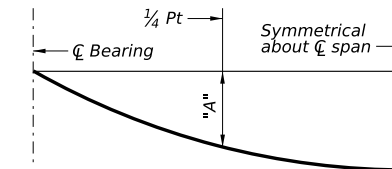


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TABLE OF DEAD LOAD DEFLECTIONS

TYPE Tx28 GIRDERS			TYPE Tx34 GIRDERS			TYPE Tx40 GIRDERS			TYPE Tx46 GIRDERS			TYPE Tx54 GIRDERS		
SPAN LENGTH	"A"	"B"	SPAN LENGTH	"A"	"B"	SPAN LENGTH	"A"	"B"	SPAN LENGTH	"A"	"B"	SPAN LENGTH	"A"	"B"
Ft	Ft	Ft	Ft	Ft	Ft	Ft	Ft	Ft	Ft	Ft	Ft	Ft	Ft	Ft
40	0.008	0.012	40	0.005	0.007	40	0.003	0.005	40	0.002	0.003	40	0.001	0.002
45	0.014	0.019	45	0.008	0.012	45	0.005	0.008	45	0.004	0.005	45	0.002	0.003
50	0.021	0.030	50	0.013	0.018	50	0.008	0.012	50	0.006	0.008	50	0.004	0.005
55	0.031	0.045	55	0.019	0.027	55	0.012	0.017	55	0.008	0.012	55	0.006	0.008
60	0.045	0.064	60	0.027	0.038	60	0.018	0.025	60	0.012	0.017	60	0.008	0.011
65	0.063	0.089	65	0.037	0.053	65	0.025	0.035	65	0.017	0.024	65	0.011	0.016
70	0.085	0.121	70	0.051	0.073	70	0.033	0.047	70	0.023	0.032	70	0.015	0.021
75	0.113	0.161	75	0.068	0.096	75	0.044	0.063	75	0.030	0.043	75	0.020	0.028
			80	0.088	0.125	80	0.058	0.082	80	0.039	0.056	80	0.026	0.037
			85	0.113	0.161	85	0.074	0.105	85	0.050	0.072	85	0.033	0.047
						90	0.093	0.133	90	0.064	0.090	90	0.042	0.060
						95	0.117	0.166	95	0.079	0.113	95	0.052	0.075
									100	0.098	0.139	100	0.065	0.092
									105	0.119	0.170	105	0.079	0.112
									110	0.144	0.205	110	0.095	0.136
									115			115	0.114	0.163
									120			120	0.136	0.193
									125			125	0.161	0.228



DEAD LOAD DEFLECTION DIAGRAM

Calculated deflections shown are due to the concrete slab on interior girders only ($E_c = 5000$ ksi). Adjust values as required for exterior girders and if optional slab forming is used. These values may require field verification.

TABLE OF ESTIMATED QUANTITIES

SPAN LENGTH	REINF CONCRETE SLAB	Prestressed Concrete Girders			TOTAL REINF STEEL (5)
		ABUT TO INT BT (4)	INT BT TO INT BT (4)	ABUT TO ABUT (4)	
Ft	SF	LF	LF	LF	Lb
40	1,440	197.50	197.50	197.50	3,312
45	1,620	222.50	222.50	222.50	3,726
50	1,800	247.50	247.50	247.50	4,140
55	1,980	272.50	272.50	272.50	4,554
60	2,160	297.50	297.50	297.50	4,968
65	2,340	322.50	322.50	322.50	5,382
70	2,520	347.50	347.50	347.50	5,796
75	2,700	372.50	372.50	372.50	6,210
80	2,880	397.50	397.50	397.50	6,624
85	3,060	422.50	422.50	422.50	7,038
90	3,240	447.50	447.50	447.50	7,452
95	3,420	472.50	472.50	472.50	7,866
100	3,600	497.50	497.50	497.50	8,280
105	3,780	522.50	522.50	522.50	8,694
110	3,960	547.50	547.50	547.50	9,108
115	4,140	572.50	572.50	572.50	9,522
120	4,320	597.50	597.50	597.50	9,936
125	4,500	622.50	622.50	622.50	10,350

- (4) Fabricator will adjust lengths for girder slopes as required.
- (5) Reinforcing steel weight is calculated using an approximate factor of 2.3 lbs/SF.

MATERIAL NOTES:

Provide Class S concrete ($f_c = 4,000$ psi).
 Provide Class S (HPC) concrete if shown elsewhere in the plans.
 Provide Grade 60 reinforcing steel.
 Provide bar laps, where required, as follows:
 Uncoated ~ #4 = 1'-7"
 Epoxy coated ~ #4 = 2'-5"
 Deformed welded wire reinforcement (WWR) (ASTM A1064) of equal size and spacing may be substituted for Bars A, D, OA, P or T unless noted otherwise.

GENERAL NOTES:

Designed according to AASHTO LRFD Bridge Design Specifications.
 Multi-span units, with slab continuous over interior bents, may be formed with the details shown on this sheet and the I-Girder Continuous Slab Detail (IGCS) standard.
 See I-Girder Thickened Slab End Details (IGTS) standard for details and quantity adjustments.
 See Prestressed Concrete Panels (PCP) standard and Prestressed Concrete Panel Fabrication Details (PCP-FAB) standard for panel details not shown.
 See I-Girder Miscellaneous Slab Details (IGMS) standard for miscellaneous details.
 See applicable rail details for rail anchorage in slab.
 See Permanent Metal Deck Forms (PMD) standard for details and quantity adjustments if this option is used.
 This standard does not support the use of transition bents.

Cover dimensions are clear dimensions, unless noted otherwise.

HL93 LOADING

SHEET 2 OF 2



PRESTRESSED CONCRETE I-GIRDER SPANS (TYPE Tx28 THRU Tx54) 34' ROADWAY

SIG-34

FILE: IG-SIG3400-24.dgn	DN: TAR	CK: VC	DW: SFS	CK: TAR
©TxDOT January 2023	CONT	SECT	JOB	HIGHWAY
REVISIONS				
11-24: Flipped top mat	DIST	COUNTY	SHEET NO.	

DATE: FILE: