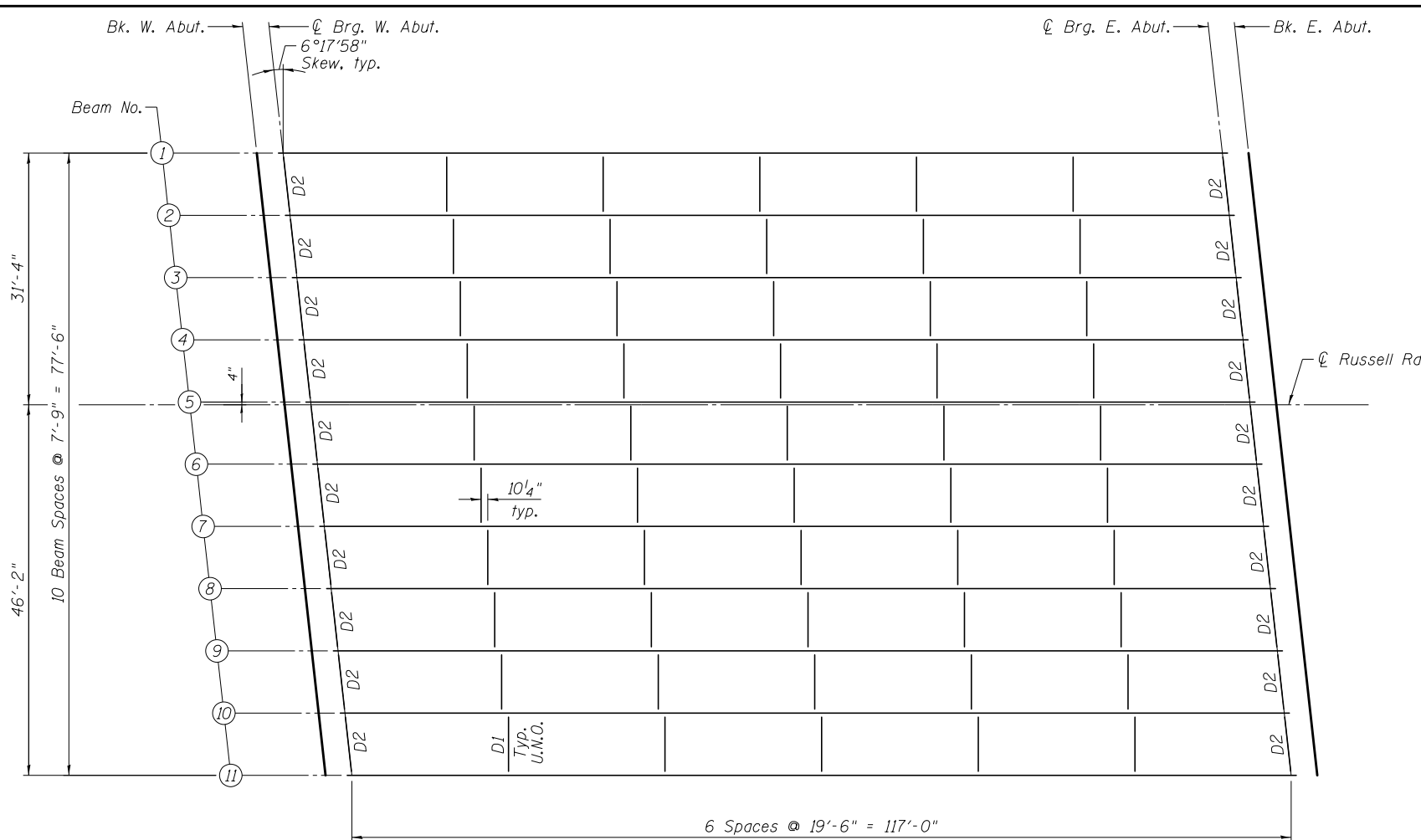


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INTERIOR GIRDER MOMENT TABLE		0.5 Sp. 1
I_s	(in ⁴)	32,425
$I_c(n)$	(in ⁴)	88,804
$I_c(3n)$	(in ⁴)	62,252
$I_c(cr)$	(in ⁴)	-
S_s	(in ³)	1,512
$S_c(n)$	(in ³)	2,081
$S_c(3n)$	(in ³)	1,903
$S_c(cr)$	(in ³)	-
DC1	(k/')	1.08
M _{DC1}	(k)	1,876
DC2	(k/')	0.155
M _{DC2}	(k)	265
DW	(k/')	0.325
M _{DW}	(k)	556
$M_{\xi + IM}$	(k)	2,239
M_u (Strength I)	(k)	7,430
$\phi_r M_n$	(k)	9,925
f_s DC1	(ksi)	14.89
f_s DC2	(ksi)	1.67
f_s DW	(ksi)	3.51
$f_s (\xi + IM)$	(ksi)	12.91
f_s (Service II)	(ksi)	36.85
$0.95R_n F_y f$	(ksi)	47.5
