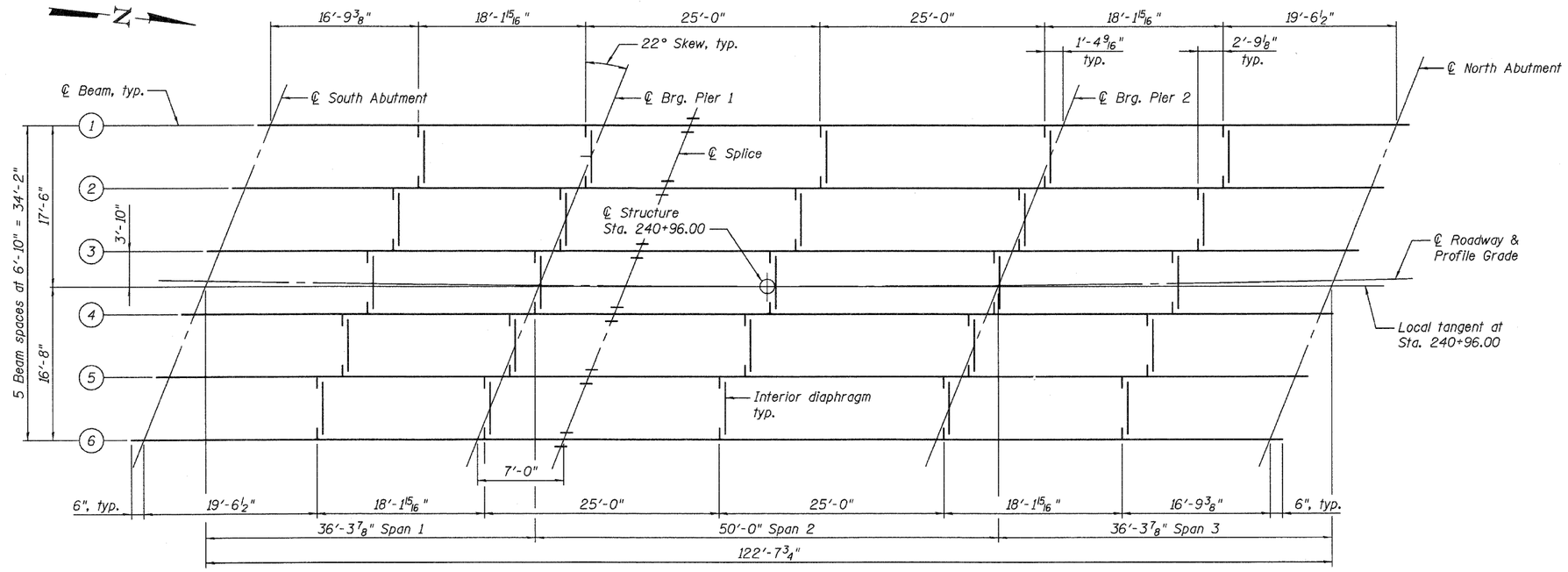

FRAMING PLAN

INTERIOR GIRDER MOMENT TABLE				
		0.4 Sp. 1 or 0.6 Sp. 3	Pier 1 or Pier 2	0.5 Sp. 2
I_s	(in^4)	3270	3270	3270
$I_c(n)$	(in^4)	10119	——	10119
$I_c(3n)$	(in^4)	7517	——	7517
S_s	(in^3)	243	243	243
$S_c(n)$	(in^3)	383	——	383
$S_c(3n)$	(in^3)	347	——	347
DC1	(k/')	0.810	0.810	0.810
M_{DC1}	('k)	65.8	156.6	96.4
DC2	(k/')	0.150	0.150	0.150
M_{DC2}	('k)	12.2	29.0	17.9
DW	(k/')	0.342	0.342	0.342
M_{DW}	('k)	27.8	66.2	40.7
M_{L+IM}	('k)	336.4	317.8	360.1
M_u (Strength I)	('k)	728.0	887.6	834.1
* $\phi_f M_n$, $\phi_f M_{nc}$	('k)	1977	1141	1977
f_s DC1	(ksi)	3.249	7.733	4.760
f_s DC2	(ksi)	0.422	1.432	0.619
f_s DW	(ksi)	0.961	3.269	1.407
f_s 1.3(L+IM)	(ksi)	13.702	20.402	14.667
f_s (Service II)	(ksi)	18.334	32.836	21.453
V_r	(k)	20.1	——	18.1

* Compact sections

INTERIOR GIRDER REACTION TABLE			
		N. Abut. or S. Abut.	Pier 1 or Pier 2
R_{DC1}	(k)	10.4	39.3
R_{DC2}	(k)	1.9	7.3
R_{DW}	(k)	4.4	16.6
R_{L+IM}	(k)	59.7	87.6
R_{Total}	(k)	76.4	150.8

Notes:
All diaphragms shall be installed as steel is erected and secured with erection pins and bolts. Individual diaphragms at supports may be temporarily disconnected to install bearing anchor rods.
For beam elevation, field splice and interior diaphragm details, see sheet 21 of 32.
For details of diaphragms at the abutments, see sheet 13 of 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 ($in.^4$ 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) 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) due to 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 (kip-ft.).
$\phi_f M_{nc}$: Compact non-composite negative moment capacity computed according to Article A6.1.1 (kip-ft.).
f_s (Service II): Sum of stresses as computed from the moments below (ksi). $M_{DC1} + M_{DC2} + M_{DW} + 1.3\,M_{L+IM}$
V_r: Maximum factored shear range in composite portion of span computed according to Article 6.10.10.

MODJESKI and MASTERS
Experience great bridges.

FILE NAME =	USER NAME =	DESIGNED - RLM	REVISED -
		CHECKED - MJP	REVISED -
	PLOT SCALE =	DRAWN - PRC	REVISED -
	PLOT DATE = 12/02/2010	CHECKED - RLM	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FRAMING PLAN AND DESIGN DATA
STRUCTURE NO. 039-0073
SHEET NO. 20 OF 32 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1908	(13B)I-2	JACKSON	71	59

CONTRACT NO. 98898
ILLINOIS FED. AID PROJECT