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DATE:  
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**TABLE OF FOUNDATION LOADS - 0° SKEW**

Span Length	Drilled Shaft Loads				Pile Loads				
	DC	LL	Service I (1)	Strength I (2)	DC	EH (3)	LL	Service I (1)	Strength I (2)
	Tons/Shaft	Tons/Shaft	Tons/Shaft	Tons/Shaft	Tons/Pile	Tons/Pile	Tons/Pile	Tons/Pile	Tons/Pile
40	42	22	64	91	22	16	21	59	88
45	45	23	68	97	23	16	22	61	91
50	48	24	72	102	25	16	22	63	94
55	51	25	76	108	27	16	23	66	98
60	55	26	81	114	28	16	23	67	99
65	58	27	85	120	30	16	24	70	104
70	61	28	89	125	32	16	24	72	106
75	64	28	92	129	33	16	24	73	107
80	67	29	96	135	35	16	25	76	112
85	70	30	100	140	36	16	25	77	113
90	73	30	103	144	38	16	25	79	115
95	77	31	108	151	40	16	26	82	120
100	80	32	112	156	41	16	26	83	121
105	83	32	115	160	43	16	26	85	123
110	86	33	119	165	45	16	27	88	128
115	89	33	122	169	46	16	27	89	129
120	92	34	126	175	48	16	27	91	131
125	95	34	129	178	49	16	27	92	133

**TABLE OF FOUNDATION LOADS - 15° SKEW**

Span Length	Drilled Shaft Loads				Pile Loads				
	DC	LL	Service I (1)	Strength I (2)	DC	EH (3)	LL	Service I (1)	Strength I (2)
	Tons/Shaft	Tons/Shaft	Tons/Shaft	Tons/Shaft	Tons/Pile	Tons/Pile	Tons/Pile	Tons/Pile	Tons/Pile
40	42	22	64	91	22	16	22	60	90
45	46	23	69	98	24	16	22	62	93
50	49	24	73	103	25	16	23	64	96
55	52	25	77	109	27	16	23	66	98
60	55	26	81	114	29	16	24	69	102
65	58	27	85	120	30	16	24	70	104
70	61	28	89	125	32	16	24	72	106
75	64	28	92	129	33	16	25	74	109
80	67	29	96	135	35	16	25	76	112
85	71	30	101	141	37	16	25	78	114
90	74	30	104	145	38	16	26	80	117
95	77	31	108	151	40	16	26	82	120
100	80	32	112	156	41	16	26	83	121
105	83	32	115	160	43	16	27	86	125
110	86	33	119	165	45	16	27	88	128
115	89	33	122	169	46	16	27	89	129
120	93	34	127	176	48	16	28	92	133
125	96	34	130	180	50	16	28	94	136

**TABLE OF FOUNDATION LOADS - 30° SKEW**

Span Length	Drilled Shaft Loads				Pile Loads				
	DC	LL	Service I (1)	Strength I (2)	DC	EH (3)	LL	Service I (1)	Strength I (2)
	Tons/Shaft	Tons/Shaft	Tons/Shaft	Tons/Shaft	Tons/Pile	Tons/Pile	Tons/Pile	Tons/Pile	Tons/Pile
40	35	18	53	75	18	14	18	50	75
45	37	19	56	80	20	14	18	52	78
50	40	20	60	85	21	14	18	53	79
55	42	20	62	88	22	14	19	55	82
60	45	21	66	93	23	14	19	56	83
65	47	22	69	97	25	14	19	58	86
70	50	22	72	101	26	14	20	60	89
75	52	23	75	105	27	14	20	61	90
80	55	23	78	109	29	14	20	63	92
85	58	24	82	115	30	14	21	65	95
90	60	24	84	117	31	14	21	66	97
95	63	25	88	123	32	14	21	67	98
100	65	25	90	125	34	14	21	69	100
105	68	26	94	131	35	14	22	71	103
110	70	26	96	133	36	14	22	72	105
115	73	27	100	139	38	14	22	74	107
120	75	27	102	141	39	14	22	75	108
125	78	28	106	147	40	14	23	77	111

**TABLE OF FOUNDATION LOADS - 45° SKEW**

Span Length	Drilled Shaft Loads				Pile Loads				
	DC	LL	Service I (1)	Strength I (2)	DC	EH (3)	LL	Service I (1)	Strength I (2)
	Tons/Shaft	Tons/Shaft	Tons/Shaft	Tons/Shaft	Tons/Pile	Tons/Pile	Tons/Pile	Tons/Pile	Tons/Pile
40	31	15	46	65	16	14	16	46	69
45	33	16	49	69	17	14	16	47	70
50	35	16	51	72	18	14	17	49	73
55	37	17	54	76	19	14	17	50	75
60	39	17	56	79	20	14	17	51	76
65	41	18	59	83	22	14	18	54	80
70	43	19	62	87	23	14	18	55	81
75	46	19	65	91	24	14	18	56	83
80	48	19	67	93	25	14	18	57	84
85	50	20	70	98	26	14	19	59	87
90	52	20	72	100	27	14	19	60	88
95	54	21	75	104	28	14	19	61	89
100	56	21	77	107	29	14	19	62	91
105	58	22	80	111	30	14	19	63	92
110	60	22	82	114	31	14	20	65	95
115	62	22	84	116	32	14	20	66	96
120	64	23	87	120	33	14	20	67	97
125	66	23	89	123	34	14	20	68	99

- ① 1.00DC + 1.00EH + 1.00LL (all other loads not included)
- ② 1.25DC + 1.50EH + 1.75LL (all other loads not included)
- ③ Axial load due to the soil pressure acting on the backwall, which is generated due to the pile batter.


**GENERAL NOTES:**  
Designed according to AASHTO LRFD Bridge Design Specifications.

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 abutments shown on the standards AIG-38, AIG-38-15, AIG-38-30, and AIG-38-45.

NOT A STANDARD / NOT FOR INCLUSION IN THE PLANS.

**HL93 LOADING**

 Texas Department of Transportation		Bridge Division Standard	
<b>ABUTMENT FOUNDATION LOADS</b> <b>PRESTR CONCRETE I-GIRDERS</b> <b>TYPE Tx28 - Tx54</b> <b>38' ROADWAY</b> <b>IG-AFL38-24</b>			
FILE: IG-AFL38-24.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT
©TxDOT	May 2024	CONTRACT	SECTION
REVISIONS		JOB	HIGHWAY
		DIST	COUNTY
		SHEET NO.	