f_s (Total)(Strength I)	(ksi)	48.56
$\phi_r F_n$	(ksi)	-
V_f	(k)	28.4

INTERIOR GIRDER REACTION TABLE		
	W. Abut.	E. Abut.
R _{DC1}	(k) 65.2	65.2
R _{DC2}	(k) 9.6	8.6
R _{DW}	(k) 18.7	19.3
$R_{\xi + IM}$	(k) 106.5	106.5
R _{Total}	(k) 199.9	199.5

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).

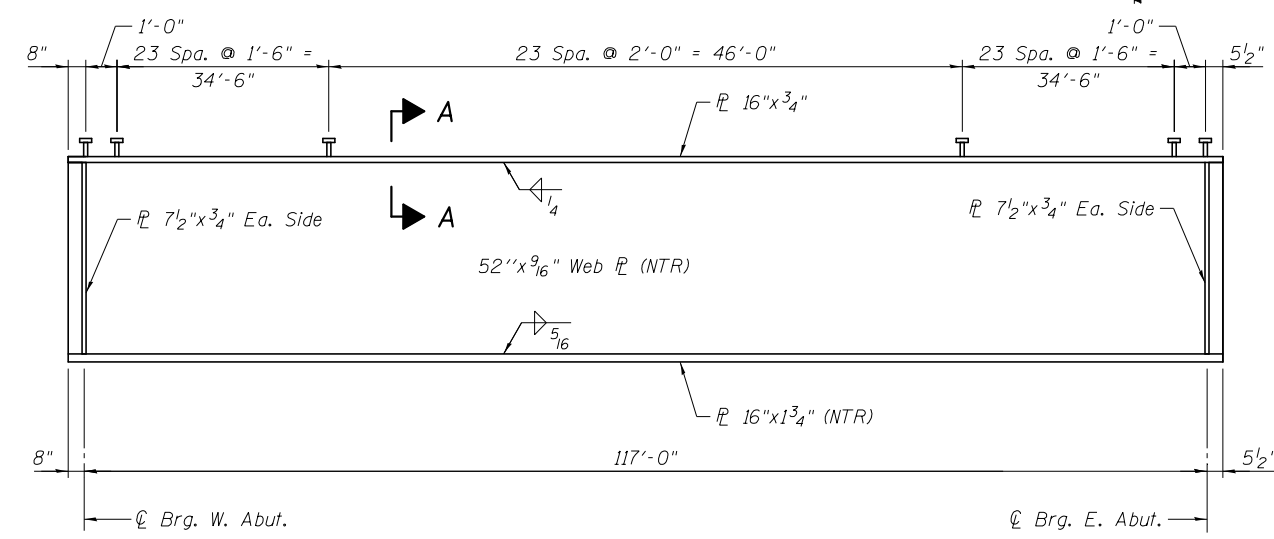
$I_c(cr), S_c(cr)$: Composite moment of inertia and section modulus of the steel and longitudinal deck reinforcement, used for computing f_s (Total-Strength I and Service II) in cracked sections, due to both short-term composite live loads and long-term composite dead loads (in⁴ and in³).

