



CAMBER DIAGRAM

***TOP OF GIRDER WEB ELEVATIONS (E.B.)**

Location	℄ Brg. W. Abut.	℄ Splice 1	℄ Brg. Pier	℄ Splice 2	℄ Brg. E. Abut.
Girder 1	713.24	712.25	711.77	711.39	710.66
Girder 2	713.41	712.42	711.94	711.56	710.83
Girder 3	713.55	712.56	712.08	711.70	710.97
Girder 4	713.48	712.49	712.01	711.64	710.90
Girder 5	713.38	712.39	711.91	711.53	710.80
Girder 6	713.24	712.25	711.77	711.39	710.66

*For fabrication use only.

***TOP OF GIRDER WEB ELEVATIONS (W.B.)**

Location	℄ Brg. W. Abut.	℄ Splice 1	℄ Brg. Pier	℄ Splice 2	℄ Brg. E. Abut.
Girder 7	712.86	711.87	711.39	711.01	710.28
Girder 8	713.05	712.06	711.58	711.20	710.47
Girder 9	713.21	712.21	711.74	711.36	710.63
Girder 10	713.32	712.33	711.85	711.48	710.74
Girder 11	713.23	712.24	711.76	711.38	710.65
Girder 12	713.11	712.12	711.64	711.27	710.53

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INTERIOR GIRDER MOMENT TABLE		
	0.4 Sp. 1 or 0.6 Sp. 2	Pier
I_s	(in ⁴) 115965	226580
$I_c(n)$	(in ⁴) 220413	349594
$I_c(3n)$	(in ⁴) 164210	278411
$I_c(cr)$	(in ⁴)	243085
S_s	(in ³) 2995	5395
$S_c(n)$	(in ³) 3780	6167
$S_c(3n)$	(in ³) 3437	5777
$S_c(cr)$	(in ³)	6143
DC1	(k/ft) 1.209	1.430
M _{DC1}	(k) 3001.0	7060.0
DC2	(k/ft) 0.173	0.173
M _{DC2}	(k) 441.0	973.0
DW	(k/ft) 0.383	0.383
M _{DW}	(k) 977.0	2154.0
$M_{\ell + IM}$	(k) 3419.0	4126.0
M_u (Strength I)	(k) 11751.3	20492.8
$\phi_r M_n$	(k) 17754.3	24545.3
f_s DC1	(ksi) 12.0	15.7
f_s DC2	(ksi) 1.5	1.9
f_s DW	(ksi) 3.4	4.2
f_s ($\ell + IM$)	(ksi) 10.9	8.1
f_s (Service II)	(ksi) 31.1	32.3
$0.95R_n F_y f$	(ksi) 47.5	47.5
f_s (Total)(Strength I)	(ksi)	42.4
$\phi_r F_n$	(ksi)	50.0
V_r	(k)	54.8
		65.2

INTERIOR GIRDER REACTION TABLE		
	Abutments	Pier
R _{DC1}	(k) 86.2	324.0
R _{DC2}	(k) 12.4	44.3
R _{DW}	(k) 27.5	98.1
R $\ell + IM$	(k) 123.6	245.3
R _{Total}	(k) 249.7	711.7

- I_s, S_s : Non-composite moment of inertia and section modulus of the steel section used for computing f_s (Total-Strength I, and Service II) due to non-composite dead loads (in⁴ and in³).
- $I_c(n), S_c(n)$: Composite moment of inertia and section modulus of the steel and deck based upon the modular ratio, "n", used for computing f_s (Total-Strength I, and Service II) in uncracked sections due to short-term composite live loads (in⁴ and in³).
- $I_c(3n), S_c(3n)$: Composite moment of inertia and section modulus of the steel and deck based upon 3 times the modular ratio, "3n", used for computing f_s (Total-Strength I, and Service II) in uncracked sections, due to long-term composite (superimposed) dead loads (in⁴ and in³).
- $I_c(cr), S_c(cr)$: Composite moment of inertia and section modulus of the steel and longitudinal deck reinforcement, used for computing f_s (Total-Strength I and Service II) in cracked sections, due to both short-term composite live loads and long-term composite (superimposed) dead loads (in⁴ and in³).
- DC1: Un-factored non-composite dead load (kips/ft.).
- M_{DC1}: Un-factored moment due to non-composite dead load (kip-ft.).
- DC2: Un-factored long-term composite (superimposed excluding future wearing surface) dead load (kips/ft.).
- M_{DC2}: Un-factored moment due to long-term composite (superimposed excluding future wearing surface) dead load (kip-ft.).
- DW: Un-factored long-term composite (superimposed future wearing surface only) dead load (kips/ft.).
- M_{DW}: Un-factored moment due to long-term composite (superimposed future wearing surface only) dead load (kip-ft.).
- $M_{\ell + IM}$: Un-factored live load moment plus dynamic load allowance (kip-ft.).
- M_u (Strength I): Factored design moment (kip-ft.).
1.25 (M_{DC1} + M_{DC2}) + 1.5 M_{DW} + 1.75 $M_{\ell + IM}$
- $\phi_r M_n$: Compact composite positive moment capacity computed according to Article 6.10.7.1 or non-slender negative moment capacity according to Article A6.1.1 or A6.1.2 (kip-ft.).
- f_s DC1: Un-factored stress at edge of flange for controlling steel flange due to vertical non-composite dead loads as calculated below (ksi).
M_{DC1} / S_{nc}
- f_s DC2: Un-factored stress at edge of flange for controlling steel flange due to vertical composite dead loads as calculated below (ksi).
M_{DC2} / $S_c(3n)$ or M_{DC2} / $S_c(cr)$ as applicable.
- f_s DW: Un-factored stress at edge of flange for controlling steel flange due to vertical composite future wearing surface loads as calculated below (ksi).
M_{DW} / $S_c(3n)$ or M_{DW} / $S_c(cr)$ as applicable.
- f_s ($\ell + IM$): Un-factored stress at edge of flange for controlling steel flange due to vertical composite live load plus impact loads as calculated below (ksi).
 $M_{\ell + IM} / S_c(n)$ or M_{DW} / $S_c(cr)$ as applicable.
- f_s (Service II): Sum of stresses as computed below (ksi).
 $f_{sDC1} + f_{sDC2} + f_{sDW} + 1.3 f_s(\ell + IM)$
- $0.95R_n F_y f$: Composite stress capacity for Service II loading according to Article 6.10.4.2 (ksi).
- f_s (Total)(Strength I): Sum of stresses as computed below on non-compact section (ksi).
1.25 ($f_{sDC1} + f_{sDC2}$) + 1.5 $f_{sDW} + 1.75 f_s(\ell + IM)$
- $\phi_r F_n$: Non-Compact composite positive or negative stress capacity for Strength I loading according to Article 6.10.7 or 6.10.8 (ksi).
- V_r : Maximum factored shear range in span computed according to Article 6.10.10.

PRE-FINAL