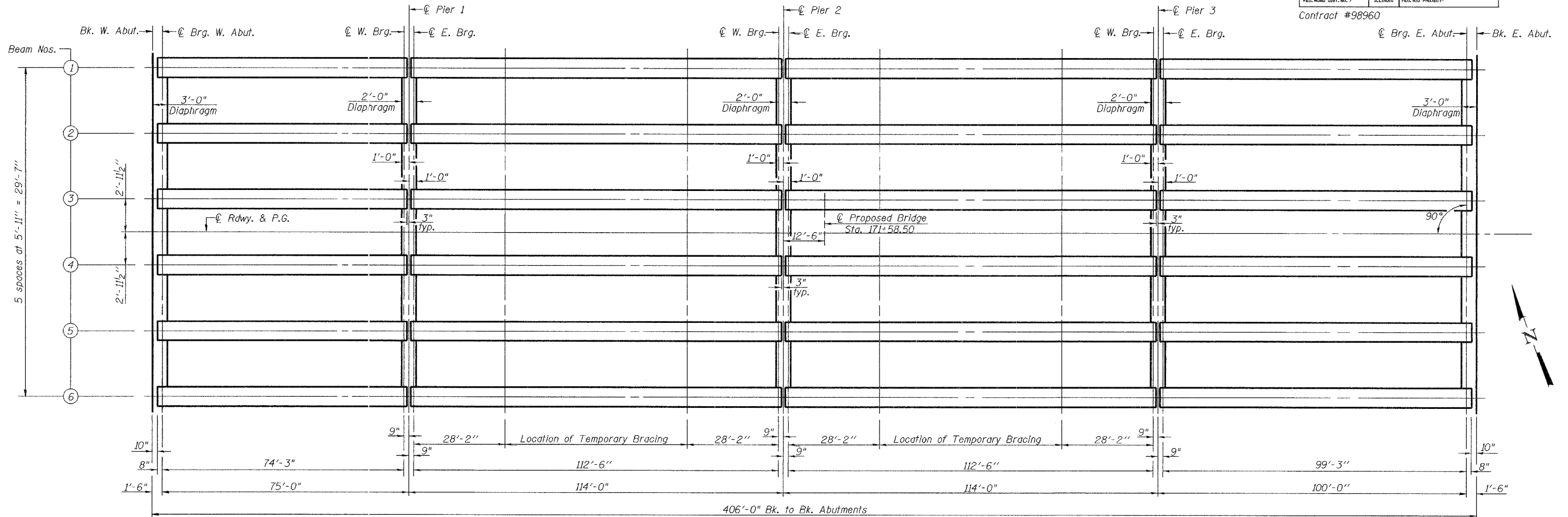


STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 857	10IBR-6	WHITE	100	31
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 12  
27 SHEETS  
Contract #98960



	0.4 Sp. 1	Pier 1	0.5 Sp. 2	Pier 2	0.5 Sp. 3	Pier 3	0.6 Sp. 4
I (in <sup>4</sup> )	392638		392638		392638		392638
I' (in <sup>4</sup> )	704136		704136		704136		704136
Sb (in <sup>3</sup> )	12224		12224		12224		12224
Sb' (in <sup>3</sup> )	15767		15767		15767		15767
St (in <sup>3</sup> )	12715		12715		12715		12715
St' (in <sup>3</sup> )	38393		38393		38393		38393
DC1 (K/ft.)	1.32		1.32		1.32		1.32
M DC1 (K-ft.)	891.0		2144.3		2144.3		1584.0
DC2 (K/ft.)	0.15	0.15	0.15	0.15	0.15	0.15	0.15
M DC2 (K-ft.)	45.7	138.9	91.4	165.6	74.2	173.3	110.7
DW (K/ft.)	0.296	0.296	0.296	0.296	0.296	0.296	0.296
M DW (K-ft.)	90.2	274.1	180.4	326.8	146.4	342.0	218.4
M LL+I (K-ft.)	954.7	1178.0	1128.3	1278.7	1150.6	1294.9	1272.4

	W. Abut.	Pier 1 Sp1	Pier 1 Sp2	Pier 2 Sp2	Pier 2 Sp3	Pier 3 Sp3	Pier 3 Sp4	E. Abut.
R DC1 (K)	49.5	49.5	75.2	75.2	75.2	75.2	66.0	66.0
* R DC2 (K)	3.8	7.9	7.9	8.7	8.7	9.0	9.0	5.8
* R DW (K)	7.4	15.6	15.6	17.1	17.1	17.6	17.6	11.4
* R LL+I (K)	69.6	65.0	65.0	69.3	69.3	69.8	69.8	75.6
R (Total) (K)	130.3	138.0	163.7	170.3	170.3	171.6	162.4	158.8