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.).
 $M_{\xi + IM}$: Un-factored live load moment plus dynamic load allowance (impact) (kip-ft.).
 M_u (Strength I): Factored design moment (kip-ft.).
 $1.25 (M_{DC1} + M_{DC2}) + 1.5 M_{DW} + 1.75 M_{\xi + IM}$
 $\phi_r M_n$: 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_c
 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.
 $f_s (\xi + IM)$: Un-factored stress at edge of flange for controlling steel flange due to vertical composite live plus impact loads as calculated below (ksi).
 $M_{\xi + IM} / S_c(3n)$ or $M_{\xi + IM} / S_c(cr)$ as applicable.
 f_s (Service II): Sum of stresses as computed below (ksi).
 $f_{sDC1} + f_{sDC2} + f_{sDW} + 1.3 f_s (\xi + IM)$
 $0.95R_n F_y f$: 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).
 $1.25 (f_{sDC1} + f_{sDC2}) + 1.5 f_{sDW} + 1.75 f_s (\xi + IM)$
 $\phi_r F_n$: Non-Compact composite positive or negative stress capacity for Strength I loading according to Article 6.10.7.2 (ksi).
 V_f : Maximum factored shear range in composite portion of span computed according to Article 6.10.10.

FRAMING PLAN

TOP OF WEB ELEVATIONS
(For Fabrication only)

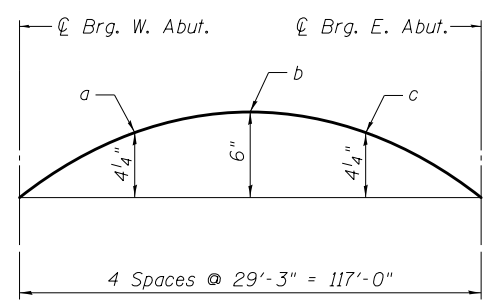
Beam	℄ Brg. W. Abut.	a	b	c	℄ Brg. E. Abut.
1	758.40	758.61	758.61	758.33	757.83
2	758.56	758.77	758.77	758.48	757.98
3	758.72	758.93	758.93	758.64	758.14
4	758.88	759.09	759.09	758.79	758.29
5	759.04	759.25	759.24	758.95	758.44
6	758.89	759.10	759.09	758.79	758.29
7	758.73	758.93	758.93	758.63	758.12
8	758.57	758.77	758.76	758.46	757.95
9	758.41	758.60	758.59	758.29	757.78
10	758.47	758.66	758.65	758.35	757.84
11	758.63	758.82	758.81	758.51	757.99



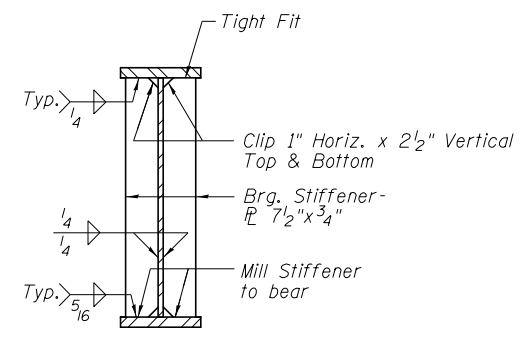
GIRDER ELEVATION

"NTR" denotes plates to which notch toughness requirements are applicable.

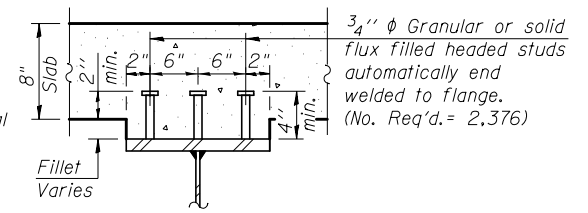
NOTES:
Webs, Flanges, and Bearing Stiffeners to be AASHTO M270 Grade 50 Steel.
Load carrying components designated "NTR" shall conform to the Impact Testing Requirement, Zone 2.



CAMBER DIAGRAM



SECTION AT ABUTMENT



SECTION A-A

BOWMAN, BARRETT & ASSOCIATES INC.
CONSULTING ENGINEERS
Chicago, Illinois
312.228.0100
www.bbandainc.com

FILE NAME =	USER NAME =	DESIGNED - TL	REVISIONS -
		CHECKED - MRM	REVISIONS -
		DRAWN - MTR	REVISIONS -
		CHECKED - SF	REVISIONS -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FRAMING PLAN
STRUCTURE NO. 049-0533

SHEET NO. S-19 OF S-33 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1199	49-1(HB & HB-1R)	LAKE	225	133
CONTRACT NO. 60L76				
ILLINOIS FED. AID PROJECT				