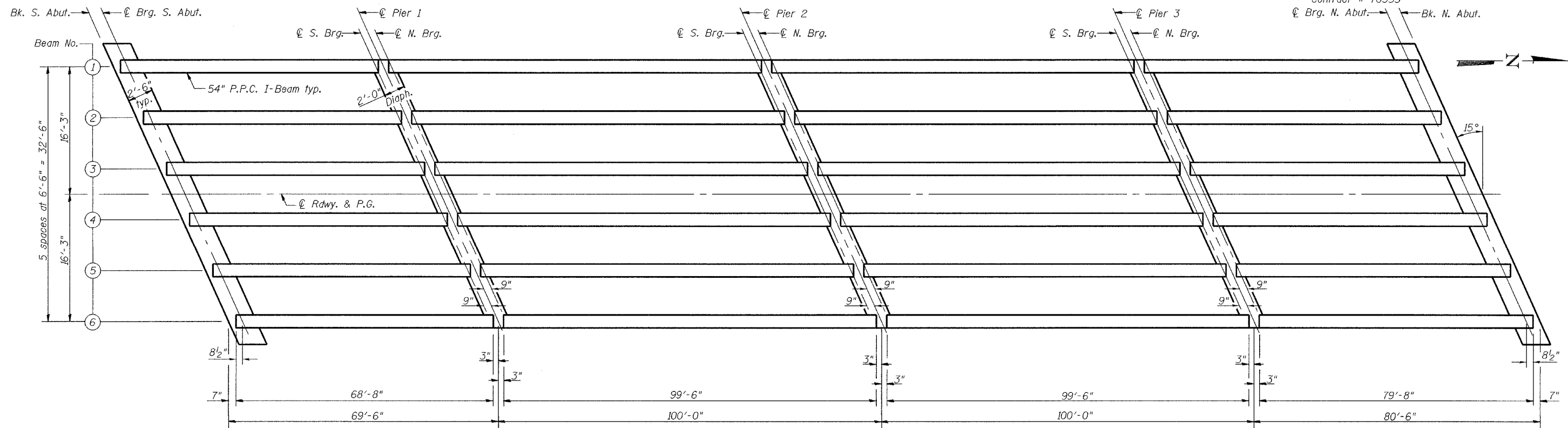


STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET
FAP 836	(119BR) BR	CHAMPAIGN	20	21 SHEETS
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

