

Index 11310 Cantilever Sign Structure

Design Criteria

AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals; Structures Manual, Volume 3, FDOT Modifications to LTS-6.; ***Structures Manual*** Introduction I.6 References; ***Structures Design Guidelines (SDG)***.

Design Assumptions and Limitations

The maximum span length of Cantilever Sign Structures is 50 feet. See the [PPM](#), Volume 1, Chapters 7 and 29 for additional information.

See notes on the ***Design Standard, Structures Manual*** Volume 3 and ***SDG***.

Use this ***Design Standard*** in conjunction with the [FDOT Cantilever Overhead Sign Program](#) and Index 11300.

Plan Content Requirements

See [PPM](#) Volume 2, Chapter 23.

Complete the appropriate Cantilever Sign Structures Data Table and include it in the plans. There is a choice of two tables, one for a sign structure with a flat slab foundation and the other for a sign structure with a drilled shaft foundation. Much of the data for inclusion in the table may be found in the FDOT Cantilever Overhead Sign Program output. Include Design Wind Speed and soils information. See [Introduction I.3](#) for more information regarding use of Data Tables.

Table for use with a Spread Footing Foundation:

CANTILEVER SIGN STRUCTURES DATA TABLE											Table Date 07-01-14			
SIGN NO.	STATION	DIMENSIONS			PANELS	MEMBER SIZES				BACKRAKE				
		A	B		C	N	D (CHORD)		E (WEB)	F (UPRIGHT)	G			
		ft	ft	In	In	#	O. D. x Wall Thk. (in)		Angle (In)	O. D. x Wall Thk. (in)	In			

CANTILEVER SIGN STRUCTURES DATA TABLE (CONT.)																								Table Date 01-01-11				
SIGN NO.	GUSSET PLATES												TRUSS CONNECTION								SPLICE							
	GA	GB	GC	GD	GE	GF	GG	GH	GJ	GK	TA	TB	TC	TD	TE	TF	TG	TH	TJ	SA	SB	SC	SD					
	in	in	ft	in	ft	in	ft	in	ft	in	ft	in	ft	in	in	#	#	in	in	in	in	in	in	Angle (in)	#	in	#	

CANTILEVER SIGN STRUCTURES DATA TABLE (CONT.)																				Table Date 01-01-11							
SIGN NO.	BASE CONNECTION								ANCHOR		FOOTING DIMENSIONS								FOOTING REINF.				PED. REINF.				
	BA	BB	BC	BD	BE	BF	BG	BH	BJ	BK	FA	FB	FC	FD	FE	FF	FG	FH	FJ	FK	FL						
	in	#	in	in	ft	in	in	in	in	in	ft	in	ft	in	ft	in	ft	in	ft	in	size	size	size	size	in	# / Size	

NOTES [Notes Date 7-01-13]:
 1. Work these Data Tables with Index 11310.
 2. Design Wind Speed = ___ mph.
 3. Upright wall thickness given is a minimum dimension.

FOUNDATION NOTES [Notes Date 7-01-12]:
 1. Design based on Borings taken sealed by _____.
 2. Assumptions and Values used in design:
 Soil Type _____
 Soil Layer Thickness = ___ ft.
 Soil Friction Angle = ___ deg.
 Soil Weight = ___ pcf
 Design Water Table is ___ ft. below surface

Table for use with a Drilled Shaft Foundation:

CANTILEVER SIGN STRUCTURES DATA TABLE										Table Date 07-01-14	
SIGN NO.	STATION	DIMENSIONS			PANELS	MEMBER SIZES				BACKRAKE	
		A	B		C	N	D (CHORD)		E (WEB)	F (UPRIGHT)	G
		ft	ft	In	In	#	O. D. x Wall Thk. (in)		Angle (in)	O. D. x Wall Thk. (in)	In

CANTILEVER SIGN STRUCTURES DATA TABLE (CONT.)																				Table Date 01-01-11				
SIGN NO.	GUSSET PLATES										TRUSS CONNECTION								SPLICE					
	GA	GB	GC	GD	GE	GF	GG	GH	GJ	GK	TA	TB	TC	TD	TE	TF	TG	TH	TJ	SA	SB	SC	SD	
	in	in	ft	in	ft	in	ft	in	ft	in	ft	in	ft	in	in	in	in	in	in	Angle (in)	#	in	#	

CANTILEVER SIGN STRUCTURES DATA TABLE (CONT.)																	Table Date 07-01-15												
SIGN NO.	BASE CONNECTION								ANCHOR		FOOTING - DRILLED SHAFT																		
	BA	BB	BC	BD	BE	BF	BG	BH	BJ	BK	FA	FB	FC	FD	FE	FF	FG	ft	in	ft	in	# / Size	#	in	#	in			
	in	#	in	in	ft	in	in	in	in	in	ft	in	ft	in	#	in	#	in	#	in									

Payment

Item number	Item description	Unit Measure
700-4-ABC	Overhead Static Sign Structure	EA
700-3-ABB	Sign Panel	EA