INTERIOR GIRDER MOMENT TABLE				
		0.4 Sp. 1	Pier	0.6 Sp. 2
I_s	(in^4)	17195	23734	14436
$I_c(n)$	(in^4)	44624		35187
$I_c(3n)$	(in^4)	32431		26359
$I_c(cr)$	(in^4)		29200	
S_s	(in^3)	915	1001	687
$S_c(n)$	(in^3)	1238		940
$S_c(3n)$	(in^3)	1141		864
$S_c(cr)$	(in^3)		1392	
DC1	(k/')	0.99	1.09	0.96
M_{DC1}	('k)	932	1265	53
DC2	(k/')	0.15	0.15	0.15
M_{DC2}	('k)	146	189	10
DW	(k/')	0.38	0.38	0.38
M_{DW}	('k)	365	473	25
M_{L+IM}	('k)	1336	1373	838
M_u (Strength I)	('k)	4233	4930	1583
* $\phi_f M_n$	('k)	5922	5997	4777
f_s DC1	(ksi)	12.22	15.17	0.93
f_s DC2	(ksi)	1.54	1.63	0.14
f_s DW	(ksi)	3.84	4.08	0.35
f_s (L+IM)	(ksi)	12.95	11.83	10.7
f_s (Service II)	(ksi)	34.43	36.26	15.32
$0.95R_hF_{yf}$	(ksi)	47.50	47.50	47.50
V_f	(k)	30.1	30.1	29.5

* Compact Section

INTERIOR GIRDER REACTION TABLE				
		S. Abut.	Pier	N. Abut.
R_{DC1}	(k)	43.42	119.14	15.88
R_{DC2}	(k)	6.62	17.96	2.43
R_{DW}	(k)	16.55	44.85	6.08
R_{L+IM}	(k)	100.57	160.24	78.04
R_{Total}	(k)	167.15	342.20	102.43

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 $in.^3$).

$I_c(cr)$, $S_c(cr)$: 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 ($in.^4$ 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.) and appendix A criteria for negative moment.

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).
$f_{sDC1} + f_{sDC2} + f_{sDW} + 1.3\ f_s(L+IM)$

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

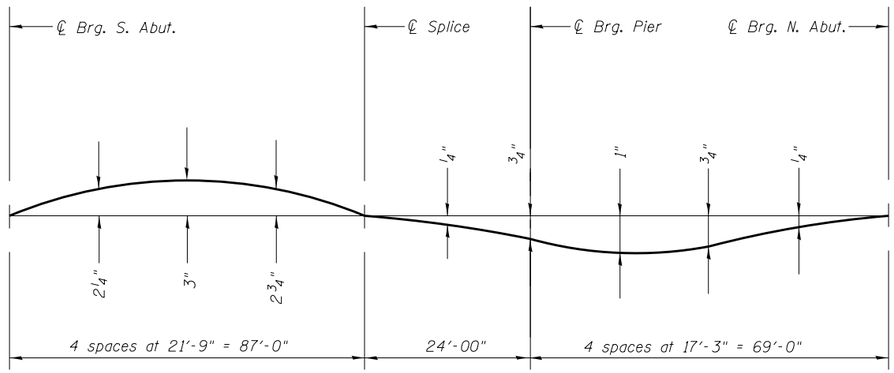
$\Phi_f F_n$: Non-Compact composite positive or negative stress capacity for Strength I loading according to Article 6.10.7.2 (ksi).

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

* TOP OF WEB ELEVATIONS

Location	Girder 1	Girder 2	Girder 3	Girder 4	Girder 5	Girder 6
℄ S. Abut.	488.24	488.50	488.64	488.60	488.48	488.18
℄ Splice	488.58	488.85	488.98	488.94	488.82	488.53
℄ Brg. Pier	488.73	489.00	489.13	489.09	488.97	488.69
℄ N. Abut.	489.16	489.43	489.57	489.53	489.42	489.17

* For Fabrication Only



CAMBER DIAGRAM

T:\Projects\10-221.IDOT-TazBridges_Ten Mile Creek-Phase II\Drawings\Structural\Final Plans\SHEETS\D468671-015-Steel details.dgn

TERRA ENGINEERING LTD.

USER NAME = WAH	DESIGNED - OY	REVISED -	
FILE NAME = D468671-015-Steel details.dgn	CHECKED - DB	REVISED -	
	DRAWN - CM	REVISED -	
PLOT DATE = 10/5/2012	CHECKED - JB	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STEEL DETAILS
STRUCTURE NO. 090-0179
SHEET NO. S15 OF S22 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
673	(102B-1) BR	TAZEWELL	89	58
		CONTRACT NO. 68671		
	ILLINOIS FED. AID PROJECT			