Contract # 70355



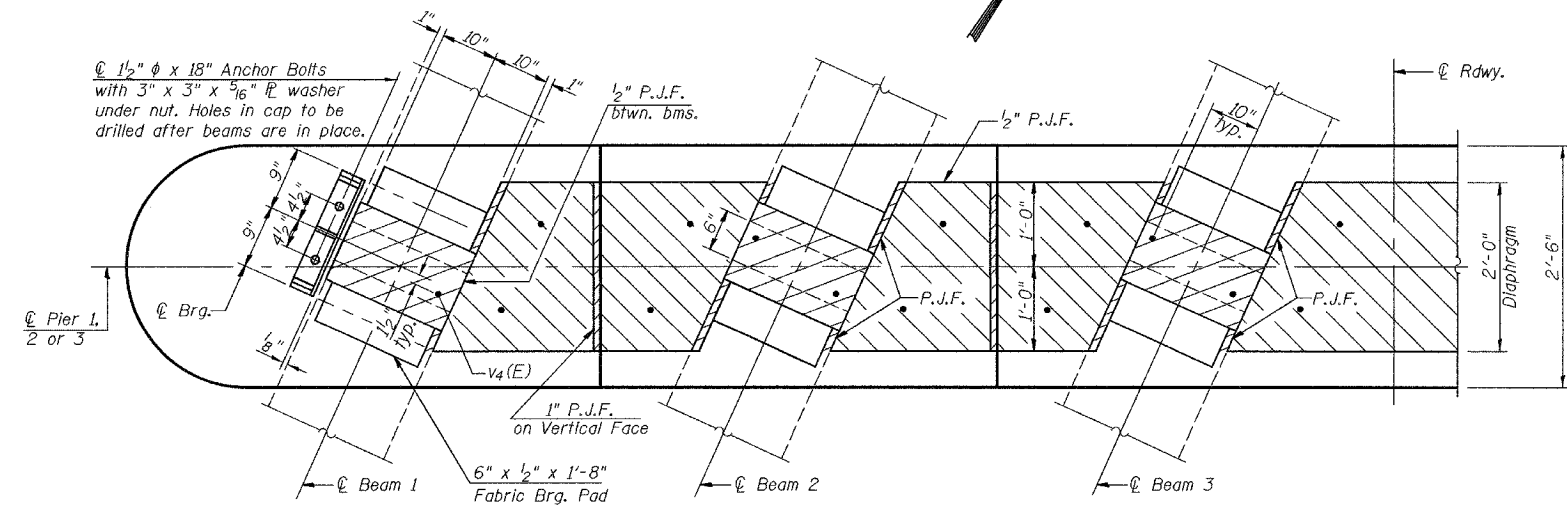
FRAMING PLAN

Provide new bursting steel details shown in the special provision "Precast Prestressed Concrete I-Beams and Bulb-T Beams Bursting Steel Details" for beam lines 2 through 6 spans 2 and 3 only. Revise G6 bar locations and lifting loops according to the special provision "Precast Prestressed Concrete I-Beams and Bulb-T Beams Bursting Steel Details" for all beams.

	0.4 Sp. 1	Pier 1	0.5 Sp. 2	Pier 2	0.5 Sp. 3	Pier 3	0.6 Sp. 4
I	(in ⁴) 213715		213715		213715		213715
I'	(in ⁴) 497608		497608		497608		497608
S _b	(in ³) 8559		8559		8559		8559
S _b '	(in ³) 12674		12674		12674		12674
S _t	(in ³) 7362		7362		7362		7362
S _t '	(in ³) 33725		33725		33725		33725
l _p	(K/ft.) 1.264		1.264		1.264		1.264
M _d	(K) 718		1531		1533		973
s _d	(K/ft.) 0.475	0.475	0.475	0.475	0.475	0.475	0.475
M _s	(K) 129	342	216	413	197	381	205
M _l	(K) 463	494	563	573	570	530	555
M (Imp)	(K) 121	119	124	126	126	122	133

	S. Abut.	Pier 1	Pier 2	Pier 3	N. Abut.
R _d	(K) 43.1	43.1	63.2	50.1	50.1
R _s	(K) 11.2	22.1	24.3	23.5	14.0
R _l	(K) 35.5	27.0	28.9	28.0	36.4
R (Imp.)	(K) 9.2	6.5	6.4	6.4	8.7
R (Total)	(K) 99.0	98.7	108.0	108.0	109.2

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.
 M_d is the moment due to dead loads on the non-composite prestressed beam. It is conservatively calculated at 0.5 of the span.
 M_s is the moment due to dead loads on the composite section.
 M_l is the moment due to live load on the composite section.
 M (Imp) is the moment due to live load impact on the composite section.
 R (Total) is the sum of the reaction per bearing due to R_d (non-composite) + R_s (composite) + R_l + I (composite).



HALF PLAN AT PIER CAPS

DESIGNED Philip E. Coppernoll
 December 1, 2004
 CHECKED Ray Ahanchi
 DRAWN R. Sommer
 CHECKED P.E.C./G.R.A.
 EXAMINED Thomas J. Domagalaki
 PASSED Ralph E. Anderson

FRAMING PLAN
F.A.P. RT. 836-SECTION (119BR)BR
CHAMPAIGN COUNTY
STATION 1015+21.00
STRUCTURE NO. 010-0280

Note: See sheet 8 of 21 for side retainer details and notes.
 For v₄(E) bars See sheet 8, 16, 17 & 18 of 21.