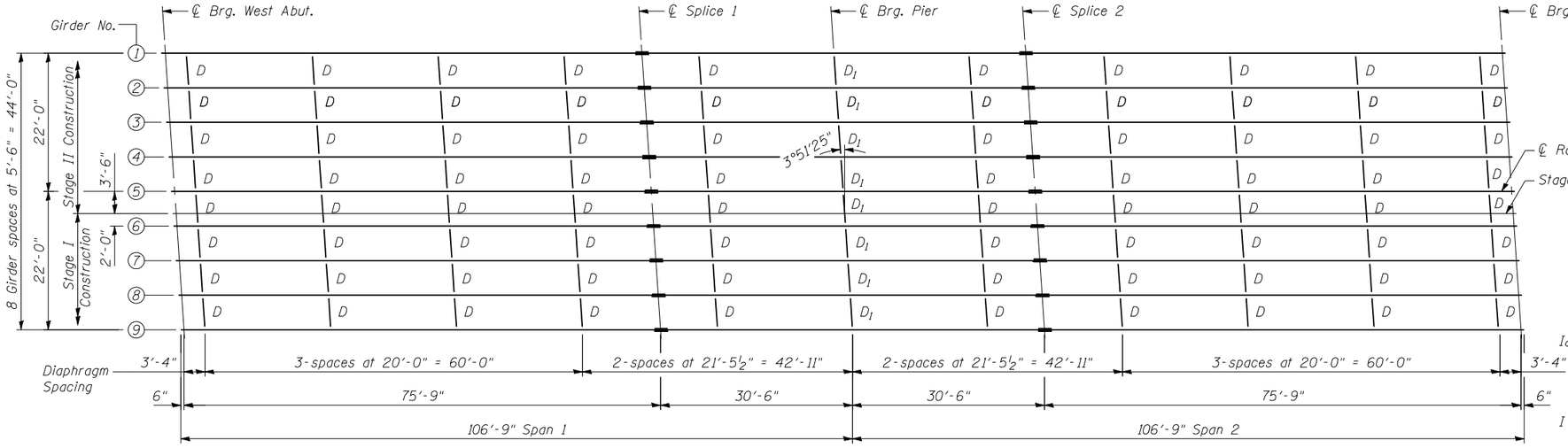
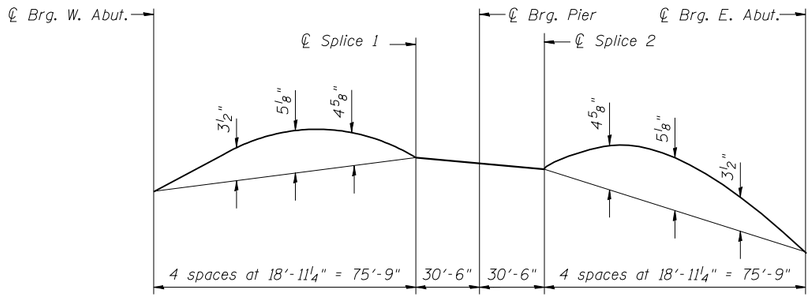


FRAMING PLAN

TOP OF WEB ELEVATIONS

(for fabrication only)

Location	Girder 1	Girder 2	Girder 3	Girder 4	Girder 5	Girder 6	Girder 7	Girder 8	Girder 9
℄ Brg. W. Abut.	735.62	735.74	735.86	735.95	736.04	735.97	735.89	735.79	735.68
℄ Splice 1	736.23	736.34	736.45	736.54	736.62	736.54	736.45	736.34	736.22
℄ Pier	735.91	736.02	736.12	736.20	736.29	736.20	736.11	735.99	735.87
℄ Splice 2	735.58	735.69	735.79	735.87	735.95	735.86	735.76	735.65	735.52
℄ Brg. E. Abut.	733.37	733.47	733.57	733.64	734.70	733.60	733.50	733.38	733.25



CAMBER DIAGRAM

Note:
See Sheet 18 of 27 For splice and diaphragm details.

INTERIOR GIRDER MOMENT TABLE			
		0.4 Sp. 1 or .6 Sp. 2	Pier
I_s	(in^4)	10160	31631
$I_c(n)$	(in^4)	23421	53971
$I_c(3n)$	(in^4)	17323	41521
$I_c(cr)$	(in^4)	----	34942
S_s	(in^3)	535	1543
$S_c(n)$	(in^3)	723	1819
$S_c(3n)$	(in^3)	658	1690
$S_c(cr)$	(in^3)	----	1599
DC1	(k/')	0.80	0.80
M_{DC1}	('k)	468	1550
DC2	(k/')	0.31	0.31
M_{DC2}	('k)	199	553
DW	(k/')	0.2	0.20
M_{DW}	('k)	128	353
M_{L+IM}	('k)	1166	1741
M_u (Strength I)	('k)	3066	6205
$\phi_f M_n$	('k)	3591	----
f_s DC1	(ksi)	10.5	12.1
f_s DC2	(ksi)	3.6	4.2
f_s DW	(ksi)	2.3	2.6
f_s (L+IM)	(ksi)	19.4	13.1
f_s (Service II)	(ksi)	41.6	35.9
$0.95R_hF_{yf}$	(ksi)	47.5	47.5
f_s (Total)(Strength I)	(ksi)	----	47.2
$\phi_f F_n$	(ksi)	----	50.0
V_r	(k)	26.9	26.9

INTERIOR GIRDER REACTION TABLE			
		Abutments	Pier
R_{DC1}	(k)	28	114
R_{DC2}	(k)	11	43
R_{DW}	(k)	8	28
R_{L+IM}	(k)	75	166
R_{Total}	(k)	122	351

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 (in^4 and in^3).

$I_c(n)$, $S_c(n)$: 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 (in^4 and in^3).

$I_c(3n)$, $S_c(3n)$: 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 (in^4 and in^3).

I (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 (in^4 and in^3).

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 moment plus dynamic load allowance (impact) (kip-ft.).

M_u (Strength I): Factored design moment (kip-ft.).
$1.25\ (M_{DC1} + M_{DC2}) + 1.5\ M_{DW} + 1.75\ M_{L+IM}$

$\phi_f M_n$: Compact composite positive moment capacity computed according to Article 6.10.7.1 or non-slender negative moment capacity according to Article A6.1.2 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 (L+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).
$M_{L+IM} / S_c(n)$ or $M_{DW} / S_c(cr)$ as applicable.

f_s (Service II): Sum of stresses as computed below (ksi).
$f_{sDC1} + f_{sDC2} + f_{sDW} + 1.3\ f_s(L+IM)$

$0.95R_hF_yf$: 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).
$1.25\ (f_{sDC1} + f_{sDC2}) + 1.5\ f_{sDW} + 1.75\ f_s(L+IM)$

$\phi_f F_n$: Non-Compact composite positive or negative stress capacity for Strength I loading according to Article 6.10.7 or 6.10.8 (ksi).

V_f: Maximum factored shear range in span computed according to Article 6.10.10.

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CB PROJECT NO 09070-7

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PLOT DATE = 9/17/2012	CHECKED - RKM/MCB	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FRAMING PLAN
STRUCTURE NO. 010-0291
SHEET NO. 17 OF 27 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	(10-32HB-2)BY	CHAMPAIGN	81	55
		CONTRACT NO. 70109		
	ILLINOIS FED. AID PROJECT			