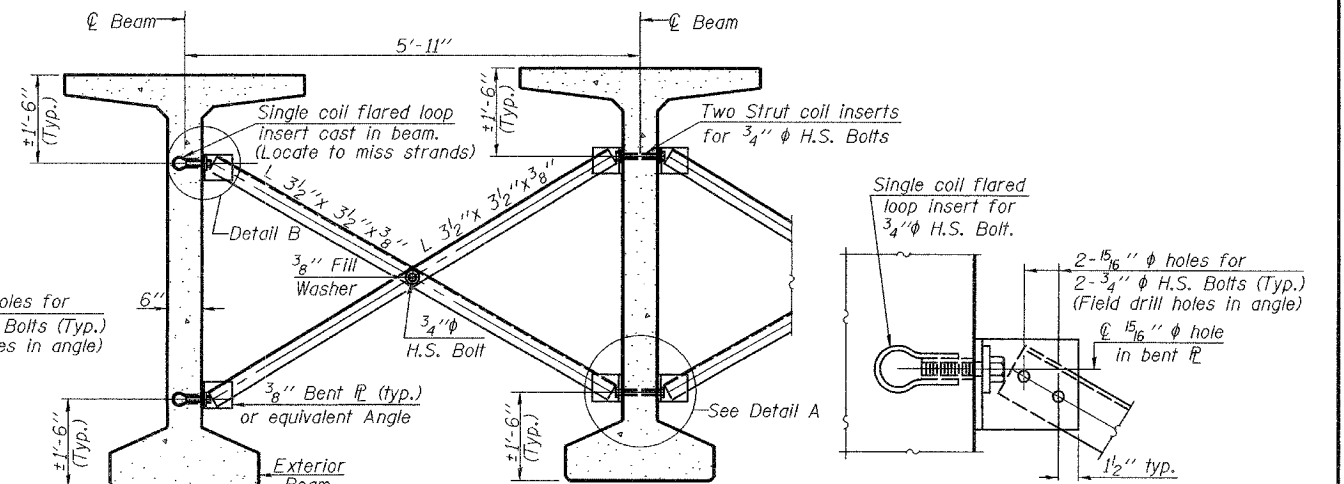
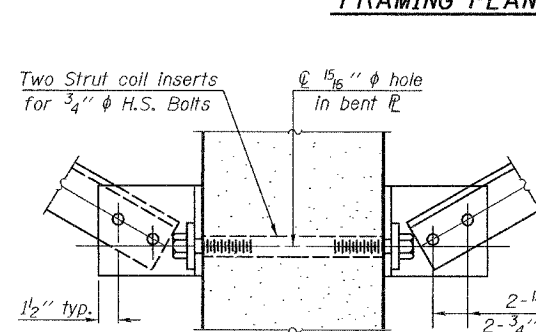
\*The total RDC2, RDW and R LL+I are assumed to be distributed evenly to each bearing line at a Pier regardless of the span ratios.

DESIGNED Daniel H. Tobias  
CHECKED W. A. Beisner  
DRAWN R. Sommer  
CHECKED WAB/FT

December 4, 2006  
EXAMINED Thomas J. Domagala  
PASSED Ralph E. Anderson

I and I' are the moment of inertia and composite moment of inertia of the beam section. Sb and Sb' are the non-composite and composite section modulus for the bottom fiber of the prestressed beam. St and St' are the non-composite and composite section modulus for the top fiber of the prestressed beam. M DC1 is the unfactored moment due to the non-composite dead load. It is conservatively calculated at 0.5 of the span. M DC2 is the unfactored moment due to the composite dead load (superimposed excluding future wearing surface). M DW is the unfactored moment due to the composite wearing surface (superimposed future wearing surface only). M LL+I is the unfactored moment due to the Live Load plus dynamic load allowance (impact) on the composite section.

FRAMING PLAN



Notes: Fasteners shall be high strength bolts. Bolts 3/4"  $\phi$ , open holes 15/16"  $\phi$ . Details other than those shown are allowed subject to approval of the Engineer. Two hardened washers shall be required over all holes in bracing connection. All inserts shall be galvanized in accordance with AASHTO M 232. Remove temporary bracing after falsework for deck is removed and fill inserts with 3/4"  $\phi$  bolts galvanized in accordance with AASHTO M 232. For insert locations see sheet 14 of 27. Temporary bracing, inserts and all associated hardware are included with Furnishing and Erecting Precast Prestressed Concrete Bulb T-Beams, 63".

FRAMING PLAN  
F.A.P. RT. 857 SEC. 10IBR-6  
WHITE COUNTY  
STATION 171+58.50  
STRUCTURE NO. 097-0071