



FRAMING PLAN

INTERIOR GIRDER MOMENT TABLE					
		0.4 Span 1 or 0.6 Span 4	0.5 Span 2 or Span 3	Pier 1 or Pier 3	Pier 2
I_s	(in ⁴)	5630	5630	5630	5630
$I_c(n)$	(in ⁴)	14,777	14,777	-	-
$I_c(3n)$	(in ⁴)	10,690	10,690	-	-
S_s	(in ³)	411	411	411	411
$S_c(n)$	(in ³)	591.2	591.2	-	-
$S_c(3n)$	(in ³)	532.9	532.9	-	-
Z	(in ³)	-	-	461	461
\bar{Q}	(k/')	0.84	0.84	1.36	1.36
$M\bar{Q}$	(k)	141.5	136.4	382.8	405.6
$s\bar{Q}$	(k/')	0.516	0.516	-	-
$M_s\bar{Q}$	(k)	99.4	110.2	-	-
$M\bar{L}$	(k)	326.7	351.4	194.9	214.2
M_{1W}	(k)	93.8	94.3	54.1	57.5
$^5_3 [M\bar{L} + I]$	(k)	700.8	742.8	415.0	452.8
M_a	(k)	1,224.3	1,286.3	1,037.1	1,116.0
M_u	(k)	2,678.8	2,679.3	1,905.6	1,905.6
$f_s \bar{Q}$ non-comp	(ksi)	4.17	4.02	7.56	7.80
$f_s \bar{Q}$ (comp)	(ksi)	2.24	2.48	3.71	4.15
$f_s \ ^5_3 [M\bar{L} + M_I]$	(ksi)	14.22	15.08	12.22	13.34
f_s (Overload)	(ksi)	20.63	21.58	23.5	25.28
f_s (Total)	(ksi)	-	-	-	-
VR	(k)	48.78	39.07	-	-

* Compact section
** Braced non-compact and partially braced section

I_s, S_s : Non-composite moment of inertia and section modulus of the steel section used for computing f_s (Total and Overload) 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 and Overload) 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 and Overload) due to long-term composite (superimposed) dead loads (in⁴ and in³).
 Z : Plastic Section Modulus of the steel section in non-composite areas (in³).
 \bar{Q} : Un-factored non-composite dead load (kips/ft.).
 $M\bar{Q}$: Un-factored moment due to non-composite dead load (kip-ft.).
 $s\bar{Q}$: Un-factored long-term composite (superimposed) dead load (kips/ft.).
 $M_s\bar{Q}$: Un-factored moment due to long-term composite (superimposed) dead load (kip-ft.).

INTERIOR GIRDER REACTION TABLE				
		Abut.	Piers 1 & 3	Pier 2
$R\bar{Q}$	(k)	25.6	82.6	84.2
$R\bar{L}$	(k)	35	41.5	43.0
R_I	(k)	10.05	11.51	11.53
R_{Total}	(k)	70.6	135.6	138.7

$M\bar{L}$: Un-factored live load moment (kip-ft.).
 M_I : Un-factored moment due to impact (kip-ft.).
 M_a : Factored design moment (kip-ft.).
 $1.3 [M\bar{Q} + M_s\bar{Q} + \frac{5}{3} (M\bar{L} + M_I)]$
 M_u : Compact composite moment capacity according to AASHTO LFD 10.50.1.1 or compact non-composite moment capacity according to AASHTO LFD 10.48.1 (kip-ft.).
 f_s (Overload): Sum of stresses as computed from the moments below (ksi).
 $M\bar{Q} + M_s\bar{Q} + \frac{5}{3} (M\bar{L} + M_I)$
 f_s (Total): Sum of stresses as computed from the moments below on non-compact section (ksi).
 $1.3 [M\bar{Q} + M_s\bar{Q} + \frac{5}{3} (M\bar{L} + M_I)]$
 VR : Maximum \bar{L} + impact shear range within the composite portion of the span for stud shear connector design (kips).

- Notes:
- Load carrying components designated "NTR" shall conform to the Supplemental Requirements for Notch Toughness, Zone 2.
 - For Diaphragm Details see sheet S15.
 - For Beam and Splice Details see sheet S16.