

TOP OF WEB ELEVATIONS

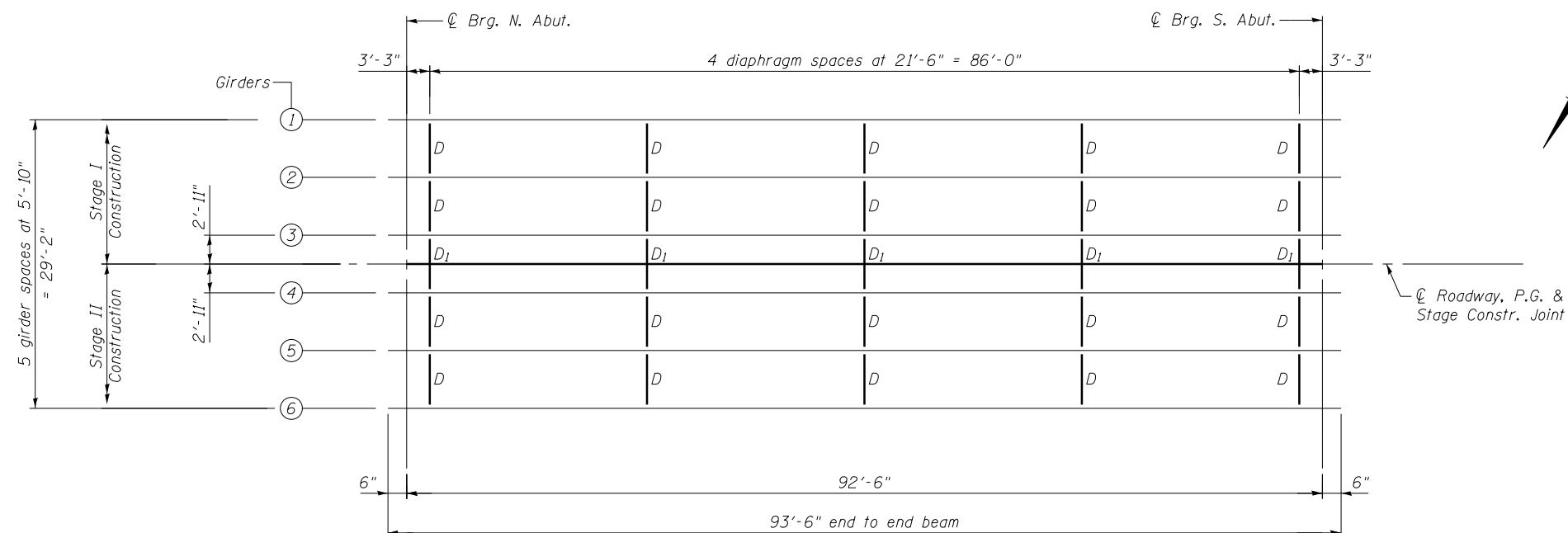
(for fabrication only)

Location	Girder 1	Girder 2	Girder 3	Girder 4	Girder 5	Girder 6
℄ N. Abut.	361.07	361.18	361.27	361.27	361.18	361.07
℄ S. Abut.	362.67	362.77	362.87	362.87	362.77	362.67

INTERIOR GIRDER MOMENT TABLE		0.5 Sp. 1
I_s	(in ⁴)	15174
$I_c(n)$	(in ⁴)	37961
$I_c(3n)$	(in ⁴)	27396
S_s	(in ³)	802
$S_c(n)$	(in ³)	1067
$S_c(3n)$	(in ³)	981
DC1	(k/ft)	0.79
M _{DC1}	(k)	845
DC2	(k/ft)	0.15
M _{DC2}	(k)	160
DW	(k/ft)	0.27
M _{DW}	(k)	289
$M_{\psi} + IM$	(k)	1296
M_u (Strength I)	(k)	3958
$\phi_r M_n$	(k)	5146
f_s DC1	(ksi)	12.6
f_s DC2	(ksi)	2.0
f_s DW	(ksi)	3.5
f_s ($\psi + IM$)	(ksi)	14.6
f_s (Service II)	(ksi)	37.1
$0.95R_h F_{yf}$	(ksi)	47.5
V _f	(k)	24.7

INTERIOR GIRDER REACTION TABLE		Abutment
R _{DC1}	(k)	36.5
R _{DC2}	(k)	6.9
R _{DW}	(k)	12.5
R $\psi + IM$	(k)	76.7
R _{Total}	(k)	132.6

- 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).
- 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.).
- $M_{\psi} + IM$: 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 $M_{\psi} + IM$
- $\phi_r M_n$: 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_{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 ($\psi + IM$): Un-factored stress at edge of flange for controlling steel flange due to vertical composite live plus impact loads as calculated below (ksi).
 $M_{\psi} + IM$ / S_{c(n)} or $M_{\psi} + IM$ / S_{c(cr)} as applicable.
- f_s (Service II): Sum of stresses as computed below (ksi).
 $f_{sDC1} + f_{sDC2} + f_{sDW} + 1.3 f_s(\psi + IM)$
- 0.95R_hF_{yf}: Composite stress capacity for Service II loading according to Article 6.10.4.2 (ksi).
- V_f: Maximum factored shear range in composite portion of span computed according to Article 6.10.10.



PLAN

FILE NAME =	USER NAME = \$USER\$	DESIGNED - CME	REVISED -
et:\pw\work\p\id\lavender\ba\d0293530\0760030-78165-014-Framing-det.dgn		CHECKED - MCB	REVISED -
	PLOT SCALE = 1/64.000174 '1' / in.	DRAWN - CFC/MML	REVISED -
CB PROJECT NO 08056-14	PLOT DATE = 1/23/2012	CHECKED - CME	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**FRAMING PLAN
STRUCTURE NO. 076-0030**

SHEET NO. 14 OF 20 SHEETS

See Sheet 15 of 20 for Structural Steel Details

CB Coombe-Bloxdorf P.C.
- CIVIL ENGINEERS -
- STRUCTURAL ENGINEERS -
- LAND SURVEYORS -

Design Firm License No. 184-002703

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
885	6B-3	POPE	41	35
				CONTRACT NO. 78165

ILLINOIS FED. AID PROJECT