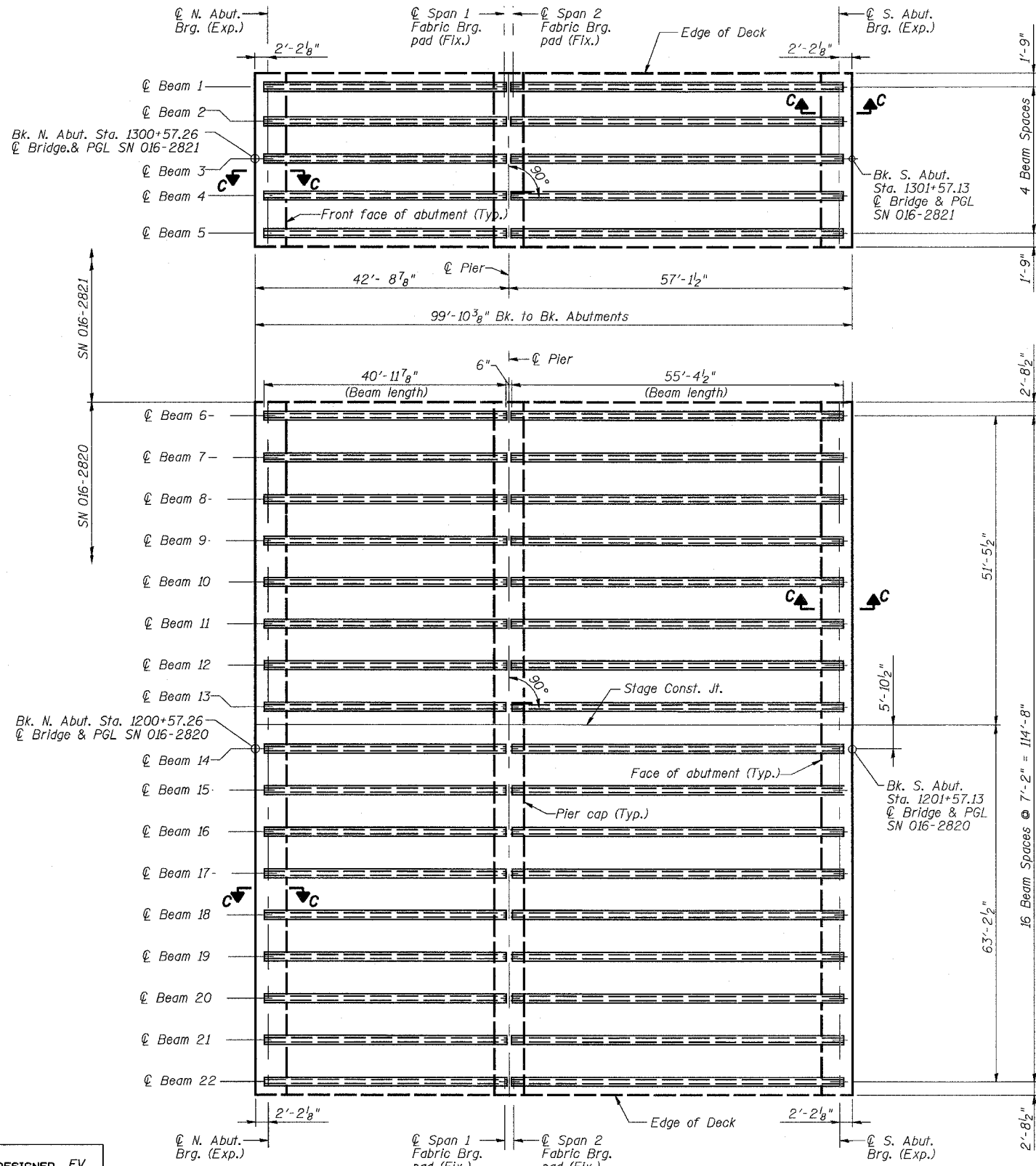


STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 351	2008-001VB	COOK	579	428
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

CONTRACT NO. 60E10

SHEET NO. 18
54 SHEETS



	0.4 N. Span 1	Pier	0.6 S. Span 2
I (in ⁴)	48648		48648
I' (in ⁴)	173993		173993
S _b (in ³)	3165		3165
S _{b'} (in ³)	5896		5896
S _t (in ³)	2358		2358
S _{t'} (in ³)	26792		26792
D̄ (k/')	1.06		1.06
M̄D (k)	210		389
s̄D (k/')	0.38	0.38	0.38
M̄sD (k)	30	111	90
M̄L (k)	235	235	342
M (Imp) (k)	71	71	102

	N.Abut.	N. Pier Brg.	S. Pier Brg.	S. Abut.
R̄D (k)	21.1	21.1	28.7	28.7
R̄sD (k)	4.8	10.4	12.3	8.2
R̄L (k)	34.2	37.8	40.6	36.9
Imp. (k)	10.0	11.4	12.3	10.6
R (Total) (k)	70.1	80.7	93.9	84.4

I and I' are the moment of inertia and composite moment of inertia of the beam section.
 S_b and S_{b'} are the non-composite and composite section modulus for the bottom fiber of the prestressed beam.
 S_t and S_{t'} are the non-composite and composite section modulus for the top fiber of the prestressed beam.
 M̄D - Moment due to dead loads on non-composite section.
 M̄sD - Moment due to superimposed dead loads on composite section.
 M̄L - Moment due to live load on composite section.
 M (Imp) - Moment due to live load impact on composite section.

- Notes:
- All beams are Precast Prestressed Concrete I Beam, 36".
 - See Sheet 21 for Section C-C.
 - See Sheet 16 for bridge cross section.
 - See Sheets 19 and 20 for beam details.
 - See Sheet 21 for diaphragm details.

DESIGNED	EV
CHECKED	NPP
DRAWN	EV
CHECKED	NPP

FRAMING PLAN
 $\frac{3}{32}'' = 1'-0''$
 (Diaphragms not shown for clarity)

NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 US RTE 6 FROM I-294 TO IL RTE 1
FRAMING PLAN
 STRUCTURES FOR CN INTERMODAL
 YARD VEHICLES OVER U.S. RTE. 6 (159TH STREET)
 STATION 95+02.14 STRUCTURE NOS. 016-2820 & 016-2821
 SCALE: $\frac{3}{8}'' = 1'-0''$ DATE: 2/21/2008

URS
 100 South Wacker Drive,
 Suite 500
 Chicago, IL 60606
 (312) 939-1000

EV
EV