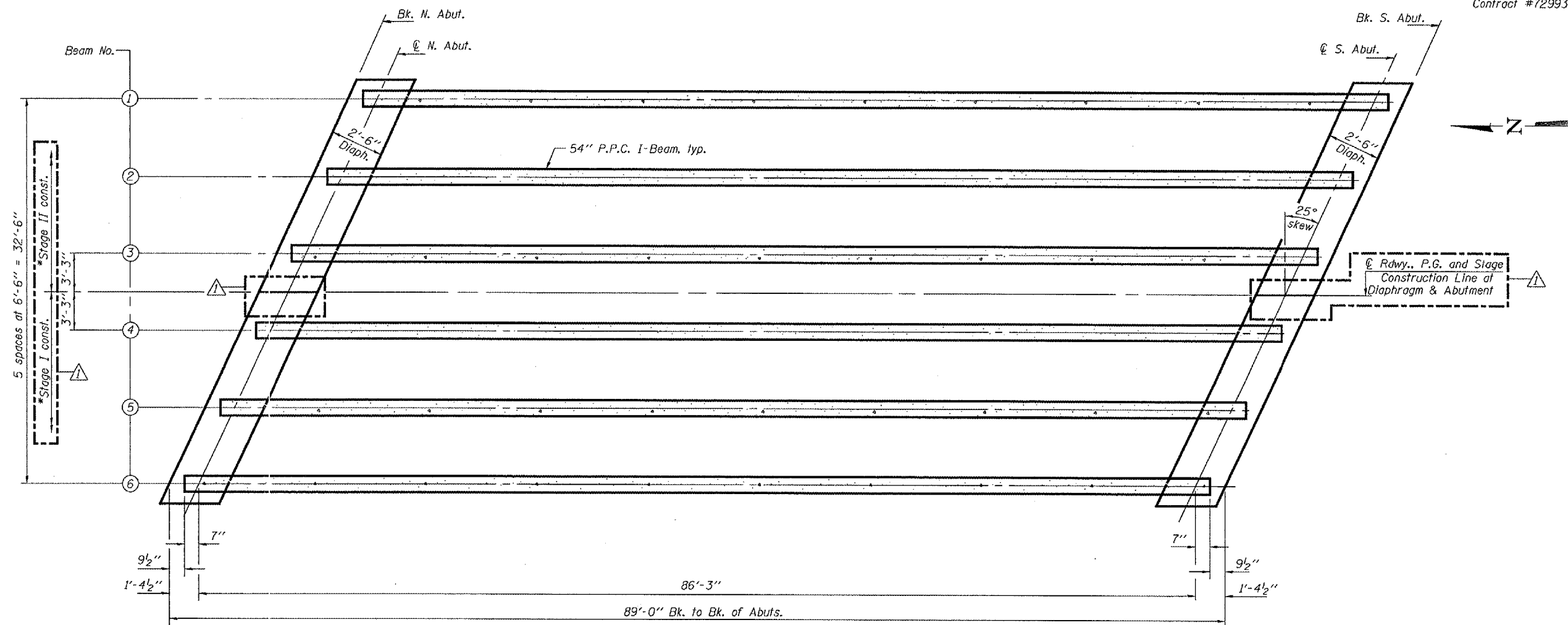


STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEETS	SHEET	SHEET NO. 10 20 SHEETS
FAP 662	(V,T)B-2	MACOUPIN	60	41	
FED. ROAD DIST. NO. 7	ALIGNMENT	FED. AID PROJECT			

Contract #72993



**FRAMING PLAN**

\*For diaphragms and abutments only.

INTERIOR BEAM MOMENT TABLE		
0.5 Span		
I	(in <sup>4</sup> )	213715
I'	(in <sup>4</sup> )	507830
S <sub>b</sub>	(in <sup>3</sup> )	8559
S <sub>b</sub> '	(in <sup>3</sup> )	12888
S <sub>t</sub>	(in <sup>3</sup> )	7362
S <sub>t</sub> '	(in <sup>3</sup> )	34788
DC1	(k/')	1.254
M DC1	('k)	1166.0
DC2	(k/')	0.15
M DC2	('k)	139.5
DW	(k/')	.325
M DW	('k)	302.2
M <sub>Σ</sub> + Imp	('k)	1365.5

INTERIOR BEAM REACTION TABLE		
HL93 LOADING		
		Abut.
R DC1	(k)	54.1
R DC2	(k)	6.5
R DW	(k)	14.0
R $\Sigma$	(k)	65.6
R (Imp)	(k)	23.7
R (Total)	(k)	163.9

- I: Non-composite moment of inertia of beam section (in<sup>4</sup>).
- I': Composite moment of inertia of beam section (in<sup>4</sup>).
- S<sub>b</sub>: Non-composite section modulus for the bottom fiber of the prestressed beam (in<sup>3</sup>).
- S<sub>b</sub>': Composite section modulus for the bottom fiber of the prestressed beam (in<sup>3</sup>).
- S<sub>t</sub>: Non-composite section modulus for the top fiber of the prestressed beam (in<sup>3</sup>).
- S<sub>t</sub>': Composite section modulus for the top fiber of the prestressed beam (in<sup>3</sup>).
- DC1: Un-factored non-composite dead load (kips/ft.).
- M<sub>DC1</sub>: 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<sub>DC2</sub>: 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<sub>DW</sub>: Un-factored moment due to long-term composite (superimposed future wearing surface only) dead load (kip-ft.).
- M<sub>Σ</sub> + Imp: Un-factored live load moment plus dynamic load allowance (impact) (kip-ft.).

DESIGNED	DPN
CHECKED	AJB
DRAWN	h.t. duong
CHECKED	FT/AJB/DPN

Jan 23, 2007  
 EXAMINED *Thomas J. Damagala*  
 ENGINEER OF BRIDGE DESIGN  
 PASSED *Ralph E. Anderson*  
 ENGINEER OF BRIDGES AND STRUCTURES

**FRAMING PLAN**  
**F.A.P. RT. 662 - SECTION (V,T)B-2**  
**MACOUPIN COUNTY**  
**STATION 447+03.80**  
**STRUCTURE NO. 059-0504**