

## Index 11310 Cantilever Sign Structure (Rev. 11/16)

### Design Criteria

**AASHTO LRFD Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals (LRFDLTS-1); Structures Manual**, Volume 3, FDOT Modifications to LRFDLTS-1.; **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	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	ft	in	ft	in	ft	in	ft	in	ft	in	ft	in	ft	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	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			
	in	#	in	in	ft	in	in	in	in	in	ft	in	ft	in	# / Size	#	in	#	in	

## Payment

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