	1 1/4
DL DEFLECTION	0	0	1/16	3/16	1/4
RESIDUAL CAMBER	1/8	1/4	3/8	7/8	1

**NOTE:**

CAMBER AND DEFLECTIONS SHOWN ARE AT THE END OF CANTILEVER.

① WHEN ERECTING CANTILEVER TRUSSES, SET THE POST 1/8" PER FOOT OUT OF PLUMB AWAY FROM THE TRAFFIC LANE UNDER THE SUPPORTED SIGN TO COMPENSATE FOR DEFLECTION OF THE POST.



PANEL MOUNTING POST QUANTITIES INCLUDES MOUNTING ANGLES	
PANEL HEIGHT	WEIGHT/POST
6' 6"	70 LBS
7' 0"	74 LBS
7' 6"	78 LBS
8' 0"	82 LBS
8' 6"	86 LBS
9' 0"	90 LBS
9' 6"	93 LBS
10' 0"	97 LBS
10' 6"	101 LBS
11' 0"	105 LBS
11' 6"	160 LBS
12' 0"	166 LBS
12' 6"	172 LBS
13' 0"	178 LBS
13' 6"	184 LBS
14' 0"	190 LBS
14' 6"	196 LBS
15' 0"	202 LBS

WALKWAY SUPPORT QUANTITIES		
TRUSS TYPE (WEIGHT/SUPPORT)		
A	B	C
96 LBS	103 LBS	108 LBS

**WALKWAY WEIGHTS:**

- USE 3' 4 3/4" WIDE GRATING @ 64 LB./FT. FOR FIXED HANDRAIL (INCLUDES TOE ANGLES).
- USE 3' 4 3/4" WIDE GRATING @ 60 LB./FT. FOR FOLDING HANDRAIL (INCLUDES TOE ANGLES).

POST TYPE			
POST TYPE	BASEPLATE TYPE	PERMISSIBLE PIPE SECTIONS	
		OUTSIDE DIAMETER (INCH)	WALL THICKNESS (INCH)
1	A	18	0.250
2	A	18	0.312
3	A	18	0.375
4	A	18	0.500
5	B	20	0.500
6	B	24	0.500

WALL THICKNESS IS MINIMUM. THINNER WALLS WILL NOT BE APPROVED.

**GENERAL NOTE:**

FOR FOUNDATION QUANTITIES, SEE STANDARD PLAN 5-297.763.

**POST TYPE NOTES:**

NO SPLICES OF ANY KIND WILL BE PERMITTED IN POSTS INTENDED FOR USE IN CANTILEVER TYPE STRUCTURES.

ONE OF TWO POSTS FOR SIMPLE SPAN STRUCTURES MAY INCORPORATE ONE WELDED CIRCUMFERENTIAL BUTT SPLICE CONFORMING TO AWS D1.1 DETAIL B-U2 IN THE UPPER 1/3 OF ITS LENGTH. BACK UP RINGS FOR THESE WELDED SPLICES SHALL BE COMMERCIAL PRODUCTS. BUTT WELDS REQUIRE RADIOGRAPHIC INSPECTION (SPEC. 2471.3).

ALL RADIOGRAPHIC INSPECTIONS AND MAGNETIC PARTICLE TESTING REPORTS AND RADIOGRAPHIC FILMS SHALL BECOME THE PROPERTY OF THE DEPARTMENT.

SEE STANDARD PLAN 5-297.764 FOR BASEPLATE DETAILS.

POST QUANTITIES						
QUANTITIES INCLUDE ANCHORAGE ASSEMBLY AND TRUSS CONNECTION PLATES. PAY LENGTH OF POSTS IS FROM THE BOTTOM OF THE BASE PLATE TO THE TOP OF THE TRUSS. ADD 15 LBS TO THE CALCULATED TOTAL FOR TYPE 'E' POSTS.						
POST TYPE	CANTILEVER			SIMPLE SPAN		
	TRUSS TYPE A	TRUSS TYPE B	TRUSS TYPE C	TRUSS TYPE A	TRUSS TYPE B	TRUSS TYPE C
1	1800+47 LBS/FT	N/A	N/A	1860+47 LBS/FT	1910+47 LBS/FT	1930+47 LBS/FT
2	1800+59 LBS/FT	N/A	N/A	1860+59 LBS/FT	1910+59 LBS/FT	1930+59 LBS/FT
3	1800+71 LBS/FT	N/A	N/A	1860+71 LBS/FT	1910+71 LBS/FT	1930+71 LBS/FT
4	1800+94 LBS/FT	1830+94 LBS/FT	N/A	1860+94 LBS/FT	1910+94 LBS/FT	1930+94 LBS/FT
5	3050+105 LBS/FT	3080+105 LBS/FT	3140+105 LBS/FT	3110+105 LBS/FT	3160+105 LBS/FT	3180+105 LBS/FT
6	N/A	3060+126 LBS/FT	3130+126 LBS/FT	N/A	3190+126 LBS/FT	3210+126 LBS/FT

LEAD EXPERT OFFICE  
KEVIN WESTERN  
STATE BRIDGE ENGINEER

STANDARD OVERHEAD SIGN STRUCTURES - DESIGN D  
CAMBER, POST TYPE, AND ESTIMATED QUANTITIES

APPROVED: 03-05-2020  
REVISED:

*Tom Styrbicki*  
THOMAS STYRBICKI  
STATE DESIGN ENGINEER

STANDARD PLAN  
5-297.762

1 OF 1



STANDARD PLAN

STATE PROJ. NO.  
TRUNK HWY.

SHEET NO.  
TOTAL SHEETS