

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 662	(V,T)B-2	MACOUPIN	66	36
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

SHEET NO. 10
20 SHEETS

Contract #72993



FRAMING PLAN

INTERIOR BEAM MOMENT TABLE	
	0.5 Span
I	(in ⁴) 213715
I'	(in ⁴) 507830
S_b	(in ³) 8559
S_b'	(in ³) 12888
S_t	(in ³) 7362
S_t'	(in ³) 34788
$DC1$	(k/ft.) 1.254
M_{DC1}	(k) 1166.0
$DC2$	(k/ft.) 0.15
M_{DC2}	(k) 139.5
DW	(k/ft.) .325
M_{DW}	(k) 302.2
$M_L + Imp$	(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_L	(k) 65.6
R_{Imp}	(k) 23.7
R_{Total}	(k) 163.9

- I : Non-composite moment of inertia of beam section (in⁴).
- I' : Composite moment of inertia of beam section (in⁴).
- S_b : Non-composite section modulus for the bottom fiber of the prestressed beam (in³).
- S_b' : Composite section modulus for the bottom fiber of the prestressed beam (in³).
- S_t : Non-composite section modulus for the top fiber of the prestressed beam (in³).
- S_t' : Composite section modulus for the top fiber of the prestressed beam (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.).
- $M_L + Imp$: 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. Domagala*
 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