

DISCLAIMER: The use of this standard is governed by the "Texas Engineering Practice Act". No warranty of any kind is made by TxDOT for any purpose whatsoever. TxDOT assumes no responsibility for the conversion of this standard to other formats or for incorrect results or damages resulting from its use.

DATE:  
FILE:

TABLE OF FOUNDATION LOADS - 0° SKEW									
Span Average	Minimum Concrete Pile Size	Tx28, Tx34 & Tx40 GIRDERS				Tx46 & Tx54 GIRDERS			
		Pile Loads				Pile Loads			
		DC	LL	Service I (1)	Strength I (2)	DC	LL	Service I (1)	Strength I (2)
Ft	In.	Tons/Pile	Tons/Pile	Tons/Pile	Tons/Pile	Tons/Pile	Tons/Pile	Tons/Pile	Tons/Pile
40	18	49	17	66	91	52	17	69	95
45		53	18	71	98	57	18	75	103
50		58	19	77	106	62	19	81	111
55	20	62	20	82	113	67	20	87	119
60		67	21	88	121	71	21	92	126
65		71	21	92	126	76	21	97	132
70	24	76	22	98	134	81	22	103	140
75		80	23	103	140	86	23	109	148
80		84	24	108	147	91	24	115	156
85		89	24	113	153	96	24	120	162

TABLE OF FOUNDATION LOADS - 15° SKEW									
Span Average	Minimum Concrete Pile Size	Tx28, Tx34 & Tx40 GIRDERS				Tx46 & Tx54 GIRDERS			
		Pile Loads				Pile Loads			
		DC	LL	Service I (1)	Strength I (2)	DC	LL	Service I (1)	Strength I (2)
Ft	In.	Tons/Pile	Tons/Pile	Tons/Pile	Tons/Pile	Tons/Pile	Tons/Pile	Tons/Pile	Tons/Pile
40	18	49	17	66	91	53	17	70	96
45		54	18	72	99	57	18	75	103
50		58	19	77	106	62	19	81	111
55	20	63	20	83	114	67	20	87	119
60		67	21	88	121	72	21	93	127
65		71	21	92	126	77	21	98	133
70	24	76	22	98	134	81	22	103	140
75		80	23	103	140	86	23	109	148
80		85	24	109	148	91	24	115	156
85		89	24	113	153	96	24	120	162

TABLE OF FOUNDATION LOADS - 30° SKEW									
Span Average	Minimum Concrete Pile Size	Tx28, Tx34 & Tx40 GIRDERS				Tx46 & Tx54 GIRDERS			
		Pile Loads				Pile Loads			
		DC	LL	Service I (1)	Strength I (2)	DC	LL	Service I (1)	Strength I (2)
Ft	In.	Tons/Pile	Tons/Pile	Tons/Pile	Tons/Pile	Tons/Pile	Tons/Pile	Tons/Pile	Tons/Pile
40	18	50	17	67	92	53	17	70	96
45		55	18	73	100	58	18	76	104
50		59	19	78	107	63	19	82	112
55	20	63	20	83	114	68	20	88	120
60		68	21	89	122	73	21	94	128
65		72	21	93	127	77	21	98	133
70	24	77	22	99	135	82	22	104	141
75		81	23	104	142	87	23	110	149
80		86	24	110	150	92	24	116	157
85		90	24	114	155	97	24	121	163

TABLE OF FOUNDATION LOADS - 45° SKEW									
Span Average	Minimum Concrete Pile Size	Tx28, Tx34 & Tx40 GIRDERS				Tx46 & Tx54 GIRDERS			
		Pile Loads				Pile Loads			
		DC	LL	Service I (1)	Strength I (2)	DC	LL	Service I (1)	Strength I (2)
Ft	In.	Tons/Pile	Tons/Pile	Tons/Pile	Tons/Pile	Tons/Pile	Tons/Pile	Tons/Pile	Tons/Pile
40	18	52	17	69	95	55	17	72	99
45		56	18	74	102	60	18	78	107
50		61	19	80	110	65	19	84	115
55	20	65	20	85	116	70	20	90	123
60		70	21	91	124	74	21	95	129
65		74	21	95	129	79	21	100	136
70	24	78	22	100	136	84	22	106	144
75		83	23	106	144	89	23	112	152
80		87	24	111	151	94	24	118	160
85		92	24	116	157	98	24	122	165

- (1) 1.00DC + 1.00LL (all other loads not included)
- (2) 1.25DC + 1.75LL (all other loads not included)

**GENERAL NOTES:**  
 Designed according to AASHTO LRFD Bridge Design Specifications.  
 Pile foundation loads based on exposed height of 24 ft.

FOR DESIGNER'S INFORMATION ONLY.  
 Loads included here within are to be added to the Foundation Notes sheet.

The values shown on these sheets are applicable for use only with the I-girder trestle bents shown on the standards BTIG-34, BTIG-34-15, BTIG-34-30, and BTIG-34-45.

NOT A STANDARD / NOT FOR INCLUSION IN THE PLANS.

**HL93 LOADING**

Texas Department of Transportation				Bridge Division Standard	
<p><b>TRESTLE BENT          FOUNDATION LOADS          PRESTR CONCRETE I-GIRDERS          34' ROADWAY</b></p> <p><b>IG-BTFL34-24</b></p>					
FILE: IG-BTFL34-24.dgn		DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
©TxDOT May 2024		CONT	SECT	JOB	HIGHWAY
REVISIONS		DIST		COUNTY	SHEET NO.