

SPLICE DETAIL #1 & #2
(12 Required)

- Notes:
1. Splice plates shall be Grade 50 Structural Steel **.
 2. Load carrying components designated "NTR" shall conform to the Impact Testing Requirements given in the special provision for Structural Steel for Bridges.
 3. Bolts shall have no threads in the shear planes of the connected plates.

** See Special Provision for Structural Steel for Bridges

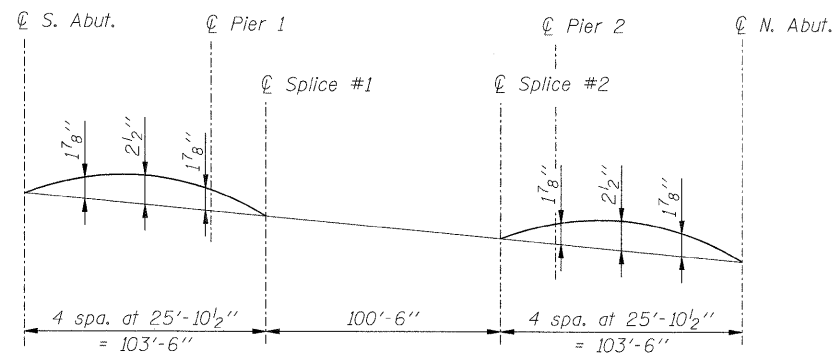
INTERIOR GIRDER MOMENT TABLE

	0.4 Sp. 1	Pier 1	0.5 Sp. 2	Pier 2	0.6 Sp. 3
I_s	(in ⁴) 31,584	44,353	31,584	44,353	31,584
$I_c(n)$	(in ⁴) 67,884	--	67,884	--	67,884
$I_c(3n)$	(in ⁴) 51,581	--	51,581	--	51,581
$I_c(cr)$	(in ⁴) --	51,458	--	51,458	--
S_s	(in ³) 1,128	1,556	1,128	1,556	1,128
$S_c(n)$	(in ³) 1,459	--	1,459	--	1,459
$S_c(3n)$	(in ³) 1,348	--	1,348	--	1,348
$S_c(cr)$	(in ³) --	1,640	--	1,640	--
DC1	(k/ft) 1.103	1.158	1.103	1.158	1.103
M _{DC1}	(k) 40	1950	1250	1950	40
DC2	(k/ft) 0.150	0.150	0.150	0.150	0.150
M _{DC2}	(k) 5	260	174	260	5
DW	(k/ft) 0.367	0.367	0.367	0.367	0.367
M _{DW}	(k) 12	635	425	635	12
M _{ℓ + IM}	(k) 1,056	1,822	1,604	1,822	1,056
M _u (Strength I)	(k) 1,922	6,904	5,225	6,904	1,922
$\phi_r M_n, \phi_r M_{nc}$	(k) 7,744	7,359	7,216	7,359	7,744
f_s DC1	(ksi) 0.4	15.0	13.3	15.0	0.4
f_s DC2	(ksi) 0.0	1.9	1.5	1.9	0.0
f_s DW	(ksi) 0.1	4.6	3.8	4.6	0.1
f_s (ℓ + IM)	(ksi) 8.7	13.3	0.2	13.3	8.7
f_s (Service II)	(ksi) 11.9	38.9	18.9	38.9	11.9
0.95R _n F _y f	(ksi) 47.5	47.5	47.5	47.5	47.5
V _r	(k) 33	--	34	--	33

* Compact sections

INTERIOR GIRDER REACTION TABLE

	S. Abut.	Pier 1	Pier 2	N. Abut.
R _{DC1}	(k) 47.1	154.7	154.7	47.1
R _{DC2}	(k) 2.5	20.6	20.6	2.5
R _{DW}	(k) 6.1	50.3	50.3	6.1
R _{ℓ + IM}	(k) 87.6	187.1	187.1	87.6
R _{Total}	(k) 143.3	412.7	412.7	143.3



CAMBER DIAGRAM

TOP OF WEB ELEVATIONS
(For fabrication only.)

Girder No.	℄ S. Abut.	℄ Pier 1	℄ Splice #1	℄ Splice #2	℄ Pier 2	℄ N. Abut.
1	731.78	732.19	732.12	731.32	730.98	729.32
2	731.96	732.36	732.29	731.49	731.15	729.49
3	732.09	732.49	732.42	731.62	731.28	729.62
4	732.09	732.49	732.42	731.62	731.28	729.62
5	731.96	732.36	732.29	731.49	731.15	729.49
6	731.78	732.19	732.12	731.32	730.98	729.32

- 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 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_{ℓ + IM}: Un-factored live load plus dynamic load allowance (impact) ((kip-ft.).
- M_u (Strength I): 1.25 (M_{DC1} + M_{DC2}) + 1.5 M_{DW} + 1.75 M_{ℓ + IM}
- $\phi_r M_n$: Compact composite positive moment capacity computed according to Article 6.10.7.1 (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 (ℓ + IM): Un-factored stress at edge of flange for controlling steel flange due to vertical composite live plus impact loads as calculated below (ksi).
- M_{ℓ + IM} / S_{c(3n)} or M_{ℓ + IM} / 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_nF_yf: 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_{sℓ + IM}
- $\phi_r F_n$: Non-Compact composite positive or negative stress capacity for Strength I loading according to Article 6.10.7.2 (ksi).
- V_r: Maximum factored shear range in composite portion of span computed according to Article 6.10.10.

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