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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	35	18	53	75	18	13	17	48	72
45	37	19	56	80	19	13	18	50	75
50	40	20	60	85	21	13	18	52	77
55	42	20	62	88	22	13	18	53	79
60	45	21	66	93	23	13	19	55	82
65	47	22	69	97	25	13	19	57	84
70	50	22	72	101	26	13	19	58	85
75	53	23	76	107	27	13	20	60	88
80	55	23	78	109	29	13	20	62	91
85	58	24	82	115	30	13	20	63	92
90	60	24	84	117	31	13	20	64	93
95	63	25	88	123	33	13	21	67	98
100	65	25	90	125	34	13	21	68	99
105	68	26	94	131	35	13	21	69	100
110	71	26	97	134	37	13	21	71	103
115	73	27	100	139	38	13	22	73	106
120	76	27	103	142	39	13	22	74	107

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	35	18	53	75	18	13	17	48	72
45	38	19	57	81	20	13	18	51	76
50	40	20	60	85	21	13	18	52	77
55	43	20	63	89	22	13	19	54	80
60	45	21	66	93	24	13	19	56	83
65	48	22	70	99	25	13	19	57	84
70	50	22	72	101	26	13	20	59	87
75	53	23	76	107	28	13	20	61	90
80	56	23	79	110	29	13	20	62	91
85	58	24	82	115	30	13	20	63	92
90	61	24	85	118	31	13	21	65	95
95	63	25	88	123	33	13	21	67	98
100	66	25	91	126	34	13	21	68	99
105	68	26	94	131	35	13	21	69	100
110	71	26	97	134	37	13	22	72	104
115	74	27	101	140	38	13	22	73	106
120	76	27	103	142	39	13	22	74	107

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	36	18	54	77	19	14	18	51	76
45	38	19	57	81	20	14	18	52	78
50	41	20	61	86	21	14	19	54	81
55	44	20	64	90	23	14	19	56	83
60	46	21	67	94	24	14	20	58	86
65	49	22	71	100	25	14	20	59	87
70	51	22	73	102	27	14	20	61	90
75	54	23	77	108	28	14	21	63	93
80	56	23	79	110	29	14	21	64	94
85	59	24	83	116	31	14	21	66	97
90	62	24	86	120	32	14	21	67	98
95	64	25	89	124	33	14	22	69	101
100	67	25	92	128	35	14	22	71	103
105	69	26	95	132	36	14	22	72	105
110	72	26	98	136	37	14	22	73	106
115	75	27	102	141	39	14	23	76	110
120	77	27	104	144	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	32	15	47	66	17	14	17	48	72
45	34	16	50	71	18	14	17	49	73
50	36	16	52	73	19	14	17	50	75
55	38	17	55	77	20	14	18	52	78
60	40	17	57	80	21	14	18	53	79
65	43	18	61	85	22	14	18	54	80
70	45	19	64	90	23	14	18	55	81
75	47	19	66	92	24	14	19	57	84
80	49	19	68	95	25	14	19	58	86
85	51	20	71	99	27	14	19	60	88
90	53	20	73	101	28	14	19	61	89
95	55	21	76	106	29	14	20	63	92
100	58	21	79	109	30	14	20	64	94
105	60	22	82	114	31	14	20	65	95
110	62	22	84	116	32	14	20	66	96
115	64	22	86	119	33	14	20	67	97
120	66	23	89	123	34	14	21	69	100

- 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-40, AIG-40-15, AIG-40-30, and AIG-40-45.

NOT A STANDARD / NOT FOR INCLUSION IN THE PLANS.

HL93 LOADING

 Texas Department of Transportation				Bridge Division Standard	
ABUTMENT FOUNDATION LOADS PRESTR CONCRETE I-GIRDERS TYPE Tx28 - Tx54 40' ROADWAY IG-AFL40-24					
FILE: IG-AFL40-24.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT	
©TxDOT May 2024	CONT	SECT	JOB	HIGHWAY	
REVISIONS		DIST	COUNTY	SHEET NO.	